



Proposed 132kV Submarine Cable
Route for Airport "A" to Castle Peak
Power Station Cable Circuit

*Fifteenth Weekly Impact Monitoring Report -
3rd March to 9th March 2008*

14th March 2008

Environmental Resources Management

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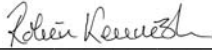
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CLP Power

Proposed 132kV Submarine Cable
Route for Airport "A" to Castle
Peak Power Station Cable Circuit:
*Fifteenth Weekly Impact Monitoring
Report – 3rd March 2008 – 9th March
2008*

March 2008

Reference 0072833

For and on behalf of ERM-Hong Kong, Limited
Approved by: <u>Dr Robin Kennish</u>
Signed: <u></u>
Position: <u>Director</u>
Date: <u>14 March 2008</u>

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EXECUTIVE SUMMARY

The construction works for the Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit (Application No. DIR-143/2006) commenced on 10 November 2007. This is the 15th weekly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 3 to 9 March 2008 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting Period

During the reporting week, cable laying works between Airport and Tuen Mun landing sites were carried out from 3 March 2008 to the morning of 5 March 2008. Cable landing works were then undertaken at the Airport landing site in the period of 5 March afternoon to 8 March 2008. Subsequently, cable lay barge preparation works and cable landing works at Tuen Mun landing site were performed on 9 March 2008.

Water Quality

Six monitoring events were scheduled between 3 March and 9 March 2008 at Tuen Mun and Airport landing sites. All monitoring events at all designated monitoring stations were performed on schedule, ie on 4 March, 6 March and 8 March 2008 at Tuen Mun, and on 3 March, 5 March and 7 March 2008 at the Airport.

All measured dissolved oxygen levels complied with the Action and Limit (AL) Levels, and all measured Turbidity and Suspended Solids (SS) levels were below AL Levels with exception of 5 to 8 March 2008.

Environmental Non-conformance

Twenty-three exceedances of Action and Limit Levels were recorded on four monitoring days, ie 5, 6, 7, and 8 March 2008, in the reporting week. The exceedances were examined against the construction works. It was concluded that they were isolated cases and unlikely related to the Project.

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

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

Future Key Issues

During the following week (ie 10 to 16 March 2008), cable landing works at Tuen Mun landing site and cable lay barge preparation works will continue. Jetting/cable laying operations will then be carried out between the Airport and Tuen Mun landing sites. Following this, cable landing works at the Airport will be undertaken.

ERM-Hong Kong, Limited (ERM) was appointed by CLP Power (CLP) as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for the Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit (thereinafter called the ('Project')).

1.1 PURPOSE OF THE REPORT

This is the 15th weekly EM&A report, which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 3 to 9 March 2008.

1.2 STRUCTURE OF THE REPORT

The structure of the report is as follows:

Section 1 : Introduction

Details the background, purpose and structure of the report.

Section 2 : Project Information

Summarises background and scope of the project, site description, project organisation and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licenses during the reporting period.

Section 3 : Environmental Monitoring Requirement

Summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, Event / Action Plans, environmental mitigation measures as recommended in the EIA report and relevant environmental requirements.

Section 4 : Implementation Status on Environmental Mitigation Measures

Summarises the implementation of environmental protection measures during the reporting period.

Section 5 : Monitoring Results

Summarises the monitoring results obtained in the reporting period.

Section 6 : Environmental Non-conformance

Summarises any monitoring exceedance, environmental complaints and environmental summons within the reporting period.

Section 7: Future Key Issues

Summarises the monitoring schedule for the next week.

Section 8: Review of EM&A Data and Impact Assessment Predictions

Compares and contrasts the EM&A data in the reporting period with the impact assessment predictions and annotates with explanations of discrepancies.

Section 9: Conclusions

Presents the key findings of the impact monitoring results.

2.1 BACKGROUND

CLP will install a 132 kV submarine cable circuit to connect Castle Peak Power Station and Hong Kong International Airport in order to meet the electricity load growth at the Airport.

The proposed cable route will start from Tuen Mun and extend southward crossing the Urmston Road to the Airport. The cable landing sites will be located to the west of Butterfly Beach, Tuen Mun and at the northern part of the platform of the Airport (see *Figure 2.1*).

In September 2006, a Project Profile (PP) for the proposed 132kV Cable Route for Airport "A" to Castle Peak CCTS (thereinafter called the 'Project') was prepared and submitted to the Environmental Protection Department (EPD) under the *Environmental Impact Assessment Ordinance (EIAO)* for application for Permission to apply directly for Environmental Permit (EP) (Application No. *DIR-143/2006*).

An Environmental Permit (*EP-267/2007*) for the works was granted on 29 March 2007. Under the requirements of *Condition 2.12* of the EP, an EM&A programme as set out in the *Environmental Monitoring and Audit Manual (EM&A Manual)* is required to be implemented. In accordance with the *EM&A Manual*, impact monitoring of water quality is required for the Project.

Baseline Monitoring was conducted at Tuen Mun landing site between 18 October and 28 October 2007. Through communications with EPD, a silt curtain at the water intake of the Airport should already be in place during the baseline monitoring. EPD hence advised the baseline monitoring (thereinafter called *Baseline Environmental Monitoring Part B*) for the Airport East section of works should be postponed until a silt curtain is ready. The baseline monitoring for Tuen Mun section of the Project and sediment quality testing were hence undertaken first (thereinafter called *Baseline Environmental Monitoring Part A*) and the results were presented in *Part A* of the report which was submitted to EPD.

The silt curtains were installed at the Airport seawater intake on 20 December 2007 and *Baseline Environmental Monitoring Part B* was then carried out between 22 December 2007 and 2 January 2008.

Impact Monitoring has been carried out at Tuen Mun landing site since 10 November 2007 and at Airport landing site since 16 January 2008. This report, therefore, presents results of the data from monitoring stations around the Tuen Mun and Airport landing sites (*Figure 2.1*). Results of the impact monitoring data will therefore be compared against the results of the *Baseline Environmental Monitoring Part A* and *Part B*.

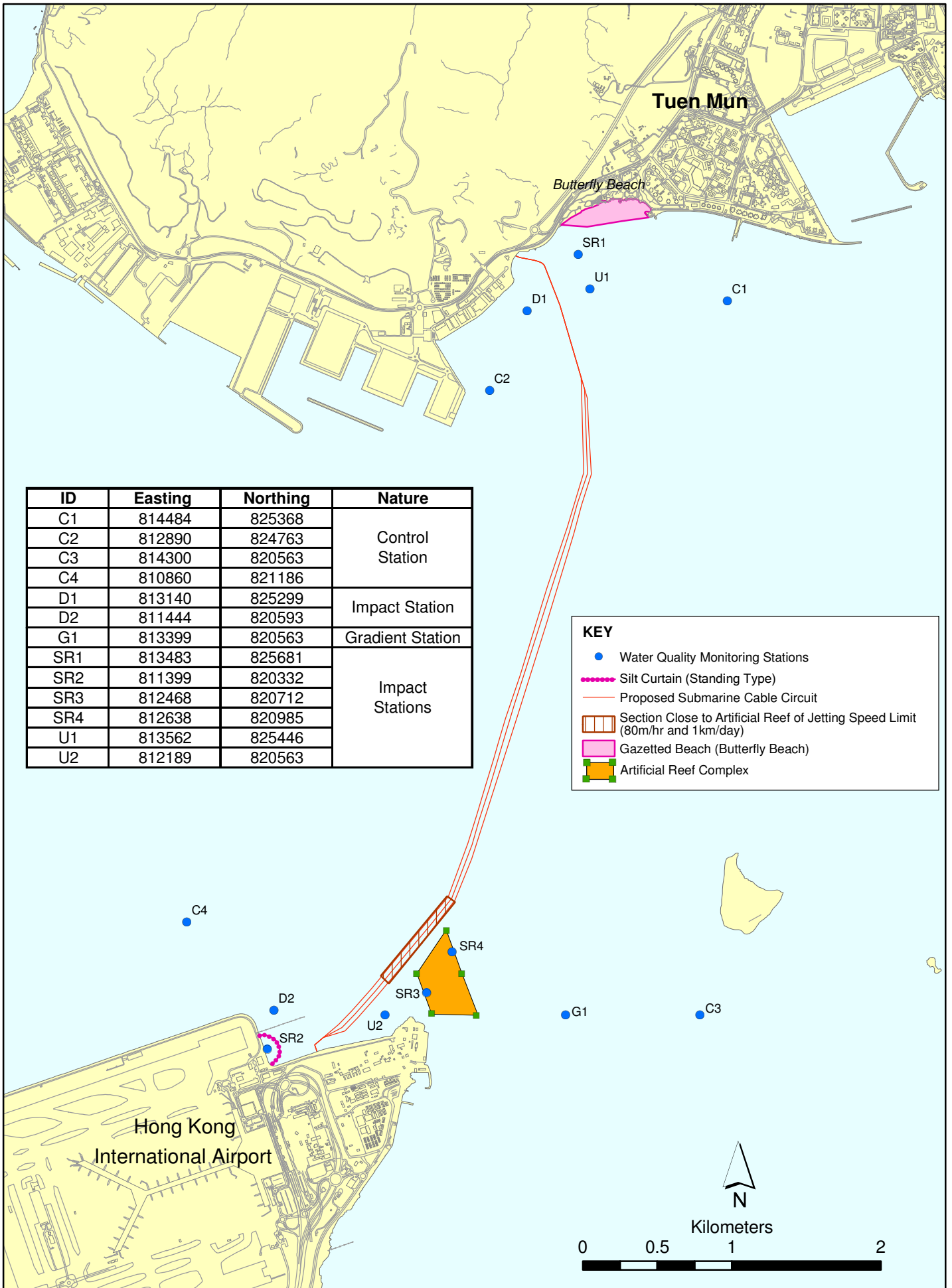


FIGURE 2.1

Location of Water Quality Monitoring Stations

2.2 *SITE DESCRIPTION*

The proposed 132kV cable is located in-between Tuen Mun and the Hong Kong International Airport. The alignment of the cable is illustrated in *Figure 2.1*.

2.3 *MARINE CONSTRUCTION WORKS UNDERTAKEN DURING REPORTING WEEK*

During the reporting week, cable laying works between Airport and Tuen Mun landing sites were carried out from 3 March 2008 to the morning of 5 March 2008. Cable landing works were then undertaken at the Airport landing site in the period of 5 March afternoon to 8 March 2008. Subsequently, cable lay barge preparation works and cable landing works at Tuen Mun landing site were performed on 9 March 2008.

The works programme of the period between 3 and 9 March 2008 is presented in *Annex A*.

2.4 *PROJECT ORGANISATION*

The Project Organisation chart and contact details are shown in *Annex B*.

2.5 *STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS*

A summary of the relevant permits, licences, notifications and/or reports on environmental protection for this Project is presented in *Table 2.1*.

Table 2.1 *Summary of Environmental Licensing, Notification, Permit and Reporting Status*

Permit / Licence / Notification / Report	Reference	Validity Period	Remarks
EM&A Manual	-	Throughout the construction period	submitted on 25 January 2007
Environmental Permit	EP-267/2007	Throughout the construction period	granted on 29 March 2007
Baseline Environmental Monitoring Report (Part A)	-	Throughout the construction period for Tuen Mun Section	approved by EPD on 8 November 2007
Baseline Environmental Monitoring Report (Part B)	-	Throughout the construction period for Airport Section	approved by EPD on 16 January 2008

3.1 MONITORING LOCATIONS

In accordance with the *EM&A Manual*, prior to the installation of the cable, water quality sampling was undertaken at stations situated around the cable laying works area at Tuen Mun and the Airport. The locations of the sampling stations are shown in *Figure 2.1*.

- C1 and C2 are Control Stations located over 1 km away from the Tuen Mun landing point and hence are not expected to be influenced by the construction works due to their remoteness;
- U1 and D1 are Gradient Stations situated approximately 300 m either side of the cable alignment for monitoring the effect of dredging at the Tuen Mun landing point and for identifying the source of impact; and,
- SR1 is a Sensitive Receiver used to monitor the effect of the construction works on Butterfly Beach.
- C3 and C4 are Control Stations near the Airport, which are not expected to be influenced by the construction works due to their remoteness from the construction works.
- U2 and D2 are Impact Stations located approximately 300 m either from the cable alignment for monitoring the effect of dredging at the Airport landing point.
- SR2 is Impact Station (sensitive receiver) used to monitor the effect of the construction works to the Seawater Intake at the Airport.
- SR3 and SR4 are Impact Stations (sensitive receivers) used to verify the predictions concerning sediment plume dispersion during dredging at the areas close to the Artificial Reef (AR) and at the landing sites.
- G1 is Gradient Station which is situated in between C3 and the AR. It is used to determine the source of pollutants by comparing the monitoring results with those recorded at C3, SR3 and SR4. Since G1 is located between C3 and the construction work alignment, it serves the gradient function with C3 during flood tide, but has no relationship and function with C4 during ebb tide.

The co-ordinates of these monitoring stations are listed in *Table 3.1*.

Table 3.1 *Co-ordinates of Water Quality Monitoring Stations (HK Grid)*

Station	Nature	Easting	Northing
C1	Control Station	814483	825367
C2	Control Station	812890	824763
C3	Control Station	814300	820563
C4	Control Station	810860	821186
U1	Impact Station	813561	825446
U2	Impact Station	812189	820563
D1	Impact Station	813140	825298
D2	Impact Station	811444	820593
SR1	Impact Station	813483	825681
SR2	Impact Station	811399	820332
SR3	Impact Station	812468	820712
SR4	Impact Station	812638	820985
G1	Gradient Station	813399	820563

3.2 *MONITORING PARAMETERS AND FREQUENCY*

The impact water quality monitoring was conducted in accordance with the requirements stated in *EM&A Manual*. These are presented below.

3.2.1 *Monitoring Parameters*

Parameters measured *in situ* were:

- dissolved oxygen (DO) (% saturation and mg L⁻¹);
- temperature (°C);
- turbidity (NTU); and
- salinity (‰).

The only parameter measured in the laboratory was:

- suspended solids (SS) (mgL⁻¹).

In addition to the water quality parameters, other relevant data were measured and recorded in field logs, including the location of the sampling stations, water depth, time, weather conditions, sea conditions, tidal state, special phenomena and work activities undertaken around the monitoring and works area that may influence the monitoring results.

3.2.2 *Monitoring Frequency*

Impact water quality monitoring was carried out three times a week. The interval between two sets of monitoring was not less than 36 hours. The monitoring was undertaken at 13 locations (eight impact monitoring stations D1, D2, U1, U2, SR1, SR2, SR3 and SR4, one gradient station G1, and four control monitoring stations C1, C2, C3 and C4), as shown on *Figure 2.1*.

Samples were taken during mid-flood and mid-ebb tidal state on each sampling occasion.

3.3 *MONITORING EQUIPMENT AND METHODOLOGY*

3.3.1 *Monitoring Equipment*

Dissolved Oxygen, Temperature, Salinity, Turbidity Measuring Equipment

The instrument was a portable, weatherproof multi-parameter measuring instrument (YSI 6820) complete with cables, multi-probe sensor, comprehensive operation manuals, and was operable from a DC power source. It was capable of measuring:

- dissolved oxygen levels in the range of 0 – 50 mg L⁻¹; and 0-500% saturation;
- temperature of -5 to 50 °C;
- turbidity levels between 0-1000 NTU (response of the sensor was checked with certified standard turbidity solutions before the start of measurement); and,
- salinity in the range of 0-40 ppt (checked with 30 ppt Salinity solutions before the start of the measurement).

Water Depth Gauge

The water depth gauge affixed to the bottom of the water quality monitoring vessel was used.

Current Velocity and Direction

Current velocity and direction was estimated by conducting float tracking.

Positioning Device

A Global Positioning System (GPS) was used (C-Navigator World DGPS, GPS 72A) during monitoring to ensure the accurate recording of the position of the monitoring vessel before taking measurements. The use of DGPS was used for positioning device, which was well calibrated at appropriate checkpoint.

Water Sampling Equipment

Water samples for suspended solids measurement were collected by the use of a multi-bottle water sampling system (General Oceanics Inc., Rosette Sampler ROS02), consisting of PVC bottles of more than two litres, which could be effectively sealed with cups at both ends. The water sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.

3.3.2

Monitoring Methodology

Timing & Frequency

The water quality sampling was undertaken within a 3 hour window of 1.5 hours before and 1.5 hours after mid-flood and mid-ebb tides. Tidal range for flood and ebb tides was not less than 0.5m for capturing representative tides.

Reference was made to the predicted tides at Lok On Pai, which is the tidal station nearest to the Project site, published on the website of Hong Kong Observatory⁽¹⁾. Based on the predicted water levels at Lok On Pai, the impact water quality monitoring was conducted following the schedule presented in *Annex C*.

Duplicate samples were collected from each of the monitoring events for *in situ* measurements and laboratory analysis.

Depths

Each station was sampled and measurements were taken at three depths, 1 m below the sea surface, mid depth and 1m above the sea bed.

Protocols

The multi-parameter measuring instrument (YSI 6820) was checked and calibrated by an HOKLAS accredited laboratory before use. Onsite calibration was also carried out to check the responses of sensors and electrodes using certified standard solutions before each use. Sufficient stocks of spare parts were maintained for replacements when necessary, and backup monitoring equipment was made available.

Water samples for SS measurements were collected in high density polythene bottles, packed in ice (cooled to 4° C without being frozen), and delivered to an HOKLAS accredited laboratory as soon as possible after collection.

Laboratory Analysis

All laboratory work was carried out by an HOKLAS accredited laboratory. Water samples of about 1,000 mL were collected at the monitoring and control stations for carrying out the laboratory determinations. The determination work started within the next working day after collection of the water samples. The analyses followed the standard methods as described in *APHA Standard Methods for the Examination of Water and Wastewater*, 19th Edition, unless otherwise specified (APHA 2540D for SS).

The QA/QC details were in accordance with requirements of HOKLAS or another internationally accredited scheme (for details refer to *Annex D*).

(1) Hong Kong Observatory (2007) <http://www.hko.gov.hk/tide/eLOPtide.htm> [Accessed on 13 October 2007]

3.3.3 Action and Limit Levels

Two sets of the Action and Limit levels, which were established based on the results of *Baseline Environmental Monitoring Part A* and *Part B*, are presented in *Tables 3.2* and *3.3* respectively.

Table 3.2 *Action and Limit Levels for Water Quality for the Tuen Mun Landing Site*

Parameter	Unit	Tide	Depth	Action Level	Limit Level
Suspended Solids (SS)	mg L ⁻¹	Mid-Ebb	Depth-averaged	12.8	13.3
		Mid-Flood	Depth-averaged	23.6	28.3
Dissolved Oxygen (DO)	mg L ⁻¹	Mid-Ebb	Surface and Middle	5.2	4.0
			Bottom	5.3	2.0
		Mid-Flood	Surface and Middle	5.5	4.0
			Bottom	5.5	2.0
Turbidity	NTU	Mid-Ebb	Depth-averaged	7.0	8.3
		Mid-Flood	Depth-averaged	14.8	18.9

Table 3.2 *Action and Limit Levels for Water Quality for the Airport Landing Site*

Parameter	Unit	Tide	Depth	Action Level	Limit Level
Suspended Solids (SS)	mg L ⁻¹	Mid-Ebb	Depth-averaged	21.6	29.8
		Mid-Flood	Depth-averaged	30.8	34.3
Dissolved Oxygen (DO)	mg L ⁻¹	Mid-Ebb	Surface and Middle	6.6	4.0
			Bottom	6.9	2.0
		Mid-Flood	Surface and Middle	6.8	4.0
			Bottom	6.8	2.0
Turbidity	NTU	Mid-Ebb	Depth-averaged	17.4	25.9
		Mid-Flood	Depth-averaged	22.9	27.9

Notes:

- (1) The results recorded at the gradient station during the mid-flood period will be used to decide whether any exceedance being recorded during mid-flood are arising from the marine works of this Project.
- (2) Turbidity and SS levels will make reference to 120% and 130% of value recorded at the upstream control station during the same tidal conditions to assess the compliance of Action and Limit Levels respectively.

3.3.4 Event and Action Plan

The Event and Action Plan for water quality monitoring which was stipulated in the *EM&A Manual* is presented in *Table 3.3*.

Table 3.3 *Event and Action Plan for Water Quality*

Event	Action
Action Level Exceedance	<p>Step 1 - repeat sampling event;</p> <p>Step 2 - identify source(s) of impact and confirm whether exceedance was due to the construction works;</p> <p>Step 3 - inform EPD and LCSD and confirm notification of the non-compliance in writing;</p> <p>Step 4 - discuss with cable installation contractor the most appropriate method of reducing suspended solids during cable installation (e.g. reduce cable laying speed/ volume of water used during installation, increase effectiveness of silt curtain).</p> <p>Step 5 - repeat measurements after implementation of mitigation for confirmation of compliance.</p> <p>Step 6 - if non compliance continues - increase measures in Step 3 and repeat measurements in Step 3. If non compliance occurs a third time, suspend cable laying operations.</p>
Limit Level Exceedance	<p>Undertake Steps 1-5 immediately, if further non compliance continues at the Limit Level, suspend cable laying operations until an effective solution is identified.</p>

4 *IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES*

4.1 *RECOMMENDED MITIGATION MEASURES*

Mitigation measures for water quality control have been recommended in the Project Profile and the Environmental Permit. The Contractor is responsible for the design and implementation of the following measures.

During cable laying the following will be undertaken:

- Although the sediment loss during both grab dredging and suction dredging is expected to be quite small, the Contractor will be employing a silt curtain around the dredgers to reduce the dispersion of sediments from the landing points.
- Closed grab dredgers will be used to avoid dispersion of suspended solids into the sea.
- The maximum dredging rate at Tuen Mun shore approach will be limited to 1,500 m³ day⁻¹ for working 10 hours per day, i.e., 150 m³ hr⁻¹.
- The maximum dredging rates of grab dredgers and suction method, whichever to be deployed by the contractor, at the Airport shore approach will be limited to 650 m³ day⁻¹ and 1,600 m³ day⁻¹ for working 16 hours per day, i.e., 41 m³ hr⁻¹ and 100 m³ hr⁻¹.
- All barges used for the transport of dredged materials will be fitted with tight bottom seals in order to prevent leakage of material during loading and transport.
- All barges will be filled to a level, to ensure that material does not spill over during loading and transport to the disposal site and that adequate freeboard is maintained to ensure that the decks are not washed by wave action.
- The forward speed of the jetting machine will be limited to a maximum of 80 m hr⁻¹ and 24 hours operation.

4.2 *IMPLEMENTATION STATUS OF MITIGATION MEASURES*

In addition to the regulatory requirements as mentioned in *Section 4.1* above, the Contractor has implemented a precautionary measure for the works undertaken at the inshore area. As a precautionary measure, a silt curtain has been installed at the Airport seawater intake and five silt curtains have been installed at the five AR blocks along the direction facing the cable alignment during construction of the Project. In addition, the cable laying

works undertaken in the vicinity of the ARs will be restricted to periods when the tidal current is moving away from the artificial reef towards the works area.

5 MONITORING RESULTS

5.1 IMPACT MONITORING RESULTS

The monitoring data and graphical presentations of the results are included in *Annex E*. These are summarised below.

A total of six monitoring events were scheduled between 3 March and 9 March 2008 at the Tuen Mun and Airport landing sites. All monitoring events at all designated monitoring stations were performed on schedule, ie on 4 March, 6 March and 8 March 2008 at Tuen Mun, and on 3 March, 5 March and 7 March at the Airport.

No major activities influencing the water quality were identified between 3 and 9 March 2008.

All measured dissolved oxygen levels compiled with the Action and Limit (AL) Levels, while Turbidity and Suspended Solids (SS) levels were all below AL Levels during the reporting week (*Annex E*), with exception of 5 to 8 March 2008.

5.2 DOLPHIN MONITORING

In accordance with the EM&A Manual, dolphin monitoring has been conducted during the cable laying (jetting) operations on 3 March to the morning of 5 March 2008. During the reporting period, no dolphin sightings were recorded. The dolphin observation recording forms are included in *Annex F*.

5.3 TIDAL FLOW DIRECTION MONITORING

Cable laying works were carried out, in accordance with the EM&A Manual, only during periods when the tidal current was moving away from the artificial reef towards the works near the Airport.

To monitor the tidal flow direction, two flow meters were installed, one on the burial machine to record the current direction near the seabed and one on the lay barge to record the current direction near the water surface. The current direction was logged by computer on board.

The cable laying operations across the AR restricted zone were conducted in 3 March 2008 afternoon (from 3:09 pm to 3:51 pm and 4:41 pm to 5:11 pm). The current flow and direction data during that specific period are presented in *Annex G*. It should be noted that the tidal current was moving towards the flood direction opposite to the artificial reef most of the time and the current speed ranged from 0.1 to 2.2 km/hr.

6.1 SUMMARY OF ENVIRONMENTAL EXCEEDANCE

6.1.1 Exceedance on 5 March 2008

Exceedance of the Action Level of depth-averaged Suspended Solids (SS) was recorded at Station U2 during mid-flood tide on 5 March 2008 (*Table 6.1*).

Table 6.1 *Exceedance of Action Level of Depth-averaged Suspended Solids (mg/L) during Mid-flood Tide on 5 March 2008*

Exceedance Log No.	0072833_5 Mar 08_SS_F_Station U2	
Sampling date	5 March 2008	
Monitoring station	U2	
Action Levels (mg/L)	Mid-ebb	SS = 21.6
	Mid-flood	SS = 30.87
Limit Levels (mg/L)	Mid-ebb	SS = 29.8
	Mid-flood	SS = 34.3
Measured Levels (mg/L) at U2	Mid-ebb	SS = 14.3
	Mid-flood	SS = 31.5 (exceeds Action Level)

According to the work programme provided by the Contractor (*Annex A*), the Contractor confirmed no jetting operations were carried out near the Airport landing site during the mid-flood tide on 5 March 2008. The marine works involved relocating the submarine cable into the pre-excavated trench by the diver manually. Such works did not involve any removal of seabed sediments and hence it was unlikely to cause disturbance to the seabed.

In addition, U2 was located upstream of the Project site during mid-flood (see *Figure 6.1*). The exceedance at U2 was hence likely to be caused by the regional effect rather than the Project works. The exceedance was also considered to be an isolated case since SS levels at all Impact Stations did not show non-compliance during the preceding mid-ebb tidal conditions. This suggests that there may be temporarily tidal influence at the area.

Based on the above, the exceedance was unlikely to be caused by the Project. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.

6.1.2 Exceedance on 6 March 2008

Exceedances of the Action/Limit Levels of depth-averaged Turbidity (NTU) and SS (mg/L) were recorded at Stations D1, U1 and SR1 during mid-ebb tide and mid-flood tide on 6 March 2008 (*Table 6.2*).

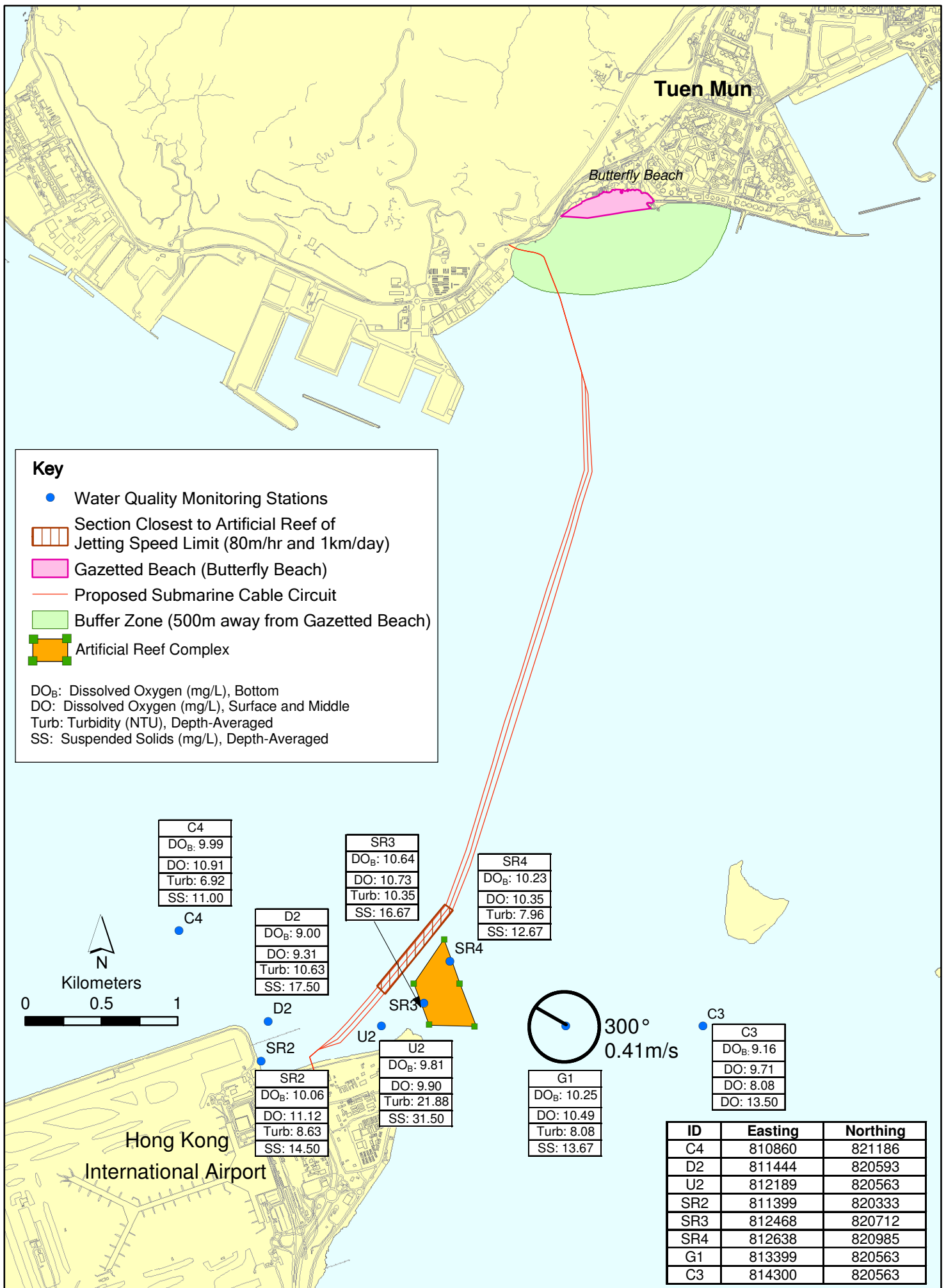


Figure 6.1

Mid Flood Water Quality Monitoring
(5 March 2008)

Table 6.2 *Exceedances of Action/Limit Levels of Depth-averaged Turbidity (NTU) and Suspended Solids (SS, mg/L) during Mid-ebb Tide on 6 March 2008*

Exceedance Log No.	0072833_6 Mar 08_Turb_E_Station D1 0072833_6 Mar 08_Turb_E_Station U1 0072833_6 Mar 08_Turb_E_Station SR1 0072833_6 Mar 08_SS_E_Station D1 0072833_6 Mar 08_SS_E_Station U1 0072833_6 Mar 08_SS_E_Station SR1	
Sampling date	6 March 2008	
Monitoring station	D1, U1 and SR1	
Action Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 7.0, SS = 12.8
	Mid-flood	Turbidity = 14.8, SS = 23.6
Limit Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 8.3, SS = 13.3
	Mid-flood	Turbidity = 18.9, SS = 28.3
Measured Levels (Turbidity, NTU; SS, mg/L) at D1	Mid-ebb	Turbidity = 8.70 (exceed Limit Level) SS = 14.50 (exceed Limit Level)
	Mid-flood	Turbidity = 6.33, SS = 11.67
Measured Levels (Turbidity, NTU; SS, mg/L) at U1	Mid-ebb	Turbidity = 7.41 (exceed Action Level) SS = 13.67 (exceeds Limit Level)
	Mid-flood	Turbidity = 6.97, SS = 13.50
Measured Levels (Turbidity, NTU; SS, mg/L) at SR1	Mid-ebb	Turbidity = 11.40 (exceed Limit Level) SS = 19.17 (exceeds Limit Level)
	Mid-flood	Turbidity = 5.37, SS = 10.17

The Contractor confirmed the cable landing works were carried out near the Tuen Mun landing site whereas the monitoring stations were located near the Airport landing site. The marine works involved guiding the cable into the land joint bay at the Airport which were unlikely to disturb the seabed.

