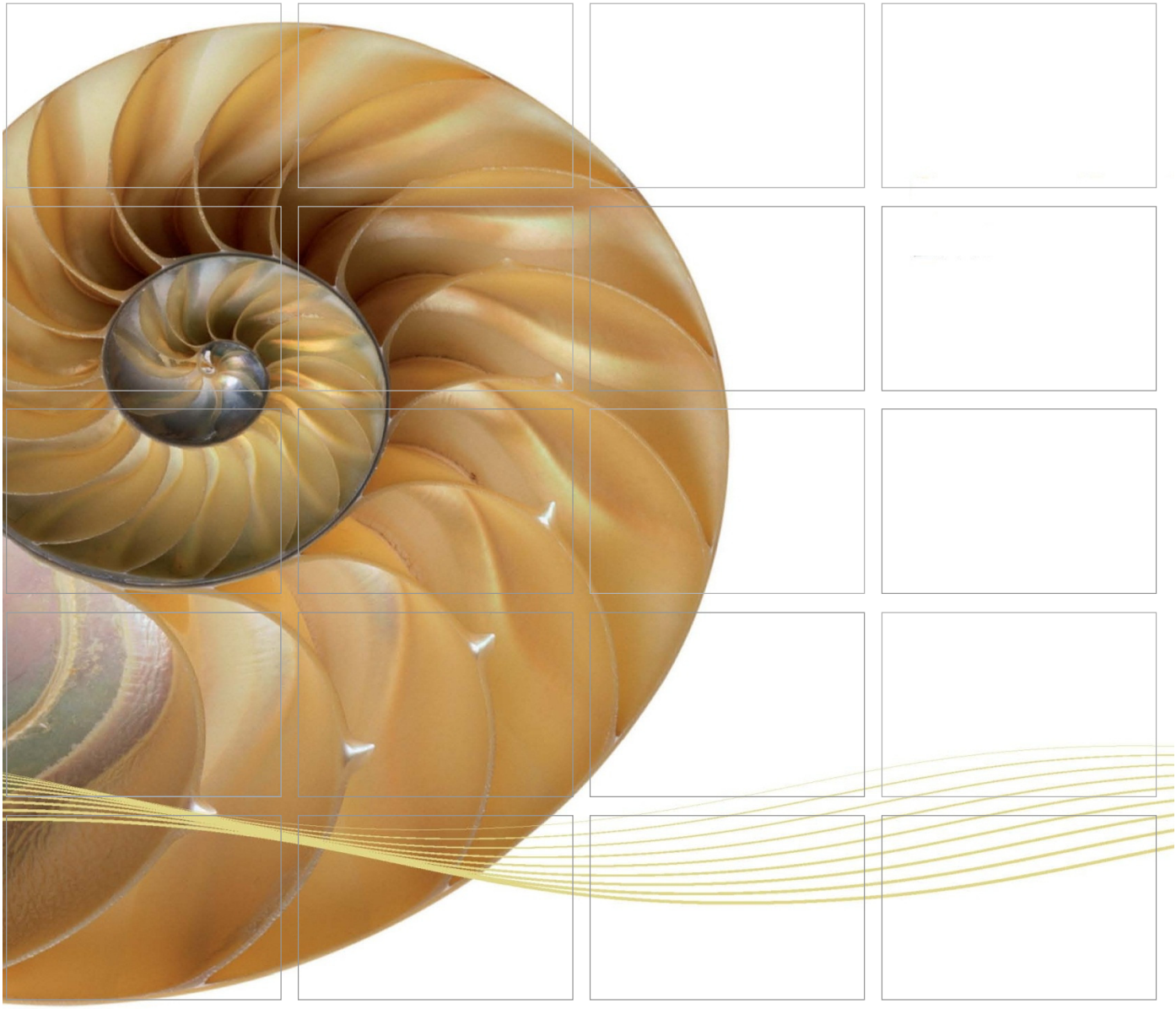
REPORT



Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

Baseline Monitoring Report

19 February 2014

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16/F, DCH Commercial Centre
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Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

Baseline Monitoring Report

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Client:	Project No:
Gammon	0215660
Summary:	Date: 19 February 2014
This document presents the Baseline Monitoring Report for Tuen Mun – Chek Lap Kok Link Southern Connection Viaduct Section.	Approved by:  *Mr Craig Reid* *Partner*
	Certified by:  *Mr Jovy Tam* *ET Leader*

Revision	Description	By	Checked	Approved	Date
V1	Baseline Monitoring Report	CL	JT	CAR	19/02/14

This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

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Ref.: HYDHZMBEEM00_0_1694L.14 20 February 2014

AECOM By Fax (2492 2057) and By Post
Supervising Officer Representative's Office
6 Hoi Kok Street,
Tsuen Wan, N.T.

Attention: Mr. Daniel Ip

Dear Sir,

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

Contract No. HY/2011/07 TM-CLKL Southern Connection Viaduct Section
Baseline Monitoring Report (EP Condition 4.3)

We refer to the Baseline Monitoring Report forwarded by environmental team (ERM's ref: "0215560 TM-CLKL Baseline_v1_2014_02_19.docx" dated on 19 February 2014) provided to us via email on 19 February 2014.

We are pleased to inform you that we have no adverse comments on the captioned Report. We write to verify the captioned submission in accordance with Condition 4.3 of EP-354/2009/B.

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

Yours sincerely,

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

c.c. HyD – Mr. Stephen Chan (By Fax: 3188 6614)
HyD – Mr. Matthew Fung (By Fax: 3188 6614)
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Under *Contract No. HY/2012/07*, Gammon Construction Limited is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct Section of Tuen Mun – Chek Lap Kok Link (TM-CLKL) ("the Contract"). ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) for the Contract.

According to the requirements of the Environmental Monitoring and Audit Manual (EM&A Manual) which is prepared for the TM-CLKL Project (*Register No.: AEIAR- 146/2009*), baseline monitoring has been undertaken prior to commencement of the construction works of the Contract. This Baseline Monitoring Report presents findings of the following baseline monitoring components:

- Air Quality;
- Noise;
- Water Quality; and
- Ecology (including baseline walk-over survey, baseline dolphin monitoring and baseline bored piling monitoring).

Before the commencement of the Contract, HyD employed environmental specialists under *Agreement No. CE35/2011 (EP)* and *Contract No. HY/2011/02* to conduct baseline environmental monitoring of air quality, noise, water quality and ecology to facilitate early commencement of construction of Hong Kong Boundary Crossing Facility (HKBCF) reclamation works and TM-CLKL advance Southern Landfall reclamation works under *Contract No. HY/2010/02*. The baseline environmental monitoring was undertaken between September and November 2011 in accordance with requirements in the EM&A Manuals for the Hong Kong Link Road (HKLR), HKBCF and TM-CLKL. A Baseline Environmental Monitoring Report (Version C) for Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects – Investigation (hereafter referred to as "BEMR") was prepared to fulfill the Environmental Permits' conditions for HKBCF (including TM-CLKL southern landfall) Project (1).

In the present baseline monitoring report, relevant baseline monitoring results for air quality, noise, water quality and ecology (baseline dolphin monitoring) presented in the BEMR have been adopted for this Contract. In addition, baseline water quality monitoring, baseline bored piling monitoring and baseline walk-over survey have been undertaken in the period of August to October 2013 to collect additional baseline monitoring data for the Contract which were not covered by the 2011 baseline monitoring.

The baseline monitoring works undertaken for air quality, noise, water quality and ecology for the Contract are presented in *Tables 1-4* below.

(1) Agreement No. CE 35/2011 (EP) Baseline Envrionmental Monitoring for Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects-Investigation.

http://www.hzmbenpo.com/ep_docs/HKBCF_HY201002/503/Baseline_Report_Version_C.pdf

Air Quality

Table 1 Baseline Air Quality Monitoring Period

Monitoring Stations	Baseline Monitoring Period
ASR 9A – Siu Ho Wan MTRC Depot ASR 9C – Siu Ho Wan MTRC Depot	18/10/2011 – 31/10/2011

During the monitoring, there was no major dust generating activities undertaken in the vicinity of the two monitoring stations (*Table 1*). Data collected were reviewed and analyzed to determine the Action and Limit Levels for air quality which will be used for the impact monitoring throughout the construction of the Contract. Details on the monitoring methodology, locations and results are presented in *Section 2*.

Noise

Table 2 Baseline Noise Monitoring Period

Monitoring Station	Baseline Monitoring Period
NSR 1 – Pak Mong Village	18/10/2011-1/11/2011

Monitoring data collected was reviewed and analyzed in accordance with requirements of the EM&A Manual. Details on the methodology, locations and results of monitoring are presented in *Section 3* of this report. The baseline noise monitoring data was analyzed for the following periods:

- Daytime: 0700-1900 hrs on normal weekdays
- Evening-time: 1900-2300 hrs
- Holiday-time: 0700-1900 hrs on holidays
- Night-time: 2300-0700 hrs of next day

Water Quality

Table 3 Baseline Water Quality Monitoring Period

Monitoring Stations	Parameters, unit	Baseline Monitoring Period (1)
IS(Mf)9, IS(Mf)16, IS8, SR4, CS(Mf)3, CS(Mf)5	• Temperature(°C) • pH(pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended solids (SS) (mg/L)	6/10/2011 – 31/10/2011
SR4a (2)		29/8/2013 – 24/9/2013

Monitoring Stations	Parameters, unit	Baseline Monitoring Period [1]

Notes:

(1) 3 days per week, at mid-flood and mid-ebb tides, for a period of 4 weeks prior to the commencement of the marine works)

(2) Additional baseline water quality monitoring was undertaken at SR4a for this Contract as per recommendation of the Environmental Review for the Temporary Staging for Construction of the Southern Connection (ERM, 2013).

Details of the baseline water quality monitoring are presented in *Section 4*. The collected data were used to establish the Action and Limit Levels for Dissolved Oxygen (DO), Turbidity and Suspended Solids (SS) for the impact monitoring throughout the construction of the Contract.

Ecology

Baseline walk-over survey was undertaken on 13 and 24 September 2013 to confirm the existing ecological conditions before commencement of the Contract's construction works with reference to the habitat maps presented in the EIA Report. Findings of the baseline walk-over survey are presented in *Section 5.1*.

Table 4 Baseline Dolphin Monitoring Period

Date of Baseline Dolphin Monitoring	
1	05/09/2011
2	07/09/2011
3	16/09/2011
4	23/09/2011
5	06/10/2011
6	10/10/2011
7	13/10/2011
8	17/10/2011
9	28/10/2011
10	01/11/2011
11	02/11/2011
12	05/11/2011
13	06/11/2011
14	07/11/2011

Baseline dolphin monitoring was undertaken from September to November 2011. Details on the monitoring methodology, locations and findings are presented in *Section 5.2*. Determination of Action and Limit Levels for dolphin monitoring is also presented under the same section.

Baseline bored piling monitoring, including land-based theodolite tracking, underwater noise monitoring and acoustic behavioural monitoring, were undertaken from September to October 2013. Details on the monitoring methodology, locations and findings are presented in *Section 5.3*. Determination of Action and Limit Levels as well as the Event Action Plan for the bored piling monitoring is also presented under the same section.

1 INTRODUCTION

1.1 BACKGROUND

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

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

Under *Contract No. HY/2012/07*, Gammon Construction Limited is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct Section of TM-CLKL ("the Contract"), including the following:

- A dual 2-lane main marine crossing (Structures E2, E5, E6, E7 and E8) across the sea between the southern landfall of TM-CLKL and NLH;
- Five link or slip roads (Structures F1, F2, F3, F4 and F5) at the southern landfall of TM-CLKL connecting a dual 2-lane rural trunk road (main marine crossing) in (i) above with the HKBCF and the TM-CLKL Northern Connection Sub-sea Tunnel Section;
- Four link roads (Structures E1, A1, A2, B1, B2, B3,C1, C2, C3, C4, D1, D2, D3 and D4) at North Lantau connecting the main marine crossing in (i) above with the NLH ;
- Associated civil, structural, geotechnical, marine, environmental protection, landscaping, drainage, highway electrical and mechanical (E&M) works, street lightings, traffic aids and sign gantries, marine navigational aids, ship impact protection system, water mains and fire hydrants, lightning protection system, SHMS, as well as operation and maintenance provisions of viaducts, provisioning of facilities for installation of TCSS, provisioning

of facilities for installation of telecommunication cables/equipment and reprovisioning works of affected existing facilities/utilities; and

- Incidental works thereto the above and other associated works which are shown on the Drawings or specified in the Contract.

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

ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) for the Contract.

1.2 BASELINE MONITORING FOR THE CONTRACT

The scope of the EM&A programme follows the demarcation of monitoring responsibilities set out in Environmental Project Office's letter dated 29.10.2013. Under the defined scope and according to relevant requirements of the Environmental Monitoring and Audit Manual (EM&A Manual) which is prepared for the TM-CLKL Project (*Register No.: AEIAR- 146/2009*), baseline monitoring has been undertaken prior to commencement of the construction works of the Contract. This Baseline Monitoring Report presents findings of the following baseline monitoring components:

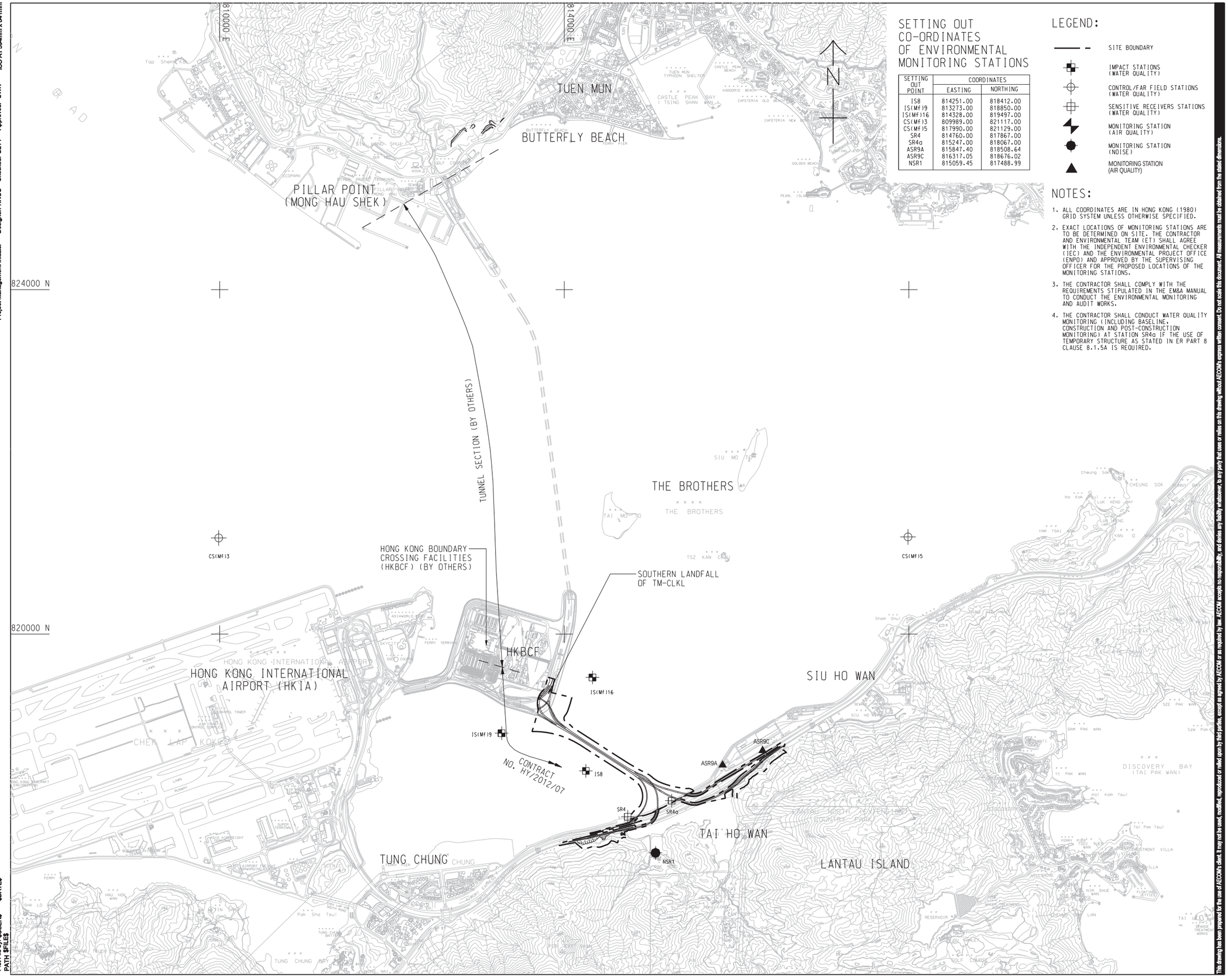
- Air Quality;
- Noise;
- Water Quality; and
- Ecology (including baseline walk-over survey, baseline dolphin monitoring and baseline bored piling monitoring).

Before the commencement of the Contract, HyD employed environmental specialists under *Agreement No. CE35/2011 (EP)* and *Contract No. HY/2011/02* to conduct baseline environmental monitoring of air quality, noise, water quality and ecology to facilitate early commencement of construction of Hong Kong Boundary Crossing Facility (HKBCF) reclamation works and TM-CLKL advance Southern Landfall reclamation works under *Contract No. HY/2010/02*. The baseline environmental monitoring was undertaken between September and November 2011 in accordance with requirements in the EM&A Manuals for the Hong Kong Link Road (HKLR), HKBCF and TM-CLKL. A Baseline Environmental Monitoring Report (Version C) for Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects – Investigation (hereafter referred to as "BEMR") was prepared to fulfil the Environmental Permits' conditions for HKBCF (including TM-CLKL southern landfall) Project [(1)].

In the present baseline monitoring report, relevant baseline monitoring results for air quality, noise, water quality and ecology (baseline dolphin monitoring) presented in the BEMR have been adopted for this Contract. In addition, baseline water quality monitoring, baseline bored piling monitoring and

(1) Agreement No. CE 35/2011 (EP) Baseline Envrionmental Monitoring for Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects-Investigation.

http://www.hzmbenpo.com/ep_docs/HKBCF_HY201002/503/Baseline_Report_Version_C.pdf



SETTING OUT CO-ORDINATES OF ENVIRONMENTAL MONITORING STATIONS

SETTING OUT POINT	COORDINATES	
	EASTING	NORTHING
IS8	814251.00	818412.00
IS(Mf)9	813273.00	818850.00
IS(Mf)16	814328.00	819497.00
CS(Mf)3	809989.00	821117.00
CS(Mf)5	817990.00	821129.00
SR4	814760.00	817867.00
SR4a	815247.00	818067.00
ASR9A	815847.40	818508.64
ASR9C	816317.05	818676.02
NSR1	815059.45	817488.99

LEGEND:

- SITE BOUNDARY
- IMPACT STATIONS (WATER QUALITY)
- CONTROL/FAR FIELD STATIONS (WATER QUALITY)
- SENSITIVE RECEIVERS STATIONS (WATER QUALITY)
- MONITORING STATION (AIR QUALITY)
- MONITORING STATION (NOISE)
- MONITORING STATION (AIR QUALITY)

NOTES:

1. ALL COORDINATES ARE IN HONG KONG (1980) GRID SYSTEM UNLESS OTHERWISE SPECIFIED.
2. EXACT LOCATIONS OF MONITORING STATIONS ARE TO BE DETERMINED ON SITE. THE CONTRACTOR AND ENVIRONMENTAL TEAM (ET) SHALL AGREE WITH THE INDEPENDENT ENVIRONMENTAL CHECKER (IEC) AND THE ENVIRONMENTAL PROJECT OFFICE (ENPO) AND APPROVED BY THE SUPERVISING OFFICER FOR THE PROPOSED LOCATIONS OF THE MONITORING STATIONS.
3. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS STIPULATED IN THE EM&A MANUAL TO CONDUCT THE ENVIRONMENTAL MONITORING AND AUDIT WORKS.
4. THE CONTRACTOR SHALL CONDUCT WATER QUALITY MONITORING (INCLUDING BASELINE, CONSTRUCTION AND POST-CONSTRUCTION MONITORING) AT STATION SR4a IF THE USE OF TEMPORARY STRUCTURE AS STATED IN ER PART 8 CLAUSE 8.1.5A IS REQUIRED.

AECOM

PROJECT 項目

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE

TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT 業主

路政署 HIGHWAYS DEPARTMENT
港珠澳大橋香港工程管理處
Hong Kong - Zhuhai - Macao Bridge
Hong Kong Project Management Office

CONSULTANT 工程顧問公司

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SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
B	DEC12	TENDER ADDENDUM No. 3	CWN
A	NOV12	TENDER ADDENDUM No. 2	CWN
-	OCT12	TENDER DRAWING	CWN

STATUS 階段

SCALE 比例: A1 1:20000

DIMENSION UNIT 尺寸單位: METERS

KEY PLAN 索引圖

Fig 1.1 Contract Layout and Location of Monitoring Stations

PROJECT NO. 項目編號: 60240249

CONTRACT NO. 合約編號: HY/2012/07

SHEET TITLE 圖紙名稱

ENVIRONMENTAL MONITORING STATIONS

SHEET NUMBER 圖紙編號

60240249/C1/6501B

Project Management Initials: Designer: NNCC Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

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baseline walk-over survey have been undertaken in the period of August to October 2013 to collect additional baseline monitoring data for the Contract which were not covered by the 2011 baseline monitoring. Based on findings from the 2011 and 2013 baseline monitoring, baseline levels for air quality, noise, water quality and ecology are set out in this report for the Contract in accordance with the EM&A Manual. These baseline levels will be used as the basis for compliance check during the impact monitoring in the construction of the TM-CLKL southern viaduct. Locations, schedule, methodology and results for the baseline monitoring are also presented in this report.

1.3 STRUCTURE OF THE BASELINE MONITORING REPORT

Following this introductory section, the remainder of the Report is structured as follows:

Section 2 *Air Quality* – presents the methodology and findings of the baseline air quality monitoring.

Section 3 *Noise* – presents the methodology and findings of the baseline noise monitoring.

Section 4 *Water Quality* – presents the methodology and findings of the baseline water quality monitoring.

Section 5 *Ecology* – presents the methodology and findings of the baseline walk-over survey, baseline dolphin monitoring as well as baseline bored piling monitoring programme.

Section 6 Conclusion

2 AIR QUALITY

2.1 MONITORING REQUIREMENT

According to the EM&A Manual of the TM-CLKL Project, baseline air quality monitoring should be carried out for a period of not less than 14 days to collect baseline data on 1-hour and 24-hour Total Suspended Particulates (TSP) levels at all monitoring locations. Monitoring of 1-hour TSP should be carried out at least three times per day while that of 24-hour TSP should be conducted daily for 14 consecutive days. Further details of the baseline air quality monitoring are presented in the following sections.

2.2 MONITORING LOCATIONS

Baseline air quality monitoring was conducted at two (2) monitoring stations (ie ASR9A and ASR9C – Siu Ho Wan MTRC Depot) under this Contract. Locations of the two monitoring stations, ASR9A and ASR9C, are shown in *Figure 1.1.*

2.3 MONITORING EQUIPMENT

High Volume Samplers (HVS) were used to carry out the 24-hour TSP monitoring. Direct reading dust meter was used to measure 1-hour average TSP levels. The 1-hour TSP level was determined periodically by HVS to check the validity and accuracy of the results measured by the direct reading method.

Wind data monitoring equipment was set at Rooftop of Village Office at San Tau for logging wind speed and wind direction such that the wind sensors are clear of obstructions or turbulence caused by building. The wind data monitoring equipment is recalibrated at least once every six months.

Table 2.1 summarizes the equipment used in the baseline air quality monitoring programme. Copies of the calibration certificates for the equipment are presented in *Annex A1.*

Table 2.1 Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
HVS Sampler	GMWS 2310 c/w of TSP sampling inlet	9
Calibrator	G25A	1
1-hour TSP Dust Meter	Laser Dust Monitor – Model LD3/3B	7
Wind Anemometer	Davis Weather Monitor II, Model no. 7440	1

2.4 MONITORING PARAMETERS, FREQUENCY AND DURATION

Table 2.2 summarizes the monitoring parameters, monitoring period and frequency of baseline air quality monitoring.

Table 2.2 Frequency and Parameters of Air Quality Monitoring

Monitoring Station	Location for Measurement	Parameter	Period	Frequency
ASR 9A	Near Security Office of Siu Ho Wan MTRC Depot	1-hour TSP	0700-1900 for 1-hour TSP	3 times/ day for 1-hour TSP
ASR 9C	Near Staff Canteen of Siu Ho Wan MTRC Depot	24-hour TSP	24 hours for 24-hour TSP	Daily for 24-hour TSP

2.5 MONITORING METHODOLOGY AND QUALITY ASSURANCE/ QUALITY CONTROL (QA/QC)

Weather data was recorded during the baseline period and is shown in *Annex F*. The air temperature, precipitation and the relative humidity data were obtained from Hong Kong Observatory while wind speed and direction were recorded by the installed Wind Anemometer. The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staff on the monitoring days.

2.6 24 HOUR TSP MONITORING

Instrumentation

High volume Samplers (HVS) completed with appropriate sampling inlets was employed for air quality monitoring. Each sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complies with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50).

HVS Installation

The following guidelines were adopted during the installation of HVS:

- Sufficient support was provided to secure the samplers against gusty wind;
- No two samplers were placed less than 2 m apart;
- The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler;
- A minimum of 2 m of separation from walls, parapets and penthouses was required for rooftop samples;

- A minimum of 2 m separation from any supporting structure, measured horizontally, was required;
- No furnaces or incineration flues were nearby;
- Airflow around the sampler was unrestricted;
- The samplers were more than 20 meters from the drip line; and
- Any wire fence and gate used to protect the sampler should not cause any obstruction during monitoring.

Filter Preparation

Fiberglass filters were used. These filters have a collection efficiency of larger than 99% for particles of 0.3μm in diameter. A HOKLAS accredited laboratory, Wellab Ltd., was responsible for the preparation of 24-hr conditioned and pre-weighed filter papers for the monitoring.

All filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not varied by more than ±3 °C; the relative humidity (RH) was <50% and not varied by more than ±5%.

Operating/ Analytical Procedures

Operating/analytical procedures for the air quality monitoring were highlighted as follows:

- Prior to the commencement of the dust sampling, the flow rate of the HVS was properly set (between 1.1 m3/min. and 1.4 m3/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- The power supply was checked to ensure the sampler worked properly.
- On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air quality monitoring station.
- The filter holding frame was then removed by loosening the four nuts and carefully a weighted and conditioned filter was centered with the stamped number upwards, on a supporting screen.
- The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.
- The shelter lid was closed and secured with the aluminum strip.

- The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).

- After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.

- Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ±3°C; the RH should be < 50% and not vary by more than ±5%. Weighing results were used for further analysis of TSP concentrations collected by each filter.

Maintenance and Calibration

The following maintenance/calibration was required for the HVS:

- The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply were in good working condition.

- All HVS were calibrated (five point calibration) using Calibration Kit prior to the commencement of the baseline monitoring and thereafter at bi-monthly intervals.

2.7 1 HOUR TSP MONITORING

Measuring Procedures

The 1-hour TSP levels were measured by the dust meter in accordance with procedures specified in the Manufacturer's Instruction Manual which are described as follows:

- The 1-hour dust meter was placed at least 1.3 m above ground.

- Set POWER to "ON" and make sure that the battery level was not flash or in low level.

- Allow the instrument to stand for about three (3) minutes with the cap of the air sampling inlet released.

- Pushed the knob at MEASURE position.

- Set time/mode setting to [BG] by pushing the time setting switch. Then, started the background measurement by pushing the start/stop switch once. It took approximately six (6) seconds to complete the background measurement.

- Pushed the time setting switch to change the time setting display to [MANUAL] at the bottom left of the liquid crystal display. Finally, pushed the start/stop switch to stop the measuring after 1 hour sampling.

- Information such as sampling date, time, count value and site condition were recorded during the monitoring period.

Maintenance and Calibration

For the 1-hour dust meter, it should be checked and calibrated by HVS to determine the validity and accuracy of the results measured by direct reading method at 2-month intervals throughout the air quality monitoring period.

2.8 BASELINE MONITORING RESULTS

Under this Contract, baseline air quality monitoring was conducted at two (2) monitoring stations, namely ASR 9A and ASR 9C, at the Siu Ho Wan MTRC Depot during the period of 18 October and 2 November 2011. The detailed monitoring schedule is presented in *Annex E*.

The monitoring data of ASR 9A and ASR 9C are summarized in *Tables 2.3* and *2.4*. All monitoring data of 1- hour and 24-hour TSP are presented in *Annexes A2* and *A4*, respectively. Graphical presentations of the 1-hour TSP and 24-hour TSP results are shown in *Annex A3* and *A5*, respectively. Detailed weather conditions during the baseline monitoring period are presented in *Annex F*.

Table 2.3 Summary of Baseline 1-hour TSP Monitoring Results

Monitoring Station	**Average TSP Concentration (μg/m³) (Range)**
ASR 9A – Siu Ho Wan MTRC Depot	222.3 (71.2-463.6)
ASR 9C – Siu Ho Wan MTRC Depot	219.9 (70.2-461.8)

Table 2.4 Summary of Baseline 24-hour TSP Monitoring Results

Monitoring Station	**Average TSP Concentration (μg/m³) (Range)**
ASR 9A – Siu Ho Wan MTRC Depot	74.1 (38.6-128.1)
ASR 9C – Siu Ho Wan MTRC Depot	74.5 (45.1-113.4)

The weather was generally sunny and fine during the baseline monitoring period. Road traffic dust is identified as the influencing factors which may affect the results of baseline monitoring.

2.9 ACTION AND LIMIT LEVEL

Guidelines for establishing the Action and Limit Levels for air quality monitoring during the construction of the Contract are presented in *Table 2.5*.

Table 2.5 Guidelines for Establishing Action and Limit Levels for Air Quality

Parameters	Action Level	Limit Level
1-hour TSP Level in µg/m³	For baseline level ≤ 384 µg/m³, Action level = (Baseline level*1.3 + Limit level)/2 For baseline level > 384 µg/m³, Action level = Limit level	500
24-hour TSP Level in µg/m³	For baseline level ≤ 200 µg/m³, Action level = (Baseline level*1.3 + Limit level)/2 For baseline level > 200 µg/m³, Action level = Limit level	260

Following the above guidelines, the Action and Limit Levels for air quality impact monitoring are determined and presented in *Tables 2.6* and *2.7.*

Table 2.6 Action and Limit Levels for 1-hour TSP

Location	Action Level, µg/m³	Limit Level, µg/m³
ASR 9A	394	500
ASR 9C	393	

Table 2.7 Action and Limit Levels for 24-hour TSP

Location	Action Level, µg/m³	Limit Level, µg/m³
ASR 9A ASR 9C	178	260

Should non-compliance with the air quality criteria occur, the ET, the IEC and the SOR and the Contractor shall undertake their specified actions in accordance with the Action Plan shown in *Table 3.2*.

Table 2.8 Event/ Action Plan for Air Quality

	ACTION			
EVENT	**ET [(1)]**	**IEC [(1)]**	**SOR [(1)]**	**Contractor**
Action Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by the ET. 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IEC and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IEC and the SOR. 7. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate

3 NOISE

3.1 MONITORING REQUIREMENT

According to the EM&A Manual of TM-CLKL, baseline noise monitoring should be carried out for a period of fourteen (14) days at all designated monitoring locations. The noise levels should be measured in terms of A-weighted equivalent continuous sound pressure level (L_{eq}). Details of the baseline noise monitoring are presented in the following sections.

3.2 MONITORING LOCATIONS

Baseline noise monitoring was conducted at one (1) monitoring station, namely NSR 1 at Pak Mong Village, under the Contract (*Figure 1.1*).

3.3 MONITORING EQUIPMENT

Integrating Sound Level Meter was used for noise monitoring. The meter is a Type 1 sound level meter capable of giving a continuous readout of the noise level readings including equivalent continuous sound pressure level (L_{eq}) and percentile sound pressure level (L_x). The meter used also complied with International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. The noise monitoring equipment being used and copies of the calibration certificates for the sound level meter and calibrator are presented in *Annex B1*.

3.4 MONITORING PARAMETERS, FREQUENCY AND DURATION

In accordance with the EM&A Manual, baseline noise for the A-weighted levels L_{eq}, L_{10} and L_{90} was recorded. Data obtained from the baseline noise monitoring were processed and presented for the following periods:

- Daytime: 0700-1900 hrs on normal weekdays
- Evening time: 1900-2300 hrs
- Holiday time: 0700-1900 hrs on holidays
- Night time: 2300-0700 hrs of next day

The frequency and parameters of noise measurement are presented in *Table 3.1*.

Table 3.1 Frequency and Parameters of Noise Monitoring

Monitoring Station	Location for Measurement	Time Period	Duration, min	Parameter
NSR 1	Pak Mong Village (Roof Top of Pak Mong Watch Tower)	Daytime on normal weekdays (0700-1900 hrs)	30 min	L_{eq}, L_{10} & L_{90}
		Evening time on all days (1900-2300 hrs) and daytime during holidays (including Sundays) (0700-1900 hrs)	5min	
		Night time on all days (2300-0700 hrs)		

3.5 MONITORING METHODOLOGY

Façade measurement was taken at the monitoring station NSR1. Weather data was recorded during the baseline period and is presented in *Annex F*. The air temperature, precipitation and the relative humidity data were obtained from Hong Kong Observatory where the wind speed and direction were recorded by the installed Wind Anemometer. The general weather conditions (i.e. sunny, cloudy or rainy) were recorded by the field staff on the monitoring days.

The monitoring procedures are as follows:

- The microphone head of the head level meter was normally positioned 1 m exterior of the noise sensitive façade and lowered sufficiently so that the building's external wall acts as a reflecting surface.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels would be adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure good functioning of the meter.
- Parameters such as frequency weighting, time weighting and measurement time were set as follows:
  - frequency weighting: A
  - time weighting: Fast
  - measurement time: 5 minutes ($L_{eq\ (30\text{-}min)}$ would be determined for daytime noise by calculating the logarithmic average of six $L_{eq\ (5min)}$ data.)
- Prior to and after noise measurement, the meter was calibrated using the calibrator for 94.0 dB at 1,000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement was considered invalid and repeat of noise measurement was required after re-calibration or repair of the equipment.

- Noise monitoring was carried out continuously for 24 hours during the 14 days baseline monitoring period. Monitoring data were recorded and stored automatically within the sound level meter system. At the end of the monitoring period, noise levels in term of L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded when the equipment were checked and inspected every two days.

- All the monitoring data stored in the sound level meter system were downloaded through the computer software, and all these data were checked and reviewed on computer.

3.6 MAINTENANCE AND CALIBRATION

Maintenance and calibration procedures were follows:

- The microphone head of the sound level meter and calibrator were cleaned with a soft cloth at quarterly intervals;

- The sound level meter and calibrator were checked and calibrated at yearly intervals; and

- Immediately prior to and following each noise measurement, the accuracy of the sound level meter should be checked using an acoustic calibrator generating known sound pressure level at known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

3.7 BASELINE MONITORING RESULTS

Baseline noise monitoring was conducted at the noise monitoring station NSR1 in the period of 18 October and 1 November 2011 for this Contract. The monitoring schedule is shown in *Annex E*.

The baseline noise monitoring results are summarized in *Tables 3.2 to 3.4*. All baseline noise monitoring results are presented in *Annexes B2-B4*. Graphical presentations of the data are provided in *Annex B5*. Weather conditions recorded during the baseline monitoring period are shown in *Annex F*.

Table 3.2 Summary of Daytime Noise Monitoring Results (Normal Weekdays)

Daytime 0700-1900 hrs on normal weekdays	**Range of Noise Level, dB(A)**								
	$L_{eq\ (30\ min)}$			**$L_{10\ (5\ min)}$**			**$L_{90\ (5\ min)}$**		
	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min
NSR 1	56.2	65.9	48.4	58.4	75.4	42.7	46.5	59.9	38.8

Table 3.3 Summary of Evening-Time & Daytime (Holidays) Noise Monitoring Results

Evening-time 1900-2300 hrs on all days & Daytime 0700-1900 hrs on holidays	Range of Noise Level, dB(A)								
	$L_{eq\ (30\ min)}$			$L_{10\ (5\ min)}$			$L_{90\ (5\ min)}$		
	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min
NSR 1	54.7	68.0	41.4	58.1	72.1	42.7	45.5	59.6	39.1

Table 3.4 Summary of Night-Time Noise Monitoring Results

Night-time 2300-0700 hrs of the next day	Range of Noise Level, dB(A)								
	$L_{eq\ (30\ min)}$			$L_{10\ (5\ min)}$			$L_{90\ (5\ min)}$		
	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min
NSR 1	50.1	69.1	37.0	53.0	73.6	38.4	42.2	52.0	35.2

The weather was generally sunny and fine during the baseline monitoring periods. Insect and bird calling was noted as the influencing factors which may affect the baseline monitoring results.

3.8 ACTION AND LIMIT LEVELS

The Action and Limit Levels were established in accordance with the EM&A Manual. The baseline noise level should be referenced during the compliance check during the impact noise monitoring period. *Table 3.5* presents the Action and Limit Levels for construction noise of the Contract. Should non-compliance of the criteria occur, the ET, the IEC, the SOR and the Contractor shall undertake their specified actions in accordance with the Action Plan shown in *Table 3.6*.

Table 3.5 Action Limit Levels for Noise during Construction Period

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75* dB(A)

Table 3.6 Event/ Action Plan for Construction Noise

	ACTION			
EVENT	**ET**	**IEC**	**SOR**	**Contractor**
Action Level	1. Notify the IEC and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the SOR accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC 2. Implement noise mitigation proposals
Limit Level	1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform the IEC, the SOR and the DEP the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst the SOR, the ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.

4 WATER QUALITY

According to the EM&A Manual of TM-CLKL, baseline water quality monitoring should be carried out three (3) times per week for a period of four (4) weeks at all the monitoring locations prior to the commencement of marine works. The measurement should be taken at all designated monitoring stations, including control stations, at mid flood (within ±1.75 hour of the predicated time) and mid-ebb (within ±1.75 hour of the predicated time) tides. Further details of the baseline water quality monitoring under this Contract are presented in the following sections.

4.1 MONITORING LOCATIONS

Baseline water quality monitoring was conducted at seven (7) monitoring stations under the Contract. Coordinates of the monitoring stations are summarized in *Table 4.1*. Locations of the monitoring stations are shown in *Figure 1.1*.

Table 4.1 Marine Water Quality Monitoring Locations

Monitoring Stations	Coordinates	
	Easting	Northing
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
IS8	814251	818412
SR4	814760	817867
SR4a	815247	818067
CS(Mf)3	809989	821117
CS(Mf)5	817990	821129

4.2 MONITORING PARAMETERS AND FREQUENCY

Table 4.2 summarizes the monitoring parameters, monitoring period and frequencies of the water quality monitoring.

Table 4.2 ***Water Quality Monitoring Parameters and Frequency***

Monitoring Stations	Parameters, unit	Depth	Frequency
IS(Mf)9 IS(Mf)16 IS8 SR4 SR4a* CS(Mf)3 CS(Mf)5	• Temperature(°C) • pH(pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • DO (mg/L and % of saturation) • SS (mg/L)	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted.	Baseline monitoring: 3 days per week, at mid-flood and mid-ebb tides, for a period of 4 weeks prior to the commencement of the marine works

Note: * Additional monitoring station under this Contract as per recommendation of the Environmental Review for the Temporary Staging for Construction of the Southern Connection (ERM, 2013)..

In addition to the parameters presented in *Table 4.2*, monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby should also be recorded.

4.3 MONITORING METHODOLOGY

Instrumentation

Table 4.3 summarizes the equipment used in the baseline water quality monitoring works. All the monitoring equipment complied with the requirements set out in the EM&A Manual. Copies of the calibration certificates are attached in *Annex C1*.

Table 4.3 ***Water Quality Monitoring Equipment***

Equipment	Model	Qty.
Water Sampler	Kahlsico Water-Bottle Model 135DW 150	4
Multi-parameter Water Quality System	YSI 6820-C-M/YSI 6920	6
Dissolved Oxygen Meter	YSI Pro 2030	1
pH Meter	HANNA HI 8314	1
Turbidity Meter	HACH 2100Q	1
Monitoring Position Equipment	"Magellan" Handheld GPS Model eXplorist GC	4
	DGPS Koden KGP913MK2 (1)	1

Note:
(1) DGPS has been used for the baseline water quality monitoring for station SR4a.

A multi-parameter meters (Model YSI 6820-C-M /YSI 6920) were used to measure DO, turbidity, salinity, pH and temperature for all monitoring stations except at SR4a.

For water quality monitoring at SR4a, pH was measured by HANNA HI 8314, turbidity was measured by HACH 2100Q whilst DO, salinity and temperature were measured by YSI Pro 2030.

Operating/Analytical Procedures

At each sampling depth, two consecutive measurements of DO level, DO saturation, salinity, turbidity, pH and temperature were taken. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken. Two samples were collected for laboratory analysis of SS content. Following collection, water samples for laboratory analysis were stored in high density polythene bottles (250ml/1L) with no preservatives added, packed in ice (cooled to 4°C without being frozen) and kept in dark during both on-site temporary storage and shipment to the testing laboratory. The samples were delivered to the laboratory as soon as possible and the laboratory determination works were started within 24 hours after collection of the water samples. Sufficient volume of samples was collected to achieve the detection limit.

Laboratory Analytical Methods

The testing of all parameters for all stations except SR4a was conducted by Wellab Ltd. (HOKLAS Registration No.083) whilst that for station SR4a was conducted by ALS Technichem (HK) Pty Ltd. (HOKLAS Registration No. 066). Comprehensive quality assurance and control procedures were in place in order to ensure quality and consistency in results. The testing method and reporting limit are provided in *Table 4.4.*

Table 4.4 Methods for Laboratory Analysis for Water Samples

Determinant	Instrumentation	Analytical Method	Reporting Limit
Suspended Solids (SS)	Weighing	APHA 17e 2540D	0.5 mg/L (1)

4.4 QA/QC REQUIREMENTS

Calibration of In Situ Instruments

All *in situ* monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring programme. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring event.

For the on site calibration of field equipment (Multi-parameter Water Quality

System), the BS 1427:2009, "Guide to on-site test methods for the analysis of waters" was observed.

Sufficient stocks of spare parts were maintained for replacements when necessary. Backup monitoring equipment was also being made available so that monitoring can proceed uninterrupted even when some equipment was under maintenance, calibration, etc.

Decontamination Procedures

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

Sampling Management and Supervision

All sampling bottles were labeled with the sample I.D (including the indication of sampling station and tidal stage e.g. IS1_me_a), laboratory number and sampling date. Water samples were dispatched to the testing laboratory for analysis as soon as possible after the sampling. All samples were stored in a cool box and kept at less than 4°C but without frozen. All water samples were handled under chain of custody protocols and relinquished to the laboratory representatives at locations specified by the laboratory. The laboratory determination works were started within 24 hours after collection of water samples.

Quality Control Measures for Sample Testing

The samples testing were performed by Wellab Ltd. and ALS Technichem (HK) Pty Ltd. The following quality control programme was performed by the laboratories for every batch of 20 samples:

- One method blank; and
- One set of quality control (QC) samples (including method QC and sample duplicate).

The QA/QC results are attached in *Annex C2*.

4.5 BASELINE MONITORING RESULTS

Baseline water quality monitoring was conducted between 6 and 31 October 2011 for all monitoring stations, except for station SR4a for which monitoring was conducted between 29 August and 24 September 2013. The monitoring results are shown in *Annex C3*. Graphical presentation of water quality at the monitoring stations is given in *Annex C4*. Detailed weather conditions at the monitoring locations during the baseline monitoring period are shown in *Annex F*. The monitoring schedule is shown in *Annex E*.

During the baseline monitoring period, no marine construction works were observed in the vicinity of all monitoring stations. The baseline monitoring results are thus considered representative of the ambient water quality.

4.6 *ACTION AND LIMIT LEVELS*

The Action and Limit Levels for DO, SS and turbidity are determined in accordance with requirements set out in the EM&A Manual which are summarized in *Table 4.5*.

Table 4.5 Action and Limit Levels for Water Quality

Parameter (unit)	Water Depth	Action Level	Limit Level
Dissolved Oxygen (mg/L) (surface, middle and bottom	Surface and Middle	5%-ile of baseline data	4mg/L except 5mg/l for FCZ or 1%-ile of baseline data
	Bottom	5%-ile of baseline data	2mg/L or 1%-ile of baseline data
Turbidity (NTU)	Depth average	95%-ile of baseline data and 120% of upstream control station's turbidity at the same tide of the same day	99%-ile of baseline and 130% of turbidity at the upstream control station at the same tide of same day
SS (mg/L)	Depth average	95%-ile of baseline data and 120% of upstream control station's SS at the same tide of the same day	99%-ile of baseline and 130% of SS at the upstream control station at the same tide of same day

Notes:

(1) Depth-averaged is calculated by taking the arithmetic means of reading of all three depths

(2) For DO, non-compliance of the water quality limit occurs when monitoring result is lower that the limit.

(3) For SS & turbidity non-compliance of the water quality limits occur when monitoring result is higher than the limits.

The calculated Action and Limit levels are shown in *Table 4.6*.

Table 4.6 Action and Limit Levels for Water Quality

Parameter (unit)	Water Depth	Action Level	Limit Level
Dissolved Oxygen (mg/L) (surface, middle and bottom	Surface and Middle	5.0	4.2 except 5 for FCZ
	Bottom	4.7	3.6
Turbidity (NTU)	Depth average	27.5 and 120% of upstream control station's turbidity at the same tide of the same day	47.0 and 130% of turbidity at the upstream control station at the same tide of same day
SS (mg/L)	Depth average	23.5 and 120% of upstream control station's SS at the same tide of the same day	34.4 and 130% of SS at the upstream control station at the same tide of same day

Notes:

(1) Depth-averaged is calculated by taking the arithmetic means of reading of all three depths

(2) For DO, non-compliance of the water quality limit occurs when monitoring result is lower that the limit.

(3) For SS & turbidity non-compliance of the water quality limits occur when monitoring result is higher than the limits.

Table 4.7 Event/ Action Plan for Water Quality

Event	ET Leader	IEC	SOR	Contractor
Action level being exceeded by one sampling day	Repeat in situ measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor and SOR; Check monitoring data, all plant, equipment and Contractor's working methods.	Check monitoring data submitted by ET and Contractor's working methods.	Confirm receipt of notification of non-compliance in writing; Notify Contractor.	Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Action level;	Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; Supervise the implementation of mitigation measures.	Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation measures.	Inform the Supervising Officer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working methods; Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment	Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the proposed mitigation	Confirm receipt of notification of failure in writing; Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to review the	Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working

Event	ET Leader	IEC	SOR	Contractor
	and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor;	measures submitted by Contractor and advise the SOR accordingly.	working methods.	methods; Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR.
Limit level being exceeded by two or more consecutive sampling days	Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days;	Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly; Supervise the implementation of mitigation measures.	Discuss with IEC, ET and Contractor on the proposed mitigation measures; Request Contractor to critically review the working methods; Make agreement on the mitigation measures to be implemented; Ensure mitigation measures are properly implemented; Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level.	Take immediate action to avoid further exceedance; Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures; Resubmit proposals of mitigation measures if problem still not under control; As directed by the Supervising Officer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level.

5 ECOLOGY

5.1 BASELINE WALK-OVER SURVEY

Baseline walk-over survey was carried out in September 2013 to confirm the existing ecological conditions with reference to the habitat maps presented in the approved EIA Report of the Project. In accordance with requirements of the EM&A Manual, no detailed ecological surveys of flora and fauna were undertaken for the baseline walk-over survey.

5.1.1 Observations

With reference to the habitat categorization in the approved EIA report, habitats were classified into following ten (10) types (please also refer to *Table 5.1*):

Mixed Woodland

In this walk over survey mixed woodland refer to both secondary woodland and mature plantation woodland with reasonable proportion of native species and typical woodland flora profile.

Tall Shrubland

Tall shrubland habitat is densely populated with a mix of native tree and shrubby plant species.

Shrubby Grassland

The shrubby grassland is dominated by herbaceous ferns and grass with shrubs and tree species that are patchily distributed on the hill-slopes within the Study area.

Salt Marsh

Salt Marsh is those low-lying wet land that is influenced by saltwater.

Plantation

In this walk over survey, plantation refers to artificial planting area which included man-made slope and roadside plantation for landscape and ornamental use.

Cultivated Field

Cultivated field includes both active, inactive cultivation fields and orchards.

Mangrove

Mangrove refers to coastal vegetation which dominated by mangrove and mangrove associated species.

Wasteland

Wasteland is an open field which has dominated by weeds and pioneer species.

Watercourse

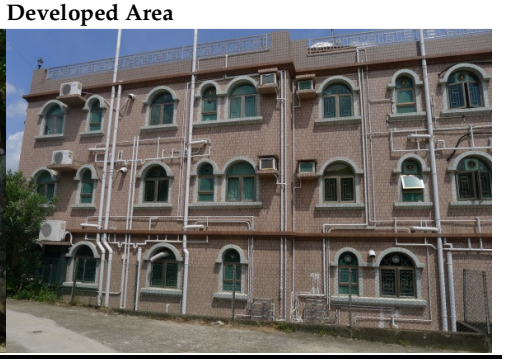
Watercourse included both natural stream and modified stream.

Developed Area

Typical developed areas within the Study area are the Airport Railway Deport, North Lantau Highway and Pak Mong Village.

Table 5.1 Types of Habitats observed in Walk-over Survey

Mixed Woodland	**Tall Shrubland**
	
Shrubby Grassland	**Salt Marsh**
	
Plantation	**Cultivated Field**
	
Mangrove	**Wasteland**

Mixed Woodland	Tall Shrubland
	
Watercourse	**Developed Area**
	

5.1.2 *Results*

Habitats within Study Area

The updated habitat map is presented in *Figure 5.1.* Larger area of tall shrubland was identified within the Study area. It is believed that they are developed from previous shrubby grassland identified in approved EIA. Woodland behind Pak Mong Village was defined as plantation woodland in previous EIA. In this walk-over survey, both mature native species and fruit tree species are well developed into typical woodland profile. Therefore, it is now classified as mixed woodland. Some of the orchard area and farmland are now invaded by self-seeded plant indicating its inactive status. However, according the approved EIA report both inactive and active are categorized as cultivated land. Thus only those believed to be abandoned and developed into a stage that can fit the description of another types of habitat mentioned above will be shown in the updated habitat map.

It should be noted that mangrove area increased along the inner bay of Tai Ho Wan.

Habitats within Project Area

Habitat types within the Project area are similar to the approved EIA report except some of the man-made slope and landscape area that previously defined as developed area are now classified as plantation because of its vegetation coverage and maturity of development.

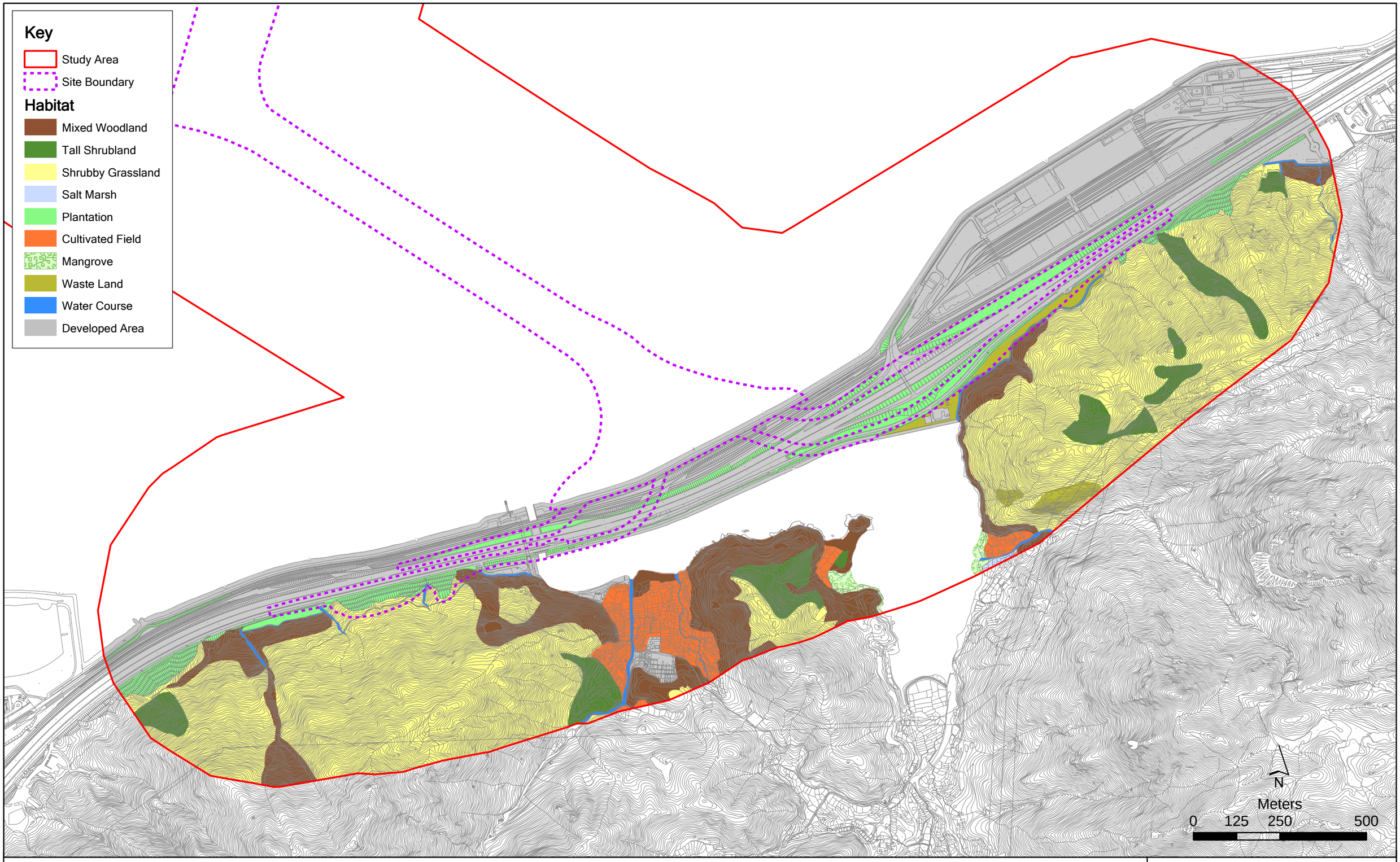


Figure 5.1

Updated Habitat Map after Walk Over Survey

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Flora Species of Conservation Interest

This walk-over survey also confirmed the existence of the flora species of conservation interest according to the figure "Location of Species of Conservation Interest Recorded in North Lantau between 2003 to 2009" in approved EIA report. Most of them can be found within the Study area except those grown in some inaccessible area (e.g. fence off area).

5.2 BASELINE DOLPHIN MONITORING

Baseline dolphin monitoring was undertaken at Northwest Lantau (NWL) and Northeast Lantau (NEL) under the *Chinese White Dolphin (CWD) Service Contract No. HY/2011/02* for a period of three months prior to the commencement of the Contract. The baseline line-transect vessel surveys for dolphin monitoring were conducted in September, October and November 2011 as shown in *Table 5.2.* Location of dolphin transect survey is presented in *Figure 5.2*. Detailed monitoring results are presented in *Annex D*.

Table 5.2 Date of Baseline Dolphin Monitoring

No.	Date	Location
1	05/09/2011	W LANTAU + NW LANTAU
2	07/09/2011	NW LANTAU + NE LANTAU
3	16/09/2011	NW LANTAU + NE LANTAU
4	23/09/2011	W LANTAU + NW LANTAU
5	06/10/2011	NE LANTAU + NW LANTAU
6	10/10/2011	NW LANTAU +NE LANTAU
7	13/10/2011	NE LANTAU
8	17/10/2011	W LANTAU + NW LANTAU
9	28/10/2011	NW LANTAU + W LANTAU
10	01/11/2011	NW LANTAU +NE LANTAU
11	02/11/2011	W LANTAU + NE LANTAU
12	05/11/2011	NW LANTAU + NE LANTAU
13	06/11/2011	NE LANTAU
14	07/11/2011	NW LANTAU + W LANTAU

Notes:
* NW Lantau = Northwest Lantau Survey Area, NE Lantau = Northeast Lantau Survey Area, W Lantau = West Lantau

In total, 112 groups of Chinese White Dolphins, numbering 413 individuals, were observed during the three-month survey. Most of them were sighted in the West Lantau (WL) and Northwest Lantau (NWL) regions.

Major findings along and near the future alignments of HKLR and TM-CLKL as well as the reclamation site of HKBCF (collectively called "the Site" below) are summarized as follows:

- Dolphins were sighted but not in high concentration near the Site;
- Several large dolphin aggregations were seen near the Site;

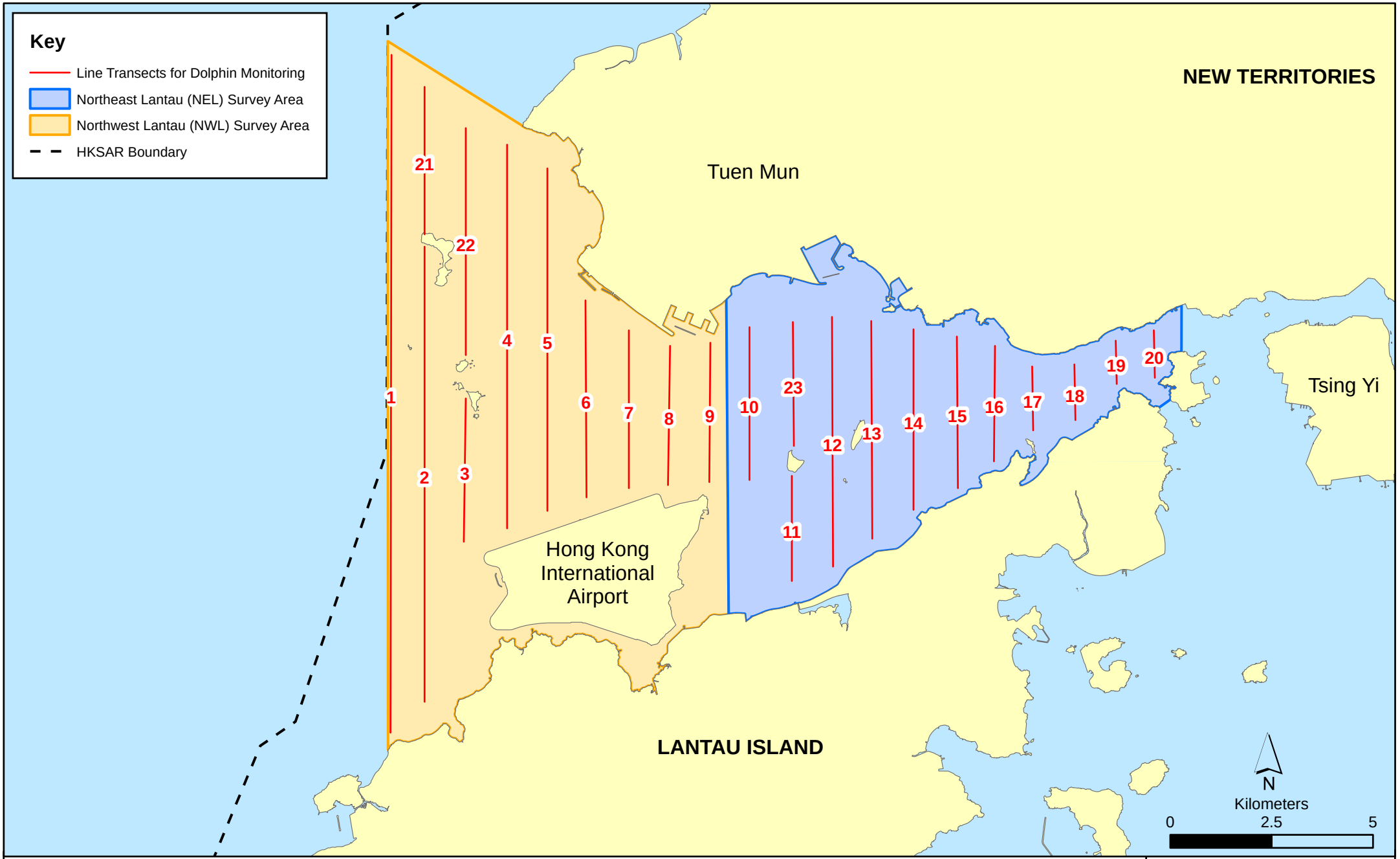

Figure 5.2

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

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Date: 9/12/2013

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- Several grids had moderate to high dolphin density near the Site;
- Several mother-calf pairs were recorded (near alignments of HKLR and TM-CLKL only);
- Several feeding activities were sighted along and near the Site; and
- Two fishing boat-associated sightings were made near the Site.

Through photo-identification work, 96 individuals were identified from 182 sightings. Some were sighted over three times during the three-month survey, indicating their frequent use of Hong Kong waters. Many of them were year-round residents and some were accompanied by calves. Ranging pattern developed showed that most of the dolphins ranged across the three survey areas including the HZMB work areas.

5.2.1 Determination of Action and Limit Levels for Dolphin Monitoring

Vessel-based Line-transect Survey Methodology

According to the requirement of the EM&A Manual, dolphin monitoring programme should cover all transect lines in NEL and NWL survey areas twice per month throughout the entire construction period.

The survey team used standard line-transect methods (Buckland *et al.* 2001) to conduct the systematic vessel surveys. For each monitoring vessel survey, a 15-m inboard vessel (*Standard* 31516) with an open upper deck (about 4.5 m above water surface) will be used to make observations from the flying bridge area.

Two experienced observers (a data recorder and a primary observer) made up the on-effort survey team, and the survey vessel will transit different transect lines at a constant speed of 13-15 km per hour. The data recorder will search with unaided eyes and fill out the datasheets, while the primary observer will search for Chinese white dolphins continuously through 7 x 50 marine binoculars. Both observers will search the sea ahead of the vessel, between 270° and 90° (in relation to the bow, which is defined as 0°). One to two additional experienced observers will be available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members.

During on-effort survey periods, the survey team will record effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance traveled in each series (a continuous period of search effort) with the assistance of a handheld GPS (*Garmin eTrex Legend*).

Data including time, position and vessel speed will also automatically and continuously be logged by handheld GPS throughout the entire survey for subsequent review.

When dolphins are sighted, the survey team will end the survey effort, and immediately record the initial sighting distance and angle of the dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel will be diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, and behavioural observations. The perpendicular distance (PSD) of the dolphin group to the transect line will be later calculated from the initial sighting distance and angle.

Survey effort being conducted along the parallel transect lines that are perpendicular to the coastlines will be labeled as "primary" survey effort, while the survey effort conducted along the connecting lines between parallel lines will be labeled as "secondary" survey effort.

Data Analysis (Dolphin Encounter Rate)

Encounter rates of Chinese white dolphins (number of on-effort sightings per 100 km of survey effort, and total number of dolphins sighted on-effort per 100 km of survey effort) will be calculated in NEL and NWL survey areas in relation to the amount of survey effort conducted during each month of monitoring survey. Dolphin encounter rates will be calculated for comparison between the baseline monitoring and impact monitoring results

For the HZMB baseline monitoring results, the encounter rates were calculated using primary survey effort alone (i.e. effort conducted along parallel transect lines that were perpendicular to the coastlines). Only data collected under Beaufort 3 or below condition would be used for encounter rate analysis. The average encounter rate of sightings (STG) and average encounter rate of dolphins (ANI) were deduced based on the encounter rates from six events during the baseline period (i.e. six sets of line-transect surveys in North Lantau) using the following formulae:

$$\textbf{Encounter Rate (STG)} = \frac{\text{Total No. of On-effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

$$\textbf{Encounter Rate (ANI)} = \frac{\text{Total No. of Dolphins from All On-effort Sightings}}{\text{Total Amount of Survey Effort (km)}} \times 100$$

These encounter rates will be used for the implementation of Event and Action Plan to examine whether the Action Level or Limit Level should be triggered from the comparison of encounter rates between baseline and impact phase quarterly monitoring periods.

Dolphin Encounter Rates during Baseline Period

During the present three-month study period, the encounter rates of Chinese White Dolphins deduced from the survey effort and on-effort sighting data from the primary transect lines under favourable conditions (Beaufort 3 or below) from each of the survey areas are shown in *Table 5.3*.

Table 5.3 Dolphin Encounter Rates (Sightings Per 100 km of Survey Effort) during the Baseline Monitoring Period (September - November 2011)

Survey Area	Dolphin Monitoring	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)	Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)
		Primary Lines Only	**Primary Lines Only**
Northeast Lantau	Set 1	3.34	3.34
	Set 2	0.00	0.00
	Set 3	3.02	15.11
	Set 4	5.92	14.79
	Set 5	13.76	73.39
	Set 6	9.93	26.49
	Average from the six sets	**6.00 ± 5.05**	**22.19 ± 26.81**
Northwest Lantau	Set 1	1.39	2.77
	Set 2	16.57	55.25
	Set 3	5.24	24.48
	Set 4	8.45	35.47
	Set 5	13.13	86.30
	Set 6	14.33	83.69
	Average from the six sets	**9.85 ± 5.85**	**44.66 ± 29.85**

Event and Action Plan for Dolphin Impact Monitoring

To define the Action Level (AL) and Limit Level (LL) in comparison with the baseline dolphin encounter rate, the seasonal fluctuation of dolphin encounter rate in NWL and NEL were considered by comparing dolphin encounter rates across the four seasons in order to take the natural fluctuation of dolphin occurrence into account.

Notably, the natural fluctuation among different seasons can differ by as much as 30%, and in a few extreme cases up to 40-60% upon review of dolphin historical data in North Lantau waters.

Therefore, the approach of 30% and 60% percentage reduction to define the AL and LL, respectively, is reasonable to determine whether the construction activities of TM-CLKL project have caused real significant impact on dolphin occurrence, instead of triggering false alarms prematurely. Although the exact percentages (30%/60%) for the AL and LL are set somewhat arbitrarily, this is based on careful consideration of the natural fluctuation of dolphin occurrences among different seasons as explained above.

The proposed AL and LL are shown in *Tables 5.4* and *5.5:*

Table 5.4 Action Level and Limit Level for Dolphin Impact Monitoring

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

Notes:

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

Table 5.5 Derived Value of Action Level (AL) and Limit Level (LL)

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

Notes:

1. AL will be trigger if either NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

Should non-compliance of the criteria occur, action in accordance with the Event and Action Plan, as provided in *Table 5.6* should be carried out.

Table 5.6 Implementation of Event-Action Plan for Dolphin Monitoring

Event	ET Leader	IEC	SOR	Contractor
Action Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor; 5. Check monitoring data. 6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor.	1. Discuss monitoring with the IEC and any other measures proposed by the ET; 2. If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented.	1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR; 3. Implement the agreed measures.

Event	ET Leader	IEC	SOR	Contractor
Limit Level	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, ER/SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary; 7. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, ER/SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor; 3. Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures; 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise ER/SOR of the results and findings accordingly; 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly.	1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures; 2. If ER/SOR is satisfied with the proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, ER/SOR to signify the agreement in writing on such proposals and any other mitigation measures; 3. Supervise the implementation of additional monitoring and/or any other mitigation measures.	1. Inform the ER/SOR and confirm notification of the non- compliance in writing; 2. Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures; 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary; 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

5.3 BASELINE BORED PILLING MONITORING

In accordance with the EM&A Manual, baseline bored piling monitoring comprising land-based theodolite tracking, underwater noise monitoring and acoustic behavioural monitoring were undertaken in September and October 2013 before commencement of construction of the Contract. Findings of the baseline bored pilling monitoring are presented in the following sections.

5.3.1 *Land-Based Theodolite Tracking*

The objective of the land-based theodolite tracking is to monitor the movement and behaviour of Chinese White Dolphins near the bored piling works before, during and after the works in order to record and note any changes in response to the bored piling noise. Detailed methodology, results and discussion of the baseline land-based theodolite tracking which is undertaken before commencement of construction under the Contract is presented in *Annex G*. Key findings are presented below.

Survey Location and Efforts

A total of 186 hours and 28 minutes were spent during the 30 days of effort from 9 September to 14 October 2013 for the baseline land-based theodolite tracking. Dolphins were successfully tracked from the land-based station on 2 of 30 days of effort, and a total of three (3) dolphin groups were tracked. A total of 3,053 vessels of 16 different types were tracked with the majority being transportation vessels.

Location of the Pak Mong Station where monitoring was undertaken is provided in *Figure 5.3*.

Key Findings

Amongst the three dolphin tracks recorded during the baseline monitoring, only one met the conditions for analysis (please refer to *Annex G* for details on methodology of data analysis). This group was tracked for 47 minutes and 37 seconds near Siu Ho Wan (ie approximately 1.5-2.0 km from the alignment of the Southern Connection Viaduct Section; *Figures 5.4* and *5.5*), during which three (3) vessels approached within 500 meters (fishing boat = 1, dumping guide boats = 2). A maximum of one (1) boat was present at any time, for a total of 10 minutes of interaction time for all three boats. The mean speed of the dolphin group over the duration of the track was 9.02 km/hr, reorientation rate was 156.1 °/surfacing, linearity was 0.010, and inter-breath interval was 99 seconds.

Notably, the single track analysed for the present Study was located near Siu Ho Wan and Shum Shui Kok, at least 2km from the Pak Mong Station and at a distance from the Southern Connection Viaduct Section. Therefore, the movement pattern of dolphins at this great distance away from the potential impact area may not provide indicative information to establish the baseline condition for the EM&A programme.

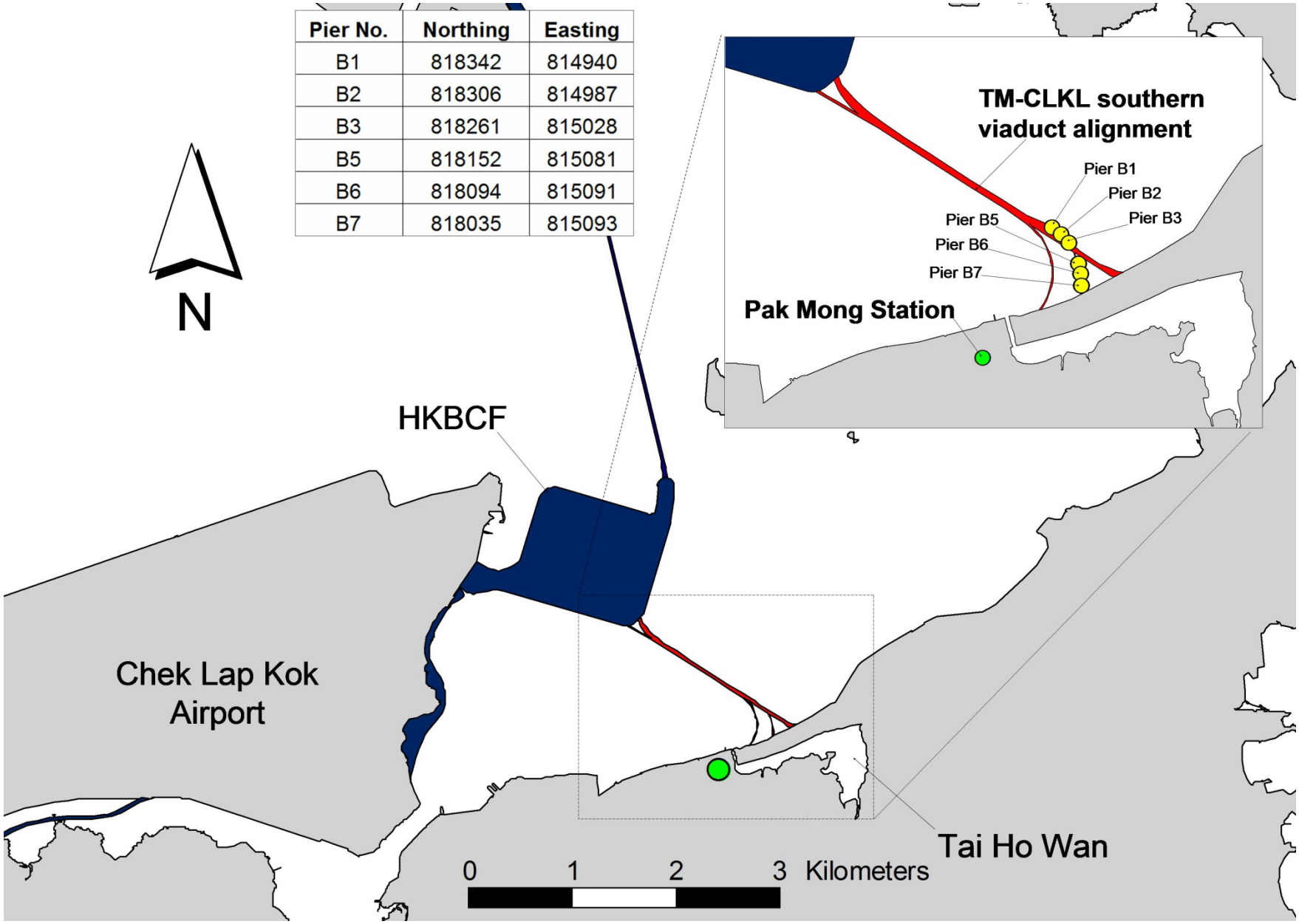

Figure 5.3 Location of Pak Mong Station in NE Lantau with alignment of TM-CLKL Southern Connection Viaduct

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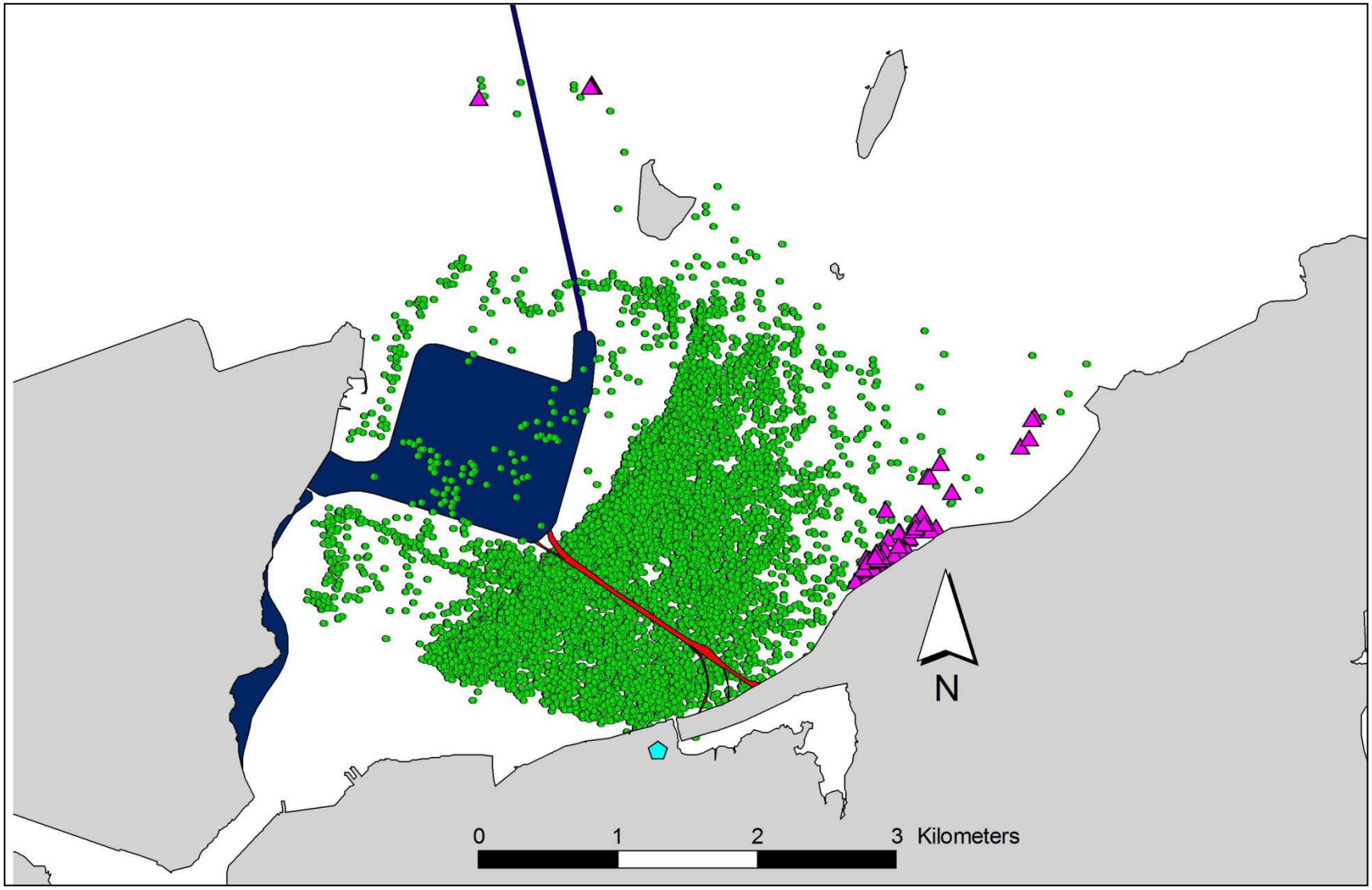

Figure 5.4 Fix positions of vessels (green dots) and dolphins (purple triangle) from Pak Mong Theodolite Tracking Station in relation to TM-CLKL alignment and HKBCF/HKLR reclamation sites in Sept. 9th –Oct. 14th 2013

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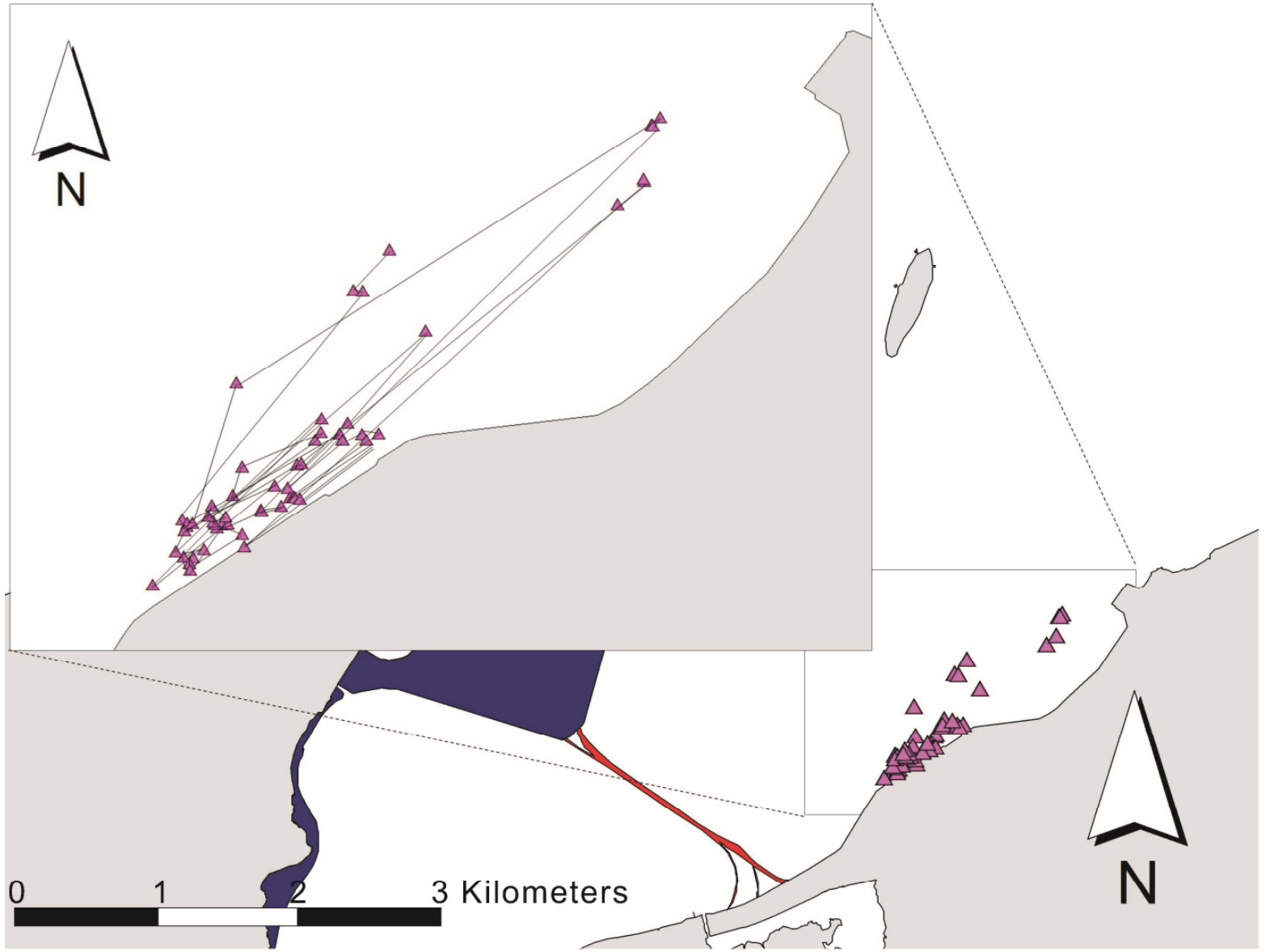

Figure 5.5 Track lines of the only dolphin group that was tracked and analyzed for movement and behavioural patterns in the present study

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From the results presented here, it is clear that the Study area is not frequently used by dolphins even before commencement of construction of the Southern Connection Viaduct Section. In fact, there are multiple lines of evidence to support that dolphins rarely occur in the area near the Southern Connection Viaduct Section in the past and present:

- Review of Hong Kong Cetacean Research Project (HKCRP) long-term monitoring data on Chinese White Dolphins indicated that very few dolphins have occurred in this area in the past. Out of the 927 dolphin sightings made in NEL during 2002-2013, fewer than 10 groups were sighted in the proximity to the Southern Connection Viaduct Section (*Figure 5.6*).

- Under the same bored piling monitoring programme for the TM-CLKL, concurrent intensive surveys were conducted to examine dolphin acoustic behaviour in NEL area between 26 September and 25 October 2013. Despite a large amount of search effort spent in this area during the 30-day period, no dolphin was sighted in the proximity to the TM-CLKL alignment at all, and most dolphin sightings were made in the northern portion of the survey area (*Figure 5.7*).

- For the same bored piling monitoring programme, passive acoustic monitoring was also conducted to detect dolphin presence 24 hours a day, by deploying an Ecological Acoustic Recorder (EAR) adjacent to the bridge alignment from 27 September to 26 October 2013. Results indicated that dolphin acoustic activity near the TM-CLKL alignment was much lower than a control site near Lung Kwu Chau. The Study concluded that the lack of dolphin whistles recorded and the sparse detections of clicks was an indicator that the area near the TM-CLKL alignment was likely not used very much for socializing or regular foraging by the dolphins.

In summary, dolphins rarely occur along or near the Southern Connection Viaduct Section in the past and present. This may be related to the high level of human activity, but more likely is driven by other factors such as the absence of prey, or the shallowness of seabed in this area. If this area has a naturally low density of dolphins, then the overall effect of construction activities on dolphins is likely to be low, which confirm the prediction from the original EIA study for the TM-CLKL Project.

Variation to the Event and Action Plan

According to *Section 6.5* of the EM&A Manual, the Action and Limit Levels as well as the Event and Action Plan for ecology should be proposed using the baseline monitoring data. The response variables for dolphin movement patterns (ie mean leg speed, mean inter-breath interval, reorientation rate and linearity) and dolphin behaviour (five different behavioural states) should be assessed under the Event and Action Plan, and these variables should be recorded during both baseline and construction phase monitoring works. Departures of any of these variables between baseline and construction phases

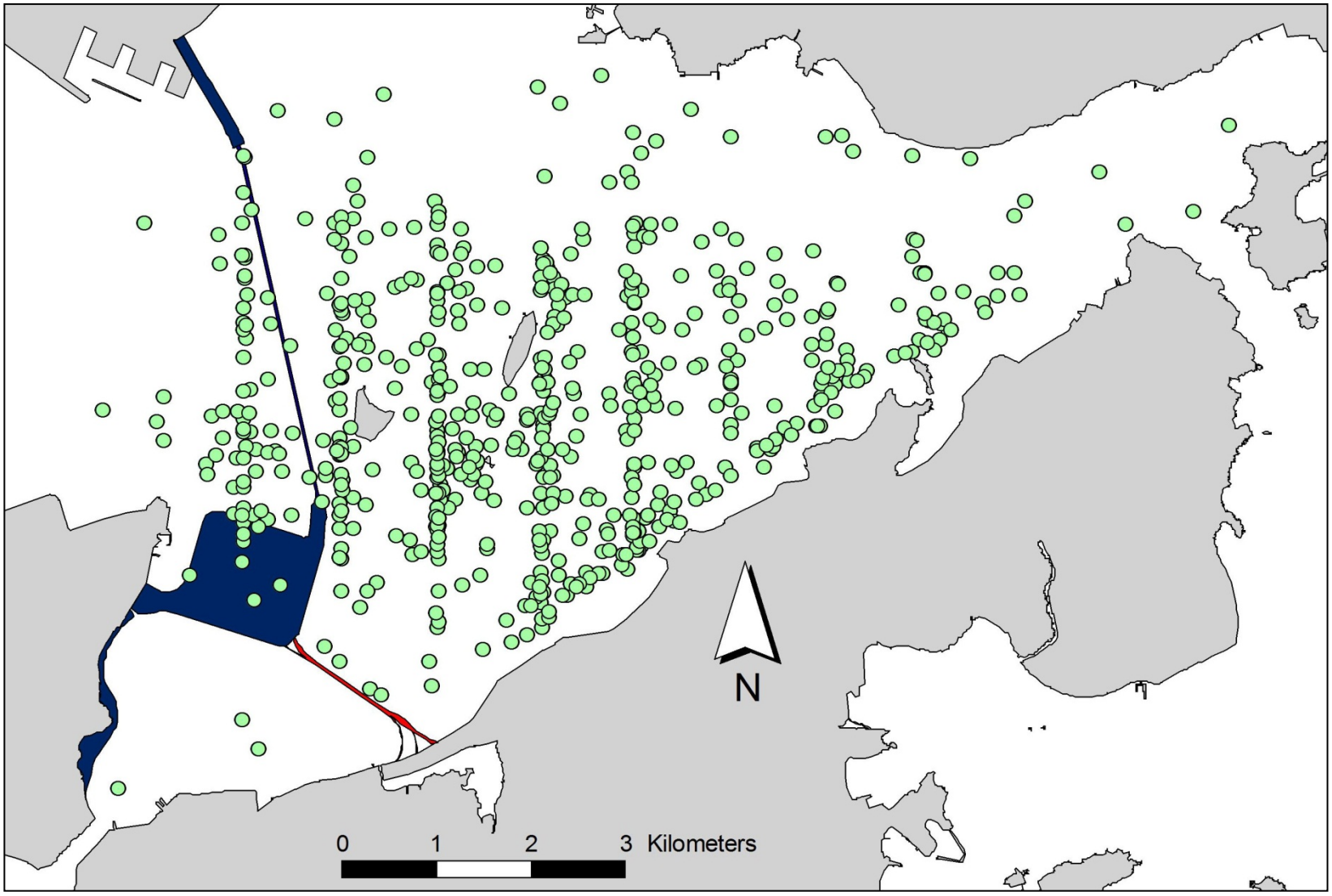

Figure 5.6 Distribution of Chinese white dolphin sightings in Northeast Lantau during January 2002-December 2013 (source: HKCRP unpublished data)

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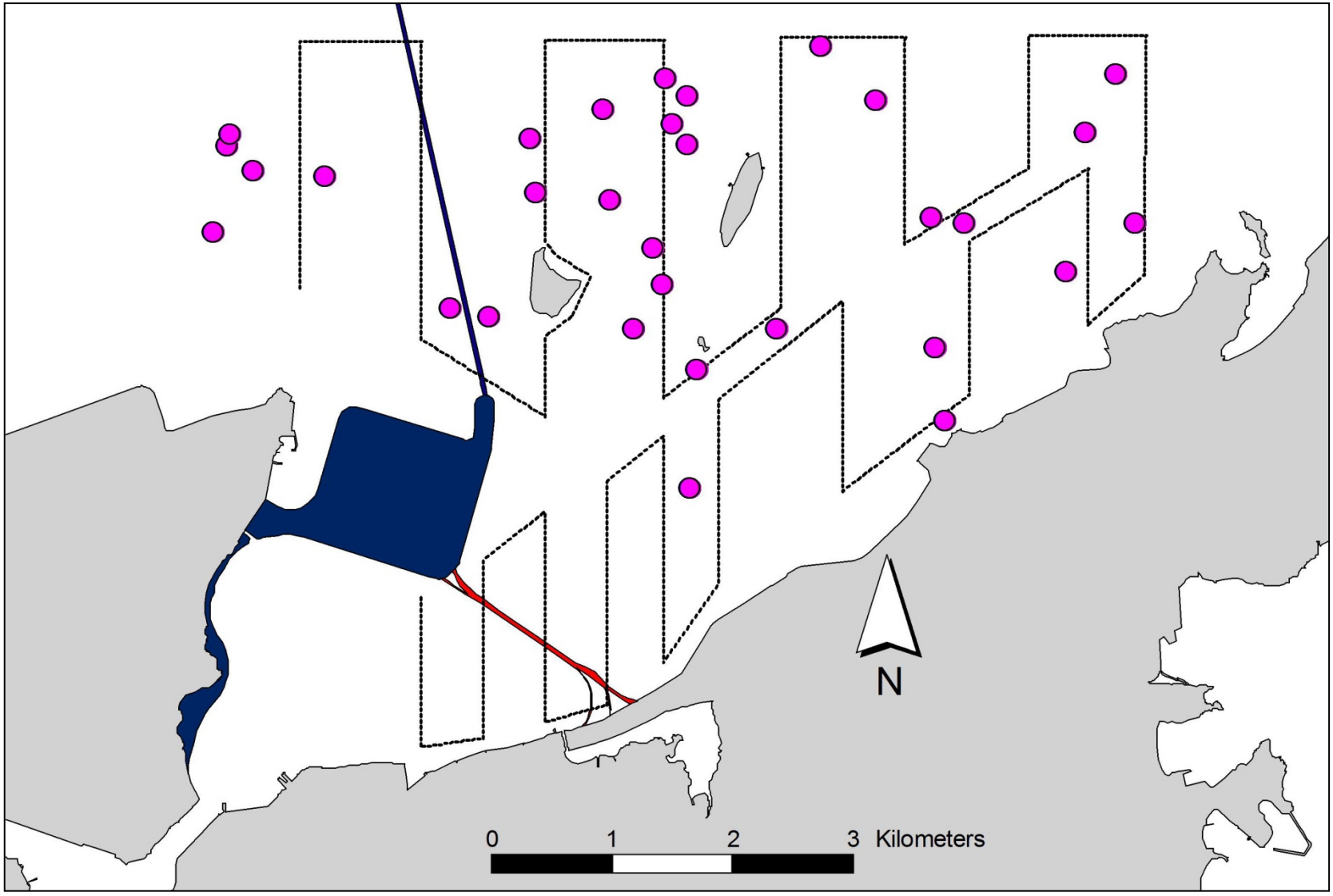

Figure 5.7 Distribution of Chinese white dolphin sightings during TM-CLKL acoustic surveys (Sep 26th-Oct 25th, 2013)

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by a certain percentage of difference would trigger the Action and Limit Levels.

However, due to the paucity of dolphin sightings and the availability of a single track for analysis from the present 30-day land-based theodolite tracking works, it is impossible to reliably establish the baseline values for the various response variables. In addition, as dolphins rarely occur in this area as discussed above, it is expected that such rare occurrence of dolphins would persist during the construction phase of the Contract. Without appropriate baseline information established for the behaviour and movement of Chinese White Dolphins, it is decided that any Event and Action Plan cannot be properly implemented for the land-based theodolite tracking during impact monitoring, and therefore it would rely on the implementation of Event and Action Plan on dolphin acoustic behaviour to monitor/safeguard dolphins from the potential impacts of the bored piling works. Nevertheless, it is important to conduct the construction phase and post-construction phase monitoring on behaviour and movements of Chinese White Dolphin through land-based theodolite tracking to confirm that they are not seriously affected by the construction works if they are present.

5.3.2 Underwater Noise Monitoring

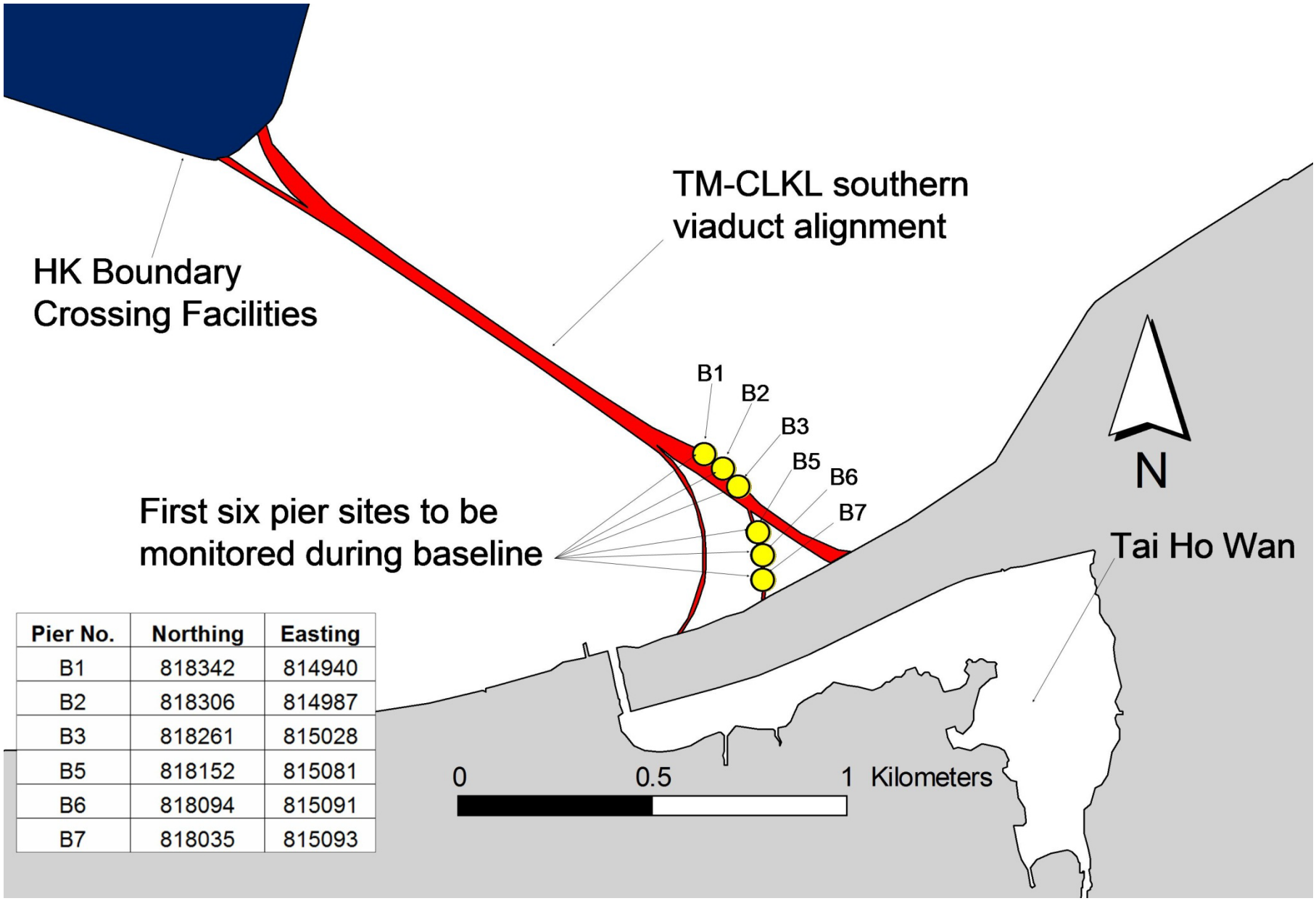
For the underwater noise monitoring, the primary objectives were to measure and characterize the following:

- Baseline ambient noise levels during the pre-construction phase of development; and
- Industrial noise levels associated with bored piling activities during the construction phase.

Detailed methodology, results and discussion of the baseline underwater noise monitoring which is undertaken before commencement of construction under the Contract is presented in *Annex H*. Key findings are presented below.

Survey Location and Efforts

Thirty days of underwater noise monitoring were conducted between 26 September and 25 October 2013 before commencement of construction of the Southern Connection Viaduct Section. To characterize the local soundscape, underwater sound data collection were conducted mostly in the northeastern waters of Lantau Island where bored piling activities in association with construction of the Southern Connection Viaduct Section will occur. Sound measurements were made at various distances from six bored piling sites along the TM-CLKL alignment (*Figure 5.8*) to allow estimation of a simple acoustic propagation model for the region.



Pier No.	Northing	Easting
B1	818342	814940
B2	818306	814987
B3	818261	815028
B5	818152	815081
B6	818094	815091
B7	818035	815093

Figure 5.8 Location of the bored pile pier sites to be monitored for the underwater noise measurement study of TM-CLKL construction

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Key Findings

A total of 472 underwater acoustic recordings were available for the underwater noise monitoring. After data quality checking, 440 recordings were selected for subsequent noise analyses. The primary reason for data exclusion, accounting for 32 recordings, were user-selected gain changes that occurred mid-recording and introduced high-frequency (10–20 kHz) artifacts that could bias the acoustic results with electronic noise.

The selected data were analyzed in terms of both a "wideband" frequency range of 30 Hz to 40 kHz and a "dolphin-sensitive" frequency range of 400 Hz to 12.5 kHz. Mean bandlevel across all recordings was 116.71 ± 6.29 dB re 1 μ Pa for the wideband case and 112.27 ± 6.36 dB re 1 μ Pa for the dolphin band case, where "± x.xx" refers to one standard deviation from the mean and indicates the degree of variability in the measurements. According to observer logs and confirmed in the acoustic records, vessel traffic is the greatest contributor to the local soundscape. Bandlevels were not substantially affected by wind speed or tidal height (tidal current), likely due to generally light winds and recording system design, respectively.

Of the 440 recordings analyzed, 122 recordings contained dolphin vocalizations. Average bandlevel across these recordings was 118.44 ± 5.88 dB re 1 μ Pa and 114.94 ± 5.26 dB re 1 μ Pa for the wideband frequency range and dolphin band, respectively (*Figure 5.9*). By comparison, recordings without dolphin vocalizations (318 recordings) had average bandlevels of 116.04 ± 6.34 dB re 1 μ Pa and 111.24 ± 6.46 dB re 1 μ Pa for wide and dolphin frequency bands, respectively. Since mean bandlevel was calculated across the entire recording and the bandwidth as indicated, bandlevels for the recordings containing dolphin vocalizations may not be representative of received levels of individual dolphin vocalizations, and likely contain other sound sources such as vessels and should thus be interpreted with caution. However, the large sample sizes and over 3 dB difference in average bandlevels, in particular in the dolphin band, suggest that, when vocalizing, dolphins can contribute significantly to the soundscape.

Variability of soundscape with time is observed with increased sound levels during daylight hours (*Figure 5.10*). However, a bias might be present due to the relatively small sample sizes outside daytime hours (n=82, as compared to the sample size in daytime hours (n=358)), but increased sound levels during daylight hours may also be attributed to increased vessel traffic, fishing, construction, and other anthropogenic activity more likely to occur during the day.

It should be noted the development of an Event and Action Plan is not required under the EM&A Manual for the underwater noise monitoring. However, results obtained from this Study, in conjunction with the concurrent dolphin acoustic behavioural and land-based theodolite tracking studies, would provide guidance with respect to mitigation for the resident dolphin population during the impact monitoring phase.

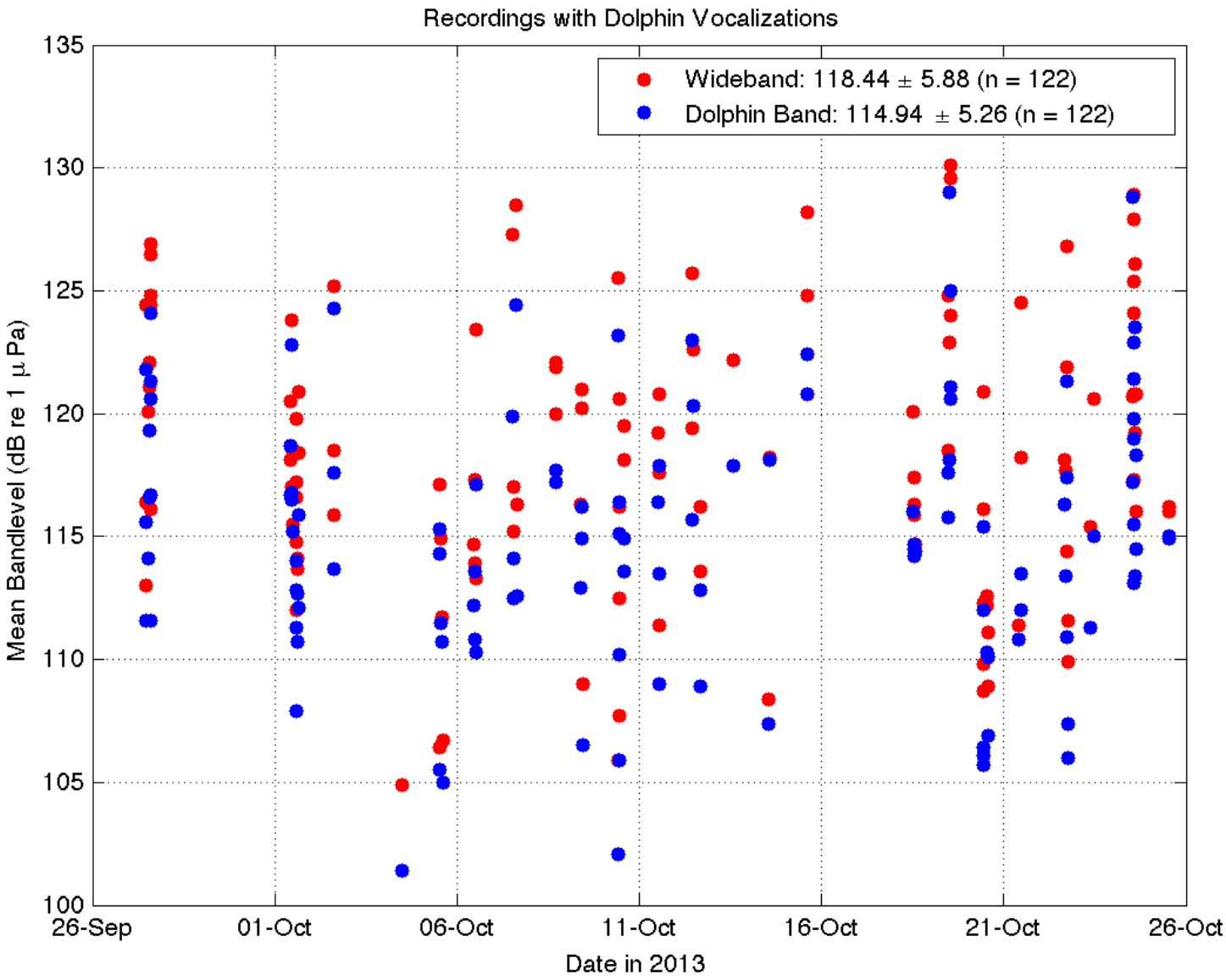

Figure 5.9 Mean bandlevels for the 122 recordings containing dolphin vocalizations. Bandlevels were analyzed in terms of both the 30–40,000 Hz "wideband" frequency range (red) and 400–12,500 Hz "dolphin-sensitive" band (blue).

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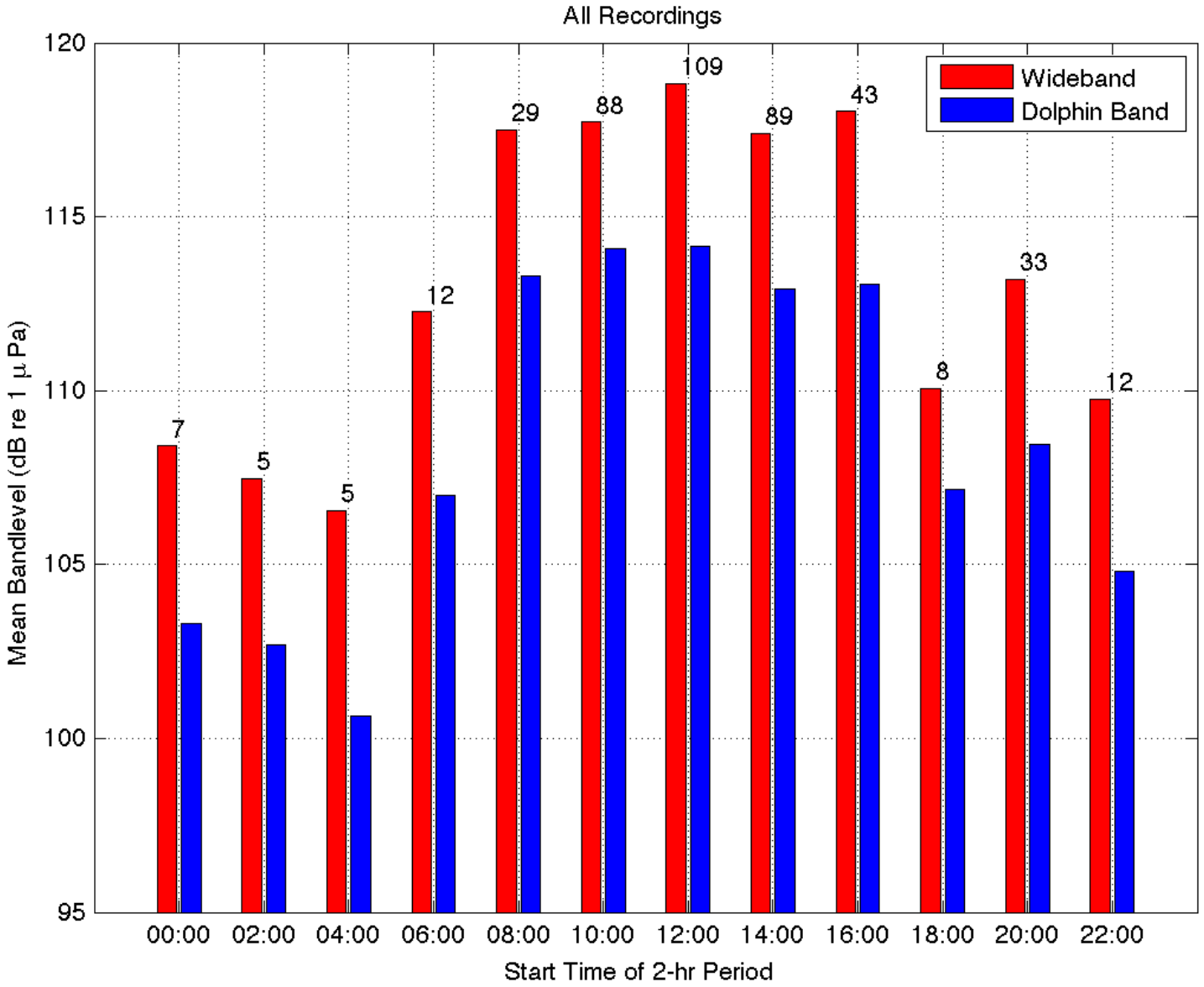

Figure 5.10 Mean bandlevels for all 440 recordings as a function of time of day. Red and blue represent the 30–40,000 Hz "wideband" frequency range and 400–12,500 Hz "dolphin-sensitive" band, respectively.

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5.3.3 Acoustic Behavioural Monitoring

The primary objective of the acoustic behavioural monitoring of Chinese White Dolphins was to investigate their acoustic behaviour in response to bored piling sites during both baseline and construction phases of the Southern Connection Viaduct Section in order to understand whether any observed differences in acoustic behaviour of dolphins may represent a reaction to the bored piling works.

Detailed methodology, results and discussion of the baseline acoustic behavioural monitoring which is undertaken before commencement of construction under the Contract is presented in *Annex H*. Key findings are presented below.

Survey Location and Efforts

The acoustic behavioural monitoring was conducted concurrently with the underwater noise monitoring between 26 September and 26 October 2013 before commencement of construction of the Southern Connection Viaduct Section. The acoustic behavioural monitoring was undertaken using both dipping hydrophone and passive acoustic monitoring by ecological acoustic recorders (EARs).

Acoustic behavioural monitoring by dipping hydrophone was undertaken mostly in the northeastern waters of Lantau Island where the bored piling activities will occur. For this Study, the research vessel followed a predefined route for systematic search effort in Northeast Lantau region to cover the area overlapped with the alignment of the Southern Connection Viaduct Section (*Figure 5.11*), where dolphins will be potentially disturbed by the bored piling works during the construction phase. The survey also covered part of Northwest Lantau waters as control sites, where dolphins were likely encountered for acoustic data collection but would not be disturbed by the bored piling activities (eg Sha Chau, Lung Kwu Chau and Black Point).

For passive acoustic monitoring, the EARs were deployed at following two locations (*Figure 5.11)*:

- Within 500 m of the bridge alignment (Site C1); and
- A control site between Sha Chau and Lung Kwu Chau (Site C2), a less disturbed site relatively far away from the alignment of the Southern Connection Viaduct Section.

Key Findings

<u>Acoustic Behavioural Monitoring using Dipping Hydrophones</u>

A total of 629 recording minutes were made during the baseline acoustic monitoring period. *Figure 5.12* shows the number of recording minutes summed for each day, as well as the number of sightings per day.

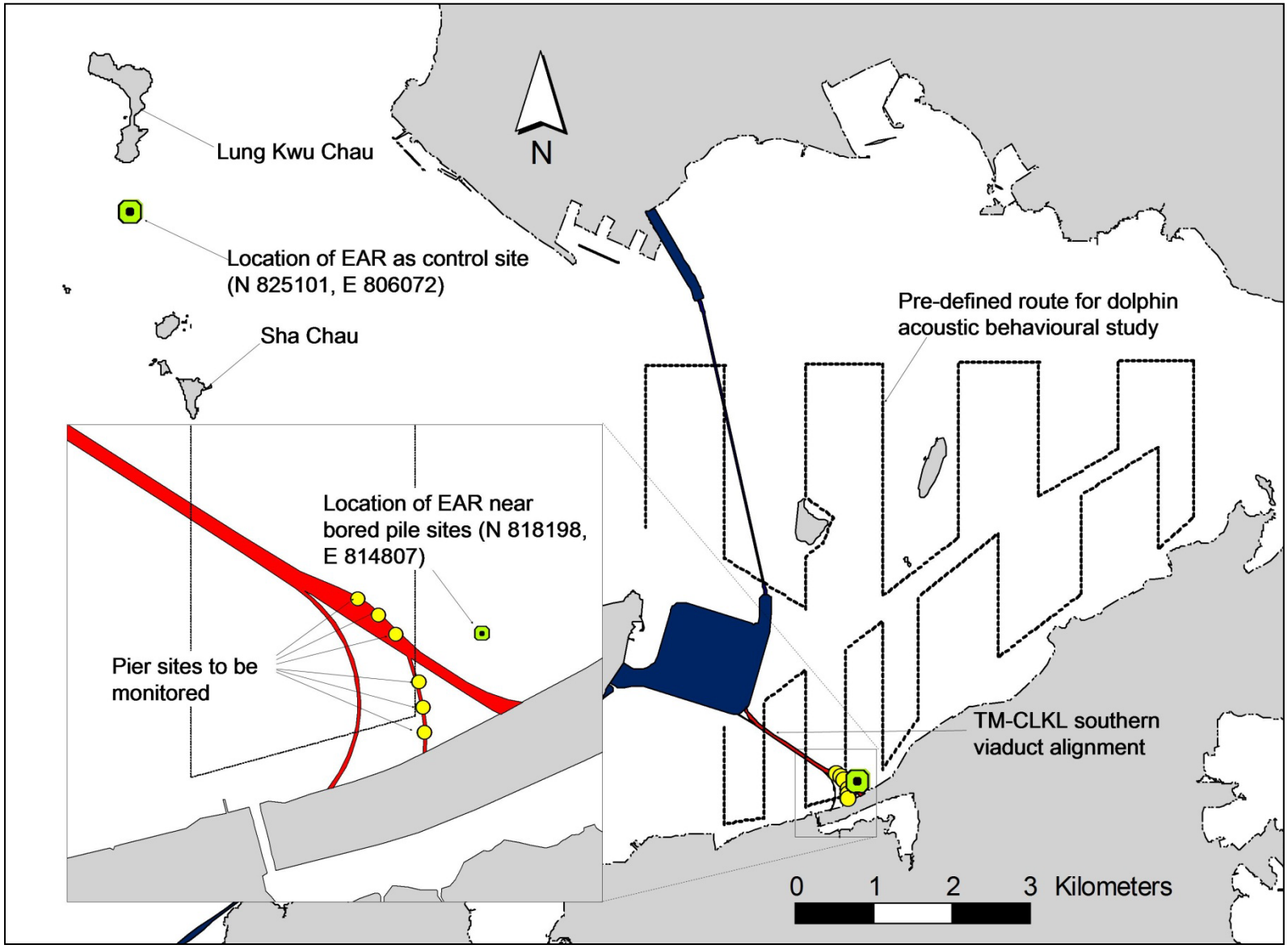

Figure 5.11 Map showing the tentative location of EAR deployments, pier sites to be monitored as well as pre-defined route for dolphin acoustic behavioural study

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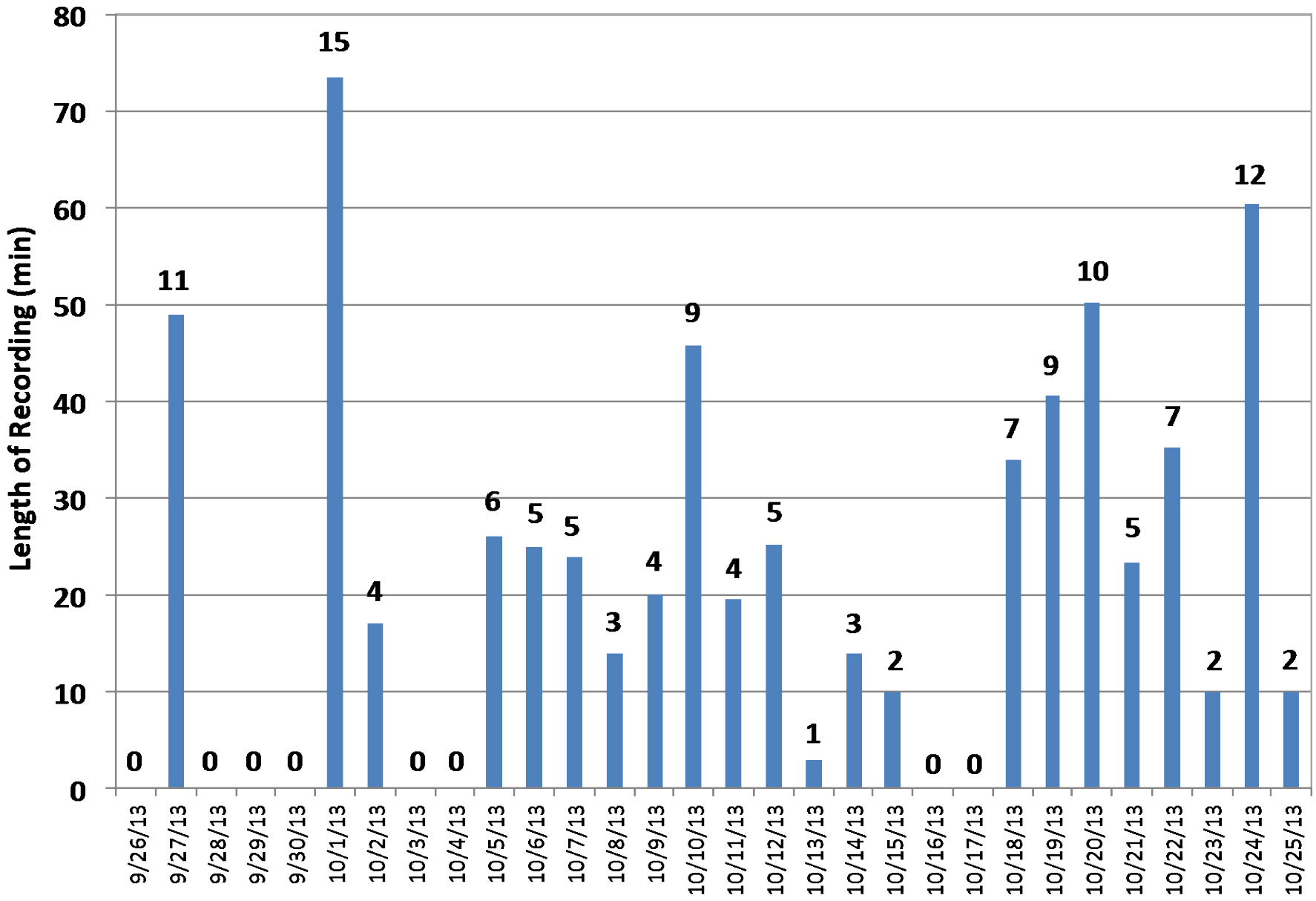

Figure 5.12 The summed length of recordings in minutes made for each day of observational effort during the baseline acoustic monitoring in September-October 2013. The values above each column represent the number of 5-minute recordings per day

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Recordings were obtained on all but 8 days of the 30-day period. The daily number of 5-minute recordings ranged between 0 and 15 (mean = 4.4, stdv = 4.1) and the daily number of minutes recorded was between 0 and 73.4 (mean = 21.0, stdv = 20.1). Whistling and clicking rates were determined for all recordings (n =122). *Figure 5.13* shows the daily rate of click and whistle production recorded. The mean daily whistling rate was 2.8 whistles/min (stdv = 3.9) and the mean click production rate was 165.9 clicks/min (stdv = 100.0).

Findings from the baseline acoustic behavioural monitoring using dipping hydrophones indicate that acoustic activity of Chinese White Dolphins tended to increase with group size and was highest during socializing periods. There was a gradual rise in the click production rate throughout the day, peaking in the afternoon period between 14:00 and 15:59. This suggests that the afternoon could be a time of increased foraging or socializing for dolphins in this area. A large difference in the occurrence of whistling was observed between Zones 1a (to the west of the construction area) and 1b (including the construction area). This suggests that, at least during daytime hours when the data were obtained, Zone 1a may be used differently than Zone 1b by the dolphins. A proportionately greater whistling rate in Zone 1b suggests more emphasis on social behaviors. On the other hand, clicking rates were equivalent between zones, suggesting that dolphin vigilance and foraging effort may be similar in the two zones.

Summary of data collected from the baseline acoustic behavioural monitoring using dipping hydrophones is presented in *Table 5.7*.

Table 5.7 ***Values of the two response variables of dolphin acoustic behaviour collected by calibrated hydrophone (mean clicks and whistles per minutes) by size of group, behavioural state and time of day during baseline period***

	Mean number of clicks per minute (± s.d.)	**Mean number of whistles per minute (± s.d.)**
Group Size		
1 dolphins	169.74 ± 194.88 (n=10)	2.89 ± 5.21 (n=10)
2-5 dolphins	161.46 ± 160.61 (n=86)	3.14 ± 6.54 (n=86)
6-9 dolphins	207.25 ± 157.17 (n=35)	5.64 ± 9.91 (n=35)
Behavioural State		
Feeding	165.09 ± 118.49 (n=18)	2.71 ± 6.67 (n=18)
Milling	183.73 ± 182.09 (n=123)	3.83 ± 7.63 (n=123)
Socializing	294.63 ± 159.98 (n=4)	3.05 ± 3.33 (n=4)
Traveling	119.98 ± 81.82 (n=22)	4.98 ± 8.77 (n=22)
Time of day		
08:00-09:59	100.83 ± 77.23 (n=5)	2.30 ± 4.35 (n=5)
10:00-11:59	155.65 ± 120.40 (n=35)	4.77 ± 9.59 (n=35)
12:00-13:59	171.08 ± 149.02 (n=52)	2.08 ± 5.08 (n=52)
14:00-15:59	218.49 ± 241.38 (n=27)	3.88 ± 5.77 (n=27)

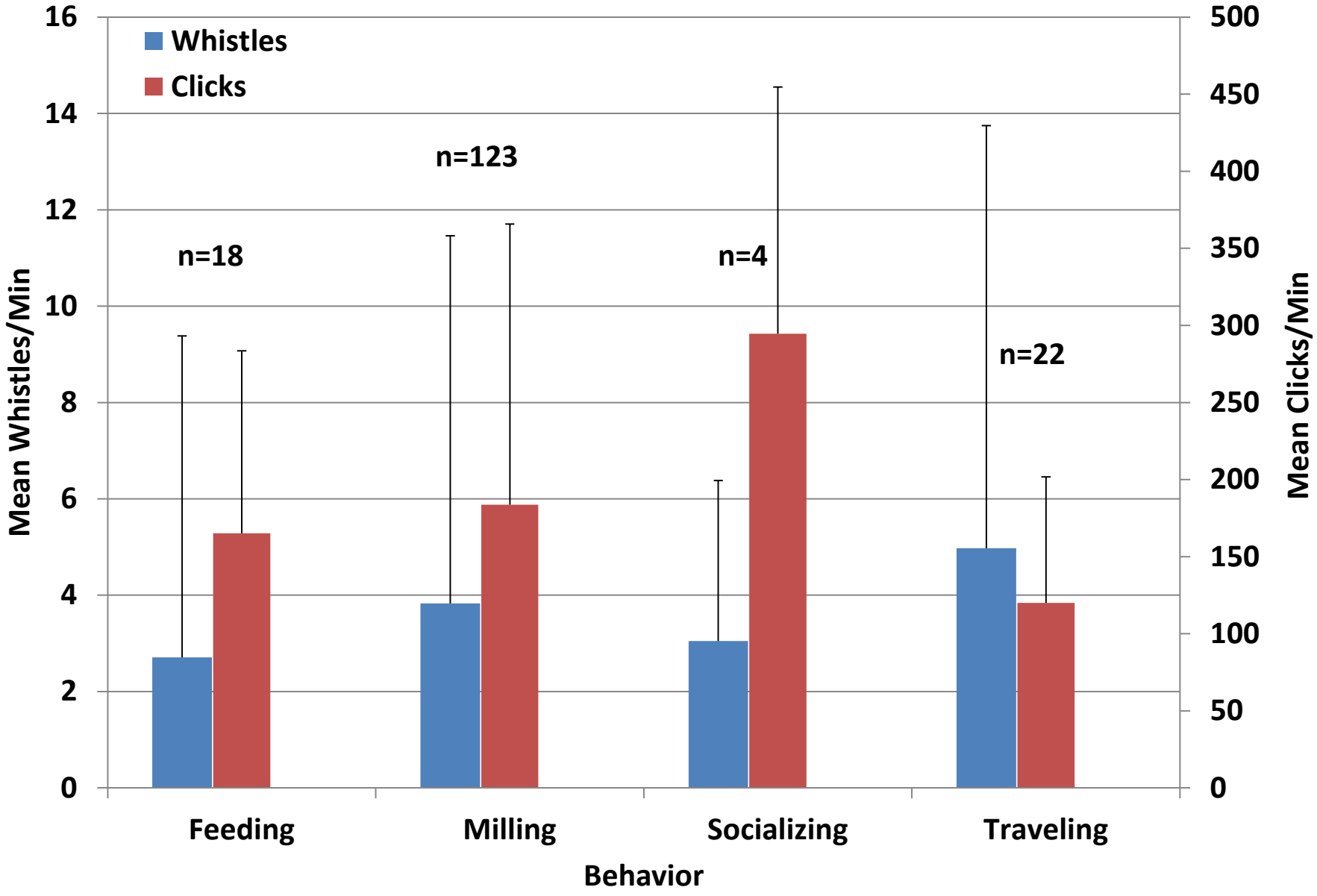

Figure 5.13 Mean number of whistles per minute and clicks per minute recorded as a function of dolphin behavioural state. Error bars represent one standard deviation

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16:00-17:59	186.40 ± 122.57 (n=11)	7.82 ± 11.83 (n=11)

Passive Acoustic Monitoring by EARs

Dolphin signals were detected on 26 out of 30 days of EAR recordings at C1 (Southern Connection Viaduct Section alignment area). *Figure 5.14* shows the percentage of files for each day (288 recordings per day) that contained dolphin signals. Daily dolphin acoustic activity was low, with between 0% and 4.5% of recordings containing dolphin signals any given day. *Figure 5.15* shows the number of dolphin encounters and the mean duration of encounters for each day of the deployment period. There were a mean of 4.6 encounters per day (S.D. = 3.3) at site C1, which lasted a mean of 1.9 min (S.D. = 3.6).

Dolphin signals were detected on all 30 days of EAR recordings at Site C2 (control site near Lung Kwu Chau). *Figure 5.16* shows the percentage of files for each day (288 recordings per day) that contained dolphin signals. Daily dolphin acoustic activity was variable, with between ~1% and 28% or recordings containing dolphin signals any given day. *Figure 5.17* shows the number of dolphin encounters and the mean duration of encounters for each day of the deployment period. There were a mean of 8.6 encounters per day (S.D. = 2.0) at site C2, which lasted a mean of 25.0 min (S.D. = 14.3).

The EAR data indicate that dolphin acoustic activity is considerably greater at site C2 (control site near Lung Kwu Chau) than at site C1 (Southern Connection Viaduct Section alignment area). Dolphin detections at site C1 did not exhibit any temporal pattern of dolphin occurrence. At site C2, the main temporal features were the peak in detections occurring in the morning hours between 08:00 and 9:59, followed by a comparative lull in the mid-day hours between 11:00 and 13:59. The difference in both detection rates and temporal occurrence suggest that dolphins use sites C1 and C2 very differently. The lack of whistles recorded and the sparse detections at Site C1 is an indicator that the area is likely not used very much for socializing or regular foraging.

Event Action Plan

According to *Section 6.5* of the EM&A Manual, the Action and Limit Levels as well as the Event Action Plan for ecology should be proposed using the baseline monitoring data. More specifically, as described in *Table 6.9* of the EM&A Manual, the Event Action Plan should be triggered when dolphin numbers and behaviour patterns recorded in the construction and post-construction monitoring are significantly lower or different than those recorded in the pre-construction monitoring. Therefore, an Event and Action Plan should be developed to examine changes in the dolphin acoustic behaviour between baseline and impact phases of monitoring.

To develop the Event and Action Plan (EAP) on dolphin acoustic behaviour, it is proposed to take into account of the values of two response variables (clicking and whistling rates) as a function of the size of dolphin group, their

behavioural state and time of day deduced from the calibrated hydrophone data as presented in *Table 5.7*. Departures of any of these variables between baseline and construction phases with a 20% difference will be of concern and should trigger the Action Level under the Event Action Plan. If a 40% difference in any of these variables between baseline and construction phases is detected, then the Limit Level under the Event Action Plan should be triggered and immediate actions will be required. The Action and Limit Levels of these variables are presented in *Table 5.8*.

In addition, the response variable for the EAR data should be the diel occurrence at the two sites (ie Impact Site C1 and Control Site C2). However, there was no distinct diel pattern in acoustic activity of dolphins at Site C1 and there was only a weak diel pattern observed at Site C2. As there was no distinct peak occurrence of dolphins at Site C1, the shift of peak occurrence in acoustic signal detection cannot be used as triggering mechanism for the Event and Action Plan. Alternatively, it is proposed that if there is a 20% difference in detections occurred during the nighttime period between 19:00 and 6:59 at Site C1 (baseline percentage of detection as 54%) in the impact phase monitoring period (i.e. ≥74% or ≤34% of all detections occurred at nighttime), then the Action Level should be triggered. On the other hand, if there is a 40% difference in detections occurred during the nighttime period between 19:00 and 6:59 at Site C1 in the impact phase monitoring period (i.e. ≥94% or ≤14% of all detections occurred at nighttime), then the Limit Level should be triggered. However, if such 20% or 40% difference occurs at both Sites C1 and C2 (baseline percentages of detections as 54% and 53% respectively), the action or limit level should not be triggered, as the change in diel pattern of dolphin occurrence does not only occur at the site of impact (C1) but also at the control site (C2), and the changes in dolphin occurrence at both sites may not be directly to the TM-CLKL construction works. Such review of data from Site C2 (control site between Lung Kwu Chau and Sha Chau) should be part of the review as listed in Action #2 by the ET Leader when the AL or LL is triggered as detailed in the Action and Event Plan (*Table 5.9*).

Table 5.8 Action Level (AL) and Limit Level (LL) for all response variables by size of group, behavioural state and time of day

	Mean no. of clicks per minute	**Mean no. of whistles per minute**
Group Size	AL / LL	AL / LL
1 dolphins (20%/40% ***lower***)	135.79 / 101.84	2.31 / 1.73
1 dolphins (20%/40% ***higher***)	203.69 / 237.64	3.47 / 4.05
2-5 dolphins (20%/40% ***lower***)	129.17 / 96.88	2.51 / 1.88
2-5 dolphins (20%/40% ***higher***)	193.75 / 226.04	3.77 / 4.40
6-9 dolphins (20%/40% ***lower***)	165.80 / 124.35	4.51 / 3.38
6-9 dolphins (20%/40% ***higher***)	248.70 / 290.15	6.77 / 7.90
Behavioural State	AL / LL	AL / LL
Feeding (20%/40% ***lower***)	132.07 / 99.05	2.17 / 1.63
Feeding (20%/40% ***higher***)	198.11 / 231.13	3.25 / 3.79
Milling (20%/40% ***lower***)	146.98 / 110.24	3.06 / 2.30
Milling (20%/40% ***higher***)	220.48 / 257.22	4.60 / 5.36

	Mean no. of clicks per minute	Mean no. of whistles per minute
Socializing (20%/40% ***lower***)	235.70 / 176.78	2.44 / 1.83
Socializing (20%/40% ***higher***)	353.56 / 412.48	3.66 / 4.27
Traveling (20%/40% ***lower***)	95.98 / 71.99	3.98 / 2.99
Traveling (20%/40% ***higher***)	143.98 / 167.97	5.98 / 6.97
Time of day	AL / LL	AL / LL
08:00-09:59 (20%/40% ***lower***)	80.66 / 60.50	1.84 / 1.38
08:00-09:59 (20%/40% ***higher***)	121.00 / 141.16	2.76 / 3.22
10:00-11:59 (20%/40% ***lower***)	124.52 / 93.39	3.82 / 2.86
10:00-11:59 (20%/40% ***higher***)	186.78 / 217.91	5.72 / 6.68
12:00-13:59 (20%/40% ***lower***)	136.86 / 102.65	1.66 / 1.25
12:00-13:59 (20%/40% ***higher***)	205.30 / 239.51	2.50 / 2.91
14:00-15:59 (20%/40% ***lower***)	174.79 / 131.09	3.10 / 2.33
14:00-15:59 (20%/40% ***higher***)	262.19 / 305.89	4.66 / 5.43
16:00-17:59 (20%/40% ***lower***)	149.12 / 111.84	6.26 / 4.69
16:00-17:59 (20%/40% ***higher***)	223.68 / 260.96	9.38 / 10.95

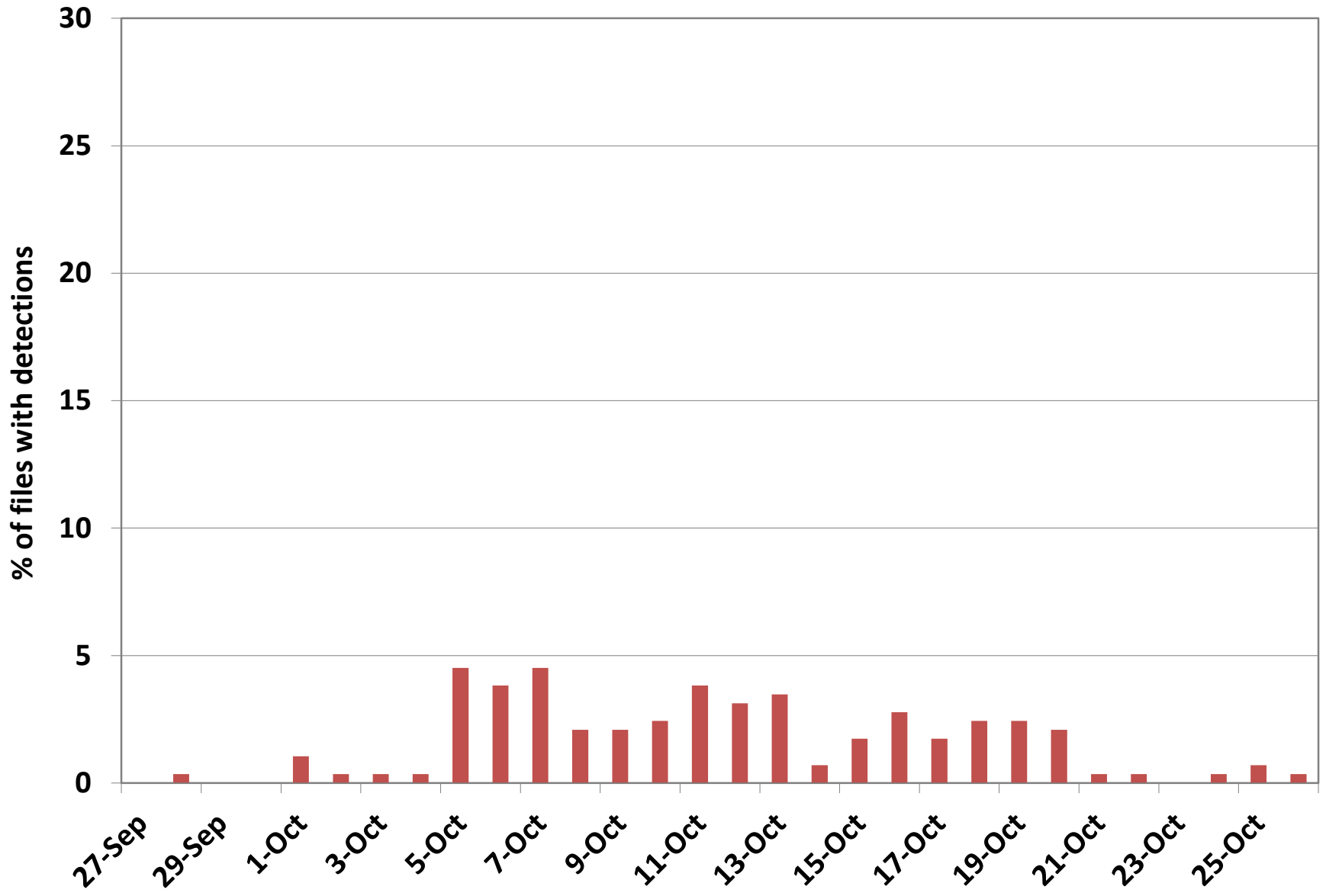

Figure 5.14 Histogram of the percentage of EAR recordings with dolphin detections made at site C1 (Bridge Alignment Area) during 30 days of the deployment period.

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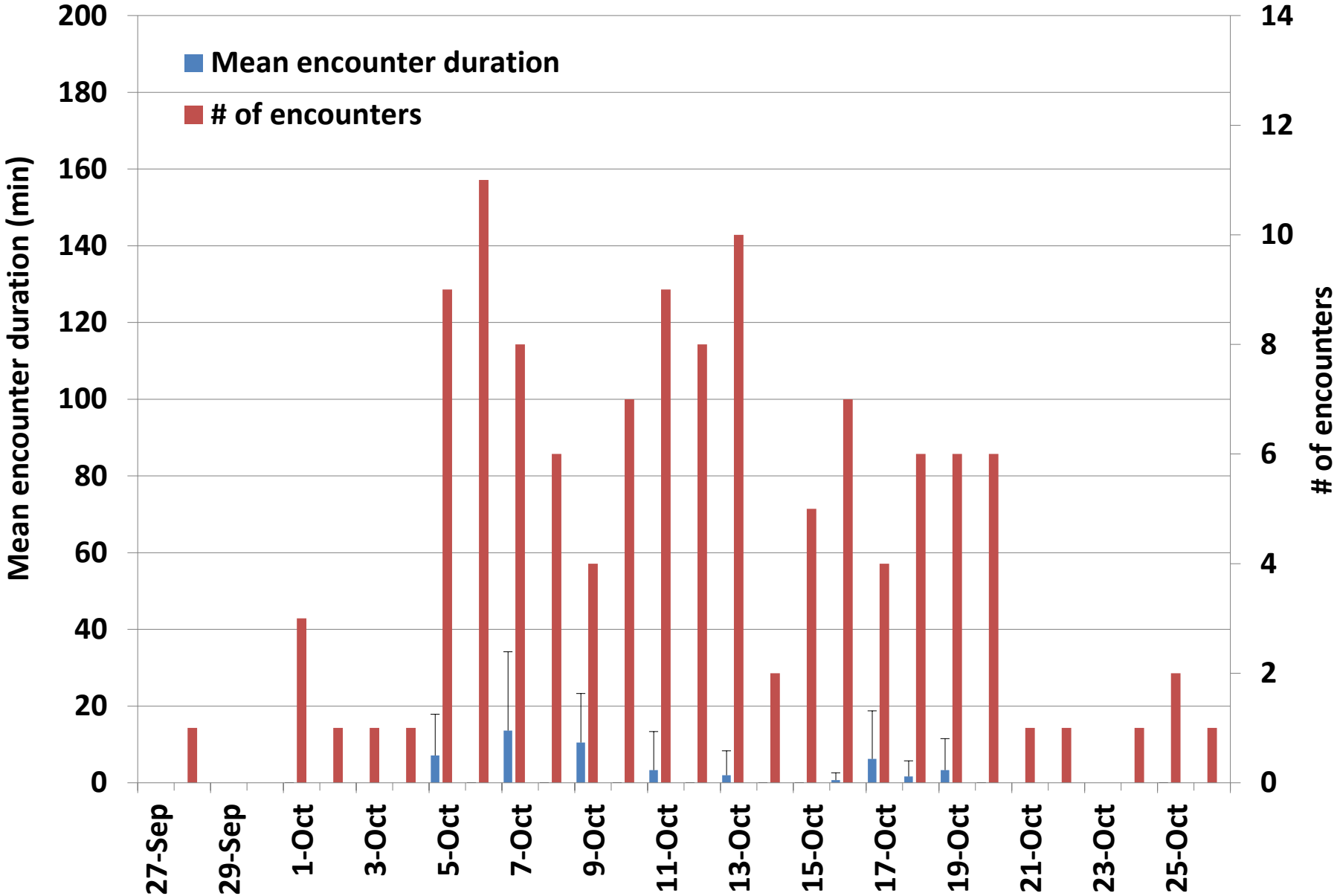

Figure 5.15 The number of dolphin encounters and the mean encounter duration for each day recorded on the EAR at site C1 (Bridge Alignment Area). Error bars represent one standard deviation.

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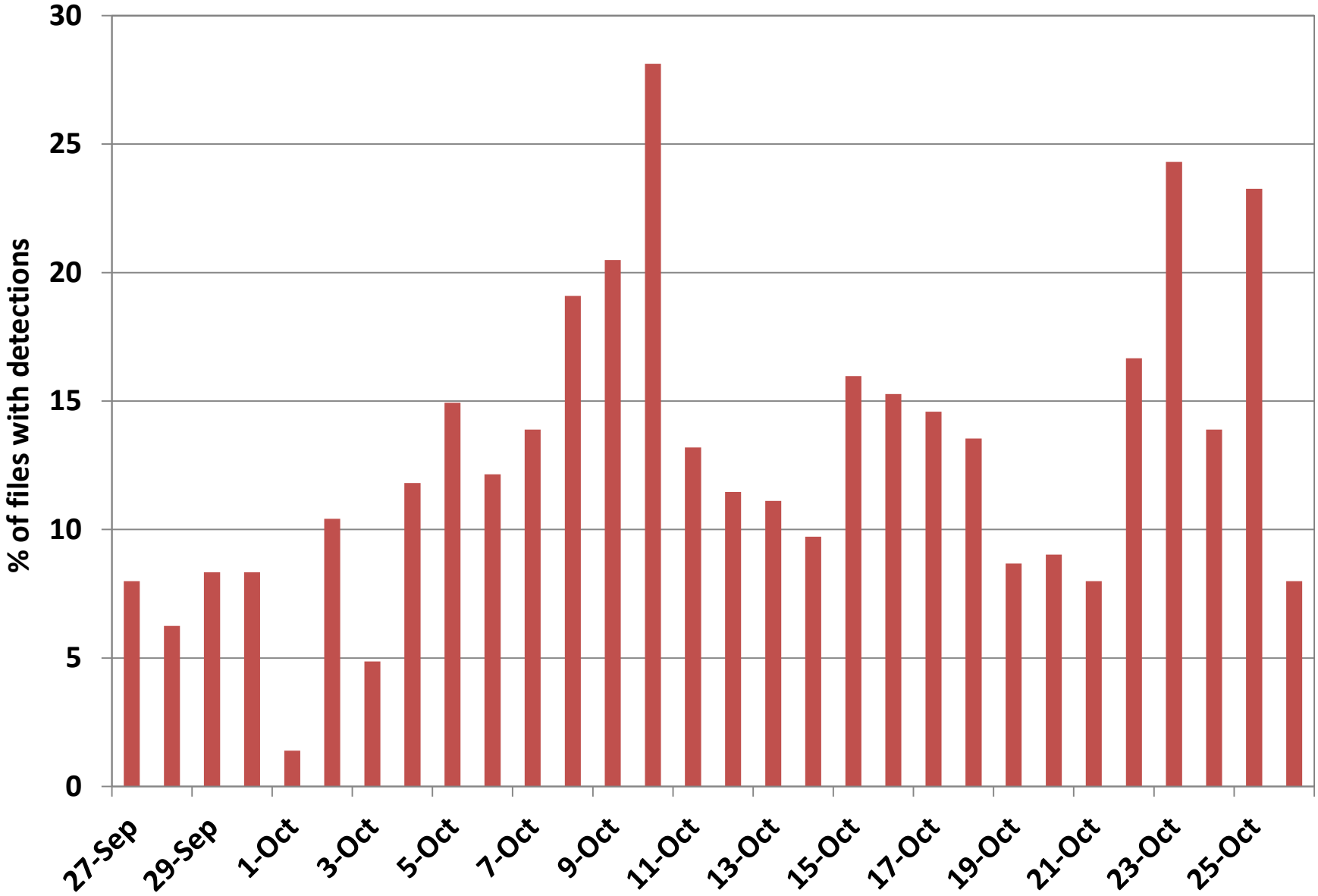

Figure 5.16 Histogram of the percentage of EAR recordings at site C2 (near Lung Kwu Chau), with dolphin detections made during 30 days of the deployment period.

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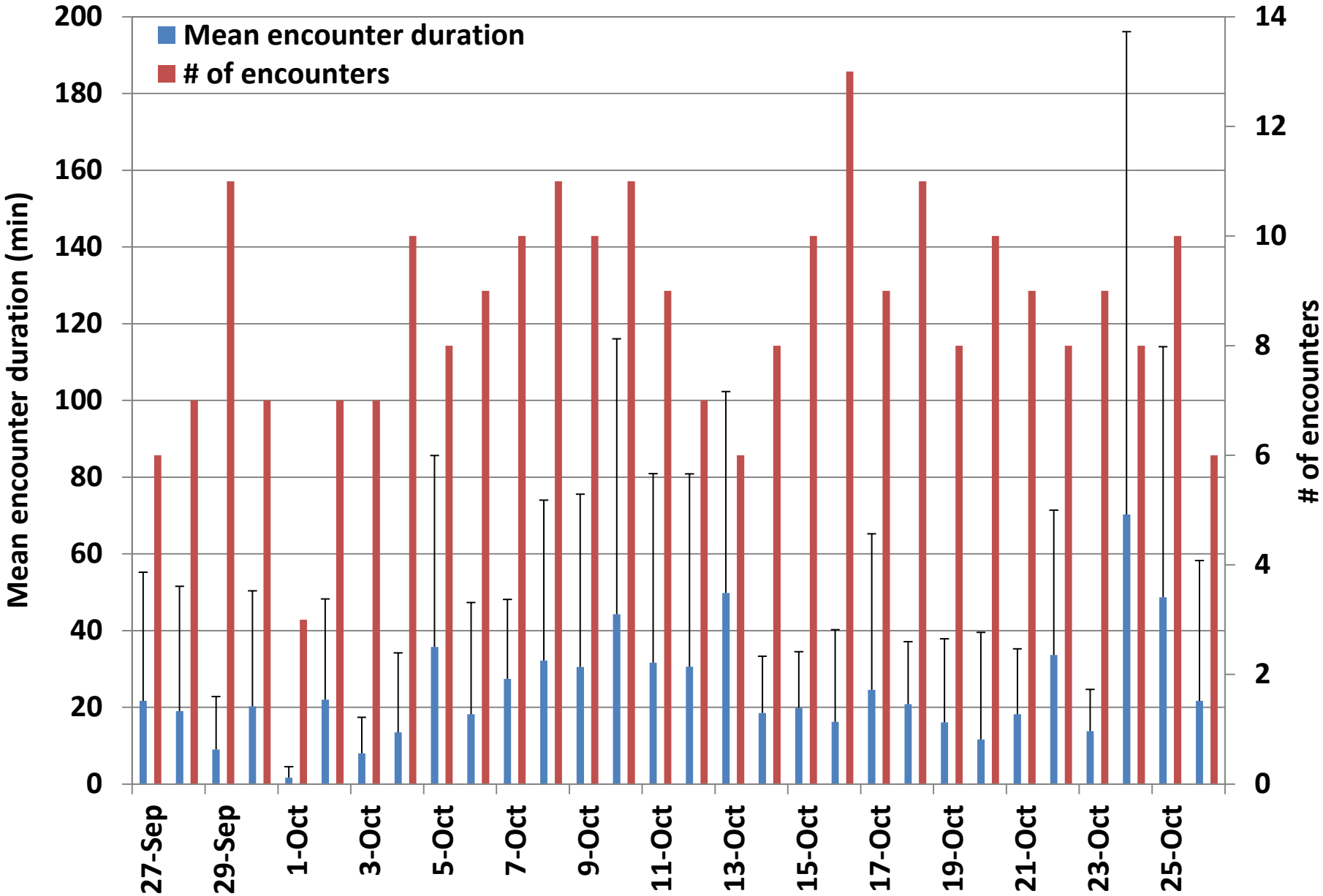

Figure 5.17 The number of dolphin encounters and the mean encounter duration for each day recorded on the EAR at site C2 (near Lung Kwu Chau). Error bars represent one standard deviation

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Table 5.9 Event and Action Plan on Dolphin Acoustic Behaviour

EVENT	ACTION			
	ET Leader	**IEC**	**SO**	**Contractor**
Action Level With the numerical values presented in *Table 5.7*, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 20% lower or higher than that recorded in the baseline monitoring (see *Table5.8*), or when there is a difference of 20% in dolphin acoustic signal detection at nighttime period at Site C1 only, the action level should be triggered	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor;	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	1. Inform the SO and confirm notification of the non- compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

EVENT	ACTION			
	ET Leader	**IEC**	**SO**	**Contractor**
Limit Level With the numerical values presented in Table 5.7, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 40% lower or higher than that recorded in the baseline monitoring (see Table 5.8), or when there is a difference of 40% in dolphin acoustic signal detection at nighttime at Site C1 only, the limit level should be triggered	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 7. Discuss additional dolphin monitoring and any other potential mitigation measures (eg consider to temporarily stop relevant portion of construction activity) with the IEC and Contractor.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; 3. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly.	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	1. Inform the SO and confirm notification of the non- compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, SO – Supervising Office

6 CONCLUSION

In accordance with the EM&A Manual of the TM-CLKL Project, baseline monitoring has been undertaken prior to commencement of the construction works of the Contract for the following baseline monitoring components:

- Air Quality;
- Noise;
- Water Quality; and
- Ecology (including baseline walk-over survey, baseline dolphin monitoring and baseline bored piling monitoring).

The baseline air quality monitoring was conducted at two (2) monitoring locations (ASR9A and ASR9C – Siu Ho Wan MTRC Depot) between 18 and 31 October 2011. Overall, the baseline air quality monitoring results are considered representative to the ambient air quality conditions of the respective sensitive receivers. The Action and Limit Levels for air quality (ie for 1-hour and 24-hour TSP levels) were established based on the baseline monitoring results.

Baseline noise monitoring was conducted at the designated monitoring station NSR1 at Pak Mong Village between 18 October and 1 November 2011. The major noise sources identified at the monitoring station are the noise from insect and bird calling. The baseline monitoring results are considered representative of the ambient noise level.

Baseline water quality monitoring was conducted at seven (7) monitoring stations (IS(Mf)9, IS(Mf)16, IS8, SR4, SR4a, CS(Mf)3 and CS(Mf)5) between 6 and 31 October 2011, except for monitoring at station SR4a which was conducted between 29 August and 24 September 2013. No observable pollution source was recorded at the monitoring stations and the baseline monitoring results are thus considered representative of the ambient water quality levels. Action and Limit Levels were established for DO, SS and turbidity based on the baseline monitoring results.

Baseline walk-over survey was conducted on 13 and 24 September 2013 with ten (10) different types of habitats observed in the Study area. Overall, there appeared to be no significant changes in conditions of habitats within the Study area.

Baseline Chinese White Dolphin monitoring was conducted in two survey areas (Northeast Lantau and Northwest Lantau) from September to November 2011. Dolphin sightings, distribution, encounter rate, group size, habitat use, mother-calf pairs and behavior were reported. Photo-identification and range estimation of identified individuals were also made. Action and Limit Levels are established based on the dolphin encounter rate with due consideration on seasonal variation in dolphin abundance.