It was observed that the turbidity and SS levels at the upstream control station C2 were relatively high (*Figure 6.2*). This suggests that the exceedances may be due to a high background level of turbidity and SS. In addition, turbidity and SS levels of all Impact Stations did not show non-compliance during the subsequent mid-flood tidal conditions and persist occurrence of exceedance was not observed. The exceedances were hence considered to be an isolated case and may be due to natural fluctuation. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.

6.1.3 *Exceedance on 7 March 2008*

Exceedances of the Action/Limit Levels of depth-averaged Turbidity (NTU) and SS (mg/L) were recorded at Stations U2 and SR4 during mid-ebb tide and mid-flood tide on 7 March 2008 (*Table 6.3*).

Table 6.3 *Exceedances of Action/Limit Levels of Depth-averaged Turbidity (NTU) and Suspended Solids (SS, mg/L) during Mid-flood Tide on 7 March 2008*

Exceedance Log No.	0072833_7 Mar 08_Turb_F_Station U2 0072833_7 Mar 08_Turb_F_Station SR4 0072833_7 Mar 08_SS_F_Station U2 0072833_7 Mar 08_SS_F_Station SR4	
---------------------------	--	--

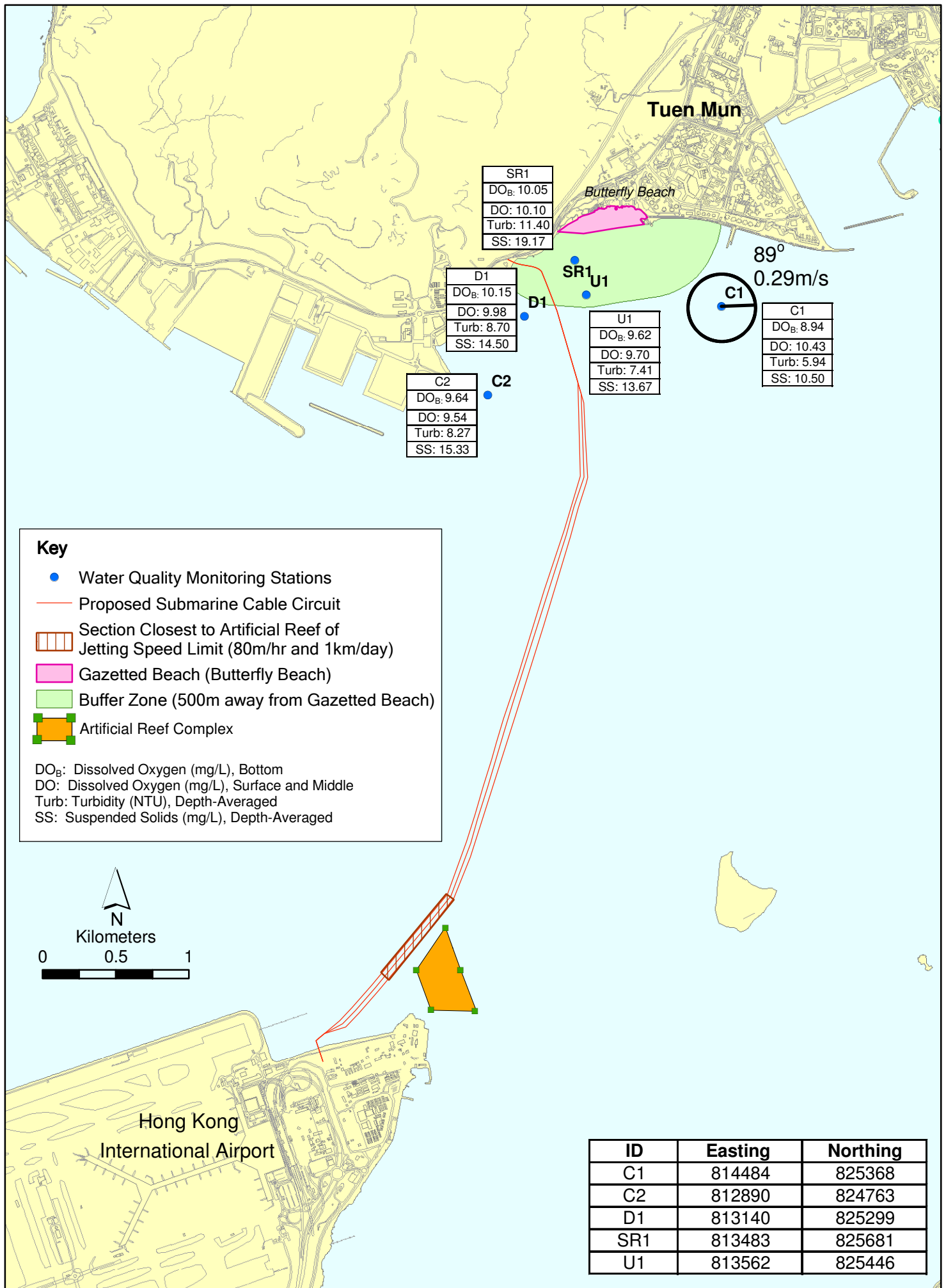


Figure 6.2

Mid Ebb Water Quality Monitoring
 (6 March 2008)

Environmental
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 Management



Sampling date	7 March 2008	
Monitoring station	U2 and SR4	
Action Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 17.4, SS = 21.6
	Mid-flood	Turbidity = 22.9, SS = 30.8
Limit Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 25.9, SS = 29.8
	Mid-flood	Turbidity = 27.4, SS = 34.3
Measured Levels (Turbidity, NTU; SS, mg/L) at U2	Mid-ebb	Turbidity = 10.55, SS = 15.00
	Mid-flood	Turbidity = 23.71 (exceeds Action Level) SS = 37.00 (exceeds Limit Level)
Measured Levels (Turbidity, NTU; SS, mg/L) at SR4	Mid-ebb	Turbidity = 11.23, SS = 15.83
	Mid-flood	Turbidity = 30.01 (exceeds Limit Level) SS = 42.67 (exceeds Limit Level)

The Contractor confirmed no jetting works were carried out near the Airport landing site on 7 March 2008. The marine works involved guiding the cable into the land joint bay at the Airport which were unlikely to disturb the seabed. The Contractor also confirmed that the cable landing operations were finished at 6:30 pm whereas the samples of stations SR4 and U 2 were taken after 7:54 pm.

As seen in *Figure 6.3*, U2 and SR4 were located upstream of the Project site during mid-flood. In addition, the cable landing operations were undertaken during both mid-ebb and mid-flood tides, whereas turbidity and SS of all Impact Stations did not show non-compliance during the preceding mid-ebb tidal conditions. This suggests that there maybe temporarily tidal influence at the area. The exceedances were hence considered to be an isolated case and may be due to natural fluctuation. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.

6.1.4 Exceedance on 8 March 2008

Exceedances of the Action/Limit Levels of depth-averaged Turbidity (NTU) and SS (mg/L) were recorded at Stations D1, U1 and SR1 during mid-ebb tide and mid-flood tide on 8 March 2008 (*Table 6.4*).

Table 6.4 *Exceedances of Action/Limit Levels of Depth-averaged Turbidity (NTU) and Suspended Solids (SS, mg/L) during Mid-ebb Tide and Mid-flood Tide on 8 March 2008*

Exceedance Log No.	0072833_8 Mar 08_Turb_E_Station D1 0072833_8 Mar 08_Turb_E_Station U1 0072833_8 Mar 08_Turb_E_Station SR1 0072833_8 Mar 08_Turb_F_Station D1 0072833_8 Mar 08_Turb_F_Station U1 0072833_8 Mar 08_Turb_F_Station SR1 0072833_8 Mar 08_SS_E_Station D1 0072833_8 Mar 08_SS_E_Station U1 0072833_8 Mar 08_SS_E_Station SR1 0072833_8 Mar 08_SS_F_Station D1 0072833_8 Mar 08_SS_F_Station U1 0072833_8 Mar 08_SS_F_Station SR1
Sampling date	8 March 2008
Monitoring station	D1, U1 and SR1

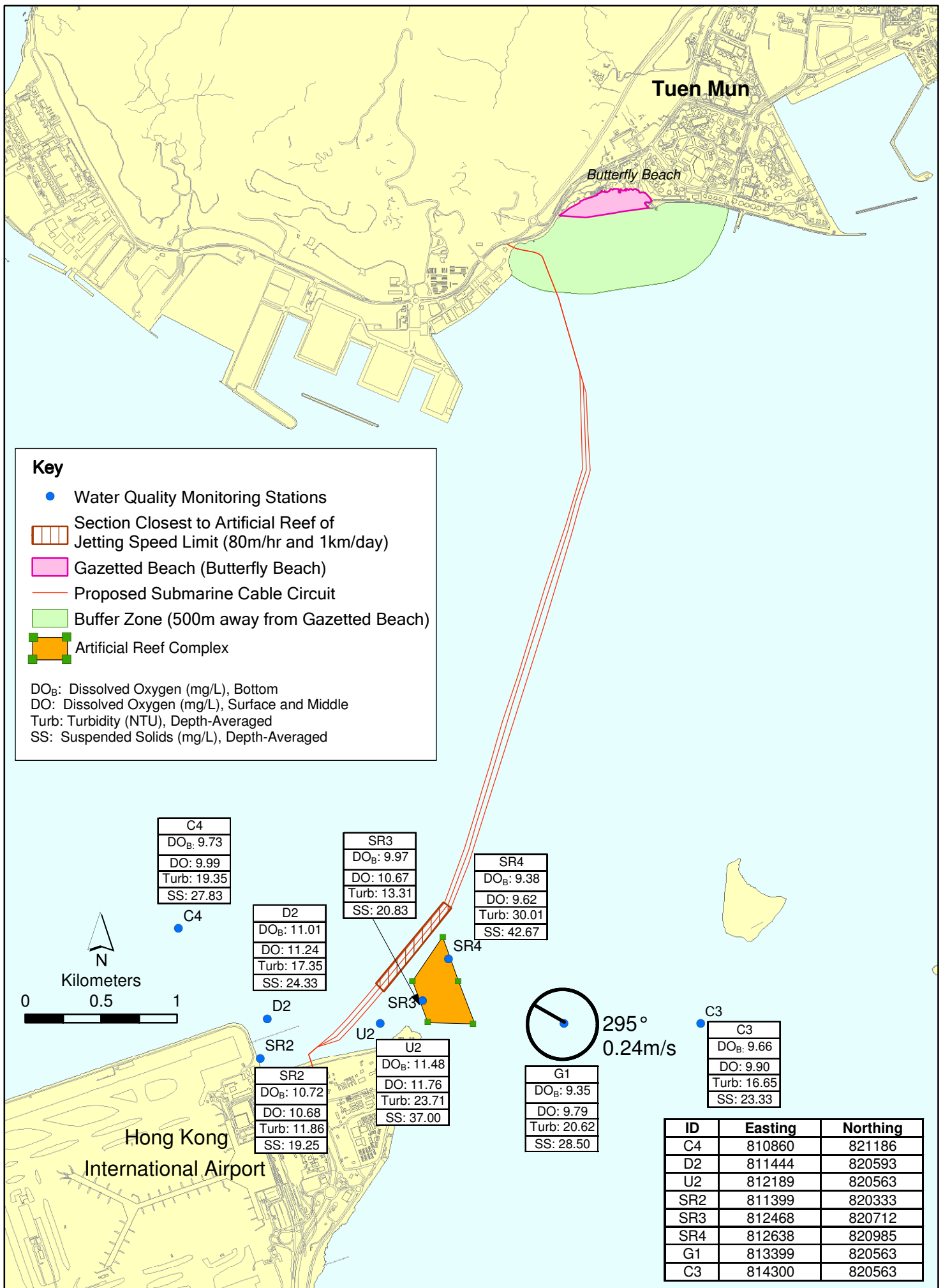


Figure 6.3

Mid Flood Water Quality Monitoring
(7 March 2008)

Environmental
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Management



Action Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 7.0, SS = 12.8
	Mid-flood	Turbidity = 14.8, SS = 23.6
Limit Levels (Turbidity, NTU; SS, mg/L)	Mid-ebb	Turbidity = 8.3, SS = 13.3
	Mid-flood	Turbidity = 18.9, SS = 28.3
Measured Levels (Turbidity, NTU; SS, mg/L) at D1	Mid-ebb	Turbidity = 9.32 (exceeds Limit Level) SS = 15.33 (exceeds Limit Level)
	Mid-flood	Turbidity = 21.14 (exceeds Limit Level) SS = 33.50 (exceeds Limit Level)
Measured Levels (Turbidity, NTU; SS, mg/L) at U1	Mid-ebb	Turbidity = 7.96 (exceeds Action Level) SS = 14.67 (exceeds Limit Level)
	Mid-flood	Turbidity = 18.97 (exceeds Limit Level) SS = 26.33 (exceeds Action Level)
Measured Levels (Turbidity, NTU; SS, mg/L) at SR1	Mid-ebb	Turbidity = 7.23 (exceeds Action Level) SS = 13.67 (exceeds Limit Level)
	Mid-flood	Turbidity = 19.82 (exceeds Limit Level) SS = 31.00 (exceeds Limit Level)

The Contractor confirmed that no marine works were carried out at the Tuen Mun landing site on 8 March 2008. The marine works which involved guiding the cable into the land joint bay at the Airport were unlikely to disturb the seabed and not in the close proximity of the monitoring stations.

In addition, the turbidity and SS levels at the upstream control station C2 were relatively high during mid-ebb and mid-flood tidal conditions as shown in *Figure 6.4* and *Figure 6.5*, respectively. This implies the exceedances may be due to high background levels of turbidity and SS.

Hence, the exceedances were considered to be an isolated case and may be due to natural fluctuation. No action was therefore required.

The exceedance incident has been notified to EPD and LCSD.

6.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

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

6.3 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during the reporting period.

6.4 SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION

No summons or prosecution on environmental matters was received during the reporting period.

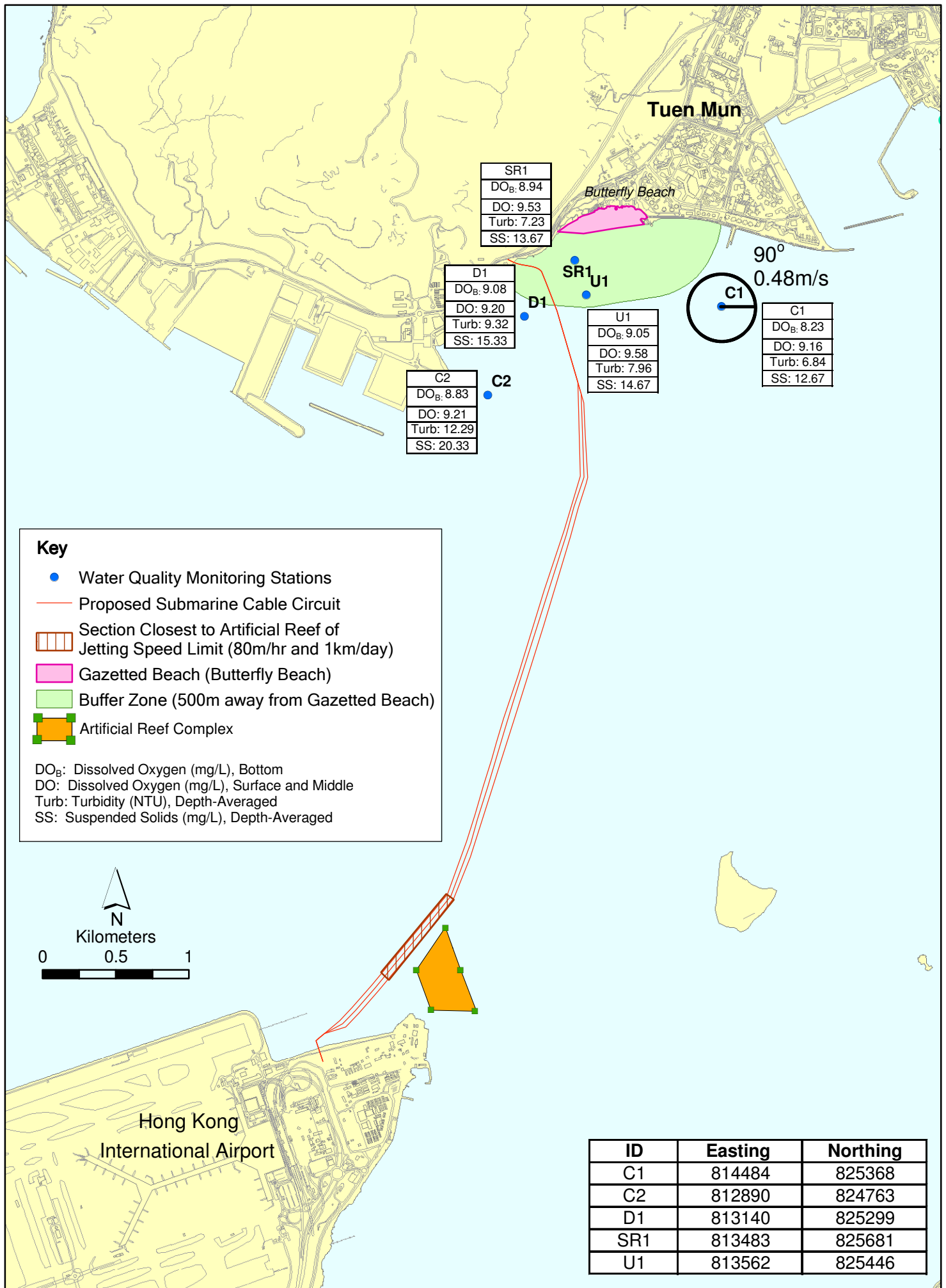


Figure 6.4

Mid Ebb Water Quality Monitoring
(8 March 2008)

Environmental
Resources
Management



7 *FUTURE KEY ISSUES*

7.1 *KEY ISSUES FOR THE COMING MONTH*

During the following week (ie 10 to 16 March 2008), cable lay barges preparation works will be carried out. Jetting/cable laying operations between the Airport and Tuen Mun landing sites will be undertaken afterwards.

The expected construction programme is enclosed in *Annex A*.

7.2 *MONITORING SCHEDULE FOR THE COMING MONTHS*

The tentative schedule of impact water quality monitoring in March 2008 is presented in *Annex C*. The environmental monitoring will be conducted at the same monitoring locations as those for this reporting week.

Cable laying (jetting) operations and landing works were carried out between the Airport and Tuen Mun land sites during the period of 3 March to 9 March 2008. The monitoring data collected are therefore compared with the impact assessment predictions in the Project Profile.

It should be noted that exceedances of Action and Limit Levels were recorded when there were no cable laying (jetting) operations undertaken. The exceedances were investigated (see *Section 6.1*) and considered unlikely due to the Project. The impact water quality monitoring results are in line with the conclusions made in the water quality impact assessment in the Project Profile.

This Weekly Impact Monitoring Report presents the EM&A work undertaken during the period from 3 March to 9 March 2008 in accordance with the EM&A Manual and the requirements under *EP-267/2007*.

Exceedances of Action and Limit Levels were recorded on four monitoring days, ie 5, 6, 7, and 8 March 2008, in the reporting week. The exceedances were examined against the construction works. It was concluded that they were isolated cases and unlikely related to the Project.

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

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

The ET will keep track of the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Annex A

Works Programme of the
Period between 2 March
and 23 March 2008

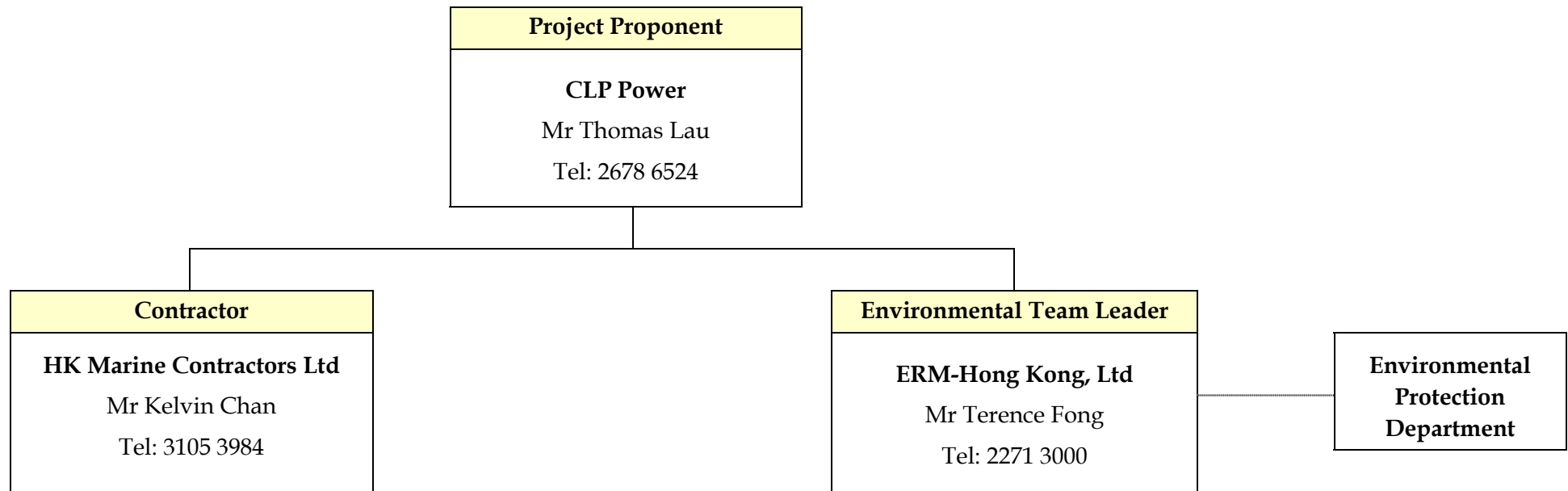
Marine Work of 132kV Submarine Cable Installation between Airport to Tuen Mun

Item	Date	Workdone for Last Week							Plan for This Week							Anticipate Plan for Next Week						
		3/3	4/3	5/3	6/3	7/3	8/3	9/3	10/3	11/3	12/3	13/3	14/3	15/3	16/3	17/3	18/3	19/3	20/3	21/3	22/3	23/3
1	Mobilization of Plants																					
2	Utilities Detection																					
3	Mobilization of Marine Plant																					
4	Site Setting Out																					
5	Site Clearance																					
6	Installation of Silt Curtain																					
5	Rock Breaking (Land Portion)																					
6	Rock Breaking (Marine Portion)																					
7	Dredging (Tuen Mun)																					
8	Mobilization of Marine Plant																					
9	Dredging (Airport)																					
10	Mobilization of Cable Laying Barges																					
11	Cable Lay Barges Preparation Work																					
12	Installation of Silt Curtain (AR)																					
13	Cable Burial Machine Testing																					
14	Cable Laying																					
15	Cable Landing Work (Tuen Mun)																					
16	Cable Landing Work (Airport)																					

Annex B

Project Organisation Chart (with Contact Details)

ANNEX B - PROJECT ORGANIZATION (WITH CONTACT DETAILS)



————— Line of Project Management Responsibility
 Communication Channel

Annex C

Tentative Monitoring Schedule

**Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit
Tentative Water Quality Monitoring Schedule at Tuen Mun and Airport landing site - February 2008**

Reference Tidal Station: Lok On Pai (source: HK Observatory Department)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-Feb	02-Feb
						Mid-Flood 10:08 Mid-Ebb 22:24 <i>Impact Monitoring (Airport)</i>
03-Feb	04-Feb	05-Feb	06-Feb	07-Feb	08-Feb	09-Feb
	Mid-Ebb 11:34 Mid-Flood 16:06 <i>Impact Monitoring (Airport)</i>		Mid-Flood 07:46 Mid-Ebb 12:54 <i>Impact Monitoring (Airport)</i>			Mid-Flood 08:55 Mid-Ebb 14:32 <i>Impact Monitoring (Airport)</i>
10-Feb	11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb
	Mid-Flood 09:41 Mid-Ebb 15:44 <i>Impact Monitoring (Airport)</i>		Mid-Flood 10:38 Mid-Ebb 17:27 <i>Impact Monitoring (Airport)</i>		Mid-Flood 11:50 Mid-Ebb 20:08 <i>Impact Monitoring (Airport)</i>	
17-Feb	18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb
	Mid-Flood 16:09 Mid-Ebb 23:37 <i>Impact Monitoring (Airport)</i>	Mid-Ebb 12:11 Mid-Flood 17:19 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 12:48 Mid-Flood 18:12 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Ebb 13:22 Mid-Flood 18:58 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 13:53 Mid-Flood 19:39 <i>Impact Monitoring (Airport)</i>	Mid-Flood 08:40 Mid-Ebb 14:21 <i>Impact Monitoring (Tuen Mun)</i>
24-Feb	25-Feb	26-Feb	27-Feb	28-Feb	29-Feb	
	Mid-Flood 09:18 Mid-Ebb 15:22 <i>Impact Monitoring (Airport)</i>	Mid-Flood 09:39 Mid-Ebb 15:58 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 10:00 Mid-Ebb 16:40 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Flood 10:18 Mid-Ebb 17:34 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 10:21 Mid-Ebb 19:13 <i>Impact Monitoring (Airport)</i>	

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

**Proposed 132kV Submarine Cable Route for Airport "A" to Castle Peak Power Station Cable Circuit
Tentative Water Quality Monitoring Schedule at Tuen Mun and Airport landing site - March 2008**

Reference Tidal Station: Lok On Pai (source: HK Observatory Department)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Mar
						Mid-Flood 07:48 Mid-Ebb 20:34 <i>Impact Monitoring (Tuen Mun)</i>
02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar	08-Mar
	Mid-Flood 10:15 Mid-Ebb 22:33 <i>Impact Monitoring (Airport)</i>	Mid-Ebb 11:26 Mid-Flood 16:06 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 12:00 Mid-Flood 17:05 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Ebb 12:32 Mid-Flood 17:55 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 13:01 Mid-Flood 18:41 <i>Impact Monitoring (Airport)</i>	Mid-Ebb 13:31 Mid-Flood 19:26 <i>Impact Monitoring (Tuen Mun)</i>
09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	15-Mar
	Mid-Flood 08:29 Mid-Ebb 14:41 <i>Impact Monitoring (Airport)</i>	Mid-Flood 08:56 Mid-Ebb 15:22 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 09:24 Mid-Ebb 16:09 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Flood 09:54 Mid-Ebb 17:06 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 10:23 Mid-Ebb 18:13 <i>Impact Monitoring (Airport)</i>	
16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar	22-Mar
Mid-Flood 08:43 Mid-Ebb 21:19 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 10:04 Mid-Ebb 22:28 <i>Impact Monitoring (Airport)</i>	Mid-Ebb 11:23 Mid-Flood 16:28 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 11:56 Mid-Flood 17:26 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Ebb 12:27 Mid-Flood 18:13 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 12:56 Mid-Flood 18:55 <i>Impact Monitoring (Airport)</i>	
23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar	29-Mar
Mid-Ebb 13:51 Mid-Flood 20:10 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Ebb 14:22 Mid-Flood 20:47 <i>Impact Monitoring (Airport)</i>	Mid-Flood 08:28 Mid-Ebb 14:54 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 08:49 Mid-Ebb 15:28 <i>Impact Monitoring (Airport) + Ma Wan</i>	Mid-Flood 09:08 Mid-Ebb 16:06 <i>Impact Monitoring (Tuen Mun)</i>	Mid-Flood 09:20 Mid-Ebb 16:53 <i>Impact Monitoring (Airport)</i>	Mid-Flood 08:00 Mid-Ebb 17:54 <i>Impact Monitoring (Tuen Mun)</i>
30-Mar	31-Mar					
	Mid-Flood 08:08 Mid-Ebb 19:00 <i>Impact Monitoring (Airport)</i>					

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

Annex D

QA/QC Results of Laboratory Testing for Suspended Solids



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803416
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 4 Mar 2008
Order number	: ----			Date of issue	: 6 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 92
Site	: ----				- Analysed : 92

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803416 supersedes any previous reports with this reference. The completion date of analysis is 6 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803416 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 607306)								
HK0803416-001	2008/03/03/22:05/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	14	15	7.4
	REPL. 1							
HK0803416-011	2008/03/03/21:44/SR3/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	10	8	18.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 607307)								
HK0803416-021	2008/03/03/21:57/D2/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	6	5	28.0
	REPL. 1							
HK0803416-031	2008/03/03/21:32/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	19	19	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 607308)								
HK0803416-041	2008/03/03/21:25/G1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	5	6	0.0
	REPL. 2							
HK0803416-051	2008/03/03/10:30/C4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	5	4	0.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 607309)								
HK0803416-061	2008/03/03/10:12/U2/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	4	4	0.0
	REPL. 1							
HK0803416-072	2008/03/03/09:36/C3/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	8	6	24.9
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 607310)								
HK0803416-081	2008/03/03/10:00/SR4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	12	10	16.2
	REPL. 2							
HK0803416-091	2008/03/03/10:16/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	9	11	18.0
	REPL. 2							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results



Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		Method: Analysis Description	CAS number	LOR		Units	Result	SCS	DCS	Low	High
EA/ED: Physical and Aggregate Properties (QCLot: 607306)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	92.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 607307)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 607308)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	101	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 607309)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 607310)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803472
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E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 5 Mar 2008
Order number	: ----			Date of issue	: 7 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 60
Site	: ----				- Analysed : 60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803472 supersedes any previous reports with this reference. The completion date of analysis is 6 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803472 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 608783)								
HK0803472-001	2008/03/04/21:56/C1/B/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	8	6	30.0
HK0803472-011	2008/03/04/22:09/SR1/M/E/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	6	8	40.7
EA/ED: Physical and Aggregate Properties (QC Lot: 608784)								
HK0803472-021	2008/03/04/22:22/D1/T/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	9	7	25.2
HK0803472-031	2008/03/04/14:51/C1/B/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	6	7	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 608785)								
HK0803472-041	2008/03/04/15:05/SR1/M/F/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	6	7	20.9
HK0803472-051	2008/03/04/15:22/D1/T/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
Method: Analysis Description	CAS number	LOR	Units	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 608783)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608784)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608785)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	99.5	----	85	115	----	----



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 11
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803544
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 6 Mar 2008
Order number	: ----			Date of issue	: 10 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 116
Site	: ----				- Analysed : 116