Baseline bored piling monitoring comprising land-based theodolite tracking, underwater noise monitoring and acoustic behavioural monitoring were conducted between September and October 2013 before commencement of construction of the Contract. Action and Limit Levels as well as the Event Action Plan are established based on the baseline monitoring data obtained from the dolphin acoustic behaviour monitoring.

Annex A1

Calibration Certification for Air Quality Monitoring Equipment

High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA11050/65/001

Station: ASR 9A - Siu Ho Wan MTRC Deport Operator: WK

Date: 18-Oct-11 Next Due Date: 17-Dec-11

Equipment No.: A-01-65 Serial No. 3221

Ambient Condition			
Temperature, Ta (K)	299.8	Pressure, Pa (mmHg)	761.7

Orifice Transfer Standard Information					
Equipment No.:	A-04-01	Slope, mc	0.0568	Intercept, bc	-0.0432
Last Calibration Date:	9-Oct-11	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	8-Oct-12	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	12.0	3.46	61.63	8.3	2.88
2	10.2	3.19	56.88	7.1	2.66
3	7.3	2.70	48.24	5.1	2.25
4	5.1	2.25	40.44	3.3	1.81
5	3.1	1.76	31.70	1.9	1.38

By Linear Regression of Y on X

Slope , mw = 0.0505 **Intercept, bw =** -0.2169

Correlation coefficient* = 0.9994

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.83

Remarks:

Conducted by: Wk. Tang Signature: Kwai Date: 18/10/11

Checked by: [illegible] Signature: [illegible] Date: 18 October 2011

High-Volume TSP Sampler
5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA11050/66/001

Station: ASR 9C - Siu Ho Wan MTRC Deport Operator: WK

Date: 18-Oct-11 Next Due Date: 17-Dec-11

Equipment No.: A-01-66 Serial No. 3217

Ambient Condition			
Temperature, Ta (K)	299.7	Pressure, Pa (mmHg)	761.5

Orifice Transfer Standard Information					
Equipment No.:	A-04-01	Slope, mc	0.0568	Intercept, bc	-0.0432
Last Calibration Date:	9-Oct-11	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	8-Oct-12	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler

Calibration Point	Orfice			HVS	
	ΔH (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	ΔW (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	11.2	3.34	59.57	7.7	2.77
2	9.6	3.09	55.21	6.3	2.51
3	7.7	2.77	49.52	5.0	2.23
4	4.8	2.19	39.26	3.2	1.79
5	3.3	1.81	32.68	2.0	1.41

By Linear Regression of Y on X

Slope , mw = 0.0490 **Intercept, bw :** -0.1742

Correlation coefficient* = 0.9986

*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point; $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$ 3.75

Remarks:

Conducted by: WK. Tang Signature: Kwa Date: 18/10/11

Checked by: [illegible] Signature: [illegible] Date: 18 October 2011

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TEST REPORT

Description	Calibration Orifice	**Manufacturer**	Thermo Andersen
Serial No.	1536	**Temperature,Ta (K)**	298
Model No.	G25A	**Pressure, Pa (mmHg)**	762.3
Date	9 October 2011		

Plate	Diff.Vol (m^3)	Diff.Time (min)	Diff.Hg (mm)	Diff.H_2O (in.)
1	1.00	1.3760	3.4	2.00
2	1.00	0.9740	6.4	4.00
3	1.00	0.8730	7.9	5.00
4	1.00	0.8320	8.6	5.50
5	1.00	0.6890	12.8	8.00

DATA TABULATION

Vstd	(X axis) Qstd	(Y axis)
0.9985	0.7257	1.4163
0.9946	1.0211	2.0030
0.9926	1.1370	2.2394
0.9917	1.1919	2.3487
0.9861	1.4313	2.8326

Y axis= SQRT[H_2O(Pa/760)(298/Ta)]

Qstd Slope (m) = 2.00766
Intercept (b) = -0.04318
Coefficient (r) = 0.99999

Va	(X axis) Qa	(Y axis)
0.9955	0.7235	0.8842
0.9916	1.0181	1.2505
0.9896	1.1336	1.3981
0.9887	1.1884	1.4664
0.9832	1.4270	1.7685

Y axis= SQRT[H_2O(Ta/Pa)]

Qa Slope (m) = 1.25716
Intercept (b) = -0.02696
Coefficient (r) = 0.99999

CALCULATIONS

Vstd=Diff. Vol[(Pa-Diff.Hg)/760](298/Ta)
Qstd=Vstd/Time
Va=Diff.Vol[(Pa-Diff.Hg)/Pa]
Qa=Va/Time

For subsequent flow rate calculations:
Qstd=I/m{[SQRT(H_2O(Pa/760)(298/Ta))]-b}
Qa=I/m{[SQRT H_2O(Ta/Pa)]-b}

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

PATRICK TSE
Laboratory Manager

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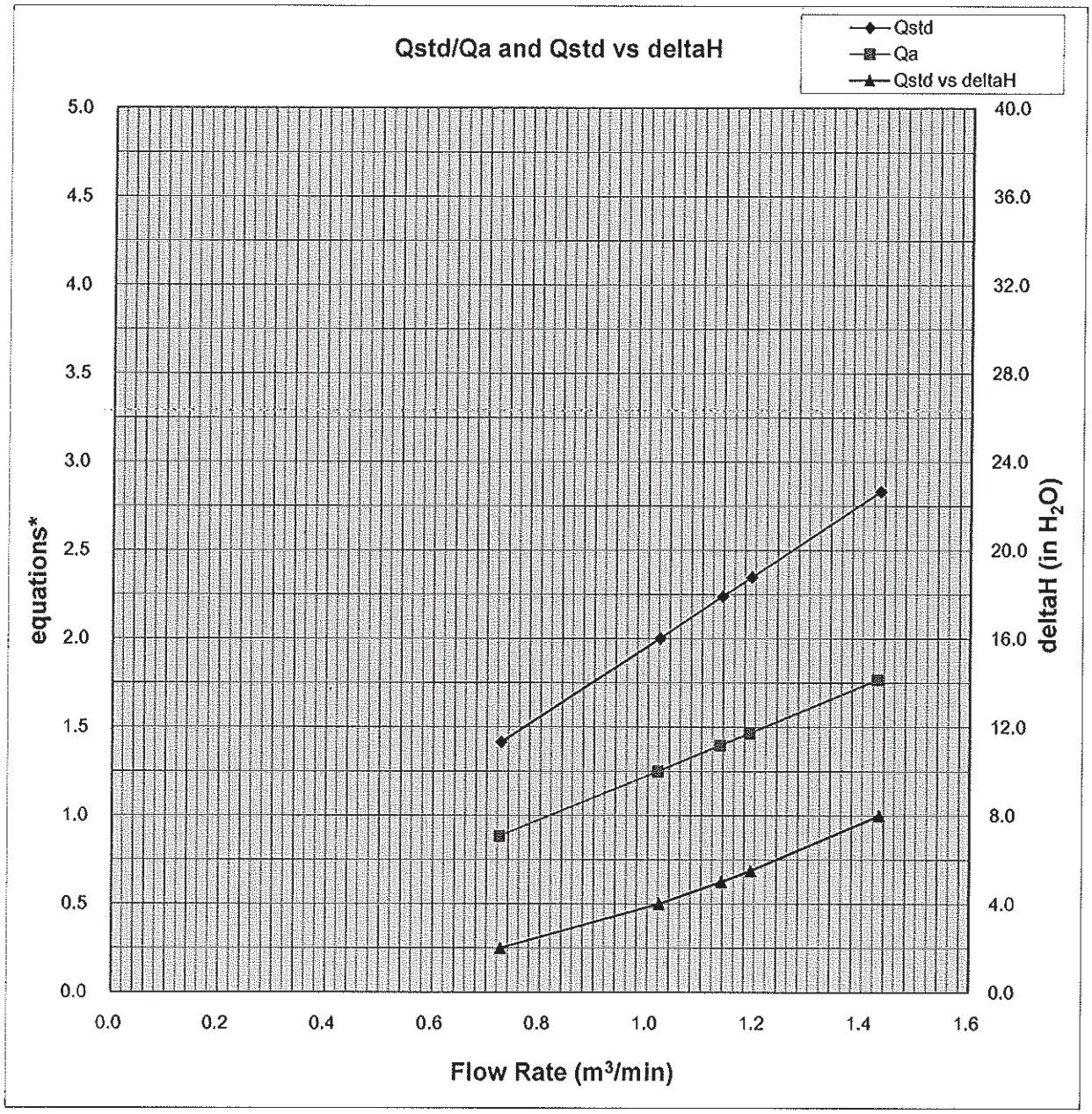
TEST REPORT



Y-axis equations:

Qstd series: SQRT[ΔH(Pa/Pstd)(Tstd/Ta)]

Qa series: SQRT[ΔH(Ta/Pa)]

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TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.:	C/111021/1A
		Date of Issue:	2011-10-24
		Date Received:	2011-10-21
		Date Tested:	2011-10-21
		Date Completed:	2011-10-24
		Next Due Date:	2011-12-23
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3
Serial No.	: 251634
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 550 CPM
Equipment No.	: A-02-01

Test Conditions:

Room Temperature	: 21 degree Celsius
Relative Humidity	: 68%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0032

****

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Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Test Report No.:	C/110901/2
Date of Issue:	2011-09-03
Date Received:	2011-09-01
Date Tested:	2011-09-01
Date Completed:	2011-09-03
Next Due Date:	2011-11-02

ATTN: **Mr. Henry Leung**

Page: 1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 853944
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 685 CPM
Equipment No.	: A-02-04

Test Conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 66%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0031

****

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Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.:	C/111007/1
		Date of Issue:	2011-10-09
		Date Received:	2011-10-07
		Date Tested:	2011-10-07
		Date Completed:	2011-10-09
		Next Due Date:	2011-12-08
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 954253
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 685 CPM
Equipment No.	: A-02-05

Test Conditions:

Room Temperature	: 23 degree Celsius
Relative Humidity	: 65%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0032

****

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TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.:	C/110901/1
		Date of Issue:	2011-09-03
		Date Received:	2011-09-01
		Date Tested:	2011-09-01
		Date Completed:	2011-09-03
		Next Due Date:	2011-11-02
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 014750
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 790 CPM
Equipment No.	: A-02-06

Test Conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 66%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0031

****

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TEST REPORT

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

ATTN: **Mr. W. K. Tang**

Test Report No.:	C/111021/1D
Date of Issue:	2011-10-24
Date Received:	2011-10-21
Date Tested:	2011-10-21
Date Completed:	2011-10-24
Next Due Date:	2011-12-23
Page:	1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 095039
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 764 CPM
Equipment No.	: A-02-08

Test Conditions:

Room Temperature	: 21 degree Celsius
Relative Humidity	: 68%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0031

****

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
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Shatin, NT, Hong Kong

Test Report No.:	C/110826/2
Date of Issue:	2011-08-29
Date Received:	2011-08-26
Date Tested:	2011-08-26
Date Completed:	2011-08-29
Next Due Date:	2011-10-28

ATTN: **Mr. W. K. Tang**

Page: 1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 095050
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 577 CPM
Equipment No.	: A-02-09

Test Conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 69%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0031

****

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TEST REPORT

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

ATTN: **Mr. W. K. Tang**

Test Report No.:	C/110826/3
Date of Issue:	2011-08-29
Date Received:	2011-08-26
Date Tested:	2011-08-26
Date Completed:	2011-08-29
Next Due Date:	2011-10-28
Page:	1 of 1

Certificate of Calibration

Item for Calibration:

Description	: Laser Dust Monitor
Manufacturer	: Sibata
Model No.	: LD-3B
Serial No.	: 095029
Sensitivity (K) 1 CPM	: 0.001 mg/m^3
Sen. Adjustment Scale Setting	: 551 CPM
Equipment No.	: A-02-10

Test Conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 69%

Test Specifications & Methodology:

1. Instruction and Operation Manual High Volume Sampler, Andersen Samplers, Inc.
2. In-house method in according to the instruction manual: The Laser Dust Monitor was compared with a calibrated High Volume Sampler and the result was used to generate the Correlation Factor (CF) between the Laser Dust Monitor and High Volume Sampler.

Results:

Correlation Factor (CF)	0.0030

****

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Patrick Tse

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Laboratory Manager

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TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/10/110510A
Date of Issue:	2011-05-10
Date Received:	2011-05-09
Date Tested:	2011-05-09
Date Completed:	2011-05-10
Next Due Date:	2011-11-09
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Weather Monitor II
Manufacturer	: Davis Instruments
Model No.	: 7440
Serial No.	: MC20813A11

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 64%

Test Specifications:

1. Performance check of anemometer
2. Performance check of wind direction sensor

Methodology:

In-house method with reference anemometer (RS232 Integral Vane Digital Anemometer)

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Patrick Tse

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Laboratory Manager

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TEST REPORT

Test Report No.:	C/10/110510A
Date of Issue:	2011-05-10
Date Received:	2011-05-09
Date Tested:	2011-05-09
Date Completed:	2011-05-10
Next Due Date:	2011-11-09

Results:

1. Performance check of anemometer

Air Velocity, m/s		Difference D (m/s)
Instrument Reading (V1)	Reference Value (V1)	D = V1 – V2
2.00	2.00	0.00

2. Performance check of wind direction sensor

Wind Direction (°)		Difference D (°)
Instrument Reading (W1)	Reference Value (W2)	D = W1 - W2
0.0	0.0	0
45.2	45.0	0.2
90.3	90.5	-0.2
135.1	135.0	0.1
180.2	180.0	0.2
224.6	225.0	-0.4
270.2	270.0	0.2
315.1	315.0	0.1
359.7	360.0	-0.3

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

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Annex A2

1-Hour TSP Baseline Monitoring Results

Annex A2 - 1-hour TSP Monitoring Results

Location ASR 9A - Siu Ho Wan MTRC Depot			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
18-Oct-11	10:20	Sunny	219.9
	11:20	Sunny	225.7
	12:20	Sunny	231.4
19-Oct-11	12:45	Sunny	196.9
	13:45	Sunny	193.4
	14:45	Sunny	176.4
20-Oct-11	12:45	Sunny	274.7
	13:45	Sunny	282.5
	14:45	Sunny	287.7
21-Oct-11	12:45	Sunny	265.4
	13:45	Sunny	256.5
	14:45	Sunny	249.7
22-Oct-11	12:45	Sunny	190.6
	13:45	Sunny	192.2
	14:45	Sunny	207.4
23-Oct-11	12:45	Sunny	168.8
	13:45	Sunny	178.4
	14:45	Sunny	190.9
24-Oct-11	12:45	Sunny	240.1
	13:45	Sunny	224.9
	14:45	Sunny	217.9
25-Oct-11	12:45	Sunny	191.9
	13:45	Sunny	189.0
	14:45	Sunny	166.4
26-Oct-11	12:45	Sunny	85.5
	13:45	Sunny	87.2
	14:45	Sunny	87.4
27-Oct-11	12:45	Fine	194.1
	13:45	Fine	253.2
	14:45	Fine	213.0
28-Oct-11	12:40	Fine	161.8
	13:40	Fine	166.4
	14:40	Fine	170.7
29-Oct-11	12:45	Sunny	455.3
	13:45	Sunny	463.6
	14:45	Sunny	446.8
30-Oct-11	12:45	Fine	394.1
	13:45	Fine	368.8
	14:45	Fine	337.6
31-Oct-11	12:45	Fine	86.5
	13:45	Fine	73.0
	14:45	Fine	71.2
		Min	71.2
		Max	463.6
		Average	222.3

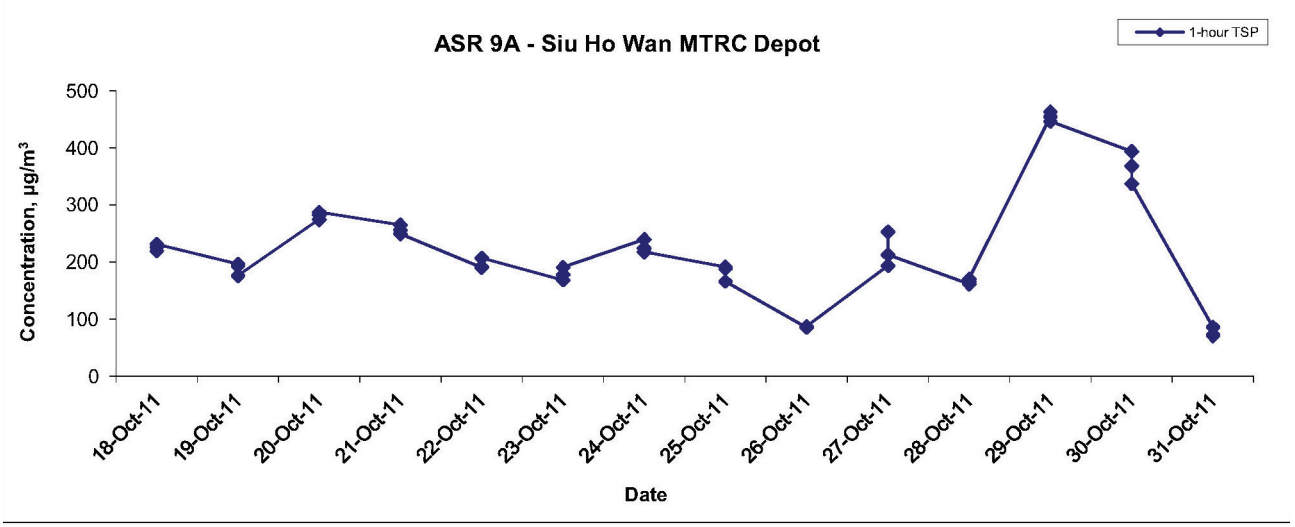
Annex A2 - 1-hour TSP Monitoring Results

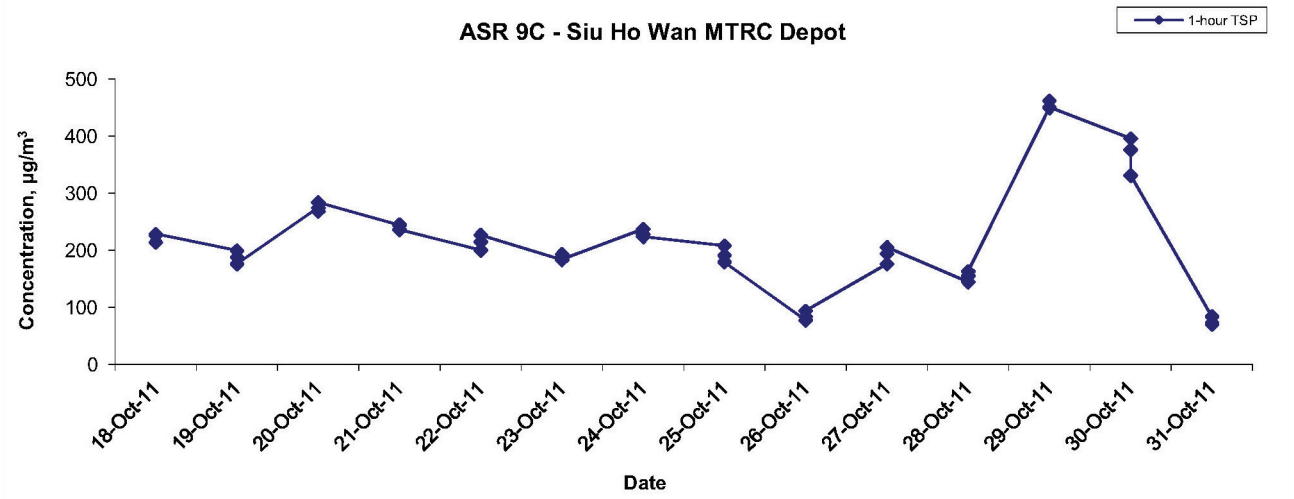
Location ASR 9C - Siu Ho Wan MTRC Depot			
Date	Time	Weather	Particulate Concentration ($\mu g/m^3$)
18-Oct-11	10:35	Sunny	214.2
	11:35	Sunny	225.8
	12:35	Sunny	228.7
19-Oct-11	13:00	Sunny	199.5
	14:00	Sunny	187.7
	15:00	Sunny	176.0
20-Oct-11	13:00	Sunny	274.5
	14:00	Sunny	268.4
	15:00	Sunny	283.7
21-Oct-11	13:00	Sunny	243.8
	14:00	Sunny	245.1
	15:00	Sunny	235.8
22-Oct-11	13:00	Sunny	199.9
	14:00	Sunny	214.8
	15:00	Sunny	226.7
23-Oct-11	13:00	Sunny	183.4
	14:00	Sunny	193.0
	15:00	Sunny	184.0
24-Oct-11	13:00	Sunny	237.1
	14:00	Sunny	227.7
	15:00	Sunny	223.6
25-Oct-11	13:00	Sunny	207.9
	14:00	Sunny	191.0
	15:00	Sunny	179.4
26-Oct-11	13:00	Sunny	77.3
	14:00	Sunny	83.8
	15:00	Sunny	93.8
27-Oct-11	13:00	Fine	176.0
	14:00	Fine	194.0
	15:00	Fine	205.2
28-Oct-11	12:50	Fine	144.3
	13:50	Fine	155.2
	14:50	Fine	162.7
29-Oct-11	13:00	Sunny	449.5
	14:00	Sunny	461.8
	15:00	Sunny	451.0
30-Oct-11	13:00	Fine	395.7
	14:00	Fine	375.9
	15:00	Fine	330.9
31-Oct-11	13:00	Fine	83.9
	14:00	Fine	72.8
	15:00	Fine	70.2
		Min	70.2
		Max	461.8
		Average	219.9

Annex A3

Graphical Presentation of Baseline 1-Hour TSP Levels

1-hour TSP Concentration Levels





Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex A3

Graphical Presentation of
1-hour TSP Baseline Monitoring Results

FILE: 0215660i3
DATE: 30/09/2013

Environmental
Resources
Management

ERM

Annex A4

24-Hour TSP Baseline Monitoring Results

Annex A4 - 24-hour TSP Baseline Monitoring Results

Location AMS 7 - SkyCity Marriott Hotel

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
18-Oct-11	Sunny	298.1	766.8	3.3828	3.6259	0.2431	0.0	24.0	24.0	1.24	1.24	1.24	1785.1	136.2
19-Oct-11	Sunny	297.0	766.0	3.4197	3.5484	0.1287	24.0	48.0	24.0	1.24	1.24	1.24	1787.1	72.0
20-Oct-11	Sunny	297.1	765.4	3.4218	3.5883	0.1665	48.0	72.0	24.0	1.24	1.24	1.24	1786.3	93.2
21-Oct-11	Sunny	297.5	765.3	3.3401	3.5336	0.1935	72.0	96.0	24.0	1.24	1.24	1.24	1785.0	108.4
22-Oct-11	Sunny	297.6	764.8	3.3622	3.4493	0.0871	96.0	120.0	24.0	1.24	1.24	1.24	1784.4	48.8
23-Oct-11	Sunny	297.2	764.6	3.3949	3.5240	0.1291	120.0	144.0	24.0	1.24	1.24	1.24	1785.2	72.3
24-Oct-11	Sunny	299.2	764.3	3.3643	3.5386	0.1743	144.0	168.0	24.0	1.24	1.24	1.24	1779.4	98.0
25-Oct-11	Sunny	298.2	765.3	3.3745	3.5103	0.1358	168.0	192.0	24.0	1.24	1.24	1.24	1783.3	76.2
26-Oct-11	Sunny	295.0	767.2	3.3923	3.5035	0.1112	192.0	216.0	24.0	1.25	1.25	1.25	1793.8	62.0
27-Oct-11	Fine	295.5	767.0	3.4274	3.5482	0.1208	216.0	240.0	24.0	1.24	1.24	1.24	1792.3	67.4
28-Oct-11	Fine	297.5	767.3	3.3446	3.4886	0.1440	240.0	264.0	24.0	1.24	1.24	1.24	1787.1	80.6
29-Oct-11	Sunny	297.0	766.7	3.3474	3.4848	0.1374	264.0	288.0	24.0	1.24	1.24	1.24	1788.0	76.8
30-Oct-11	Fine	296.0	765.3	3.3704	3.5283	0.1579	288.0	312.0	24.0	1.24	1.24	1.24	1789.1	88.3
31-Oct-11	Fine	298.5	766.2	3.3745	3.5022	0.1277	312.0	336.0	24.0	1.24	1.24	1.24	1783.4	71.6
													Min	48.8
													Max	136.2
													Average	82.3

Location ASR 9A - Siu Ho Wan MTRC Depot

Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. ($\mu g/m^3$)
				Initial	Final		Initial	Final		Initial	Final			
18-Oct-11	Sunny	299.1	764.9	3.3848	3.5548	0.1700	0.0	24.0	24.0	1.22	1.22	1.22	1750.4	97.1
19-Oct-11	Sunny	298.2	763.1	3.3647	3.5890	0.2243	24.0	48.0	24.0	1.22	1.22	1.22	1750.8	128.1
20-Oct-11	Sunny	299.1	763.4	3.3633	3.4915	0.1282	48.0	72.0	24.0	1.21	1.21	1.21	1748.7	73.3
21-Oct-11	Sunny	300.4	762.6	3.3892	3.4619	0.0727	72.0	96.0	24.0	1.21	1.21	1.21	1744.6	41.7
22-Oct-11	Sunny	299.9	762.7	3.3974	3.4874	0.0900	96.0	120.0	24.0	1.21	1.21	1.21	1746.0	51.5
23-Oct-11	Sunny	299.9	762.9	3.3548	3.4222	0.0674	120.0	144.0	24.0	1.21	1.21	1.21	1746.1	38.6
24-Oct-11	Sunny	300.3	762.3	3.4070	3.5795	0.1725	144.0	168.0	24.0	1.21	1.21	1.21	1744.4	98.9
25-Oct-11	Sunny	298.1	765.4	3.3615	3.5061	0.1446	168.0	192.0	24.0	1.22	1.22	1.22	1753.6	82.5
26-Oct-11	Sunny	294.9	767.4	3.3811	3.4543	0.0732	192.0	216.0	24.0	1.23	1.22	1.23	1764.1	41.5
27-Oct-11	Fine	297.7	765.2	3.4047	3.5048	0.1001	216.0	240.0	24.0	1.22	1.22	1.22	1754.4	57.1
28-Oct-11	Fine	298.8	765.4	3.3897	3.5123	0.1226	240.0	264.0	24.0	1.22	1.22	1.22	1751.6	70.0
29-Oct-11	Sunny	299.5	764.5	3.3694	3.5194	0.1500	264.0	288.0	24.0	1.21	1.21	1.21	1748.9	85.8
30-Oct-11	Fine	298.8	763.6	3.3573	3.5148	0.1575	288.0	312.0	24.0	1.22	1.21	1.22	1749.7	90.0
31-Oct-11	Fine	299.1	764.2	3.3336	3.4765	0.1429	312.0	336.0	24.0	1.22	1.21	1.21	1749.5	81.7
													Min	38.6
													Max	128.1
													Average	74.1

Annex A4 - 24-hour TSP Baseline Monitoring Results

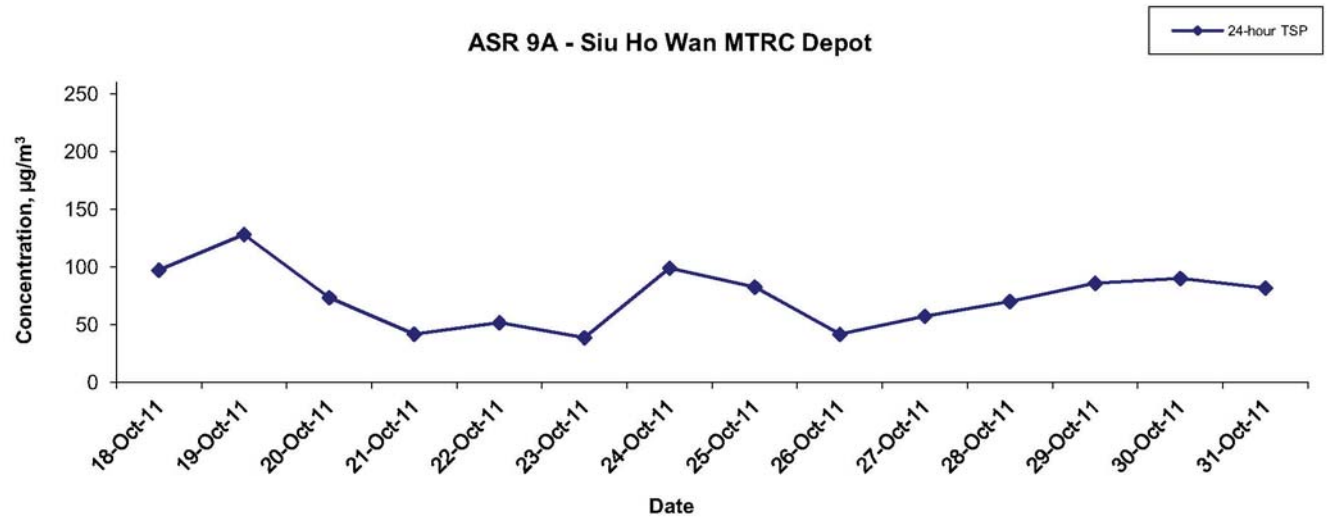
Location ASR 9C - Siu Ho Wan MTRC Depot

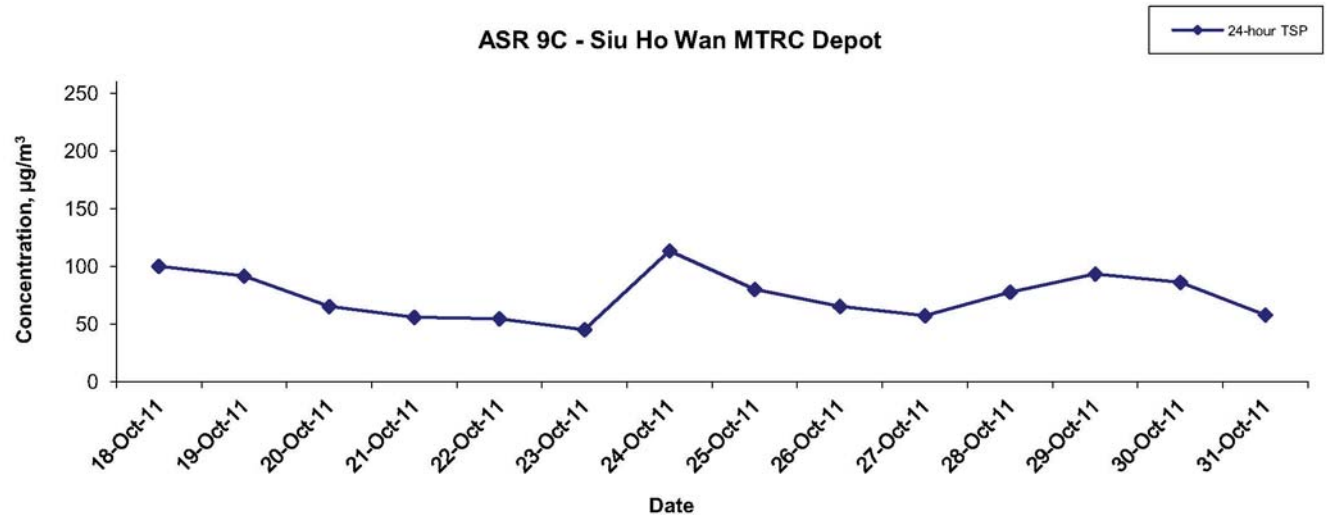
Start Date	Weather Condition	Air Temp. (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Elapse Time		Sampling Time(hrs.)	Flow Rate (m^3/min)		Av. flow (m^3/min)	Total vol. (m^3)	Conc. (μg/m^3)
				Initial	Final		Initial	Final		Initial	Final			
18-Oct-11	Sunny	299.1	764.9	3.4221	3.5989	0.1768	0.0	24.0	24.0	1.23	1.23	1.23	1768.5	100.0
19-Oct-11	Sunny	298.2	763.1	3.3587	3.5206	0.1619	24.0	48.0	24.0	1.23	1.23	1.23	1768.9	91.5
20-Oct-11	Sunny	299.1	763.4	3.3766	3.4917	0.1151	48.0	72.0	24.0	1.23	1.23	1.23	1766.7	65.1
21-Oct-11	Sunny	300.4	762.6	3.4178	3.5160	0.0982	72.0	96.0	24.0	1.22	1.22	1.22	1762.5	55.7
22-Oct-11	Sunny	299.9	762.7	3.4007	3.4968	0.0961	96.0	120.0	24.0	1.23	1.22	1.22	1764.0	54.5
23-Oct-11	Sunny	299.9	762.9	3.3515	3.4310	0.0795	120.0	144.0	24.0	1.23	1.22	1.23	1764.0	45.1
24-Oct-11	Sunny	300.3	762.3	3.4252	3.6250	0.1998	144.0	168.0	24.0	1.22	1.22	1.22	1762.3	113.4
25-Oct-11	Sunny	298.1	765.4	3.3629	3.5045	0.1416	168.0	192.0	24.0	1.23	1.23	1.23	1771.7	79.9
26-Oct-11	Sunny	294.9	767.4	3.3815	3.4978	0.1163	192.0	216.0	24.0	1.24	1.24	1.24	1782.6	65.2
27-Oct-11	Fine	297.7	765.2	3.3531	3.4545	0.1014	216.0	240.0	24.0	1.23	1.23	1.23	1772.6	57.2
28-Oct-11	Fine	298.8	765.4	3.3939	3.5309	0.1370	240.0	264.0	24.0	1.23	1.23	1.23	1769.7	77.4
29-Oct-11	Sunny	299.5	764.5	3.3362	3.5012	0.1650	264.0	288.0	24.0	1.23	1.23	1.23	1766.9	93.4
30-Oct-11	Fine	298.8	763.6	3.4141	3.5663	0.1522	288.0	312.0	24.0	1.23	1.23	1.23	1767.8	86.1
31-Oct-11	Fine	299.1	764.2	3.3731	3.4753	0.1022	312.0	336.0	24.0	1.23	1.23	1.23	1767.6	57.8
													Min	45.1
													Max	113.4
													Average	74.5

Annex A5

Graphical Presentation of Baseline 24-Hour TSP Levels

24-hour TSP Concentration Levels





Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex A5

Graphical Presentation of
24-hour TSP Baseline Monitoring Results

FILE: 0215660i6
DATE: 30/09/2013

Environmental
Resources
Management

ERM

Annex B1

Copies of Calibration Certificates for Noise Monitoring Equipment

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Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.: Date of Issue: Date Received: Date Tested: Date Completed: Next Due Date:	C/N/110117/1 2011-01-17 2011-01-14 2011-01-14 2011-01-17 2012-01-16
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 955
Serial No.	: 14302
Microphone No.	: 17204
Equipment No.	: N-08-04

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 58%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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

Patrick Tse

PATRICK TSE
Laboratory Manager

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Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/110124/1
Date of Issue:	2011-01-24
Date Received:	2011-01-21
Date Tested:	2011-01-21
Date Completed:	2011-01-24
Next Due Date:	2012-01-23
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 955
Serial No.	: 14303
Microphone No.	: 17204
Equipment No.	: N-08-05

Test conditions:

Room Temperatre	: 23 degree Celsius
Relative Humidity	: 55%.

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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

PATRICK TSE
Laboratory Manager

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APPLICANT: **Cinotech Consultants Limited**
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Shatin, NT, Hong Kong

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/100902/1
Date of Issue:	2011-09-03
Date Received:	2011-09-02
Date Tested:	2011-09-02
Date Completed:	2011-09-03
Next Due Date:	2012-09-02
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 955
Serial No.	: 21139
Microphone No.	: 43690
Equipment No.	: N-08-06

Test conditions:

Room Temperatre	: 21 degree Celsius
Relative Humidity	: 62%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.:	C/N/110906/1
		Date of Issue:	2011-09-07
		Date Received:	2011-09-06
		Date Tested:	2011-09-06
		Date Completed:	2011-09-07
		Next Due Date:	2012-09-06
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 957
Serial No.	: 21455
Microphone No.	: 43730
Equipment No.	: N-08-07

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 66%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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PATRICK TSE
Laboratory Manager

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TEST REPORT

APPLICANT:	**Cinotech Consultants Limited** **Room 1710, Technology Park,** **18 On Lai Street,** **Shatin, NT, Hong Kong**	Test Report No.: Date of Issue: Date Received: Date Tested: Date Completed: Next Due Date:	C/N/110906/2 2011-09-07 2011-09-06 2011-09-06 2011-09-07 2012-09-06
ATTN:	**Mr. Henry Leung**	Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 957
Serial No.	: 21459
Microphone No.	: 43676
Equipment No.	: N-08-08

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 66%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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PATRICK TSE
Laboratory Manager

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
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Test Report No.:	C/N/110906/3
Date of Issue:	2011-09-07
Date Received:	2011-09-06
Date Tested:	2011-09-06
Date Completed:	2011-09-07
Next Due Date:	2012-09-06

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Page: 1 of 1

Certificate of Calibration

Item for calibration:

Description	: 'SVANTEK' Integrating Sound Level Meter
Manufacturer	: SVANTEK
Model No.	: SVAN 957
Serial No.	: 21460
Microphone No.	: 43679
Equipment No.	: N-08-09

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 66%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
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Test Report No.:	C/N/110923/2
Date of Issue:	2011-09-24
Date Received:	2011-09-23
Date Tested:	2011-09-23
Date Completed:	2011-09-24
Next Due Date:	2012-09-23

ATTN: **Mr. Henry Leung**

Page: 1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 10929
Equipment No.	: N-09-01

Test conditions:

Room Temperatre	: 23 degree Celsius
Relative Humidity	: 59%

Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

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TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/101110/1
Date of Issue:	2010-11-10
Date Received:	2010-11-08
Date Tested:	2010-11-08
Date Completed:	2010-11-10
Next Due Date:	2011-11-09
Page:	1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: SVANTEK
Model No.	: SV30A
Serial No.	: 10965
Equipment No.	: N-09-02

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 57%

Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

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TEST REPORT

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

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/101115/1
Date of Issue:	2010-11-15
Date Received:	2010-11-12
Date Tested:	2010-11-12
Date Completed:	2010-11-15
Next Due Date:	2011-11-14
Page:	1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2326353
Project No.	: C13
Equipment No.	: N-02-01

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 64%

Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

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

PATRICK TSE
Laboratory Manager

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WELLAB 匯力 Testing & Research

WELLAB LIMITED
Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

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

Test Report No.:	C/N/110902-3
Date of Issue:	2011-09-03
Date Received:	2011-09-02
Date Tested:	2011-09-02
Date Completed:	2011-09-03
Next Due Date:	2012-09-02

ATTN: **Mr. Henry Leung**

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2412367
Equipment No.	: N-02-03

Test conditions:

Room Temperatre	: 21 degree Celsius
Relative Humidity	: 62%

Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

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

Patrick Tse
PATRICK TSE
Laboratory Manager

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Annex B2

Day-time 07:00 – 19:00 Hrs Baseline Noise Monitoring Data

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
19-Oct-11	07:00	57.0	58.5	49.1	59.0
19-Oct-11	07:05	63.0	61.9	50.7	
19-Oct-11	07:10	58.2	61.7	47.0	
19-Oct-11	07:15	55.7	54.5	48.2	
19-Oct-11	07:20	58.5	59.7	48.6	
19-Oct-11	07:25	56.9	58.8	48.4	
19-Oct-11	07:30	59.4	63.6	49.8	60.6
19-Oct-11	07:35	64.5	68.6	51.0	
19-Oct-11	07:40	58.8	61.6	50.3	
19-Oct-11	07:45	57.1	58.7	51.4	
19-Oct-11	07:50	62.0	65.0	50.2	
19-Oct-11	07:55	56.2	58.7	48.8	
19-Oct-11	08:00	54.8	54.2	48.4	57.8
19-Oct-11	08:05	58.3	61.7	50.0	
19-Oct-11	08:10	60.0	63.9	52.2	
19-Oct-11	08:15	56.8	59.8	51.2	
19-Oct-11	08:20	58.5	61.9	51.2	
19-Oct-11	08:25	56.7	60.3	48.2	
19-Oct-11	08:30	62.9	61.0	49.0	58.5
19-Oct-11	08:35	57.5	61.7	49.0	
19-Oct-11	08:40	55.1	57.6	50.5	
19-Oct-11	08:45	56.2	59.6	48.7	
19-Oct-11	08:50	55.6	57.6	49.3	
19-Oct-11	08:55	58.1	61.4	49.8	
19-Oct-11	09:00	56.5	60.5	47.6	57.4
19-Oct-11	09:05	57.8	61.4	49.2	
19-Oct-11	09:10	56.4	58.8	47.0	
19-Oct-11	09:15	58.9	62.8	49.9	
19-Oct-11	09:20	58.2	61.9	50.1	
19-Oct-11	09:25	55.6	58.7	49.2	
19-Oct-11	09:30	56.4	60.9	47.8	56.9
19-Oct-11	09:35	56.4	60.6	48.0	
19-Oct-11	09:40	57.2	60.7	48.3	
19-Oct-11	09:45	59.0	63.4	48.6	
19-Oct-11	09:50	56.4	60.4	48.5	
19-Oct-11	09:55	55.0	57.9	48.6	
19-Oct-11	10:00	59.1	63.2	49.6	65.9
19-Oct-11	10:05	56.5	60.6	47.4	
19-Oct-11	10:10	56.2	60.2	47.0	
19-Oct-11	10:15	58.3	61.9	49.3	
19-Oct-11	10:20	61.3	63.9	49.6	
19-Oct-11	10:25	72.9	75.4	59.9	
19-Oct-11	10:30	57.7	61.6	48.9	56.8
19-Oct-11	10:35	56.0	59.7	47.3	
19-Oct-11	10:40	58.7	62.5	49.5	
19-Oct-11	10:45	56.0	59.7	48.3	
19-Oct-11	10:50	54.4	58.3	46.6	
19-Oct-11	10:55	56.6	60.7	47.6	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
19-Oct-11	11:00	55.1	58.8	48.2	56.6
19-Oct-11	11:05	58.4	61.2	47.3	
19-Oct-11	11:10	58.1	61.7	47.3	
19-Oct-11	11:15	54.2	55.9	46.9	
19-Oct-11	11:20	56.8	60.8	47.0	
19-Oct-11	11:25	55.2	58.6	48.0	
19-Oct-11	11:30	58.5	62.6	47.6	59.0
19-Oct-11	11:35	56.7	60.6	47.6	
19-Oct-11	11:40	57.5	61.6	46.4	
19-Oct-11	11:45	63.0	66.6	48.6	
19-Oct-11	11:50	57.7	61.8	46.5	
19-Oct-11	11:55	56.6	60.9	47.5	
19-Oct-11	12:00	56.1	60.1	49.6	55.6
19-Oct-11	12:05	55.3	58.1	47.2	
19-Oct-11	12:10	56.2	59.9	48.0	
19-Oct-11	12:15	55.2	59.0	47.8	
19-Oct-11	12:20	52.4	56.4	43.7	
19-Oct-11	12:25	57.1	61.9	44.9	
19-Oct-11	12:30	61.7	65.0	46.8	58.4
19-Oct-11	12:35	61.3	64.8	51.4	
19-Oct-11	12:40	58.4	62.1	49.4	
19-Oct-11	12:45	54.1	57.9	45.5	
19-Oct-11	12:50	54.5	58.1	44.2	
19-Oct-11	12:55	49.7	48.4	42.5	
19-Oct-11	13:00	50.5	49.4	44.0	54.6
19-Oct-11	13:05	55.6	59.9	43.4	
19-Oct-11	13:10	57.5	62.1	43.3	
19-Oct-11	13:15	56.3	60.6	42.6	
19-Oct-11	13:20	51.9	53.4	40.8	
19-Oct-11	13:25	50.5	45.9	41.4	
19-Oct-11	13:30	58.8	63.8	41.6	57.6
19-Oct-11	13:35	52.8	56.1	43.8	
19-Oct-11	13:40	59.9	63.3	44.2	
19-Oct-11	13:45	57.2	61.5	45.1	
19-Oct-11	13:50	58.5	63.0	44.3	
19-Oct-11	13:55	54.9	58.6	44.3	
19-Oct-11	14:00	49.2	52.8	42.2	53.1
19-Oct-11	14:05	46.0	46.3	42.1	
19-Oct-11	14:10	52.5	57.0	41.5	
19-Oct-11	14:15	53.7	57.7	43.8	
19-Oct-11	14:20	55.9	60.0	43.8	
19-Oct-11	14:25	54.9	59.6	44.3	
19-Oct-11	14:30	50.0	55.1	41.6	53.3
19-Oct-11	14:35	45.8	47.7	43.5	
19-Oct-11	14:40	57.1	61.8	45.9	
19-Oct-11	14:45	56.4	59.9	45.9	
19-Oct-11	14:50	48.7	50.6	46.1	
19-Oct-11	14:55	50.5	49.0	45.2	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
19-Oct-11	15:00	57.1	61.8	44.3	56.1
19-Oct-11	15:05	47.1	48.1	43.2	
19-Oct-11	15:10	54.3	57.2	44.7	
19-Oct-11	15:15	55.5	59.4	43.2	
19-Oct-11	15:20	58.3	62.8	49.2	
19-Oct-11	15:25	57.8	62.3	45.5	
19-Oct-11	15:30	54.7	58.4	45.1	53.1
19-Oct-11	15:35	52.8	56.3	43.6	
19-Oct-11	15:40	54.8	58.9	46.9	
19-Oct-11	15:45	50.1	51.5	42.3	
19-Oct-11	15:50	47.4	49.6	44.8	
19-Oct-11	15:55	54.5	58.5	46.7	
19-Oct-11	16:00	53.2	56.7	44.9	55.5
19-Oct-11	16:05	54.9	58.6	47.1	
19-Oct-11	16:10	54.4	58.0	47.0	
19-Oct-11	16:15	57.1	60.8	48.8	
19-Oct-11	16:20	56.6	60.4	48.7	
19-Oct-11	16:25	55.5	58.7	48.1	
19-Oct-11	16:30	58.0	61.5	48.8	56.3
19-Oct-11	16:35	55.7	58.5	51.3	
19-Oct-11	16:40	57.4	61.4	49.2	
19-Oct-11	16:45	55.1	54.5	48.3	
19-Oct-11	16:50	54.6	52.7	47.1	
19-Oct-11	16:55	56.0	58.4	51.5	
19-Oct-11	17:00	56.7	59.5	51.4	55.9
19-Oct-11	17:05	52.7	54.0	50.0	
19-Oct-11	17:10	56.7	59.3	52.3	
19-Oct-11	17:15	56.6	60.0	48.8	
19-Oct-11	17:20	55.7	58.2	51.6	
19-Oct-11	17:25	56.0	58.7	51.8	
19-Oct-11	17:30	57.0	59.6	51.7	58.4
19-Oct-11	17:35	55.4	57.3	52.5	
19-Oct-11	17:40	55.9	59.0	51.3	
19-Oct-11	17:45	62.3	62.5	51.0	
19-Oct-11	17:50	56.6	60.3	51.3	
19-Oct-11	17:55	59.0	61.6	52.0	
19-Oct-11	18:00	57.1	60.3	48.7	54.8
19-Oct-11	18:05	57.6	61.7	45.3	
19-Oct-11	18:10	46.4	48.3	43.5	
19-Oct-11	18:15	56.9	61.0	45.2	
19-Oct-11	18:20	51.8	55.7	43.6	
19-Oct-11	18:25	45.1	46.9	42.4	
19-Oct-11	18:30	47.1	46.7	42.7	57.7
19-Oct-11	18:35	50.7	55.2	42.4	
19-Oct-11	18:40	51.5	53.7	42.1	
19-Oct-11	18:45	63.4	67.7	47.3	
19-Oct-11	18:50	56.7	53.5	44.2	
19-Oct-11	18:55	57.5	61.7	46.5	
	Mean	56.0	59.0	47.3	57.0
	Maximum	72.9	75.4	59.9	65.9
	Minimum	45.1	45.9	40.8	53.1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
20-Oct-11	07:00	45.2	47.5	42.2	48.4
20-Oct-11	07:05	44.9	47.2	41.3	
20-Oct-11	07:10	45.3	47.7	42.0	
20-Oct-11	07:15	46.2	48.7	42.2	
20-Oct-11	07:20	52.6	51.0	42.8	
20-Oct-11	07:25	49.8	49.4	43.0	
20-Oct-11	07:30	48.6	50.9	44.9	51.8
20-Oct-11	07:35	50.2	51.4	44.5	
20-Oct-11	07:40	53.6	50.9	43.9	
20-Oct-11	07:45	50.2	50.1	44.8	
20-Oct-11	07:50	52.2	54.8	46.9	
20-Oct-11	07:55	53.5	57.0	46.2	
20-Oct-11	08:00	51.2	53.3	48.7	55.0
20-Oct-11	08:05	55.4	57.6	46.9	
20-Oct-11	08:10	56.0	59.8	45.0	
20-Oct-11	08:15	55.5	56.8	47.3	
20-Oct-11	08:20	55.1	54.1	46.3	
20-Oct-11	08:25	55.2	55.7	48.4	
20-Oct-11	08:30	56.0	59.1	47.4	57.4
20-Oct-11	08:35	51.9	53.1	47.0	
20-Oct-11	08:40	56.6	56.4	48.8	
20-Oct-11	08:45	61.0	64.9	50.0	
20-Oct-11	08:50	57.7	61.1	49.7	
20-Oct-11	08:55	56.6	60.4	47.4	
20-Oct-11	09:00	55.9	59.3	50.4	58.6
20-Oct-11	09:05	59.0	62.8	52.0	
20-Oct-11	09:10	60.3	64.2	51.5	
20-Oct-11	09:15	59.9	64.2	50.1	
20-Oct-11	09:20	58.6	61.7	50.6	
20-Oct-11	09:25	55.9	58.5	51.7	
20-Oct-11	09:30	58.5	60.8	52.2	58.7
20-Oct-11	09:35	56.3	57.8	50.0	
20-Oct-11	09:40	59.1	62.9	52.0	
20-Oct-11	09:45	62.3	66.4	51.9	
20-Oct-11	09:50	55.6	58.6	50.2	
20-Oct-11	09:55	56.9	60.0	51.0	
20-Oct-11	10:00	57.1	61.7	47.3	57.7
20-Oct-11	10:05	55.9	57.5	46.8	
20-Oct-11	10:10	52.8	52.5	44.7	
20-Oct-11	10:15	59.8	64.0	46.1	
20-Oct-11	10:20	59.1	63.7	44.2	
20-Oct-11	10:25	58.1	62.0	46.7	
20-Oct-11	10:30	55.5	59.2	46.1	55.3
20-Oct-11	10:35	57.0	61.6	46.8	
20-Oct-11	10:40	58.2	62.7	46.3	
20-Oct-11	10:45	54.5	57.9	47.0	
20-Oct-11	10:50	50.2	53.5	41.0	
20-Oct-11	10:55	51.7	48.7	39.4	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
20-Oct-11	11:00	56.9	60.7	44.4	56.1
20-Oct-11	11:05	49.7	49.0	39.5	
20-Oct-11	11:10	56.4	61.2	40.3	
20-Oct-11	11:15	53.8	57.0	39.1	
20-Oct-11	11:20	56.2	60.4	41.5	
20-Oct-11	11:25	58.7	63.0	44.1	
20-Oct-11	11:30	56.8	61.3	43.1	58.6
20-Oct-11	11:35	54.3	58.4	41.5	
20-Oct-11	11:40	60.1	64.6	43.6	
20-Oct-11	11:45	57.4	61.2	43.3	
20-Oct-11	11:50	62.6	68.2	45.9	
20-Oct-11	11:55	53.6	57.6	39.9	
20-Oct-11	12:00	60.3	65.4	41.1	55.5
20-Oct-11	12:05	54.7	58.7	41.8	
20-Oct-11	12:10	54.5	57.6	44.2	
20-Oct-11	12:15	47.2	50.3	42.6	
20-Oct-11	12:20	54.6	58.6	41.4	
20-Oct-11	12:25	52.0	56.3	41.4	
20-Oct-11	12:30	51.3	55.7	39.1	49.5
20-Oct-11	12:35	50.6	52.3	41.2	
20-Oct-11	12:40	50.7	54.9	40.4	
20-Oct-11	12:45	49.3	52.6	40.4	
20-Oct-11	12:50	46.2	46.4	39.2	
20-Oct-11	12:55	46.5	44.5	38.8	
20-Oct-11	13:00	52.8	53.2	45.1	53.1
20-Oct-11	13:05	52.1	53.6	45.2	
20-Oct-11	13:10	52.1	53.9	44.4	
20-Oct-11	13:15	51.6	51.4	43.9	
20-Oct-11	13:20	54.5	57.1	45.7	
20-Oct-11	13:25	54.6	58.5	44.2	
20-Oct-11	13:30	57.7	61.0	45.4	58.1
20-Oct-11	13:35	58.8	62.9	40.0	
20-Oct-11	13:40	49.0	45.6	39.1	
20-Oct-11	13:45	63.5	68.6	41.3	
20-Oct-11	13:50	51.3	46.0	39.3	
20-Oct-11	13:55	45.8	48.2	42.2	
20-Oct-11	14:00	41.7	44.3	38.8	54.6
20-Oct-11	14:05	42.5	43.9	39.5	
20-Oct-11	14:10	57.1	60.8	39.9	
20-Oct-11	14:15	56.3	60.5	48.3	
20-Oct-11	14:20	56.6	60.4	46.6	
20-Oct-11	14:25	55.0	58.8	46.7	
20-Oct-11	14:30	51.0	52.8	47.6	50.1
20-Oct-11	14:35	51.0	52.6	48.1	
20-Oct-11	14:40	51.8	53.6	44.1	
20-Oct-11	14:45	49.9	49.8	40.3	
20-Oct-11	14:50	46.7	42.7	39.2	
20-Oct-11	14:55	48.1	46.5	42.1	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
20-Oct-11	15:00	52.9	50.5	42.9	56.4
20-Oct-11	15:05	55.3	54.8	42.0	
20-Oct-11	15:10	47.7	45.8	38.9	
20-Oct-11	15:15	46.7	43.9	39.6	
20-Oct-11	15:20	62.9	68.8	43.8	
20-Oct-11	15:25	43.5	44.2	39.9	
20-Oct-11	15:30	54.1	52.9	41.6	51.4
20-Oct-11	15:35	49.6	47.2	42.0	
20-Oct-11	15:40	53.5	51.3	41.2	
20-Oct-11	15:45	51.9	51.0	41.1	
20-Oct-11	15:50	47.4	46.9	40.6	
20-Oct-11	15:55	47.1	46.8	41.7	
20-Oct-11	16:00	47.2	48.5	41.7	55.0
20-Oct-11	16:05	61.4	65.7	42.7	
20-Oct-11	16:10	49.8	51.6	45.1	
20-Oct-11	16:15	50.7	50.2	43.9	
20-Oct-11	16:20	50.0	49.1	43.4	
20-Oct-11	16:25	51.6	52.5	44.9	
20-Oct-11	16:30	53.4	53.8	45.1	55.6
20-Oct-11	16:35	57.8	57.7	48.7	
20-Oct-11	16:40	54.1	56.9	48.1	
20-Oct-11	16:45	56.6	58.4	47.2	
20-Oct-11	16:50	54.4	57.0	47.9	
20-Oct-11	16:55	55.4	57.0	47.1	
20-Oct-11	17:00	55.1	57.5	49.4	56.2
20-Oct-11	17:05	53.9	56.6	48.5	
20-Oct-11	17:10	54.9	57.6	48.8	
20-Oct-11	17:15	59.3	64.1	50.4	
20-Oct-11	17:20	56.3	59.0	50.1	
20-Oct-11	17:25	55.2	57.2	48.9	
20-Oct-11	17:30	55.1	57.8	50.2	56.0
20-Oct-11	17:35	55.5	58.5	48.8	
20-Oct-11	17:40	56.3	59.7	49.2	
20-Oct-11	17:45	53.9	57.0	48.2	
20-Oct-11	17:50	56.4	58.8	48.4	
20-Oct-11	17:55	57.6	60.6	50.4	
20-Oct-11	18:00	54.0	55.8	49.0	54.6
20-Oct-11	18:05	53.8	55.0	47.9	
20-Oct-11	18:10	55.5	55.9	47.8	
20-Oct-11	18:15	55.4	58.4	48.4	
20-Oct-11	18:20	52.2	54.5	48.4	
20-Oct-11	18:25	55.7	57.7	49.2	
20-Oct-11	18:30	53.7	56.6	48.0	56.2
20-Oct-11	18:35	54.8	57.5	50.1	
20-Oct-11	18:40	56.9	58.9	51.2	
20-Oct-11	18:45	57.5	60.7	49.3	
20-Oct-11	18:50	55.8	55.9	49.9	
20-Oct-11	18:55	57.1	57.1	50.5	
	Mean	53.9	55.9	45.2	55.0
	Maximum	63.5	68.8	52.2	58.7
	Minimum	41.7	42.7	38.8	48.4

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
21-Oct-11	07:00	54.4	57.3	44.9	53.2
21-Oct-11	07:05	56.7	53.9	45.2	
21-Oct-11	07:10	50.7	50.7	44.6	
21-Oct-11	07:15	50.0	52.8	46.0	
21-Oct-11	07:20	50.9	53.6	46.9	
21-Oct-11	07:25	52.5	55.5	46.0	
21-Oct-11	07:30	56.9	59.6	50.4	59.5
21-Oct-11	07:35	55.4	56.3	50.3	
21-Oct-11	07:40	57.5	59.8	49.6	
21-Oct-11	07:45	56.8	58.5	50.7	
21-Oct-11	07:50	57.2	56.4	49.2	
21-Oct-11	07:55	64.7	65.5	45.9	
21-Oct-11	08:00	53.4	54.0	45.4	56.1
21-Oct-11	08:05	57.6	61.0	51.4	
21-Oct-11	08:10	55.0	55.5	49.0	
21-Oct-11	08:15	55.7	55.9	48.5	
21-Oct-11	08:20	57.3	61.4	50.2	
21-Oct-11	08:25	56.4	59.6	49.2	
21-Oct-11	08:30	56.6	59.6	50.5	55.6
21-Oct-11	08:35	52.7	54.3	46.3	
21-Oct-11	08:40	51.5	52.8	46.3	
21-Oct-11	08:45	56.6	60.3	47.3	
21-Oct-11	08:50	53.4	55.0	49.3	
21-Oct-11	08:55	58.6	63.1	48.9	
21-Oct-11	09:00	57.3	60.6	48.6	55.6
21-Oct-11	09:05	56.2	59.0	46.2	
21-Oct-11	09:10	52.9	54.5	46.5	
21-Oct-11	09:15	56.3	60.0	48.0	
21-Oct-11	09:20	56.2	60.2	45.5	
21-Oct-11	09:25	52.5	53.3	44.4	
21-Oct-11	09:30	56.2	60.9	46.1	57.3
21-Oct-11	09:35	55.6	58.8	47.4	
21-Oct-11	09:40	59.6	63.3	50.5	
21-Oct-11	09:45	58.0	61.8	47.6	
21-Oct-11	09:50	57.6	61.2	48.7	
21-Oct-11	09:55	55.0	58.8	45.9	
21-Oct-11	10:00	56.2	60.2	46.0	57.7
21-Oct-11	10:05	58.6	62.3	48.0	
21-Oct-11	10:10	58.3	62.2	48.2	
21-Oct-11	10:15	56.7	60.3	46.3	
21-Oct-11	10:20	54.9	58.9	45.4	
21-Oct-11	10:25	59.6	64.2	46.4	
21-Oct-11	10:30	56.2	60.2	46.6	56.1
21-Oct-11	10:35	56.0	59.8	45.2	
21-Oct-11	10:40	57.6	61.7	44.8	
21-Oct-11	10:45	55.9	60.6	43.9	
21-Oct-11	10:50	54.0	58.6	42.6	
21-Oct-11	10:55	56.4	60.4	44.3	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
21-Oct-11	11:00	52.1	56.7	43.2	52.3
21-Oct-11	11:05	49.4	53.2	41.4	
21-Oct-11	11:10	52.6	57.0	40.5	
21-Oct-11	11:15	55.1	60.1	43.1	
21-Oct-11	11:20	53.8	58.3	42.7	
21-Oct-11	11:25	42.4	44.3	40.1	
21-Oct-11	11:30	55.1	59.8	42.2	57.1
21-Oct-11	11:35	52.4	56.3	41.8	
21-Oct-11	11:40	52.9	56.7	44.0	
21-Oct-11	11:45	53.4	56.6	44.7	
21-Oct-11	11:50	63.0	68.2	43.8	
21-Oct-11	11:55	53.0	57.3	42.6	
21-Oct-11	12:00	52.0	55.8	43.1	59.2
21-Oct-11	12:05	56.3	60.4	42.8	
21-Oct-11	12:10	59.7	63.7	45.4	
21-Oct-11	12:15	59.2	63.7	43.3	
21-Oct-11	12:20	55.4	54.5	40.8	
21-Oct-11	12:25	63.7	69.0	42.4	
21-Oct-11	12:30	52.1	48.5	41.9	53.7
21-Oct-11	12:35	48.0	46.9	42.3	
21-Oct-11	12:40	58.6	59.9	44.6	
21-Oct-11	12:45	54.3	55.5	41.1	
21-Oct-11	12:50	49.1	53.5	40.3	
21-Oct-11	12:55	49.9	52.5	40.5	
21-Oct-11	13:00	48.1	50.9	41.8	50.7
21-Oct-11	13:05	48.2	51.2	41.9	
21-Oct-11	13:10	49.3	50.7	45.2	
21-Oct-11	13:15	53.2	54.9	49.1	
21-Oct-11	13:20	50.9	52.8	48.4	
21-Oct-11	13:25	52.1	53.5	49.1	
21-Oct-11	13:30	52.6	53.9	48.2	52.1
21-Oct-11	13:35	51.5	53.5	48.5	
21-Oct-11	13:40	50.5	52.2	48.1	
21-Oct-11	13:45	52.7	55.7	48.7	
21-Oct-11	13:50	52.3	54.4	49.8	
21-Oct-11	13:55	52.8	54.9	49.1	
21-Oct-11	14:00	53.4	54.8	51.2	54.8
21-Oct-11	14:05	52.5	54.0	50.6	
21-Oct-11	14:10	56.0	57.9	50.7	
21-Oct-11	14:15	57.1	59.8	52.0	
21-Oct-11	14:20	54.5	56.4	51.4	
21-Oct-11	14:25	53.2	54.7	50.3	
21-Oct-11	14:30	54.5	56.0	50.8	55.9
21-Oct-11	14:35	53.4	54.6	50.1	
21-Oct-11	14:40	53.9	54.6	48.8	
21-Oct-11	14:45	57.5	58.7	51.1	
21-Oct-11	14:50	59.4	64.4	49.3	
21-Oct-11	14:55	52.4	53.6	49.4	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
21-Oct-11	15:00	54.7	54.3	48.6	53.7
21-Oct-11	15:05	54.5	56.5	50.3	
21-Oct-11	15:10	53.7	55.2	49.6	
21-Oct-11	15:15	52.1	53.4	47.9	
21-Oct-11	15:20	53.3	53.4	49.0	
21-Oct-11	15:25	53.5	56.0	46.6	
21-Oct-11	15:30	55.1	57.2	50.7	53.9
21-Oct-11	15:35	54.6	56.5	50.4	
21-Oct-11	15:40	52.7	53.5	48.2	
21-Oct-11	15:45	54.4	57.2	49.1	
21-Oct-11	15:50	52.5	54.6	47.5	
21-Oct-11	15:55	53.6	56.2	48.4	
21-Oct-11	16:00	53.4	55.3	48.4	52.2
21-Oct-11	16:05	51.8	53.9	48.4	
21-Oct-11	16:10	50.4	52.6	47.2	
21-Oct-11	16:15	52.4	54.5	47.9	
21-Oct-11	16:20	53.6	55.7	47.6	
21-Oct-11	16:25	50.6	52.2	46.3	
21-Oct-11	16:30	53.6	56.8	47.7	52.7
21-Oct-11	16:35	52.0	54.2	46.9	
21-Oct-11	16:40	52.2	54.3	48.0	
21-Oct-11	16:45	53.4	55.5	48.9	
21-Oct-11	16:50	51.9	54.0	48.5	
21-Oct-11	16:55	52.6	55.3	48.0	
21-Oct-11	17:00	54.4	55.8	48.5	54.2
21-Oct-11	17:05	55.6	54.8	48.2	
21-Oct-11	17:10	54.0	54.7	46.9	
21-Oct-11	17:15	53.0	51.8	47.2	
21-Oct-11	17:20	52.7	53.0	47.0	
21-Oct-11	17:25	54.7	57.5	52.2	
21-Oct-11	17:30	56.9	59.1	52.9	57.5
21-Oct-11	17:35	58.6	62.6	50.9	
21-Oct-11	17:40	58.4	61.8	51.3	
21-Oct-11	17:45	58.4	62.2	51.6	
21-Oct-11	17:50	57.4	61.0	49.7	
21-Oct-11	17:55	53.9	56.2	49.8	
21-Oct-11	18:00	52.3	55.4	47.2	56.2
21-Oct-11	18:05	52.9	52.3	48.1	
21-Oct-11	18:10	58.9	64.8	48.7	
21-Oct-11	18:15	56.8	60.3	50.0	
21-Oct-11	18:20	58.2	63.8	48.7	
21-Oct-11	18:25	52.9	56.7	48.8	
21-Oct-11	18:30	50.7	53.3	46.2	53.3
21-Oct-11	18:35	53.1	55.9	47.8	
21-Oct-11	18:40	53.4	55.5	47.4	
21-Oct-11	18:45	54.4	47.0	45.2	
21-Oct-11	18:50	51.6	47.7	43.2	
21-Oct-11	18:55	55.2	57.6	42.9	
	Mean	54.4	56.8	47.1	55.0
	Maximum	64.7	69.0	52.9	59.5
	Minimum	42.4	44.3	40.1	50.7

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
22-Oct-11	07:00	52.2	54.2	44.4	50.1
22-Oct-11	07:05	49.5	50.9	43.3	
22-Oct-11	07:10	49.9	52.7	44.4	
22-Oct-11	07:15	48.0	50.7	45.0	
22-Oct-11	07:20	50.4	53.2	46.1	
22-Oct-11	07:25	49.5	51.8	45.9	
22-Oct-11	07:30	63.3	68.4	48.4	57.0
22-Oct-11	07:35	51.5	53.8	48.2	
22-Oct-11	07:40	54.6	59.6	46.2	
22-Oct-11	07:45	48.2	49.9	46.0	
22-Oct-11	07:50	50.8	53.6	46.8	
22-Oct-11	07:55	53.5	56.8	45.7	
22-Oct-11	08:00	54.3	55.8	47.0	57.5
22-Oct-11	08:05	51.2	54.1	46.5	
22-Oct-11	08:10	60.0	65.0	49.0	
22-Oct-11	08:15	55.5	58.2	48.9	
22-Oct-11	08:20	60.7	64.9	48.4	
22-Oct-11	08:25	56.1	59.0	50.0	
22-Oct-11	08:30	52.0	54.5	48.6	56.3
22-Oct-11	08:35	58.5	62.3	50.5	
22-Oct-11	08:40	59.0	63.2	51.8	
22-Oct-11	08:45	54.7	57.1	48.5	
22-Oct-11	08:50	54.1	57.0	47.4	
22-Oct-11	08:55	55.3	58.8	47.8	
22-Oct-11	09:00	56.7	60.4	49.6	55.4
22-Oct-11	09:05	51.9	55.3	46.8	
22-Oct-11	09:10	54.1	54.8	46.6	
22-Oct-11	09:15	55.8	60.3	47.3	
22-Oct-11	09:20	54.6	56.7	48.3	
22-Oct-11	09:25	57.2	60.9	48.2	
22-Oct-11	09:30	54.8	57.3	46.8	55.9
22-Oct-11	09:35	53.8	57.1	44.9	
22-Oct-11	09:40	57.5	61.2	47.6	
22-Oct-11	09:45	58.2	61.8	48.9	
22-Oct-11	09:50	54.8	58.7	44.8	
22-Oct-11	09:55	54.0	57.4	47.6	
22-Oct-11	10:00	56.4	60.2	45.8	58.5
22-Oct-11	10:05	56.5	60.9	45.6	
22-Oct-11	10:10	55.1	58.3	48.2	
22-Oct-11	10:15	58.9	62.8	47.7	
22-Oct-11	10:20	62.2	66.1	46.6	
22-Oct-11	10:25	58.0	62.2	46.1	
22-Oct-11	10:30	49.2	50.4	44.6	54.5
22-Oct-11	10:35	53.3	57.5	44.8	
22-Oct-11	10:40	57.5	62.2	43.5	
22-Oct-11	10:45	57.2	61.7	44.7	
22-Oct-11	10:50	52.2	53.4	45.2	
22-Oct-11	10:55	50.9	51.2	44.8	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
22-Oct-11	11:00	55.0	57.3	48.0	54.4
22-Oct-11	11:05	56.2	59.7	44.8	
22-Oct-11	11:10	50.6	54.1	43.0	
22-Oct-11	11:15	54.2	58.3	42.4	
22-Oct-11	11:20	56.8	60.4	46.9	
22-Oct-11	11:25	47.0	49.1	41.5	
22-Oct-11	11:30	42.7	44.1	40.1	52.1
22-Oct-11	11:35	51.5	55.4	41.4	
22-Oct-11	11:40	56.8	61.4	46.0	
22-Oct-11	11:45	48.6	49.3	43.9	
22-Oct-11	11:50	48.3	51.3	42.3	
22-Oct-11	11:55	52.8	56.7	42.1	
22-Oct-11	12:00	49.2	47.8	41.2	56.5
22-Oct-11	12:05	45.0	47.7	40.3	
22-Oct-11	12:10	56.9	61.4	41.5	
22-Oct-11	12:15	55.1	55.6	42.9	
22-Oct-11	12:20	57.8	59.0	42.8	
22-Oct-11	12:25	60.6	64.9	43.4	
22-Oct-11	12:30	57.9	63.0	42.2	56.7
22-Oct-11	12:35	55.0	58.6	43.3	
22-Oct-11	12:40	59.7	64.0	44.6	
22-Oct-11	12:45	52.8	56.3	41.0	
22-Oct-11	12:50	56.1	59.1	45.5	
22-Oct-11	12:55	55.1	58.5	43.7	
22-Oct-11	13:00	54.9	59.1	43.8	56.8
22-Oct-11	13:05	57.4	61.4	45.9	
22-Oct-11	13:10	55.9	59.6	45.1	
22-Oct-11	13:15	57.6	61.0	45.6	
22-Oct-11	13:20	56.2	59.7	44.5	
22-Oct-11	13:25	57.8	61.7	44.5	
22-Oct-11	13:30	55.0	59.7	46.4	57.9
22-Oct-11	13:35	59.3	62.6	51.1	
22-Oct-11	13:40	58.0	62.4	47.8	
22-Oct-11	13:45	59.7	63.2	49.5	
22-Oct-11	13:50	58.5	60.6	47.6	
22-Oct-11	13:55	53.7	57.4	46.1	
22-Oct-11	14:00	61.4	62.8	49.1	58.0
22-Oct-11	14:05	58.7	62.8	47.7	
22-Oct-11	14:10	56.9	60.1	47.0	
22-Oct-11	14:15	56.4	59.1	48.4	
22-Oct-11	14:20	56.3	59.9	47.7	
22-Oct-11	14:25	55.1	54.7	45.1	
22-Oct-11	14:30	55.7	59.7	44.9	56.8
22-Oct-11	14:35	61.9	66.6	46.8	
22-Oct-11	14:40	56.0	58.5	45.0	
22-Oct-11	14:45	54.6	58.6	44.6	
22-Oct-11	14:50	52.1	55.4	42.1	
22-Oct-11	14:55	48.7	50.8	41.8	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
22-Oct-11	15:00	50.8	55.1	42.5	57.4
22-Oct-11	15:05	44.3	47.4	40.1	
22-Oct-11	15:10	57.3	62.4	41.6	
22-Oct-11	15:15	56.8	61.2	43.5	
22-Oct-11	15:20	62.9	67.8	43.4	
22-Oct-11	15:25	53.3	56.7	43.9	
22-Oct-11	15:30	52.7	56.8	44.3	53.9
22-Oct-11	15:35	53.8	57.4	44.2	
22-Oct-11	15:40	55.4	59.3	44.8	
22-Oct-11	15:45	52.4	56.5	43.8	
22-Oct-11	15:50	55.2	59.6	45.5	
22-Oct-11	15:55	52.6	54.2	46.1	
22-Oct-11	16:00	49.4	52.5	44.6	54.3
22-Oct-11	16:05	50.2	52.9	45.3	
22-Oct-11	16:10	58.6	63.4	44.2	
22-Oct-11	16:15	57.2	61.5	44.1	
22-Oct-11	16:20	49.6	52.1	45.3	
22-Oct-11	16:25	49.1	51.5	44.3	
22-Oct-11	16:30	56.4	61.0	45.2	59.6
22-Oct-11	16:35	54.8	57.0	45.5	
22-Oct-11	16:40	55.6	59.7	45.2	
22-Oct-11	16:45	65.7	70.0	50.6	
22-Oct-11	16:50	52.5	55.2	46.3	
22-Oct-11	16:55	56.8	60.8	47.6	
22-Oct-11	17:00	57.3	61.2	47.8	58.6
22-Oct-11	17:05	60.8	64.8	46.4	
22-Oct-11	17:10	55.5	60.2	44.5	
22-Oct-11	17:15	56.7	61.0	47.4	
22-Oct-11	17:20	62.1	67.5	43.7	
22-Oct-11	17:25	52.7	56.9	43.2	
22-Oct-11	17:30	54.7	58.6	44.1	57.8
22-Oct-11	17:35	49.7	54.0	42.2	
22-Oct-11	17:40	60.6	64.9	44.6	
22-Oct-11	17:45	54.1	58.1	43.7	
22-Oct-11	17:50	62.3	66.4	47.6	
22-Oct-11	17:55	51.5	55.9	43.6	
22-Oct-11	18:00	51.3	55.4	43.8	56.2
22-Oct-11	18:05	61.0	65.7	43.9	
22-Oct-11	18:10	54.8	58.8	44.1	
22-Oct-11	18:15	53.0	57.0	45.4	
22-Oct-11	18:20	54.6	58.4	45.1	
22-Oct-11	18:25	55.2	59.2	44.3	
22-Oct-11	18:30	56.8	60.1	44.0	55.6
22-Oct-11	18:35	55.3	59.3	45.4	
22-Oct-11	18:40	57.3	60.9	45.7	
22-Oct-11	18:45	53.9	56.5	46.6	
22-Oct-11	18:50	57.1	60.2	45.8	
22-Oct-11	18:55	46.7	48.9	43.8	
	Mean	54.9	58.2	45.4	56.1
	Maximum	65.7	70.0	51.8	59.6
	Minimum	42.7	44.1	40.1	50.1

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
24-Oct-11	07:00	53.1	54.1	45.5	54.4
24-Oct-11	07:05	49.7	50.8	46.2	
24-Oct-11	07:10	51.6	53.0	46.7	
24-Oct-11	07:15	53.5	53.8	48.0	
24-Oct-11	07:20	58.9	59.8	49.2	
24-Oct-11	07:25	53.1	54.5	47.9	
24-Oct-11	07:30	53.1	55.1	46.5	55.6
24-Oct-11	07:35	57.2	60.5	49.4	
24-Oct-11	07:40	56.9	59.2	47.6	
24-Oct-11	07:45	52.9	54.3	45.6	
24-Oct-11	07:50	55.3	56.4	48.1	
24-Oct-11	07:55	56.1	56.7	47.2	
24-Oct-11	08:00	55.9	58.5	49.3	57.2
24-Oct-11	08:05	56.3	59.8	48.7	
24-Oct-11	08:10	56.3	59.0	49.9	
24-Oct-11	08:15	57.5	61.0	49.8	
24-Oct-11	08:20	58.5	62.6	50.0	
24-Oct-11	08:25	58.0	61.5	50.0	
24-Oct-11	08:30	54.1	56.6	46.4	54.2
24-Oct-11	08:35	52.5	54.5	46.8	
24-Oct-11	08:40	53.9	52.4	46.1	
24-Oct-11	08:45	55.4	60.7	47.0	
24-Oct-11	08:50	52.0	54.4	47.3	
24-Oct-11	08:55	56.1	60.6	48.2	
24-Oct-11	09:00	56.8	60.9	49.2	57.3
24-Oct-11	09:05	58.2	63.2	48.1	
24-Oct-11	09:10	55.2	59.3	48.5	
24-Oct-11	09:15	56.6	61.0	45.9	
24-Oct-11	09:20	56.2	60.3	45.8	
24-Oct-11	09:25	59.4	63.9	45.6	
24-Oct-11	09:30	55.8	59.4	44.8	58.2
24-Oct-11	09:35	56.8	60.6	47.2	
24-Oct-11	09:40	52.1	55.1	46.2	
24-Oct-11	09:45	63.7	67.7	53.0	
24-Oct-11	09:50	55.9	59.2	48.1	
24-Oct-11	09:55	53.2	55.9	47.3	
24-Oct-11	10:00	56.4	60.2	49.1	57.6
24-Oct-11	10:05	57.8	61.7	47.7	
24-Oct-11	10:10	56.2	59.5	49.2	
24-Oct-11	10:15	55.7	59.5	48.6	
24-Oct-11	10:20	55.9	59.9	49.1	
24-Oct-11	10:25	61.0	65.2	50.0	
24-Oct-11	10:30	53.9	56.0	48.6	58.1
24-Oct-11	10:35	54.2	55.4	49.2	
24-Oct-11	10:40	56.7	59.7	50.7	
24-Oct-11	10:45	56.8	60.6	49.6	
24-Oct-11	10:50	58.7	62.4	51.0	
24-Oct-11	10:55	62.2	63.8	53.5	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
24-Oct-11	11:00	54.8	57.2	49.7	56.9
24-Oct-11	11:05	58.2	62.6	49.3	
24-Oct-11	11:10	56.5	61.2	48.2	
24-Oct-11	11:15	54.4	57.8	48.6	
24-Oct-11	11:20	56.5	60.2	49.6	
24-Oct-11	11:25	59.2	63.0	50.0	
24-Oct-11	11:30	56.7	60.2	50.3	55.8
24-Oct-11	11:35	58.2	64.0	47.3	
24-Oct-11	11:40	55.9	60.1	49.2	
24-Oct-11	11:45	54.3	57.8	46.6	
24-Oct-11	11:50	52.4	55.9	47.2	
24-Oct-11	11:55	54.9	59.2	46.8	
24-Oct-11	12:00	56.2	60.7	47.3	58.0
24-Oct-11	12:05	61.5	66.6	48.3	
24-Oct-11	12:10	58.8	63.2	46.2	
24-Oct-11	12:15	55.9	60.1	45.3	
24-Oct-11	12:20	57.1	60.6	48.9	
24-Oct-11	12:25	54.2	57.8	46.8	
24-Oct-11	12:30	51.8	53.0	46.2	57.6
24-Oct-11	12:35	53.4	56.0	47.4	
24-Oct-11	12:40	59.8	64.3	46.3	
24-Oct-11	12:45	56.7	61.0	47.2	
24-Oct-11	12:50	58.7	63.2	48.0	
24-Oct-11	12:55	59.5	63.3	50.1	
24-Oct-11	13:00	55.3	59.3	47.5	55.6
24-Oct-11	13:05	53.0	56.0	44.5	
24-Oct-11	13:10	54.5	57.9	44.6	
24-Oct-11	13:15	54.8	58.3	47.2	
24-Oct-11	13:20	56.8	61.3	43.1	
24-Oct-11	13:25	57.6	61.7	43.0	
24-Oct-11	13:30	54.5	59.2	39.9	57.7
24-Oct-11	13:35	62.7	67.0	45.4	
24-Oct-11	13:40	55.5	59.3	45.2	
24-Oct-11	13:45	56.1	59.7	47.6	
24-Oct-11	13:50	56.6	60.1	44.3	
24-Oct-11	13:55	52.7	57.2	43.1	
24-Oct-11	14:00	53.8	57.8	42.5	54.9
24-Oct-11	14:05	51.4	54.9	43.4	
24-Oct-11	14:10	56.7	57.1	44.8	
24-Oct-11	14:15	58.2	62.0	46.8	
24-Oct-11	14:20	54.8	59.2	41.9	
24-Oct-11	14:25	46.1	45.9	40.5	
24-Oct-11	14:30	53.3	57.5	42.0	56.3
24-Oct-11	14:35	60.7	65.4	45.1	
24-Oct-11	14:40	52.3	56.0	43.1	
24-Oct-11	14:45	49.0	47.7	41.5	
24-Oct-11	14:50	47.4	50.4	42.5	
24-Oct-11	14:55	59.3	64.2	44.2	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
24-Oct-11	15:00	55.0	59.1	45.3	56.1
24-Oct-11	15:05	52.7	54.9	47.0	
24-Oct-11	15:10	55.3	58.4	45.7	
24-Oct-11	15:15	57.1	60.8	46.6	
24-Oct-11	15:20	59.6	63.2	47.2	
24-Oct-11	15:25	53.0	54.9	44.9	
24-Oct-11	15:30	55.0	58.2	46.4	57.8
24-Oct-11	15:35	58.3	61.9	45.9	
24-Oct-11	15:40	56.1	59.2	47.6	
24-Oct-11	15:45	58.7	62.3	48.4	
24-Oct-11	15:50	59.4	63.5	49.2	
24-Oct-11	15:55	57.6	61.0	44.9	
24-Oct-11	16:00	57.5	60.2	47.1	56.2
24-Oct-11	16:05	55.4	59.1	45.4	
24-Oct-11	16:10	52.6	56.0	45.4	
24-Oct-11	16:15	56.0	60.3	45.4	
24-Oct-11	16:20	58.3	63.4	46.7	
24-Oct-11	16:25	55.0	58.2	45.0	
24-Oct-11	16:30	55.4	59.7	44.0	55.8
24-Oct-11	16:35	55.2	59.4	45.2	
24-Oct-11	16:40	57.4	62.0	45.3	
24-Oct-11	16:45	56.7	60.1	46.3	
24-Oct-11	16:50	56.0	60.1	45.7	
24-Oct-11	16:55	52.7	57.0	44.5	
24-Oct-11	17:00	55.5	58.7	47.3	54.9
24-Oct-11	17:05	55.4	59.8	45.3	
24-Oct-11	17:10	56.2	59.8	45.7	
24-Oct-11	17:15	55.8	59.8	46.2	
24-Oct-11	17:20	53.5	57.8	45.1	
24-Oct-11	17:25	51.6	55.4	46.4	
24-Oct-11	17:30	48.4	51.7	44.3	53.8
24-Oct-11	17:35	54.2	57.7	43.7	
24-Oct-11	17:40	56.1	60.8	46.3	
24-Oct-11	17:45	46.3	48.4	43.7	
24-Oct-11	17:50	52.2	56.0	45.0	
24-Oct-11	17:55	56.9	60.5	45.6	
24-Oct-11	18:00	51.2	54.8	46.1	56.4
24-Oct-11	18:05	45.7	47.7	43.5	
24-Oct-11	18:10	45.0	46.3	43.1	
24-Oct-11	18:15	49.9	47.1	41.7	
24-Oct-11	18:20	59.0	60.5	42.4	
24-Oct-11	18:25	61.9	65.9	45.0	
24-Oct-11	18:30	57.1	59.8	47.5	55.7
24-Oct-11	18:35	54.2	56.6	46.7	
24-Oct-11	18:40	56.7	60.5	43.4	
24-Oct-11	18:45	56.3	59.9	43.4	
24-Oct-11	18:50	55.3	59.5	45.3	
24-Oct-11	18:55	53.3	57.1	44.9	
	Mean	55.5	58.7	46.5	56.3
	Maximum	63.7	67.7	53.5	58.2
	Minimum	45.0	45.9	39.9	53.8

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
25-Oct-11	07:00	55.4	59.5	41.3	55.7
25-Oct-11	07:05	57.1	62.2	42.8	
25-Oct-11	07:10	51.9	56.3	43.1	
25-Oct-11	07:15	57.5	62.5	43.2	
25-Oct-11	07:20	54.1	58.4	43.4	
25-Oct-11	07:25	55.7	59.1	42.6	
25-Oct-11	07:30	57.1	61.0	46.6	56.3
25-Oct-11	07:35	57.8	62.4	45.5	
25-Oct-11	07:40	56.9	61.1	43.1	
25-Oct-11	07:45	56.5	60.6	44.9	
25-Oct-11	07:50	53.4	57.2	42.3	
25-Oct-11	07:55	54.2	58.0	46.5	
25-Oct-11	08:00	56.7	60.7	45.1	55.7
25-Oct-11	08:05	50.6	53.4	45.0	
25-Oct-11	08:10	57.1	60.5	43.5	
25-Oct-11	08:15	56.3	60.4	44.0	
25-Oct-11	08:20	53.8	57.9	42.8	
25-Oct-11	08:25	56.7	60.0	47.6	
25-Oct-11	08:30	53.6	57.3	46.8	54.8
25-Oct-11	08:35	56.3	59.9	45.8	
25-Oct-11	08:40	57.9	60.5	46.9	
25-Oct-11	08:45	52.3	51.0	44.9	
25-Oct-11	08:50	54.3	58.3	44.7	
25-Oct-11	08:55	49.5	52.5	44.1	
25-Oct-11	09:00	57.5	61.3	48.3	54.8
25-Oct-11	09:05	55.5	59.5	48.1	
25-Oct-11	09:10	49.1	51.1	46.0	
25-Oct-11	09:15	53.1	57.3	46.0	
25-Oct-11	09:20	55.3	59.4	44.8	
25-Oct-11	09:25	54.6	57.9	46.0	
25-Oct-11	09:30	54.0	54.7	45.6	56.8
25-Oct-11	09:35	46.6	48.3	44.3	
25-Oct-11	09:40	59.7	64.4	45.4	
25-Oct-11	09:45	56.5	60.4	47.7	
25-Oct-11	09:50	57.5	61.4	49.8	
25-Oct-11	09:55	57.9	62.4	48.8	
25-Oct-11	10:00	62.9	68.1	51.3	59.4
25-Oct-11	10:05	56.7	60.9	48.0	
25-Oct-11	10:10	58.5	61.9	45.9	
25-Oct-11	10:15	57.1	58.3	46.9	
25-Oct-11	10:20	54.1	52.5	45.8	
25-Oct-11	10:25	61.3	65.1	46.7	
25-Oct-11	10:30	55.9	59.4	47.2	53.5
25-Oct-11	10:35	53.2	52.5	45.3	
25-Oct-11	10:40	50.7	53.6	46.0	
25-Oct-11	10:45	55.5	58.6	44.9	
25-Oct-11	10:50	52.3	54.1	45.6	
25-Oct-11	10:55	49.5	50.6	45.5	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
25-Oct-11	11:00	54.9	57.2	47.5	52.7
25-Oct-11	11:05	52.5	53.9	45.9	
25-Oct-11	11:10	50.4	52.5	45.4	
25-Oct-11	11:15	51.2	50.2	46.0	
25-Oct-11	11:20	54.3	57.6	46.1	
25-Oct-11	11:25	50.8	52.3	46.0	
25-Oct-11	11:30	59.2	64.3	48.8	57.7
25-Oct-11	11:35	50.3	51.7	46.7	
25-Oct-11	11:40	63.2	69.2	47.1	
25-Oct-11	11:45	53.3	55.8	48.0	
25-Oct-11	11:50	50.2	53.0	46.4	
25-Oct-11	11:55	53.4	53.8	45.0	
25-Oct-11	12:00	52.3	52.2	47.1	53.7
25-Oct-11	12:05	54.7	56.8	46.2	
25-Oct-11	12:10	54.4	52.9	43.8	
25-Oct-11	12:15	55.4	55.3	47.3	
25-Oct-11	12:20	53.1	51.2	45.8	
25-Oct-11	12:25	50.7	51.7	45.9	
25-Oct-11	12:30	57.9	56.1	48.3	58.1
25-Oct-11	12:35	54.6	57.1	47.5	
25-Oct-11	12:40	63.3	67.3	46.6	
25-Oct-11	12:45	49.8	52.0	47.1	
25-Oct-11	12:50	55.5	53.5	45.9	
25-Oct-11	12:55	55.9	55.5	45.8	
25-Oct-11	13:00	53.8	52.7	47.0	54.7
25-Oct-11	13:05	56.3	59.8	47.3	
25-Oct-11	13:10	57.3	60.0	44.8	
25-Oct-11	13:15	55.3	58.8	45.5	
25-Oct-11	13:20	52.1	55.0	44.8	
25-Oct-11	13:25	48.7	50.3	43.1	
25-Oct-11	13:30	57.2	60.6	46.7	55.4
25-Oct-11	13:35	52.6	56.6	43.5	
25-Oct-11	13:40	54.0	57.1	46.8	
25-Oct-11	13:45	55.6	60.1	45.0	
25-Oct-11	13:50	54.1	57.7	45.9	
25-Oct-11	13:55	56.9	60.9	46.6	
25-Oct-11	14:00	56.3	58.9	49.1	57.8
25-Oct-11	14:05	56.9	61.2	46.9	
25-Oct-11	14:10	55.4	58.8	44.9	
25-Oct-11	14:15	62.5	66.7	51.6	
25-Oct-11	14:20	55.3	58.7	46.4	
25-Oct-11	14:25	52.9	50.2	44.5	
25-Oct-11	14:30	48.7	51.4	45.0	52.8
25-Oct-11	14:35	51.6	55.3	44.1	
25-Oct-11	14:40	53.1	56.0	42.7	
25-Oct-11	14:45	52.4	56.3	45.1	
25-Oct-11	14:50	51.8	54.2	41.2	
25-Oct-11	14:55	56.1	60.3	45.0	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
25-Oct-11	15:00	58.2	58.6	44.4	57.7
25-Oct-11	15:05	55.9	59.4	42.2	
25-Oct-11	15:10	59.7	64.1	42.8	
25-Oct-11	15:15	57.3	61.9	40.6	
25-Oct-11	15:20	57.9	62.7	43.7	
25-Oct-11	15:25	56.3	61.3	43.4	
25-Oct-11	15:30	60.6	65.0	42.5	56.5
25-Oct-11	15:35	56.1	60.1	43.6	
25-Oct-11	15:40	54.5	57.8	47.0	
25-Oct-11	15:45	53.8	57.8	43.9	
25-Oct-11	15:50	54.1	60.7	49.5	
25-Oct-11	15:55	55.1	57.6	49.0	
25-Oct-11	16:00	54.3	55.8	49.3	55.3
25-Oct-11	16:05	53.9	56.4	49.0	
25-Oct-11	16:10	55.5	58.5	49.7	
25-Oct-11	16:15	56.4	59.6	49.3	
25-Oct-11	16:20	55.8	58.5	50.8	
25-Oct-11	16:25	55.5	58.5	51.0	
25-Oct-11	16:30	64.2	67.6	50.6	59.7
25-Oct-11	16:35	60.6	56.9	50.2	
25-Oct-11	16:40	56.8	59.0	49.9	
25-Oct-11	16:45	55.8	58.5	50.3	
25-Oct-11	16:50	55.5	58.3	50.0	
25-Oct-11	16:55	57.4	60.1	52.4	
25-Oct-11	17:00	55.5	58.5	50.3	53.7
25-Oct-11	17:05	54.8	57.6	49.4	
25-Oct-11	17:10	53.1	57.4	49.5	
25-Oct-11	17:15	52.5	56.7	49.1	
25-Oct-11	17:20	51.5	55.9	47.6	
25-Oct-11	17:25	53.4	54.5	47.9	
25-Oct-11	17:30	52.7	54.1	46.2	52.9
25-Oct-11	17:35	54.6	55.6	47.9	
25-Oct-11	17:40	50.8	53.1	45.2	
25-Oct-11	17:45	53.7	54.9	44.9	
25-Oct-11	17:50	53.9	55.2	44.1	
25-Oct-11	17:55	49.2	51.6	44.1	
25-Oct-11	18:00	55.4	59.7	42.6	57.2
25-Oct-11	18:05	53.0	57.0	44.4	
25-Oct-11	18:10	54.0	58.2	43.3	
25-Oct-11	18:15	47.1	49.1	44.3	
25-Oct-11	18:20	57.3	61.4	46.1	
25-Oct-11	18:25	62.4	66.8	48.3	
25-Oct-11	18:30	55.9	58.2	46.5	58.2
25-Oct-11	18:35	56.0	59.5	46.8	
25-Oct-11	18:40	58.9	63.2	46.0	
25-Oct-11	18:45	56.3	59.6	44.7	
25-Oct-11	18:50	59.6	63.9	48.6	
25-Oct-11	18:55	60.4	64.4	47.7	
	Mean	55.1	57.9	46.2	55.9
	Maximum	64.2	69.2	52.4	59.7
	Minimum	46.6	48.3	40.6	52.7

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
26-Oct-11	07:00	54.6	55.0	47.8	53.1
26-Oct-11	07:05	51.7	52.4	47.2	
26-Oct-11	07:10	54.0	56.4	47.9	
26-Oct-11	07:15	50.9	53.7	47.3	
26-Oct-11	07:20	51.3	54.6	46.1	
26-Oct-11	07:25	54.5	55.9	49.0	
26-Oct-11	07:30	59.4	60.2	50.6	55.5
26-Oct-11	07:35	53.7	55.6	48.1	
26-Oct-11	07:40	57.3	58.8	50.3	
26-Oct-11	07:45	51.5	53.3	47.7	
26-Oct-11	07:50	52.7	55.3	44.2	
26-Oct-11	07:55	52.6	54.4	45.3	
26-Oct-11	08:00	56.6	59.1	47.2	57.5
26-Oct-11	08:05	56.7	60.5	47.6	
26-Oct-11	08:10	54.0	57.4	46.7	
26-Oct-11	08:15	49.6	51.9	44.3	
26-Oct-11	08:20	62.6	66.8	47.0	
26-Oct-11	08:25	54.9	58.1	44.3	
26-Oct-11	08:30	52.3	55.6	42.3	55.3
26-Oct-11	08:35	53.5	56.0	44.7	
26-Oct-11	08:40	60.4	63.7	47.5	
26-Oct-11	08:45	48.2	51.4	42.6	
26-Oct-11	08:50	51.1	53.2	42.1	
26-Oct-11	08:55	55.3	58.5	44.3	
26-Oct-11	09:00	55.3	57.4	43.6	53.5
26-Oct-11	09:05	56.2	60.3	41.1	
26-Oct-11	09:10	50.0	52.8	41.5	
26-Oct-11	09:15	49.7	50.7	40.2	
26-Oct-11	09:20	50.5	51.1	41.8	
26-Oct-11	09:25	54.3	56.6	42.1	
26-Oct-11	09:30	51.9	51.0	44.5	56.7
26-Oct-11	09:35	60.9	65.6	48.3	
26-Oct-11	09:40	53.2	56.2	45.5	
26-Oct-11	09:45	57.0	60.5	48.5	
26-Oct-11	09:50	56.7	60.3	47.6	
26-Oct-11	09:55	54.0	55.0	46.1	
26-Oct-11	10:00	56.1	59.7	45.8	60.6
26-Oct-11	10:05	60.0	63.5	50.2	
26-Oct-11	10:10	62.0	64.1	48.2	
26-Oct-11	10:15	61.0	65.1	49.7	
26-Oct-11	10:20	61.1	64.7	49.9	
26-Oct-11	10:25	61.4	64.8	53.9	
26-Oct-11	10:30	59.7	63.8	49.7	58.3
26-Oct-11	10:35	54.0	57.5	43.4	
26-Oct-11	10:40	55.9	59.7	43.9	
26-Oct-11	10:45	61.0	65.5	46.0	
26-Oct-11	10:50	55.5	59.5	43.8	
26-Oct-11	10:55	59.5	64.8	43.4	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
26-Oct-11	11:00	55.8	60.4	42.3	54.7
26-Oct-11	11:05	54.1	58.5	43.2	
26-Oct-11	11:10	54.3	58.1	42.0	
26-Oct-11	11:15	56.9	60.3	46.2	
26-Oct-11	11:20	52.4	56.0	46.0	
26-Oct-11	11:25	53.4	54.9	45.4	
26-Oct-11	11:30	56.0	60.8	43.7	55.6
26-Oct-11	11:35	54.2	58.3	43.2	
26-Oct-11	11:40	55.3	59.5	42.6	
26-Oct-11	11:45	55.0	59.5	43.3	
26-Oct-11	11:50	51.5	56.0	43.0	
26-Oct-11	11:55	58.5	63.1	43.8	
26-Oct-11	12:00	52.6	57.0	42.0	55.3
26-Oct-11	12:05	54.4	58.0	44.8	
26-Oct-11	12:10	56.2	60.8	43.5	
26-Oct-11	12:15	58.2	61.8	48.8	
26-Oct-11	12:20	50.7	51.6	40.5	
26-Oct-11	12:25	55.8	60.2	44.0	
26-Oct-11	12:30	47.3	49.6	44.1	55.1
26-Oct-11	12:35	53.7	57.9	43.1	
26-Oct-11	12:40	58.0	61.9	49.1	
26-Oct-11	12:45	56.9	61.5	43.7	
26-Oct-11	12:50	54.7	58.9	45.2	
26-Oct-11	12:55	53.4	57.1	45.6	
26-Oct-11	13:00	54.0	57.6	45.5	56.9
26-Oct-11	13:05	56.0	59.7	44.7	
26-Oct-11	13:10	60.7	65.3	42.9	
26-Oct-11	13:15	55.2	59.7	43.5	
26-Oct-11	13:20	56.4	61.3	42.5	
26-Oct-11	13:25	55.2	58.7	41.4	
26-Oct-11	13:30	56.8	61.5	42.3	56.7
26-Oct-11	13:35	58.0	62.9	43.1	
26-Oct-11	13:40	55.6	60.4	44.2	
26-Oct-11	13:45	56.2	60.5	42.9	
26-Oct-11	13:50	57.3	61.7	43.6	
26-Oct-11	13:55	55.7	60.8	41.7	
26-Oct-11	14:00	56.4	61.9	43.4	56.8
26-Oct-11	14:05	55.9	60.2	44.9	
26-Oct-11	14:10	55.4	61.5	45.8	
26-Oct-11	14:15	57.2	62.6	45.7	
26-Oct-11	14:20	57.3	61.7	45.6	
26-Oct-11	14:25	58.1	62.4	44.2	
26-Oct-11	14:30	56.9	62.8	43.9	56.7
26-Oct-11	14:35	56.4	59.9	44.5	
26-Oct-11	14:40	56.7	60.1	46.7	
26-Oct-11	14:45	55.8	61.2	43.5	
26-Oct-11	14:50	59.3	62.4	45.0	
26-Oct-11	14:55	53.2	56.7	45.8	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
26-Oct-11	15:00	52.5	55.6	46.4	55.8
26-Oct-11	15:05	55.1	58.7	47.6	
26-Oct-11	15:10	55.3	59.9	46.7	
26-Oct-11	15:15	58.7	61.4	46.7	
26-Oct-11	15:20	56.4	60.5	45.2	
26-Oct-11	15:25	54.3	62.2	43.4	
26-Oct-11	15:30	55.1	60.7	42.7	55.2
26-Oct-11	15:35	54.2	58.1	42.9	
26-Oct-11	15:40	56.8	60.5	43.0	
26-Oct-11	15:45	54.6	59.7	43.5	
26-Oct-11	15:50	54.2	58.9	42.0	
26-Oct-11	15:55	55.9	59.3	45.9	
26-Oct-11	16:00	56.4	60.5	44.5	57.3
26-Oct-11	16:05	54.9	59.6	43.8	
26-Oct-11	16:10	55.8	60.8	43.1	
26-Oct-11	16:15	57.1	62.8	46.2	
26-Oct-11	16:20	59.1	61.7	47.1	
26-Oct-11	16:25	58.9	63.1	46.0	
26-Oct-11	16:30	57.9	63.4	46.5	57.7
26-Oct-11	16:35	58.6	63.3	48.9	
26-Oct-11	16:40	57.5	61.5	47.1	
26-Oct-11	16:45	56.9	61.0	44.6	
26-Oct-11	16:50	57.1	61.4	47.5	
26-Oct-11	16:55	58.2	62.0	48.2	
26-Oct-11	17:00	57.2	62.5	47.9	56.6
26-Oct-11	17:05	56.9	61.9	48.7	
26-Oct-11	17:10	56.4	60.4	48.6	
26-Oct-11	17:15	57.2	60.2	47.2	
26-Oct-11	17:20	55.9	61.1	48.1	
26-Oct-11	17:25	55.4	59.7	47.6	
26-Oct-11	17:30	52.0	55.3	46.4	56.0
26-Oct-11	17:35	53.4	62.1	47.5	
26-Oct-11	17:40	55.8	60.7	48.1	
26-Oct-11	17:45	57.3	59.0	48.3	
26-Oct-11	17:50	54.8	60.7	49.0	
26-Oct-11	17:55	59.1	63.9	50.4	
26-Oct-11	18:00	58.9	62.7	49.1	56.5
26-Oct-11	18:05	57.4	60.4	48.7	
26-Oct-11	18:10	54.6	58.3	45.5	
26-Oct-11	18:15	55.3	60.6	44.7	
26-Oct-11	18:20	56.5	60.8	46.2	
26-Oct-11	18:25	54.2	59.6	45.9	
26-Oct-11	18:30	55.4	61.0	45.8	55.7
26-Oct-11	18:35	56.7	61.8	47.7	
26-Oct-11	18:40	58.4	62.0	45.4	
26-Oct-11	18:45	56.2	59.3	46.4	
26-Oct-11	18:50	50.1	54.1	46.3	
26-Oct-11	18:55	53.1	55.8	48.2	
	Mean	55.6	59.4	45.5	56.2
	Maximum	62.6	66.8	53.9	60.6
	Minimum	47.3	49.6	40.2	53.1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
27-Oct-11	07:00	46.3	48.6	41.6	52.6
27-Oct-11	07:05	48.7	46.8	41.4	
27-Oct-11	07:10	53.1	55.4	43.7	
27-Oct-11	07:15	55.2	57.6	44.1	
27-Oct-11	07:20	53.3	51.0	43.3	
27-Oct-11	07:25	53.6	56.4	43.6	
27-Oct-11	07:30	53.2	57.7	44.8	53.9
27-Oct-11	07:35	54.3	53.8	44.2	
27-Oct-11	07:40	53.3	52.9	43.9	
27-Oct-11	07:45	51.5	51.5	44.4	
27-Oct-11	07:50	54.1	54.4	44.1	
27-Oct-11	07:55	55.8	59.9	43.9	
27-Oct-11	08:00	58.0	62.4	44.0	58.9
27-Oct-11	08:05	56.4	60.4	43.2	
27-Oct-11	08:10	56.4	59.7	43.3	
27-Oct-11	08:15	55.0	58.9	44.3	
27-Oct-11	08:20	56.9	60.7	44.3	
27-Oct-11	08:25	63.8	64.8	45.1	
27-Oct-11	08:30	52.6	56.9	43.0	59.8
27-Oct-11	08:35	51.5	55.1	41.9	
27-Oct-11	08:40	66.4	68.7	45.2	
27-Oct-11	08:45	56.6	61.1	44.0	
27-Oct-11	08:50	55.1	60.0	42.1	
27-Oct-11	08:55	53.9	57.5	41.0	
27-Oct-11	09:00	59.2	63.3	45.5	57.1
27-Oct-11	09:05	55.1	59.9	42.9	
27-Oct-11	09:10	54.6	58.8	44.3	
27-Oct-11	09:15	56.4	60.9	44.0	
27-Oct-11	09:20	57.7	61.9	43.5	
27-Oct-11	09:25	57.7	61.8	44.7	
27-Oct-11	09:30	53.2	57.8	42.1	56.6
27-Oct-11	09:35	57.6	62.2	41.3	
27-Oct-11	09:40	56.8	61.1	43.6	
27-Oct-11	09:45	56.1	59.4	43.6	
27-Oct-11	09:50	58.3	62.8	44.1	
27-Oct-11	09:55	56.0	60.2	44.3	
27-Oct-11	10:00	55.8	59.8	44.3	59.6
27-Oct-11	10:05	58.5	62.6	44.0	
27-Oct-11	10:10	63.2	67.3	46.7	
27-Oct-11	10:15	56.6	60.3	42.9	
27-Oct-11	10:20	59.0	63.5	44.4	
27-Oct-11	10:25	60.2	64.5	47.7	
27-Oct-11	10:30	60.1	64.6	44.6	57.8
27-Oct-11	10:35	59.8	63.6	44.4	
27-Oct-11	10:40	55.0	58.6	45.1	
27-Oct-11	10:45	59.2	63.0	45.6	
27-Oct-11	10:50	54.9	58.3	44.5	
27-Oct-11	10:55	52.2	56.7	42.9	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
27-Oct-11	11:00	55.6	59.9	41.8	56.7
27-Oct-11	11:05	54.5	59.2	43.6	
27-Oct-11	11:10	50.7	54.7	43.2	
27-Oct-11	11:15	50.5	54.2	43.8	
27-Oct-11	11:20	60.9	64.5	43.2	
27-Oct-11	11:25	58.4	62.8	44.8	
27-Oct-11	11:30	57.6	62.0	45.3	56.4
27-Oct-11	11:35	53.8	58.3	42.7	
27-Oct-11	11:40	55.3	59.6	42.1	
27-Oct-11	11:45	59.3	63.4	44.2	
27-Oct-11	11:50	54.7	58.1	43.7	
27-Oct-11	11:55	55.4	59.1	45.9	
27-Oct-11	12:00	52.4	56.7	43.1	56.9
27-Oct-11	12:05	58.7	60.9	41.9	
27-Oct-11	12:10	51.0	55.5	42.3	
27-Oct-11	12:15	59.9	65.0	41.1	
27-Oct-11	12:20	59.0	62.8	42.5	
27-Oct-11	12:25	50.9	54.7	41.3	
27-Oct-11	12:30	56.4	60.3	43.7	56.9
27-Oct-11	12:35	56.7	61.2	43.1	
27-Oct-11	12:40	60.0	63.3	40.9	
27-Oct-11	12:45	46.3	49.3	40.1	
27-Oct-11	12:50	54.1	58.7	40.4	
27-Oct-11	12:55	58.7	63.3	41.9	
27-Oct-11	13:00	57.3	61.8	43.2	64.0
27-Oct-11	13:05	58.8	61.9	42.4	
27-Oct-11	13:10	50.6	50.1	39.1	
27-Oct-11	13:15	70.9	72.4	48.0	
27-Oct-11	13:20	59.6	64.4	42.6	
27-Oct-11	13:25	54.7	59.0	40.5	
27-Oct-11	13:30	58.2	62.5	43.3	57.8
27-Oct-11	13:35	60.0	65.2	43.4	
27-Oct-11	13:40	55.8	59.5	45.5	
27-Oct-11	13:45	56.6	60.9	43.2	
27-Oct-11	13:50	58.1	62.2	45.9	
27-Oct-11	13:55	56.8	60.9	42.7	
27-Oct-11	14:00	57.7	62.1	45.7	57.4
27-Oct-11	14:05	55.1	59.4	44.5	
27-Oct-11	14:10	56.8	60.7	46.0	
27-Oct-11	14:15	58.1	62.9	44.0	
27-Oct-11	14:20	57.0	61.0	44.7	
27-Oct-11	14:25	59.0	64.0	43.7	
27-Oct-11	14:30	58.2	63.1	43.2	58.9
27-Oct-11	14:35	56.0	60.4	42.5	
27-Oct-11	14:40	55.1	59.4	43.0	
27-Oct-11	14:45	64.4	69.7	41.8	
27-Oct-11	14:50	55.5	59.6	44.9	
27-Oct-11	14:55	52.4	55.8	45.1	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
27-Oct-11	15:00	50.7	53.7	43.8	56.7
27-Oct-11	15:05	55.7	59.7	47.0	
27-Oct-11	15:10	56.5	60.6	45.6	
27-Oct-11	15:15	60.2	64.6	45.8	
27-Oct-11	15:20	55.5	59.7	44.3	
27-Oct-11	15:25	56.9	61.6	42.0	
27-Oct-11	15:30	54.8	58.3	42.5	56.6
27-Oct-11	15:35	53.0	57.8	42.0	
27-Oct-11	15:40	59.0	62.1	43.1	
27-Oct-11	15:45	53.4	57.3	42.9	
27-Oct-11	15:50	53.9	57.9	41.9	
27-Oct-11	15:55	60.0	64.3	45.7	
27-Oct-11	16:00	56.7	60.6	43.9	58.9
27-Oct-11	16:05	54.3	58.7	43.4	
27-Oct-11	16:10	56.7	61.0	42.6	
27-Oct-11	16:15	58.6	63.5	46.0	
27-Oct-11	16:20	61.3	62.7	46.9	
27-Oct-11	16:25	61.5	65.2	46.3	
27-Oct-11	16:30	60.8	62.7	46.4	58.4
27-Oct-11	16:35	59.7	64.4	45.7	
27-Oct-11	16:40	56.6	60.9	46.5	
27-Oct-11	16:45	57.0	61.1	45.0	
27-Oct-11	16:50	56.6	60.6	46.7	
27-Oct-11	16:55	57.8	60.9	48.7	
27-Oct-11	17:00	58.3	62.7	48.6	56.6
27-Oct-11	17:05	57.7	61.7	49.5	
27-Oct-11	17:10	54.5	57.6	49.0	
27-Oct-11	17:15	56.4	60.7	48.9	
27-Oct-11	17:20	55.7	59.8	47.7	
27-Oct-11	17:25	56.1	60.1	47.0	
27-Oct-11	17:30	48.8	50.8	45.6	58.5
27-Oct-11	17:35	60.4	64.5	49.5	
27-Oct-11	17:40	58.4	62.5	48.9	
27-Oct-11	17:45	57.3	58.2	49.4	
27-Oct-11	17:50	57.3	60.4	49.5	
27-Oct-11	17:55	61.1	65.0	49.9	
27-Oct-11	18:00	57.5	60.7	48.4	56.5
27-Oct-11	18:05	56.7	61.2	46.5	
27-Oct-11	18:10	52.3	56.5	45.4	
27-Oct-11	18:15	59.5	62.5	45.4	
27-Oct-11	18:20	55.5	60.4	45.7	
27-Oct-11	18:25	53.2	57.4	47.3	
27-Oct-11	18:30	56.6	60.4	47.2	56.4
27-Oct-11	18:35	58.4	61.7	47.2	
27-Oct-11	18:40	59.4	63.0	45.6	
27-Oct-11	18:45	55.4	59.3	45.3	
27-Oct-11	18:50	49.8	53.2	45.3	
27-Oct-11	18:55	52.4	56.2	45.4	
	Mean	56.4	60.1	44.4	57.5
	Maximum	70.9	72.4	49.9	64.0
	Minimum	46.3	46.8	39.1	52.6

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
28-Oct-11	07:00	54.6	56.8	48.5	57.2
28-Oct-11	07:05	58.6	62.3	51.3	
28-Oct-11	07:10	56.2	57.8	49.6	
28-Oct-11	07:15	54.9	57.9	48.5	
28-Oct-11	07:20	58.9	63.7	48.5	
28-Oct-11	07:25	58.1	62.1	47.1	
28-Oct-11	07:30	56.1	59.8	46.7	56.7
28-Oct-11	07:35	54.5	53.8	48.0	
28-Oct-11	07:40	55.6	58.9	49.0	
28-Oct-11	07:45	57.1	60.9	48.9	
28-Oct-11	07:50	58.4	62.5	49.4	
28-Oct-11	07:55	57.4	60.4	48.9	
28-Oct-11	08:00	60.5	64.8	51.4	59.2
28-Oct-11	08:05	55.1	58.7	49.4	
28-Oct-11	08:10	56.5	59.9	49.3	
28-Oct-11	08:15	57.5	61.2	51.3	
28-Oct-11	08:20	57.0	60.3	50.2	
28-Oct-11	08:25	63.1	62.1	48.9	
28-Oct-11	08:30	58.3	62.9	49.1	60.6
28-Oct-11	08:35	55.6	58.9	49.0	
28-Oct-11	08:40	66.1	68.6	49.3	
28-Oct-11	08:45	58.0	61.5	49.6	
28-Oct-11	08:50	56.8	60.8	49.1	
28-Oct-11	08:55	58.2	62.1	49.0	
28-Oct-11	09:00	54.4	57.7	48.1	58.2
28-Oct-11	09:05	59.2	62.7	50.3	
28-Oct-11	09:10	57.8	61.5	50.1	
28-Oct-11	09:15	60.0	63.9	50.4	
28-Oct-11	09:20	58.4	62.1	49.7	
28-Oct-11	09:25	57.2	60.8	50.7	
28-Oct-11	09:30	57.7	61.4	48.4	56.6
28-Oct-11	09:35	58.9	63.0	47.9	
28-Oct-11	09:40	55.4	59.3	48.3	
28-Oct-11	09:45	54.5	58.3	45.2	
28-Oct-11	09:50	55.0	57.0	45.8	
28-Oct-11	09:55	56.5	59.6	50.3	
28-Oct-11	10:00	58.9	63.1	49.9	57.7
28-Oct-11	10:05	57.5	61.5	49.2	
28-Oct-11	10:10	56.9	59.9	50.6	
28-Oct-11	10:15	59.0	62.4	50.9	
28-Oct-11	10:20	56.0	59.0	48.9	
28-Oct-11	10:25	57.2	60.9	49.7	
28-Oct-11	10:30	54.2	56.8	48.0	57.7
28-Oct-11	10:35	55.0	58.0	47.9	
28-Oct-11	10:40	57.2	60.7	49.0	
28-Oct-11	10:45	56.9	61.5	47.0	
28-Oct-11	10:50	60.8	65.3	45.6	
28-Oct-11	10:55	58.6	62.8	42.0	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
28-Oct-11	11:00	57.9	62.1	45.5	58.9
28-Oct-11	11:05	53.6	57.5	44.7	
28-Oct-11	11:10	51.0	52.5	44.9	
28-Oct-11	11:15	62.7	64.5	49.9	
28-Oct-11	11:20	60.5	63.1	47.8	
28-Oct-11	11:25	58.5	62.3	49.7	
28-Oct-11	11:30	53.9	57.2	48.0	52.8
28-Oct-11	11:35	53.4	54.3	48.5	
28-Oct-11	11:40	53.1	54.6	49.2	
28-Oct-11	11:45	52.9	53.9	48.9	
28-Oct-11	11:50	52.4	54.6	47.5	
28-Oct-11	11:55	50.3	51.4	46.4	
28-Oct-11	12:00	50.9	53.1	46.1	52.4
28-Oct-11	12:05	52.2	51.4	46.7	
28-Oct-11	12:10	53.7	53.6	46.2	
28-Oct-11	12:15	54.5	54.0	46.5	
28-Oct-11	12:20	51.1	52.1	46.2	
28-Oct-11	12:25	50.0	51.9	47.0	
28-Oct-11	12:30	55.4	56.9	46.7	60.9
28-Oct-11	12:35	68.0	71.7	48.0	
28-Oct-11	12:40	50.2	52.1	46.6	
28-Oct-11	12:45	50.3	52.1	47.1	
28-Oct-11	12:50	55.6	54.6	48.6	
28-Oct-11	12:55	51.5	53.8	47.6	
28-Oct-11	13:00	51.5	53.9	48.2	52.3
28-Oct-11	13:05	52.2	55.0	46.3	
28-Oct-11	13:10	51.4	53.7	48.1	
28-Oct-11	13:15	51.4	53.0	48.0	
28-Oct-11	13:20	54.4	55.9	49.4	
28-Oct-11	13:25	52.2	54.8	47.7	
28-Oct-11	13:30	52.2	54.7	49.0	52.8
28-Oct-11	13:35	51.1	53.6	48.1	
28-Oct-11	13:40	52.6	54.8	49.2	
28-Oct-11	13:45	51.4	53.7	48.5	
28-Oct-11	13:50	52.2	54.4	48.5	
28-Oct-11	13:55	55.7	58.5	49.3	
28-Oct-11	14:00	52.7	55.2	49.3	52.6
28-Oct-11	14:05	51.7	53.7	48.4	
28-Oct-11	14:10	51.9	54.1	47.6	
28-Oct-11	14:15	53.2	54.5	49.0	
28-Oct-11	14:20	52.9	54.8	50.1	
28-Oct-11	14:25	53.1	55.1	49.9	
28-Oct-11	14:30	51.7	53.6	47.8	52.4
28-Oct-11	14:35	51.1	52.8	49.1	
28-Oct-11	14:40	52.0	53.9	49.1	
28-Oct-11	14:45	51.5	53.6	48.6	
28-Oct-11	14:50	52.1	54.4	47.9	
28-Oct-11	14:55	54.8	57.3	48.8	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
28-Oct-11	15:00	50.8	52.7	48.2	53.2
28-Oct-11	15:05	58.0	61.8	49.0	
28-Oct-11	15:10	52.1	54.0	48.5	
28-Oct-11	15:15	50.4	52.4	47.8	
28-Oct-11	15:20	50.0	51.9	46.4	
28-Oct-11	15:25	51.4	52.6	47.9	
28-Oct-11	15:30	51.0	52.9	47.4	55.7
28-Oct-11	15:35	56.7	60.4	48.4	
28-Oct-11	15:40	55.7	57.9	49.4	
28-Oct-11	15:45	53.6	54.2	49.0	
28-Oct-11	15:50	57.1	61.9	49.4	
28-Oct-11	15:55	57.0	59.5	50.4	
28-Oct-11	16:00	56.0	59.8	50.4	57.6
28-Oct-11	16:05	54.5	57.6	49.3	
28-Oct-11	16:10	55.6	58.4	50.0	
28-Oct-11	16:15	58.5	62.2	51.5	
28-Oct-11	16:20	59.1	63.3	50.3	
28-Oct-11	16:25	59.4	63.2	51.3	
28-Oct-11	16:30	56.0	59.1	50.6	57.0
28-Oct-11	16:35	55.4	58.7	50.3	
28-Oct-11	16:40	57.8	61.7	51.5	
28-Oct-11	16:45	58.5	62.0	52.2	
28-Oct-11	16:50	57.3	60.9	51.3	
28-Oct-11	16:55	55.9	59.4	50.9	
28-Oct-11	17:00	58.3	62.1	52.0	57.5
28-Oct-11	17:05	59.1	62.6	51.2	
28-Oct-11	17:10	56.2	58.8	51.0	
28-Oct-11	17:15	56.7	60.0	51.3	
28-Oct-11	17:20	58.0	61.2	50.4	
28-Oct-11	17:25	56.0	59.9	49.3	
28-Oct-11	17:30	52.3	55.1	47.5	56.1
28-Oct-11	17:35	57.5	61.4	47.2	
28-Oct-11	17:40	53.9	58.4	47.4	
28-Oct-11	17:45	55.0	58.5	49.6	
28-Oct-11	17:50	58.4	61.4	50.1	
28-Oct-11	17:55	56.5	60.1	50.4	
28-Oct-11	18:00	58.4	61.3	51.7	56.9
28-Oct-11	18:05	55.0	57.6	50.7	
28-Oct-11	18:10	54.9	57.9	50.8	
28-Oct-11	18:15	57.6	60.5	50.4	
28-Oct-11	18:20	57.1	59.6	50.3	
28-Oct-11	18:25	57.2	60.7	50.5	
28-Oct-11	18:30	55.8	58.9	50.7	55.9
28-Oct-11	18:35	54.0	56.8	50.1	
28-Oct-11	18:40	56.0	57.4	49.2	
28-Oct-11	18:45	56.2	58.9	51.2	
28-Oct-11	18:50	56.1	59.3	51.0	
28-Oct-11	18:55	56.6	60.3	50.3	
	Mean	55.5	58.3	48.9	56.2
	Maximum	68.0	71.7	52.2	60.9
	Minimum	50.0	51.4	42.0	52.3

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
29-Oct-11	07:00	51.5	53.8	47.2	56.3
29-Oct-11	07:05	56.6	59.6	47.9	
29-Oct-11	07:10	56.6	58.7	51.3	
29-Oct-11	07:15	53.0	55.7	49.3	
29-Oct-11	07:20	54.6	56.1	48.2	
29-Oct-11	07:25	60.0	55.7	47.0	
29-Oct-11	07:30	54.7	57.7	46.5	54.7
29-Oct-11	07:35	48.5	49.6	44.0	
29-Oct-11	07:40	53.8	54.7	45.8	
29-Oct-11	07:45	54.9	58.5	46.3	
29-Oct-11	07:50	52.3	52.4	45.2	
29-Oct-11	07:55	58.4	60.8	46.3	
29-Oct-11	08:00	54.9	57.9	47.5	56.7
29-Oct-11	08:05	57.0	61.5	46.8	
29-Oct-11	08:10	56.2	60.4	45.5	
29-Oct-11	08:15	54.9	57.9	45.4	
29-Oct-11	08:20	57.1	60.5	47.6	
29-Oct-11	08:25	58.7	63.1	47.2	
29-Oct-11	08:30	57.5	60.8	49.4	56.1
29-Oct-11	08:35	54.6	58.0	47.0	
29-Oct-11	08:40	54.8	57.1	46.0	
29-Oct-11	08:45	55.1	58.6	47.0	
29-Oct-11	08:50	56.7	60.1	48.2	
29-Oct-11	08:55	56.8	60.8	47.5	
29-Oct-11	09:00	58.6	62.8	49.3	58.4
29-Oct-11	09:05	59.5	63.2	50.5	
29-Oct-11	09:10	59.2	63.4	50.4	
29-Oct-11	09:15	57.9	61.7	50.3	
29-Oct-11	09:20	57.5	60.8	50.0	
29-Oct-11	09:25	57.3	60.6	49.5	
29-Oct-11	09:30	59.1	62.5	50.9	59.6
29-Oct-11	09:35	59.2	62.8	50.8	
29-Oct-11	09:40	57.5	61.3	50.2	
29-Oct-11	09:45	61.7	66.3	49.7	
29-Oct-11	09:50	58.2	61.7	49.7	
29-Oct-11	09:55	60.4	63.7	50.5	
29-Oct-11	10:00	57.0	60.4	49.2	56.9
29-Oct-11	10:05	53.1	53.9	47.3	
29-Oct-11	10:10	55.2	58.9	47.6	
29-Oct-11	10:15	59.1	63.2	48.1	
29-Oct-11	10:20	56.6	60.4	49.2	
29-Oct-11	10:25	58.2	61.9	50.0	
29-Oct-11	10:30	57.9	62.1	48.9	58.0
29-Oct-11	10:35	59.8	63.9	49.3	
29-Oct-11	10:40	59.7	63.6	51.2	
29-Oct-11	10:45	59.1	63.2	48.5	
29-Oct-11	10:50	53.4	55.6	48.0	
29-Oct-11	10:55	54.6	57.8	48.7	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
29-Oct-11	11:00	56.4	60.0	47.9	56.8
29-Oct-11	11:05	55.7	58.8	48.6	
29-Oct-11	11:10	55.3	58.6	46.2	
29-Oct-11	11:15	57.4	61.0	48.3	
29-Oct-11	11:20	55.4	58.8	48.4	
29-Oct-11	11:25	59.3	63.7	47.9	
29-Oct-11	11:30	57.1	61.4	47.8	57.5
29-Oct-11	11:35	56.2	60.2	48.0	
29-Oct-11	11:40	55.1	58.9	48.5	
29-Oct-11	11:45	59.4	64.2	48.2	
29-Oct-11	11:50	58.9	63.7	48.2	
29-Oct-11	11:55	57.0	60.7	48.6	
29-Oct-11	12:00	59.2	62.2	51.4	58.4
29-Oct-11	12:05	62.0	65.3	48.3	
29-Oct-11	12:10	59.2	63.1	48.8	
29-Oct-11	12:15	54.8	57.8	48.7	
29-Oct-11	12:20	53.6	57.2	47.4	
29-Oct-11	12:25	55.6	58.5	49.3	
29-Oct-11	12:30	52.9	54.4	48.7	57.5
29-Oct-11	12:35	55.4	58.9	48.3	
29-Oct-11	12:40	57.0	60.6	50.6	
29-Oct-11	12:45	61.8	66.0	51.0	
29-Oct-11	12:50	55.7	58.2	50.9	
29-Oct-11	12:55	56.4	59.9	49.7	
29-Oct-11	13:00	57.9	61.7	51.0	59.3
29-Oct-11	13:05	57.9	61.9	51.1	
29-Oct-11	13:10	56.9	59.9	51.8	
29-Oct-11	13:15	55.6	59.3	49.4	
29-Oct-11	13:20	52.0	53.7	49.0	
29-Oct-11	13:25	64.6	65.3	51.4	
29-Oct-11	13:30	55.8	58.8	51.0	56.5
29-Oct-11	13:35	58.7	62.0	51.1	
29-Oct-11	13:40	57.4	60.6	51.3	
29-Oct-11	13:45	54.8	57.5	50.1	
29-Oct-11	13:50	53.6	55.8	49.2	
29-Oct-11	13:55	56.6	59.8	50.4	
29-Oct-11	14:00	61.4	64.5	51.0	57.3
29-Oct-11	14:05	53.3	55.5	49.6	
29-Oct-11	14:10	56.8	60.2	51.4	
29-Oct-11	14:15	55.0	58.2	50.2	
29-Oct-11	14:20	54.9	57.3	51.5	
29-Oct-11	14:25	57.0	60.3	52.0	
29-Oct-11	14:30	58.9	62.1	52.4	59.6
29-Oct-11	14:35	60.9	65.8	51.7	
29-Oct-11	14:40	55.8	58.5	52.2	
29-Oct-11	14:45	62.2	64.3	54.1	
29-Oct-11	14:50	59.1	62.5	51.7	
29-Oct-11	14:55	57.7	61.3	52.0	
29-Oct-11	15:00	57.3	60.9	50.2	58.5
29-Oct-11	15:05	57.6	60.7	52.8	
29-Oct-11	15:10	58.5	61.5	53.0	
29-Oct-11	15:15	57.9	60.8	52.4	
29-Oct-11	15:20	60.6	63.6	52.4	
29-Oct-11	15:25	58.3	61.6	52.7	
29-Oct-11	15:30	59.7	62.9	52.7	58.9
29-Oct-11	15:35	59.2	62.4	53.1	
29-Oct-11	15:40	59.8	62.9	52.3	
29-Oct-11	15:45	59.1	62.8	52.1	
29-Oct-11	15:50	57.7	60.7	52.2	
29-Oct-11	15:55	56.9	59.6	51.0	
29-Oct-11	16:00	57.9	61.3	52.4	59.8
29-Oct-11	16:05	59.3	62.1	53.4	
29-Oct-11	16:10	62.9	63.8	52.1	
29-Oct-11	16:15	57.9	60.6	53.2	
29-Oct-11	16:20	59.4	62.4	53.9	
29-Oct-11	16:25	59.1	62.3	53.3	
29-Oct-11	16:30	58.2	61.2	53.5	58.7
29-Oct-11	16:35	56.6	58.8	53.1	
29-Oct-11	16:40	59.4	62.0	53.2	
29-Oct-11	16:45	60.4	64.2	53.2	
29-Oct-11	16:50	59.1	61.9	54.3	
29-Oct-11	16:55	57.5	60.6	53.0	
29-Oct-11	17:00	57.2	60.2	52.1	58.2
29-Oct-11	17:05	58.2	61.1	53.3	
29-Oct-11	17:10	58.7	61.8	53.4	
29-Oct-11	17:15	58.3	61.2	52.6	
29-Oct-11	17:20	59.3	62.7	53.1	
29-Oct-11	17:25	57.3	59.6	52.4	
29-Oct-11	17:30	58.0	61.5	52.5	56.7
29-Oct-11	17:35	57.5	60.6	53.1	
29-Oct-11	17:40	56.0	58.7	52.2	
29-Oct-11	17:45	55.1	57.4	52.0	
29-Oct-11	17:50	55.2	57.8	50.7	
29-Oct-11	17:55	57.5	60.8	50.7	
29-Oct-11	18:00	58.4	61.4	51.7	57.3
29-Oct-11	18:05	54.9	57.4	50.4	
29-Oct-11	18:10	59.0	62.2	51.7	
29-Oct-11	18:15	57.5	59.3	52.5	
29-Oct-11	18:20	57.3	60.4	51.8	
29-Oct-11	18:25	55.6	58.8	51.1	
29-Oct-11	18:30	57.4	60.8	51.1	55.9
29-Oct-11	18:35	53.0	55.2	49.7	
29-Oct-11	18:40	54.4	56.7	50.9	
29-Oct-11	18:45	54.2	56.3	48.9	
29-Oct-11	18:50	58.7	62.3	51.1	
29-Oct-11	18:55	54.9	58.2	50.2	
	Mean	57.2	60.3	50.1	57.7
	Maximum	64.6	66.3	54.3	59.8
	Minimum	48.5	49.6	44.0	54.7

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
31-Oct-11	07:00	53.4	56.7	44.7	57.3
31-Oct-11	07:05	55.1	58.8	44.5	
31-Oct-11	07:10	55.8	59.4	46.2	
31-Oct-11	07:15	61.5	64.4	46.3	
31-Oct-11	07:20	55.7	58.7	43.7	
31-Oct-11	07:25	56.9	59.6	43.5	
31-Oct-11	07:30	53.4	55.8	44.0	57.6
31-Oct-11	07:35	60.3	61.9	44.1	
31-Oct-11	07:40	59.7	62.1	45.2	
31-Oct-11	07:45	58.4	61.5	45.8	
31-Oct-11	07:50	53.6	57.8	44.1	
31-Oct-11	07:55	54.8	58.7	45.3	
31-Oct-11	08:00	55.3	57.7	44.9	57.2
31-Oct-11	08:05	52.5	57.2	44.8	
31-Oct-11	08:10	56.9	59.3	45.7	
31-Oct-11	08:15	54.2	61.5	46.1	
31-Oct-11	08:20	59.5	62.6	48.4	
31-Oct-11	08:25	60.0	62.7	47.5	
31-Oct-11	08:30	62.6	64.0	48.9	60.5
31-Oct-11	08:35	60.3	63.1	48.7	
31-Oct-11	08:40	60.5	62.5	50.2	
31-Oct-11	08:45	58.2	63.1	47.8	
31-Oct-11	08:50	59.7	62.6	49.2	
31-Oct-11	08:55	60.5	63.8	48.1	
31-Oct-11	09:00	61.3	62.9	46.9	60.5
31-Oct-11	09:05	62.2	63.7	48.7	
31-Oct-11	09:10	60.1	63.2	48.9	
31-Oct-11	09:15	59.8	64.5	47.6	
31-Oct-11	09:20	59.5	65.4	48.9	
31-Oct-11	09:25	59.4	62.4	50.2	
31-Oct-11	09:30	58.3	61.8	50.7	57.8
31-Oct-11	09:35	58.6	62.3	51.4	
31-Oct-11	09:40	57.9	62.9	49.2	
31-Oct-11	09:45	57.5	63.0	48.7	
31-Oct-11	09:50	56.4	60.6	46.5	
31-Oct-11	09:55	57.8	60.9	48.9	
31-Oct-11	10:00	56.1	59.7	47.5	56.5
31-Oct-11	10:05	55.9	60.0	46.8	
31-Oct-11	10:10	56.3	59.2	47.9	
31-Oct-11	10:15	57.2	60.3	48.2	
31-Oct-11	10:20	58.1	60.7	47.9	
31-Oct-11	10:25	54.3	58.8	47.2	
31-Oct-11	10:30	59.1	62.4	48.4	57.0
31-Oct-11	10:35	58.7	51.5	47.6	
31-Oct-11	10:40	54.6	56.7	48.2	
31-Oct-11	10:45	56.9	61.6	49.1	
31-Oct-11	10:50	57.2	61.9	48.5	
31-Oct-11	10:55	52.5	62.3	47.9	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
31-Oct-11	11:00	55.8	63.5	47.5	57.0
31-Oct-11	11:05	55.7	59.6	49.2	
31-Oct-11	11:10	50.7	54.2	47.5	
31-Oct-11	11:15	57.2	60.5	48.1	
31-Oct-11	11:20	59.4	62.3	47.5	
31-Oct-11	11:25	58.6	64.4	47.8	
31-Oct-11	11:30	57.4	60.9	47.5	56.5
31-Oct-11	11:35	55.9	59.3	47.1	
31-Oct-11	11:40	55.4	59.2	48.3	
31-Oct-11	11:45	53.5	57.4	45.9	
31-Oct-11	11:50	59.9	62.4	48.1	
31-Oct-11	11:55	53.2	57.0	47.2	
31-Oct-11	12:00	52.9	55.1	46.8	53.1
31-Oct-11	12:05	51.3	56.2	47.6	
31-Oct-11	12:10	55.5	56.9	47.5	
31-Oct-11	12:15	53.8	54.5	45.3	
31-Oct-11	12:20	51.7	53.6	45.9	
31-Oct-11	12:25	51.5	53.4	46.4	
31-Oct-11	12:30	52.3	54.3	47.7	56.7
31-Oct-11	12:35	54.3	56.8	46.8	
31-Oct-11	12:40	57.9	61.5	47.1	
31-Oct-11	12:45	58.5	60.2	47.2	
31-Oct-11	12:50	56.4	59.4	47.8	
31-Oct-11	12:55	57.6	59.8	46.9	
31-Oct-11	13:00	52.6	55.3	46.5	52.9
31-Oct-11	13:05	52.8	55.7	45.1	
31-Oct-11	13:10	53.4	56.9	45.2	
31-Oct-11	13:15	53.0	56.8	46.5	
31-Oct-11	13:20	51.6	55.7	45.9	
31-Oct-11	13:25	53.5	56.9	47.1	
31-Oct-11	13:30	52.3	54.7	46.4	55.0
31-Oct-11	13:35	57.4	60.5	45.8	
31-Oct-11	13:40	57.5	61.4	46.1	
31-Oct-11	13:45	54.6	59.8	45.7	
31-Oct-11	13:50	52.7	57.5	45.9	
31-Oct-11	13:55	50.8	54.3	45.8	
31-Oct-11	14:00	53.5	56.7	46.1	55.3
31-Oct-11	14:05	52.7	56.8	45.7	
31-Oct-11	14:10	54.6	58.1	46.2	
31-Oct-11	14:15	55.5	59.2	45.4	
31-Oct-11	14:20	57.2	59.4	47.3	
31-Oct-11	14:25	56.5	59.6	46.5	
31-Oct-11	14:30	53.5	57.5	45.9	54.8
31-Oct-11	14:35	54.4	58.5	49.2	
31-Oct-11	14:40	53.8	57.0	47.2	
31-Oct-11	14:45	54.4	58.0	47.1	
31-Oct-11	14:50	57.1	59.4	47.5	
31-Oct-11	14:55	54.5	58.7	48.3	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
31-Oct-11	15:00	58.6	62.7	47.6	57.3
31-Oct-11	15:05	54.2	57.8	46.3	
31-Oct-11	15:10	55.3	59.7	46.5	
31-Oct-11	15:15	53.1	55.3	47.4	
31-Oct-11	15:20	59.6	64.1	47.5	
31-Oct-11	15:25	58.9	62.5	46.9	
31-Oct-11	15:30	59.6	60.9	48.0	56.1
31-Oct-11	15:35	55.7	58.9	46.9	
31-Oct-11	15:40	54.2	56.4	42.4	
31-Oct-11	15:45	54.5	56.7	42.7	
31-Oct-11	15:50	55.5	58.9	41.5	
31-Oct-11	15:55	53.9	55.1	41.4	
31-Oct-11	16:00	54.8	59.1	42.3	56.7
31-Oct-11	16:05	56.2	60.5	41.8	
31-Oct-11	16:10	58.7	62.4	41.6	
31-Oct-11	16:15	56.9	59.3	40.4	
31-Oct-11	16:20	53.7	56.4	40.5	
31-Oct-11	16:25	58.1	61.5	41.7	
31-Oct-11	16:30	57.5	61.3	42.3	55.2
31-Oct-11	16:35	55.2	59.8	42.4	
31-Oct-11	16:40	54.1	56.7	41.5	
31-Oct-11	16:45	56.8	61.8	42.8	
31-Oct-11	16:50	53.7	55.6	41.9	
31-Oct-11	16:55	51.5	56.4	42.3	
31-Oct-11	17:00	50.2	55.1	43.6	51.3
31-Oct-11	17:05	51.6	53.4	44.5	
31-Oct-11	17:10	50.7	52.5	43.9	
31-Oct-11	17:15	51.9	53.4	43.4	
31-Oct-11	17:20	52.4	55.4	43.8	
31-Oct-11	17:25	50.6	56.5	42.7	
31-Oct-11	17:30	52.7	57.9	43.5	55.7
31-Oct-11	17:35	51.1	58.1	43.1	
31-Oct-11	17:40	58.6	53.4	44.9	
31-Oct-11	17:45	54.8	59.5	44.2	
31-Oct-11	17:50	55.6	60.4	43.5	
31-Oct-11	17:55	57.2	61.9	42.9	
31-Oct-11	18:00	55.2	59.6	42.8	55.1
31-Oct-11	18:05	51.0	55.3	43.0	
31-Oct-11	18:10	56.3	60.2	42.0	
31-Oct-11	18:15	58.3	62.1	42.7	
31-Oct-11	18:20	52.0	55.7	42.5	
31-Oct-11	18:25	53.7	58.5	43.1	
31-Oct-11	18:30	56.0	60.0	42.2	57.2
31-Oct-11	18:35	58.1	61.1	41.9	
31-Oct-11	18:40	51.7	54.4	41.6	
31-Oct-11	18:45	57.4	59.4	43.4	
31-Oct-11	18:50	57.3	58.2	41.9	
31-Oct-11	18:55	59.5	64.4	43.2	
	Mean	55.8	59.1	45.8	56.3
	Maximum	62.6	65.4	51.4	60.5
	Minimum	50.2	51.5	40.4	51.3

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
1-Nov-11	07:00	57.0	61.2	45.3	56.7
1-Nov-11	07:05	54.3	57.0	45.4	
1-Nov-11	07:10	57.0	60.3	47.1	
1-Nov-11	07:15	60.4	63.2	48.1	
1-Nov-11	07:20	52.4	55.7	44.2	
1-Nov-11	07:25	54.3	57.6	43.3	
1-Nov-11	07:30	52.8	51.7	43.1	55.1
1-Nov-11	07:35	58.7	60.9	44.4	
1-Nov-11	07:40	54.1	57.8	43.8	
1-Nov-11	07:45	54.1	56.1	44.6	
1-Nov-11	07:50	50.2	52.0	43.9	
1-Nov-11	07:55	55.9	56.2	46.6	
1-Nov-11	08:00	51.3	52.9	44.8	56.9
1-Nov-11	08:05	58.9	63.4	45.6	
1-Nov-11	08:10	57.5	61.4	47.3	
1-Nov-11	08:15	58.8	62.6	50.2	
1-Nov-11	08:20	56.7	60.4	46.4	
1-Nov-11	08:25	53.5	57.2	46.1	
1-Nov-11	08:30	61.5	60.9	45.8	58.7
1-Nov-11	08:35	55.3	58.3	44.4	
1-Nov-11	08:40	56.6	60.1	49.7	
1-Nov-11	08:45	60.1	64.3	49.0	
1-Nov-11	08:50	59.5	63.5	50.3	
1-Nov-11	08:55	55.2	58.6	47.5	
1-Nov-11	09:00	57.3	61.4	47.0	58.4
1-Nov-11	09:05	57.0	60.4	49.6	
1-Nov-11	09:10	57.8	61.6	50.2	
1-Nov-11	09:15	60.0	63.7	50.1	
1-Nov-11	09:20	59.5	63.4	50.2	
1-Nov-11	09:25	58.2	61.8	49.5	
1-Nov-11	09:30	57.2	60.9	49.0	57.6
1-Nov-11	09:35	57.9	61.5	50.7	
1-Nov-11	09:40	59.3	63.1	50.4	
1-Nov-11	09:45	56.3	60.8	47.6	
1-Nov-11	09:50	56.0	58.3	47.9	
1-Nov-11	09:55	58.0	61.7	50.0	
1-Nov-11	10:00	54.6	57.8	48.1	55.4
1-Nov-11	10:05	55.5	59.6	49.0	
1-Nov-11	10:10	55.5	58.5	49.2	
1-Nov-11	10:15	56.2	60.0	47.2	
1-Nov-11	10:20	56.3	60.4	47.3	
1-Nov-11	10:25	53.8	57.3	47.4	
1-Nov-11	10:30	62.9	65.2	47.8	58.1
1-Nov-11	10:35	56.4	60.4	47.3	
1-Nov-11	10:40	51.1	52.6	47.0	
1-Nov-11	10:45	57.9	61.7	47.1	
1-Nov-11	10:50	54.5	58.1	48.5	
1-Nov-11	10:55	56.9	60.9	47.6	

Annex B2

Day-time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
1-Nov-11	11:00	57.2	61.4	46.7	58.0
1-Nov-11	11:05	55.0	57.9	46.2	
1-Nov-11	11:10	48.2	50.2	45.2	
1-Nov-11	11:15	59.1	60.4	47.8	
1-Nov-11	11:20	57.3	61.4	47.5	
1-Nov-11	11:25	61.8	66.1	48.5	
1-Nov-11	11:30	56.2	59.5	48.6	54.6
1-Nov-11	11:35	55.2	58.6	48.9	
1-Nov-11	11:40	55.7	58.1	46.8	
1-Nov-11	11:45	52.2	55.6	46.3	
1-Nov-11	11:50	55.0	59.0	47.6	
1-Nov-11	11:55	50.9	53.9	46.3	
1-Nov-11	12:00	51.4	52.2	46.4	52.7
1-Nov-11	12:05	56.4	59.9	46.5	
1-Nov-11	12:10	50.3	51.7	46.5	
1-Nov-11	12:15	52.2	52.6	47.3	
1-Nov-11	12:20	48.5	50.4	45.3	
1-Nov-11	12:25	52.8	54.1	46.8	
1-Nov-11	12:30	53.5	53.8	46.5	54.7
1-Nov-11	12:35	55.1	57.6	47.2	
1-Nov-11	12:40	58.2	62.3	47.4	
1-Nov-11	12:45	53.7	54.4	45.6	
1-Nov-11	12:50	51.6	53.4	46.3	
1-Nov-11	12:55	52.7	54.8	46.1	
1-Nov-11	13:00	49.3	51.0	45.7	50.1
1-Nov-11	13:05	49.3	51.1	45.8	
1-Nov-11	13:10	50.1	52.4	46.2	
1-Nov-11	13:15	49.0	51.4	45.7	
1-Nov-11	13:20	49.2	51.3	46.1	
1-Nov-11	13:25	52.5	53.6	48.0	
1-Nov-11	13:30	50.1	52.1	47.2	54.6
1-Nov-11	13:35	60.6	64.2	47.9	
1-Nov-11	13:40	50.3	52.4	47.4	
1-Nov-11	13:45	50.4	52.6	47.3	
1-Nov-11	13:50	52.1	53.8	47.2	
1-Nov-11	13:55	50.1	52.5	45.6	
1-Nov-11	14:00	52.9	54.6	47.8	54.7
1-Nov-11	14:05	52.6	51.8	46.0	
1-Nov-11	14:10	55.8	57.9	46.5	
1-Nov-11	14:15	57.6	60.7	46.5	
1-Nov-11	14:20	53.1	53.2	47.3	
1-Nov-11	14:25	53.7	54.8	48.0	
1-Nov-11	14:30	52.7	54.1	48.4	54.9
1-Nov-11	14:35	54.6	57.1	48.3	
1-Nov-11	14:40	54.1	56.7	48.3	
1-Nov-11	14:45	54.7	57.5	49.1	
1-Nov-11	14:50	56.2	59.7	49.1	
1-Nov-11	14:55	56.3	58.3	49.6	

Date	dB(A)				
	Time	L_{eq}	L_{10}	L_{90}	$L_{eq\ (30\text{-}min)}$
1-Nov-11	15:00	59.2	63.8	49.3	57.6
1-Nov-11	15:05	53.6	55.0	47.1	
1-Nov-11	15:10	53.0	54.7	47.7	
1-Nov-11	15:15	52.1	53.1	46.7	
1-Nov-11	15:20	62.0	65.5	49.3	
1-Nov-11	15:25	56.6	60.0	48.0	
1-Nov-11	15:30	56.3	58.9	47.3	54.2
1-Nov-11	15:35	55.1	57.2	46.8	
1-Nov-11	15:40	53.7	54.9	42.0	
1-Nov-11	15:45	53.9	54.8	41.1	
1-Nov-11	15:50	53.0	48.0	39.8	
1-Nov-11	15:55	52.2	49.1	40.4	
1-Nov-11	16:00	54.3	58.4	41.3	56.8
1-Nov-11	16:05	57.3	61.3	40.6	
1-Nov-11	16:10	60.5	63.4	40.6	
1-Nov-11	16:15	54.9	55.7	39.0	
1-Nov-11	16:20	52.4	49.2	40.3	
1-Nov-11	16:25	56.5	60.9	42.0	
1-Nov-11	16:30	56.0	60.4	42.5	57.3
1-Nov-11	16:35	53.4	57.2	41.6	
1-Nov-11	16:40	49.9	49.8	42.5	
1-Nov-11	16:45	63.8	64.0	44.3	
1-Nov-11	16:50	49.9	50.4	41.7	
1-Nov-11	16:55	44.7	46.8	41.5	
1-Nov-11	17:00	46.7	48.2	42.3	55.2
1-Nov-11	17:05	49.9	52.5	43.3	
1-Nov-11	17:10	49.1	50.9	43.4	
1-Nov-11	17:15	49.1	51.8	42.9	
1-Nov-11	17:20	62.0	64.0	43.8	
1-Nov-11	17:25	49.8	52.0	41.8	
1-Nov-11	17:30	55.4	56.5	42.5	54.6
1-Nov-11	17:35	53.6	57.8	42.1	
1-Nov-11	17:40	54.1	57.8	44.4	
1-Nov-11	17:45	54.7	58.3	43.9	
1-Nov-11	17:50	56.2	60.5	42.4	
1-Nov-11	17:55	52.7	57.0	41.6	
1-Nov-11	18:00	54.4	58.9	42.0	54.8
1-Nov-11	18:05	50.6	54.4	42.5	
1-Nov-11	18:10	53.3	57.9	41.4	
1-Nov-11	18:15	53.5	58.0	42.4	
1-Nov-11	18:20	58.4	61.9	42.5	
1-Nov-11	18:25	54.4	58.7	43.7	
1-Nov-11	18:30	54.4	56.8	44.9	54.8
1-Nov-11	18:35	52.7	56.4	44.0	
1-Nov-11	18:40	56.4	60.7	43.9	
1-Nov-11	18:45	53.8	57.9	44.1	
1-Nov-11	18:50	43.9	45.5	41.2	
1-Nov-11	18:55	58.0	60.3	43.1	
	Mean	54.7	57.3	45.9	55.7
	Maximum	63.8	66.1	50.7	58.7
	Minimum	43.9	45.5	39.0	50.1

Summary of Day-time Noise Level at Pak Mong Village_NSR 1			
	$L_{eq(30min)}$	L_{10}	L_{90}
Mean	56.2	58.4	46.5
Maximum	65.9	75.4	59.9
Minimum	48.4	42.7	38.8

Annex B3

Evening-time 19:00 – 23:00 Hrs & Holidays 07:00 – 19:00 Baseline Noise Monitoring Data

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
18-Oct-11	19:00	44.7	45.5	41.6
18-Oct-11	19:05	56.5	61.1	45.0
18-Oct-11	19:10	55.7	58.8	43.3
18-Oct-11	19:15	55.5	59.9	42.3
18-Oct-11	19:20	57.9	60.5	44.9
18-Oct-11	19:25	56.2	60.2	45.8
18-Oct-11	19:30	53.9	58.1	44.9
18-Oct-11	19:35	56.7	60.4	45.6
18-Oct-11	19:40	55.3	58.2	45.9
18-Oct-11	19:45	52.5	57.3	44.0
18-Oct-11	19:50	48.7	53.0	44.1
18-Oct-11	19:55	48.7	53.0	44.1
18-Oct-11	20:00	50.2	53.8	45.0
18-Oct-11	20:05	51.5	56.5	43.2
18-Oct-11	20:10	54.8	58.8	45.9
18-Oct-11	20:15	54.8	59.2	44.8
18-Oct-11	20:20	52.9	56.1	45.1
18-Oct-11	20:25	52.8	56.6	44.4
18-Oct-11	20:30	57.8	62.1	45.1
18-Oct-11	20:35	55.3	60.4	44.4
18-Oct-11	20:40	55.9	59.6	44.7
18-Oct-11	20:45	52.7	57.6	42.7
18-Oct-11	20:50	56.8	60.9	45.1
18-Oct-11	20:55	54.2	58.5	45.2
18-Oct-11	21:00	50.2	53.3	45.2
18-Oct-11	21:05	46.7	49.0	43.8
18-Oct-11	21:10	48.1	49.7	43.0
18-Oct-11	21:15	55.9	60.3	45.1
18-Oct-11	21:20	45.0	46.7	43.1
18-Oct-11	21:25	47.1	47.9	44.0
18-Oct-11	21:30	53.3	58.1	43.4
18-Oct-11	21:35	53.9	58.1	44.2
18-Oct-11	21:40	49.4	53.8	42.3
18-Oct-11	21:45	54.7	59.1	41.9
18-Oct-11	21:50	55.0	59.1	42.0
18-Oct-11	21:55	56.0	59.9	44.6
18-Oct-11	22:00	56.4	61.1	45.2
18-Oct-11	22:05	55.5	60.0	46.1
18-Oct-11	22:10	52.9	57.1	43.4
18-Oct-11	22:15	56.5	60.5	44.6
18-Oct-11	22:20	57.0	61.7	42.5
18-Oct-11	22:25	54.3	59.4	40.6
18-Oct-11	22:30	52.5	56.6	40.4
18-Oct-11	22:35	54.4	58.6	41.6
18-Oct-11	22:40	49.8	52.8	40.2
18-Oct-11	22:45	41.4	42.7	40.1
18-Oct-11	22:50	52.3	56.5	39.2
18-Oct-11	22:55	51.1	55.6	39.4
	Mean	52.9	56.7	43.6
	Maximum	57.9	62.1	46.1
	Minimum	41.4	42.7	39.2