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803544 supersedes any previous reports with this reference. The completion date of analysis is 7 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803544 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 608786)								
HK0803544-001	2008/03/05/13:07/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	13	13.4
	REPL. 1							
HK0803544-011	2008/03/05/12:56/SR3/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	11	11.5
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 608787)								
HK0803544-023	2008/03/05/12:03/D2/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	14	11	21.5
	REPL. 2							
HK0803544-031	2008/03/05/12:41/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	18	15	20.3
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 608788)								
HK0803544-041	2008/03/05/12:35/G1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	25	26	6.2
	REPL. 2							
HK0803544-051	2008/03/05/11:08/M1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	7	6	18.3
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 608789)								
HK0803544-061	2008/03/05/16:03/C4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	11	10	0.0
	REPL. 1							
HK0803544-071	2008/03/05/16:13/U2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	31	31	0.0
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 608790)								
HK0803544-081	2008/03/05/16:40/D2/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	14	13	0.0
	REPL. 2							
HK0803544-091	2008/03/05/16:28/SR4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	10	12	10.8
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 608791)								
HK0803544-101	2008/03/05/15:52/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	16	16	0.0
	REPL. 1							
HK0803544-111	2008/03/05/17:42/M2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	8	8	0.0
	REPL. 1							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results



Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		Method: Analysis Description	CAS number	LOR		Units	Result	SCS	DCS	Low	High
EA/ED: Physical and Aggregate Properties (QCLot: 608786)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	95.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608787)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	110	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608788)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608789)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608790)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	88.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 608791)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	112	----	85	115	----	----



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803622
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 7 Mar 2008
Order number	: ----			Date of issue	: 10 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 60
Site	: ----				- Analysed : 60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803622 supersedes any previous reports with this reference. The completion date of analysis is 7 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803622 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 609853)								
HK0803622-001	2008/03/06/17:40/C1/B/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	14	14	0.0
HK0803622-011	2008/03/06/17:55/SR1/M/E/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	9	10	11.2
EA/ED: Physical and Aggregate Properties (QC Lot: 609854)								
HK0803622-021	2008/03/06/18:10/D1/T/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	11	10	0.0
HK0803622-031	2008/03/06/11:36/C1/B/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	11	10	10.9
EA/ED: Physical and Aggregate Properties (QC Lot: 609855)								
HK0803622-041	2008/03/06/12:14/SR1/M/F/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	22	22	0.0
HK0803622-051	2008/03/06/12:25/D1/T/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	14	15	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
Method: Analysis Description	CAS number	LOR	Units	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 609853)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 609854)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 609855)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.5	----	85	115	----	----



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 9
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803738
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 8 Mar 2008
Order number	: ----			Date of issue	: 11 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 92
Site	: ----				- Analysed : 92

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803738 supersedes any previous reports with this reference. The completion date of analysis is 10 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803738 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 610984)								
HK0803738-001	2008/03/07/12:54/C4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	30	27	11.6
	REPL. 1							
HK0803738-012	2008/03/07/12:34/SR3/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	12	13	12.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 610985)								
HK0803738-021	2008/03/07/12:47/D2/T/E/	EA025: Suspended Solids (SS)	----	1	mg/L	19	18	5.5
	REPL. 1							
HK0803738-031	2008/03/07/12:23/SR4/B/E/	EA025: Suspended Solids (SS)	----	1	mg/L	20	23	14.9
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 610986)								
HK0803738-041	2008/03/07/12:14/G1/M/E/	EA025: Suspended Solids (SS)	----	1	mg/L	20	20	0.0
	REPL. 2							
HK0803738-052	2008/03/07/20:46/C4/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	25	28	11.0
	REPL. 2							
EA/ED: Physical and Aggregate Properties (QC Lot: 610987)								
HK0803738-061	2008/03/07/20:21/U2/T/F/	EA025: Suspended Solids (SS)	----	1	mg/L	27	29	8.4
	REPL. 1							
HK0803738-071	2008/03/07/19:24/C3/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	36	33	8.1
	REPL. 1							
EA/ED: Physical and Aggregate Properties (QC Lot: 610988)								
HK0803738-081	2008/03/07/20:01/SR4/M/F/	EA025: Suspended Solids (SS)	----	1	mg/L	49	44	9.3
	REPL. 2							
HK0803738-089	2008/03/07/17:49/SR2/B/F/	EA025: Suspended Solids (SS)	----	1	mg/L	19	20	5.8
	REPL. 1							

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results



Matrix Type: WATER

Method: Analysis Description		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
		CAS number	LOR	Units	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
							SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 610984)												
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 610985)												
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	98.5	----	85	115	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 610986)												
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	94.0	----	85	115	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 610987)												
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	92.0	----	85	115	----	----	
EA/ED: Physical and Aggregate Properties (QCLot: 610988)												
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----	



CERTIFICATE OF ANALYSIS

Client	: ERM HONG KONG	Laboratory	: ALS Technichem (HK) Pty Ltd	Page	: 1 of 6
Contact	: MS JOANNA KWAN	Contact	: Alice Wong	Work Order	: HK0803761
Address	: 21/F, LINCOLN HOUSE, 979 KING`S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	Address	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
E-mail	: Joanna.kwan@erm.com	E-mail	: Alice.Wong@alsenviro.com		
Telephone	: 2271 3000	Telephone	: +852 2610 1044		
Facsimile	: 2723 5660	Facsimile	: +852 2610 2021		
Project	: EM&A FOR THE PROPOSED 132kV SUBMARINE CABLE ROUTE FOR AIRPORT "A" TO CASTLE PEAK CCTS	Quote number	: ----	Date received	: 10 Mar 2008
Order number	: ----			Date of issue	: 12 Mar 2008
C-O-C number	: ----			No. of samples	- Received : 60
Site	: ----				- Analysed : 60

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803761 supersedes any previous reports with this reference. The completion date of analysis is 11 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803761 : **Sample(s) were received in a chilled condition.**
Water sample(s) analysed and reported on an as received basis.

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<i>Signatory</i>	<i>Position</i>	<i>Authorised results for:-</i>
Fung Lim Chee, Richard	General Manager	Inorganics



Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 611775)								
HK0803761-001	2008/03/08/12:01/C1/B/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	12	15	22.4
HK0803761-011	2008/03/08/12:21/SR1/M/E/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	13	12	14.1
EA/ED: Physical and Aggregate Properties (QC Lot: 611776)								
HK0803761-021	2008/03/08/12:47/D1/T/E/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	13	14	13.2
HK0803761-031	2008/03/08/17:59/C1/B/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	19	17	12.1
EA/ED: Physical and Aggregate Properties (QC Lot: 611777)								
HK0803761-041	2008/03/08/18:12/SR1/M/F/ REPL. 2	EA025: Suspended Solids (SS)	----	1	mg/L	30	28	4.6
HK0803761-051	2008/03/08/18:32/D1/T/F/ REPL. 1	EA025: Suspended Solids (SS)	----	1	mg/L	18	19	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
Method: Analysis Description	CAS number	LOR	Units	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
						SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 611775)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 611776)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	105	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 611777)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----

Annex E

Impact Water Quality Monitoring Results

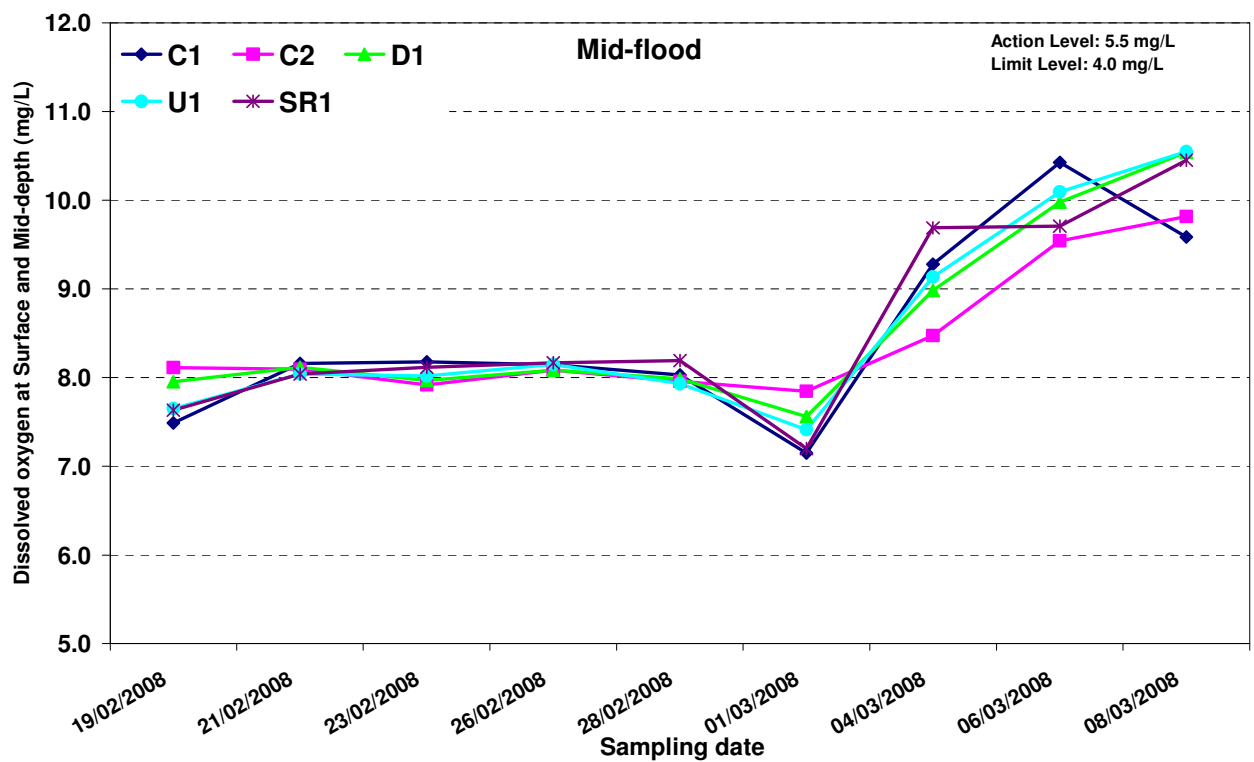
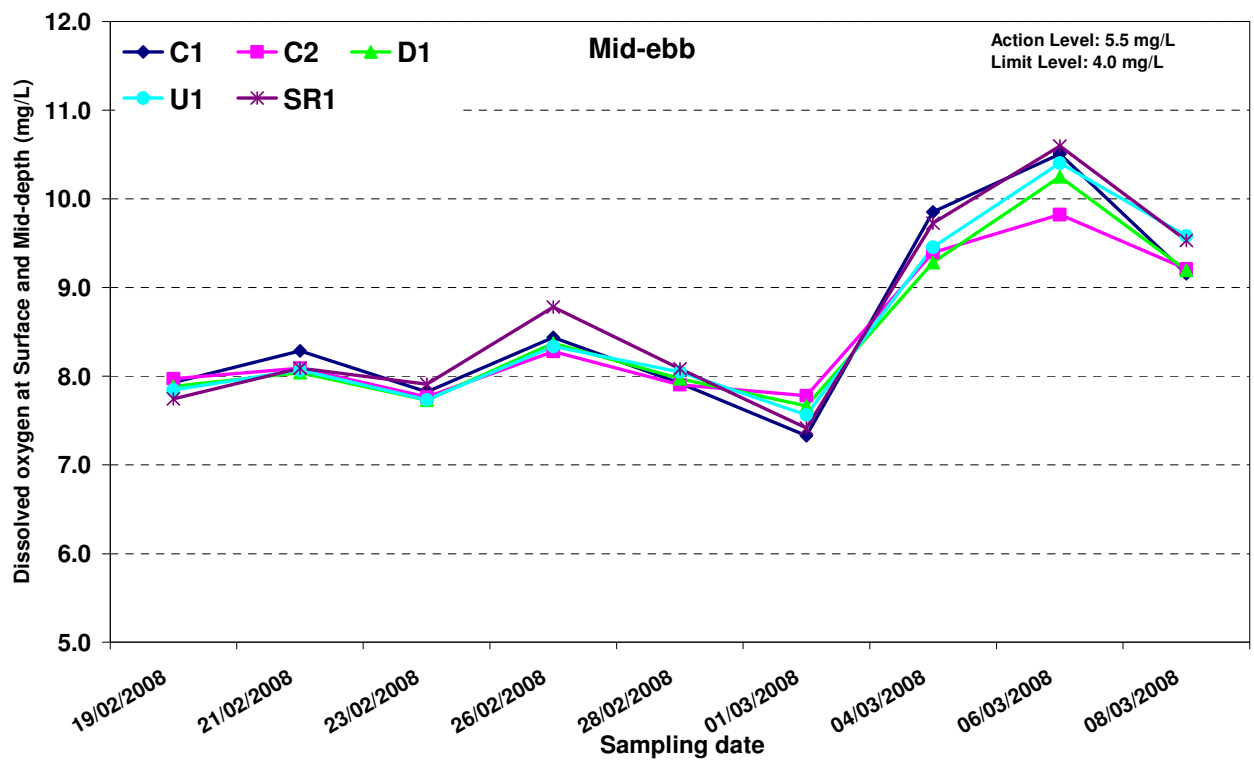


Figure E1 Dissolved oxygen concentration (mean of surface and mid-depth) (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 18 February and 9 March 2008

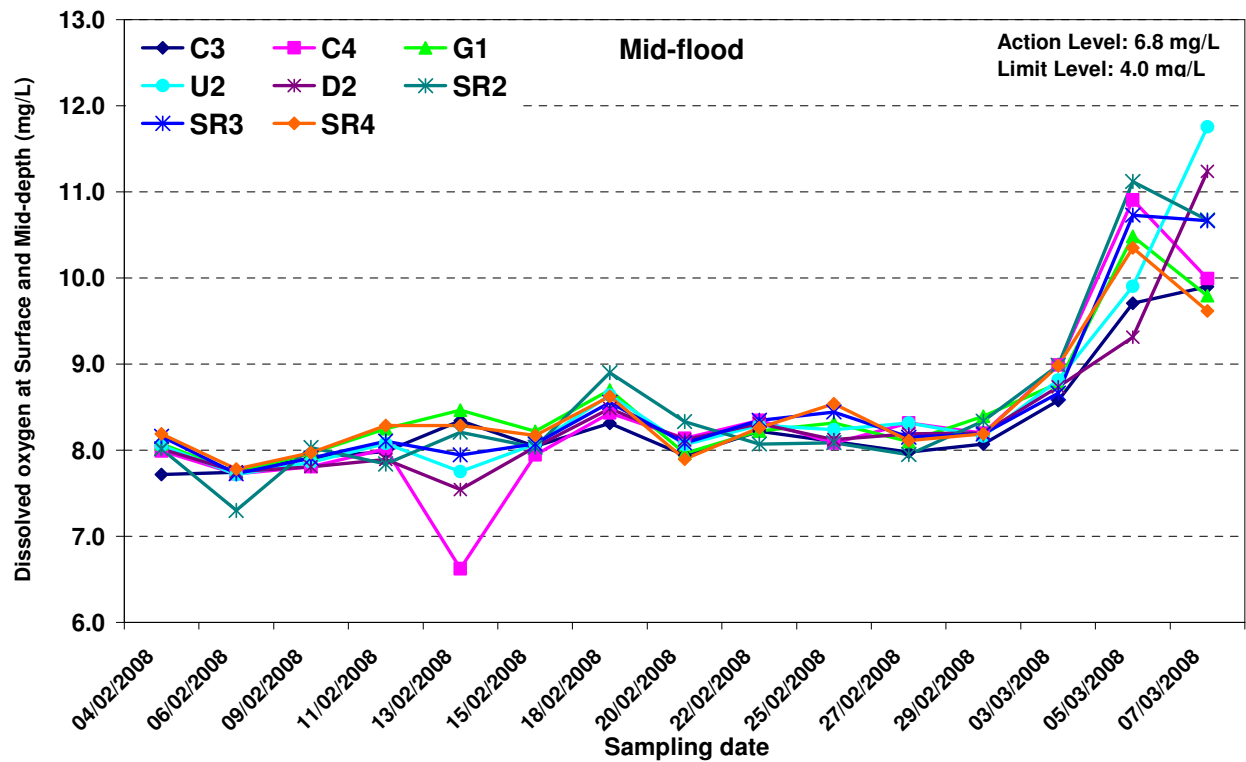
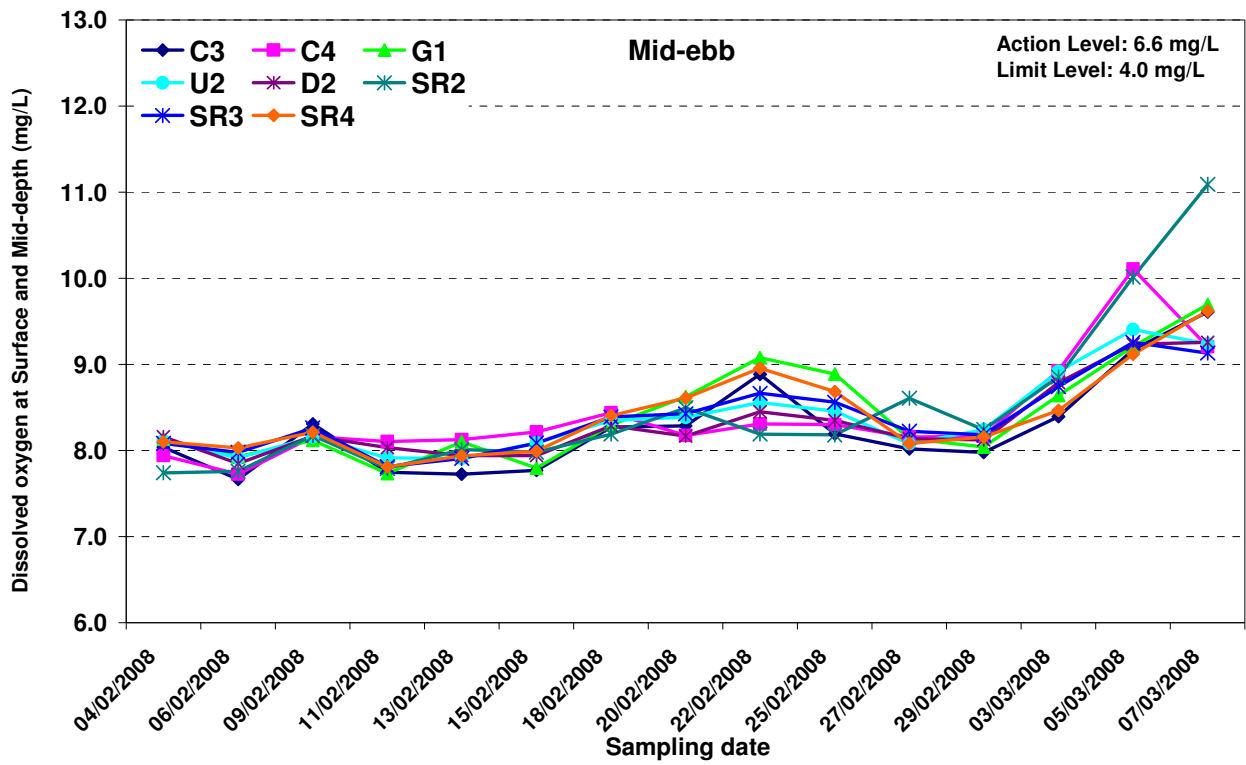


Figure E2 Dissolved oxygen concentration (mean of surface and mid-depth) (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 3 March and 9 March 2008, and previous monitoring period between 4 February 2008 and 2 March 2008



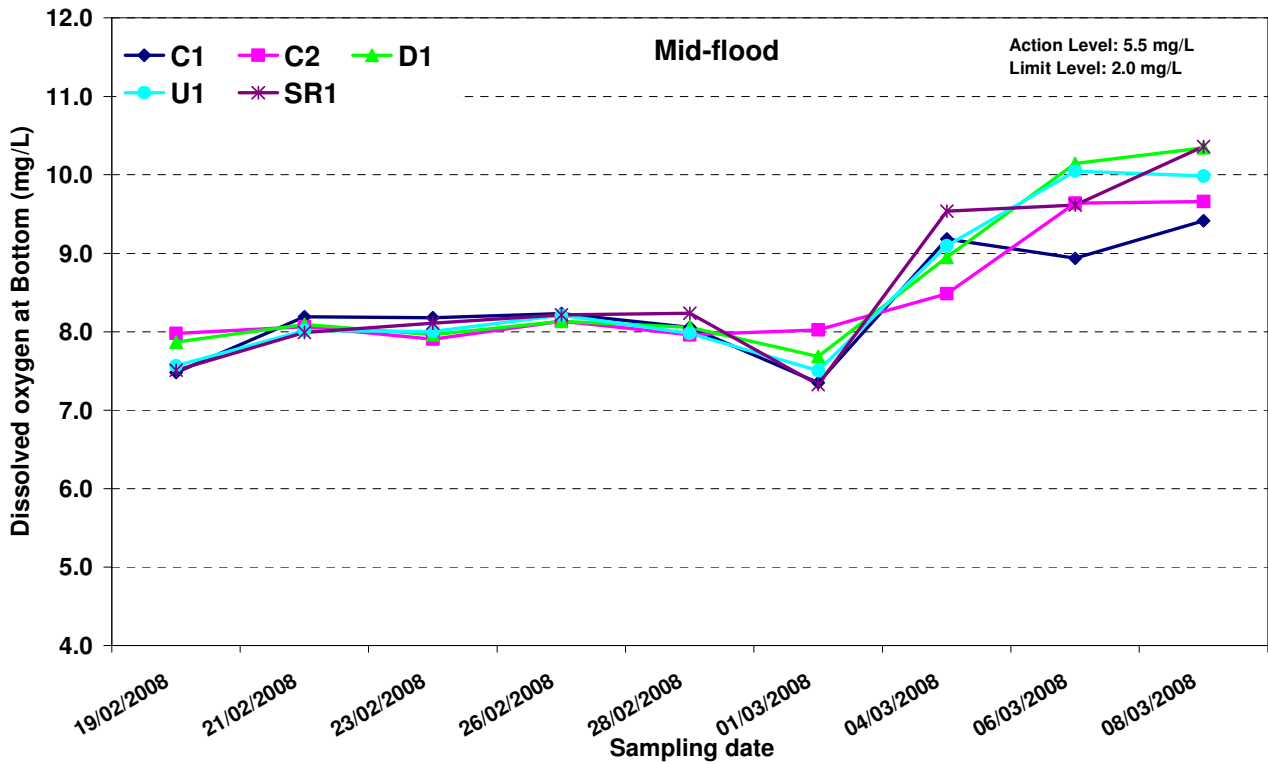
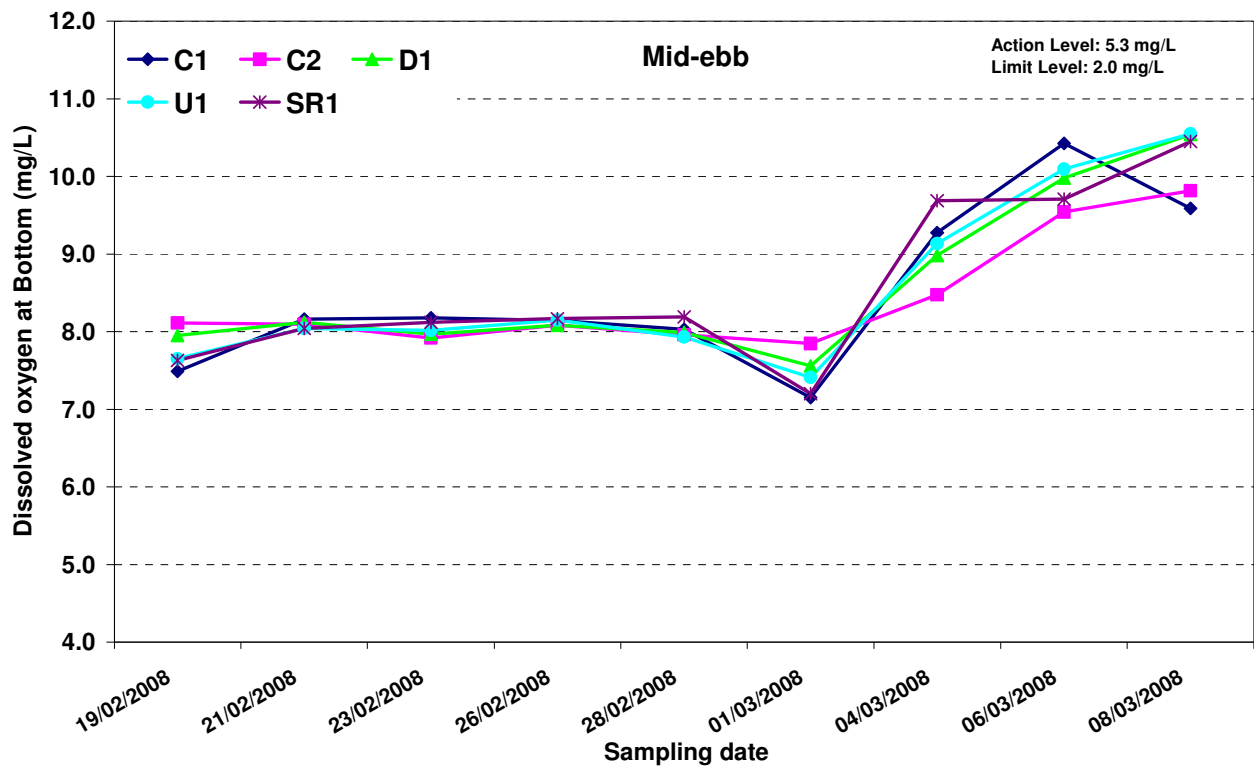


Figure E3 Dissolved oxygen concentration (bottom) (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 18 February and 9 March 2008



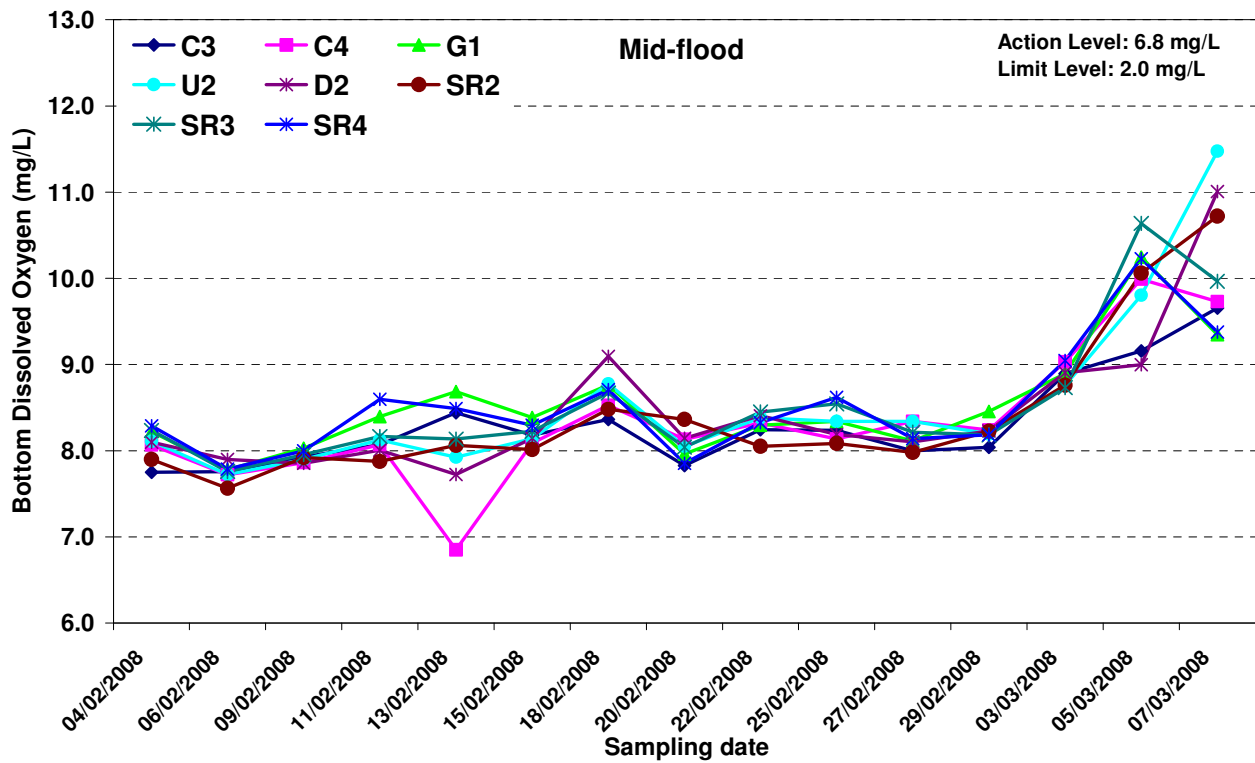
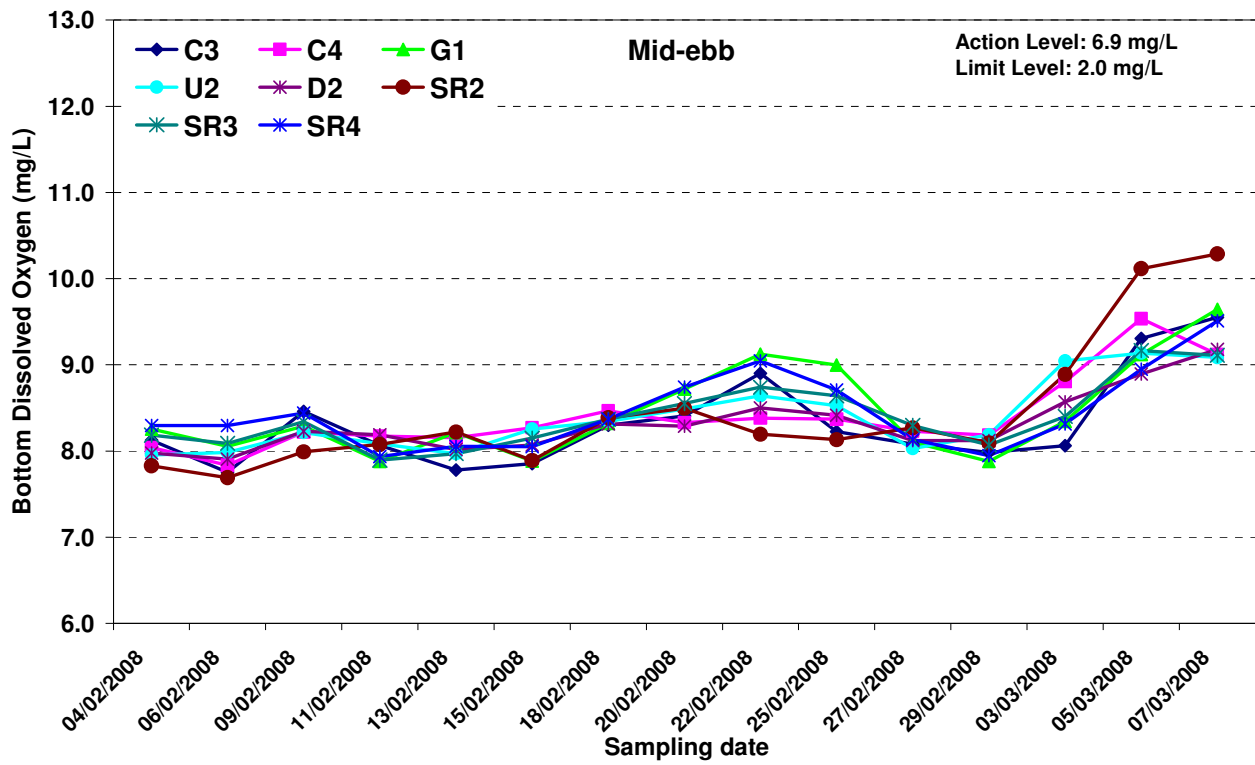


Figure E4 Dissolved oxygen concentration (bottom) (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 3 March and 9 March 2008, and previous monitoring period between 4 February 2008 and 2 March 2008



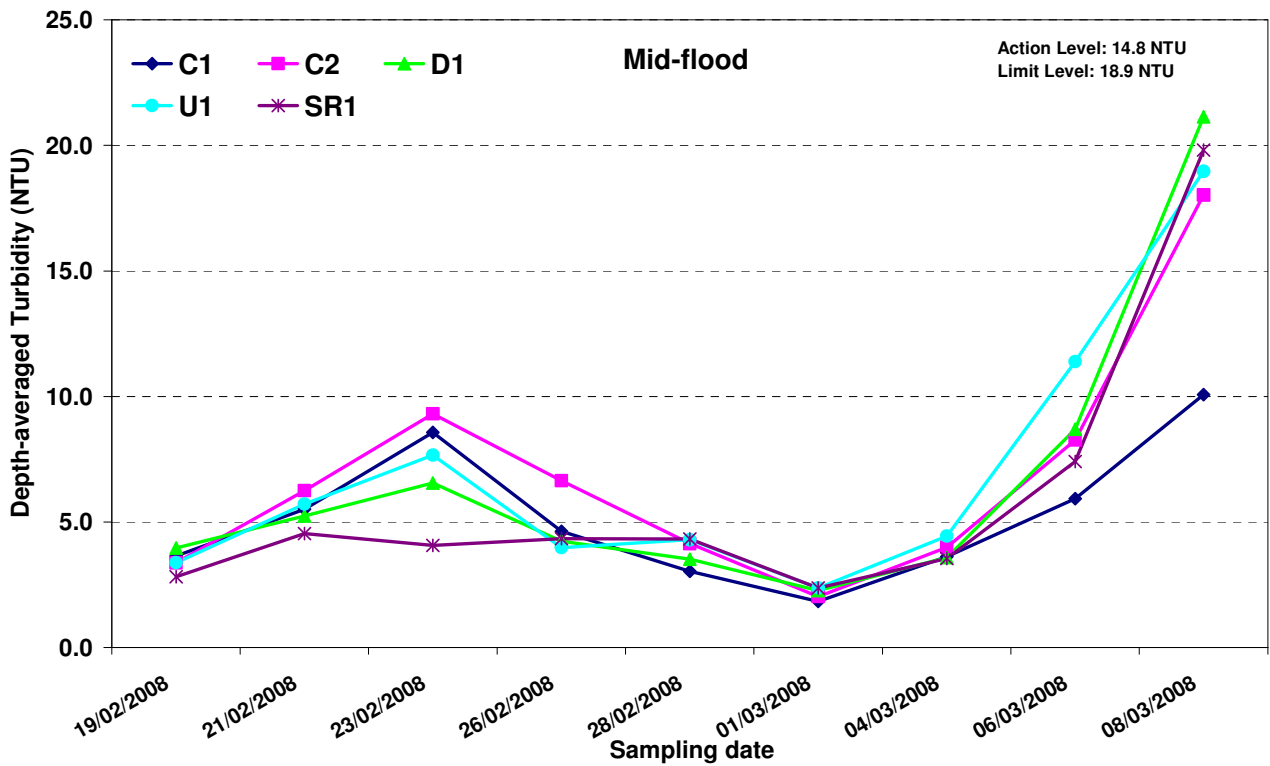
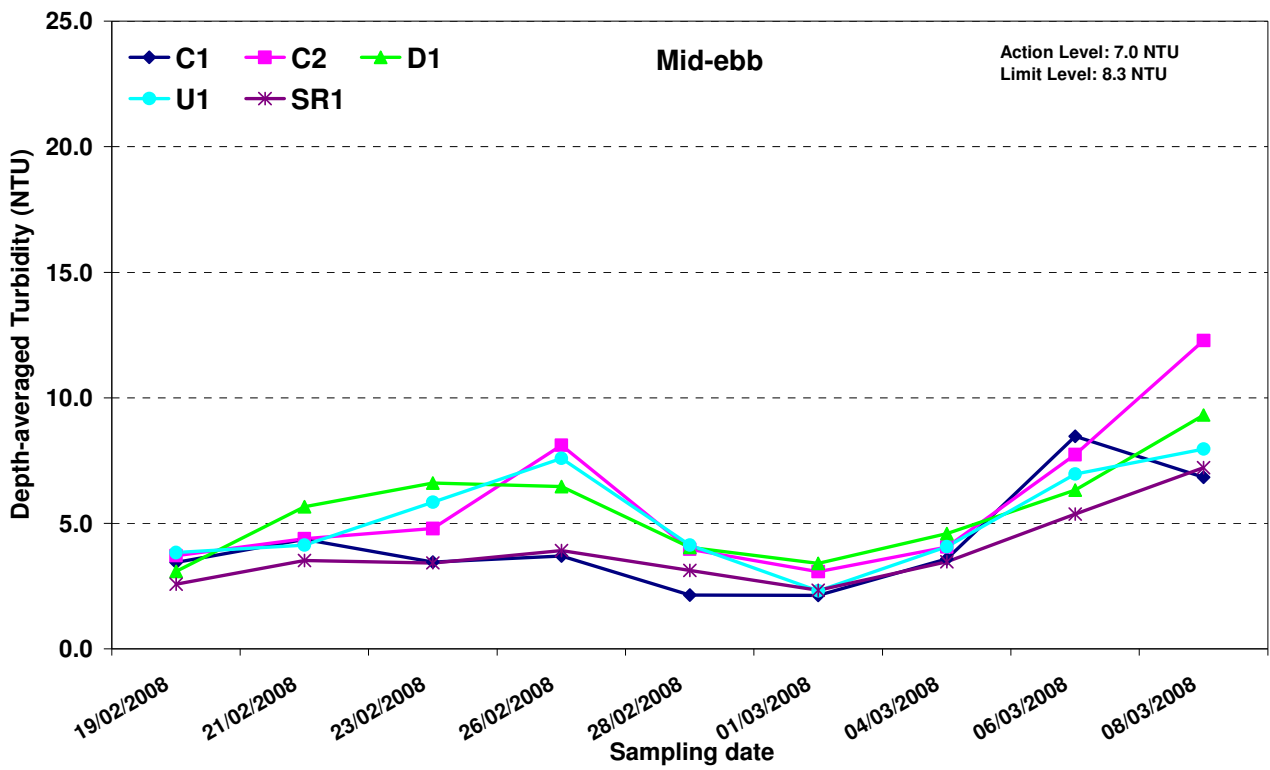


Figure E5 Depth-averaged turbidity (NTU) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 18 February and 9 March 2008

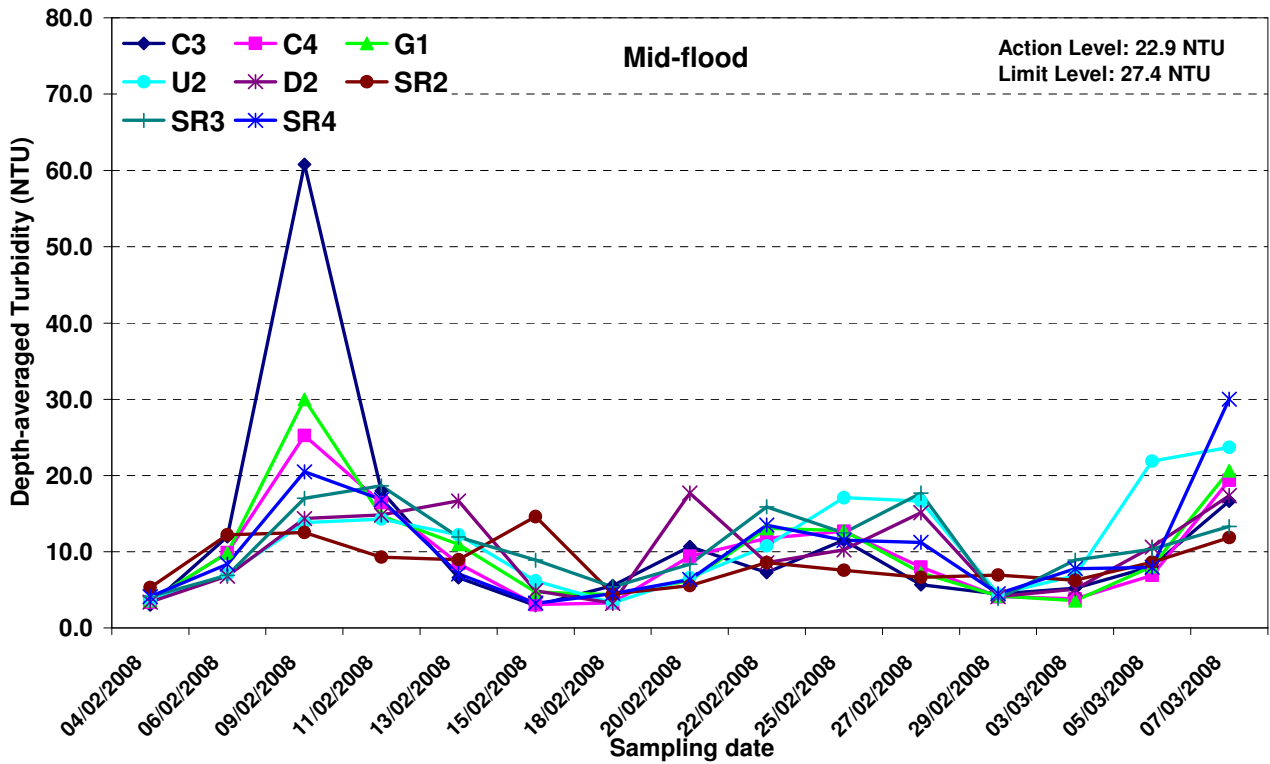
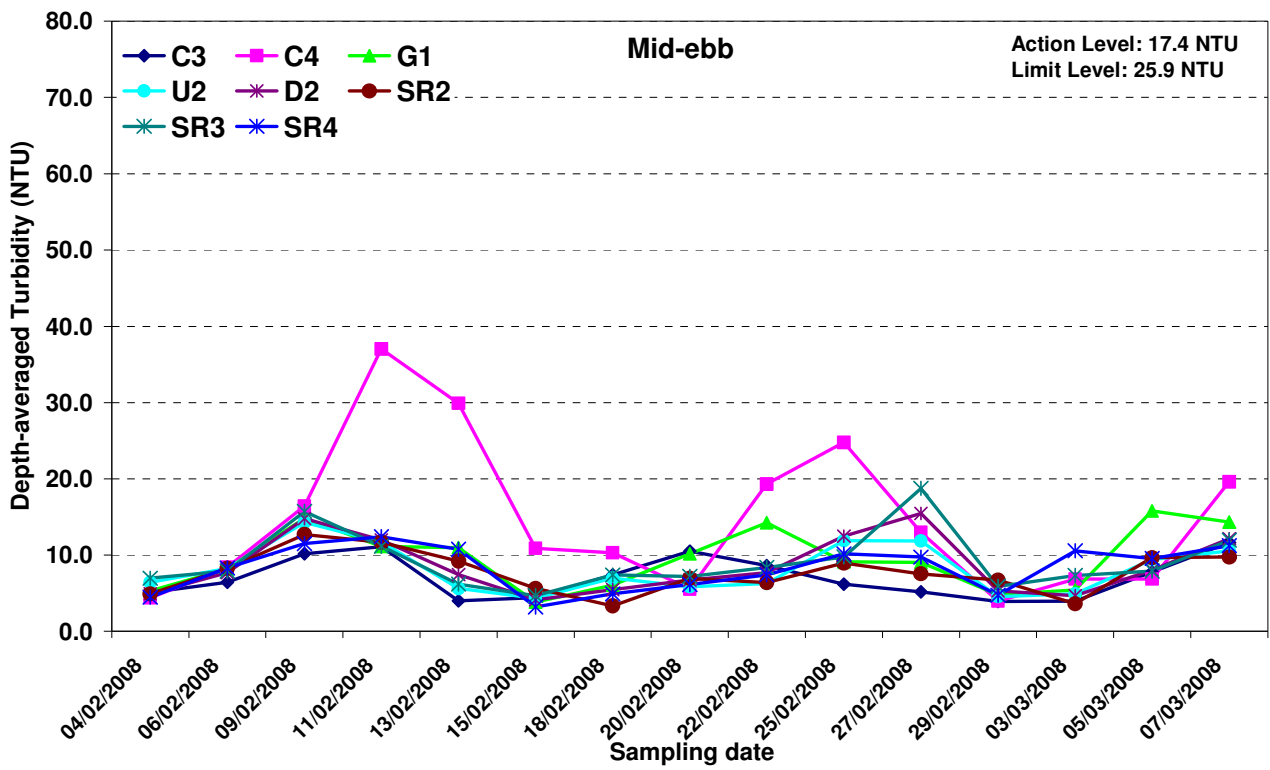


Figure E6 Depth-averaged turbidity (NTU) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 3 March and 9 March 2008, and previous monitoring period between 4 February 2008 and 2 March 2008



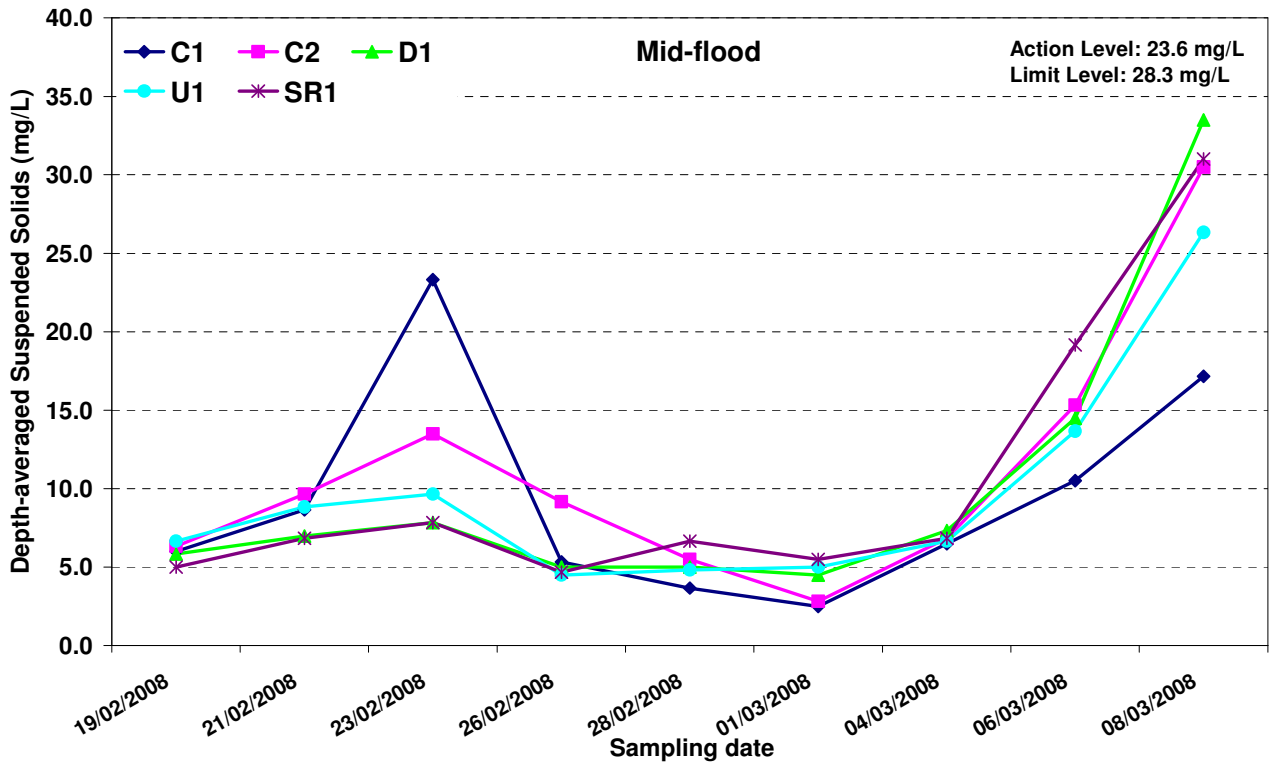
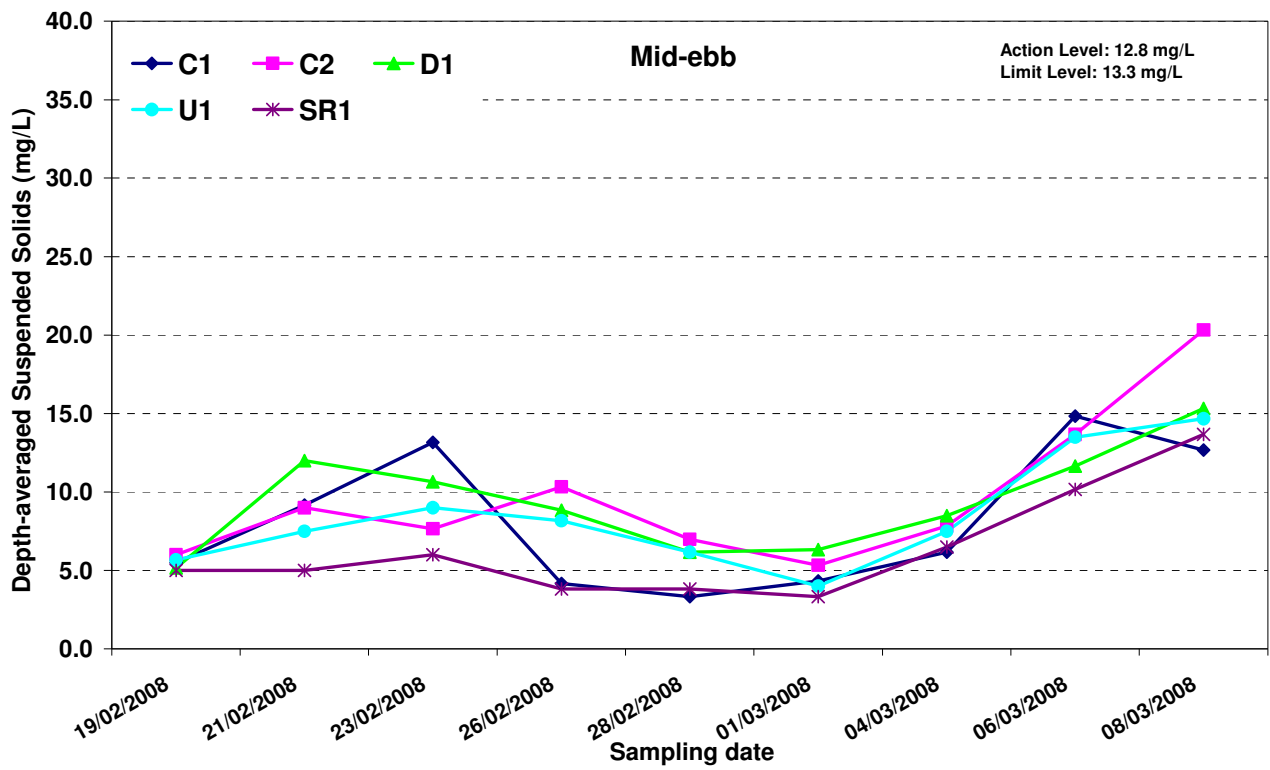


Figure E7 Depth-averaged suspended solids concentration (mg/L) of water samples from the five sampling locations near Tuen Mun at mid-ebb and mid-flood between 18 February and 9 March 2008

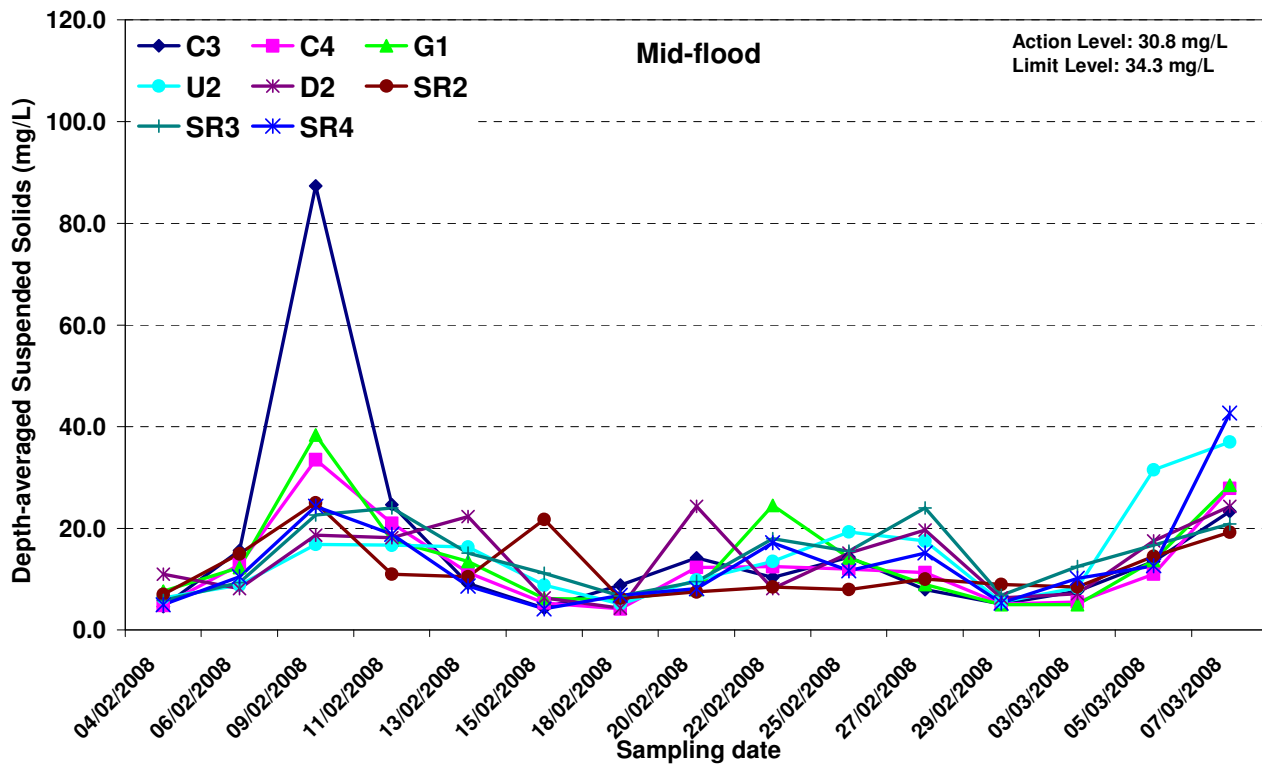
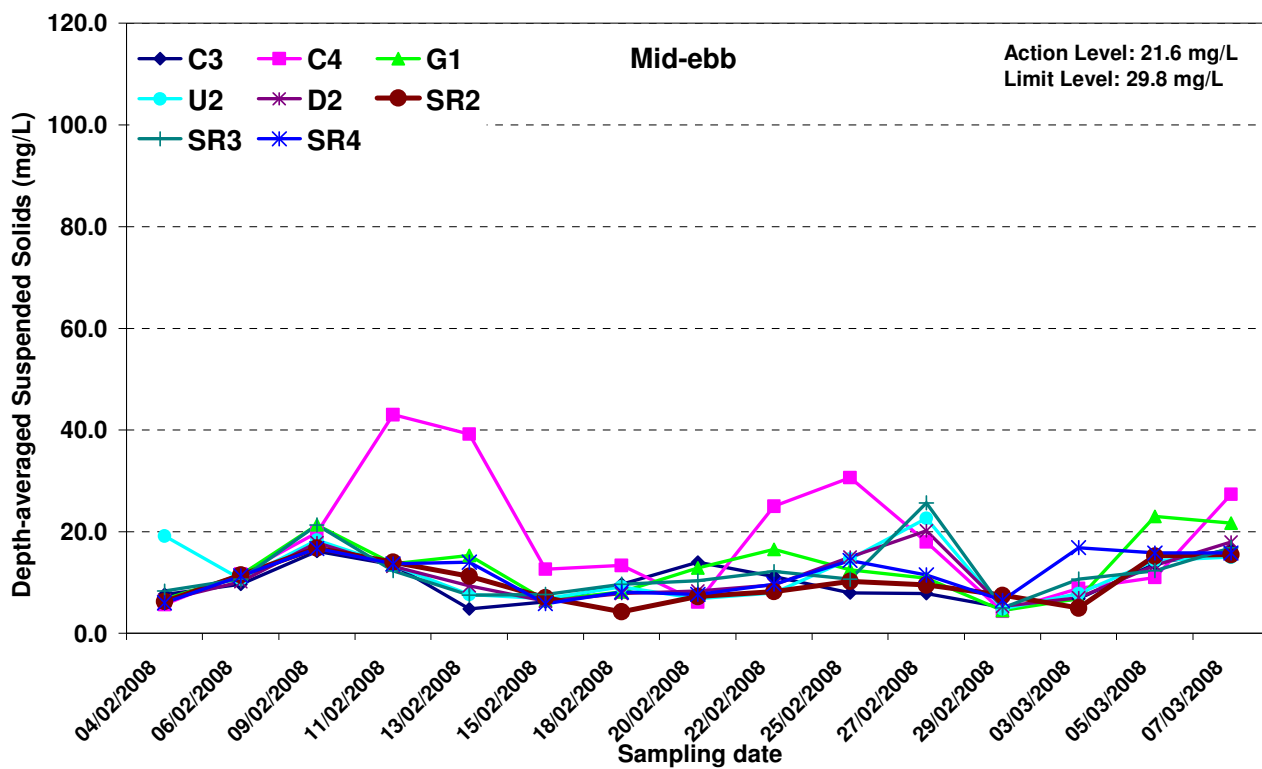


Figure E8 Depth-averaged suspended solids concentration (mg/L) of water samples from the eight sampling locations near the airport at mid-ebb and mid-flood between 3 March and 9 March 2008, and previous monitoring period between 4 February 2008 and 2 March 2008



Annex E1- Water Quality Results at Airport during mid-ebb tide for 3 March 2008

Mid-Ebb

Sampling Date	3/3/2008
Weather & Ambient Temperature	Sunny, 17C

Station C3										
Time (hh:mm) 21:12-21:16										
Water Depth (m) 11.60										
Monitoring Depth (m)										
1.10			5.70			9.90				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.1	16.5	15.4	15.5	15.4	15.4	15.73	-		
Salinity (ppt)	30.9	30.5	31.5	31.6	31.5	31.6	31.25	-		
pH	7.7	7.8	7.6	7.7	7.6	7.7	7.68	-		
D.O. Saturation (%)	107.0	108.3	97.7	97.2	97.9	97.7	100.96	-		
D.O. (mg/L)	8.73	8.79	8.05	8.00	8.07	8.05	8.28	8.06	8.39	
Turbidity (NTU)	3.90	3.70	3.60	4.00	4.20	4.30	3.99	-		
SS (mg/L)	6.0	8.0	7.0	5.0	6.0	9.0	6.83	-		
Remarks										

Station U2										
Time (hh:mm) 21:48-21:51										
Water Depth (m) 8.20										
Monitoring Depth (m)										
1.00			4.00			7.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.9	16.9	16.0	15.9	15.4	15.4	16.09	-		
Salinity (ppt)	29.8	29.7	30.8	30.9	31.4	31.4	30.66	-		
pH	7.9	7.9	7.8	7.8	7.8	7.8	7.82	-		
D.O. Saturation (%)	112.1	113.9	103.8	108.5	102.9	116.5	109.62	-		
D.O. (mg/L)	9.07	9.21	8.50	8.89	8.49	9.60	8.96	9.05	8.92	
Turbidity (NTU)	3.10	3.00	4.30	4.60	7.40	7.10	4.92	-		
SS (mg/L)	4.0	8.0	8.0	6.0	10.0	11.0	7.83	-		
Remarks										

Station C4										
Time (hh:mm) 22:05-22:08										
Water Depth (m) 9.40										
Monitoring Depth (m)										
1.10			4.50			8.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.5	16.5	16.5	15.9	15.8	15.8	16.16	-		
Salinity (ppt)	31.1	31.1	31.1	31.8	31.8	31.8	31.46	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	-		
D.O. Saturation (%)	111.5	110.4	110.7	108.2	106.2	109.5	109.41	-		
D.O. (mg/L)	9.02	8.93	8.94	8.82	8.67	8.94	8.89	8.81	8.93	
Turbidity (NTU)	2.80	3.90	3.50	7.90	11.10	11.80	6.85	-		
SS (mg/L)	7.0	4.0	5.0	7.0	14.0	16.0	8.83	-		
Remarks										

Station SR2									
Time (hh:mm) 21:25-21:31									
Water Depth (m) 4.30									
Monitoring Depth (m)									
1.00			3.10						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle
Water Temperature (°C)	16.4	16.5			16.1	16.1	16.25	-	
Salinity (ppt)	30.4	30.4			30.7	30.8	30.57	-	
pH	7.9	8.0			7.9	7.9	7.94	-	
D.O. Saturation (%)	109.4	108.4			110.0	107.5	108.81	-	
D.O. (mg/L)	8.90	8.81			8.99	8.79	8.87	8.89	8.86
Turbidity (NTU)	2.90	3.10			4.20	4.20	3.64	-	
SS (mg/L)	3.0	5.0			6.0	6.0	5.00	-	
Remarks									

Station D2										
Time (hh:mm) 21:56-21:59										
Water Depth (m) 7.10										
Monitoring Depth (m)										
1.10			3.60			6.00				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.7	16.4	16.2	16.0	15.6	15.6	16.09	-		
Salinity (ppt)	29.8	30.3	30.5	30.8	31.3	31.3	30.66	-		
pH	7.9	7.8	7.8	7.8	7.8	7.8	7.83	-		
D.O. Saturation (%)	111.1	108.7	106.5	104.9	103.8	104.6	106.59	-		
D.O. (mg/L)	9.01	8.85	8.69	8.59	8.54	8.60	8.71	8.57	8.79	
Turbidity (NTU)	3.10	3.40	4.20	4.70	6.20	6.40	4.66	-		
SS (mg/L)	6.0	7.0	6.0	6.0	7.0	10.0	7.00	-		
Remarks										

Station SR3										
Time (hh:mm) 21:40-21:44										
Water Depth (m) 12.80										
Monitoring Depth (m)										
1.10			6.20			10.70				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.5	16.4	15.6	15.7	15.4	15.3	15.80	-		
Salinity (ppt)	30.3	30.3	31.2	31.1	31.5	31.5	30.99	-		
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.79	-		
D.O. Saturation (%)	110.7	111.5	102.8	102.5	101.4	102.1	105.16	-		
D.O. (mg/L)	9.01	9.08	8.46	8.42	8.37	8.43	8.63	8.40	8.74	
Turbidity (NTU)	3.60	3.50	5.60	6.10	13.30	11.80	7.33	-		
SS (mg/L)	8.0	7.0	6.0	10.0	16.0	17.0	10.67	-		
Remarks										

Station G1										
Time (hh:mm) 21:23-21:26										
Water Depth (m) 12.60										
Monitoring Depth (m)										
1.10			6.00			11.20				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.0	16.5	15.6	15.6	15.4	15.5	15.75	-		
Salinity (ppt)	30.8	30.3	31.4	31.4	31.6	31.6	31.17	-		
pH	7.8	7.8	7.7	7.7	7.7	7.7	7.73	-		
D.O. Saturation (%)	109.1	113.2	100.1	99.8	98.7	104.0	104.13	-		
D.O. (mg/L)	8.92	9.19	8.23	8.21	8.13	8.56	8.54	8.35	8.64	
Turbidity (NTU)	4.00	3.40	5.30	5.10	9.10	5.80	5.44	-		
SS (mg/L)	7.0	5.0	6.0	5.0	10.0	8.0	6.83	-		
Remarks										