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
19-Oct-11	19:00	60.0	64.2	45.5
19-Oct-11	19:05	65.5	68.0	50.0
19-Oct-11	19:10	62.7	64.8	43.2
19-Oct-11	19:15	58.5	62.6	47.2
19-Oct-11	19:20	45.9	47.6	44.0
19-Oct-11	19:25	63.3	67.7	51.4
19-Oct-11	19:30	56.7	60.3	45.6
19-Oct-11	19:35	56.3	60.5	44.6
19-Oct-11	19:40	54.2	59.0	44.1
19-Oct-11	19:45	55.9	60.5	44.4
19-Oct-11	19:50	65.1	69.3	46.9
19-Oct-11	19:55	59.8	62.8	45.5
19-Oct-11	20:00	54.0	58.0	44.3
19-Oct-11	20:05	54.8	59.0	44.5
19-Oct-11	20:10	52.2	56.1	45.1
19-Oct-11	20:15	53.4	57.2	45.5
19-Oct-11	20:20	54.5	58.3	48.3
19-Oct-11	20:25	54.6	58.3	47.2
19-Oct-11	20:30	55.3	58.8	46.6
19-Oct-11	20:35	60.8	64.7	47.0
19-Oct-11	20:40	55.4	58.5	50.0
19-Oct-11	20:45	55.6	59.8	47.6
19-Oct-11	20:50	61.2	65.5	46.8
19-Oct-11	20:55	54.9	58.4	47.0
19-Oct-11	21:00	53.6	56.8	46.7
19-Oct-11	21:05	46.1	47.7	43.3
19-Oct-11	21:10	47.6	48.8	45.8
19-Oct-11	21:15	54.8	58.8	45.4
19-Oct-11	21:20	48.1	49.9	45.7
19-Oct-11	21:25	46.7	48.7	44.4
19-Oct-11	21:30	48.5	51.7	43.5
19-Oct-11	21:35	47.1	49.1	44.2
19-Oct-11	21:40	54.7	58.3	46.6
19-Oct-11	21:45	47.1	48.5	45.0
19-Oct-11	21:50	60.3	65.2	48.3
19-Oct-11	21:55	68.0	72.1	49.1
19-Oct-11	22:00	57.7	61.9	46.5
19-Oct-11	22:05	56.0	60.7	45.7
19-Oct-11	22:10	59.2	63.5	48.2
19-Oct-11	22:15	59.7	64.5	45.9
19-Oct-11	22:20	52.5	55.6	46.6
19-Oct-11	22:25	52.3	56.4	45.4
19-Oct-11	22:30	61.1	65.4	46.9
19-Oct-11	22:35	54.0	58.0	45.7
19-Oct-11	22:40	53.8	57.2	45.5
19-Oct-11	22:45	52.9	56.2	45.6
19-Oct-11	22:50	50.0	48.7	44.4
19-Oct-11	22:55	57.5	61.3	43.2
	Mean	55.4	58.9	46.0
	Maximum	68.0	72.1	51.4
	Minimum	45.9	47.6	43.2

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
20-Oct-11	19:00	54.2	54.7	49.7
20-Oct-11	19:05	52.6	55.8	47.1
20-Oct-11	19:10	53.4	54.8	47.8
20-Oct-11	19:15	47.1	49.3	44.5
20-Oct-11	19:20	44.4	46.0	42.0
20-Oct-11	19:25	43.6	45.7	41.0
20-Oct-11	19:30	43.7	46.2	39.1
20-Oct-11	19:35	62.8	67.8	41.1
20-Oct-11	19:40	43.0	44.9	40.2
20-Oct-11	19:45	42.7	43.6	39.2
20-Oct-11	19:50	44.8	46.5	41.0
20-Oct-11	19:55	44.5	47.0	41.0
20-Oct-11	20:00	54.4	55.6	41.9
20-Oct-11	20:05	56.3	59.3	41.8
20-Oct-11	20:10	50.2	51.0	41.7
20-Oct-11	20:15	48.1	52.0	41.8
20-Oct-11	20:20	48.3	52.4	42.3
20-Oct-11	20:25	56.4	58.1	41.7
20-Oct-11	20:30	49.2	44.9	40.1
20-Oct-11	20:35	43.8	46.2	40.4
20-Oct-11	20:40	55.1	45.3	40.1
20-Oct-11	20:45	45.3	47.8	41.1
20-Oct-11	20:50	48.0	50.1	43.1
20-Oct-11	20:55	48.8	51.6	44.2
20-Oct-11	21:00	46.2	48.9	43.1
20-Oct-11	21:05	47.2	50.1	43.3
20-Oct-11	21:10	51.3	55.5	43.3
20-Oct-11	21:15	47.7	51.5	42.3
20-Oct-11	21:20	54.1	59.5	42.7
20-Oct-11	21:25	55.1	59.5	43.1
20-Oct-11	21:30	50.4	54.0	42.0
20-Oct-11	21:35	54.8	58.4	45.2
20-Oct-11	21:40	48.7	52.7	42.0
20-Oct-11	21:45	52.4	57.1	43.2
20-Oct-11	21:50	49.8	53.3	42.3
20-Oct-11	21:55	56.6	60.7	42.2
20-Oct-11	22:00	51.7	55.3	42.1
20-Oct-11	22:05	52.8	52.9	41.6
20-Oct-11	22:10	55.8	59.8	41.6
20-Oct-11	22:15	55.5	58.8	44.7
20-Oct-11	22:20	55.7	58.5	42.9
20-Oct-11	22:25	59.1	63.0	43.4
20-Oct-11	22:30	58.5	59.7	41.2
20-Oct-11	22:35	59.2	61.1	41.8
20-Oct-11	22:40	51.3	53.7	41.0
20-Oct-11	22:45	55.3	58.7	42.6
20-Oct-11	22:50	54.9	57.8	42.8
20-Oct-11	22:55	54.8	57.4	43.3
	Mean	51.2	53.6	42.5
	Maximum	62.8	67.8	49.7
	Minimum	42.7	43.6	39.1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
21-Oct-11	19:00	53.7	48.6	42.6
21-Oct-11	19:05	45.3	47.7	42.4
21-Oct-11	19:10	53.4	51.9	44.0
21-Oct-11	19:15	56.6	52.2	43.7
21-Oct-11	19:20	50.0	50.3	43.7
21-Oct-11	19:25	45.7	47.7	43.2
21-Oct-11	19:30	44.5	45.8	42.7
21-Oct-11	19:35	49.0	52.2	45.0
21-Oct-11	19:40	49.6	47.9	43.7
21-Oct-11	19:45	45.8	47.6	43.5
21-Oct-11	19:50	49.5	52.3	44.2
21-Oct-11	19:55	54.5	59.0	43.9
21-Oct-11	20:00	53.9	58.4	44.0
21-Oct-11	20:05	55.6	60.0	44.4
21-Oct-11	20:10	57.9	62.6	44.0
21-Oct-11	20:15	43.9	45.1	42.4
21-Oct-11	20:20	52.5	46.5	42.6
21-Oct-11	20:25	57.3	62.6	42.2
21-Oct-11	20:30	62.1	66.6	44.1
21-Oct-11	20:35	60.0	64.9	46.6
21-Oct-11	20:40	54.7	59.1	45.0
21-Oct-11	20:45	51.2	55.0	43.8
21-Oct-11	20:50	56.7	60.4	44.1
21-Oct-11	20:55	55.6	58.5	43.1
21-Oct-11	21:00	58.9	62.3	44.5
21-Oct-11	21:05	52.5	56.5	42.5
21-Oct-11	21:10	55.6	60.0	43.1
21-Oct-11	21:15	61.4	66.2	45.5
21-Oct-11	21:20	61.3	66.8	46.4
21-Oct-11	21:25	58.6	62.3	45.1
21-Oct-11	21:30	57.0	60.7	46.0
21-Oct-11	21:35	57.7	62.4	43.9
21-Oct-11	21:40	55.3	58.9	47.0
21-Oct-11	21:45	51.1	54.5	44.6
21-Oct-11	21:50	50.5	54.1	43.5
21-Oct-11	21:55	53.2	57.6	43.6
21-Oct-11	22:00	55.6	60.8	42.4
21-Oct-11	22:05	43.0	44.6	41.3
21-Oct-11	22:10	45.0	45.5	42.2
21-Oct-11	22:15	50.2	54.8	43.4
21-Oct-11	22:20	50.8	55.3	43.1
21-Oct-11	22:25	54.6	59.6	43.3
21-Oct-11	22:30	51.6	53.2	44.7
21-Oct-11	22:35	44.4	45.9	42.4
21-Oct-11	22:40	57.1	61.7	42.0
21-Oct-11	22:45	52.2	56.0	43.8
21-Oct-11	22:50	53.3	56.5	44.7
21-Oct-11	22:55	56.2	60.8	42.4
	Mean	53.0	55.8	43.8
	Maximum	62.1	66.8	47.0
	Minimum	43.0	44.6	41.3

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
22-Oct-11	19:00	54.1	57.8	47.5
22-Oct-11	19:05	60.1	65.0	49.1
22-Oct-11	19:10	49.3	52.4	44.9
22-Oct-11	19:15	51.6	54.9	46.2
22-Oct-11	19:20	57.9	60.6	50.8
22-Oct-11	19:25	57.1	61.6	48.3
22-Oct-11	19:30	49.3	51.8	46.4
22-Oct-11	19:35	54.4	56.6	48.1
22-Oct-11	19:40	51.4	54.6	46.8
22-Oct-11	19:45	63.8	68.5	54.0
22-Oct-11	19:50	60.1	63.6	49.8
22-Oct-11	19:55	55.4	58.2	48.2
22-Oct-11	20:00	56.1	59.7	48.2
22-Oct-11	20:05	57.1	61.5	47.3
22-Oct-11	20:10	57.6	61.2	47.2
22-Oct-11	20:15	58.1	62.4	48.4
22-Oct-11	20:20	64.0	68.4	46.0
22-Oct-11	20:25	53.3	57.5	46.5
22-Oct-11	20:30	56.2	60.6	46.1
22-Oct-11	20:35	55.8	59.9	47.1
22-Oct-11	20:40	55.5	59.5	45.2
22-Oct-11	20:45	56.4	60.0	47.0
22-Oct-11	20:50	58.5	62.7	45.3
22-Oct-11	20:55	56.8	59.8	47.1
22-Oct-11	21:00	57.4	61.7	46.1
22-Oct-11	21:05	61.8	66.4	46.1
22-Oct-11	21:10	58.7	61.4	47.3
22-Oct-11	21:15	57.1	61.9	46.4
22-Oct-11	21:20	54.5	58.7	45.5
22-Oct-11	21:25	48.2	52.0	42.3
22-Oct-11	21:30	52.8	56.9	43.4
22-Oct-11	21:35	56.9	60.5	44.7
22-Oct-11	21:40	50.8	54.8	42.9
22-Oct-11	21:45	52.7	57.1	42.0
22-Oct-11	21:50	57.3	62.0	43.9
22-Oct-11	21:55	62.7	66.6	51.7
22-Oct-11	22:00	53.6	56.0	42.2
22-Oct-11	22:05	49.0	43.9	40.9
22-Oct-11	22:10	56.2	60.5	43.3
22-Oct-11	22:15	52.7	57.7	40.7
22-Oct-11	22:20	47.6	51.8	41.6
22-Oct-11	22:25	51.0	55.2	41.3
22-Oct-11	22:30	54.4	58.7	40.3
22-Oct-11	22:35	54.1	57.5	45.7
22-Oct-11	22:40	50.0	53.7	42.9
22-Oct-11	22:45	57.3	60.9	42.7
22-Oct-11	22:50	53.2	56.8	45.0
22-Oct-11	22:55	53.6	52.0	42.1
	Mean	55.3	58.8	45.7
	Maximum	64.0	68.5	54.0
	Minimum	47.6	43.9	40.3

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
23-Oct-11	07:00	48.9	51.8	44.9
23-Oct-11	07:05	48.9	50.5	45.1
23-Oct-11	07:10	59.2	63.8	47.6
23-Oct-11	07:15	51.0	54.4	46.3
23-Oct-11	07:20	51.8	55.2	45.0
23-Oct-11	07:25	60.9	64.9	47.7
23-Oct-11	07:30	47.7	49.9	44.6
23-Oct-11	07:35	48.0	50.1	45.0
23-Oct-11	07:40	49.3	52.3	44.4
23-Oct-11	07:45	59.5	57.7	48.0
23-Oct-11	07:50	48.7	50.9	45.8
23-Oct-11	07:55	59.7	63.6	48.0
23-Oct-11	08:00	53.1	55.9	47.0
23-Oct-11	08:05	50.4	51.8	46.2
23-Oct-11	08:10	53.2	55.7	47.1
23-Oct-11	08:15	52.9	56.0	47.1
23-Oct-11	08:20	51.7	53.5	46.0
23-Oct-11	08:25	54.3	57.1	47.5
23-Oct-11	08:30	59.7	63.8	48.0
23-Oct-11	08:35	57.4	60.3	49.1
23-Oct-11	08:40	64.7	66.4	47.7
23-Oct-11	08:45	53.1	54.0	46.4
23-Oct-11	08:50	52.1	52.5	46.8
23-Oct-11	08:55	51.2	53.1	46.7
23-Oct-11	09:00	51.2	53.7	46.6
23-Oct-11	09:05	53.2	54.7	47.6
23-Oct-11	09:10	53.9	56.2	46.2
23-Oct-11	09:15	59.4	63.3	49.7
23-Oct-11	09:20	58.3	62.0	50.0
23-Oct-11	09:25	53.0	56.4	46.3
23-Oct-11	09:30	55.2	58.4	48.6
23-Oct-11	09:35	53.0	54.6	47.4
23-Oct-11	09:40	55.7	60.0	46.9
23-Oct-11	09:45	58.0	62.2	48.9
23-Oct-11	09:50	54.8	58.5	47.9
23-Oct-11	09:55	55.1	58.7	46.4
23-Oct-11	10:00	58.1	61.7	48.1
23-Oct-11	10:05	56.2	59.0	50.5
23-Oct-11	10:10	53.8	56.7	48.4
23-Oct-11	10:15	59.8	63.6	49.2
23-Oct-11	10:20	57.5	60.8	50.4
23-Oct-11	10:25	56.4	60.1	47.8
23-Oct-11	10:30	56.7	60.6	47.4
23-Oct-11	10:35	58.9	62.5	49.8
23-Oct-11	10:40	59.1	62.2	47.7
23-Oct-11	10:45	61.2	65.4	52.7
23-Oct-11	10:50	54.8	57.8	49.2
23-Oct-11	10:55	53.3	55.8	47.9

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
23-Oct-11	11:00	53.8	56.7	49.5
23-Oct-11	11:05	60.6	64.0	54.1
23-Oct-11	11:10	53.2	54.2	49.6
23-Oct-11	11:15	54.1	57.0	50.8
23-Oct-11	11:20	52.2	54.3	49.4
23-Oct-11	11:25	53.0	57.7	47.8
23-Oct-11	11:30	60.0	65.3	46.2
23-Oct-11	11:35	58.0	62.0	46.4
23-Oct-11	11:40	58.3	62.5	46.3
23-Oct-11	11:45	54.1	58.7	47.1
23-Oct-11	11:50	54.2	57.6	47.0
23-Oct-11	11:55	51.6	56.0	45.4
23-Oct-11	12:00	52.4	55.3	43.6
23-Oct-11	12:05	56.4	60.5	47.4
23-Oct-11	12:10	55.9	60.0	47.4
23-Oct-11	12:15	54.5	57.3	48.5
23-Oct-11	12:20	55.3	58.5	47.5
23-Oct-11	12:25	56.2	58.7	46.2
23-Oct-11	12:30	51.1	52.7	46.0
23-Oct-11	12:35	56.5	59.4	46.2
23-Oct-11	12:40	62.5	67.3	51.0
23-Oct-11	12:45	52.5	56.0	43.6
23-Oct-11	12:50	52.8	56.2	42.6
23-Oct-11	12:55	65.7	70.2	43.8
23-Oct-11	13:00	58.1	60.2	47.3
23-Oct-11	13:05	52.5	56.7	41.4
23-Oct-11	13:10	53.8	57.6	43.3
23-Oct-11	13:15	53.0	57.4	43.2
23-Oct-11	13:20	54.3	58.2	45.3
23-Oct-11	13:25	51.7	56.4	43.3
23-Oct-11	13:30	58.5	62.6	42.4
23-Oct-11	13:35	53.0	57.2	42.7
23-Oct-11	13:40	52.2	55.8	43.7
23-Oct-11	13:45	56.0	60.9	42.1
23-Oct-11	13:50	54.7	57.5	43.9
23-Oct-11	13:55	52.1	55.5	43.2
23-Oct-11	14:00	53.9	57.1	48.8
23-Oct-11	14:05	56.5	59.9	47.7
23-Oct-11	14:10	55.5	58.5	47.8
23-Oct-11	14:15	63.3	62.0	45.2
23-Oct-11	14:20	48.8	50.7	45.4
23-Oct-11	14:25	54.4	59.4	43.1
23-Oct-11	14:30	47.3	48.5	43.1
23-Oct-11	14:35	46.3	47.7	44.3
23-Oct-11	14:40	58.6	58.6	44.7
23-Oct-11	14:45	61.2	64.6	46.0
23-Oct-11	14:50	56.3	60.5	46.3
23-Oct-11	14:55	53.8	53.9	42.7

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
23-Oct-11	15:00	58.4	62.2	46.5
23-Oct-11	15:05	60.3	64.8	47.0
23-Oct-11	15:10	55.8	59.8	45.2
23-Oct-11	15:15	54.8	59.1	44.3
23-Oct-11	15:20	49.0	51.4	43.5
23-Oct-11	15:25	52.7	55.1	44.1
23-Oct-11	15:30	51.8	50.3	43.8
23-Oct-11	15:35	54.8	59.3	43.8
23-Oct-11	15:40	55.4	58.8	47.5
23-Oct-11	15:45	59.5	63.0	47.8
23-Oct-11	15:50	58.5	62.5	49.6
23-Oct-11	15:55	51.3	53.3	44.9
23-Oct-11	16:00	55.3	58.2	47.4
23-Oct-11	16:05	54.6	57.4	49.9
23-Oct-11	16:10	54.8	57.6	50.5
23-Oct-11	16:15	51.7	54.0	48.6
23-Oct-11	16:20	58.0	61.8	49.9
23-Oct-11	16:25	56.7	60.1	49.8
23-Oct-11	16:30	59.5	63.0	49.8
23-Oct-11	16:35	58.2	61.8	50.8
23-Oct-11	16:40	55.7	59.6	48.6
23-Oct-11	16:45	56.0	55.9	49.7
23-Oct-11	16:50	59.8	63.3	51.7
23-Oct-11	16:55	57.2	59.9	50.0
23-Oct-11	17:00	58.3	61.2	50.7
23-Oct-11	17:05	57.1	61.0	48.2
23-Oct-11	17:10	58.9	63.2	50.6
23-Oct-11	17:15	56.9	61.0	49.1
23-Oct-11	17:20	60.0	64.9	49.1
23-Oct-11	17:25	58.0	61.9	48.6
23-Oct-11	17:30	58.4	61.0	49.5
23-Oct-11	17:35	57.0	60.2	50.1
23-Oct-11	17:40	58.6	63.2	48.3
23-Oct-11	17:45	51.6	53.1	48.3
23-Oct-11	17:50	61.2	64.2	52.0
23-Oct-11	17:55	58.4	62.5	49.2
23-Oct-11	18:00	56.1	60.0	46.7
23-Oct-11	18:05	53.2	57.5	45.4
23-Oct-11	18:10	55.3	58.7	48.3
23-Oct-11	18:15	55.9	57.7	46.1
23-Oct-11	18:20	53.3	57.4	45.7
23-Oct-11	18:25	63.7	66.0	47.1
23-Oct-11	18:30	58.5	62.3	49.2
23-Oct-11	18:35	50.3	52.5	44.1
23-Oct-11	18:40	55.8	59.1	47.4
23-Oct-11	18:45	58.5	59.7	46.6
23-Oct-11	18:50	46.2	48.5	42.9
23-Oct-11	18:55	54.7	50.0	43.9

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
23-Oct-11	19:00	54.0	56.4	45.1
23-Oct-11	19:05	56.5	61.1	45.1
23-Oct-11	19:10	50.6	52.6	48.0
23-Oct-11	19:15	53.5	57.1	48.0
23-Oct-11	19:20	55.1	59.0	48.2
23-Oct-11	19:25	52.0	51.7	48.1
23-Oct-11	19:30	58.1	61.3	49.1
23-Oct-11	19:35	55.3	56.2	44.7
23-Oct-11	19:40	56.1	58.8	49.0
23-Oct-11	19:45	51.0	54.5	45.9
23-Oct-11	19:50	56.0	60.7	47.2
23-Oct-11	19:55	57.3	61.5	46.9
23-Oct-11	20:00	56.8	61.0	50.1
23-Oct-11	20:05	54.2	57.8	47.8
23-Oct-11	20:10	53.5	56.5	46.0
23-Oct-11	20:15	55.5	60.0	45.8
23-Oct-11	20:20	54.9	58.6	45.7
23-Oct-11	20:25	64.2	64.8	44.0
23-Oct-11	20:30	46.5	48.7	43.4
23-Oct-11	20:35	52.0	56.1	43.0
23-Oct-11	20:40	56.5	60.9	45.1
23-Oct-11	20:45	55.7	60.1	45.5
23-Oct-11	20:50	57.0	60.6	47.7
23-Oct-11	20:55	55.1	58.5	47.8
23-Oct-11	21:00	53.5	56.9	47.6
23-Oct-11	21:05	55.8	59.3	47.1
23-Oct-11	21:10	53.9	57.7	46.1
23-Oct-11	21:15	51.4	55.5	44.4
23-Oct-11	21:20	52.9	57.5	44.0
23-Oct-11	21:25	50.8	54.8	43.1
23-Oct-11	21:30	53.2	57.8	44.0
23-Oct-11	21:35	58.7	63.2	43.8
23-Oct-11	21:40	63.0	64.8	44.2
23-Oct-11	21:45	62.8	65.3	45.5
23-Oct-11	21:50	55.2	59.6	46.0
23-Oct-11	21:55	57.3	62.1	44.6
23-Oct-11	22:00	58.8	62.7	48.7
23-Oct-11	22:05	51.8	54.9	47.1
23-Oct-11	22:10	49.0	52.4	44.5
23-Oct-11	22:15	52.6	56.3	44.8
23-Oct-11	22:20	61.6	66.4	46.9
23-Oct-11	22:25	59.9	59.6	44.0
23-Oct-11	22:30	56.2	56.7	45.4
23-Oct-11	22:35	55.5	59.6	46.4
23-Oct-11	22:40	53.2	57.3	43.6
23-Oct-11	22:45	53.0	56.8	46.0
23-Oct-11	22:50	55.5	60.0	47.6
23-Oct-11	22:55	55.5	60.1	46.4
	Mean	55.3	58.4	46.8
	Maximum	65.7	70.2	54.1
	Minimum	46.2	47.7	41.4

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
24-Oct-11	19:00	59.1	64.1	44.3
24-Oct-11	19:05	52.3	56.1	43.4
24-Oct-11	19:10	57.1	60.7	44.5
24-Oct-11	19:15	61.7	66.8	41.8
24-Oct-11	19:20	45.9	46.4	41.9
24-Oct-11	19:25	49.6	54.3	43.0
24-Oct-11	19:30	55.0	59.1	45.2
24-Oct-11	19:35	53.8	58.5	44.3
24-Oct-11	19:40	56.4	59.8	49.3
24-Oct-11	19:45	54.8	58.7	48.5
24-Oct-11	19:50	52.5	55.7	47.4
24-Oct-11	19:55	53.2	56.2	48.4
24-Oct-11	20:00	54.6	59.0	47.2
24-Oct-11	20:05	47.8	49.3	45.8
24-Oct-11	20:10	52.7	56.4	47.4
24-Oct-11	20:15	49.1	50.8	46.0
24-Oct-11	20:20	48.5	50.3	45.3
24-Oct-11	20:25	49.4	51.6	46.4
24-Oct-11	20:30	48.5	50.6	46.1
24-Oct-11	20:35	56.1	61.7	45.6
24-Oct-11	20:40	53.6	58.0	46.7
24-Oct-11	20:45	48.1	49.7	45.3
24-Oct-11	20:50	54.7	57.6	48.3
24-Oct-11	20:55	53.4	55.2	45.8
24-Oct-11	21:00	58.4	63.8	45.6
24-Oct-11	21:05	53.6	56.7	49.3
24-Oct-11	21:10	57.7	62.4	48.5
24-Oct-11	21:15	57.9	62.1	48.9
24-Oct-11	21:20	59.6	64.0	52.0
24-Oct-11	21:25	54.5	56.5	51.2
24-Oct-11	21:30	50.9	52.8	48.3
24-Oct-11	21:35	53.7	56.8	49.9
24-Oct-11	21:40	56.0	59.2	50.1
24-Oct-11	21:45	57.0	60.6	49.5
24-Oct-11	21:50	57.2	61.4	48.2
24-Oct-11	21:55	52.9	54.2	46.5
24-Oct-11	22:00	53.2	56.3	47.2
24-Oct-11	22:05	54.2	57.6	48.7
24-Oct-11	22:10	56.1	60.5	48.5
24-Oct-11	22:15	57.5	61.6	49.1
24-Oct-11	22:20	56.5	60.7	47.2
24-Oct-11	22:25	52.8	55.8	48.4
24-Oct-11	22:30	58.2	63.5	47.7
24-Oct-11	22:35	51.1	52.3	48.0
24-Oct-11	22:40	55.8	59.6	50.4
24-Oct-11	22:45	55.9	58.9	50.3
24-Oct-11	22:50	54.9	57.8	50.3
24-Oct-11	22:55	56.1	59.6	49.5
	Mean	54.2	57.5	47.3
	Maximum	61.7	66.8	52.0
	Minimum	45.9	46.4	41.8

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
25-Oct-11	19:00	57.7	61.5	45.6
25-Oct-11	19:05	56.1	58.8	45.7
25-Oct-11	19:10	54.2	58.0	45.6
25-Oct-11	19:15	56.5	58.8	46.8
25-Oct-11	19:20	56.8	60.6	45.5
25-Oct-11	19:25	52.3	53.4	44.1
25-Oct-11	19:30	55.7	59.0	42.8
25-Oct-11	19:35	52.9	53.7	44.3
25-Oct-11	19:40	51.8	51.4	44.7
25-Oct-11	19:45	48.9	50.6	44.0
25-Oct-11	19:50	48.8	50.0	43.5
25-Oct-11	19:55	48.7	51.4	45.2
25-Oct-11	20:00	47.7	52.3	43.2
25-Oct-11	20:05	47.9	52.0	42.5
25-Oct-11	20:10	47.4	51.8	42.5
25-Oct-11	20:15	48.9	53.0	43.1
25-Oct-11	20:20	48.9	53.6	43.2
25-Oct-11	20:25	49.4	52.8	42.3
25-Oct-11	20:30	42.7	43.9	41.3
25-Oct-11	20:35	49.0	52.5	43.1
25-Oct-11	20:40	53.3	57.5	44.2
25-Oct-11	20:45	56.6	60.6	46.6
25-Oct-11	20:50	54.9	58.6	44.9
25-Oct-11	20:55	54.4	58.3	43.0
25-Oct-11	21:00	55.1	59.3	45.1
25-Oct-11	21:05	59.7	63.8	47.6
25-Oct-11	21:10	54.4	58.6	44.8
25-Oct-11	21:15	56.5	58.0	45.0
25-Oct-11	21:20	54.6	57.9	44.9
25-Oct-11	21:25	58.8	61.1	45.4
25-Oct-11	21:30	56.7	58.7	43.5
25-Oct-11	21:35	53.2	52.7	42.3
25-Oct-11	21:40	51.6	56.0	43.9
25-Oct-11	21:45	52.4	56.2	43.8
25-Oct-11	21:50	54.2	58.0	44.6
25-Oct-11	21:55	60.4	64.5	44.7
25-Oct-11	22:00	56.9	61.5	44.0
25-Oct-11	22:05	51.4	55.3	42.4
25-Oct-11	22:10	53.7	57.8	44.2
25-Oct-11	22:15	55.6	58.6	45.5
25-Oct-11	22:20	53.5	57.8	44.8
25-Oct-11	22:25	55.0	59.3	42.5
25-Oct-11	22:30	45.2	48.1	41.4
25-Oct-11	22:35	51.1	55.0	43.1
25-Oct-11	22:40	49.8	53.9	42.0
25-Oct-11	22:45	56.4	60.5	45.5
25-Oct-11	22:50	58.0	60.2	42.7
25-Oct-11	22:55	55.7	60.6	42.4
	Mean	53.2	56.4	44.0
	Maximum	60.4	64.5	47.6
	Minimum	42.7	43.9	41.3

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
26-Oct-11	19:00	53.5	57.4	45.3
26-Oct-11	19:05	59.1	64.4	48.7
26-Oct-11	19:10	58.1	63.2	44.9
26-Oct-11	19:15	51.2	54.7	42.5
26-Oct-11	19:20	57.9	61.8	43.4
26-Oct-11	19:25	56.4	60.7	44.2
26-Oct-11	19:30	55.6	58.9	45.4
26-Oct-11	19:35	60.0	63.7	47.3
26-Oct-11	19:40	57.6	61.6	47.4
26-Oct-11	19:45	58.4	61.5	48.4
26-Oct-11	19:50	58.7	62.8	46.3
26-Oct-11	19:55	51.7	55.6	43.2
26-Oct-11	20:00	49.7	45.9	41.3
26-Oct-11	20:05	58.1	63.1	42.9
26-Oct-11	20:10	53.2	58.4	42.6
26-Oct-11	20:15	53.6	57.9	42.7
26-Oct-11	20:20	51.6	55.4	41.7
26-Oct-11	20:25	58.1	62.0	41.4
26-Oct-11	20:30	55.3	59.8	42.3
26-Oct-11	20:35	63.3	66.8	42.4
26-Oct-11	20:40	53.1	54.9	41.6
26-Oct-11	20:45	57.0	59.9	41.2
26-Oct-11	20:50	56.8	61.4	41.8
26-Oct-11	20:55	52.3	55.1	40.8
26-Oct-11	21:00	63.1	66.8	40.3
26-Oct-11	21:05	56.4	60.9	42.2
26-Oct-11	21:10	52.2	56.8	40.6
26-Oct-11	21:15	58.3	62.8	42.7
26-Oct-11	21:20	52.0	55.7	43.0
26-Oct-11	21:25	53.6	58.4	42.6
26-Oct-11	21:30	54.4	58.1	43.6
26-Oct-11	21:35	53.8	57.4	44.0
26-Oct-11	21:40	47.9	49.5	44.3
26-Oct-11	21:45	52.3	56.8	44.3
26-Oct-11	21:50	50.2	51.2	45.0
26-Oct-11	21:55	61.6	62.4	45.0
26-Oct-11	22:00	56.2	60.6	45.3
26-Oct-11	22:05	55.7	60.3	45.0
26-Oct-11	22:10	55.2	59.5	45.6
26-Oct-11	22:15	49.8	53.5	43.7
26-Oct-11	22:20	53.8	58.2	44.5
26-Oct-11	22:25	56.7	61.3	44.8
26-Oct-11	22:30	53.3	57.7	43.1
26-Oct-11	22:35	45.3	47.3	42.8
26-Oct-11	22:40	55.0	59.8	44.1
26-Oct-11	22:45	53.5	57.6	44.3
26-Oct-11	22:50	49.9	47.9	42.0
26-Oct-11	22:55	53.7	58.3	43.0
	Mean	54.9	58.5	43.7
	Maximum	63.3	66.8	48.7
	Minimum	45.3	45.9	40.3

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
27-Oct-11	19:00	56.0	59.8	47.4
27-Oct-11	19:05	59.1	63.8	47.2
27-Oct-11	19:10	54.3	58.0	46.2
27-Oct-11	19:15	59.8	64.4	46.4
27-Oct-11	19:20	57.3	60.7	46.8
27-Oct-11	19:25	60.4	64.5	48.1
27-Oct-11	19:30	61.0	60.2	45.6
27-Oct-11	19:35	56.0	59.9	46.0
27-Oct-11	19:40	54.6	58.7	45.4
27-Oct-11	19:45	56.0	59.9	46.0
27-Oct-11	19:50	53.1	57.2	44.4
27-Oct-11	19:55	54.3	58.0	46.2
27-Oct-11	20:00	57.9	62.6	46.6
27-Oct-11	20:05	56.8	60.9	45.0
27-Oct-11	20:10	53.6	57.7	43.2
27-Oct-11	20:15	53.7	58.1	43.0
27-Oct-11	20:20	57.3	61.2	43.7
27-Oct-11	20:25	44.0	45.3	42.2
27-Oct-11	20:30	54.1	58.8	43.0
27-Oct-11	20:35	44.1	45.8	42.0
27-Oct-11	20:40	49.3	50.5	43.6
27-Oct-11	20:45	54.6	57.8	46.4
27-Oct-11	20:50	54.3	58.3	45.7
27-Oct-11	20:55	59.2	63.4	45.3
27-Oct-11	21:00	55.0	59.1	44.0
27-Oct-11	21:05	51.3	55.1	43.2
27-Oct-11	21:10	57.5	61.6	44.6
27-Oct-11	21:15	57.2	60.5	45.1
27-Oct-11	21:20	54.9	58.5	44.3
27-Oct-11	21:25	58.1	62.4	44.1
27-Oct-11	21:30	59.0	62.6	43.2
27-Oct-11	21:35	56.2	60.2	43.7
27-Oct-11	21:40	54.0	58.1	42.8
27-Oct-11	21:45	52.4	55.8	41.3
27-Oct-11	21:50	55.8	60.5	43.7
27-Oct-11	21:55	53.7	58.2	42.5
27-Oct-11	22:00	53.4	57.2	42.9
27-Oct-11	22:05	53.1	57.3	43.5
27-Oct-11	22:10	54.5	59.0	42.1
27-Oct-11	22:15	58.2	62.2	44.5
27-Oct-11	22:20	57.4	61.1	44.1
27-Oct-11	22:25	52.0	56.7	42.0
27-Oct-11	22:30	57.9	63.1	44.9
27-Oct-11	22:35	49.9	53.2	43.8
27-Oct-11	22:40	53.4	56.9	43.7
27-Oct-11	22:45	53.0	57.7	43.7
27-Oct-11	22:50	54.6	58.6	45.0
27-Oct-11	22:55	57.0	61.3	43.8
	Mean	55.0	58.8	44.4
	Maximum	61.0	64.5	48.1
	Minimum	44.0	45.3	41.3

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
28-Oct-11	19:00	56.9	60.3	50.6
28-Oct-11	19:05	55.2	57.6	51.7
28-Oct-11	19:10	59.7	62.1	50.6
28-Oct-11	19:15	56.5	59.8	50.5
28-Oct-11	19:20	57.9	61.4	51.4
28-Oct-11	19:25	58.6	62.1	51.2
28-Oct-11	19:30	60.3	64.1	52.9
28-Oct-11	19:35	56.5	59.7	51.0
28-Oct-11	19:40	57.1	60.8	50.1
28-Oct-11	19:45	58.3	60.7	49.1
28-Oct-11	19:50	56.9	60.7	48.6
28-Oct-11	19:55	60.5	63.5	48.2
28-Oct-11	20:00	58.1	62.0	47.3
28-Oct-11	20:05	55.0	58.5	48.2
28-Oct-11	20:10	54.2	57.7	48.2
28-Oct-11	20:15	58.5	61.4	50.3
28-Oct-11	20:20	57.8	60.5	52.0
28-Oct-11	20:25	55.7	57.7	49.3
28-Oct-11	20:30	55.8	59.0	50.2
28-Oct-11	20:35	54.8	57.2	48.6
28-Oct-11	20:40	54.3	56.4	49.9
28-Oct-11	20:45	57.0	60.9	47.9
28-Oct-11	20:50	56.9	58.5	50.2
28-Oct-11	20:55	56.7	59.8	50.2
28-Oct-11	21:00	56.2	59.3	49.5
28-Oct-11	21:05	55.7	58.2	50.6
28-Oct-11	21:10	54.5	58.4	48.5
28-Oct-11	21:15	61.3	64.3	51.1
28-Oct-11	21:20	58.3	61.8	49.9
28-Oct-11	21:25	60.0	63.1	50.0
28-Oct-11	21:30	54.0	56.8	46.8
28-Oct-11	21:35	55.6	58.3	50.9
28-Oct-11	21:40	54.1	56.9	48.5
28-Oct-11	21:45	54.4	57.8	49.2
28-Oct-11	21:50	55.0	58.5	49.0
28-Oct-11	21:55	53.9	56.8	49.4
28-Oct-11	22:00	56.8	60.2	49.2
28-Oct-11	22:05	54.4	55.4	49.1
28-Oct-11	22:10	54.5	57.9	48.3
28-Oct-11	22:15	58.1	61.5	49.2
28-Oct-11	22:20	56.9	60.9	49.0
28-Oct-11	22:25	57.1	61.0	47.8
28-Oct-11	22:30	55.9	59.3	49.3
28-Oct-11	22:35	56.3	59.3	51.0
28-Oct-11	22:40	56.2	59.5	50.8
28-Oct-11	22:45	56.1	59.8	49.6
28-Oct-11	22:50	59.8	62.1	50.5
28-Oct-11	22:55	57.8	61.9	50.9
	Mean	56.7	59.8	49.7
	Maximum	61.3	64.3	52.9
	Minimum	53.9	55.4	46.8

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
29-Oct-11	19:00	54.4	56.1	51.3
29-Oct-11	19:05	55.7	58.9	50.0
29-Oct-11	19:10	57.4	61.1	50.1
29-Oct-11	19:15	56.2	59.8	49.6
29-Oct-11	19:20	56.8	60.6	50.0
29-Oct-11	19:25	54.9	58.0	50.3
29-Oct-11	19:30	56.8	60.0	50.1
29-Oct-11	19:35	53.0	55.8	48.8
29-Oct-11	19:40	56.2	60.1	48.7
29-Oct-11	19:45	57.6	61.5	50.2
29-Oct-11	19:50	55.9	59.6	50.0
29-Oct-11	19:55	62.2	64.3	51.5
29-Oct-11	20:00	52.2	55.2	48.3
29-Oct-11	20:05	53.4	57.6	46.1
29-Oct-11	20:10	53.2	58.0	44.2
29-Oct-11	20:15	48.7	51.6	43.9
29-Oct-11	20:20	46.8	48.2	43.5
29-Oct-11	20:25	51.9	56.0	45.4
29-Oct-11	20:30	54.1	58.6	45.8
29-Oct-11	20:35	51.3	55.3	44.7
29-Oct-11	20:40	51.9	55.6	45.5
29-Oct-11	20:45	56.0	60.0	47.3
29-Oct-11	20:50	55.5	58.8	44.8
29-Oct-11	20:55	52.4	57.0	45.1
29-Oct-11	21:00	59.2	65.5	44.5
29-Oct-11	21:05	58.5	62.7	47.8
29-Oct-11	21:10	51.5	55.4	46.7
29-Oct-11	21:15	55.4	58.8	48.4
29-Oct-11	21:20	54.4	57.8	48.9
29-Oct-11	21:25	52.9	55.4	50.0
29-Oct-11	21:30	55.0	59.4	47.3
29-Oct-11	21:35	53.0	56.4	48.2
29-Oct-11	21:40	55.3	58.7	49.6
29-Oct-11	21:45	48.9	50.9	46.1
29-Oct-11	21:50	55.0	58.6	48.8
29-Oct-11	21:55	49.5	51.5	46.6
29-Oct-11	22:00	54.9	59.2	47.3
29-Oct-11	22:05	57.1	61.7	47.9
29-Oct-11	22:10	50.9	54.4	46.4
29-Oct-11	22:15	50.7	52.3	45.6
29-Oct-11	22:20	54.1	57.9	47.5
29-Oct-11	22:25	52.9	56.4	47.3
29-Oct-11	22:30	55.8	59.7	50.0
29-Oct-11	22:35	51.2	52.7	47.9
29-Oct-11	22:40	50.4	52.5	46.5
29-Oct-11	22:45	55.4	59.3	46.9
29-Oct-11	22:50	51.0	53.5	48.2
29-Oct-11	22:55	55.3	59.3	48.9
	Mean	54.0	57.5	47.7
	Maximum	62.2	65.5	51.5
	Minimum	46.8	48.2	43.5

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
30-Oct-11	07:00	46.9	49.8	41.4
30-Oct-11	07:05	48.5	51.4	42.3
30-Oct-11	07:10	46.0	48.5	42.7
30-Oct-11	07:15	47.3	49.8	43.5
30-Oct-11	07:20	49.2	51.6	46.1
30-Oct-11	07:25	53.5	58.4	45.4
30-Oct-11	07:30	48.3	50.4	45.5
30-Oct-11	07:35	48.9	52.0	44.6
30-Oct-11	07:40	49.9	53.1	45.6
30-Oct-11	07:45	53.6	58.5	44.8
30-Oct-11	07:50	55.3	59.1	45.7
30-Oct-11	07:55	56.8	59.6	44.2
30-Oct-11	08:00	55.1	58.4	46.1
30-Oct-11	08:05	58.7	61.5	47.5
30-Oct-11	08:10	56.9	59.4	45.8
30-Oct-11	08:15	61.4	65.8	50.3
30-Oct-11	08:20	63.1	67.6	51.2
30-Oct-11	08:25	58.0	61.9	48.1
30-Oct-11	08:30	58.7	62.4	49.2
30-Oct-11	08:35	57.0	60.6	48.5
30-Oct-11	08:40	57.5	60.8	49.5
30-Oct-11	08:45	55.7	58.5	47.1
30-Oct-11	08:50	56.8	59.9	48.1
30-Oct-11	08:55	57.8	61.2	47.4
30-Oct-11	09:00	60.3	65.0	49.5
30-Oct-11	09:05	53.9	57.6	47.0
30-Oct-11	09:10	59.6	62.7	51.5
30-Oct-11	09:15	55.5	58.5	47.8
30-Oct-11	09:20	56.8	59.9	49.1
30-Oct-11	09:25	57.2	61.3	48.7
30-Oct-11	09:30	56.6	61.9	47.5
30-Oct-11	09:35	57.4	62.5	48.1
30-Oct-11	09:40	56.7	59.7	47.3
30-Oct-11	09:45	57.8	61.7	47.5
30-Oct-11	09:50	57.4	62.0	48.6
30-Oct-11	09:55	56.7	59.6	49.0
30-Oct-11	10:00	56.4	60.5	48.0
30-Oct-11	10:05	56.2	60.7	48.3
30-Oct-11	10:10	56.8	59.2	48.7
30-Oct-11	10:15	58.7	61.8	48.8
30-Oct-11	10:20	56.1	61.3	48.1
30-Oct-11	10:25	55.9	59.9	47.4
30-Oct-11	10:30	58.8	62.4	48.9
30-Oct-11	10:35	56.7	61.5	47.6
30-Oct-11	10:40	57.4	60.7	47.2
30-Oct-11	10:45	57.8	61.4	48.3
30-Oct-11	10:50	59.1	62.3	48.9
30-Oct-11	10:55	60.4	64.2	50.5

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
30-Oct-11	11:00	57.9	62.5	47.9
30-Oct-11	11:05	57.8	60.3	48.2
30-Oct-11	11:10	59.3	61.9	51.3
30-Oct-11	11:15	54.1	60.0	59.6
30-Oct-11	11:20	55.2	60.4	47.5
30-Oct-11	11:25	55.7	60.3	47.9
30-Oct-11	11:30	55.6	59.7	48.1
30-Oct-11	11:35	55.1	60.7	48.2
30-Oct-11	11:40	59.3	60.8	47.6
30-Oct-11	11:45	56.2	58.6	45.3
30-Oct-11	11:50	57.1	59.1	47.8
30-Oct-11	11:55	55.5	58.4	47.4
30-Oct-11	12:00	57.9	61.4	47.1
30-Oct-11	12:05	56.8	62.5	47.0
30-Oct-11	12:10	57.2	61.9	47.3
30-Oct-11	12:15	59.7	62.3	47.9
30-Oct-11	12:20	58.7	62.2	47.2
30-Oct-11	12:25	56.4	61.5	47.3
30-Oct-11	12:30	56.8	61.2	47.5
30-Oct-11	12:35	56.3	60.4	47.4
30-Oct-11	12:40	55.9	60.5	47.6
30-Oct-11	12:45	55.9	60.8	48.8
30-Oct-11	12:50	54.3	59.5	46.7
30-Oct-11	12:55	56.4	61.4	46.4
30-Oct-11	13:00	58.8	63.2	47.6
30-Oct-11	13:05	59.6	63.4	48.9
30-Oct-11	13:10	58.7	62.9	50.1
30-Oct-11	13:15	56.3	58.9	48.7
30-Oct-11	13:20	55.6	59.4	46.2
30-Oct-11	13:25	53.4	56.2	45.9
30-Oct-11	13:30	54.2	59.4	46.5
30-Oct-11	13:35	53.6	59.9	45.2
30-Oct-11	13:40	55.8	61.1	45.1
30-Oct-11	13:45	56.5	61.2	43.2
30-Oct-11	13:50	52.7	55.6	42.6
30-Oct-11	13:55	51.4	54.6	42.2
30-Oct-11	14:00	55.2	59.0	42.4
30-Oct-11	14:05	51.4	55.3	42.1
30-Oct-11	14:10	60.7	62.8	45.4
30-Oct-11	14:15	58.3	63.2	46.2
30-Oct-11	14:20	57.1	64.4	45.5
30-Oct-11	14:25	55.3	59.8	45.1
30-Oct-11	14:30	52.5	56.7	43.5
30-Oct-11	14:35	56.0	60.1	44.0
30-Oct-11	14:40	54.5	58.1	42.9
30-Oct-11	14:45	53.6	59.4	43.2
30-Oct-11	14:50	54.8	59.2	44.1
30-Oct-11	14:55	55.0	60.7	43.9

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
30-Oct-11	15:00	52.6	57.1	42.6
30-Oct-11	15:05	51.9	56.9	42.8
30-Oct-11	15:10	52.6	57.4	44.7
30-Oct-11	15:15	55.5	59.7	43.2
30-Oct-11	15:20	50.8	52.5	45.8
30-Oct-11	15:25	51.2	56.4	46.0
30-Oct-11	15:30	55.3	57.8	45.2
30-Oct-11	15:35	53.2	59.3	44.9
30-Oct-11	15:40	54.5	58.2	45.7
30-Oct-11	15:45	56.5	60.3	44.5
30-Oct-11	15:50	57.1	61.1	48.6
30-Oct-11	15:55	57.4	60.5	47.1
30-Oct-11	16:00	55.9	59.7	45.2
30-Oct-11	16:05	56.3	60.8	45.8
30-Oct-11	16:10	60.2	63.8	51.3
30-Oct-11	16:15	58.5	62.7	47.7
30-Oct-11	16:20	58.9	63.7	46.7
30-Oct-11	16:25	56.6	60.0	45.6
30-Oct-11	16:30	54.6	58.0	45.0
30-Oct-11	16:35	59.4	64.6	43.9
30-Oct-11	16:40	51.7	55.6	42.7
30-Oct-11	16:45	52.2	56.3	43.6
30-Oct-11	16:50	55.2	59.2	43.7
30-Oct-11	16:55	52.3	55.9	44.1
30-Oct-11	17:00	55.8	59.8	45.2
30-Oct-11	17:05	54.3	57.5	44.2
30-Oct-11	17:10	55.4	59.8	44.1
30-Oct-11	17:15	58.2	62.5	45.8
30-Oct-11	17:20	55.7	60.4	44.6
30-Oct-11	17:25	61.7	65.8	47.1
30-Oct-11	17:30	63.7	67.8	47.1
30-Oct-11	17:35	57.7	61.2	47.4
30-Oct-11	17:40	55.5	59.8	46.1
30-Oct-11	17:45	54.2	60.5	44.7
30-Oct-11	17:50	55.3	60.6	45.3
30-Oct-11	17:55	56.1	61.2	44.1
30-Oct-11	18:00	56.0	62.0	43.8
30-Oct-11	18:05	57.7	62.0	42.7
30-Oct-11	18:10	54.7	59.0	45.5
30-Oct-11	18:15	55.2	59.0	46.0
30-Oct-11	18:20	55.9	60.2	45.8
30-Oct-11	18:25	54.8	60.0	46.1
30-Oct-11	18:30	55.2	59.2	47.0
30-Oct-11	18:35	53.8	57.6	45.8
30-Oct-11	18:40	61.0	65.3	43.4
30-Oct-11	18:45	52.4	56.5	45.7
30-Oct-11	18:50	51.8	55.7	44.1
30-Oct-11	18:55	54.7	58.4	46.7

Annex B3

Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
30-Oct-11	19:00	51.0	53.9	43.4
30-Oct-11	19:05	61.3	65.1	50.1
30-Oct-11	19:10	58.8	63.6	47.1
30-Oct-11	19:15	57.0	61.3	46.4
30-Oct-11	19:20	56.8	60.7	45.8
30-Oct-11	19:25	55.4	60.1	44.7
30-Oct-11	19:30	56.0	60.4	44.2
30-Oct-11	19:35	55.1	59.1	44.6
30-Oct-11	19:40	56.6	60.5	45.1
30-Oct-11	19:45	56.4	60.8	44.7
30-Oct-11	19:50	51.4	55.6	43.9
30-Oct-11	19:55	48.9	52.2	41.4
30-Oct-11	20:00	47.2	50.9	40.8
30-Oct-11	20:05	53.1	57.9	42.8
30-Oct-11	20:10	43.5	44.7	42.2
30-Oct-11	20:15	59.6	64.2	43.0
30-Oct-11	20:20	54.2	58.3	44.3
30-Oct-11	20:25	60.1	63.5	42.6
30-Oct-11	20:30	46.1	47.8	42.4
30-Oct-11	20:35	54.0	57.8	43.7
30-Oct-11	20:40	51.3	56.2	42.5
30-Oct-11	20:45	49.2	51.0	40.9
30-Oct-11	20:50	41.9	42.9	40.3
30-Oct-11	20:55	54.1	58.2	42.1
30-Oct-11	21:00	54.1	58.1	44.9
30-Oct-11	21:05	45.5	49.0	41.1
30-Oct-11	21:10	56.8	61.5	42.7
30-Oct-11	21:15	60.5	65.2	41.9
30-Oct-11	21:20	57.0	61.5	44.9
30-Oct-11	21:25	53.1	53.2	41.7
30-Oct-11	21:30	58.8	62.6	43.5
30-Oct-11	21:35	57.2	61.4	42.1
30-Oct-11	21:40	46.8	49.4	42.3
30-Oct-11	21:45	55.2	59.4	41.7
30-Oct-11	21:50	56.1	60.7	41.0
30-Oct-11	21:55	57.3	61.2	46.1
30-Oct-11	22:00	44.5	46.9	40.5
30-Oct-11	22:05	49.7	47.0	40.2
30-Oct-11	22:10	57.2	62.0	41.5
30-Oct-11	22:15	42.8	44.3	40.2
30-Oct-11	22:20	45.9	50.3	40.0
30-Oct-11	22:25	58.4	62.5	42.0
30-Oct-11	22:30	56.6	60.6	41.1
30-Oct-11	22:35	51.0	54.6	40.0
30-Oct-11	22:40	56.6	61.3	42.0
30-Oct-11	22:45	52.1	49.3	40.2
30-Oct-11	22:50	49.9	52.2	41.1
30-Oct-11	22:55	43.9	46.3	41.5
	Mean	55.1	58.9	45.5
	Maximum	63.7	67.8	59.6
	Minimum	41.9	42.9	40.0

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
31-Oct-11	19:00	56.7	60.9	41.8
31-Oct-11	19:05	54.0	58.8	42.4
31-Oct-11	19:10	55.3	60.3	41.5
31-Oct-11	19:15	53.6	58.7	40.6
31-Oct-11	19:20	58.1	62.6	42.3
31-Oct-11	19:25	59.3	62.8	41.8
31-Oct-11	19:30	57.1	61.3	42.5
31-Oct-11	19:35	50.5	53.7	41.1
31-Oct-11	19:40	56.8	61.3	42.6
31-Oct-11	19:45	57.8	62.3	42.9
31-Oct-11	19:50	60.2	63.4	42.1
31-Oct-11	19:55	54.1	56.3	41.7
31-Oct-11	20:00	52.3	45.5	40.7
31-Oct-11	20:05	56.2	61.1	41.9
31-Oct-11	20:10	58.5	62.9	42.8
31-Oct-11	20:15	53.6	58.3	42.6
31-Oct-11	20:20	56.6	60.7	43.9
31-Oct-11	20:25	61.3	64.7	43.0
31-Oct-11	20:30	52.4	57.3	41.7
31-Oct-11	20:35	56.3	60.0	42.3
31-Oct-11	20:40	58.9	63.7	46.1
31-Oct-11	20:45	55.4	58.0	42.4
31-Oct-11	20:50	57.9	61.0	40.7
31-Oct-11	20:55	59.2	63.0	40.9
31-Oct-11	21:00	56.9	61.2	43.0
31-Oct-11	21:05	51.5	55.0	40.4
31-Oct-11	21:10	64.2	69.0	40.5
31-Oct-11	21:15	51.8	52.6	40.5
31-Oct-11	21:20	51.7	56.0	40.0
31-Oct-11	21:25	55.8	60.3	42.1
31-Oct-11	21:30	57.0	61.3	41.5
31-Oct-11	21:35	53.8	58.6	41.8
31-Oct-11	21:40	46.9	47.1	41.4
31-Oct-11	21:45	54.3	58.2	41.6
31-Oct-11	21:50	51.0	55.4	41.1
31-Oct-11	21:55	57.4	62.1	42.0
31-Oct-11	22:00	56.8	60.9	43.4
31-Oct-11	22:05	55.0	59.0	42.1
31-Oct-11	22:10	55.5	57.5	41.1
31-Oct-11	22:15	55.0	59.8	42.3
31-Oct-11	22:20	58.3	62.6	43.5
31-Oct-11	22:25	57.7	62.1	41.5
31-Oct-11	22:30	53.7	57.3	41.1
31-Oct-11	22:35	53.4	58.1	41.6
31-Oct-11	22:40	52.0	55.8	42.2
31-Oct-11	22:45	51.6	56.5	41.1
31-Oct-11	22:50	53.3	58.0	42.0
31-Oct-11	22:55	56.8	61.2	43.7
	Mean	55.5	59.3	42.0
	Maximum	64.2	69.0	46.1
	Minimum	46.9	45.5	40.0

Summary of Evening Time and Holiday Noise Level at Pak Mong Village_NSR 1			
	L_{eq}	L_{10}	L_{90}
Mean	54.7	58.1	45.5
Maximum	68.0	72.1	59.6
Minimum	41.4	42.7	39.1

Annex B4

Night-time 23:00 – 07:00 Hrs of the Next Day Baseline Noise Monitoring Data

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
18-Oct-11	23:00	54.8	59.4	41.4
18-Oct-11	23:05	54.3	54.5	39.7
18-Oct-11	23:10	57.1	61.6	40.1
18-Oct-11	23:15	53.8	58.3	40.5
18-Oct-11	23:20	52.9	56.0	40.0
18-Oct-11	23:25	56.6	61.0	38.9
18-Oct-11	23:30	56.6	59.7	38.4
18-Oct-11	23:35	57.2	61.7	42.8
18-Oct-11	23:40	57.1	61.8	42.2
18-Oct-11	23:45	57.4	61.0	40.3
18-Oct-11	23:50	55.9	59.9	41.0
18-Oct-11	23:55	52.1	54.6	39.6
	Mean	55.5	59.1	40.4
	Maximum	57.4	61.8	42.8
	Minimum	52.1	54.5	38.4

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
19-Oct-11	00:00	58.1	60.8	41.1
19-Oct-11	00:05	59.2	62.5	43.8
19-Oct-11	00:10	60.1	64.0	43.8
19-Oct-11	00:15	58.5	62.9	41.4
19-Oct-11	00:20	60.2	64.1	44.5
19-Oct-11	00:25	53.5	57.7	42.0
19-Oct-11	00:30	51.8	55.7	39.3
19-Oct-11	00:35	53.8	56.4	39.9
19-Oct-11	00:40	52.5	57.0	39.8
19-Oct-11	00:45	53.8	57.5	44.4
19-Oct-11	00:50	48.0	51.3	41.4
19-Oct-11	00:55	59.2	63.6	43.7
19-Oct-11	01:00	57.4	60.2	41.1
19-Oct-11	01:05	55.2	59.8	42.0
19-Oct-11	01:10	54.7	57.2	38.6
19-Oct-11	01:15	55.4	60.5	38.8
19-Oct-11	01:20	55.4	60.3	40.2
19-Oct-11	01:25	56.3	60.6	39.7
19-Oct-11	01:30	50.6	54.5	40.7
19-Oct-11	01:35	48.3	51.8	40.5
19-Oct-11	01:40	57.4	60.6	43.3
19-Oct-11	01:45	57.9	62.5	38.9
19-Oct-11	01:50	46.5	49.6	40.9
19-Oct-11	01:55	45.7	48.9	40.3
19-Oct-11	02:00	56.1	60.5	41.0
19-Oct-11	02:05	44.9	48.0	39.1
19-Oct-11	02:10	44.4	47.5	38.3
19-Oct-11	02:15	50.2	53.1	37.3
19-Oct-11	02:20	43.2	46.6	36.9
19-Oct-11	02:25	41.4	44.6	36.2
19-Oct-11	02:30	39.4	41.6	35.9
19-Oct-11	02:35	48.6	42.4	36.3
19-Oct-11	02:40	48.3	52.5	37.3
19-Oct-11	02:45	39.0	41.5	35.8
19-Oct-11	02:50	39.0	41.0	36.5
19-Oct-11	02:55	46.9	50.2	37.7
19-Oct-11	03:00	40.4	42.1	36.2
19-Oct-11	03:05	54.0	59.2	36.8
19-Oct-11	03:10	42.7	43.2	36.8
19-Oct-11	03:15	54.5	57.6	36.8
19-Oct-11	03:20	54.5	57.3	36.8
19-Oct-11	03:25	60.7	65.3	37.1
19-Oct-11	03:30	54.2	59.2	37.5
19-Oct-11	03:35	54.6	59.7	37.6
19-Oct-11	03:40	55.8	60.3	38.8
19-Oct-11	03:45	54.8	59.4	40.1
19-Oct-11	03:50	58.6	63.3	40.0
19-Oct-11	03:55	57.2	61.9	40.5
19-Oct-11	04:00	51.6	55.3	39.9
19-Oct-11	04:05	58.0	62.6	40.6
19-Oct-11	04:10	48.7	48.8	38.3
19-Oct-11	04:15	61.6	65.8	40.9
19-Oct-11	04:20	58.3	62.0	43.9
19-Oct-11	04:25	44.7	47.9	39.1
19-Oct-11	04:30	45.6	49.1	39.4
19-Oct-11	04:35	54.5	58.1	38.7
19-Oct-11	04:40	52.6	50.4	42.0
19-Oct-11	04:45	46.1	48.4	42.2
19-Oct-11	04:50	44.8	47.5	39.2
19-Oct-11	04:55	46.9	50.3	40.1
19-Oct-11	05:00	47.3	50.0	42.2
19-Oct-11	05:05	56.1	60.8	42.6
19-Oct-11	05:10	43.9	46.1	38.2
19-Oct-11	05:15	43.2	45.5	39.6
19-Oct-11	05:20	52.2	50.6	40.2
19-Oct-11	05:25	47.1	46.7	39.1
19-Oct-11	05:30	45.2	48.1	40.5
19-Oct-11	05:35	53.0	57.6	44.4
19-Oct-11	05:40	47.3	50.3	42.1
19-Oct-11	05:45	49.8	52.2	45.6
19-Oct-11	05:50	51.8	52.9	45.7
19-Oct-11	05:55	50.9	53.0	46.5
19-Oct-11	06:00	52.1	54.8	45.6
19-Oct-11	06:05	52.8	55.5	46.7
19-Oct-11	06:10	50.5	52.8	46.7
19-Oct-11	06:15	50.8	52.5	47.2
19-Oct-11	06:20	50.3	52.8	46.4
19-Oct-11	06:25	57.5	61.7	48.3
19-Oct-11	06:30	57.9	62.7	47.3
19-Oct-11	06:35	52.3	52.7	48.1
19-Oct-11	06:40	54.9	55.1	47.5
19-Oct-11	06:45	59.4	57.0	49.4
19-Oct-11	06:50	55.7	58.8	49.6
19-Oct-11	06:55	57.3	60.2	49.8
19-Oct-11	23:00	54.5	57.6	46.0
19-Oct-11	23:05	53.0	57.3	47.8
19-Oct-11	23:10	59.7	64.2	49.2
19-Oct-11	23:15	53.3	56.9	47.0
19-Oct-11	23:20	52.3	56.4	46.4
19-Oct-11	23:25	49.1	51.2	46.4
19-Oct-11	23:30	49.4	51.9	45.7
19-Oct-11	23:35	55.1	59.0	46.0
19-Oct-11	23:40	52.6	56.8	45.9
19-Oct-11	23:45	49.7	51.5	46.1
19-Oct-11	23:50	53.8	57.5	47.3
19-Oct-11	23:55	49.0	51.2	46.0
	Mean	51.8	54.9	41.8
	Maximum	61.6	65.8	49.8
	Minimum	39.0	41.0	35.8

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
20-Oct-11	00:00	57.2	61.8	47.6
20-Oct-11	00:05	50.4	53.4	45.4
20-Oct-11	00:10	54.3	57.8	45.9
20-Oct-11	00:15	56.8	61.0	46.5
20-Oct-11	00:20	56.0	60.2	48.1
20-Oct-11	00:25	57.6	62.0	48.4
20-Oct-11	00:30	57.3	61.0	48.9
20-Oct-11	00:35	59.6	64.6	46.0
20-Oct-11	00:40	47.7	47.6	44.2
20-Oct-11	00:45	58.7	55.2	46.8
20-Oct-11	00:50	49.0	51.3	45.1
20-Oct-11	00:55	53.7	59.0	44.2
20-Oct-11	01:00	57.2	61.9	46.4
20-Oct-11	01:05	55.1	60.1	45.1
20-Oct-11	01:10	46.9	48.9	43.9
20-Oct-11	01:15	54.0	56.4	44.9
20-Oct-11	01:20	61.5	66.4	48.1
20-Oct-11	01:25	59.7	65.2	45.3
20-Oct-11	01:30	54.9	59.5	45.6
20-Oct-11	01:35	55.6	60.2	43.4
20-Oct-11	01:40	53.4	57.9	45.3
20-Oct-11	01:45	57.9	63.2	44.9
20-Oct-11	01:50	60.2	64.2	48.2
20-Oct-11	01:55	56.7	60.9	46.6
20-Oct-11	02:00	56.3	60.9	46.4
20-Oct-11	02:05	56.7	61.4	47.0
20-Oct-11	02:10	59.8	64.3	46.2
20-Oct-11	02:15	55.5	59.4	47.7
20-Oct-11	02:20	45.9	48.4	43.1
20-Oct-11	02:25	44.5	45.9	42.6
20-Oct-11	02:30	46.5	48.3	44.1
20-Oct-11	02:35	45.0	47.0	42.8
20-Oct-11	02:40	53.8	58.5	44.6
20-Oct-11	02:45	51.0	54.3	45.0
20-Oct-11	02:50	45.0	47.0	42.5
20-Oct-11	02:55	49.2	48.9	41.2
20-Oct-11	03:00	54.7	60.1	42.7
20-Oct-11	03:05	42.6	44.5	40.6
20-Oct-11	03:10	57.6	62.4	42.6
20-Oct-11	03:15	43.2	45.2	40.8
20-Oct-11	03:20	56.8	62.1	40.8
20-Oct-11	03:25	55.5	59.6	44.3
20-Oct-11	03:30	56.9	61.9	40.9
20-Oct-11	03:35	50.1	54.0	42.0
20-Oct-11	03:40	55.6	59.8	42.9
20-Oct-11	03:45	53.3	56.6	43.8
20-Oct-11	03:50	56.1	60.9	42.7
20-Oct-11	03:55	43.8	46.2	41.2
20-Oct-11	04:00	56.2	61.1	40.9
20-Oct-11	04:05	53.4	57.3	41.7
20-Oct-11	04:10	58.6	63.6	41.1
20-Oct-11	04:15	55.2	62.5	43.1
20-Oct-11	04:20	54.6	61.2	42.0
20-Oct-11	04:25	47.7	50.9	42.3
20-Oct-11	04:30	50.1	54.7	41.4
20-Oct-11	04:35	49.8	53.4	42.9
20-Oct-11	04:40	50.5	53.7	42.7
20-Oct-11	04:45	47.1	49.8	43.0
20-Oct-11	04:50	48.2	51.2	43.8
20-Oct-11	04:55	44.5	46.6	41.7
20-Oct-11	05:00	46.8	49.1	42.5
20-Oct-11	05:05	42.7	44.7	40.6
20-Oct-11	05:10	44.7	46.2	43.1
20-Oct-11	05:15	49.2	51.8	43.8
20-Oct-11	05:20	46.2	48.8	42.4
20-Oct-11	05:25	46.6	50.0	42.2
20-Oct-11	05:30	51.9	55.4	43.4
20-Oct-11	05:35	53.1	56.1	45.2
20-Oct-11	05:40	56.1	60.3	48.2
20-Oct-11	05:45	51.4	53.7	47.1
20-Oct-11	05:50	47.3	49.8	43.5
20-Oct-11	05:55	45.9	48.3	42.9
20-Oct-11	06:00	49.9	52.7	45.9
20-Oct-11	06:05	49.1	51.1	45.9
20-Oct-11	06:10	49.1	51.0	46.3
20-Oct-11	06:15	49.9	52.6	46.4
20-Oct-11	06:20	47.5	50.9	41.4
20-Oct-11	06:25	50.1	53.1	43.8
20-Oct-11	06:30	49.1	52.9	43.6
20-Oct-11	06:35	47.0	50.0	42.1
20-Oct-11	06:40	49.7	46.1	41.3
20-Oct-11	06:45	49.1	53.8	42.8
20-Oct-11	06:50	57.0	56.6	41.6
20-Oct-11	06:55	54.5	45.7	40.6
20-Oct-11	23:00	56.9	61.9	44.3
20-Oct-11	23:05	54.7	56.4	44.9
20-Oct-11	23:10	59.7	63.8	43.3
20-Oct-11	23:15	44.4	44.7	41.5
20-Oct-11	23:20	60.1	64.6	43.4
20-Oct-11	23:25	57.1	60.8	43.7
20-Oct-11	23:30	46.5	49.9	41.1
20-Oct-11	23:35	55.8	61.3	41.3
20-Oct-11	23:40	50.3	54.8	41.4
20-Oct-11	23:45	54.8	59.0	43.4
20-Oct-11	23:50	54.3	58.6	43.7
20-Oct-11	23:55	51.8	55.5	41.8
	Mean	52.2	55.5	43.9
	Maximum	61.5	66.4	48.9
	Minimum	42.6	44.5	40.6

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
21-Oct-11	00:00	53.5	57.2	42.6
21-Oct-11	00:05	54.7	59.1	42.3
21-Oct-11	00:10	55.3	59.9	41.2
21-Oct-11	00:15	52.8	56.8	44.2
21-Oct-11	00:20	42.7	43.6	40.9
21-Oct-11	00:25	55.9	60.3	41.5
21-Oct-11	00:30	56.6	61.2	42.9
21-Oct-11	00:35	45.3	48.0	41.4
21-Oct-11	00:40	44.2	46.5	41.1
21-Oct-11	00:45	46.0	48.0	41.3
21-Oct-11	00:50	54.9	60.3	40.9
21-Oct-11	00:55	48.6	52.6	40.4
21-Oct-11	01:00	60.5	65.3	41.3
21-Oct-11	01:05	43.9	46.1	41.2
21-Oct-11	01:10	52.1	57.0	39.6
21-Oct-11	01:15	55.6	60.2	43.9
21-Oct-11	01:20	48.4	53.3	40.8
21-Oct-11	01:25	44.3	44.5	40.3
21-Oct-11	01:30	56.1	60.7	41.7
21-Oct-11	01:35	57.6	58.0	42.1
21-Oct-11	01:40	49.1	45.7	40.5
21-Oct-11	01:45	55.3	59.5	43.1
21-Oct-11	01:50	44.6	44.0	40.7
21-Oct-11	01:55	58.6	62.9	41.4
21-Oct-11	02:00	55.6	59.3	41.4
21-Oct-11	02:05	46.6	48.4	41.8
21-Oct-11	02:10	43.0	44.5	40.4
21-Oct-11	02:15	55.5	60.6	41.9
21-Oct-11	02:20	54.4	55.0	42.0
21-Oct-11	02:25	58.3	62.1	44.0
21-Oct-11	02:30	58.5	63.2	41.1
21-Oct-11	02:35	53.2	57.9	41.6
21-Oct-11	02:40	55.4	60.5	41.4
21-Oct-11	02:45	54.7	59.0	45.5
21-Oct-11	02:50	61.1	66.4	41.1
21-Oct-11	02:55	59.6	64.7	43.2
21-Oct-11	03:00	54.5	58.6	43.5
21-Oct-11	03:05	55.6	58.9	46.2
21-Oct-11	03:10	51.5	55.5	40.6
21-Oct-11	03:15	42.0	44.2	39.6
21-Oct-11	03:20	51.9	55.5	40.3
21-Oct-11	03:25	58.4	62.4	40.9
21-Oct-11	03:30	45.9	45.3	39.7
21-Oct-11	03:35	40.5	41.7	39.1
21-Oct-11	03:40	44.1	44.5	38.3
21-Oct-11	03:45	51.6	55.1	39.0
21-Oct-11	03:50	60.6	66.0	39.7
21-Oct-11	03:55	42.9	45.3	39.2
21-Oct-11	04:00	40.9	43.5	38.3
21-Oct-11	04:05	40.8	42.5	39.1
21-Oct-11	04:10	40.5	42.1	38.5
21-Oct-11	04:15	40.3	42.2	38.4
21-Oct-11	04:20	41.3	42.9	39.5
21-Oct-11	04:25	41.5	42.9	39.8
21-Oct-11	04:30	41.4	43.2	40.0
21-Oct-11	04:35	42.3	43.7	41.0
21-Oct-11	04:40	57.1	61.9	42.1
21-Oct-11	04:45	44.6	47.0	41.9
21-Oct-11	04:50	43.7	45.7	41.3
21-Oct-11	04:55	47.1	48.8	44.9
21-Oct-11	05:00	50.5	52.8	47.0
21-Oct-11	05:05	55.6	59.7	46.6
21-Oct-11	05:10	47.2	49.6	44.6
21-Oct-11	05:15	45.9	47.7	43.5
21-Oct-11	05:20	47.7	49.6	44.6
21-Oct-11	05:25	48.3	50.3	45.5
21-Oct-11	05:30	56.8	57.1	46.5
21-Oct-11	05:35	60.8	64.7	50.0
21-Oct-11	05:40	55.1	59.4	46.9
21-Oct-11	05:45	56.0	60.5	43.6
21-Oct-11	05:50	48.7	51.5	44.2
21-Oct-11	05:55	54.5	59.6	42.5
21-Oct-11	06:00	54.8	59.1	44.6
21-Oct-11	06:05	53.5	58.4	42.6
21-Oct-11	06:10	43.6	45.8	40.7
21-Oct-11	06:15	45.9	48.9	39.5
21-Oct-11	06:20	51.4	54.1	44.7
21-Oct-11	06:25	48.3	50.7	45.3
21-Oct-11	06:30	49.2	50.4	45.0
21-Oct-11	06:35	47.9	49.7	44.3
21-Oct-11	06:40	52.6	49.9	43.5
21-Oct-11	06:45	48.4	49.7	44.0
21-Oct-11	06:50	56.4	59.0	47.4
21-Oct-11	06:55	48.3	50.4	45.3
21-Oct-11	23:00	54.8	59.1	44.3
21-Oct-11	23:05	55.6	60.0	44.5
21-Oct-11	23:10	54.0	57.7	45.2
21-Oct-11	23:15	55.7	59.7	44.1
21-Oct-11	23:20	47.5	50.0	42.9
21-Oct-11	23:25	54.9	59.4	42.5
21-Oct-11	23:30	55.3	59.8	43.3
21-Oct-11	23:35	58.7	63.4	44.6
21-Oct-11	23:40	44.1	46.4	41.4
21-Oct-11	23:45	44.1	45.5	42.4
21-Oct-11	23:50	44.2	45.4	43.0
21-Oct-11	23:55	60.7	65.6	42.1
	Mean	50.7	53.7	42.4
	Maximum	61.1	66.4	50.0
	Minimum	40.3	41.7	38.3

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
22-Oct-11	00:00	47.2	49.3	43.2
22-Oct-11	00:05	44.4	45.7	43.0
22-Oct-11	00:10	49.4	52.7	44.2
22-Oct-11	00:15	57.0	60.9	46.3
22-Oct-11	00:20	60.7	64.8	49.6
22-Oct-11	00:25	46.2	47.9	43.8
22-Oct-11	00:30	58.8	64.5	44.4
22-Oct-11	00:35	53.6	58.2	45.7
22-Oct-11	00:40	45.9	47.5	44.2
22-Oct-11	00:45	55.5	60.3	43.8
22-Oct-11	00:50	60.3	64.7	44.5
22-Oct-11	00:55	42.3	44.3	40.0
22-Oct-11	01:00	42.4	44.2	40.3
22-Oct-11	01:05	46.6	47.5	40.4
22-Oct-11	01:10	51.2	57.0	40.4
22-Oct-11	01:15	47.2	49.9	39.6
22-Oct-11	01:20	42.3	43.6	39.8
22-Oct-11	01:25	43.1	45.7	40.2
22-Oct-11	01:30	42.5	44.1	39.7
22-Oct-11	01:35	41.5	42.9	40.0
22-Oct-11	01:40	41.9	43.0	40.1
22-Oct-11	01:45	43.0	45.4	40.3
22-Oct-11	01:50	53.9	58.3	40.2
22-Oct-11	01:55	60.1	65.0	42.9
22-Oct-11	02:00	42.8	44.4	40.7
22-Oct-11	02:05	57.9	62.7	42.4
22-Oct-11	02:10	56.8	61.3	43.1
22-Oct-11	02:15	59.8	64.9	42.0
22-Oct-11	02:20	46.0	49.1	40.4
22-Oct-11	02:25	43.1	44.5	41.3
22-Oct-11	02:30	60.2	65.3	43.3
22-Oct-11	02:35	42.3	43.9	40.8
22-Oct-11	02:40	45.5	48.8	41.5
22-Oct-11	02:45	41.3	42.7	39.7
22-Oct-11	02:50	40.4	41.5	39.2
22-Oct-11	02:55	41.5	43.8	39.2
22-Oct-11	03:00	44.8	41.9	39.3
22-Oct-11	03:05	45.6	42.4	39.6
22-Oct-11	03:10	40.2	41.2	39.2
22-Oct-11	03:15	40.2	41.1	39.2
22-Oct-11	03:20	40.8	42.0	39.4
22-Oct-11	03:25	41.1	41.9	39.9
22-Oct-11	03:30	50.9	55.4	40.1
22-Oct-11	03:35	40.5	41.3	39.5
22-Oct-11	03:40	41.1	41.9	40.2
22-Oct-11	03:45	40.9	41.9	39.4
22-Oct-11	03:50	41.5	42.8	40.1
22-Oct-11	03:55	41.5	43.0	40.0
22-Oct-11	04:00	41.7	43.2	40.2
22-Oct-11	04:05	57.3	62.7	42.0
22-Oct-11	04:10	54.1	58.3	42.2
22-Oct-11	04:15	56.8	61.3	44.5
22-Oct-11	04:20	50.1	54.6	42.2
22-Oct-11	04:25	45.3	46.8	40.5
22-Oct-11	04:30	46.6	46.8	40.3
22-Oct-11	04:35	43.8	46.2	40.2
22-Oct-11	04:40	55.5	60.2	43.3
22-Oct-11	04:45	44.5	47.4	41.2
22-Oct-11	04:50	43.8	46.1	41.1
22-Oct-11	04:55	44.4	46.8	41.2
22-Oct-11	05:00	55.1	59.3	42.2
22-Oct-11	05:05	45.9	47.9	43.4
22-Oct-11	05:10	58.9	63.8	42.5
22-Oct-11	05:15	50.4	49.5	42.5
22-Oct-11	05:20	45.6	48.2	41.0
22-Oct-11	05:25	43.6	45.9	40.3
22-Oct-11	05:30	45.6	48.4	41.5
22-Oct-11	05:35	45.6	46.8	40.3
22-Oct-11	05:40	52.7	55.6	40.6
22-Oct-11	05:45	49.7	52.4	44.4
22-Oct-11	05:50	49.7	51.8	45.7
22-Oct-11	05:55	51.2	54.9	46.5
22-Oct-11	06:00	47.8	50.4	42.6
22-Oct-11	06:05	57.5	62.6	44.1
22-Oct-11	06:10	59.7	64.1	47.6
22-Oct-11	06:15	47.6	49.9	44.2
22-Oct-11	06:20	46.2	48.4	42.3
22-Oct-11	06:25	51.7	55.8	45.1
22-Oct-11	06:30	47.9	50.8	43.0
22-Oct-11	06:35	50.2	52.6	46.0
22-Oct-11	06:40	53.6	57.9	46.3
22-Oct-11	06:45	46.0	48.3	42.7
22-Oct-11	06:50	48.3	49.9	44.2
22-Oct-11	06:55	49.8	52.2	45.0
22-Oct-11	23:00	54.1	59.0	43.0
22-Oct-11	23:05	55.2	59.9	41.9
22-Oct-11	23:10	59.2	64.1	43.4
22-Oct-11	23:15	42.8	44.6	40.5
22-Oct-11	23:20	42.7	44.2	41.2
22-Oct-11	23:25	53.1	57.4	40.4
22-Oct-11	23:30	50.8	55.3	41.1
22-Oct-11	23:35	44.2	46.4	41.0
22-Oct-11	23:40	42.8	44.2	41.2
22-Oct-11	23:45	44.2	45.7	42.0
22-Oct-11	23:50	51.5	55.8	42.5
22-Oct-11	23:55	53.2	57.4	43.0
	Mean	48.4	51.0	42.0
	Maximum	60.7	65.3	49.6
	Minimum	40.2	41.1	39.2

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
23-Oct-11	00:00	57.2	61.4	44.2
23-Oct-11	00:05	59.5	63.8	45.5
23-Oct-11	00:10	55.9	60.5	44.4
23-Oct-11	00:15	50.8	54.4	43.2
23-Oct-11	00:20	55.9	60.5	43.6
23-Oct-11	00:25	43.4	45.3	41.3
23-Oct-11	00:30	57.8	61.7	46.7
23-Oct-11	00:35	55.2	59.0	43.5
23-Oct-11	00:40	57.8	62.6	45.1
23-Oct-11	00:45	54.0	58.2	43.5
23-Oct-11	00:50	60.7	64.9	48.0
23-Oct-11	00:55	51.4	54.4	44.8
23-Oct-11	01:00	54.8	59.6	43.4
23-Oct-11	01:05	52.2	56.4	43.2
23-Oct-11	01:10	54.4	58.6	43.6
23-Oct-11	01:15	51.8	56.2	43.4
23-Oct-11	01:20	59.7	65.3	43.4
23-Oct-11	01:25	50.8	54.3	44.1
23-Oct-11	01:30	51.8	55.8	43.1
23-Oct-11	01:35	53.6	57.9	43.1
23-Oct-11	01:40	51.2	50.5	42.6
23-Oct-11	01:45	51.0	55.2	42.4
23-Oct-11	01:50	45.3	47.1	42.4
23-Oct-11	01:55	51.2	55.6	42.8
23-Oct-11	02:00	58.1	62.6	43.9
23-Oct-11	02:05	58.7	63.6	41.9
23-Oct-11	02:10	46.0	48.8	42.2
23-Oct-11	02:15	44.5	49.4	42.1
23-Oct-11	02:20	43.5	46.1	40.0
23-Oct-11	02:25	53.0	43.0	39.3
23-Oct-11	02:30	44.2	47.3	40.4
23-Oct-11	02:35	61.0	65.2	43.8
23-Oct-11	02:40	43.0	45.5	39.5
23-Oct-11	02:45	58.4	63.5	40.5
23-Oct-11	02:50	56.8	61.0	43.2
23-Oct-11	02:55	43.4	45.9	39.1
23-Oct-11	03:00	41.8	43.9	39.1
23-Oct-11	03:05	41.6	43.7	39.2
23-Oct-11	03:10	41.1	42.9	39.1
23-Oct-11	03:15	41.6	43.8	39.2
23-Oct-11	03:20	57.7	61.6	40.3
23-Oct-11	03:25	44.1	46.8	41.0
23-Oct-11	03:30	41.1	42.9	39.0
23-Oct-11	03:35	42.0	44.9	39.0
23-Oct-11	03:40	59.3	62.9	41.3
23-Oct-11	03:45	59.4	64.3	40.4
23-Oct-11	03:50	41.1	43.0	39.3
23-Oct-11	03:55	39.8	40.8	38.6
23-Oct-11	04:00	40.8	42.8	38.0
23-Oct-11	04:05	42.5	45.7	38.6
23-Oct-11	04:10	43.2	45.5	39.6
23-Oct-11	04:15	42.3	44.9	38.9
23-Oct-11	04:20	43.0	45.4	39.2
23-Oct-11	04:25	41.3	44.5	37.5
23-Oct-11	04:30	42.2	45.7	38.2
23-Oct-11	04:35	43.5	45.6	40.1
23-Oct-11	04:40	42.1	45.7	38.8
23-Oct-11	04:45	43.0	44.8	40.2
23-Oct-11	04:50	41.6	43.9	38.7
23-Oct-11	04:55	39.8	41.6	38.1
23-Oct-11	05:00	40.3	42.3	38.3
23-Oct-11	05:05	40.7	42.5	39.1
23-Oct-11	05:10	43.6	46.3	40.4
23-Oct-11	05:15	56.3	57.5	40.6
23-Oct-11	05:20	58.8	63.0	42.4
23-Oct-11	05:25	45.0	47.7	39.5
23-Oct-11	05:30	45.4	48.4	40.8
23-Oct-11	05:35	43.7	46.8	38.1
23-Oct-11	05:40	44.7	47.5	41.6
23-Oct-11	05:45	43.3	46.6	39.6
23-Oct-11	05:50	43.7	46.4	39.9
23-Oct-11	05:55	45.6	47.7	43.0
23-Oct-11	06:00	47.5	50.0	43.7
23-Oct-11	06:05	48.2	50.6	44.2
23-Oct-11	06:10	50.4	54.4	43.4
23-Oct-11	06:15	59.6	64.9	43.5
23-Oct-11	06:20	49.6	53.2	45.0
23-Oct-11	06:25	51.6	56.2	45.3
23-Oct-11	06:30	47.6	50.2	43.4
23-Oct-11	06:35	59.0	63.6	46.0
23-Oct-11	06:40	50.0	52.5	46.6
23-Oct-11	06:45	49.1	51.4	45.5
23-Oct-11	06:50	52.5	52.9	46.0
23-Oct-11	06:55	49.1	51.3	45.4
23-Oct-11	23:00	59.6	63.6	48.4
23-Oct-11	23:05	56.5	60.2	51.0
23-Oct-11	23:10	53.7	58.3	43.1
23-Oct-11	23:15	55.6	60.3	42.6
23-Oct-11	23:20	59.2	64.3	45.5
23-Oct-11	23:25	48.7	52.8	42.2
23-Oct-11	23:30	53.8	59.0	44.4
23-Oct-11	23:35	48.2	52.3	42.5
23-Oct-11	23:40	51.1	54.8	43.0
23-Oct-11	23:45	46.6	45.7	42.8
23-Oct-11	23:50	44.3	45.9	42.4
23-Oct-11	23:55	43.7	45.1	42.2
	Mean	49.4	52.4	42.1
	Maximum	61.0	65.3	51.0
	Minimum	39.8	40.8	37.5

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
24-Oct-11	00:00	45.5	47.8	43.0
24-Oct-11	00:05	56.8	61.3	43.4
24-Oct-11	00:10	49.0	51.3	44.7
24-Oct-11	00:15	57.4	61.4	44.6
24-Oct-11	00:20	54.3	58.5	44.0
24-Oct-11	00:25	53.5	57.3	43.4
24-Oct-11	00:30	43.1	44.4	42.0
24-Oct-11	00:35	56.1	60.9	43.0
24-Oct-11	00:40	52.2	56.8	41.5
24-Oct-11	00:45	51.6	56.4	42.2
24-Oct-11	00:50	49.8	53.3	42.4
24-Oct-11	00:55	50.7	54.6	43.0
24-Oct-11	01:00	47.5	49.5	45.0
24-Oct-11	01:05	54.8	59.5	43.8
24-Oct-11	01:10	46.8	49.7	43.0
24-Oct-11	01:15	55.3	60.0	43.6
24-Oct-11	01:20	55.9	60.1	45.7
24-Oct-11	01:25	49.6	52.3	45.7
24-Oct-11	01:30	58.6	62.7	45.5
24-Oct-11	01:35	53.2	51.5	43.0
24-Oct-11	01:40	60.0	65.3	43.8
24-Oct-11	01:45	43.6	45.2	41.8
24-Oct-11	01:50	47.3	50.8	42.2
24-Oct-11	01:55	45.6	47.7	42.7
24-Oct-11	02:00	56.2	61.4	44.6
24-Oct-11	02:05	44.7	47.0	42.0
24-Oct-11	02:10	47.3	51.1	42.7
24-Oct-11	02:15	52.6	56.6	43.1
24-Oct-11	02:20	46.7	49.0	44.0
24-Oct-11	02:25	61.4	65.8	44.0
24-Oct-11	02:30	49.3	51.8	45.6
24-Oct-11	02:35	46.3	48.6	43.4
24-Oct-11	02:40	55.3	60.0	45.6
24-Oct-11	02:45	56.7	61.4	45.8
24-Oct-11	02:50	53.4	58.7	42.4
24-Oct-11	02:55	54.3	56.9	43.3
24-Oct-11	03:00	51.0	55.9	40.3
24-Oct-11	03:05	39.3	40.2	38.2
24-Oct-11	03:10	57.7	62.6	39.4
24-Oct-11	03:15	50.3	54.2	40.2
24-Oct-11	03:20	55.1	59.5	40.9
24-Oct-11	03:25	45.7	49.8	39.2
24-Oct-11	03:30	42.5	45.2	38.5
24-Oct-11	03:35	39.9	41.0	38.5
24-Oct-11	03:40	39.2	40.8	37.4
24-Oct-11	03:45	38.4	39.8	37.0
24-Oct-11	03:50	38.6	39.9	37.2
24-Oct-11	03:55	37.5	38.9	36.1
24-Oct-11	04:00	39.5	41.5	36.9
24-Oct-11	04:05	38.6	39.5	36.3
24-Oct-11	04:10	37.4	38.6	35.4
24-Oct-11	04:15	38.8	40.5	36.5
24-Oct-11	04:20	40.4	42.5	38.2
24-Oct-11	04:25	40.0	41.3	38.1
24-Oct-11	04:30	40.0	41.8	37.7
24-Oct-11	04:35	38.1	39.0	37.1
24-Oct-11	04:40	38.2	39.2	37.1
24-Oct-11	04:45	41.1	43.0	38.8
24-Oct-11	04:50	40.2	42.2	38.0
24-Oct-11	04:55	37.0	38.4	35.5
24-Oct-11	05:00	37.6	40.0	35.2
24-Oct-11	05:05	50.5	55.5	36.2
24-Oct-11	05:10	45.9	49.2	37.4
24-Oct-11	05:15	42.6	44.5	39.8
24-Oct-11	05:20	42.1	44.7	37.8
24-Oct-11	05:25	41.6	44.4	37.9
24-Oct-11	05:30	42.7	45.4	39.1
24-Oct-11	05:35	44.7	48.2	38.6
24-Oct-11	05:40	44.9	48.3	41.0
24-Oct-11	05:45	43.4	45.6	40.5
24-Oct-11	05:50	46.0	48.7	42.0
24-Oct-11	05:55	46.0	48.6	42.6
24-Oct-11	06:00	46.1	48.7	42.3
24-Oct-11	06:05	47.2	49.7	43.4
24-Oct-11	06:10	47.2	49.8	42.0
24-Oct-11	06:15	48.8	51.3	44.7
24-Oct-11	06:20	52.3	56.6	44.9
24-Oct-11	06:25	54.3	57.9	47.2
24-Oct-11	06:30	48.3	50.3	45.2
24-Oct-11	06:35	48.9	51.4	45.1
24-Oct-11	06:40	48.9	51.4	45.3
24-Oct-11	06:45	49.1	51.7	45.4
24-Oct-11	06:50	51.5	53.4	48.3
24-Oct-11	06:55	53.8	55.2	48.4
24-Oct-11	23:00	51.4	53.1	48.5
24-Oct-11	23:05	49.9	51.8	46.8
24-Oct-11	23:10	54.1	57.3	49.1
24-Oct-11	23:15	51.7	54.0	47.7
24-Oct-11	23:20	52.9	55.5	49.4
24-Oct-11	23:25	56.6	60.7	49.1
24-Oct-11	23:30	56.1	60.2	49.3
24-Oct-11	23:35	55.4	59.6	49.6
24-Oct-11	23:40	56.2	59.7	49.2
24-Oct-11	23:45	58.1	62.5	49.7
24-Oct-11	23:50	51.6	53.1	49.2
24-Oct-11	23:55	54.2	58.5	48.6
	Mean	48.3	51.2	42.4
	Maximum	61.4	65.8	49.7
	Minimum	37.0	38.4	35.2

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
25-Oct-11	00:00	50.7	53.0	47.7
25-Oct-11	00:05	54.8	59.0	47.4
25-Oct-11	00:10	52.3	55.6	47.2
25-Oct-11	00:15	56.2	60.5	49.7
25-Oct-11	00:20	52.7	55.6	48.8
25-Oct-11	00:25	52.5	55.2	46.2
25-Oct-11	00:30	57.9	61.2	51.8
25-Oct-11	00:35	55.8	60.5	46.0
25-Oct-11	00:40	56.2	60.7	46.6
25-Oct-11	00:45	58.5	61.9	50.2
25-Oct-11	00:50	60.7	65.6	48.8
25-Oct-11	00:55	58.3	61.5	51.3
25-Oct-11	01:00	51.1	53.7	48.1
25-Oct-11	01:05	56.8	61.0	49.4
25-Oct-11	01:10	54.9	59.0	47.6
25-Oct-11	01:15	56.6	61.1	49.2
25-Oct-11	01:20	55.9	60.1	46.8
25-Oct-11	01:25	51.5	55.1	46.3
25-Oct-11	01:30	46.3	48.5	43.4
25-Oct-11	01:35	53.5	58.3	43.9
25-Oct-11	01:40	48.3	50.5	45.1
25-Oct-11	01:45	54.8	58.7	47.2
25-Oct-11	01:50	52.1	51.8	44.5
25-Oct-11	01:55	63.8	70.3	45.9
25-Oct-11	02:00	49.0	51.8	45.1
25-Oct-11	02:05	48.2	51.3	43.5
25-Oct-11	02:10	53.9	57.3	43.3
25-Oct-11	02:15	49.2	52.0	42.9
25-Oct-11	02:20	48.4	51.6	44.1
25-Oct-11	02:25	48.5	50.7	45.3
25-Oct-11	02:30	50.3	52.9	45.6
25-Oct-11	02:35	47.8	50.2	44.7
25-Oct-11	02:40	45.3	48.9	43.4
25-Oct-11	02:45	45.6	48.0	43.1
25-Oct-11	02:50	43.2	44.7	41.4
25-Oct-11	02:55	50.6	52.9	43.5
25-Oct-11	03:00	53.3	57.9	41.0
25-Oct-11	03:05	64.3	70.7	43.8
25-Oct-11	03:10	46.0	49.3	40.0
25-Oct-11	03:15	41.3	43.0	39.1
25-Oct-11	03:20	50.9	54.7	42.9
25-Oct-11	03:25	41.8	43.5	39.8
25-Oct-11	03:30	42.1	43.9	39.7
25-Oct-11	03:35	51.8	55.5	40.5
25-Oct-11	03:40	41.8	44.0	39.2
25-Oct-11	03:45	50.5	53.9	41.2
25-Oct-11	03:50	46.6	49.6	42.2
25-Oct-11	03:55	45.6	48.8	40.2
25-Oct-11	04:00	45.6	47.8	42.7
25-Oct-11	04:05	44.7	47.2	41.4
25-Oct-11	04:10	46.2	49.4	41.5
25-Oct-11	04:15	47.1	49.8	40.8
25-Oct-11	04:20	45.0	47.9	40.3
25-Oct-11	04:25	50.4	54.6	40.7
25-Oct-11	04:30	48.6	51.9	44.3
25-Oct-11	04:35	47.8	50.5	43.4
25-Oct-11	04:40	46.0	49.4	40.2
25-Oct-11	04:45	44.7	46.3	41.1
25-Oct-11	04:50	47.2	50.3	43.4
25-Oct-11	04:55	47.5	50.3	44.0
25-Oct-11	05:00	49.6	53.2	42.5
25-Oct-11	05:05	48.4	50.7	45.0
25-Oct-11	05:10	51.2	54.9	43.8
25-Oct-11	05:15	49.8	52.4	43.8
25-Oct-11	05:20	52.3	55.8	45.2
25-Oct-11	05:25	53.2	55.0	45.7
25-Oct-11	05:30	47.4	49.6	43.6
25-Oct-11	05:35	47.0	49.6	42.6
25-Oct-11	05:40	46.3	49.0	41.8
25-Oct-11	05:45	47.7	50.9	41.7
25-Oct-11	05:50	49.3	52.5	43.4
25-Oct-11	05:55	46.2	49.6	41.4
25-Oct-11	06:00	43.0	44.9	40.7
25-Oct-11	06:05	44.1	46.1	40.7
25-Oct-11	06:10	47.8	47.1	40.8
25-Oct-11	06:15	57.4	62.3	40.8
25-Oct-11	06:20	47.7	49.2	40.6
25-Oct-11	06:25	55.7	52.5	42.4
25-Oct-11	06:30	49.8	49.5	41.5
25-Oct-11	06:35	49.4	48.3	40.5
25-Oct-11	06:40	55.2	52.4	40.0
25-Oct-11	06:45	49.9	53.0	42.2
25-Oct-11	06:50	50.7	53.3	43.0
25-Oct-11	06:55	48.2	51.6	41.8
25-Oct-11	23:00	48.5	51.7	43.2
25-Oct-11	23:05	43.2	45.5	40.8
25-Oct-11	23:10	52.7	56.8	41.5
25-Oct-11	23:15	43.5	45.2	41.0
25-Oct-11	23:20	42.6	43.8	41.3
25-Oct-11	23:25	44.5	46.6	42.0
25-Oct-11	23:30	59.4	63.6	42.6
25-Oct-11	23:35	57.9	61.1	46.3
25-Oct-11	23:40	52.6	57.0	42.9
25-Oct-11	23:45	44.1	45.8	40.8
25-Oct-11	23:50	44.8	43.7	40.2
25-Oct-11	23:55	54.7	59.6	43.0
	Mean	50.1	52.9	43.5
	Maximum	64.3	70.7	51.8
	Minimum	41.3	43.0	39.1

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
26-Oct-11	00:00	42.2	43.4	41.0
26-Oct-11	00:05	53.5	57.9	40.8
26-Oct-11	00:10	56.7	61.5	42.2
26-Oct-11	00:15	56.0	60.5	43.6
26-Oct-11	00:20	55.6	60.1	43.7
26-Oct-11	00:25	61.3	66.7	42.5
26-Oct-11	00:30	56.5	61.2	44.1
26-Oct-11	00:35	55.9	60.7	42.5
26-Oct-11	00:40	52.8	56.9	41.2
26-Oct-11	00:45	51.7	53.2	41.5
26-Oct-11	00:50	50.5	51.2	41.4
26-Oct-11	00:55	55.4	60.1	45.2
26-Oct-11	01:00	61.6	65.8	49.2
26-Oct-11	01:05	58.5	62.9	45.4
26-Oct-11	01:10	62.1	67.0	45.1
26-Oct-11	01:15	55.5	59.4	44.7
26-Oct-11	01:20	52.7	57.5	42.3
26-Oct-11	01:25	56.1	60.0	43.1
26-Oct-11	01:30	54.3	58.3	43.2
26-Oct-11	01:35	48.3	51.5	42.1
26-Oct-11	01:40	44.6	46.7	42.2
26-Oct-11	01:45	43.2	45.3	40.9
26-Oct-11	01:50	56.0	61.3	41.5
26-Oct-11	01:55	46.4	50.1	41.0
26-Oct-11	02:00	44.4	45.9	42.3
26-Oct-11	02:05	51.5	55.7	40.3
26-Oct-11	02:10	51.9	56.3	40.6
26-Oct-11	02:15	40.9	42.2	39.4
26-Oct-11	02:20	54.9	60.5	40.1
26-Oct-11	02:25	40.6	42.4	39.0
26-Oct-11	02:30	39.7	40.7	38.2
26-Oct-11	02:35	53.2	58.3	40.8
26-Oct-11	02:40	43.8	46.7	39.9
26-Oct-11	02:45	40.3	42.0	38.3
26-Oct-11	02:50	43.5	46.3	38.4
26-Oct-11	02:55	41.4	43.6	38.8
26-Oct-11	03:00	41.5	45.6	39.3
26-Oct-11	03:05	42.5	44.8	39.3
26-Oct-11	03:10	59.5	63.9	39.7
26-Oct-11	03:15	40.4	42.1	38.6
26-Oct-11	03:20	39.2	40.7	37.5
26-Oct-11	03:25	40.8	42.9	38.4
26-Oct-11	03:30	40.8	43.2	38.0
26-Oct-11	03:35	59.5	64.6	39.4
26-Oct-11	03:40	44.8	47.7	39.2
26-Oct-11	03:45	38.9	40.4	37.1
26-Oct-11	03:50	40.5	42.8	38.2
26-Oct-11	03:55	58.0	63.3	40.7
26-Oct-11	04:00	42.1	44.6	38.4
26-Oct-11	04:05	51.8	57.9	40.0
26-Oct-11	04:10	44.9	49.7	40.8
26-Oct-11	04:15	44.2	46.8	40.3
26-Oct-11	04:20	41.5	43.7	39.2
26-Oct-11	04:25	44.3	47.8	39.6
26-Oct-11	04:30	43.4	45.6	40.0
26-Oct-11	04:35	41.5	43.3	39.4
26-Oct-11	04:40	56.6	61.5	42.5
26-Oct-11	04:45	42.8	45.6	38.7
26-Oct-11	04:50	43.4	45.9	40.3
26-Oct-11	04:55	42.9	45.3	40.0
26-Oct-11	05:00	41.0	43.3	38.5
26-Oct-11	05:05	43.5	46.0	40.6
26-Oct-11	05:10	38.9	40.5	36.7
26-Oct-11	05:15	42.8	44.8	40.6
26-Oct-11	05:20	45.7	47.7	41.3
26-Oct-11	05:25	45.5	46.8	41.5
26-Oct-11	05:30	53.4	55.2	44.1
26-Oct-11	05:35	57.8	62.8	42.7
26-Oct-11	05:40	56.3	61.0	41.2
26-Oct-11	05:45	51.3	48.6	42.7
26-Oct-11	05:50	49.1	53.3	43.7
26-Oct-11	05:55	46.2	48.6	42.7
26-Oct-11	06:00	49.7	49.8	43.3
26-Oct-11	06:05	48.5	51.8	43.2
26-Oct-11	06:10	45.9	48.1	43.0
26-Oct-11	06:15	45.5	47.9	42.4
26-Oct-11	06:20	45.9	48.6	42.9
26-Oct-11	06:25	49.7	52.7	43.6
26-Oct-11	06:30	50.7	52.9	46.9
26-Oct-11	06:35	60.9	66.1	46.3
26-Oct-11	06:40	51.0	52.8	46.9
26-Oct-11	06:45	51.4	53.7	47.1
26-Oct-11	06:50	51.3	53.4	46.0
26-Oct-11	06:55	64.3	69.0	52.0
26-Oct-11	23:00	57.1	61.3	46.0
26-Oct-11	23:05	52.3	53.1	43.6
26-Oct-11	23:10	58.0	62.8	44.6
26-Oct-11	23:15	58.7	62.7	44.9
26-Oct-11	23:20	55.0	59.0	46.2
26-Oct-11	23:25	60.3	64.5	46.0
26-Oct-11	23:30	54.5	58.5	42.5
26-Oct-11	23:35	52.0	57.0	41.7
26-Oct-11	23:40	56.9	61.4	40.8
26-Oct-11	23:45	53.7	58.8	40.4
26-Oct-11	23:50	49.1	53.4	40.6
26-Oct-11	23:55	56.1	61.1	41.4
	Mean	49.7	52.9	41.8
	Maximum	64.3	69.0	52.0
	Minimum	38.9	40.4	36.7

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
27-Oct-11	00:00	59.4	64.3	43.0
27-Oct-11	00:05	58.4	60.7	44.0
27-Oct-11	00:10	59.2	64.4	41.0
27-Oct-11	00:15	53.7	58.0	40.0
27-Oct-11	00:20	56.4	58.8	40.3
27-Oct-11	00:25	56.1	61.2	40.9
27-Oct-11	00:30	54.2	58.6	41.9
27-Oct-11	00:35	55.0	57.0	40.2
27-Oct-11	00:40	47.3	45.0	39.8
27-Oct-11	00:45	59.4	64.2	40.1
27-Oct-11	00:50	58.1	63.0	41.9
27-Oct-11	00:55	51.6	56.9	40.4
27-Oct-11	01:00	47.8	50.8	39.5
27-Oct-11	01:05	50.0	54.2	40.7
27-Oct-11	01:10	47.5	51.1	41.8
27-Oct-11	01:15	52.2	56.2	41.4
27-Oct-11	01:20	53.0	56.6	38.6
27-Oct-11	01:25	40.7	42.7	38.4
27-Oct-11	01:30	51.2	54.8	38.7
27-Oct-11	01:35	49.5	53.1	41.2
27-Oct-11	01:40	44.1	47.4	39.3
27-Oct-11	01:45	50.2	52.5	40.3
27-Oct-11	01:50	48.8	51.7	39.1
27-Oct-11	01:55	52.5	57.4	38.7
27-Oct-11	02:00	47.9	52.5	38.1
27-Oct-11	02:05	49.6	53.3	42.0
27-Oct-11	02:10	46.4	50.0	39.2
27-Oct-11	02:15	43.2	46.6	38.4
27-Oct-11	02:20	41.2	43.0	38.8
27-Oct-11	02:25	54.0	58.9	39.7
27-Oct-11	02:30	40.4	42.4	37.2
27-Oct-11	02:35	49.0	52.6	37.9
27-Oct-11	02:40	43.4	46.6	39.4
27-Oct-11	02:45	41.6	43.8	38.7
27-Oct-11	02:50	42.1	44.8	38.6
27-Oct-11	02:55	42.0	44.4	39.0
27-Oct-11	03:00	44.5	46.6	37.5
27-Oct-11	03:05	49.8	54.0	38.2
27-Oct-11	03:10	51.2	56.0	40.0
27-Oct-11	03:15	48.4	52.5	39.5
27-Oct-11	03:20	47.5	50.8	39.6
27-Oct-11	03:25	49.6	53.9	39.4
27-Oct-11	03:30	42.0	44.2	39.2
27-Oct-11	03:35	46.7	49.1	39.5
27-Oct-11	03:40	47.5	51.7	39.6
27-Oct-11	03:45	50.3	54.2	41.5
27-Oct-11	03:50	52.9	56.5	45.0
27-Oct-11	03:55	51.0	55.0	42.1
27-Oct-11	04:00	47.4	51.0	39.2
27-Oct-11	04:05	52.5	57.0	40.6
27-Oct-11	04:10	46.8	50.7	38.2
27-Oct-11	04:15	50.6	54.2	39.4
27-Oct-11	04:20	44.6	47.3	39.8
27-Oct-11	04:25	50.3	54.8	38.8
27-Oct-11	04:30	51.8	56.7	40.5
27-Oct-11	04:35	43.9	47.1	39.0
27-Oct-11	04:40	42.6	45.3	37.3
27-Oct-11	04:45	42.4	44.8	38.8
27-Oct-11	04:50	42.8	45.3	38.9
27-Oct-11	04:55	43.4	46.4	38.7
27-Oct-11	05:00	44.3	45.9	39.1
27-Oct-11	05:05	49.6	54.0	38.6
27-Oct-11	05:10	41.6	44.4	37.6
27-Oct-11	05:15	42.6	45.0	38.1
27-Oct-11	05:20	44.2	44.9	39.0
27-Oct-11	05:25	51.8	54.2	40.0
27-Oct-11	05:30	45.3	44.6	38.2
27-Oct-11	05:35	58.5	62.2	40.0
27-Oct-11	05:40	51.0	49.0	39.4
27-Oct-11	05:45	50.5	52.5	40.0
27-Oct-11	05:50	50.8	46.0	40.1
27-Oct-11	05:55	42.6	44.2	39.4
27-Oct-11	06:00	42.7	44.3	39.5
27-Oct-11	06:05	52.7	54.6	39.4
27-Oct-11	06:10	60.2	62.5	40.0
27-Oct-11	06:15	57.1	56.3	41.0
27-Oct-11	06:20	49.3	50.3	41.2
27-Oct-11	06:25	51.9	53.8	42.3
27-Oct-11	06:30	44.6	47.0	40.6
27-Oct-11	06:35	46.2	48.1	41.5
27-Oct-11	06:40	48.6	48.2	42.0
27-Oct-11	06:45	53.6	52.3	43.0
27-Oct-11	06:50	54.4	58.3	45.0
27-Oct-11	06:55	48.5	51.5	42.0
27-Oct-11	23:00	44.4	46.4	41.2
27-Oct-11	23:05	57.1	62.0	43.1
27-Oct-11	23:10	55.9	61.0	42.7
27-Oct-11	23:15	59.6	62.4	45.0
27-Oct-11	23:20	57.3	61.7	43.8
27-Oct-11	23:25	53.4	57.1	40.3
27-Oct-11	23:30	54.7	58.6	41.0
27-Oct-11	23:35	42.4	44.5	40.0
27-Oct-11	23:40	54.9	59.4	41.7
27-Oct-11	23:45	53.2	57.8	43.2
27-Oct-11	23:50	58.3	61.6	43.4
27-Oct-11	23:55	57.9	62.7	44.3
	Mean	49.7	52.6	40.3
	Maximum	60.2	64.4	45.0
	Minimum	40.4	42.4	37.2

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
28-Oct-11	00:00	55.0	59.2	42.7
28-Oct-11	00:05	55.6	60.3	43.2
28-Oct-11	00:10	58.7	62.8	42.4
28-Oct-11	00:15	56.4	61.2	41.8
28-Oct-11	00:20	61.6	66.2	45.1
28-Oct-11	00:25	61.6	66.3	41.3
28-Oct-11	00:30	61.6	66.2	40.5
28-Oct-11	00:35	62.3	67.0	40.1
28-Oct-11	00:40	61.5	65.1	42.5
28-Oct-11	00:45	62.9	67.3	43.7
28-Oct-11	00:50	51.0	54.6	41.0
28-Oct-11	00:55	59.1	62.5	41.6
28-Oct-11	01:00	61.2	65.5	45.5
28-Oct-11	01:05	62.0	66.7	45.5
28-Oct-11	01:10	58.9	63.9	43.6
28-Oct-11	01:15	52.3	47.4	39.2
28-Oct-11	01:20	47.7	43.4	39.1
28-Oct-11	01:25	51.8	43.1	38.6
28-Oct-11	01:30	57.5	61.4	40.4
28-Oct-11	01:35	51.5	45.3	40.0
28-Oct-11	01:40	53.6	44.2	38.3
28-Oct-11	01:45	48.6	50.4	38.4
28-Oct-11	01:50	55.0	60.1	40.1
28-Oct-11	01:55	41.1	43.5	38.1
28-Oct-11	02:00	53.4	57.9	37.8
28-Oct-11	02:05	50.2	52.1	39.7
28-Oct-11	02:10	56.1	61.0	39.8
28-Oct-11	02:15	53.2	57.8	40.7
28-Oct-11	02:20	49.5	53.0	41.4
28-Oct-11	02:25	44.1	47.2	38.6
28-Oct-11	02:30	43.4	46.0	38.0
28-Oct-11	02:35	44.9	48.2	38.6
28-Oct-11	02:40	43.9	46.9	38.7
28-Oct-11	02:45	41.6	45.1	36.3
28-Oct-11	02:50	40.1	42.3	36.9
28-Oct-11	02:55	41.4	43.9	38.1
28-Oct-11	03:00	45.2	48.6	38.0
28-Oct-11	03:05	58.2	63.5	41.6
28-Oct-11	03:10	53.3	58.2	38.3
28-Oct-11	03:15	56.1	59.6	37.6
28-Oct-11	03:20	60.5	65.0	39.3
28-Oct-11	03:25	52.2	57.3	37.6
28-Oct-11	03:30	56.7	61.6	38.8
28-Oct-11	03:35	61.0	65.3	42.5
28-Oct-11	03:40	51.3	56.5	38.9
28-Oct-11	03:45	56.9	61.2	39.4
28-Oct-11	03:50	56.9	60.5	41.3
28-Oct-11	03:55	56.5	61.5	38.5
28-Oct-11	04:00	57.0	61.9	39.8
28-Oct-11	04:05	43.6	45.3	38.8
28-Oct-11	04:10	52.7	57.9	39.0

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
28-Oct-11	04:15	53.6	58.4	39.4
28-Oct-11	04:20	44.1	47.4	38.6
28-Oct-11	04:25	45.1	45.1	38.3
28-Oct-11	04:30	43.9	46.7	39.5
28-Oct-11	04:35	46.3	47.8	40.3
28-Oct-11	04:40	54.4	58.1	38.3
28-Oct-11	04:45	43.7	46.4	39.3
28-Oct-11	04:50	51.3	56.0	39.7
28-Oct-11	04:55	41.4	43.6	38.5
28-Oct-11	05:00	41.6	43.5	38.5
28-Oct-11	05:05	43.3	46.0	38.8
28-Oct-11	05:10	44.4	47.3	39.1
28-Oct-11	05:15	46.2	48.3	40.0
28-Oct-11	05:20	48.7	50.6	41.5
28-Oct-11	05:25	46.1	48.9	41.2
28-Oct-11	05:30	45.2	47.8	41.1
28-Oct-11	05:35	45.9	48.2	42.3
28-Oct-11	05:40	48.3	50.8	41.8
28-Oct-11	05:45	48.6	50.4	44.0
28-Oct-11	05:50	52.7	51.9	43.7
28-Oct-11	05:55	50.6	52.8	43.0
28-Oct-11	06:00	53.2	56.0	44.7
28-Oct-11	06:05	51.6	50.7	43.8
28-Oct-11	06:10	57.4	55.2	44.3
28-Oct-11	06:15	48.8	50.9	45.4
28-Oct-11	06:20	59.7	63.8	45.8
28-Oct-11	06:25	48.5	51.1	43.0
28-Oct-11	06:30	53.3	56.6	45.0
28-Oct-11	06:35	52.0	53.2	44.9
28-Oct-11	06:40	58.6	61.3	49.1
28-Oct-11	06:45	55.8	54.0	47.2
28-Oct-11	06:50	51.3	53.8	46.0
28-Oct-11	06:55	52.3	54.4	46.7
28-Oct-11	23:00	55.4	58.9	48.9
28-Oct-11	23:05	52.8	55.8	46.7
28-Oct-11	23:10	59.0	63.2	47.5
28-Oct-11	23:15	56.4	60.4	48.6
28-Oct-11	23:20	55.7	58.9	49.4
28-Oct-11	23:25	56.8	60.3	50.7
28-Oct-11	23:30	57.4	60.7	50.0
28-Oct-11	23:35	55.4	58.8	48.7
28-Oct-11	23:40	56.4	60.3	49.0
28-Oct-11	23:45	56.4	59.8	47.7
28-Oct-11	23:50	59.4	63.4	48.3
28-Oct-11	23:55	55.3	59.7	47.7
	Mean	52.4	55.2	41.9
	Maximum	62.9	67.3	50.7
	Minimum	40.1	42.3	36.3

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
29-Oct-11	00:00	58.0	60.3	48.3
29-Oct-11	00:05	57.6	61.5	49.6
29-Oct-11	00:10	58.0	62.4	47.0
29-Oct-11	00:15	56.9	60.5	48.6
29-Oct-11	00:20	57.8	61.3	50.1
29-Oct-11	00:25	52.1	55.5	47.0
29-Oct-11	00:30	51.6	54.9	44.9
29-Oct-11	00:35	55.2	58.6	46.7
29-Oct-11	00:40	59.9	63.2	52.0
29-Oct-11	00:45	56.7	60.7	48.9
29-Oct-11	00:50	55.5	58.8	48.0
29-Oct-11	00:55	55.8	59.8	48.5
29-Oct-11	01:00	51.7	54.8	47.2
29-Oct-11	01:05	48.7	51.2	44.9
29-Oct-11	01:10	53.5	54.3	45.8
29-Oct-11	01:15	51.9	55.6	44.2
29-Oct-11	01:20	48.8	51.7	43.8
29-Oct-11	01:25	52.3	56.0	44.3
29-Oct-11	01:30	52.8	56.4	44.3
29-Oct-11	01:35	51.1	53.9	44.7
29-Oct-11	01:40	57.4	61.1	44.4
29-Oct-11	01:45	48.8	51.6	42.5
29-Oct-11	01:50	47.1	50.1	41.2
29-Oct-11	01:55	50.9	54.7	42.5
29-Oct-11	02:00	44.8	47.6	40.5
29-Oct-11	02:05	51.7	54.2	45.5
29-Oct-11	02:10	49.3	51.8	43.7
29-Oct-11	02:15	53.2	56.7	43.3
29-Oct-11	02:20	48.5	52.0	41.6
29-Oct-11	02:25	48.7	51.8	42.1
29-Oct-11	02:30	47.9	51.4	39.8
29-Oct-11	02:35	50.9	54.6	40.8
29-Oct-11	02:40	50.5	49.3	38.4
29-Oct-11	02:45	46.4	50.4	39.5
29-Oct-11	02:50	51.1	54.2	44.3
29-Oct-11	02:55	51.0	54.6	39.8
29-Oct-11	03:00	43.7	46.7	38.1
29-Oct-11	03:05	51.4	55.4	40.3
29-Oct-11	03:10	42.5	44.7	39.2
29-Oct-11	03:15	52.7	57.7	37.7
29-Oct-11	03:20	43.9	46.8	38.6
29-Oct-11	03:25	44.8	47.9	38.8
29-Oct-11	03:30	52.8	57.0	42.0
29-Oct-11	03:35	49.4	47.0	39.2
29-Oct-11	03:40	43.8	46.7	39.2
29-Oct-11	03:45	45.1	46.3	38.3
29-Oct-11	03:50	43.4	46.5	37.9
29-Oct-11	03:55	46.5	50.0	38.7
29-Oct-11	04:00	55.9	58.8	39.2
29-Oct-11	04:05	48.5	51.6	40.6
29-Oct-11	04:10	48.6	52.1	40.1
29-Oct-11	04:15	50.2	52.7	41.5
29-Oct-11	04:20	48.3	50.8	41.4
29-Oct-11	04:25	45.2	47.9	40.0
29-Oct-11	04:30	47.0	50.3	40.2
29-Oct-11	04:35	45.9	48.6	41.0
29-Oct-11	04:40	49.2	53.9	40.6
29-Oct-11	04:45	46.8	50.1	39.6
29-Oct-11	04:50	49.3	52.6	41.7
29-Oct-11	04:55	48.1	51.5	41.2
29-Oct-11	05:00	52.4	51.4	41.8
29-Oct-11	05:05	48.6	51.9	42.3
29-Oct-11	05:10	53.0	56.7	43.5
29-Oct-11	05:15	48.3	50.9	42.3
29-Oct-11	05:20	49.8	52.9	42.9
29-Oct-11	05:25	48.9	51.7	42.7
29-Oct-11	05:30	51.3	54.3	44.4
29-Oct-11	05:35	53.5	57.1	45.1
29-Oct-11	05:40	54.4	57.7	46.0
29-Oct-11	05:45	50.0	51.2	44.0
29-Oct-11	05:50	50.4	51.9	45.0
29-Oct-11	05:55	47.1	47.6	42.9
29-Oct-11	06:00	57.2	51.7	42.5
29-Oct-11	06:05	53.7	57.3	43.3
29-Oct-11	06:10	55.5	54.9	44.0
29-Oct-11	06:15	51.6	50.5	44.3
29-Oct-11	06:20	50.3	51.9	46.4
29-Oct-11	06:25	55.6	53.3	45.1
29-Oct-11	06:30	49.6	51.7	44.8
29-Oct-11	06:35	54.8	58.0	48.3
29-Oct-11	06:40	50.0	51.9	45.2
29-Oct-11	06:45	53.6	57.0	45.6
29-Oct-11	06:50	57.1	55.9	47.5
29-Oct-11	06:55	57.5	58.7	49.6
29-Oct-11	23:00	49.7	51.7	47.2
29-Oct-11	23:05	48.1	50.1	45.4
29-Oct-11	23:10	49.8	51.8	47.1
29-Oct-11	23:15	51.1	52.9	48.2
29-Oct-11	23:20	54.8	58.2	50.4
29-Oct-11	23:25	51.0	52.9	48.3
29-Oct-11	23:30	55.9	60.5	48.0
29-Oct-11	23:35	52.9	55.5	48.5
29-Oct-11	23:40	62.4	66.4	49.0
29-Oct-11	23:45	55.2	58.8	49.1
29-Oct-11	23:50	56.8	60.7	49.8
29-Oct-11	23:55	54.5	57.3	51.1
	Mean	51.3	53.9	43.9
	Maximum	62.4	66.4	52.0
	Minimum	42.5	44.7	37.7

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
30-Oct-11	00:00	57.2	60.7	51.1
30-Oct-11	00:05	54.6	58.6	48.8
30-Oct-11	00:10	56.1	59.8	50.1
30-Oct-11	00:15	56.3	59.6	51.6
30-Oct-11	00:20	57.7	61.9	50.2
30-Oct-11	00:25	49.2	51.3	45.5
30-Oct-11	00:30	51.1	53.3	48.1
30-Oct-11	00:35	52.8	53.4	47.5
30-Oct-11	00:40	55.1	59.7	48.2
30-Oct-11	00:45	55.5	59.5	49.4
30-Oct-11	00:50	51.8	54.4	47.3
30-Oct-11	00:55	51.7	55.5	46.9
30-Oct-11	01:00	59.8	64.9	46.5
30-Oct-11	01:05	49.0	51.0	46.0
30-Oct-11	01:10	56.0	60.5	47.9
30-Oct-11	01:15	57.1	61.4	47.8
30-Oct-11	01:20	50.8	52.6	48.5
30-Oct-11	01:25	48.9	50.9	46.7
30-Oct-11	01:30	48.0	50.0	45.2
30-Oct-11	01:35	49.6	51.5	46.6
30-Oct-11	01:40	52.6	51.9	47.3
30-Oct-11	01:45	52.1	55.2	48.1
30-Oct-11	01:50	51.7	55.0	45.4
30-Oct-11	01:55	47.8	50.3	43.5
30-Oct-11	02:00	51.7	56.4	43.6
30-Oct-11	02:05	49.2	51.9	45.6
30-Oct-11	02:10	49.1	51.3	46.1
30-Oct-11	02:15	48.7	50.9	43.9
30-Oct-11	02:20	51.7	54.9	45.2
30-Oct-11	02:25	52.5	55.6	44.7
30-Oct-11	02:30	47.5	50.7	43.1
30-Oct-11	02:35	50.8	53.7	47.1
30-Oct-11	02:40	46.5	49.0	43.6
30-Oct-11	02:45	55.3	59.1	45.3
30-Oct-11	02:50	44.4	46.8	40.6
30-Oct-11	02:55	42.8	45.0	38.6
30-Oct-11	03:00	43.3	45.4	40.3
30-Oct-11	03:05	48.5	50.3	42.9
30-Oct-11	03:10	43.6	45.8	40.6
30-Oct-11	03:15	46.6	49.6	40.9
30-Oct-11	03:20	44.1	47.3	38.5
30-Oct-11	03:25	45.5	49.5	37.5
30-Oct-11	03:30	52.6	55.8	46.6
30-Oct-11	03:35	45.6	48.1	40.9
30-Oct-11	03:40	46.9	50.1	39.6
30-Oct-11	03:45	52.0	55.5	45.0
30-Oct-11	03:50	44.5	47.5	40.0
30-Oct-11	03:55	45.3	47.7	41.3
30-Oct-11	04:00	45.9	49.5	40.9
30-Oct-11	04:05	47.0	49.9	38.1
30-Oct-11	04:10	53.4	58.2	42.7
30-Oct-11	04:15	47.5	50.7	41.4
30-Oct-11	04:20	48.0	51.1	42.3
30-Oct-11	04:25	48.8	51.7	45.0
30-Oct-11	04:30	47.2	51.7	41.1
30-Oct-11	04:35	46.5	49.1	41.4
30-Oct-11	04:40	47.0	49.6	43.5
30-Oct-11	04:45	45.8	48.3	40.7
30-Oct-11	04:50	46.6	50.2	39.9
30-Oct-11	04:55	47.1	50.3	42.1
30-Oct-11	05:00	46.8	50.2	40.0
30-Oct-11	05:05	42.9	45.4	38.6
30-Oct-11	05:10	42.4	44.6	39.0
30-Oct-11	05:15	46.5	50.4	39.3
30-Oct-11	05:20	47.6	51.2	41.5
30-Oct-11	05:25	49.1	52.1	43.8
30-Oct-11	05:30	49.0	52.6	40.9
30-Oct-11	05:35	48.9	52.1	42.3
30-Oct-11	05:40	49.8	52.8	44.7
30-Oct-11	05:45	48.9	51.7	43.5
30-Oct-11	05:50	47.2	50.1	42.5
30-Oct-11	05:55	46.9	49.5	43.0
30-Oct-11	06:00	49.2	52.1	44.6
30-Oct-11	06:05	49.1	51.9	45.4
30-Oct-11	06:10	51.7	55.6	44.6
30-Oct-11	06:15	50.5	52.4	44.6
30-Oct-11	06:20	62.0	67.0	48.0
30-Oct-11	06:25	52.9	52.6	44.5
30-Oct-11	06:30	47.8	50.3	44.4
30-Oct-11	06:35	50.9	54.2	46.1
30-Oct-11	06:40	46.0	47.4	44.4
30-Oct-11	06:45	47.6	50.6	44.7
30-Oct-11	06:50	49.5	53.4	43.5
30-Oct-11	06:55	46.7	49.9	41.4
30-Oct-11	23:00	46.5	49.2	42.2
30-Oct-11	23:05	54.4	59.3	43.3
30-Oct-11	23:10	57.0	60.0	41.5
30-Oct-11	23:15	53.9	57.7	40.5
30-Oct-11	23:20	57.1	61.6	43.1
30-Oct-11	23:25	48.5	51.7	42.2
30-Oct-11	23:30	46.8	46.2	41.3
30-Oct-11	23:35	53.9	59.3	41.7
30-Oct-11	23:40	49.7	52.1	41.2
30-Oct-11	23:45	48.2	51.6	40.9
30-Oct-11	23:50	49.4	52.5	41.3
30-Oct-11	23:55	47.6	51.0	41.0
	Mean	49.7	52.7	43.8
	Maximum	62.0	67.0	51.6
	Minimum	42.4	44.6	37.5

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
31-Oct-11	00:00	46.5	50.7	40.7
31-Oct-11	00:05	50.5	51.2	41.3
31-Oct-11	00:10	53.2	52.4	43.5
31-Oct-11	00:15	46.4	49.7	40.4
31-Oct-11	00:20	58.1	63.2	40.3
31-Oct-11	00:25	48.3	51.6	41.2
31-Oct-11	00:30	42.7	44.7	40.3
31-Oct-11	00:35	58.1	62.7	42.7
31-Oct-11	00:40	41.9	43.2	40.7
31-Oct-11	00:45	42.1	43.8	39.2
31-Oct-11	00:50	56.1	60.7	40.2
31-Oct-11	00:55	41.2	42.2	40.1
31-Oct-11	01:00	43.1	45.6	40.2
31-Oct-11	01:05	42.9	45.9	39.6
31-Oct-11	01:10	43.8	45.6	41.6
31-Oct-11	01:15	56.3	60.5	41.2
31-Oct-11	01:20	56.7	60.0	43.6
31-Oct-11	01:25	49.8	51.7	40.6
31-Oct-11	01:30	47.5	52.8	38.9
31-Oct-11	01:35	54.1	58.5	42.0
31-Oct-11	01:40	54.3	59.4	41.2
31-Oct-11	01:45	58.5	62.8	46.0
31-Oct-11	01:50	54.8	58.1	42.1
31-Oct-11	01:55	56.6	61.5	39.2
31-Oct-11	02:00	46.6	48.9	39.3
31-Oct-11	02:05	40.9	42.7	38.4
31-Oct-11	02:10	55.9	60.7	40.6
31-Oct-11	02:15	42.1	43.6	38.9
31-Oct-11	02:20	44.7	46.2	42.4
31-Oct-11	02:25	45.9	47.0	41.8
31-Oct-11	02:30	42.2	44.5	40.3
31-Oct-11	02:35	43.1	45.1	40.5
31-Oct-11	02:40	42.7	44.8	39.7
31-Oct-11	02:45	44.3	45.4	39.9
31-Oct-11	02:50	48.9	53.1	37.7
31-Oct-11	02:55	42.5	45.5	37.8
31-Oct-11	03:00	41.9	45.2	37.7
31-Oct-11	03:05	62.9	68.1	38.8
31-Oct-11	03:10	53.8	56.8	40.8
31-Oct-11	03:15	43.3	45.8	39.6
31-Oct-11	03:20	40.9	43.5	38.4
31-Oct-11	03:25	41.5	43.9	39.0
31-Oct-11	03:30	42.9	45.5	41.3
31-Oct-11	03:35	46.0	48.2	42.0
31-Oct-11	03:40	43.4	46.0	39.8
31-Oct-11	03:45	54.5	59.6	41.2
31-Oct-11	03:50	57.2	61.6	43.3
31-Oct-11	03:55	55.9	60.8	44.7
31-Oct-11	04:00	45.5	49.0	41.5
31-Oct-11	04:05	42.1	43.6	40.5
31-Oct-11	04:10	44.1	46.9	40.4
31-Oct-11	04:15	49.8	43.9	39.7
31-Oct-11	04:20	59.8	64.2	44.2
31-Oct-11	04:25	47.7	46.4	40.7
31-Oct-11	04:30	57.6	62.6	42.8
31-Oct-11	04:35	57.1	62.0	43.6
31-Oct-11	04:40	56.7	61.8	41.7
31-Oct-11	04:45	42.4	44.1	40.4
31-Oct-11	04:50	52.2	46.8	40.4
31-Oct-11	04:55	61.8	66.1	42.0
31-Oct-11	05:00	63.6	67.6	40.7
31-Oct-11	05:05	46.6	49.4	41.1
31-Oct-11	05:10	41.9	43.6	40.2
31-Oct-11	05:15	42.2	44.2	40.1
31-Oct-11	05:20	42.0	43.5	40.3
31-Oct-11	05:25	43.4	45.8	40.5
31-Oct-11	05:30	45.8	47.2	40.6
31-Oct-11	05:35	42.7	46.9	41.2
31-Oct-11	05:40	43.2	49.7	40.3
31-Oct-11	05:45	43.9	46.3	40.5
31-Oct-11	05:50	44.8	49.2	40.7
31-Oct-11	05:55	46.5	47.6	40.9
31-Oct-11	06:00	47.2	48.5	41.6
31-Oct-11	06:05	45.3	47.2	41.4
31-Oct-11	06:10	44.0	46.3	41.8
31-Oct-11	06:15	48.8	54.5	41.6
31-Oct-11	06:20	49.2	57.1	42.3
31-Oct-11	06:25	48.5	54.8	42.8
31-Oct-11	06:30	51.3	55.6	43.1
31-Oct-11	06:35	52.6	56.7	41.9
31-Oct-11	06:40	49.8	56.1	41.8
31-Oct-11	06:45	49.7	56.9	42.4
31-Oct-11	06:50	50.4	54.6	42.7
31-Oct-11	06:55	52.6	55.8	42.6
31-Oct-11	23:00	55.3	59.7	42.4
31-Oct-11	23:05	44.0	45.9	41.4
31-Oct-11	23:10	42.5	44.2	40.6
31-Oct-11	23:15	51.4	55.8	41.8
31-Oct-11	23:20	58.3	62.8	42.6
31-Oct-11	23:25	55.8	60.3	42.2
31-Oct-11	23:30	57.0	61.3	42.6
31-Oct-11	23:35	61.1	66.0	43.0
31-Oct-11	23:40	59.2	63.8	42.6
31-Oct-11	23:45	57.7	62.6	41.9
31-Oct-11	23:50	54.6	57.0	42.0
31-Oct-11	23:55	56.7	60.1	41.6
	Mean	49.3	52.4	41.1
	Maximum	63.6	68.1	46.0
	Minimum	40.9	42.2	37.7

Annex B4

Night Time Noise Level at Pak Mong Village_NSR 1

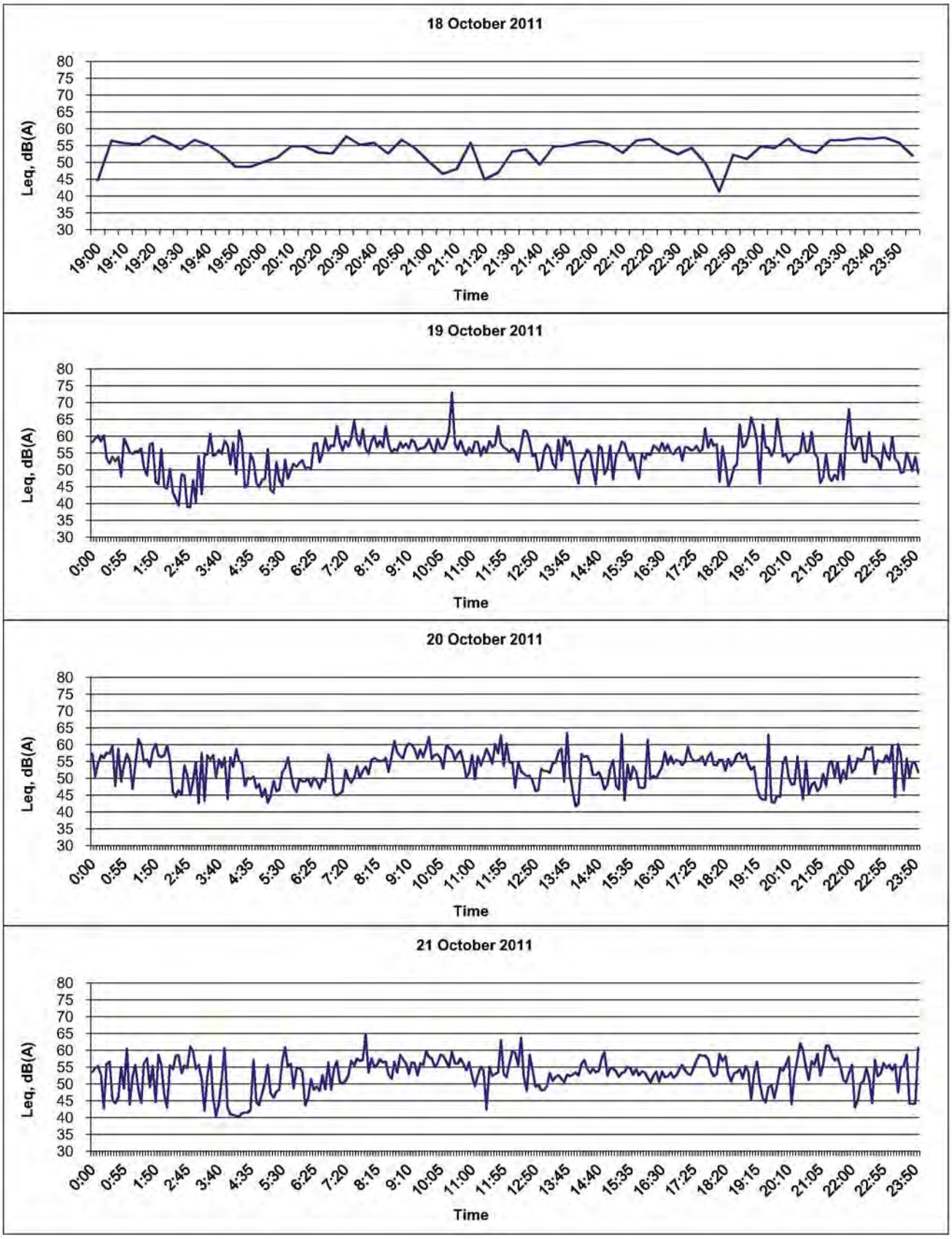
Date	dB(A)			
	Time	L_{eq}	L_{10}	L_{90}
1-Nov-11	00:00	55.6	59.6	40.1
1-Nov-11	00:05	56.8	61.8	41.9
1-Nov-11	00:10	60.6	65.3	42.9
1-Nov-11	00:15	61.1	65.5	42.5
1-Nov-11	00:20	58.3	62.9	42.2
1-Nov-11	00:25	55.3	59.9	41.8
1-Nov-11	00:30	55.7	60.5	41.2
1-Nov-11	00:35	43.8	45.7	39.7
1-Nov-11	00:40	69.1	73.6	44.1
1-Nov-11	00:45	61.0	64.9	41.5
1-Nov-11	00:50	56.2	58.6	40.6
1-Nov-11	00:55	59.0	63.4	42.4
1-Nov-11	01:00	54.2	48.2	41.0
1-Nov-11	01:05	49.6	52.8	40.5
1-Nov-11	01:10	52.9	57.3	40.9
1-Nov-11	01:15	47.9	51.3	41.6
1-Nov-11	01:20	52.8	56.8	41.4
1-Nov-11	01:25	48.5	52.6	40.1
1-Nov-11	01:30	41.9	42.9	39.1
1-Nov-11	01:35	49.8	51.7	38.8
1-Nov-11	01:40	53.9	57.8	41.2
1-Nov-11	01:45	46.4	50.2	39.2
1-Nov-11	01:50	50.6	55.3	39.4
1-Nov-11	01:55	48.9	52.1	39.0
1-Nov-11	02:00	51.9	55.9	39.7
1-Nov-11	02:05	40.0	41.7	38.3
1-Nov-11	02:10	48.6	52.5	39.2
1-Nov-11	02:15	40.8	42.4	39.2
1-Nov-11	02:20	47.4	52.0	38.3
1-Nov-11	02:25	40.4	42.1	38.2
1-Nov-11	02:30	40.7	43.2	37.8
1-Nov-11	02:35	44.1	47.8	38.6
1-Nov-11	02:40	39.3	41.4	37.3
1-Nov-11	02:45	39.4	41.2	37.5
1-Nov-11	02:50	39.9	41.6	38.0
1-Nov-11	02:55	40.0	41.8	37.9
1-Nov-11	03:00	40.0	42.0	37.9
1-Nov-11	03:05	38.7	40.6	36.4
1-Nov-11	03:10	39.5	41.5	37.3
1-Nov-11	03:15	40.1	41.8	38.2
1-Nov-11	03:20	39.1	40.9	37.1
1-Nov-11	03:25	50.7	55.3	38.3
1-Nov-11	03:30	46.5	50.8	38.0
1-Nov-11	03:35	39.9	41.5	38.1
1-Nov-11	03:40	50.0	54.5	37.0
1-Nov-11	03:45	50.5	54.2	41.1
1-Nov-11	03:50	49.0	53.0	38.7
1-Nov-11	03:55	50.4	55.4	37.9
1-Nov-11	04:00	46.0	50.1	37.2
1-Nov-11	04:05	54.4	57.9	38.5
1-Nov-11	04:10	46.8	50.3	38.5
1-Nov-11	04:15	51.8	56.1	38.1
1-Nov-11	04:20	38.5	40.3	36.3
1-Nov-11	04:25	39.0	41.1	36.6
1-Nov-11	04:30	46.1	50.1	38.0
1-Nov-11	04:35	40.0	41.8	37.9
1-Nov-11	04:40	49.4	53.5	37.0
1-Nov-11	04:45	40.3	42.4	36.6
1-Nov-11	04:50	39.7	42.5	36.7
1-Nov-11	04:55	39.5	41.6	37.0
1-Nov-11	05:00	39.6	41.0	38.0
1-Nov-11	05:05	40.1	42.3	37.2
1-Nov-11	05:10	41.0	42.9	37.9
1-Nov-11	05:15	40.1	42.2	37.5
1-Nov-11	05:20	42.8	43.9	37.7
1-Nov-11	05:25	42.3	44.5	38.9
1-Nov-11	05:30	46.6	46.5	38.2
1-Nov-11	05:35	41.8	44.1	38.7
1-Nov-11	05:40	45.2	48.4	39.8
1-Nov-11	05:45	42.7	44.8	40.1
1-Nov-11	05:50	48.3	48.9	40.5
1-Nov-11	05:55	48.6	47.0	39.6
1-Nov-11	06:00	50.7	50.5	40.1
1-Nov-11	06:05	44.2	46.7	40.3
1-Nov-11	06:10	43.8	45.7	41.1
1-Nov-11	06:15	56.7	57.0	41.5
1-Nov-11	06:20	53.2	56.3	43.2
1-Nov-11	06:25	50.1	52.3	41.9
1-Nov-11	06:30	50.4	53.9	43.4
1-Nov-11	06:35	49.1	52.3	42.7
1-Nov-11	06:40	46.2	47.8	42.1
1-Nov-11	06:45	45.2	47.3	41.0
1-Nov-11	06:50	53.1	50.7	42.9
1-Nov-11	06:55	51.2	54.0	43.8
	Mean	47.4	50.1	39.5
	Maximum	69.1	73.6	44.1
	Minimum	47.4	50.1	39.5

Summary of Night Time Noise Level at Pak Mong Village_NSR 1			
	L_{eq}	L_{10}	L_{90}
Mean	50.1	53.0	42.2
Maximum	69.1	73.6	52.0
Minimum	37.0	38.4	35.2

Annex B5

Graphical Presentation of Baseline Noise Levels

Noise Level at Pak Mong Village_NSR 1



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex B5

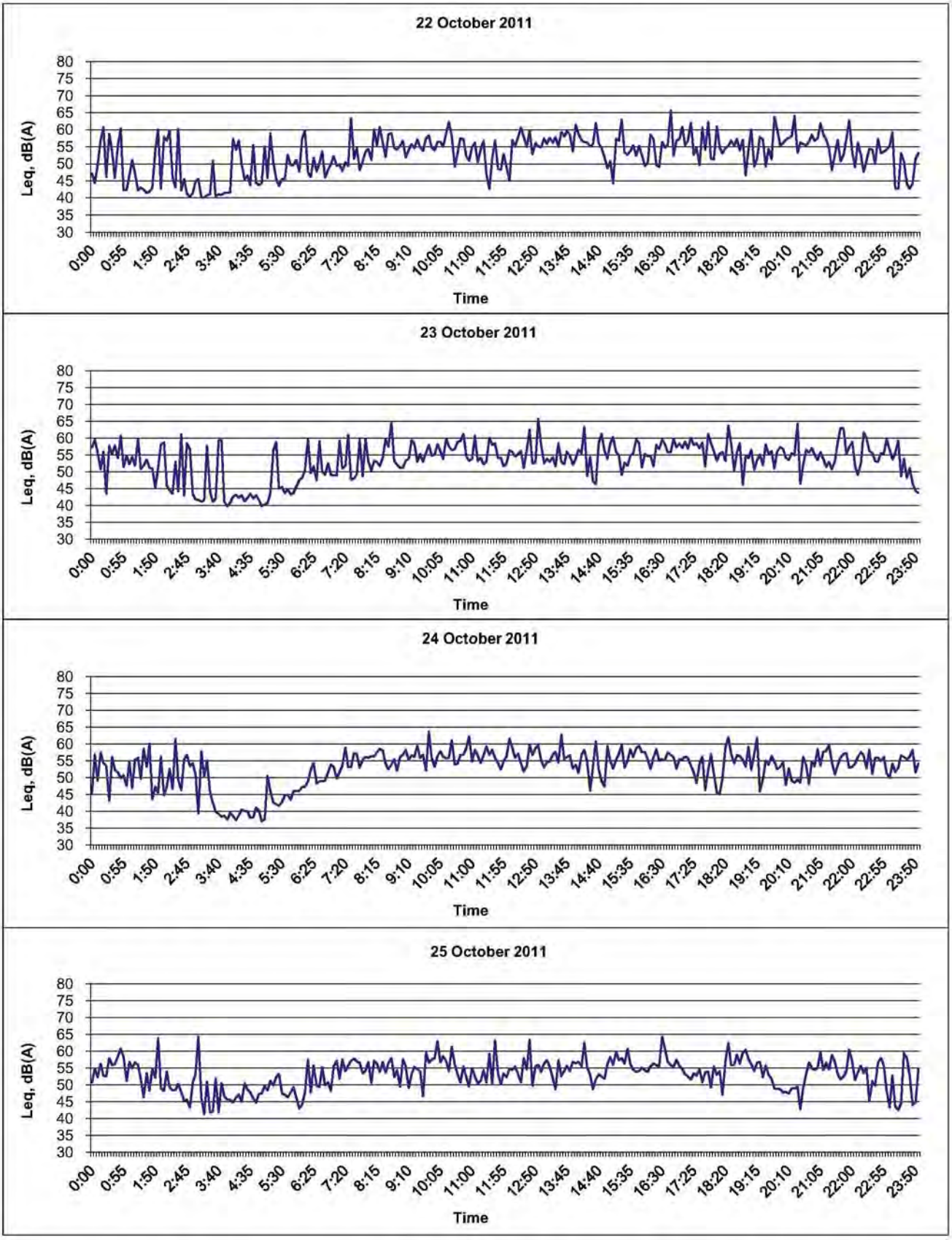
Graphical Presentation of Baseline Noise Levels at Pak Mong Village_NSR 1

FILE: 0215660i27
DATE: 30/09/2013

Environmental Resources Management

ERM

Noise Level at Pak Mong Village_NSR 1



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex B5

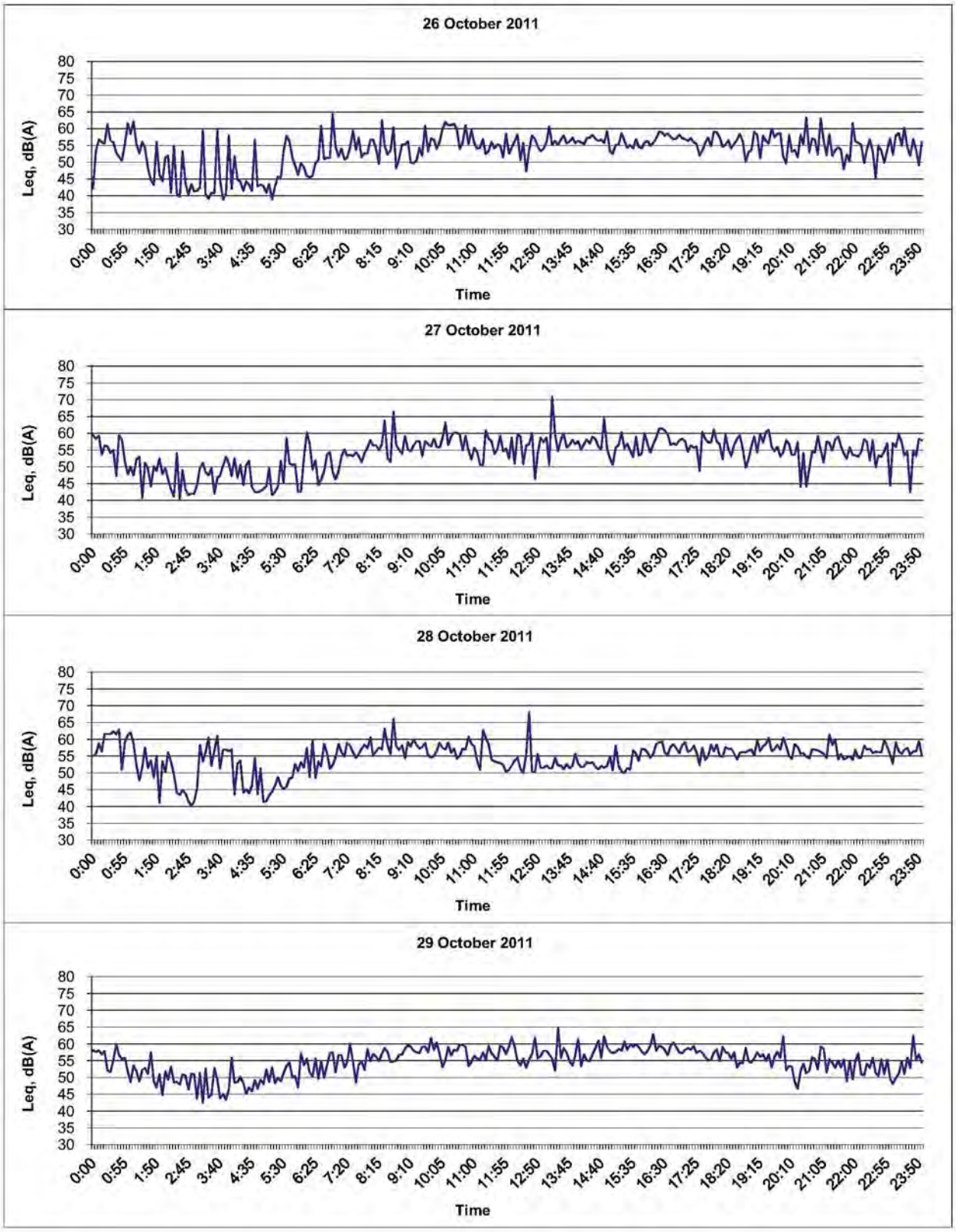
Graphical Presentation of Baseline Noise Levels at Pak Mong Village_NSR 1

FILE: 0215660i28
DATE: 30/09/2013

Environmental Resources Management

ERM

Noise Level at Pak Mong Village_NSR 1



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex B5

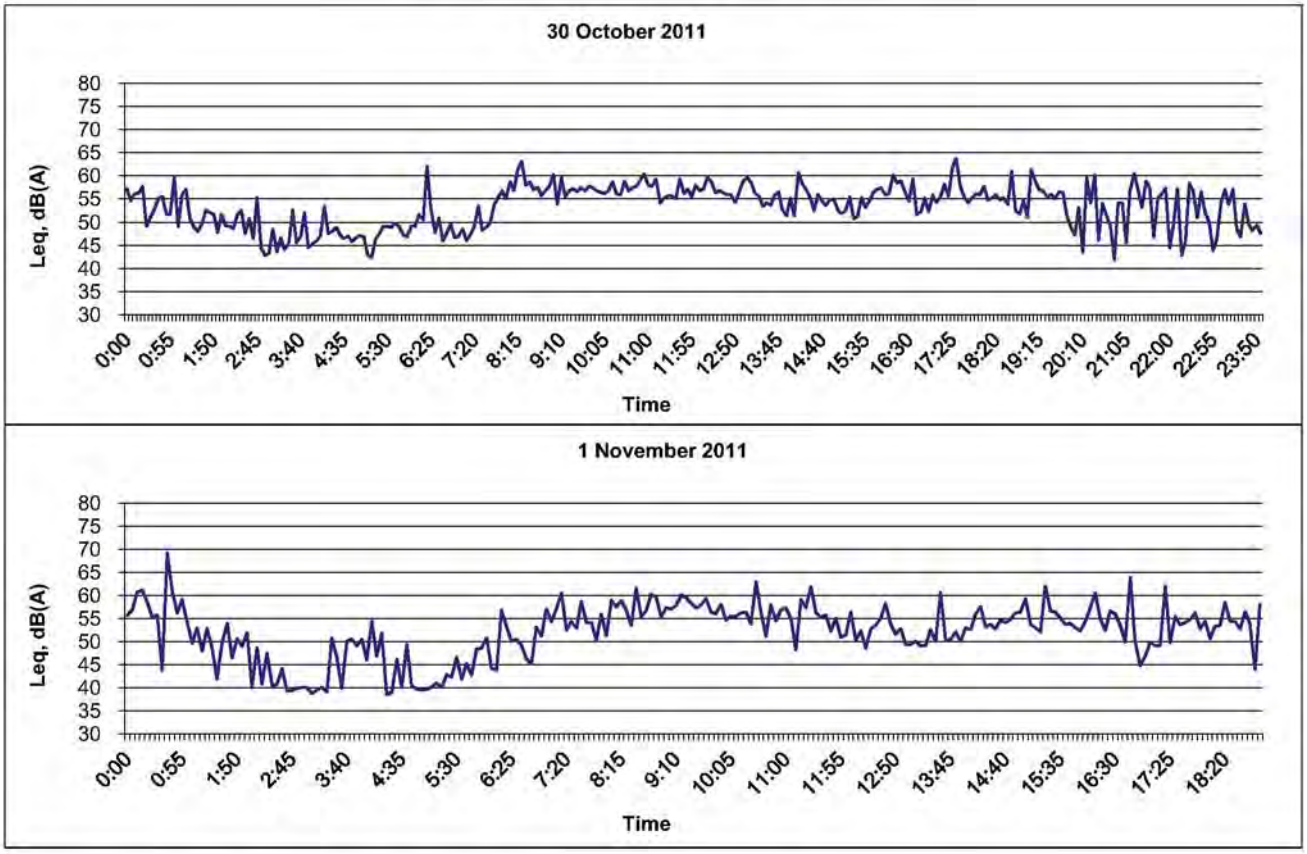
Graphical Presentation of Baseline Noise Levels at Pak Mong Village_NSR 1

FILE: 0215660i29
DATE: 30/09/2013

Environmental Resources Management

ERM

Noise Level at Pak Mong Village_NSR 1



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Annex B5

Graphical Presentation of Baseline Noise Levels at Pak Mong Village_NSR 1

FILE: 0215660i30
DATE: 30/09/2013

Environmental Resources Management

ERM

Annex C1

Copies of Calibration Certificates for Water Quality Monitoring Equipment

WELLAB 匯力 Testing & Research

WELLAB LIMITED
Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

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

ATTN: **Mr. W.K. Tang**

Test Report No.:	C/W/111005-1
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0126AA
Equipment No.	: W.03.01

Test conditions:

Room Temperature	: 25 degree Celsius
Relative Humidity	: 58%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 11J100025
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 07E100029
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 11J1000475
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 11H
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

PATRICK TSE
Laboratory Manager

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Testing & Research

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Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

Test Report No.:	C/W/111005-1
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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WELLAB LIMITED
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Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

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

Test Report No.:	C/W/111005-2
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04

ATTN: **Mr. W.K. Tang**

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0293AA
Equipment No.	: W.03.02

Test conditions:

Room Temperature	: 24 degree Celsius
Relative Humidity	: 56%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 11J100025
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0146
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 11J100476
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 10E
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

PATRICK TSE
Laboratory Manager

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TEST REPORT

Test Report No.:	C/W/111005-2
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1421	1420	1	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.0	9.0	0.0	± 0.2
Half-saturated	5.8	5.8	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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Rms 816, 1516 & 1701, Technology Park,
18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

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

ATTN: **Mr. W.K. Tang**

Test Report No.:	C/W/111005-3
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	1 of 2

Certificate of Calibration

Item for calibration:

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

Test conditions:

Room Temperature	: 24 degree Celsius
Relative Humidity	: 56%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 03H1461
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 08C100610
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 09M100672
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 07E
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

PATRICK TSE
Laboratory Manager

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Website: www.wellab.com.hk

TEST REPORT

Test Report No.:	C/W/111005-3
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.0	0.0	1.00 ± 0.05

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

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Website: www.wellab.com.hk

TEST REPORT

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

ATTN: **Mr. W.K. Tang**

Test Report No.:	C/W/111005-4
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 04F11451AC
Equipment No.	: W.03.05

Test conditions:

Room Temperature	: 24 degree Celsius
Relative Humidity	: 56%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 10C100151
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 07E100029
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 10C101580
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 11H
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

Test Report No.:	C/W/111005-4
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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Website: www.wellab.com.hk

TEST REPORT

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

ATTN: **Mr. W.K. Tang**

Test Report No.:	C/W/111005-5
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 11J101089
Equipment No.	: W.03.10

Test conditions:

Room Temperature	: 24 degree Celsius
Relative Humidity	: 56%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 11J100023
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 11J100272
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 11J100474
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 11H
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

Patrick Tse
PATRICK TSE
Laboratory Manager

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Website: www.wellab.com.hk

TEST REPORT

Test Report No.:	C/W/111005-5
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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TEST REPORT

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

Test Report No.:	C/W/111005-6
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04
Page:	1 of 2

ATTN: **Mr. W.K. Tang**

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 11J101088
Equipment No.	: W.03.11

Test conditions:

Room Temperature	: 24 degree Celsius
Relative Humidity	: 56%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 11J100023
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 11J100272
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 11J100477
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 11H
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

PATRICK TSE
Laboratory Manager

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TEST REPORT

Test Report No.:	C/W/111005-6
Date of Issue:	2011-10-05
Date Received:	2011-10-05
Date Tested:	2011-10-05
Date Completed:	2011-10-05
Next Due Date:	2012-01-04

Results:

1. Conductivity performance check

Specific Conductivity, µS/cm		Correction, µS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1420	0	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5
1000	1000	0	1000 ± 100

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

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

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東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/010 Manufacturer : HACH

Model No. : 2100Q Serial No. : 11110 C 014260

Date of Calibration : ~~09/072013~~ 09/07/2013 Due Date : 08/10/2013

Gelex Vial Std	Theoretical Value (NTU)	Measured Value (NTU)	Difference %
0-10 NTU	5.22	5.14	1.54
10-100 NTU	51.4	50.3	2.16
100-1000 NTU	536	531	0.94

Acceptance Criteria

Difference : ~~<5%~~ -5% to 5%

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

Checked by : _____ Approved by : _____

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Form E/CE/R/15/Issue 6 (1/1) [08/03]

Internal Calibration & Performance Check Report of pH Meter

Equipment Ref. No. : ET/EW/007/003 Manufacturer : HANNA
Model No. : HI 8314 Serial No. : 674469
Date of Calibration : 08/08/2013 Calibration Due Date : 07/09/2013

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/15
Temperature of Solution : 19.7 $pH_{½}$ = +0.08
pH value of diluted buffer : 6.79 pH (S) = 6.881
pH = pH(S) - pH of diluted buffer = 0.091 (Observed Deviation)
Liquid Junction Error (pH_j) = pH - $pH_{½}$ = 0.011

Shift on Stirring

pH of buffer solution (with stirring), pH_s = 6.90
Shift on stirring, pH_s= pH_s - pH(S) - pH_j = 0.008

Noise

Noise, pH_n = difference between max and min reading : 0.01

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
Temperature record from the reference thermometer (T_R): 20.0 °C
Temperature record from the ATC (T_{ATC}): 19.7 °C
Temperature Difference (T_R - T_{ATC}) 0.3 °C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	pHj	≤0.05
Shift on Stirring	pHs	≤0.02
Noise	pHn	≤0.02
Verifcation of ATC	Temperature Difference	≤0.5°C

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

* Delete as appropriate

Calibrated by : Approved Signatory :

Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No.	:	ET/EW/008/004	Manufacturer	:	YSI
Model No.	:	Pro 2030	Serial No.	:	10F 101978
Date of Calibration	:	31/07/2013	Calibration Due Date	:	30/10/2013

Temperature Verification

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

Ref. No. of Water Bath : ---

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

Standardization of sodium thiosulphate ($Na_2S_2O_3$) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/7	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/001/20

	Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.10	0.00
Final Vol. of $Na_2S_2O_3$ (ml)	10.55	10.40
Vol. of $Na_2S_2O_3$ used (ml)	10.45	10.40
Normality of $Na_2S_2O_3$ solution (N)	0.02392	0.02404
Average Normality (**N**) of $Na_2S_2O_3$ solution (N)	0.02398	
Acceptance criteria, Deviation	Less than ± 0.001N	

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

Lineality Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
Trial	1	2	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.20	22.30	0.00	8.20	13.20
Final Vol. of $Na_2S_2O_3$ (ml)	11.20	22.30	30.60	8.20	13.20	18.20
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	11.20	11.10	8.30	8.20	5.00	5.00
Dissolved Oxygen (**DO**), mg/L	7.21	7.15	5.34	5.28	3.22	3.22
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = **V** x **N** x 8000/298

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.22	7.11	7.17	7.21	7.15	7.18	0.14
5	5.36	5.15	5.26	5.34	5.28	5.31	0.95
10	3.34	3.12	3.23	3.22	3.22	3.22	0.31
Linear regression coefficient				0.9998			

Internal Calibration Report of Dissolved Oxygen Meter

Zero Point Checking

DO meter reading, mg/L	0.00

Salinity Checking

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/07	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/07

Determination of dissolved oxygen content by Winkler Titration **

Salinity (ppt)	10		30	
Trial	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	12.20	24.30	35.50
Final Vol. of $Na_2S_2O_3$ (ml)	12.20	24.30	35.50	46.50
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	12.20	12.10	11.20	11.00
Dissolved Oxygen (**DO**), mg/L	7.85	7.79	7.21	7.08
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = **V** x **N** x 8000/298

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.86	7.91	7.89	7.85	7.79	7.82	0.89
30	7.24	7.29	7.27	7.21	7.08	7.15	1.66

Acceptance Criteria

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

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

" Delete as appropriate

Calibrated by : _____ Approved by : _____

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Salinity Meter

Equipment Ref. No. :	ET/EW/008/004	Manufacturer :	YSI
Model No. :	Pro 2030	Serial No. :	10F 101978
Date of Calibration :	31/07/2013	Due Date :	30/10/2013

Ref. No. of Salinity Standard used (30ppt)	S/001/4

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	30.8	2.63

Acceptance Criteria

Difference : <10 %

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

Checked by : _____ Approved by : _____

Annex C2

Quality Control Report for Laboratory Analysis

WELLAB 匯力 Testing & Research

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Website: www.wellab.com.hk

TEST REPORT

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

Laboratory No.:	QC14265-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	97	101	98	97	98	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	97	101	98	80-120

Sample Duplicate

Parameter	14265-10 and 10 chk	14265-20 and 20 chk	14265-30 and 30 chk	14265-40 and 40 chk	14265-50 and 50 chk	14265-60 and 60 chk	Acceptance
Suspended Solids (SS), %	3	4	3	6	5	3	RPD≤20

Parameter	14265-70 and 70 chk	14265-80 and 80 chk	14265-86 and 86 chk	Acceptance
Suspended Solids (SS), %	4	3	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14265-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14265

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

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

Patrick Tse

PATRICK TSE

Laboratory Manager

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WELLAB 滙力 Testing & Research

WELLAB LIMITED
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18 On Lai Street, Shatin, N.T, Hong Kong.
Tel: 2898 7388 Fax: 2898 7076
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TEST REPORT

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

Laboratory No.:	QC14266-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	96	96	91	94	94	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	94	95	80-120

Sample Duplicate

Parameter	14266-10 and 10 chk	14266-20 and 20 chk	14266-30 and 30 chk	14266-40 and 40 chk	14266-50 and 50 chk	14266-60 and 60 chk	Acceptance
Suspended Solids (SS), %	6	3	2	5	6	2	RPD≤20

Parameter	14266-70 and 70 chk	14266-76 and 76 chk	Acceptance
Suspended Solids (SS), %	5	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14266-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14266

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

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Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14267-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

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Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	93	95	94	98	94	95	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	96	95	95	93	94	95	80-120

Sample Duplicate

Parameter	14267-10 and 10 chk	14267-20 and 20 chk	14267-30 and 30 chk	14267-40 and 40 chk	14267-50 and 50 chk	14267-60 and 60 chk	Acceptance
Suspended Solids (SS), %	6	4	6	2	3	7	RPD≤20

Parameter	14267-70 and 70 chk	14267-80 and 80 chk	14267-90 and 90 chk	14267-100 and 100 chk	14267-110 and 110 chk	14267-116 and 116 chk	Acceptance
Suspended Solids (SS), %	7	4	4	3	6	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14267-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14267

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TEST REPORT

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

Laboratory No.:	QC14268-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

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Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	98	99	97	99	96	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	93	94	99	93	98	98	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	97	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14268-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14268

****

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TEST REPORT

Laboratory No.:	QC14268-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

QC report:

Sample Duplicate

Parameter	14268-10 and 10 chk	14268-20 and 20 chk	14268-30 and 30 chk	14268-40 and 40 chk	14268-50 and 50 chk	14268-60 and 60 chk	Acceptance
Suspended Solids (SS), %	6	7	7	6	4	2	RPD≤20

Parameter	14268-70 and 70 chk	14268-80 and 80 chk	14268-90 and 90 chk	14268-100 and 100 chk	14268-110 and 110 chk	14268-120 and 120 chk	Acceptance
Suspended Solids (SS), %	7	7	6	2	4	3	RPD≤20

Parameter	14268-124 and 124 chk	Acceptance
Suspended Solids (SS), %	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14268-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14268

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14274-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14
Page:	1 of 1

ATTN: **Miss Mei Ling Tang**

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	97	97	97	96	97	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	98	96	97	80-120

Sample Duplicate

Parameter	14274-11 and 11 chk	14274-21 and 21 chk	14274-31 and 31 chk	14274-41 and 41 chk	14274-51 and 51 chk	14274-61 and 61 chk	Acceptance
Suspended Solids (SS), %	7	3	4	4	3	7	RPD≤20

Parameter	14274-72 and 72 chk	14274-82 and 82 chk	14274-86 and 86 chk	Acceptance
Suspended Solids (SS), %	3	6	5	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14274-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14274

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Shatin, N.T., Hong Kong

Laboratory No.:	QC14275-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	96	96	100	97	98	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	99	98	80-120

Sample Duplicate

Parameter	14275-10 and 10 chk	14275-20 and 20 chk	14275-30 and 30 chk	14275-40 and 40 chk	14275-50 and 50 chk	14275-60 and 60 chk	Acceptance
Suspended Solids (SS), %	3	7	3	3	5	7	RPD≤20

Parameter	14275-70 and 70 chk	14275-74 and 74 chk	Acceptance
Suspended Solids (SS), %	4	5	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14275-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14275

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14276-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	97	102	98	95	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	101	98	98	100	97	98	80-120

Sample Duplicate

Parameter	14276-10 and 10 chk	14276-20 and 20 chk	14276-30 and 30 chk	14276-40 and 40 chk	14276-50 and 50 chk	14276-60 and 60 chk	Acceptance
Suspended Solids (SS), %	6	6	5	3	2	4	RPD≤20

Parameter	14276-70 and 70 chk	14276-80 and 80 chk	14276-90 and 90 chk	14276-100 and 100 chk	14276-110 and 110 chk	14276-114 and 114 chk	Acceptance
Suspended Solids (SS), %	5	4	6	6	3	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14276-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14276

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Shatin, N.T., Hong Kong

Laboratory No.:	QC14277-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14
Page:	1 of 1

ATTN: **Miss Mei Ling Tang**

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	97	98	99	97	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	97	99	100	98	97	98	80-120

Sample Duplicate

Parameter	14277-10 and 10 chk	14277-20 and 20 chk	14277-30 and 30 chk	14277-41 and 41 chk	14277-51 and 51 chk	14277-61 and 61 chk	Acceptance
Suspended Solids (SS), %	4	4	2	3	3	6	RPD≤20

Parameter	14277-71 and 71 chk	14277-81 and 81 chk	14277-91 and 91 chk	14277-102 and 102 chk	14277-112 and 112 chk	14277-122 and 122 chk	Acceptance
Suspended Solids (SS), %	4	4	6	4	6	5	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14277-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14277

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14300-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	96	98	98	100	99	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	98	93	97	80-120

Sample Duplicate

Parameter	14300-12 and 12 chk	14300-22 and 22 chk	14300-34 and 34 chk	14300-44 and 44 chk	14300-56 and 56 chk	14300-67 and 67 chk	Acceptance
Suspended Solids (SS), %	3	3	5	6	6	2	RPD≤20

Parameter	14300-78 and 78 chk	14300-89 and 89 chk	14300-96 and 96 chk	Acceptance
Suspended Solids (SS), %	4	6	3	RPD≤20

Remark: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14300-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14300

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
18 On Lai Street,
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Laboratory No.:	QC14301-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	101	97	100	95	96	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	101	99	80-120

Sample Duplicate

Parameter	14301-14 and 14 chk	14301-28 and 28 chk	14301-41 and 41 chk	14301-61 and 61 chk	14301-76 and 76 chk	14301-90 and 90 chk	Acceptance
Suspended Solids (SS), %	6	7	7	4	3	7	RPD≤20

Parameter	14301-104 and 104 chk	14301-120 and 120 chk	Acceptance
Suspended Solids (SS), %	6	5	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14301-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14301

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TEST REPORT

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

Laboratory No.:	QC14302-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17
Page:	1 of 1

ATTN: **Miss Mei Ling Tang**

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	99	100	95	95	94	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	99	98	99	97	99	94	80-120

Sample Duplicate

Parameter	14302-12 and 12 chk	14302-23 and 23 chk	14302-34 and 34 chk	14302-46 and 46 chk	14302-57 and 57 chk	14302-69 and 69 chk	Acceptance
Suspended Solids (SS), %	5	4	6	5	5	2	RPD≤20

Parameter	14302-81 and 81 chk	14302-91 and 91 chk	14302-103 and 103 chk	14302-115 and 115 chk	14302-126 and 126 chk	14302-132 and 132 chk	Acceptance
Suspended Solids (SS), %	3	7	2	5	7	7	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14302-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14302

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TEST REPORT

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

Laboratory No.:	QC14303-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	96	100	95	96	96	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	97	99	98	98	98	101	80-120

Sample Duplicate

Parameter	14303-11 and 11 chk	14303-23 and 23 chk	14303-33 and 33 chk	14303-44 and 44 chk	14303-56 and 56 chk	14303-66 and 66 chk	Acceptance
Suspended Solids (SS), %	2	3	5	2	3	4	RPD≤20

Parameter	14303-77 and 77 chk	14303-89 and 89 chk	14303-99 and 99 chk	14303-110 and 110 chk	14303-122 and 122 chk	14303-132 and 132 chk	Acceptance
Suspended Solids (SS), %	3	7	7	4	5	2	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14303-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14303

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

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

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Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14313-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	96	95	99	97	96	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	100	95	97	80-120

Sample Duplicate

Parameter	14313-12 and 12 chk	14313-22 and 22 chk	14313-35 and 35 chk	14313-45 and 45 chk	14313-58 and 58 chk	14313-68 and 68 chk	Acceptance
Suspended Solids (SS), %	3	6	4	4	6	3	RPD≤20

Parameter	14313-80 and 80 chk	14313-91 and 91 chk	14313-96 and 96 chk	Acceptance
Suspended Solids (SS), %	4	4	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14313-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14313

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Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14314-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

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Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	94	97	101	95	97	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	95	98	80-120

Sample Duplicate

Parameter	14314-14 and 14 chk	14314-30 and 30 chk	14314-44 and 44 chk	14314-62 and 62 chk	14314-77 and 77 chk	14314-92 and 92 chk	Acceptance
Suspended Solids (SS), %	4	6	3	3	2	3	RPD≤20

Parameter	14314-107 and 107 chk	14314-120 and 120 chk	Acceptance
Suspended Solids (SS), %	6	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14314-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14314

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TEST REPORT

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

Laboratory No.:	QC14315-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18
Page:	1 of 1

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QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	100	99	97	99	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	94	93	96	96	98	96	80-120

Sample Duplicate

Parameter	14315-12 and 12 chk	14315-23 and 23 chk	14315-34 and 34 chk	14315-46 and 46 chk	14315-57 and 57 chk	14315-69 and 69 chk	Acceptance
Suspended Solids (SS), %	6	4	5	3	6	2	RPD≤20

Parameter	14315-81 and 81 chk	14315-91 and 91 chk	14315-103 and 103 chk	14315-115 and 115 chk	14315-126 and 126 chk	14315-132 and 132 chk	Acceptance
Suspended Solids (SS), %	7	4	4	5	4	7	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14315-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14315

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
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Laboratory No.:	QC14316-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

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Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	101	100	92	94	97	100	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	96	95	98	99	97	98	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	94	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14316-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14316

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TEST REPORT

Laboratory No.:	QC14316-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

QC report:

Sample Duplicate

Parameter	14316-10 and 10 chk	14316-22 and 22 chk	14316-32 and 32 chk	14316-42 and 42 chk	14316-54 and 54 chk	14316-64 and 64 chk	Acceptance
Suspended Solids (SS), %	6	4	5	4	6	5	RPD≤20

Parameter	14316-74 and 74 chk	14316-86 and 86 chk	14316-96 and 96 chk	14316-106 and 106 chk	14316-118 and 118 chk	14316-128 and 128 chk	Acceptance
Suspended Solids (SS), %	7	5	7	2	2	3	RPD≤20

Parameter	14316-132 and 132 chk	Acceptance
Suspended Solids (SS), %	5	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14316-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14316

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14332-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

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Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	95	96	97	96	94	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	94	98	97	80-120

Sample Duplicate

Parameter	14332-12 and 12 chk	14332-22 and 22 chk	14332-35 and 35 chk	14332-45 and 45 chk	14332-58 and 58 chk	14332-68 and 68 chk	Acceptance
Suspended Solids (SS), %	4	3	7	5	3	2	RPD≤20

Parameter	14332-80 and 80 chk	14332-91 and 91 chk	14332-96 and 96 chk	Acceptance
Suspended Solids (SS), %	3	7	5	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14332-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14332

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Shatin, N.T., Hong Kong

Laboratory No.:	QC14333-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	98	97	99	98	101	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	100	97	80-120

Sample Duplicate

Parameter	14333-14 and 14 chk	14333-31 and 31 chk	14333-46 and 46 chk	14333-63 and 63 chk	14333-78 and 78 chk	14333-94 and 94 chk	Acceptance
Suspended Solids (SS), %	5	3	3	5	5	3	RPD≤20

Parameter	14333-110 and 110 chk	14333-120 and 120 chk	Acceptance
Suspended Solids (SS), %	5	2	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14333-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14333

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Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14334-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

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Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	100	99	95	98	97	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	99	97	96	96	96	96	80-120

Sample Duplicate

Parameter	14334-12 and 12 chk	14334-24 and 24 chk	14334-37 and 37 chk	14334-49 and 49 chk	14334-59 and 59 chk	14334-70 and 70 chk	Acceptance
Suspended Solids (SS), %	3	7	4	4	3	5	RPD≤20

Parameter	14334-82 and 82 chk	14334-94 and 94 chk	14334-107 and 107 chk	14334-118 and 118 chk	14334-128 and 128 chk	14334-132 and 132 chk	Acceptance
Suspended Solids (SS), %	4	6	5	3	4	7	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14334-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14334

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14335-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

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Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	94	98	98	98	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	95	96	97	94	96	96	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	97	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14335-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14335

****

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TEST REPORT

Laboratory No.:	QC14335-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

QC report:

Sample Duplicate

Parameter	14335-10 and 10 chk	14335-22 and 22 chk	14335-32 and 32 chk	14335-42 and 42 chk	14335-54 and 54 chk	14335-64 and 64 chk	Acceptance
Suspended Solids (SS), %	2	2	3	3	5	3	RPD≤20

Parameter	14335-74 and 74 chk	14335-86 and 86 chk	14335-96 and 96 chk	14335-106 and 106 chk	14335-118 and 118 chk	14335-128 and 128 chk	Acceptance
Suspended Solids (SS), %	3	3	5	7	2	4	RPD≤20

Parameter	14335-132 and 132 chk	Acceptance
Suspended Solids (SS), %	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14335-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14335

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Shatin, N.T., Hong Kong

Laboratory No.:	QC14349-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	94	99	93	100	98	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	95	100	94	80-120

Sample Duplicate

Parameter	14349-11 and 11 chk	14349-21 and 21 chk	14349-34 and 34 chk	14349-44 and 44 chk	14349-55 and 55 chk	14349-66 and 66 chk	Acceptance
Suspended Solids (SS), %	6	6	4	3	3	6	RPD≤20

Parameter	14349-77 and 77 chk	14349-89 and 89 chk	14349-96 and 96 chk	Acceptance
Suspended Solids (SS), %	5	6	2	RPD≤20

Remark: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14349-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14349

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TEST REPORT

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

Laboratory No.:	QC14350-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	93	99	96	96	98	93	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	96	93	80-120

Sample Duplicate

Parameter	14350-14 and 14 chk	14350-30 and 30 chk	14350-44 and 44 chk	14350-60 and 60 chk	14350-74 and 74 chk	14350-90 and 90 chk	Acceptance
Suspended Solids (SS), %	2	6	2	7	5	6	RPD≤20

Parameter	14350-104 and 104 chk	14350-120 and 120 chk	Acceptance
Suspended Solids (SS), %	5	3	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14350-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14350

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

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

Patrick Tse
PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14351-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	93	100	94	96	100	98	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	100	97	101	100	98	98	80-120

Sample Duplicate

Parameter	14351-12 and 12 chk	14351-24 and 24 chk	14351-37 and 37 chk	14351-49 and 49 chk	14351-60 and 60 chk	14351-72 and 72 chk	Acceptance
Suspended Solids (SS), %	5	3	4	3	5	3	RPD≤20

Parameter	14351-83 and 83 chk	14351-96 and 96 chk	14351-108 and 108 chk	14351-119 and 119 chk	14351-130 and 130 chk	14351-132 and 132 chk	Acceptance
Suspended Solids (SS), %	4	5	6	4	4	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14351-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14351

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
18 On Lai Street,
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Laboratory No.:	QC14352-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang**

Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	98	98	95	94	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	101	97	97	98	97	94	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	103	80-120

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14352-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14352

****

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TEST REPORT

Laboratory No.:	QC14352-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

QC report:

Sample Duplicate

Parameter	14352-10 and 10 chk	14352-22 and 22 chk	14352-32 and 32 chk	14352-42 and 42 chk	14352-54 and 54 chk	14352-64 and 64 chk	Acceptance
Suspended Solids (SS), %	6	7	4	3	3	5	RPD≤20

Parameter	14352-74 and 74 chk	14352-86 and 86 chk	14352-96 and 96 chk	14352-106 and 106 chk	14352-118 and 118 chk	14352-128 and 128 chk	Acceptance
Suspended Solids (SS), %	4	7	6	5	5	4	RPD≤20

Parameter	14352-132 and 132 chk	Acceptance
Suspended Solids (SS), %	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14352-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14352

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14364-V1
Date of Issue:	2011-12-09
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	98	98	100	100	100	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	98	97	100	80-120

Sample Duplicate

Parameter	14364-10 and 10 chk	14364-20 and 20 chk	14364-30 and 30 chk	14364-40 and 40 chk	14364-50 and 50 chk	14364-60 and 60 chk	Acceptance
Suspended Solids (SS), %	5	4	4	4	3	5	RPD≤20

Parameter	14364-70 and 70 chk	14364-80 and 80 chk	14364-84 and 84 chk	Acceptance
Suspended Solids (SS), %	5	6	3	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14364-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14364

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14365-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

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Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	96	96	100	97	95	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	96	101	80-120

Sample Duplicate

Parameter	14365-10 and 10 chk	14365-20 and 20 chk	14365-30 and 30 chk	14365-40 and 40 chk	14365-50 and 50 chk	14365-60 and 60 chk	Acceptance
Suspended Solids (SS), %	6	5	2	6	5	7	RPD≤20

Parameter	14365-70 and 70 chk	14365-76 and 76 chk	Acceptance
Suspended Solids (SS), %	6	3	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14365-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14365

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14366-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

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Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	100	93	100	94	94	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	96	98	99	94	93	100	80-120

Sample Duplicate

Parameter	14366-10 and 10 chk	14366-20 and 20 chk	14366-30 and 30 chk	14366-40 and 40 chk	14366-50 and 50 chk	14366-60 and 60 chk	Acceptance
Suspended Solids (SS), %	5	4	4	5	6	3	RPD≤20

Parameter	14366-70 and 70 chk	14366-80 and 80 chk	14366-90 and 90 chk	14366-100 and 100 chk	14366-110 and 110 chk	14366-116 and 116 chk	Acceptance
Suspended Solids (SS), %	3	2	6	6	5	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14366-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14366

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14367-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

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Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	100	95	99	98	99	96	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	95	98	98	96	95	98	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	101	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14367-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14367

****

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PATRICK TSE
Laboratory Manager

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TEST REPORT

Laboratory No.:	QC14367-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

QC report:

Sample Duplicate

Parameter	14367-10 and 10 chk	14367-20 and 20 chk	14367-30 and 30 chk	14367-40 and 40 chk	14367-50 and 50 chk	14367-60 and 60 chk	Acceptance
Suspended Solids (SS), %	3	3	7	7	7	3	RPD≤20

Parameter	14367-70 and 70 chk	14367-80 and 80 chk	14367-90 and 90 chk	14367-100 and 100 chk	14367-110 and 110 chk	14367-120 and 120 chk	Acceptance
Suspended Solids (SS), %	5	4	3	3	4	5	RPD≤20

Parameter	14367-124 and 124 chk	Acceptance
Suspended Solids (SS), %	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14367-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14367

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TEST REPORT

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

Laboratory No.:	QC14399-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	98	97	99	100	99	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	99	99	97	80-120

Sample Duplicate

Parameter	14399-10 and 10 chk	14399-20 and 20 chk	14399-30 and 30 chk	14399-40 and 40 chk	14399-50 and 50 chk	14399-60 and 60 chk	Acceptance
Suspended Solids (SS), %	5	3	5	4	3	3	RPD≤20

Parameter	14399-70 and 70 chk	14399-80 and 80 chk	14399-84 and 84 chk	Acceptance
Suspended Solids (SS), %	3	5	4	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14399-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14399

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TEST REPORT

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

Laboratory No.:	QC14400-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	95	96	101	93	96	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	98	96	80-120

Sample Duplicate

Parameter	14400-10 and 10 chk	14400-20 and 20 chk	14400-30 and 30 chk	14400-40 and 40 chk	14400-50 and 50 chk	14400-60 and 60 chk	Acceptance
Suspended Solids (SS), %	4	5	4	5	5	6	RPD≤20

Parameter	14400-70 and 70 chk	14400-76 and 76 chk	Acceptance
Suspended Solids (SS), %	3	3	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14400-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14400

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TEST REPORT

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

Laboratory No.:	QC14401-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	97	97	96	97	101	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	100	97	99	96	97	98	80-120

Sample Duplicate

Parameter	14401-10 and 10 chk	14401-20 and 20 chk	14401-30 and 30 chk	14401-40 and 40 chk	14401-50 and 50 chk	14401-60 and 60 chk	Acceptance
Suspended Solids (SS), %	2	6	5	5	2	4	RPD≤20

Parameter	14401-70 and 70 chk	14401-80 and 80 chk	14401-90 and 90 chk	14401-100 and 100 chk	14401-110 and 110 chk	14401-114 and 114 chk	Acceptance
Suspended Solids (SS), %	6	6	3	6	3	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14401-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14401

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TEST REPORT

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

Laboratory No.:	QC14402-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

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Page: 1 of 2

QC report:
Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	99	93	96	100	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	94	98	97	95	93	95	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	91	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14402-V2
4) This report supersedes the one dated 2011/11/03 with certificate number QC14402

****

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

Patrick Tse
PATRICK TSE
Laboratory Manager

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TEST REPORT

Laboratory No.:	QC14402-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

QC report:

Sample Duplicate

Parameter	14402-10 and 10 chk	14402-20 and 20 chk	14402-30 and 30 chk	14402-40 and 40 chk	14402-50 and 50 chk	14402-60 and 60 chk	Acceptance
Suspended Solids (SS), %	7	3	5	5	3	4	RPD≤20

Parameter	14402-70 and 70 chk	14402-80 and 80 chk	14402-90 and 90 chk	14402-100 and 100 chk	14402-110 and 110 chk	14402-120 and 120 chk	Acceptance
Suspended Solids (SS), %	2	3	5	4	4	5	RPD≤20

Parameter	14402-124 and 124 chk	Acceptance
Suspended Solids (SS), %	6	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14402-V2

4) This report supersedes the one dated 2011/11/03 with certificate number QC14402

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TEST REPORT

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

Laboratory No.:	QC14426-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	95	100	95	101	99	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	96	98	99	80-120

Sample Duplicate

Parameter	14426-12 and 12 chk	14426-26 and 26 chk	14426-41 and 41 chk	14426-53 and 53 chk	14426-70 and 70 chk	14426-81 and 81 chk	Acceptance
Suspended Solids (SS), %	4	2	6	2	4	2	RPD≤20

Parameter	14426-98 and 98 chk	14426-109 and 109 chk	14426-119 and 119 chk	Acceptance
Suspended Solids (SS), %	2	7	4	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14426-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14426

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14427-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	100	94	96	96	98	100	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	98	99	80-120

Sample Duplicate

Parameter	14427-11 and 11 chk	14427-24 and 24 chk	14427-35 and 35 chk	14427-48 and 48 chk	14427-59 and 59 chk	14427-72 and 72 chk	Acceptance
Suspended Solids (SS), %	3	3	6	7	7	5	RPD≤20

Parameter	14427-83 and 83 chk	14427-96 and 96 chk	Acceptance
Suspended Solids (SS), %	7	2	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14427-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14427

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Shatin, N.T., Hong Kong

Laboratory No.:	QC14428-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31
Page:	1 of 1

ATTN: **Miss Mei Ling Tang**

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	94	96	99	99	95	96	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	100	100	97	96	98	95	80-120

Sample Duplicate

Parameter	14428-12 and 12 chk	14428-23 and 23 chk	14428-34 and 34 chk	14428-46 and 46 chk	14428-58 and 58 chk	14428-72 and 72 chk	Acceptance
Suspended Solids (SS), %	4	4	5	6	6	5	RPD≤20

Parameter	14428-83 and 83 chk	14428-94 and 94 chk	14428-106 and 106 chk	14428-117 and 117 chk	14428-130 and 130 chk	14428-132 and 132 chk	Acceptance
Suspended Solids (SS), %	6	5	7	3	4	5	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14428-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14428

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14429-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

ATTN: **Miss Mei Ling Tang** Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	101	94	97	98	96	99	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	100	96	93	101	100	95	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	96	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14429-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14429

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TEST REPORT

Laboratory No.:	QC14429-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

QC report:

Sample Duplicate

Parameter	14429-10 and 10 chk	14429-22 and 22 chk	14429-32 and 32 chk	14429-42 and 42 chk	14429-54 and 54 chk	14429-64 and 64 chk	Acceptance
Suspended Solids (SS), %	6	6	5	6	7	6	RPD≤20

Parameter	14429-74 and 74 chk	14429-86 and 86 chk	14429-96 and 96 chk	14429-106 and 106 chk	14429-118 and 118 chk	14429-128 and 128 chk	Acceptance
Suspended Solids (SS), %	4	5	6	4	2	5	RPD≤20

Parameter	14429-132 and 132 chk	Acceptance
Suspended Solids (SS), %	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14429-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14429

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14453-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	99	95	95	95	98	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	97	98	99	80-120

Sample Duplicate

Parameter	14453-12 and 12 chk	14453-26 and 26 chk	14453-41 and 41 chk	14453-53 and 53 chk	14453-70 and 70 chk	14453-81 and 81 chk	Acceptance
Suspended Solids (SS), %	2	4	5	3	6	3	RPD≤20

Parameter	14453-98 and 98 chk	14453-109 and 109 chk	14453-119 and 119 chk	Acceptance
Suspended Solids (SS), %	5	4	2	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14453-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14453

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14454-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	94	99	93	97	96	97	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	96	100	80-120

Sample Duplicate

Parameter	14454-11 and 11 chk	14454-24 and 24 chk	14454-35 and 35 chk	14454-48 and 48 chk	14454-59 and 59 chk	14454-72 and 72 chk	Acceptance
Suspended Solids (SS), %	3	6	5	5	6	4	RPD≤20

Parameter	14454-83 and 83 chk	14454-96 and 96 chk	Acceptance
Suspended Solids (SS), %	2	6	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14454-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14454

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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
RM 1710, Technology Park,
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Laboratory No.:	QC14455-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	98	97	93	100	95	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	94	97	101	97	95	99	80-120

Sample Duplicate

Parameter	14455-13 and 13 chk	14455-25 and 25 chk	14455-36 and 36 chk	14455-48 and 48 chk	14455-60 and 60 chk	14455-73 and 73 chk	Acceptance
Suspended Solids (SS), %	3	6	4	5	6	2	RPD≤20

Parameter	14455-84 and 84 chk	14455-95 and 95 chk	14455-107 and 107 chk	14455-118 and 118 chk	14455-130 and 130 chk	14455-132 and 132 chk	Acceptance
Suspended Solids (SS), %	4	3	5	5	4	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14455-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14455

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TEST REPORT

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

Laboratory No.:	QC14456-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	94	99	99	100	97	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	97	100	94	99	94	99	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	93	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14456-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14456

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TEST REPORT

Laboratory No.:	QC14456-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03
Page:	2 of 2

QC report:

Sample Duplicate

Parameter	14456-10 and 10 chk	14456-22 and 22 chk	14456-32 and 32 chk	14456-42 and 42 chk	14456-54 and 54 chk	14456-64 and 64 chk	Acceptance
Suspended Solids (SS), %	7	2	6	4	3	4	RPD≤20

Parameter	14456-74 and 74 chk	14456-86 and 86 chk	14456-96 and 96 chk	14456-106 and 106 chk	14456-118 and 118 chk	14456-128 and 128 chk	Acceptance
Suspended Solids (SS), %	5	6	3	5	7	3	RPD≤20

Parameter	14456-132 and 132 chk	Acceptance
Suspended Solids (SS), %	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14456-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14456

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TEST REPORT

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

Laboratory No.:	QC14469-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	97	98	95	100	100	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	100	95	94	80-120

Sample Duplicate

Parameter	14469-12 and 12 chk	14469-26 and 26 chk	14469-41 and 41 chk	14469-53 and 53 chk	14469-70 and 70 chk	14469-81 and 81 chk	Acceptance
Suspended Solids (SS), %	6	3	5	6	5	3	RPD≤20

Parameter	14469-98 and 98 chk	14469-109 and 109 chk	14469-119 and 119 chk	Acceptance
Suspended Solids (SS), %	3	2	5	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14469-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14469

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

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

Patrick Tse
PATRICK TSE
Laboratory Manager

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Website: www.wellab.com.hk

TEST REPORT

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

Laboratory No.:	QC14470-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	101	97	100	97	94	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	94	98	80-120

Sample Duplicate

Parameter	14470-11 and 11 chk	14470-24 and 24 chk	14470-35 and 35 chk	14470-48 and 48 chk	14470-59 and 59 chk	14470-72 and 72 chk	Acceptance
Suspended Solids (SS), %	3	7	2	6	5	7	RPD≤20

Parameter	14470-83 and 83 chk	14470-96 and 96 chk	Acceptance
Suspended Solids (SS), %	6	2	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14470-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14470

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Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14471-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	95	94	95	98	98	95	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	Acceptance
Suspended Solids (SS), %	94	98	98	96	99	80-120

Sample Duplicate

Parameter	14471-13 and 13 chk	14471-25 and 25 chk	14471-39 and 39 chk	14471-50 and 50 chk	14471-61 and 61 chk	14471-74 and 74 chk	Acceptance
Suspended Solids (SS), %	6	5	3	4	3	5	RPD≤20

Parameter	14471-85 and 85 chk	14471-97 and 97 chk	14471-110 and 110 chk	14471-122 and 122 chk	14471-132 and 132 chk	Acceptance
Suspended Solids (SS), %	6	5	7	7	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14471-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14471

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Patrick Tse
PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14472-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	98	99	94	98	100	95	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	99	99	98	99	98	99	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	103	80-120

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14472-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14472

****

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

PATRICK TSE
Laboratory Manager

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TEST REPORT

Laboratory No.:	QC14472-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03
Page:	2 of 2

QC report:

Sample Duplicate

Parameter	14472-10 and 10 chk	14472-22 and 22 chk	14472-32 and 32 chk	14472-42 and 42 chk	14472-54 and 54 chk	14472-64 and 64 chk	Acceptance
Suspended Solids (SS), %	3	3	3	3	5	5	RPD≤20

Parameter	14472-74 and 74 chk	14472-86 and 86 chk	14472-96 and 96 chk	14472-106 and 106 chk	14472-118 and 118 chk	14472-128 and 128 chk	Acceptance
Suspended Solids (SS), %	4	6	3	6	4	6	RPD≤20

Parameter	14472-132 and 132 chk	Acceptance
Suspended Solids (SS), %	4	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14472-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14472

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TEST REPORT

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

Laboratory No.:	QC14490-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	97	95	97	94	97	96	80-120

Parameter	MQC7	MQC8	MQC9	Acceptance
Suspended Solids (SS), %	96	99	99	80-120

Sample Duplicate

Parameter	14490-12 and 12 chk	14490-26 and 26 chk	14490-41 and 41 chk	14490-53 and 53 chk	14490-70 and 70 chk	14490-81 and 81 chk	Acceptance
Suspended Solids (SS), %	6	6	3	5	3	5	RPD≤20

Parameter	14490-98 and 98 chk	14490-109 and 109 chk	14490-119 and 119 chk	Acceptance
Suspended Solids (SS), %	4	5	3	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14490-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14490

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PREPARED AND CHECKED BY:
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PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14491-V1
Date of Issue:	2011-12-09
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	101	99	101	97	97	99	80-120

Parameter	MQC7	MQC8	Acceptance
Suspended Solids (SS), %	100	98	80-120

Sample Duplicate

Parameter	14491-11 and 11 chk	14491-24 and 24 chk	14491-35 and 35 chk	14491-51 and 51 chk	14491-61 and 61 chk	14491-75 and 75 chk	Acceptance
Suspended Solids (SS), %	3	3	7	4	4	4	RPD≤20

Parameter	14491-85 and 85 chk	14491-96 and 96 chk	Acceptance
Suspended Solids (SS), %	4	4	RPD≤20

Remark: 1) < = less than
2) N/A = Not applicable
3) This report is the summary of quality control data for report number 14491-V2
4) This report supersedes the one dated 2011/11/04 with certificate number QC14491

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PREPARED AND CHECKED BY:
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Patrick Tse

PATRICK TSE
Laboratory Manager

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TEST REPORT

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

Laboratory No.:	QC14492-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang**

Page: 1 of 1

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	96	95	101	93	95	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	Acceptance
Suspended Solids (SS), %	98	96	97	94	100	80-120

Sample Duplicate

Parameter	14492-13 and 13 chk	14492-25 and 25 chk	14492-37 and 37 chk	14492-49 and 49 chk	14492-61 and 61 chk	14492-75 and 75 chk	Acceptance
Suspended Solids (SS), %	5	6	6	4	4	3	RPD≤20

Parameter	14492-87 and 87 chk	14492-98 and 98 chk	14492-110 and 110 chk	14492-122 and 122 chk	14492-132 and 132 chk	Acceptance
Suspended Solids (SS), %	5	5	6	5	3	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14492-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14492

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

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

PATRICK TSE
Laboratory Manager

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Website: www.wellab.com.hk

TEST REPORT

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

Laboratory No.:	QC14493-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang**

Page: 1 of 2

QC report:

Method Blank

Parameter	Method Blank 1	Method Blank 2	Method Blank 3	Method Blank 4	Method Blank 5	Method Blank 6	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 7	Method Blank 8	Method Blank 9	Method Blank 10	Method Blank 11	Method Blank 12	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Parameter	Method Blank 13	Acceptance
Suspended Solids (SS), mg	<0.5	<0.5

Method QC

Parameter	MQC1	MQC2	MQC3	MQC4	MQC5	MQC6	Acceptance
Suspended Solids (SS), %	99	97	99	94	97	97	80-120

Parameter	MQC7	MQC8	MQC9	MQC10	MQC11	MQC12	Acceptance
Suspended Solids (SS), %	99	98	98	94	98	95	80-120

Parameter	MQC13	Acceptance
Suspended Solids (SS), %	92	80-120

Remark: 1) <= less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14493-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14493

****

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PATRICK TSE
Laboratory Manager

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TEST REPORT

Laboratory No.:	QC14493-V1
Date of Issue:	2011-12-08
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

QC report:

Sample Duplicate

Parameter	14493-10 and 10 chk	14493-22 and 22 chk	14493-32 and 32 chk	14493-42 and 42 chk	14493-54 and 54 chk	14493-64 and 64 chk	Acceptance
Suspended Solids (SS), %	6	4	6	5	2	3	RPD≤20

Parameter	14493-74 and 74 chk	14493-86 and 86 chk	14493-96 and 96 chk	14493-106 and 106 chk	14493-118 and 118 chk	14493-128 and 128 chk	Acceptance
Suspended Solids (SS), %	5	5	5	5	5	4	RPD≤20

Parameter	14493-132 and 132 chk	Acceptance
Suspended Solids (SS), %	5	RPD≤20

Remark: 1) < = less than

2) N/A = Not applicable

3) This report is the summary of quality control data for report number 14493-V2

4) This report supersedes the one dated 2011/11/04 with certificate number QC14493

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CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1326026**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **23-SEP-2013**		
Order number	: **----**			*Date of issue*	: **30-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1326026 supersedes any previous reports with this reference. The completion date of analysis is 28-SEP-2013. 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 HK1326026 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3083130)								
HK1326026-001	F SRA4 S1	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.9	8.0	1.9
HK1326320-003	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	14.2	14.2	0.7

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3083130)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	107	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1325970**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **21-SEP-2013**		
Order number	: **----**			*Date of issue*	: **27-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1325970 supersedes any previous reports with this reference. The completion date of analysis is 24-SEP-2013. 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 HK1325970 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3074735)								
HK1325736-006	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.0	7.1	23.7
HK1325970-003	F SR4A B1	EA025: Suspended Solids (SS)	----	0.5	mg/L	14.8	15.1	2.3

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3074735)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	98.5	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1325736**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **17-SEP-2013**		
Order number	: **----**			*Date of issue*	: **24-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1325736 supersedes any previous reports with this reference. The completion date of analysis is 24-SEP-2013. 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 HK1325736 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3074735)								
HK1325736-006	E SR4A S2	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.0	7.1	23.7
HK1325970-003	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	14.8	15.1	2.3

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3074735)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	98.5	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1325414**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **16-SEP-2013**		
Order number	: **----**			*Date of issue*	: **23-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1325414 supersedes any previous reports with this reference. The completion date of analysis is 18-SEP-2013. 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 HK1325414 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3066182)								
HK1325141-005	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.3	0.0
HK1325141-007	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.9	3.8

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3066182)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	100	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1325141**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **13-SEP-2013**		
Order number	: **----**			*Date of issue*	: **19-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1325141 supersedes any previous reports with this reference. The completion date of analysis is 18-SEP-2013. 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 HK1325141 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

				Laboratory Duplicate (DUP) Report				
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3066182)								
HK1325141-005	SR4A S1 E	EA025: Suspended Solids (SS)	----	0.5	mg/L	2.3	2.3	0.0
HK1325141-007	SR4A B1 E	EA025: Suspended Solids (SS)	----	0.5	mg/L	3.0	2.9	3.8

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

		Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3066182)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	100	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1324772**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **----**	*Date received*	: **11-SEP-2013**		
Order number	: **----**			*Date of issue*	: **16-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**8**	
Site	: **----**				- *Analysed* :	**8**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1324772 supersedes any previous reports with this reference. The completion date of analysis is 11-SEP-2013. 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 HK1324772 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3055769)								
HK1324267-008	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	3.9	30.0
HK1324772-004	F SR4A B2	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.4	9.0	3.6

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3055769)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	97.0	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1324472**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **----**	*Date received*	: **09-SEP-2013**		
Order number	: **----**			*Date of issue*	: **13-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**8**	
Site	: **----**				- *Analysed* :	**8**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1324472 supersedes any previous reports with this reference. The completion date of analysis is 12-SEP-2013. 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 HK1324472 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3057202)								
HK1324472-003	FSR4A B1	EA025: Suspended Solids (SS)	----	0.5	mg/L	30.2	30.4	0.4

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3057202)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	98.0	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1324267**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **----**	*Date received*	: **06-SEP-2013**		
Order number	: **----**			*Date of issue*	: **12-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* :	**8**	
Site	: **----**				- *Analysed* :	**8**	

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1324267 supersedes any previous reports with this reference. The completion date of analysis is 11-SEP-2013. 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 HK1324267 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3055769)								
HK1324267-008	E SR4A B2	EA025: Suspended Solids (SS)	----	0.5	mg/L	5.3	3.9	30.0
HK1324772-004	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	9.4	9.0	3.6

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3055769)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	97.0	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 4**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1324008**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**	*Amendment No.*	: **1**		
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
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Project	: **----**	*Quote number*	: **----**	*Date received*	: **04-SEP-2013**		
Order number	: **----**			*Date of issue*	: **11-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1324008_1.00 supersedes any previous reports with this reference. The completion date of analysis is 05-SEP-2013. 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 HK1324008 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3046305)								
HK1323495-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.5	7.7	3.4
HK1323697-002	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	26.4	24.4	8.0
EA/ED: Physical and Aggregate Properties (QC Lot: 3046307)								
HK1323697-005	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	37.4	39.2	4.8

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3046305)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	102	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 3046307)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	100	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1323697**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**	*Amendment No.*	: **1**		
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **----**	*Date received*	: **02-SEP-2013**		
Order number	: **----**			*Date of issue*	: **12-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1323697_1.00 supersedes any previous reports with this reference. The completion date of analysis is 05-SEP-2013. 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 HK1323697 : Sample(s) were received in an ambient condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3046305)								
HK1323495-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.5	7.7	3.4
HK1323697-002	F SR4A S2	EA025: Suspended Solids (SS)	----	0.5	mg/L	26.4	24.4	8.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3046305)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	102	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MS LINDA LAW**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1323611**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **etl@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7792**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **----**	*Date received*	: **30-AUG-2013**		
Order number	: **----**			*Date of issue*	: **06-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1323611 supersedes any previous reports with this reference. The completion date of analysis is 05-SEP-2013. 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 HK1323611 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3046305)								
HK1323495-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.5	7.7	3.4
HK1323697-002	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	26.4	24.4	8.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3046305)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	102	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

CERTIFICATE OF ANALYSIS

Client	: **ETS - TESTCONSULT LTD**	*Laboratory*	: **ALS Technichem HK Pty Ltd**	*Page*	: **1 of 3**		
Contact	: **MR C.L LAU**	*Contact*	: **Fung Lim Chee, Richard**	*Work Order*	: **HK1326320**		
Address	: **8/F, BLOCK B, VERISTRONG IND CTR, NO 34-36 AU PUI WAN STREET, FOTAN, SHATIN, N.T. HONG KONG**	*Address*	: **11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong**				
E-mail	: **env@ets-testconsult.com**	*E-mail*	: **Richard.Fung@alsglobal.com**				
Telephone	: **+852 2946 7791**	*Telephone*	: **+852 2610 1044**				
Facsimile	: **+852 2695 3944**	*Facsimile*	: **+852 2610 2021**				
Project	: **----**	*Quote number*	: **HK/1012/2013**	*Date received*	: **25-SEP-2013**		
Order number	: **----**			*Date of issue*	: **30-SEP-2013**		
C-O-C number	: **----**			*No. of samples*	- *Received* : **8**		
Site	: **----**				- *Analysed* : **8**		

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK1326320 supersedes any previous reports with this reference. The completion date of analysis is 28-SEP-2013. 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 HK1326320 : Sample(s) were received in a chilled condition.
Water sample(s) analysed and reported on an as received basis.

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Signatory	*Position*	*Authorised results for:-*
Fung Lim Chee, Richard	**General Manager**	**Inorganics**

Laboratory Duplicate (DUP) Report

Matrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report				
				LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 3083130)								
HK1326026-001	Anonymous	EA025: Suspended Solids (SS)	----	0.5	mg/L	7.9	8.0	1.9
HK1326320-003	SR4A B1 F	EA025: Suspended Solids (SS)	----	0.5	mg/L	14.2	14.2	0.7

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: **WATER**

Method: Compound	CAS Number	Method Blank (MB) Report			Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 3083130)											
EA025: Suspended Solids (SS)	----	0.5	mg/L	<0.5	20.0 mg/L	107	----	85	115	----	----

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

- **No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.**

Annex C3

Baseline Water Quality Monitoring Results

Water Quality Monitoring Results at CS(Mf)3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	09:50	5.1	Surface	1	26.1 26.1	26.1	7.8 7.8	7.8	26.3 26.3	26.3	87.1 86.8	87.0	6.6 6.6	6.6	6.6	4.5 4.5	4.5	6.1	4.2 4.2	4.2	4.6
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.8 25.8	25.8	7.8 7.8	7.8	26.5 26.6	26.6	86.5 86.4	86.5	6.6 6.6	6.6	6.6	7.4 7.8	7.6		4.9 4.9	4.9	
8-Oct-11	Sunny	Moderate	11:21	6	Surface	1	26.3 26.3	26.3	8.0 8.0	8.0	32.3 32.3	32.3	96.4 96.1	96.3	7.3 7.3	7.3	7.2	3.0 3.0	3.0	7.8	3.3 3.2	3.3	5.0
					Middle	3	26.2 26.2	26.2	8.0 8.0	8.0	32.9 32.8	32.9	94.4 94.3	94.4	7.1 7.1	7.1		6.1 5.5	5.8		6.0 6.2	6.1	
					Bottom	5	26.1 26.1	26.1	8.1 8.1	8.1	33.5 33.5	33.5	92.3 92.2	92.3	7.0 7.0	7.0	7.0	14.9 14.2	14.6		5.5 5.6	5.6	
10-Oct-11	Cloudy	Moderate	12:56	7	Surface	1	26.6 26.7	26.7	8.0 8.0	8.0	31.4 31.3	31.4	104.7 103.1	103.9	7.1 6.9	7.0	7.0	3.8 3.9	3.9	8.8	11.0 11.0	11.0	7.8
					Middle	3.5	26.5 26.5	26.5	8.0 8.0	8.0	32.1 32.1	32.1	104.7 103.4	104.1	7.0 7.0	7.0		5.2 5.0	5.1		6.3 6.4	6.4	
					Bottom	6	26.4 26.4	26.4	8.0 8.0	8.0	32.9 32.9	32.9	104.0 103.5	103.8	7.0 7.0	7.0	7.0	17.1 17.6	17.4		6.2 6.1	6.2	
12-Oct-11	Rainy	Moderate	13:37	7.5	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	31.5 31.5	31.5	98.9 99.0	99.0	6.7 6.7	6.7	6.7	6.0 6.0	6.0	13.7	8.1 8.4	8.3	8.3
					Middle	4	26.4 26.4	26.4	8.0 8.0	8.0	31.7 31.7	31.7	97.7 97.6	97.7	6.6 6.6	6.6		6.3 6.4	6.4		7.5 7.3	7.4	
					Bottom	7	26.2 26.2	26.2	8.0 8.0	8.0	32.2 32.3	32.3	95.9 95.8	95.9	6.5 6.5	6.5	6.5	28.9 28.2	28.6		9.3 9.0	9.2	
14-Oct-11	Cloudy	Moderate	12:44	5.2	Surface	1	26.8 26.7	26.8	7.9 7.9	7.9	24.6 25.0	24.8	86.0 82.1	84.1	5.9 5.7	5.8	5.8	4.1 4.4	4.3	5.8	5.6 5.4	5.5	5.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.4 26.5	26.5	8.0 7.9	8.0	30.5 28.1	29.3	82.9 80.3	81.6	5.6 5.5	5.6	5.6	7.0 7.5	7.3		4.5 4.4	4.5	
16-Oct-11	Sunny	Moderate	13:56	5.1	Surface	1	26.5 26.4	26.5	8.0 8.0	8.0	27.9 29.2	28.6	103.1 93.3	98.2	7.1 6.4	6.8	6.8	3.9 4.0	4.0	5.0	8.2 8.5	8.4	6.6
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.3 26.3	26.3	8.0 8.0	8.0	31.6 31.7	31.7	91.7 86.0	88.9	6.3 5.9	6.1	6.1	5.4 6.4	5.9		4.9 4.8	4.9	
18-Oct-11	Sunny	Moderate	15:02	8	Surface	1	26.6 26.6	26.6	7.9 7.8	7.9	30.0 30.0	30.0	94.5 94.6	94.6	7.1 7.1	7.1	7.0	6.0 5.7	5.9	8.6	6.0 6.0	6.0	7.3
					Middle	4	26.3 26.3	26.3	7.8 7.8	7.8	30.7 30.7	30.7	91.6 91.1	91.4	6.9 6.9	6.9		7.4 7.3	7.4		8.5 8.7	8.6	
					Bottom	7	26.2 26.2	26.2	7.7 7.7	7.7	31.3 31.3	31.3	79.9 79.9	79.9	6.0 6.0	6.0	6.0	12.3 12.6	12.5		7.4 7.4	7.4	
22-Oct-11	Sunny	Moderate	09:08	5.2	Surface	1	26.7 26.7	26.7	8.2 8.2	8.2	27.1 27.1	27.1	129.6 112.0	120.8	8.9 7.7	8.3	8.3	2.7 3.2	3.0	3.8	7.2 7.4	7.3	6.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.1 26.2	26.2	8.1 8.1	8.1	30.2 29.9	30.1	105.4 103.7	104.6	7.2 7.1	7.2	7.2	4.6 4.3	4.5		6.3 6.1	6.2	
25-Oct-11	Sunny	Moderate	12:26	7.1	Surface	1	26.4 26.5	26.5	8.3 8.3	8.3	27.5 27.4	27.5	94.2 92.7	93.5	6.3 6.2	6.3	6.3	5.7 5.7	5.7	9.7	7.5 7.3	7.4	10.8
					Middle	3.5	26.3 26.3	26.3	8.3 8.3	8.3	28.1 28.0	28.1	94.2 93.0	93.6	6.3 6.3	6.3		5.6 5.4	5.5		8.0 7.8	7.9	
					Bottom	6	26.2 26.2	26.2	8.3 8.3	8.3	28.8 28.8	28.8	93.6 93.1	93.4	6.3 6.3	6.3	6.3	17.5 18.0	17.8		17.0 17.0	17.0	

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

Water Quality Monitoring Results at CS(Mf)3 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	12:17	7	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	30.8 30.8	30.8	101.5 100.5	101.0	6.9 6.9	6.9	6.9	6.6 7.0	6.8	16.6	11.0 11.0	11.0	11.9
					Middle	3.5	25.9 25.9	25.9	8.1 8.1	8.1	30.9 31.0	31.0	100.1 99.6	99.9	6.8 6.8	6.8		10.7 10.4	10.6		17.0 17.0	17.0	
					Bottom	6	25.8 25.8	25.8	8.1 8.1	8.1	31.3 31.4	31.4	99.0 99.0	99.0	6.8 6.8	6.8	6.8	31.9 32.7	32.3		7.7 7.6	7.7	
29-Oct-11	Sunny	Moderate	13:38	6.1	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	29.4 29.4	29.4	88.0 88.0	88.0	6.0 6.0	6.0	5.9	5.7 5.7	5.7	8.3	16.0 16.0	16.0	17.3
					Middle	3	26.0 26.0	26.0	8.1 8.1	8.1	29.8 29.8	29.8	83.6 83.6	83.6	5.7 5.7	5.7		7.3 7.2	7.3		16.0 16.0	16.0	
					Bottom	5	26.0 26.0	26.0	8.1 8.1	8.1	29.8 29.8	29.8	81.4 81.4	81.4	5.6 5.6	5.6	5.6	11.9 11.7	11.8		20.0 20.0	20.0	
31-Oct-11	Sunny	Moderate	15:06	8	Surface	1	26.0 26.0	26.0	8.1 8.1	8.1	29.6 29.6	29.6	93.9 92.3	93.1	6.4 6.3	6.4	5.7	7.1 7.3	7.2	7.6	14.0 14.0	14.0	14.3
					Middle	4	25.9 25.9	25.9	8.1 8.1	8.1	30.1 30.0	30.1	72.7 72.5	72.6	5.0 5.0	5.0		7.7 7.6	7.7		14.0 14.0	14.0	
					Bottom	7	25.8 25.8	25.8	8.1 8.1	8.1	30.3 30.3	30.3	72.1 72.1	72.1	4.9 4.9	4.9	4.9	7.8 7.7	7.8		15.0 15.0	15.0	

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

Water Quality Monitoring Results at CS(Mf)3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	15:13	7.8	Surface	1	25.8 25.8	25.8	7.8 7.8	7.8	27.5 27.5	27.5	81.8 81.9	81.9	6.2 6.2	6.2	6.2	10.3 10.6	10.5	11.9	17.0 17.0	17.0	42.5
					Middle	4	25.8 25.8	25.8	7.8 7.8	7.8	27.5 27.5	27.5	82.0 82.0	82.0	6.2 6.2	6.2		12.3 11.7	12.0		38.0 38.0	38.0	
					Bottom	7	25.8 25.8	25.8	7.8 7.8	7.8	27.5 27.5	27.5	82.2 82.1	82.2	6.2 6.2	6.2	6.2	12.6 13.9	13.3		71.0 74.0	72.5	
8-Oct-11	Sunny	Moderate	16:21	5.2	Surface	1	26.8 26.8	26.8	8.0 8.0	8.0	29.3 29.3	29.3	94.8 94.5	94.7	7.2 7.2	7.2	7.2	2.9 2.9	2.9	4.7	4.0 4.0	4.0	8.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.3 26.3	26.3	8.0 8.0	8.0	32.4 32.4	32.4	92.8 92.6	92.7	7.0 7.0	7.0	7.0	6.4 6.3	6.4		12.0 13.0	12.5	
10-Oct-11	Cloudy	Moderate	17:02	7	Surface	1	26.6 26.6	26.6	8.0 8.0	8.0	31.4 31.4	31.4	103.0 100.2	101.6	6.9 6.7	6.8	6.8	7.0 7.0	7.0	7.8	11.0 11.0	11.0	10.2
					Middle	3.5	26.6 26.6	26.6	8.0 8.0	8.0	31.4 31.4	31.4	100.5 99.8	100.2	6.8 6.7	6.8		7.8 7.8	7.8		11.0 12.0	11.5	
					Bottom	6	26.6 26.6	26.6	8.0 8.0	8.0	31.4 31.4	31.4	100.0 100.0	100.0	6.7 6.7	6.7	6.7	8.6 8.5	8.6		8.1 8.1	8.1	
12-Oct-11	Rainy	Moderate	17:27	8	Surface	1	26.9 26.9	26.9	7.9 7.9	7.9	29.9 31.4	30.7	89.9 89.7	89.8	6.1 6.0	6.1	6.0	5.3 5.2	5.3	8.6	11.0 11.0	11.0	9.3
					Middle	4	26.8 26.8	26.8	7.9 7.9	7.9	31.8 31.8	31.8	88.4 88.3	88.4	5.9 5.9	5.9		7.5 7.7	7.6		9.5 9.4	9.5	
					Bottom	7	26.7 26.7	26.7	7.9 7.9	7.9	32.2 32.2	32.2	86.8 86.7	86.8	5.8 5.8	5.8	5.8	13.2 12.8	13.0		7.5 7.2	7.4	
14-Oct-11	Cloudy	Moderate	09:01	7.9	Surface	1	26.6 26.6	26.6	7.9 7.9	7.9	25.2 25.3	25.3	82.6 78.8	80.7	5.7 5.4	5.6	5.6	4.7 4.9	4.8	5.9	6.2 6.2	6.2	5.7
					Middle	4	26.6 26.6	26.6	7.9 7.9	7.9	27.7 28.1	27.9	80.9 79.0	80.0	5.5 5.4	5.5		4.8 5.4	5.1		5.1 5.0	5.1	
					Bottom	7	26.5 26.5	26.5	8.0 8.0	8.0	29.7 29.7	29.7	80.0 80.0	80.0	5.4 5.4	5.4	5.4	7.8 7.5	7.7		5.8 5.9	5.9	
16-Oct-11	Sunny	Moderate	10:40	7.2	Surface	1	26.2 26.2	26.2	8.0 8.0	8.0	30.5 30.6	30.6	90.8 86.3	88.6	6.2 5.9	6.1	6.0	5.5 5.6	5.6	9.0	14.0 14.0	14.0	15.2
					Middle	3.5	26.2 26.2	26.2	8.0 8.0	8.0	30.8 30.8	30.8	88.0 84.9	86.5	6.0 5.8	5.9		6.6 6.2	6.4		11.0 11.0	11.0	
					Bottom	6	26.2 26.2	26.2	8.0 8.0	8.0	31.9 30.3	31.1	84.3 82.5	83.4	5.8 5.7	5.8	5.8	15.7 14.5	15.1		21.0 20.0	20.5	
18-Oct-11	Sunny	Moderate	11:10	8	Surface	1	26.3 26.3	26.3	7.8 7.8	7.8	29.9 28.9	29.4	85.3 85.0	85.2	6.5 6.5	6.5	6.5	5.1 5.2	5.2	5.9	10.0 10.0	10.0	10.8
					Middle	4	26.3 26.3	26.3	7.8 7.8	7.8	30.0 30.0	30.0	84.2 84.1	84.2	6.4 6.4	6.4		5.1 5.0	5.1		11.0 12.0	11.5	
					Bottom	7	26.2 26.2	26.2	7.8 7.8	7.8	30.6 30.6	30.6	82.4 82.4	82.4	6.2 6.2	6.2	6.2	7.4 7.4	7.4		11.0 11.0	11.0	
22-Oct-11	Sunny	Moderate	14:59	7.2	Surface	1	26.9 26.8	26.9	8.3 8.2	8.3	28.8 28.8	28.8	113.7 100.1	106.9	7.7 6.8	7.3	7.0	3.9 4.2	4.1	6.5	9.8 9.8	9.8	10.6
					Middle	3.5	26.5 26.5	26.5	8.2 8.2	8.2	28.9 28.9	28.9	96.1 95.5	95.8	6.6 6.5	6.6		6.5 6.1	6.3		10.0 10.0	10.0	
					Bottom	6	26.5 26.5	26.5	8.2 8.2	8.2	29.0 28.9	29.0	92.8 92.6	92.7	6.3 6.3	6.3	6.3	8.6 9.4	9.0		12.0 12.0	12.0	
25-Oct-11	Sunny	Moderate	16:32	5	Surface	1	26.4 26.4	26.4	8.3 8.3	8.3	27.5 27.5	27.5	92.7 90.1	91.4	6.2 6.1	6.2	6.2	7.4 7.1	7.3	8.2	4.3 4.3	4.3	3.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.4 26.4	26.4	8.3 8.3	8.3	27.5 27.5	27.5	90.0 90.0	90.0	6.1 6.1	6.1	6.1	9.0 8.9	9.0		3.4 3.5	3.5	

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

Water Quality Monitoring Results at CS(Mf)3 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	07:31	8	Surface	1	25.8 25.8	25.8	8.1 8.1	8.1	30.8 30.9	30.9	99.7 99.6	99.7	6.8 6.8	6.8	6.8	7.9 8.0	8.0	16.4	12.0 13.0	12.5	10.5
					Middle	4	25.8 25.8	25.8	8.1 8.1	8.1	30.8 30.9	30.9	99.7 99.7	99.7	6.8 6.8	6.8		8.5 9.4	9.0		13.0 13.0	13.0	
					Bottom	7	25.8 25.8	25.8	8.1 8.1	8.1	30.9 30.9	30.9	99.5 99.4	99.5	6.8 6.8	6.8	6.8	30.7 33.6	32.2		6.1 6.1	6.1	
29-Oct-11	Sunny	Moderate	10:19	8.2	Surface	1	25.9 25.8	25.9	8.1 8.1	8.1	29.5 29.5	29.5	81.2 81.3	81.3	5.6 5.6	5.6	5.7	11.0 11.0	11.0	10.0	16.0 17.0	16.5	11.7
					Middle	4	25.6 25.6	25.6	8.1 8.1	8.1	29.8 29.8	29.8	83.6 83.6	83.6	5.7 5.7	5.7		7.3 7.2	7.3		8.6 8.4	8.5	
					Bottom	7	25.5 25.5	25.5	8.1 8.1	8.1	29.8 29.8	29.8	81.4 81.4	81.4	5.6 5.6	5.6	5.6	11.9 11.7	11.8		10.0 10.0	10.0	
31-Oct-11	Sunny	Moderate	12:11	8.1	Surface	1	25.7 25.7	25.7	8.1 8.1	8.1	30.2 30.2	30.2	71.6 70.7	71.2	4.9 4.8	4.9	4.9	13.0 10.5	11.8	13.9	11.0 10.0	10.5	10.0
					Middle	4	25.6 25.6	25.6	8.1 8.1	8.1	30.1 30.1	30.1	71.3 71.2	71.3	4.9 4.9	4.9		11.9 11.2	11.6		13.0 13.0	13.0	
					Bottom	7	25.6 25.6	25.6	8.1 8.1	8.1	30.2 30.1	30.2	70.8 71.2	71.0	4.9 4.9	4.9	4.9	18.3 18.1	18.2		6.4 6.3	6.4	

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

Water Quality Monitoring Results at CS(Mf)5 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	07:49	11	Surface	1	26.7 26.7	26.7	7.8 7.8	7.8	33.1 33.1	33.1	96.0 95.5	95.8	6.4 6.4	6.4	6.2	9.8 9.7	9.8	12.7	9.6 9.4	9.5	15.0
					Middle	5.5	26.3 26.3	26.3	7.8 7.8	7.8	33.1 33.1	33.1	87.5 87.2	87.4	5.9 5.8	5.9		12.4 12.5	12.5		19.0 18.0	18.5	
					Bottom	10	26.3 26.3	26.3	7.8 7.8	7.8	33.1 33.1	33.1	87.4 87.2	87.3	5.9 5.9	5.9	5.9	15.8 16.0	15.9		17.0 17.0	17.0	
8-Oct-11	Sunny	Moderate	09:26	13.9	Surface	1	26.5 26.5	26.5	7.8 7.8	7.8	32.7 32.7	32.7	123.0 119.8	121.4	8.2 8.0	8.1	8.2	8.1 8.0	8.1	15.8	7.3 7.1	7.2	8.3
					Middle	7	26.5 26.5	26.5	7.8 7.8	7.8	32.8 32.8	32.8	123.4 122.9	123.2	8.3 8.2	8.3		19.7 22.3	21.0		9.8 10.0	9.9	
					Bottom	13	26.6 26.6	26.6	7.8 7.8	7.8	32.9 32.9	32.9	132.5 130.5	131.5	8.9 8.7	8.8	8.8	19.3 17.2	18.3		7.8 7.9	7.9	
10-Oct-11	Cloudy	Moderate	10:46	14	Surface	1	26.6 26.5	26.6	7.7 7.7	7.7	32.5 31.3	31.9	81.6 87.4	84.5	5.5 5.9	5.7	5.6	2.9 3.0	3.0	6.9	9.2 9.2	9.2	6.3
					Middle	7	26.6 26.6	26.6	7.7 7.7	7.7	32.8 31.1	32.0	78.5 85.1	81.8	5.2 5.7	5.5		6.9 6.7	6.8		4.8 4.8	4.8	
					Bottom	13	26.6 26.6	26.6	7.7 7.7	7.7	32.8 32.2	32.5	77.7 79.6	78.7	5.2 5.3	5.3	5.3	10.1 11.4	10.8		5.0 4.8	4.9	
12-Oct-11	Rainy	Moderate	12:27	13	Surface	1	26.6 26.6	26.6	7.8 7.8	7.8	31.8 32.2	32.0	90.0 87.3	88.7	6.0 5.8	5.9	5.8	11.0 10.9	11.0	13.9	7.9 7.8	7.9	9.6
					Middle	6.5	26.4 26.4	26.4	7.8 7.8	7.8	31.8 32.2	32.0	85.7 82.6	84.2	5.8 5.6	5.7		13.6 13.7	13.7		12.0 11.0	11.5	
					Bottom	12	26.4 26.4	26.4	7.8 7.8	7.8	32.2 32.2	32.2	83.4 82.5	83.0	5.6 5.6	5.6	5.6	17.0 17.2	17.1		9.5 9.5	9.5	
14-Oct-11	Cloudy	Moderate	14:47	12.2	Surface	1	26.5 26.5	26.5	7.8 7.8	7.8	30.6 30.6	30.6	81.6 81.7	81.7	5.5 5.5	5.5	5.4	8.7 8.0	8.4	15.9	8.1 8.2	8.2	9.2
					Middle	6	26.5 26.5	26.5	7.8 7.8	7.8	31.4 31.4	31.4	78.5 78.5	78.5	5.3 5.3	5.3		9.9 10.3	10.1		8.5 8.4	8.5	
					Bottom	11	26.5 26.5	26.5	7.8 7.8	7.8	31.5 31.5	31.5	77.5 77.3	77.4	5.2 5.2	5.2	5.2	28.2 30.2	29.2		11.0 11.0	11.0	
16-Oct-11	Sunny	Moderate	15:42	12.1	Surface	1	26.3 26.3	26.3	7.9 7.9	7.9	30.7 30.7	30.7	81.8 81.1	81.5	6.3 6.2	6.3	6.2	4.0 3.9	4.0	7.6	11.0 11.0	11.0	12.8
					Middle	6	26.3 26.3	26.3	7.9 7.9	7.9	31.1 31.1	31.1	78.6 78.6	78.6	6.0 6.0	6.0		4.8 4.8	4.8		13.0 13.0	13.0	
					Bottom	11	26.3 26.3	26.3	7.9 7.9	7.9	31.3 31.3	31.3	76.2 76.2	76.2	5.8 5.8	5.8	5.8	13.6 14.2	13.9		14.0 15.0	14.5	
18-Oct-11	Sunny	Moderate	16:28	11	Surface	1	26.8 26.8	26.8	8.1 8.1	8.1	33.1 33.1	33.1	95.5 93.2	94.4	6.4 6.2	6.3	6.3	8.0 8.4	8.2	15.0	3.8 3.8	3.8	4.8
					Middle	5.5	26.8 26.8	26.8	8.1 8.1	8.1	33.1 33.1	33.1	94.3 92.9	93.6	6.3 6.2	6.3		8.2 9.2	8.7		5.9 6.1	6.0	
					Bottom	10	26.8 26.8	26.8	8.1 8.1	8.1	33.1 33.1	33.1	93.2 92.2	92.7	6.2 6.1	6.2	6.2	29.6 26.3	28.0		4.7 4.6	4.7	
22-Oct-11	Sunny	Moderate	07:35	13.3	Surface	1	25.9 25.9	25.9	8.0 8.0	8.0	26.2 26.2	26.2	107.8 109.7	108.8	8.3 8.4	8.4	7.3	2.8 2.8	2.8	14.1	8.1 8.3	8.2	10.1
					Middle	6.5	26.0 26.0	26.0	7.8 7.8	7.8	27.6 27.6	27.6	81.7 81.7	81.7	6.2 6.2	6.2		3.6 3.6	3.6		13.0 12.0	12.5	
					Bottom	12	26.0 26.0	26.0	7.7 7.7	7.7	28.1 28.1	28.1	71.0 71.0	71.0	5.4 5.4	5.4	5.4	37.9 34.0	36.0		9.4 9.8	9.6	
25-Oct-11	Sunny	Moderate	10:20	12	Surface	1	26.4 26.4	26.4	7.9 7.9	7.9	24.9 24.9	24.9	75.1 75.1	75.1	5.7 5.7	5.7	5.8	2.5 2.5	2.5	3.7	5.0 4.9	5.0	5.6
					Middle	6	26.4 26.4	26.4	7.9 7.9	7.9	24.9 24.9	24.9	77.1 77.1	77.1	5.9 5.9	5.9		4.2 4.1	4.2		8.8 8.7	8.8	
					Bottom	11	26.3 26.3	26.3	7.9 7.9	7.9	25.1 25.1	25.1	75.7 75.9	75.8	5.8 5.8	5.8	5.8	4.5 4.5	4.5		3.2 3.2	3.2	

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

Water Quality Monitoring Results at CS(Mf)5 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	14:02	11	Surface	1	27.4 27.5	27.5	7.6 7.6	7.6	34.0 34.0	34.0	84.8 82.8	83.8	6.0 5.8	5.9	5.9	7.6 8.0	7.8	14.6	6.8 6.7	6.8	5.8
					Middle	5.5	27.5 27.5	27.5	7.6 7.6	7.6	34.0 34.0	34.0	83.8 82.6	83.2	5.9 5.8	5.9		7.8 8.8	8.3		6.2 6.2	6.2	
					Bottom	10	27.5 27.5	27.5	7.6 7.6	7.6	34.0 34.0	34.0	82.8 82.0	82.4	5.8 5.8	5.8	5.8	29.2 25.9	27.6		4.4 4.3	4.4	
29-Oct-11	Sunny	Moderate	15:48	13.2	Surface	1	25.9 25.9	25.9	8.0 8.0	8.0	23.3 23.3	23.3	81.8 81.1	81.5	6.3 6.2	6.3	6.3	1.8 1.8	1.8	6.5	12.0 12.0	12.0	11.9
					Middle	6.5	26.0 26.0	26.0	7.8 7.8	7.8	24.7 24.7	24.7	81.7 81.7	81.7	6.2 6.2	6.2		3.6 3.6	3.6		7.6 7.7	7.7	
					Bottom	12	26.0 26.0	26.0	7.7 7.7	7.7	25.2 25.2	25.2	71.0 71.0	71.0	5.4 5.4	5.4	5.4	13.9 14.0	14.0		16.0 16.0	16.0	
31-Oct-11	Sunny	Moderate	17:25	13.1	Surface	1	25.9 25.9	25.9	7.8 7.8	7.8	25.0 25.0	25.0	88.5 88.5	88.5	6.7 6.7	6.7	6.3	2.6 2.7	2.7	2.6	7.2 7.2	7.2	10.4
					Middle	6.5	25.8 25.8	25.8	7.8 7.8	7.8	25.4 25.4	25.4	78.1 78.3	78.2	5.9 5.9	5.9		2.6 2.6	2.6		11.0 11.0	11.0	
					Bottom	12	25.8 25.8	25.8	7.8 7.8	7.8	25.4 25.4	25.4	78.1 77.8	78.0	5.9 5.9	5.9	5.9	2.6 2.5	2.6		13.0 13.0	13.0	

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

Water Quality Monitoring Results at CS(Mf)5 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	17:16	11	Surface	1	26.6 26.7	26.7	7.8 7.9	7.9	33.2 33.2	33.2	86.9 84.8	85.9	5.8 5.6	5.7	5.7	7.9 8.3	8.1	14.9	11.0 11.0	11.0	12.3
					Middle	5.5	26.7 26.7	26.7	7.8 7.9	7.9	33.2 33.2	33.2	85.8 84.5	85.2	5.7 5.6	5.7		8.1 9.1	8.6		12.0 12.0	12.0	
					Bottom	10	26.7 26.7	26.7	7.8 7.9	7.9	33.2 33.2	33.2	84.8 83.9	84.4	5.6 5.6	5.6	5.6	29.5 26.2	27.9		14.0 14.0	14.0	
8-Oct-11	Sunny	Moderate	17:23	14.1	Surface	1	26.8 26.5	26.7	7.8 7.8	7.8	32.8 32.8	32.8	117.6 121.9	119.8	7.8 8.2	8.0	8.1	6.8 7.7	7.3	7.9	7.5 7.6	7.6	15.2
					Middle	7	26.5 26.7	26.6	7.8 7.8	7.8	32.8 32.8	32.8	119.5 122.9	121.2	8.0 8.2	8.1		6.7 6.4	6.6		13.0 13.0	13.0	
					Bottom	13	26.7 26.5	26.6	7.8 7.8	7.8	32.8 32.8	32.8	123.5 118.6	121.1	8.2 7.9	8.1	8.1	9.9 9.5	9.7		25.0 25.0	25.0	
10-Oct-11	Cloudy	Moderate	18:43	14	Surface	1	26.6 26.7	26.7	7.8 7.8	7.8	33.2 33.0	33.1	76.0 84.5	80.3	5.1 5.6	5.4	5.3	3.6 3.8	3.7	7.6	3.6 3.6	3.6	3.8
					Middle	7	26.6 26.7	26.7	7.8 7.8	7.8	33.1 33.1	33.1	74.5 79.0	76.8	5.0 5.3	5.2		8.3 8.3	8.3		3.9 4.0	4.0	
					Bottom	13	26.6 26.7	26.7	7.8 7.8	7.8	33.2 33.1	33.2	73.5 77.4	75.5	4.9 5.2	5.1	5.1	11.2 10.6	10.9		4.0 3.9	4.0	
12-Oct-11	Rainy	Moderate	19:30	13	Surface	1	26.6 26.6	26.6	7.8 7.9	7.9	31.9 32.3	32.1	84.2 81.6	82.9	5.7 5.5	5.6	5.6	9.1 9.5	9.3	16.1	4.4 4.5	4.5	7.3
					Middle	6.5	26.6 26.6	26.6	7.9 7.9	7.9	31.9 32.4	32.2	83.7 81.0	82.4	5.6 5.4	5.5		9.3 10.3	9.8		4.5 4.3	4.4	
					Bottom	12	26.6 26.6	26.6	7.9 7.9	7.9	32.3 32.4	32.4	81.6 80.6	81.1	5.5 5.4	5.5	5.5	30.7 27.4	29.1		13.0 13.0	13.0	
14-Oct-11	Cloudy	Moderate	07:18	13.1	Surface	1	26.5 26.5	26.5	7.8 7.8	7.8	30.4 30.4	30.4	84.0 84.0	84.0	5.7 5.7	5.7	5.6	5.5 5.6	5.6	18.0	8.8 9.1	9.0	10.7
					Middle	6.5	26.5 26.5	26.5	7.8 7.8	7.8	31.3 31.3	31.3	79.4 79.1	79.3	5.4 5.3	5.4		16.2 16.9	16.6		9.1 9.0	9.1	
					Bottom	12	26.5 26.5	26.5	7.8 7.8	7.8	31.3 31.3	31.3	78.0 77.8	77.9	5.3 5.3	5.3	5.3	31.4 32.1	31.8		14.0 14.0	14.0	
16-Oct-11	Sunny	Moderate	09:02	13.2	Surface	1	26.3 26.3	26.3	7.9 7.9	7.9	30.7 30.7	30.7	82.7 82.1	82.4	6.3 6.3	6.3	6.2	3.9 3.8	3.9	8.9	12.0 12.0	12.0	16.7
					Middle	6.5	26.3 26.3	26.3	7.9 7.9	7.9	31.2 31.2	31.2	79.0 78.6	78.8	6.0 6.0	6.0		5.2 5.3	5.3		16.0 16.0	16.0	
					Bottom	12	26.3 26.3	26.3	7.9 7.9	7.9	31.3 31.3	31.3	76.7 76.7	76.7	5.8 5.8	5.8	5.8	17.3 17.5	17.4		22.0 22.0	22.0	
18-Oct-11	Sunny	Moderate	10:27	11	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	33.0 33.0	33.0	105.6 105.0	105.3	7.0 7.0	7.0	6.7	10.0 9.9	10.0	12.9	7.1 7.2	7.2	10.1
					Middle	5.5	26.1 26.1	26.1	8.0 8.0	8.0	33.0 33.0	33.0	96.2 95.9	96.1	6.4 6.4	6.4		12.6 12.7	12.7		11.0 11.0	11.0	
					Bottom	10	26.0 26.0	26.0	8.0 8.0	8.0	33.0 33.0	33.0	96.1 95.9	96.0	6.4 6.4	6.4	6.4	16.0 16.2	16.1		12.0 12.0	12.0	
22-Oct-11	Sunny	Moderate	17:04	13.2	Surface	1	25.9 25.9	25.9	7.9 7.9	7.9	26.3 26.3	26.3	85.6 85.6	85.6	7.4 7.4	7.4	6.9	3.1 3.1	3.1	5.5	7.9 8.0	8.0	7.8
					Middle	6.5	26.0 26.0	26.0	7.8 7.8	7.8	27.6 27.6	27.6	74.2 72.0	73.1	6.3 6.2	6.3		3.6 3.5	3.6		11.0 10.0	10.5	
					Bottom	12	26.0 26.0	26.0	7.7 7.7	7.7	28.2 28.2	28.2	63.2 63.2	63.2	5.4 5.4	5.4	5.4	9.8 9.9	9.9		4.9 4.9	4.9	
25-Oct-11	Sunny	Moderate	18:38	12.2	Surface	1	26.5 26.5	26.5	7.9 7.9	7.9	25.0 25.0	25.0	76.3 76.6	76.5	5.8 5.8	5.8	5.9	2.8 2.8	2.8	4.0	3.1 3.2	3.2	3.9
					Middle	6	26.5 26.5	26.5	7.9 7.9	7.9	25.0 25.0	25.0	78.3 78.3	78.3	6.0 6.0	6.0		4.5 4.4	4.5		4.5 4.5	4.5	
					Bottom	11	26.4 26.4	26.4	7.9 7.9	7.9	25.1 25.1	25.1	77.1 77.1	77.1	5.9 5.9	5.9	5.9	4.8 4.8	4.8		4.1 4.2	4.2	

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

Water Quality Monitoring Results at CS(Mf)5 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	06:23	11	Surface	1	27.5 27.5	27.5	7.6 7.6	7.6	33.9 33.9	33.9	93.4 93.0	93.2	6.6 6.5	6.6	6.3	9.5 9.4	9.5	12.4	5.8 5.7	5.8	5.7
					Middle	5.5	27.1 27.1	27.1	7.6 7.6	7.6	33.9 33.9	33.9	86.0 85.7	85.9	6.0 6.0	6.0		12.1 12.2	12.2		5.2 5.0	5.1	
					Bottom	10	27.1 27.1	27.1	7.6 7.6	7.6	33.9 33.9	33.9	86.0 85.8	85.9	6.0 6.0	6.0	6.0	15.5 15.7	15.6		6.2 6.0	6.1	
29-Oct-11	Sunny	Moderate	08:06	12	Surface	1	26.4 26.4	26.4	7.9 7.9	7.9	24.9 24.9	24.9	83.2 83.3	83.3	6.3 6.3	6.3	5.9	2.5 2.3	2.4	2.0	7.3 7.2	7.3	9.0
					Middle	6	26.4 26.4	26.4	7.9 7.9	7.9	24.9 24.9	24.9	72.1 72.2	72.2	5.5 5.5	5.5		1.7 1.5	1.6		6.9 6.8	6.9	
					Bottom	11	26.3 26.3	26.3	7.9 7.9	7.9	25.1 25.0	25.1	70.5 70.9	70.7	5.4 5.4	5.4	5.4	2.1 1.9	2.0		13.0 13.0	13.0	
31-Oct-11	Sunny	Moderate	10:01	13	Surface	1	26.5 26.5	26.5	7.7 7.7	7.7	25.7 25.7	25.7	82.6 82.1	82.4	6.3 6.3	6.3	6.2	3.9 3.8	3.9	8.9	22.0 23.0	22.5	35.0
					Middle	6.5	26.5 26.5	26.5	7.7 7.7	7.7	26.2 26.2	26.2	79.0 78.6	78.8	6.0 6.0	6.0		5.2 5.3	5.3		37.0 37.0	37.0	
					Bottom	12	26.5 26.5	26.5	7.7 7.7	7.7	26.3 26.3	26.3	76.7 76.7	76.7	5.8 5.8	5.8	5.8	17.3 17.5	17.4		45.0 46.0	45.5	

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

Water Quality Monitoring Results at SR4 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	07:03	4	Surface	1	25.7 25.7	25.7	6.6 6.8	6.7	26.1 26.2	26.2	75.2 75.0	75.1	5.8 5.7	5.8	5.8	11.1 10.9	11.0	9.6	8.2 8.5	8.4	10.2
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.7 25.7	25.7	7.2 7.2	7.2	26.2 26.2	26.2	75.3 75.3	75.3	5.8 5.8	5.8	5.8	8.0 8.1	8.1		12.0 12.0	12.0	
8-Oct-11	Sunny	Moderate	09:00	4.8	Surface	1	26.0 26.0	26.0	7.9 7.9	7.9	32.7 32.7	32.7	81.7 81.4	81.6	6.2 6.2	6.2	6.2	7.3 7.0	7.2	8.7	9.1 9.1	9.1	8.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.0 26.0	26.0	7.9 7.9	7.9	32.8 32.8	32.8	79.1 78.9	79.0	6.0 6.0	6.0	6.0	10.3 9.9	10.1		7.8 7.5	7.7	
10-Oct-11	Cloudy	Moderate	10:23	5	Surface	1	26.6 26.5	26.6	7.9 7.9	7.9	32.8 32.7	32.8	97.9 96.4	97.2	6.6 6.5	6.6	6.6	4.5 4.8	4.7	5.2	6.7 6.7	6.7	7.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.5 26.5	26.5	7.9 7.9	7.9	32.8 32.7	32.8	95.6 95.7	95.7	6.4 6.4	6.4	6.4	6.0 5.3	5.7		7.3 7.5	7.4	
12-Oct-11	Rainy	Moderate	11:35	4	Surface	1	26.2 26.2	26.2	8.0 8.0	8.0	30.8 30.7	30.8	94.3 94.2	94.3	6.4 6.4	6.4	6.4	4.7 4.6	4.7	7.9	12.0 12.0	12.0	14.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.1 26.1	26.1	8.0 8.0	8.0	32.1 32.1	32.1	89.9 89.9	89.9	6.1 6.1	6.1	6.1	11.4 10.7	11.1		17.0 17.0	17.0	
14-Oct-11	Cloudy	Moderate	14:48	4.2	Surface	1	27.0 26.8	26.9	8.0 8.0	8.0	29.8 30.4	30.1	79.5 78.2	78.9	5.4 5.3	5.4	5.4	7.6 8.7	8.2	9.7	6.8 7.1	7.0	7.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.5 26.5	26.5	8.0 8.0	8.0	30.8 29.3	30.1	79.4 78.5	79.0	5.4 5.3	5.4	5.4	11.0 11.4	11.2		7.8 7.9	7.9	
16-Oct-11	Sunny	Moderate	15:32	4.1	Surface	1	26.8 26.5	26.7	8.0 8.0	8.0	29.5 30.9	30.2	67.8 64.6	66.2	4.6 4.4	4.5	4.5	6.9 7.0	7.0	8.4	8.4 8.3	8.4	8.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	8.0 7.9	8.0	30.3 31.5	30.9	62.8 61.7	62.3	4.3 4.2	4.3	4.3	9.9 9.4	9.7		8.9 9.2	9.1	
18-Oct-11	Sunny	Moderate	16:09	4.1	Surface	1	26.7 26.7	26.7	8.0 8.0	8.0	29.9 29.9	29.9	96.8 96.8	96.8	7.3 7.3	7.3	7.3	5.3 5.2	5.3	7.6	7.9 7.8	7.9	7.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.2	26.2	7.9 7.9	7.9	30.2 30.1	30.2	85.1 85.1	85.1	6.4 6.4	6.4	6.4	9.9 9.7	9.8		6.8 6.8	6.8	
22-Oct-11	Sunny	Moderate	07:08	4.8	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	28.5 28.6	28.6	107.7 107.2	107.5	7.4 7.4	7.4	7.4	4.8 5.1	5.0	6.0	16.0 16.0	16.0	14.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.2 26.1	26.2	8.1 8.2	8.2	29.0 28.9	29.0	109.3 106.3	107.8	7.5 7.3	7.4	7.4	7.3 6.4	6.9		12.0 12.0	12.0	
25-Oct-11	Sunny	Moderate	10:00	4.9	Surface	1	26.4 26.3	26.4	8.2 8.2	8.2	28.9 28.8	28.9	88.1 86.7	87.4	5.9 5.8	5.9	5.9	4.9 5.2	5.1	5.6	4.4 4.3	4.4	5.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.3 26.3	26.3	8.2 8.2	8.2	28.8 28.8	28.8	86.0 86.1	86.1	5.8 5.8	5.8	5.8	6.4 5.7	6.1		6.3 6.1	6.2	

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

Water Quality Monitoring Results at SR4 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	14:58	2.9	Surface	-	-	-	-	-	-	-	-	-	-	-	6.4	-	-	18.9	-	-	14.0
							-		-		-		-		-			-			-		
					Middle	1.4	26.2	26.2	8.0	8.0	31.0	31.0	94.0	93.9	6.4	6.4		18.9	18.9		14.0	14.0	
							26.2		8.0		30.9		93.8		6.4			18.9			14.0		
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
							-		-		-		-		-			-			-		
29-Oct-11	Sunny	Moderate	15:49	2.9	Surface	-	-	-	-	-	-	-	-	-	-	-	6.3	-	-	12.7	-	-	16.0
							-		-		-		-		-			-			-		
					Middle	1.4	26.1	26.1	8.1	8.1	28.9	28.9	91.7	91.7	6.3	6.3		12.7	12.7		16.0	16.0	
							26.1		8.1		28.9		91.7		6.3			12.6			16.0		
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
							-		-		-		-		-			-			-		
31-Oct-11	Sunny	Moderate	17:30	2.8	Surface	-	-	-	-	-	-	-	-	-	-	-	5.4	-	-	7.2	-	-	20.0
							-		-		-		-		-			-			-		
					Middle	1.4	26.0	26.0	8.1	8.1	29.6	29.6	79.5	79.4	5.4	5.4		7.2	7.2		20.0	20.0	
							26.0		8.1		29.6		79.2		5.4			7.2			20.0		
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
							-		-		-		-		-			-			-		

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

Water Quality Monitoring Results at SR4 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	18:06	4.8	Surface	1	26.2 26.2	26.2	7.7 7.7	7.7	24.5 24.0	24.3	76.5 76.3	76.4	5.9 5.9	5.9	5.9	10.2 10.0	10.1	10.6	13.0 13.0	13.0	13.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.2 26.2	26.2	7.7 7.7	7.7	24.1 24.1	24.1	76.0 76.0	76.0	5.8 5.8	5.8	5.8	11.1 11.1	11.1		13.0 13.0	13.0	
8-Oct-11	Sunny	Moderate	18:50	4	Surface	1	26.3 26.3	26.3	8.0 8.0	8.0	32.8 32.8	32.8	86.5 85.6	86.1	6.5 6.5	6.5	6.5	13.1 13.2	13.2	13.6	18.0 18.0	18.0	17.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.0 8.0	8.0	32.9 32.9	32.9	83.7 83.6	83.7	6.3 6.3	6.3	6.3	14.1 13.7	13.9		18.0 17.0	17.5	
10-Oct-11	Cloudy	Moderate	19:45	4.9	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	102.3 102.0	102.2	6.9 6.9	6.9	6.9	4.4 4.9	4.7	5.4	6.1 6.2	6.2	7.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	101.9 102.0	102.0	6.8 6.9	6.9	6.9	6.2 5.9	6.1		9.1 9.3	9.2	
12-Oct-11	Rainy	Moderate	20:01	3.8	Surface	1	26.3 26.3	26.3	8.0 8.0	8.0	29.9 31.4	30.7	90.6 90.3	90.5	6.2 6.1	6.2	6.2	7.1 7.2	7.2	8.6	11.0 12.0	11.5	13.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.0 8.0	8.0	31.5 30.1	30.8	89.4 89.3	89.4	6.0 6.1	6.1	6.1	9.9 9.8	9.9		16.0 15.0	15.5	
14-Oct-11	Cloudy	Moderate	06:45	4	Surface	1	26.5 26.5	26.5	7.9 7.9	7.9	28.5 28.5	28.5	79.0 79.0	79.0	5.4 5.4	5.4	5.4	6.0 5.5	5.8	7.0	6.4 6.3	6.4	5.6
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.5 26.5	26.5	7.9 7.9	7.9	29.2 29.3	29.3	79.2 78.8	79.0	5.4 5.4	5.4	5.4	8.2 7.9	8.1		4.9 4.8	4.9	
16-Oct-11	Sunny	Moderate	08:31	4	Surface	1	26.2 26.2	26.2	7.9 7.9	7.9	30.5 30.5	30.5	77.9 76.7	77.3	5.4 5.3	5.4	5.4	15.4 17.6	16.5	20.6	25.0 25.0	25.0	24.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.2	26.2	7.9 7.9	7.9	30.5 30.5	30.5	76.3 76.6	76.5	5.2 5.3	5.3	5.3	26.8 22.3	24.6		24.0 24.0	24.0	
18-Oct-11	Sunny	Moderate	09:59	4.6	Surface	1	26.4 26.4	26.4	7.8 7.8	7.8	29.3 29.3	29.3	89.6 89.6	89.6	6.8 6.8	6.8	6.8	5.2 5.2	5.2	7.1	11.0 11.0	11.0	11.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.2 26.2	26.2	7.8 7.8	7.8	29.7 29.7	29.7	80.9 80.6	80.8	6.1 6.1	6.1	6.1	9.1 8.8	9.0		11.0 11.0	11.0	
22-Oct-11	Sunny	Moderate	17:18	4.2	Surface	1	26.1 26.1	26.1	8.5 8.5	8.5	28.5 28.6	28.6	96.9 96.4	96.7	6.7 6.6	6.7	6.7	3.8 4.1	4.0	5.0	11.0 10.0	10.5	10.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.1	26.2	8.5 8.5	8.5	29.0 28.9	29.0	98.3 95.6	97.0	6.8 6.6	6.7	6.7	6.3 5.4	5.9		11.0 10.0	10.5	
25-Oct-11	Sunny	Moderate	19:15	4.3	Surface	1	26.3 26.3	26.3	8.3 8.3	8.3	28.3 28.3	28.3	92.0 91.8	91.9	6.2 6.2	6.2	6.2	4.8 5.3	5.1	5.8	4.2 4.3	4.3	6.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.3 8.3	8.3	28.3 28.3	28.3	91.7 91.8	91.8	6.2 6.2	6.2	6.2	6.6 6.3	6.5		9.2 8.9	9.1	

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

Water Quality Monitoring Results at SR4 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	05:38	4.9	Surface	1	25.9 25.8	25.9	8.0 8.1	8.1	31.2 31.2	31.2	100.5 100.7	100.6	6.9 6.9	6.9	6.9	7.8 7.8	7.8	9.1	12.0 11.0	11.5	15.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.9 25.9	25.9	8.0 8.1	8.1	31.3 31.2	31.3	100.8 100.5	100.7	6.9 6.9	6.9	6.9	10.9 9.7	10.3		20.0 20.0	20.0	
29-Oct-11	Sunny	Moderate	07:34	3	Surface	-	- -	-	- -	-	- -	-	- -	-	- -	-	6.7	- -	-	13.8	- -	-	10.5
					Middle	1.5	25.7 25.7	25.7	8.1 8.1	8.1	29.5 29.4	29.5	98.7 96.9	97.8	6.8 6.6	6.7		13.8 13.7	13.8		10.0 11.0	10.5	
					Bottom	-	- -	-	- -	-	- -	-	- -	-	- -	-	-	- -	-		- -	-	
31-Oct-11	Sunny	Moderate	10:23	3.1	Surface	1	25.6 25.6	25.6	8.1 8.1	8.1	30.2 30.2	30.2	93.4 93.0	93.2	6.4 6.4	6.4	6.4	17.1 17.2	17.2	18.7	12.0 12.0	12.0	10.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	25.6 25.6	25.6	8.1 8.1	8.1	30.3 30.2	30.3	93.1 92.9	93.0	6.4 6.4	6.4	6.4	20.0 20.2	20.1		8.1 8.2	8.2	

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

Water Quality Monitoring Results at IS8 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	07:20	4.1	Surface	1	25.5 25.6	25.6	7.6 7.6	7.6	26.3 26.3	26.3	81.0 81.0	81.0	6.2 6.2	6.2	6.2	7.4 6.3	6.9	9.9	5.3 5.2	5.3	11.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.5 25.5	25.5	7.6 7.6	7.6	26.3 26.3	26.3	80.6 80.6	80.6	6.2 6.2	6.2	6.2	12.5 13.3	12.9		17.0 17.0	17.0	
8-Oct-11	Sunny	Moderate	09:15	5	Surface	1	26.2 26.2	26.2	8.0 8.0	8.0	32.8 32.8	32.8	86.2 85.8	86.0	6.5 6.5	6.5	6.5	8.5 8.8	8.7	10.0	25.0 26.0	25.5	25.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.1 26.1	26.1	7.9 8.0	8.0	32.8 32.8	32.8	82.9 82.6	82.8	6.3 6.3	6.3	6.3	11.2 11.4	11.3		25.0 26.0	25.5	
10-Oct-11	Cloudy	Moderate	10:36	5	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	32.6 32.7	32.7	102.6 102.1	102.4	6.9 6.9	6.9	6.9	4.4 4.1	4.3	5.0	6.3 6.5	6.4	7.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.5 26.5	26.5	7.9 7.9	7.9	32.7 32.7	32.7	101.1 100.6	100.9	6.8 6.8	6.8	6.8	5.7 5.4	5.6		9.3 9.1	9.2	
12-Oct-11	Rainy	Moderate	11:45	4	Surface	1	26.1 26.2	26.2	8.0 8.0	8.0	29.6 29.8	29.7	96.9 96.9	96.9	6.6 6.6	6.6	6.6	4.0 4.1	4.1	4.0	5.5 5.4	5.5	5.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.2	26.2	8.0 8.0	8.0	31.2 31.2	31.2	95.5 95.5	95.5	6.5 6.5	6.5	6.5	3.9 3.9	3.9		5.5 5.6	5.6	
14-Oct-11	Cloudy	Moderate	14:39	4.3	Surface	1	27.0 27.0	27.0	8.0 8.0	8.0	29.7 29.7	29.7	86.9 84.4	85.7	5.9 5.7	5.8	5.8	6.0 6.5	6.3	11.5	7.2 7.4	7.3	9.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.5	26.5	8.0 8.0	8.0	30.9 30.8	30.9	84.3 84.1	84.2	5.7 5.7	5.7	5.7	16.0 17.2	16.6		12.0 12.0	12.0	
16-Oct-11	Sunny	Moderate	15:23	4.1	Surface	1	26.9 26.9	26.9	8.0 8.0	8.0	31.1 31.1	31.1	71.8 70.6	71.2	4.9 4.8	4.9	4.9	4.5 5.2	4.9	8.3	9.3 9.0	9.2	8.2
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	8.0 7.9	8.0	31.8 31.7	31.8	62.6 65.4	64.0	4.3 4.5	4.4	4.4	11.6 11.6	11.6		7.2 7.4	7.3	
18-Oct-11	Sunny	Moderate	16:04	5	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	29.9 29.9	29.9	88.6 88.6	88.6	6.7 6.7	6.7	6.7	8.8 8.7	8.8	10.9	7.8 7.9	7.9	9.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.3 26.3	26.3	7.9 7.9	7.9	30.4 30.4	30.4	80.5 80.5	80.5	6.1 6.1	6.1	6.1	12.9 12.8	12.9		12.0 12.0	12.0	
22-Oct-11	Sunny	Moderate	07:16	4.2	Surface	1	26.2 26.2	26.2	8.3 8.3	8.3	28.3 28.3	28.3	124.9 124.4	124.7	8.6 8.6	8.6	8.6	2.7 3.2	3.0	5.2	9.7 9.9	9.8	12.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.3 8.3	8.3	29.3 29.5	29.4	124.4 121.3	122.9	8.5 8.3	8.4	8.4	7.3 7.4	7.4		15.0 15.0	15.0	
25-Oct-11	Sunny	Moderate	10:10	4	Surface	1	26.3 26.3	26.3	8.3 8.3	8.3	28.6 28.6	28.6	92.3 91.8	92.1	6.2 6.2	6.2	6.2	4.8 4.5	4.7	5.4	6.1 6.0	6.1	6.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.2 8.2	8.2	28.7 28.7	28.7	90.9 90.5	90.7	6.1 6.1	6.1	6.1	6.1 5.8	6.0		6.0 6.2	6.1	

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

Water Quality Monitoring Results at IS8 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	14:47	4.3	Surface	1	26.2 26.2	26.2	8.1 8.1	8.1	30.8 30.8	30.8	102.8 102.9	102.9	7.0 7.0	7.0	7.0	6.4 6.5	6.5	11.2	7.1 7.1	7.1	9.6
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.8 25.8	25.8	8.1 8.1	8.1	31.0 31.0	31.0	99.8 99.4	99.6	6.8 6.8	6.8	6.8	15.2 16.6	15.9		12.0 12.0	12.0	
29-Oct-11	Sunny	Moderate	15:45	4.2	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	30.2 30.2	30.2	91.7 91.7	91.7	6.2 6.2	6.2	6.2	12.4 12.8	12.6	12.2	17.0 17.0	17.0	17.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.1 26.1	26.1	8.1 8.1	8.1	30.2 29.0	29.6	91.7 92.2	92.0	6.2 6.3	6.3	6.3	11.4 11.9	11.7		19.0 18.0	18.5	
31-Oct-11	Sunny	Moderate	17:12	4.1	Surface	1	26.0 26.0	26.0	8.1 8.1	8.1	29.6 29.5	29.6	81.8 81.5	81.7	5.6 5.6	5.6	5.6	7.3 7.2	7.3	7.5	9.9 9.8	9.9	11.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.9 25.9	25.9	8.1 8.1	8.1	30.0 30.0	30.0	75.9 76.0	76.0	5.2 5.2	5.2	5.2	7.5 7.6	7.6		13.0 13.0	13.0	

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

Water Quality Monitoring Results at IS8 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	18:00	5	Surface	1	26.2 26.2	26.2	7.7 7.7	7.7	25.9 25.9	25.9	80.3 80.2	80.3	6.1 6.1	6.1	6.1	12.1 12.7	12.4	16.5	16.0 16.0	16.0	15.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.2 26.2	26.2	7.7 7.7	7.7	25.8 25.8	25.8	82.2 81.9	82.1	6.2 6.2	6.2	6.2	20.6 20.4	20.5		15.0 15.0	15.0	
8-Oct-11	Sunny	Moderate	18:41	4	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	32.8 32.8	32.8	86.5 86.2	86.4	6.5 6.5	6.5	6.5	10.2 10.1	10.2	24.5	15.0 15.0	15.0	31.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	8.0 8.0	8.0	32.9 32.9	32.9	85.4 85.3	85.4	6.4 6.4	6.4	6.4	37.5 40.1	38.8		48.0 47.0	47.5	
10-Oct-11	Cloudy	Moderate	19:35	5	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	102.8 102.3	102.6	6.9 6.9	6.9	6.9	4.9 4.9	4.9	5.4	5.7 5.6	5.7	5.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	102.2 102.0	102.1	6.9 6.9	6.9	6.9	6.1 5.5	5.8		5.8 5.9	5.9	
12-Oct-11	Rainy	Moderate	19:47	4	Surface	1	26.3 26.3	26.3	8.0 8.0	8.0	31.4 29.9	30.7	91.2 90.9	91.1	6.2 6.2	6.2	6.2	7.5 7.3	7.4	8.9	14.0 14.0	14.0	10.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.0 8.0	8.0	31.6 31.6	31.6	89.3 89.2	89.3	6.0 6.0	6.0	6.0	10.4 10.4	10.4		7.8 7.7	7.8	
14-Oct-11	Cloudy	Moderate	06:57	4.2	Surface	1	26.5 26.5	26.5	7.9 7.9	7.9	29.1 29.2	29.2	80.6 79.4	80.0	5.5 5.4	5.5	5.5	6.5 6.4	6.5	13.8	4.7 4.6	4.7	7.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	7.9 7.9	7.9	30.1 30.2	30.2	79.0 78.6	78.8	5.4 5.3	5.4	5.4	22.7 19.3	21.0		9.9 9.8	9.9	
16-Oct-11	Sunny	Moderate	08:43	4.1	Surface	1	26.1 26.2	26.2	8.0 8.0	8.0	30.3 30.4	30.4	82.3 80.6	81.5	5.7 5.5	5.6	5.6	8.7 8.2	8.5	11.1	21.0 21.0	21.0	20.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.2	26.2	8.0 8.0	8.0	30.6 30.6	30.6	80.4 79.7	80.1	5.5 5.5	5.5	5.5	12.8 14.4	13.6		20.0 20.0	20.0	
18-Oct-11	Sunny	Moderate	10:08	4.7	Surface	1	26.1 26.1	26.1	7.8 7.8	7.8	29.0 29.0	29.0	84.6 84.7	84.7	6.5 6.5	6.5	6.5	4.5 4.6	4.6	15.9	10.0 10.0	10.0	8.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.2 26.2	26.2	7.8 7.8	7.8	29.6 29.6	29.6	81.8 81.5	81.7	6.2 6.2	6.2	6.2	28.5 25.8	27.2		7.4 7.5	7.5	
22-Oct-11	Sunny	Moderate	17:00	4.2	Surface	1	26.2 26.2	26.2	8.6 8.6	8.6	28.3 28.3	28.3	112.4 111.9	112.2	7.7 7.7	7.7	7.7	2.4 2.2	2.3	4.5	11.0 11.0	11.0	13.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.6 8.6	8.6	29.3 29.5	29.4	111.9 109.1	110.5	7.7 7.5	7.6	7.6	6.8 6.5	6.7		16.0 16.0	16.0	
25-Oct-11	Sunny	Moderate	19:05	4.1	Surface	1	26.3 26.3	26.3	8.3 8.3	8.3	28.3 28.3	28.3	92.5 92.0	92.3	6.2 6.2	6.2	6.2	5.3 5.3	5.3	5.8	7.7 7.9	7.8	7.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.3 26.3	26.3	8.3 8.3	8.3	28.3 28.3	28.3	91.9 91.8	91.9	6.2 6.2	6.2	6.2	6.5 5.9	6.2		7.2 7.3	7.3	

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

Water Quality Monitoring Results at IS8 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	05:50	4	Surface	1	25.8 25.8	25.8	8.0 8.1	8.1	31.0 31.0	31.0	100.2 100.0	100.1	6.9 6.8	6.9	6.9	8.8 8.9	8.9	10.7	13.0 13.0	13.0	12.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.8 25.8	25.8	8.1 8.1	8.1	31.0 31.0	31.0	100.1 99.9	100.0	6.8 6.8	6.8	6.8	12.3 12.5	12.4		11.0 11.0	11.0	
29-Oct-11	Sunny	Moderate	07:48	4	Surface	1	25.9 25.9	25.9	8.1 8.1	8.1	29.8 29.8	29.8	84.1 84.5	84.3	5.7 5.8	5.8	5.8	7.7 7.5	7.6	10.0	13.0 13.0	13.0	10.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.8 25.8	25.8	8.1 8.1	8.1	29.7 29.7	29.7	81.0 80.8	80.9	5.5 5.5	5.5	5.5	12.5 12.3	12.4		8.7 8.5	8.6	
31-Oct-11	Sunny	Moderate	10:30	4	Surface	1	25.6 25.6	25.6	8.1 8.1	8.1	30.1 30.1	30.1	97.3 95.2	96.3	6.7 6.5	6.6	6.6	14.1 13.6	13.9	16.0	15.0 15.0	15.0	18.3
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.6 25.6	25.6	8.1 8.1	8.1	30.1 30.1	30.1	98.3 95.8	97.1	6.8 6.6	6.7	6.7	19.7 16.4	18.1		21.0 22.0	21.5	

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

Water Quality Monitoring Results at IS(Mf)9 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	06:41	3.3	Surface	1	25.7 25.7	25.7	7.8 7.8	7.8	32.0 32.0	32.0	88.3 87.5	87.9	6.0 6.0	6.0	6.0	7.4 7.3	7.4	7.7	18.0 18.0	18.0	15.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	25.7 25.7	25.7	7.9 7.9	7.9	32.1 32.1	32.1	86.8 86.7	86.8	5.9 5.9	5.9	5.9	7.9 7.8	7.9		12.0 12.0	12.0	
8-Oct-11	Sunny	Moderate	08:54	3.8	Surface	1	26.0 26.0	26.0	7.9 7.9	7.9	32.1 32.1	32.1	87.6 87.5	87.6	5.9 5.9	5.9	5.9	5.8 5.7	5.8	6.0	5.6 5.7	5.7	6.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.0 26.0	26.0	7.9 7.9	7.9	32.1 32.1	32.1	87.1 87.0	87.1	5.9 5.9	5.9	5.9	6.3 6.1	6.2		7.7 7.8	7.8	
10-Oct-11	Cloudy	Moderate	10:13	4	Surface	1	26.4 26.4	26.4	7.9 7.9	7.9	32.0 32.0	32.0	93.4 93.0	93.2	6.3 6.3	6.3	6.3	4.4 4.2	4.3	4.5	6.2 6.0	6.1	20.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	7.9 7.9	7.9	32.0 32.0	32.0	92.7 92.6	92.7	6.2 6.2	6.2	6.2	4.7 4.6	4.7		34.0 34.0	34.0	
12-Oct-11	Rainy	Moderate	11:25	3.7	Surface	1	26.2 26.2	26.2	7.9 7.9	7.9	31.2 31.2	31.2	96.1 95.6	95.9	6.5 6.5	6.5	6.5	6.2 6.3	6.3	6.5	7.9 7.8	7.9	7.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.2 26.2	26.2	7.9 7.9	7.9	31.2 31.2	31.2	95.6 95.4	95.5	6.5 6.5	6.5	6.5	6.9 6.2	6.6		7.8 7.7	7.8	
14-Oct-11	Cloudy	Moderate	14:51	3.2	Surface	1	26.8 26.8	26.8	7.9 7.9	7.9	30.0 30.0	30.0	95.0 94.2	94.6	6.4 6.4	6.4	6.4	5.8 5.5	5.7	6.8	17.0 18.0	17.5	12.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	26.5 26.4	26.5	7.9 7.9	7.9	30.5 30.6	30.6	91.0 90.3	90.7	6.2 6.1	6.2	6.2	7.4 8.4	7.9		6.8 6.6	6.7	
16-Oct-11	Sunny	Moderate	16:25	3.9	Surface	1	26.7 26.7	26.7	7.9 7.9	7.9	29.3 29.3	29.3	73.5 72.6	73.1	5.0 4.9	5.0	5.0	5.5 5.5	5.5	6.7	5.4 5.6	5.5	5.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.4 26.4	26.4	7.9 7.9	7.9	29.6 29.6	29.6	73.8 73.4	73.6	5.0 5.0	5.0	5.0	7.8 7.8	7.8		6.3 6.1	6.2	
18-Oct-11	Sunny	Moderate	16:57	3.6	Surface	1	26.7 26.6	26.7	8.1 8.1	8.1	29.3 29.4	29.4	120.4 120.9	120.7	8.2 8.2	8.2	8.2	4.7 4.7	4.7	6.0	8.2 8.4	8.3	8.1
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.6 26.6	26.6	8.0 8.0	8.0	29.6 29.6	29.6	118.8 118.8	118.8	8.1 8.1	8.1	8.1	7.3 7.3	7.3		7.8 7.9	7.9	
22-Oct-11	Sunny	Moderate	07:04	3.7	Surface	1	25.7 25.8	25.8	8.1 8.1	8.1	28.5 28.5	28.5	138.2 137.2	137.7	9.6 9.5	9.6	9.6	2.3 2.3	2.3	2.7	6.2 6.1	6.2	5.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	26.0 26.0	26.0	8.2 8.2	8.2	28.6 28.6	28.6	148.8 147.2	148.0	10.3 10.2	10.3	10.3	2.9 3.0	3.0		4.8 4.9	4.9	
25-Oct-11	Sunny	Moderate	10:02	3.2	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	30.2 30.1	30.2	61.6 60.0	60.8	4.2 4.1	4.2	4.2	5.2 5.2	5.2	8.2	7.3 7.3	7.3	8.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	26.7 26.7	26.7	8.0 8.0	8.0	30.8 30.8	30.8	57.6 56.6	57.1	3.9 3.9	3.9	3.9	11.8 10.5	11.2		9.4 9.5	9.5	

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

Water Quality Monitoring Results at IS(Mf)9 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	13:49	4.2	Surface	1	26.1 26.1	26.1	8.2 8.2	8.2	31.1 31.1	31.1	101.7 101.9	101.8	7.7 7.7	7.7	7.7	5.9 5.9	5.9	17.0	14.0 14.0	14.0	13.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.9 25.9	25.9	8.2 8.2	8.2	31.1 31.1	31.1	99.7 98.9	99.3	7.6 7.5	7.6	7.6	25.2 30.7	28.0		13.0 13.0	13.0	
29-Oct-11	Sunny	Moderate	07:42	4.1	Surface	1	25.9 25.9	25.9	8.1 8.1	8.1	29.8 29.8	29.8	91.2 89.3	90.3	6.3 6.1	6.2	6.2	12.9 15.3	14.1	15.8	16.0 15.0	15.5	12.7
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.8 25.9	25.9	8.1 8.1	8.1	31.0 30.9	31.0	89.9 89.5	89.7	6.1 6.1	6.1	6.1	18.2 16.7	17.5		9.9 9.7	9.8	
31-Oct-11	Sunny	Moderate	17:03	3.4	Surface	1	26.0 26.0	26.0	8.1 8.1	8.1	31.0 31.0	31.0	106.2 106.4	106.3	7.2 7.3	7.3	7.3	11.1 10.4	10.8	11.2	15.0 15.0	15.0	15.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	26.0 26.0	26.0	8.1 8.1	8.1	31.0 31.0	31.0	105.9 105.8	105.9	7.2 7.2	7.2	7.2	12.1 11.0	11.6		15.0 15.0	15.0	

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

Water Quality Monitoring Results at IS(Mf)9 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	15:02	2.8	Surface	-	-	-	-	-	-	-	-	-	-	-	6.3	-	-	8.3	-	-	21.0
					Middle	1.4	26.0	26.0	7.9	7.9	32.4	32.4	92.2	92.4	6.2	6.3		7.6	8.3		21.0	21.0	
							26.0		7.9		32.3		92.6		6.3			8.9			21.0		
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
8-Oct-11	Sunny	Moderate	15:51	2.8	Surface	-	-	-	-	-	-	-	-	-	-	-	6.0	-	-	20.7	-	-	17.0
					Middle	1.4	26.4	26.4	7.9	7.9	32.6	32.6	89.9	89.8	6.0	6.0		21.0	20.7		17.0	17.0	
							26.4		7.9		32.6		89.6		6.0			20.3			17.0		
					Bottom	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	
10-Oct-11	Cloudy	Moderate	17:10	3	Surface	1	26.5	26.6	7.9	7.9	31.4	31.4	95.1	94.8	6.4	6.4	6.4	4.4	4.7	5.6	7.6	7.6	9.8
							26.6		7.9		31.3		94.5		6.4			4.9			7.5		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	2	26.6	26.6	7.9	7.9	31.6	31.7	94.3	94.1	6.3	6.3	6.3	6.4	6.5		12.0	12.0	
							26.6		7.9		31.7		93.9		6.3			6.6			12.0		
12-Oct-11	Rainy	Moderate	17:10	3	Surface	1	26.2	26.2	7.9	7.9	31.4	31.4	93.6	93.7	6.3	6.3	6.3	6.4	6.5	6.9	7.4	7.4	9.2
							26.2		7.9		31.4		93.7		6.3			6.5			7.4		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	2	26.2	26.2	7.9	7.9	31.4	31.4	93.0	93.3	6.3	6.3	6.3	7.4	7.2		11.0	11.0	
							26.2		7.9		31.4		93.6		6.3			7.0			11.0		
14-Oct-11	Cloudy	Moderate	06:40	3	Surface	1	26.4	26.4	7.9	7.9	30.5	30.6	92.4	91.8	6.3	6.3	6.3	6.9	7.6	8.5	9.2	9.3	14.1
							26.4		7.9		30.7		91.1		6.2			8.2			9.3		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	2	26.4	26.4	7.9	7.9	30.7	30.7	90.7	90.8	6.2	6.2	6.2	8.9	9.4		19.0	19.0	
							26.4		7.9		30.7		90.8		6.2			9.8			19.0		
16-Oct-11	Sunny	Moderate	09:23	4.1	Surface	1	26.2	26.2	7.9	7.9	29.7	29.7	52.4	51.7	3.6	3.6	3.6	8.3	7.7	10.7	13.0	13.0	17.0
							26.1		7.9		29.6		51.0		3.5			7.1			13.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	3	26.4	26.4	7.9	7.9	30.2	30.2	49.0	48.6	3.3	3.3	3.3	14.3	13.7		21.0	21.0	
							26.4		7.9		30.2		48.1		3.3			13.0			21.0		
18-Oct-11	Sunny	Moderate	10:06	3.2	Surface	1	26.1	26.1	7.9	7.9	29.0	29.0	99.6	99.7	6.9	6.9	6.9	3.6	3.6	5.4	6.4	6.3	7.3
							26.1		7.9		29.0		99.7		6.9			3.6			6.1		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	2	26.2	26.2	7.9	7.9	29.6	29.6	96.3	96.3	6.6	6.6	6.6	7.1	7.2		8.3	8.3	
							26.2		7.9		29.6		96.2		6.6			7.2			8.2		
22-Oct-11	Sunny	Moderate	16:52	3.2	Surface	1	26.7	26.7	8.4	8.4	29.0	29.0	138.9	138.8	8.9	8.9	8.9	5.2	5.2	8.4	12.0	12.0	11.0
							26.7		8.4		29.0		138.7		8.8			5.1			12.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	2	26.6	26.6	8.3	8.3	29.2	29.2	172.2	172.2	11.7	11.7	11.7	11.6	11.5		10.0	10.0	
							26.6		8.3		29.2		172.1		11.7			11.4			10.0		
25-Oct-11	Sunny	Moderate	18:33	4.3	Surface	1	27.1	27.1	8.2	8.2	28.6	28.6	91.9	91.4	6.3	6.3	6.3	2.2	2.2	3.4	21.0	21.0	21.5
							27.1		8.2		28.6		90.8		6.2			2.2			21.0		
					Middle	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
							-		-		-		-		-			-			-		
					Bottom	3	26.8	26.8	8.1	8.2	28.9	28.9	92.3	92.1	6.3	6.3	6.3	4.5	4.5		22.0	22.0	
							26.8		8.2		28.9		91.8		6.3			4.5			22.0		

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

Water Quality Monitoring Results at IS(Mf)9 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	06:03	4.2	Surface	1	25.8 25.8	25.8	8.0 8.0	8.0	30.4 30.4	30.4	85.2 86.4	85.8	6.5 6.6	6.6	6.6	7.5 7.3	7.4	7.8	5.6 5.6	5.6	7.4
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.8 25.8	25.8	8.0 8.0	8.0	30.4 30.4	30.4	82.4 81.7	82.1	6.3 6.2	6.3	6.3	8.1 8.1	8.1		9.1 9.1	9.1	
29-Oct-11	Sunny	Moderate	15:55	4.1	Surface	1	25.7 25.7	25.7	8.1 8.1	8.1	30.5 30.5	30.5	100.3 93.1	96.7	6.9 6.4	6.7	6.7	18.8 18.7	18.8	22.6	17.0 17.0	17.0	14.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	3	25.7 25.7	25.7	8.1 8.1	8.1	30.6 30.6	30.6	98.9 91.6	95.3	6.8 6.3	6.6	6.6	25.7 26.9	26.3		12.0 12.0	12.0	
31-Oct-11	Sunny	Moderate	09:47	3.2	Surface	1	25.5 25.5	25.5	7.9 8.0	8.0	30.9 30.9	30.9	106.1 104.2	105.2	7.3 7.2	7.3	7.3	14.3 14.1	14.2	14.6	30.0 30.0	30.0	26.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	2	25.5 25.5	25.5	8.0 8.0	8.0	30.9 30.9	30.9	104.2 103.6	103.9	7.2 7.1	7.2	7.2	15.2 14.8	15.0		22.0 22.0	22.0	

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

Water Quality Monitoring Results at IS(Mf)16 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	07:40	7	Surface	1	26.0 26.0	26.0	7.7 7.7	7.7	26.3 26.3	26.3	82.8 82.7	82.8	6.3 6.3	6.3	6.3	7.5 7.4	7.5	10.5	8.2 8.4	8.3	12.4
					Middle	3.5	25.9 25.9	25.9	7.7 7.7	7.7	26.3 26.3	26.3	82.5 82.2	82.4	6.3 6.3	6.3		8.7 9.9	9.3		12.0 12.0	12.0	
					Bottom	6	25.8 25.8	25.8	7.7 7.7	7.7	26.3 26.3	26.3	81.9 81.9	81.9	6.3 6.3	6.3	6.3	14.3 15.2	14.8		17.0 17.0	17.0	
8-Oct-11	Sunny	Moderate	09:29	7	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	32.7 32.7	32.7	85.5 85.4	85.5	6.4 6.4	6.4	6.5	6.5 6.6	6.6	10.4	7.2 7.3	7.3	28.3
					Middle	3.5	26.2 26.2	26.2	8.0 8.0	8.0	32.8 32.8	32.8	86.9 86.7	86.8	6.6 6.6	6.6		5.1 5.2	5.2		9.5 9.5	9.5	
					Bottom	6	26.1 26.1	26.1	8.0 8.0	8.0	32.9 32.9	32.9	86.2 86.2	86.2	6.5 6.5	6.5	6.5	18.7 19.9	19.3		69.0 67.0	68.0	
10-Oct-11	Cloudy	Moderate	10:50	6.2	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	32.7 32.7	32.7	105.2 103.3	104.3	7.1 6.9	7.0	7.0	4.0 3.8	3.9	5.6	6.5 6.4	6.5	7.1
					Middle	3	26.5 26.5	26.5	8.0 8.0	8.0	32.7 32.7	32.7	102.7 101.9	102.3	6.9 6.8	6.9		5.3 5.1	5.2		6.7 7.0	6.9	
					Bottom	5	26.5 26.5	26.5	8.0 8.0	8.0	32.7 32.7	32.7	101.5 100.6	101.1	6.8 6.8	6.8	6.8	7.1 8.0	7.6		8.2 7.9	8.1	
12-Oct-11	Rainy	Moderate	11:59	7	Surface	1	26.3 26.3	26.3	8.0 8.0	8.0	31.6 31.6	31.6	92.6 92.5	92.6	6.3 6.3	6.3	6.2	4.2 4.5	4.4	7.9	7.3 7.2	7.3	7.5
					Middle	3.5	26.3 26.3	26.3	8.0 8.0	8.0	31.9 31.9	31.9	89.5 89.2	89.4	6.0 6.0	6.0		6.9 7.2	7.1		8.4 8.3	8.4	
					Bottom	6	26.3 26.3	26.3	8.0 8.0	8.0	32.0 32.0	32.0	87.4 87.5	87.5	5.9 5.9	5.9	5.9	11.8 12.3	12.1		7.0 6.8	6.9	
14-Oct-11	Cloudy	Moderate	14:26	5.4	Surface	1	26.7 26.6	26.7	8.0 8.0	8.0	28.7 29.1	28.9	79.7 79.6	79.7	5.4 5.4	5.4	5.4	6.7 7.4	7.1	8.7	7.1 7.0	7.1	6.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.5 26.5	26.5	8.0 8.0	8.0	30.3 30.0	30.2	80.5 80.3	80.4	5.5 5.4	5.5	5.5	10.2 10.3	10.3		6.7 6.7	6.7	
16-Oct-11	Sunny	Moderate	15:13	5.3	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	30.5 30.5	30.5	65.7 65.4	65.6	4.5 4.5	4.5	4.5	5.3 4.5	4.9	4.6	9.0 9.1	9.1	8.9
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.6 26.4	26.5	8.0 8.0	8.0	32.6 32.5	32.6	64.7 63.8	64.3	4.4 4.3	4.4	4.4	4.1 4.2	4.2		8.8 8.6	8.7	
18-Oct-11	Sunny	Moderate	15:59	6.8	Surface	1	26.4 26.4	26.4	7.9 7.9	7.9	30.2 30.1	30.2	85.8 85.8	85.8	6.5 6.5	6.5	6.3	7.7 7.4	7.6	9.9	9.8 10.0	9.9	9.8
					Middle	3.5	26.5 26.4	26.5	7.9 7.9	7.9	30.8 30.8	30.8	81.2 80.4	80.8	6.1 6.0	6.1		7.9 8.0	8.0		7.5 7.6	7.6	
					Bottom	6	26.4 26.4	26.4	7.8 7.8	7.8	31.1 31.1	31.1	74.8 74.0	74.4	5.6 5.6	5.6	5.6	13.8 14.2	14.0		12.0 12.0	12.0	
22-Oct-11	Sunny	Moderate	07:30	6.9	Surface	1	26.2 26.2	26.2	8.3 8.3	8.3	29.1 29.1	29.1	124.0 116.5	120.3	8.5 8.0	8.3	7.3	3.9 4.6	4.3	13.3	5.6 5.7	5.7	5.6
					Middle	3.5	26.1 26.1	26.1	8.1 8.1	8.1	30.3 30.3	30.3	93.2 88.7	91.0	6.4 6.1	6.3		13.2 13.8	13.5		4.8 4.8	4.8	
					Bottom	6	26.1 26.1	26.1	8.1 8.1	8.1	30.6 30.5	30.6	88.9 87.8	88.4	6.1 6.0	6.1	6.1	20.3 23.9	22.1		6.4 6.3	6.4	
25-Oct-11	Sunny	Moderate	10:21	6.2	Surface	1	26.3 26.3	26.3	8.3 8.3	8.3	28.7 28.7	28.7	94.6 92.9	93.8	6.3 6.2	6.3	6.3	4.4 4.2	4.3	6.0	14.0 13.0	13.5	11.7
					Middle	3	26.3 26.3	26.3	8.3 8.3	8.3	28.7 28.7	28.7	92.4 91.7	92.1	6.2 6.1	6.2		5.7 5.5	5.6		10.0 11.0	10.5	
					Bottom	5	26.3 26.3	26.3	8.3 8.3	8.3	28.7 28.7	28.7	91.3 90.5	90.9	6.1 6.1	6.1	6.1	7.5 8.4	8.0		11.0 11.0	11.0	

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

Water Quality Monitoring Results at IS(Mf)16 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	14:36	5.2	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	30.9 30.9	30.9	100.6 99.8	100.2	6.9 6.8	6.9	6.9	7.5 7.6	7.6	10.4	8.4 8.3	8.4	9.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.9 25.9	25.9	8.1 8.1	8.1	30.9 30.9	30.9	99.7 99.5	99.6	6.8 6.8	6.8	6.8	14.1 12.3	13.2		9.9 9.5	9.7	
29-Oct-11	Sunny	Moderate	15:34	5.2	Surface	1	26.1 26.1	26.1	8.1 8.1	8.1	28.9 30.2	29.6	91.9 91.9	91.9	6.3 6.3	6.3	6.3	12.5 12.5	12.5	12.0	18.0 18.0	18.0	15.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.1 26.1	26.1	8.1 8.1	8.1	30.2 30.2	30.2	91.6 91.6	91.6	6.2 6.2	6.2	6.2	11.3 11.5	11.4		13.0 13.0	13.0	
31-Oct-11	Sunny	Moderate	16:56	5.3	Surface	1	26.0 26.0	26.0	8.1 8.1	8.1	29.6 29.5	29.6	83.1 82.5	82.8	5.7 5.6	5.7	5.7	7.2 7.1	7.2	7.4	11.0 11.0	11.0	12.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.8 25.8	25.8	8.1 8.1	8.1	30.1 30.1	30.1	74.1 74.4	74.3	5.1 5.1	5.1	5.1	7.5 7.5	7.5		14.0 14.0	14.0	

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

Water Quality Monitoring Results at IS(Mf)16 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
6-Oct-11	Fine	Moderate	17:41	6	Surface	1	26.1 26.1	26.1	7.7 7.7	7.7	26.3 26.4	26.4	79.6 79.2	79.4	6.0 6.0	6.0	6.0	9.0 9.1	9.1	12.2	14.0 14.0	14.0	12.5
					Middle	3	26.1 26.1	26.1	7.7 7.7	7.7	26.3 25.8	26.1	79.3 79.2	79.3	6.0 6.0	6.0		10.1 10.2	10.2		12.0 12.0	12.0	
					Bottom	5	26.1 26.1	26.1	7.8 7.8	7.8	26.4 25.8	26.1	79.1 79.1	79.1	6.0 6.0	6.0	6.0	17.1 17.3	17.2		12.0 11.0	11.5	
8-Oct-11	Sunny	Moderate	18:25	7	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	33.0 30.8	31.9	92.4 92.2	92.3	7.0 7.0	7.0	7.0	8.2 8.1	8.2	10.3	13.0 14.0	13.5	13.2
					Middle	3.5	26.4 26.4	26.4	8.0 8.0	8.0	33.0 33.0	33.0	91.9 92.0	92.0	6.9 6.9	6.9		9.3 9.7	9.5		12.0 13.0	12.5	
					Bottom	6	26.4 26.4	26.4	8.0 8.0	8.0	33.0 33.0	33.0	92.1 92.2	92.2	6.9 6.9	6.9	6.9	12.8 13.5	13.2		13.0 14.0	13.5	
10-Oct-11	Cloudy	Moderate	19:23	6.2	Surface	1	26.5 26.5	26.5	8.0 8.0	8.0	30.6 32.3	31.5	99.5 99.4	99.5	6.7 6.7	6.7	6.7	4.1 4.0	4.1	5.9	9.8 9.5	9.7	10.6
					Middle	3	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	99.6 99.1	99.4	6.7 6.7	6.7		5.5 5.7	5.6		14.0 13.0	13.5	
					Bottom	5	26.5 26.5	26.5	8.0 8.0	8.0	32.3 32.3	32.3	99.6 99.3	99.5	6.7 6.7	6.7	6.7	7.4 8.7	8.1		8.6 8.8	8.7	
12-Oct-11	Rainy	Moderate	19:26	7	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	29.8 31.4	30.6	91.9 91.9	91.9	6.3 6.2	6.3	6.3	4.5 4.5	4.5	6.3	6.9 7.0	7.0	6.3
					Middle	3.5	26.3 26.3	26.3	8.0 8.0	8.0	31.5 31.4	31.5	92.3 92.3	92.3	6.2 6.2	6.2		5.4 5.3	5.4		6.3 6.1	6.2	
					Bottom	6	26.3 26.3	26.3	8.0 8.0	8.0	31.5 31.5	31.5	92.5 92.5	92.5	6.3 6.3	6.3	6.3	9.2 8.9	9.1		5.6 5.7	5.7	
14-Oct-11	Cloudy	Moderate	07:13	6.1	Surface	1	26.4 26.4	26.4	8.0 8.0	8.0	30.2 30.1	30.2	80.5 79.9	80.2	5.5 5.4	5.5	5.5	10.1 11.2	10.7	14.8	13.0 12.0	12.5	12.2
					Middle	3	26.4 26.5	26.5	8.0 8.0	8.0	30.1 30.2	30.2	80.0 79.6	79.8	5.4 5.4	5.4		14.7 15.0	14.9		14.0 14.0	14.0	
					Bottom	5	26.4 26.4	26.4	8.0 8.0	8.0	30.2 30.1	30.2	79.8 79.3	79.6	5.4 5.4	5.4	5.4	18.7 18.9	18.8		10.0 10.0	10.0	
16-Oct-11	Sunny	Moderate	08:57	6.2	Surface	1	26.1 26.1	26.1	8.0 8.0	8.0	30.5 30.4	30.5	79.1 78.4	78.8	5.4 5.4	5.4	5.3	4.7 4.8	4.8	18.1	6.0 5.9	6.0	6.2
					Middle	3	26.2 26.2	26.2	8.0 8.0	8.0	31.0 30.9	31.0	75.6 76.5	76.1	5.2 5.2	5.2		9.5 9.7	9.6		5.5 5.4	5.5	
					Bottom	5	26.3 26.3	26.3	8.0 8.0	8.0	31.3 31.5	31.4	75.6 74.3	75.0	5.2 5.1	5.2	5.2	39.9 39.6	39.8		7.2 7.3	7.3	
18-Oct-11	Sunny	Moderate	10:17	6.8	Surface	1	26.4 26.4	26.4	7.8 7.8	7.8	29.0 29.0	29.0	86.4 86.4	86.4	6.6 6.6	6.6	6.5	5.1 4.9	5.0	18.4	6.2 6.2	6.2	7.1
					Middle	3.5	26.1 26.1	26.1	7.8 7.8	7.8	29.7 29.7	29.7	84.1 84.1	84.1	6.4 6.4	6.4		10.9 10.9	10.9		7.5 7.5	7.5	
					Bottom	6	26.2 26.2	26.2	7.8 7.8	7.8	29.8 29.8	29.8	79.7 79.7	79.7	6.1 6.1	6.1	6.1	40.8 37.8	39.3		7.5 7.6	7.6	
22-Oct-11	Sunny	Moderate	16:44	6.2	Surface	1	26.2 26.2	26.2	8.6 8.6	8.6	29.1 29.1	29.1	111.6 104.8	108.2	7.7 7.2	7.5	6.6	2.9 3.6	3.3	12.4	14.0 14.0	14.0	13.4
					Middle	3	26.1 26.1	26.1	8.4 8.4	8.4	30.3 30.3	30.3	83.8 79.8	81.8	5.7 5.5	5.6		12.6 12.8	12.7		17.0 17.0	17.0	
					Bottom	5	26.1 26.1	26.1	8.4 8.4	8.4	30.6 30.5	30.6	80.0 79.0	79.5	5.5 5.4	5.5	5.5	19.3 22.9	21.1		9.2 9.0	9.1	
25-Oct-11	Sunny	Moderate	18:53	5.4	Surface	1	26.3 26.3	26.3	8.3 8.3	8.3	26.6 28.3	27.5	89.5 89.4	89.5	6.1 6.0	6.1	6.1	4.5 4.4	4.5	6.5	6.6 6.7	6.7	6.5
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	26.3 26.3	26.3	8.3 8.3	8.3	28.3 28.3	28.3	89.6 89.3	89.5	6.0 6.0	6.0	6.0	7.8 9.1	8.5		6.4 6.3	6.4	

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

Water Quality Monitoring Results at IS(Mf)16 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Water Depth (m)	Sampling Depth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
27-Oct-11	Cloudy	Moderate	06:02	5.3	Surface	1	25.8 25.8	25.8	8.0 8.1	8.1	31.0 31.0	31.0	100.9 100.8	100.9	6.9 6.9	6.9	6.9	4.6 5.1	4.9	8.2	9.0 9.1	9.1	11.8
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.9 25.9	25.9	8.1 8.1	8.1	31.2 31.2	31.2	100.6 100.5	100.6	6.9 6.9	6.9	6.9	11.2 11.6	11.4		15.0 14.0	14.5	
29-Oct-11	Sunny	Moderate	08:03	5.3	Surface	1	25.9 25.9	25.9	8.1 8.1	8.1	29.9 29.9	29.9	84.2 84.2	84.2	5.8 5.8	5.8	5.8	7.5 7.6	7.6	9.9	15.0 15.0	15.0	15.0
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.8 25.8	25.8	8.1 8.1	8.1	29.7 29.7	29.7	81.1 81.1	81.1	5.6 5.6	5.6	5.6	12.2 11.9	12.1		15.0 15.0	15.0	
31-Oct-11	Sunny	Moderate	10:43	5.3	Surface	1	25.5 25.5	25.5	8.2 8.2	8.2	30.3 30.3	30.3	85.9 79.3	82.6	5.9 5.5	5.7	5.7	7.6 8.1	7.9	13.1	7.1 7.2	7.2	9.6
					Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
					Bottom	4	25.5 25.5	25.5	8.2 8.2	8.2	30.3 30.2	30.3	82.6 78.3	80.5	5.7 5.4	5.6	5.6	18.1 18.3	18.2		12.0 12.0	12.0	

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

Water Quality Monitoring Results at SR4a - Mid-Ebb Tide

Date	Weather Condition	Sea Condition	Sampling Time	Water Depth	Sampling Dapth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
29/Aug/13	Sunny	Moderate	18:05	3.8	Surface	1.0	29.4	29.4	7.6	7.6	11.2	11.2	85.9	85.7	6.2	6.2	6.0	6.4	6.4	6.8	4.7	5.1	5.2
							29.4		7.6		11.2		85.5		6.1			6.4			5.4		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.8	29.2	29.2	7.7	7.7	11.6	11.6	80.2	80.5	5.8	5.8		7.3	7.2		5.7	5.3	
							29.2		7.7		11.5		80.7		5.8			7.2			4.8		
31/Aug/13	Cloudy	Calm	9:30	4.7	Surface	1.0	29.2	29.2	7.7	7.7	11.4	11.4	85.5	85.3	6.2	6.2	5.9	6.6	6.6	7.0	3.8	3.8	4.4
							29.1		7.7		11.3		85.1		6.1			6.6			3.8		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	3.7	29.0	29.0	7.8	7.8	11.6	11.6	77.2	77.4	5.6	5.6		7.5	7.5		4.5	5.0	
							28.9		7.7		11.5		77.6		5.6			7.5			5.4		
3/Sep/13	Cloudy	Calm	10:25	4.8	Surface	1.0	28.1	28.1	6.5	6.5	13.7	13.8	91.9	91.6	6.7	6.6	6.3	4.3	4.2	5.0	5.3	4.7	5.1
							28.1		6.5		13.8		91.2		6.6			4.2			4.0		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	3.8	27.9	27.9	6.8	6.8	15.0	15.0	82.3	82.1	5.9	5.9		5.6	5.7		5.9	5.5	
							27.9		6.9		15.0		81.9		5.9			5.8			5.0		
5/Sep/13	Rainy	Calm	11:15	4.7	Surface	1.0	27.9	27.9	6.4	6.4	14.0	14.1	89.4	89.6	6.5	6.5	6.2	4.3	4.3	5.1	4.4	4.5	4.7
							27.9		6.5		14.1		89.7		6.5			4.4			4.6		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	3.7	27.7	27.7	6.9	6.9	15.1	15.1	80.7	80.9	5.8	5.8		5.8	5.8		4.5	4.9	
							27.7		7.0		15.1		81.0		5.8			5.8			5.3		
7/Sep/13	Fine	Calm	14:25	3.8	Surface	1.0	26.9	26.9	7.0	7.0	16.5	16.6	59.3	59.6	4.5	4.5	4.8	10.9	10.5	22.7	15.0	15.9	31.3
							26.8		7.0		16.6		59.9		4.6			10.0			16.8		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.8	26.8	26.8	6.8	6.8	16.8	16.9	64.7	65.0	4.9	5.0		34.5	35.0		45.8	46.8	
							26.7		6.8		16.9		65.3		5.0			35.4			47.7		
10/Sep/13	Fine	Moderate	14:15	5.2	Surface	1.0	28.1	28.1	6.6	6.6	17.2	17.3	66.4	66.7	4.7	4.7	5.2	8.1	8.1	7.4	8.3	8.1	7.8
							28.0		6.6		17.4		66.9		4.8			8.1			7.8		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.2	27.5	27.6	7.0	7.0	18.4	18.4	79.4	79.1	5.7	5.6		6.8	6.8		7.3	7.6	
							27.6		7.0		18.3		78.8		5.6			6.7			7.9		

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at SR4a - Mid-Ebb Tide

Date	Weather Condition	Sea Condition	Sampling Time	Water Depth	Sampling Dapth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
12/Sep/13	Fine	Calm	16:20	4.0	Surface	1.0	28.7	28.8	6.3	6.3	16.1	16.2	65.9	65.8	4.7	4.7	4.6	3.7	3.5	3.8	2.3	2.2	2.5
							28.8		6.3		16.2		65.6		4.7			3.4			2.0		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	3.0	28.6	28.6	6.3	6.3	16.3	16.3	64.8	64.6	4.6	4.6		3.4	4.0		3.0	2.8	
							28.6		6.3		16.3		64.3		4.6			4.6			2.5		
14/Sep/13	Fine	Calm	8:05	4.5	Surface	1.0	28.2	28.3	6.8	6.8	15.4	15.5	73.5	73.8	5.3	5.3	5.2	4.3	4.2	4.2	4.8	4.1	4.4
							28.3		6.8		15.5		74.1		5.3			4.1			3.3		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	3.5	28.1	28.1	6.9	6.9	15.7	15.8	71.7	71.5	5.1	5.1		4.1	4.2		6.0	4.8	
							28.1		6.9		15.8		71.2		5.1			4.3			3.5		
17/Sep/13	Fine	Calm	9:20	3.4	Surface	1.0	28.0	28.0	7.8	7.8	21.3	21.4	70.3	70.4	4.9	4.9	4.8	5.9	5.6	5.5	7.4	8.2	8.1
							28.0		7.9		21.4		70.4		4.9			5.3			9.0		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.4	27.9	28.0	7.9	7.9	21.5	21.5	67.6	67.3	4.7	4.7		5.5	5.5		7.9	7.9	
							28.0		7.9		21.5		66.9		4.7			5.4			7.9		
19/Sep/13	Cloudy	Moderate	13:30	3.9	Surface	1.0	28.4	28.4	7.4	7.4	21.9	22.0	79.0	79.2	5.4	5.5	5.4	12.6	12.7	12.6	14.4	13.6	14.3
							28.4		7.4		22.0		79.3		5.5			12.8			12.7		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.9	28.2	28.2	7.4	7.4	22.2	22.2	76.7	76.5	5.3	5.3		12.5	12.4		15.1	15.1	
							28.1		7.4		22.2		76.3		5.3			12.3			15.0		
21/Sep/13	Fine	Moderate	12:15	3.5	Surface	1.0	28.5	28.5	6.9	6.9	19.8	19.8	72.9	72.6	5.1	5.0	5.0	8.7	8.7	8.7	8.4	7.7	7.9
							28.5		6.9		19.8		72.2		5.0			8.7			7.0		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.5	28.5	28.5	6.7	6.8	19.9	19.9	71.4	71.8	5.0	5.0		8.7	8.7		8.2	8.1	
							28.5		6.8		19.8		72.1		5.0			8.8			8.0		
24/Sep/13	Fine	Moderate	14:05	5.0	Surface	1.0	28.3	28.3	6.2	6.4	18.4	18.5	82.5	82.3	5.8	5.8	5.5	19.2	16.7	18.0	11.4	11.1	14.0
							28.3		6.7		18.5		82.1		5.8			14.2			10.8		
					Middle	---	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.0	28.0	28.0	7.2	7.2	19.0	19.0	72.7	74.0	5.1	5.2		18.6	19.2		17.4	16.9	
							28.0		7.3		19.0		75.3		5.3			19.8			16.4		

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at SR4a - Mid-Flood Tide

Date	Weather Condition	Sea Condition	Sampling Time	Water Depth	Sampling Dapth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
29/Aug/13	Sunny	Moderate	8:20	3.3	Surface	1.0	29.30	29.3	7.70	7.7	11.30	11.3	86.80	86.6	6.25	6.2	6.0	6.53	6.5	7.0	5.2	5.2	5.5
							29.30		7.67		11.20		86.40		6.23			6.50			5.2		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.3	29.10	29.1	7.73	7.7	11.50	11.5	78.50	78.7	5.66	5.7		7.40	7.4		5.8	5.7	
							29.10		7.72		11.40		78.90		5.70			7.44			5.6		
31/Aug/13	Cloudy	Calm	16:30	5.1	Surface	1.0	29.30	29.3	7.65	7.6	11.30	11.3	86.30	86.2	6.21	6.2	5.9	6.52	6.5	6.9	17.5	22.0	23.6
							29.30		7.63		11.30		86.10		6.19			6.48			26.4		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.1	29.10	29.1	7.67	7.7	11.70	11.7	77.90	78.2	5.63	5.7		7.38	7.4		12.9	25.2	
							29.00		7.65		11.60		78.40		5.67			7.41			37.4		
3/Sep/13	Cloudy	Calm	17:00	5.0	Surface	1.0	28.00	28.0	6.32	6.3	13.60	13.6	92.70	92.5	6.72	6.7	6.3	4.33	4.4	4.9	6.2	5.8	5.5
							28.00		6.28		13.60		92.30		6.69			4.52			5.3		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.0	27.80	27.8	6.67	6.6	15.10	15.1	82.10	81.9	5.92	5.9		5.23	5.3		5.2	5.3	
							27.80		6.60		15.00		81.60		5.88			5.37			5.3		
5/Sep/13	Rainy	Calm	17:38	5.0	Surface	1.0	28.00	28.1	6.37	6.4	13.90	13.9	90.80	91.0	6.57	6.6	6.3	4.29	4.3	4.9	4.2	4.1	4.3
							28.10		6.39		13.90		91.10		6.59			4.32			4.0		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.0	28.00	28.0	6.77	6.8	15.00	15.0	82.60	82.7	5.94	6.0		5.46	5.5		4.7	4.5	
							28.00		6.78		15.00		82.80		5.96			5.49			4.2		
7/Sep/13	Fine	Calm	8:26	5.4	Surface	1.0	26.70	26.8	6.31	6.3	17.80	17.8	57.50	57.8	4.16	4.2	4.3	8.72	8.8	13.0	14.5	15.1	22.1
							26.80		6.33		17.80		58.10		4.20			8.78			15.6		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	4.4	26.60	26.6	6.53	6.6	17.90	17.9	62.40	62.3	4.52	4.5		16.90	17.2		30.2	29.1	
							26.60		6.58		17.90		62.10		4.50			17.40			28.0		
10/Sep/13	Fine	Moderate	14:15	3.4	Surface	1.0	27.70	27.7	6.48	6.5	16.30	16.3	70.20	70.4	5.04	5.0	5.0	4.66	4.7	5.9	3.8	4.0	6.3
							27.70		6.49		16.30		70.50		5.05			4.72			4.2		
					Middle	-	---	---	---	---	---	---	---	---	---	---		---	---		---	---	
							---		---		---		---		---			---			---		
					Bottom	2.4	27.70	27.7	6.54	6.5	16.30	16.3	69.80	70.0	5.02	5.0		7.11	7.2		7.9	8.7	
							27.70		6.54		16.30		70.10		5.04			7.20			9.4		