Station SR4										
Time (hh:mm) 21:32-21:36										
Water Depth (m) 13.40										
Monitoring Depth (m)										
1.10			6.60			11.50				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface & Middle	
Water Temperature (°C)	16.2	16.3	15.5	15.5	15.5	15.4	15.74	-		
Salinity (ppt)	30.5	30.5	31.3	31.3	31.3	31.3	31.04	-		
pH	7.8	7.8	7.7	7.7	7.7	7.7	7.76	-		
D.O. Saturation (%)	105.9	106.3	100.2	100.6	100.4	101.4	102.45	-		
D.O. (mg/L)	8.63	8.67	8.26	8.29	8.27	8.36	8.41	8.32	8.46	
Turbidity (NTU)	3.90	3.40	10.70	11.60	14.90	18.90	10.57	-		
SS (mg/L)	8.0	4.0	16.0	17.0	19.0	37.0	16.83	-		
Remarks										

Annex E2- Water Quality Results at Airport during mid-flood tide for 3 March 2008

Sampling Date	3/3/2008
Weather & Ambient Temperature	Sunny, 19C

Mid-Flood

Station	C3					
Time (hh:mm)	09:36-09:40					
Water Depth (m)	10.30					
Monitoring Depth (m)	1.00		5.00		9.20	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	15.4	15.4	15.4	15.3	15.3	15.3
Salinity (ppt)	31.3	31.4	31.5	31.5	31.5	31.5
pH	7.7	7.7	7.7	7.7	7.7	7.7
D.O. Saturation (%)	103.7	104.3	104.3	103.6	110.6	104.9
D.O. (mg/L)	8.55	8.60	8.61	8.55	9.13	8.66
Turbidity (NTU)	5.40	7.70	5.10	4.80	4.30	4.20
SS (mg/L)	7.0	10.0	8.0	6.0	8.0	7.0
Remarks						

Station	U2					
Time (hh:mm)	10:11-10:14					
Water Depth (m)	8.60					
Monitoring Depth (m)	1.10		4.10		6.90	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	15.8	16.0	15.8	15.8	15.5	15.7
Salinity (ppt)	30.7	30.5	30.9	30.9	31.2	31.0
pH	7.8	7.8	7.8	7.8	7.8	7.8
D.O. Saturation (%)	108.6	110.5	105.0	105.1	104.7	108.0
D.O. (mg/L)	8.93	9.06	8.63	8.64	8.63	8.88
Turbidity (NTU)	4.80	4.10	5.90	6.00	11.00	9.50
SS (mg/L)	4.0	5.0	8.0	10.0	13.0	10.0
Remarks						

Station	C4					
Time (hh:mm)	10:28-10:31					
Water Depth (m)	9.40					
Monitoring Depth (m)	1.10		4.50		8.10	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	16.1	16.1	15.5	15.5	15.4	15.4
Salinity (ppt)	30.1	30.1	31.2	31.2	31.4	31.3
pH	7.9	7.9	7.8	7.8	7.8	7.8
D.O. Saturation (%)	113.2	111.9	106.9	105.3	109.4	109.2
D.O. (mg/L)	9.28	9.17	8.82	8.68	9.04	9.02
Turbidity (NTU)	3.50	3.50	3.60	4.00	4.20	4.10
SS (mg/L)	7.0	6.0	4.0	5.0	6.0	5.0
Remarks						

Station	SR2					
Time (hh:mm)	10:11-10:18					
Water Depth (m)	4.30					
Monitoring Depth (m)	1.00		3.20		3.20	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	16.1	16.1			15.5	15.5
Salinity (ppt)	30.1	30.1			31.1	31.1
pH	7.9	8.0			7.7	8.0
D.O. Saturation (%)	110.7	108.2			108.2	104.2
D.O. (mg/L)	9.09	8.88			8.92	8.60
Turbidity (NTU)	5.30	5.40			7.20	7.40
SS (mg/L)	9.0	7.0			9.0	9.0
Remarks						

Station	D2					
Time (hh:mm)	10:19-10:22					
Water Depth (m)	7.50					
Monitoring Depth (m)	1.10		3.50		6.00	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	16.2	16.0	15.4	15.4	15.5	15.4
Salinity (ppt)	29.8	30.1	31.3	31.4	31.1	31.4
pH	7.8	7.8	7.8	7.8	7.8	7.8
D.O. Saturation (%)	106.8	106.0	108.9	103.1	110.1	105.7
D.O. (mg/L)	8.76	8.70	8.98	8.51	9.08	8.73
Turbidity (NTU)	5.80	5.90	4.80	4.10	5.60	4.70
SS (mg/L)	8.0	7.0	6.0	8.0	8.0	6.0
Remarks						

Station	SR3					
Time (hh:mm)	10:03-10:07					
Water Depth (m)	12.10					
Monitoring Depth (m)	1.10		6.00		11.10	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	15.7	15.9	15.6	15.6	15.5	15.5
Salinity (ppt)	30.9	30.9	31.1	31.1	31.2	31.2
pH	7.8	7.8	7.8	7.8	7.8	7.8
D.O. Saturation (%)	106.7	105.6	105.2	104.1	106.0	105.8
D.O. (mg/L)	8.77	8.65	8.66	8.57	8.74	8.72
Turbidity (NTU)	6.30	6.60	10.40	9.20	10.30	10.60
SS (mg/L)	7.0	7.0	19.0	15.0	11.0	16.0
Remarks						

Station	G1					
Time (hh:mm)	09:46-09:50					
Water Depth (m)	12.40					
Monitoring Depth (m)	1.10		6.10		11.00	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	15.6	15.7	15.4	15.4	15.4	15.4
Salinity (ppt)	31.3	31.2	31.4	31.4	31.4	31.4
pH	7.7	7.7	7.7	7.7	7.7	7.7
D.O. Saturation (%)	107.8	107.3	106.0	105.1	106.8	106.96
D.O. (mg/L)	8.87	8.81	8.75	8.67	8.81	8.98
Turbidity (NTU)	2.80	3.10	3.10	2.90	4.90	4.60
SS (mg/L)	3.0	5.0	6.0	4.0	5.0	7.0
Remarks						

Station	SR4					
Time (hh:mm)	09:57-10:00					
Water Depth (m)	13.20					
Monitoring Depth (m)	1.20		6.50		12.00	
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
Water Temperature (°C)	15.7	15.8	15.6	15.6	15.5	15.4
Salinity (ppt)	31.0	30.9	31.1	31.1	31.3	31.3
pH	7.8	7.8	7.8	7.8	7.8	7.8
D.O. Saturation (%)	109.9	109.1	110.0	107.7	110.6	108.8
D.O. (mg/L)	9.04	8.96	9.06	8.86	9.11	8.98
Turbidity (NTU)	6.30	6.30	7.50	8.90	9.00	9.00
SS (mg/L)	7.0	10.0	9.0	12.0	10.0	13.0
Remarks						

Annex E3- Water Quality Results at Tuen Mun during mid-ebb tide for 4 March 2008

Date	03/04/2008								
Station	C1								
Time (hh:mm)	21:56 - 21:59								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	8.40								
Monitoring Depth (m)	1.30	3.90			7.20				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.2	16.2	16.0	16.1	15.9	15.9	16.03	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.4	31.4	31.38	-	
pH	7.7	7.7	7.6	7.7	7.6	7.7	7.67	-	
D.O. Saturation (%)	124.9	122.1	118.7	118.5	115.4	121.4	120.15	-	
D.O. (mg/L)	10.15	9.93	9.68	9.64	9.43	9.91	9.79	9.67	
Turbidity (NTU)	3.10	3.20	3.60	3.40	4.00	4.00	3.59	-	
SS (mg/L)	4.0	5.0	6.0	8.0	8.0	6.0	6.17	-	
Remarks	-								

Date	03/04/2008								
Station	C2								
Time (hh:mm)	22:29 - 22:32								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	13.40								
Monitoring Depth (m)	1.10	6.50			12.20				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.3	16.3	16.1	16.1	15.8	15.8	16.05	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.6	31.6	31.46	-	
pH	7.9	7.9	7.9	7.9	7.8	7.8	7.85	-	
D.O. Saturation (%)	118.9	118.3	112.6	112.7	110.7	112.4	114.25	-	
D.O. (mg/L)	9.65	9.60	9.16	9.17	9.05	9.19	9.30	9.12	
Turbidity (NTU)	3.50	3.10	3.80	3.60	4.90	5.40	4.06	-	
SS (mg/L)	6.0	8.0	11.0	6.0	6.0	10.0	7.83	-	
Remarks	-								

Date	03/04/2008								
Station	D1								
Time (hh:mm)	22:21 - 22:24								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	8.90								
Monitoring Depth (m)	1.10	4.20			7.30				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.0	16.0	16.0	15.9	15.9	15.9	15.96	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.4	31.4	31.41	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.81	-	
D.O. Saturation (%)	114.7	114.2	113.0	113.3	110.3	114.5	113.34	-	
D.O. (mg/L)	9.36	9.31	9.21	9.25	9.01	9.35	9.25	9.18	
Turbidity (NTU)	4.70	4.00	4.40	4.20	5.50	4.80	4.60	-	
SS (mg/L)	9.0	10.0	7.0	6.0	9.0	10.0	8.50	-	
Remarks	-								

Date	03/04/2008								
Station	U1								
Time (hh:mm)	22:13 - 22:16								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	9.20								
Monitoring Depth (m)	1.10	4.60			8.20				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.1	16.2	16.0	16.0	15.9	16.0	16.01	-	
Salinity (ppt)	31.3	31.3	31.4	31.4	31.4	31.4	31.40	-	
pH	7.8	7.9	7.8	7.8	7.8	7.8	7.80	-	
D.O. Saturation (%)	116.4	119.1	113.9	114.9	110.9	116.4	115.24	-	
D.O. (mg/L)	9.47	9.69	9.29	9.37	9.05	9.49	9.39	9.27	
Turbidity (NTU)	3.60	3.40	4.40	3.80	4.90	4.20	4.07	-	
SS (mg/L)	8.0	7.0	6.0	10.0	6.0	8.0	7.50	-	
Remarks	-								

Date	03/04/2008								
Station	SR1								
Time (hh:mm)	22:07 - 22:10								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	6.10								
Monitoring Depth (m)	1.10	3.20			5.10				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.2	16.2	16.1	16.1	16.0	16.0	16.07	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.4	31.5	31.42	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.77	-	
D.O. Saturation (%)	121.7	121.2	116.7	118.7	113.4	117.5	118.19	-	
D.O. (mg/L)	9.88	9.84	9.51	9.67	9.25	9.58	9.62	9.42	
Turbidity (NTU)	3.30	2.90	3.50	3.60	3.70	3.60	3.47	-	
SS (mg/L)	6.0	10.0	6.0	6.0	5.0	6.0	6.50	-	
Remarks	-								

Annex E4- Water Quality Results at Tuen Mun during mid-flood tide for 4 March 2008

Date	03/04/2008								
Station	C1								
Time (hh:mm)	14:51 - 14:55								
Ambient Temperature (°C)	19								
Weather	Sunny								
Water Depth (m)	8.30								
Monitoring Depth (m)	1.20	4.20			7.00				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	16.6	16.4	15.8	15.8	15.7	15.7	15.99	-	
Salinity (ppt)	31.2	31.2	31.4	31.4	31.4	31.4	31.33	-	
pH	7.8	7.8	7.7	7.7	7.7	7.7	7.76	-	
D.O. Saturation (%)	114.8	118.0	113.5	109.6	108.9	115.1	113.33	-	
D.O. (mg/L)	9.28	9.55	9.30	8.98	8.93	9.44	9.25	9.19	
Turbidity (NTU)	3.30	3.30	3.60	3.50	4.10	3.70	3.62	-	
SS (mg/L)	9.0	5.0	5.0	9.0	6.0	5.0	6.50	-	
Remarks	-								

Date	03/04/2008								
Station	C2								
Time (hh:mm)	15:29 - 15:32								
Ambient Temperature (°C)	19								
Weather	Sunny								
Water Depth (m)	13.20								
Monitoring Depth (m)	1.10	6.50			12.00				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	15.9	15.9	15.7	15.7	15.7	15.7	15.76	-	
Salinity (ppt)	31.4	31.4	31.5	31.5	31.5	31.5	31.44	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.77	-	
D.O. Saturation (%)	106.4	104.6	102.4	100.9	103.4	103.5	103.52	-	
D.O. (mg/L)	8.68	8.54	8.40	8.28	8.48	8.49	8.48	8.49	
Turbidity (NTU)	3.60	3.50	4.00	3.70	5.20	3.80	3.99	-	
SS (mg/L)	6.0	7.0	8.0	6.0	6.0	8.0	6.83	-	
Remarks	-								

Date	03/04/2008								
Station	D1								
Time (hh:mm)	15:21 - 15:24								
Ambient Temperature (°C)	19								
Weather	Sunny								
Water Depth (m)	8.70								
Monitoring Depth (m)	1.20	4.10			7.10				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	15.9	15.9	15.9	15.9	15.8	15.9	15.89	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.4	31.4	31.38	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	-	
D.O. Saturation (%)	110.2	109.8	110.5	109.3	108.6	110.2	109.77	-	
D.O. (mg/L)	9.01	8.96	9.03	8.93	8.89	9.01	8.97	8.95	
Turbidity (NTU)	3.80	3.10	3.60	3.70	3.40	3.70	3.59	-	
SS (mg/L)	8.0	7.0	6.0	6.0	8.0	9.0	7.33	-	
Remarks	-								

Date	03/04/2008								
Station	U1								
Time (hh:mm)	15:13 - 15:16								
Ambient Temperature (°C)	19								
Weather	Sunny								
Water Depth (m)	9.50								
Monitoring Depth (m)	1.10	4.60			8.20				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	16.2	16.2	15.8	15.8	15.8	15.8	15.92	-	
Salinity (ppt)	31.3	31.3	31.4	31.4	31.5	31.5	31.41	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.78	-	
D.O. Saturation (%)	115.8	113.2	110.1	108.9	110.9	111.3	111.70	-	
D.O. (mg/L)	9.42	9.19	9.01	8.92	9.08	9.11	9.12	9.10	
Turbidity (NTU)	3.80	3.30	4.40	3.60	5.70	5.80	4.45	-	
SS (mg/L)	7.0	5.0	5.0	9.0	8.0	6.0	6.67	-	
Remarks	-								

Date	03/04/2008								
Station	SR1								
Time (hh:mm)	15:03 - 15:06								
Ambient Temperature (°C)	19								
Weather	Sunny								
Water Depth (m)	5.30								
Monitoring Depth (m)	1.00	2.60			4.00				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	16.1	16.1	16.1	16.1	16.1	16.1	16.11	-	
Salinity (ppt)	31.3	31.3	31.3	31.3	31.3	31.3	31.30	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	-	
D.O. Saturation (%)	118.8	119.2	118.3	119.6	114.9	119.5	118.39	-	
D.O. (mg/L)	9.68	9.71	9.63	9.73	9.35	9.73	9.64	9.54	
Turbidity (NTU)	4.30	3.50	3.40	3.30	3.40	3.20	3.55	-	
SS (mg/L)	9.0	6.0	6.0	6.0	8.0	6.0	6.83	-	
Remarks	-								

Annex E5- Water Quality Results at Airport during mid-ebb tide for 5 March 2008

Sampling Date	03/05/2008
Weather & Ambient Temperature	Sunny, 17C

Mid-Ebb

Station C3									
Time (hh:mm) 12:17-12:23									
Water Depth (m) 9.40									
Monitoring Depth (m) 1.20			4.50			8.20			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.0	16.0	16.0	16.0	15.9	15.9	15.96	-	
Salinity (ppt)	31.4	31.3	31.4	31.3	31.3	31.3	31.35	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	-	
D.O. Saturation (%)	111.6	112.3	111.2	114.4	111.7	116.0	112.86	-	
D.O. (mg/L)	9.10	9.16	9.08	9.34	9.13	9.48	9.22	9.31	9.17
Turbidity (NTU)	7.60	7.40	6.60	8.00	8.80	8.30	7.76	-	
SS (mg/L)	14.0	12.0	13.0	17.0	13.0	13.0	13.67	-	
Remarks									

Station U2									
Time (hh:mm) 11:25-11:41									
Water Depth (m) 8.40									
Monitoring Depth (m) 1.10			4.10			7.00			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.0	16.1	16.0	16.0	16.0	15.9	15.99	-	
Salinity (ppt)	30.9	30.9	30.9	30.9	30.9	31.0	30.89	-	
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.10	-	
D.O. Saturation (%)	116.1	116.0	115.2	112.9	113.9	109.2	113.86	-	
D.O. (mg/L)	9.49	9.47	9.43	9.24	9.33	8.94	9.32	9.14	9.41
Turbidity (NTU)	8.50	12.30	9.40	8.50	8.50	9.40	9.42	-	
SS (mg/L)	12.0	16.0	17.0	14.0	13.0	14.0	14.33	-	
Remarks									

Station C4									
Time (hh:mm) 13:07-13:13									
Water Depth (m) 8.70									
Monitoring Depth (m) 1.20			4.20			7.00			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.3	16.4	16.2	16.4	16.1	16.2	16.27	-	
Salinity (ppt)	31.1	31.1	31.1	31.1	31.1	31.1	31.11	-	
pH	8.0	8.0	7.9	8.0	7.9	7.9	7.95	-	
D.O. Saturation (%)	124.9	127.2	121.6	124.6	116.3	117.9	122.08	-	
D.O. (mg/L)	10.14	10.30	9.89	10.10	9.47	9.60	9.92	9.54	10.11
Turbidity (NTU)	7.20	7.10	6.60	6.80	6.70	7.00	6.87	-	
SS (mg/L)	12.0	10.0	10.0	12.0	12.0	10.0	11.00	-	
Remarks									

Station SR2									
Time (hh:mm) 11:01-11:10									
Water Depth (m) 4.40									
Monitoring Depth (m) 0.80			3.10						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.2	16.2			16.1	16.1	16.12	-	
Salinity (ppt)	30.6	30.6			30.7	30.7	30.67	-	
pH	8.1	8.1			8.0	8.1	8.05	-	
D.O. Saturation (%)	121.8	123.5			125.0	122.4	123.18	-	
D.O. (mg/L)	9.95	10.08			10.22	10.01	10.07	10.12	10.02
Turbidity (NTU)	9.20	7.40			11.20	10.90	9.66	-	
SS (mg/L)	10.0	10.0			22.0	19.0	15.25	-	
Remarks									

Station D2									
Time (hh:mm) 11:53-12:04									
Water Depth (m) 8.60									
Monitoring Depth (m) 1.00			4.10			7.00			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.1	16.2	16.0	16.0	16.0	16.0	16.04	-	
Salinity (ppt)	30.9	30.8	30.9	30.9	30.9	30.9	30.88	-	
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.13	-	
D.O. Saturation (%)	112.5	115.3	111.3	113.2	106.6	110.6	111.58	-	
D.O. (mg/L)	9.18	9.40	9.09	9.26	8.73	9.06	9.12	8.90	9.23
Turbidity (NTU)	6.90	7.90	7.90	8.20	8.60	9.00	8.06	-	
SS (mg/L)	12.0	11.0	15.0	14.0	14.0	14.0	13.33	-	
Remarks									

Station SR3									
Time (hh:mm) 12:52-12:57									
Water Depth (m) 12.50									
Monitoring Depth (m) 1.20			6.00			11.30			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.1	16.1	15.9	15.9	15.9	15.9	15.99	-	
Salinity (ppt)	31.1	31.1	31.2	31.2	31.2	31.3	31.18	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	-	
D.O. Saturation (%)	117.1	114.6	112.8	109.1	112.6	111.6	112.98	-	
D.O. (mg/L)	9.54	9.34	9.22	8.92	9.21	9.12	9.23	9.17	9.26
Turbidity (NTU)	7.00	7.60	8.30	6.90	9.70	8.10	7.91	-	
SS (mg/L)	12.0	13.0	11.0	12.0	14.0	12.0	12.33	-	
Remarks									

Station G1									
Time (hh:mm) 12:30-12:36									
Water Depth (m) 12.60									
Monitoring Depth (m) 1.10			6.10			11.20			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.1	16.1	16.1	16.1	15.9	16.0	16.05	-	
Salinity (ppt)	31.1	31.1	31.2	31.2	31.3	31.3	31.18	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.89	-	
D.O. Saturation (%)	112.6	111.9	114.6	112.8	110.8	112.5	112.54	-	
D.O. (mg/L)	9.19	9.13	9.33	9.19	9.06	9.18	9.18	9.12	9.21
Turbidity (NTU)	18.70	18.20	18.70	17.60	10.50	11.20	15.81	-	
SS (mg/L)	25.0	26.0	26.0	25.0	16.0	20.0	23.00	-	
Remarks									

Station SR4									
Time (hh:mm) 12:41-12:48									
Water Depth (m) 13.30									
Monitoring Depth (m) 1.10			6.70			12.10			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.2	16.2	15.9	15.9	15.9	15.9	16.01	-	
Salinity (ppt)	31.0	31.1	31.3	31.3	31.3	31.3	31.22	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	-	
D.O. Saturation (%)	111.7	116.8	108.2	110.6	107.8	111.3	111.07	-	
D.O. (mg/L)	9.09	9.51	8.84	9.04	8.81	9.09	9.06	8.95	9.12
Turbidity (NTU)	7.80	7.80	10.10	9.20	11.60	10.90	9.56	-	
SS (mg/L)	11.0	15.0	16.0	13.0	18.0	22.0	15.83	-	
Remarks									

Annex E6- Water Quality Results at Airport during mid-flood tide for 5 March 2008

Sampling Date	03/05/2008
Weather & Ambient Temperature	Sunny, 18C

Mid-Flood

Station C3										Station U2									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.1	16.1	16.1	15.9	15.8	15.8	15.97	-		Water Temperature (°C)	16.3	16.3	16.3	16.3	16.3	16.2	16.26	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.6	31.6	31.45	-		Salinity (ppt)	30.9	30.9	30.8	30.9	30.8	30.9	30.86	-	
pH	7.9	7.9	7.9	7.8	7.8	7.8	7.86	-		pH	8.2	8.1	8.1	8.1	8.1	8.1	8.13	-	
D.O. Saturation (%)	124.7	119.9	119.0	112.9	111.8	112.1	116.76	-		D.O. Saturation (%)	120.8	123.2	120.5	122.3	123.0	117.9	121.27	-	
D.O. (mg/L)	10.15	9.77	9.68	9.22	9.14	9.17	9.52	9.16	9.71	D.O. (mg/L)	9.83	10.02	9.81	9.95	10.01	9.60	9.87	9.81	9.90
Turbidity (NTU)	6.30	6.60	6.40	7.50	10.60	11.20	8.08	-		Turbidity (NTU)	17.70	20.10	22.60	23.00	21.90	26.00	21.88	-	
SS (mg/L)	10.0	13.0	15.0	9.0	16.0	18.0	13.50	-		SS (mg/L)	28.0	27.0	36.0	33.0	31.0	34.0	31.50	-	
Remarks										Remarks									

Station C4										Station SR2									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.3	16.4	16.3	16.3	16.1	16.1	16.25	-		Water Temperature (°C)	16.7	16.7			16.4	16.4	16.53	-	
Salinity (ppt)	30.9	31.0	31.0	31.0	31.1	31.1	31.01	-		Salinity (ppt)	30.7	30.8			30.8	30.8	30.80	-	
pH	7.9	7.9	7.8	7.9	7.8	7.8	7.84	-		pH	8.1	8.2			8.0	8.1	8.10	-	
D.O. Saturation (%)	133.5	139.2	130.5	134.0	120.6	124.4	130.39	-		D.O. Saturation (%)	139.0	136.4			123.7	124.1	130.80	-	
D.O. (mg/L)	10.84	11.30	10.60	10.88	9.83	10.15	10.60	9.99	10.91	D.O. (mg/L)	11.23	11.01			10.05	10.07	10.59	10.06	11.12
Turbidity (NTU)	6.90	5.90	6.20	6.30	8.00	8.40	6.92	-		Turbidity (NTU)	8.10	8.50			9.10	8.90	8.63	-	
SS (mg/L)	11.0	11.0	10.0	10.0	10.0	14.0	11.00	-		SS (mg/L)	13.0	12.0			16.0	17.0	14.50	-	
Remarks										Remarks									

Station D2										Station SR3									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.2	16.2	16.1	16.2	16.1	16.1	16.13	-		Water Temperature (°C)	16.2	16.2	16.2	16.2	16.1	16.0	16.13	-	
Salinity (ppt)	30.9	30.9	30.9	30.9	30.9	30.9	30.91	-		Salinity (ppt)	31.2	31.2	31.2	31.2	31.2	31.3	31.23	-	
pH	8.2	8.1	8.1	8.1	8.1	8.1	8.12	-		pH	7.9	7.9	7.9	7.9	7.9	7.8	7.88	-	
D.O. Saturation (%)	106.1	115.1	117.9	117.9	106.7	113.7	112.89	-		D.O. Saturation (%)	135.4	131.0	134.1	127.4	132.0	128.9	131.42	-	
D.O. (mg/L)	8.64	9.38	9.62	9.61	8.71	9.28	9.21	9.00	9.31	D.O. (mg/L)	11.01	10.65	10.90	10.36	10.75	10.52	10.70	10.64	10.73
Turbidity (NTU)	14.50	12.00	9.20	12.50	5.20	10.40	10.63	-		Turbidity (NTU)	7.10	7.10	17.50	9.70	10.40	10.40	10.35	-	
SS (mg/L)	15.0	19.0	18.0	14.0	18.0	21.0	17.50	-		SS (mg/L)	10.0	14.0	20.0	17.0	20.0	19.0	16.67	-	
Remarks										Remarks									

Station G1										Station SR4									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.3	16.2	16.2	16.1	15.9	15.9	16.12	-		Water Temperature (°C)	16.2	16.2	16.0	16.0	15.9	16.0	16.06	-	
Salinity (ppt)	31.2	31.2	31.2	31.2	31.3	31.3	31.23	-		Salinity (ppt)	31.2	31.2	31.3	31.3	31.3	31.3	31.26	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90	-		pH	7.9	7.9	7.8	7.9	7.8	7.8	7.87	-	
D.O. Saturation (%)	132.7	129.8	127.0	126.4	123.8	127.1	127.78	-		D.O. Saturation (%)	132.5	129.7	123.1	123.2	122.6	127.9	126.46	-	
D.O. (mg/L)	10.78	10.55	10.32	10.29	10.11	10.38	10.41	10.25	10.49	D.O. (mg/L)	10.76	10.54	10.05	10.04	10.01	10.44	10.31	10.23	10.35
Turbidity (NTU)	7.70	7.30	8.10	7.60	9.60	8.30	8.08	-		Turbidity (NTU)	6.30	6.20	6.80	7.90	12.00	8.70	7.96	-	
SS (mg/L)	16.0	12.0	11.0	14.0	15.0	14.0	13.67	-		SS (mg/L)	10.0	10.0	18.0	15.0	11.0	12.0	12.67	-	
Remarks										Remarks									

Annex E7- Water Quality Results at Tuen Mun during mid-ebb tide for 6 March 2008

Date	03/06/2008								
Station	C1								
Time (hh:mm)	11:36 - 11:42								
Ambient Temperature (°C)	18								
Weather	Cloudy								
Water Depth (m)	8.20								
Monitoring Depth (m)	1.20	4.00			7.10				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.1	16.1	16.0	16.1	15.9	15.9	16.02	-	
Salinity (ppt)	31.3	31.3	31.3	31.3	31.4	31.4	31.34	-	
pH	7.8	7.8	7.8	7.8	7.7	7.8	7.78	-	
D.O. Saturation (%)	130.0	130.9	123.4	127.5	108.3	110.6	121.79	-	
D.O. (mg/L)	10.59	10.66	10.06	10.39	8.84	9.03	9.93	8.94	
Turbidity (NTU)	5.70	6.10	6.20	5.90	5.60	6.40	5.94	-	
SS (mg/L)	9.0	10.0	12.0	10.0	11.0	11.0	10.50	-	
Remarks	-								

Date	03/06/2008								
Station	C2								
Time (hh:mm)	12:34 - 12:38								
Ambient Temperature (°C)	18								
Weather	Cloudy								
Water Depth (m)	13.40								
Monitoring Depth (m)	1.20	6.50			12.10				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.0	16.0	16.0	16.0	16.0	16.0	16.02	-	
Salinity (ppt)	31.3	31.3	31.3	31.3	31.4	31.4	31.33	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	-	
D.O. Saturation (%)	118.3	114.6	119.8	115.2	120.4	116.0	117.42	-	
D.O. (mg/L)	9.65	9.35	9.77	9.40	9.82	9.46	9.58	9.64	
Turbidity (NTU)	8.70	7.40	9.10	8.10	9.00	7.40	8.27	-	
SS (mg/L)	16.0	15.0	14.0	16.0	16.0	15.0	15.33	-	
Remarks	-								

Date	03/06/2008								
Station	D1								
Time (hh:mm)	12:24 - 12:27								
Ambient Temperature (°C)	18								
Weather	Cloudy								
Water Depth (m)	8.70								
Monitoring Depth (m)	1.20	4.00			7.10				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.1	16.1	16.0	16.0	16.0	16.0	16.04	-	
Salinity (ppt)	31.4	31.4	31.4	31.4	31.4	31.4	31.37	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.84	-	
D.O. Saturation (%)	123.6	119.9	125.5	121.0	127.4	121.6	123.15	-	
D.O. (mg/L)	10.06	9.77	10.23	9.85	10.38	9.91	10.03	10.15	
Turbidity (NTU)	9.70	8.30	9.00	8.50	8.60	8.20	8.70	-	
SS (mg/L)	14.0	14.0	16.0	16.0	15.0	12.0	14.50	-	
Remarks	-								

Date	03/06/2008								
Station	U1								
Time (hh:mm)	11:50 - 11:55								
Ambient Temperature (°C)	18								
Weather	Cloudy								
Water Depth (m)	8.60								
Monitoring Depth (m)	1.20	3.90			6.80				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.0	16.0	16.0	16.0	16.0	16.0	16.02	-	
Salinity (ppt)	31.3	31.3	31.3	31.3	31.3	31.4	31.33	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	-	
D.O. Saturation (%)	121.1	117.0	120.7	117.5	118.6	117.1	118.66	-	
D.O. (mg/L)	9.87	9.54	9.84	9.58	9.68	9.55	9.68	9.62	
Turbidity (NTU)	6.60	6.70	6.70	7.40	7.90	9.30	7.41	-	
SS (mg/L)	12.0	17.0	14.0	12.0	13.0	14.0	13.67	-	
Remarks	-								

Date	03/06/2008								
Station	SR1								
Time (hh:mm)	12:10 - 12:14								
Ambient Temperature (°C)	18								
Weather	Cloudy								
Water Depth (m)	5.40								
Monitoring Depth (m)	1.20	2.50			4.00				
Tide	Mid-Ebb								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	16.2	16.2	16.0	16.0	16.0	16.0	16.07	-	
Salinity (ppt)	31.3	31.4	31.3	31.4	31.3	31.4	31.35	-	
pH	7.9	7.8	7.8	7.8	7.8	7.8	7.83	-	
D.O. Saturation (%)	128.3	121.3	125.7	120.6	122.8	123.7	123.72	-	
D.O. (mg/L)	10.43	9.87	10.25	9.83	10.02	10.08	10.08	10.05	
Turbidity (NTU)	11.30	13.30	7.40	14.90	7.40	14.10	11.40	-	
SS (mg/L)	15.0	29.0	16.0	22.0	11.0	22.0	19.17	-	
Remarks	-								