Remarks: *DA: Depth-Averaged

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

Water Quality Monitoring Results at SR4a - Mid-Flood Tide

Date	Weather Condition	Sea Condition	Sampling Time	Water Depth	Sampling Dapth (m)		Water Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity (NTU)			Suspended Solids (mg/L)		
							Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
12/Sep/13	Fine	Calm	11:05	4.2	Surface	1.0	28.60	28.6	6.20	6.2	16.00	16.1	66.50	66.7	4.72	4.7	4.7	2.94	2.9	3.1	3.0	2.7	2.8
							28.60		6.23		16.10		66.90		4.75			2.83			2.4		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	3.2	28.50	28.5	6.26	6.3	16.40	16.4	65.20	65.1	4.63	4.6		2.97	3.2		2.9	3.0	
							28.40		6.25		16.30		64.90		4.61			3.46			3.0		
14/Sep/13	Fine	Calm	14:15	4.2	Surface	1.0	28.50	28.5	6.86	6.9	15.50	15.5	74.70	75.0	5.35	5.4	5.3	3.96	4.2	4.3	4.2	4.2	4.1
							28.40		6.89		15.50		75.30		5.39			4.38			4.1		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	3.2	28.30	28.3	6.88	6.9	15.70	15.7	72.60	72.5	5.20	5.2		4.23	4.4		4.5	4.0	
							28.20		6.87		15.60		72.40		5.18			4.47			3.4		
17/Sep/13	Fine	Calm	16:00	4.0	Surface	1.0	28.10	28.1	7.79	7.8	21.40	21.4	67.70	68.2	4.71	4.7	4.6	3.50	3.6	3.8	6.3	6.2	6.1
							28.00		7.80		21.40		68.60		4.77			3.68			6.1		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	3.0	28.00	28.0	7.88	7.9	21.40	21.5	64.90	65.2	4.52	4.5		4.23	4.1		6.1	5.9	
							28.00		7.82		21.50		65.50		4.56			3.89			5.7		
19/Sep/13	Cloudy	Moderate	17:30	4.2	Surface	1.0	28.40	28.4	7.27	7.3	21.80	21.9	78.20	78.4	5.38	5.4	5.3	13.40	13.5	13.3	14.3	14.2	14.3
							28.30		7.31		21.90		78.50		5.40			13.50			14.1		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	3.2	28.20	28.2	7.33	7.3	22.10	22.2	76.00	75.8	5.23	5.2		13.20	13.1		14.8	14.3	
							28.20		7.35		22.20		75.60		5.21			12.90			13.8		
21/Sep/13	Fine	Moderate	8:15	4.1	Surface	1.0	28.50	28.5	6.77	6.7	19.60	19.6	76.70	76.2	5.34	5.3	5.2	9.42	9.4	9.5	7.9	7.8	8.4
							28.50		6.69		19.60		75.70		5.27			9.46			7.7		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	3.1	28.50	28.5	6.63	6.6	19.60	19.6	73.60	73.5	5.12	5.1		9.54	9.5		8.7	9.0	
							28.50		6.60		19.60		73.30		5.10			9.50			9.2		
24/Sep/13	Fine	Moderate	9:15	5.4	Surface	1.0	28.10	28.1	6.13	6.2	18.30	18.3	82.60	83.2	5.84	5.9	5.7	16.30	16.9	16.5	14.4	14.8	14.5
							28.10		6.21		18.30		83.70		5.92			17.50			15.1		
					Middle	-	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
							---		---		---		---		---			---			---		
					Bottom	4.4	27.90	27.9	6.79	6.8	19.10	19.1	71.10	74.7	5.44	5.5		15.90	16.0		14.2	14.2	
							27.90		6.84		19.10		78.20		5.52			16.10			14.2		

Remarks: *DA: Depth-Averaged

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

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14266-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14266-37	14266-38	14266-39	14266-40	14266-41	14266-42
Sample ID	IS7-a	IS(Mf)9-a	CS2-b	CS2-b	CS2-b	IS3-b
Sampling Depth	M	M	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	21	5.3	8.1	7.5	14

Sample Number	14266-43	14266-44	14266-45	14266-46	14266-47	14266-48
Sample ID	IS3-b	IS4-b	IS4-b	IS4-b	SR2-b	SR3-b
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	20	11	33	29	53	16

Sample Number	14266-49	14266-50	14266-51	14266-52	14266-53	14266-54
Sample ID	IS5-b	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS(Mf)6-b
Sampling Depth	S	M	B	M	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	10	16	62	27	10

Sample Number	14266-55	14266-56	14266-57	14266-58	14266-59	14266-60
Sample ID	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b	CS2-b	CS2-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	13	18	12	16	23

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14266-V1

4) The samples as received are chilled and kept in ice-box

****

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14266-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14266-61	14266-62	14266-63	14266-64	14266-65	14266-66
Sample ID	CS2-b	IS3-b	IS3-b	IS4-b	IS4-b	IS4-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	27	23	18	15	11	13

Sample Number	14266-67	14266-68	14266-69	14266-70	14266-71	14266-72
Sample ID	SR2-b	SR3-b	SR3-b	IS5-b	IS5-b	IS5-b
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	7.9	7.1	8.0	8.2	11

Sample Number	14266-73	14266-74	14266-75	14266-76
Sample ID	IS(Mf)20-b	IS(Mf)6-b	IS7-b	IS(Mf)9-b
Sampling Depth	M	M	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	12	17	21

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14266-V1

4) The samples as received are chilled and kept in ice-box

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

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14268-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14268-13	14268-14	14268-15	14268-16	14268-17	14268-18
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	9.2	7.1	6.4	12	8.4

Sample Number	14268-19	14268-20	14268-21	14268-22	14268-23	14268-24
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.3	11	6.5	8.9	12

Sample Number	14268-25	14268-26	14268-27	14268-28	14268-29	14268-30
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	7.5	11	7.5	9.6	19

Sample Number	14268-31	14268-32	14268-33	14268-34	14268-35	14268-36
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	12	11	5.7	12	8.6

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14268-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14268-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14268-37	14268-38	14268-39	14268-40	14268-41	14268-42
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	8.7	6.6	7.9	13	12

Sample Number	14268-43	14268-44	14268-45	14268-46	14268-47	14268-48
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	16	15	14	11	17

Sample Number	14268-49	14268-50	14268-51	14268-52	14268-53	14268-54
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	19	14	10	9.5	9.6

Sample Number	14268-55	14268-56	14268-57	14268-58	14268-59	14268-60
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	8.2	9.5	9.3	12	11

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14268-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14268-61	14268-62	14268-63	14268-64	14268-65	14268-66
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	14	8.3	7.0	8.2	12

Sample Number	14268-67	14268-68	14268-69	14268-70	14268-71	14268-72
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.1	13	6.6	6.4	10	9.1

Sample Number	14268-73	14268-74	14268-75	14268-76	14268-77	14268-78
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	12	9.9	9.2	7.1	6.4

Sample Number	14268-79	14268-80	14268-81	14268-82	14268-83	14268-84
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	8.4	11	9.4	11	6.6

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14268-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14268-85	14268-86	14268-87	14268-88	14268-89	14268-90
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.2	12	14	7.4	10	7.7

Sample Number	14268-91	14268-92	14268-93	14268-94	14268-95	14268-96
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.4	18	17	12	11	5.6

Sample Number	14268-97	14268-98	14268-99	14268-100	14268-101	14268-102
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	8.5	14	8.7	6.6	7.8

Sample Number	14268-103	14268-104	14268-105	14268-106	14268-107	14268-108
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	12	16	14	14

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14268-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14268-109	14268-110	14268-111	14268-112	14268-113	14268-114
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	17	14	19	15	10

Sample Number	14268-115	14268-116	14268-117	14268-118	14268-119	14268-120
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	9.6	13	7.9	9.3	9.5

Sample Number	14268-121	14268-122	14268-123	14268-124
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	11	12	14

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4) The samples as received are chilled and kept in ice-box

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HOKLAS 083 TEST

TEST REPORT

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

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 116 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-06

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14267-1	14267-2	14267-3	14267-4	14267-5	14267-6
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	12	5.3	17	12	15

Sample Number	14267-7	14267-8	14267-9	14267-10	14267-11	14267-12
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	34	14	10	14	13	23

Remark: 1) < = less than
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3) This report supersedes the one dated 2011/11/23 with certificate number 14267-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14267-13	14267-14	14267-15	14267-16	14267-17	14267-18
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	6.1	15	8.2	12	17

Sample Number	14267-19	14267-20	14267-21	14267-22	14267-23	14267-24
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	11	19	19	15	4.2

Sample Number	14267-25	14267-26	14267-27	14267-28	14267-29	14267-30
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.9	12	16	12	13	13

Sample Number	14267-31	14267-32	14267-33	14267-34	14267-35	14267-36
Sample ID	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	15	5.1	12	14	8.2

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14267-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14267-37	14267-38	14267-39	14267-40	14267-41	14267-42
Sample ID	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.2	8.5	12	11	17	14

Sample Number	14267-43	14267-44	14267-45	14267-46	14267-47	14267-48
Sample ID	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	14	12	12	11	10

Sample Number	14267-49	14267-50	14267-51	14267-52	14267-53	14267-54
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.0	40	27	27	17	38

Sample Number	14267-55	14267-56	14267-57	14267-58	14267-59	14267-60
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	71	8.1	7.7	11	8.5	12

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TEST

TEST REPORT

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results

Sample Number	14267-61	14267-62	14267-63	14267-64	14267-65	14267-66
Sample ID	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.2	17	12	15	34	14

Sample Number	14267-67	14267-68	14267-69	14267-70	14267-71	14267-72
Sample ID	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	14	13	23	10	6.0

Sample Number	14267-73	14267-74	14267-75	14267-76	14267-77	14267-78
Sample ID	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	8.4	12	17	10	11

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TEST REPORT

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14267-79	14267-80	14267-81	14267-82	14267-83	14267-84
Sample ID	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	19	18	14	4.2	4.9	12

Sample Number	14267-85	14267-86	14267-87	14267-88	14267-89	14267-90
Sample ID	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b	IS8-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	12	13	13	16	15

Sample Number	14267-91	14267-92	14267-93	14267-94	14267-95	14267-96
Sample ID	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.1	11	14	8.0	7.2	8

Sample Number	14267-97	14267-98	14267-99	14267-100	14267-101	14267-102
Sample ID	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	12	17	14	17	14

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14267-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14267-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-06
Date Tested:	2011-10-06
Date Completed:	2011-10-12

Results:

Sample Number	14267-103	14267-104	14267-105	14267-106	14267-107	14267-108
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	11	12	9.4	8.9	40

Sample Number	14267-109	14267-110	14267-111	14267-112	14267-113	14267-114
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	27	26	17	38	74	8.1

Sample Number	14267-115	14267-116
Sample ID	CS4-b	CS4-b
Sampling Depth	M	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	11

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14267-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14275-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14275-13	14275-14	14275-15	14275-16	14275-17	14275-18
Sample ID	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	B	M	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	7.0	7.7	7.1	11	6.1

Sample Number	14275-19	14275-20	14275-21	14275-22	14275-23	14275-24
Sample ID	IS(Mf)9-a	IS(Mf)9-a	CS2-a	CS2-a	CS2-a	IS3-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.6	7.7	5.2	7.2	20	24

Sample Number	14275-25	14275-26	14275-27	14275-28	14275-29	14275-30
Sample ID	IS3-a	IS4-a	IS4-a	IS4-a	SR2-a	SR3-a
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	29	6.4	9.7	20	17	12

Sample Number	14275-31	14275-32	14275-33	14275-34	14275-35	14275-36
Sample ID	IS5-a	IS5-a	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS7-a
Sampling Depth	S	M	B	M	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	11	12	9.4	11	13

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14275-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14275-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14275-37	14275-38	14275-39	14275-40	14275-41	14275-42
Sample ID	IS(Mf)9-a	CS2-b	CS2-b	CS2-b	IS3-b	IS3-b
Sampling Depth	M	S	M	B	S	B
Tide	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	9.7	13	27	15	12

Sample Number	14275-43	14275-44	14275-45	14275-46	14275-47	14275-48
Sample ID	IS4-b	IS4-b	IS4-b	SR2-b	SR3-b	IS5-b
Sampling Depth	S	M	B	M	M	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	16	20	12	7.2	7.8

Sample Number	14275-49	14275-50	14275-51	14275-52	14275-53	14275-54
Sample ID	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b
Sampling Depth	M	B	M	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.0	17	7.0	7.7	7.1	12

Sample Number	14275-55	14275-56	14275-57	14275-58	14275-59	14275-60
Sample ID	IS7-b	IS(Mf)9-b	IS(Mf)9-b	CS2-b	CS2-b	CS2-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.9	5.7	7.8	5.1	7.3	19

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14275-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14275-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14275-61	14275-62	14275-63	14275-64	14275-65	14275-66
Sample ID	IS3-b	IS3-b	IS4-b	IS4-b	IS4-b	SR2-b
Sampling Depth	S	B	S	M	B	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	24	29	6.4	9.7	20	17

Sample Number	14275-67	14275-68	14275-69	14275-70	14275-71	14275-72
Sample ID	SR3-b	IS5-b	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b
Sampling Depth	M	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	11	10	11	9.4	11

Sample Number	14275-73	14275-74
Sample ID	IS7-b	IS(Mf)9-b
Sampling Depth	M	M
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	17

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3) This report supersedes the one dated 2011/11/23 with certificate number 14275-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 114 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-08

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14276-1	14276-2	14276-3	14276-4	14276-5	14276-6
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.1	7.8	27	25	25	11

Sample Number	14276-7	14276-8	14276-9	14276-10	14276-11	14276-12
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	4.8	5.2	16	10	12

Remark: 1) < = less than
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3) This report supersedes the one dated 2011/11/23 with certificate number 14276-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14276-13	14276-14	14276-15	14276-16	14276-17	14276-18
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	14	7.7	7.2	9.5	69

Sample Number	14276-19	14276-20	14276-21	14276-22	14276-23	14276-24
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	12	14	8.3	14	3.3

Sample Number	14276-25	14276-26	14276-27	14276-28	14276-29	14276-30
Sample ID	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	6.0	5.5	5.9	8.3	8.7	18

Sample Number	14276-31	14276-32	14276-33	14276-34	14276-35	14276-36
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	15	48	8.1	8.5	19

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14276-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14276-37	14276-38	14276-39	14276-40	14276-41	14276-42
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	16	38	10	9.7	6.2

Sample Number	14276-43	14276-44	14276-45	14276-46	14276-47	14276-48
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.8	8.9	13	12	13	13

Sample Number	14276-49	14276-50	14276-51	14276-52	14276-53	14276-54
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	13	5.2	7.7	4.0	12

Sample Number	14276-55	14276-56	14276-57	14276-58	14276-59	14276-60
Sample ID	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.0	5.3	8.7	9.1	7.5	26

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14276-V1

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TEST REPORT

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14276-61	14276-62	14276-63	14276-64	14276-65	14276-66
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	26	26	11	17	4.8	5.1

Sample Number	14276-67	14276-68	14276-69	14276-70	14276-71	14276-72
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	9.9	12	11	14	7.7

Sample Number	14276-73	14276-74	14276-75	14276-76	14276-77	14276-78
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.3	9.5	67	8.3	12	13

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TEST REPORT

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14276-79	14276-80	14276-81	14276-82	14276-83	14276-84
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	14	3.2	6.2	5.6	5.8

Sample Number	14276-85	14276-86	14276-87	14276-88	14276-89	14276-90
Sample ID	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b	IS8-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	8.8	18	17	15	47

Sample Number	14276-91	14276-92	14276-93	14276-94	14276-95	14276-96
Sample ID	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.3	8.7	20	16	16	37

Sample Number	14276-97	14276-98	14276-99	14276-100	14276-101	14276-102
Sample ID	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	9.6	6.3	8.5	9.0	14

Remark: 1) <= less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14276-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14276-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14276-103	14276-104	14276-105	14276-106	14276-107	14276-108
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	14	13	16	14	5.3

Sample Number	14276-109	14276-110	14276-111	14276-112	14276-113	14276-114
Sample ID	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b	CS4-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	4.0	13	6.8	5.3	8.8

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14277-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14277-13	14277-14	14277-15	14277-16	14277-17	14277-18
Sample ID	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a	IS15-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	8.6	7.4	9.8	11	12

Sample Number	14277-19	14277-20	14277-21	14277-22	14277-23	14277-24
Sample ID	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a	IS12-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	15	18	8.9	13	13

Sample Number	14277-25	14277-26	14277-27	14277-28	14277-29	14277-30
Sample ID	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	19	24	7.3	9.8	7.8

Sample Number	14277-31	14277-32	14277-33	14277-34	14277-36	14277-37
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	CSA-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	14	11	11	9.4	6.6

Remark: 1) < = less than

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HOKLAS 083
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TEST REPORT

Laboratory No.:	14277-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14277-38	14277-39	14277-40	14277-41	14277-42	14277-43
Sample ID	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a	SR8-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	16	3.7	7.1	5.3	5.2

Sample Number	14277-44	14277-45	14277-46	14277-47	14277-48	14277-49
Sample ID	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a	IS15-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	12	14	6.3	6.0	18

Sample Number	14277-50	14277-51	14277-52	14277-53	14277-54	14277-55
Sample ID	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a	IS12-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	6.8	7.2	10	7.6	11

Sample Number	14277-56	14277-57	14277-58	14277-59	14277-60	14277-61
Sample ID	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.4	7.9	5.9	7.5	13	25

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3) This report supersedes the one dated 2011/11/23 with certificate number 14277-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14277-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14277-86	14277-87	14277-88	14277-89	14277-90	14277-91
Sample ID	IS14-b	IS14-b	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.5	20	24	7.1	10	7.9

Sample Number	14277-92	14277-93	14277-94	14277-95	14277-97	14277-98
Sample ID	SR10A-b	SR10A-b	SR10A-b	SR10B-b	SR10B-b	CSA-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	14	11	11	9.1	6.7

Sample Number	14277-99	14277-100	14277-101	14277-102	14277-103	14277-104
Sample ID	CSA-b	CSA-b	CS6-b	CS6-b	CS6-b	SR8-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	16	3.7	7.1	5.3	5.0

Sample Number	14277-105	14277-106	14277-107	14277-108	14277-109	14277-110
Sample ID	SR8-b	SR9-b	SR9-b	IS15-b	IS15-b	IS15-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	12	14	6.3	6.0	18

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4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14277-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-08
Date Tested:	2011-10-08
Date Completed:	2011-10-14

Results:

Sample Number	14277-111	14277-112	14277-113	14277-114	14277-115	14277-116
Sample ID	IS13-b	IS13-b	IS13-b	IS12-b	IS12-b	IS12-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	6.8	7.4	10	7.2	12

Sample Number	14277-117	14277-118	14277-119	14277-120	14277-121	14277-122
Sample ID	IS14-b	IS14-b	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.5	8.1	5.9	7.6	13	25

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TEST

TEST REPORT

Laboratory No.:	14301-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14301-18	14301-19	14301-21	14301-22	14301-24	14301-25
Sample ID	IS5-a	IS(Mf)20-a	IS(Mf)20-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	5.6	4.3	5.5	12	8.9

Sample Number	14301-27	14301-28	14301-30	14301-31	14301-32	14301-33
Sample ID	IS7-a	IS(Mf)9-a	IS(Mf)9-a	CS2-a	CS2-a	CS2-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.2	6.2	34	13	15	11

Sample Number	14301-34	14301-36	14301-37	14301-38	14301-39	14301-41
Sample ID	IS3-a	IS3-a	IS4-a	IS4-a	IS4-a	SR2-a
Sampling Depth	S	B	S	M	B	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	12	9.6	15	13	13

Sample Number	14301-44	14301-46	14301-47	14301-48	14301-50	14301-53
Sample ID	SR3-a	IS5-a	IS5-a	IS5-a	IS(Mf)20-a	IS(Mf)6-a
Sampling Depth	M	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	7.5	9.3	18	20	12

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14301-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14301-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14301-56	14301-58	14301-60	14301-61	14301-62	14301-63
Sample ID	IS7-a	IS(Mf)9-a	IS(Mf)9-a	CS2-b	CS2-b	CS2-b
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	7.6	12	9.4	3.4	15

Sample Number	14301-64	14301-66	14301-67	14301-68	14301-69	14301-71
Sample ID	IS3-b	IS3-b	IS4-b	IS4-b	IS4-b	SR2-b
Sampling Depth	S	B	S	M	B	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	14	13	18	19	11

Sample Number	14301-74	14301-76	14301-77	14301-78	14301-79	14301-81
Sample ID	SR3-b	IS5-b	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)20-b
Sampling Depth	M	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.5	8.8	12	5.4	4.3

Sample Number	14301-82	14301-84	14301-85	14301-87	14301-88	14301-90
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.6	12	8.9	6.3	6.0	34

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TEST

TEST REPORT

Laboratory No.:	14301-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14301-91	14301-92	14301-93	14301-94	14301-96	14301-97
Sample ID	CS2-b	CS2-b	CS2-b	IS3-b	IS3-b	IS4-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	15	11	16	12	9.4

Sample Number	14301-98	14301-99	14301-101	14301-104	14301-106	14301-107
Sample ID	IS4-b	IS4-b	SR2-b	SR3-b	IS5-b	IS5-b
Sampling Depth	M	B	M	M	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	13	13	14	7.6	9.4

Sample Number	14301-108	14301-110	14301-113	14301-116	14301-118	14301-120
Sample ID	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	B	M	M	M	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	19	12	8.4	7.5	12

Remark: 1) < = less than

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 116 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-10

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14302-1	14302-3	14302-4	14302-6	14302-7	14302-8
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	7.3	6.3	9.3	5.4	10

Sample Number	14302-9	14302-10	14302-11	14302-12	14302-13	14302-15
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.2	3.6	3.9	6.8	4.8	2.7

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14302-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14302-16	14302-17	14302-18	14302-19	14302-20	14302-21
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.7	10	17	6.5	6.7	8.2

Sample Number	14302-22	14302-23	14302-24	14302-25	14302-27	14302-28
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	3.8	5.0	5.2	6.8	6.6	11

Sample Number	14302-29	14302-30	14302-31	14302-32	14302-33	14302-34
Sample ID	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	6.3	6.2	9.4	7.4	5.1	6.1

Sample Number	14302-36	14302-37	14302-39	14302-40	14302-41	14302-42
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.1	5.7	5.8	21	28	16

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14302-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14302-43	14302-44	14302-45	14302-46	14302-48	14302-49
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	12	9.3	11	10	13

Sample Number	14302-50	14302-51	14302-52	14302-53	14302-54	14302-55
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	9.7	9.8	14	8.6	9.9

Sample Number	14302-56	14302-57	14302-58	14302-60	14302-61	14302-62
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	10	10	10	11	11

Sample Number	14302-63	14302-64	14302-65	14302-66	14302-67	14302-69
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.1	4.4	5.2	7.1	6.7	7.5

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14302-70	14302-72	14302-73	14302-74	14302-75	14302-76
Sample ID	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.5	9.1	5.2	10	6.3	3.4

Sample Number	14302-77	14302-78	14302-79	14302-81	14302-82	14302-83
Sample ID	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.0	6.6	4.8	2.8	5.6	9.7

Sample Number	14302-84	14302-85	14302-86	14302-87	14302-88	14302-89
Sample ID	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	6.4	7.0	7.9	3.8	5.1

Sample Number	14302-90	14302-91	14302-93	14302-94	14302-95	14302-96
Sample ID	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.3	6.9	6.5	11	6.4	6.1

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3) This report supersedes the one dated 2011/11/23 with certificate number 14302-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14302-97	14302-98	14302-99	14302-100	14302-102	14302-103
Sample ID	CS4-b	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.5	7.2	5.2	6.2	9.3	5.6

Sample Number	14302-105	14302-106	14302-107	14302-108	14302-109	14302-110
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.9	22	28	16	13	12

Sample Number	14302-111	14302-112	14302-114	14302-115	14302-116	14302-117
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.2	11	10	13	8.3	9.7

Sample Number	14302-118	14302-119	14302-120	14302-121	14302-122	14302-123
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.5	13	8.8	10	11	9.6

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14302-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14302-124	14302-126	14302-127	14302-128	14302-129	14302-130
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	11	11	12	8.1	4.4

Sample Number	14302-131	14302-132
Sample ID	CS4-b	CS4-b
Sampling Depth	M	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.3	7.1

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TEST REPORT

Laboratory No.:	14303-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14303-15	14303-16	14303-18	14303-19	14303-20	14303-21
Sample ID	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a	IS15-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	13	12	20	13	9.8

Sample Number	14303-22	14303-23	14303-24	14303-25	14303-26	14303-27
Sample ID	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a	IS12-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.5	13	5.4	17	6.6	7.1

Sample Number	14303-28	14303-29	14303-30	14303-31	14303-32	14303-33
Sample ID	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.3	6.8	5.3	9.2	4.8	5.0

Sample Number	14303-34	14303-35	14303-36	14303-37	14303-39	14303-40
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	CSA-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	9.9	8.5	14	10	4.0

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14303-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14303-41	14303-42	14303-43	14303-44	14303-45	14303-46
Sample ID	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a	SR8-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.7	4.6	11	12	13	7.4

Sample Number	14303-48	14303-49	14303-51	14303-52	14303-53	14303-54
Sample ID	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a	IS15-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.0	5.5	4.9	10	6.9	10

Sample Number	14303-55	14303-56	14303-57	14303-58	14303-59	14303-60
Sample ID	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a	IS12-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.2	5.9	11	5.3	6.0	6.3

Sample Number	14303-61	14303-62	14303-63	14303-64	14303-65	14303-66
Sample ID	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.6	17	8.5	3.6	3.9	4.0

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TEST REPORT

Laboratory No.:	14303-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14303-94	14303-95	14303-96	14303-97	14303-98	14303-99
Sample ID	IS14-b	IS14-b	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.1	6.5	5.3	9.2	4.8	4.8

Sample Number	14303-100	14303-101	14303-102	14303-103	14303-105	14303-106
Sample ID	SR10A-b	SR10A-b	SR10A-b	SR10B-b	SR10B-b	CSA-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	10	8.6	14	10	4.0

Sample Number	14303-107	14303-108	14303-109	14303-110	14303-111	14303-112
Sample ID	CSA-b	CSA-b	CS6-b	CS6-b	CS6-b	SR8-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.9	4.7	11	12	14	7.3

Sample Number	14303-114	14303-115	14303-117	14303-118	14303-119	14303-120
Sample ID	SR8-b	SR9-b	SR9-b	IS15-b	IS15-b	IS15-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.0	5.3	4.7	9.9	7.0	10

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TEST REPORT

Laboratory No.:	14303-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-10
Date Tested:	2011-10-10
Date Completed:	2011-10-17

Results:

Sample Number	14303-121	14303-122	14303-123	14303-124	14303-125	14303-126
Sample ID	IS13-b	IS13-b	IS13-b	IS12-b	IS12-b	IS12-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.1	5.9	11	5.1	5.9	6.1

Sample Number	14303-127	14303-128	14303-129	14303-130	14303-131	14303-132
Sample ID	IS14-b	IS14-b	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.7	18	8.8	3.6	4.0	3.9

Remark: 1) < = less than

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TEST REPORT

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

Laboratory No.:	14314-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

ATTN: **Miss Mei Ling Tang** Page: 1 of 4

Sample Description : 76 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-12

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14314-1	14314-2	14314-3	14314-4	14314-6	14314-7
Sample ID	CS2-a	CS2-a	CS2-a	IS3-a	IS3-a	IS4-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	10	11	14	17	13

Sample Number	14314-8	14314-9	14314-11	14314-14	14314-16	14314-17
Sample ID	IS4-a	IS4-a	SR2-a	SR3-a	IS5-a	IS5-a
Sampling Depth	M	B	M	M	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	18	15	6.6	11	34

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14314-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14314-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14314-18	14314-20	14314-22	14314-24	14314-25	14314-27
Sample ID	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	B	M	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	32	9.2	6.7	13	9.6	9.7

Sample Number	14314-28	14314-30	14314-31	14314-32	14314-33	14314-34
Sample ID	IS(Mf)9-a	IS(Mf)9-a	CS2-a	CS2-a	CS2-a	IS3-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.9	7.8	11	8.1	47	20

Sample Number	14314-36	14314-37	14314-38	14314-39	14314-41	14314-44
Sample ID	IS3-a	IS4-a	IS4-a	IS4-a	SR2-a	SR3-a
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	22	11	11	18	8.3	12

Sample Number	14314-46	14314-47	14314-48	14314-50	14314-53	14314-56
Sample ID	IS5-a	IS5-a	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS7-a
Sampling Depth	S	M	B	M	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	17	14	11	9.5	12

Remark: 1) < = less than

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14314-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14314-58	14314-60	14314-61	14314-62	14314-63	14314-64
Sample ID	IS(Mf)9-a	IS(Mf)9-a	CS2-b	CS2-b	CS2-b	IS3-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.4	11	12	10	11	14

Sample Number	14314-66	14314-67	14314-68	14314-69	14314-71	14314-74
Sample ID	IS3-b	IS4-b	IS4-b	IS4-b	SR2-b	SR3-b
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	13	17	18	15	6.7

Sample Number	14314-76	14314-77	14314-78	14314-80	14314-82	14314-84
Sample ID	IS5-b	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS(Mf)6-b
Sampling Depth	S	M	B	M	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	34	32	9.0	6.6	13

Sample Number	14314-85	14314-87	14314-88	14314-90	14314-91	14314-92
Sample ID	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b	CS2-b	CS2-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.7	9.8	7.8	7.7	11	8.1

Remark: 1) < = less than

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TEST REPORT

Laboratory No.:	14314-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14314-93	14314-94	14314-96	14314-97	14314-98	14314-99
Sample ID	CS2-b	IS3-b	IS3-b	IS4-b	IS4-b	IS4-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	47	19	23	11	11	17

Sample Number	14314-101	14314-104	14314-106	14314-107	14314-108	14314-110
Sample ID	SR2-b	SR3-b	IS5-b	IS5-b	IS5-b	IS(Mf)20-b
Sampling Depth	M	M	S	M	B	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.6	11	7.9	17	13	11

Sample Number	14314-113	14314-116	14314-118	14314-120
Sample ID	IS(Mf)6-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	M	M	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.6	12	7.4	11

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 116 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-12

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14315-1	14315-3	14315-4	14315-6	14315-7	14315-8
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	17	5.5	5.5	9.7	9.0

Sample Number	14315-9	14315-10	14315-11	14315-12	14315-13	14315-15
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	14	10	7.7	7.5	8.4

Remark: 1) < = less than
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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14315-16	14315-17	14315-18	14315-19	14315-20	14315-21
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.5	6.2	6.6	7.3	8.4	7.0

Sample Number	14315-22	14315-23	14315-24	14315-25	14315-27	14315-28
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.8	8.9	8.7	16	9.0	8.1

Sample Number	14315-29	14315-30	14315-31	14315-32	14315-33	14315-34
Sample ID	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	7.5	9.3	7.6	10	7.5	11

Sample Number	14315-36	14315-37	14315-39	14315-40	14315-41	14315-42
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	14	7.8	9.6	7.1	12

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14315-43	14315-44	14315-45	14315-46	14315-48	14315-49
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.5	9.7	9.1	9.2	8.5	11

Sample Number	14315-50	14315-51	14315-52	14315-53	14315-54	14315-55
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	4.2	6.9	6.3	5.6	9.8

Sample Number	14315-56	14315-57	14315-58	14315-60	14315-61	14315-62
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.7	11	20	15	11	9.5

Sample Number	14315-63	14315-64	14315-65	14315-66	14315-67	14315-69
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.5	12	8.3	7.0	12	17

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14315-70	14315-72	14315-73	14315-74	14315-75	14315-76
Sample ID	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.4	5.6	9.8	8.9	11	14

Sample Number	14315-77	14315-78	14315-79	14315-81	14315-82	14315-83
Sample ID	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	7.7	7.6	8.6	7.2	6.3

Sample Number	14315-84	14315-85	14315-86	14315-87	14315-88	14315-89
Sample ID	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	7.2	8.3	6.8	7.8	8.9

Sample Number	14315-90	14315-91	14315-93	14315-94	14315-95	14315-96
Sample ID	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.8	16	9.1	8.4	7.3	9.0

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14315-97	14315-98	14315-99	14315-100	14315-102	14315-103
Sample ID	CS4-b	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.4	9.9	7.7	12	15	14

Sample Number	14315-105	14315-106	14315-107	14315-108	14315-109	14315-110
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	9.6	7.2	12	8.5	9.9

Sample Number	14315-111	14315-112	14315-114	14315-115	14315-116	14315-117
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.0	8.9	8.6	11	11	4.3

Sample Number	14315-118	14315-119	14315-120	14315-121	14315-122	14315-123
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.0	6.1	5.7	9.5	6.7	12

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14315-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14315-124	14315-126	14315-127	14315-128	14315-129	14315-130
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	19	15	11	9.4	7.2	12

Sample Number	14315-131	14315-132
Sample ID	CS4-b	CS4-b
Sampling Depth	M	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	6.9

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Website:http://www.wellab.com.hk E-mail:wellab@wellab.com.hk

HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14316-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14316-13	14316-15	14316-16	14316-18	14316-19	14316-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.9	6.2	3.1	4.1	4.1	7.7

Sample Number	14316-21	14316-22	14316-23	14316-24	14316-25	14316-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.0	7.4	6.6	6.6	8.1	9.0

Sample Number	14316-27	14316-28	14316-29	14316-30	14316-31	14316-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.0	7.6	6.1	8.2	7.9	12

Sample Number	14316-33	14316-34	14316-35	14316-36	14316-37	14316-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.5	11	8.7	9.6	7.6	11

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14316-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14316-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14316-65	14316-66	14316-67	14316-68	14316-69	14316-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.5	13	7.5	11	19	11

Sample Number	14316-71	14316-72	14316-73	14316-74	14316-75	14316-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	12	4.9	7.1	5.9	6.9

Sample Number	14316-77	14316-78	14316-79	14316-81	14316-82	14316-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	24	6.0	6.2	3.1	4.1

Sample Number	14316-85	14316-86	14316-87	14316-88	14316-89	14316-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.0	7.3	4.9	7.3	6.4	6.7

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14316-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14316-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14316-91	14316-92	14316-93	14316-94	14316-95	14316-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	8.8	9.2	7.7	6.3	8.0

Sample Number	14316-97	14316-98	14316-99	14316-100	14316-101	14316-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	11	9.5	11	8.9	9.9

Sample Number	14316-103	14316-104	14316-105	14316-106	14316-107	14316-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	11	11	9.6	11	16

Sample Number	14316-109	14316-110	14316-111	14316-112	14316-114	14316-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	13	15	16	6.9	8.7

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3) This report supersedes the one dated 2011/11/23 with certificate number 14316-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14316-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-12
Date Tested:	2011-10-12
Date Completed:	2011-10-18

Results:

Sample Number	14316-117	14316-118	14316-119	14316-120	14316-121	14316-122
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	5.7	5.6	7.6	11	7.3

Sample Number	14316-123	14316-124	14316-125	14316-126	14316-127	14316-128
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.9	6.2	4.2	6.2	3.9	9.1

Sample Number	14316-129	14316-130	14316-131	14316-132
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.6	4.5	4.3	13

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14333-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14333-18	14333-20	14333-23	14333-25	14333-27	14333-28
Sample ID	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS7-a	IS7-a	IS(Mf)9-a
Sampling Depth	B	M	M	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	25	5.3	7.3	6.3	11	17

Sample Number	14333-30	14333-31	14333-32	14333-33	14333-34	14333-36
Sample ID	IS(Mf)9-a	CS2-a	CS2-a	CS2-a	IS3-a	IS3-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.8	8.2	10	10	11	13

Sample Number	14333-37	14333-38	14333-39	14333-41	14333-44	14333-46
Sample ID	IS4-a	IS4-a	IS4-a	SR2-a	SR3-a	IS5-a
Sampling Depth	S	M	B	M	M	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	15	16	9.1	16	12

Sample Number	14333-47	14333-48	14333-50	14333-53	14333-56	14333-58
Sample ID	IS5-a	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS7-a	IS(Mf)9-a
Sampling Depth	M	B	M	M	M	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	15	16	15	7.9	9.2

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14333-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14333-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14333-60	14333-61	14333-62	14333-63	14333-64	14333-66
Sample ID	IS(Mf)9-a	CS2-b	CS2-b	CS2-b	IS3-b	IS3-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	19	12	13	31	10	9.4

Sample Number	14333-67	14333-68	14333-69	14333-71	14333-74	14333-76
Sample ID	IS4-b	IS4-b	IS4-b	SR2-b	SR3-b	IS5-b
Sampling Depth	S	M	B	M	M	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	14	19	7.3	10	21

Sample Number	14333-77	14333-78	14333-80	14333-83	14333-85	14333-87
Sample ID	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	M	M	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	21	25	5.2	7.4	6.3	11

Sample Number	14333-88	14333-90	14333-91	14333-92	14333-93	14333-94
Sample ID	IS(Mf)9-b	IS(Mf)9-b	CS2-b	CS2-b	CS2-b	IS3-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	6.6	7.9	10	10	11

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14333-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14333-96	14333-97	14333-98	14333-99	14333-101	14333-104
Sample ID	IS3-b	IS4-b	IS4-b	IS4-b	SR2-b	SR3-b
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	15	14	16	9.5	17

Sample Number	14333-106	14333-107	14333-108	14333-110	14333-113	14333-116
Sample ID	IS5-b	IS5-b	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS7-b
Sampling Depth	S	M	B	M	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	10	15	16	15	7.6

Sample Number	14333-118	14333-120
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.3	19

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4) The samples as received are chilled and kept in ice-box

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

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 114 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-14

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14334-1	14334-3	14334-4	14334-6	14334-7	14334-8
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.8	7.8	7.2	12	3.2	2.8

Sample Number	14334-9	14334-10	14334-11	14334-12	14334-13	14334-15
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	2.6	3.5	3.0	4.3	8.4	4.8

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3) This report supersedes the one dated 2011/11/23 with certificate number 14334-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14334-16	14334-17	14334-18	14334-19	14334-21	14334-22
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.8	6.4	6.0	7.1	6.7	5.4

Sample Number	14334-23	14334-24	14334-25	14334-27	14334-28	14334-30
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.9	2.9	9.0	6.9	5.6	4.5

Sample Number	14334-31	14334-32	14334-33	14334-34	14334-36	14334-37
Sample ID	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a	IS8-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.2	7.8	12	6.4	4.9	4.7

Sample Number	14334-39	14334-40	14334-41	14334-42	14334-43	14334-44
Sample ID	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a	GG1-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.9	16	15	13	13	14

Remark: 1) < = less than

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TEST REPORT

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14334-45	14334-46	14334-48	14334-49	14334-50	14334-51
Sample ID	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a	IS10-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	9.6	11	6.7	10	6.7

Sample Number	14334-52	14334-53	14334-54	14334-55	14334-56	14334-57
Sample ID	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	14	10	8.2	9.9	6.7

Sample Number	14334-58	14334-59	14334-60	14334-61	14334-62	14334-63
Sample ID	SR5-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.0	11	9.3	6.2	5.1	5.8

Sample Number	14334-64	14334-65	14334-66	14334-67	14334-69	14334-70
Sample ID	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.6	9.0	8.0	7.1	7.9	7.4

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14334-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14334-72	14334-73	14334-74	14334-75	14334-76	14334-77
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	3.1	2.8	2.7	3.6	3.0

Sample Number	14334-78	14334-79	14334-81	14334-82	14334-83	14334-84
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.3	8.4	4.8	6.0	6.5	6.0

Sample Number	14334-85	14334-87	14334-88	14334-89	14334-90	14334-91
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.0	6.7	5.5	5.9	2.9	8.9

Sample Number	14334-93	14334-94	14334-96	14334-97	14334-98	14334-99
Sample ID	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b	CS4-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.8	5.4	4.4	5.0	7.6	13

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14334-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14334-100	14334-102	14334-103	14334-105	14334-106	14334-107
Sample ID	SR4-b	SR4-b	IS8-b	IS8-b	IS17-b	IS17-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.3	4.8	4.6	9.8	16	15

Sample Number	14334-108	14334-109	14334-110	14334-111	14334-112	14334-114
Sample ID	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b	SR7-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	14	16	9.5	12

Sample Number	14334-115	14334-116	14334-117	14334-118	14334-119	14334-120
Sample ID	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.5	10	6.7	12	14	10

Sample Number	14334-121	14334-122	14334-123	14334-124	14334-125	14334-126
Sample ID	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	SR5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.4	9.9	6.8	9.1	11	9.3

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14334-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14334-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14334-127	14334-128	14334-129	14334-130	14334-131	14334-132
Sample ID	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b	CS4-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.2	5.0	5.9	9.5	8.7	7.9

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TEST REPORT

Laboratory No.:	14335-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14335-13	14335-15	14335-16	14335-18	14335-19	14335-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	11	12	8.7	10	8.4

Sample Number	14335-21	14335-22	14335-23	14335-24	14335-25	14335-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.9	10	7.8	12	7.9	7.7

Sample Number	14335-27	14335-28	14335-29	14335-30	14335-31	14335-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.8	13	17	11	8.1	8.5

Sample Number	14335-33	14335-34	14335-35	14335-36	14335-37	14335-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	11	11	10	25	28

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14335-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14335-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14335-39	14335-40	14335-41	14335-42	14335-43	14335-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	28	13	11	7.9	8.3	12

Sample Number	14335-45	14335-46	14335-48	14335-49	14335-51	14335-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.6	9.8	12	6.4	6.0	7.4

Sample Number	14335-53	14335-54	14335-55	14335-56	14335-57	14335-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	12	7.7	8.4	9.1	7.9

Sample Number	14335-59	14335-60	14335-61	14335-62	14335-63	14335-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	8.8	11	12	14	8.8

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14335-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14335-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14335-65	14335-66	14335-67	14335-68	14335-69	14335-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.1	14	9.7	11	11	33

Sample Number	14335-71	14335-72	14335-73	14335-74	14335-75	14335-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	33	26	7.0	9.2	12	15

Sample Number	14335-77	14335-78	14335-79	14335-81	14335-82	14335-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.4	12	10	11	12	8.5

Sample Number	14335-85	14335-86	14335-87	14335-88	14335-89	14335-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.9	8.7	8.9	10	7.7	12

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3) This report supersedes the one dated 2011/11/23 with certificate number 14335-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14335-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-14
Date Tested:	2011-10-14
Date Completed:	2011-10-20

Results:

Sample Number	14335-91	14335-92	14335-93	14335-94	14335-95	14335-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.1	7.7	7.7	14	17	11

Sample Number	14335-97	14335-98	14335-99	14335-100	14335-101	14335-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	8.4	11	11	10	9.9

Sample Number	14335-103	14335-104	14335-105	14335-106	14335-107	14335-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	25	27	27	14	12	7.8

Sample Number	14335-109	14335-110	14335-111	14335-112	14335-114	14335-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.4	12	9.3	9.6	12	6.4

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14335-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14350-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 4

Sample Description : 80 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-16

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14350-1	14350-2	14350-3	14350-4	14350-6	14350-7
Sample ID	CS2-a	CS2-a	CS2-a	IS3-a	IS3-a	IS4-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.5	19	9.7	13	9.2	12

Sample Number	14350-8	14350-9	14350-11	14350-14	14350-16	14350-17
Sample ID	IS4-a	IS4-a	SR2-a	SR3-a	IS5-a	IS5-a
Sampling Depth	M	B	M	M	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	13	12	13	7.9	10

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14350-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14350-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14350-18	14350-20	14350-22	14350-24	14350-25	14350-27
Sample ID	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	B	M	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	7.7	12	6.5	6.4	5.8

Sample Number	14350-28	14350-30	14350-31	14350-32	14350-33	14350-34
Sample ID	IS(Mf)9-a	IS(Mf)9-a	CS2-a	CS2-a	CS2-a	IS3-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.4	6.3	14	12	19	11

Sample Number	14350-36	14350-37	14350-38	14350-39	14350-41	14350-44
Sample ID	IS3-a	IS4-a	IS4-a	IS4-a	SR2-a	SR3-a
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	9.4	9.4	18.0	12	9.8

Sample Number	14350-46	14350-47	14350-48	14350-50	14350-52	14350-54
Sample ID	IS5-a	IS5-a	IS5-a	IS(Mf)20-a	IS(Mf)6-a	IS(Mf)6-a
Sampling Depth	S	M	B	M	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.3	6.9	8.1	12	11	8.6

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14350-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14350-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14350-55	14350-57	14350-58	14350-60	14350-61	14350-62
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	CS2-b	CS2-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	8.0	13	21	8.6	19

Sample Number	14350-63	14350-64	14350-66	14350-67	14350-68	14350-69
Sample ID	CS2-b	IS3-b	IS3-b	IS4-b	IS4-b	IS4-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.9	13	9.5	12	8.5	13

Sample Number	14350-71	14350-74	14350-76	14350-77	14350-78	14350-80
Sample ID	SR2-b	SR3-b	IS5-b	IS5-b	IS5-b	IS(Mf)20-b
Sampling Depth	M	M	S	M	B	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	13	7.7	10	14	7.7

Sample Number	14350-82	14350-84	14350-85	14350-87	14350-88	14350-90
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	6.3	6.6	5.7	5.6	6.1

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14350-V1

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14350-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21
Page:	4 of 4

Results:

Sample Number	14350-91	14350-92	14350-93	14350-94	14350-96	14350-97
Sample ID	CS2-b	C2S-b	C2S-b	IS3-b	IS3-b	IS4-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	11	18	11	12	9.3

Sample Number	14350-98	14350-99	14350-101	14350-104	14350-106	14350-107
Sample ID	IS4-b	IS4-b	SR2-b	SR3-b	IS5-b	IS5-b
Sampling Depth	M	B	M	M	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.7	18	12	9.5	6.5	7.1

Sample Number	14350-108	14350-110	14350-112	14350-114	14350-115	14350-117
Sample ID	IS5-b	IS(Mf)20-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	B	M	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.1	12	11	8.8	17	8.1

Sample Number	14350-118	14350-120
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	21

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3) This report supersedes the one dated 2011/11/23 with certificate number 14350-V1

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14351-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 112 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-16

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14351-1	14351-3	14351-4	14351-6	14351-7	14351-8
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	8.9	9.3	7.2	9.1	8.1

Sample Number	14351-9	14351-10	14351-11	14351-12	14351-13	14351-15
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.1	8.0	6.3	6.6	7.1	15

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14351-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14351-16	14351-17	14351-18	14351-19	14351-21	14351-22
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.4	6.7	6.9	9.0	8.8	5.3

Sample Number	14351-23	14351-24	14351-25	14351-27	14351-28	14351-30
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.0	8.7	7.9	8.2	4.9

Sample Number	14351-31	14351-32	14351-33	14351-34	14351-36	14351-37
Sample ID	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a	IS8-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.8	5.9	6.5	25	24	21

Sample Number	14351-39	14351-40	14351-41	14351-42	14351-43	14351-44
Sample ID	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a	GG1-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	20	9.9	8.2	7.8	6.4	6.0

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14351-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14351-45	14351-46	14351-48	14351-49	14351-50	14351-51
Sample ID	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a	IS10-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.6	12	12	13	14	12

Sample Number	14351-52	14351-53	14351-54	14351-55	14351-56	14351-57
Sample ID	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.0	5.5	7.2	10	6.7	9.0

Sample Number	14351-58	14351-60	14351-61	14351-62	14351-63	14351-64
Sample ID	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a	CS4-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	20	21	14	11	21	13

Sample Number	14351-65	14351-66	14351-67	14351-69	14351-70	14351-72
Sample ID	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b	IS8-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	7.3	8.3	9.2	9.0	7.4

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TEST

TEST REPORT

Laboratory No.:	14351-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14351-73	14351-74	14351-75	14351-76	14351-77	14351-78
Sample ID	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.9	8.4	7.3	7.8	6.4	6.6

Sample Number	14351-79	14351-81	14351-82	14351-83	14351-84	14351-85
Sample ID	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.3	15	7.4	6.7	6.9	9.1

Sample Number	14351-87	14351-88	14351-89	14351-90	14351-91	14351-93
Sample ID	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	5.1	11	9.2	8.4	7.9

Sample Number	14351-94	14351-96	14351-97	14351-98	14351-99	14351-100
Sample ID	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b	CS4-b	SR4-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	8.5	4.8	5.6	6.1	6.5	25

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14351-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14351-102	14351-103	14351-105	14351-106	14351-107	14351-108
Sample ID	SR4-b	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	24	21	20	10	8.3	8.0

Sample Number	14351-109	14351-110	14351-111	14351-112	14351-114	14351-115
Sample ID	GG1-b	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.6	6.0	6.9	12	12	13

Sample Number	14351-116	14351-117	14351-118	14351-119	14351-120	14351-121
Sample ID	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	12	5.9	5.4	7.3	10

Sample Number	14351-122	14351-123	14351-124	14351-126	14351-127	14351-128
Sample ID	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.4	8.9	21	22	14	11

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14315-V1

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HOKLAS 083 TEST

TEST REPORT

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

Laboratory No.:	14352-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 124 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-16

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14352-1	14352-2	14352-3	14352-4	14352-5	14352-6
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	SR10B-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	24	14	13	8.8	12	16

Sample Number	14352-7	14352-8	14352-9	14352-10	14352-11	14352-12
Sample ID	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	16	15	13	15	12

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14352-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14352-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14352-13	14352-15	14352-16	14352-18	14352-19	14352-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	13	14	10	8.7	11

Sample Number	14352-21	14352-22	14352-23	14352-24	14352-25	14352-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.0	18	10	12	18	17

Sample Number	14352-27	14352-28	14352-29	14352-30	14352-31	14352-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	14	11	13	11	13

Sample Number	14352-33	14352-34	14352-35	14352-36	14352-37	14352-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	13	17	27	15	10

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14352-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
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TEST REPORT

Laboratory No.:	14352-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14352-39	14352-40	14352-41	14352-42	14352-43	14352-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	15	20	12	11	14

Sample Number	14352-45	14352-46	14352-48	14352-49	14352-51	14352-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	19	13	17	17	14

Sample Number	14352-53	14352-54	14352-55	14352-56	14352-57	14352-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	16	15	12	17	17

Sample Number	14352-59	14352-60	14352-61	14352-62	14352-63	14352-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	13	20	17	10	12

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14352-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14352-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14352-65	14352-66	14352-67	14352-68	14352-69	14352-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	22	24	14	13	8.6

Sample Number	14352-71	14352-72	14352-73	14352-74	14352-75	14352-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	16	8.7	16	15	13

Sample Number	14352-77	14352-78	14352-79	14352-81	14352-82	14352-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	12	15	13	14	10

Sample Number	14352-85	14352-86	14352-87	14352-88	14352-89	14352-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.9	11	9.0	18	10	12

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TEST REPORT

Laboratory No.:	14352-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-16
Date Tested:	2011-10-16
Date Completed:	2011-10-21

Results:

Sample Number	14352-91	14352-92	14352-93	14352-94	14352-95	14352-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	19	17	18	14	11	13

Sample Number	14352-97	14352-98	14352-99	14352-100	14352-101	14352-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	13	15	14	17	27

Sample Number	14352-103	14352-104	14352-105	14352-106	14352-107	14352-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	10	18	15	20	12

Sample Number	14352-109	14352-110	14352-111	14352-112	14352-114	14352-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	14	7.9	19	13	17

Remark: 1) < = less than

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4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14365-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

ATTN: **Miss Mei Ling Tang** Page: 1 of 4

Sample Description : 76 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-18

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14365-1	14365-2	14365-3	14365-4	14365-5	14365-6
Sample ID	SR6-a	SR6-a	ST2-a	ST2-a	ST2-a	CS2-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	26	3.3	4.2	5.5	7.1

Sample Number	14365-7	14365-8	14365-9	14365-10	14365-11	14365-12
Sample ID	CS2-a	CS2-a	IS4-a	IS4-a	IS4-a	IS5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	8.0	4.7	6.3	18	9.2

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14365-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14365-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14365-13	14365-14	14365-15	14365-16	14365-17	14365-18
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.0	8.8	11	13	6.9	13

Sample Number	14365-19	14365-20	14365-21	14365-22	14365-23	14365-24
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	7.8	6.3	6.1	8.5	7.0

Sample Number	14365-25	14365-26	14365-27	14365-28	14365-29	14365-30
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	8.5	13	9.2	8.9	8.5

Sample Number	14365-31	14365-32	14365-33	14365-34	14365-35	14365-36
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS7-a
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.5	6.2	7.5	7.2	8.5	9.2

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14365-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14365-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14365-37	14365-38	14365-39	14365-40	14365-41	14365-42
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b	ST2-b	ST2-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.4	8.3	8.2	26	3.4	4.1

Sample Number	14365-43	14365-44	14365-45	14365-46	14365-47	14365-48
Sample ID	ST2-b	CS2-b	CS2-b	CS2-b	IS4-b	IS4-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.5	7.0	10	8.0	4.7	6.4

Sample Number	14365-49	14365-50	14365-51	14365-52	14365-53	14365-54
Sample ID	IS4-b	IS5-b	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	9.2	7.8	8.6	11	13

Sample Number	14365-55	14365-56	14365-57	14365-58	14365-59	14365-60
Sample ID	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.0	13	8.4	7.9	6.5	6.1

Remark: 1) < = less than

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14365-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14365-61	14365-62	14365-63	14365-64	14365-65	14365-66
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.5	7.0	7.4	8.5	13	9.1

Sample Number	14365-67	14365-68	14365-69	14365-70	14365-71	14365-72
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.6	8.5	8.6	6.2	7.7	6.9

Sample Number	14365-73	14365-74	14365-75	14365-76
Sample ID	IS(Mf)6-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	M	M	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.5	9.3	6.1	8.2

Remark: 1) <= less than

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TEST REPORT

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

Laboratory No.:	14366-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 116 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-18

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14366-1	14366-2	14366-3	14366-4	14366-5	14366-6
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	6.8	7.8	12	8.2	13

Sample Number	14366-7	14366-8	14366-9	14366-10	14366-11	14366-12
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.3	6.3	9.3	7.1	7.5	12

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4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14366-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14366-13	14366-14	14366-15	14366-16	14366-17	14366-18
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.0	31	7.7	9.8	7.5	12

Sample Number	14366-19	14366-20	14366-21	14366-22	14366-23	14366-24
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.5	11	11	9.4	5.8	6.0

Sample Number	14366-25	14366-26	14366-27	14366-28	14366-29	14366-30
Sample ID	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	8.5	7.4	9.5	10	7.2	11

Sample Number	14366-31	14366-32	14366-33	14366-34	14366-35	14366-36
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	10	7.4	6.0	6.9	7.4

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14366-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14366-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14366-37	14366-38	14366-39	14366-40	14366-41	14366-42
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	19	6.3	8.4	6.5	4.9	9.1

Sample Number	14366-43	14366-44	14366-45	14366-46	14366-47	14366-48
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.4	5.1	6.2	7.5	7.5	8.3

Sample Number	14366-49	14366-50	14366-51	14366-52	14366-53	14366-54
Sample ID	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.8	5.7	6.1	8.2	10	11

Sample Number	14366-55	14366-56	14366-57	14366-58	14366-59	14366-60
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.1	9.6	8.6	7.8	6.8

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3) This report supersedes the one dated 2011/11/23 with certificate number 14366-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14366-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14366-61	14366-62	14366-63	14366-64	14366-65	14366-66
Sample ID	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	12	8.0	13	9.2	6.3

Sample Number	14366-67	14366-68	14366-69	14366-70	14366-71	14366-72
Sample ID	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.5	7.1	7.4	12	8.7	31

Sample Number	14366-73	14366-74	14366-75	14366-76	14366-77	14366-78
Sample ID	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.0	10	7.6	12	8.5	11

Sample Number	14366-79	14366-80	14366-81	14366-82	14366-83	14366-84
Sample ID	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	9.9	5.7	6.0	8.7	7.4

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3) This report supersedes the one dated 2011/11/23 with certificate number 14366-V1

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14366-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14366-85	14366-86	14366-87	14366-88	14366-89	14366-90
Sample ID	CS4-b	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.9	10	7.3	11	11	10

Sample Number	14366-91	14366-92	14366-93	14366-94	14366-95	14366-96
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.5	6.2	6.9	7.7	19	6.2

Sample Number	14366-97	14366-98	14366-99	14366-100	14366-101	14366-102
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	6.5	4.8	9.1	7.5	5.0

Sample Number	14366-103	14366-104	14366-105	14366-106	14366-107	14366-108
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.2	7.5	7.6	8.3	5.6	5.7

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4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14367-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 124 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-18

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14367-1	14367-2	14367-3	14367-4	14367-5	14367-6
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	SR10B-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.2	5.8	6.4	6.4	6.3	6.9

Sample Number	14367-7	14367-8	14367-9	14367-10	14367-11	14367-12
Sample ID	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.9	7.9	9.6	8.8	12	8.6

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4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14367-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14367-13	14367-14	14367-15	14367-16	14367-17	14367-18
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.1	7.5	8.6	7.5	6.8	7.1

Sample Number	14367-19	14367-20	14367-21	14367-22	14367-23	14367-24
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	6.2	12	5.7	4.7	4.3

Sample Number	14367-25	14367-26	14367-27	14367-28	14367-29	14367-30
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.2	4.2	4.2	5.6	3.8	5.9

Sample Number	14367-31	14367-32	14367-33	14367-34	14367-35	14367-36
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.7	6.0	10	12	8.6	6.6

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14367-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14367-37	14367-38	14367-39	14367-40	14367-41	14367-42
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.9	8.7	8.1	9.3	13	7.4

Sample Number	14367-43	14367-44	14367-45	14367-46	14367-47	14367-48
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.3	8.9	8.0	7.1	6.5	8.5

Sample Number	14367-49	14367-50	14367-51	14367-52	14367-53	14367-54
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	7.2	12	4.4	6.3	3.5

Sample Number	14367-55	14367-56	14367-57	14367-58	14367-59	14367-60
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	2.9	6.5	11	7.2	6.3	7.1

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TEST REPORT

Laboratory No.:	14367-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14367-61	14367-62	14367-63	14367-64	14367-65	14367-66
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	12	9.3	5.9	6.1	6.4

Sample Number	14367-67	14367-68	14367-69	14367-70	14367-71	14367-72
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.2	7.0	8.8	7.7	10	8.8

Sample Number	14367-73	14367-74	14367-75	14367-76	14367-77	14367-78
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	8.8	9.3	7.4	8.8	7.2

Sample Number	14367-79	14367-80	14367-81	14367-82	14367-83	14367-84
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.8	7.2	7.8	6.2	12	5.6

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TEST REPORT

Laboratory No.:	14367-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-18
Date Tested:	2011-10-18
Date Completed:	2011-10-24

Results:

Sample Number	14367-85	14367-86	14367-87	14367-88	14367-89	14367-90
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.8	4.4	6.3	4.2	4.3	5.7

Sample Number	14367-91	14367-92	14367-93	14367-94	14367-95	14367-96
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	3.8	6.1	4.6	6.2	10	13

Sample Number	14367-97	14367-98	14367-99	14367-100	14367-101	14367-102
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.6	6.5	7.8	8.9	7.9	9.2

Sample Number	14367-103	14367-104	14367-105	14367-106	14367-107	14367-108
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	7.7	9.6	9.0	7.9	7.3

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 4

Sample Description : 80 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-22

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14400-1	14400-2	14400-3	14400-4	14400-5	14400-6
Sample ID	SR6-a	SR6-a	ST2-a	ST2-a	ST2-a	CS2-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	8.0	12	5.3	5.3	14

Sample Number	14400-7	14400-8	14400-9	14400-10	14400-11	14400-12
Sample ID	CS2-a	CS2-a	IS4-a	IS4-a	IS4-a	IS5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	8.7	9.9	10	15	7.1

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-13	14400-14	14400-15	14400-16	14400-17	14400-18
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	8.6	6.6	7.6	6.9	19

Sample Number	14400-19	14400-20	14400-21	14400-22	14400-23	14400-24
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.2	4.8	13	13	12	9.2

Sample Number	14400-25	14400-26	14400-27	14400-28	14400-29	14400-30
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	20	22	10	13	13

Sample Number	14400-31	14400-32	14400-33	14400-34	14400-35	14400-36
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	8.6	10	8.9	16	18

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-37	14400-38	14400-39	14400-40	14400-41	14400-42
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	18	12	10	6.8	8.0

Sample Number	14400-43	14400-44	14400-45	14400-46	14400-47	14400-48
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	5.2	5.1	14	12	8.6

Sample Number	14400-49	14400-50	14400-51	14400-52	14400-53	14400-54
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.8	11	15	7.1	8.6	8.5

Sample Number	14400-55	14400-56	14400-57	14400-58	14400-59	14400-60
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.6	7.6	7.0	19	6.1	4.9

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-61	14400-62	14400-63	14400-64	14400-65	14400-66
Sample ID	SR6-b	SR6-b	ST2-b	ST2-b	ST2-b	CS2-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	12	9.4	8.1	20

Sample Number	14400-67	14400-68	14400-69	14400-70	14400-71	14400-72
Sample ID	CS2-b	CS2-b	IS4-b	IS4-b	IS4-b	IS5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	22	10	13	13	14	8.8

Sample Number	14400-73	14400-74	14400-75	14400-76	14400-77	14400-78
Sample ID	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	9.0	16	19	17	18

Sample Number	14400-79	14400-80
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	10

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3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

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

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 114 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-22

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14401-1	14401-2	14401-3	14401-4	14401-5	14401-6
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	12	9.7	15	8.2	6.6

Sample Number	14401-7	14401-8	14401-9	14401-10	14401-11	14401-12
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	12	9.5	13	12	7.2

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-13	14401-14	14401-15	14401-16	14401-17	14401-18
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.6	7.2	4.8	5.6	4.8	6.4

Sample Number	14401-19	14401-20	14401-21	14401-22	14401-23	14401-24
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	7.3	6.0	7.5	6.6	7.2

Sample Number	14401-25	14401-26	14401-27	14401-28	14401-29	14401-30
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.3	9.0	5.9	8.9	11	11

Sample Number	14401-31	14401-32	14401-33	14401-34	14401-35	14401-36
Sample ID	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	16	11	13	11	11

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-37	14401-38	14401-39	14401-40	14401-41	14401-42
Sample ID	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	14	14	11	9.9

Sample Number	14401-43	14401-44	14401-45	14401-46	14401-47	14401-48
Sample ID	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	14	17	9.2	14	18

Sample Number	14401-49	14401-50	14401-51	14401-52	14401-53	14401-54
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	9.9	11	9.8	10	12

Sample Number	14401-55	14401-56	14401-57	14401-58	14401-59	14401-60
Sample ID	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	7.5	10	16	12	9.9

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-61	14401-62	14401-63	14401-64	14401-65	14401-66
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	8.4	6.7	12	13	9.7

Sample Number	14401-67	14401-68	14401-69	14401-70	14401-71	14401-72
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	12	7.5	6.8	7.5	4.7

Sample Number	14401-73	14401-74	14401-75	14401-76	14401-77	14401-78
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.7	4.8	6.3	8.3	7.0	6.0

Sample Number	14401-79	14401-80	14401-81	14401-82	14401-83	14401-84
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.3	6.5	7.4	6.1	9.2	6.1

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-85	14401-86	14401-87	14401-88	14401-89	14401-90
Sample ID	CS4-b	SR4-b	SR4-b	IS8-b	IS8-b	IS17-b
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.3	10	10	11	16	12

Sample Number	14401-91	14401-92	14401-93	14401-94	14401-95	14401-96
Sample ID	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	10	12	13	13	14

Sample Number	14401-97	14401-98	14401-99	14401-100	14401-101	14401-102
Sample ID	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	11	9.7	10	14	17

Sample Number	14401-103	14401-104	14401-105	14401-106	14401-107	14401-108
Sample ID	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.0	13	18	13	9.8	11

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 124 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-22

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14402-1	14402-2	14402-3	14402-4	14402-5	14402-6
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	SR10B-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	6.0	7.3	7.7	4.9	4.5

Sample Number	14402-7	14402-8	14402-9	14402-10	14402-11	14402-12
Sample ID	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	11	8.6	5.0	5.7	8.3

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-13	14402-14	14402-15	14402-16	14402-17	14402-18
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	12	6.3	8.9	11	8.1

Sample Number	14402-19	14402-20	14402-21	14402-22	14402-23	14402-24
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	13	16	13	11	7.3

Sample Number	14402-25	14402-26	14402-27	14402-28	14402-29	14402-30
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	16	11	12	8.1	13

Sample Number	14402-31	14402-32	14402-33	14402-34	14402-35	14402-36
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.4	13	8.0	7.5	7.7	7.3

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-37	14402-38	14402-39	14402-40	14402-41	14402-42
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.9	7.2	6.4	8.4	10	12

Sample Number	14402-43	14402-44	14402-45	14402-46	14402-47	14402-48
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	11	11	6.2	7.7	12

Sample Number	14402-49	14402-50	14402-51	14402-52	14402-53	14402-54
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	19	20	6.6	8.3	12

Sample Number	14402-55	14402-56	14402-57	14402-58	14402-59	14402-60
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	16	8.4	12	6.9	7.9

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-61	14402-62	14402-63	14402-64	14402-65	14402-66
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	4.9	7.0	5.9	7.4	7.7

Sample Number	14402-67	14402-68	14402-69	14402-70	14402-71	14402-72
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.8	4.3	10	11	8.5	5.0

Sample Number	14402-73	14402-74	14402-75	14402-76	14402-77	14402-78
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.9	8.2	13	12	6.3	8.9

Sample Number	14402-79	14402-80	14402-81	14402-82	14402-83	14402-84
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	8.1	13	13	16	13

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-85	14402-86	14402-87	14402-88	14402-89	14402-90
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	7.4	7.7	16	12	12

Sample Number	14402-91	14402-92	14402-93	14402-94	14402-95	14402-96
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.3	12	9.8	13	8.0	7.5

Sample Number	14402-97	14402-98	14402-99	14402-100	14402-101	14402-102
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.5	7.3	6.0	7.0	6.5	8.4

Sample Number	14402-103	14402-104	14402-105	14402-106	14402-107	14402-108
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	12	11	10	11	6.3

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-13	14400-14	14400-15	14400-16	14400-17	14400-18
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	8.6	6.6	7.6	6.9	19

Sample Number	14400-19	14400-20	14400-21	14400-22	14400-23	14400-24
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.2	4.8	13	13	12	9.2

Sample Number	14400-25	14400-26	14400-27	14400-28	14400-29	14400-30
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	20	22	10	13	13

Sample Number	14400-31	14400-32	14400-33	14400-34	14400-35	14400-36
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	8.6	10	8.9	16	18

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-37	14400-38	14400-39	14400-40	14400-41	14400-42
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	18	12	10	6.8	8.0

Sample Number	14400-43	14400-44	14400-45	14400-46	14400-47	14400-48
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	5.2	5.1	14	12	8.6

Sample Number	14400-49	14400-50	14400-51	14400-52	14400-53	14400-54
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.8	11	15	7.1	8.6	8.5

Sample Number	14400-55	14400-56	14400-57	14400-58	14400-59	14400-60
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.6	7.6	7.0	19	6.1	4.9

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14400-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14400-61	14400-62	14400-63	14400-64	14400-65	14400-66
Sample ID	SR6-b	SR6-b	ST2-b	ST2-b	ST2-b	CS2-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	12	9.4	8.1	20

Sample Number	14400-67	14400-68	14400-69	14400-70	14400-71	14400-72
Sample ID	CS2-b	CS2-b	IS4-b	IS4-b	IS4-b	IS5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	22	10	13	13	14	8.8

Sample Number	14400-73	14400-74	14400-75	14400-76	14400-77	14400-78
Sample ID	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	9.0	16	19	17	18

Sample Number	14400-79	14400-80
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	10

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14400-V1

4) The samples as received are chilled and kept in ice-box

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

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 114 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-22

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14401-1	14401-2	14401-3	14401-4	14401-5	14401-6
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	12	9.7	15	8.2	6.6

Sample Number	14401-7	14401-8	14401-9	14401-10	14401-11	14401-12
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	12	9.5	13	12	7.2

Remark: 1) < = less than
2) S = Surface, M = Middle, B = Bottom
3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-13	14401-14	14401-15	14401-16	14401-17	14401-18
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.6	7.2	4.8	5.6	4.8	6.4

Sample Number	14401-19	14401-20	14401-21	14401-22	14401-23	14401-24
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	7.3	6.0	7.5	6.6	7.2

Sample Number	14401-25	14401-26	14401-27	14401-28	14401-29	14401-30
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.3	9.0	5.9	8.9	11	11

Sample Number	14401-31	14401-32	14401-33	14401-34	14401-35	14401-36
Sample ID	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	16	11	13	11	11

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-37	14401-38	14401-39	14401-40	14401-41	14401-42
Sample ID	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	13	14	14	11	9.9

Sample Number	14401-43	14401-44	14401-45	14401-46	14401-47	14401-48
Sample ID	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	14	17	9.2	14	18

Sample Number	14401-49	14401-50	14401-51	14401-52	14401-53	14401-54
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	9.9	11	9.8	10	12

Sample Number	14401-55	14401-56	14401-57	14401-58	14401-59	14401-60
Sample ID	CS4-a	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	7.5	10	16	12	9.9

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-61	14401-62	14401-63	14401-64	14401-65	14401-66
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	8.4	6.7	12	13	9.7

Sample Number	14401-67	14401-68	14401-69	14401-70	14401-71	14401-72
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	12	7.5	6.8	7.5	4.7

Sample Number	14401-73	14401-74	14401-75	14401-76	14401-77	14401-78
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.7	4.8	6.3	8.3	7.0	6.0

Sample Number	14401-79	14401-80	14401-81	14401-82	14401-83	14401-84
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.3	6.5	7.4	6.1	9.2	6.1

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3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14401-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14401-85	14401-86	14401-87	14401-88	14401-89	14401-90
Sample ID	CS4-b	SR4-b	SR4-b	IS8-b	IS8-b	IS17-b
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.3	10	10	11	16	12

Sample Number	14401-91	14401-92	14401-93	14401-94	14401-95	14401-96
Sample ID	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	10	12	13	13	14

Sample Number	14401-97	14401-98	14401-99	14401-100	14401-101	14401-102
Sample ID	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	11	9.7	10	14	17

Sample Number	14401-103	14401-104	14401-105	14401-106	14401-107	14401-108
Sample ID	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.0	13	18	13	9.8	11

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14401-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 124 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-22

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14402-1	14402-2	14402-3	14402-4	14402-5	14402-6
Sample ID	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a	SR10B-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	6.0	7.3	7.7	4.9	4.5

Sample Number	14402-7	14402-8	14402-9	14402-10	14402-11	14402-12
Sample ID	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a	CS6-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	11	8.6	5.0	5.7	8.3

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3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-13	14402-14	14402-15	14402-16	14402-17	14402-18
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	12	6.3	8.9	11	8.1

Sample Number	14402-19	14402-20	14402-21	14402-22	14402-23	14402-24
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	13	16	13	11	7.3

Sample Number	14402-25	14402-26	14402-27	14402-28	14402-29	14402-30
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	16	11	12	8.1	13

Sample Number	14402-31	14402-32	14402-33	14402-34	14402-35	14402-36
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.4	13	8.0	7.5	7.7	7.3

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-37	14402-38	14402-39	14402-40	14402-41	14402-42
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.9	7.2	6.4	8.4	10	12

Sample Number	14402-43	14402-44	14402-45	14402-46	14402-47	14402-48
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	11	11	6.2	7.7	12

Sample Number	14402-49	14402-50	14402-51	14402-52	14402-53	14402-54
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	19	20	6.6	8.3	12

Sample Number	14402-55	14402-56	14402-57	14402-58	14402-59	14402-60
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	16	8.4	12	6.9	7.9

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TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-61	14402-62	14402-63	14402-64	14402-65	14402-66
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	4.9	7.0	5.9	7.4	7.7

Sample Number	14402-67	14402-68	14402-69	14402-70	14402-71	14402-72
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.8	4.3	10	11	8.5	5.0

Sample Number	14402-73	14402-74	14402-75	14402-76	14402-77	14402-78
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.9	8.2	13	12	6.3	8.9

Sample Number	14402-79	14402-80	14402-81	14402-82	14402-83	14402-84
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	8.1	13	13	16	13

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TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-85	14402-86	14402-87	14402-88	14402-89	14402-90
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	7.4	7.7	16	12	12

Sample Number	14402-91	14402-92	14402-93	14402-94	14402-95	14402-96
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.3	12	9.8	13	8.0	7.5

Sample Number	14402-97	14402-98	14402-99	14402-100	14402-101	14402-102
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.5	7.3	6.0	7.0	6.5	8.4

Sample Number	14402-103	14402-104	14402-105	14402-106	14402-107	14402-108
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	12	11	10	11	6.3

Remark: 1) < = less than

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14402-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-22
Date Tested:	2011-10-22
Date Completed:	2011-10-28

Results:

Sample Number	14402-109	14402-110	14402-111	14402-112	14402-113	14402-114
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	12	11	20	20	6.5

Sample Number	14402-115	14402-116	14402-117	14402-118	14402-119	14402-120
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.3	12	12	17	8.2	11

Sample Number	14402-121	14402-122	14402-123	14402-124
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.9	8.0	10	4.9

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3) This report supersedes the one dated 2011/11/23 with certificate number 14402-V1

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TEST

TEST REPORT

Laboratory No.:	14427-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14427-14	14427-15	14427-16	14427-18	14427-19	14427-21
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	21	21	22	16	8.8	5.4

Sample Number	14427-22	14427-24	14427-25	14427-27	14427-28	14427-29
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.3	9.4	12	22	25	20

Sample Number	14427-30	14427-31	14427-32	14427-33	14427-34	14427-35
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	24	21	21	28	24	17

Sample Number	14427-36	14427-37	14427-38	14427-39	14427-40	14427-42
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	20	14	14	15	8.6	9.3

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3) This report supersedes the one dated 2011/11/23 with certificate number 14427-V1

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TEST

TEST REPORT

Laboratory No.:	14427-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14427-43	14427-45	14427-46	14427-48	14427-49	14427-51
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.3	21	22	11	19

Sample Number	14427-52	14427-53	14427-54	14427-55	14427-56	14427-57
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.5	10	7.8	11	6.1	8.4

Sample Number	14427-58	14427-59	14427-60	14427-61	14427-62	14427-63
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	18	23	11	21	21

Sample Number	14427-64	14427-66	14427-67	14427-69	14427-70	14427-72
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	22	16	8.8	5.5	7.3	9.5

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TEST REPORT

Laboratory No.:	14427-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14427-73	14427-75	14427-76	14427-77	14427-78	14427-79
Sample ID	SR6-b	SR6-b	ST2-b	ST2-b	ST2-b	CS2-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	23	25	20	24	20

Sample Number	14427-80	14427-81	14427-82	14427-83	14427-84	14427-85
Sample ID	CS2-b	CS2-b	IS4-b	IS4-b	IS4-b	IS5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	22	28	24	17	20	14

Sample Number	14427-86	14427-87	14427-88	14427-90	14427-91	14427-93
Sample ID	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	15	8.7	9.1	11	9.4

Sample Number	14427-94	14427-96
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	21	22

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 112 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-25

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14428-1	14428-3	14428-4	14428-6	14428-7	14428-8
Sample ID	SR4-a	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.4	6.3	6.1	6.0	6.6	11

Sample Number	14428-9	14428-10	14428-11	14428-12	14428-13	14428-15
Sample ID	IS17-a	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.9	8.6	10	12	6.3	6.2

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3) This report supersedes the one dated 2011/11/23 with certificate number 14428-V1
4) The samples as received are chilled and kept in ice-box

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14428-16	14428-17	14428-18	14428-19	14428-20	14428-21
Sample ID	IS10-a	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)16-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.6	10	9.8	14	10	11

Sample Number	14428-22	14428-23	14428-24	14428-25	14428-27	14428-28
Sample ID	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	9.2	13	14	10	7.5

Sample Number	14428-29	14428-30	14428-31	14428-32	14428-33	14428-34
Sample ID	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood
Suspended Solids (SS), mg/L	8.0	17	9.4	8.8	14	4.2

Sample Number	14428-36	14428-37	14428-39	14428-40	14428-41	14428-42
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.2	7.7	7.2	5.8	12	9.7

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3) This report supersedes the one dated 2011/11/23 with certificate number 14428-V1

4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14428-43	14428-44	14428-45	14428-46	14428-48	14428-49
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.4	8.0	7.0	8.8	7.1	6.7

Sample Number	14428-50	14428-51	14428-52	14428-54	14428-55	14428-56
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.6	11	6.6	6.4	5.8	7.6

Sample Number	14428-57	14428-58	14428-60	14428-61	14428-63	14428-64
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS4-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.3	7.2	7.2	4.3	3.4	8.7

Sample Number	14428-65	14428-66	14428-67	14428-69	14428-70	14428-72
Sample ID	CS4-a	CS4-a	SR4-b	SR4-b	IS8-b	IS8-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.4	6.4	4.3	6.1	6.0	6.2

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14428-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14428-73	14428-74	14428-75	14428-76	14428-77	14428-78
Sample ID	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.7	11	5.9	8.5	10	12

Sample Number	14428-79	14428-81	14428-82	14428-83	14428-84	14428-85
Sample ID	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.3	6.4	9.4	10	9.7	13

Sample Number	14428-86	14428-87	14428-88	14428-89	14428-90	14428-91
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	11	10	9.3	13	14

Sample Number	14428-93	14428-94	14428-95	14428-96	14428-97	14428-98
Sample ID	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	7.3	7.8	17	9.6	8.8

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14428-99	14428-100	14428-102	14428-103	14428-105	14428-106
Sample ID	CS4-b	SR4-b	SR4-b	IS8-b	IS8-b	IS17-b
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	4.3	8.9	7.9	7.3	5.6

Sample Number	14428-107	14428-108	14428-109	14428-110	14428-111	14428-112
Sample ID	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	10	5.6	8.3	7.1	8.6

Sample Number	14428-114	14428-115	14428-116	14428-117	14428-118	14428-120
Sample ID	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.3	6.8	4.5	11	6.7	6.3

Sample Number	14428-121	14428-122	14428-123	14428-124	14428-126	14428-127
Sample ID	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.9	7.8	5.0	7.2	7.3	4.3

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14428-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14428-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14428-129	14428-130	14428-131	14428-132
Sample ID	CS(Mf)3-b	CS4-b	CS4-b	CS4-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	3.5	8.5	7.4	6.7

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TEST

TEST REPORT

Laboratory No.:	14429-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14429-13	14429-15	14429-16	14429-18	14429-19	14429-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	3.0	3.4	3.9	6.4	5.4	4.5

Sample Number	14429-21	14429-22	14429-23	14429-24	14429-25	14429-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.3	2.7	6.8	3.4	3.2	4.2

Sample Number	14429-27	14429-28	14429-29	14429-30	14429-31	14429-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.1	2.8	4.0	3.3	5.0	8.8

Sample Number	14429-33	14429-34	14429-35	14429-36	14429-37	14429-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	3.2	3.7	4.5	6.2	8.4	5.2

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14429-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14429-39	14429-40	14429-41	14429-42	14429-43	14429-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	3.5	7.6	6.5	2.8	4.6	5.0

Sample Number	14429-45	14429-46	14429-48	14429-49	14429-51	14429-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.9	7.3	13	13	6.4	9.4

Sample Number	14429-53	14429-54	14429-55	14429-56	14429-57	14429-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.1	2.9	4.2	6.8	6.4	5.9

Sample Number	14429-59	14429-60	14429-61	14429-62	14429-63	14429-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.7	5.2	4.4	4.7	6.0	3.1

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14429-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14429-65	14429-66	14429-67	14429-68	14429-69	14429-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.5	4.1	2.9	3.1	4.9	2.6

Sample Number	14429-71	14429-72	14429-73	14429-74	14429-75	14429-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	3.4	3.3	3.9	7.6	3.1	4.9

Sample Number	14429-77	14429-78	14429-79	14429-81	14429-82	14429-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	3.1	6.5	3.0	3.5	3.8	6.3

Sample Number	14429-85	14429-86	14429-87	14429-88	14429-89	14429-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.3	4.5	4.1	2.6	6.8	3.5

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14429-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14429-91	14429-92	14429-93	14429-94	14429-95	14429-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	3.2	4.3	5.0	2.7	3.9	3.4

Sample Number	14429-97	14429-98	14429-99	14429-100	14429-101	14429-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.9	8.7	3.2	3.7	4.4	6.0

Sample Number	14429-103	14429-104	14429-105	14429-106	14429-107	14429-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.1	5.3	3.5	7.5	6.3	2.8

Sample Number	14429-109	14429-110	14429-111	14429-112	14429-114	14429-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.6	5.1	6.9	7.2	13	13

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14429-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-25
Date Tested:	2011-10-25
Date Completed:	2011-10-31

Results:

Sample Number	14429-117	14429-118	14429-119	14429-120	14429-121	14429-122
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.5	9.4	6.1	2.8	4.1	6.8

Sample Number	14429-123	14429-124	14429-125	14429-126	14429-127	14429-128
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.3	6.0	6.7	5.1	4.5	4.9

Sample Number	14429-129	14429-130	14429-131	14429-132
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.8	3.2	4.5	4.2

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TEST REPORT

Laboratory No.:	14454-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14454-43	14454-45	14454-46	14454-48	14454-49	14454-51
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.6	11	5.6	9.1	19	9.1

Sample Number	14454-52	14454-53	14454-54	14454-55	14454-56	14454-57
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.2	8.9	8.7	8.5	12	8.3

Sample Number	14454-58	14454-59	14454-60	14454-61	14454-62	14454-63
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	16	19	16	15	11

Sample Number	14454-64	14454-66	14454-67	14454-69	14454-70	14454-72
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	8.8	9.5	8.8	14	13

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14454-V1

4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14454-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14454-73	14454-75	14454-76	14454-77	14454-78	14454-79
Sample ID	SR6-b	SR6-b	ST2-b	ST2-b	ST2-b	CS2-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	11	13	11	12	12

Sample Number	14454-80	14454-81	14454-82	14454-83	14454-84	14454-85
Sample ID	CS2-b	CS2-b	IS4-b	IS4-b	IS4-b	IS5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	16	15	20	9.3	12

Sample Number	14454-86	14454-87	14454-88	14454-90	14454-91	14454-93
Sample ID	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	16	12	11	9.7	11

Sample Number	14454-94	14454-96
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.6	9.1

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Website:http://www.wellab.com.hk E-mail:wellab@wellab.com.hk

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TEST

TEST REPORT

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

Laboratory No.:	14455-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 6

Sample Description : 112 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-27

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14455-2	14455-4	14455-6	14455-7	14455-8	14455-9
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	7.1	12	5.9	8.1	9.0

Sample Number	14455-10	14455-11	14455-12	14455-13	14455-15	14455-16
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.6	15	17	20	17	12

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3) This report supersedes the one dated 2011/11/23 with certificate number 14455-V1
4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: Patrick Tse
Tse Siu Kei, Patrick
Laboratory Manager

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TEST REPORT

Laboratory No.:	14455-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14455-17	14455-18	14455-19	14455-21	14455-22	14455-23
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	26	8.4	9.9	4.5	6.3

Sample Number	14455-24	14455-25	14455-26	14455-27	14455-28	14455-29
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	13	14	7.2	11	17

Sample Number	14455-30	14455-31	14455-32	14455-33	14455-34	14455-36
Sample ID	CS(Mf)3-a	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	11	10	35	12	20

Sample Number	14455-37	14455-39	14455-40	14455-41	14455-42	14455-43
Sample ID	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	11	16	14	16	15

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14455-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14455-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14455-44	14455-45	14455-46	14455-48	14455-49	14455-50
Sample ID	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	8.3	11	25	8.1	14

Sample Number	14455-51	14455-52	14455-54	14455-55	14455-56	14455-57
Sample ID	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	9.0	15	13	14	20

Sample Number	14455-58	14455-60	14455-61	14455-62	14455-63	14455-64
Sample ID	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a	CS4-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	31	8.6	12	13	6.1	7.6

Sample Number	14455-65	14455-66	14455-68	14455-70	14455-72	14455-73
Sample ID	CS4-a	CS4-a	SR4-b	IS8-b	IS8-b	IS17-b
Sampling Depth	M	B	M	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.1	23	14	7.1	12	5.9

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3) This report supersedes the one dated 2011/11/23 with certificate number 14455-V1

4) The samples as received are chilled and kept in ice-box

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HKLAS 083 TEST

TEST REPORT

Laboratory No.:	14455-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14455-74	14455-75	14455-76	14455-77	14455-78	14455-79
Sample ID	IS17-b	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.9	8.9	7.8	15	17	19

Sample Number	14455-81	14455-82	14455-83	14455-84	14455-85	14455-87
Sample ID	SR7-b	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	13	16	26	8.3	9.5

Sample Number	14455-88	14455-89	14455-90	14455-91	14455-92	14455-93
Sample ID	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	SR5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.3	6.1	13	13	13	7.2

Sample Number	14455-94	14455-95	14455-96	14455-97	14455-98	14455-99
Sample ID	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b	CS4-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	17	7.6	12	10	35

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14455-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14455-100	14455-102	14455-103	14455-105	14455-106	14455-107
Sample ID	SR4-b	SR4-b	IS8-b	IS8-b	IS17-b	IS17-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	20	13	11	16	14

Sample Number	14455-108	14455-109	14455-110	14455-111	14455-112	14455-114
Sample ID	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b	SR7-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	15	14	8.2	12	26

Sample Number	14455-115	14455-116	14455-117	14455-118	14455-120	14455-121
Sample ID	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.1	14	16	9.1	14	13

Sample Number	14455-122	14455-123	14455-124	14455-126	14455-127	14455-128
Sample ID	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	20	31	8.9	13	13

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14456-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14456-13	14456-15	14456-16	14456-18	14456-19	14456-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.8	9.9	9.2	11	5.3	5.9

Sample Number	14456-21	14456-22	14456-23	14456-24	14456-25	14456-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.3	7.1	7.3	11	7.5	6.0

Sample Number	14456-27	14456-28	14456-29	14456-30	14456-31	14456-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.0	9.0	9.0	12	6.8	6.2

Sample Number	14456-33	14456-34	14456-35	14456-36	14456-37	14456-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.4	4.1	5.9	6.6	7.5	8.8

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14456-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14456-39	14456-40	14456-41	14456-42	14456-43	14456-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.2	8.6	8.5	9.3	5.1	8.0

Sample Number	14456-45	14456-46	14456-48	14456-49	14456-51	14456-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	37	6.8	6.4	11	5.1	5.7

Sample Number	14456-53	14456-54	14456-55	14456-56	14456-57	14456-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.8	13	21	28	14	9.7

Sample Number	14456-59	14456-60	14456-61	14456-62	14456-63	14456-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.1	5.2	6.5	6.5	4.9	5.8

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4) The samples as received are chilled and kept in ice-box

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TEST

TEST REPORT

Laboratory No.:	14456-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14456-65	14456-66	14456-67	14456-68	14456-69	14456-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.2	6.2	12	13	7.1	5.7

Sample Number	14456-71	14456-72	14456-73	14456-74	14456-75	14456-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.5	8.2	8.8	14	7.3	7.1

Sample Number	14456-77	14456-78	14456-79	14456-81	14456-82	14456-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.1	8.8	4.8	10	9.5	11

Sample Number	14456-85	14456-86	14456-87	14456-88	14456-89	14456-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.6	5.8	8.3	6.9	7.4	12

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TEST REPORT

Laboratory No.:	14456-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14456-91	14456-92	14456-93	14456-94	14456-95	14456-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.6	6.0	6.8	8.8	9.0	12

Sample Number	14456-97	14456-98	14456-99	14456-100	14456-101	14456-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.7	6.2	4.3	4.1	5.9	6.8

Sample Number	14456-103	14456-104	14456-105	14456-106	14456-107	14456-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.7	9.0	7.1	8.4	8.5	9.0

Sample Number	14456-109	14456-110	14456-111	14456-112	14456-114	14456-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.1	7.9	36	6.8	6.5	11

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TEST

TEST REPORT

Laboratory No.:	14456-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-27
Date Tested:	2011-10-27
Date Completed:	2011-11-03

Results:

Sample Number	14456-117	14456-118	14456-119	14456-120	14456-121	14456-122
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.3	5.5	7.7	13	21	27

Sample Number	14456-123	14456-124	14456-125	14456-126	14456-127	14456-128
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	9.4	8.3	5.0	6.4	6.4

Sample Number	14456-129	14456-130	14456-131	14456-132
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	4.8	5.7	5.0	6.0

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

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Rooms 816, 1502, 1516 and 1701-2, Technology Park, 18 On Lai Street, Shatin. N.T., HK
Tel: 2898 7388 Fax: 2898 7076
Website:http://www.wellab.com.hk E-mail:wellab@wellab.com.hk

HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14470-V1
Date of Issue:	2011-11-23
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14470-14	14470-15	14470-16	14470-18	14470-19	14470-21
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	24	19	12	7.5	11

Sample Number	14470-22	14470-24	14470-25	14470-27	14470-28	14470-29
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	9.9	10	10	13	14

Sample Number	14470-30	14470-31	14470-32	14470-33	14470-34	14470-35
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.2	12	25	13	16	19

Sample Number	14470-36	14470-37	14470-38	14470-39	14470-40	14470-42
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	8.3	17	8.9	11	30

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14470-V1

4) The samples as received are chilled and kept in ice-box

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Laboratory No.:	14470-V1
Date of Issue:	2011-11-23
Date Received:	2011-10-29
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Date Completed:	2011-11-03
Page:	3 of 4

Results:

Sample Number	14470-43	14470-45	14470-46	14470-48	14470-49	14470-51
Sample ID	IS7-a	IS7-a	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.8	17	17	12	11	7.8

Sample Number	14470-52	14470-53	14470-54	14470-55	14470-56	14470-57
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.2	6.6	11	12	13	12

Sample Number	14470-58	14470-59	14470-60	14470-61	14470-62	14470-63
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	22	15	19	19	17	24

Sample Number	14470-64	14470-66	14470-67	14470-69	14470-70	14470-72
Sample ID	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	13	7.7	11	15	9.7

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TEST REPORT

Laboratory No.:	14470-V1
Date of Issue:	2011-11-23
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14470-73	14470-75	14470-76	14470-77	14470-78	14470-79
Sample ID	SR6-b	SR6-b	ST2-b	ST2-b	ST2-b	CS2-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	10	13	14	8.1	12

Sample Number	14470-80	14470-81	14470-82	14470-83	14470-84	14470-85
Sample ID	CS2-b	CS2-b	IS4-b	IS4-b	IS4-b	IS5-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	26	13	15	19	14	8.5

Sample Number	14470-86	14470-87	14470-88	14470-90	14470-91	14470-93
Sample ID	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b	IS7-b	IS7-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	8.8	11	30	7.6	17

Sample Number	14470-94	14470-96
Sample ID	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	S	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	17	12

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HOKLAS 083
TEST

TEST REPORT

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

Laboratory No.:	14471-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 5

Sample Description : 110 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-29

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14471-2	14471-4	14471-6	14471-7	14471-8	14471-9
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	17	19	18	13	14

Sample Number	14471-10	14471-11	14471-12	14471-13	14471-15	14471-16
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	14	11	12	14	11

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4) The samples as received are chilled and kept in ice-box

****

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14471-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14471-17	14471-18	14471-19	14471-21	14471-22	14471-23
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	12	10	18	13	14	14

Sample Number	14471-24	14471-25	14471-27	14471-28	14471-29	14471-30
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	18	19	8.8	16	16	20

Sample Number	14471-31	14471-32	14471-33	14471-35	14471-37	14471-39
Sample ID	CS4-a	CS4-a	CS4-a	SR4-a	IS8-a	IS8-a
Sampling Depth	S	M	B	M	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	5.8	16	10	13	8.7

Sample Number	14471-40	14471-41	14471-42	14471-43	14471-44	14471-45
Sample ID	IS17-a	IS17-a	IS17-a	GG1-a	GG1-a	GG1-a
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	12	7.2	13	5.9	14

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3) This report supersedes the one dated 2011/11/23 with certificate number 14471-V1

4) The samples as received are chilled and kept in ice-box

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14471-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14471-46	14471-48	14471-49	14471-50	14471-51	14471-52
Sample ID	SR7-a	SR7-a	IS10-a	IS10-a	IS10-a	IS(Mf)16-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	2.9	15	21	12	9.1	15

Sample Number	14471-54	14471-55	14471-56	14471-57	14471-58	14471-59
Sample ID	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a	SR5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	4.8	14	8.0	13	11

Sample Number	14471-60	14471-61	14471-62	14471-63	14471-64	14471-65
Sample ID	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	20	16	8.6	10	14	12

Sample Number	14471-66	14471-68	14471-70	14471-72	14471-73	14471-74
Sample ID	CS4-a	SR4-b	IS8-b	IS8-b	IS17-b	IS17-b
Sampling Depth	B	M	S	B	S	M
Tide	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	16	17	18	18	13

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14471-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14471-75	14471-76	14471-77	14471-78	14471-79	14471-81
Sample ID	IS17-b	GG1-b	GG1-b	GG1-b	SR7-b	SR7-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	13	14	11	12	14

Sample Number	14471-82	14471-83	14471-84	14471-85	14471-87	14471-88
Sample ID	IS10-b	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	11	10	18	13	15

Sample Number	14471-89	14471-90	14471-91	14471-93	14471-94	14471-95
Sample ID	IS(Mf)11-b	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	14	18	19	8.8	16	16

Sample Number	14471-96	14471-97	14471-98	14471-99	14471-101	14471-103
Sample ID	CS(Mf)3-b	CS4-b	CS4-b	CS4-b	SR4-b	IS8-b
Sampling Depth	B	S	M	B	M	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	20	16	6	16	11	13

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TEST REPORT

Laboratory No.:	14471-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03
Page:	5 of 5

Results:

Sample Number	14471-105	14471-106	14471-107	14471-108	14471-109	14471-110
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.5	12	12	6.9	13	5.8

Sample Number	14471-111	14471-112	14471-114	14471-115	14471-116	14471-117
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	3.0	14	22	12	9.3

Sample Number	14471-118	14471-120	14471-121	14471-122	14471-123	14471-124
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	15	4.9	14	7.8	13

Sample Number	14471-125	14471-126	14471-127	14471-128	14471-129	14471-130
Sample ID	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	20	17	8.4	10	15

Sample ID	CS4-b	CS4-b
Sampling Depth	M	B
Tide	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	10

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

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14472-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14472-13	14472-15	14472-16	14472-18	14472-19	14472-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	10	5.6	5.5	4.9	7.1

Sample Number	14472-21	14472-22	14472-23	14472-24	14472-25	14472-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	7.8	10	17	9.8	6.6	12

Sample Number	14472-27	14472-28	14472-29	14472-30	14472-31	14472-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	5.8	8.8	12	17	12	7.6

Sample Number	14472-33	14472-34	14472-35	14472-36	14472-37	14472-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	11	9.9	9.2	10	11

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

3) This report supersedes the one dated 2011/11/23 with certificate number 14472-V1

4) The samples as received are chilled and kept in ice-box

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Website:http://www.wellab.com.hk E-mail:wellab@wellab.com.hk

HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14472-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14472-39	14472-40	14472-41	14472-42	14472-43	14472-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.5	9.7	14	13	12	12

Sample Number	14472-45	14472-46	14472-48	14472-49	14472-51	14472-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.4	16	5.9	6.1	6.5	7.8

Sample Number	14472-53	14472-54	14472-55	14472-56	14472-57	14472-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	6.3	5.6	5.2	8.7	8.6

Sample Number	14472-59	14472-60	14472-61	14472-62	14472-63	14472-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	5.1	9.5	8.0	12	8.5	7.3

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3) This report supersedes the one dated 2011/11/23 with certificate number 14472-V1

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HKLAS 083
TEST

TEST REPORT

Laboratory No.:	14472-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14472-65	14472-66	14472-67	14472-68	14472-69	14472-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.9	13	12	8.6	8.7	11

Sample Number	14472-71	14472-72	14472-73	14472-74	14472-75	14472-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	15	8.8	11	11	11	9.4

Sample Number	14472-77	14472-78	14472-79	14472-81	14472-82	14472-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	12	11	10	5.4	5.4

Sample Number	14472-85	14472-86	14472-87	14472-88	14472-89	14472-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	4.8	7.0	7.6	11	17	9.8

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4) The samples as received are chilled and kept in ice-box

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TEST REPORT

Laboratory No.:	14472-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14472-91	14472-92	14472-93	14472-94	14472-95	14472-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	6.8	12	5.8	8.5	13	17

Sample Number	14472-97	14472-98	14472-99	14472-100	14472-101	14472-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	7.7	16	11	10	9.0

Sample Number	14472-103	14472-104	14472-105	14472-106	14472-107	14472-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.9	12	9.8	10	15	13

Sample Number	14472-109	14472-110	14472-111	14472-112	14472-114	14472-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	12	13	8.3	16	5.9	6.2

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TEST REPORT

Laboratory No.:	14472-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-29
Date Tested:	2011-10-29
Date Completed:	2011-11-03

Results:

Sample Number	14472-117	14472-118	14472-119	14472-120	14472-121	14472-122
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.6	7.7	11	6.2	5.6	5.1

Sample Number	14472-123	14472-124	14472-125	14472-126	14472-127	14472-128
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.8	8.6	5.0	9.2	8.0	12

Sample Number	14472-129	14472-130	14472-131	14472-132
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	8.4	7.2	6.8	13

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TEST REPORT

Laboratory No.:	14491-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14491-14	14491-15	14491-16	14491-18	14491-19	14491-21
Sample ID	IS5-a	IS5-a	IS(Mf)6-a	IS(Mf)6-a	IS7-a	IS7-a
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	11	15	13	16	21	21

Sample Number	14491-22	14491-24	14491-25	14491-27	14491-28	14491-29
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-a	SR6-a	ST2-a	ST2-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	15	13	12	12	11

Sample Number	14491-30	14491-31	14491-32	14491-33	14491-34	14491-35
Sample ID	ST2-a	CS2-a	CS2-a	CS2-a	IS4-a	IS4-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	8.9	18	16	14	13

Sample Number	14491-36	14491-37	14491-38	14491-39	14491-41	14491-44
Sample ID	IS4-a	IS5-a	IS5-a	IS5-a	IS(Mf)6-a	IS7-a
Sampling Depth	B	S	M	B	M	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	16	28	22	21	35	34

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TEST REPORT

Laboratory No.:	14491-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14491-46	14491-48	14491-49	14491-51	14491-52	14491-53
Sample ID	IS(Mf)9-a	IS(Mf)9-a	SR6-b	SR6-b	ST2-b	ST2-b
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	30	22	8.3	8.8	7.0	11

Sample Number	14491-54	14491-55	14491-56	14491-57	14491-58	14491-59
Sample ID	ST2-b	CS2-b	CS2-b	CS2-b	IS4-b	IS4-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.0	18	18	15	11	15

Sample Number	14491-60	14491-61	14491-62	14491-63	14491-64	14491-66
Sample ID	IS4-b	IS5-b	IS5-b	IS5-b	IS(Mf)6-b	IS(Mf)6-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	10	10	11	15	13	17

Sample Number	14491-67	14491-69	14491-70	14491-72	14491-73	14491-75
Sample ID	IS7-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b	SR6-b	SR6-b
Sampling Depth	S	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	21	21	15	15	13	13

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TEST REPORT

Laboratory No.:	14491-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14491-76	14491-77	14491-78	14491-79	14491-80	14491-81
Sample ID	ST2-b	ST2-b	ST2-b	CS2-b	CS2-b	CS2-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	11	13	8.9	18	16

Sample Number	14491-82	14491-83	14491-84	14491-85	14491-86	14491-87
Sample ID	IS4-b	IS4-b	IS4-b	IS5-b	IS5-b	IS5-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	14	16	28	21	22

Sample Number	14491-89	14491-92	14491-94	14491-96
Sample ID	IS(Mf)6-b	IS7-b	IS(Mf)9-b	IS(Mf)9-b
Sampling Depth	M	M	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	35	34	30	22

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TEST

TEST REPORT

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

Laboratory No.:	14492-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

ATTN: **Miss Mei Ling Tang** Page: 1 of 5

Sample Description : 108 liquid samples as received by customer said to be marine water
Project No. : MA11050
Project Name : Baseline Environmental Monitoring for Hong Kong-Zhuhai-Marco Brige Hong Kong Projects - Investigation
Sampling Date : 2011-10-31

Test Requested & Methodology:

Item	Parameters	Ref. Method	Limit of Reporting
1	Suspended Solids (SS)	APHA 17ed 2540 D	*0.5 mg/L

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

Results:

Sample Number	14492-2	14492-4	14492-6	14492-7	14492-8	14492-9
Sample ID	SR4-a	IS8-a	IS8-a	IS17-a	IS17-a	IS17-a
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	20	9.9	13	12	13	11

Sample Number	14492-10	14492-11	14492-12	14492-13	14492-15	14492-16
Sample ID	GG1-a	GG1-a	GG1-a	SR7-a	SR7-a	IS10-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.6	14	15	14	28	25

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

Approved Signatory: _____
Tse Siu Kei, Patrick
Laboratory Manager

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Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14492-17	14492-18	14492-19	14492-21	14492-22	14492-23
Sample ID	IS10-a	IS10-a	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	21	15	11	14	16	11

Sample Number	14492-24	14492-25	14492-27	14492-28	14492-29	14492-30
Sample ID	IS(Mf)11-a	SR5-a	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	13	11	14	14	15

Sample Number	14492-31	14492-32	14492-33	14492-34	14492-36	14492-37
Sample ID	CS4-a	CS4-a	CS4-a	SR4-a	SR4-a	IS8-a
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	14	7.9	12	8.1	15

Sample Number	14492-39	14492-40	14492-41	14492-42	14492-43	14492-44
Sample ID	IS8-a	IS17-a	IS17-a	IS17-a	GG1-a	GG1-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	21	12	8.4	8.0	8.4	12

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TEST REPORT

Laboratory No.:	14492-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14492-45	14492-46	14492-48	14492-49	14492-50	14492-51
Sample ID	GG1-a	SR7-a	SR7-a	IS10-a	IS10-a	IS10-a
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.7	5.9	7.4	6.8	12	12

Sample Number	14492-52	14492-54	14492-55	14492-56	14492-57	14492-58
Sample ID	IS(Mf)16-a	IS(Mf)16-a	IS(Mf)11-a	IS(Mf)11-a	IS(Mf)11-a	SR5-a
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.1	12	15	10	6.4	18

Sample Number	14492-60	14492-61	14492-62	14492-63	14492-64	14492-66
Sample ID	SR5-a	CS(Mf)3-a	CS(Mf)3-a	CS(Mf)3-a	CS4-a	CS4-a
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.5	11	13	6.4	5.6	9.2

Sample Number	14492-68	14492-70	14492-72	14492-73	14492-74	14492-75
Sample ID	SR4-b	IS8-b	IS8-b	IS17-b	IS17-b	IS17-b
Sampling Depth	M	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	20	9.8	13	12	14	11

Remark: 1) < = less than

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3) This report supersedes the one dated 2011/11/23 with certificate number 14492-V1

4) The samples as received are chilled and kept in ice-box

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HKLAS 083
TEST

TEST REPORT

Laboratory No.:	14492-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14492-76	14492-77	14492-78	14492-79	14492-81	14492-82
Sample ID	GG1-b	GG1-b	GG1-b	SR7-b	SR7-b	IS10-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.4	14	16	14	29	25

Sample Number	14492-83	14492-84	14492-85	14492-87	14492-88	14492-89
Sample ID	IS10-b	IS10-b	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b
Sampling Depth	M	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	20	15	11	14	17	11

Sample Number	14492-90	14492-91	14492-93	14492-94	14492-95	14492-96
Sample ID	IS(Mf)11-b	SR5-b	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	16	13	11	14	14	15

Sample Number	14492-97	14492-98	14492-99	14492-100	14492-102	14492-103
Sample ID	CS4-b	CS4-b	CS4-b	SR4-b	SR4-b	IS8-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	15	7.6	12	8.2	15

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HKLAS 083
TEST

TEST REPORT

Laboratory No.:	14492-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14492-105	14492-106	14492-107	14492-108	14492-109	14492-110
Sample ID	IS8-b	IS17-b	IS17-b	IS17-b	GG1-b	GG1-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	22	12	8.5	7.9	8.5	12

Sample Number	14492-111	14492-112	14492-114	14492-115	14492-116	14492-117
Sample ID	GG1-b	SR7-b	SR7-b	IS10-b	IS10-b	IS10-b
Sampling Depth	B	S	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.9	6.0	7.5	6.9	11	12

Sample Number	14492-118	14492-120	14492-121	14492-122	14492-123	14492-124
Sample ID	IS(Mf)16-b	IS(Mf)16-b	IS(Mf)11-b	IS(Mf)11-b	IS(Mf)11-b	SR5-b
Sampling Depth	S	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.2	12	14	10	6.3	18

Sample Number	14492-126	14492-127	14492-128	14492-129	14492-130	14492-132
Sample ID	SR5-b	CS(Mf)3-b	CS(Mf)3-b	CS(Mf)3-b	CS4-b	CS4-b
Sampling Depth	B	S	M	B	S	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	6.5	10	13	6.3	5.5	9.3

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HOKLAS 083
TEST

TEST REPORT

Laboratory No.:	14493-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14493-13	14493-15	14493-16	14493-18	14493-19	14493-20
Sample ID	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a	IS15-a
Sampling Depth	S	B	S	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	13	17	15	17	25

Sample Number	14493-21	14493-22	14493-23	14493-24	14493-25	14493-26
Sample ID	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a	IS12-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	14	6.3	7.3	9.7	10

Sample Number	14493-27	14493-28	14493-29	14493-30	14493-31	14493-32
Sample ID	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a	CS(Mf)5-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	8.8	11	12	18	7.2	11

Sample Number	14493-33	14493-34	14493-35	14493-36	14493-37	14493-38
Sample ID	CS(Mf)5-a	SR10A-a	SR10A-a	SR10A-a	SR10B-a	SR10B-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	13	12	11	7.6	10	8.8

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TEST REPORT

Laboratory No.:	14493-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14493-39	14493-40	14493-41	14493-42	14493-43	14493-44
Sample ID	SR10B-a	CSA-a	CSA-a	CSA-a	CS6-a	CS6-a
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	11	16	15	20	18	24

Sample Number	14493-45	14493-46	14493-48	14493-49	14493-51	14493-52
Sample ID	CS6-a	SR8-a	SR8-a	SR9-a	SR9-a	IS15-a
Sampling Depth	B	S	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	24	22	14	14	18	26

Sample Number	14493-53	14493-54	14493-55	14493-56	14493-57	14493-58
Sample ID	IS15-a	IS15-a	IS13-a	IS13-a	IS13-a	IS12-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	14	15	13	17	9.6	15

Sample Number	14493-59	14493-60	14493-61	14493-62	14493-63	14493-64
Sample ID	IS12-a	IS12-a	IS14-a	IS14-a	IS14-a	CS(Mf)5-a
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	28	16	13	18	15	22

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TEST REPORT

Laboratory No.:	14493-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14493-65	14493-66	14493-67	14493-68	14493-69	14493-70
Sample ID	CS(Mf)5-a	CS(Mf)5-a	SR10A-b	SR10A-b	SR10A-b	SR10B-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	37	45	16	18	10	17

Sample Number	14493-71	14493-72	14493-73	14493-74	14493-75	14493-76
Sample ID	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b	CS6-b
Sampling Depth	M	B	S	M	B	S
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	30	14	11	22	17	13

Sample Number	14493-77	14493-78	14493-79	14493-81	14493-82	14493-84
Sample ID	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b	SR9-b
Sampling Depth	M	B	S	B	S	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	13	19	17	13	16	15

Sample Number	14493-85	14493-86	14493-87	14493-88	14493-89	14493-90
Sample ID	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b	IS13-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	17	24	18	14	6.2	7.2

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TEST REPORT

Laboratory No.:	14493-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14493-91	14493-92	14493-93	14493-94	14493-95	14493-96
Sample ID	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b	IS14-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Ebb
Suspended Solids (SS), mg/L	9.7	10	8.5	11	13	18

Sample Number	14493-97	14493-98	14493-99	14493-100	14493-101	14493-102
Sample ID	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b	SR10A-b	SR10A-b	SR10A-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Ebb	Mid-Ebb	Mid-Ebb	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	7.2	11	13	12	11	7.5

Sample Number	14493-103	14493-104	14493-105	14493-106	14493-107	14493-108
Sample ID	SR10B-b	SR10B-b	SR10B-b	CSA-b	CSA-b	CSA-b
Sampling Depth	S	M	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	10	9.0	12	16	15	20

Sample Number	14493-109	14493-110	14493-111	14493-112	14493-114	14493-115
Sample ID	CS6-b	CS6-b	CS6-b	SR8-b	SR8-b	SR9-b
Sampling Depth	S	M	B	S	B	S
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	24	24	22	14	14

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TEST REPORT

Laboratory No.:	14493-V2
Date of Issue:	2011-12-07
Date Received:	2011-10-31
Date Tested:	2011-10-31
Date Completed:	2011-11-03

Results:

Sample Number	14493-117	14493-118	14493-119	14493-120	14493-121	14493-122
Sample ID	SR9-b	IS15-b	IS15-b	IS15-b	IS13-b	IS13-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	18	26	14	16	13	17

Sample Number	14493-123	14493-124	14493-125	14493-126	14493-127	14493-128
Sample ID	IS13-b	IS12-b	IS12-b	IS12-b	IS14-b	IS14-b
Sampling Depth	B	S	M	B	S	M
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	9.5	15	27	16	13	18

Sample Number	14493-129	14493-130	14493-131	14493-132
Sample ID	IS14-b	CS(Mf)5-b	CS(Mf)5-b	CS(Mf)5-b
Sampling Depth	B	S	M	B
Tide	Mid-Flood	Mid-Flood	Mid-Flood	Mid-Flood
Suspended Solids (SS), mg/L	15	23	37	46

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Analytical Results

Sub-Matrix: **SEAWATER**

Compound	**EA025: Suspended Solids (SS)**				
LOR Unit	0.5 mg/L				
Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	EA/ED: Physical and Aggregate Properties				
SR4A-SE	[29-AUG-2013]	HK1323611-001	**4.7**				
SR4A-SDE	[29-AUG-2013]	HK1323611-002	**5.4**				
SR4A-BE	[29-AUG-2013]	HK1323611-003	**5.7**				
SR4A-BDE	[29-AUG-2013]	HK1323611-004	**4.8**				
SR4A-SF	[29-AUG-2013]	HK1323611-005	**5.2**				
SR4A-SDF	[29-AUG-2013]	HK1323611-006	**5.2**				
SR4A-BF	[29-AUG-2013]	HK1323611-007	**5.8**				
SR4A-BDF	[29-AUG-2013]	HK1323611-008	**5.6**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SR4A S1	[31-AUG-2013]	HK1323697-001		**17.5**				
F SR4A S2	[31-AUG-2013]	HK1323697-002		**26.4**				
F SR4A B1	[31-AUG-2013]	HK1323697-003		**12.9**				
E SR4A S1	[31-AUG-2013]	HK1323697-004		**3.8**				
F SR4A B2	[31-AUG-2013]	HK1323697-005		**37.4**				
E SR4A S2	[31-AUG-2013]	HK1323697-006		**3.8**				
E SR4A B1	[31-AUG-2013]	HK1323697-007		**4.5**				
E SR4A B2	[31-AUG-2013]	HK1323697-008		**5.4**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SR4A 1S	[03-SEP-2013]	HK1324008-001		**6.2**				
F SR4A 2S	[03-SEP-2013]	HK1324008-002		**5.3**				

Sub-Matrix: **WATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SR4A B1	[03-SEP-2013]	HK1324008-003		**5.2**				
F SR4A B2	[03-SEP-2013]	HK1324008-004		**5.3**				
E SR4A 1S	[03-SEP-2013]	HK1324008-005		**5.3**				
E SR4A 2S	[03-SEP-2013]	HK1324008-006		**4.0**				
E SR4A B1	[03-SEP-2013]	HK1324008-007		**5.9**				
E SR4A B2	[03-SEP-2013]	HK1324008-008		**5.0**				

Analytical Results

Sub-Matrix: **SEAWATER**

Compound	**EA025: Suspended Solids (SS)**				
LOR Unit	0.5 mg/L				
Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	EA/ED: Physical and Aggregate Properties				
F SR4A S1	[05-SEP-2013]	HK1324267-001	**4.2**				
F SR4A S2	[05-SEP-2013]	HK1324267-002	**4.0**				
F SR4A B1	[05-SEP-2013]	HK1324267-003	**4.7**				
F SR4A B2	[05-SEP-2013]	HK1324267-004	**4.2**				
E SR4A S1	[05-SEP-2013]	HK1324267-005	**4.4**				
E SR4A S2	[05-SEP-2013]	HK1324267-006	**4.6**				
E SR4A B1	[05-SEP-2013]	HK1324267-007	**4.5**				
E SR4A B2	[05-SEP-2013]	HK1324267-008	**5.3**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
FSR4A S1	[07-SEP-2013]	HK1324472-001		**14.5**				
FSR4A S2	[07-SEP-2013]	HK1324472-002		**15.6**				
FSR4A B1	[07-SEP-2013]	HK1324472-003		**30.2**				
FSR4A B2	[07-SEP-2013]	HK1324472-004		**28.0**				
ESR4A S1	[07-SEP-2013]	HK1324472-005		**15.0**				
ESR4A S2	[07-SEP-2013]	HK1324472-006		**16.8**				
ESR4A B1	[07-SEP-2013]	HK1324472-007		**45.8**				
ESR4A B2	[07-SEP-2013]	HK1324472-008		**47.7**				

Analytical Results

Sub-Matrix: **SEAWATER**

Compound	**EA025: Suspended Solids (SS)**				
LOR Unit	0.5 mg/L				
Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	EA/ED: Physical and Aggregate Properties				
F SR4A S1	[10-SEP-2013]	HK1324772-001	**3.8**				
F SR4A S2	[10-SEP-2013]	HK1324772-002	**4.2**				
F SR4A B1	[10-SEP-2013]	HK1324772-003	**7.9**				
F SR4A B2	[10-SEP-2013]	HK1324772-004	**9.4**				
E SR4A S1	[10-SEP-2013]	HK1324772-005	**8.3**				
E SR4A S2	[10-SEP-2013]	HK1324772-006	**7.8**				
E SR4A B1	[10-SEP-2013]	HK1324772-007	**7.3**				
E SR4A B2	[10-SEP-2013]	HK1324772-008	**7.9**				

Analytical Results

Sub-Matrix: **SEAWATER**

Compound	**EA025: Suspended Solids (SS)**				
LOR Unit	0.5 mg/L				
Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	EA/ED: Physical and Aggregate Properties				
SR4A S1 F	[12-SEP-2013]	HK1325141-001	**3.0**				
SR4A S2 F	[12-SEP-2013]	HK1325141-002	**2.4**				
SR4A B1 F	[12-SEP-2013]	HK1325141-003	**2.9**				
SR4A B2 F	[12-SEP-2013]	HK1325141-004	**3.0**				
SR4A S1 E	[12-SEP-2013]	HK1325141-005	**2.3**				
SR4A S2 E	[12-SEP-2013]	HK1325141-006	**2.0**				
SR4A B1 E	[12-SEP-2013]	HK1325141-007	**3.0**				
SR4A B2 E	[12-SEP-2013]	HK1325141-008	**2.5**				

Analytical Results

Sub-Matrix: **SEAWATER**

Compound	**EA025: Suspended Solids (SS)**				
LOR Unit	0.5 mg/L				
Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	EA/ED: Physical and Aggregate Properties				
F SR4A S1	[14-SEP-2013]	HK1325414-001	**4.2**				
F SR4A S2	[14-SEP-2013]	HK1325414-002	**4.1**				
F SR4A B1	[14-SEP-2013]	HK1325414-003	**4.5**				
F SR4A B2	[14-SEP-2013]	HK1325414-004	**3.4**				
E SR4A S1	[14-SEP-2013]	HK1325414-005	**4.8**				
E SR4A S2	[14-SEP-2013]	HK1325414-006	**3.3**				
E SR4A B1	[14-SEP-2013]	HK1325414-007	**6.0**				
E SR4A B2	[14-SEP-2013]	HK1325414-008	**3.5**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SR4A S1	[17-SEP-2013]	HK1325736-001		**6.3**				
F SR4A S2	[17-SEP-2013]	HK1325736-002		**6.1**				
F SR4A B1	[17-SEP-2013]	HK1325736-003		**6.1**				
F SR4A B2	[17-SEP-2013]	HK1325736-004		**5.7**				
E SR4A S1	[17-SEP-2013]	HK1325736-005		**7.4**				
E SR4A S2	[17-SEP-2013]	HK1325736-006		**9.0**				
E SR4A B1	[17-SEP-2013]	HK1325736-007		**7.9**				
E SR4A B2	[17-SEP-2013]	HK1325736-008		**7.9**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SR4A S1	[19-SEP-2013]	HK1325970-001		**14.3**				
F SR4A S2	[19-SEP-2013]	HK1325970-002		**14.1**				
F SR4A B1	[19-SEP-2013]	HK1325970-003		**14.8**				
F SR4A B2	[19-SEP-2013]	HK1325970-004		**13.8**				
E SR4A S1	[19-SEP-2013]	HK1325970-005		**14.4**				
E SR4A S2	[19-SEP-2013]	HK1325970-006		**12.7**				
E SR4A B1	[19-SEP-2013]	HK1325970-007		**15.1**				
E SR4A B2	[19-SEP-2013]	HK1325970-008		**15.0**				

Analytical Results

Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
F SRA4 S1	[21-SEP-2013]	HK1326026-001		**7.9**				
F SRA4 S2	[21-SEP-2013]	HK1326026-002		**7.7**				
F SR4A B1	[21-SEP-2013]	HK1326026-003		**8.7**				
F SR4A B2	[21-SEP-2013]	HK1326026-004		**9.2**				
E SR4A S1	[21-SEP-2013]	HK1326026-005		**8.4**				
E SR4A S2	[21-SEP-2013]	HK1326026-006		**7.0**				
E SR4A B1	[21-SEP-2013]	HK1326026-007		**8.2**				
E SR4A B2	[21-SEP-2013]	HK1326026-008		**8.0**				

Analytical Results

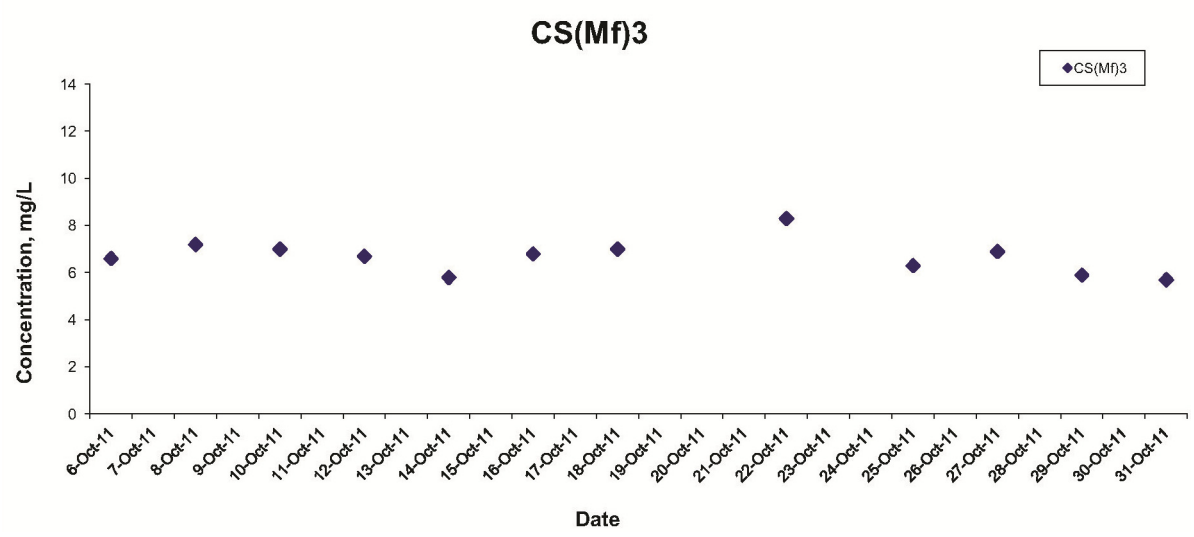
Sub-Matrix: **SEAWATER**

Client sample ID	*Client sampling date / time*	*Laboratory sample ID*	*Compound*	**EA025: Suspended Solids (SS)**				
			LOR Unit	0.5 mg/L				
				EA/ED: Physical and Aggregate Properties				
SR4A S1 F	[24-SEP-2013]	HK1326320-001		**14.4**				
SR4A S2 F	[24-SEP-2013]	HK1326320-002		**15.1**				
SR4A B1 F	[24-SEP-2013]	HK1326320-003		**14.2**				
SR4A B2 F	[24-SEP-2013]	HK1326320-004		**14.2**				
SR4A S1 E	[24-SEP-2013]	HK1326320-005		**11.4**				
SR4A S2 E	[24-SEP-2013]	HK1326320-006		**10.8**				
SR4A B1 E	[24-SEP-2013]	HK1326320-007		**17.4**				
SR4A B2 E	[24-SEP-2013]	HK1326320-008		**16.4**				

Annex C4

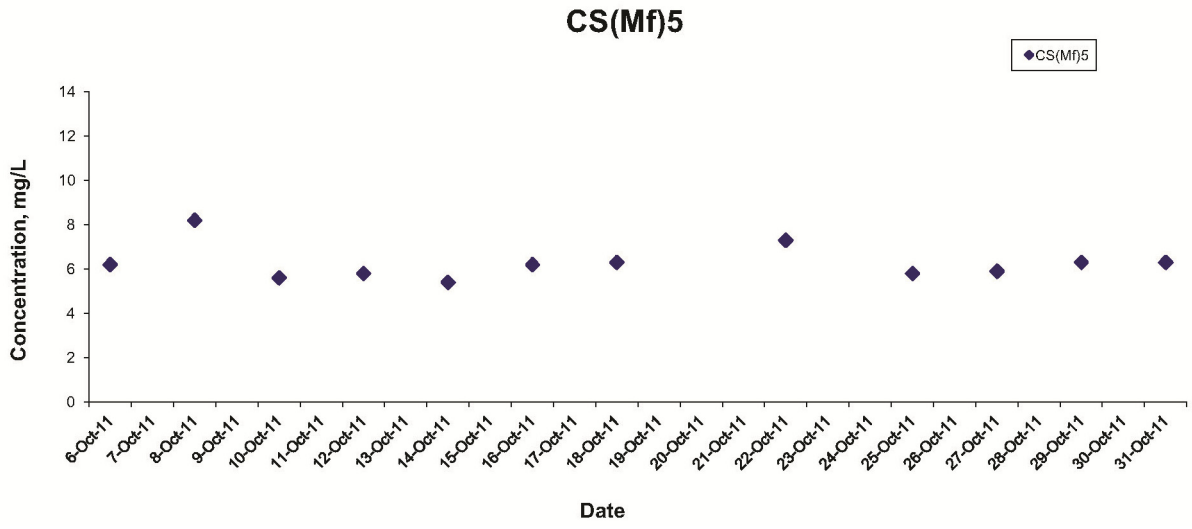
Graphical Presentation of Baseline Water Quality Monitoring Data

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



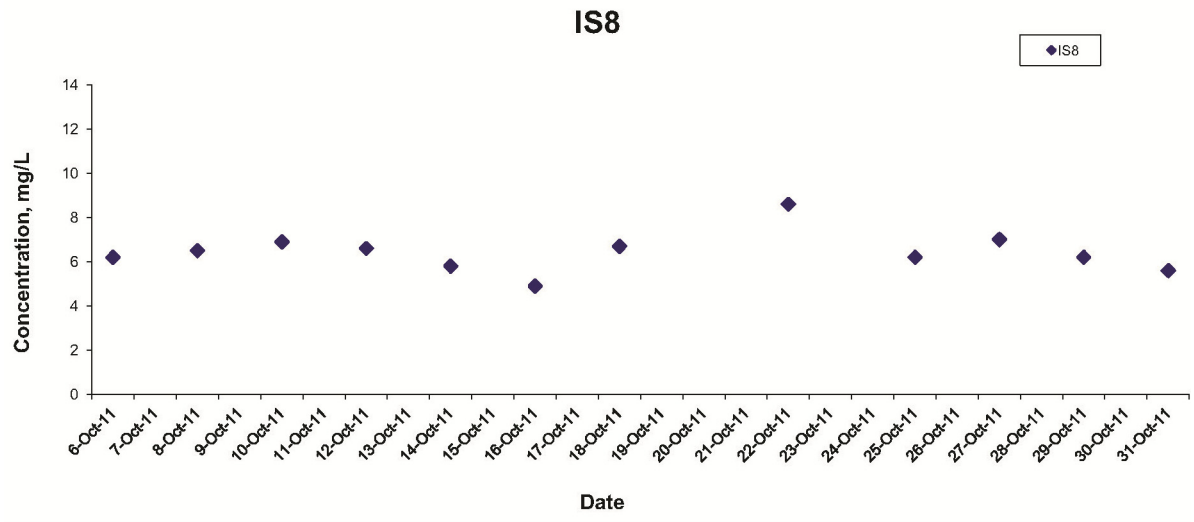
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

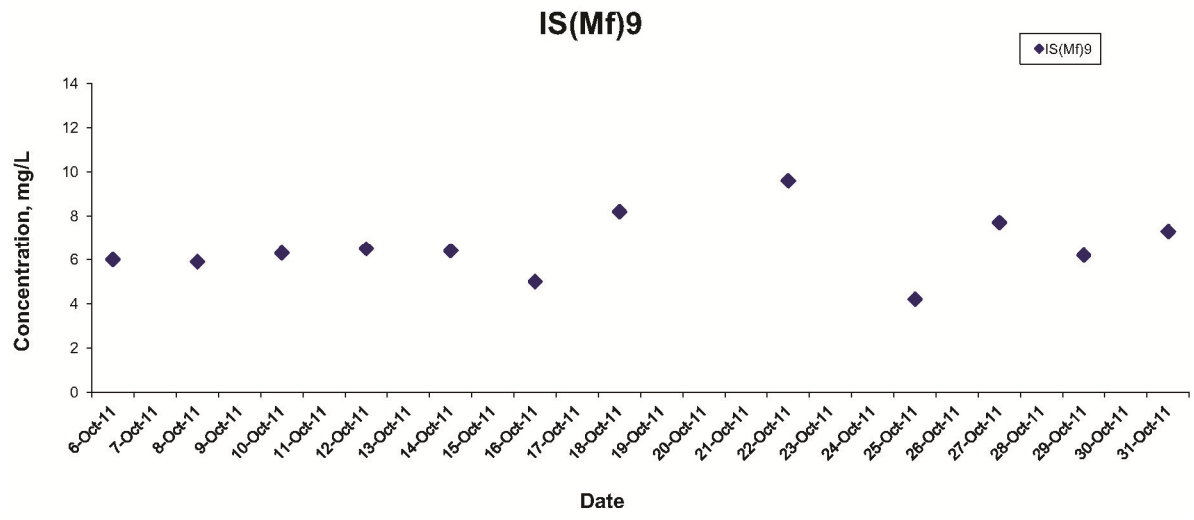
Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

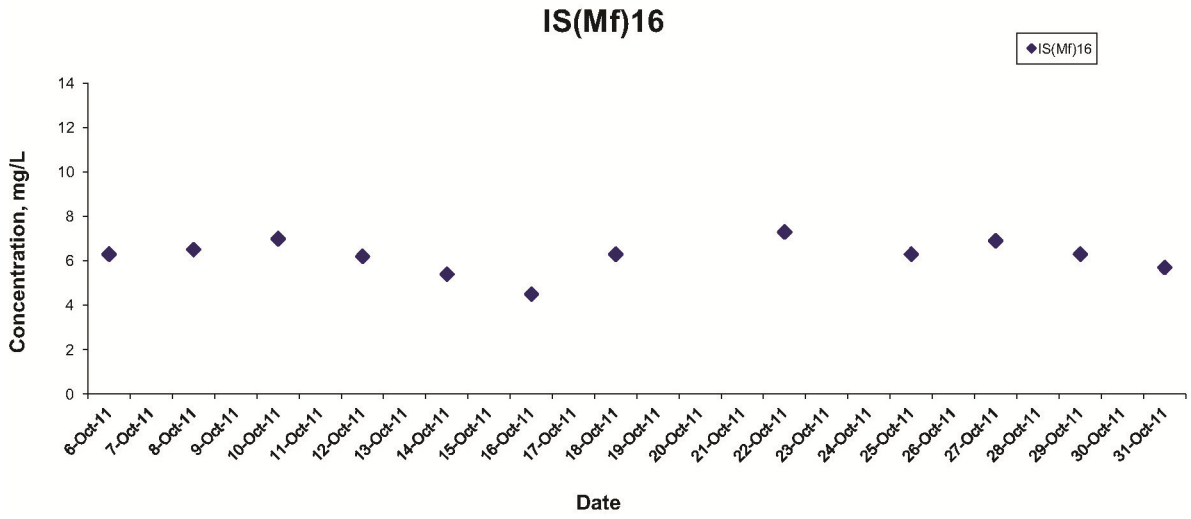
Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide





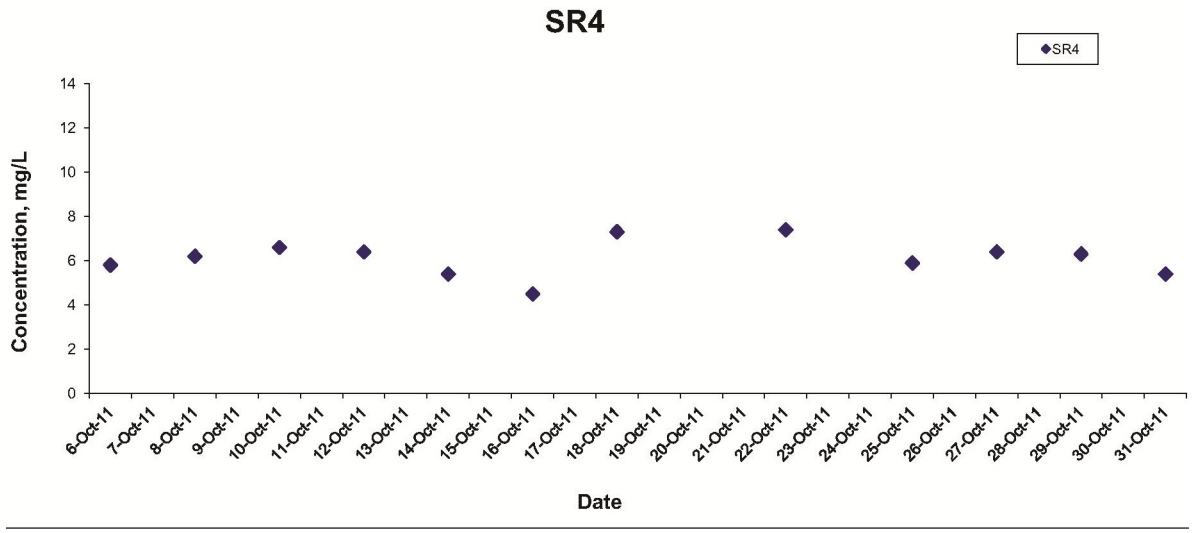
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

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



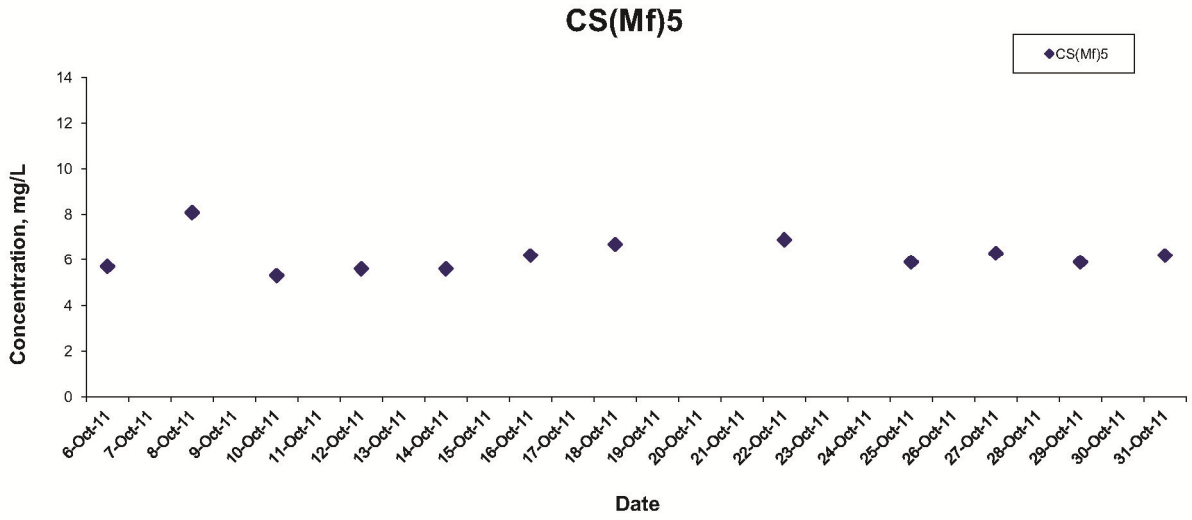
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

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



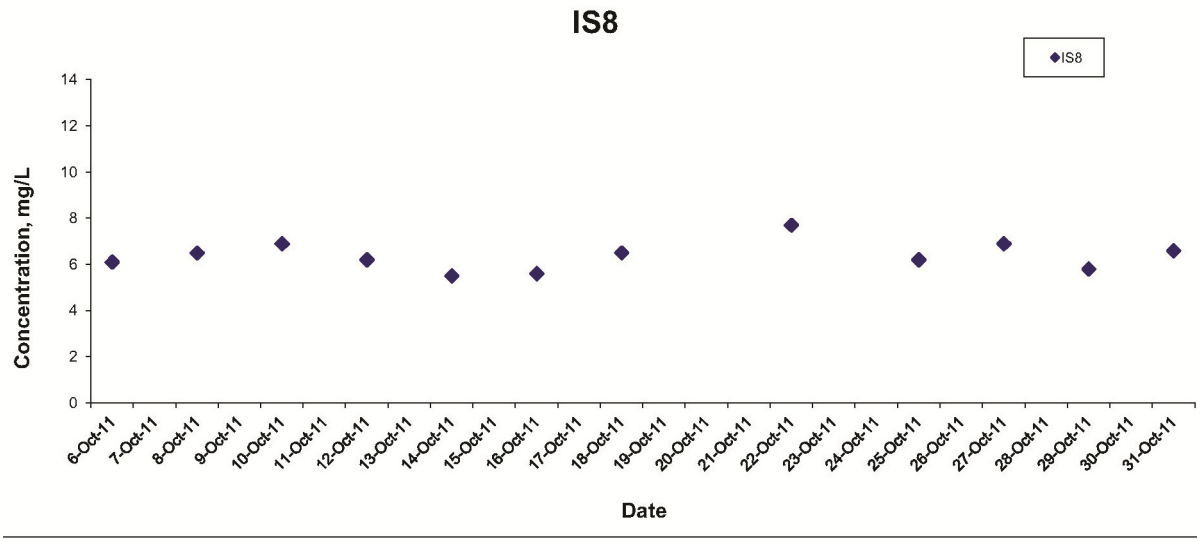
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

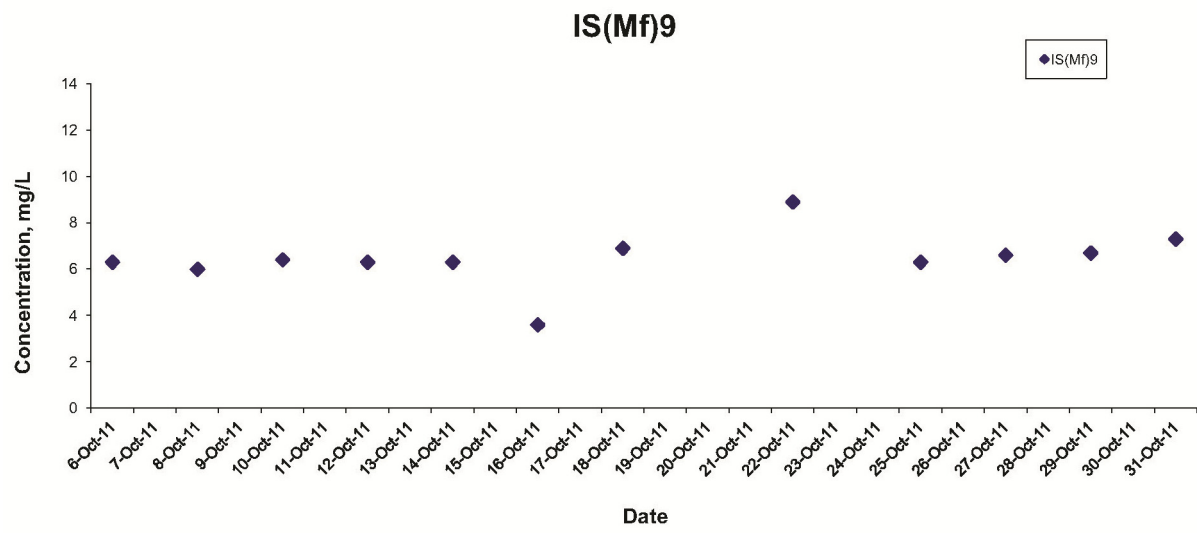
Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

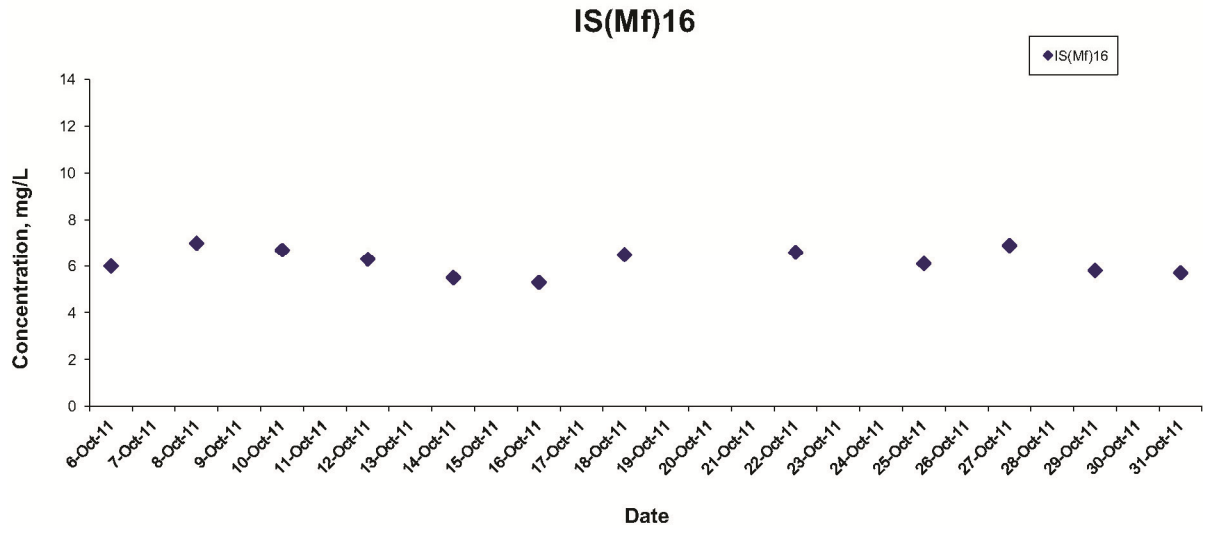
Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide





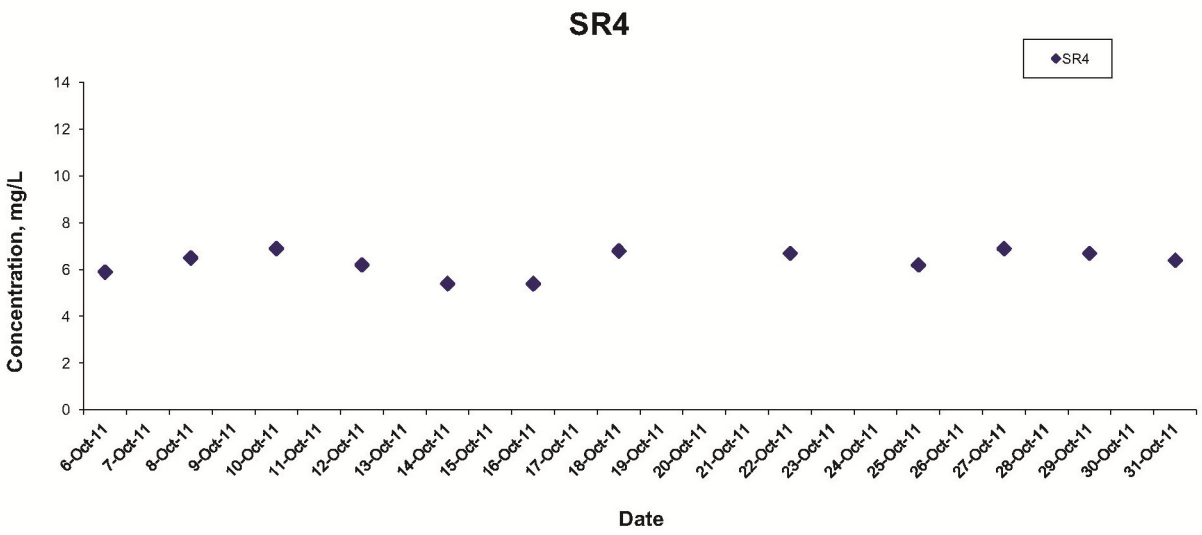
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

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



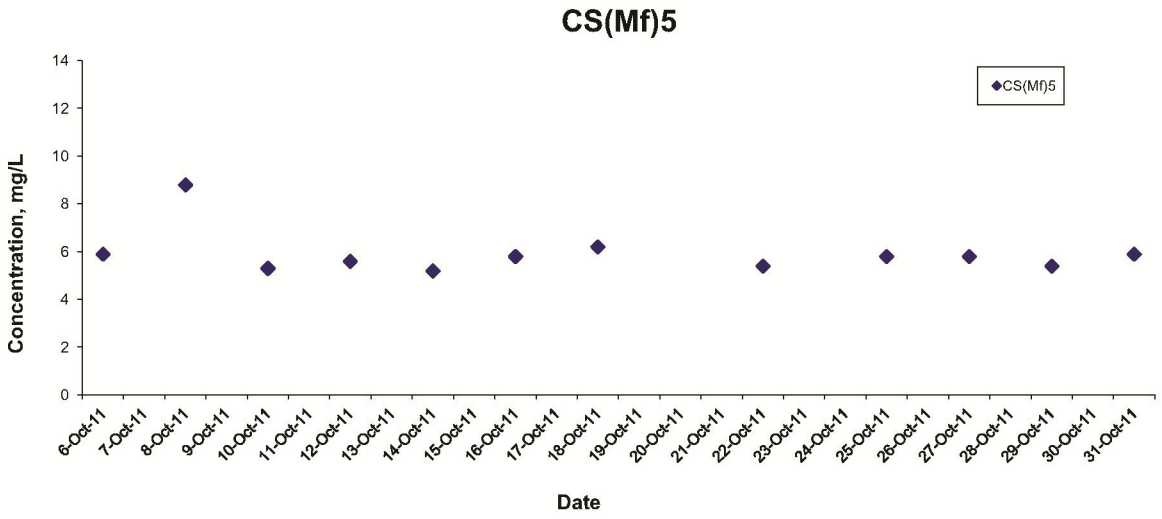
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

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



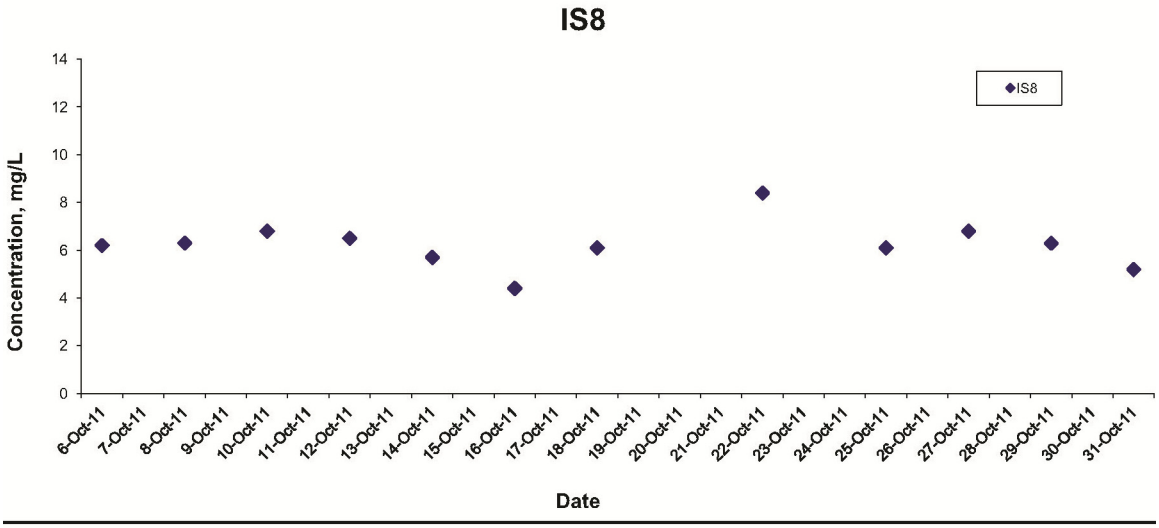
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

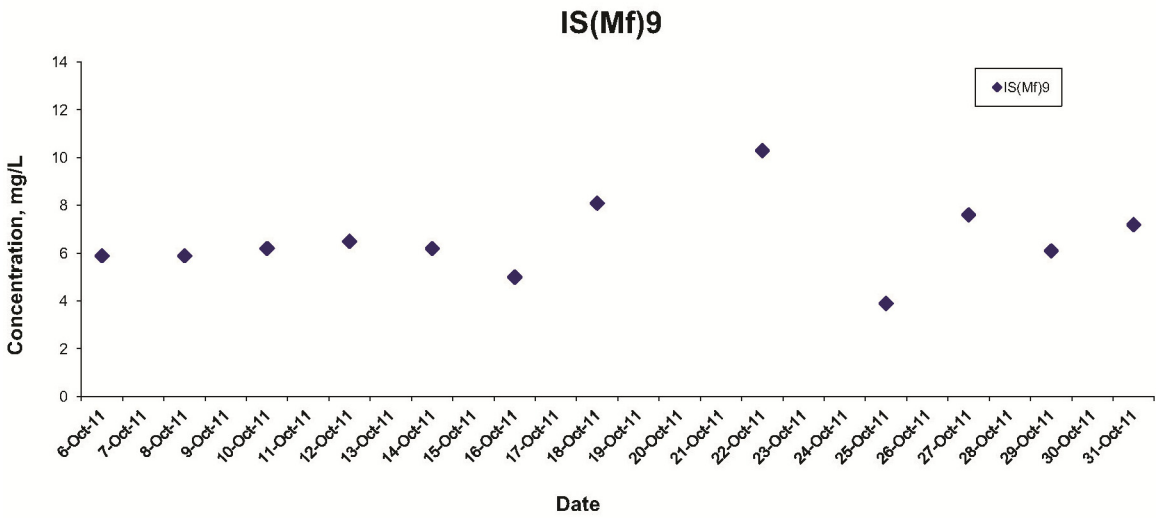
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

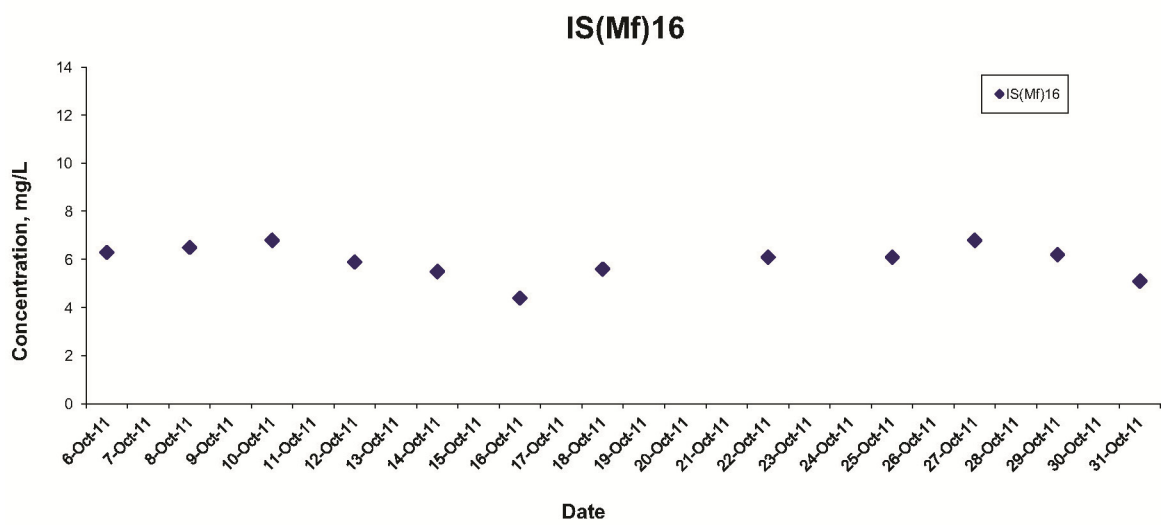
Dissolved Oxygen (Bottom) at Mid-Ebb Tide





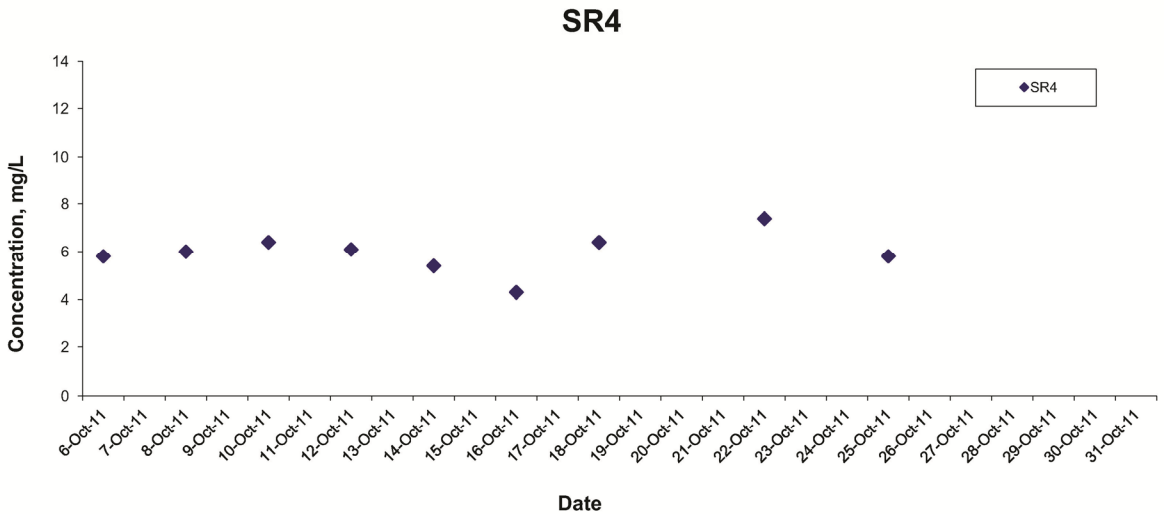
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Dissolved Oxygen (Bottom) at Mid-Ebb Tide



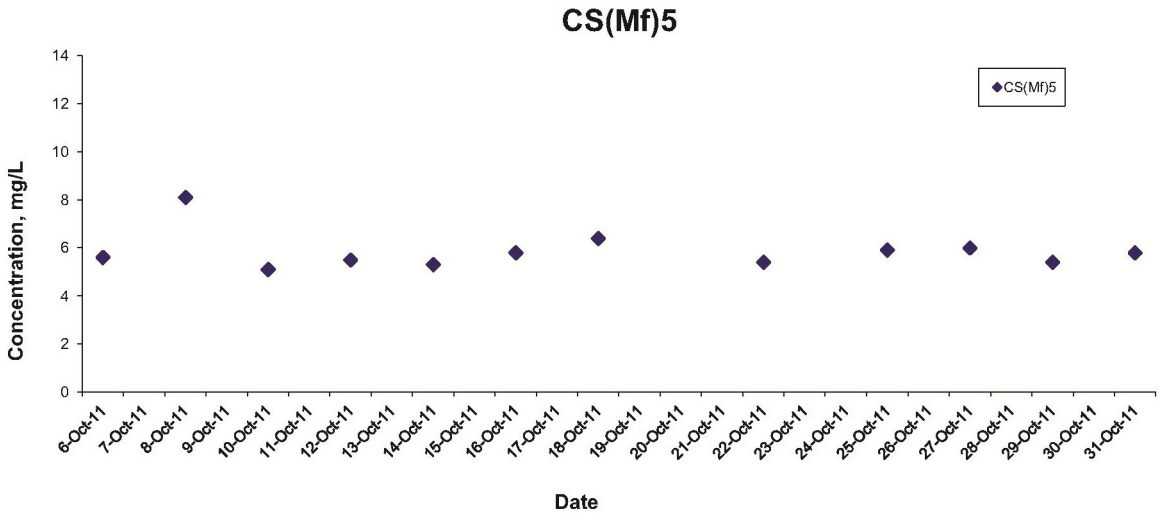
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Dissolved Oxygen (Bottom) at Mid-Ebb Tide



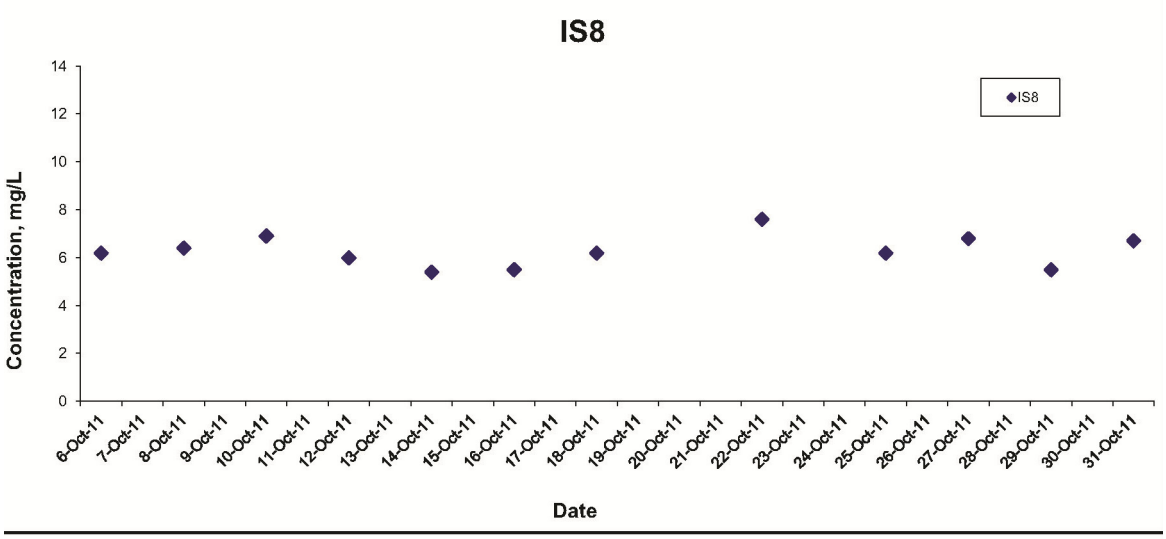
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

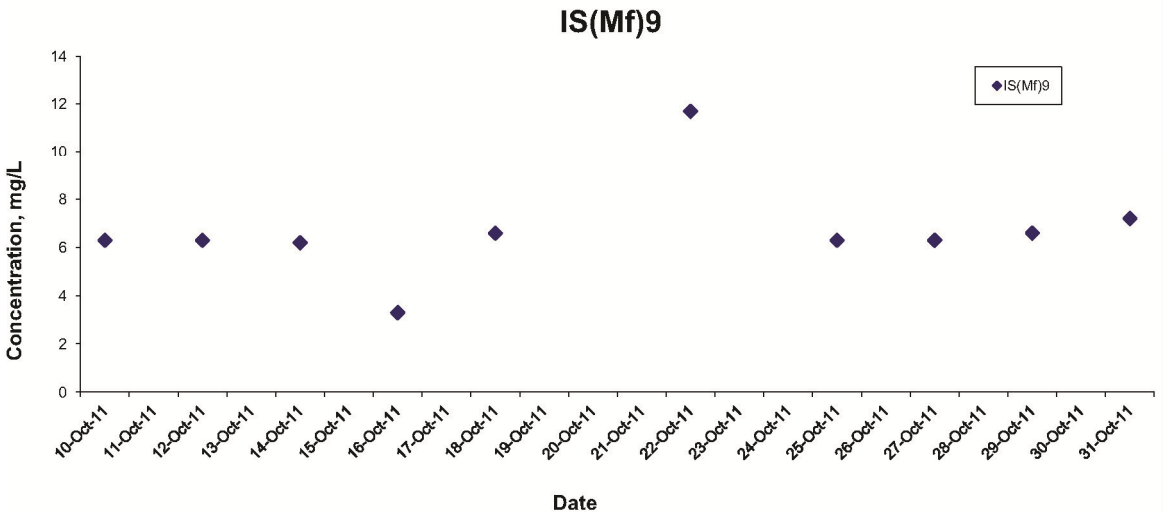
Dissolved Oxygen (Bottom) at Mid-Flood Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

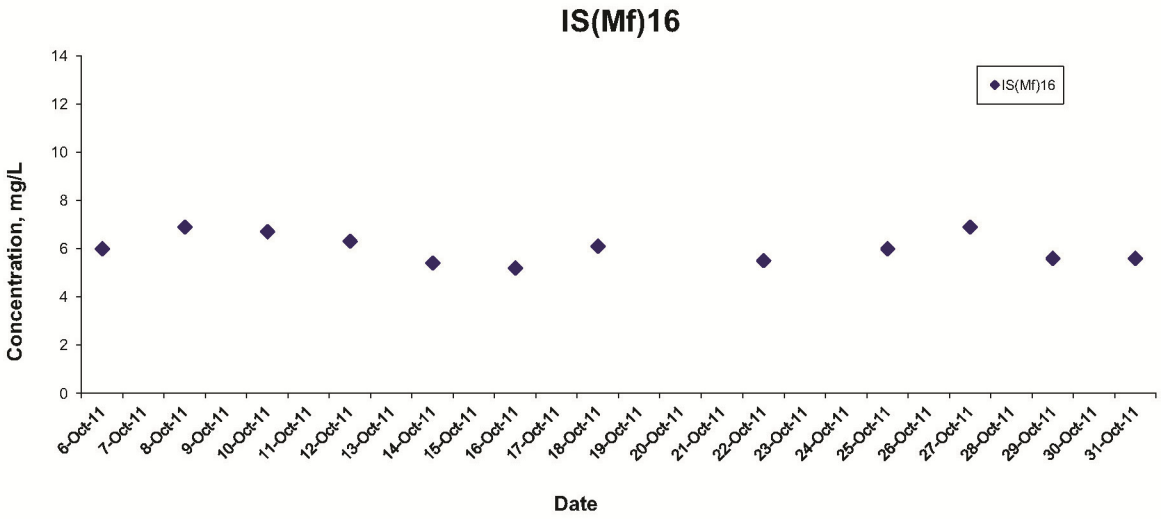
Dissolved Oxygen (Bottom) at Mid-Flood Tide





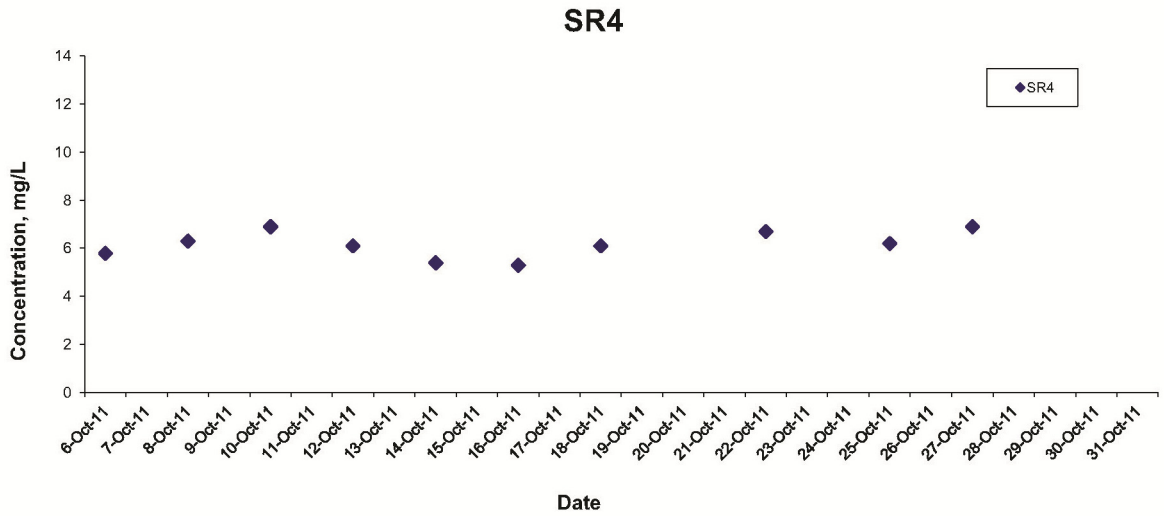
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Dissolved Oxygen (Bottom) at Mid-Flood Tide



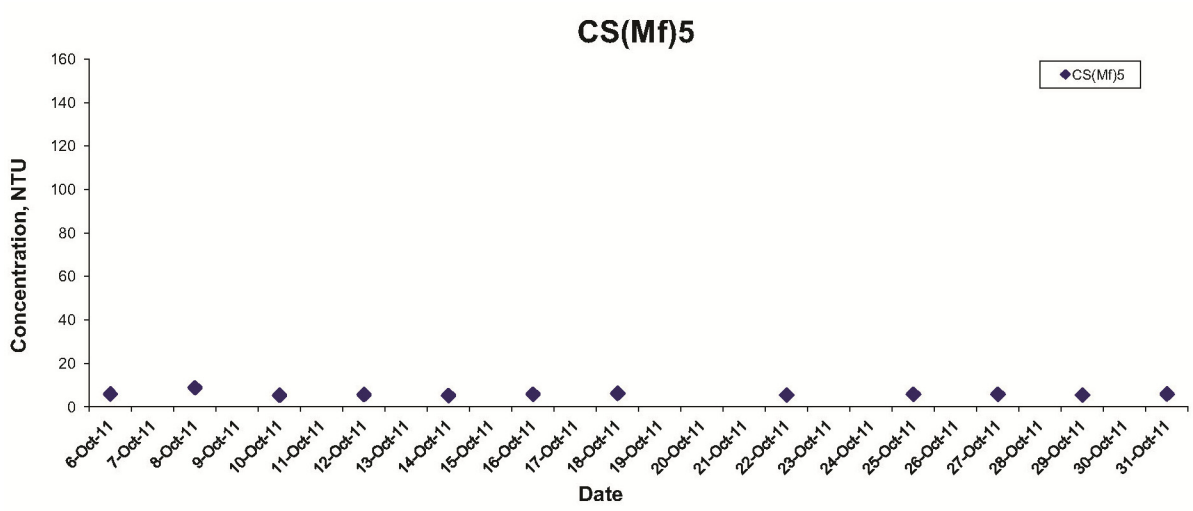
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Dissolved Oxygen (Bottom) at Mid-Flood Tide



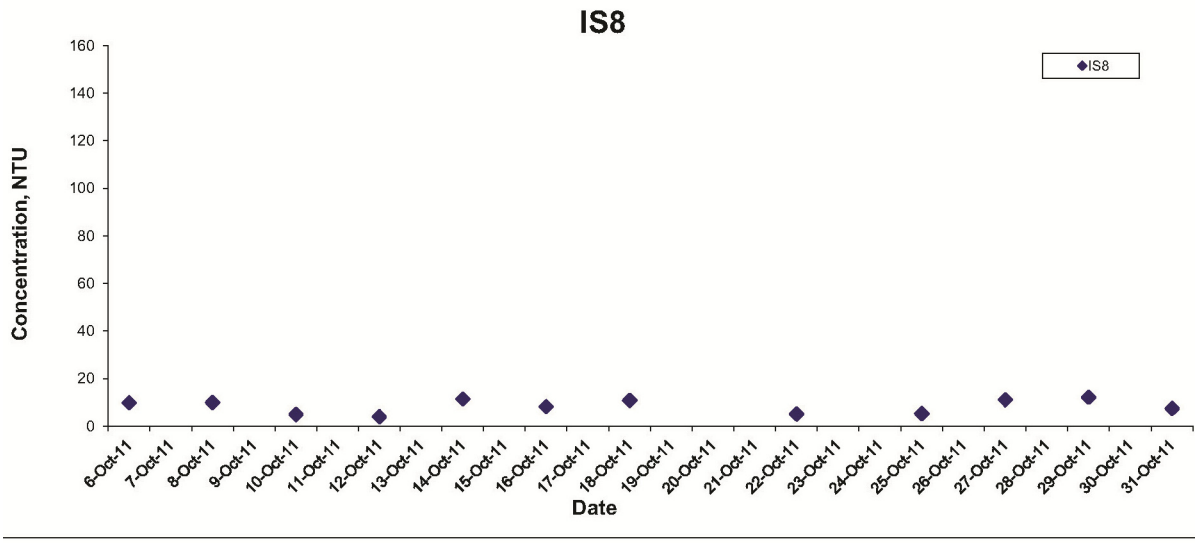
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

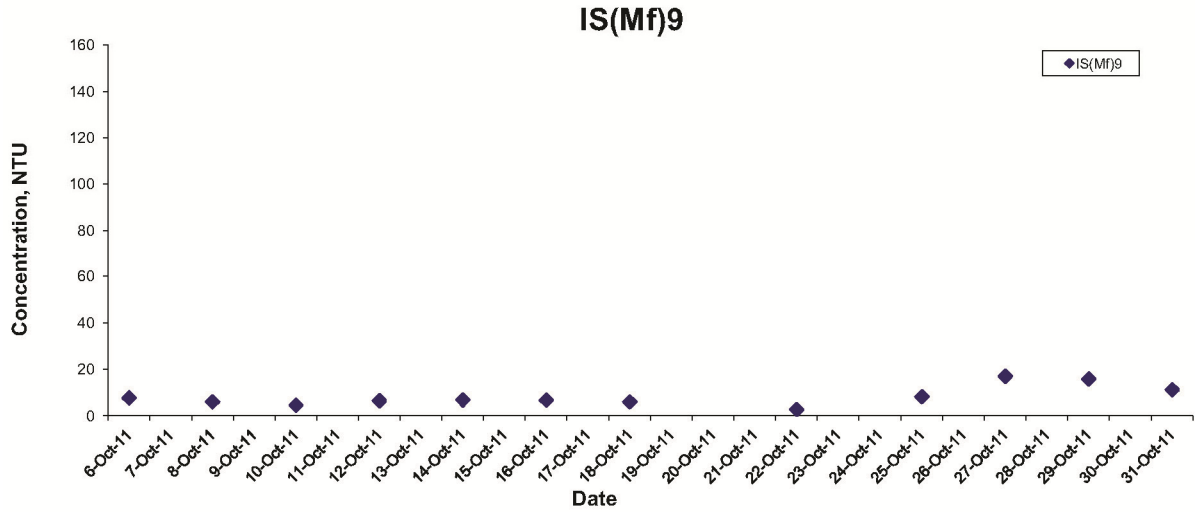
Turbidity (Depth-averaged) at Mid-Ebb Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

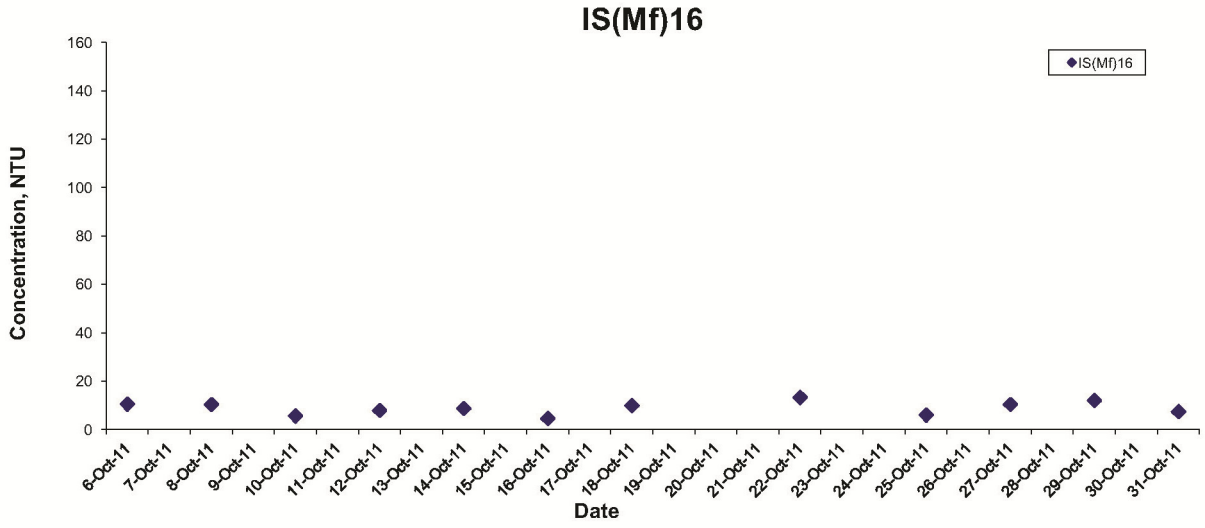
Turbidity (Depth-averaged) at Mid-Ebb Tide





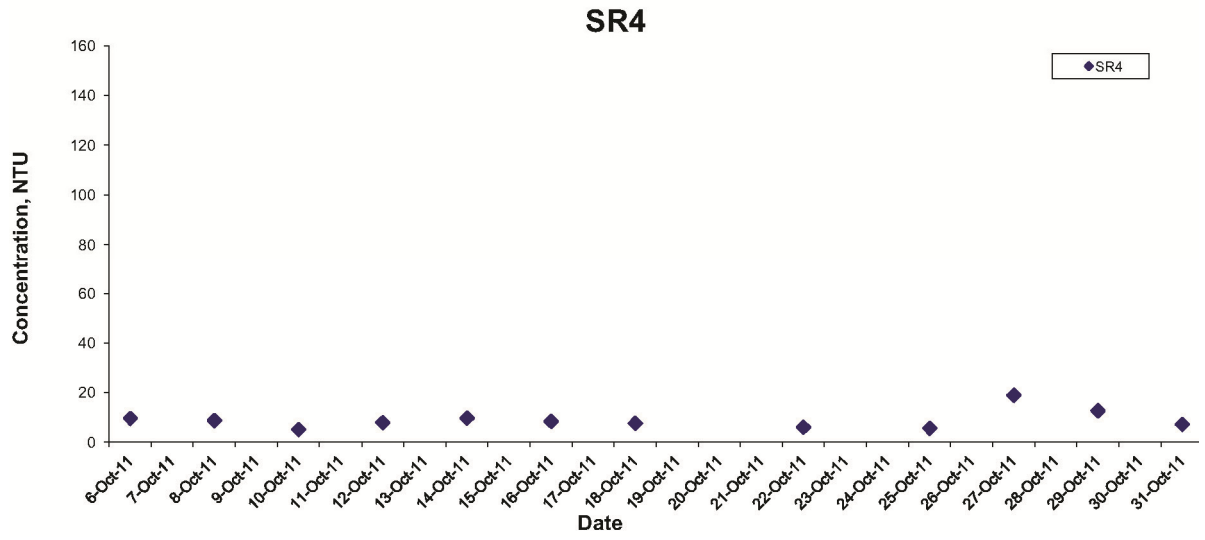
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Turbidity (Depth-averaged) at Mid-Ebb Tide



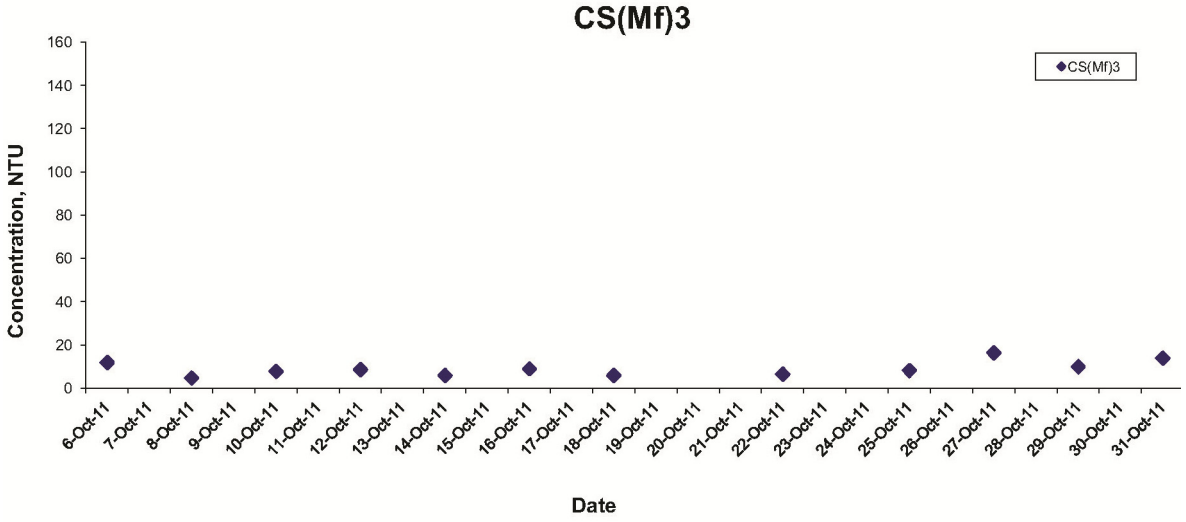
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Turbidity (Depth-averaged) at Mid-Ebb Tide



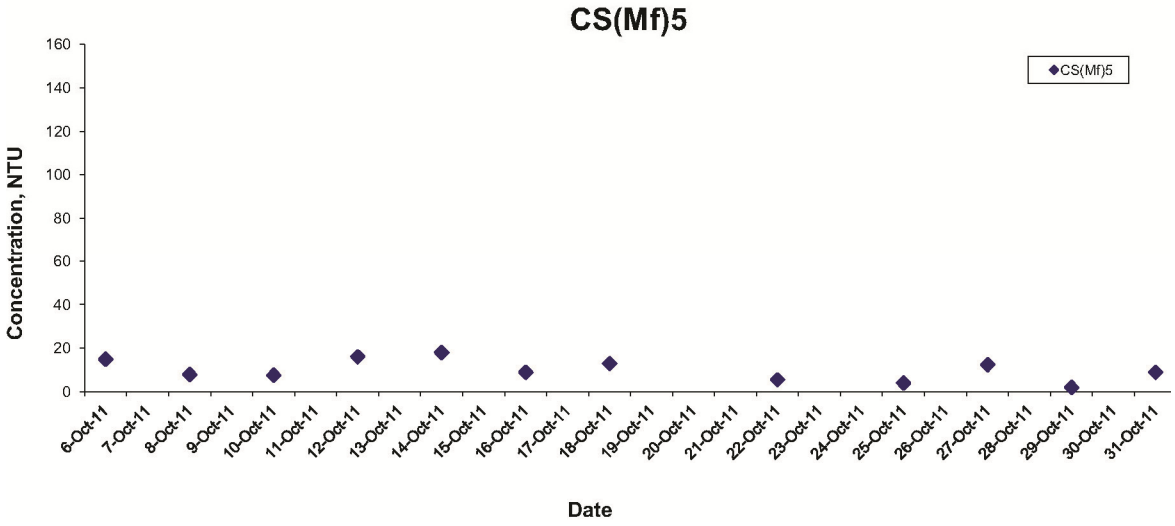
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Turbidity (Depth-averaged) at Mid-Flood Tide



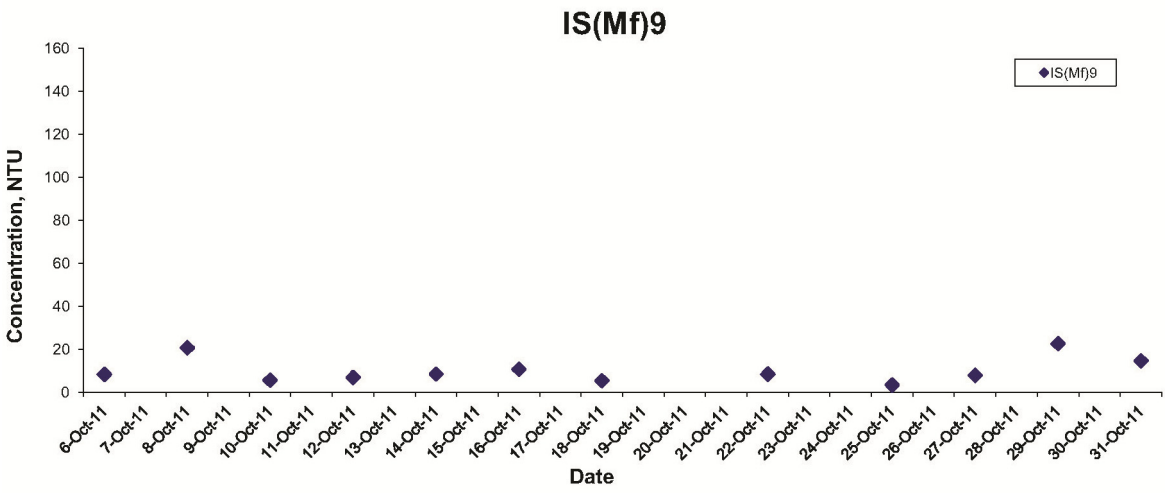
Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Turbidity (Depth-averaged) at Mid-Flood Tide



Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

Turbidity (Depth-averaged) at Mid-Flood Tide



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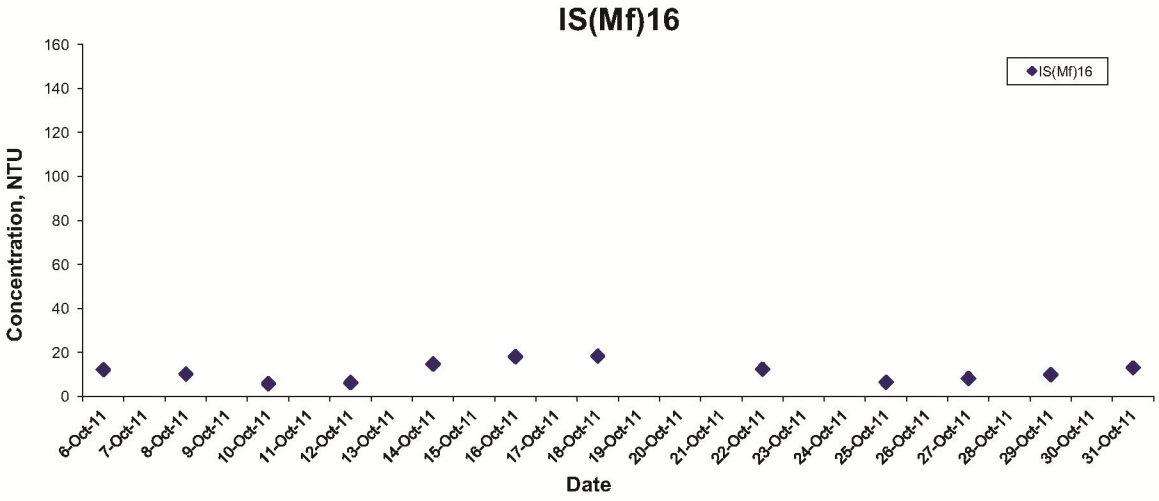

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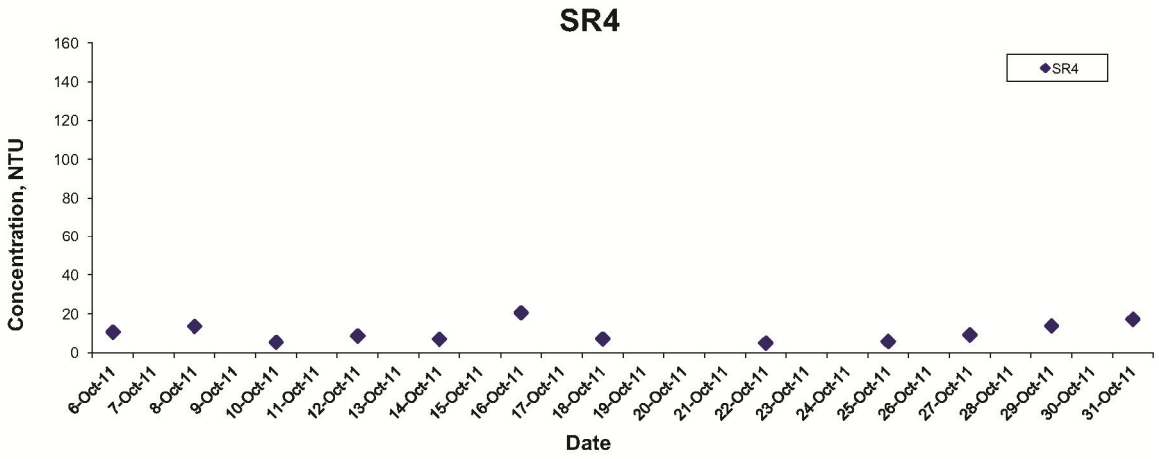

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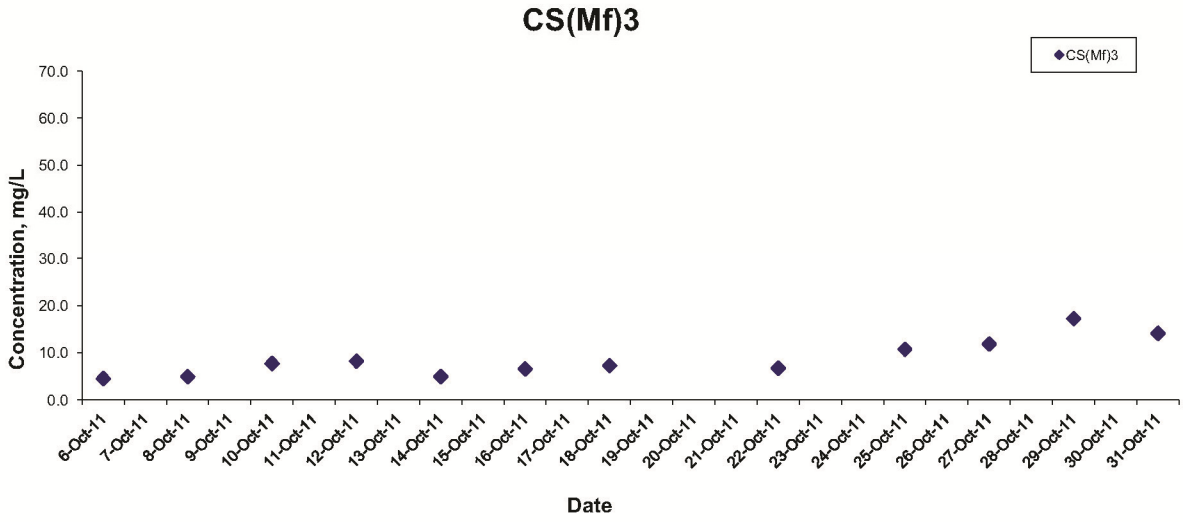
Suspended Solids (Depth-averaged) at Mid-Ebb Tide



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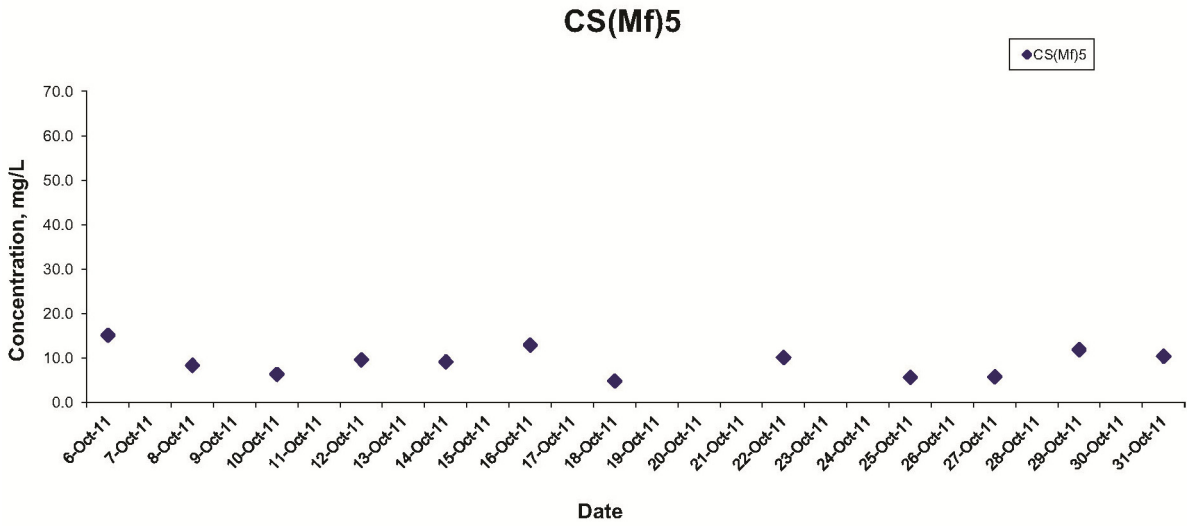

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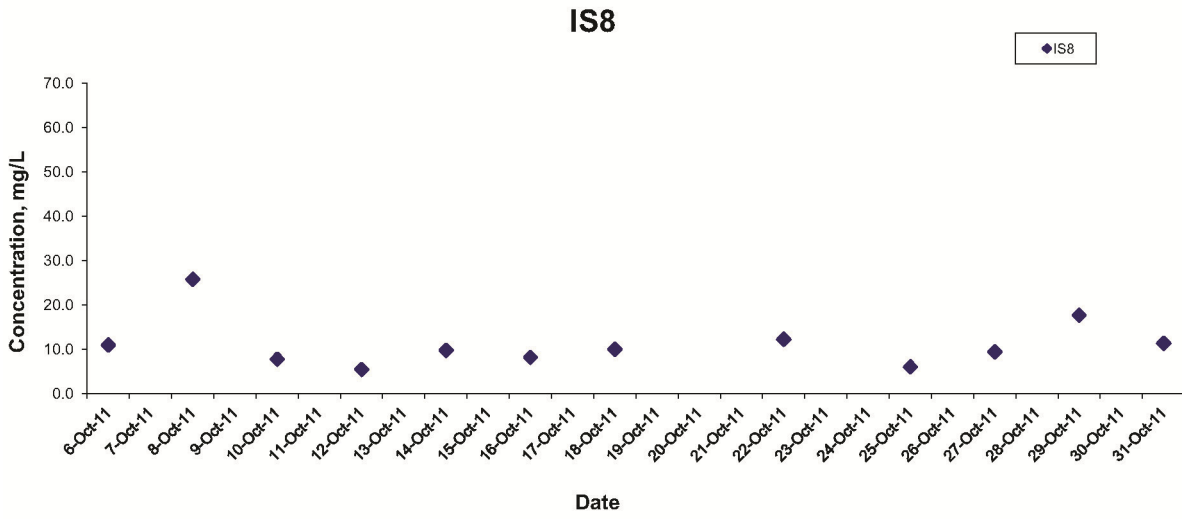

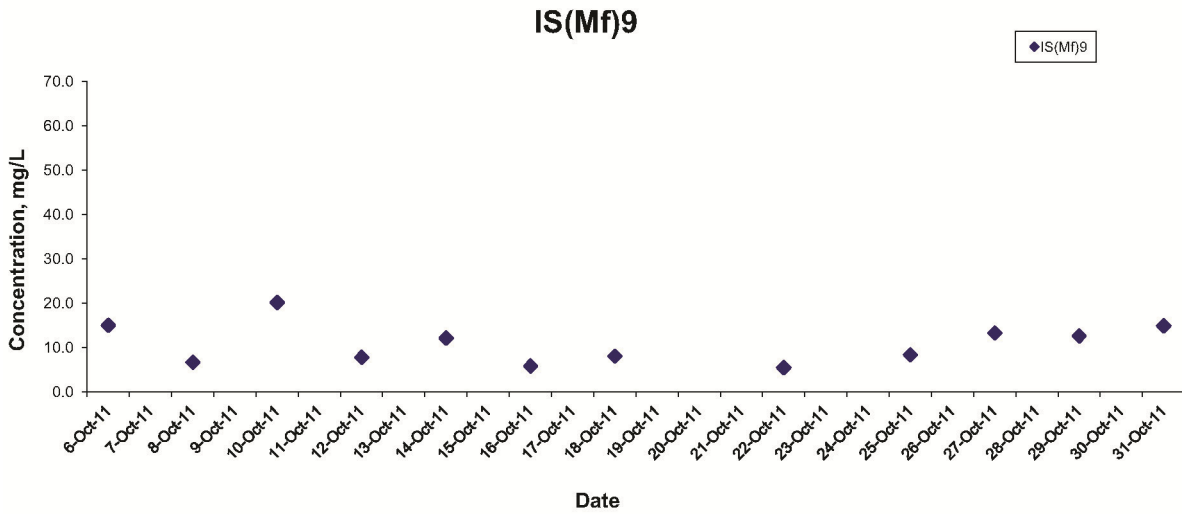

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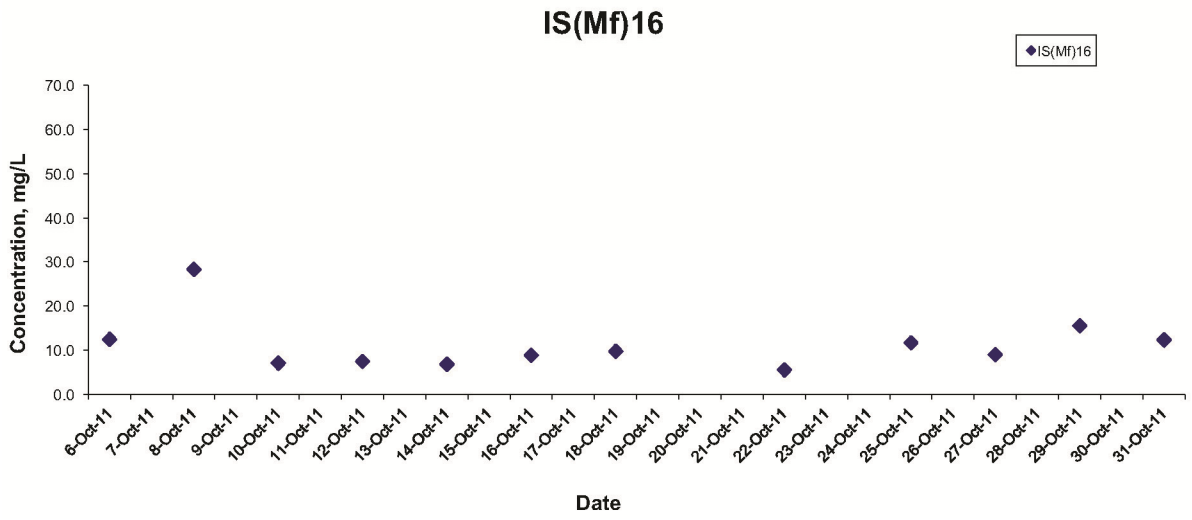

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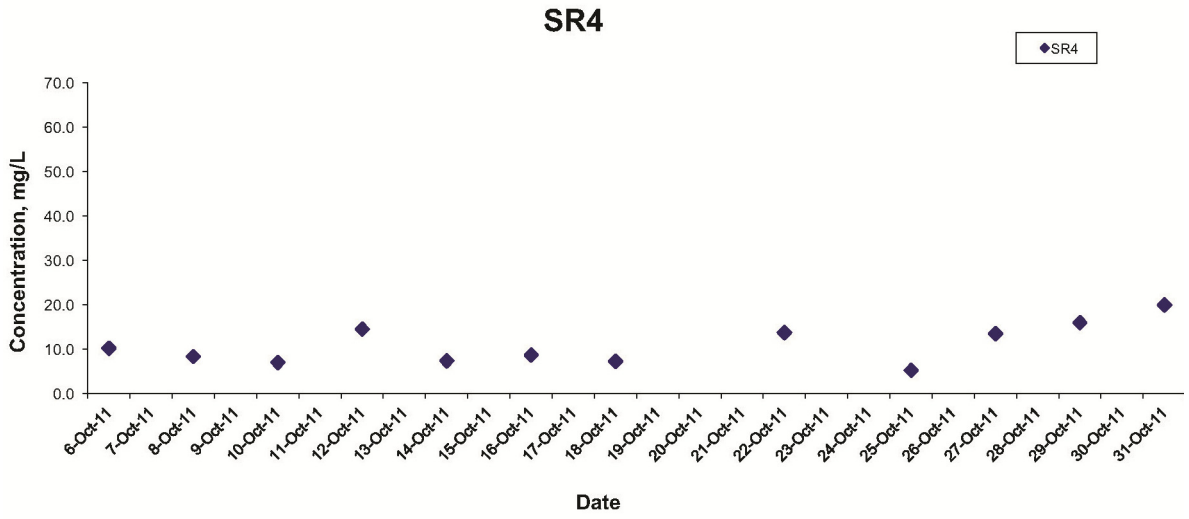

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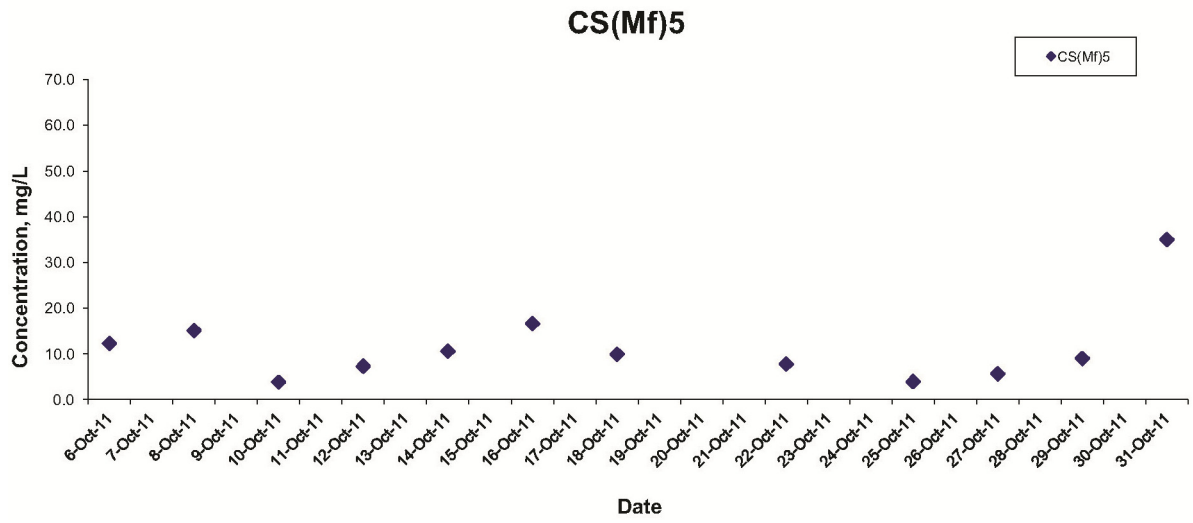

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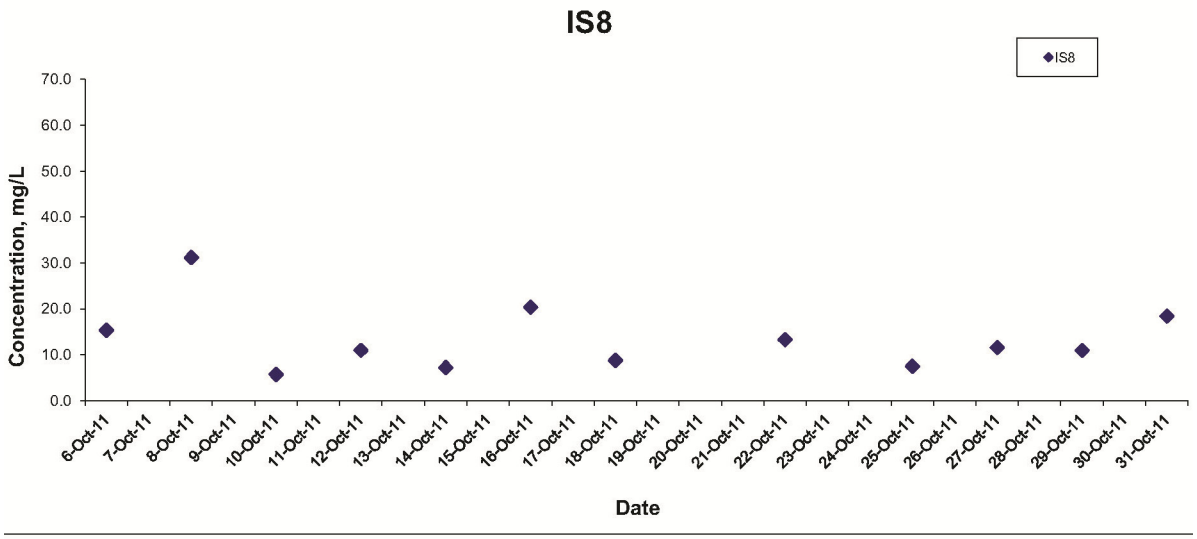

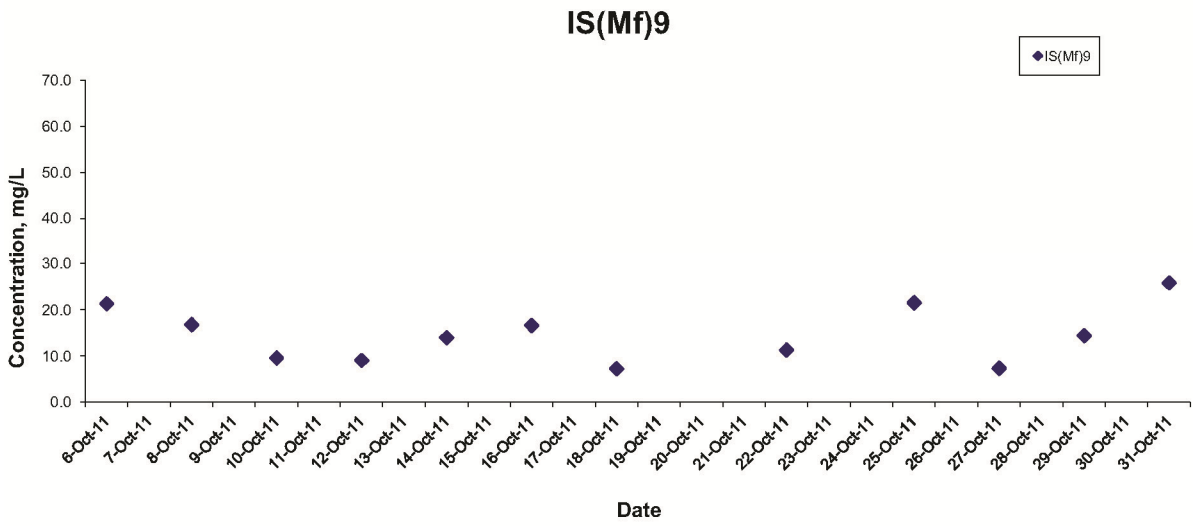

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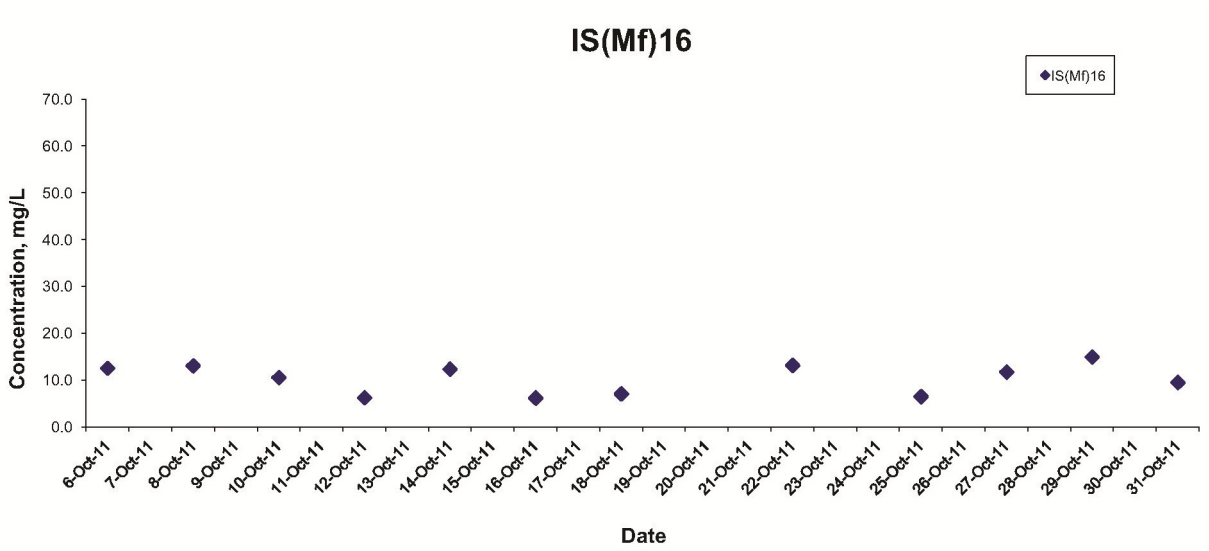

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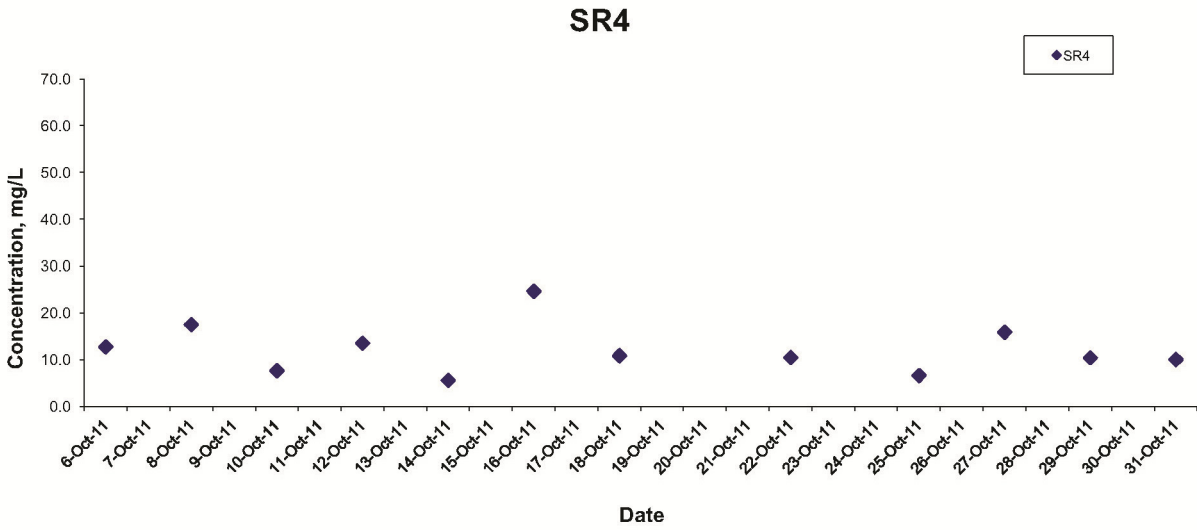
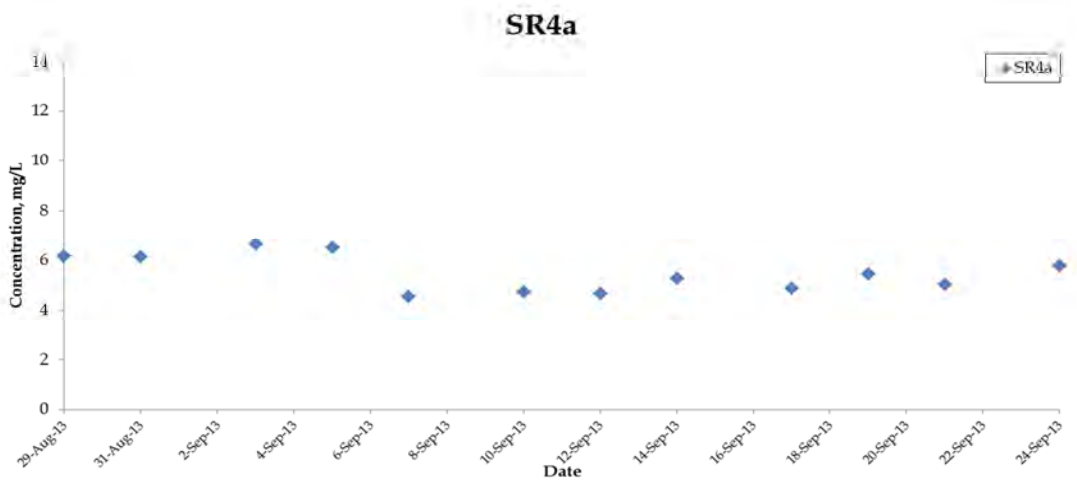


Sources : Agreement No. CE 35/2011 (EP) Baseline Environmental Monitoring For Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects - Investigation

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



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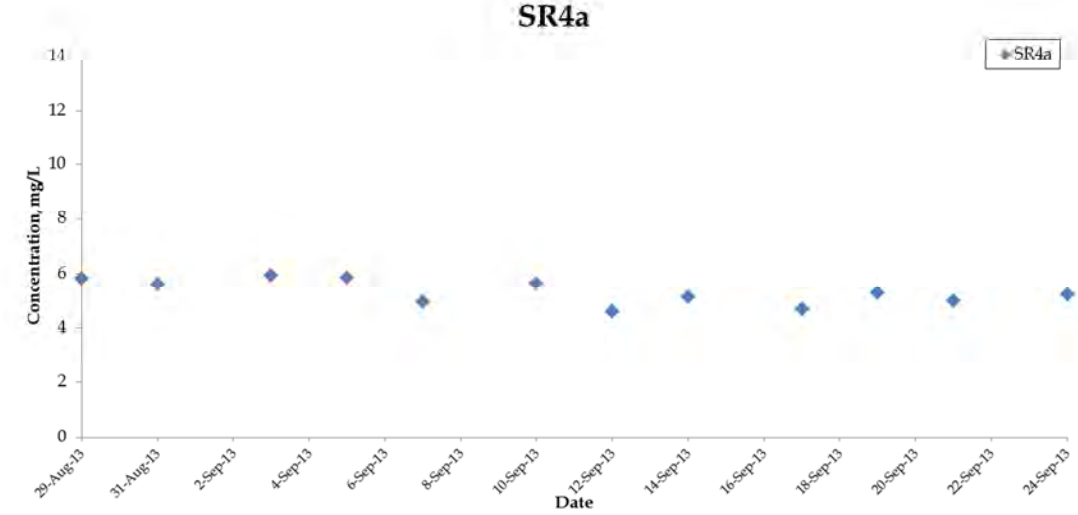

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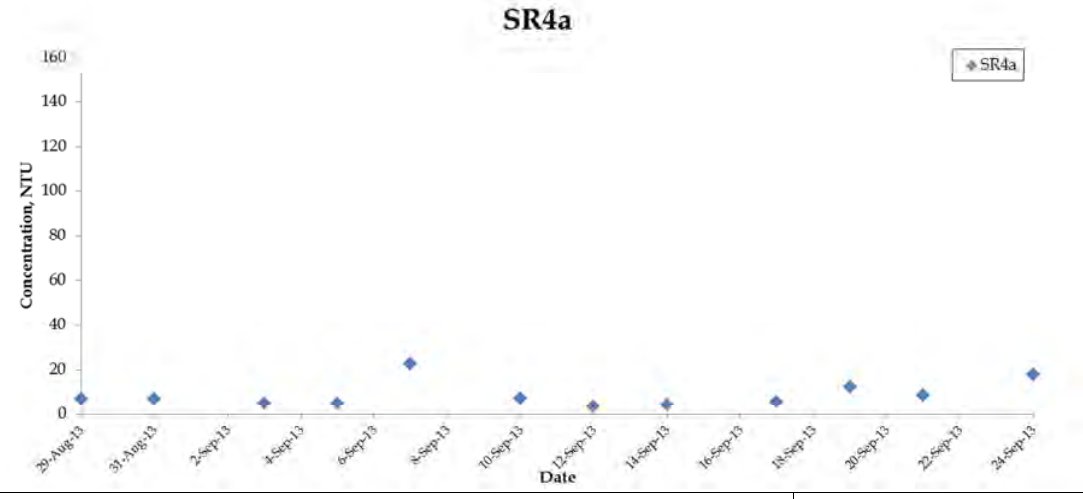

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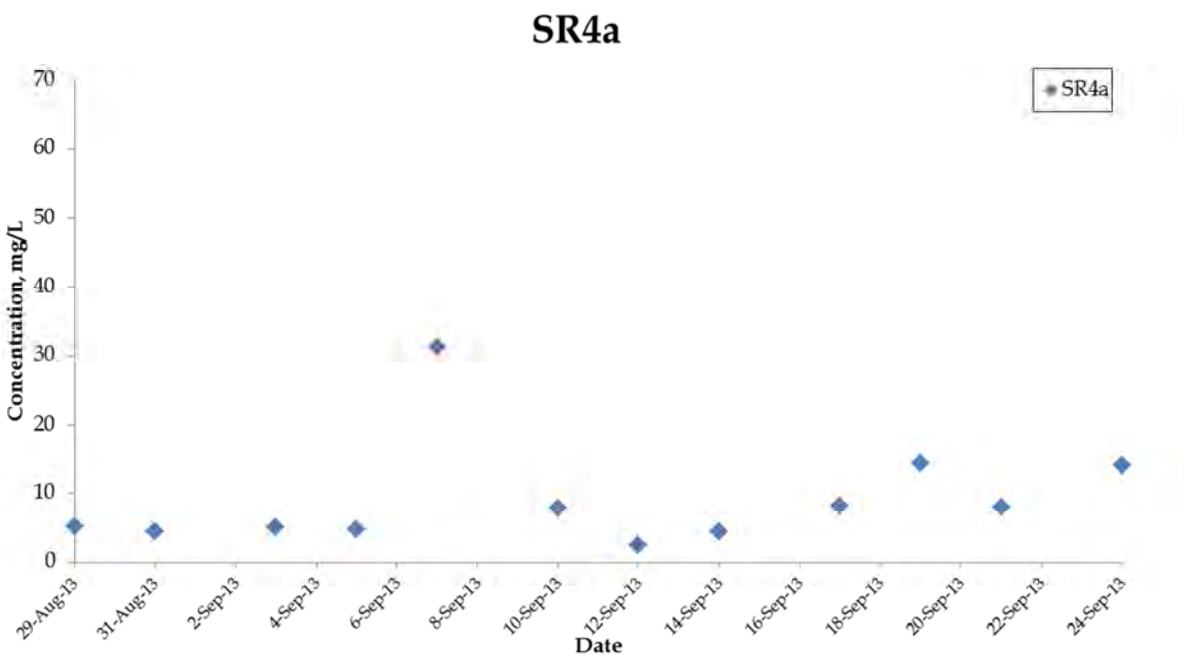

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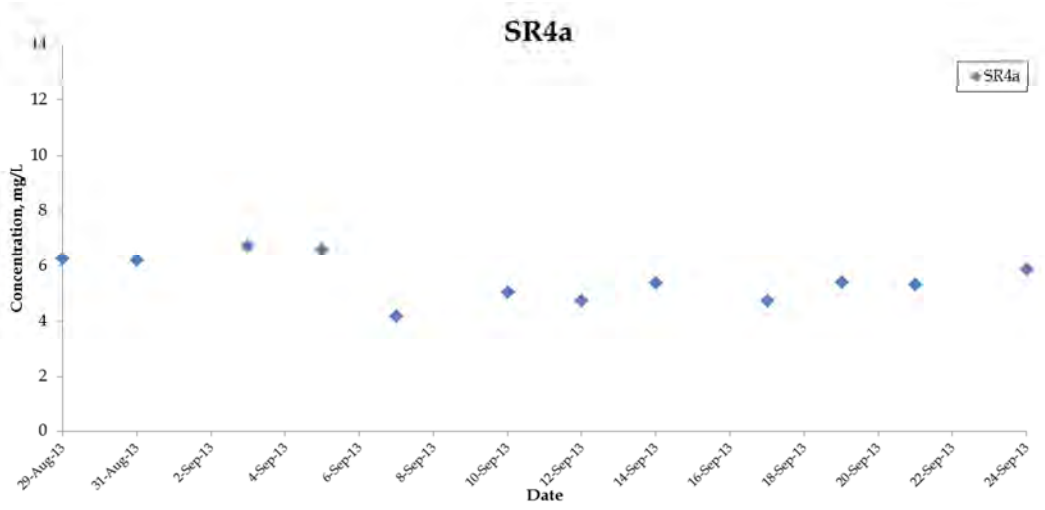

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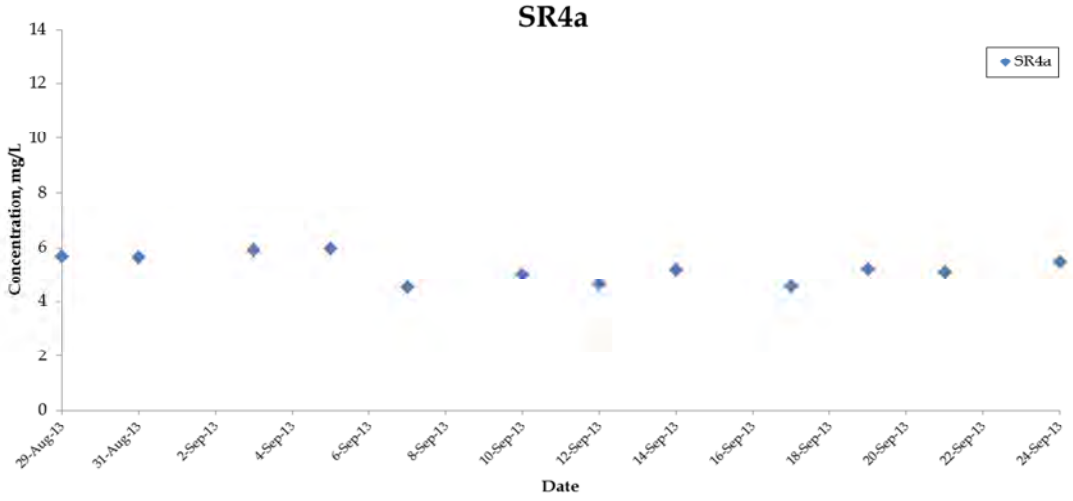

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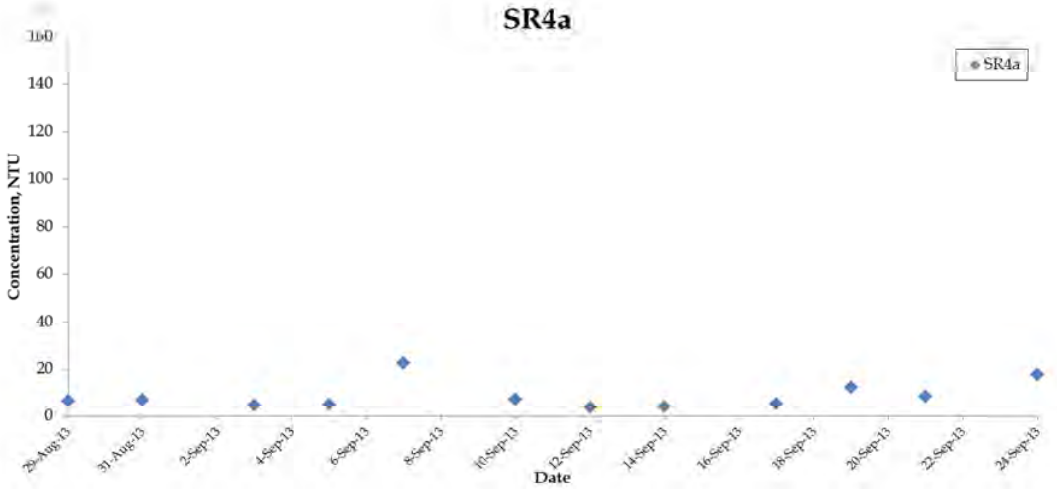

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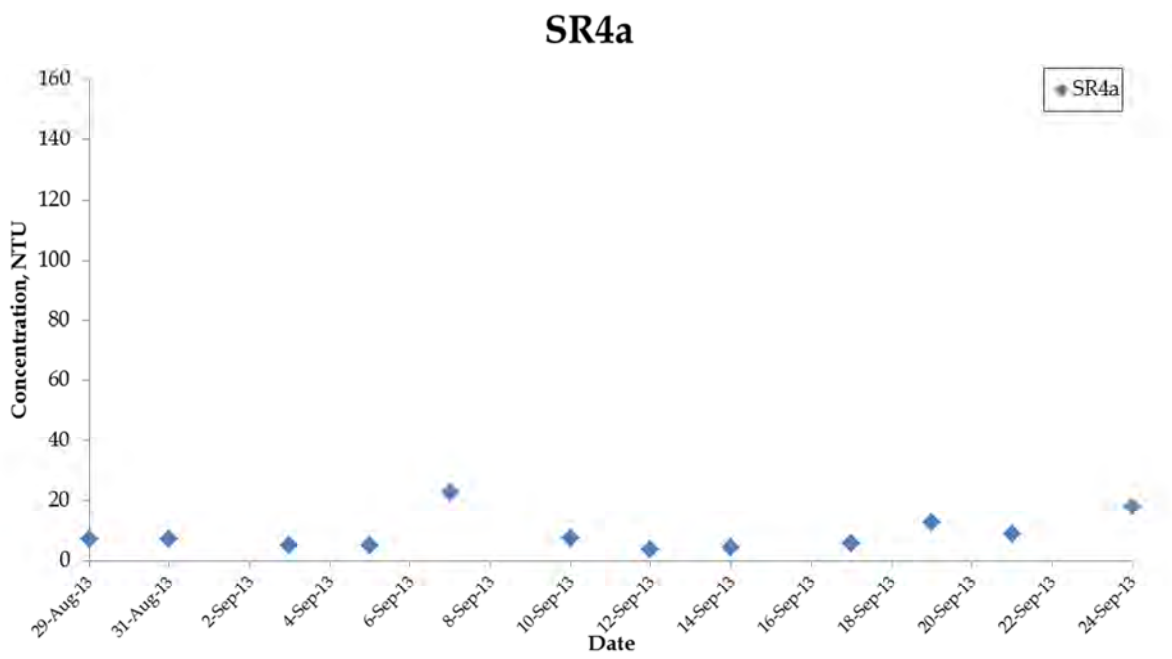

Annex D

Baseline Dolphin Monitoring Report prepared by Chinese White Dolphin (CWD) Service Contract HY/11/02

Contract No. HY/2011/02
Baseline Chinese White Dolphin Monitoring for Hong Kong-Zhuhai-Macao Bridge Hong Kong Projects

Draft Final Report on Baseline Monitoring (September - November 2011)
submitted to the
Hong Kong-Zhuhai-Macao Bridge Hong Kong Project Management Office,
Highways Department


NL24 with newborn calf © HKCRP

Submitted by
Samuel K.Y. Hung, Ph.D.
Hong Kong Cetacean Research Project

15 November 2011

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1. INTRODUCTION

In 2009, the Hong Kong-Zhuhai-Macao Bridge (HZMB) received official approval to be built by the Governments of the Hong Kong Special Administrative Region, Guangdong Province and the Macao Special Administrative Region. The Main Bridge will be jointly funded by all three Governments. Each Government will be responsible for constructing its own boundary crossing facility and link road to connect to the Main Bridge. In Hong Kong, there are three projects associated with the HZMB construction, namely the Hong Kong Link Road (HKLR) Project, the Hong Kong Boundary Crossing Facilities (HKBCF) Project, and the Tuen Mun-Chek Lap Kok Link (TM-CLKL) Project. According to the EM&A Manuals and EPs of the HZMB Projects in Hong Kong (i.e. HKBCF, HKLR and TM-CLKL), baseline dolphin monitoring is required to be carried out three months prior to the commencement of the HKBCF reclamation contract.

To comply with the requirements of the EM&A Manuals and EPS of the HZMB Projects in Hong Kong, the present monitoring study aims to collect data on Chinese White Dolphins (a.k.a. Indo-Pacific humpback dolphin, *Sousa chinensis*) during the pre-construction phase (i.e. baseline dolphin monitoring) in Northeast Lantau (NEL), Northwest Lantau (NWL) and West Lantau (WL) survey areas. This report is the draft final report submitted to the Highways Department, summarizing the results of the survey findings during the entire baseline monitoring period (i.e. September to November 2011).

2. OBJECTIVES AND METHODOLOGY

2.1. Objectives of the Present Study

Several objectives were set for this baseline monitoring study of Chinese White Dolphins for the study area in North and West Lantau waters, in association with the construction works of HZMB Projects. The first objective was to assess the spatial and temporal patterns of distribution and habitat use of Chinese White Dolphins during the pre-construction phase of HZMB Projects in great details. This objective was achieved through collection of research data on dolphins by conducting line-transect vessel surveys in NWL, NEL and WL survey areas.

The second objective was to identify individual Chinese White Dolphins by their natural marks, which was achieved by taking high-quality photographs of dolphins for photo-identification analysis. Photographs of identified individuals were compiled and added to the photo-identification catalogue.

The third objective was to analyze the monitoring data from the present baseline study for better understanding of the various aspects of local dolphin population in relation to the construction works of HZMB Projects. This objective was achieved by conducting various data analyses, including distribution analysis, encounter rate analysis, behavioural analysis and quantitative grid analysis to assess the spatial and temporal patterns of distribution and habitat use of local dolphins based on systematic line-transect survey data, and ranging pattern analysis to study individual movement based on photo-identification data.

2.2. Line-transect Vessel Surveys

The survey team used standard line-transect methods (Buckland et al. 2001) to conduct regular vessel surveys, and followed the same technique of data collection that has been adopted in the last 16 years of marine mammal monitoring surveys in Hong Kong (Hung 2010, 2011; Jefferson 2000). The territorial water of Hong Kong Special Administrative Region was divided into twelve survey areas, and line-transect surveys were conducted in NWL, NEL and WL areas (see transect line layout in Figure 1).

During each vessel survey, a 15-m inboard vessel (*Standard* 31516) with an open upper deck (about 4.5 m above water surface) was used to make observations from the flying bridge area. Two experienced observers (a data recorder and a primary observer) made up the on-effort survey team, and the survey vessel transited different transect lines at a constant speed of 13-15 km per hour. The data recorder searched with unaided eyes and filled out the datasheets, while the primary observer searched for dolphins continuously through 7 x 35 *Brunton* marine binoculars. Both observers searched the sea ahead of the vessel, between 270° and 90° (in relation to the bow, which is defined as 0°). Two to three additional experienced observers were available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members. All observers were experienced in small cetacean survey techniques and identifying local cetacean species. Beforehand they had participated in rigorous at-sea training program provided by the PI.

During on-effort survey periods, the survey team recorded effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance traveled in each series (a continuous period of search effort) with the assistance of a handheld GPS (*Garmin eTrex Legend H*). When dolphins were sighted, the survey team would end the survey effort, and immediately recorded the initial sighting distance and angle of the dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel was diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, and behavioural observations. The perpendicular distance (PSD) of the dolphin group to the transect line was later calculated from the initial sighting distance and angle. The line-transect data collected during the present study were compatible with the long-term databases maintained by Hong Kong Cetacean Research Project (HKCRP) in a way that it can be analyzed by established computer programmes (e.g. all recent versions of DISTANCE programme including version 6.0, ArcView© GIS programme) for examination of population status including trends in abundance, distribution and habitat use of Chinese White Dolphins.

2.3. Photo-identification

When a group of Chinese White Dolphins were sighted during the line-transect survey, the survey team would end effort and approach the group slowly from the side and behind to take photographs of them. Every attempt was made to photograph every dolphin in the group, and even photograph both sides of the dolphins, since the colouration and markings on both sides may not be symmetrical (Jefferson 2000). Two professional digital cameras (*Canon* EOS 7-D, 60-D models), each equipped with long telephoto lenses (100-400 mm zoom), were available on board for researchers to take sharp, close-up photographs of dolphins as they surfaced. The images were shot at the highest available resolution and stored on Compact Flash memory cards for downloading onto a computer.

All digital images taken in the field were first examined, and those containing potentially identifiable individuals were sorted out. These photographs would then be examined in greater details, and were carefully compared to over 700 identified dolphins in the PRE Chinese White Dolphin photo-identification catalogue managed by the HKCRP researchers. Chinese White Dolphins can be identified by their natural markings, such as nicks, cuts, scars and deformities on their dorsal fin and body, and their unique spotting patterns were also used as secondary identifying

features (Jefferson 2000). All photographs of each individual were then compiled and arranged in chronological order, with data including the date and location first identified (initial sighting), re-sightings, associated dolphins, distinctive features, and age classes entered into a computer database. Any new individuals were given a new identification number, and their data were also added to the catalogue, along with text descriptions including age class, gender, any nickname or unique markings.

2.4. Data Analyses

2.4.1. Distribution pattern analysis

The line-transect survey data was integrated with the Geographic Information System (GIS) in order to visualize and interpret different spatial and temporal patterns of dolphin distribution using sighting positions. Location data of dolphin groups were plotted on map layers of Hong Kong using a desktop GIS (ArcView© 3.1) to examine their distribution patterns in details. The dataset was also stratified into different subsets to examine distribution patterns of dolphin groups with different categories of group sizes, young calves and activities.

2.4.2. Encounter rate analysis

Since the line-transect survey effort was uneven among different survey areas and across different years, the encounter rates of Chinese White Dolphins (number of on-effort sightings per 100 km of survey effort) were calculated in each survey area in relation to the amount of survey effort conducted during the baseline monitoring period, which was also compared to the ones calculated from previous years of monitoring data to examine temporal trend. The encounter rate could be used as an indicator to determine areas of importance to dolphins within the study area.

2.4.3. Quantitative grid analysis on habitat use

To conduct quantitative grid analysis of habitat use, positions of on-effort sightings of Chinese White Dolphins collected during the 3-month baseline monitoring period were plotted onto 1-km^2 grids among NWL, NEL and WL survey areas on GIS. Sighting densities (number of on-effort sightings per km^2) and dolphin densities (total number of dolphins from on-effort sightings per km^2) were then calculated for each 1 km by 1 km grid with the aid of GIS. Sighting density grids and dolphin density grids were then further normalized with the amount of survey effort conducted within each grid. The total amount of survey effort spent on each grid was calculated by examining the survey coverage on each line-transect survey to determine how many times the grid was surveyed during the study period.

For example, when the survey boat traversed through a specific grid 50 times, 50 units of survey effort were counted for that grid. With the amount of survey effort calculated for each grid, the sighting density and dolphin density of each grid were then normalized (i.e. divided by the unit of survey effort).

The newly-derived unit for sighting density was termed SPSE, representing the number of on-effort **s**ightings **p**er 100 units of **s**urvey **e**ffort. In addition, the derived unit for actual dolphin density was termed DPSE, representing the number of **d**olphins **p**er 100 units of **s**urvey **e**ffort. Among the 1-km^2 grids that were partially covered by land, the percentage of sea area was calculated using GIS tools, and their SPSE and DPSE values were adjusted accordingly. The following formulae were used to estimate SPSE and DPSE in each 1-km^2 grid within the study area:

$$SPSE = ((S / E) \times 100) / SA\%$$

$$DPSE = ((D / E) \times 100) / SA\%$$

where S = total number of on-effort sightings

D = total number of dolphins from on-effort sightings

E = total number of units of survey effort

SA% = percentage of sea area

2.4.4. Behavioural analysis

When dolphins were sighted during vessel surveys, their behaviour was observed. Different activities were categorized (i.e. feeding, milling/resting, traveling, socializing) and recorded on sighting datasheets. This data was then input into a separate database with sighting information, which can be used to determine the distribution of behavioural data with a desktop GIS. Distribution of sightings of dolphins engaged in different activities and behaviours would then be plotted on GIS and carefully examined to identify important areas for different activities of the dolphins.

2.4.5. Ranging pattern analysis

Location data of individual dolphins that occurred during the 3-month baseline monitoring period were obtained from the dolphin sighting database and photo-identification catalogue. To deduce home ranges for individual dolphins using the fixed kernel methods, the program Animal Movement Analyst Extension, created by the Alaska Biological Science Centre, USGS (Hooge and Eichenlaub 1997), was loaded as an extension with ArcView© 3.1 along with another extension Spatial Analyst 2.0. Using the fixed kernel method, the program calculated kernel density estimates based on all sighting positions, and provided an active interface to display

kernel density plots. The kernel estimator then calculated and displayed the overall ranging area at 95% UD level.

3. RESULTS AND DISCUSSIONS

3.1. Summary of survey effort and dolphin sightings

From September to November 2011, a total of 14 line-transect vessel surveys were conducted in NWL, NEL and WL survey areas (Appendix I). Among these surveys, 966 km of survey effort was collected, with 95% of these effort conducted under favourable sea conditions (Beaufort 3 or below with good visibility). The high percentage of survey effort conducted under favourable sea conditions is critical to the success of the dolphin data collection programme in Hong Kong, as only such data can be used in various analyses such as the examination of encounter rates, habitat use and estimation of density and abundance. The details of the survey effort data collected during the baseline monitoring are shown in Appendix II.

During the 3-month study period, 112 groups of Chinese White Dolphins, numbering 413 individuals, were sighted from the vessel surveys (Appendix III). Among them, 91 groups were sighted during on-effort line-transect vessel surveys, while the others were sighted during off-effort search. Most sightings were made in WL (46 groups) and NWL (49 groups), comprising 84.8% of the total (Figure 1). In addition, 17 dolphin groups were also sighted in NEL throughout the 3-month study period (Figure 1).

3.2. Distribution

Dolphin sightings were unevenly distributed throughout the three survey areas of NWL, NEL and WL during the study period. In North Lantau region, concentration of these sightings were found around Lung Kwu Chau, near Black Point, Pillar Point and Shum Shui Kok, but the dolphins generally avoided the waters to the north of the Chek Lap Kok airport as well as the northern and eastern portions of NEL survey area (Figure 2). On the contrary, dolphins occurred evenly throughout the WL survey area, but slightly more sightings were made near Kai Kung Shan, Fan Lau and the offshore waters between Tai O Peninsula and Kai Kung Shan (Figure 3).

Throughout the baseline monitoring period, dolphins occurred regularly in the

vicinity of the future alignments of HKLR and TM-CLKL as well as the reclamation site of HKBCF, but not in high concentration (Figures 2-3). Their occurrence around these future construction sites in association with HZMB Projects should be continuously monitored to determine whether there will be any change in dolphin distribution and habitat use around these work areas during the construction period.

3.3. Encounter rate

To calculate encounter rates of Chinese White Dolphins, only data collected in Beaufort 0-3 conditions was included in the analysis (see Hung 2011). During the baseline monitoring period, the combined dolphin encounter rate of NWL, NEL and WL was 10.8 sightings per 100 km. This was much higher than the ones in previous years from 2008-2010, but was slightly lower than the one in 2007 recorded during AFCD marine mammal monitoring programme (Figure 4a).

Among the three survey areas, the dolphin encounter rate was the highest in WL (20.4 sightings per 100 km), which was much higher than the ones in NWL (9.3) and NEL (5.4) (Figure 4b). The prominent usage of WL during the same three-month period (September to November) was also consistent throughout the past five years (Figure 4b), providing solid evidence that this stretch of coastal waters presents the most important habitat for Chinese White Dolphins in Hong Kong. Moreover, dolphin usage among all three survey areas during this three-month period also followed similar temporal trends, with encounter rates dropping from the highest in 2007 to the lowest in 2010, but increasing to a higher level in 2011 (Figure 4b). In fact, dolphin encounter rate in NEL reached the highest in 2011 during the five-year period.

3.4. Group size

Group sizes of dolphins during the baseline monitoring period ranged from singles to 18 animals, with an overall mean of 3.7 ± 3.1 (SD) animals per group. Among the three survey areas, their mean group sizes were similar across NEL, NWL and WL survey areas (3.2-3.9 dolphins per group). Moreover, the mean dolphin group size during the 3-month study period was very similar to the one recorded during the 2010-11 AFCD monitoring period (Hung 2011).

Most dolphin groups sighted during the 3-month period tended to be small, with 48.2% of the groups composed of 1-2 animals, and 72.3% of the groups with fewer

than five animals. On the other hand, 31 groups had 5 or more animals, and only five groups had 10 or more animals. These larger aggregations of dolphins were mostly found near Sha Chau and between Lung Kwu Chau and Black Point in NWL; around the Brothers Islands in NEL; and between Tai O Peninsula and Peaked Hill in WL (Figure 5). Notably, several large dolphin groups could be found near the alignments of HKLR and TM-CLKL as well as the reclamation site of HKBCF (Figure 5). Since large dolphin aggregations in certain locations may imply rich fishery resources and good feeding opportunities for dolphins, dolphin occurrence in these important feeding habitats should be closely monitored throughout the construction period to determine whether the construction works in association with the HZMB Projects would affect the feeding opportunities of the dolphins.

3.5. Habitat use

From September to November 2011, the most heavily utilized habitats by Chinese White Dolphins included the waters around Lung Kwu Chau and Shau Chau, near Pillar Point and Black Point, and along the Urmston Road in NWL; around the Brothers Islands and near Shum Shui Kok in NEL; and around Tai O Peninsula, near Kai Kung Shan, Peaked Hill and Fan Lau in WL (Figures 6-7). These important dolphin habitats during the baseline monitoring period coincided well with the results from the previous AFCD monitoring periods (e.g. Hung 2010, 2011), further confirming the importance of these habitats to Chinese White Dolphins in Hong Kong.

Notably, several grids along the alignments of HKLR (Grids E21, F21 & G20) and TM-CLKL (Grids O14-15) as well as near the reclamation site of HKBCF (Grid P17) recorded moderate to high dolphin densities (Figures 6-7). Although the impending construction works in association with HZMB Projects are not situated at the most important dolphin habitats in Hong Kong (e.g. Lung Kwu Chau, Tai O Peninsula to Fan Lau, the Brothers Islands), these works will still be in the vicinity of these sensitive habitats, and dolphin usage should therefore be carefully monitored during the entire construction period to observe any significant changes incurred.

3.6. Mother-calf pairs

During the 3-month baseline monitoring period, a total of 14 unspotted calves (UC) and 14 unspotted juveniles (UJ) were sighted among the three survey areas. These young calves comprised 6.8% of all animals sighted. The young calves were

regularly sighted in the WL and NWL survey areas, but only twice in the NEL survey area. Concentration of these sightings with mother-calf pairs could be found near Tai O Peninsula and Black Point (Figure 8). Several sightings with mother-calf pairs were also located near the alignments of HKLR and TM-CLKL. As the young calves need to maintain close acoustic contact with their mothers in order to survive (Van Parijs and Corkeron 2001), they are more susceptible to acoustic disturbances from underwater construction activities, and their activities around the works area should be carefully monitored throughout the entire construction period.

3.7. Activities and associations with fishing boats

During the baseline monitoring period, 13 and 6 dolphin sightings were associated with feeding and socializing activities respectively, comprising of 11.6% and 5.4% of the total dolphin sightings. Only two dolphin groups were engaged in traveling activities near Pillar Point and to the west of the airport (Figure 9). Dolphin sightings associated with feeding activities were mostly found near Kai Kung Shan and Tai O in WL, and near Lung Kwu Chau in NWL (Figure 9). On the other hand, sightings associated with socializing activities were more scattered around the marine park area in NWL and the central portion of WL (Figure 9). Notably, several sightings associated with feeding activities were observed along and near the alignments of HKLR and TM-CLKL, and around the reclamation site of HKBCF (Figure 9).

Only six dolphin groups were found to be associated with operating fishing boats, comprising of 5.4% of all dolphin groups. These sightings included three dolphin groups associated with pair trawlers, two with hang trawlers and one with shrimp trawler. The location of these fishing boat-associated sightings were scattered throughout the three survey areas, with no apparent concentration (Figure 10). Only two of these sightings were found in the vicinity of the future work sites of HZMB Projects (Figure 10).

3.8. Photo-identification work and individual range use

From September to November 2011, over 5,000 digital photographs of Chinese White Dolphins were taken during the baseline monitoring surveys for the photo-identification work. In total, 96 individuals sighted 182 times altogether were identified (Table 1). The majority of these re-sightings were made in NWL and WL, comprising 53.2% and 31.9% of the total respectively. In addition, 27 re-sightings

were also made in NEL, or about half of the total number of dolphins sighted there during the 3-month study period. Most of the identified individuals were sighted only once or twice, with some notable exceptions though. For example, two individuals (CH34 and NL104) were sighted seven times, and WL04 were sighted five times during the study period. In addition, six individuals were sighted four times, while 15 other individuals were also sighted three times during the baseline monitoring period. Repeated sightings of these individuals during the relatively short study period indicated their frequent use of Hong Kong waters during the baseline monitoring study period.

Ranging patterns of the 96 individuals identified during the baseline monitoring surveys were determined by fixed kernel method, and are shown in Appendix IV. Notably, the majority of these individuals ranged extensively across NEL, NWL and WL survey areas, and many of their ranges overlapped with the alignments of HKLR and TM-CLKL as well as the reclamation site of HKBCF during the baseline monitoring period (Appendix IV). In particular, some individuals (e.g. NL136, NL246, NL264, WL05) were sighted in both NEL and NWL survey areas, while others (e.g. NL258, WL04, WL116, WL137) were sighted in both NWL and WL survey areas during the three-month period (Appendix IV). Several individuals were even sighted across all three areas within the relatively short study period (e.g. NL33, NL123, NL226) (Appendix IV). Their frequent movements across these three survey areas will make them more susceptible to the potential disturbance arisen from the construction activities in association with the HZMB Projects, as the HKLR will be constructed at the boundary of NWL and WL survey areas, while the HKBCF and TM-CLKL will be constructed at the boundary of NWL and NEL survey areas. Recent research on social structure analysis also indicated that there are two social clusters in Hong Kong, with their overall 95% UD ranges overlapped at the waters where the HKLR will be constructed (Dungan 2011; Hung 2011). Consequently, individual movement patterns and habitat use should be closely monitored in the vicinity of the work sites of HKLR, TM-CLKL and HKBCF during and after the construction period, to determine whether individual dolphins will be affected by these construction works.

More importantly, many individuals that were sighted during the baseline monitoring period were year-round residents (e.g. EL01, NL98, NL139, WL25), and some were even accompanied by young calves (e.g. NL24, NL33, NL104, NL123). In fact, these were also the individuals being sighted multiple times during the 3-month baseline monitoring period, showing their strong reliance of Hong Kong

waters. Special attention should be paid to the range use of these year-round residents, as their continuous reliance of these three survey areas during and after the HZMB construction period can become an important indicator to determine whether the local dolphins will be affected by various construction works of HZMB Projects.

4. LITERATURE CITED

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Table 1. Individual dolphins identified during HYD-HZMB baseline dolphin monitoring surveys in September-November 2011

ID#	DATE	STG#	AREA
CH34	06/10/11	6	NW LANTAU
	28/10/11	5	NW LANTAU
	01/11/11	6	NE LANTAU
	01/11/11	8	NE LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	6	NW LANTAU
	07/11/11	2	NW LANTAU
CH40	17/10/11	2	W LANTAU
	17/10/11	8	W LANTAU
CH98	02/11/11	13	NW LANTAU
CH108	02/11/11	3	W LANTAU
	02/11/11	8	W LANTAU
CH153	28/10/11	3	NW LANTAU
CH157	02/11/11	3	W LANTAU
EL01	01/11/11	9	NE LANTAU
	02/11/11	14	NW LANTAU
NL11	02/11/11	12	NW LANTAU
	07/11/11	2	NW LANTAU
NL12	02/11/11	12	NW LANTAU
NL24	10/10/11	2	NW LANTAU
	05/11/11	5	NW LANTAU
	05/11/11	8	NW LANTAU
	06/11/11	2	NE LANTAU
NL33	23/09/11	10	NW LANTAU
	01/11/11	8	NE LANTAU
	05/11/11	2	NW LANTAU
	07/11/11	5	NW LANTAU
NL37	16/09/11	4	NW LANTAU
NL46	28/10/11	4	NW LANTAU
NL48	16/09/11	5	NW LANTAU
	02/11/11	14	NW LANTAU
	07/11/11	2	NW LANTAU
NL75	16/09/11	3	NW LANTAU
	16/09/11	7	NW LANTAU
	01/11/11	9	NE LANTAU
NL80	02/11/11	12	NW LANTAU
NL93	05/11/11	6	NW LANTAU
	07/11/11	4	NW LANTAU
NL98	06/10/11	2	NE LANTAU
	01/11/11	8	NE LANTAU
	06/11/11	2	NE LANTAU
	07/11/11	2	NW LANTAU

ID#	DATE	STG#	AREA
NL104	16/09/11	7	NW LANTAU
	23/09/11	10	NW LANTAU
	28/10/11	5	NW LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	6	NW LANTAU
	05/11/11	8	NW LANTAU
	07/11/11	2	NW LANTAU
NL118	16/09/11	7	NW LANTAU
NL120	10/10/11	2	NW LANTAU
	06/11/11	4	NE LANTAU
NL123	06/10/11	4	NW LANTAU
	10/10/11	2	NW LANTAU
	06/11/11	2	NE LANTAU
NL136	16/09/11	7	NW LANTAU
	10/10/11	3	NE LANTAU
	28/10/11	1	NW LANTAU
	28/10/11	3	NW LANTAU
NL139	16/09/11	7	NW LANTAU
	10/10/11	3	NE LANTAU
	01/11/11	9	NE LANTAU
NL165	02/11/11	14	NW LANTAU
	05/11/11	8	NW LANTAU
NL170	06/10/11	1	NE LANTAU
NL176	01/11/11	6	NE LANTAU
	01/11/11	8	NE LANTAU
	06/11/11	4	NE LANTAU
NL179	16/09/11	7	NW LANTAU
	06/11/11	2	NE LANTAU
NL188	28/10/11	3	NW LANTAU
	01/11/11	2	NW LANTAU
	07/11/11	5	NW LANTAU
NL191	07/09/11	1	NW LANTAU
NL202	28/10/11	3	NW LANTAU
	07/11/11	4	NW LANTAU
NL206	17/10/11	6	W LANTAU
NL210	07/09/11	1	NW LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	7	NW LANTAU
	07/11/11	5	NW LANTAU
NL214	28/10/11	5	NW LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	6	NW LANTAU
NL220	10/10/11	3	NE LANTAU
NL224	28/10/11	4	NW LANTAU
NL226	17/10/11	2	W LANTAU
	05/11/11	2	NW LANTAU

Table 1. (cont'd)

ID#	DATE	STG#	AREA
NL230	17/10/11	4	W LANTAU
	02/11/11	12	NW LANTAU
NL233	16/09/11	3	NW LANTAU
	06/10/11	4	NW LANTAU
	28/10/11	4	NW LANTAU
NL241	16/09/11	7	NW LANTAU
	02/11/11	12	NW LANTAU
	07/11/11	2	NW LANTAU
NL242	10/10/11	2	NW LANTAU
NL244	05/09/11	3	W LANTAU
	01/11/11	5	NW LANTAU
	01/11/11	8	NE LANTAU
NL246	16/09/11	7	NW LANTAU
	06/11/11	2	NE LANTAU
NL256	02/11/11	12	NW LANTAU
NL258	05/09/11	3	W LANTAU
	16/09/11	5	NW LANTAU
NL259	07/11/11	5	NW LANTAU
NL260	07/11/11	5	NW LANTAU
NL261	01/11/11	9	NE LANTAU
NL264	23/09/11	11	NW LANTAU
	06/10/11	2	NE LANTAU
	06/11/11	3	NE LANTAU
NL269	02/11/11	12	NW LANTAU
NL272	16/09/11	7	NW LANTAU
	28/10/11	4	NW LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	8	NW LANTAU
NL275	23/09/11	9	W LANTAU
NL278	02/11/11	12	NW LANTAU
NL279	02/11/11	12	NW LANTAU
SL40	23/09/11	4	W LANTAU
SL42	02/11/11	13	NW LANTAU
SL43	28/10/11	4	NW LANTAU
SL48	23/09/11	7	W LANTAU
	17/10/11	3	W LANTAU
	02/11/11	8	W LANTAU
WL04	16/09/11	6	NW LANTAU
	10/10/11	2	NW LANTAU
	17/10/11	1	W LANTAU
	02/11/11	14	NW LANTAU
	05/11/11	5	NW LANTAU
WL05	01/11/11	6	NE LANTAU
	01/11/11	8	NE LANTAU
WL11	07/11/11	5	NW LANTAU
WL25	16/09/11	1	NW LANTAU
	23/09/11	9	W LANTAU
	17/10/11	4	W LANTAU

ID#	DATE	STG#	AREA
WL28	23/09/11	9	W LANTAU
WL42	05/09/11	1	W LANTAU
	02/11/11	6	W LANTAU
WL47	17/10/11	2	W LANTAU
WL48	23/09/11	9	W LANTAU
WL61	17/10/11	4	W LANTAU
WL62	23/09/11	6	W LANTAU
	17/10/11	2	W LANTAU
WL66	07/11/11	8	W LANTAU
WL68	05/09/11	1	W LANTAU
	05/09/11	2	W LANTAU
WL72	23/09/11	4	W LANTAU
	02/11/11	3	W LANTAU
	02/11/11	8	W LANTAU
WL87	23/09/11	6	W LANTAU
WL88	16/09/11	1	NW LANTAU
	02/11/11	6	W LANTAU
WL111	02/11/11	14	NW LANTAU
WL116	16/09/11	4	NW LANTAU
WL118	02/11/11	3	W LANTAU
	02/11/11	8	W LANTAU
WL123	02/11/11	8	W LANTAU
WL124	02/11/11	12	NW LANTAU
WL128	02/11/11	10	W LANTAU
	07/11/11	9	W LANTAU
WL131	23/09/11	6	W LANTAU
	02/11/11	3	W LANTAU
	02/11/11	8	W LANTAU
WL132	23/09/11	6	W LANTAU
WL137	02/11/11	8	W LANTAU
WL138	02/11/11	8	W LANTAU
WL144	02/11/11	4	W LANTAU
WL145	05/09/11	5	W LANTAU
WL146	17/10/11	2	W LANTAU
WL153	07/11/11	8	W LANTAU
WL156	23/09/11	9	W LANTAU
	28/10/11	3	NW LANTAU
WL157	23/09/11	9	W LANTAU
WL158	23/09/11	9	W LANTAU
WL162	16/09/11	3	NW LANTAU
WL163	02/11/11	4	W LANTAU
	07/11/11	9	W LANTAU
WL165	17/10/11	6	W LANTAU
WL167	17/10/11	2	W LANTAU
WL170	07/11/11	11	W LANTAU
WL171	28/10/11	8	W LANTAU

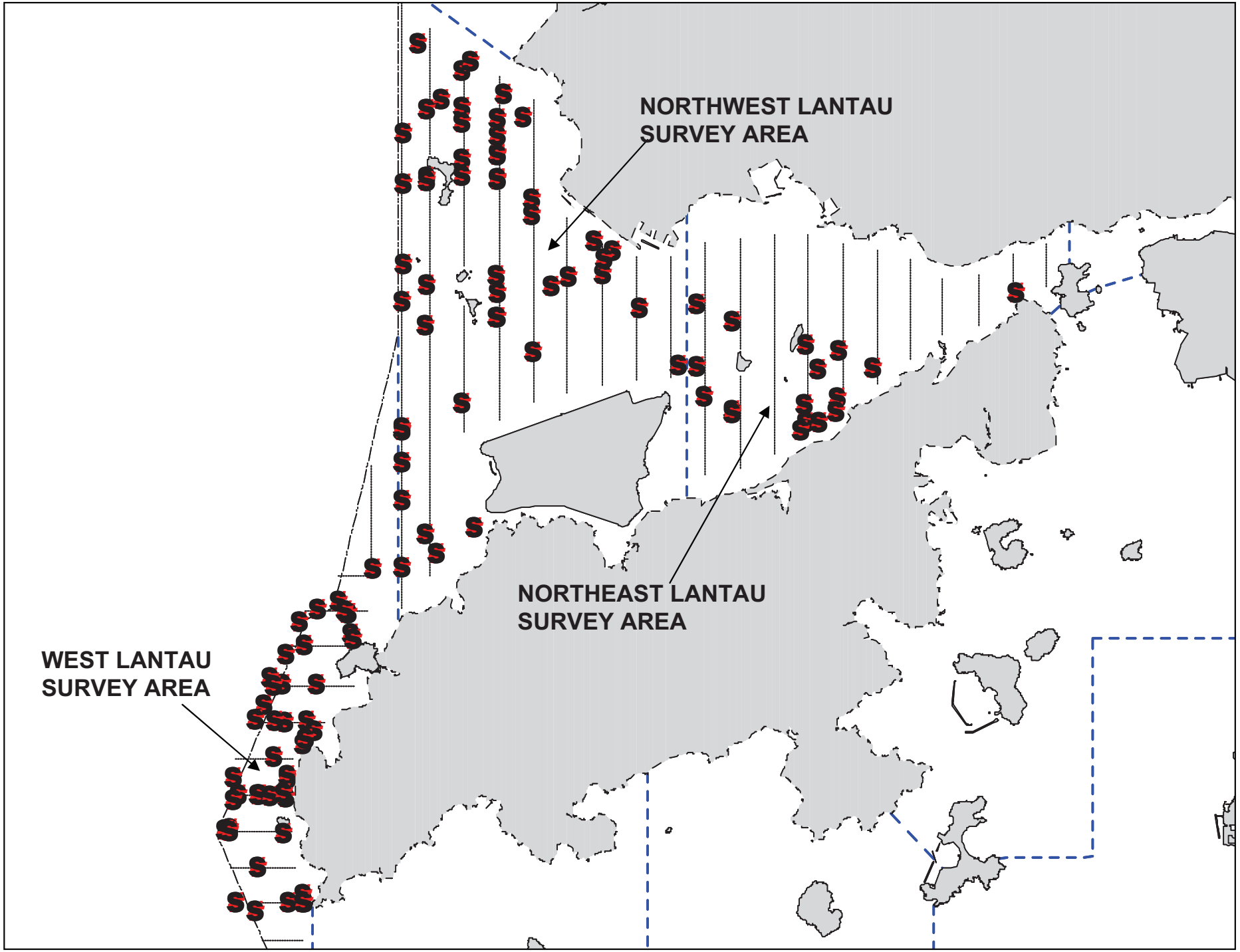


Figure 1. Distribution of Chinese white dolphin sighting during HYD-HZMB baseline monitoring surveys (September – November 2011)

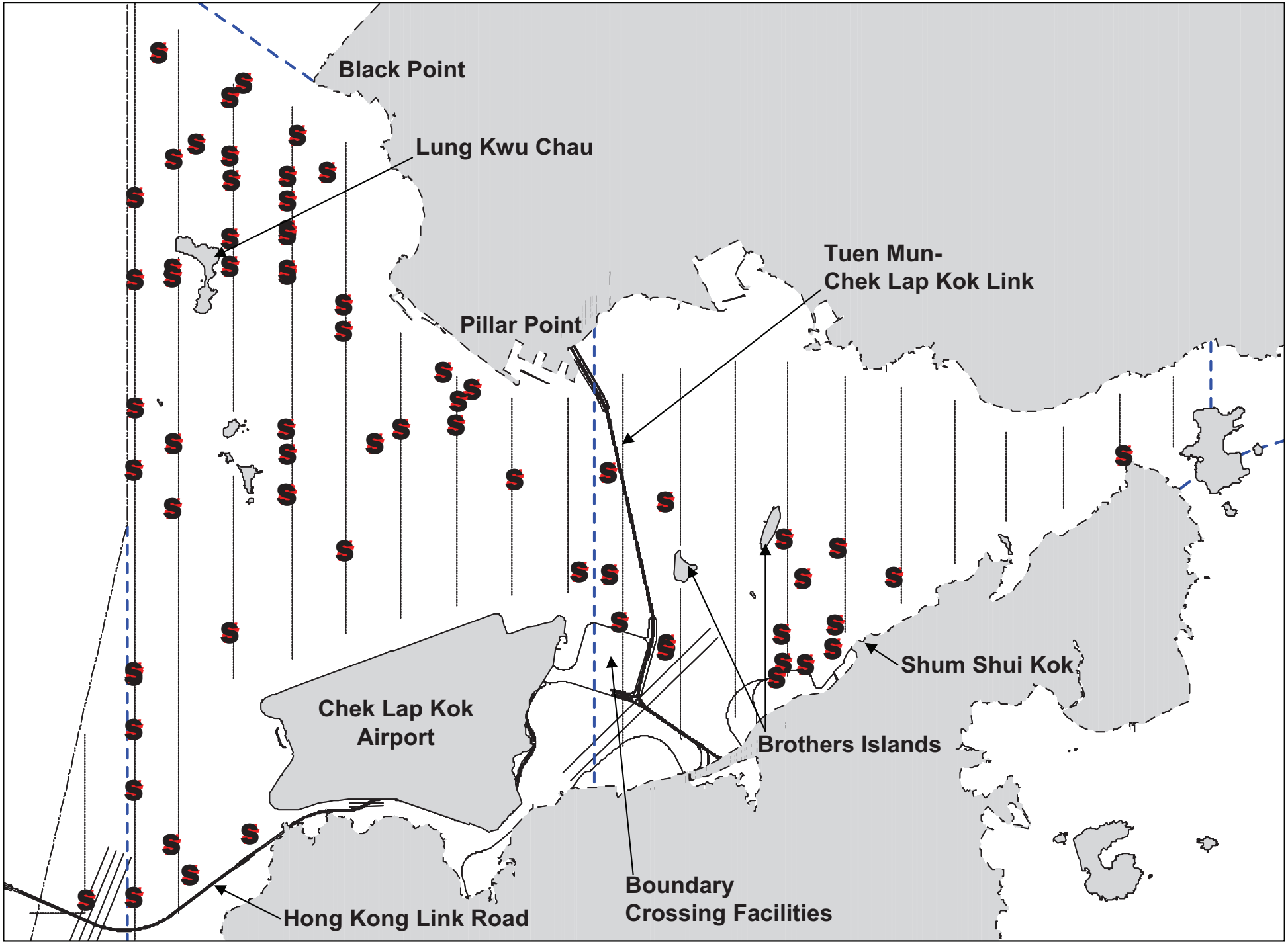


Figure 2. Distribution of Chinese white dolphin sighting in Northwest and Northeast Lantau during HYD-HZMB baseline monitoring surveys (September – November 2011)

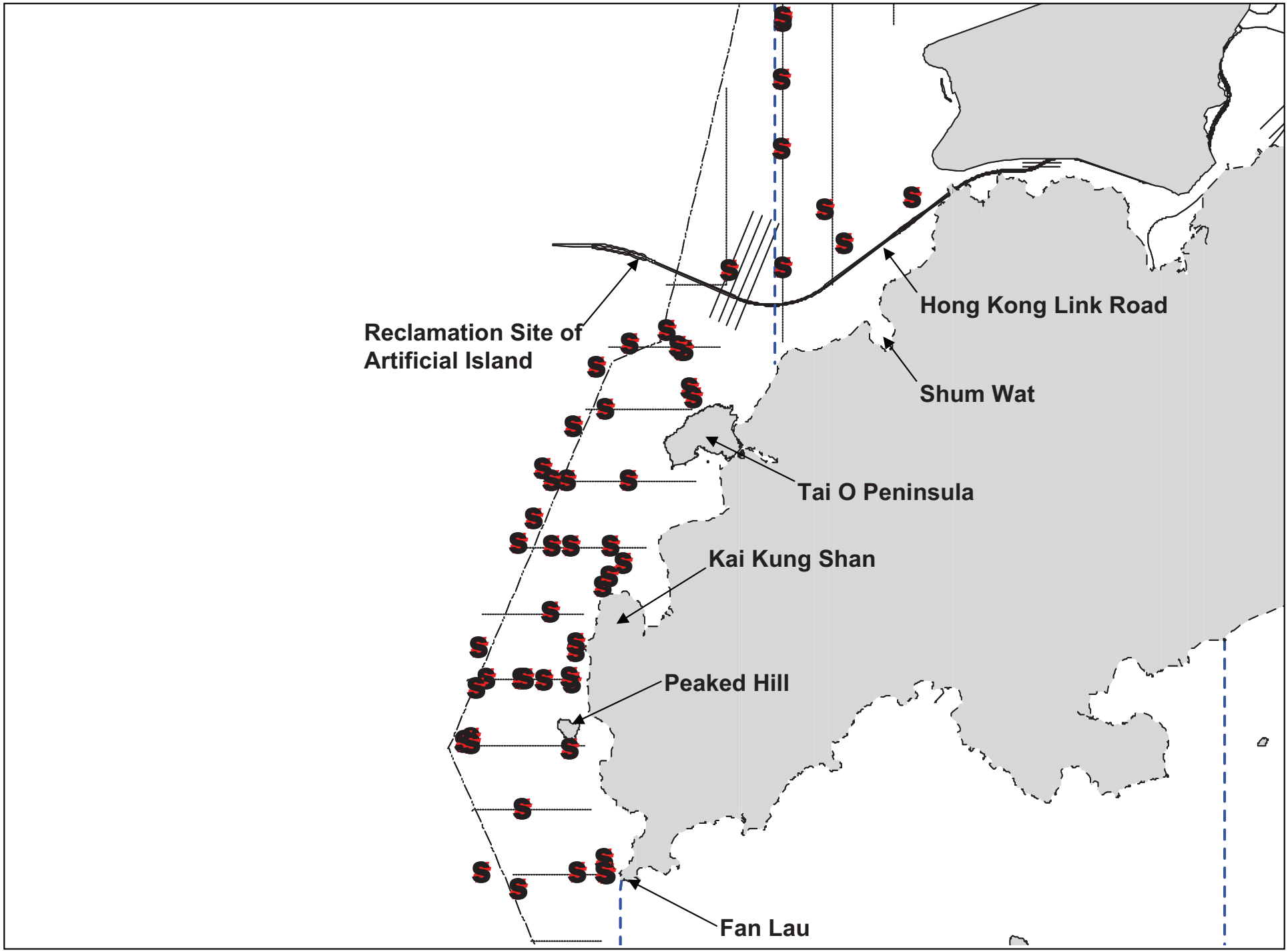


Figure 3. Distribution of Chinese white dolphin sighting in West Lantau during HYD-HZMB baseline monitoring surveys (September – November 2011)

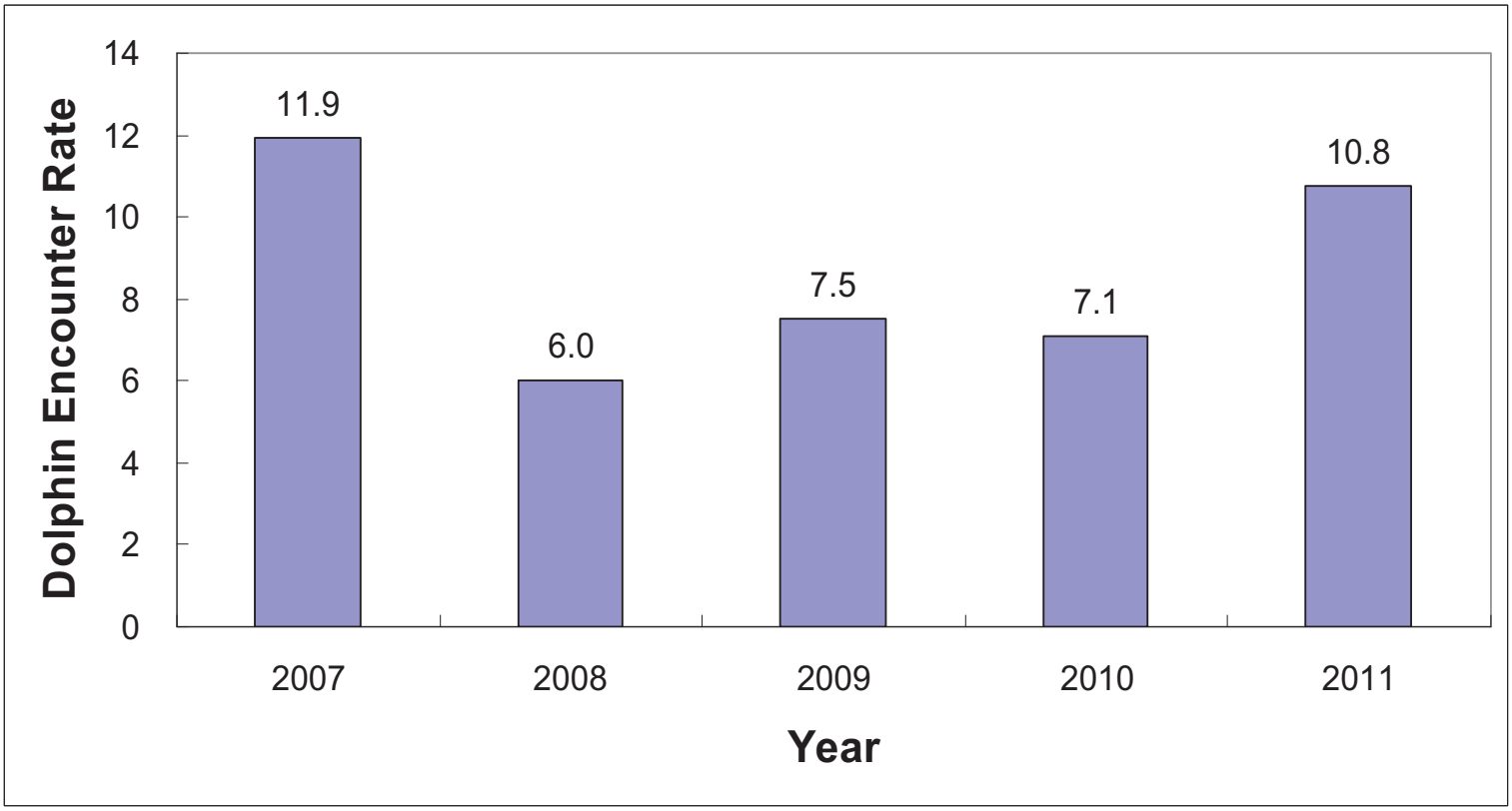


Figure 4a. Temporal trend of encounter rate of Chinese white dolphins (combined from Northwest, Northeast and West Lantau survey areas) during the same 3-month period of September to November from 2007-2011

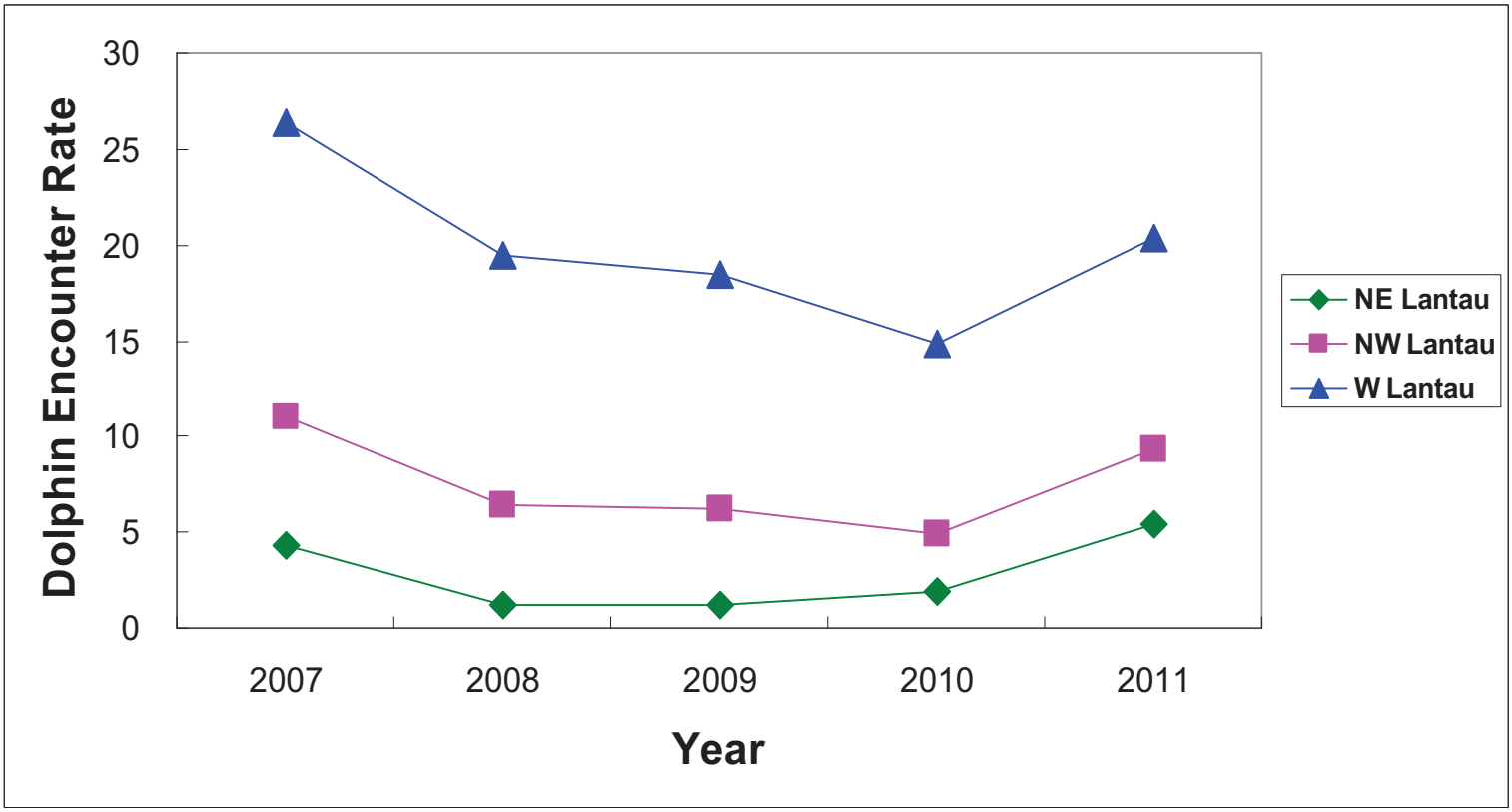


Figure 4b. Temporal trend of encounter rate of Chinese white dolphins in each of the three survey areas during the same 3-month period of September to November from 2007-2011



Figure 5. Distribution of Chinese white dolphins with larger group sizes during HZMB baseline monitoring surveys (green dots: group sizes of 5 or more; purple dots: group sizes of 10 or more)

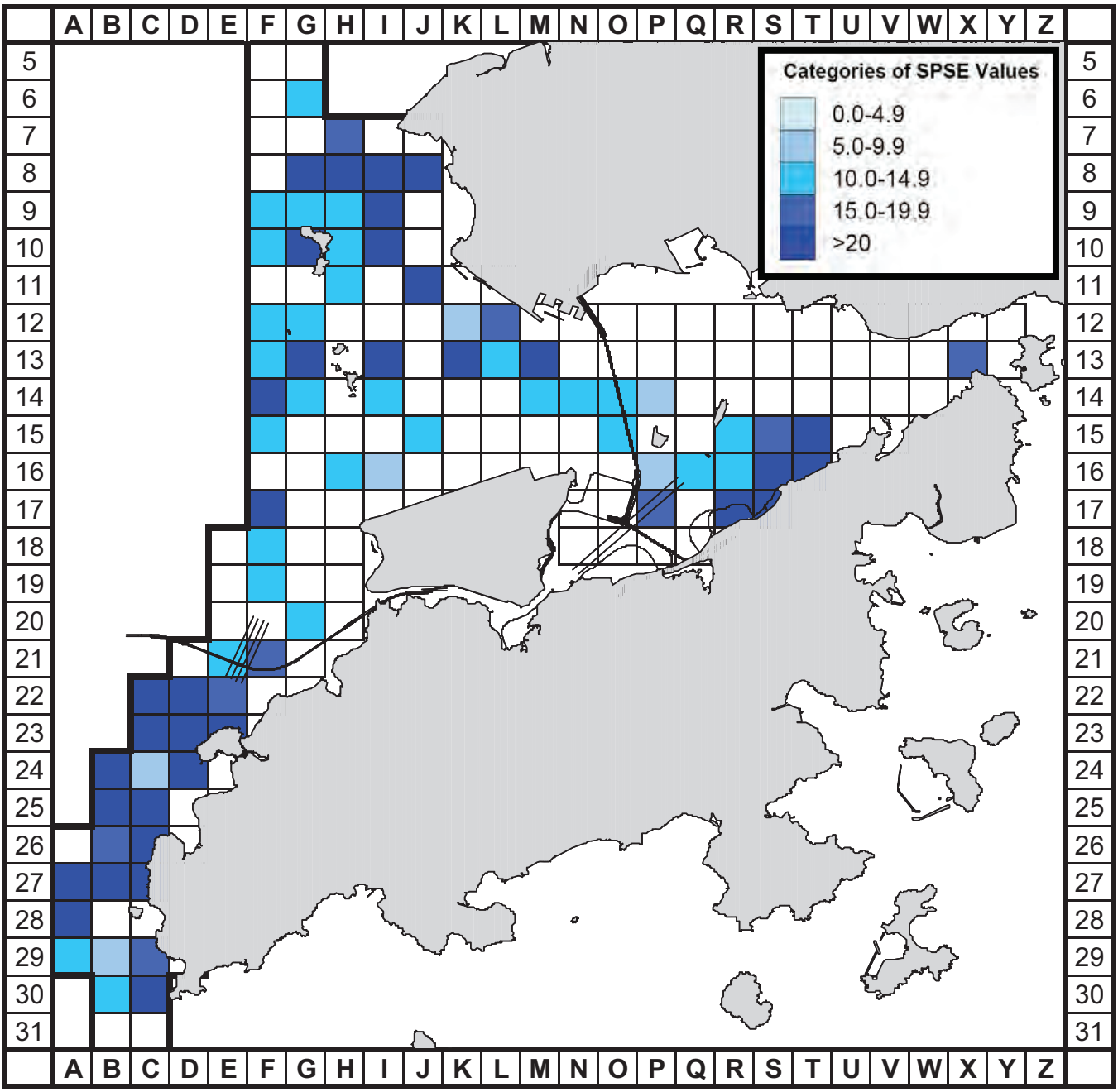


Figure 6. Sighting density of Chinese white dolphins with corrected survey effort per km^2 in Northwest, Northeast and West Lantau survey areas, using data collected during HZMB baseline monitoring period (September to November 2011) (SPSE = no. of on-effort sightings per 100 units of survey effort)

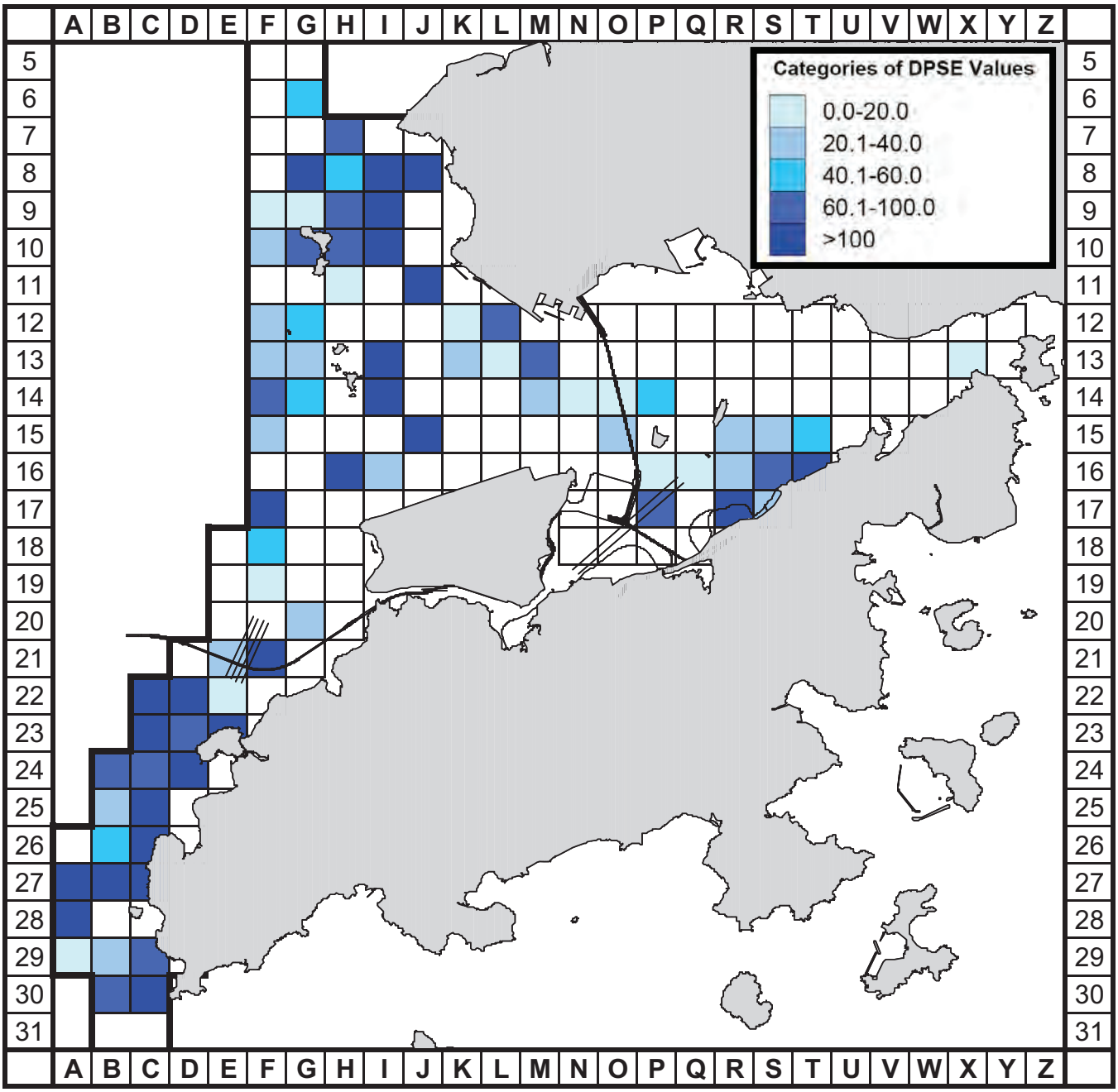


Figure 7. Density of Chinese white dolphins with corrected survey effort per km^2 in Northwest, Northeast and West Lantau survey areas, using data collected during HZMB baseline monitoring period (September to November 2011) (DPSE = no. of dolphins per 100 units of survey effort)

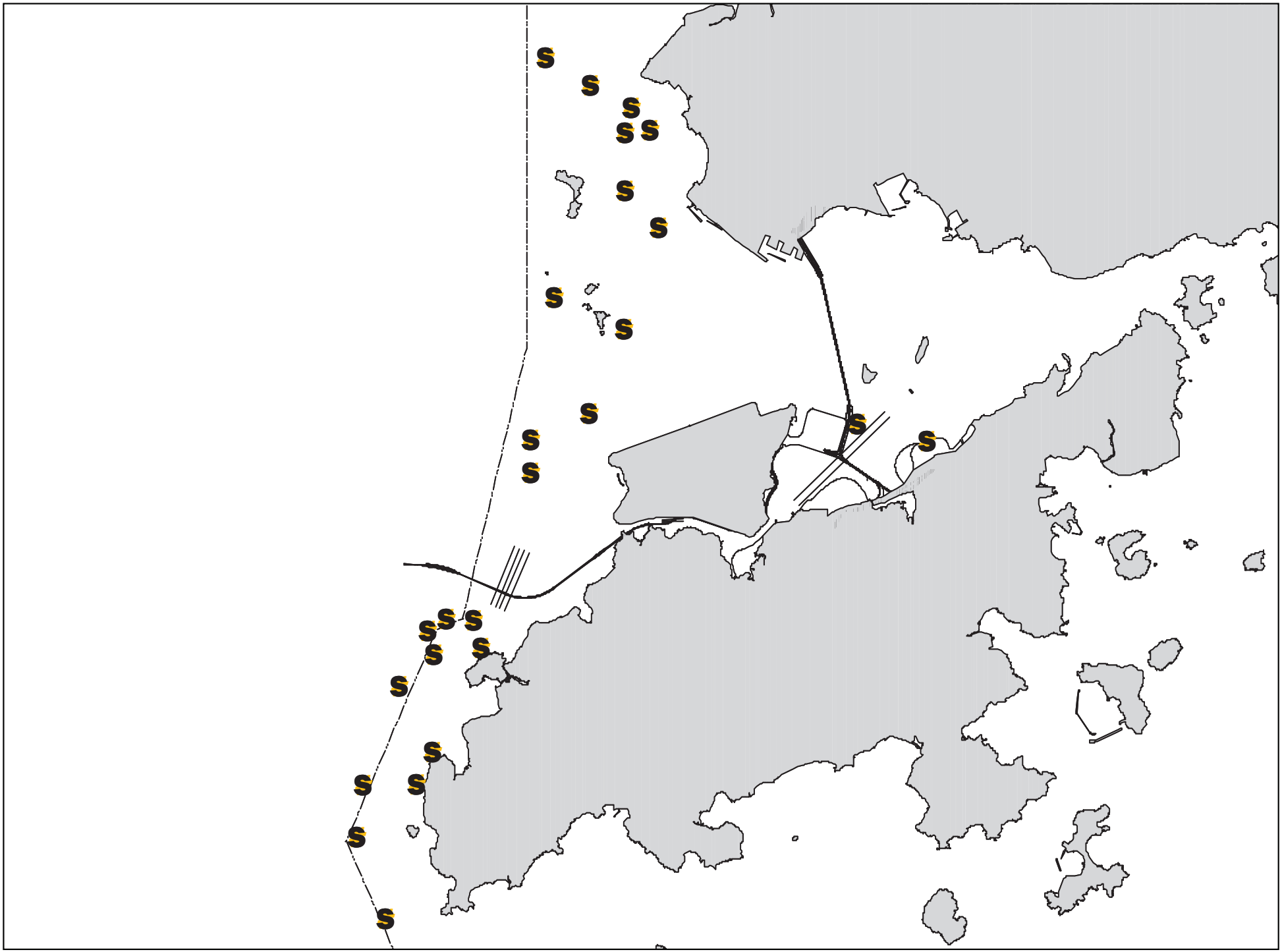


Figure 8. Distribution of young calves of Chinese white dolphins during HZMB baseline monitoring surveys



Figure 9. Distribution of Chinese white dolphins engaged in feeding (blue dots), socializing (pink dots) and traveling (green dots) activities during HZMB baseline monitoring surveys

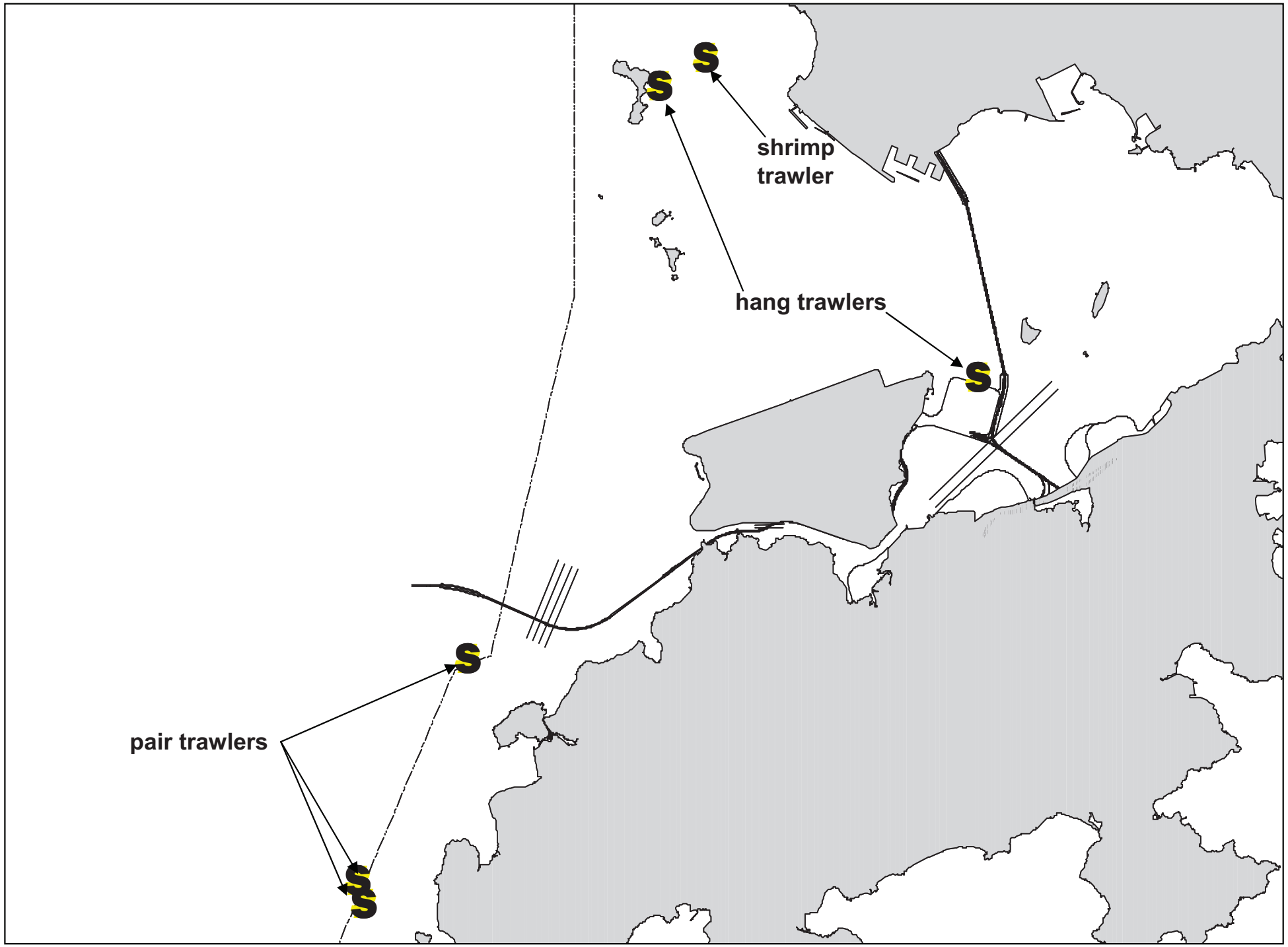


Figure 10. Distribution of dolphin sightings associated with fishing boats during HZMB baseline monitoring surveys

Appendix I. HYD-HZMB Survey Schedule and Details (September-November 2011)

DATE	AREA	SURVEY TIME	# SURVEY HOURS	SEASON	TYPE
5-Sep-11	W LANTAU + NW LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
7-Sep-11	NW LANTAU + NE LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
16-Sep-11	NW LANTAU + NE LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
23-Sep-11	W LANTAU + NW LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
6-Oct-11	NE LANTAU + NW LANTAU	09:00 - 18:00	9.0	AUTUMN	HYD-HZMB
10-Oct-11	NW LANTAU + NE LANTAU	09:30 - 17:00	7.5	AUTUMN	HYD-HZMB
13-Oct-11	NE LANTAU	14:00 - 17:00	3.0	AUTUMN	HYD-HZMB
17-Oct-11	W LANTAU + NW LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
28-Oct-11	NW LANTAU + W LANTAU	09:30 - 17:30	8.0	AUTUMN	HYD-HZMB
1-Nov-11	NW LANTAU + NE LANTAU	09:30 - 18:00	8.5	AUTUMN	HYD-HZMB
2-Nov-11	W LANTAU + NW LANTAU	09:00 - 17:30	8.5	AUTUMN	HYD-HZMB
5-Nov-11	NW LANTAU + NE LANTAU	09:30 - 18:30	9.0	AUTUMN	HYD-HZMB
6-Nov-11	NE LANTAU	14:00 - 17:30	3.5	AUTUMN	HYD-HZMB
7-Nov-11	NW LANTAU + W LANTAU	09:00 - 17:30	8.5	AUTUMN	HYD-HZMB

Appendix II. HYD-HZMB Survey Effort Database (September-November 2011)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
5-Sep-11	W LANTAU	2	8.3	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Sep-11	W LANTAU	3	12.0	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Sep-11	W LANTAU	2	11.1	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Sep-11	W LANTAU	3	7.6	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Sep-11	NW LANTAU	2	10.7	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Sep-11	NW LANTAU	3	28.0	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Sep-11	NW LANTAU	2	4.4	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Sep-11	NW LANTAU	3	2.1	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Sep-11	NW LANTAU	2	14.1	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Sep-11	NW LANTAU	3	19.4	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Sep-11	NW LANTAU	4	3.6	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Sep-11	NW LANTAU	2	1.9	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Sep-11	NW LANTAU	3	10.3	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Sep-11	NW LANTAU	4	0.7	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Sep-11	NE LANTAU	2	8.2	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Sep-11	NE LANTAU	3	21.7	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Sep-11	NE LANTAU	2	7.9	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Sep-11	NE LANTAU	3	3.1	AUTUMN	STANDARD31516	HYD-HZMB	S
16-Sep-11	NW LANTAU	1	2.9	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NW LANTAU	2	27.5	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NW LANTAU	3	6.3	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NW LANTAU	1	0.8	AUTUMN	STANDARD31516	HYD-HZMB	S
16-Sep-11	NW LANTAU	2	5.1	AUTUMN	STANDARD31516	HYD-HZMB	S
16-Sep-11	NW LANTAU	3	0.9	AUTUMN	STANDARD31516	HYD-HZMB	S
16-Sep-11	NE LANTAU	2	4.1	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NE LANTAU	3	22.8	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NE LANTAU	4	2.4	AUTUMN	STANDARD31516	HYD-HZMB	P
16-Sep-11	NE LANTAU	2	6.7	AUTUMN	STANDARD31516	HYD-HZMB	S
16-Sep-11	NE LANTAU	3	3.9	AUTUMN	STANDARD31516	HYD-HZMB	S
23-Sep-11	W LANTAU	2	9.0	AUTUMN	STANDARD31516	HYD-HZMB	P
23-Sep-11	W LANTAU	3	12.0	AUTUMN	STANDARD31516	HYD-HZMB	P
23-Sep-11	W LANTAU	2	11.7	AUTUMN	STANDARD31516	HYD-HZMB	S
23-Sep-11	W LANTAU	3	7.2	AUTUMN	STANDARD31516	HYD-HZMB	S
23-Sep-11	NW LANTAU	2	9.7	AUTUMN	STANDARD31516	HYD-HZMB	P
23-Sep-11	NW LANTAU	3	7.9	AUTUMN	STANDARD31516	HYD-HZMB	P
23-Sep-11	NW LANTAU	2	5.2	AUTUMN	STANDARD31516	HYD-HZMB	S
23-Sep-11	NW LANTAU	3	4.0	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Oct-11	NE LANTAU	0	1.6	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Oct-11	NE LANTAU	1	13.5	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Oct-11	NE LANTAU	2	18.0	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Oct-11	NE LANTAU	1	5.3	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Oct-11	NE LANTAU	2	4.9	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Oct-11	NW LANTAU	1	0.9	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Oct-11	NW LANTAU	2	21.7	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Oct-11	NW LANTAU	1	12.7	AUTUMN	STANDARD31516	HYD-HZMB	S
10-Oct-11	NW LANTAU	2	16.7	AUTUMN	STANDARD31516	HYD-HZMB	P
10-Oct-11	NW LANTAU	3	17.9	AUTUMN	STANDARD31516	HYD-HZMB	P
10-Oct-11	NW LANTAU	2	11.8	AUTUMN	STANDARD31516	HYD-HZMB	S
10-Oct-11	NW LANTAU	3	2.2	AUTUMN	STANDARD31516	HYD-HZMB	S
10-Oct-11	NE LANTAU	2	6.8	AUTUMN	STANDARD31516	HYD-HZMB	P
10-Oct-11	NE LANTAU	3	10.2	AUTUMN	STANDARD31516	HYD-HZMB	P
10-Oct-11	NE LANTAU	4	1.3	AUTUMN	STANDARD31516	HYD-HZMB	P
10-Oct-11	NE LANTAU	2	2.1	AUTUMN	STANDARD31516	HYD-HZMB	S
10-Oct-11	NE LANTAU	3	2.1	AUTUMN	STANDARD31516	HYD-HZMB	S
13-Oct-11	NE LANTAU	2	15.0	AUTUMN	STANDARD31516	HYD-HZMB	P
13-Oct-11	NE LANTAU	3	1.8	AUTUMN	STANDARD31516	HYD-HZMB	P
13-Oct-11	NE LANTAU	2	10.3	AUTUMN	STANDARD31516	HYD-HZMB	S
13-Oct-11	NE LANTAU	3	1.0	AUTUMN	STANDARD31516	HYD-HZMB	S
17-Oct-11	W LANTAU	2	5.2	AUTUMN	STANDARD31516	HYD-HZMB	P
17-Oct-11	W LANTAU	3	10.3	AUTUMN	STANDARD31516	HYD-HZMB	P
17-Oct-11	W LANTAU	4	3.6	AUTUMN	STANDARD31516	HYD-HZMB	P

Appendix II. (cont'd)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
17-Oct-11	W LANTAU	2	3.5	AUTUMN	STANDARD31516	HYD-HZMB	S
17-Oct-11	W LANTAU	3	10.1	AUTUMN	STANDARD31516	HYD-HZMB	S
17-Oct-11	W LANTAU	4	5.2	AUTUMN	STANDARD31516	HYD-HZMB	S
17-Oct-11	NW LANTAU	2	24.9	AUTUMN	STANDARD31516	HYD-HZMB	P
17-Oct-11	NW LANTAU	3	2.6	AUTUMN	STANDARD31516	HYD-HZMB	P
17-Oct-11	NW LANTAU	2	4.5	AUTUMN	STANDARD31516	HYD-HZMB	S
17-Oct-11	NW LANTAU	3	2.1	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	NW LANTAU	1	1.5	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	NW LANTAU	2	9.3	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	NW LANTAU	3	20.9	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	NW LANTAU	1	3.9	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	NW LANTAU	2	2.5	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	NW LANTAU	3	0.9	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	W LANTAU	2	1.3	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	W LANTAU	3	14.9	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	W LANTAU	4	0.9	AUTUMN	STANDARD31516	HYD-HZMB	P
28-Oct-11	W LANTAU	2	1.1	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	W LANTAU	3	12.1	AUTUMN	STANDARD31516	HYD-HZMB	S
28-Oct-11	W LANTAU	4	3.6	AUTUMN	STANDARD31516	HYD-HZMB	S
1-Nov-11	NW LANTAU	1	2.4	AUTUMN	STANDARD31516	HYD-HZMB	P
1-Nov-11	NW LANTAU	2	21.1	AUTUMN	STANDARD31516	HYD-HZMB	P
1-Nov-11	NW LANTAU	3	7.9	AUTUMN	STANDARD31516	HYD-HZMB	P
1-Nov-11	NW LANTAU	1	1.8	AUTUMN	STANDARD31516	HYD-HZMB	S
1-Nov-11	NW LANTAU	2	6.1	AUTUMN	STANDARD31516	HYD-HZMB	S
1-Nov-11	NW LANTAU	3	2.1	AUTUMN	STANDARD31516	HYD-HZMB	S
1-Nov-11	NE LANTAU	2	21.8	AUTUMN	STANDARD31516	HYD-HZMB	P
1-Nov-11	NE LANTAU	2	9.9	AUTUMN	STANDARD31516	HYD-HZMB	S
2-Nov-11	W LANTAU	2	9.0	AUTUMN	STANDARD31516	HYD-HZMB	P
2-Nov-11	W LANTAU	3	6.6	AUTUMN	STANDARD31516	HYD-HZMB	P
2-Nov-11	W LANTAU	4	3.2	AUTUMN	STANDARD31516	HYD-HZMB	P
2-Nov-11	W LANTAU	2	12.1	AUTUMN	STANDARD31516	HYD-HZMB	S
2-Nov-11	W LANTAU	3	7.8	AUTUMN	STANDARD31516	HYD-HZMB	S
2-Nov-11	NW LANTAU	2	17.9	AUTUMN	STANDARD31516	HYD-HZMB	P
2-Nov-11	NW LANTAU	3	4.0	AUTUMN	STANDARD31516	HYD-HZMB	P
2-Nov-11	NW LANTAU	2	7.2	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Nov-11	NW LANTAU	0	2.2	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Nov-11	NW LANTAU	1	10.6	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Nov-11	NW LANTAU	2	19.4	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Nov-11	NW LANTAU	1	3.0	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Nov-11	NW LANTAU	2	4.5	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Nov-11	NE LANTAU	1	1.2	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Nov-11	NE LANTAU	2	15.2	AUTUMN	STANDARD31516	HYD-HZMB	P
5-Nov-11	NE LANTAU	1	1.2	AUTUMN	STANDARD31516	HYD-HZMB	S
5-Nov-11	NE LANTAU	2	8.2	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Nov-11	NE LANTAU	3	10.2	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Nov-11	NE LANTAU	4	3.5	AUTUMN	STANDARD31516	HYD-HZMB	P
6-Nov-11	NE LANTAU	2	4.3	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Nov-11	NE LANTAU	3	7.2	AUTUMN	STANDARD31516	HYD-HZMB	S
6-Nov-11	NE LANTAU	4	1.2	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NW LANTAU	2	14.6	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NW LANTAU	3	16.0	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NW LANTAU	4	7.6	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NW LANTAU	2	3.6	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NW LANTAU	3	3.3	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NW LANTAU	4	0.8	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NE LANTAU	2	0.6	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NE LANTAU	3	13.9	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NE LANTAU	4	5.1	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NE LANTAU	5	0.2	AUTUMN	STANDARD31516	HYD-HZMB	P
7-Nov-11	NE LANTAU	2	4.3	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NE LANTAU	3	9.0	AUTUMN	STANDARD31516	HYD-HZMB	S
7-Nov-11	NE LANTAU	4	6.1	AUTUMN	STANDARD31516	HYD-HZMB	S

Appendix III. HYD-HZMB Chinese White Dolphin Sighting Database (September-November 2011)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Associa

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.
05-Sep-11	1	1111	2	W LANTAU	3	ND	OFF	HYD-HZMB	811890	800623	AUTUMN	NONE
05-Sep-11	2	1143	2	W LANTAU	2	230	ON	HYD-HZMB	809851	801299	AUTUMN	NONE
05-Sep-11	3	1155	4	W LANTAU	2	44	ON	HYD-HZMB	809434	799865	AUTUMN	PAIR
05-Sep-11	4	1244	6	W LANTAU	2	179	ON	HYD-HZMB	806232	800373	AUTUMN	NONE
05-Sep-11	5	1324	8	W LANTAU	2	883	ON	HYD-HZMB	809910	799722	AUTUMN	PAIR
07-Sep-11	1	1055	2	NW LANTAU	2	349	ON	HYD-HZMB	824052	804669	AUTUMN	NONE
07-Sep-11	2	1657	1	NE LANTAU	2	179	ON	HYD-HZMB	821661	817387	AUTUMN	NONE
16-Sep-11	1	1001	6	NW LANTAU	2	ND	OFF	HYD-HZMB	816088	805652	AUTUMN	NONE
16-Sep-11	2	1013	2	NW LANTAU	2	330	ON	HYD-HZMB	816609	805334	AUTUMN	NONE
16-Sep-11	3	1038	4	NW LANTAU	2	87	ON	HYD-HZMB	822356	805335	AUTUMN	NONE
16-Sep-11	4	1102	2	NW LANTAU	1	59	ON	HYD-HZMB	826431	805354	AUTUMN	NONE
16-Sep-11	5	1144	3	NW LANTAU	2	157	ON	HYD-HZMB	826350	807424	AUTUMN	NONE
16-Sep-11	6	1204	1	NW LANTAU	2	4	ON	HYD-HZMB	823271	807428	AUTUMN	NONE
16-Sep-11	7	1210	9	NW LANTAU	2	73	ON	HYD-HZMB	822585	807406	AUTUMN	NONE
16-Sep-11	8	1350	1	NW LANTAU	2	ND	OFF	HYD-HZMB	824384	810767	AUTUMN	NONE
16-Sep-11	9	1406	3	NW LANTAU	2	295	ON	HYD-HZMB	822843	811548	AUTUMN	NONE
23-Sep-11	1	1104	1	W LANTAU	3	ND	OFF	HYD-HZMB	813867	803153	AUTUMN	NONE
23-Sep-11	2	1115	2	W LANTAU	3	130	ON	HYD-HZMB	813284	801266	AUTUMN	NONE
23-Sep-11	3	1126	2	W LANTAU	2	7	ON	HYD-HZMB	811503	800365	AUTUMN	NONE
23-Sep-11	4	1149	5	W LANTAU	2	176	ON	HYD-HZMB	809973	801299	AUTUMN	NONE
23-Sep-11	5	1211	1	W LANTAU	2	ND	OFF	HYD-HZMB	809444	800411	AUTUMN	NONE
23-Sep-11	6	1222	4	W LANTAU	2	21	ON	HYD-HZMB	808526	799605	AUTUMN	NONE
23-Sep-11	7	1247	2	W LANTAU	2	351	ON	HYD-HZMB	806462	801797	AUTUMN	NONE
23-Sep-11	8	1315	1	W LANTAU	3	433	ON	HYD-HZMB	806474	801322	AUTUMN	NONE
23-Sep-11	9	1417	9	W LANTAU	2	125	ON	HYD-HZMB	812465	801150	AUTUMN	NONE
23-Sep-11	10	1517	4	NW LANTAU	3	26	ON	HYD-HZMB	819489	804649	AUTUMN	NONE
23-Sep-11	11	1538	2	NW LANTAU	3	137	ON	HYD-HZMB	823011	804646	AUTUMN	NONE
23-Sep-11	12	1608	1	NW LANTAU	2	776	ON	HYD-HZMB	828568	805770	AUTUMN	NONE
6-Oct-11	1	1040	1	NE LANTAU	2	633	ON	HYD-HZMB	823250	822571	AUTUMN	NONE
6-Oct-11	2	1306	5	NE LANTAU	2	57	ON	HYD-HZMB	822462	814277	AUTUMN	NONE
6-Oct-11	3	1455	2	NW LANTAU	1	236	ON	HYD-HZMB	823764	810478	AUTUMN	NONE

Appendix III. (cont'd)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Associa