Annex E8- Water Quality Results at Tuen Mun during mid-flood tide for 6 March 2008

Date	03/06/2008							
Station	C1							
Time (hh:mm)	17:40 - 17:45							
Ambient Temperature (°C)	17							
Weather	Cloudy							
Water Depth (m)	8.30							
Monitoring Depth (m)	1.20	4.20		7.00				
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.3	16.3	16.2	16.2	16.1	16.2	16.22	-
Salinity (ppt)	31.2	31.2	31.3	31.3	31.3	31.3	31.26	-
pH	7.8	7.9	7.8	7.8	7.8	7.8	7.81	-
D.O. Saturation (%)	132.0	129.6	128.9	126.8	123.9	124.6	127.63	-
D.O. (mg/L)	10.71	10.52	10.48	10.31	10.08	10.13	10.37	10.11
Turbidity (NTU)	6.30	7.50	8.30	9.90	9.40	9.50	8.47	-
SS (mg/L)	10.0	16.0	14.0	16.0	14.0	19.0	14.83	-
Remarks	-							

Date	03/06/2008							
Station	U1							
Time (hh:mm)	18:01 - 18:04							
Ambient Temperature (°C)	17							
Weather	Cloudy							
Water Depth (m)	9.40							
Monitoring Depth (m)	1.20	4.40		8.10				
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.3	16.3	16.3	16.3	16.3	16.3	16.31	-
Salinity (ppt)	31.3	31.3	31.3	31.3	31.3	31.3	31.29	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	-
D.O. Saturation (%)	128.6	128.7	127.0	128.9	120.0	128.1	126.89	-
D.O. (mg/L)	10.43	10.43	10.30	10.45	9.74	10.39	10.29	10.07
Turbidity (NTU)	7.00	6.60	7.40	6.20	7.30	7.50	6.97	-
SS (mg/L)	14.0	12.0	11.0	14.0	16.0	14.0	13.50	-
Remarks	-							

Date	03/06/2008							
Station	C2							
Time (hh:mm)	18:18 - 18:22							
Ambient Temperature (°C)	17							
Weather	Cloudy							
Water Depth (m)	13.20							
Monitoring Depth (m)	1.10	6.50		11.90				
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.2	16.2	16.2	16.2	16.2	16.2	16.20	-
Salinity (ppt)	31.3	31.3	31.3	31.3	31.3	31.3	31.29	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	-
D.O. Saturation (%)	121.4	121.0	120.0	121.2	116.5	121.0	120.18	-
D.O. (mg/L)	9.86	9.83	9.75	9.85	9.47	9.83	9.77	9.65
Turbidity (NTU)	7.00	7.00	8.00	8.20	8.40	8.00	7.74	-
SS (mg/L)	14.0	11.0	13.0	15.0	17.0	12.0	13.67	-
Remarks	-							

Date	03/06/2008							
Station	SR1							
Time (hh:mm)	17:51 - 17:56							
Ambient Temperature (°C)	17							
Weather	Cloudy							
Water Depth (m)	5.60							
Monitoring Depth (m)	1.10	2.40		4.20				
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.4	16.4	16.4	16.4	16.4	16.4	16.40	-
Salinity (ppt)	31.2	31.2	31.2	31.2	31.2	31.2	31.22	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	-
D.O. Saturation (%)	132.8	131.3	130.1	129.4	119.8	122.4	127.62	-
D.O. (mg/L)	10.75	10.63	10.53	10.48	9.70	9.91	10.33	9.81
Turbidity (NTU)	5.20	5.60	5.00	5.10	5.80	5.80	5.37	-
SS (mg/L)	8.0	8.0	12.0	9.0	12.0	12.0	10.17	-
Remarks	-							

Date	03/06/2008							
Station	D1							
Time (hh:mm)	18:09 - 18:12							
Ambient Temperature (°C)	17							
Weather	Cloudy							
Water Depth (m)	9.70							
Monitoring Depth (m)	1.20	4.30		8.30				
Tide	Mid-Flood							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.3	16.3	16.3	16.3	16.3	16.3	16.32	-
Salinity (ppt)	31.3	31.3	31.3	31.3	31.3	31.3	31.27	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90	-
D.O. Saturation (%)	125.6	127.3	125.7	127.0	117.8	127.0	125.05	-
D.O. (mg/L)	10.18	10.32	10.20	10.30	9.55	10.30	10.14	9.93
Turbidity (NTU)	6.70	6.20	6.20	6.30	6.70	6.10	6.33	-
SS (mg/L)	11.0	10.0	11.0	12.0	13.0	13.0	11.67	-
Remarks	-							

Annex E9- Water Quality Results at Airport during mid-ebb tide for 7 March 2008

Sampling Date	03/07/2008
Weather & Ambient Temperature	Sunny, 19C

Mid-Ebb

Station C3										Station U2													
Time (hh:mm)		11:58-12:02										Time (hh:mm)		12:37-12:40									
Water Depth (m)		11.30										Water Depth (m)		8.60									
Monitoring Depth (m)		0.90		5.50				10.10						1.10		3.80				7.20			
Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle	Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.5	16.6	16.3	16.4	16.3	16.3	16.4	16.3	16.4	16.3	16.3	16.5	16.5	16.3	16.4	16.3	16.3	16.3	16.3	16.3	16.38	-	
Salinity (ppt)	30.8	30.8	30.8	30.8	30.8	30.9	30.8	30.9	30.81	-		30.1	30.1	30.6	30.5	30.8	30.7	30.8	30.7	30.44	-		
pH	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.76	-		7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.85	-		
D.O. Saturation (%)	120.1	119.8	116.1	118.0	116.5	118.5	118.5	118.4	-	-		114.0	112.5	113.4	113.9	109.1	114.1	114.1	112.83	-	-		
D.O. (mg/L)	9.72	9.69	9.45	9.58	9.46	9.64	9.59	9.55	9.61	-		9.27	9.16	9.23	9.28	8.88	9.29	9.19	9.09	9.24	-		
Turbidity (NTU)	11.40	12.10	12.60	11.10	10.80	11.70	11.63	-	-	-		9.10	8.40	11.40	9.40	14.80	10.30	10.55	-	-	-		
SS (mg/L)	15.0	18.0	17.0	15.0	16.0	18.0	16.50	-	-	-		15.0	12.0	15.0	16.0	18.0	14.0	15.00	-	-	-		
Remarks																							

Station C4										Station SR2													
Time (hh:mm)		12:54-12:58										Time (hh:mm)		12:20-12:32									
Water Depth (m)		9.60										Water Depth (m)		4.30									
Monitoring Depth (m)		1.20		4.60				8.00						1.10		3.20							
Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle	Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.6	16.6	16.3	16.5	16.3	16.3	16.4	16.3	16.45	-		17.0	17.0						16.6	16.5	16.76	-	
Salinity (ppt)	30.4	30.5	30.6	30.5	30.6	30.7	30.55	-	-			30.1	30.1						30.6	30.6	30.35	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.87	-	-			8.2	8.2						8.1	8.1	8.12	-	
D.O. Saturation (%)	116.2	113.3	112.2	111.8	110.4	113.7	112.94	-	-			137.2	138.0						129.4	124.3	132.23	-	
D.O. (mg/L)	9.42	9.19	9.13	9.08	8.99	9.25	9.18	9.12	9.21	-		11.06	11.12						10.49	10.08	10.69	10.29	11.09
Turbidity (NTU)	13.00	13.60	23.90	13.70	22.30	30.90	19.60	-	-	-		8.80	8.90						9.50	11.80	9.74	-	
SS (mg/L)	16.0	22.0	29.0	20.0	30.0	47.0	27.33	-	-	-		15.0	18.0						15.0	14.0	15.50	-	
Remarks																							

Station D2										Station SR3													
Time (hh:mm)		12:46-12:49										Time (hh:mm)		12:30-12:34									
Water Depth (m)		7.40										Water Depth (m)		12.50									
Monitoring Depth (m)		1.10		3.60				6.00						1.10		6.00				11.10			
Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle	Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.5	16.4	16.4	16.5	16.4	16.4	16.44	-	-			16.4	16.5	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.27	-	
Salinity (ppt)	30.5	30.4	30.7	30.5	30.7	30.6	30.58	-	-			30.5	30.1	30.8	30.8	30.9	30.9	30.9	30.9	30.9	30.67	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88	-	-			7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.83	-	
D.O. Saturation (%)	115.1	111.7	115.0	113.9	110.8	115.2	113.62	-	-			113.8	112.9	111.8	110.2	111.7	111.9	111.9	112.04	-	-		
D.O. (mg/L)	9.35	9.09	9.34	9.24	9.00	9.36	9.23	9.18	9.26	-		9.26	9.18	9.11	8.98	9.10	9.12	9.13	9.13	9.11	9.11	9.11	9.13
Turbidity (NTU)	12.50	12.30	11.10	11.80	12.30	12.80	12.15	-	-	-		10.20	8.40	13.80	12.30	12.80	14.00	11.94	-	-	-		
SS (mg/L)	19.0	19.0	17.0	14.0	20.0	19.0	18.00	-	-	-		14.0	12.0	20.0	18.0	17.0	20.0	16.83	-	-	-		
Remarks																							

Station G1										Station SR4													
Time (hh:mm)		12:11-12:14										Time (hh:mm)		12:23-12:26									
Water Depth (m)		12.40										Water Depth (m)		13.20									
Monitoring Depth (m)		0.90		5.90				11.10						1.10		6.50				12.20			
Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle	Trial	1	2	1	2	1	2	1	2	Depth-averaged	Bottom	Surface&Middle
Water Temperature (°C)	16.5	16.4	16.3	16.4	16.2	16.2	16.34	-	-			16.6	16.6	16.3	16.3	16.2	16.2	16.2	16.2	16.2	16.37	-	
Salinity (ppt)	30.4	30.5	30.6	30.6	30.8	30.8	30.63	-	-			30.1	30.1	30.7	30.8	30.9	30.9	30.9	30.9	30.9	30.59	-	
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	-	-			7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.83	-	
D.O. Saturation (%)	121.6	119.6	118.6	117.2	117.9	118.8	118.94	-	-			120.4	119.5	118.2	115.5	115.8	117.6	117.82	-	-	-		
D.O. (mg/L)	9.87	9.72	9.65	9.54	9.61	9.68	9.68	9.65	9.70	-		9.78	9.70	9.61	9.39	9.44	9.58	9.58	9.51	9.62	-		
Turbidity (NTU)	8.40	8.80	11.70	10.50	23.40	23.10	14.33	-	-	-		8.40	7.60	10.40	9.60	16.60	14.90	11.23	-	-	-		
SS (mg/L)	13.0	13.0	20.0	20.0	31.0	33.0	21.67	-	-	-		13.0	11.0	14.0	17.0	20.0	20.0	15.83	-	-	-		
Remarks																							

Annex E10- Water Quality Results at Airport during mid-flood tide for 7 March 2008

Sampling Date	03/07/2008
Weather & Ambient Temperature	Sunny, 17C

Mid-Flood

Station C3										Station U2									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>
Water Temperature (°C)	16.4	16.4	16.4	16.4	16.3	16.3	16.37	-		Water Temperature (°C)	17.1	17.1	17.1	17.1	17.1	17.1	17.13	-	
Salinity (ppt)	30.4	30.6	30.5	30.6	30.6	30.6	30.55	-		Salinity (ppt)	30.1	30.1	30.1	30.2	30.1	30.1	30.11	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.02	-		pH	8.1	8.1	8.1	8.1	8.2	8.1	8.13	-	
D.O. Saturation (%)	123.0	121.6	121.9	120.6	117.6	119.7	120.70	-		D.O. Saturation (%)	144.9	145.8	147.0	147.2	145.4	140.1	145.07	-	
D.O. (mg/L)	10.00	9.88	9.91	9.81	9.57	9.74	9.82	9.66	9.90	D.O. (mg/L)	11.65	11.72	11.82	11.83	11.69	11.26	11.66	11.48	11.76
Turbidity (NTU)	9.40	13.90	12.30	17.50	24.20	22.60	16.65	-		Turbidity (NTU)	19.10	19.60	27.90	25.50	26.00	24.20	23.71	-	
SS (mg/L)	16.0	19.0	21.0	23.0	36.0	25.0	23.33	-		SS (mg/L)	27.0	27.0	39.0	46.0	37.0	46.0	37.00	-	
Remarks										Remarks									

Station C4										Station SR2									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>
Water Temperature (°C)	16.5	16.5	16.5	16.5	16.4	16.5	16.47	-		Water Temperature (°C)	17.3	17.3			17.3	17.3	17.28	-	
Salinity (ppt)	30.2	30.2	30.2	30.3	30.3	30.3	30.26	-		Salinity (ppt)	29.7	29.7			29.7	29.7	29.70	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.00	-		pH	8.1	8.1			8.1	8.1	8.09	-	
D.O. Saturation (%)	122.9	123.4	122.2	122.9	118.7	120.5	121.78	-		D.O. Saturation (%)	132.5	133.2			133.6	133.3	133.14	-	
D.O. (mg/L)	10.00	10.03	9.94	10.00	9.66	9.80	9.91	9.73	9.99	D.O. (mg/L)	10.65	10.70			10.74	10.70	10.70	10.72	10.68
Turbidity (NTU)	17.10	18.10	18.60	19.20	21.90	21.10	19.35	-		Turbidity (NTU)	10.20	10.00			15.30	11.90	11.86	-	
SS (mg/L)	23.0	25.0	28.0	26.0	30.0	35.0	27.83	-		SS (mg/L)	16.0	20.0			19.0	22.0	19.25	-	
Remarks										Remarks									

Station D2										Station SR3									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>
Water Temperature (°C)	16.9	16.9	16.9	16.9	16.9	16.9	16.86	-		Water Temperature (°C)	16.6	16.6	16.8	16.8	16.9	16.9	16.74	-	
Salinity (ppt)	30.3	30.3	30.3	30.3	29.8	30.3	30.20	-		Salinity (ppt)	30.2	30.1	30.2	30.2	30.3	30.2	30.19	-	
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.09	-		pH	8.0	8.0	8.1	8.1	8.1	8.1	8.08	-	
D.O. Saturation (%)	140.0	139.8	137.5	139.6	133.1	139.3	138.20	-		D.O. Saturation (%)	128.3	129.3	134.0	134.8	134.2	112.7	128.88	-	
D.O. (mg/L)	11.29	11.29	11.09	11.27	10.77	11.24	11.16	11.01	11.24	D.O. (mg/L)	10.41	10.50	10.84	10.91	10.83	9.10	10.43	9.97	10.67
Turbidity (NTU)	15.90	15.70	18.70	17.50	18.40	17.90	17.35	-		Turbidity (NTU)	12.50	12.30	13.50	12.60	15.80	13.30	13.31	-	
SS (mg/L)	24.0	22.0	26.0	27.0	23.0	24.0	24.33	-		SS (mg/L)	18.0	19.0	18.0	22.0	24.0	24.0	20.83	-	
Remarks										Remarks									

Station G1										Station SR4									
Time (hh:mm)										Time (hh:mm)									
Water Depth (m)										Water Depth (m)									
Monitoring Depth (m)										Monitoring Depth (m)									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>	Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	<i>Surface&Middle</i>
Water Temperature (°C)	16.3	16.5	16.3	16.4	16.2	16.2	16.29	-		Water Temperature (°C)	16.5	16.4	16.3	16.3	16.3	16.3	16.33	-	
Salinity (ppt)	30.5	30.4	30.6	30.5	30.7	30.7	30.56	-		Salinity (ppt)	30.0	30.2	30.3	30.4	30.4	30.4	30.30	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.00	-		pH	8.0	8.0	8.0	8.0	8.0	8.0	7.98	-	
D.O. Saturation (%)	117.1	126.0	117.5	120.4	114.4	114.7	118.37	-		D.O. Saturation (%)	120.2	118.5	116.2	116.9	115.5	114.3	116.91	-	
D.O. (mg/L)	9.55	10.24	9.58	9.80	9.33	9.36	9.64	9.35	9.79	D.O. (mg/L)	9.79	9.66	9.48	9.53	9.42	9.33	9.54	9.38	9.62
Turbidity (NTU)	18.50	6.90	13.80	14.80	30.80	38.90	20.62	-		Turbidity (NTU)	17.40	19.10	37.80	27.40	44.80	33.60	30.01	-	
SS (mg/L)	15.0	20.0	21.0	17.0	58.0	40.0	28.50	-		SS (mg/L)	25.0	30.0	44.0	49.0	58.0	50.0	42.67	-	
Remarks										Remarks									

Annex E11- Water Quality Results at Tuen Mun during mid-ebb tide for 8 March 2008

Date	03/08/2008							
Station	C1							
Time (hh:mm)	12:01 - 12:07							
Ambient Temperature (°C)	20							
Weather	Sunny							
Water Depth (m)	8.30							
Monitoring Depth (m)	1.30	4.40		7.50				
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.9	17.0	16.7	16.5	16.5	16.5	16.69	-
Salinity (ppt)	30.3	30.3	30.3	30.3	30.4	30.4	30.34	-
pH	8.0	8.0	8.0	8.0	7.9	7.9	7.96	-
D.O. Saturation (%)	115.6	120.8	109.9	106.9	100.5	102.1	109.30	-
D.O. (mg/L)	9.32	9.72	8.91	8.68	8.16	8.29	8.85	8.23
Turbidity (NTU)	5.40	5.20	6.20	6.90	8.60	8.70	6.84	-
SS (mg/L)	13.0	14.0	10.0	15.0	12.0	12.0	12.67	-
Remarks	-							

Date	03/08/2008							
Station	C2							
Time (hh:mm)	12:59 - 13:04							
Ambient Temperature (°C)	20							
Weather	Sunny							
Water Depth (m)	13.10							
Monitoring Depth (m)	1.20	6.80		12.00				
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.6	16.7	16.4	16.5	16.4	16.3	16.50	-
Salinity (ppt)	30.4	30.4	30.5	30.4	30.4	30.6	30.46	-
pH	8.0	8.0	8.0	8.0	8.0	7.9	7.96	-
D.O. Saturation (%)	115.0	118.4	108.8	111.8	107.4	109.4	111.81	-
D.O. (mg/L)	9.32	9.58	8.85	9.08	8.74	8.91	9.08	8.83
Turbidity (NTU)	9.20	7.30	14.40	11.10	15.90	15.90	12.29	-
SS (mg/L)	18.0	14.0	22.0	20.0	24.0	24.0	20.33	-
Remarks	-							

Date	03/08/2008							
Station	D1							
Time (hh:mm)	12:45 - 12:49							
Ambient Temperature (°C)	20							
Weather	Sunny							
Water Depth (m)	8.70							
Monitoring Depth (m)	1.10	4.20		6.90				
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.7	16.6	16.6	16.6	16.6	16.6	16.62	-
Salinity (ppt)	30.4	30.4	30.4	30.4	30.3	30.4	30.37	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.98	-
D.O. Saturation (%)	114.3	113.0	113.2	113.3	110.4	113.5	112.96	-
D.O. (mg/L)	9.26	9.16	9.18	9.19	8.95	9.20	9.16	9.08
Turbidity (NTU)	8.30	12.20	8.20	10.00	8.50	9.00	9.32	-
SS (mg/L)	13.0	16.0	16.0	18.0	13.0	16.0	15.33	-
Remarks	-							

Date	03/08/2008							
Station	U1							
Time (hh:mm)	12:30 - 12:35							
Ambient Temperature (°C)	20							
Weather	Sunny							
Water Depth (m)	9.40							
Monitoring Depth (m)	1.10	4.70		8.40				
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	17.0	16.9	16.8	16.7	16.6	16.6	16.78	-
Salinity (ppt)	30.3	30.3	30.3	30.4	30.4	30.4	30.34	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.01	-
D.O. Saturation (%)	120.8	122.5	115.8	115.7	111.4	112.1	116.38	-
D.O. (mg/L)	9.72	9.89	9.36	9.36	9.02	9.08	9.41	9.05
Turbidity (NTU)	6.70	6.90	7.70	8.30	9.20	9.10	7.96	-
SS (mg/L)	10.0	17.0	16.0	12.0	15.0	18.0	14.67	-
Remarks	-							

Date	03/08/2008							
Station	SR1							
Time (hh:mm)	12:16 - 12:22							
Ambient Temperature (°C)	20							
Weather	Sunny							
Water Depth (m)	5.30							
Monitoring Depth (m)	1.60	2.80		4.10				
Tide	Mid-Ebb							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>
Water Temperature (°C)	16.9	16.8	16.7	16.6	16.6	16.6	16.70	-
Salinity (ppt)	30.3	30.3	30.2	30.3	30.2	30.3	30.26	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.01	-
D.O. Saturation (%)	121.1	121.6	115.8	112.7	108.6	111.7	115.24	-
D.O. (mg/L)	9.77	9.83	9.39	9.14	8.81	9.06	9.33	8.94
Turbidity (NTU)	7.10	5.50	6.80	7.00	9.40	7.40	7.23	-
SS (mg/L)	14.0	14.0	12.0	13.0	18.0	11.0	13.67	-
Remarks	-							

Annex E12- Water Quality Results at Tuen Mun during mid-flood tide for 8 March 2008

Date	03/08/2008								
Station	C1								
Time (hh:mm)	17:59 - 18:02								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	7.30								
Monitoring Depth (m)	1.10	3.70			6.60				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	16.8	16.8	16.8	16.8	16.8	16.8	16.79	-	
Salinity (ppt)	30.3	30.3	30.2	30.4	30.2	30.4	30.29	-	
pH	8.0	8.0	8.0	8.0	7.9	8.0	7.97	-	
D.O. Saturation (%)	118.1	119.8	117.6	119.0	114.3	118.6	117.90	-	
D.O. (mg/L)	9.54	9.68	9.52	9.61	9.25	9.58	9.53	9.42	
Turbidity (NTU)	8.20	5.90	10.40	11.60	11.70	12.80	10.08	-	
SS (mg/L)	11.0	12.0	20.0	17.0	19.0	24.0	17.17	-	
Remarks	-								

Date	03/08/2008								
Station	C2								
Time (hh:mm)	18:41 - 18:46								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	13.40								
Monitoring Depth (m)	1.00	6.50			12.30				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	16.8	16.8	16.8	16.8	16.8	16.8	16.79	-	
Salinity (ppt)	30.4	30.4	30.4	30.3	30.4	30.3	30.35	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.00	-	
D.O. Saturation (%)	121.2	121.8	121.1	121.9	118.9	120.2	120.86	-	
D.O. (mg/L)	9.80	9.84	9.78	9.85	9.61	9.71	9.77	9.66	
Turbidity (NTU)	15.50	15.50	17.20	18.50	20.20	21.20	18.02	-	
SS (mg/L)	27.0	29.0	24.0	34.0	29.0	40.0	30.50	-	
Remarks	-								

Date	03/08/2008								
Station	D1								
Time (hh:mm)	18:31 - 18:34								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	8.90								
Monitoring Depth (m)	0.90	4.00			7.20				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	17.0	17.0	17.0	17.0	17.0	17.0	16.99	-	
Salinity (ppt)	30.4	30.3	30.3	30.4	30.3	30.4	30.34	-	
pH	8.0	8.1	8.0	8.1	8.1	8.1	8.05	-	
D.O. Saturation (%)	129.4	132.5	129.8	132.1	126.8	130.3	130.15	-	
D.O. (mg/L)	10.42	10.66	10.45	10.63	10.21	10.48	10.48	10.35	
Turbidity (NTU)	13.00	24.60	18.90	26.10	25.80	18.60	21.14	-	
SS (mg/L)	18.0	36.0	30.0	37.0	43.0	37.0	33.50	-	
Remarks	-								

Date	03/08/2008								
Station	U1								
Time (hh:mm)	18:20 - 18:24								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	8.70								
Monitoring Depth (m)	1.10	4.10			7.10				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	17.0	17.0	17.0	17.0	17.0	17.0	16.99	-	
Salinity (ppt)	30.4	30.3	30.3	30.3	30.3	30.3	30.34	-	
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.05	-	
D.O. Saturation (%)	129.5	133.4	128.5	132.8	123.2	124.9	128.72	-	
D.O. (mg/L)	10.43	10.73	10.35	10.68	9.92	10.05	10.36	9.99	
Turbidity (NTU)	11.20	11.10	13.60	15.60	29.70	32.70	18.97	-	
SS (mg/L)	20.0	17.0	19.0	22.0	43.0	37.0	26.33	-	
Remarks	-								

Date	03/08/2008								
Station	SR1								
Time (hh:mm)	18:09 - 18:12								
Ambient Temperature (°C)	18								
Weather	Sunny								
Water Depth (m)	5.60								
Monitoring Depth (m)	1.10	2.60			4.00				
Tide	Mid-Flood								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	<i>Depth-averaged</i>	<i>Bottom</i>	
Water Temperature (°C)	17.0	17.0	17.0	17.0	17.0	17.0	16.98	-	
Salinity (ppt)	30.3	30.3	30.2	30.3	30.2	30.3	30.27	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.04	-	
D.O. Saturation (%)	129.9	130.2	129.2	129.8	127.5	129.7	129.38	-	
D.O. (mg/L)	10.46	10.48	10.41	10.45	10.27	10.45	10.42	10.36	
Turbidity (NTU)	21.90	16.10	21.60	17.30	22.40	19.50	19.82	-	
SS (mg/L)	30.0	22.0	34.0	30.0	38.0	32.0	31.00	-	
Remarks	-								

Annex F

Dolphin Observation Recording Forms



DOLPHIN OBSERVATION RECORDING FORM

Date: (dd/mm/yyyy): 03/13/2017 Vessel Name: CHI Weather: Fair
 Observer's name: Kevin Chan
 Start Time: 12:00 End Time: 12:30 Total Time: 0:30
 Observer's Height Above Sea Level (m) 10 Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
12:00	812991	821131	0.0 knot	2	1.6	1-5 km	CLB	Nil
12:15	812991	821131	0.0 knot	2	1.6	1-5 km	CLB	Nil
12:30	812991	821131	0.0 knot	2	1.6	1-5 km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. Location: Record Easting & Northing (HK80 GRID) Speed: Record in knots. Sea State: 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam streaks. Swell Height: Light = 0-1m; Moderate = 1-2m; Heavy = > 2m. Visibility: < 1km; 1-5km; 6-10km; >10km. Boat Activity: TB = Tugboat; CLB = Cable Lay Barge Sighting Reference: Refer to number(s) on Sighting Record Form

Form



DOLPHIN OBSERVATION RECORDING FORM

Date: (dd/mm/yyyy): 09/11/2008 Vessel Name: CHI Weather: Part
 Observer's name: Kevin Chan
 Start Time: 1:30 End Time: 4:20 Total Time: 2:50
 Observer's Height Above Sea Level (m): 10 Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
1:30	822170	820735	0.3 knots	2	L/G	1-5 km	CLB	N/A
1:45	822170	820725	0.4 knots	2	L/G	1-5 km	CLB	N/A
1:50	822170	820725	0.4 knots	2	L/G	1-5 km	CLB	N/A

DATA DEFINITIONS:

Time: 24hrs clock. Location: Record Easting & Northing (HK80 GRD) Speed: Record in knots. Sea State: 0 = minor calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam streaks. Swell Height: Light = 0-5m; Moderate = 1-2m; Heavy = > 2m. Visibility: < 1km; 1-5km; 6-10km; >10km. Boat Activity: TB = Tugboat; CLB = Cable Lay Barge Sighting Reference: Refer to number(s) on Sighting Record Form.



HONG KONG MARINE CONTRACTORS LIMITED

DOLPHIN OBSERVATION RECORDING FORM

Date: (dd/mm/yyyy): 05/03/2007 Vessel Name: [H] WATER - Fair
 Observer's name: Kevin Chan
 Start Time: 9:00 End Time: 9:30 Total Time: 0:30
 Observer's Height Above Sea Level (m) 10 Field of View 180 degree FWD / 90 degree L / 90 degree R

Time	Easting	Northing	Speed	Sea State	Swell Height	Visibility	Boat Activity	Sighting Ref.
9:00	811801	820337	0.0 knots	2	1.5	1-5 km	CLB	Nil
9:15	811801	820337	0.0 knots	2	1.5	1-5 km	CLB	Nil
9:30	811801	820337	0.0 knots	2	1.5	1-5 km	CLB	Nil

DATA DEFINITIONS:

Time: 24hrs clock. Location: Record Easting & Northing (HK80 GRID) Speed: Record in knots. Sea State: 0 = mirror calm; 1 = slight ripples, no foam crest; 2 = small wavelets, glassy crests, but no whitecaps; 3 = large wavelets, crest begin to break, few whitecaps; 4 = longer waves, many whitecaps; 5 = moderate waves of longer form, some spray; 6 = large waves, whitecaps everywhere, frequent spray; 7 = sea heaps up, white foam lows in streaks; 8 = long, high waves edges breaking, foam blows in streaks; 9 = high waves, sea begin to roll, dense foam streaks. Swell Height: Light = 0-1m; Moderate = 1-2m; Heavy = > 2m. Visibility: < 1km; 1-5km; 6-10km; >10km. Boat Activity: TB = Tugboat; CLB = Cable Lay Barge Sighting Reference: Refer to number(s) on Sighting Record Form.

Annex G

Current Flow Data

030308.txt
Curr X km/h -000.2 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 13:05:34
FULMAR-V3D3.089,513,520,095,X++,001,Y++,008,FR8,FR9,001111111
Curr X km/h +000.1 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 083
Heading deg 041 Compass degs 124
TIME STAMP 2008/03/03 13:05:35
FULMAR-V3D3.076,512,518,096,X++,000,Y++,006,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:29
FULMAR-V3D3.074,516,512,098,X++,004,Y--,006,FR8,FR9,001111111
Curr X km/h +000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 041
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:05:30
FULMAR-V3D3.092,512,524,100,X--,006,Y++,012,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 082
Heading deg 041 Compass degs 123
TIME STAMP 2008/03/03 13:05:34
FULMAR-V3D3.086,512,517,101,X--,004,Y++,005,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.4
Curr R km/h +000.4 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:32
FULMAR-V3D3.073,512,507,102,X--,004,Y--,005,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.4
Curr R km/h +000.4 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:05:33
FULMAR-V3D3.070,512,512,103,X--,004,Y++,001,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:05:34
FULMAR-V3D3.074,510,510,104,X--,002,Y--,002,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 225
Heading deg 041 Compass degs 266
TIME STAMP 2008/03/03 13:05:35
FULMAR-V3D3.090,512,518,105,X++,002,Y++,006,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:36
FULMAR-V3D3.085,512,508,107,X--,000,Y--,004,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:05:37
FULMAR-V3D3.072,512,510,108,X--,004,Y--,002,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:05:38
FULMAR-V3D3.072,514,512,109,X++,002,Y++,008,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:05:39
FULMAR-V3D3.075,515,512,110,X++,003,Y++,000,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 041

030308.txt
TIME STAMP 2008/03/03 13:05:40
FULMAR-V3D3.091,510,515,111,X--,002,Y++,003,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.2
Curr R km/h +000.3 Bearing deg 165
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 13:05:41
FULMAR-V3D3.086,508,524,113,X--,004,Y++,012,FR8,FR9,001111111
Curr R km/h -000.3 Curr Y km/h +000.9
Curr R km/h +000.9 Bearing deg 100
Heading deg 041 Compass degs 149
TIME STAMP 2008/03/03 13:05:42
FULMAR-V3D3.068,508,514,114,X--,004,Y++,002,FR8,FR9,001111111
Curr X km/h -000.3 Curr Y km/h +000.2
Curr R km/h +000.3 Bearing deg 153
Heading deg 041 Compass degs 194
TIME STAMP 2008/03/03 13:05:43
FULMAR-V3D3.072,512,512,115,X--,002,Y++,003,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:05:44
FULMAR-V3D3.076,512,514,116,X--,004,Y++,002,FR8,FR9,001111111
Curr R km/h +000.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:45
FULMAR-V3D3.090,510,512,117,X--,002,Y--,002,FR8,FR9,001111111
Curr X km/h -000.1 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:05:46
FULMAR-V3D3.085,510,516,119,X--,002,Y++,004,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h -000.2
Curr R km/h +000.3 Bearing deg 214
Heading deg 041 Compass degs 255
TIME STAMP 2008/03/03 13:05:47
FULMAR-V3D3.069,511,515,120,X--,001,Y++,003,FR8,FR9,001111111
Curr X km/h +000.2 Bearing deg 108
Heading deg 041 Compass degs 149
TIME STAMP 2008/03/03 13:05:48
FULMAR-V3D3.072,512,514,121,X--,000,Y++,002,FR8,FR9,001111111
Curr X km/h -000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:49
FULMAR-V3D3.076,510,514,122,X--,002,Y++,002,FR8,FR9,001111111
Curr X km/h -000.2 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 13:05:50
FULMAR-V3D3.094,508,516,123,X--,004,Y++,004,FR8,FR9,001111111
Curr R km/h +000.3 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 13:05:51
FULMAR-V3D3.089,512,520,124,X--,002,Y++,008,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:52
FULMAR-V3D3.070,512,516,126,X--,004,Y++,004,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.3
Curr R km/h +000.3 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:53
FULMAR-V3D3.072,512,512,127,X--,006,Y--,005,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0

030308.txt
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:05:54
FULMAR-V3D3.076,510,515,128,X--,002,Y++,003,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.2
Curr R km/h +000.3 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 13:05:55
FULMAR-V3D3.094,508,512,129,X--,004,Y++,005,FR8,FR9,001111111
Curr X km/h +000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:05:56
FULMAR-V3D3.089,512,522,130,X++,000,Y++,010,FR8,FR9,001111111
Curr X km/h +000.8 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:05:57
FULMAR-V3D3.070,512,132,X--,000,Y++,003,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.3
Curr R km/h +000.3 Bearing deg 063
Heading deg 041 Compass degs 104
TIME STAMP 2008/03/03 13:05:58
FULMAR-V3D3.079,510,512,133,X--,002,Y--,002,FR8,FR9,001111111
Curr X km/h -000.0 Curr Y km/h -000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:05:59
FULMAR-V3D3.080,512,510,134,X++,000,Y--,002,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:06:00
FULMAR-V3D3.093,514,518,135,X++,002,Y++,006,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 072
Heading deg 041 Compass degs 113
TIME STAMP 2008/03/03 13:06:01
FULMAR-V3D3.089,514,514,136,X++,002,Y++,002,FR8,FR9,001111111
Curr X km/h +000.2 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 045
Heading deg 041 Compass degs 086
TIME STAMP 2008/03/03 13:06:02
FULMAR-V3D3.080,512,512,137,X--,000,Y--,002,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:06:03
FULMAR-V3D3.079,512,506,139,X--,000,Y--,006,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:06:04
FULMAR-V3D3.087,506,512,140,X--,006,Y++,005,FR8,FR9,001111111
Curr X km/h +000.5 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:06:05
FULMAR-V3D3.090,518,520,141,X++,006,Y++,008,FR8,FR9,001111111
Curr X km/h +000.5 Bearing deg 053
Heading deg 041 Compass degs 094
TIME STAMP 2008/03/03 13:06:06
FULMAR-V3D3.085,512,518,143,X--,004,Y++,006,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.5
Curr R km/h +000.5 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:07

030308.txt
FULMAR-V3D3.075,512,513,143,X++,003,Y++,001,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.1
Curr R km/h +000.1 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:08
FULMAR-V3D3.075,510,512,145,X--,002,Y++,005,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:06:09
FULMAR-V3D3.088,521,512,146,X++,009,Y++,008,FR8,FR9,001111111
Curr X km/h +000.7 Curr Y km/h +000.0
Curr R km/h +000.7 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:06:10
FULMAR-V3D3.092,511,521,147,X--,001,Y++,009,FR8,FR9,001111111
Curr X km/h -000.1 Curr Y km/h +000.7
Curr R km/h +000.7 Bearing deg 096
Heading deg 041 Compass degs 137
TIME STAMP 2008/03/03 13:06:11
FULMAR-V3D3.085,509,512,148,X--,003,Y--,002,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:06:12
FULMAR-V3D3.074,512,503,149,X++,002,Y--,009,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.7
Curr R km/h +000.7 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:06:13
FULMAR-V3D3.073,512,520,151,X--,005,Y++,008,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.1
Curr R km/h +000.1 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:14
FULMAR-V3D3.085,512,520,152,X++,006,Y++,008,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:15
FULMAR-V3D3.092,512,514,153,X--,003,Y++,002,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:16
FULMAR-V3D3.087,516,512,154,X++,004,Y--,002,FR8,FR9,001111111
Curr X km/h +000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:06:17
FULMAR-V3D3.076,512,512,155,X++,002,Y++,002,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:06:18
FULMAR-V3D3.068,512,517,156,X++,006,Y++,005,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.4
Curr R km/h +000.4 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:06:19
FULMAR-V3D3.088,512,512,158,X--,004,Y++,004,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:06:20
FULMAR-V3D3.090,510,514,159,X--,002,Y++,002,FR8,FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 135

Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:25
FULMAR-V3D3,087,512,512,044,X--,006,Y++,008,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:26
FULMAR-V3D3,091,508,04,045,X--,004,Y--,008,FR8,FR9,00111111
Curr X km/h +000.3 Curr Y km/h +000.6
Curr R km/h +000.7 Bearing deg 243
Heading deg 041 Compass degs 284
TIME STAMP 2008/03/03 13:15:27
FULMAR-V3D3,088,512,505,046,X--,002,Y--,007,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:28
FULMAR-V3D3,082,510,506,047,X--,002,Y--,006,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 252
Heading deg 041 Compass degs 293
TIME STAMP 2008/03/03 13:15:29
FULMAR-V3D3,071,512,512,049,X--,002,Y++,005,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:30
FULMAR-V3D3,074,512,512,050,X--,005,Y++,007,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:31
FULMAR-V3D3,088,509,051,051,X--,003,Y--,004,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:15:32
FULMAR-V3D3,093,509,509,052,X--,003,Y--,003,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.2
Curr R km/h +000.3 Bearing deg 225
Heading deg 041 Compass degs 266
TIME STAMP 2008/03/03 13:15:33
FULMAR-V3D3,088,509,506,053,X--,003,Y--,006,FR8,FR9,00111111
Curr X km/h +000.5 Bearing deg 243
Heading deg 041 Compass degs 284
TIME STAMP 2008/03/03 13:15:34
FULMAR-V3D3,070,512,515,055,X--,001,Y++,003,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:15:35
FULMAR-V3D3,074,512,508,056,X--,001,Y--,004,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:36
FULMAR-V3D3,080,512,508,057,X--,000,Y--,004,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:37
FULMAR-V3D3,093,512,059,X--,002,Y--,002,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:38
FULMAR-V3D3,089,515,502,059,X++,003,Y--,010,FR8,FR9,00111111
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Curr X km/h +000.2 Curr Y km/h -000.8
Curr R km/h +000.8 Bearing deg 287
Heading deg 041 Compass degs 328
TIME STAMP 2008/03/03 13:15:39
FULMAR-V3D3,070,510,512,062,X--,002,Y--,003,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:15:40
FULMAR-V3D3,074,509,514,063,X--,003,Y++,002,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.2
Curr R km/h +000.3 Bearing deg 146
Heading deg 041 Compass degs 187
TIME STAMP 2008/03/03 13:15:41
FULMAR-V3D3,092,508,503,064,X--,004,Y--,009,FR8,FR9,00111111
Curr X km/h -000.3 Curr Y km/h -000.7
Curr R km/h +000.7 Bearing deg 246
Heading deg 041 Compass degs 287
TIME STAMP 2008/03/03 13:15:42
FULMAR-V3D3,090,512,512,065,X--,004,Y--,004,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:43
FULMAR-V3D3,087,512,512,066,X--,002,Y++,008,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:44
FULMAR-V3D3,076,512,510,070,X--,005,Y--,002,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:47
FULMAR-V3D3,091,506,517,071,X--,006,Y++,005,FR8,FR9,00111111
Curr X km/h -000.5 Curr Y km/h +000.4
Curr R km/h +000.6 Bearing deg 140
Heading deg 041 Compass degs 181
TIME STAMP 2008/03/03 13:15:48
FULMAR-V3D3,091,508,523,072,X--,004,Y++,011,FR8,FR9,00111111
Curr X km/h -000.3 Curr Y km/h +000.8
Curr R km/h +000.9 Bearing deg 110
Heading deg 041 Compass degs 151
TIME STAMP 2008/03/03 13:15:49
FULMAR-V3D3,073,510,512,074,X--,002,Y--,006,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h -000.7
Curr R km/h +000.7 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:50
FULMAR-V3D3,069,512,518,075,X--,004,Y++,006,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:15:51
FULMAR-V3D3,074,508,512,076,X--,004,Y--,004,FR8,FR9,00111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
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TIME STAMP 2008/03/03 13:15:52
FULMAR-V3D3,080,510,512,077,X--,002,Y++,004,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:15:53
FULMAR-V3D3,093,518,512,078,X++,006,Y--,004,FR8,FR9,00111111
Curr X km/h +000.5 Curr Y km/h +000.0
Curr R km/h +000.5 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:15:54
FULMAR-V3D3,088,512,515,079,X--,000,Y++,003,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:15:55
FULMAR-V3D3,069,512,517,081,X--,006,Y++,005,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.4
Curr R km/h +000.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:15:56
FULMAR-V3D3,073,500,525,082,X--,012,Y++,013,FR8,FR9,00111111
Curr X km/h -000.9 Curr Y km/h +001.0
Curr R km/h +001.3 Bearing deg 133
Heading deg 041 Compass degs 174
TIME STAMP 2008/03/03 13:15:57
FULMAR-V3D3,076,512,512,083,X--,008,Y--,006,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:15:58
FULMAR-V3D3,090,512,510,084,X--,004,Y--,002,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:15:59
FULMAR-V3D3,092,512,520,085,X--,003,Y++,008,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:16:00
FULMAR-V3D3,074,510,506,087,X--,002,Y--,006,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:16:01
FULMAR-V3D3,070,512,512,088,X--,005,Y++,004,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:16:02
FULMAR-V3D3,074,512,520,089,X--,008,Y++,008,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 13:16:03
FULMAR-V3D3,076,506,516,090,X--,006,Y++,004,FR8,FR9,00111111
Curr X km/h -000.5 Curr Y km/h +000.3
Curr R km/h +000.5 Bearing deg 146
Heading deg 041 Compass degs 187
TIME STAMP 2008/03/03 13:16:04
FULMAR-V3D3,094,515,505,091,X++,003,Y--,007,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h -000.5
Curr R km/h +000.2 Bearing deg 293
Heading deg 041 Compass degs 334
TIME STAMP 2008/03/03 13:16:05
FULMAR-V3D3,090,504,512,092,X--,008,Y++,010,FR8,FR9,00111111
Curr X km/h -000.6 Curr Y km/h +000.0
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Curr R km/h +000.6 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:16:06
FULMAR-V3D3,076,512,500,094,X--,003,Y--,012,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.9
Curr R km/h +000.9 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:16:07
FULMAR-V3D3,068,510,502,095,X--,002,Y--,010,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 259
Heading deg 041 Compass degs 300
TIME STAMP 2008/03/03 13:16:08
FULMAR-V3D3,073,506,516,096,X--,006,Y++,004,FR8,FR9,00111111
Curr X km/h +000.5 Curr Y km/h +000.3
Curr R km/h +000.5 Bearing deg 146
Heading deg 041 Compass degs 187
TIME STAMP 2008/03/03 13:16:09
FULMAR-V3D3,079,512,506,097,X--,004,Y--,006,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:16:10
FULMAR-V3D3,094,514,512,098,X--,002,Y++,006,FR8,FR9,00111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 13:16:11
FULMAR-V3D3,074,500,512,100,X--,004,Y--,008,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:16:12
FULMAR-V3D3,075,509,512,101,X--,003,Y++,007,FR8,FR9,00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:16:13
FULMAR-V3D3,070,512,502,102,X--,004,Y--,010,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 13:16:14
FULMAR-V3D3,074,500,512,103,X--,012,Y++,008,FR8,FR9,00111111
Curr X km/h -000.0 Curr Y km/h +000.0
Curr R km/h +000.9 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 13:16:15
FULMAR-V3D3,089,516,506,104,X--,010,Y++,012,FR8,FR9,00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 13:16:16
FULMAR-V3D3,089,512,501,106,X--,002,Y--,011,FR8,FR9,00111111
Curr X km/h -000.6 Curr Y km/h +000.3
Curr R km/h +000.7 Bearing deg 207
Heading deg 041 Compass degs 248
TIME STAMP 2008/03/03 13:16:17
FULMAR-V3D3,074,520,507,107,X--,008,Y--,005,FR8,FR9,00111111
Curr X km/h +000.6 Curr Y km/h +000.4
Curr R km/h +000.7 Bearing deg 328
Heading deg 041 Compass degs 009
TIME STAMP 2008/03/03 13:16:18
FULMAR-V3D3,069,516,506,108,X--,004,Y--,006,FR8,FR9,00111111
Curr X km/h +000.3 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 304
Heading deg 041 Compass degs 345
TIME STAMP 2008/03/03 13:16:19
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TIME STAMP 2008/03/03 14: 48: 48
FULMAR-V3D3,084,512,521,106,X++,000,Y++,009,FR8,FR9,001111111
Curr R km/h +000.0 Curr Y km/h +000.7
Headng deg 039 Compas degs 129

Curr R km/h +000.5 Bearing deg 090
Headng deg 039 Compas degs 129
TIME STAMP 2008/03/03 14: 49: 02
FULMAR-V3D3,069,512,514,123,X++,000,Y++,002,FR8,FR9,001111111

FULMAR-V3D3,068,514,520,138,X++,002,Y++,008,FR8,FR9,001111111
Curr R km/h +000.2 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 076

Headng deg 039 Compas degs 118
TIME STAMP 2008/03/03 14: 49: 29
FULMAR-V3D3,073,512,514,155,X++,000,Y++,002,FR8,FR9,001111111

Curr R km/h +000.3 Bearing deg 214
Heading deg 041 Compass degs 255
TIME STAMP 2008/03/03 15:42:18
FULMAR-V3D3 076 512 510 113 X--...

FULMAR-V3D3 080 512 512 130 X--...
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000

Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 15:42:45
FULMAR-V3D3 079 512 512 146 X--...

Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 15:42:59

Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 16:04:58
FULMAR-V3D3 074,512,511,208,X--,002,Y--,001,FR8,FR9,001111111

FULMAR-V3D3,083,512,512,224,X+,,000,Y--,,000,FR8,FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000

Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:05:25
FULMAR-V3D3,086,516,508,240,X+,,004,Y--,004,FR8,FR9,001111111
Curr X km/h +000.3 Curr Y km/h -000.3

Curr X km/h +000.2 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 315
Heading deg 041 Compass degs 356
TIME STAMP 2008/03/03 16:05:39

Curr X km/h +000.0 Curr Y km/h -000.1
Curr R km/h +000.1 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:11:19
FULMAR-V3D3.089, 512, 511, 153, X--, 000, Y--, 001, FR8, FR9, 001111111

TIME STAMP 2008/03/03 16:11:32
FULMAR-V3D3.072, 512, 512, 169, X++, 000, Y--, 000, FR8, FR9, 001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000

Curr R km/h +000.3 Bearing deg 243
Heading deg 041 Compass degs 284
TIME STAMP 2008/03/03 16:11:46
FULMAR-V3D3.090, 512, 512, 186, X--, 000, Y--, 000, FR8, FR9, 001111111

FULMAR-V3D3.071, 512, 512, 201, X--, 002, Y--, 000, FR8, FR9, 001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000

030308.txt
Curr X km/h +000.0 Curr Y km/h -000.6
Curr R km/h +000.6 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:47:35
FULMAR-V3D3.088.510.506.201.X--,002.Y--,006.FR8.FR9,001111111
Curr X km/h -000.2 Curr Y km/h -000.5
Curr R km/h +000.5 Bearing deg 252
Heading deg 041 Compass degs 293
TIME STAMP 2008/03/03 16:47:39
FULMAR-V3D3.087.522.507.202.X++,010.Y--,005.FR8.FR9,001111111
Curr X km/h +000.8 Curr Y km/h -000.4
Curr R km/h +000.8 Bearing deg 333
Heading deg 041 Compass degs 014
TIME STAMP 2008/03/03 16:47:47
FULMAR-V3D3.083.512.503.204.X++,004.Y--,009.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.7
Curr R km/h +000.7 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:47:58
FULMAR-V3D3.081.505.522.205.X--,007.Y++,010.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.8
Curr R km/h +000.9 Bearing deg 125
Heading deg 041 Compass degs 166
TIME STAMP 2008/03/03 16:47:59
FULMAR-V3D3.082.502.526.206.X--,010.Y++,014.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +001.1
Curr R km/h +001.3 Bearing deg 126
Heading deg 041 Compass degs 167
TIME STAMP 2008/03/03 16:47:40
FULMAR-V3D3.076.504.519.207.X--,008.Y++,007.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.5
Curr R km/h +000.8 Bearing deg 139
Heading deg 041 Compass degs 180
TIME STAMP 2008/03/03 16:47:41
FULMAR-V3D3.072.512.500.208.X++,006.Y--,012.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.9
Curr R km/h +000.9 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:47:42
FULMAR-V3D3.073.506.513.210.X--,006.Y++,001.FR8.FR9,001111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:47:43
FULMAR-V3D3.074.507.506.211.X--,005.Y--,006.FR8.FR9,001111111
Curr X km/h -000.4 Curr Y km/h -000.5
Curr R km/h +000.6 Bearing deg 230
Heading deg 041 Compass degs 271
TIME STAMP 2008/03/03 16:47:44
FULMAR-V3D3.076.512.512.212.X++,000.Y--,000.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 16:47:45
FULMAR-V3D3.080.512.510.214.X++,000.Y--,002.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:47:46
FULMAR-V3D3.080.514.511.215.X++,002.Y--,001.FR8.FR9,001111111
Curr X km/h +000.2 Curr Y km/h -000.1
Curr R km/h +000.2 Bearing deg 333
Heading deg 041 Compass degs 014
TIME STAMP 2008/03/03 16:47:47
FULMAR-V3D3.083.509.510.217.X--,003.Y--,002.FR8.FR9,001111111
Curr X km/h -000.2 Curr Y km/h -000.2
Curr R km/h +000.3 Bearing deg 214
Heading deg 041 Compass degs 255

030308.txt
TIME STAMP 2008/03/03 16:47:48
FULMAR-V3D3.091.510.508.218.X--,002.Y--,004.FR8.FR9,001111111
Curr X km/h -000.2 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 284
Heading deg 041 Compass degs 284
TIME STAMP 2008/03/03 16:47:49
FULMAR-V3D3.092.512.509.219.X++,000.Y--,003.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 311
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 16:47:50
FULMAR-V3D3.089.513.510.220.X++,001.Y--,002.FR8.FR9,001111111
Curr X km/h +000.1 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 297
Heading deg 041 Compass degs 338
TIME STAMP 2008/03/03 16:47:51
FULMAR-V3D3.088.512.512.221.X++,000.Y--,000.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 16:47:52
FULMAR-V3D3.085.512.512.223.X--,007.Y++,010.FR8.FR9,001111111
Curr X km/h +000.0 Bearing deg 000
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 16:47:53
FULMAR-V3D3.083.507.517.224.X--,005.Y++,005.FR8.FR9,001111111
Curr X km/h -000.4 Curr Y km/h +000.4
Curr R km/h +000.5 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 16:47:54
FULMAR-V3D3.081.512.512.225.X++,003.Y--,006.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 16:47:55
FULMAR-V3D3.080.512.515.226.X--,000.Y++,003.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.2
Curr R km/h +000.2 Bearing deg 131
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 16:47:56
FULMAR-V3D3.082.508.512.227.X--,004.Y--,002.FR8.FR9,001111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:47:57
FULMAR-V3D3.080.504.520.229.X--,008.Y++,008.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.0
Curr R km/h +000.5 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:47:58
FULMAR-V3D3.080.508.517.230.X--,004.Y++,005.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.4
Curr R km/h +000.5 Bearing deg 170
Heading deg 041 Compass degs 170
TIME STAMP 2008/03/03 16:47:59
FULMAR-V3D3.080.507.517.231.X--,005.Y++,005.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.4
Curr R km/h +000.5 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 16:48:00
FULMAR-V3D3.079.506.521.232.X--,006.Y++,009.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.7
Curr R km/h +000.8 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 16:48:01
FULMAR-V3D3.074.502.522.233.X--,010.Y++,010.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +000.8

030308.txt
Curr R km/h +001.1 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 16:48:02
FULMAR-V3D3.074.504.518.234.X--,008.Y++,006.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.5
Curr R km/h +000.8 Bearing deg 143
Heading deg 041 Compass degs 184
TIME STAMP 2008/03/03 16:48:03
FULMAR-V3D3.072.510.512.236.X--,002.Y++,007.FR8.FR9,001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:48:04
FULMAR-V3D3.072.504.517.237.X--,008.Y++,005.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.4
Curr R km/h +000.7 Bearing deg 148
Heading deg 041 Compass degs 189
TIME STAMP 2008/03/03 16:48:05
FULMAR-V3D3.075.505.518.238.X--,007.Y++,006.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.5
Curr R km/h +000.7 Bearing deg 139
Heading deg 041 Compass degs 180
TIME STAMP 2008/03/03 16:48:06
FULMAR-V3D3.077.507.515.239.X--,005.Y++,003.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h -000.2
Curr R km/h +000.4 Bearing deg 149
Heading deg 041 Compass degs 190
TIME STAMP 2008/03/03 16:48:07
FULMAR-V3D3.072.506.528.240.X--,006.Y++,016.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +001.2
Curr R km/h +001.3 Bearing deg 111
Heading deg 041 Compass degs 152
TIME STAMP 2008/03/03 16:48:08
FULMAR-V3D3.080.505.524.242.X--,007.Y++,012.FR8.FR9,001111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:48:09
FULMAR-V3D3.079.506.526.243.X--,006.Y++,014.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 16:48:10
FULMAR-V3D3.080.504.516.244.X--,008.Y++,004.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h -000.3
Curr R km/h +000.7 Bearing deg 153
Heading deg 041 Compass degs 194
TIME STAMP 2008/03/03 16:48:11
FULMAR-V3D3.082.504.520.245.X--,008.Y++,008.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.6
Curr R km/h +000.8 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 16:48:12
FULMAR-V3D3.081.504.521.246.X--,008.Y++,009.FR8.FR9,001111111
Curr X km/h -000.9 Curr Y km/h -000.7
Curr R km/h +000.9 Bearing deg 132
Heading deg 041 Compass degs 173
TIME STAMP 2008/03/03 16:48:13
FULMAR-V3D3.080.506.512.247.X--,006.Y++,003.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.0
Curr R km/h +000.5 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 16:48:14
FULMAR-V3D3.080.504.520.249.X--,008.Y++,008.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h -000.6
Curr R km/h +000.8 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 16:48:15

030308.txt
FULMAR-V3D3.082.501.528.250.X--,011.Y++,016.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +001.2
Curr R km/h +001.5 Bearing deg 125
Heading deg 041 Compass degs 166
TIME STAMP 2008/03/03 16:48:16
FULMAR-V3D3.080.501.520.251.X--,011.Y++,008.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +000.6
Curr R km/h +001.0 Bearing deg 144
Heading deg 041 Compass degs 185
TIME STAMP 2008/03/03 16:48:17
FULMAR-V3D3.080.500.520.252.X--,012.Y++,008.FR8.FR9,001111111
Curr X km/h -000.9 Curr Y km/h +000.6
Curr R km/h +001.1 Bearing deg 146
Heading deg 041 Compass degs 187
TIME STAMP 2008/03/03 16:48:18
FULMAR-V3D3.080.501.522.253.X--,011.Y++,010.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +000.8
Curr R km/h +001.1 Bearing deg 138
Heading deg 041 Compass degs 179
TIME STAMP 2008/03/03 16:48:19
FULMAR-V3D3.081.504.525.255.X--,008.Y++,013.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +001.0
Curr R km/h +001.1 Bearing deg 122
Heading deg 041 Compass degs 163
TIME STAMP 2008/03/03 16:48:20
FULMAR-V3D3.081.506.526.000.X--,006.Y++,014.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 16:48:21
FULMAR-V3D3.081.502.532.001.X--,010.Y++,020.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +001.5
Curr R km/h +001.7 Bearing deg 117
Heading deg 041 Compass degs 158
TIME STAMP 2008/03/03 16:48:22
FULMAR-V3D3.079.505.517.002.X--,007.Y++,005.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.4
Curr R km/h +000.6 Bearing deg 144
Heading deg 041 Compass degs 185
TIME STAMP 2008/03/03 16:48:23
FULMAR-V3D3.080.506.530.003.X--,006.Y++,018.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 108
Heading deg 041 Compass degs 149
TIME STAMP 2008/03/03 16:48:24
FULMAR-V3D3.081.504.524.005.X--,008.Y++,012.FR8.FR9,001111111
Curr X km/h -000.4 Curr Y km/h +000.3
Curr R km/h +000.5 Bearing deg 141
Heading deg 041 Compass degs 182
TIME STAMP 2008/03/03 16:48:25
FULMAR-V3D3.081.502.520.006.X--,010.Y++,008.FR8.FR9,001111111
Curr X km/h -000.8 Curr Y km/h +000.6
Curr R km/h +001.0 Bearing deg 141
Heading deg 041 Compass degs 182
TIME STAMP 2008/03/03 16:48:26
FULMAR-V3D3.082.504.518.007.X--,008.Y++,006.FR8.FR9,001111111
Curr X km/h -000.6 Curr Y km/h +000.5
Curr R km/h +000.8 Bearing deg 143
Heading deg 041 Compass degs 184
TIME STAMP 2008/03/03 16:48:27
FULMAR-V3D3.081.506.523.008.X--,006.Y++,011.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.8
Curr R km/h +000.9 Bearing deg 119
Heading deg 041 Compass degs 160
TIME STAMP 2008/03/03 16:48:28
FULMAR-V3D3.083.505.524.009.X--,007.Y++,012.FR8.FR9,001111111
Curr X km/h -000.5 Curr Y km/h +000.9
Curr R km/h +001.0 Bearing deg 120

Curr X km/h -001.0 Curr Y km/h +001.7
Curr R km/h +001.9 Bearing deg 121
Heading deg 041 Compass degs 162
TIME STAMP 2008/03/03 17:05:43
FULMAR-V3D3.074.500.541.226.X--.012.Y++..029.FR8.FR9.001111111
Curr X km/h -000.9 Curr Y km/h +002.2
Curr R km/h +002.4 Bearing deg 112
Heading deg 041 Compass degs 153
TIME STAMP 2008/03/03 17:05:44
FULMAR-V3D3.076.498.531.227.X--.014.Y++..019.FR8.FR9.001111111
Curr X km/h -001.1 Curr Y km/h +001.4
Curr R km/h +001.8 Bearing deg 126
Heading deg 041 Compass degs 167
TIME STAMP 2008/03/03 17:05:45
FULMAR-V3D3.094.512.546.229.X--.016.Y++..034.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +002.6
Curr R km/h +002.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:05:46
FULMAR-V3D3.092.501.546.230.X--.011.Y++..034.FR8.FR9.001111111
Curr X km/h -000.8 Curr Y km/h +002.6
Curr R km/h +002.7 Bearing deg 108
Heading deg 041 Compass degs 149
TIME STAMP 2008/03/03 17:05:47
FULMAR-V3D3.088.512.535.231.X--.008.Y++..023.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +001.7
Curr R km/h +001.7 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:05:48
FULMAR-V3D3.086.507.512.232.X--.005.Y++..016.FR8.FR9.001111111
Curr X km/h -000.4 Curr Y km/h +000.0
Curr R km/h +000.4 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:05:49
FULMAR-V3D3.080.512.523.233.X--.004.Y++..011.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:05:50
FULMAR-V3D3.070.505.532.235.X--.007.Y++..020.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:05:51
FULMAR-V3D3.074.512.530.236.X--.003.Y++..018.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:05:52
FULMAR-V3D3.075.509.529.237.X--.003.Y++..017.FR8.FR9.001111111
Curr X km/h -000.2 Curr Y km/h +001.3
Curr R km/h +001.3 Bearing deg 100
Heading deg 041 Compass degs 141
TIME STAMP 2008/03/03 17:05:53
FULMAR-V3D3.086.499.533.238.X--.013.Y++..021.FR8.FR9.001111111
Curr X km/h -001.0 Curr Y km/h +001.6
Curr R km/h +001.9 Bearing deg 122
Heading deg 041 Compass degs 163
TIME STAMP 2008/03/03 17:05:54
FULMAR-V3D3.092.499.540.239.X--.013.Y++..028.FR8.FR9.001111111
Curr X km/h -001.0 Curr Y km/h +002.1
Curr R km/h +002.3 Bearing deg 115
Heading deg 041 Compass degs 156
TIME STAMP 2008/03/03 17:05:55
FULMAR-V3D3.090.500.536.240.X--.012.Y++..024.FR8.FR9.001111111
Curr X km/h -000.9 Curr Y km/h +001.8
Curr R km/h +002.0 Bearing deg 117
Heading deg 041 Compass degs 158