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.
6-Oct-11	4	1500	6	NW LANTAU	2	151	ON	HYD-HZMB	824185	810520	AUTUMN	NONE
6-Oct-11	5	1517	2	NW LANTAU	2	96	ON	HYD-HZMB	824672	810243	AUTUMN	NONE
6-Oct-11	6	1552	1	NW LANTAU	2	ND	OFF	HYD-HZMB	825827	808442	AUTUMN	NONE
6-Oct-11	7	1615	1	NW LANTAU	2	ND	OFF	HYD-HZMB	821630	808455	AUTUMN	NONE
10-Oct-11	1	1009	3	NW LANTAU	3	183	ON	HYD-HZMB	815702	804652	AUTUMN	NONE
10-Oct-11	2	1207	9	NW LANTAU	3	382	ON	HYD-HZMB	820228	806382	AUTUMN	NONE
10-Oct-11	3	1629	3	NE LANTAU	2	167	ON	HYD-HZMB	820354	817344	AUTUMN	NONE
13-Oct-11	3	1459	2	NE LANTAU	2	42	ON	HYD-HZMB	820015	814284	AUTUMN	NONE
17-Oct-11	1	1014	6	W LANTAU	3	275	ON	HYD-HZMB	814765	802774	AUTUMN	NONE
17-Oct-11	2	1023	10	W LANTAU	3	216	ON	HYD-HZMB	814545	802165	AUTUMN	PAIR
17-Oct-11	3	1045	3	W LANTAU	3	505	ON	HYD-HZMB	812654	800769	AUTUMN	NONE
17-Oct-11	4	1116	5	W LANTAU	3	606	ON	HYD-HZMB	810461	800888	AUTUMN	NONE
17-Oct-11	5	1131	2	W LANTAU	4	ND	OFF	HYD-HZMB	809301	799700	AUTUMN	NONE
17-Oct-11	6	1136	3	W LANTAU	3	ND	OFF	HYD-HZMB	808460	799481	AUTUMN	NONE
17-Oct-11	7	1243	1	W LANTAU	3	104	ON	HYD-HZMB	809432	800473	AUTUMN	NONE
17-Oct-11	8	1324	5	W LANTAU	2	142	ON	HYD-HZMB	814203	801628	AUTUMN	NONE
17-Oct-11	9	1402	1	W LANTAU	2	328	ON	HYD-HZMB	814443	803020	AUTUMN	NONE
17-Oct-11	10	1548	1	NW LANTAU	2	583	ON	HYD-HZMB	827080	807435	AUTUMN	SHRIMP
17-Oct-11	11	1609	1	NW LANTAU	2	ND	OFF	HYD-HZMB	822562	807416	AUTUMN	NONE
28-Oct-11	1	0953	1	NW LANTAU	2	662	ON	HYD-HZMB	823699	809479	AUTUMN	NONE
28-Oct-11	2	1004	1	NW LANTAU	2	ND	OFF	HYD-HZMB	823445	809004	AUTUMN	NONE
28-Oct-11	3	1044	8	NW LANTAU	3	0	ON	HYD-HZMB	823703	807398	AUTUMN	NONE
28-Oct-11	4	1117	7	NW LANTAU	3	160	ON	HYD-HZMB	827579	807426	AUTUMN	NONE
28-Oct-11	5	1129	4	NW LANTAU	3	93	ON	HYD-HZMB	828022	807416	AUTUMN	NONE
28-Oct-11	6	1412	2	W LANTAU	3	27	ON	HYD-HZMB	811457	801220	AUTUMN	NONE
28-Oct-11	7	1418	3	W LANTAU	3	235	ON	HYD-HZMB	811467	801859	AUTUMN	NONE
28-Oct-11	8	1518	4	W LANTAU	3	64	ON	HYD-HZMB	808482	799512	AUTUMN	NONE
1-Nov-11	1	0952	2	NW LANTAU	2	ND	OFF	HYD-HZMB	816794	806746	AUTUMN	NONE
1-Nov-11	2	1021	4	NW LANTAU	2	161	ON	HYD-HZMB	819534	804649	AUTUMN	NONE
1-Nov-11	3	1135	2	NW LANTAU	1	524	ON	HYD-HZMB	828356	806387	AUTUMN	NONE
1-Nov-11	4	1153	1	NW LANTAU	2	ND	OFF	HYD-HZMB	826950	806395	AUTUMN	NONE

Appendix III. (cont'd)

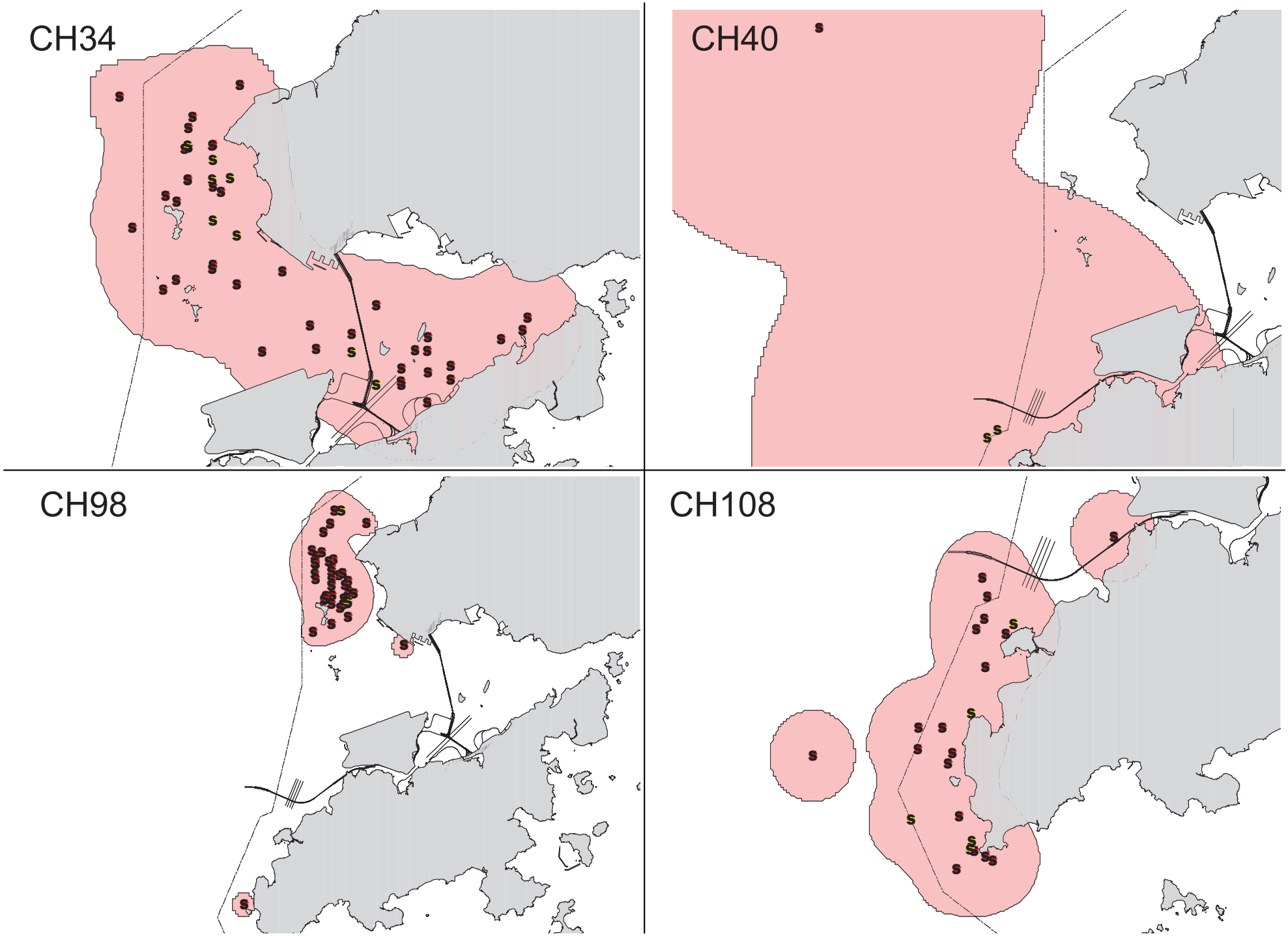
(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Associa

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.
1-Nov-11	5	1156	5	NW LANTAU	2	161	ON	HYD-HZMB	826473	806394	AUTUMN	HANG
1-Nov-11	6	1405	4	NE LANTAU	2	350	ON	HYD-HZMB	821213	813245	AUTUMN	NONE
1-Nov-11	7	1416	1	NE LANTAU	2	ND	OFF	HYD-HZMB	820404	813440	AUTUMN	HANG
1-Nov-11	8	1505	8	NE LANTAU	2	277	ON	HYD-HZMB	819926	814273	AUTUMN	NONE
1-Nov-11	9	1612	4	NE LANTAU	2	159	ON	HYD-HZMB	819702	816406	AUTUMN	NONE
2-Nov-11	1	0957	2	W LANTAU	2	564	ON	HYD-HZMB	815660	803796	AUTUMN	NONE
2-Nov-11	2	1021	1	W LANTAU	2	29	ON	HYD-HZMB	814454	803072	AUTUMN	NONE
2-Nov-11	3	1026	10	W LANTAU	2	561	ON	HYD-HZMB	813723	803204	AUTUMN	NONE
2-Nov-11	4	1044	4	W LANTAU	2	316	ON	HYD-HZMB	813560	801782	AUTUMN	NONE
2-Nov-11	5	1114	1	W LANTAU	3	746	ON	HYD-HZMB	809386	801246	AUTUMN	NONE
2-Nov-11	6	1120	8	W LANTAU	3	112	ON	HYD-HZMB	809409	800793	AUTUMN	NONE
2-Nov-11	7	1144	1	W LANTAU	2	92	ON	HYD-HZMB	808449	799615	AUTUMN	NONE
2-Nov-11	8	1301	14	W LANTAU	2	303	ON	HYD-HZMB	810847	801745	AUTUMN	NONE
2-Nov-11	9	1343	4	W LANTAU	2	259	ON	HYD-HZMB	812455	800903	AUTUMN	NONE
2-Nov-11	10	1403	6	W LANTAU	2	243	ON	HYD-HZMB	814510	802959	AUTUMN	NONE
2-Nov-11	11	1501	2	NW LANTAU	2	30	ON	HYD-HZMB	826309	805353	AUTUMN	NONE
2-Nov-11	12	1513	18	NW LANTAU	2	282	ON	HYD-HZMB	828303	805357	AUTUMN	NONE
2-Nov-11	13	1555	3	NW LANTAU	2	262	ON	HYD-HZMB	827025	807425	AUTUMN	NONE
2-Nov-11	14	1601	12	NW LANTAU	2	263	ON	HYD-HZMB	826405	807424	AUTUMN	NONE
5-Nov-11	1	1018	1	NW LANTAU	2	204	ON	HYD-HZMB	817540	804645	AUTUMN	NONE
5-Nov-11	2	1025	4	NW LANTAU	2	220	ON	HYD-HZMB	818581	804647	AUTUMN	NONE
5-Nov-11	3	1110	2	NW LANTAU	2	220	ON	HYD-HZMB	826255	804663	AUTUMN	NONE
5-Nov-11	4	1121	1	NW LANTAU	2	534	ON	HYD-HZMB	827651	804666	AUTUMN	NONE
5-Nov-11	5	1138	6	NW LANTAU	1	453	ON	HYD-HZMB	830119	805104	AUTUMN	NONE
5-Nov-11	6	1153	7	NW LANTAU	1	248	ON	HYD-HZMB	829353	806389	AUTUMN	NONE
5-Nov-11	7	1208	5	NW LANTAU	1	21	ON	HYD-HZMB	827946	806397	AUTUMN	NONE
5-Nov-11	8	1321	8	NW LANTAU	2	312	ON	HYD-HZMB	825384	808431	AUTUMN	NONE
5-Nov-11	9	1516	4	NE LANTAU	1	195	ON	HYD-HZMB	820189	816376	AUTUMN	NONE
5-Nov-11	10	1524	3	NE LANTAU	2	ND	OFF	HYD-HZMB	821141	816768	AUTUMN	NONE
5-Nov-11	11	1537	2	NE LANTAU	1	136	ON	HYD-HZMB	821828	816409	AUTUMN	NONE
5-Nov-11	12	1614	2	NE LANTAU	2	193	ON	HYD-HZMB	821172	818396	AUTUMN	NONE

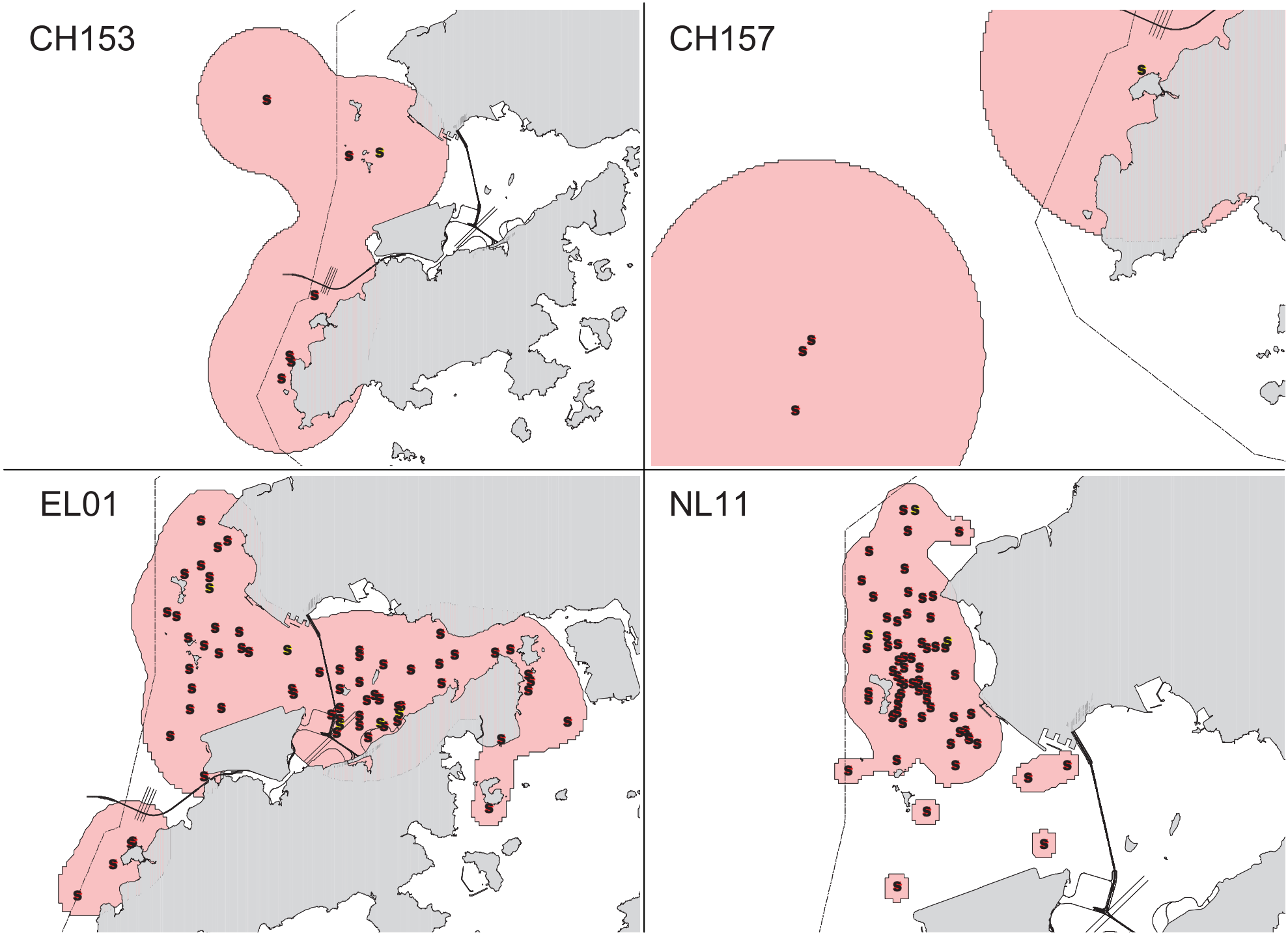
Appendix III. (cont'd)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Associa

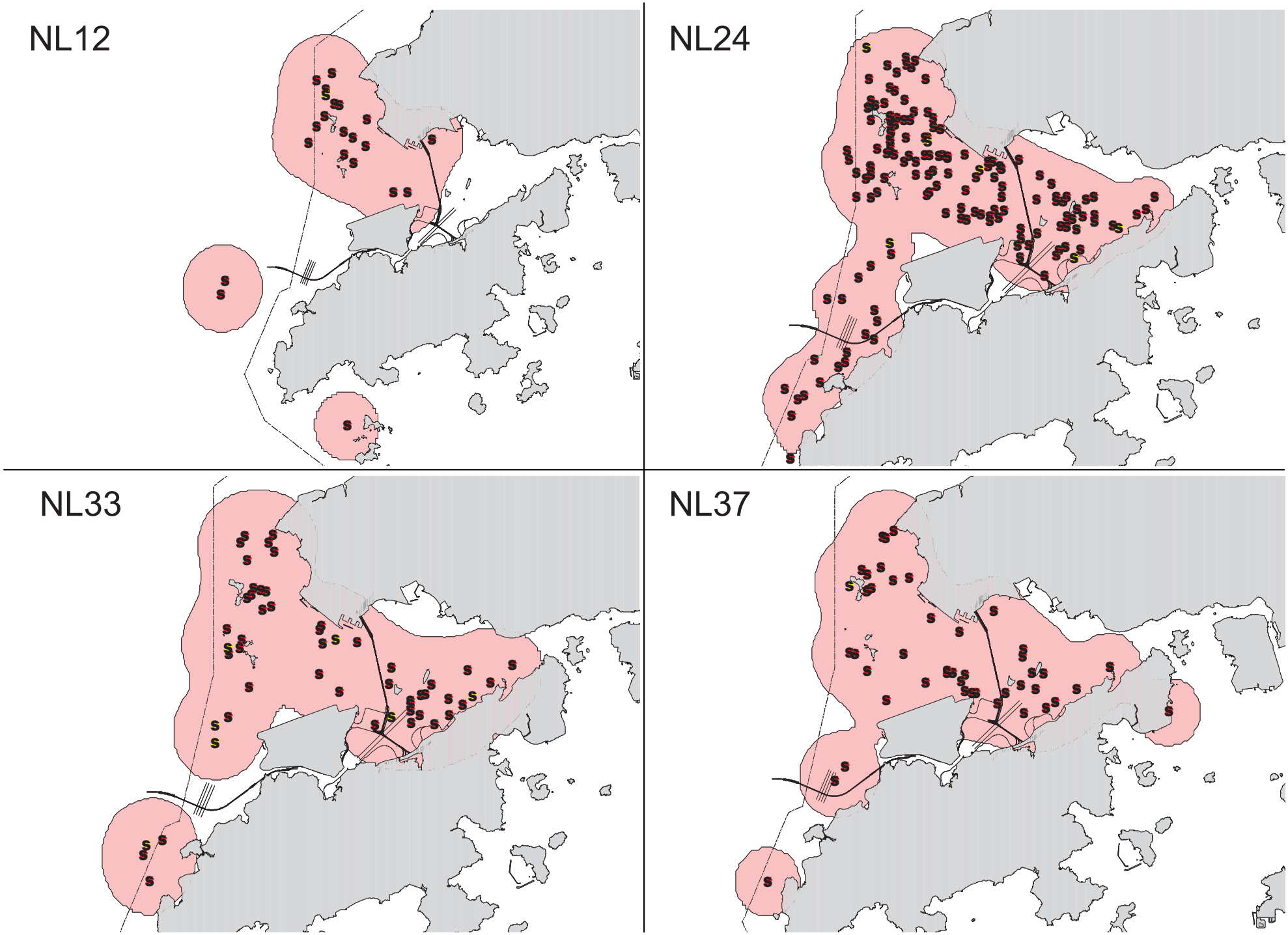
DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.
6-Nov-11	1	1447	2	NE LANTAU	4	92	ON	HYD-HZMB	822951	813237	AUTUMN	NONE
6-Nov-11	2	1543	8	NE LANTAU	3	44	ON	HYD-HZMB	819459	816292	AUTUMN	NONE
6-Nov-11	3	1605	2	NE LANTAU	2	163	ON	HYD-HZMB	819668	816808	AUTUMN	NONE
6-Nov-11	4	1611	2	NE LANTAU	2	18	ON	HYD-HZMB	819956	817303	AUTUMN	NONE
7-Nov-11	1	0922	1	NW LANTAU	2	ND	OFF	HYD-HZMB	821258	812720	AUTUMN	NONE
7-Nov-11	2	1116	8	NW LANTAU	2	790	ON	HYD-HZMB	828087	808158	AUTUMN	NONE
7-Nov-11	3	1136	4	NW LANTAU	2	59	ON	HYD-HZMB	828708	807603	AUTUMN	NONE
7-Nov-11	4	1146	3	NW LANTAU	2	160	ON	HYD-HZMB	829607	806637	AUTUMN	NONE
7-Nov-11	5	1226	6	NW LANTAU	3	ND	OFF	HYD-HZMB	823463	805358	AUTUMN	NONE
7-Nov-11	6	1411	1	W LANTAU	3	245	ON	HYD-HZMB	811458	800921	AUTUMN	NONE
7-Nov-11	7	1421	1	W LANTAU	2	ND	OFF	HYD-HZMB	811189	802075	AUTUMN	NONE
7-Nov-11	8	1424	5	W LANTAU	2	52	ON	HYD-HZMB	810991	801838	AUTUMN	NONE
7-Nov-11	9	1436	4	W LANTAU	3	68	ON	HYD-HZMB	809464	801195	AUTUMN	NONE
7-Nov-11	10	1507	3	W LANTAU	2	48	ON	HYD-HZMB	807450	800438	AUTUMN	NONE
7-Nov-11	11	1518	3	W LANTAU	2	105	ON	HYD-HZMB	806694	801756	AUTUMN	NONE
7-Nov-11	12	1537	2	W LANTAU	3	ND	OFF	HYD-HZMB	806488	799775	AUTUMN	NONE
7-Nov-11	13	1545	1	W LANTAU	3	49	ON	HYD-HZMB	806484	801755	AUTUMN	NONE
7-Nov-11	14	1554	1	W LANTAU	2	ND	OFF	HYD-HZMB	808368	801193	AUTUMN	NONE
7-Nov-11	15	1625	1	W LANTAU	3	ND	OFF	HYD-HZMB	812463	802150	AUTUMN	NONE



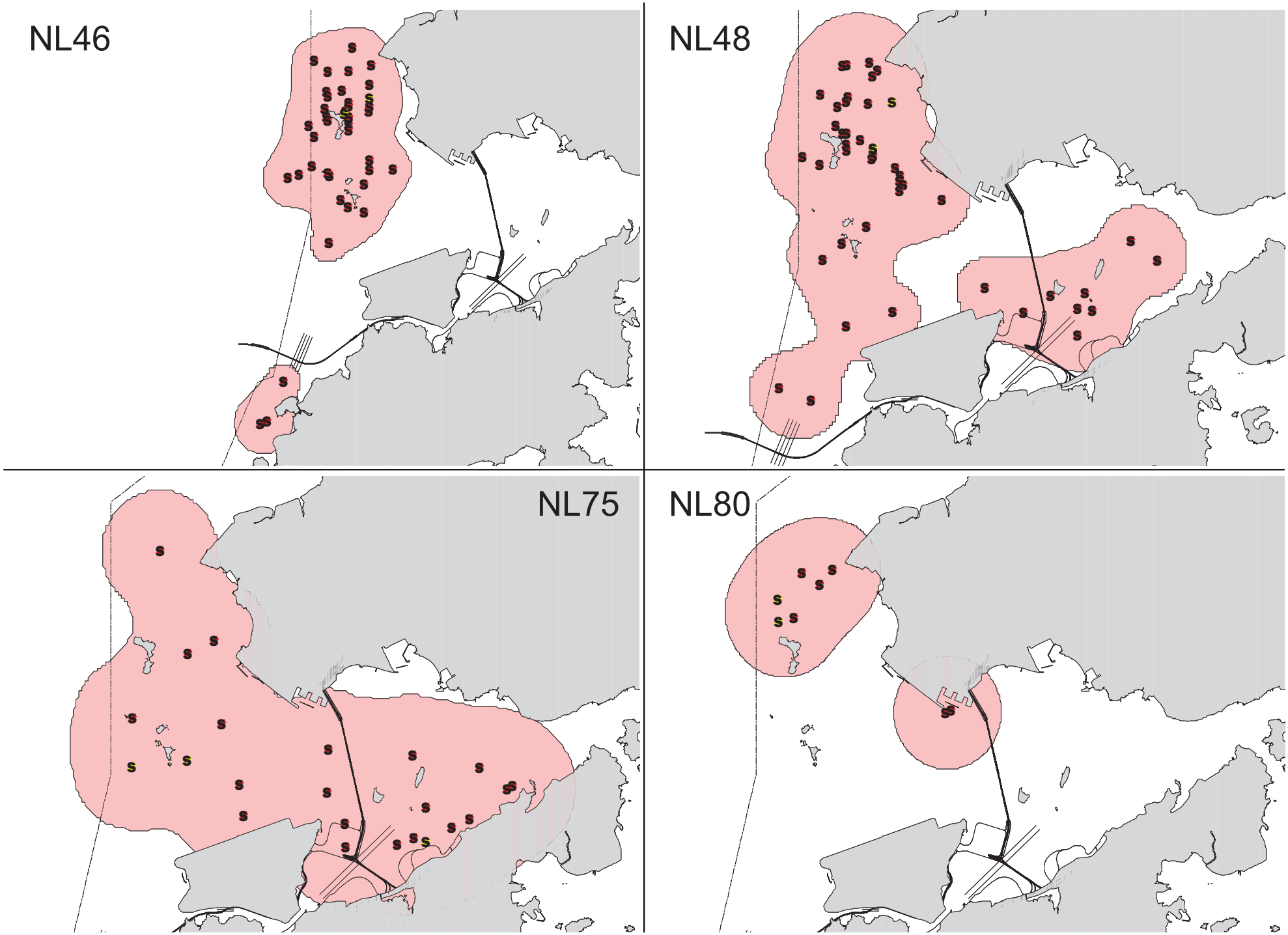
Appendix IV. Ranging patterns (95% kernel ranges) of 96 individual dolphins that were identified during HYD-HZMB baseline monitoring surveys (yellow dots: sightings made during September to November 2011)



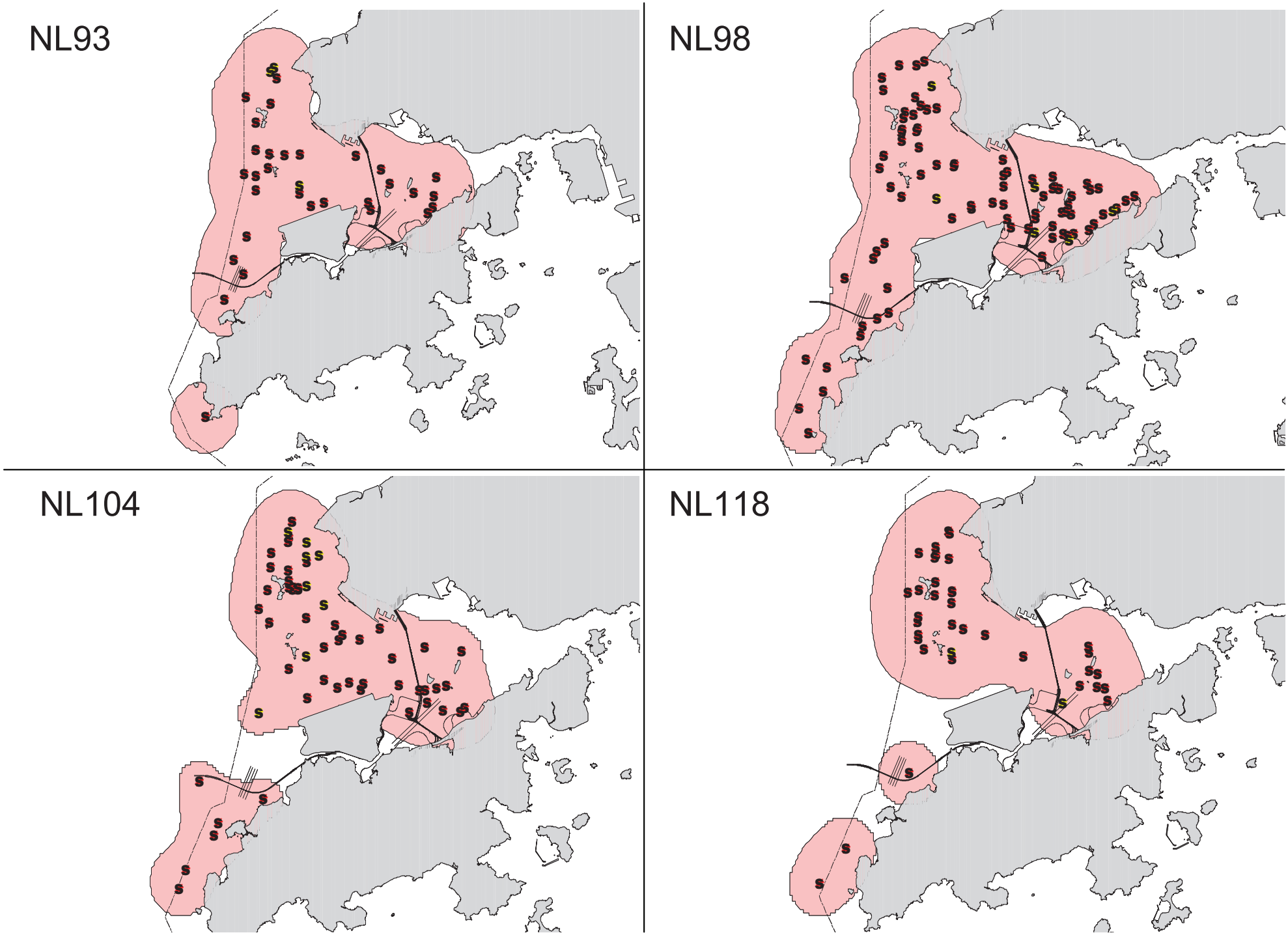
Appendix IV. (cont'd)



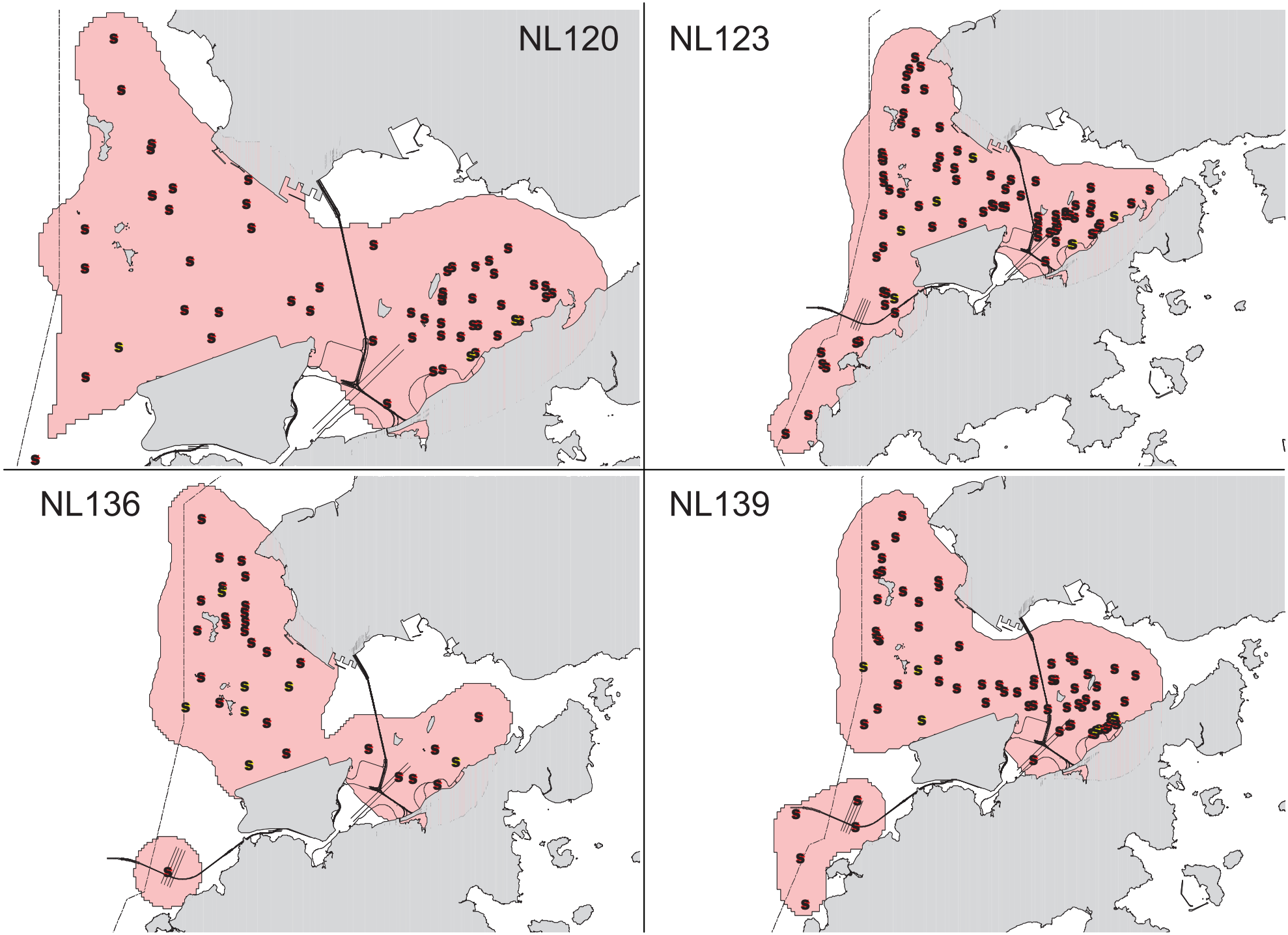
Appendix IV. (cont'd)



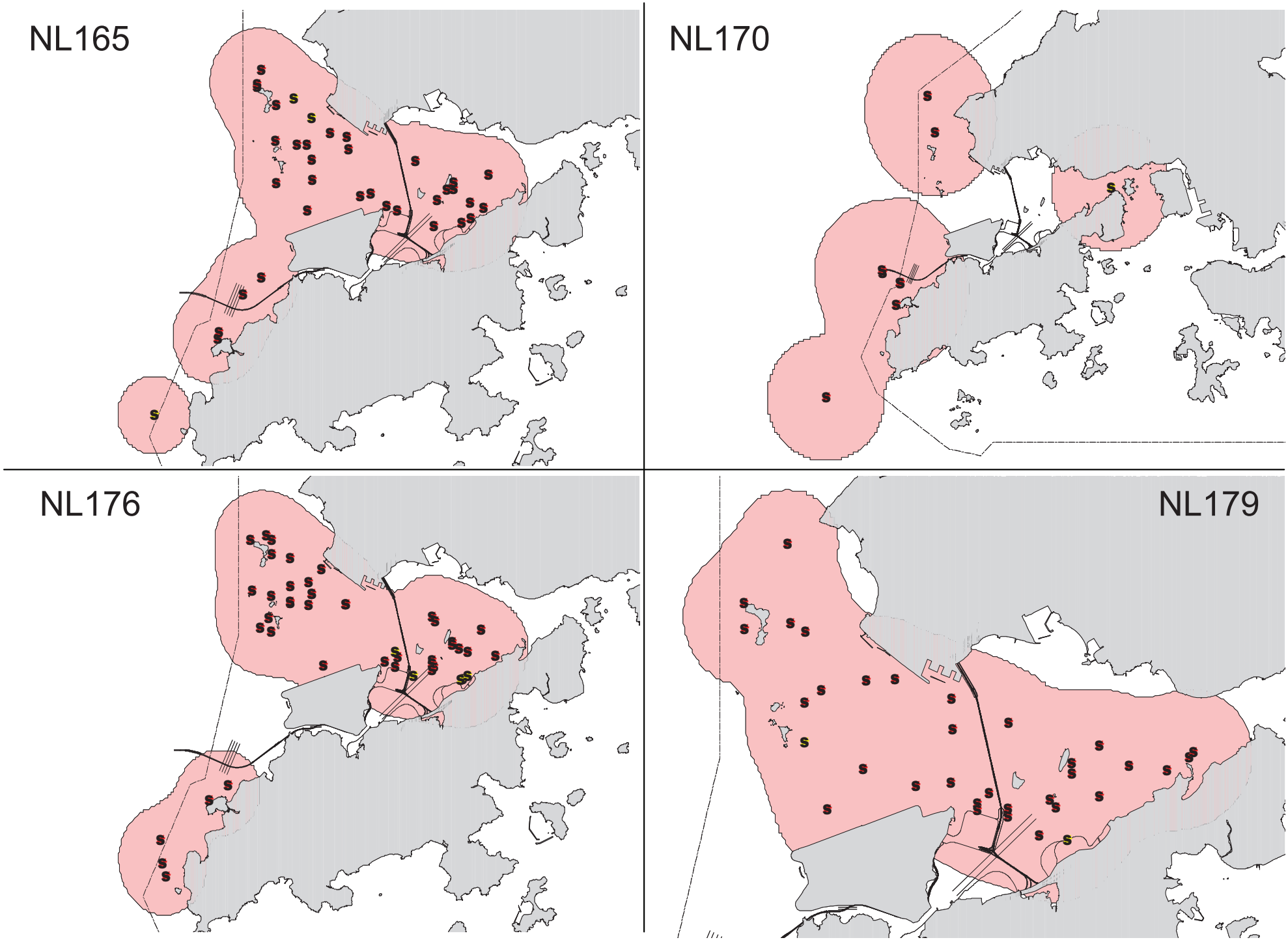
Appendix IV. (cont'd)



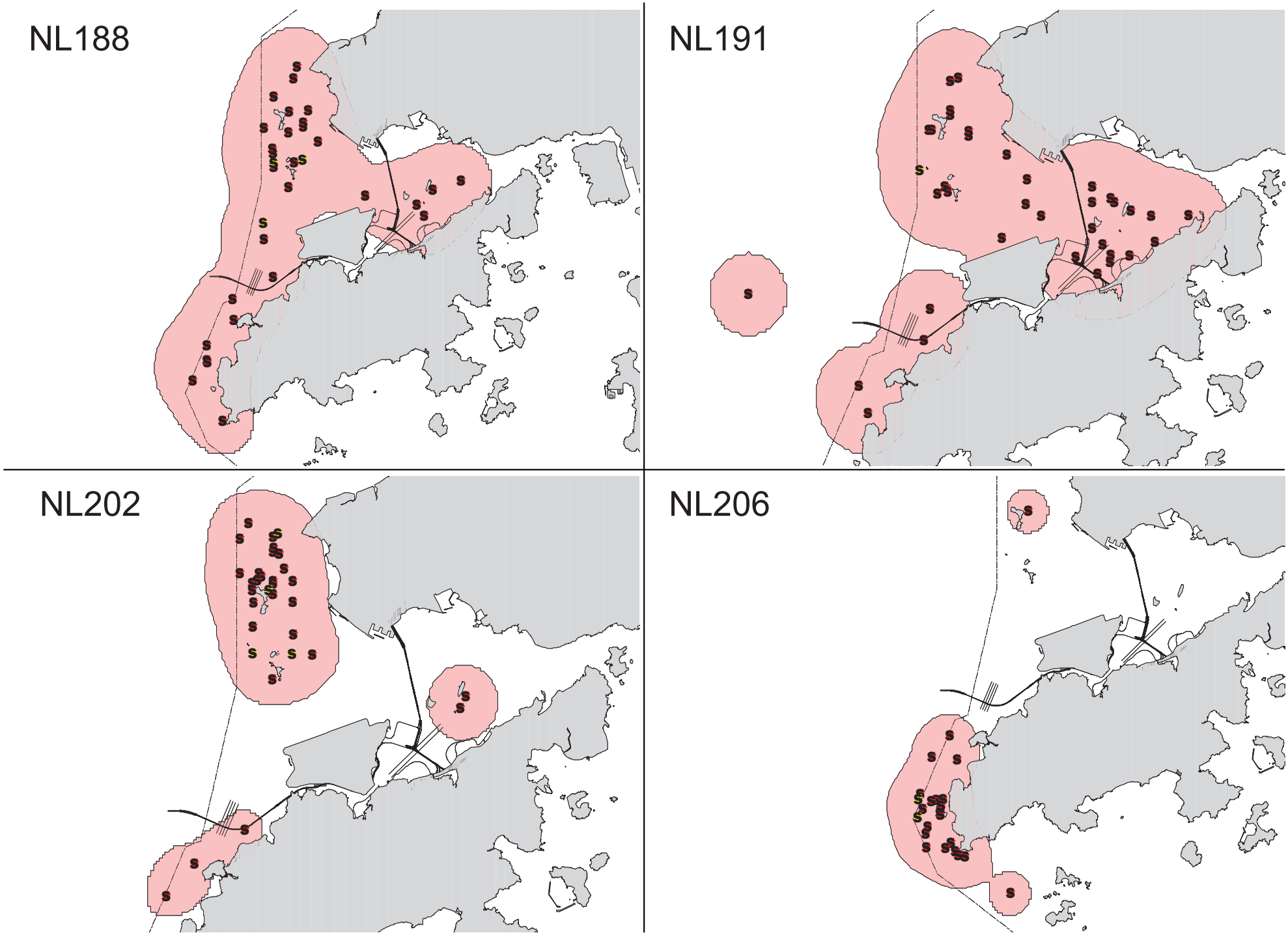
Appendix IV. (cont'd)



Appendix IV. (cont'd)



Appendix IV. (cont'd)



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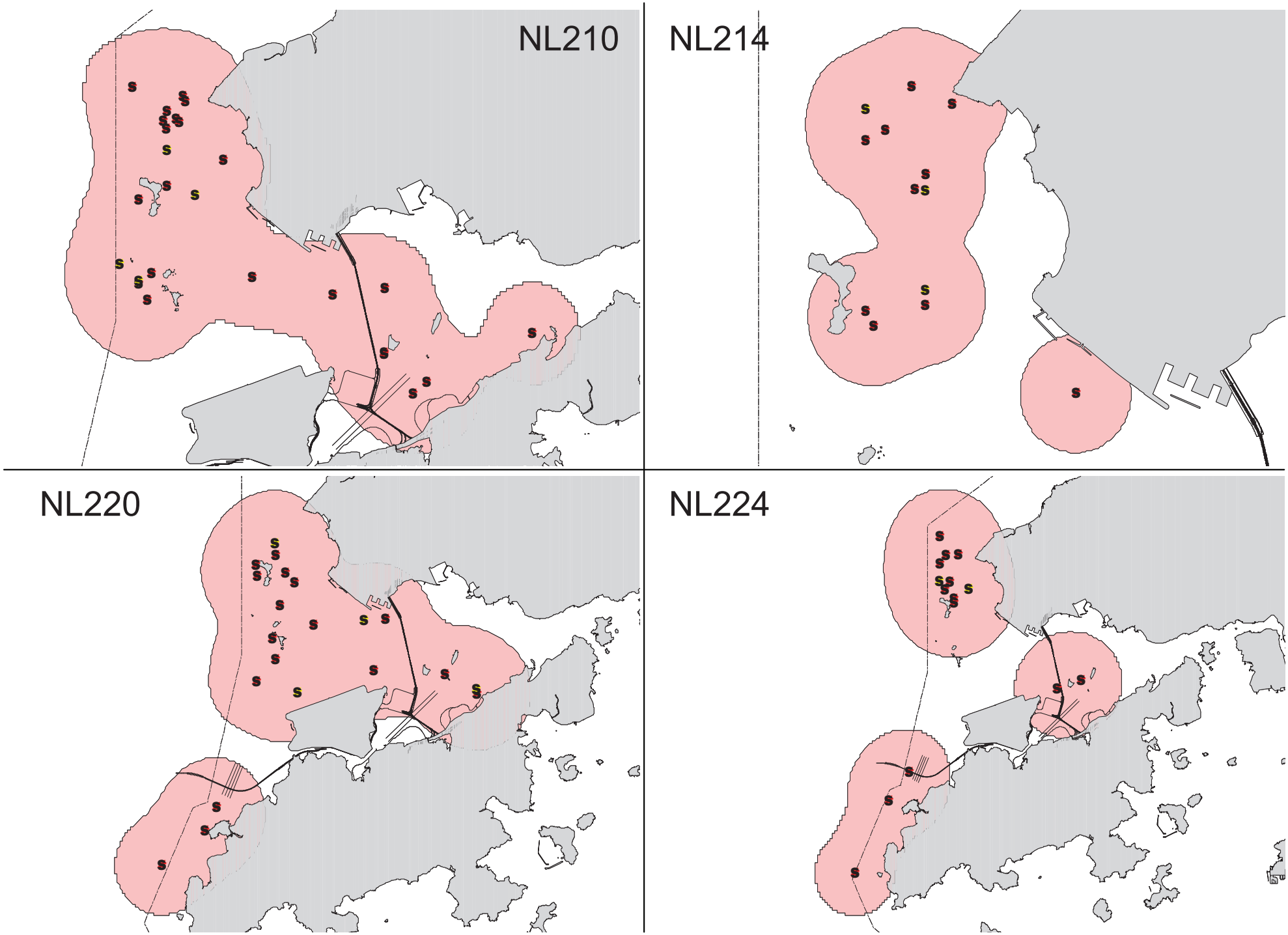
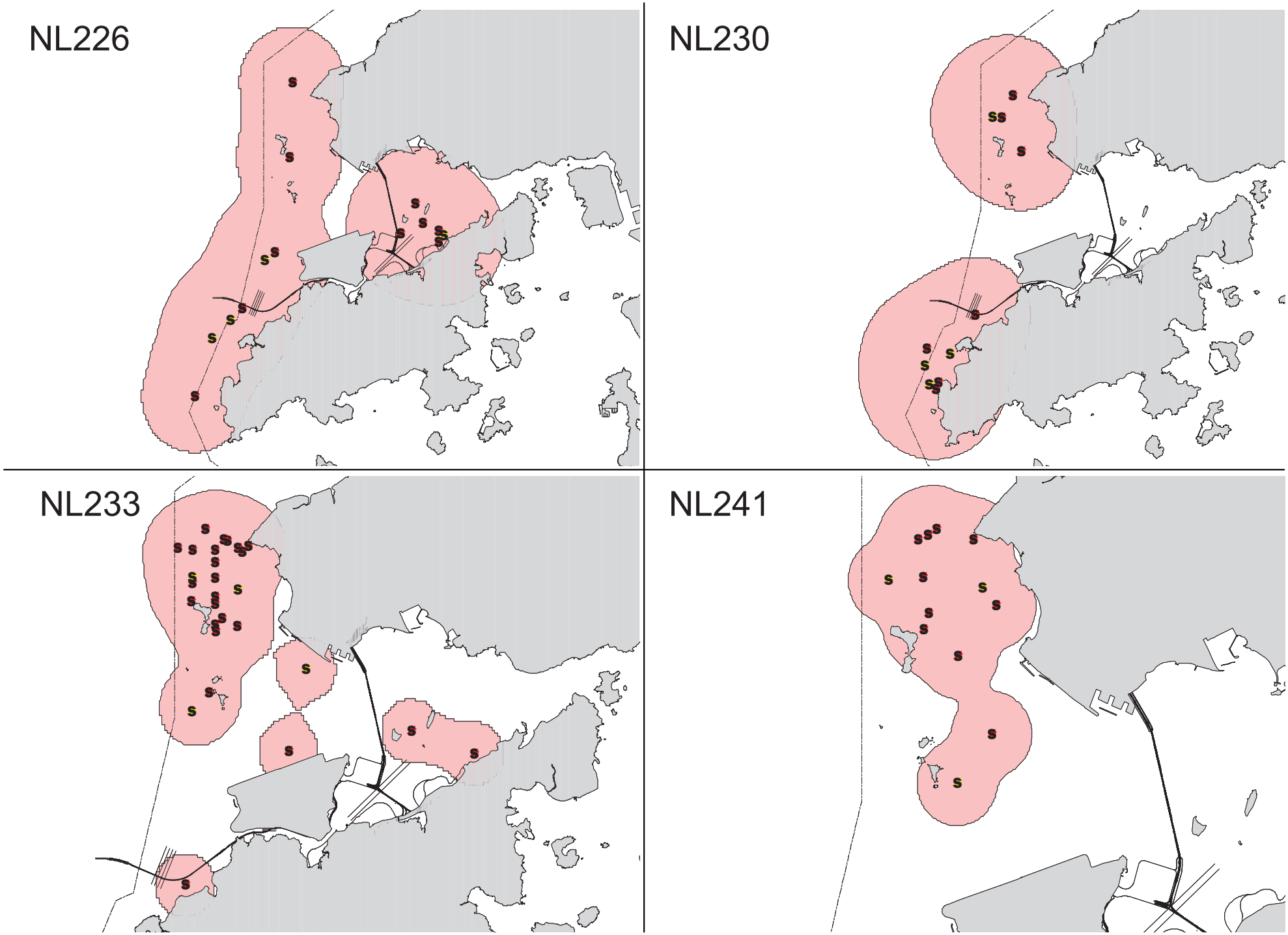


Appendix IV. (cont'd)



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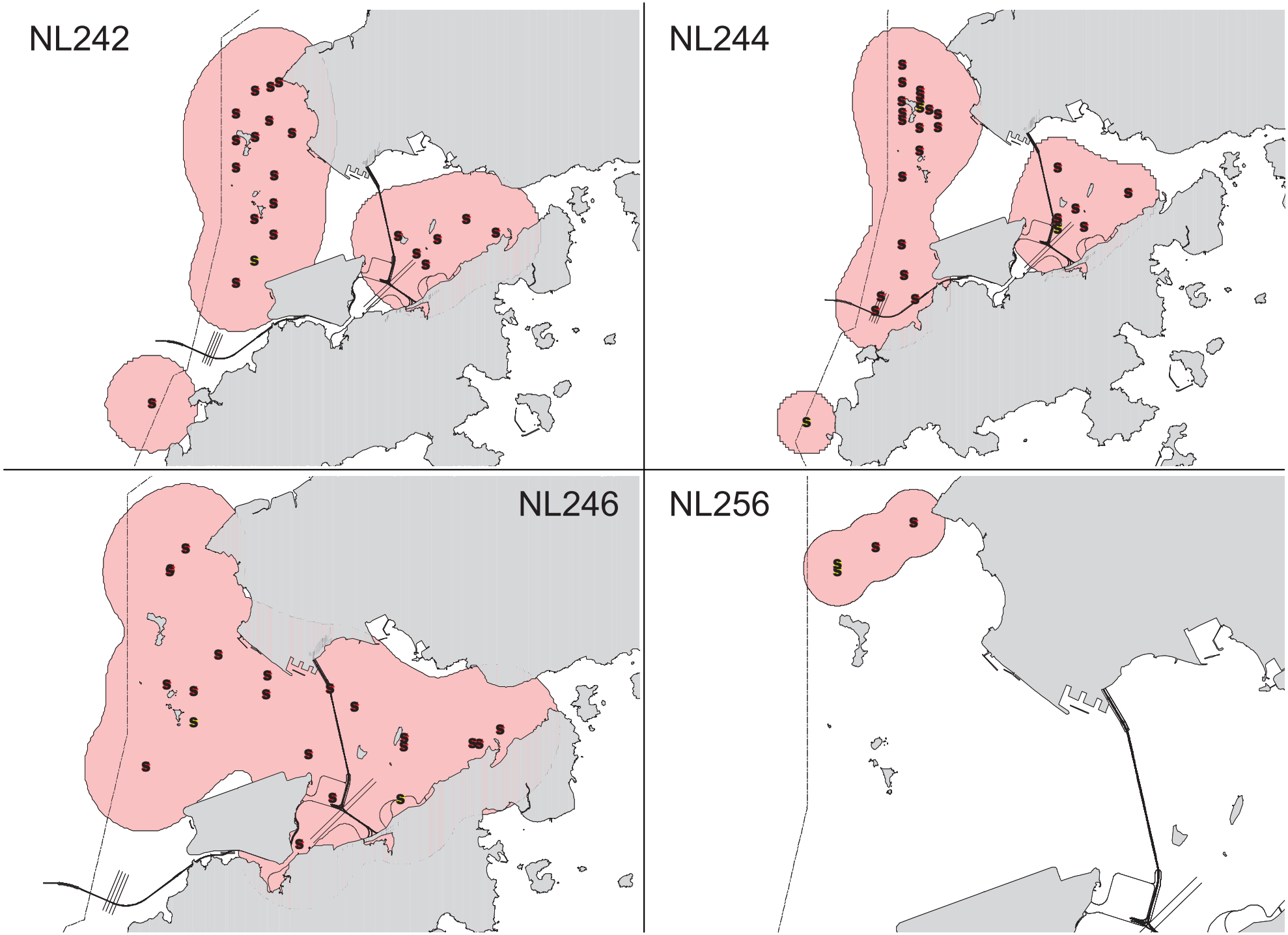

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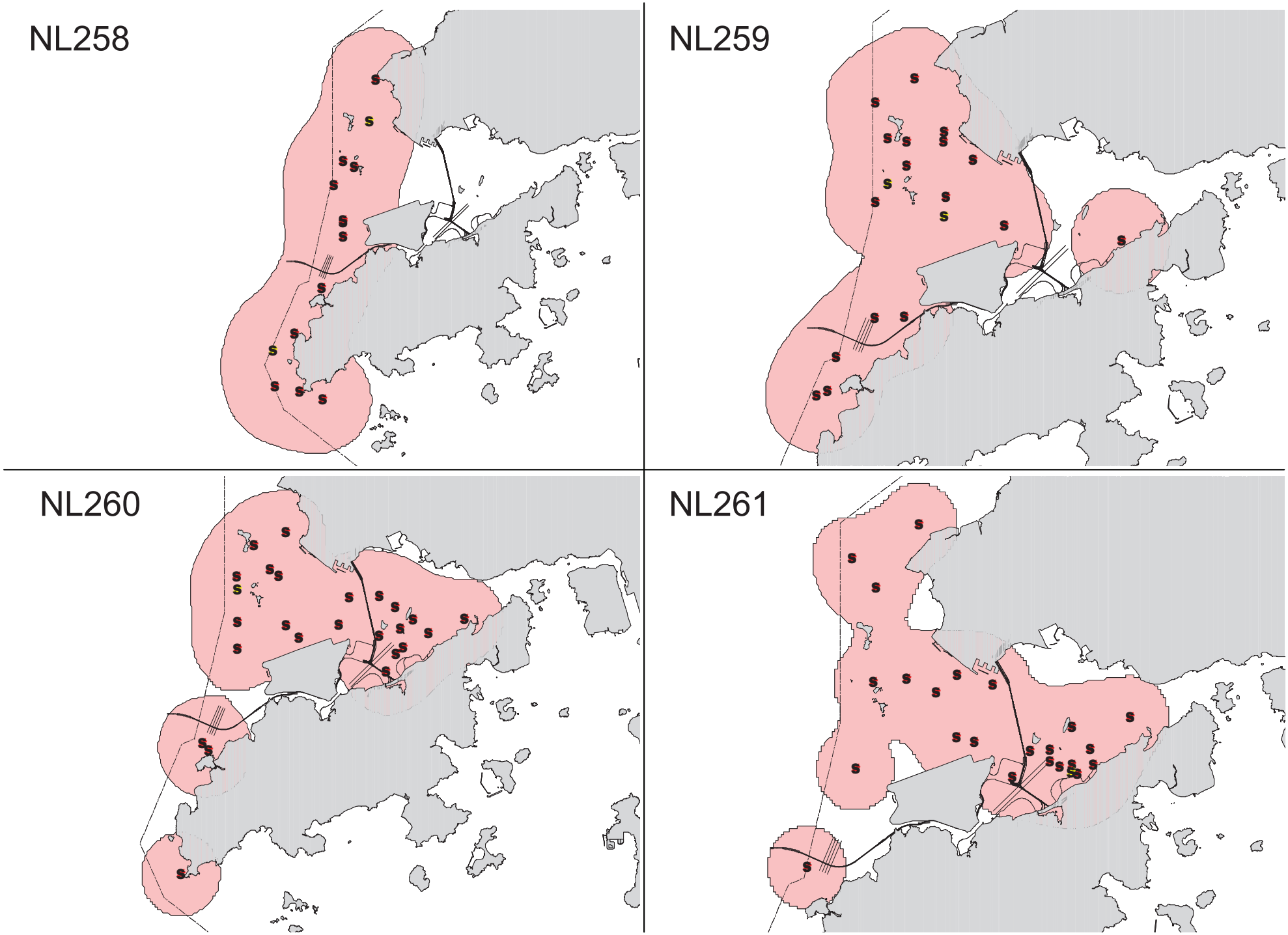

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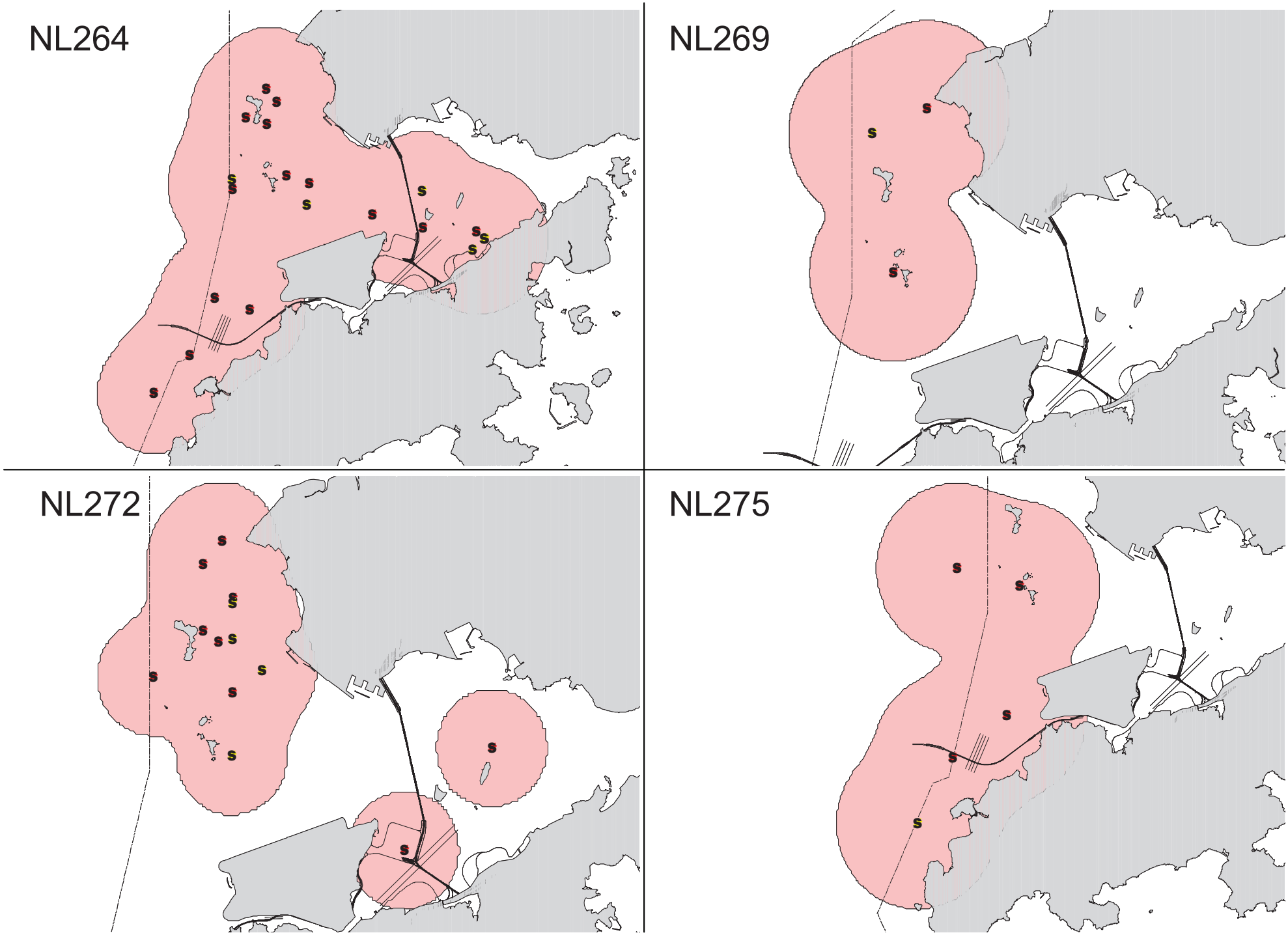

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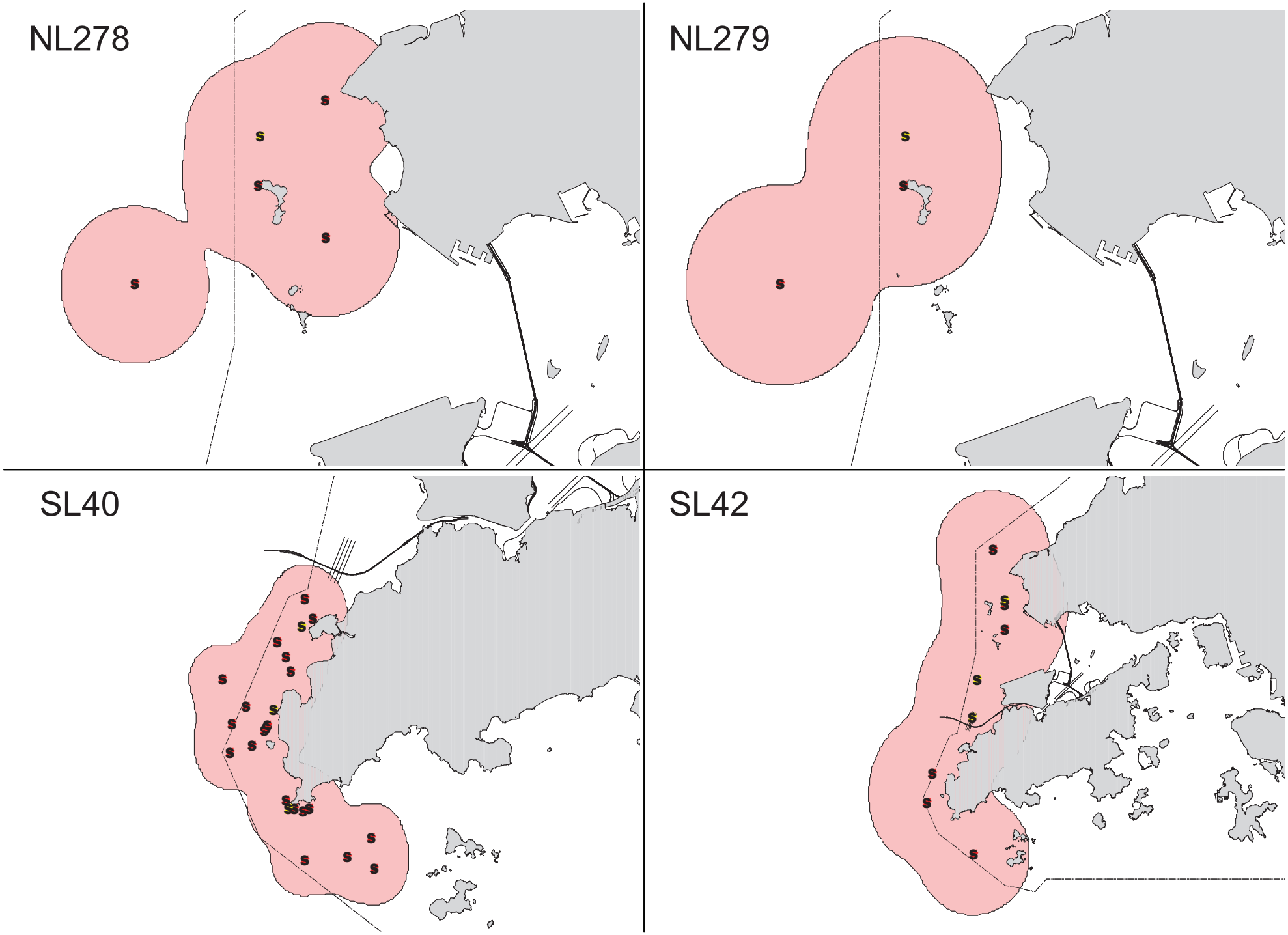

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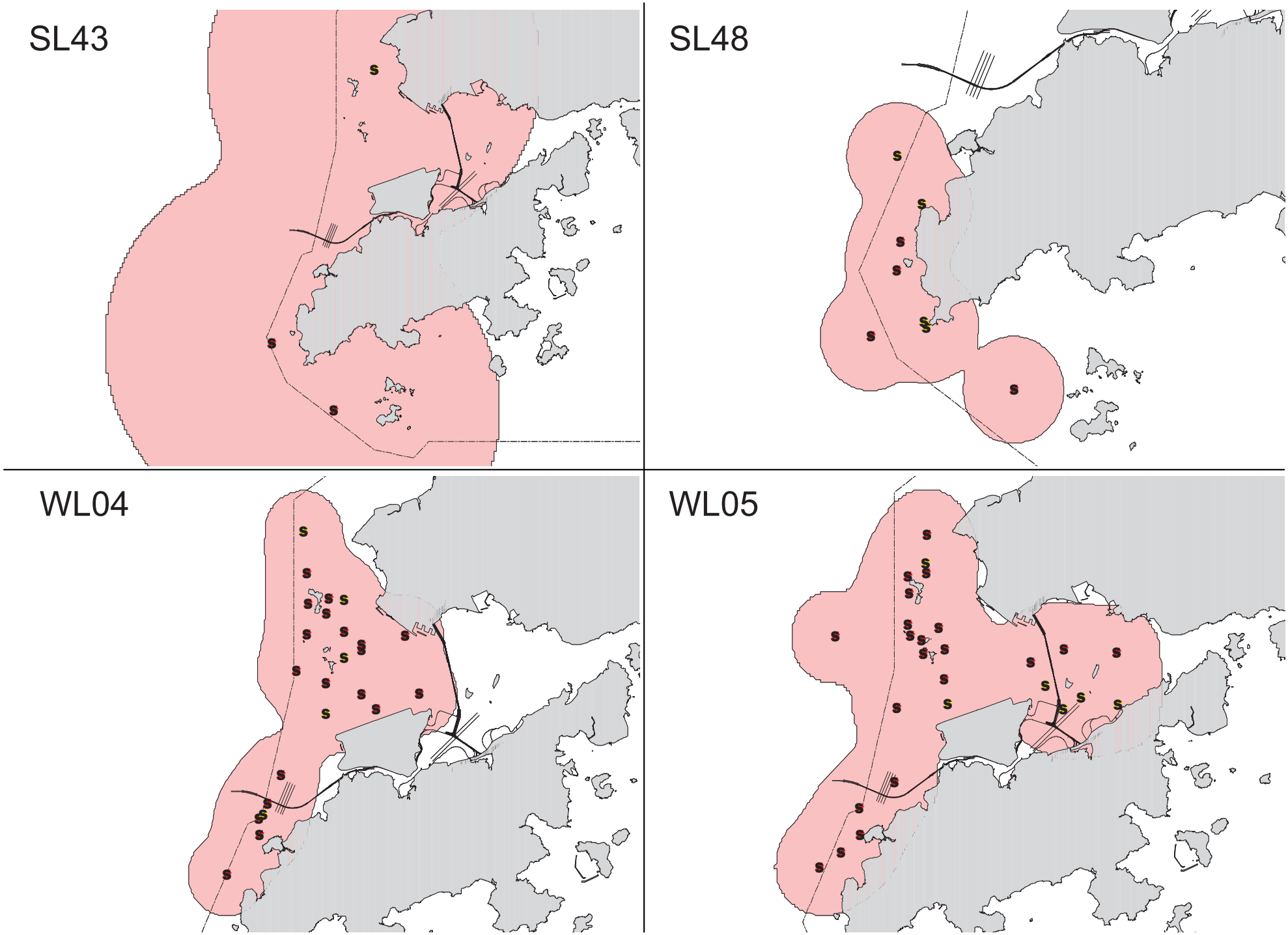

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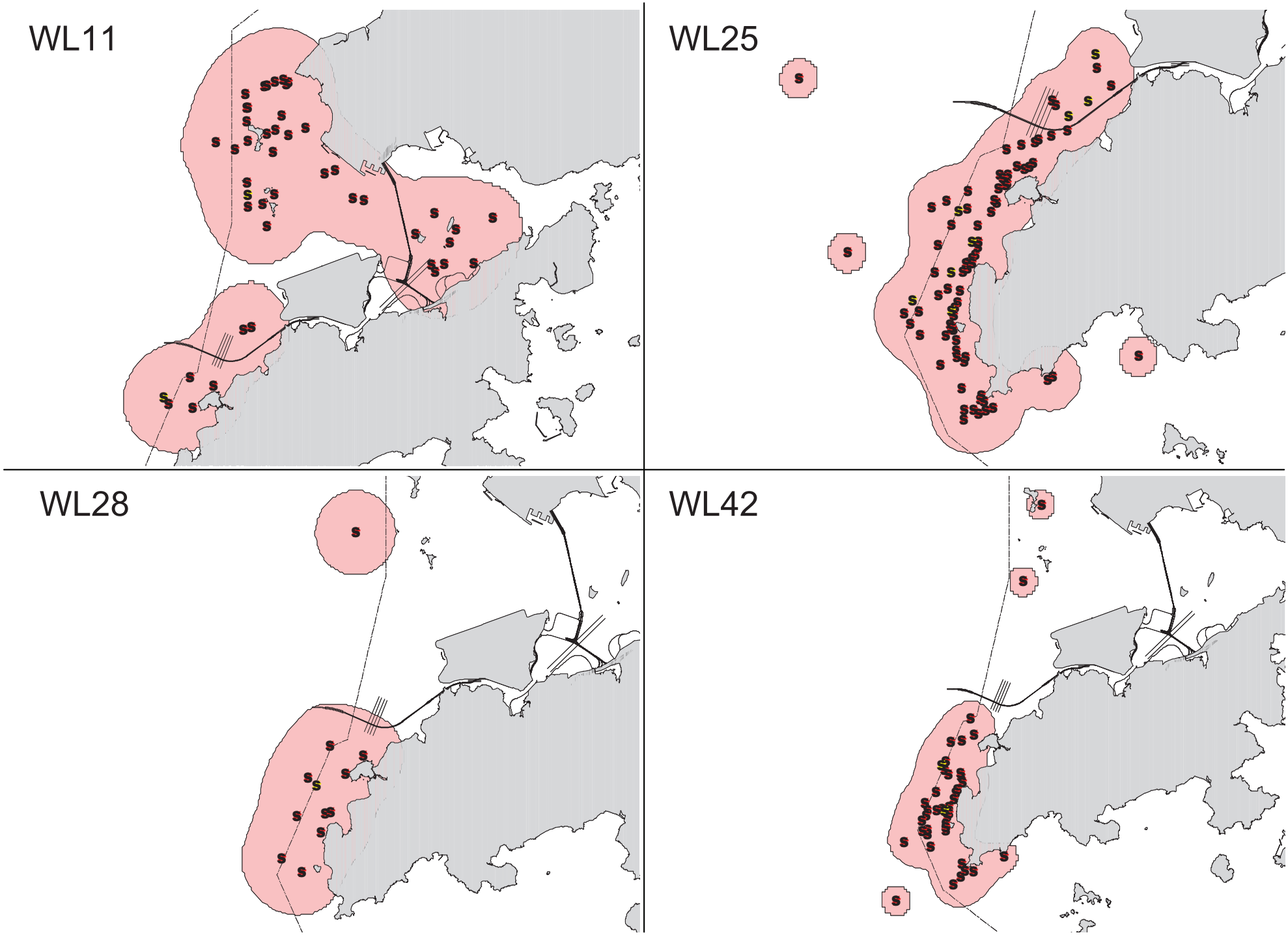

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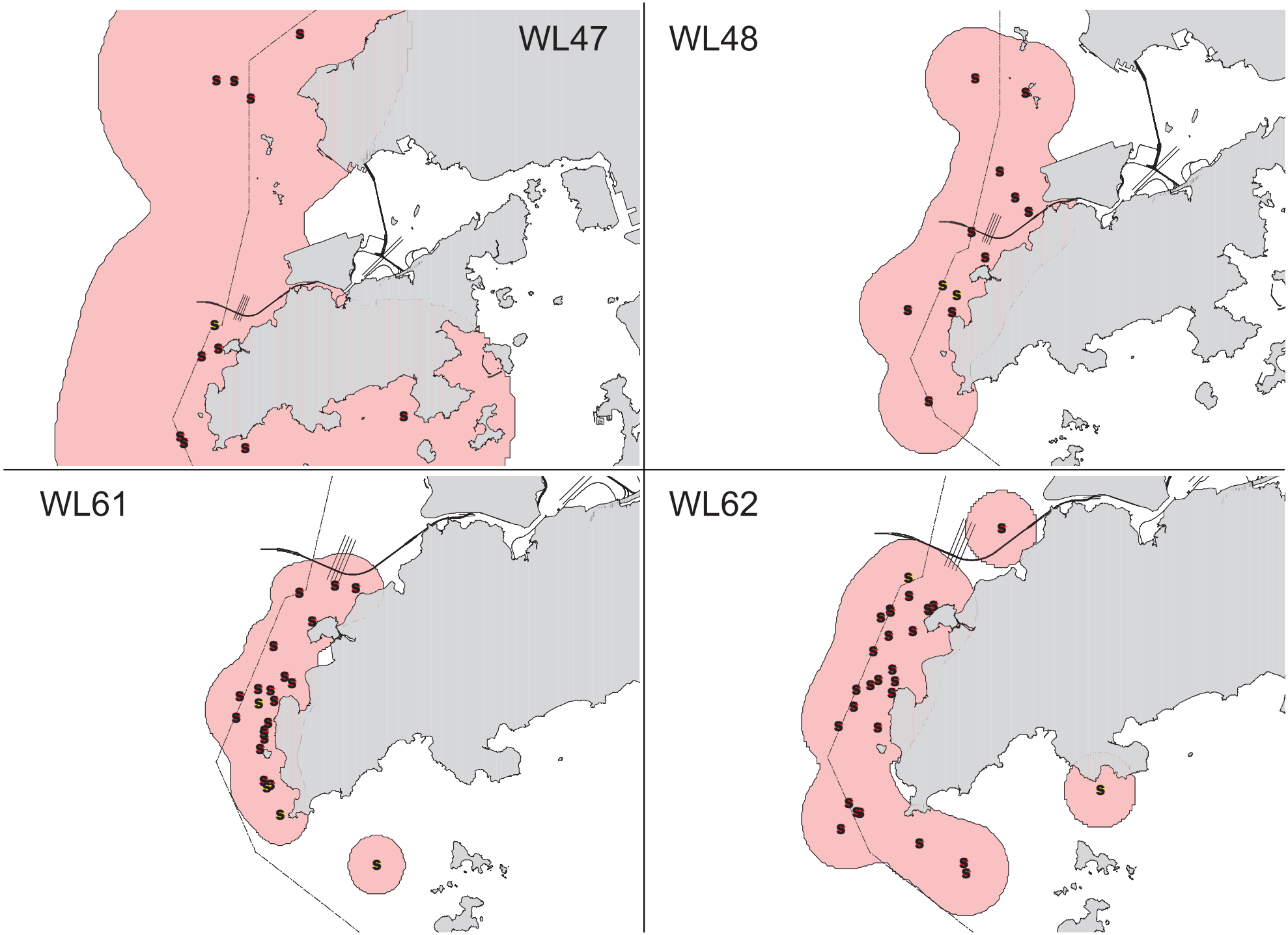

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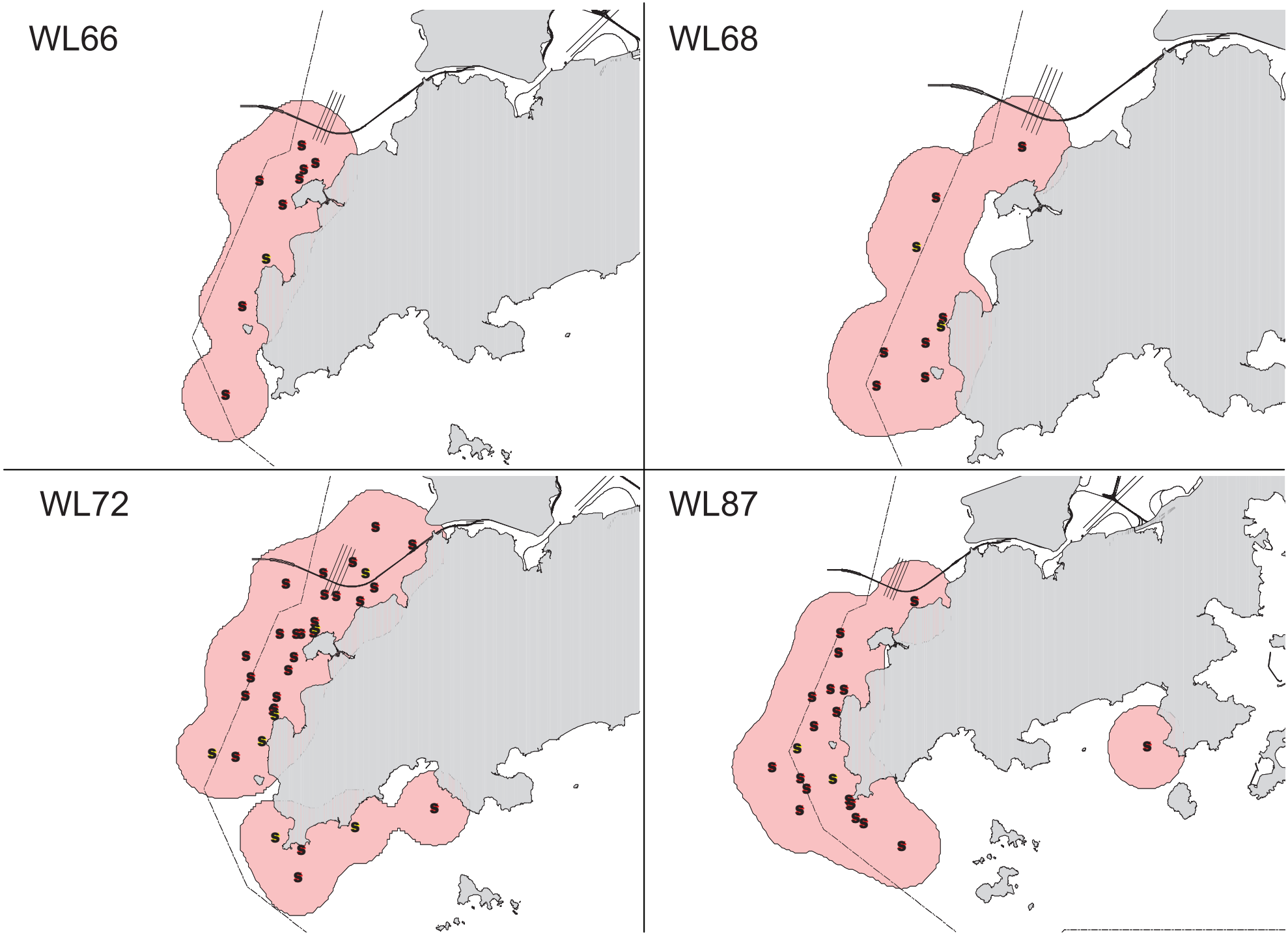

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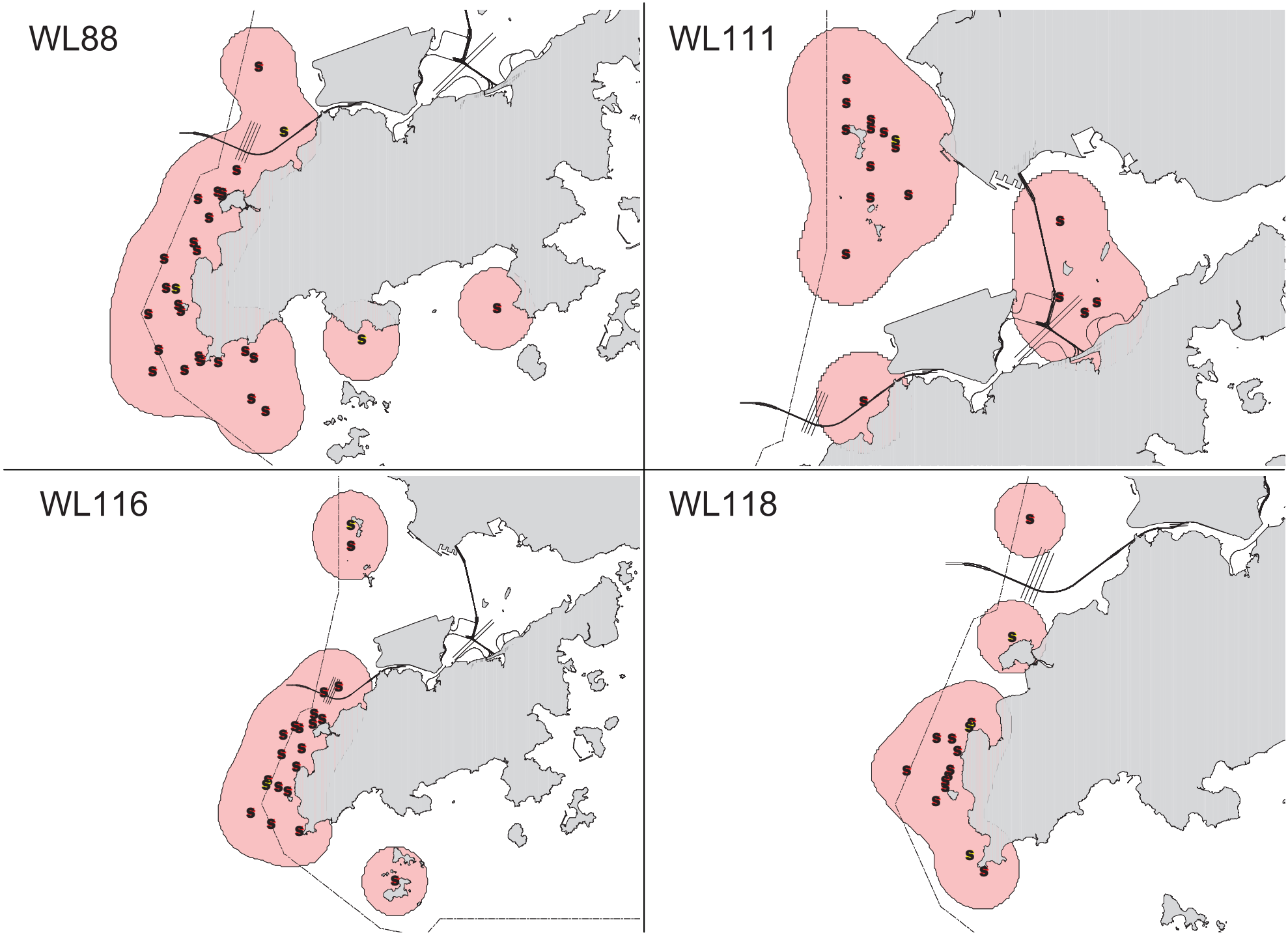

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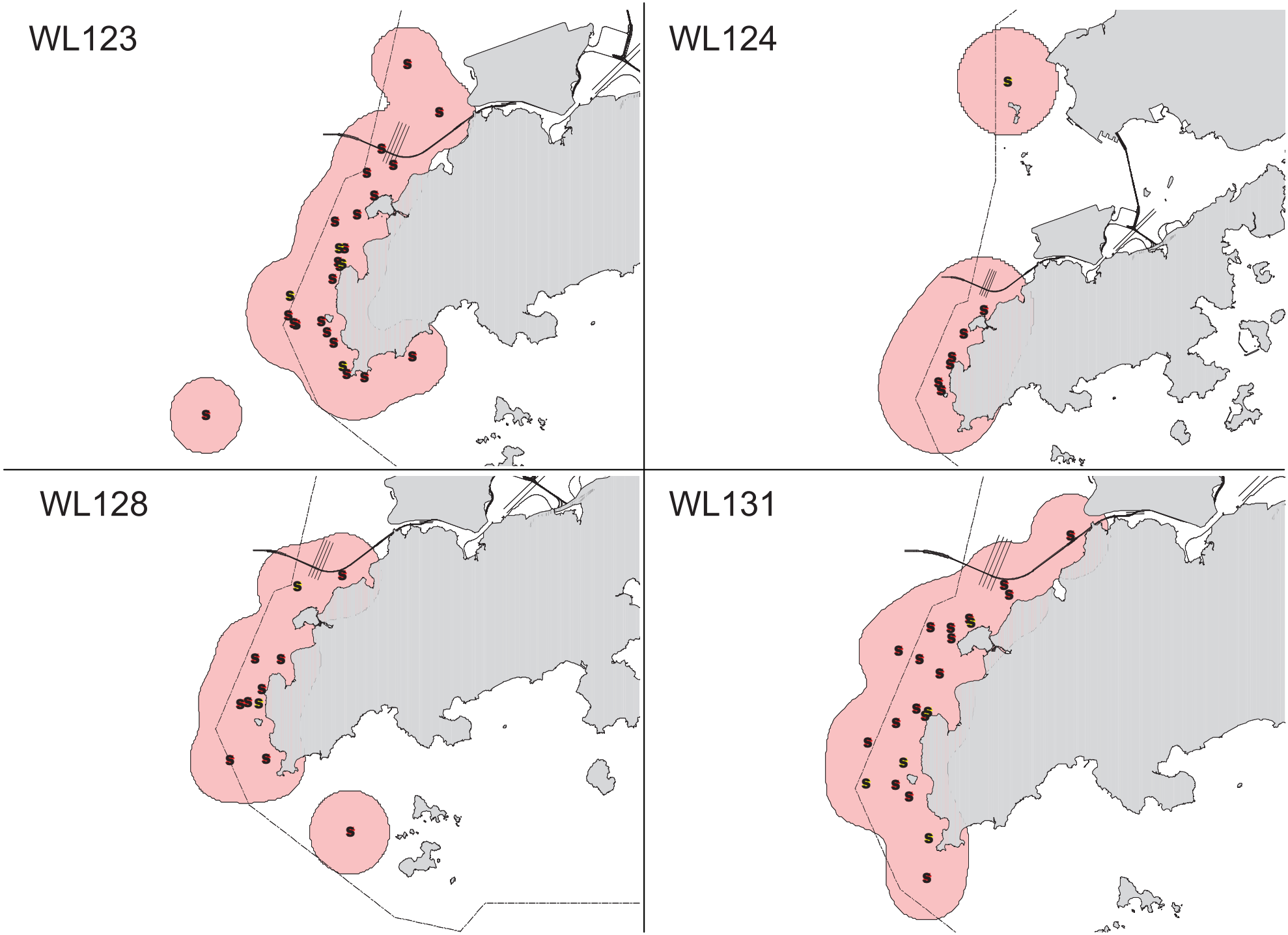

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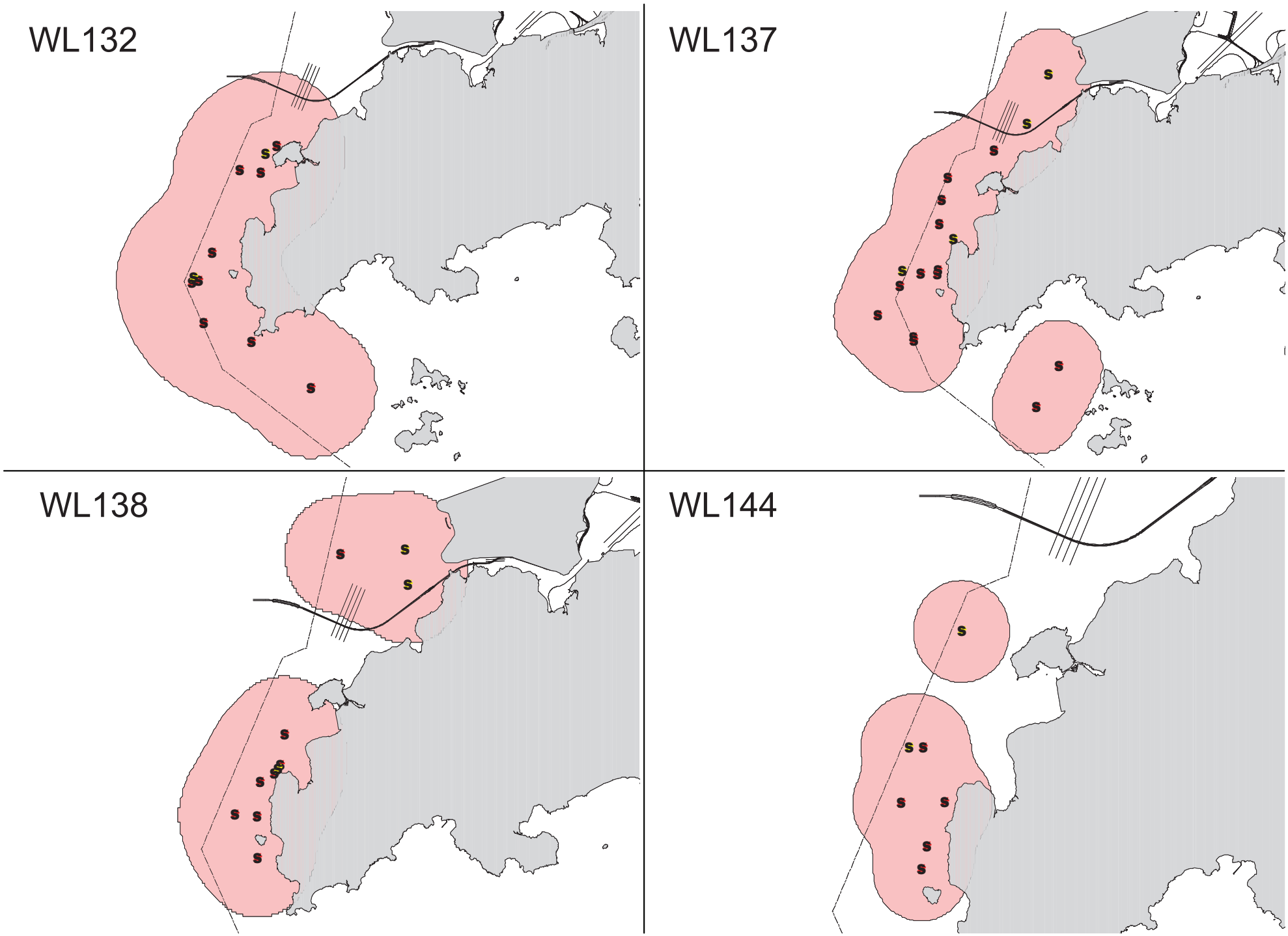

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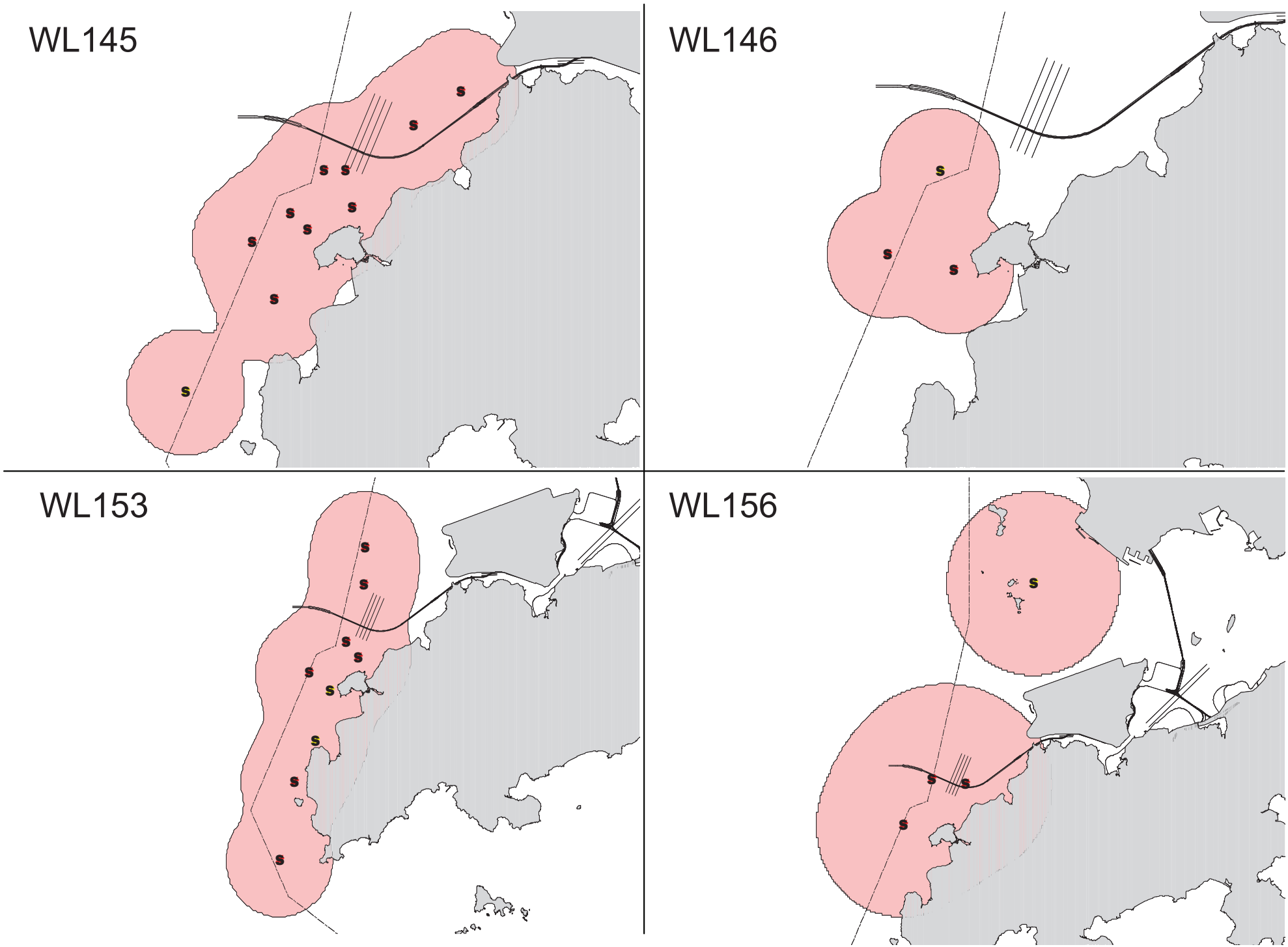

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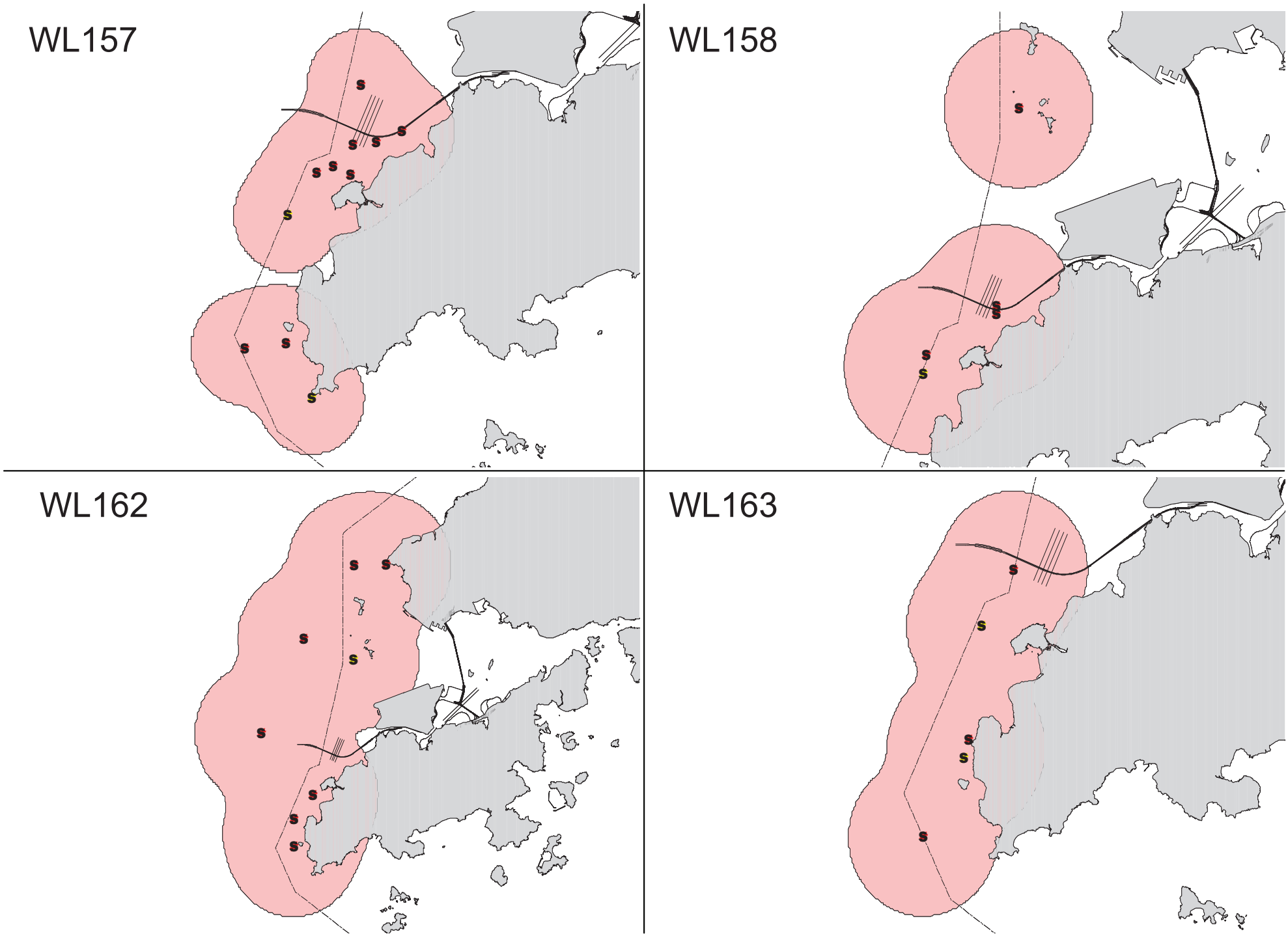

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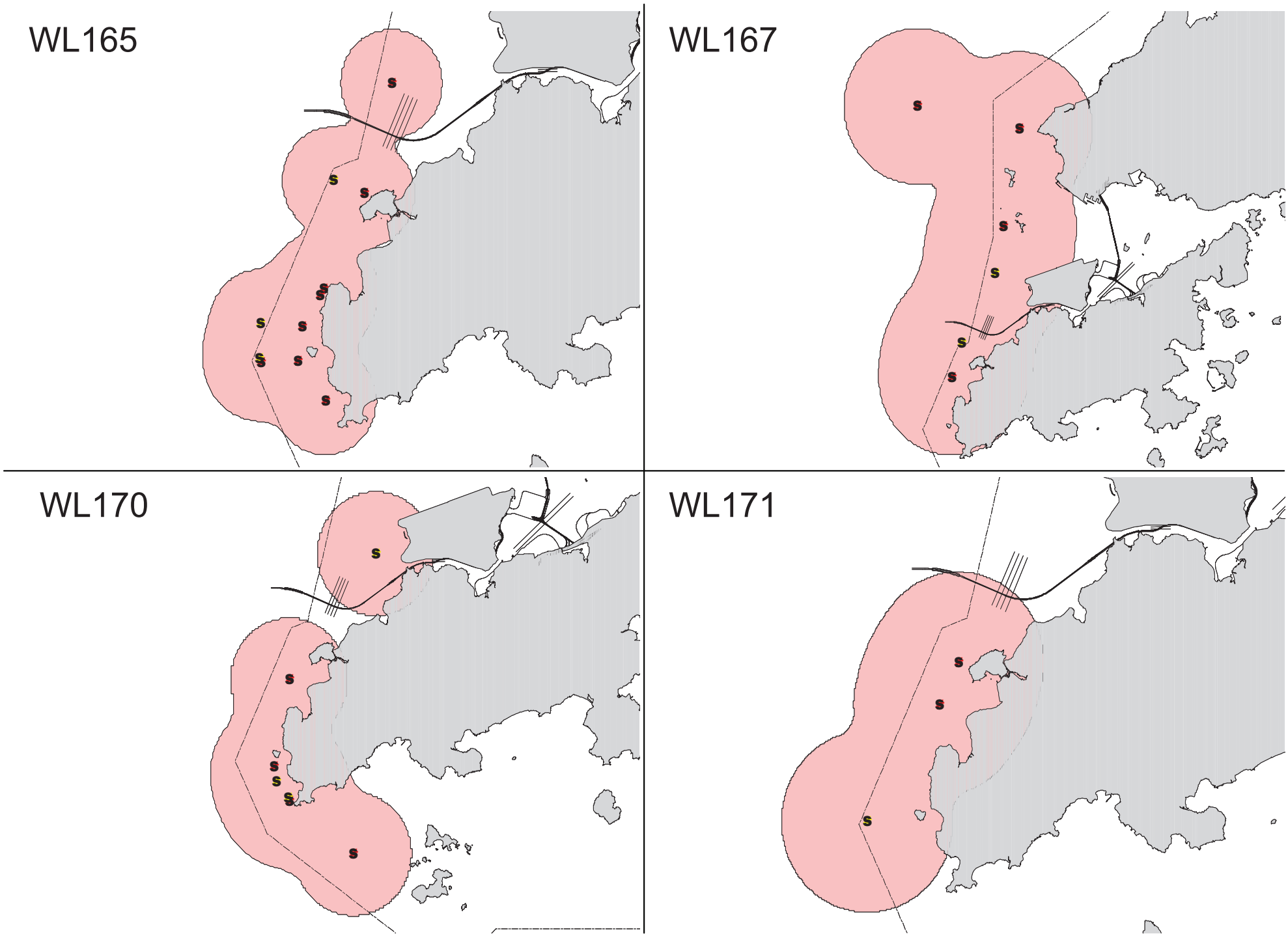

Appendix IV. (cont'd)

Annex E

Baseline Air Quality, Noise and Water Quality Monitoring Schedule

Agreement No. CE 35/2011 (EP)
Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation
Baseline Water Quality Monitoring Schedule for September 2011 & October 2011 (Route 1)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Sep	2-Sep	**1-Oct**
2-Oct	3-Oct	4-Oct	**5-Oct**	6-Oct	7-Oct	8-Oct
				Mid-Ebb 08:21 Start Time 06:36 End Time 10:06 **Mid-Flood** 16:13 Start Time 14:28 End Time 17:58		**Mid-Ebb** 10:21 Start Time 08:36 End Time 12:06 **Mid-Flood** 17:15 Start Time 15:30 End Time 19:00
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
	Mid-Ebb 11:45 Start Time 10:00 End Time 13:30 **Mid-Flood** 18:00 Start Time 16:16 End Time 19:46		**Mid-Ebb** 12:53 Start Time 11:08 End Time 14:38 **Mid-Flood** 18:47 Start Time 17:02 End Time 20:32		**Mid-Flood** 08:09 Start Time 06:24 End Time 09:54 **Mid-Ebb** 13:52 Start Time 12:07 End Time 15:37	
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
Mid-Flood 09:27 Start Time 07:42 End Time 11:12 **Mid-Ebb** 14:52 Start Time 13:07 End Time 16:37		**Mid-Flood** 11:12 Start Time 09:27 End Time 12:57 **Mid-Ebb** 16:09 Start Time 14:24 End Time 17:54				**Mid-Ebb** 08:18 Start Time 06:33 End Time 10:03 **Mid-Flood** 15:41 Start Time 13:56 End Time 17:26
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
		Mid-Ebb 11:25 Start Time 09:40 End Time 13:10 **Mid-Flood** 17:28 Start Time 15:43 End Time 19:13		**Mid-Flood** 07:06 Start Time 05:21 End Time 08:51 **Mid-Ebb** 13:04 Start Time 11:19 End Time 14:49		**Mid-Flood** 08:53 Start Time 07:08 End Time 10:38 **Mid-Ebb** 14:40 Start Time 12:55 End Time 16:25
30-Oct	31-Oct					
	Mid-Flood 10:52 Start Time 09:07 End Time 12:37 **Mid-Ebb** 16:28 Start Time 14:43 End Time 18:13					

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

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

Agreement No. CE 35/2011 (EP)
Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation
Baseline Water Quality Monitoring Schedule for September 2011 & October 2011 (Route 2)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Oct
2-Oct	3-Oct	4-Oct	**5-Oct**	6-Oct	7-Oct	8-Oct
				Mid-Ebb 08:43		**Mid-Ebb** 10:38
				Start Time 06:58		Start Time 08:53
				End Time 10:28		End Time 12:23
				Mid-Flood 16:33		**Mid-Flood** 17:34
				Start Time 14:48		Start Time 15:49
				End Time 18:18		End Time 19:19
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
	Mid-Ebb 11:55		**Mid-Ebb** 12:58		**Mid-Flood** 08:22	
	Start Time 10:10		Start Time 11:13		Start Time 06:37	
	End Time 13:40		End Time 14:43		End Time 10:07	
	Mid-Flood 18:15		**Mid-Flood** 18:54		**Mid-Ebb** 14:00	
	Start Time 16:30		Start Time 17:09		Start Time 12:15	
	End Time 20:00		End Time 20:39		End Time 15:45	
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
Mid-Flood 09:44		**Mid-Flood** 11:34				**Mid-Ebb** 08:37
Start Time 07:59		Start Time 09:49				Start Time 06:52
End Time 11:29		End Time 13:19				End Time 10:22
Mid-Ebb 15:04		**Mid-Ebb** 16:20				**Mid-Flood** 15:59
Start Time 13:19		Start Time 14:35				Start Time 14:14
End Time 16:49		End Time 18:05				End Time 17:44
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
		Mid-Ebb 11:29		**Mid-Flood** 07:17		**Mid-Flood** 09:13
		Start Time 09:44		Start Time 05:32		Start Time 07:28
		End Time 13:14		End Time 09:02		End Time 10:58
		Mid-Flood 17:33		**Mid-Ebb** 13:08		**Mid-Ebb** 14:47
		Start Time 15:48		Start Time 11:23		Start Time 13:02
		End Time 19:18		End Time 14:53		End Time 16:32
30-Oct	31-Oct					
	Mid-Flood 11:07					
	Start Time 09:22					
	End Time 12:52					
	Mid-Ebb 16:23					
	Start Time 14:38					
	End Time 18:08					

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

Remark: Reference was made to the tidal information at Chek Lap Kok of Hong Kong Observatory

Agreement No. CE 35/2011 (EP)
Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation
Baseline Water Quality Monitoring Schedule for September 2011 & October 2011 (Route 3)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Oct
2-Oct	3-Oct	4-Oct	**5-Oct**	6-Oct	7-Oct	8-Oct
				Mid-Ebb 08:43		**Mid-Ebb** 10:38
				Start Time 06:58		Start Time 08:53
				End Time 10:28		End Time 12:23
				Mid-Flood 16:33		**Mid-Flood** 17:34
				Start Time 14:48		Start Time 15:49
				End Time 18:18		End Time 19:19
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
	Mid-Ebb 11:55		**Mid-Ebb** 12:58		**Mid-Flood** 08:22	
	Start Time 10:10		Start Time 11:13		Start Time 06:37	
	End Time 13:40		End Time 14:43		End Time 10:07	
	Mid-Flood 18:15		**Mid-Flood** 18:54		**Mid-Ebb** 14:00	
	Start Time 16:30		Start Time 17:09		Start Time 12:15	
	End Time 20:00		End Time 20:39		End Time 15:45	
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
Mid-Flood 09:44		**Mid-Flood** 11:34				**Mid-Ebb** 08:37
Start Time 07:59		Start Time 09:49				Start Time 06:52
End Time 11:29		End Time 13:19				End Time 10:22
Mid-Ebb 15:04		**Mid-Ebb** 16:20				**Mid-Flood** 15:59
Start Time 13:19		Start Time 14:35				Start Time 14:14
End Time 16:49		End Time 18:05				End Time 17:44
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
		Mid-Ebb 11:29		**Mid-Flood** 07:17		**Mid-Flood** 09:13
		Start Time 09:44		Start Time 05:32		Start Time 07:28
		End Time 13:14		End Time 09:02		End Time 10:58
		Mid-Flood 17:33		**Mid-Ebb** 13:08		**Mid-Ebb** 14:47
		Start Time 15:48		Start Time 11:23		Start Time 13:02
		End Time 19:18		End Time 14:53		End Time 16:32
30-Oct	31-Oct					
	Mid-Flood 11:07					
	Start Time 09:22					
	End Time 12:52					
	Mid-Ebb 16:23					
	Start Time 14:38					
	End Time 18:08					

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

Remark: Reference was made to the tidal information at Chek Lap Kok of Hong Kong Observatory

Agreement No. CE 35/2011 (EP)
Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation
Baseline Water Quality Monitoring Schedule for September 2011 & October 2011 (Route 4)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Sep	2-Sep	**1-Oct**
2-Oct	3-Oct	4-Oct	**5-Oct**	6-Oct	7-Oct	8-Oct
				Mid-Ebb 08:41		**Mid-Ebb** 10:36
				Start Time 06:56		Start Time 08:51
				End Time 10:26		End Time 12:21
				Mid-Flood 16:27		**Mid-Flood** 17:28
				Start Time 14:42		Start Time 15:43
				End Time 18:12		End Time 19:13
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
	Mid-Ebb 11:56		**Mid-Ebb** 12:58		**Mid-Flood** 08:20	
	Start Time 10:11		Start Time 11:13		Start Time 06:35	
	End Time 13:41		End Time 14:43		End Time 10:05	
	Mid-Flood 18:13		**Mid-Flood** 18:52		**Mid-Ebb** 13:57	
	Start Time 16:28		Start Time 17:07		Start Time 12:12	
	End Time 19:58		End Time 20:37		End Time 15:42	
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
Mid-Flood 09:41		**Mid-Flood** 11:32				**Mid-Ebb** 08:33
Start Time 07:56		Start Time 09:47				Start Time 06:48
End Time 11:26		End Time 13:17				End Time 10:18
Mid-Ebb 15:01		**Mid-Ebb** 16:20				**Mid-Flood** 15:55
Start Time 13:16		Start Time 14:35				Start Time 14:10
End Time 16:46		End Time 18:05				End Time 17:40
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
		Mid-Ebb 11:28		**Mid-Flood** 07:13		**Mid-Flood** 09:09
		Start Time 09:43		Start Time 05:28		Start Time 07:24
		End Time 13:13		End Time 08:58		End Time 10:54
		Mid-Flood 17:32		**Mid-Ebb** 13:04		**Mid-Ebb** 14:39
		Start Time 15:47		Start Time 11:19		Start Time 12:54
		End Time 19:17		End Time 14:49		End Time 16:24
30-Oct	31-Oct					
	Mid-Flood 11:03					
	Start Time 09:18					
	End Time 12:48					
	Mid-Ebb 16:14					
	Start Time 14:29					
	End Time 17:59					

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

Remark: Reference was made to the tidal information at Lok On Pai of Hong Kong Observatory

Agreement No. CE 35/2011 (EP)
Baseline Environmental Monitoring for Hong Kong - Zhuhai - Macao Bridge Hong Kong Projects - Investigation
Baseline Air Quality and Noise Monitoring Schedule for October and November 2011

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Sep	2-Sep	**1-Oct**
2-Oct	3-Oct	4-Oct	**5-Oct**	6-Oct	7-Oct	8-Oct
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
		1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise
23-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	29-Oct
*1 hr TSP x 3 *24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise
30-Oct	31-Oct	1-Nov	2-Nov			
*1 hr TSP x 3 *24 hrs TSP Noise	1 hr TSP x 3 24 hrs TSP Noise	*1 hr TSP x 3 *24 hrs TSP ^Noise	*1 hr TSP x 3 *24 hrs TSP			

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

* No baseline air quality monitoring was conducted at AMS3 - Ho Yu College due to the school closed on Sunday. Baseline air quality monitoring was then conducted on 1st and 2nd November 2011.

^ Except NMS2 - Seaview Crescent. The baseline noise monitoring at NMS2 was completed on 31 October 2011.

Air Quality Monitoring Stations

AMS1 - Sha Lo Wan
AMS2 - Tung Chung Development Pier
AMS3 - Ho Yu College
AMS4 - San Tau
AMS5 - Ma Wan Chung Village
AMS6 - Dragonair / CNAC (Group) Building
AMS7 - SkyCity Marriott Hotel
ASR9A - Siu Ho Wan MTRC Depot
ASR9C - Siu Ho Wan MTRC Depot

Noise Monitoring Stations

NMS1 - Sha Lo Wan
NMS2 - Seaview Crescent
NMS3 - Ho Yu College
NMS4 - San Tau
NMS5 - Ma Wan Chung Village
NSR1- Pak Mong Village

HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Baseline Marine Water Quality Monitoring (WQM) Schedule - WQM Station SR4a

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug
				WQM Mid-Ebb 7:08 (05:23 - 08:53) Mid-Flood 19:47 (18:02 - 21:32)		**WQM** Mid-Ebb 9:45 (08:00 - 11:30) Mid-Flood 17:25 (15:40 - 19:10)
01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep
		WQM Mid-Ebb 11:53 (10:08 - 13:38) Mid-Flood 18:35 (16:50 - 20:20)		**WQM** Mid-Ebb 13:00 (11:15 - 14:45) Mid-Flood 19:23 (17:38 - 21:08)		**WQM** Mid-Flood 7:48 (06:03 - 09:33) Mid-Ebb 14:06 (12:21 - 15:51)
08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
		WQM Mid-Flood 10:06 (08:21 - 11:51) Mid-Ebb 16:00 (14:15 - 17:45)		**WQM** Mid-Flood 12:37 (10:52 - 14:22) Mid-Ebb 18:01 (16:16 - 19:46)		**WQM** Mid-Ebb 7:54 (06:09 - 09:39) Mid-Flood 15:54 (14:09 - 17:39)
15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep
		WQM Mid-Ebb 11:14 (09:29 - 12:29) Mid-Flood 18:12 (16:27 - 19:57)		**WQM** Mid-Ebb 12:44 (10:59 - 14:29) Mid-Flood 19:12 (17:27 - 20:57)		**WQM** Mid-Flood 7:56 (06:11 - 09:41) Mid-Ebb 14:00 (12:15 - 15:45)
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
		WQM Mid-Flood 10:14 (08:29 - 11:59) Mid-Ebb 15:46 (14:01 - 17:31)				

Annex F

Weather Conditions during Baseline Monitoring Period

ANNEX F –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

I. General Information

Date	Mean Air Temperature(°C)	Mean Relative Humidity (%)	Precipitation (mm)
6 October 2011	23.3 – 27.9	70 – 85	0.1
8 October 2011	24.6 – 28.8	65 – 83	Trace
10 October 2011	24.4 – 29.0	68 – 96	5.3
12 October 2011	23.6 – 25.1	91 – 99	105.8
14 October 2011	24.3 – 27.1	79 – 98	3.8
16 October 2011	22.9 – 29.6	48 – 77	0
18 October 2011	22.7 – 27.4	61 – 83	0
19 October 2011	22.8 – 26.5	60 – 77	Trace
20 October 2011	21.7 – 27.6	60 – 81	0
21 October 2011	22.4 – 28.9	55 – 86	0
22 October 2011	23.6 – 27.9	63 – 86	0
23 October 2011	23.9 – 27.4	70 – 87	0
24 October 2011	23.1 – 28.9	62 – 88	0
25 October 2011	22.4 – 26.6	72 – 89	0.5
26 October 2011	22.0 – 25.7	69 – 91	0.1
27 October 2011	21.3 – 26.0	65 – 95	1.5
28 October 2011	22.9 – 27.1	61 – 81	Trace
29 October 2011	21.7 – 27.4	60 – 79	0
30 October 2011	22.3 – 27.0	64 – 81	Trace

ANNEX F –
WEATHER CONDITIONS DURING THE MONITORING PERIOD

I. General Information

Date	Mean Air Temperature(°C)	Mean Relative Humidity (%)	Precipitation (mm)
31 October 2011	23.0 – 27.0	59 – 78	Trace
1 November 2011	22.3 – 27.7	52 – 83	0
2 November 2011	23.3 – 28.9	55 – 84	0

Weather Condition during Baseline Water Quality Monitoring at SR4a

Date	Mean Air Temperature(C)	Mean Relative Humidity (%)	Precipitation (mm)
29 August 2013	27.8 - 32.0	69 – 88	0
31 August 2013	24.6 – 29.5	83 – 97	35.0
3 September 2013	25.0 – 28.0	82 – 98	5.0
5 September 2013	23.6 – 25.1	94 –100	197.7
7 September 2013	25.4 – 30.7	60 – 91	0
10 September 2013	26.6 – 31.8	66 – 88	0
12 September 2013	27.2 – 31.7	63 – 88	0
14 September 2013	26.1 – 31.5	68 – 88	0
17 September 2013	26.7 – 30.3	61 – 82	0
19 September 2013	26.6 – 31.4	44 – 86	0
21 September 2013	28.3 – 34.7	51 – 88	0
24 September 2013	27.2 – 30.6	78 – 94	1.3

* The above information was extracted from the daily weather summary by Hong Kong Observatory.

II. Mean Wind Speed and Wind Direction

Date	Time	Wind Speed m/s	Direction
18-Oct-2011	8:00	1.1	ESE
18-Oct-2011	9:00	1.3	SSE
18-Oct-2011	10:00	1.3	NE
18-Oct-2011	11:00	1.4	SE
18-Oct-2011	12:00	1.8	ESE
18-Oct-2011	13:00	2.0	SE
18-Oct-2011	14:00	2.1	ESE
18-Oct-2011	15:00	2.2	ESE
18-Oct-2011	16:00	2.0	SE
18-Oct-2011	17:00	2.0	ESE
18-Oct-2011	18:00	1.7	SSE
18-Oct-2011	19:00	1.7	ENE
18-Oct-2011	20:00	1.6	SE
18-Oct-2011	21:00	1.3	N
18-Oct-2011	22:00	1.6	SSE
18-Oct-2011	23:00	1.6	WSW
19-Oct-2011	0:00	1.6	ENE
19-Oct-2011	1:00	1	E
19-Oct-2011	2:00	1	ESE
19-Oct-2011	3:00	1	ESE
19-Oct-2011	4:00	1	ESE
19-Oct-2011	5:00	1.1	ESE
19-Oct-2011	6:00	1.0	ESE
19-Oct-2011	7:00	0.8	ESE
19-Oct-2011	8:00	1.0	SE
19-Oct-2011	9:00	1.3	SSE
19-Oct-2011	10:00	1.6	SSE
19-Oct-2011	11:00	1.8	NE
19-Oct-2011	12:00	2.2	ENE
19-Oct-2011	13:00	2.0	ENE
19-Oct-2011	14:00	2.2	ENE
19-Oct-2011	15:00	2.1	SSE
19-Oct-2011	16:00	1.9	SSE
19-Oct-2011	17:00	1.9	NE
19-Oct-2011	18:00	1.8	N

II. Mean Wind Speed and Wind Direction

19-Oct-2011	19:00	1.4	SSE
19-Oct-2011	20:00	1	SE
19-Oct-2011	21:00	2	SSE
19-Oct-2011	22:00	2	ESE
19-Oct-2011	23:00	1.4	SE
20-Oct-2011	0:00	1.6	S
20-Oct-2011	1:00	1.7	SSE
20-Oct-2011	2:00	1.3	SSE
20-Oct-2011	3:00	1.2	E
20-Oct-2011	4:00	1	SSE
20-Oct-2011	5:00	1.3	SSE
20-Oct-2011	6:00	1.1	SE
20-Oct-2011	7:00	1.1	E
20-Oct-2011	8:00	1.2	SSE
20-Oct-2011	9:00	1.6	SE
20-Oct-2011	10:00	1.8	ENE
20-Oct-2011	11:00	1.5	ENE
20-Oct-2011	12:00	1.7	NE
20-Oct-2011	13:00	1.8	ESE
20-Oct-2011	14:00	2.0	ESE
20-Oct-2011	15:00	2.0	ESE
20-Oct-2011	16:00	1.9	SSE
20-Oct-2011	17:00	2.0	ESE
20-Oct-2011	18:00	1.8	SE
20-Oct-2011	19:00	1.5	SE
20-Oct-2011	20:00	1.6	SE
20-Oct-2011	21:00	1.8	S
20-Oct-2011	22:00	1.7	ESE
20-Oct-2011	23:00	1.8	SE
21-Oct-2011	0:00	2.6	SE
21-Oct-2011	1:00	2.9	ESE
21-Oct-2011	2:00	2.7	ESE
21-Oct-2011	3:00	2.7	SE
21-Oct-2011	4:00	2.5	SSE
21-Oct-2011	5:00	2.5	SSE
21-Oct-2011	6:00	2.6	SSE

II. Mean Wind Speed and Wind Direction

21-Oct-2011	7:00	2.2	ESE
21-Oct-2011	8:00	2.8	WNW
21-Oct-2011	9:00	3.0	WNW
21-Oct-2011	10:00	2.8	WNW
21-Oct-2011	11:00	3.2	WNW
21-Oct-2011	12:00	3.3	SW
21-Oct-2011	13:00	3.3	WSW
21-Oct-2011	14:00	3.0	W
21-Oct-2011	15:00	3.1	W
21-Oct-2011	16:00	2.9	WNW
21-Oct-2011	17:00	2.7	SSW
21-Oct-2011	18:00	2.1	WNW
21-Oct-2011	19:00	1.9	WSW
21-Oct-2011	20:00	2.0	SSE
21-Oct-2011	21:00	1.8	SSW
21-Oct-2011	22:00	2.1	NE
21-Oct-2011	23:00	2.0	E
22-Oct-2011	0:00	1.8	SE
22-Oct-2011	1:00	2.1	SSE
22-Oct-2011	2:00	2.3	ENE
22-Oct-2011	3:00	2.4	SE
22-Oct-2011	4:00	2.4	WNW
22-Oct-2011	5:00	2.3	SW
22-Oct-2011	6:00	1.9	S
22-Oct-2011	7:00	1.9	W
22-Oct-2011	8:00	2.3	SW
22-Oct-2011	9:00	2.7	ESE
22-Oct-2011	10:00	3.0	WNW
22-Oct-2011	11:00	2.6	SE
22-Oct-2011	12:00	3.2	S
22-Oct-2011	13:00	3.5	ENE
22-Oct-2011	14:00	3.1	SE
22-Oct-2011	15:00	3.0	ENE
22-Oct-2011	16:00	3.0	ENE
22-Oct-2011	17:00	2.7	SE
22-Oct-2011	18:00	2.1	SE

II. Mean Wind Speed and Wind Direction

22-Oct-2011	19:00	1.7	E
22-Oct-2011	20:00	1.8	NE
22-Oct-2011	21:00	1.7	E
22-Oct-2011	22:00	1.8	NNW
22-Oct-2011	23:00	1.7	E
23-Oct-2011	0:00	2.3	E
23-Oct-2011	1:00	2.2	E
23-Oct-2011	2:00	2.0	ESE
23-Oct-2011	3:00	2.0	SE
23-Oct-2011	4:00	2.2	SE
23-Oct-2011	5:00	2.1	SSE
23-Oct-2011	6:00	2.2	SSW
23-Oct-2011	7:00	2.0	SE
23-Oct-2011	8:00	1.9	ESE
23-Oct-2011	9:00	2.3	SSE
23-Oct-2011	10:00	2.3	SSE
23-Oct-2011	11:00	2.7	SE
23-Oct-2011	12:00	2.3	S
23-Oct-2011	13:00	2.6	SE
23-Oct-2011	14:00	2.4	SSE
23-Oct-2011	15:00	2.3	NE
23-Oct-2011	16:00	2.3	ESE
23-Oct-2011	17:00	2.4	ESE
23-Oct-2011	18:00	2.2	SW
23-Oct-2011	19:00	1.9	N
23-Oct-2011	20:00	2.0	W
23-Oct-2011	21:00	1.5	SW
23-Oct-2011	22:00	1.2	ENE
23-Oct-2011	23:00	1.3	SW
24-Oct-2011	0:00	1.5	WNW
24-Oct-2011	1:00	1.4	SW
24-Oct-2011	2:00	1.2	SSW
24-Oct-2011	3:00	1.2	E
24-Oct-2011	4:00	1.3	SSW
24-Oct-2011	5:00	1.5	WSW
24-Oct-2011	6:00	1.3	N

II. Mean Wind Speed and Wind Direction

24-Oct-2011	7:00	1.1	NE
24-Oct-2011	8:00	1.3	N
24-Oct-2011	9:00	1.7	ENE
24-Oct-2011	10:00	2.2	NNE
24-Oct-2011	11:00	2.1	NNE
24-Oct-2011	12:00	2.8	NNE
24-Oct-2011	13:00	2.6	N
24-Oct-2011	14:00	2.5	NNE
24-Oct-2011	15:00	2.4	W
24-Oct-2011	16:00	2.4	SW
24-Oct-2011	17:00	2.3	W
24-Oct-2011	18:00	1.9	WSW
24-Oct-2011	19:00	1.5	S
24-Oct-2011	20:00	1.2	NNE
24-Oct-2011	21:00	1.5	NNE
24-Oct-2011	22:00	1.4	NNE
24-Oct-2011	23:00	1.5	NE
25-Oct-2011	0:00	1.0	ENE
25-Oct-2011	1:00	0.9	SSE
25-Oct-2011	2:00	0.8	NNE
25-Oct-2011	3:00	0.8	NE
25-Oct-2011	4:00	0.6	ENE
25-Oct-2011	5:00	0.6	NNE
25-Oct-2011	6:00	1.0	SE
25-Oct-2011	7:00	1.3	SSE
25-Oct-2011	8:00	1.3	SSE
25-Oct-2011	9:00	1.5	ESE
25-Oct-2011	10:00	1.8	SE
25-Oct-2011	11:00	2.0	SE
25-Oct-2011	12:00	2.2	SE
25-Oct-2011	13:00	2.3	SSE
25-Oct-2011	14:00	2.4	ESE
25-Oct-2011	15:00	2.5	ESE
25-Oct-2011	16:00	2.0	ESE
25-Oct-2011	17:00	1.9	ESE
25-Oct-2011	18:00	1.6	SSE

II. Mean Wind Speed and Wind Direction

25-Oct-2011	19:00	1.4	ESE
25-Oct-2011	20:00	1.3	ENE
25-Oct-2011	21:00	1.6	E
25-Oct-2011	22:00	1.4	NNE
25-Oct-2011	23:00	1.4	NNE
26-Oct-2011	0:00	1.1	SE
26-Oct-2011	1:00	1.0	SSE
26-Oct-2011	2:00	1.1	ESE
26-Oct-2011	3:00	1.1	ESE
26-Oct-2011	4:00	1.1	SE
26-Oct-2011	5:00	1.0	ESE
26-Oct-2011	6:00	1.0	SSE
26-Oct-2011	7:00	1.4	SSE
26-Oct-2011	8:00	1.4	SSE
26-Oct-2011	9:00	1.9	SSE
26-Oct-2011	10:00	2.3	ESE
26-Oct-2011	11:00	2.4	E
26-Oct-2011	12:00	2.2	ESE
26-Oct-2011	13:00	2.3	SSE
26-Oct-2011	14:00	1.9	WNW
26-Oct-2011	15:00	2.3	E
26-Oct-2011	16:00	2.3	ENE
26-Oct-2011	17:00	1.9	NE
26-Oct-2011	18:00	1.7	NE
26-Oct-2011	19:00	1.6	NNE
26-Oct-2011	20:00	1.4	WNW
26-Oct-2011	21:00	1.3	NNE
26-Oct-2011	22:00	1.4	ENE
26-Oct-2011	23:00	1.2	WSW
27-Oct-2011	0:00	1.1	WSW
27-Oct-2011	1:00	0.9	SW
27-Oct-2011	2:00	0.9	SSW
27-Oct-2011	3:00	0.9	NNW
27-Oct-2011	4:00	0.9	SSW
27-Oct-2011	5:00	0.8	WNW
27-Oct-2011	6:00	0.9	NNE

II. Mean Wind Speed and Wind Direction

27-Oct-2011	7:00	1.0	E
27-Oct-2011	8:00	1.2	E
27-Oct-2011	9:00	1.6	ENE
27-Oct-2011	10:00	1.7	E
27-Oct-2011	11:00	2.0	NE
27-Oct-2011	12:00	2.1	NE
27-Oct-2011	13:00	2.3	ENE
27-Oct-2011	14:00	2.5	NE
27-Oct-2011	15:00	2.1	NE
27-Oct-2011	16:00	2.1	E
27-Oct-2011	17:00	2.2	E
27-Oct-2011	18:00	1.8	E
27-Oct-2011	19:00	1.6	E
27-Oct-2011	20:00	1.7	ENE
27-Oct-2011	21:00	1.2	ENE
27-Oct-2011	22:00	1.7	ENE
27-Oct-2011	23:00	1.4	ESE
28-Oct-2011	0:00	1.7	NE
28-Oct-2011	1:00	1.7	ESE
28-Oct-2011	2:00	1.6	ENE
28-Oct-2011	3:00	1.4	ENE
28-Oct-2011	4:00	1.2	NNE
28-Oct-2011	5:00	1.2	NE
28-Oct-2011	6:00	1.3	ENE
28-Oct-2011	7:00	1.3	SSE
28-Oct-2011	8:00	1.4	NNE
28-Oct-2011	9:00	2.0	ESE
28-Oct-2011	10:00	1.9	SSE
28-Oct-2011	11:00	2.0	ENE
28-Oct-2011	12:00	2.1	SE
28-Oct-2011	13:00	2.4	SE
28-Oct-2011	14:00	2.5	SW
28-Oct-2011	15:00	2.2	ESE
28-Oct-2011	16:00	2.1	S
28-Oct-2011	17:00	2.2	E
28-Oct-2011	18:00	1.7	NE

II. Mean Wind Speed and Wind Direction

28-Oct-2011	19:00	1.6	NNW
28-Oct-2011	20:00	1.4	NW
28-Oct-2011	21:00	1.4	NNW
28-Oct-2011	22:00	1.4	SE
28-Oct-2011	23:00	1.7	NNE
29-Oct-2011	0:00	1.6	N
29-Oct-2011	1:00	1.5	SE
29-Oct-2011	2:00	1.7	S
29-Oct-2011	3:00	1.8	ESE
29-Oct-2011	4:00	1.9	ESE
29-Oct-2011	5:00	1.8	SE
29-Oct-2011	6:00	1.9	S
29-Oct-2011	7:00	1.8	SE
29-Oct-2011	8:00	2.0	NW
29-Oct-2011	9:00	2.1	NE
29-Oct-2011	10:00	2.4	ENE
29-Oct-2011	11:00	2.7	NE
29-Oct-2011	12:00	3.1	NE
29-Oct-2011	13:00	2.9	N
29-Oct-2011	14:00	2.8	NE
29-Oct-2011	15:00	3.1	NE
29-Oct-2011	16:00	2.9	NE
29-Oct-2011	17:00	2.7	N
29-Oct-2011	18:00	2.6	NE
29-Oct-2011	19:00	2.1	NE
29-Oct-2011	20:00	1.9	ENE
29-Oct-2011	21:00	1.7	NE
29-Oct-2011	22:00	1.8	N
29-Oct-2011	23:00	2.1	NNE
30-Oct-2011	0:00	1.6	ENE
30-Oct-2011	1:00	1.7	NNE
30-Oct-2011	2:00	1.7	NNE
30-Oct-2011	3:00	1.7	NNE
30-Oct-2011	4:00	1.5	E
30-Oct-2011	5:00	1.5	W
30-Oct-2011	6:00	1.5	ENE

II. Mean Wind Speed and Wind Direction

30-Oct-2011	7:00	1.5	NE
30-Oct-2011	8:00	1.8	W
30-Oct-2011	9:00	2.5	NE
30-Oct-2011	10:00	2.5	NE
30-Oct-2011	11:00	2.9	NE
30-Oct-2011	12:00	2.9	W
30-Oct-2011	13:00	2.5	NE
30-Oct-2011	14:00	2.1	NE
30-Oct-2011	15:00	2.2	S
30-Oct-2011	16:00	2.2	SE
30-Oct-2011	17:00	2.0	ESE
30-Oct-2011	18:00	1.8	E
30-Oct-2011	19:00	1.7	E
30-Oct-2011	20:00	1.3	NNW
30-Oct-2011	21:00	1	NNW
30-Oct-2011	22:00	1.0	NNW
30-Oct-2011	23:00	1.1	SSE
31-Oct-2011	0:00	1.0	NNW
31-Oct-2011	1:00	1	E
31-Oct-2011	2:00	1.2	SE
31-Oct-2011	3:00	1	SSE
31-Oct-2011	4:00	1.0	SE
31-Oct-2011	5:00	1	SSE
31-Oct-2011	6:00	1	SSE
31-Oct-2011	7:00	1	SSE
31-Oct-2011	8:00	0.9	ENE
31-Oct-2011	9:00	1.5	ENE
31-Oct-2011	10:00	2.0	NE
31-Oct-2011	11:00	2.3	NE
31-Oct-2011	12:00	2.3	NNE
31-Oct-2011	13:00	2.4	ENE
31-Oct-2011	14:00	2.3	ENE
31-Oct-2011	15:00	2.4	E
31-Oct-2011	16:00	2.5	E
31-Oct-2011	17:00	2.4	ENE
31-Oct-2011	18:00	2.1	NE

II. Mean Wind Speed and Wind Direction

31-Oct-2011	19:00	1.7	SSW
31-Oct-2011	20:00	2	N
31-Oct-2011	21:00	1	W
31-Oct-2011	22:00	1	W
31-Oct-2011	23:00	1	WSW
1-Nov-2011	0:00	1	N
1-Nov-2011	1:00	1	E
1-Nov-2011	2:00	1	S
1-Nov-2011	3:00	1.2	WSW
1-Nov-2011	4:00	1.2	WSW
1-Nov-2011	5:00	1.1	NE
1-Nov-2011	6:00	1.0	SSW
1-Nov-2011	7:00	1.1	SW
1-Nov-2011	8:00	1.5	SW
1-Nov-2011	9:00	1.7	E
1-Nov-2011	10:00	1.8	N
1-Nov-2011	11:00	2.1	NE
1-Nov-2011	12:00	2.2	N
1-Nov-2011	13:00	2.4	N
1-Nov-2011	14:00	2.1	ENE
1-Nov-2011	15:00	2.3	NNE
1-Nov-2011	16:00	1.9	N
1-Nov-2011	17:00	1.8	N
1-Nov-2011	18:00	1.6	ENE
1-Nov-2011	19:00	1.2	ENE
1-Nov-2011	20:00	1.3	E
1-Nov-2011	21:00	1.4	ENE
1-Nov-2011	22:00	1.4	ENE
1-Nov-2011	23:00	1.2	E
2-Nov-2011	0:00	1.7	NE
2-Nov-2011	1:00	1.7	NNE
2-Nov-2011	2:00	1.9	ESE
2-Nov-2011	3:00	1.7	N
2-Nov-2011	4:00	1.7	NE
2-Nov-2011	5:00	1.7	NNE
2-Nov-2011	6:00	1.4	SE

II. Mean Wind Speed and Wind Direction

2-Nov-2011	7:00	1.4	NE
2-Nov-2011	8:00	1.6	NNE
2-Nov-2011	9:00	2.2	E
2-Nov-2011	10:00	2.3	ENE
2-Nov-2011	11:00	2.4	ENE
2-Nov-2011	12:00	2.5	NNE
2-Nov-2011	13:00	2.6	ESE
2-Nov-2011	14:00	2.5	SW
2-Nov-2011	15:00	2.6	WSW
2-Nov-2011	16:00	2.6	N
2-Nov-2011	17:00	2.1	SW
2-Nov-2011	18:00	1.5	ENE
2-Nov-2011	19:00	1.4	NE
2-Nov-2011	20:00	1.4	ENE
2-Nov-2011	21:00	1.7	NNE
2-Nov-2011	22:00	1.4	ENE
2-Nov-2011	23:00	1.2	S

Annex G

Baseline Monitoring Report for Land-based Dolphin Behavioural and Movement Monitoring

CONTRACT NO. HY/2012/07
Hong Kong-Zhuhai-Macao Bridge
Tuen Mun – Chek Lap Kok Link (Southern Connection Viaduct Section)
Baseline Monitoring Report for Land-based Dolphin Behavioural and Movement Monitoring

Prepared by Hong Kong Cetacean Research Project
(Professor Bernd Würsig, Dr. David Lundquist and Dr. Samuel Hung)

December 30, 2013

1. INTRODUCTION

The Tuen Mun-Chek Lap Kok Link (TM-CLKL) comprises a 1.6 km long dual 2-lane viaduct section between the Hong Kong Boundary Crossing Facilities (HKBCF) and the North Lantau Highway and associated roads at Tai Ho. Gammon Construction Limited (hereinafter called the "Contractor") was awarded as the main contractor of "Contract No. HY/2012/07 – Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chek Lap Kok Link – Southern Connection Viaduct Section".

According to the TM-CLKL EM&A Manual, a number of environmental monitoring and audit (EM&A) works related to Chinese white dolphins (a.k.a Indo-Pacific humpback dolphins, *Sousa chinensis*) are to be conducted during baseline, construction and post-construction phases, including land-based dolphin behavioural and movement monitoring, to record and note any changes in response of dolphins to the bored piling noise. Such monitoring is being undertaken by qualified dolphin specialist, who have sufficient relevant post-graduate experience and publication in the respective aspects. The specialists approved for the land-based works are Professor Bernd Würsig and Dr. David Lundquist.

This baseline monitoring report of land-based dolphin behaviour and movement monitoring details the methodology and results, from September 9th to October 14th, 2013, at a location hereafter termed Pak Mong Station.

2. METHODS AND MATERIALS

2.1. Monitoring Location – Pak Mong Station

To conduct the land-based monitoring on dolphin behaviour and movement near the alignment of TM-CLKL, HKCRP research team has set up a theodolite-tracking station at Pak Mong near Tai Ho Wan in August 2013 with the assistance of Professor Bernd Würsig and Ms. Sarah Piwetz, following the same methodology that was used to set up other well-established theodolite tracking stations in Hong Kong since 2011 (Hung 2012, 2013; Piwetz et al. 2012).

The Pak Mong station near Tai Ho Wan is located near the northeast coast of Lantau Island (GPS position: 22°17.86' N and 113°57.98' E; Figure 1). The station was selected based on its height above sea level (minimum requirement of over 20 m; Würsig et al. 1991), close proximity to shore, and relatively unobstructed views of the TM-CLKL alignment (see panoramic view from the station in Figure 2). The height of Pak Mong station established by HKCRP team is 24.88 m high at mean low water (or 24.73 m relative to mPD) and 170 m from shore. Moreover, the station is only situated 650-780 m from the six bored piling sites of TM-CLKL southern viaduct section that will be monitored during the present study (i.e. Piers B1-3, B5-7; Figure 1), which is ideal for the purpose of the present behavioural and movement monitoring in relation to the TM-CLKL bored piling works.

2.2. Monitoring Methodology

The methodology of the present monitoring programme generally followed the one established under the Piwetz et al. 2012 study, which was also part of the AFCD long-term marine mammal monitoring programme (Hung 2012, 2013). On each survey day, observers searched systematically for Chinese white dolphins using the unaided eye and handheld binoculars (7 x 50) from the Pak Mong Station, overlooking the viaduct alignment to the northeast coast of Lantau Island, in particular the area around the six bored pile sites as indicated in Figure 1. Notably, all six bored piling sites were monitored during baseline phase, while three of these six sites will be chosen for construction phase and post-construction phase monitoring when the initial phase of the construction schedule is confirmed.

A theodolite tracking session was initiated when an individual dolphin or group of dolphins was located, and focal follow methods were used to track the dolphins. Within a group, a focal individual was selected for the purposes of tracking the behaviour and movement of the group,

based on its distinctive feature such as colouration or severe injury mark. The focal individual would then be tracked continuously via the theodolite, with positions recorded whenever the dolphin surfaces. If an individual could not be positively distinguished from other members, the group would be tracked by recording positions based on a central point within the group when the dolphins surfaced.

Tracking continued until animals were lost from view, moved beyond the range of reliable visibility (>5 km), or when environmental conditions obstructed visibility (e.g. intense haze). Behavioural state data (Table 1) were also recorded every 5 minutes for the focal individual or group. This interval is long enough to allow for determination of the behavioural state, and short enough to capture behavioural responses to the bored piling activities. Moreover, when multiple groups or individuals were present in the study area, attempts were made to record the behaviours of all groups/individuals every 10 minutes, with spotters assisting in determining behaviour of the dolphins.

Positions of dolphins, boats and construction activities were measured using a Sokkisha DT5 digital theodolite with ± 5-sec precision and 30-power magnification connected to a laptop computer running the program *Pythagoras* Version 1.2 (Gailey and Ortega-Ortiz 2002). This program calculates a real-time conversion of horizontal and vertical angles collected by the theodolite into geographic positions of latitude and longitude each time a fix is initiated. *Pythagoras* also displays positions, movements, and distances in real-time. When possible, the position of the focal dolphin was recorded at every surfacing with use of *Pythagoras*. The position, type, and activity of all vessels within 5 km of the focal dolphin were also recorded. An effort was made to obtain at least several positions for each vessel, and additional positions were acquired when vessels changed course or speed.

While the primary source of human disturbance to dolphins of interest in this study is bored piling works for the TM-CLKL Project, the presence of vessels may also have an effect on the behaviour and movement patterns of dolphins. Prior to the construction phase (i.e. baseline phase), the simultaneous tracking of dolphins and boats over time provides information on the speed and orientation of dolphins, as well as their movements in relation to vessel activities. This data are used as a baseline for comparison once construction begins. Other construction activities and vessel movements in relation to the bored piling works will be recorded during the construction phase monitoring, and the same theodolite tracking and behavioural procedures will be followed as during baseline phase.

2.5. Data Analysis

2.5.1. Assessment on potential impacts from bored piling activities

2.5.1.1. Movement patterns

To evaluate if dolphin behaviour or movement patterns varied in the presence of vessels in the baseline phase, it was necessary to determine how many vessels were present with the focal group at any time. A vessel was considered to be present with the focal dolphin when the two were within 500 metres of each other. Data recorded in *Pythagoras* was used to calculate dolphin and vessel positions in latitude and longitude for this comparison. Tracks were required to have a minimum duration of 10 min. to be included in the analysis. If two consecutive fixes in a track for one dolphin were more than 300 seconds apart, the track was be split at this point and analysed separately. Dolphin and vessel positions were be interpolated every 150 seconds, assuming linear travel at a constant speed between subsequent positions. Distance between the focal individual/group and each vessel was calculated to determine how many vessels were within 500 metres of the group at each point in time.

Using the above calculations, the maximum number and type of vessels present was calculated for each track. Response variables, including mean leg speed, mean inter-breath interval, reorientation rate and linearity, were calculated for each track. These response variables have been commonly used by many researchers, including the dolphin specialists of the present project (Lundquist et al. 2012a; Lundquist 2012; Lundquist and Markowitz 2009). Leg speed (km/hr) is the displacement between two successive points divided by the time interval. Inter-breath interval (s) is the length of time between successive surfacings. Reorientation rate (˚/surfacing) is a measure of how much the group changed course over time. It is calculated as the sum of the absolute values of heading changes (defined as 0 to 180 degrees relative to the current bearing) divided by the number of surfacings in the track. Linearity is a dimensionless index ranging from 0 (no net movement) to 1 (straight line). It is calculated by dividing net distance from the first to last fix of a track by the sum of all the distances for each leg.

Due to the very small number of dolphin groups found during baseline monitoring, it was not possible to use the statistical technique originally proposed (Generalized Additive Modelling). Instead, the response variables are reported below in raw form, along with a description of the number and type of vessels tracked during monitoring. Similarly, there were only a few behavioural state observations collected due to the small number of dolphin groups sighted, so the intended analysis was not possible.

3. RESULTS

3.1. Summary of Theodolite Tracking Effort

A total of 186 hours and 28 minutes were spent during the 30 days of effort from September 9th through October 14th, 2013. Dolphins were successfully tracked from shore on 2 of 30 days of effort, and a total of 3 dolphin groups were tracked. A total of 3,053 vessels of 16 different types were tracked, with the majority being transportation vessels (Table 2). Vessels observed in the study area were typically travelling (92% of observations) or stationary (5% of observations). On the two days when dolphin groups were observed in the area, 182 vessels were tracked, with 7 vessels observed within 500m of dolphins (fishing boats = 4, research vessel = 1, dumping guide boat = 2). The track log data included in these analyses are presented in Appendix I.

3.2. Movement patterns and behavioural state

After filtering the tracks as described above in the data analysis section, only 1 of the 3 dolphin tracks met the conditions for analysis. This group was tracked for 47 minutes and 37 seconds near Siu Ho Wan (approximately 1.5-2.0 km from the bridge alignment; Figures 3 and 4), during which 3 vessels approached within 500 meters (fishing boat = 1, dumping guide boats = 2). A maximum of one boat was present at any time, for a total of 10 minutes of interaction time for all three boats. The mean speed of the dolphin group over the duration of the track was 9.02 km/hr, reorientation rate was 156.1 ˚/surfacing, linearity was 0.010, and inter-breath interval was 99 seconds. There were 12 behavioural state observations for the three dolphin groups, with dolphins milling 62.5% of the time, feeding 25% of the time, and travelling 12.5% of the time.

4. DISCUSSION

While it was not possible to statistically analyse the movement patterns of dolphin groups in this area due to the paucity of sightings, a general comparison can be made to numbers reported during baseline monitoring for construction of the Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between HKSAR Boundary and Scenic Hill (i.e. HKLR09 project). Based on a sample size of 38 tracks, the numbers reported there for dolphin groups in the presence of a maximum of one vessel were: mean speed = 3.91 km/hr, reorientation rate = 48.8 ˚/surfacing, linearity = 0.572, and inter-breath interval = 36.9 seconds (Table 4 in Impact Phase Monitoring Report for Land-based Dolphin Behaviour and Movement Monitoring under Hong Kong Link

Road – Section between HKSAR Boundary and Scenic Hill (Contract HY/2011/09)). This indicates that the group tracked in the present study swam faster, dived longer, and changed direction of travel more often than might be predicted based on the HKLR project, though it was not possible to determine the statistical significance of these differences.

Notably, the single track analysed for the present project was located near Siu Ho Wan and Shum Shui Kok (Figure 4), at least two kilometres from the Pak Mong Station and at a distance from the TM-CLKL bridge alignment area. Therefore, the movement pattern of dolphins at this great distance away from the potential impact area may not provide indicative information to establish the baseline condition.

There was a much greater level of vessel traffic in the present project area than in the HKLR project area, and this resulted in a doubling of the number of vessels within 500 m of dolphin groups (HKLR: 1.16 vessels per dolphin group, present: 2.33 vessels per dolphin group). Based on the results of the HKLR project, it is expected that the presence of so many more vessels would affect the movement and behaviour of any dolphins in the study area, but again it was not possible to analyse the extent to which this happens.

From the results presented here, it is clear that the study area is not frequently used by dolphins. In fact, there are multiple lines of evidence to support that dolphins rarely occur in the area near TM-CLKL bridge alignment in the past and present:

1) Review of HKCRP long-term monitoring data on Chinese white dolphins indicated that very few dolphins have occurred in this area in the past. Out of the 927 dolphin sightings made in NEL during 2002-2013, fewer than 10 groups were sighted in the proximity to the bridge alignment (Figure 5).

2) Under the same bored piling monitoring programme for the TM-CLKL, concurrent intensive surveys were conducted to examine dolphin acoustic behaviours in NEL area between September 26th and October 25th, 2013. Despite a large amount of search effort spent in this area (especially near the bridge alignment) during the 30-day period, no dolphin was sighted in the proximity to the TM-CLKL bridge alignment at all, and most dolphin sightings were made in the northern portion of the survey area (Figure 6).

3) For the same bored piling monitoring programme, passive acoustic monitoring was also

conducted to detect dolphin presence 24 hours a day, by deploying an Ecological Acoustic Recorder (EAR) adjacent to the bridge alignment from September 27th to October 26th, 2013. Results indicated that dolphin acoustic activity near the bridge alignment area was much lower than a control site near Lung Kwu Chau. The study concluded that the lack of dolphin whistles recorded and the sparse detections of clicks was an indicator that the area near the bridge alignment was likely not used very much for socializing or regular foraging by the dolphins.

In summary, dolphins rarely occur along or near the TM-CLKL bridge alignment in the past and present. This may be related to the high level of human activity, but more likely is driven by other factors such as the presence of prey, or the shallowness of seabed in this area. If this area has a naturally low density of dolphins, then the overall effect of construction activities on dolphins is likely to be low, which confirm the prediction from the original EIA study for the TM-CLKL.

5. EVENT AND ACTION PLAN

According to Section 6.5 of the EM&A Manual, the Action and Limit Levels as well as the Event and Action Plan (EAP) for ecology shall be proposed upon the baseline monitoring data, and agreed by AFCD and EPD. Similar to the HKLR09 bored piling monitoring programme, the response variables for dolphin movement patterns (i.e. mean leg speed, mean inter-breath interval, reorientation rate and linearity) and dolphin behaviours (five different behavioural states) should be assessed under the EAP, and these variables should be recorded during both baseline and construction phase monitoring works. Departures of any of these variables between baseline and construction phases by a certain percentage of difference would trigger the Action and Limit Levels.

However, due to the paucity of dolphin sightings and the availability of a single track for analysis from the present 30-day shore-based theodolite tracking works, it is impossible to reliably establish the baseline values for the various response variables. Moreover, as dolphins rarely occur in this area as discussed in Section 4, we expect that such rare occurrence of dolphins would persist during the construction phase of the TM-CLKL projects. Without appropriate baseline information established for the behaviour and movement of Chinese white dolphins, we decide that any EAP cannot be properly implemented for the shore-based theodolite tracking study, and therefore would rely on the implementation of EAP on dolphin acoustic behaviour to safeguard

dolphins from the potential impacts of the bored piling works. Nevertheless, it is important to conduct the construction phase and post-construction phase monitoring on behaviour and movements of Chinese white dolphins through shore-based theodolite tracking, to confirm that they are not seriously affected by the construction works if they are present.

6. REFERENCES

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Table 1. Definitions of group behavioural states of dolphins.

State	Definition
Resting	Dolphins close to the surface and each other, surfacing at regular intervals and in a coordinated fashion. Movement very slow.
Traveling	All individuals oriented and moving in the same direction. This behavioural state includes all high-speed, directional behaviours (e.g. porpoising).
Milling	Individuals within the group simultaneously moving in different directions, with no overall clear direction of travel.
Socialising	Physical interactions taking place among members of the group, including chasing, high levels of body contact, coordinated clean leaps and noisy leaps.
Feeding	Dolphins observed either capturing or pursuing fish at the surface. High number of non-coordinated re-entry leaps, rapid changes in direction and long dives. Dolphin rostrum or body covered with mud. Associations with operating fishing boats.

Table 2. Number and type of vessels tracked in study area.