TIME STAMP 2008/03/03 17:05:56
FULMAR-V3D3.083.506.533.242.X--.006.Y++..021.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h +001.6
Curr R km/h +001.6 Bearing deg 147
Heading deg 041 Compass degs 147
TIME STAMP 2008/03/03 17:05:57
FULMAR-V3D3.074.512.512.243.X--.004.Y++..013.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:05:58
FULMAR-V3D3.071.506.505.244.X--.006.Y--..007.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h -000.5
Curr R km/h +000.7 Bearing deg 229
Heading deg 041 Compass degs 270
TIME STAMP 2008/03/03 17:05:59
FULMAR-V3D3.069.515.506.245.X--.003.Y--..006.FR8.FR9.001111111
Curr X km/h +000.2 Curr Y km/h -000.5
Curr R km/h +000.5 Bearing deg 297
Heading deg 041 Compass degs 338
TIME STAMP 2008/03/03 17:06:00
FULMAR-V3D3.075.512.509.246.X--.000.Y--..003.FR8.FR9.001111111
Curr X km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:06:01
FULMAR-V3D3.079.512.507.248.X--.002.Y--..005.FR8.FR9.001111111
Curr X km/h -001.0 Curr Y km/h -000.2
Curr R km/h +000.3 Bearing deg 326
Heading deg 041 Compass degs 007
TIME STAMP 2008/03/03 17:06:02
FULMAR-V3D3.088.512.506.249.X--.000.Y--..006.FR8.FR9.001111111
Curr X km/h -000.0 Curr Y km/h -000.5
Curr R km/h +000.5 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:06:03
FULMAR-V3D3.091.512.512.250.X--.004.Y--..006.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:04
FULMAR-V3D3.092.512.512.251.X--.005.Y--..004.FR8.FR9.001111111
Curr X km/h -000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:05
FULMAR-V3D3.088.512.512.252.X--.002.Y--..002.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:06
FULMAR-V3D3.085.516.508.253.X--.004.Y--..004.FR8.FR9.001111111
Curr X km/h -000.3 Bearing deg 315
Heading deg 041 Compass degs 356
TIME STAMP 2008/03/03 17:06:07
FULMAR-V3D3.069.514.504.255.X--.002.Y--..008.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h -000.6
Curr R km/h +000.2 Bearing deg 284
Heading deg 041 Compass degs 325
TIME STAMP 2008/03/03 17:06:08
FULMAR-V3D3.070.499.532.000.X--.013.Y++..020.FR8.FR9.001111111
Curr X km/h +001.5 Bearing deg 123
Heading deg 041 Compass degs 164
TIME STAMP 2008/03/03 17:06:09
FULMAR-V3D3.072.507.512.001.X--.005.Y--..004.FR8.FR9.001111111
Curr X km/h -000.4 Curr Y km/h +000.0

Curr R km/h +000.4 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:06:10
FULMAR-V3D3.076.512.512.002.X--.002.Y--..000.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:11
FULMAR-V3D3.080.512.512.003.X--.000.Y++..012.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:12
FULMAR-V3D3.092.506.515.005.X--.006.Y++..003.FR8.FR9.001111111
Curr X km/h +000.5 Curr Y km/h +000.2
Curr R km/h +000.5 Bearing deg 153
Heading deg 041 Compass degs 194
TIME STAMP 2008/03/03 17:06:13
FULMAR-V3D3.088.520.522.006.X--.008.Y++..010.FR8.FR9.001111111
Curr X km/h +000.8 Curr Y km/h +000.8
Curr R km/h +001.0 Bearing deg 051
Heading deg 041 Compass degs 092
TIME STAMP 2008/03/03 17:06:14
FULMAR-V3D3.084.506.526.007.X--.006.Y++..014.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 17:06:15
FULMAR-V3D3.077.509.530.008.X--.012.Y++..018.FR8.FR9.001111111
Curr X km/h -000.9 Curr Y km/h +001.4
Curr R km/h +001.6 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 17:06:16
FULMAR-V3D3.072.506.526.009.X--.006.Y++..014.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 17:06:17
FULMAR-V3D3.073.512.530.011.X--.008.Y++..018.FR8.FR9.001111111
Curr X km/h -000.2 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 100
Heading deg 041 Compass degs 141
TIME STAMP 2008/03/03 17:06:18
FULMAR-V3D3.071.509.534.012.X--.003.Y++..022.FR8.FR9.001111111
Curr X km/h -000.2 Curr Y km/h +001.7
Curr R km/h +001.7 Bearing deg 098
Heading deg 041 Compass degs 139
TIME STAMP 2008/03/03 17:06:19
FULMAR-V3D3.085.512.512.013.X--.006.Y--..011.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:06:20
FULMAR-V3D3.094.512.520.014.X--.005.Y++..008.FR8.FR9.001111111
Curr X km/h +000.9 Curr Y km/h +000.6
Curr R km/h +000.6 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:06:21
FULMAR-V3D3.091.512.528.015.X--.008.Y++..016.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +001.2
Curr R km/h +001.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:06:22
FULMAR-V3D3.081.512.524.016.X--.006.Y++..012.FR8.FR9.001111111
Curr X km/h +000.9 Curr Y km/h +000.9
Curr R km/h +000.9 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:06:23

FULMAR-V3D3.074.504.527.018.X--.008.Y++..015.FR8.FR9.001111111
Curr X km/h -000.6 Curr Y km/h +001.1
Curr R km/h +001.3 Bearing deg 118
Heading deg 041 Compass degs 159
TIME STAMP 2008/03/03 17:06:24
FULMAR-V3D3.068.497.526.019.X--.015.Y++..014.FR8.FR9.001111111
Curr X km/h -001.1 Curr Y km/h +001.1
Curr R km/h +001.5 Bearing deg 137
Heading deg 041 Compass degs 178
TIME STAMP 2008/03/03 17:06:25
FULMAR-V3D3.072.510.517.020.X--.002.Y++..005.FR8.FR9.001111111
Curr X km/h -000.2 Curr Y km/h +000.4
Curr R km/h +000.4 Bearing deg 112
Heading deg 041 Compass degs 153
TIME STAMP 2008/03/03 17:06:26
FULMAR-V3D3.076.512.526.021.X--.010.Y++..014.FR8.FR9.001111111
Curr X km/h +000.0 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:06:27
FULMAR-V3D3.079.508.527.022.X--.004.Y++..015.FR8.FR9.001111111
Curr X km/h -000.3 Curr Y km/h +001.1
Curr R km/h +001.2 Bearing deg 105
Heading deg 041 Compass degs 146
TIME STAMP 2008/03/03 17:06:28
FULMAR-V3D3.092.504.529.024.X--.008.Y++..017.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 17:06:29
FULMAR-V3D3.089.502.526.025.X--.010.Y++..014.FR8.FR9.001111111
Curr X km/h -000.8 Curr Y km/h +001.1
Curr R km/h +001.3 Bearing deg 126
Heading deg 041 Compass degs 167
TIME STAMP 2008/03/03 17:06:30
FULMAR-V3D3.084.504.524.026.X--.008.Y++..012.FR8.FR9.001111111
Curr X km/h -000.6 Curr Y km/h +000.9
Curr R km/h +001.1 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 17:06:31
FULMAR-V3D3.079.500.524.027.X--.012.Y++..012.FR8.FR9.001111111
Curr X km/h -000.9 Curr Y km/h +000.9
Curr R km/h +001.3 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 17:06:32
FULMAR-V3D3.072.508.512.028.X--.004.Y--..008.FR8.FR9.001111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:06:33
FULMAR-V3D3.069.508.519.029.X--.004.Y++..007.FR8.FR9.001111111
Curr X km/h -000.3 Curr Y km/h +000.5
Curr R km/h +000.6 Bearing deg 120
Heading deg 041 Compass degs 161
TIME STAMP 2008/03/03 17:06:34
FULMAR-V3D3.075.505.512.031.X--.007.Y++..006.FR8.FR9.001111111
Curr X km/h -000.5 Curr Y km/h +000.0
Curr R km/h +000.5 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:06:35
FULMAR-V3D3.078.504.520.032.X--.008.Y++..008.FR8.FR9.001111111
Curr X km/h -000.6 Curr Y km/h +000.6
Curr R km/h +000.8 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 17:06:36
FULMAR-V3D3.080.502.526.033.X--.010.Y++..014.FR8.FR9.001111111
Curr X km/h -000.8 Curr Y km/h +001.1
Curr R km/h +001.3 Bearing deg 126

030308.txt
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:08:26
FULMAR-V3D3 087 512 518 168 X++ 004 Y++ 006 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:08:27
FULMAR-V3D3 092 510 510 167 X-- 002 Y-- 002 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 225
Heading deg 041 Compass degs 266
TIME STAMP 2008/03/03 17:08:28
FULMAR-V3D3 090 512 507 168 X++ 000 Y-- 005 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.4
Curr R km/h +000.4 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:29
FULMAR-V3D3 084 505 519 169 X-- 007 Y++ 007 FR8, FR9, 00111111
Curr X km/h -000.5 Curr Y km/h +000.5
Curr R km/h +000.7 Bearing deg 135
Heading deg 041 Compass degs 176
TIME STAMP 2008/03/03 17:08:30
FULMAR-V3D3 073 508 514 171 X-- 004 Y++ 002 FR8, FR9, 00111111
Curr X km/h -000.6 Curr Y km/h +000.9
Curr R km/h +001.1 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 17:08:31
FULMAR-V3D3 070 510 503 172 X-- 002 Y-- 009 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h -000.7
Curr R km/h +000.7 Bearing deg 257
Heading deg 041 Compass degs 298
TIME STAMP 2008/03/03 17:08:32
FULMAR-V3D3 072 512 508 173 X++ 000 Y-- 004 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:33
FULMAR-V3D3 075 512 500 174 X++ 000 Y-- 012 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.9
Curr R km/h +000.9 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:34
FULMAR-V3D3 078 512 502 175 X-- 002 Y-- 010 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.8
Curr R km/h +000.8 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:35
FULMAR-V3D3 083 516 498 176 X++ 004 Y-- 014 FR8, FR9, 00111111
Curr X km/h +000.3 Curr Y km/h -001.1
Curr R km/h +001.1 Bearing deg 286
Heading deg 041 Compass degs 327
TIME STAMP 2008/03/03 17:08:36
FULMAR-V3D3 091 507 512 178 X-- 005 Y++ 010 FR8, FR9, 00111111
Curr X km/h -000.4 Curr Y km/h +000.0
Curr R km/h +000.4 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:08:37
FULMAR-V3D3 088 512 526 179 X-- 002 Y++ 014 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:08:38
FULMAR-V3D3 086 512 522 180 X-- 004 Y++ 010 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.8
Curr R km/h +000.8 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:08:39

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FULMAR-V3D3 083 513 518 181 X++ 001 Y++ 006 FR8, FR9, 00111111
Curr X km/h +000.1 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 081
Heading deg 041 Compass degs 122
TIME STAMP 2008/03/03 17:08:40
FULMAR-V3D3 081 513 512 182 X++ 001 Y-- 002 FR8, FR9, 00111111
Curr X km/h +000.1 Curr Y km/h +000.0
Curr R km/h +000.1 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 17:08:41
FULMAR-V3D3 070 512 505 184 X-- 001 Y-- 007 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.5
Curr R km/h +000.5 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:42
FULMAR-V3D3 072 510 508 185 X-- 002 Y-- 004 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 243
Heading deg 041 Compass degs 284
TIME STAMP 2008/03/03 17:08:43
FULMAR-V3D3 075 512 509 186 X-- 001 Y-- 003 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:44
FULMAR-V3D3 077 512 508 187 X++ 000 Y-- 004 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:45
FULMAR-V3D3 079 514 510 188 X++ 002 Y-- 002 FR8, FR9, 00111111
Curr X km/h +000.2 Curr Y km/h -000.2
Curr R km/h +000.2 Bearing deg 315
Heading deg 041 Compass degs 356
TIME STAMP 2008/03/03 17:08:46
FULMAR-V3D3 090 512 512 189 X-- 000 Y-- 000 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:08:47
FULMAR-V3D3 089 508 515 191 X-- 004 Y++ 003 FR8, FR9, 00111111
Curr X km/h -000.3 Curr Y km/h +000.2
Curr R km/h +000.4 Bearing deg 143
Heading deg 041 Compass degs 184
TIME STAMP 2008/03/03 17:08:48
FULMAR-V3D3 088 505 526 192 X-- 007 Y++ 014 FR8, FR9, 00111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.2 Bearing deg 117
Heading deg 041 Compass degs 158
TIME STAMP 2008/03/03 17:08:49
FULMAR-V3D3 083 512 508 193 X-- 001 Y-- 004 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.3
Curr R km/h +000.3 Bearing deg 270
Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:50
FULMAR-V3D3 071 509 536 194 X-- 003 Y++ 024 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h +001.8
Curr R km/h +001.8 Bearing deg 097
Heading deg 041 Compass degs 138
TIME STAMP 2008/03/03 17:08:51
FULMAR-V3D3 069 506 526 195 X-- 006 Y++ 014 FR8, FR9, 00111111
Curr X km/h -000.5 Curr Y km/h +001.1
Curr R km/h +001.1 Bearing deg 113
Heading deg 041 Compass degs 154
TIME STAMP 2008/03/03 17:08:52
FULMAR-V3D3 075 512 504 197 X++ 000 Y-- 008 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h -000.6
Curr R km/h +000.6 Bearing deg 270

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Heading deg 041 Compass degs 311
TIME STAMP 2008/03/03 17:08:53
FULMAR-V3D3 078 509 512 198 X-- 003 Y-- 006 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:08:54
FULMAR-V3D3 083 512 531 199 X++ 003 Y++ 019 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:08:55
FULMAR-V3D3 092 504 528 200 X-- 008 Y++ 016 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.2
Curr R km/h +001.2 Bearing deg 117
Heading deg 041 Compass degs 158
TIME STAMP 2008/03/03 17:08:56
FULMAR-V3D3 091 503 525 201 X-- 009 Y++ 013 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.0
Curr R km/h +001.0 Bearing deg 125
Heading deg 041 Compass degs 166
TIME STAMP 2008/03/03 17:08:57
FULMAR-V3D3 086 512 524 203 X++ 008 Y++ 012 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.2
Curr R km/h +001.2 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:08:58
FULMAR-V3D3 082 514 536 204 X++ 002 Y++ 024 FR8, FR9, 00111111
Curr X km/h +000.3 Curr Y km/h +001.8
Curr R km/h +001.8 Bearing deg 085
Heading deg 041 Compass degs 126
TIME STAMP 2008/03/03 17:08:59
FULMAR-V3D3 071 516 530 205 X++ 004 Y++ 018 FR8, FR9, 00111111
Curr X km/h +000.3 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 077
Heading deg 041 Compass degs 118
TIME STAMP 2008/03/03 17:09:00
FULMAR-V3D3 070 506 524 206 X-- 006 Y++ 012 FR8, FR9, 00111111
Curr X km/h -000.5 Curr Y km/h +000.9
Curr R km/h +001.0 Bearing deg 117
Heading deg 041 Compass degs 158
TIME STAMP 2008/03/03 17:09:01
FULMAR-V3D3 074 508 518 207 X-- 004 Y++ 006 FR8, FR9, 00111111
Curr X km/h -000.3 Curr Y km/h +000.5
Curr R km/h +000.5 Bearing deg 124
Heading deg 041 Compass degs 165
TIME STAMP 2008/03/03 17:09:02
FULMAR-V3D3 076 504 512 208 X-- 008 Y++ 015 FR8, FR9, 00111111
Curr X km/h -000.6 Curr Y km/h +000.0
Curr R km/h +000.6 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:09:03
FULMAR-V3D3 087 508 512 210 X-- 004 Y++ 000 FR8, FR9, 00111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:09:04
FULMAR-V3D3 093 514 512 211 X++ 002 Y-- 001 FR8, FR9, 00111111
Curr X km/h +000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 000
Heading deg 041 Compass degs 041
TIME STAMP 2008/03/03 17:09:05
FULMAR-V3D3 091 512 512 212 X++ 004 Y-- 011 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:09:06
FULMAR-V3D3 088 512 524 213 X-- 007 Y++ 012 FR8, FR9, 00111111

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Curr X km/h +000.0 Curr Y km/h +000.9
Curr R km/h +000.9 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:09:07
FULMAR-V3D3 084 519 512 214 X-- 002 Y++ 000 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:09:08
FULMAR-V3D3 069 516 530 216 X++ 004 Y++ 018 FR8, FR9, 00111111
Curr X km/h +000.3 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 077
Heading deg 041 Compass degs 118
TIME STAMP 2008/03/03 17:09:09
FULMAR-V3D3 070 500 537 217 X-- 012 Y++ 022 FR8, FR9, 00111111
Curr X km/h -000.9 Curr Y km/h +001.7
Curr R km/h +001.9 Bearing deg 119
Heading deg 041 Compass degs 160
TIME STAMP 2008/03/03 17:09:10
FULMAR-V3D3 072 516 500 218 X++ 004 Y-- 012 FR8, FR9, 00111111
Curr X km/h +000.3 Curr Y km/h -000.9
Curr R km/h +000.9 Bearing deg 288
Heading deg 041 Compass degs 329
TIME STAMP 2008/03/03 17:09:11
FULMAR-V3D3 076 504 502 219 X-- 008 Y-- 010 FR8, FR9, 00111111
Curr X km/h -000.6 Curr Y km/h -000.8
Curr R km/h +001.0 Bearing deg 231
Heading deg 041 Compass degs 272
TIME STAMP 2008/03/03 17:09:12
FULMAR-V3D3 078 512 512 220 X++ 006 Y-- 007 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:09:13
FULMAR-V3D3 079 508 512 221 X-- 004 Y-- 004 FR8, FR9, 00111111
Curr X km/h -000.3 Curr Y km/h +000.0
Curr R km/h +000.3 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:09:14
FULMAR-V3D3 083 512 512 223 X-- 014 Y++ 008 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.0
Curr R km/h +000.0 Bearing deg 000
Heading deg 041 Compass degs 000
TIME STAMP 2008/03/03 17:09:15
FULMAR-V3D3 084 510 512 224 X-- 002 Y++ 003 FR8, FR9, 00111111
Curr X km/h -000.2 Curr Y km/h +000.0
Curr R km/h +000.2 Bearing deg 180
Heading deg 041 Compass degs 221
TIME STAMP 2008/03/03 17:09:16
FULMAR-V3D3 086 512 521 225 X++ 008 Y++ 009 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +000.7
Curr R km/h +000.7 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:09:17
FULMAR-V3D3 086 512 525 226 X-- 004 Y++ 013 FR8, FR9, 00111111
Curr X km/h +000.0 Curr Y km/h +001.0
Curr R km/h +001.0 Bearing deg 090
Heading deg 041 Compass degs 131
TIME STAMP 2008/03/03 17:09:18
FULMAR-V3D3 081 506 530 227 X-- 006 Y++ 018 FR8, FR9, 00111111
Curr X km/h -000.5 Curr Y km/h +001.4
Curr R km/h +001.4 Bearing deg 108
Heading deg 041 Compass degs 149
TIME STAMP 2008/03/03 17:09:19
FULMAR-V3D3 079 508 516 229 X-- 004 Y++ 004 FR8, FR9, 00111111
Curr X km/h -000.3 Curr Y km/h +000.3
Curr R km/h +000.4 Bearing deg 135
Heading deg 041 Compass degs 176

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TIME STAMP 2008/03/03 17:09:20
 FULMAR-V3D3 088,512,533,230,X+,004,Y+,021,FR8,FR9,00111111
 Curr R km/h +000.6 Bearing deg 090
 Curr X km/h +001.6 Curr Y km/h +001.6
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:21
 FULMAR-V3D3 091,514,530,231,X+,002,Y+,018,FR8,FR9,00111111
 Curr R km/h +000.2 Curr Y km/h +001.4
 Curr X km/h +001.2 Bearing deg 084
 Heading deg 041 Compass degs 125
 TIME STAMP 2008/03/03 17:09:22
 FULMAR-V3D3 088,512,518,232,X+,006,Y+,006,FR8,FR9,00111111
 Curr X km/h +000.3 Curr Y km/h +000.5
 Curr R km/h +000.5 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:23
 FULMAR-V3D3 084,506,512,233,X-,006,Y+,004,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.5 Bearing deg 180
 Heading deg 041 Compass degs 221
 TIME STAMP 2008/03/03 17:09:24
 FULMAR-V3D3 082,512,528,235,X+,004,Y+,016,FR8,FR9,00111111
 Curr R km/h +000.0 Bearing deg 000
 Curr X km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:09:25
 FULMAR-V3D3 083,520,526,236,X+,008,Y+,014,FR8,FR9,00111111
 Curr X km/h +000.2 Curr Y km/h +001.1
 Curr R km/h +001.2 Bearing deg 060
 Heading deg 041 Compass degs 101
 TIME STAMP 2008/03/03 17:09:26
 FULMAR-V3D3 083,512,520,237,X+,007,Y+,008,FR8,FR9,00111111
 Curr X km/h +000.8 Curr Y km/h +000.6
 Curr R km/h +000.6 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:27
 FULMAR-V3D3 082,512,512,238,X-,005,Y+,006,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:09:28
 FULMAR-V3D3 082,512,520,239,X+,007,Y+,008,FR8,FR9,00111111
 Curr R km/h +000.0 Bearing deg 090
 Curr X km/h +000.0 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:29
 FULMAR-V3D3 081,516,530,240,X+,004,Y+,018,FR8,FR9,00111111
 Curr X km/h +000.3 Curr Y km/h +001.4
 Curr R km/h +001.4 Bearing deg 077
 Heading deg 041 Compass degs 118
 TIME STAMP 2008/03/03 17:09:30
 FULMAR-V3D3 080,510,526,242,X-,002,Y+,014,FR8,FR9,00111111
 Curr X km/h +000.2 Curr Y km/h +001.1
 Curr R km/h +001.1 Bearing deg 098
 Heading deg 041 Compass degs 139
 TIME STAMP 2008/03/03 17:09:31
 FULMAR-V3D3 082,502,531,243,X-,010,Y+,019,FR8,FR9,00111111
 Curr X km/h +000.2 Curr Y km/h +001.4
 Curr R km/h +001.6 Bearing deg 118
 Heading deg 041 Compass degs 159
 TIME STAMP 2008/03/03 17:09:32
 FULMAR-V3D3 080,500,531,244,X-,012,Y+,019,FR8,FR9,00111111
 Curr X km/h +000.4 Curr Y km/h +001.4
 Curr R km/h +001.7 Bearing deg 122
 Heading deg 041 Compass degs 163
 TIME STAMP 2008/03/03 17:09:33
 FULMAR-V3D3 075,508,517,246,X-,004,Y+,005,FR8,FR9,00111111
 Curr X km/h -000.3 Curr Y km/h +000.4

Curr R km/h +000.5 Bearing deg 129
 Heading deg 041 Compass degs 170
 TIME STAMP 2008/03/03 17:09:34
 FULMAR-V3D3 069,512,505,249,X-,003,Y-,007,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.5
 Curr R km/h +000.5 Bearing deg 270
 Heading deg 041 Compass degs 311
 TIME STAMP 2008/03/03 17:09:35
 FULMAR-V3D3 072,516,512,249,X+,004,Y+,004,FR8,FR9,00111111
 Curr X km/h +000.3 Curr Y km/h +000.0
 Curr R km/h +000.3 Bearing deg 000
 Heading deg 041 Compass degs 041
 TIME STAMP 2008/03/03 17:09:36
 FULMAR-V3D3 073,512,516,250,X-,000,Y+,004,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.3
 Curr R km/h +000.3 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:37
 FULMAR-V3D3 076,512,512,251,X-,002,Y-,000,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:09:38
 FULMAR-V3D3 078,518,526,252,X+,006,Y+,014,FR8,FR9,00111111
 Curr X km/h +000.5 Curr Y km/h +001.1
 Curr R km/h +001.1 Bearing deg 067
 Heading deg 041 Compass degs 108
 TIME STAMP 2008/03/03 17:09:39
 FULMAR-V3D3 077,512,502,253,X+,006,Y-,010,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.8
 Curr R km/h +000.8 Bearing deg 270
 Heading deg 041 Compass degs 311
 TIME STAMP 2008/03/03 17:09:40
 FULMAR-V3D3 078,512,514,255,X+,004,Y+,002,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.2
 Curr R km/h +000.2 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:41
 FULMAR-V3D3 082,508,512,000,X-,004,Y+,005,FR8,FR9,00111111
 Curr X km/h -000.3 Curr Y km/h +000.0
 Curr R km/h +000.3 Bearing deg 180
 Heading deg 041 Compass degs 221
 TIME STAMP 2008/03/03 17:09:42
 FULMAR-V3D3 079,508,523,001,X-,004,Y+,011,FR8,FR9,00111111
 Curr X km/h -000.3 Curr Y km/h +000.8
 Curr R km/h +000.9 Bearing deg 110
 Heading deg 041 Compass degs 151
 TIME STAMP 2008/03/03 17:09:43
 FULMAR-V3D3 081,512,529,002,X-,001,Y+,017,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +001.3
 Curr R km/h +001.3 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:44
 FULMAR-V3D3 081,506,520,003,X-,006,Y+,008,FR8,FR9,00111111
 Curr X km/h -000.5 Curr Y km/h +000.6
 Curr R km/h +000.8 Bearing deg 127
 Heading deg 041 Compass degs 168
 TIME STAMP 2008/03/03 17:09:45
 FULMAR-V3D3 086,515,518,005,X+,003,Y+,006,FR8,FR9,00111111
 Curr X km/h +000.2 Curr Y km/h +000.5
 Curr R km/h +000.5 Bearing deg 063
 Heading deg 041 Compass degs 104
 TIME STAMP 2008/03/03 17:09:46
 FULMAR-V3D3 095,512,508,006,X-,005,Y-,004,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h -000.3
 Curr R km/h +000.3 Bearing deg 270
 Heading deg 041 Compass degs 311
 TIME STAMP 2008/03/03 17:09:47

FULMAR-V3D3 093,512,517,007,X-,004,Y+,005,FR8,FR9,00111111
 Curr R km/h +000.0 Curr Y km/h +000.4
 Curr X km/h +000.4 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:48
 FULMAR-V3D3 091,512,518,008,X+,002,Y+,006,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.5
 Curr R km/h +000.5 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:49
 FULMAR-V3D3 087,510,512,009,X-,002,Y+,000,FR8,FR9,00111111
 Curr X km/h -000.2 Curr Y km/h +000.0
 Curr R km/h +000.2 Bearing deg 180
 Heading deg 041 Compass degs 221
 TIME STAMP 2008/03/03 17:09:50
 FULMAR-V3D3 083,508,508,011,X-,004,Y-,004,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:09:51
 FULMAR-V3D3 083,512,530,012,X+,004,Y+,018,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +001.4
 Curr R km/h +001.4 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:52
 FULMAR-V3D3 081,518,527,013,X+,006,Y+,015,FR8,FR9,00111111
 Curr X km/h +000.5 Curr Y km/h +001.1
 Curr R km/h +001.2 Bearing deg 068
 Heading deg 041 Compass degs 109
 TIME STAMP 2008/03/03 17:09:53
 FULMAR-V3D3 081,512,525,014,X-,004,Y+,013,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +001.0
 Curr R km/h +001.0 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:54
 FULMAR-V3D3 081,518,522,015,X+,006,Y+,010,FR8,FR9,00111111
 Curr X km/h +000.5 Curr Y km/h +000.8
 Curr R km/h +000.9 Bearing deg 059
 Heading deg 041 Compass degs 100
 TIME STAMP 2008/03/03 17:09:55
 FULMAR-V3D3 080,510,515,016,X-,002,Y+,003,FR8,FR9,00111111
 Curr X km/h -000.2 Curr Y km/h +000.2
 Curr R km/h +000.3 Bearing deg 124
 Heading deg 041 Compass degs 165
 TIME STAMP 2008/03/03 17:09:56
 FULMAR-V3D3 081,506,518,018,X-,006,Y+,006,FR8,FR9,00111111
 Curr X km/h -000.5 Curr Y km/h +000.5
 Curr R km/h +000.6 Bearing deg 135
 Heading deg 041 Compass degs 176
 TIME STAMP 2008/03/03 17:09:57
 FULMAR-V3D3 082,512,517,019,X+,003,Y+,005,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.4
 Curr R km/h +000.4 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:09:58
 FULMAR-V3D3 080,510,526,020,X-,002,Y+,014,FR8,FR9,00111111
 Curr X km/h -000.2 Curr Y km/h +001.1
 Curr R km/h +001.1 Bearing deg 098
 Heading deg 041 Compass degs 139
 TIME STAMP 2008/03/03 17:09:59
 FULMAR-V3D3 080,509,520,021,X-,003,Y+,008,FR8,FR9,00111111
 Curr X km/h -000.2 Curr Y km/h +000.6
 Curr R km/h +000.6 Bearing deg 111
 Heading deg 041 Compass degs 152
 TIME STAMP 2008/03/03 17:10:00
 FULMAR-V3D3 080,510,522,022,X-,002,Y+,010,FR8,FR9,00111111
 Curr X km/h -000.2 Curr Y km/h +000.8
 Curr R km/h +000.8 Bearing deg 101

Heading deg 041 Compass degs 142
 TIME STAMP 2008/03/03 17:10:01
 FULMAR-V3D3 080,522,524,024,X+,010,Y+,012,FR8,FR9,00111111
 Curr X km/h +000.8 Curr Y km/h +000.9
 Curr R km/h +001.2 Bearing deg 091
 Heading deg 041 Compass degs 051
 TIME STAMP 2008/03/03 17:10:02
 FULMAR-V3D3 080,514,514,025,X+,002,Y+,002,FR8,FR9,00111111
 Curr X km/h +000.2 Curr Y km/h +000.2
 Curr R km/h +000.2 Bearing deg 045
 Heading deg 041 Compass degs 086
 TIME STAMP 2008/03/03 17:10:03
 FULMAR-V3D3 078,512,522,026,X+,000,Y+,010,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.8
 Curr R km/h +000.8 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:10:04
 FULMAR-V3D3 080,508,523,027,X-,004,Y+,011,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.8
 Curr R km/h +000.9 Bearing deg 110
 Heading deg 041 Compass degs 151
 TIME STAMP 2008/03/03 17:10:05
 FULMAR-V3D3 076,505,524,028,X-,007,Y+,012,FR8,FR9,00111111
 Curr X km/h -000.5 Curr Y km/h +000.2
 Curr R km/h +001.0 Bearing deg 120
 Heading deg 041 Compass degs 161
 TIME STAMP 2008/03/03 17:10:06
 FULMAR-V3D3 076,512,521,029,X+,004,Y+,009,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.7
 Curr R km/h +000.7 Bearing deg 090
 Heading deg 041 Compass degs 131
 TIME STAMP 2008/03/03 17:10:07
 FULMAR-V3D3 075,506,528,031,X-,006,Y+,016,FR8,FR9,00111111
 Curr X km/h -000.5 Curr Y km/h +001.2
 Curr R km/h +001.3 Bearing deg 111
 Heading deg 041 Compass degs 152
 TIME STAMP 2008/03/03 17:10:08
 FULMAR-V3D3 073,508,512,032,X-,004,Y-,001,FR8,FR9,00111111
 Curr X km/h -000.3 Curr Y km/h +000.0
 Curr R km/h +000.3 Bearing deg 180
 Heading deg 041 Compass degs 221
 TIME STAMP 2008/03/03 17:10:09
 FULMAR-V3D3 076,512,512,033,X-,004,Y+,000,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:10:10
 FULMAR-V3D3 077,509,519,034,X-,003,Y+,007,FR8,FR9,00111111
 Curr R km/h +000.6 Bearing deg 113
 Heading deg 041 Compass degs 154
 TIME STAMP 2008/03/03 17:10:11
 FULMAR-V3D3 075,508,526,035,X-,004,Y+,014,FR8,FR9,00111111
 Curr X km/h -000.3 Curr Y km/h +001.1
 Curr R km/h +001.1 Bearing deg 106
 Heading deg 041 Compass degs 147
 TIME STAMP 2008/03/03 17:10:12
 FULMAR-V3D3 079,512,512,037,X+,000,Y-,003,FR8,FR9,00111111
 Curr X km/h +000.0 Curr Y km/h +000.0
 Curr R km/h +000.0 Bearing deg 000
 Heading deg 041 Compass degs 000
 TIME STAMP 2008/03/03 17:10:13
 FULMAR-V3D3 078,513,510,038,X+,001,Y-,002,FR8,FR9,00111111
 Curr X km/h +000.2 Bearing deg 297
 Heading deg 041 Compass degs 338
 TIME STAMP 2008/03/03 17:10:14
 FULMAR-V3D3 079,512,514,039,X+,003,Y+,002,FR8,FR9,00111111