Vessel Type	*Count*
Construction Boat	175
Container Boat	148
Dumping Guide Boat	38
Ferry	7
Fishing Boat	58
Fuel Boat	2
Government Boat	68
HSF High Speed Ferry	197
Research Vessel	26
Sand barge	1
Speed Boat	231
Tour Boat	13
Transportation Boat*	1812
Tug Boat	270
Water ski	4
Yacht	3
TOTAL	**3053**

* Transportation boats denote the one that carry passengers to and from the construction sites and Tung Chung Public Pier, as well as the regular ferries that serve between Tung Chung and Tune Mun

Figure 1. Location of Pak Mong Station in NE Lantau with alignment of TM-CLKL southern connection viaduct

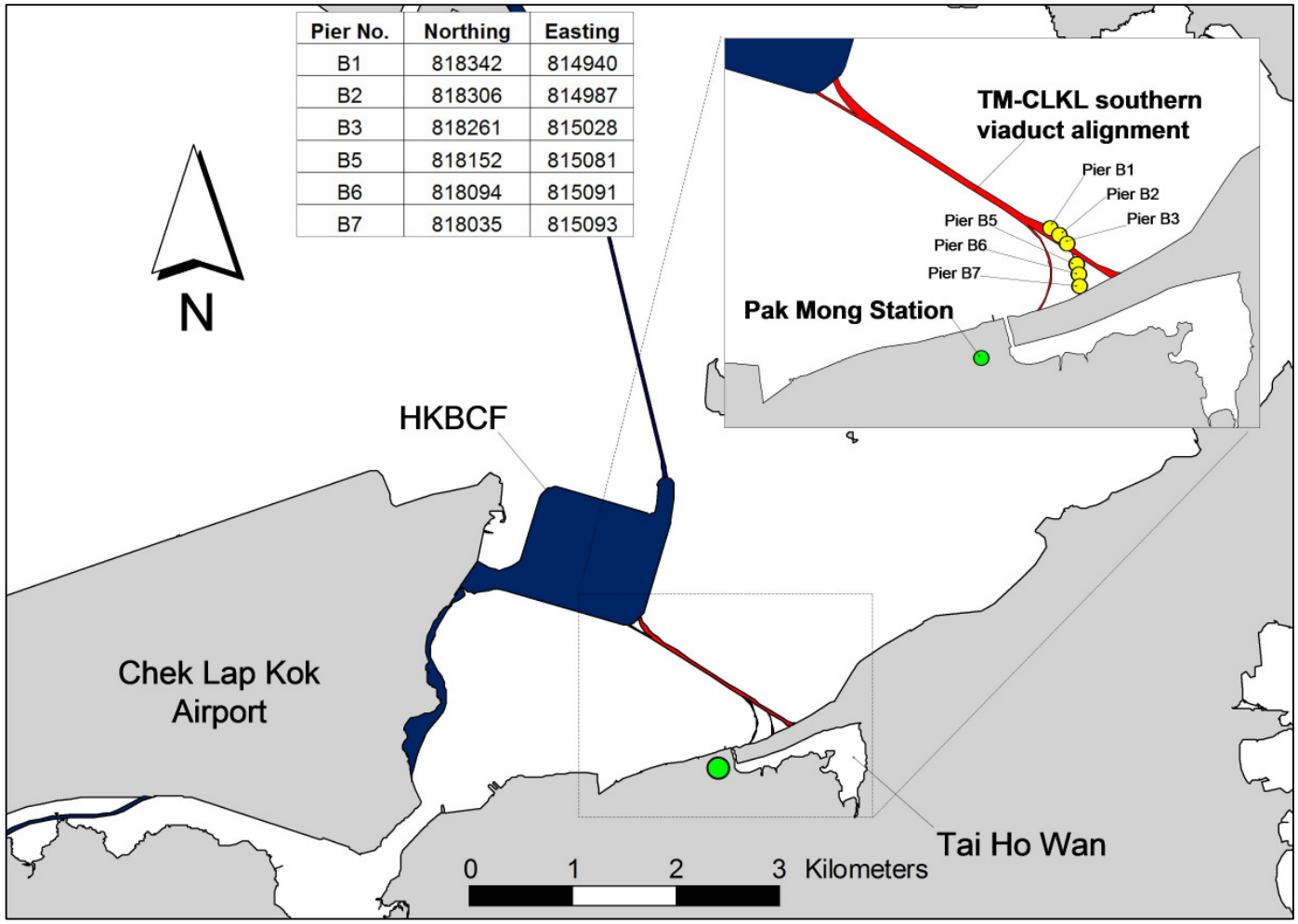


Figure 2. Panoramic View from Pak Mong Theodolite Tracking Station (photos taken on August 2013)



Figure 3. Fix positions of vessels (green dots) and dolphins (purple triangle) from Pak Mong Theodolite Tracking Station in relation to TM-CLKL alignment and HKBCF/HKLR reclamation sites in Sept. 9th –Oct. 14th 2013

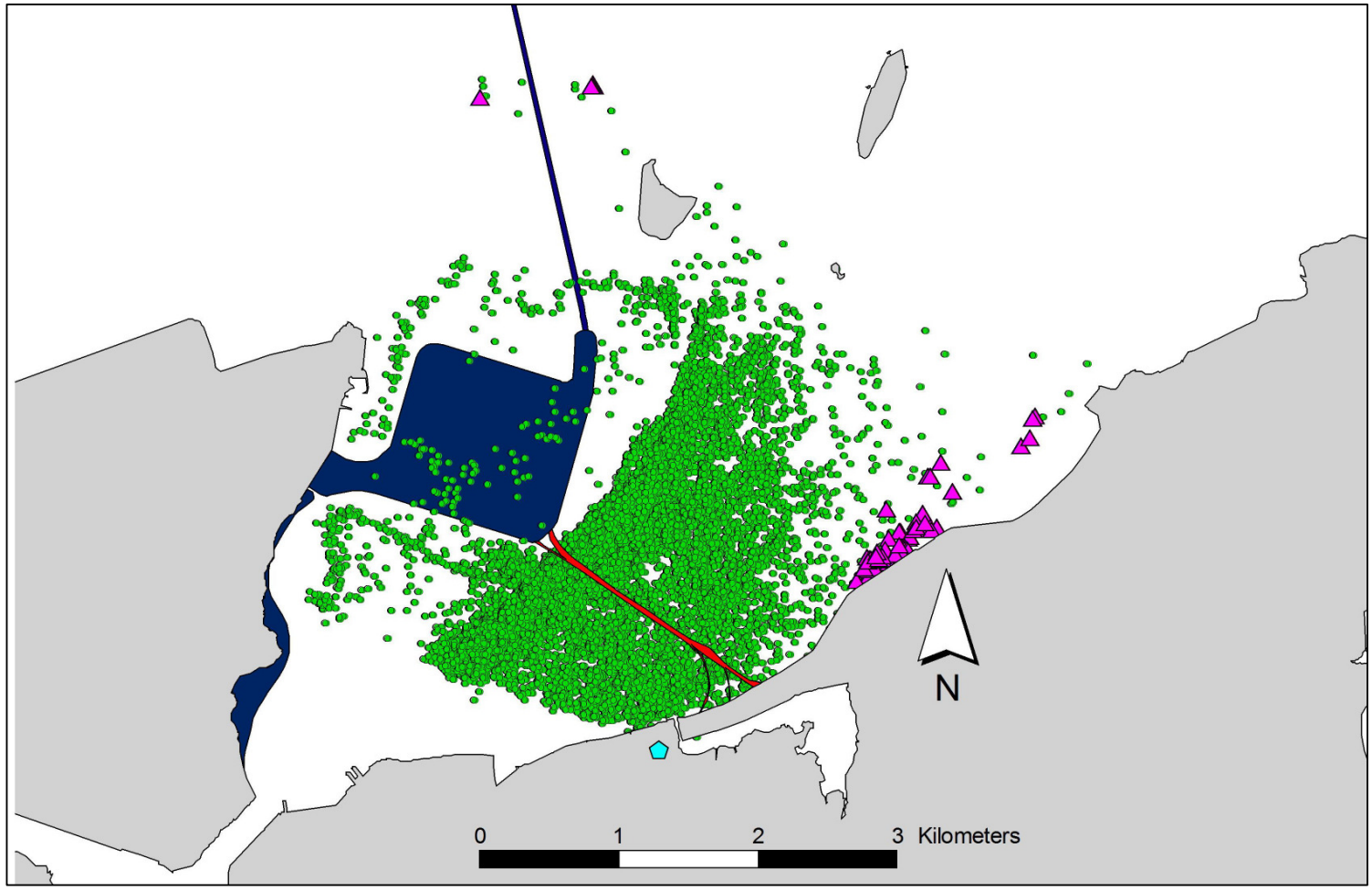


Figure 4. Track lines of the only dolphin group that was tracked and analyzed for movement and behavioural patterns in the present study

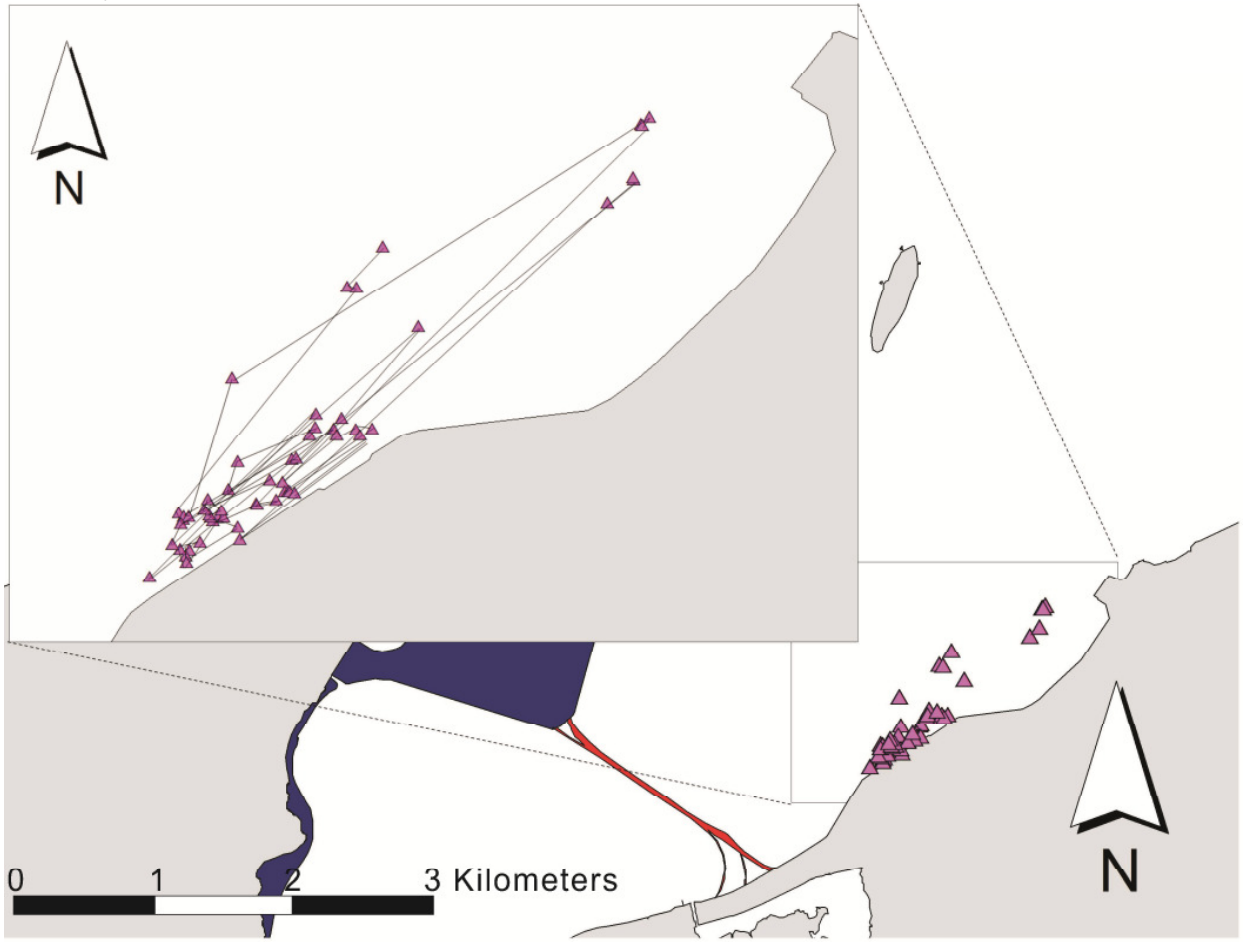


Figure 5. Distribution of Chinese white dolphin sightings in Northeast Lantau during January 2002-December 2013
(source: HKCRP unpublished data)

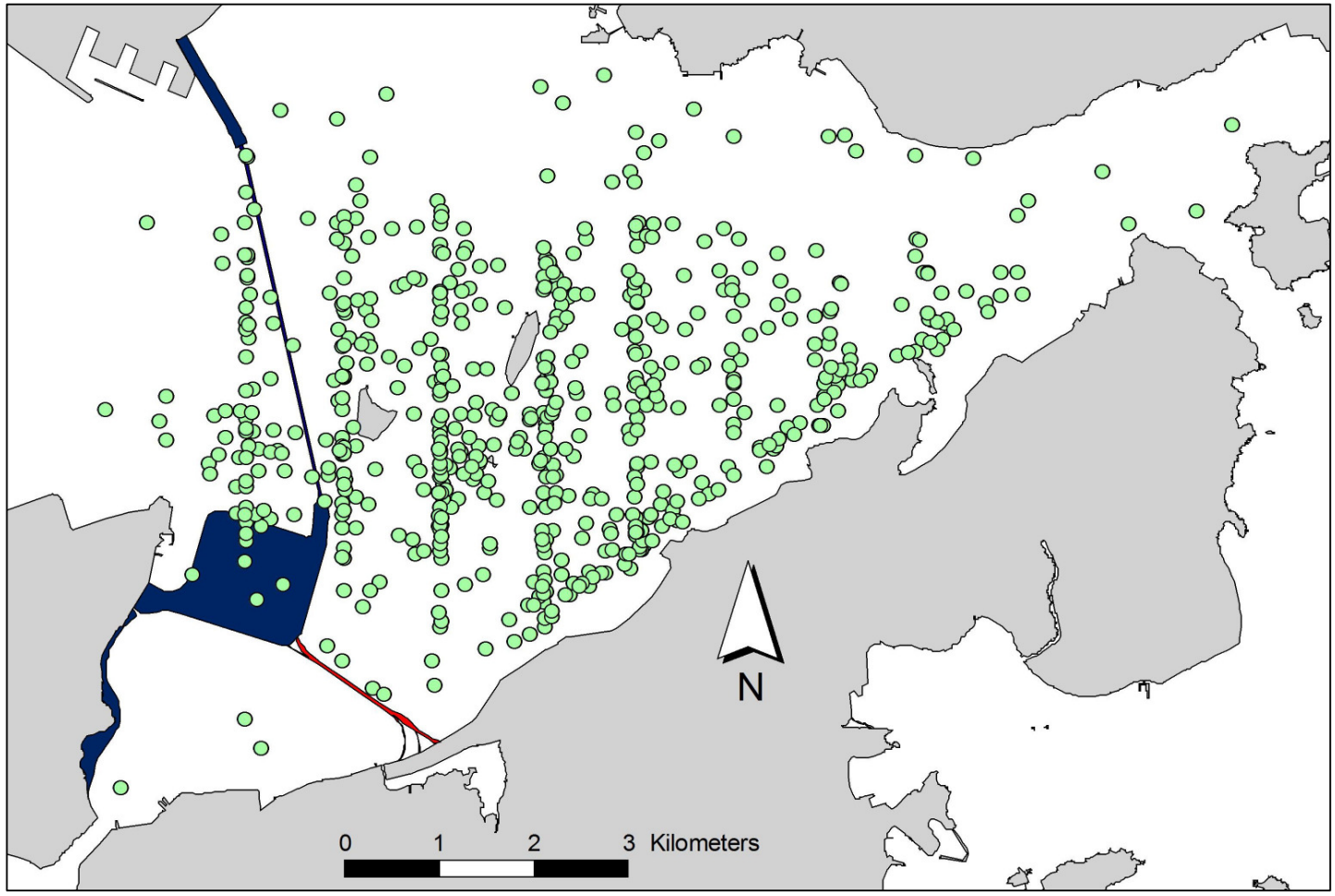
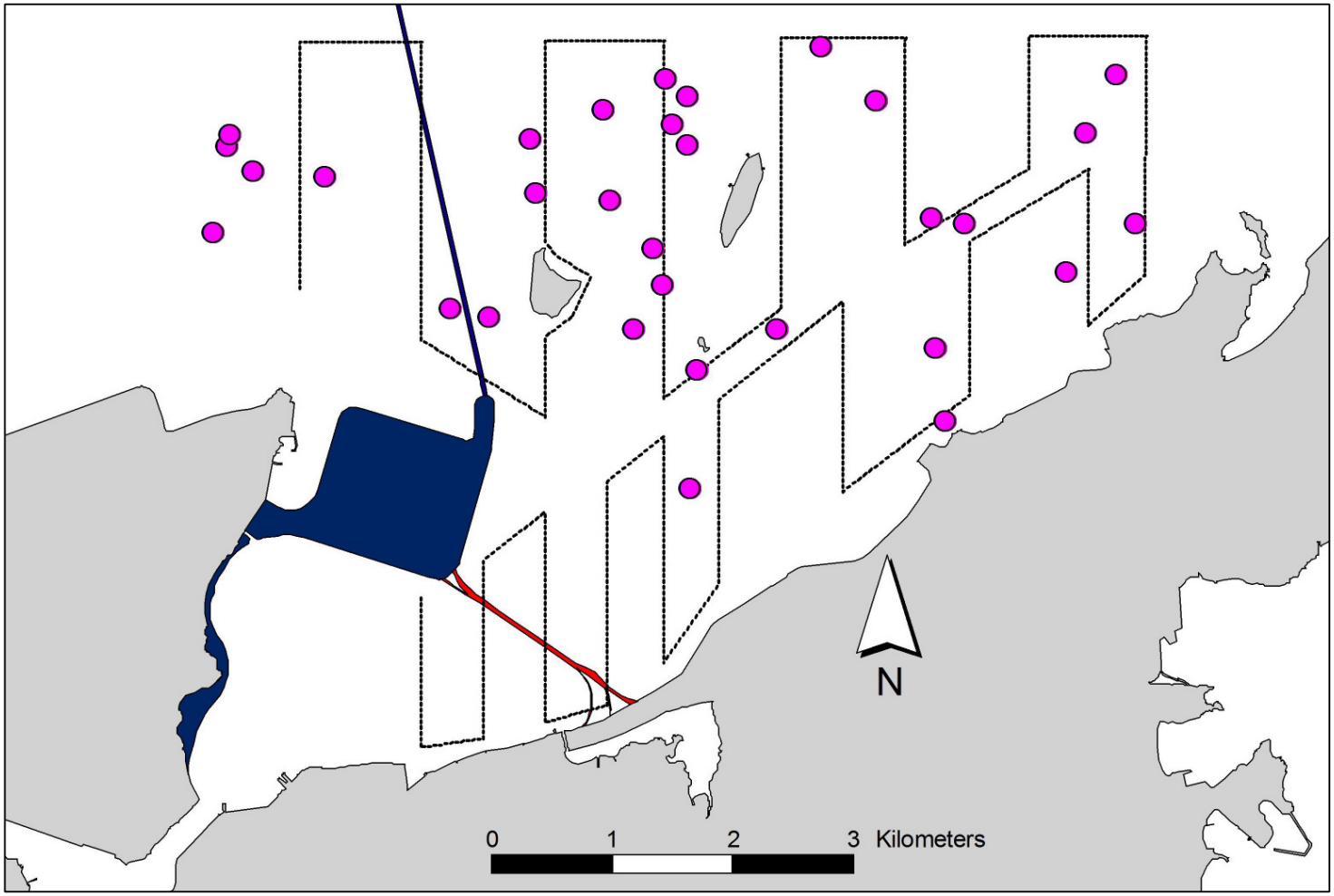


Figure 6. Distribution of Chinese white dolphin sightings during TM-CLKL acoustic surveys (Sep 26th-Oct 25th, 2013)



APPENDIX I. Baseline Monitoring on Shore-based Theodolite Tracking to Investigate Dolphin Behaviour and Movement in relation to Bored Piling Activities (September-October 2013)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep
08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
	Theodolite Tracking Survey (Day 1) (Completed)	Theodolite Tracking Survey (Day 2) (Completed)	Theodolite Tracking Survey (Day 3) (Completed)	Theodolite Tracking Survey (Day 4) (Completed)	Theodolite Tracking Survey (Day 5) (Completed)	Theodolite Tracking Survey (Day 6) (Completed)
15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep
Theodolite Tracking Survey (Day 7) (Completed)	Theodolite Tracking Survey (Day 8) (Completed)	Theodolite Tracking Survey (Day 9) (Completed)	Theodolite Tracking Survey (Day 10) (Completed)	Theodolite Tracking Survey (Day 11) (Completed)		Theodolite Tracking Survey (Day 12) (Completed)
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
		Theodolite Tracking Survey (Day 13) (Completed)	Theodolite Tracking Survey (Day 14) (Completed)	Theodolite Tracking Survey (Day 15) (Completed)	Theodolite Tracking Survey (Day 16) (Completed)	
29-Sep	30-Sep					
Theodolite Tracking Survey (Day 17) (Completed)	Theodolite Tracking Survey (Day 18) (Completed)					

APPENDIX I. (cont'd)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Oct	02-Oct	03-Oct	04-Oct	05-Oct
			Theodolite Tracking Survey (Day 19) (Completed)	Theodolite Tracking Survey (Day 20) (Completed)	Theodolite Tracking Survey (Day 21) (Completed)	Theodolite Tracking Survey (Day 22) (Completed)
06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct
	Theodolite Tracking Survey (Day 23) (Completed)	Theodolite Tracking Survey (Day 24) (Completed)	Theodolite Tracking Survey (Day 25) (Completed)	Theodolite Tracking Survey (Day 26) (Completed)	Theodolite Tracking Survey (Day 27)	Theodolite Tracking Survey (Day 28)
13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct
Theodolite Tracking Survey (Day 29)	Theodolite Tracking Survey (Day 30)					
20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct
27-Oct	28-Oct	29-Oct	30-Oct	31-Oct		

Appendix II. Track log data for TMCLKL study on dolphin movement and behaviour

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Sep-13	8:04:39	Other	Stationary	94	37	40	0	0	0	22.3005	113.9672	326.72	13.73
09-Sep-13	8:13:14	Other	Stationary	90	34	20	278	25	20	22.3065	113.9427	2631.43	292.15
09-Sep-13	8:13:24	Other	Stationary	90	34	20	282	58	0	22.3083	113.9435	2631.43	296.70
09-Sep-13	8:13:37	Other	Stationary	90	33	30	285	13	0	22.3094	113.9434	2699.83	298.95
09-Sep-13	8:13:47	Other	Stationary	90	32	30	287	39	30	22.3107	113.9433	2786.88	301.39
09-Sep-13	8:13:57	Other	Stationary	90	32	10	290	18	10	22.3118	113.9437	2817.18	304.03
09-Sep-13	8:14:06	Other	Stationary	90	33	40	293	12	10	22.3121	113.9455	2685.86	306.93
09-Sep-13	8:14:18	Other	Stationary	90	43	30	295	44	50	22.3094	113.9509	2060.26	309.48
09-Sep-13	8:14:30	Other	Stationary	90	52	10	300	12	30	22.3083	113.9544	1711.13	313.94
09-Sep-13	8:15:21	Other	Stationary	91	0	10	304	50	10	22.3076	113.9569	1480.27	318.57
09-Sep-13	8:15:37	Other	Stationary	90	53	10	307	34	30	22.3094	113.9562	1678.38	321.30
09-Sep-13	8:15:47	Other	Stationary	90	59	0	312	43	50	22.3089	113.9583	1509.95	326.46
09-Sep-13	8:15:52	Other	Stationary	90	58	0	316	36	10	22.3096	113.9590	1536.36	330.33
09-Sep-13	8:16:00	Other	Stationary	90	56	20	322	54	40	22.3107	113.9603	1582.52	336.64
09-Sep-13	8:16:05	Other	Stationary	90	54	0	328	44	20	22.3118	113.9616	1652.03	342.47
09-Sep-13	8:16:10	Other	Stationary	90	52	30	331	58	10	22.3124	113.9623	1700.07	345.70
09-Sep-13	8:16:19	Other	Stationary	90	50	20	335	46	40	22.3133	113.9633	1774.65	349.51
09-Sep-13	8:16:31	Other	Stationary	90	49	10	337	14	40	22.3138	113.9636	1817.61	350.97
09-Sep-13	8:16:39	Other	Stationary	90	44	0	340	59	50	22.3159	113.9646	2036.24	354.73
09-Sep-13	8:16:45	Other	Stationary	90	40	50	346	17	40	22.3174	113.9664	2198.71	0.02
09-Sep-13	8:16:52	Other	Stationary	90	34	30	350	9	30	22.3211	113.9681	2618.18	3.89
09-Sep-13	8:17:02	Other	Stationary	90	31	20	351	49	40	22.3236	113.9691	2895.99	5.56
09-Sep-13	8:17:40	Other	Stationary	90	29	50	348	9	40	22.3251	113.9674	3049.88	1.89
09-Sep-13	8:17:48	Other	Stationary	90	31	0	351	48	50	22.3239	113.9692	2928.79	5.54
09-Sep-13	8:17:58	Other	Stationary	90	29	40	347	20	40	22.3252	113.9670	3068.02	1.07
09-Sep-13	8:18:05	Other	Stationary	90	29	10	345	36	10	22.3257	113.9660	3123.82	359.33
09-Sep-13	8:18:15	Other	Stationary	90	29	10	343	35	30	22.3257	113.9650	3123.82	357.32
09-Sep-13	8:18:24	Other	Stationary	90	28	40	341	4	50	22.3261	113.9636	3181.74	354.81
09-Sep-13	8:18:30	Other	Stationary	90	28	50	339	38	40	22.3259	113.9629	3162.19	353.37
09-Sep-13	8:18:42	Other	Stationary	90	28	20	334	35	30	22.3260	113.9601	3221.61	348.32
09-Sep-13	8:18:52	Other	Stationary	90	27	0	329	48	40	22.3269	113.9571	3391.96	343.54
09-Sep-13	8:19:05	Other	Stationary	90	27	0	325	45	0	22.3262	113.9548	3391.96	339.48
09-Sep-13	8:19:13	Other	Stationary	90	25	50	322	56	20	22.3270	113.9527	3557.14	336.67
09-Sep-13	8:19:23	Other	Stationary	90	26	30	316	40	50	22.3247	113.9498	3460.76	330.41
09-Sep-13	8:19:30	Other	Stationary	90	28	0	311	42	0	22.3218	113.9484	3262.52	325.43
09-Sep-13	8:19:41	Other	Stationary	90	29	0	309	46	30	22.3204	113.9482	3142.88	323.50
09-Sep-13	8:19:55	Other	Stationary	90	29	30	303	24	30	22.3180	113.9460	3086.39	317.14
09-Sep-13	8:20:10	Other	Stationary	90	29	40	300	53	20	22.3170	113.9452	3068.02	314.62
09-Sep-13	8:20:37	Other	Stationary	91	26	40	309	38	10	22.3050	113.9605	1023.98	323.37
09-Sep-13	8:20:53	Construction Boat	Stationary	91	8	40	311	41	0	22.3072	113.9592	1294.97	325.41
09-Sep-13	8:21:12	Other	Stationary	91	2	30	321	58	10	22.3093	113.9607	1424.29	335.70
09-Sep-13	8:21:21	Other	Stationary	91	2	40	322	35	50	22.3093	113.9609	1420.46	336.33
09-Sep-13	8:21:36	Tug Boat	Stationary	91	16	10	332	26	30	22.3078	113.9637	1166.30	346.17
09-Sep-13	8:21:44	Construction Boat	Stationary	91	14	50	334	38	10	22.3081	113.9641	1187.26	348.37
09-Sep-13	8:22:02	Other	Stationary	90	42	20	341	12	0	22.3166	113.9646	2118.59	354.93
09-Sep-13	8:22:18	Other	Stationary	90	42	30	342	25	10	22.3166	113.9650	2110.06	356.15
09-Sep-13	8:22:38	Construction Boat	Stationary	90	33	50	356	50	20	22.3213	113.9712	2672.04	10.57
09-Sep-13	8:22:45	Construction Boat	Stationary	90	36	10	358	42	30	22.3195	113.9716	2492.73	12.44
09-Sep-13	8:22:52	Construction Boat	Stationary	90	32	20	0	21	20	22.3221	113.9730	2801.94	14.09
09-Sep-13	8:23:13	Other	Stationary	90	58	50	358	20	40	22.3109	113.9695	1514.29	12.07
09-Sep-13	8:23:21	Other	Stationary	90	58	50	0	52	50	22.3108	113.9701	1514.29	14.61
09-Sep-13	8:23:39	Other	Stationary	90	46	0	1	57	0	22.3145	113.9715	1945.58	15.68
09-Sep-13	8:23:53	Other	Stationary	90	45	20	4	49	40	22.3145	113.9725	1974.88	18.56
09-Sep-13	8:24:00	Tug Boat	Stationary	90	45	0	5	39	10	22.3145	113.9728	1989.86	19.38
09-Sep-13	8:24:14	Other	Stationary	90	35	10	3	30	40	22.3197	113.9738	2566.48	17.24
09-Sep-13	8:24:20	Other	Stationary	90	35	30	4	14	0	22.3194	113.9740	2541.41	17.96
09-Sep-13	8:24:32	Construction Boat	Stationary	90	29	40	16	24	0	22.3215	113.9814	3068.02	30.13
09-Sep-13	8:25:02	Transportation Boat	Travelling	91	0	50	296	51	50	22.3062	113.9556	1463.83	310.59
09-Sep-13	8:25:15	Transportation Boat	Travelling	91	4	30	310	51	50	22.3077	113.9586	1379.59	324.59
09-Sep-13	8:25:32	Transportation Boat	Travelling	90	44	0	346	2	30	22.3159	113.9663	2036.24	359.77
09-Sep-13	8:26:20	Dumping Guide Boat	Travelling	91	18	50	290	43	0	22.3034	113.9574	1126.52	304.45
09-Sep-13	8:26:42	Transportation Boat	Travelling	90	56	50	306	0	20	22.3084	113.9565	1568.38	319.74
09-Sep-13	8:26:48	Transportation Boat	Travelling	90	57	10	329	29	0	22.3111	113.9620	1559.10	343.21
09-Sep-13	8:26:59	Transportation Boat	Travelling	90	54	20	306	21	10	22.3090	113.9562	1641.73	320.08
09-Sep-13	8:27:19	Transportation Boat	Travelling	90	52	10	338	16	20	22.3129	113.9641	1711.13	352.00
09-Sep-13	8:28:47	Transportation Boat	Travelling	90	45	0	345	1	20	22.3155	113.9660	1989.86	358.75
09-Sep-13	8:28:59	Transportation Boat	Travelling	90	58	20	325	57	50	22.3105	113.9612	1527.46	339.69
09-Sep-13	8:29:13	Transportation Boat	Travelling	90	58	20	296	22	30	22.3065	113.9550	1527.46	310.10
09-Sep-13	8:29:54	Transportation Boat	Travelling	91	1	10	304	50	40	22.3074	113.9570	1455.75	318.57
09-Sep-13	8:30:15	Transportation Boat	Travelling	91	1	10	305	24	20	22.3075	113.9571	1455.75	319.14
09-Sep-13	8:30:24	Transportation Boat	Travelling	91	3	30	296	9	0	22.3057	113.9559	1401.58	309.88
09-Sep-13	8:30:30	Transportation Boat	Travelling	90	37	0	354	42	10	22.3193	113.9699	2434.49	8.43
09-Sep-13	8:30:38	Transportation Boat	Travelling	91	2	10	310	54	40	22.3081	113.9583	1432.03	324.64
09-Sep-13	8:30:48	HSF High Speed Ferry	Travelling	91	2	40	283	35	40	22.3035	113.9541	1420.46	297.32
09-Sep-13	8:31:42	Transportation Boat	Travelling	91	1	30	300	40	20	22.3067	113.9563	1447.75	314.40
09-Sep-13	8:31:48	Transportation Boat	Travelling	90	58	40	320	17	20	22.3099	113.9599	1518.65	334.02
09-Sep-13	8:32:02	HSF High Speed Ferry	Travelling	91	19	10	305	29	40	22.3053	113.9593	1121.74	319.22
09-Sep-13	8:32:15	Dumping Guide Boat	Travelling	91	9	40	292	18	50	22.3044	113.9564	1276.19	306.04
09-Sep-13	8:32:35	Tug Boat	Travelling	91	2	20	313	34	50	22.3084	113.9589	1428.15	327.31
09-Sep-13	8:32:42	Construction Boat	Travelling	91	4	10	312	40	0	22.3080	113.9589	1386.85	326.40
09-Sep-13	8:33:24	Dumping Guide Boat	Travelling	91	1	0	283	16	50	22.3036	113.9537	1459.78	297.01
09-Sep-13	8:33:33	Transportation Boat	Travelling	90	54	10	285	38	10	22.3049	113.9524	1646.86	299.37
09-Sep-13	8:33:39	Transportation Boat	Travelling	90	54	0	336	38	40	22.3123	113.9637	1652.03	350.37
09-Sep-13	8:33:55	HSF High Speed Ferry	Travelling	91	15	10	349	32	20	22.3082	113.9671	1181.95	3.27
09-Sep-13	8:34:04	Tug Boat	Travelling	91	0	20	318	51	10	22.3094	113.9598	1476.12	332.58
09-Sep-13	8:34:10	Construction Boat	Travelling	91	0	20	317	12	40	22.3092	113.9594	1476.12	330.94
09-Sep-13	8:34:24	Transportation Boat	Travelling	91	1	50	307	58	40	22.3078	113.9577	1439.85	321.71
09-Sep-13	8:35:02	Transportation Boat	Travelling	95	19	20	354	6	20	22.3001	113.9668	276.35	7.84
09-Sep-13	8:35:35	HSF High Speed Ferry	Travelling	91	1	0	291	1	30	22.3051	113.9547	1459.78	304.75
09-Sep-13	8:35:43	HSF High Speed Ferry	Travelling	90	51	20	13	12	10	22.3116	113.9741	1739.42	26.93
09-Sep-13	8:36:01	Transportation Boat	Travelling	90	41	30	346	37	20	22.3171	113.9665	2162.36	0.35
09-Sep-13	8:36:11	Transportation Boat	Travelling	90	59	50	322	48	20	22.3099	113.9606	1488.63	336.54
09-Sep-13	8:36:22	Transportation Boat	Travelling	92	49	20	335	59	10	22.3022	113.9655	522.54	349.72
09-Sep-13	8:36:36	Tug Boat	Travelling	91	14	40	337	18	40	22.3082	113.9646	1189.94	351.04
09-Sep-13	8:36:44	Construction Boat	Travelling	91	15	0	335	11	20	22.3081	113.9642	1184.60	348.92
09-Sep-13	8:37:18	HSF High Speed Ferry	Travelling	90	40	0	25	55	30	22.3132	113.9803	2245.94	39.65
09-Sep-13	8:37:26	HSF High Speed Ferry	Travelling	91	0	10	324	34	20	22.3100	113.9611	1480.27	338.30
09-Sep-13	8:37:53	Transportation Boat	Travelling	91	47	20	328	10	0	22.3047	113.9639	825.80	341.90
09-Sep-13	8:38:34	Transportation Boat	Travelling	90	50	40	338	19	0	22.3133	113.9640	1762.75	352.05
09-Sep-13	8:38:43	Transportation Boat	Travelling	90	40	10	351	56	30	22.3176	113.9685	2236.33	5.67
09-Sep-13	8:38:51	Transportation Boat	Travelling	90	34	10	353	27	30	22.3212	113.9696	2644.83	7.19
09-Sep-13	8:39:02	Tug Boat	Travelling	90	51	0	340	16	20	22.3133	113.9646	1751.01	354.00
09-Sep-13	8:39:09	Construction Boat	Travelling	90	52	0	339	20	40	22.3130	113.9644	1716.71	353.07
09-Sep-13	8:39:30	Tug Boat	Travelling	91	20	40	330	55	50	22.3072	113.9636	1100.72	344.66
09-Sep-13	8:39:38	Construction Boat	Travelling	91	21	40	332	7	50	22.3071	113.9638	1087.14	345.86
09-Sep-13	8:39:59	HSF High Speed Ferry	Travelling	90	38	50	350	42	40	22.3184	113.9681	2315.63	4.44
09-Sep-13	8:40:07	Transportation Boat	Travelling	90	45	50	348	11	0	22.3152	113.9670	1952.82	1.91
09-Sep-13	8:40:26	Transportation Boat	Travelling	90	35	20	356	16	20	22.3203	113.9707	2553.88	10.00
09-Sep-13	8:41:18	Transportation Boat	Travelling	90	40	10	349	9	30	22.3177	113.9675	2236.33	2.89
09-Sep-13	8:41:24	Transportation Boat	Travelling	90	46	40	343	54	20	22.3149	113.9656	1917.15	357.64
09-Sep-13	8:41:50	Transportation Boat	Travelling	90	41	10	356	38	30	22.3169	113.9702	2180.38	10.37
09-Sep-13	8:42:21	Research Vessel	Travelling	90	49	20	350	21	30	22.3139	113.9677	1811.35	4.09
09-Sep-13	8:42:52	Tug Boat	Travelling	90	40	40	349	8	0	22.3175	113.9675	2208.00	2.86
09-Sep-13	8:42:58	Construction Boat	Travelling	90	41	10	348	40	0	22.3172	113.9673	2180.38	2.40
09-Sep-13	8:43:05	Tug Boat	Travelling	91	10	10	312	29	0	22.3071	113.9595	1267.00	326.21
09-Sep-13	8:43:12	Construction Boat	Travelling	91	11	30	313	47	40	22.3071	113.9599	1243.14	327.52

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Sep-13	8:43:27	Transportation Boat	Travelling	90	52	50	345	21	20	22.3128	113.9661	1689.15	359.09
09-Sep-13	8:43:34	Transportation Boat	Travelling	91	1	40	298	44	10	22.3064	113.9560	1443.79	312.47
09-Sep-13	8:43:55	Transportation Boat	Stationary	91	3	0	322	31	40	22.3093	113.9609	1412.85	336.26
09-Sep-13	8:44:12	Transportation Boat	Travelling	90	58	20	306	26	20	22.3082	113.9569	1527.46	320.17
09-Sep-13	8:44:22	Transportation Boat	Travelling	91	7	30	292	39	50	22.3047	113.9561	1317.60	306.39
09-Sep-13	8:44:42	Speed Boat	Travelling	94	34	0	340	5	10	22.3005	113.9661	322.34	353.82
09-Sep-13	8:44:56	Transportation Boat	Travelling	90	50	0	304	14	10	22.3096	113.9548	1786.71	317.97
09-Sep-13	8:45:20	Transportation Boat	Travelling	91	11	40	322	58	20	22.3079	113.9616	1240.23	336.70
09-Sep-13	8:45:26	Transportation Boat	Travelling	91	8	0	320	59	0	22.3083	113.9610	1307.80	334.71
09-Sep-13	8:45:40	Research Vessel	Travelling	91	4	40	324	0	40	22.3091	113.9613	1376.00	337.74
09-Sep-13	8:45:59	Speed Boat	Travelling	92	42	20	295	11	40	22.3007	113.9623	545.14	308.92
09-Sep-13	8:46:40	Transportation Boat	Travelling	90	50	50	308	40	0	22.3101	113.9560	1756.86	322.40
09-Sep-13	8:46:59	Transportation Boat	Travelling	91	34	50	322	22	30	22.3053	113.9627	935.26	336.10
09-Sep-13	8:47:06	Transportation Boat	Travelling	91	9	50	293	17	20	22.3045	113.9565	1273.11	307.02
09-Sep-13	8:47:16	Tug Boat	Travelling	91	2	20	290	29	20	22.3048	113.9549	1428.15	304.22
09-Sep-13	8:47:23	Construction Boat	Travelling	91	3	10	291	31	10	22.3049	113.9552	1409.07	305.25
09-Sep-13	8:47:46	Tug Boat	Travelling	90	55	10	2	12	40	22.3116	113.9707	1616.52	15.94
09-Sep-13	8:47:58	Transportation Boat	Travelling	91	1	30	281	31	40	22.3032	113.9537	1447.75	295.26
09-Sep-13	8:48:13	Research Vessel	Travelling	91	6	0	296	1	50	22.3054	113.9563	1347.88	309.76
09-Sep-13	8:48:38	Transportation Boat	Travelling	92	21	10	322	54	0	22.3028	113.9640	627.18	336.63
09-Sep-13	8:48:57	Tug Boat	Travelling	90	58	0	1	26	50	22.3110	113.9703	1536.36	15.18
09-Sep-13	8:49:39	Research Vessel	Travelling	91	1	10	281	40	0	22.3032	113.9536	1455.75	295.40
09-Sep-13	8:50:46	Transportation Boat	Travelling	95	3	10	340	49	20	22.3002	113.9661	291.17	354.55
09-Sep-13	8:50:55	Transportation Boat	Travelling	91	0	20	317	8	0	22.3092	113.9594	1476.12	330.86
09-Sep-13	8:51:08	Tug Boat	Travelling	90	52	40	3	58	10	22.3121	113.9714	1694.59	17.70
09-Sep-13	8:52:34	Transportation Boat	Travelling	91	6	40	337	5	0	22.3095	113.9643	1334.25	350.81
09-Sep-13	8:52:49	Transportation Boat	Travelling	90	58	10	328	8	10	22.3107	113.9618	1531.90	341.87
09-Sep-13	8:52:56	Tug Boat	Travelling	90	44	40	5	44	20	22.3146	113.9729	2005.08	19.47
09-Sep-13	8:54:51	Transportation Boat	Travelling	90	52	0	338	2	50	22.3129	113.9640	1716.71	351.78
09-Sep-13	8:55:02	Transportation Boat	Travelling	91	41	50	325	51	20	22.3050	113.9634	870.63	339.59
09-Sep-13	8:55:28	Transportation Boat	Travelling	90	58	0	288	59	30	22.3051	113.9538	1536.36	302.72
09-Sep-13	8:56:52	Container Boat	Travelling	91	19	20	313	5	40	22.3061	113.9604	1119.37	326.82
09-Sep-13	8:57:21	Transportation Boat	Travelling	90	56	0	306	27	20	22.3086	113.9565	1592.08	320.19
09-Sep-13	8:57:32	Dumping Guide Boat	Travelling	91	1	10	285	28	10	22.3040	113.9540	1455.75	299.20
09-Sep-13	8:57:41	Transportation Boat	Travelling	90	43	0	346	49	10	22.3164	113.9666	2084.85	0.55
09-Sep-13	8:57:49	Transportation Boat	Travelling	91	56	10	326	8	50	22.3041	113.9638	762.73	339.88
09-Sep-13	8:58:04	Container Boat	Travelling	91	8	40	310	28	50	22.3071	113.9590	1294.97	324.21
09-Sep-13	9:00:56	Dumping Guide Boat	Travelling	91	8	0	316	35	30	22.3078	113.9601	1307.80	330.32
09-Sep-13	9:01:08	Container Boat	Travelling	90	46	20	301	26	40	22.3099	113.9532	1931.26	315.17
09-Sep-13	9:04:04	Transportation Boat	Travelling	93	55	20	349	59	50	22.3010	113.9666	375.55	3.73
09-Sep-13	9:04:35	Other	Travelling	90	52	20	25	12	50	22.3096	113.9768	1705.58	38.94
09-Sep-13	9:05:08	Dumping Guide Boat	Travelling	90	57	0	346	38	20	22.3117	113.9665	1563.72	0.37
09-Sep-13	9:05:16	Transportation Boat	Travelling	92	30	40	323	48	40	22.3025	113.9642	587.50	337.54
09-Sep-13	9:10:22	Ferry	Travelling	93	41	0	334	29	40	22.3011	113.9656	400.01	348.22
09-Sep-13	9:10:35	Speed Boat	Travelling	90	56	40	296	21	0	22.3067	113.9547	1573.06	310.08
09-Sep-13	9:10:44	Transportation Boat	Travelling	91	4	20	296	24	20	22.3056	113.9561	1383.21	310.14
09-Sep-13	9:11:07	Ferry	Travelling	94	40	30	332	18	10	22.3004	113.9657	314.83	346.03
09-Sep-13	9:11:30	Transportation Boat	Travelling	90	59	30	308	8	0	22.3082	113.9574	1497.08	321.86
09-Sep-13	9:11:38	Speed Boat	Travelling	90	58	30	306	4	30	22.3081	113.9568	1523.04	319.80
09-Sep-13	9:12:06	Transportation Boat	Travelling	91	6	40	306	41	10	22.3069	113.9581	1334.25	320.42
09-Sep-13	9:12:22	Ferry	Travelling	94	40	0	337	28	0	22.3004	113.9659	315.40	351.20
09-Sep-13	9:12:35	Speed Boat	Travelling	90	54	20	312	38	20	22.3099	113.9576	1641.73	326.37
09-Sep-13	9:12:57	HSF High Speed Ferry	Travelling	90	29	30	353	49	40	22.3252	113.9703	3086.39	7.56
09-Sep-13	9:13:28	Tug Boat	Travelling	90	57	30	287	24	10	22.3048	113.9535	1549.92	301.13
09-Sep-13	9:13:49	Ferry	Stationary	94	21	20	331	8	20	22.3006	113.9655	338.04	344.87
09-Sep-13	9:14:12	Transportation Boat	Travelling	91	4	40	322	51	20	22.3090	113.9611	1376.00	336.59
09-Sep-13	9:14:19	Transportation Boat	Travelling	91	9	0	325	48	10	22.3085	113.9620	1288.65	339.53
09-Sep-13	12:21:11	Research Vessel	Travelling	93	2	40	336	16	10	22.3017	113.9656	459.81	350.00
09-Sep-13	12:21:28	Tug Boat	Travelling	90	38	0	350	46	30	22.3178	113.9681	2246.71	4.50
09-Sep-13	12:21:38	Ferry	Travelling	92	21	50	305	1	10	22.3016	113.9626	592.71	318.75
09-Sep-13	12:22:25	Transportation Boat	Travelling	91	2	40	299	45	30	22.3060	113.9569	1348.53	313.49
09-Sep-13	12:22:39	Transportation Boat	Travelling	91	2	20	288	40	10	22.3042	113.9553	1355.87	302.40
09-Sep-13	12:22:49	Transportation Boat	Travelling	91	0	20	288	43	40	22.3044	113.9549	1401.42	302.46
09-Sep-13	12:23:00	Transportation Boat	Travelling	90	59	0	306	30	10	22.3075	113.9575	1433.55	320.23
09-Sep-13	12:23:32	Transportation Boat	Travelling	90	53	10	306	31	20	22.3086	113.9565	1593.42	320.25
09-Sep-13	12:24:00	Transportation Boat	Travelling	91	1	0	305	19	50	22.3070	113.9576	1386.12	319.06
09-Sep-13	12:24:17	Transportation Boat	Travelling	90	57	30	307	17	30	22.3079	113.9574	1471.71	321.02
09-Sep-13	12:24:48	Transportation Boat	Travelling	90	52	10	306	58	30	22.3089	113.9564	1624.75	320.70
09-Sep-13	12:25:04	Transportation Boat	Travelling	90	50	20	307	54	40	22.3095	113.9562	1685.07	321.64
09-Sep-13	12:25:13	Transportation Boat	Travelling	91	0	30	304	7	30	22.3069	113.9573	1397.94	317.85
09-Sep-13	12:25:27	Container Boat	Travelling	90	55	10	305	34	0	22.3081	113.9567	1535.12	319.30
09-Sep-13	12:30:04	Container Boat	Stationary	91	19	30	313	35	0	22.3057	113.9608	1061.60	327.31
09-Sep-13	12:33:15	Ferry	Stationary	91	47	0	285	55	50	22.3011	113.9597	787.69	299.66
09-Sep-13	12:33:26	Research Vessel	Stationary	92	38	40	321	18	20	22.3019	113.9642	530.42	335.04
09-Sep-13	12:33:43	Transportation Boat	Travelling	90	44	20	346	37	40	22.3149	113.9665	1920.40	0.36
09-Sep-13	12:34:56	Transportation Boat	Travelling	90	52	0	334	24	20	22.3120	113.9631	1632.17	348.14
09-Sep-13	12:35:03	Transportation Boat	Travelling	90	56	50	307	8	10	22.3080	113.9572	1491.27	320.87
09-Sep-13	12:36:10	Transportation Boat	Travelling	90	59	0	317	5	0	22.3089	113.9596	1435.96	330.81
09-Sep-13	12:36:19	Transportation Boat	Travelling	91	7	40	318	11	0	22.3075	113.9607	1250.04	331.91
09-Sep-13	12:37:05	Transportation Boat	Travelling	93	35	10	338	57	50	22.3011	113.9659	390.93	352.69
09-Sep-13	12:37:19	Transportation Boat	Travelling	90	54	10	305	34	20	22.3083	113.9565	1566.29	319.30
09-Sep-13	12:37:38	Transportation Boat	Travelling	91	13	10	331	58	0	22.3077	113.9636	1155.40	345.70
09-Sep-13	12:38:07	Transportation Boat	Travelling	90	49	40	338	39	40	22.3129	113.9642	1710.97	352.39
09-Sep-13	12:38:38	Transportation Boat	Travelling	92	2	20	328	53	50	22.3035	113.9644	689.04	342.63
09-Sep-13	12:39:52	Transportation Boat	Stationary	91	11	50	332	18	30	22.3079	113.9636	1177.38	346.04
09-Sep-13	12:40:00	Transportation Boat	travelling	90	57	10	324	59	30	22.3101	113.9612	1483.39	338.72
09-Sep-13	12:40:07	Transportation Boat	travelling	91	25	40	325	16	50	22.3059	113.9630	985.92	339.01
09-Sep-13	12:40:33	Fishing Boat	Travelling	91	19	20	31	18	50	22.3044	113.9737	1065.27	45.04
09-Sep-13	12:40:49	Research Vessel	Stationary	92	19	20	302	0	30	22.3015	113.9623	604.85	315.74
09-Sep-13	12:41:18	Ferry	Travelling	91	29	40	286	29	50	22.3019	113.9585	941.81	300.23
09-Sep-13	12:42:05	Transportation Boat	Travelling	91	10	50	329	37	20	22.3079	113.9631	1194.49	343.35
09-Sep-13	12:42:12	Transportation Boat	Travelling	91	2	10	322	26	20	22.3088	113.9610	1362.95	336.17
09-Sep-13	12:42:49	Fishing Boat	Operate and travelling	91	59	20	31	28	0	22.3021	113.9713	706.81	45.20
09-Sep-13	12:43:46	Transportation Boat	Travelling	91	11	40	324	17	40	22.3075	113.9621	1180.73	338.02
09-Sep-13	12:43:51	Transportation Boat	Travelling	91	11	40	333	0	0	22.3080	113.9638	1180.74	346.73
09-Sep-13	12:44:09	Fishing Boat	Operate and travelling	91	39	40	33	2	20	22.3028	113.9724	847.11	46.77
09-Sep-13	12:44:30	Research Vessel	Travelling	92	9	50	303	48	0	22.3019	113.9621	649.57	317.53
09-Sep-13	12:45:01	Fishing Boat	Non-operate and travelling	92	0	10	19	46	30	22.3029	113.9702	702.08	33.50
09-Sep-13	12:45:33	Transportation Boat	Travelling	90	54	40	306	50	0	22.3084	113.9568	1553.37	320.56
09-Sep-13	12:45:54	Fishing Boat	Non-operate and travelling	93	33	30	343	41	50	22.3012	113.9662	394.43	357.43
09-Sep-13	12:46:11	Transportation Boat		90	55	0	24	12	10	22.3086	113.9756	1543.94	37.93
09-Sep-13	12:46:26	Research Vessel	Travelling	91	41	10	328	49	40	22.3048	113.9640	834.73	342.56
09-Sep-13	12:46:36	Transportation Boat	Travelling	91	10	40	327	58	10	22.3079	113.9627	1198.02	341.70
09-Sep-13	12:46:45	Construction Boat	Travelling	91	11	10	330	16	50	22.3079	113.9632	1189.55	344.01
09-Sep-13	12:46:53	Fishing Boat	non-Operate and travelling	92	5	20	298	31	50	22.3017	113.9616	673.19	312.26
09-Sep-13	12:47:39	Ferry	Travelling	90	50	10	341	30	10	22.3128	113.9650	1695.67	355.23
09-Sep-13	12:48:02	Transportation Boat	Travelling	90	53	0	336	8	40	22.3118	113.9637	1603.54	349.87
09-Sep-13	12:49:22	Transportation Boat	Travelling	91	8	50	319	30	20	22.3075	113.9610	1230.68	333.24
09-Sep-13	12:49:31	Transportation Boat	Travelling	91	48	20	13	14	20	22.3039	113.9698	779.56	26.97
09-Sep-13	12:49:43	Transportation Boat	Travelling	91	4	40	320	26	50	22.3082	113.9608	1310.91	334.18
09-Sep-13	12:50:01	Construction Boat	Travelling	91	9	0	319	40	40	22.3075	113.9611	1227.78	333.41
09-Sep-13	12:50:31	Transportation Boat	Travelling	90	49	30	346	17	0	22.3131	113.9664	1719.57	0.01
09-Sep-13	12:51:05	Transportation Boat	Travelling	93	20	20	5	16	10	22.3012	113.9677	420.72	19.00
09-Sep-13	12:51:13	Transportation Boat	Travelling	91	4	30	300	41	10	22.3059	113.9573	1314.58	314.42
09-Sep-13	12:51:21	Transportation Boat	Travelling	90	55	20	344	28	40	22.3114	113.9659	1535.51	358.21
09-Sep-13	12:51:38	Research Vessel	Stationary	91	31	10	322	42	30	22.3053	113.9628	927.43	336.44
09-Sep-13	12:52:16	Transportation Boat	Travelling	95	17	20	0	51	10	22.2999	113.9670	265.10	14.58

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Sep-13	12:52:27	Transportation Boat	Travelling	90	59	10	285	54	0	22.3040	113.9543	1434.84	299.63
09-Sep-13	12:52:34	Transportation Boat	Travelling	91	8	30	345	43	40	22.3088	113.9663	1237.24	359.46
09-Sep-13	12:53:16	Transportation Boat	Travelling	91	0	40	307	58	10	22.3075	113.9580	1399.05	321.70
09-Sep-13	12:53:24	Construction Boat	Travelling	91	2	20	308	51	20	22.3073	113.9584	1361.20	322.59
09-Sep-13	12:55:57	Transportation Boat	Travelling	92	12	50	344	3	10	22.3033	113.9662	635.77	357.78
09-Sep-13	12:59:53	Research Vessel	Acoustic Recording	91	27	10	308	48	50	22.3046	113.9607	971.28	322.54
09-Sep-13	13:00:43	Transportation Boat	Travelling	94	40	0	353	38	10	22.3003	113.9668	300.98	7.37
09-Sep-13	13:00:57	Transportation Boat	Travelling	95	2	50	359	13	30	22.3001	113.9670	278.18	12.95
09-Sep-13	13:02:31	Research Vessel	Stationary	91	23	30	305	59	0	22.3046	113.9600	1014.57	319.71
09-Sep-13	13:03:07	Transportation Boat	Travelling	94	29	0	358	6	50	22.3004	113.9670	313.44	11.84
09-Sep-13	13:03:27	Transportation Boat	Travelling	94	30	10	355	42	40	22.3004	113.9669	312.09	9.44
09-Sep-13	13:03:52	Research Vessel	Acoustic Recording	91	22	30	304	15	40	22.3045	113.9597	1027.13	317.99
09-Sep-13	13:04:46	Transportation Boat	Travelling	91	30	10	284	26	0	22.3016	113.9583	939.35	298.16
09-Sep-13	13:08:31	Transportation Boat	Travelling	93	44	40	345	4	40	22.3010	113.9663	375.83	358.81
09-Sep-13	13:09:20	Transportation Boat	Travelling	94	55	50	0	23	30	22.3001	113.9671	285.10	14.12
09-Sep-13	13:17:18	Transportation Boat	Travelling	91	32	50	323	37	50	22.3052	113.9630	913.66	337.36
09-Sep-13	13:17:42	Research Vessel	Travelling	91	7	50	288	30	20	22.3036	113.9561	1253.52	302.24
09-Sep-13	13:18:52	Research Vessel	Travelling	90	59	40	279	5	40	22.3026	113.9536	1427.45	292.82
09-Sep-13	13:19:20	Transportation Boat	Travelling	92	46	40	328	29	30	22.3020	113.9649	507.83	342.22
09-Sep-13	13:21:07	Transportation Boat	Travelling	95	31	30	357	31	20	22.2999	113.9669	254.63	11.25
09-Sep-13	13:24:58	Transportation Boat	Travelling	91	0	50	302	27	0	22.3067	113.9570	1400.80	316.18
09-Sep-13	13:25:59	Transportation Boat	Stationary	93	14	0	309	8	50	22.3008	113.9638	436.43	322.88
09-Sep-13	13:26:18	Transportation Boat	Stationary	90	59	10	290	29	10	22.3049	113.9548	1441.03	304.22
09-Sep-13	13:27:29	Transportation Boat	Travelling	90	56	30	280	43	0	22.3032	113.9530	1510.26	294.45
09-Sep-13	13:36:48	Research Vessel	Travelling	91	2	0	291	8	10	22.3047	113.9554	1376.18	304.87
09-Sep-13	13:37:01	HSF High Speed Ferry	Stationary	90	57	40	289	17	40	22.3049	113.9543	1481.05	303.02
09-Sep-13	13:37:41	Tug Boat	Travelling	90	43	40	348	41	40	22.3153	113.9672	1966.48	2.42
09-Sep-13	13:37:47	Construction Boat	Travelling	90	42	50	349	10	10	22.3156	113.9674	2005.75	2.90
09-Sep-13	13:38:15	Construction Boat	Travelling	90	58	30	326	51	40	22.3100	113.9617	1459.89	340.59
09-Sep-13	13:38:29	HSF High Speed Ferry	Travelling	90	59	40	316	17	20	22.3088	113.9594	1431.00	330.02
09-Sep-13	13:38:51	Transportation Boat	Travelling	92	34	0	313	33	20	22.3018	113.9635	551.09	327.29
09-Sep-13	13:39:02	Speed Boat	Travelling	93	14	50	317	15	30	22.3010	113.9643	435.27	330.99
09-Sep-13	13:39:33	Research Vessel	Travelling	91	27	20	314	24	20	22.3051	113.9614	974.30	328.14
09-Sep-13	13:40:11	HSF High Speed Ferry	Travelling	90	47	30	340	46	40	22.3138	113.9647	1804.86	354.51
09-Sep-13	13:40:18	Tug Boat	Travelling	90	52	20	340	23	20	22.3123	113.9648	1635.16	354.12
09-Sep-13	13:40:26	Construction Boat	Travelling	90	53	0	339	55	30	22.3121	113.9647	1614.27	353.65
09-Sep-13	13:40:40	Transportation Boat	Travelling	95	28	0	342	33	20	22.2999	113.9662	258.00	356.29
09-Sep-13	13:40:51	Speed Boat	Travelling	94	35	10	335	31	30	22.3003	113.9658	307.84	349.25
09-Sep-13	13:41:16	Construction Boat	Travelling	90	54	30	343	6	30	22.3117	113.9656	1569.29	356.84
09-Sep-13	13:41:34	HSF High Speed Ferry	Travelling	90	36	40	350	14	0	22.3188	113.9680	2355.43	3.96
09-Sep-13	13:41:51	Transportation Boat	Travelling	90	38	40	343	51	40	22.3177	113.9655	2229.64	357.59
09-Sep-13	13:42:07	Research Vessel	Travelling	91	36	20	345	29	0	22.3056	113.9663	883.04	359.21
09-Sep-13	13:42:40	Transportation Boat	Stationary	95	53	30	354	16	20	22.2998	113.9667	239.32	8.00
09-Sep-13	13:43:10	Research Vessel	Stationary	91	39	50	346	34	20	22.3053	113.9664	852.03	0.30
09-Sep-13	13:43:29	Tug Boat	Travelling	91	6	0	324	42	20	22.3084	113.9618	1292.93	338.44
09-Sep-13	13:43:35	Construction Boat	Travelling	91	5	30	325	40	20	22.3086	113.9619	1302.92	339.40
09-Sep-13	13:43:49	Construction Boat	Travelling	90	48	50	354	4	30	22.3133	113.9687	1755.40	7.80
09-Sep-13	13:44:21	Transportation Boat	Travelling	90	37	30	337	33	50	22.3181	113.9630	2302.09	351.29
09-Sep-13	13:47:00	Tug Boat	Travelling	91	3	40	311	36	50	22.3075	113.9590	1341.46	325.34
09-Sep-13	13:47:08	Construction Boat	Travelling	91	2	40	310	41	40	22.3076	113.9587	1363.14	324.42
09-Sep-13	13:51:34	Speed Boat	Stationary	94	39	10	346	46	50	22.3004	113.9664	303.82	0.51
09-Sep-13	13:51:53	Transportation Boat	Travelling	93	42	40	345	2	10	22.3011	113.9663	381.30	358.77
09-Sep-13	13:53:38	Transportation Boat	Travelling	91	46	50	332	10	20	22.3046	113.9645	796.99	345.90
09-Sep-13	13:53:57	Research Vessel	Acoustic Recording	91	33	20	335	40	50	22.3057	113.9648	912.95	349.41
09-Sep-13	13:54:32	Other		91	31	20	335	45	30	22.3059	113.9647	933.13	349.49
09-Sep-13	13:54:44	Transportation Boat	Travelling	91	22	0	326	17	50	22.3064	113.9629	1040.11	340.03
09-Sep-13	13:55:02	Construction Boat	Stationary	91	16	20	312	20	30	22.3060	113.9603	1117.98	326.07
09-Sep-13	13:57:55	Transportation Boat	Stationary	90	57	0	321	18	10	22.3099	113.9602	1502.60	335.03
09-Sep-13	13:58:09	Transportation Boat	Travelling	91	14	10	297	40	30	22.3045	113.9580	1151.38	311.40
09-Sep-13	14:00:06	Transportation Boat	Travelling	91	15	30	309	57	0	22.3058	113.9599	1131.15	323.68
09-Sep-13	14:00:18	Transportation Boat	Travelling	91	8	10	328	2	20	22.3083	113.9626	1254.07	341.77
09-Sep-13	14:01:04	Fishing Boat	Non-operate and travelling	91	7	50	298	0	30	22.3052	113.9573	1260.41	311.74
09-Sep-13	14:01:47	Transportation Boat	Travelling	91	22	30	337	53	30	22.3068	113.9649	1034.68	351.62
09-Sep-13	14:02:00	Transportation Boat	Stationary	91	15	30	308	39	40	22.3057	113.9597	1131.42	322.39
09-Sep-13	14:02:09	Fishing Boat	Non-operate and travelling	91	20	40	301	46	20	22.3044	113.9592	1058.41	315.50
09-Sep-13	14:02:32	Research Vessel	Travelling	91	11	0	4	54	10	22.3079	113.9701	1203.88	18.63
09-Sep-13	14:04:24	Research Vessel	Travelling	91	29	40	315	38	40	22.3050	113.9617	951.76	329.37
09-Sep-13	14:04:42	Transportation Boat	Travelling	91	50	40	8	50	0	22.3040	113.9693	770.33	22.56
09-Sep-13	14:05:49	Research Vessel	Travelling	91	6	10	282	50	0	22.3028	113.9551	1293.28	296.56
09-Sep-13	14:06:19	Research Vessel	Acoustic Recording	91	19	30	326	20	10	22.3067	113.9628	1074.63	340.07
09-Sep-13	14:06:29	Other	Stationary	91	18	30	326	59	20	22.3069	113.9629	1088.45	340.72
09-Sep-13	14:06:44	Transportation Boat	Travelling	91	48	0	37	25	50	22.3021	113.9724	789.64	51.16
09-Sep-13	14:07:51	Transportation Boat	Travelling	91	43	30	43	53	0	22.3016	113.9732	824.26	57.61
09-Sep-13	14:08:28	Transportation Boat	Travelling	93	9	40	344	10	50	22.3017	113.9662	448.83	357.91
09-Sep-13	14:08:44	Fishing Boat	Operate and travelling	90	57	30	293	56	20	22.3058	113.9549	1491.38	307.67
09-Sep-13	14:09:54	Transportation Boat	Travelling	91	51	0	34	41	10	22.3022	113.9720	768.51	48.42
09-Sep-13	14:10:02	Transportation Boat	Travelling	91	54	50	332	24	30	22.3041	113.9647	742.76	346.14
09-Sep-13	14:10:32	Fishing Boat	Non-operate and stationary	90	57	40	296	17	40	22.3062	113.9553	1487.35	310.02
09-Sep-13	14:12:14	Transportation Boat	Travelling	91	10	0	323	21	30	22.3078	113.9618	1222.73	337.09
09-Sep-13	14:12:40	Transportation Boat	Travelling	91	43	0	355	17	20	22.3050	113.9677	828.78	9.02
09-Sep-13	14:12:49	Research Vessel	Travelling	91	12	30	317	13	40	22.3069	113.9608	1180.27	330.96
09-Sep-13	14:13:28	Transportation Boat	Travelling	91	1	10	322	30	0	22.3092	113.9609	1401.65	336.23
09-Sep-13	14:13:51	Transportation Boat	Travelling	91	30	10	342	32	50	22.3061	113.9658	947.58	356.28
09-Sep-13	14:14:02	Speed Boat	Travelling	90	36	0	350	29	50	22.3193	113.9681	2410.66	4.23
09-Sep-13	14:14:36	Research Vessel	Travelling	91	5	10	297	50	20	22.3055	113.9568	1314.80	311.57
09-Sep-13	14:17:33	HSF High Speed Ferry	Travelling	91	1	50	310	21	30	22.3077	113.9585	1387.06	324.09
09-Sep-13	14:21:20	Transportation Boat	Travelling	91	14	40	331	55	0	22.3076	113.9636	1146.94	345.65
09-Sep-13	14:22:21	Transportation Boat	Travelling	95	14	30	347	12	0	22.3001	113.9664	270.55	0.93
09-Sep-13	14:22:46	Transportation Boat	Travelling	95	43	20	356	31	20	22.2998	113.9668	247.70	10.25
09-Sep-13	14:26:03	Transportation Boat	Travelling	91	48	30	7	4	50	22.3042	113.9691	787.89	20.81
09-Sep-13	14:31:05	Transportation Boat	Travelling	91	41	30	354	0	30	22.3051	113.9675	843.04	7.74
09-Sep-13	14:33:20	Transportation Boat	Travelling	91	52	10	10	0	50	22.3039	113.9694	762.72	23.74
09-Sep-13	14:33:34	Research Vessel	Travelling	91	20	30	288	3	10	22.3027	113.9576	1064.82	301.78
09-Sep-13	14:33:55	Fishing Boat	Non-operate and travelling	90	50	0	291	45	50	22.3066	113.9527	1724.56	305.49
09-Sep-13	14:34:49	Transportation Boat	Travelling	93	11	30	341	12	50	22.3016	113.9660	445.99	354.94
09-Sep-13	14:36:02	Transportation Boat	Travelling	91	44	50	44	48	10	22.3015	113.9732	816.61	58.53
09-Sep-13	14:36:11	Transportation Boat	Travelling	91	56	0	332	40	30	22.3041	113.9647	737.67	346.40
09-Sep-13	14:36:23	Research Vessel	Travelling	91	54	10	327	29	20	22.3040	113.9641	749.59	341.22
09-Sep-13	14:36:54	Fishing Boat	Non-operate and stationary	90	49	0	296	55	50	22.3079	113.9534	1761.11	310.66
09-Sep-13	14:39:51	Transportation Boat	Travelling	91	55	0	15	2	30	22.3035	113.9699	744.46	28.77
09-Sep-13	14:39:59	Transportation Boat	Travelling	91	1	10	322	32	40	22.3092	113.9609	1406.34	336.27
09-Sep-13	14:40:14	Research Vessel	Stationary	91	43	40	359	50	40	22.3048	113.9683	826.28	13.57
09-Sep-13	14:42:00	Transportation Boat	Travelling	91	35	40	346	15	50	22.3057	113.9664	895.95	359.99
09-Sep-13	14:42:10	Transportation Boat	Travelling	91	1	10	306	33	50	22.3074	113.9577	1406.72	320.29
09-Sep-13	14:44:02	Transportation Boat	Travelling	90	50	0	306	43	0	22.3096	113.9557	1726.76	320.45
09-Sep-13	14:44:12	Speed Boat	Travelling	92	32	50	296	12	30	22.3009	113.9622	559.89	309.94
09-Sep-13	14:44:34	Transportation Boat	Travelling	91	7	50	326	39	0	22.3084	113.9623	1267.33	340.38
09-Sep-13	14:45:21	Speed Boat	Travelling	92	59	20	357	49	40	22.3018	113.9673	476.97	11.56
09-Sep-13	14:46:05	Transportation Boat	Travelling	91	2	20	323	23	20	22.3091	113.9612	1380.74	337.12
09-Sep-13	14:46:55	Transportation Boat	Travelling	91	0	0	304	47	0	22.3073	113.9572	1435.29	318.51
09-Sep-13	14:47:21	Transportation Boat	Travelling	90	56	40	286	59	30	22.3046	113.9537	1521.02	300.72
09-Sep-13	14:47:40	Transportation Boat	Stationary	91	3	0	323	27	20	22.3090	113.9612	1366.23	337.19
09-Sep-13	14:47:56	Speed Boat	Stationary	92	13	10	24	30	40	22.3022	113.9703	643.18	38.24
09-Sep-13	14:48:14	Transportation Boat	Travelling	90	59	50	288	0	0	22.3044	113.9545	1439.58	301.73
09-Sep-13	14:48:19	Transportation Boat	Travelling	90	59	50	296	31	20	22.3060	113.9557	1439.60	310.25
09-Sep-13	14:48:53	Speed Boat	Travelling	95	30	20	317	2	50	22.2996	113.9652	258.36	330.78
09-Sep-13	14:48:58	Speed Boat	Travelling	95	32	50	316	59	40	22.2996	113.9652	256.41	330.72

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Sep-13	14:49:32	Transportation Boat	Travelling	90	57	20	305	46	0	22.3079	113.9569	1503.49	319.50
09-Sep-13	14:49:50	Speed Boat	Travelling	95	14	50	344	30	30	22.3001	113.9663	271.20	358.24
09-Sep-13	14:49:54	Speed Boat	Travelling	95	14	30	344	24	10	22.3001	113.9663	271.49	358.13
09-Sep-13	14:52:46	Transportation Boat	Travelling	91	17	10	332	9	50	22.3073	113.9638	1113.86	345.89
09-Sep-13	14:53:22	Speed Boat	Travelling	92	13	40	28	30	10	22.3019	113.9706	641.20	42.23
09-Sep-13	14:53:27	Speed Boat	Travelling	92	13	40	28	25	20	22.3019	113.9706	641.21	42.15
09-Sep-13	14:55:34	Transportation Boat	Travelling	91	47	10	358	53	20	22.3047	113.9681	800.70	12.62
09-Sep-13	14:55:44	Transportation Boat	Travelling	91	22	20	299	8	50	22.3040	113.9590	1043.83	312.88
09-Sep-13	14:57:03	Transportation Boat	Travelling	91	55	0	20	55	40	22.3031	113.9705	746.06	34.66
09-Sep-13	14:57:10	Transportation Boat	Travelling	91	29	40	326	24	0	22.3057	113.9632	958.08	340.13
09-Sep-13	14:57:19	Speed Boat	Travelling	91	17	50	28	57	20	22.3049	113.9737	1104.88	42.69
09-Sep-13	14:57:22	Speed Boat	Travelling	91	18	0	29	2	10	22.3049	113.9737	1102.50	42.77
09-Sep-13	14:57:38	Research Vessel	Stationary	91	39	10	340	39	30	22.3054	113.9656	865.85	354.39
09-Sep-13	14:58:21	Speed Boat	Travelling	93	3	50	323	31	10	22.3015	113.9646	466.02	337.25
09-Sep-13	14:58:41	Transportation Boat	Travelling	91	46	30	44	26	40	22.3014	113.9731	806.05	58.17
09-Sep-13	14:58:50	Transportation Boat	Travelling	91	16	10	356	15	40	22.3076	113.9683	1129.47	9.99
09-Sep-13	14:59:02	Speed Boat	Travelling	92	33	50	2	50	10	22.3024	113.9679	557.27	16.57
09-Sep-13	14:59:35	Speed Boat	Stationary	91	7	20	23	41	20	22.3068	113.9740	1279.25	37.42
09-Sep-13	14:59:41	Speed Boat	Stationary	91	8	50	24	7	10	22.3065	113.9739	1251.10	37.85
09-Sep-13	14:59:50	Speed Boat	Travelling	91	44	10	23	6	30	22.3036	113.9712	824.31	36.84
09-Sep-13	15:02:24	Transportation Boat	Travelling	93	26	30	8	53	0	22.3011	113.9680	414.91	22.61
09-Sep-13	15:02:39	Transportation Boat	Travelling	90	39	0	26	3	30	22.3131	113.9803	2232.81	39.79
09-Sep-13	15:03:01	Speed Boat	Stationary	91	29	20	24	30	50	22.3044	113.9722	962.38	38.24
09-Sep-13	15:04:33	Transportation Boat	Travelling	95	53	50	353	56	30	22.2998	113.9667	241.56	7.67
09-Sep-13	15:06:41	Speed Boat	Stationary	92	7	40	17	50	30	22.3028	113.9698	672.56	31.57
09-Sep-13	15:06:50	Speed Boat	Stationary	90	56	40	20	55	50	22.3089	113.9748	1524.75	34.66
09-Sep-13	15:06:56	Speed Boat	Stationary	91	5	10	22	26	20	22.3072	113.9740	1323.47	36.17
09-Sep-13	15:07:03	Speed Boat	Stationary	91	14	10	26	23	50	22.3056	113.9737	1161.38	40.13
09-Sep-13	15:07:27	Research Vessel	Stationary	91	20	50	338	23	40	22.3071	113.9650	1064.90	352.12
09-Sep-13	15:07:35	Transportation Boat	Travelling	91	49	30	41	55	20	22.3016	113.9727	784.73	55.65
09-Sep-13	15:08:53	Transportation Boat	Travelling	91	51	10	39	16	10	22.3018	113.9724	773.04	53.00
09-Sep-13	15:13:13	Transportation Boat	Travelling	91	35	50	345	46	40	22.3057	113.9663	897.88	359.51
09-Sep-13	15:13:24	Tug Boat	Travelling	90	58	10	334	44	40	22.3107	113.9635	1486.09	348.47
09-Sep-13	15:15:51	Transportation Boat	Travelling	91	11	0	327	45	10	22.3080	113.9626	1215.01	341.48
09-Sep-13	15:16:01	Tug Boat	Travelling	91	2	0	310	21	20	22.3078	113.9584	1393.48	324.09
09-Sep-13	15:18:07	Tug Boat	Travelling	90	56	10	306	28	0	22.3083	113.9568	1540.71	320.20
09-Sep-13	15:18:20	Research Vessel	Travelling	91	12	10	331	0	20	22.3080	113.9633	1195.55	344.74
09-Sep-13	15:18:47	Transportation Boat	Travelling	91	0	20	321	18	30	22.3093	113.9605	1432.97	335.04
09-Sep-13	15:19:01	Transportation Boat	Travelling	90	46	40	23	1	0	22.3110	113.9772	1860.91	36.75
09-Sep-13	15:19:26	Tug Boat	Travelling	90	50	20	304	3	0	22.3091	113.9551	1722.76	317.78
09-Sep-13	15:20:28	Research Vessel	Travelling	91	19	0	306	16	40	22.3051	113.9596	1091.58	320.01
09-Sep-13	15:28:16	Transportation Boat	Travelling	91	47	40	43	24	40	22.3015	113.9729	800.28	57.14
09-Sep-13	15:29:30	Transportation Boat	Travelling	91	36	40	43	53	20	22.3019	113.9737	891.97	57.62
09-Sep-13	15:38:59	Transportation Boat	Travelling	91	20	30	333	40	30	22.3070	113.9641	1073.65	347.40
09-Sep-13	15:39:11	Container Boat	Travelling	90	41	10	348	20	40	22.3167	113.9671	2121.77	2.07
09-Sep-13	15:39:29	Government Boat	Travelling	90	46	0	343	27	20	22.3146	113.9655	1893.50	357.19
09-Sep-13	15:39:46	Transportation Boat	Travelling	91	1	10	299	26	40	22.3063	113.9563	1417.02	313.17
09-Sep-13	15:40:03	Speed Boat	Travelling	90	48	40	344	27	50	22.3137	113.9659	1787.70	358.19
09-Sep-13	15:41:10	Government Boat	Travelling	90	58	40	318	48	20	22.3094	113.9598	1478.49	332.54
09-Sep-13	15:41:20	Transportation Boat	Travelling	90	57	30	326	48	20	22.3104	113.9615	1508.95	340.54
09-Sep-13	15:41:28	Speed Boat	Travelling	91	5	50	318	1	30	22.3080	113.9603	1315.69	331.75
09-Sep-13	15:41:39	Container Boat	Travelling	90	50	0	339	27	0	22.3132	113.9644	1739.44	353.18
09-Sep-13	15:42:33	Government Boat	Travelling	90	57	50	292	56	50	22.3057	113.9547	1500.36	306.68
09-Sep-13	15:42:44	Transportation Boat	Travelling	90	45	20	343	48	50	22.3149	113.9656	1922.78	357.54
09-Sep-13	15:43:35	Transportation Boat	Travelling	90	58	30	316	11	40	22.3092	113.9592	1483.21	329.92
09-Sep-13	15:44:13	Container Boat	Travelling	90	58	0	323	28	10	22.3100	113.9608	1496.30	337.20
09-Sep-13	15:46:59	Transportation Boat	Travelling	91	0	50	310	32	10	22.3080	113.9583	1426.17	324.27
09-Sep-13	15:48:48	Transportation Boat	Travelling	91	29	10	339	34	20	22.3063	113.9653	969.79	353.30
09-Sep-13	15:48:58	Transportation Boat	Travelling	90	53	40	330	33	20	22.3117	113.9621	1620.02	344.29
09-Sep-13	15:49:06	Container Boat	Travelling	90	59	0	285	12	40	22.3040	113.9539	1471.48	298.94
09-Sep-13	15:51:48	Transportation Boat	Travelling	90	40	30	347	57	0	22.3171	113.9670	2161.15	1.68
09-Sep-13	15:52:02	Transportation Boat	Travelling	91	58	40	21	16	20	22.3030	113.9705	727.93	35.00
09-Sep-13	16:02:28	Transportation Boat	Travelling	91	21	30	333	28	0	22.3070	113.9641	1063.47	347.20
09-Sep-13	16:07:28	Transportation Boat	Travelling	90	58	0	317	52	0	22.3095	113.9595	1500.64	331.60
09-Sep-13	16:07:45	Speed Boat	Travelling	91	19	0	314	28	10	22.3060	113.9608	1098.11	328.20
09-Sep-13	16:08:04	Speed Boat	Stationary	92	6	50	17	53	40	22.3028	113.9699	682.24	31.62
09-Sep-13	16:08:16	Speed Boat	Stationary	90	37	30	30	36	40	22.3127	113.9823	2344.69	44.34
09-Sep-13	16:08:25	Speed Boat	Stationary	90	41	30	29	14	10	22.3115	113.9804	2111.97	42.97
09-Sep-13	16:08:45	Speed Boat	Travelling	91	18	40	315	51	30	22.3062	113.9610	1102.94	329.59
09-Sep-13	16:15:59	Transportation Boat	Travelling	91	44	50	350	55	50	22.3050	113.9671	826.90	4.66
09-Sep-13	16:16:14	Speed Boat	Stationary	91	15	30	313	2	10	22.3063	113.9603	1150.66	326.77
09-Sep-13	16:20:53	Speed Boat	Travelling	93	2	0	23	28	0	22.3010	113.9692	475.61	37.20
09-Sep-13	16:21:08	Transportation Boat	Travelling	91	50	30	41	49	0	22.3016	113.9727	784.80	55.55
09-Sep-13	16:21:22	Speed Boat	Travelling	91	11	50	315	58	50	22.3070	113.9605	1210.71	329.71
09-Sep-13	16:22:00	Speed Boat	Travelling	91	38	10	33	21	0	22.3030	113.9727	884.01	47.08
09-Sep-13	16:23:11	Speed Boat	Travelling	91	4	40	35	54	20	22.3055	113.9764	1346.67	49.64
09-Sep-13	16:23:34	Research Vessel	Acoustic Recording	91	9	20	279	58	10	22.3022	113.9552	1255.14	293.70
09-Sep-13	16:23:51	Other	Stationary	91	9	20	279	11	0	22.3020	113.9552	1255.18	292.91
09-Sep-13	16:24:57	Transportation Boat	Travelling	92	56	50	22	58	50	22.3012	113.9692	489.80	36.71
09-Sep-13	16:26:56	Transportation Boat	Travelling	95	38	20	358	49	10	22.2999	113.9669	255.32	12.55
09-Sep-13	16:32:13	Transportation Boat	Travelling	92	26	10	339	24	50	22.3029	113.9657	593.47	353.14
09-Sep-13	16:32:22	Transportation Boat	Travelling	92	14	10	27	19	10	22.3020	113.9705	646.75	41.05
09-Sep-13	16:33:43	Transportation Boat	Travelling	92	5	40	29	54	40	22.3021	113.9710	690.78	43.64
09-Sep-13	16:33:50	Transportation Boat	Travelling	91	43	20	327	37	50	22.3048	113.9638	840.81	341.36
09-Sep-13	16:34:32	Speed Boat	Travelling	91	1	50	355	21	50	22.3102	113.9686	1411.13	9.09
09-Sep-13	16:36:45	Transportation Boat	Travelling	91	30	0	315	32	0	22.3051	113.9616	966.47	329.26
09-Sep-13	16:36:54	Transportation Boat	Travelling	92	2	20	26	51	20	22.3025	113.9709	709.96	40.59
09-Sep-13	16:37:03	Speed Boat	Travelling	91	26	50	355	49	50	22.3065	113.9680	1001.99	9.56
09-Sep-13	16:37:37	Research Vessel	Acoustic Recording	91	0	40	279	55	50	22.3028	113.9536	1439.17	293.66
09-Sep-13	16:39:20	Speed Boat	Travelling	92	16	20	356	10	50	22.3033	113.9675	636.98	9.91
09-Sep-13	16:39:30	Transportation Boat	Travelling	91	9	40	286	43	0	22.3033	113.9559	1251.54	300.45
09-Sep-13	16:41:23	Speed Boat	Travelling	94	23	50	6	14	50	22.3004	113.9675	328.46	19.98
09-Sep-13	16:45:23	Transportation Boat	Travelling	91	55	0	43	32	10	22.3013	113.9726	756.21	57.27
09-Sep-13	16:51:08	Transportation Boat	Travelling	91	42	10	346	41	20	22.3053	113.9665	852.28	0.42
09-Sep-13	16:51:19	Tug Boat	Travelling	90	45	40	345	5	50	22.3149	113.9660	1924.83	358.83
09-Sep-13	16:53:39	Transportation Boat	Travelling	91	13	40	327	10	10	22.3077	113.9626	1185.02	340.90
09-Sep-13	16:53:47	Tug Boat	Travelling	90	56	40	325	50	10	22.3107	113.9612	1545.33	339.57
09-Sep-13	16:54:00	Research Vessel	Travelling	91	24	50	291	46	50	22.3030	113.9583	1027.92	305.51
09-Sep-13	16:55:26	Government Boat	Travelling	91	1	50	31	41	10	22.3066	113.9762	1414.78	45.42
09-Sep-13	16:56:00	Tug Boat	Travelling	91	0	30	302	40	20	22.3070	113.9567	1446.47	316.40
09-Sep-13	16:56:06	Transportation Boat	Travelling	90	58	10	318	39	30	22.3096	113.9596	1505.33	332.39
09-Sep-13	16:56:17	Research Vessel	Travelling	92	4	10	309	32	20	22.3027	113.9623	701.11	323.27
09-Sep-13	16:56:28	Government Boat	Travelling	91	34	50	18	16	50	22.3046	113.9711	919.16	32.01
09-Sep-13	16:56:51	Tug Boat	Travelling	90	46	40	20	38	10	22.3116	113.9767	1883.94	34.37
09-Sep-13	16:57:16	Tug Boat	Travelling	90	38	10	18	42	30	22.3152	113.9785	2316.52	32.44
09-Sep-13	16:57:31	Construction Boat	Travelling	90	36	50	19	46	40	22.3157	113.9793	2403.46	33.51
09-Sep-13	16:57:42	Government Boat	Travelling	92	13	10	328	54	10	22.3032	113.9645	653.66	342.63
09-Sep-13	16:57:58	Tug Boat	Travelling	90	55	0	282	15	20	22.3039	113.9525	1593.73	295.99
09-Sep-13	16:58:12	Research Vessel	Travelling	92	51	10	336	29	0	22.3021	113.9656	508.14	350.21
09-Sep-13	16:59:10	Research Vessel	Travelling	92	51	0	344	29	40	22.3022	113.9662	508.70	358.22
09-Sep-13	17:01:07	Tug Boat	Travelling	90	41	50	15	1	10	22.3143	113.9763	2108.51	28.75
09-Sep-13	17:01:16	Construction Boat	Travelling	90	40	30	17	2	20	22.3145	113.9772	2180.01	30.77
09-Sep-13	17:01:30	Speed Boat	Stationary	92	6	0	18	44	0	22.3029	113.9700	691.31	32.46
09-Sep-13	17:01:45	Tug Boat	Stationary	90	44	20	22	35	40	22.3120	113.9778	1986.71	36.32
09-Sep-13	17:01:57	Speed Boat	Stationary	90	43	30	31	34	40	22.3104	113.9804	2025.80	45.31
09-Sep-13	17:02:06	Speed Boat	Stationary	90	38	40	31	19	0	22.3122	113.9821	2286.95	45.05
09-Sep-13	17:02:47	Research Vessel	Stationary	92	29	10	346	33	20	22.3029	113.9664	583.68	0.29

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Sep-13	17:03:44	Other	Stationary	91	15	10	313	12	10	22.3064	113.9602	1162.61	326.93
09-Sep-13	17:04:00	Construction Boat	Stationary	91	7	20	312	57	30	22.3074	113.9595	1299.30	326.69
09-Sep-13	17:04:15	Other	Stationary	91	1	10	321	58	20	22.3094	113.9607	1431.96	335.70
09-Sep-13	17:04:21	Other	Stationary	91	1	10	322	36	0	22.3094	113.9608	1431.98	336.33
09-Sep-13	17:05:01	Construction Boat	Stationary	90	30	40	343	7	30	22.3238	113.9648	2913.26	356.85
09-Sep-13	17:05:08	Construction Boat	Stationary	90	29	10	347	12	50	22.3253	113.9669	3071.92	0.94
09-Sep-13	17:05:30	Construction Boat	Stationary	90	33	40	357	19	0	22.3210	113.9713	2641.71	11.05
09-Sep-13	17:05:37	Construction Boat	Stationary	90	33	20	358	30	20	22.3211	113.9719	2669.36	12.24
09-Sep-13	17:05:54	Construction Boat	Stationary	90	32	30	0	31	0	22.3215	113.9730	2741.12	14.25
09-Sep-13	17:06:03	Construction Boat	Stationary	90	31	20	2	5	10	22.3223	113.9740	2848.40	15.82
09-Sep-13	17:06:17	Other	Stationary	90	59	10	359	4	20	22.3106	113.9696	1481.40	12.80
09-Sep-13	17:06:23	Other	Stationary	90	59	10	1	41	40	22.3105	113.9702	1481.42	15.42
09-Sep-13	17:06:34	Other	Stationary	90	35	30	4	10	40	22.3190	113.9739	2500.06	17.91
09-Sep-13	17:06:40	Other	Stationary	90	35	0	4	45	0	22.3193	113.9742	2537.25	18.48
09-Sep-13	17:06:50	Other	Stationary	90	43	30	5	18	20	22.3149	113.9728	2027.03	19.04
09-Sep-13	17:06:58	Container Boat	Stationary	90	42	30	8	47	40	22.3149	113.9741	2076.04	22.52
09-Sep-13	17:07:13	Other	Stationary	90	40	50	15	51	50	22.3145	113.9768	2163.29	29.59
09-Sep-13	17:07:18	Other	Stationary	90	41	0	17	5	20	22.3143	113.9771	2154.26	30.82
09-Sep-13	17:07:32	Construction Boat	Stationary	90	29	30	16	44	30	22.3212	113.9814	3036.07	30.47
10-Sep-13	8:05:21	Other	Stationary	106	11	55	0	0	5	22.2984	113.9666	87.65	13.73
10-Sep-13	8:09:19	Other	Stationary	90	32	5	289	24	50	22.3114	113.9437	2792.41	303.14
10-Sep-13	8:09:30	Other	Stationary	90	32	45	292	19	0	22.3121	113.9449	2732.78	306.05
10-Sep-13	8:09:40	Other	Stationary	90	35	10	293	27	5	22.3114	113.9467	2537.01	307.18
10-Sep-13	8:10:05	Other	Stationary	90	43	30	295	43	55	22.3093	113.9511	2036.65	309.46
10-Sep-13	8:10:19	Other	Stationary	90	52	20	300	12	30	22.3081	113.9546	1686.07	313.94
10-Sep-13	8:10:27	Other	Stationary	90	57	55	303	30	0	22.3077	113.9564	1521.01	317.23
10-Sep-13	8:10:45	Other	Stationary	90	59	50	304	52	35	22.3076	113.9569	1471.56	318.61
10-Sep-13	8:10:56	Other	Stationary	90	53	10	307	34	55	22.3093	113.9563	1659.05	321.31
10-Sep-13	8:11:10	Other	Stationary	90	55	20	309	14	30	22.3091	113.9571	1592.98	322.97
10-Sep-13	8:11:19	Other	Stationary	90	58	30	313	13	40	22.3090	113.9584	1505.46	326.96
10-Sep-13	8:11:25	Other	Stationary	90	58	0	316	33	0	22.3095	113.9591	1518.61	330.28
10-Sep-13	8:11:33	Other	Stationary	90	56	35	320	24	20	22.3102	113.9598	1557.17	334.14
10-Sep-13	8:11:42	Other	Stationary	90	56	15	322	56	40	22.3106	113.9604	1566.51	336.67
10-Sep-13	8:11:55	Other	Stationary	90	54	15	326	4	30	22.3113	113.9609	1625.16	339.80
10-Sep-13	8:12:08	Other	Stationary	90	53	0	329	31	55	22.3120	113.9617	1664.11	343.26
10-Sep-13	8:12:17	Other	Stationary	90	52	20	332	56	20	22.3124	113.9626	1685.65	346.67
10-Sep-13	8:12:25	Other	Stationary	90	50	35	335	23	55	22.3130	113.9632	1745.03	349.13
10-Sep-13	8:12:34	Other	Stationary	90	47	5	337	23	40	22.3143	113.9636	1877.48	351.12
10-Sep-13	8:12:51	Other	Stationary	90	44	55	339	35	10	22.3152	113.9642	1970.13	353.32
10-Sep-13	8:13:01	Other	Stationary	90	42	30	343	5	35	22.3164	113.9653	2085.09	356.82
10-Sep-13	8:13:10	Other	Stationary	90	40	20	346	34	35	22.3174	113.9665	2200.37	0.31
10-Sep-13	8:13:21	Other	Stationary	90	34	55	349	42	40	22.3206	113.9679	2554.71	3.44
10-Sep-13	8:13:32	Other	Stationary	90	30	15	352	7	45	22.3242	113.9693	2969.20	5.86
10-Sep-13	8:13:56	Other	Stationary	90	29	25	348	9	40	22.3251	113.9674	3058.08	1.89
10-Sep-13	8:14:05	Other	Stationary	90	30	0	352	7	50	22.3244	113.9694	2995.13	5.86
10-Sep-13	8:14:17	Other	Stationary	90	29	25	348	9	0	22.3251	113.9674	3057.94	1.88
10-Sep-13	8:14:27	Other	Stationary	90	29	10	345	48	45	22.3254	113.9662	3085.67	359.54
10-Sep-13	8:14:37	Other	Stationary	90	28	25	341	56	20	22.3261	113.9641	3172.19	355.67
10-Sep-13	8:14:54	Other	Stationary	90	27	55	335	3	35	22.3262	113.9603	3232.63	348.79
10-Sep-13	8:15:03	Other	Stationary	90	28	20	332	58	10	22.3255	113.9593	3181.94	346.70
10-Sep-13	8:15:13	Other	Stationary	90	28	55	329	43	5	22.3245	113.9578	3113.67	343.45
10-Sep-13	8:15:42	Other	Stationary	90	28	5	328	2	0	22.3251	113.9566	3211.85	341.76
10-Sep-13	8:15:50	Other	Stationary	90	27	10	325	51	55	22.3257	113.9551	3327.70	339.60
10-Sep-13	8:16:04	Other	Stationary	90	25	15	323	17	40	22.3274	113.9527	3600.39	337.02
10-Sep-13	8:16:15	Other	Stationary	90	25	45	320	53	35	22.3263	113.9517	3524.75	334.62
10-Sep-13	8:16:23	Other	Stationary	90	26	0	316	42	50	22.3249	113.9497	3488.13	330.44
10-Sep-13	8:16:29	Other	Stationary	90	26	30	313	56	45	22.3236	113.9486	3417.30	327.68
10-Sep-13	8:16:41	Other	Stationary	90	28	30	309	22	15	22.3204	113.9479	3161.47	323.10
10-Sep-13	8:16:51	Other	Stationary	90	28	30	309	6	25	22.3203	113.9478	3161.40	322.84
10-Sep-13	8:17:16	Construction Boat	Stationary	91	10	10	311	57	20	22.3069	113.9595	1251.47	325.69
10-Sep-13	8:17:22	Construction Boat	Stationary	91	9	30	312	41	20	22.3071	113.9596	1263.58	326.42
10-Sep-13	8:18:19	Container Boat	Stationary	91	11	25	327	9	10	22.3081	113.9625	1229.19	340.88
10-Sep-13	8:18:52	Other	Stationary	91	2	40	321	58	40	22.3091	113.9608	1402.73	335.71
10-Sep-13	8:18:59	Other	Stationary	91	2	15	322	36	15	22.3093	113.9609	1412.21	336.33
10-Sep-13	8:19:45	Construction Boat	Stationary	90	50	55	350	23	5	22.3132	113.9676	1731.77	4.11
10-Sep-13	8:20:29	Construction Boat	Stationary	90	50	20	348	19	35	22.3134	113.9670	1752.07	2.06
10-Sep-13	8:20:47	Construction Boat	Stationary	90	28	45	346	39	50	22.3258	113.9666	3130.58	0.39
10-Sep-13	8:21:08	Construction Boat	Stationary	90	33	45	356	52	20	22.3210	113.9711	2644.20	10.60
10-Sep-13	8:21:20	Construction Boat	Stationary	90	33	30	358	31	15	22.3211	113.9719	2664.75	12.25
10-Sep-13	8:21:37	Construction Boat	Stationary	90	32	15	0	27	30	22.3218	113.9730	2772.86	14.19
10-Sep-13	8:21:46	Construction Boat	Stationary	90	31	25	2	14	5	22.3223	113.9740	2850.09	15.96
10-Sep-13	8:22:09	Other	Stationary	91	0	20	359	49	0	22.3104	113.9697	1457.08	13.55
10-Sep-13	8:22:19	Other	Stationary	91	0	15	1	38	5	22.3103	113.9702	1459.10	15.36
10-Sep-13	8:22:53	Container Boat	Stationary	90	43	40	7	32	55	22.3146	113.9736	2025.36	21.28
10-Sep-13	8:23:20	Other	Stationary	90	35	25	4	6	10	22.3192	113.9739	2513.95	17.83
10-Sep-13	8:23:27	Other	Stationary	90	34	55	4	38	45	22.3194	113.9742	2551.38	18.38
10-Sep-13	8:23:54	Container Boat	Stationary	90	52	25	10	3	5	22.3115	113.9730	1680.43	23.78
10-Sep-13	8:24:14	Tug Boat	Stationary	90	49	55	350	34	0	22.3135	113.9677	1766.13	4.30
10-Sep-13	8:24:58	Tug Boat	Stationary	90	34	55	356	13	30	22.3202	113.9707	2550.89	9.95
10-Sep-13	8:28:37	Tug Boat	Travelling	90	38	5	4	48	0	22.3175	113.9736	2330.07	18.53
10-Sep-13	8:30:04	Tug Boat	Travelling	90	35	10	5	2	45	22.3192	113.9743	2530.35	18.78
10-Sep-13	8:30:33	Transportation Boat	Travelling	90	34	15	354	4	10	22.3208	113.9698	2600.77	7.80
10-Sep-13	8:31:01	Transportation Boat	Travelling	90	34	50	355	29	30	22.3203	113.9704	2555.25	9.22
10-Sep-13	8:31:16	Transportation Boat	Travelling	90	34	50	355	46	0	22.3203	113.9705	2555.16	9.50
10-Sep-13	8:31:33	Tug Boat	Travelling	90	38	20	8	26	55	22.3169	113.9749	2313.49	22.18
10-Sep-13	8:32:50	Tug Boat	Travelling	90	43	0	6	39	15	22.3150	113.9734	2054.97	20.38
10-Sep-13	8:32:58	Transportation Boat	Travelling	90	40	10	351	42	5	22.3174	113.9684	2204.18	5.43
10-Sep-13	8:34:34	Transportation Boat	Travelling	90	53	35	336	27	45	22.3122	113.9637	1640.98	350.19
10-Sep-13	8:34:53	HSF High Speed Ferry	Travelling	91	2	55	293	10	15	22.3052	113.9556	1394.24	306.90
10-Sep-13	8:35:10	Transportation Boat	Travelling	90	59	55	289	16	35	22.3048	113.9545	1464.93	303.01
10-Sep-13	8:35:48	Transportation Boat	Travelling	91	2	0	316	18	15	22.3087	113.9595	1414.95	330.03
10-Sep-13	8:35:56	Transportation Boat	Travelling	91	0	40	295	18	10	22.3058	113.9555	1446.43	309.03
10-Sep-13	8:36:06	HSF High Speed Ferry	Travelling	91	2	25	287	45	35	22.3042	113.9547	1405.33	301.49
10-Sep-13	8:36:34	Tug Boat	Stationary	90	43	30	6	29	45	22.3148	113.9732	2029.77	20.23
10-Sep-13	8:36:49	Transportation Boat	Travelling	91	9	10	295	49	25	22.3049	113.9569	1266.60	309.55
10-Sep-13	8:37:02	Transportation Boat	Travelling	91	1	15	304	2	25	22.3072	113.9570	1432.28	317.77
10-Sep-13	8:37:14	HSF High Speed Ferry	Travelling	91	2	15	318	14	15	22.3088	113.9600	1408.94	331.97
10-Sep-13	8:37:24	HSF High Speed Ferry	Travelling	91	2	0	313	23	10	22.3083	113.9589	1414.66	327.12
10-Sep-13	8:37:40	Transportation Boat	Travelling	90	59	50	279	54	50	22.3029	113.9533	1466.53	293.64
10-Sep-13	8:37:53	Transportation Boat	Travelling	90	55	45	305	52	10	22.3084	113.9565	1575.52	319.60
10-Sep-13	8:38:15	Transportation Boat	Travelling	90	48	5	341	30	55	22.3140	113.9649	1831.59	355.25
10-Sep-13	8:38:29	Transportation Boat	Travelling	90	51	35	306	41	15	22.3094	113.9558	1704.90	320.42
10-Sep-13	8:38:43	HSF High Speed Ferry	Travelling	90	58	0	332	49	0	22.3109	113.9630	1513.34	346.55
10-Sep-13	8:38:48	HSF High Speed Ferry	Travelling	90	51	35	335	43	40	22.3127	113.9634	1704.83	349.46
10-Sep-13	8:41:27	HSF High Speed Ferry	Travelling	90	32	20	353	15	15	22.3223	113.9697	2758.27	6.98
10-Sep-13	8:41:37	HSF High Speed Ferry	Travelling	90	42	30	348	31	15	22.3163	113.9672	2077.46	2.25
10-Sep-13	8:42:04	Transportation Boat	Travelling	91	1	25	313	48	35	22.3085	113.9589	1427.43	327.54
10-Sep-13	8:42:22	Transportation Boat	Travelling	91	2	45	302	0	55	22.3066	113.9569	1396.66	315.75
10-Sep-13	8:43:26	Transportation Boat	Travelling	90	49	55	305	50	20	22.3097	113.9553	1761.81	319.57
10-Sep-13	8:46:03	Transportation Boat	Travelling	90	59	55	318	53	20	22.3093	113.9599	1462.90	332.62
10-Sep-13	8:46:13	Transportation Boat	Travelling	90	54	25	278	56	20	22.3032	113.9519	1613.04	292.67
10-Sep-13	8:48:52	Transportation Boat	Travelling	90	48	15	341	54	50	22.3140	113.9651	1822.65	355.64
10-Sep-13	8:50:57	Speed Boat	Travelling	94	36	35	326	16	55	22.3003	113.9654	314.08	340.01
10-Sep-13	8:51:22	Transportation Boat	Travelling	90	36	40	351	23	50	22.3193	113.9685	2416.27	5.13
10-Sep-13	8:51:32	Speed Boat	Travelling	93	18	5	297	39	15	22.3002	113.9632	439.10	311.38
10-Sep-13	8:52:16	Speed Boat	Travelling	91	57	45	279	26	35	22.3002	113.9598	739.94	293.17
10-Sep-13	8:52:32	Construction Boat	Travelling	90	58	5	286	42	20	22.3045	113.9537	1508.48	300.44

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Sep-13	8:55:43	Construction Boat	Travelling	91	0	55	315	57	30	22.3088	113.9593	1436.79	329.69
10-Sep-13	8:58:14	Transportation Boat	Travelling	90	45	35	342	33	5	22.3149	113.9652	1929.39	356.28
10-Sep-13	9:00:23	Transportation Boat	Travelling	90	43	30	347	45	0	22.3158	113.9669	2023.57	1.48
10-Sep-13	9:00:31	Construction Boat	Travelling	90	42	50	347	29	45	22.3161	113.9668	2055.87	1.23
10-Sep-13	9:05:55	Tug Boat	Travelling	90	49	40	346	42	45	22.3135	113.9665	1765.76	0.44
10-Sep-13	9:07:31	Transportation Boat	Travelling	90	41	40	346	12	20	22.3166	113.9664	2113.13	359.94
10-Sep-13	9:07:55	Tug Boat	Travelling	90	46	50	348	43	40	22.3145	113.9672	1874.41	2.46
10-Sep-13	9:08:09	Container Boat	Travelling	90	46	55	348	0	15	22.3144	113.9670	1870.95	1.73
10-Sep-13	9:09:27	Transportation Boat	Travelling	90	53	30	333	3	5	22.3120	113.9628	1636.27	346.78
10-Sep-13	9:09:38	Transportation Boat	Travelling	90	54	50	306	18	35	22.3086	113.9564	1595.80	320.04
10-Sep-13	9:10:25	Transportation Boat	Travelling	91	1	20	307	17	25	22.3076	113.9577	1424.23	321.02
10-Sep-13	9:10:38	Transportation Boat	Travelling	90	59	20	319	42	0	22.3095	113.9600	1472.84	333.43
10-Sep-13	9:10:51	Tug Boat	Travelling	90	45	55	357	11	30	22.3145	113.9699	1911.96	10.92
10-Sep-13	9:11:00	Container Boat	Travelling	90	46	10	356	17	55	22.3145	113.9696	1901.33	10.03
10-Sep-13	9:11:46	Transportation Boat	Travelling	91	2	40	304	57	50	22.3070	113.9575	1393.31	318.69
10-Sep-13	9:11:55	Transportation Boat	Travelling	91	2	5	291	7	10	22.3049	113.9552	1406.53	304.85
10-Sep-13	9:13:42	Transportation Boat	Travelling	90	56	25	280	39	35	22.3034	113.9527	1549.51	294.39
10-Sep-13	9:13:52	Speed Boat	Travelling	91	11	20	303	34	35	22.3057	113.9583	1221.97	317.31
10-Sep-13	9:16:05	Container Boat	Travelling	90	45	0	7	29	30	22.3140	113.9733	1950.52	21.22
10-Sep-13	9:16:12	Tug Boat	Travelling	90	47	50	353	41	55	22.3140	113.9687	1832.43	7.43
10-Sep-13	9:16:23	Speed Boat	Travelling	91	4	50	308	29	20	22.3072	113.9584	1345.40	322.22
10-Sep-13	9:16:37	HSF High Speed Ferry	Travelling	90	44	5	345	30	50	22.3155	113.9661	1991.95	359.24
10-Sep-13	9:16:47	Tug Boat	Travelling	90	48	5	350	47	35	22.3140	113.9678	1822.56	4.52
10-Sep-13	9:17:01	Speed Boat	Travelling	90	56	15	306	54	40	22.3084	113.9568	1553.51	320.64
10-Sep-13	9:17:36	Transportation Boat	Travelling	90	59	30	306	46	55	22.3078	113.9573	1467.35	320.51
10-Sep-13	9:17:51	HSF High Speed Ferry	Travelling	90	54	35	333	19	30	22.3117	113.9629	1601.54	347.05
10-Sep-13	9:18:11	Tug Boat	Travelling	90	47	50	348	41	15	22.3141	113.9672	1831.96	2.42
10-Sep-13	9:18:58	HSF High Speed Ferry	Travelling	91	0	45	315	23	15	22.3087	113.9592	1436.51	329.12
10-Sep-13	9:20:03	Container Boat	Travelling	91	5	50	316	13	35	22.3079	113.9600	1324.11	329.96
10-Sep-13	9:20:32	Transportation Boat	Travelling	90	58	30	309	2	25	22.3083	113.9576	1492.23	322.77
10-Sep-13	9:20:39	HSF High Speed Ferry	Travelling	90	57	35	285	25	30	22.3043	113.9535	1516.30	299.15
10-Sep-13	9:21:05	Transportation Boat	Travelling	91	1	30	318	23	20	22.3089	113.9599	1418.38	332.12
10-Sep-13	9:21:19	Tug Boat	Travelling	90	43	45	354	3	25	22.3155	113.9690	2006.30	7.79
10-Sep-13	9:21:31	Container Boat	Travelling	90	44	5	353	23	15	22.3154	113.9688	1990.70	7.12
10-Sep-13	9:22:22	Transportation Boat	Travelling	91	1	40	303	13	0	22.3069	113.9570	1414.27	316.95
10-Sep-13	9:22:28	Transportation Boat	Travelling	90	59	50	327	33	35	22.3100	113.9618	1458.16	341.29
10-Sep-13	9:22:36	Transportation Boat	Travelling	91	2	5	313	56	30	22.3083	113.9591	1404.61	327.67
10-Sep-13	9:22:45	Transportation Boat	Travelling	91	3	15	300	8	40	22.3062	113.9567	1378.36	313.87
10-Sep-13	9:23:04	Container Boat	Travelling	90	48	10	353	11	5	22.3139	113.9685	1817.87	6.91
10-Sep-13	9:23:14	Container Boat	Travelling	90	56	10	306	9	10	22.3083	113.9567	1554.61	319.88
10-Sep-13	9:23:31	Transportation Boat	Travelling	91	1	0	306	21	35	22.3075	113.9575	1429.71	320.09
10-Sep-13	9:23:46	Transportation Boat	Travelling	90	53	40	298	37	35	22.3075	113.9547	1628.11	312.36
10-Sep-13	9:23:54	Transportation Boat	Travelling	90	57	45	336	45	20	22.3110	113.9640	1511.24	350.49
10-Sep-13	9:24:03	Transportation Boat	Travelling	90	56	15	328	10	45	22.3109	113.9617	1552.11	341.91
10-Sep-13	9:24:08	Transportation Boat	Travelling	90	56	10	304	41	50	22.3081	113.9564	1554.43	318.43
10-Sep-13	9:24:24	Tug Boat	Travelling	90	42	10	3	51	5	22.3155	113.9725	2082.84	17.58
10-Sep-13	9:24:29	Container Boat	Travelling	90	42	10	2	49	30	22.3156	113.9722	2082.82	16.55
10-Sep-13	9:25:30	Container Boat	Travelling	90	51	5	307	13	45	22.3096	113.9559	1711.56	320.96
10-Sep-13	9:25:59	Container Boat	Travelling	90	46	0	349	27	50	22.3147	113.9674	1904.71	3.19
10-Sep-13	9:26:23	Transportation Boat	Travelling	90	42	55	294	51	45	22.3091	113.9509	2044.94	308.59
10-Sep-13	9:26:33	Transportation Boat	Travelling	90	50	50	349	53	10	22.3131	113.9675	1719.90	3.62
10-Sep-13	9:26:41	Transportation Boat	Travelling	90	43	5	345	40	50	22.3159	113.9662	2036.75	359.41
10-Sep-13	9:27:16	Transportation Boat	Travelling	91	9	15	15	56	0	22.3074	113.9725	1256.94	29.66
10-Sep-13	9:27:37	Container Boat	Stationary	90	42	45	5	12	0	22.3151	113.9729	2052.80	18.93
10-Sep-13	9:28:28	Speed Boat	Travelling	90	47	5	297	27	35	22.3086	113.9528	1859.31	311.19
10-Sep-13	9:30:16	Transportation Boat	Travelling	90	43	10	358	22	40	22.3155	113.9705	2031.77	12.11
10-Sep-13	9:30:23	Transportation Boat	Travelling	92	22	55	1	38	55	22.3029	113.9680	606.25	15.38
10-Sep-13	9:30:42	Tug Boat	Travelling	90	50	25	8	40	10	22.3120	113.9728	1733.46	22.40
10-Sep-13	9:31:18	Tug Boat	Travelling	90	46	0	354	15	35	22.3146	113.9690	1903.40	7.99
10-Sep-13	9:32:12	Transportation Boat	Travelling	90	59	0	323	13	55	22.3099	113.9608	1477.19	336.96
10-Sep-13	9:32:32	Transportation Boat	Travelling	93	3	0	354	12	15	22.3018	113.9670	472.95	7.93
10-Sep-13	9:33:12	Transportation Boat	Travelling	94	25	0	359	48	40	22.3005	113.9671	326.11	13.54
10-Sep-13	9:34:16	Transportation Boat	Travelling	90	47	25	340	51	5	22.3141	113.9647	1844.58	354.58
10-Sep-13	9:34:28	Tug Boat	Travelling	90	47	55	5	47	35	22.3131	113.9723	1824.88	19.52
10-Sep-13	9:34:53	Tug Boat	Travelling	90	30	40	354	58	5	22.3234	113.9707	2895.81	8.70
10-Sep-13	9:36:42	Tug Boat	Travelling	90	31	20	348	36	10	22.3231	113.9675	2830.32	2.33
10-Sep-13	9:38:00	Tug Boat	Travelling	90	35	10	343	8	50	22.3202	113.9651	2508.19	356.88
10-Sep-13	9:38:18	Tug Boat	Travelling	90	35	0	352	30	5	22.3202	113.9691	2520.51	6.23
10-Sep-13	9:40:44	Tug Boat	Travelling	90	46	30	341	51	35	22.3145	113.9650	1880.19	355.59
10-Sep-13	9:41:14	Transportation Boat	Travelling	91	2	30	2	34	5	22.3096	113.9702	1391.80	16.30
10-Sep-13	9:43:31	Transportation Boat	Travelling	90	59	35	1	21	0	22.3103	113.9701	1460.41	15.08
10-Sep-13	9:44:00	Tug Boat	Travelling	91	1	50	321	45	20	22.3091	113.9607	1406.50	335.49
10-Sep-13	9:44:30	Construction Boat	Travelling	91	5	20	325	55	0	22.3088	113.9619	1330.19	339.65
10-Sep-13	9:48:26	Construction Boat	Travelling	90	46	10	343	20	30	22.3146	113.9655	1892.19	357.07
10-Sep-13	9:48:53	Transportation Boat	Stationary	90	49	5	358	13	0	22.3133	113.9700	1777.32	11.95
10-Sep-13	9:49:06	Transportation Boat	Travelling	90	42	15	22	12	35	22.3127	113.9782	2071.99	35.94
10-Sep-13	9:53:52	Tug Boat	Travelling	90	59	15	308	24	35	22.3080	113.9576	1466.79	322.14
10-Sep-13	9:54:18	Other	Travelling	90	59	35	308	52	0	22.3080	113.9578	1458.39	322.60
10-Sep-13	9:54:34	Transportation Boat	Travelling	91	27	25	320	34	15	22.3057	113.9622	990.36	334.30
10-Sep-13	9:55:30	Transportation Boat	Travelling	91	1	50	355	12	20	22.3101	113.9685	1404.42	8.94
10-Sep-13	9:55:49	Tug Boat	Travelling	90	49	35	358	57	40	22.3130	113.9702	1757.47	12.69
10-Sep-13	9:56:13	Transportation Boat	Travelling	91	1	10	359	29	0	22.3101	113.9696	1419.79	13.21
10-Sep-13	9:56:21	Transportation Boat	Travelling	91	14	15	291	33	55	22.3037	113.9571	1167.16	305.30
10-Sep-13	9:57:09	Tug Boat	Travelling	90	42	55	0	3	20	22.3154	113.9711	2036.83	13.79
10-Sep-13	9:57:31	Transportation Boat	Travelling	91	0	20	0	52	40	22.3102	113.9699	1439.42	14.61
10-Sep-13	9:57:50	Tug Boat	Travelling	90	50	55	306	4	15	22.3094	113.9557	1710.13	319.80
10-Sep-13	9:58:11	Other	Travelling	90	51	50	305	48	55	22.3091	113.9558	1679.27	319.55
10-Sep-13	9:59:00	Transportation Boat	Travelling	91	13	40	358	9	25	22.3080	113.9688	1176.09	11.89
10-Sep-13	10:04:08	Transportation Boat	Travelling	95	10	35	349	50	50	22.3001	113.9666	276.92	3.58
10-Sep-13	10:06:48	Transportation Boat	Travelling	93	10	30	2	43	10	22.3015	113.9676	452.28	16.45
10-Sep-13	10:11:37	Transportation Boat	Travelling	91	11	10	4	34	20	22.3080	113.9701	1215.82	18.30
10-Sep-13	10:11:48	Speed Boat	Travelling	92	2	0	4	17	45	22.3037	113.9685	706.85	18.03
10-Sep-13	10:12:33	Speed Boat	Travelling	92	32	50	317	2	50	22.3020	113.9637	563.74	330.78
10-Sep-13	10:13:01	Speed Boat	Travelling	92	0	5	289	47	30	22.3012	113.9606	718.07	303.52
10-Sep-13	10:13:21	Speed Boat	Travelling	91	37	20	278	18	20	22.3006	113.9584	886.74	292.04
10-Sep-13	10:13:33	Transportation Boat	Travelling	90	55	40	3	53	55	22.3110	113.9710	1558.67	17.63
10-Sep-13	10:14:04	Dumping Guide Boat	Travelling	91	48	25	312	50	0	22.3036	113.9621	795.59	326.56
10-Sep-13	10:15:48	Speed Boat	Travelling	90	59	5	17	45	40	22.3089	113.9739	1466.83	31.49
10-Sep-13	10:16:43	Dumping Guide Boat	Travelling	95	39	0	347	8	50	22.2999	113.9664	253.16	0.88
10-Sep-13	10:16:57	Speed Boat	Travelling	91	4	40	16	9	25	22.3081	113.9729	1338.46	29.89
10-Sep-13	10:19:12	Speed Boat	Stationary	91	4	40	15	53	10	22.3081	113.9728	1338.07	29.62
10-Sep-13	10:19:23	Tug Boat	Travelling	91	0	50	310	39	5	22.3080	113.9583	1423.42	324.38
10-Sep-13	10:21:53	Tug Boat	Travelling	91	1	15	338	9	15	22.3102	113.9645	1413.16	351.88
10-Sep-13	10:22:02	Dumping Guide Boat	Travelling	93	35	30	5	57	50	22.3010	113.9677	398.86	19.69
10-Sep-13	10:25:21	Tug Boat	Travelling	90	45	5	6	29	50	22.3139	113.9729	1929.48	20.23
10-Sep-13	10:25:35	Dumping Guide Boat	Travelling	91	48	45	18	10	45	22.3037	113.9705	791.96	31.91
10-Sep-13	10:27:51	Speed Boat	Travelling	94	3	20	325	32	15	22.3006	113.9652	352.81	339.27
10-Sep-13	10:28:04	Tug Boat	Travelling	90	34	50	17	24	25	22.3170	113.9791	2516.67	31.14
10-Sep-13	10:28:38	Speed Boat	Travelling	93	5	55	15	52	10	22.3012	113.9686	462.17	29.60
10-Sep-13	10:29:45	Speed Boat	Travelling	91	33	10	34	11	55	22.3032	113.9731	924.68	47.93
10-Sep-13	10:30:58	Speed Boat	Travelling	90	59	30	38	19	15	22.3057	113.9775	1453.57	52.05
10-Sep-13	10:31:23	Transportation Boat	Travelling	90	45	20	342	35	10	22.3148	113.9652	1917.09	356.32
10-Sep-13	10:34:35	Transportation Boat	Travelling	90	46	35	337	48	35	22.3142	113.9637	1863.71	351.54
10-Sep-13	10:34:48	Dumping Guide Boat	Stationary	92	7	25	13	1	10	22.3030	113.9694	674.69	26.75
10-Sep-13	10:41:07	HSF High Speed Ferry	Travelling	91	1	0	309	41	5	22.3078	113.9582	1415.50	323.41
10-Sep-13	10:41:18	Transportation Boat	Stationary	90	46	0	340	32	20	22.3145	113.9646	1886.24	354.27
10-Sep-13	10:42:52	HSF High Speed Ferry	Travelling	90	49	25	339	10	35	22.3133	113.9643	1752.81	352.91

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Sep-13	10:43:38	HSF High Speed Ferry	Travelling	90	42	30	346	53	30	22.3160	113.9666	2044.95	0.62
10-Sep-13	10:44:34	HSF High Speed Ferry	Travelling	90	35	35	351	59	30	22.3196	113.9688	2456.23	5.72
10-Sep-13	10:46:53	Speed Boat	Travelling	91	19	25	22	46	10	22.3055	113.9727	1083.55	36.50
10-Sep-13	10:47:48	Speed Boat	Travelling	92	17	15	350	17	45	22.3032	113.9668	625.14	4.03
10-Sep-13	10:48:33	Speed Boat	Travelling	92	9	55	301	36	45	22.3018	113.9619	660.49	315.34
10-Sep-13	10:49:03	Speed Boat	Travelling	91	36	15	282	7	35	22.3011	113.9586	892.67	295.86
10-Sep-13	10:49:29	Transportation Boat	Travelling	91	23	55	4	13	40	22.3064	113.9695	1024.68	17.96
10-Sep-13	10:51:33	Transportation Boat	Travelling	92	7	25	356	34	15	22.3036	113.9676	673.24	10.30
10-Sep-13	10:51:41	Dumping Guide Boat	Travelling	92	9	15	18	27	40	22.3027	113.9698	663.64	32.19
10-Sep-13	10:52:51	Dumping Guide Boat	Travelling	92	10	30	37	10	45	22.3013	113.9714	657.17	50.91
10-Sep-13	10:53:00	Transportation Boat	Travelling	93	16	40	349	46	0	22.3015	113.9667	435.46	3.50
10-Sep-13	10:54:09	Transportation Boat	Travelling	95	35	15	353	31	30	22.2999	113.9667	254.78	7.25
10-Sep-13	10:54:29	Dumping Guide Boat	Travelling	92	35	20	38	39	35	22.3006	113.9707	551.66	52.39
10-Sep-13	10:56:55	Dumping Guide Boat	Travelling	92	32	20	358	44	25	22.3026	113.9676	562.38	12.47
10-Sep-13	10:57:06	Transportation Boat	Travelling	92	39	40	2	53	45	22.3022	113.9679	536.45	16.63
10-Sep-13	10:57:26	Tug Boat	Travelling	90	49	10	6	4	45	22.3125	113.9722	1758.56	19.81
10-Sep-13	10:58:57	Government Boat	Travelling	90	51	25	359	24	25	22.3123	113.9701	1679.85	13.14
10-Sep-13	10:59:47	Government Boat	Travelling	91	5	30	330	23	55	22.3090	113.9629	1313.95	344.13
10-Sep-13	11:00:06	Container Boat	Travelling	90	58	50	326	9	30	22.3100	113.9615	1464.73	339.89
10-Sep-13	11:00:23	Tug Boat	Stationary	90	49	45	8	20	35	22.3121	113.9727	1736.87	22.07
10-Sep-13	11:00:33	Government Boat	Travelling	91	0	45	299	8	55	22.3063	113.9563	1417.83	312.88
10-Sep-13	11:01:09	Government Boat	Travelling	90	49	45	280	39	25	22.3041	113.9510	1736.70	294.39
10-Sep-13	11:01:26	Container Boat	Travelling	90	52	40	336	14	25	22.3121	113.9636	1638.76	349.97
10-Sep-13	11:01:39	Container Boat	Travelling	91	6	45	314	45	10	22.3075	113.9598	1288.76	328.48
10-Sep-13	11:01:50	Transportation Boat	Travelling	91	7	15	10	8	0	22.3081	113.9714	1279.05	23.86
10-Sep-13	11:03:27	Container Boat	Travelling	90	43	30	347	39	10	22.3155	113.9669	1991.57	1.38
10-Sep-13	11:03:47	Transportation Boat	Travelling	90	54	10	10	35	5	22.3107	113.9728	1592.14	24.31
10-Sep-13	11:04:19	Research Vessel	Travelling	90	42	40	32	48	40	22.3102	113.9807	2031.26	46.54
10-Sep-13	11:05:02	Dumping Guide Boat	Travelling	91	7	55	315	6	25	22.3074	113.9600	1265.84	328.84
10-Sep-13	11:06:10	Transportation Boat	Stationary	90	50	15	8	13	5	22.3120	113.9726	1717.97	21.95
10-Sep-13	11:06:29	Research Vessel	Travelling	90	55	45	28	16	25	22.3080	113.9765	1545.67	42.00
10-Sep-13	11:10:22	Research Vessel	Travelling	91	44	10	357	25	50	22.3049	113.9679	822.22	11.16
10-Sep-13	11:10:49	Dumping Guide Boat	Travelling	92	43	35	14	40	20	22.3018	113.9688	522.64	28.40
10-Sep-13	11:11:24	Research Vessel	Travelling	91	43	10	346	0	25	22.3051	113.9664	830.12	359.74
10-Sep-13	11:12:03	Dumping Guide Boat	Travelling	92	36	25	40	2	20	22.3005	113.9707	546.58	53.77
10-Sep-13	11:17:15	Dumping Guide Boat	Stationary	94	33	50	0	0	5	22.3003	113.9671	311.36	13.73
10-Sep-13	11:17:51	Research Vessel	Travelling	90	38	45	350	10	10	22.3177	113.9679	2238.91	3.90
10-Sep-13	11:18:21	Transportation Boat	Travelling	92	57	45	346	7	40	22.3019	113.9664	480.39	359.86
10-Sep-13	11:18:43	Dumping Guide Boat	Travelling	91	27	35	321	43	25	22.3056	113.9624	977.80	335.45
10-Sep-13	11:20:06	Container Boat	Travelling	90	46	25	344	21	45	22.3143	113.9658	1859.50	358.09
10-Sep-13	11:20:38	Dumping Guide Boat	Travelling	91	4	20	312	55	50	22.3077	113.9593	1334.44	326.66
10-Sep-13	11:21:58	Transportation Boat	Travelling	93	29	20	344	13	0	22.3013	113.9663	407.50	357.95
10-Sep-13	11:22:12	Container Boat	Travelling	90	52	40	333	49	10	22.3120	113.9630	1634.33	347.55
10-Sep-13	11:26:15	Container Boat	Travelling	91	1	15	304	18	10	22.3070	113.9573	1401.42	318.03
10-Sep-13	11:27:05	Dumping Guide Boat	Travelling	91	33	30	324	8	40	22.3052	113.9630	914.56	337.87
10-Sep-13	11:27:32	Transportation Boat	Travelling	91	6	45	344	25	35	22.3092	113.9660	1284.44	358.16
10-Sep-13	11:28:06	Tug Boat	Travelling	90	48	55	347	30	45	22.3135	113.9668	1760.68	1.24
10-Sep-13	11:29:31	Container Boat	Travelling	90	55	35	279	1	40	22.3030	113.9525	1545.74	292.76
10-Sep-13	11:32:45	Tug Boat	Travelling	90	45	55	355	42	15	22.3143	113.9694	1877.10	9.43
10-Sep-13	11:33:05	Container Boat	Travelling	90	46	10	355	29	30	22.3142	113.9693	1866.62	9.22
10-Sep-13	11:35:27	Dumping Guide Boat	Travelling	92	55	10	17	39	55	22.3014	113.9689	486.42	31.40
10-Sep-13	11:35:44	Tug Boat	Travelling	90	45	50	6	24	0	22.3135	113.9727	1879.86	20.13
10-Sep-13	11:35:53	Container Boat	Travelling	90	46	10	5	28	45	22.3135	113.9724	1865.94	19.21
10-Sep-13	11:36:15	Speed Boat	Travelling	91	13	10	8	54	35	22.3073	113.9708	1169.41	22.64
10-Sep-13	11:38:26	Speed Boat	Travelling	91	42	5	335	55	30	22.3050	113.9649	836.04	349.65
10-Sep-13	11:38:53	Tug Boat	Travelling	90	46	10	9	7	35	22.3131	113.9734	1865.21	22.86
10-Sep-13	11:39:04	Container Boat	Travelling	90	44	30	8	34	35	22.3137	113.9736	1936.68	22.31
10-Sep-13	11:40:37	Speed Boat	Travelling	91	31	5	293	51	15	22.3028	113.9592	937.33	307.58
10-Sep-13	11:41:23	Dumping Guide Boat	Travelling	91	8	55	313	34	35	22.3070	113.9599	1241.41	327.31
10-Sep-13	11:42:13	Container Boat	Travelling	90	56	5	354	9	40	22.3113	113.9684	1529.22	7.89
10-Sep-13	11:42:31	Tug Boat	Stationary	90	50	0	8	29	30	22.3119	113.9727	1718.55	22.22
10-Sep-13	11:42:59	Container Boat	Stationary	90	43	30	7	41	50	22.3142	113.9734	1981.29	21.43
10-Sep-13	11:43:43	Transportation Boat	Travelling	90	46	55	355	9	30	22.3139	113.9692	1833.58	8.89
10-Sep-13	11:44:07	Container Boat	Travelling	90	53	0	349	40	15	22.3122	113.9673	1619.24	3.40
10-Sep-13	11:49:57	Container Boat	Stationary	90	48	50	348	52	55	22.3134	113.9672	1758.71	2.61
10-Sep-13	11:50:46	Speed Boat	Travelling	92	29	0	313	13	5	22.3019	113.9634	571.01	326.95
10-Sep-13	11:51:00	Dumping Guide Boat	Travelling	91	12	0	316	24	40	22.3069	113.9607	1186.26	330.14
10-Sep-13	11:51:39	Speed Boat	Travelling	92	8	35	1	36	25	22.3034	113.9681	661.94	15.34
10-Sep-13	11:52:22	Speed Boat	Travelling	91	25	5	24	14	55	22.3047	113.9724	1002.33	37.98
10-Sep-13	11:52:40	Speed Boat	Travelling	91	13	0	30	38	35	22.3051	113.9744	1169.61	44.37
10-Sep-13	11:52:49	Speed Boat	Travelling	94	36	20	4	28	50	22.3002	113.9673	307.11	18.21
10-Sep-13	11:53:09	Transportation Boat	Travelling	90	55	20	337	59	40	22.3114	113.9642	1548.05	351.72
10-Sep-13	11:53:20	Speed Boat	Travelling	92	35	50	37	46	45	22.3007	113.9706	545.71	51.51
10-Sep-13	11:54:08	Dumping Guide Boat	Travelling	91	3	20	312	1	0	22.3077	113.9590	1349.85	325.75
10-Sep-13	11:54:26	Transportation Boat	Travelling	90	59	45	330	24	15	22.3100	113.9626	1431.80	344.13
10-Sep-13	11:58:34	Transportation Boat	Travelling	91	4	30	298	54	50	22.3057	113.9569	1324.39	312.64
10-Sep-13	11:58:42	Dumping Guide Boat	Travelling	91	10	20	311	56	40	22.3066	113.9597	1213.42	325.67
10-Sep-13	12:00:48	Dumping Guide Boat	Travelling	90	51	25	305	13	20	22.3089	113.9558	1666.35	318.95
10-Sep-13	12:00:55	Transportation Boat	Travelling	90	59	10	282	5	15	22.3033	113.9537	1444.88	295.82
10-Sep-13	12:05:58	Dumping Guide Boat	Travelling	91	3	5	312	2	25	22.3077	113.9590	1353.17	325.77
10-Sep-13	12:12:34	Dumping Guide Boat	Travelling	92	55	10	16	6	10	22.3014	113.9687	484.08	29.83
10-Sep-13	12:14:41	Dumping Guide Boat	Travelling	92	37	45	34	21	55	22.3009	113.9703	537.56	48.10
10-Sep-13	12:15:34	Construction Boat	Travelling	91	10	25	319	54	10	22.3074	113.9612	1209.30	333.63
10-Sep-13	12:16:13	Dumping Guide Boat	Travelling	94	49	40	4	17	50	22.3001	113.9673	292.02	18.03
10-Sep-13	12:18:18	Construction Boat	Stationary	91	11	0	323	49	50	22.3076	113.9619	1198.84	337.56
10-Sep-13	12:21:10	Speed Boat	Travelling	93	16	0	2	2	55	22.3014	113.9675	431.99	15.78
10-Sep-13	12:21:26	Dumping Guide Boat	Travelling	93	0	45	28	38	5	22.3007	113.9695	468.54	42.36
10-Sep-13	12:23:31	Speed Boat	Travelling	91	49	0	354	59	35	22.3045	113.9675	778.16	8.72
10-Sep-13	12:29:23	Dumping Guide Boat	Travelling	90	54	10	308	25	45	22.3088	113.9570	1574.43	322.16
10-Sep-13	12:29:51	Transportation Boat	Travelling	91	4	0	311	23	40	22.3074	113.9590	1329.40	325.12
10-Sep-13	12:34:13	Transportation Boat	Travelling	90	55	50	343	12	30	22.3113	113.9656	1525.74	356.94
10-Sep-13	12:35:59	Transportation Boat	Travelling	90	49	20	350	22	20	22.3131	113.9676	1730.05	4.10
10-Sep-13	12:36:11	Dumping Guide Boat	Travelling	90	57	55	309	22	0	22.3082	113.9578	1469.69	323.10
10-Sep-13	12:42:33	Dumping Guide Boat	Travelling	92	51	35	359	39	25	22.3019	113.9675	492.30	13.39
10-Sep-13	12:44:02	Dumping Guide Boat	Travelling	93	0	25	34	42	0	22.3004	113.9698	468.03	48.43
10-Sep-13	12:47:23	Transportation Boat	Travelling	91	26	20	297	15	30	22.3034	113.9592	980.65	310.99
10-Sep-13	12:49:00	Dumping Guide Boat	Travelling	91	53	55	327	48	30	22.3040	113.9641	741.96	341.54
10-Sep-13	12:52:52	Dumping Guide Boat	Travelling	90	59	25	308	54	55	22.3078	113.9580	1428.95	322.65
10-Sep-13	12:53:07	Transportation Boat	Travelling	90	58	5	16	11	50	22.3090	113.9735	1462.16	29.93
10-Sep-13	12:56:44	Dumping Guide Boat	Travelling	90	56	10	307	57	50	22.3083	113.9573	1512.06	321.69
10-Sep-13	12:56:56	Transportation Boat	Travelling	91	0	35	307	14	10	22.3074	113.9578	1400.32	320.97
10-Sep-13	12:57:10	Transportation Boat	Travelling	90	32	40	29	58	5	22.3148	113.9841	2638.44	43.70
10-Sep-13	12:58:02	Transportation Boat	Travelling	91	0	50	286	29	15	22.3039	113.9547	1394.30	300.22
10-Sep-13	12:58:30	Transportation Boat	Travelling	90	56	35	278	31	45	22.3027	113.9529	1500.42	292.26
10-Sep-13	13:04:32	Dumping Guide Boat	Travelling	93	13	10	32	34	35	22.3003	113.9695	435.87	46.31
10-Sep-13	13:06:31	Tug Boat	Travelling	90	55	10	355	9	5	22.3113	113.9687	1537.91	8.88
10-Sep-13	13:06:54	Dumping Guide Boat	Travelling	93	16	25	8	57	45	22.3012	113.9680	428.50	22.69
10-Sep-13	13:09:03	Tug Boat	Travelling	90	58	10	346	11	30	22.3107	113.9664	1456.97	359.92
10-Sep-13	13:09:16	Dumping Guide Boat	Travelling	92	2	35	328	40	20	22.3035	113.9644	687.47	342.40
10-Sep-13	13:14:05	Dumping Guide Boat	Travelling	90	55	15	306	47	20	22.3083	113.9569	1534.42	320.52
10-Sep-13	13:14:16	Tug Boat	Stationary	90	58	20	347	3	25	22.3107	113.9666	1452.20	0.79
10-Sep-13	13:21:08	Dumping Guide Boat	Travelling	91	7	25	310	6	50	22.3067	113.9592	1255.31	323.84
10-Sep-13	13:21:33	Speed Boat	Travelling	94	7	0	352	32	25	22.3007	113.9668	340.50	6.27
10-Sep-13	13:22:47	Speed Boat	Travelling	92	31	40	300	27	55	22.3011	113.9625	555.55	314.20
10-Sep-13	13:24:09	Speed Boat	Travelling	91	24	40	281	51	5	22.3015	113.9576	997.96	295.58
10-Sep-13	13:27:10	Dumping Guide Boat	Travelling	93	21	55	27	40	55	22.3004	113.9691	417.10	41.41
10-Sep-13	13:30:44	Dumping Guide Boat	Travelling	93	21	15	4	15	20	22.3012	113.9677	418.65	17.99

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Sep-13	13:32:59	Dumping Guide Boat	Travelling	93	53	0	334	20	0	22.3008	113.9657	361.50	348.06
10-Sep-13	13:33:43	Dumping Guide Boat	Travelling	95	47	25	352	42	40	22.2998	113.9667	241.96	6.44
10-Sep-13	13:44:13	Dumping Guide Boat	Stationary	93	11	45	2	40	10	22.3014	113.9676	440.12	16.40
10-Sep-13	13:49:12	Tug Boat	Travelling	90	47	40	340	53	10	22.3137	113.9648	1790.21	354.62
10-Sep-13	13:49:23	Tug Boat	Travelling	90	47	45	341	33	20	22.3136	113.9650	1787.06	355.29
10-Sep-13	13:50:21	Transportation Boat	Travelling	90	49	15	340	32	25	22.3131	113.9647	1731.74	354.27
10-Sep-13	13:51:10	Tug Boat	Travelling	90	56	30	329	46	35	22.3106	113.9622	1506.14	343.51
10-Sep-13	13:51:27	Tug Boat	Travelling	90	59	5	321	53	45	22.3094	113.9606	1439.42	335.63
10-Sep-13	13:51:35	Transportation Boat	Travelling	90	55	50	330	34	0	22.3108	113.9624	1524.46	344.30
10-Sep-13	13:52:19	Tug Boat	Travelling	90	59	40	311	9	10	22.3081	113.9584	1425.29	324.88
10-Sep-13	13:52:38	Construction Boat	Travelling	91	0	25	311	1	25	22.3080	113.9585	1407.42	324.75
10-Sep-13	13:54:12	Tug Boat	Travelling	90	57	55	292	17	40	22.3054	113.9548	1469.26	306.02
10-Sep-13	13:54:20	Tug Boat	Travelling	90	59	5	296	12	25	22.3059	113.9557	1439.88	309.94
10-Sep-13	13:54:31	Transportation Boat	Travelling	91	4	50	297	57	15	22.3055	113.9569	1310.70	311.68
10-Sep-13	13:54:50	Dumping Guide Boat	Travelling	93	55	10	5	23	5	22.3007	113.9675	359.02	19.11
10-Sep-13	13:55:34	Tug Boat	Travelling	90	53	0	279	7	10	22.3032	113.9520	1608.00	292.85
10-Sep-13	13:55:43	Tug Boat	Travelling	90	53	50	282	54	25	22.3040	113.9526	1582.73	296.64
10-Sep-13	13:56:00	Transportation Boat	Travelling	90	57	45	281	31	20	22.3033	113.9534	1473.86	295.25
10-Sep-13	13:56:34	Tug Boat	Travelling	90	58	10	328	0	35	22.3101	113.9619	1463.24	341.74
10-Sep-13	13:56:43	Construction Boat	Travelling	90	57	25	327	18	35	22.3102	113.9617	1482.65	341.04
10-Sep-13	13:58:36	Dumping Guide Boat	Travelling	92	49	15	344	28	40	22.3021	113.9662	499.62	358.21
10-Sep-13	13:59:26	Dumping Guide Boat	Travelling	92	34	25	345	22	35	22.3025	113.9663	547.82	359.11
10-Sep-13	14:02:24	Construction Boat	Stationary	91	11	30	324	29	5	22.3075	113.9621	1188.32	338.21
10-Sep-13	14:03:31	Container Boat	Stationary	90	58	50	346	57	20	22.3106	113.9666	1447.54	0.69
10-Sep-13	14:04:05	Other	Stationary	90	48	40	348	13	50	22.3134	113.9670	1755.57	1.96
10-Sep-13	14:04:18	Other	Stationary	90	49	30	350	23	20	22.3131	113.9676	1725.48	4.12
10-Sep-13	14:04:37	Container Boat	Stationary	90	28	50	349	37	30	22.3248	113.9681	3019.96	3.35
10-Sep-13	14:04:56	Other	Stationary	90	34	50	355	39	10	22.3196	113.9703	2476.71	9.38
10-Sep-13	14:05:01	Other	Stationary	90	34	50	356	19	45	22.3196	113.9706	2476.73	10.06
10-Sep-13	14:05:15	Other	Stationary	90	58	50	359	53	50	22.3103	113.9697	1447.82	13.63
10-Sep-13	14:05:22	Other	Stationary	90	59	20	1	40	40	22.3101	113.9701	1435.47	15.41
10-Sep-13	14:05:44	Construction Boat	Stationary	90	34	0	357	15	5	22.3201	113.9711	2540.16	10.98
10-Sep-13	14:05:54	Construction Boat	Stationary	90	33	35	358	47	15	22.3202	113.9718	2573.07	12.52
10-Sep-13	14:06:00	Construction Boat	Stationary	90	32	45	359	52	40	22.3207	113.9724	2641.52	13.61
10-Sep-13	14:06:15	Container Boat	Stationary	90	48	50	11	52	20	22.3118	113.9738	1749.88	25.60
11-Sep-13	8:20:46	Other	Stationary	90	34	0	285	36	20	22.3093	113.9440	2647.39	299.34
11-Sep-13	8:20:53	Other	Stationary	90	44	10	295	42	40	22.3092	113.9512	2020.04	309.44
11-Sep-13	8:20:57	Other	Stationary	90	53	50	300	28	40	22.3080	113.9549	1650.45	314.21
11-Sep-13	8:21:05	Other	Stationary	90	54	20	308	1	20	22.3092	113.9566	1634.99	321.75
11-Sep-13	8:21:10	Other	Stationary	90	58	30	316	58	40	22.3095	113.9592	1516.79	330.71
11-Sep-13	8:21:15	Other	Stationary	90	56	0	324	53	20	22.3109	113.9608	1585.53	338.62
11-Sep-13	8:21:22	Other	Stationary	90	52	10	334	0	40	22.3126	113.9629	1704.05	347.74
11-Sep-13	8:21:26	Other	Stationary	90	47	40	338	39	50	22.3143	113.9640	1868.25	352.39
11-Sep-13	8:21:30	Other	Stationary	90	42	50	344	39	40	22.3164	113.9658	2084.46	358.39
11-Sep-13	8:21:35	Other	Stationary	90	40	10	348	10	20	22.3176	113.9671	2226.97	1.90
11-Sep-13	8:21:39	Other	Stationary	90	36	0	350	13	30	22.3200	113.9681	2494.19	3.95
11-Sep-13	8:21:44	Other	Stationary	90	33	10	351	31	10	22.3220	113.9688	2716.68	5.25
11-Sep-13	8:21:48	Other	Stationary	90	31	20	352	12	50	22.3234	113.9693	2883.68	5.94
11-Sep-13	8:22:04	Other	Stationary	91	1	0	304	48	40	22.3074	113.9570	1453.65	318.54
11-Sep-13	8:22:08	Other	Stationary	90	54	0	307	39	50	22.3092	113.9564	1645.08	321.39
11-Sep-13	8:22:19	Other	Stationary	90	31	30	348	26	20	22.3234	113.9675	2867.48	2.17
11-Sep-13	8:22:24	Other	Stationary	90	30	40	352	11	40	22.3240	113.9694	2949.58	5.92
11-Sep-13	8:22:58	Container Boat	Stationary	91	19	20	311	54	10	22.3059	113.9603	1114.58	325.63
11-Sep-13	8:23:11	Other	Stationary	91	14	10	324	33	50	22.3076	113.9621	1192.88	338.29
11-Sep-13	8:23:20	Other	Stationary	91	14	0	324	28	40	22.3076	113.9621	1195.58	338.21
11-Sep-13	8:23:26	Other	Stationary	90	50	10	349	29	40	22.3135	113.9674	1772.92	3.22
11-Sep-13	8:23:33	Other	Stationary	91	1	40	0	39	10	22.3102	113.9699	1437.52	14.38
11-Sep-13	8:23:47	Other	Stationary	90	52	50	11	53	20	22.3113	113.9735	1681.76	25.62
11-Sep-13	8:26:07	Transportation Boat	Travelling	91	5	30	285	16	10	22.3035	113.9549	1352.04	299.00
11-Sep-13	8:27:11	Transportation Boat	Travelling	91	6	40	300	40	30	22.3060	113.9572	1327.97	314.40
11-Sep-13	8:28:54	Transportation Boat	Travelling	91	9	50	298	6	50	22.3052	113.9572	1266.91	311.84
11-Sep-13	8:28:59	Transportation Boat	Travelling	91	3	10	304	43	10	22.3071	113.9574	1402.18	318.45
11-Sep-13	8:29:04	HSF High Speed Ferry	Travelling	91	4	30	297	8	40	22.3057	113.9563	1372.84	310.87
11-Sep-13	8:29:17	Fishing Boat	Non-operate and stationary	90	51	30	296	40	30	22.3077	113.9536	1725.13	310.40
11-Sep-13	8:29:25	Transportation Boat	Travelling	91	11	20	304	56	40	22.3060	113.9584	1239.94	318.67
11-Sep-13	8:29:29	Transportation Boat	Travelling	91	6	30	296	7	30	22.3053	113.9565	1331.03	309.85
11-Sep-13	8:30:09	Transportation Boat	Travelling	91	12	0	314	33	10	22.3070	113.9601	1228.26	328.28
11-Sep-13	8:30:13	Transportation Boat	Travelling	91	1	30	282	44	0	22.3034	113.9539	1440.49	296.46
11-Sep-13	8:30:23	HSF High Speed Ferry	Travelling	91	4	0	311	5	30	22.3078	113.9586	1383.51	324.82
11-Sep-13	8:30:30	Speed Boat	Travelling	91	27	30	312	32	30	22.3052	113.9610	1009.06	326.27
11-Sep-13	8:32:14	HSF High Speed Ferry	Travelling	90	58	0	328	50	0	22.3107	113.9619	1528.34	342.56
11-Sep-13	8:32:19	Transportation Boat	Travelling	90	58	40	337	39	20	22.3111	113.9642	1510.71	351.39
11-Sep-13	8:32:24	Speed Boat	Travelling	91	25	50	328	16	30	22.3064	113.9633	1028.59	342.00
11-Sep-13	8:32:35	Tug Boat	Travelling	90	50	0	354	42	20	22.3134	113.9689	1777.30	8.44
11-Sep-13	8:34:28	Transportation Boat	Travelling	90	44	40	351	2	40	22.3155	113.9680	1994.11	4.77
11-Sep-13	8:34:32	HSF High Speed Ferry	Travelling	90	47	10	345	1	30	22.3146	113.9660	1885.99	358.75
11-Sep-13	8:34:41	Speed Boat	Travelling	91	18	0	344	56	10	22.3078	113.9661	1132.45	358.67
11-Sep-13	8:34:46	Tug Boat	Travelling	90	47	40	7	29	10	22.3133	113.9730	1865.73	21.22
11-Sep-13	8:36:59	HSF High Speed Ferry	Travelling	91	2	20	289	52	50	22.3047	113.9549	1420.02	303.61
11-Sep-13	8:37:12	Transportation Boat	Travelling	90	40	20	352	42	30	22.3174	113.9688	2213.96	6.44
11-Sep-13	8:38:55	Transportation Boat	Travelling	90	53	20	291	31	30	22.3063	113.9532	1663.16	305.25
11-Sep-13	8:39:00	Transportation Boat	Travelling	90	53	20	338	18	10	22.3124	113.9642	1663.15	352.03
11-Sep-13	8:39:09	HSF High Speed Ferry	Travelling	91	0	30	324	5	10	22.3098	113.9610	1463.30	337.82
11-Sep-13	8:39:43	Speed Boat	Travelling	90	57	10	9	46	30	22.3104	113.9724	1549.78	23.50
11-Sep-13	8:39:58	Fishing Boat	Operate and stationary	90	58	0	18	54	20	22.3092	113.9744	1527.15	32.64
11-Sep-13	8:40:04	Transportation Boat	Travelling	91	3	20	303	13	10	22.3068	113.9571	1396.88	316.95
11-Sep-13	8:40:09	Transportation Boat	Travelling	91	1	0	301	27	0	22.3069	113.9565	1451.00	315.18
11-Sep-13	8:40:20	Transportation Boat	Travelling	90	59	0	288	50	20	22.3049	113.9541	1500.84	302.57
11-Sep-13	8:40:32	Speed Boat	Travelling	94	6	20	310	30	50	22.3002	113.9644	356.56	324.24
11-Sep-13	8:40:47	Transportation Boat	Travelling	90	48	20	344	27	10	22.3142	113.9658	1838.32	358.18
11-Sep-13	8:40:51	HSF High Speed Ferry	Travelling	90	48	50	343	8	20	22.3140	113.9654	1819.10	356.87
11-Sep-13	8:40:59	Transportation Boat	Travelling	91	3	30	307	14	10	22.3074	113.9579	1393.04	320.97
11-Sep-13	8:41:08	Transportation Boat	Travelling	91	5	50	311	42	10	22.3076	113.9590	1343.08	325.43
11-Sep-13	8:41:26	Transportation Boat	Travelling	90	59	10	285	53	30	22.3043	113.9537	1496.38	299.62
11-Sep-13	8:41:31	Transportation Boat	Travelling	90	52	40	338	15	40	22.3126	113.9641	1684.14	351.99
11-Sep-13	8:41:36	Transportation Boat	Travelling	91	4	0	295	21	10	22.3055	113.9560	1381.94	309.08
11-Sep-13	8:41:50	Transportation Boat	Travelling	90	59	40	288	59	50	22.3048	113.9543	1483.61	302.73
11-Sep-13	8:42:05	Transportation Boat	Travelling	91	1	10	286	27	50	22.3042	113.9542	1446.71	300.19
11-Sep-13	8:42:12	Transportation Boat	Travelling	91	2	10	301	36	40	22.3067	113.9567	1423.12	315.34
11-Sep-13	8:42:26	Transportation Boat	Travelling	91	3	10	284	28	30	22.3036	113.9544	1400.28	298.20
11-Sep-13	8:42:53	Transportation Boat	Travelling	91	1	10	306	16	10	22.3076	113.9574	1446.59	320.00
11-Sep-13	8:42:57	Transportation Boat	Travelling	91	1	10	297	26	50	22.3062	113.9558	1446.58	311.18
11-Sep-13	8:43:08	Transportation Boat	Travelling	91	1	30	319	39	40	22.3092	113.9601	1438.61	333.39
11-Sep-13	8:43:19	Transportation Boat	Travelling	90	55	50	333	19	30	22.3115	113.9629	1586.79	347.05
11-Sep-13	8:43:38	Construction Boat	Travelling	91	5	30	335	45	10	22.3096	113.9640	1349.65	349.48
11-Sep-13	8:43:52	Tug Boat	Stationary	90	47	40	10	49	30	22.3129	113.9739	1864.01	24.55
11-Sep-13	8:45:31	Transportation Boat	Travelling	91	1	30	285	39	30	22.3040	113.9542	1438.26	299.39
11-Sep-13	8:45:39	Construction Boat	Travelling	91	0	30	348	33	30	22.3108	113.9670	1462.33	2.29
11-Sep-13	8:45:48	Transportation Boat	Travelling	91	8	10	315	22	10	22.3076	113.9599	1296.00	329.10
11-Sep-13	8:45:54	Transportation Boat	Travelling	90	59	0	306	18	50	22.3080	113.9570	1499.99	320.04
11-Sep-13	8:47:25	Transportation Boat	Travelling	90	54	40	336	23	0	22.3120	113.9637	1620.53	350.11
11-Sep-13	8:47:30	Transportation Boat	Travelling	90	59	40	284	51	40	22.3040	113.9537	1482.76	298.59
11-Sep-13	8:47:48	Transportation Boat	Travelling	90	57	50	280	45	30	22.3033	113.9529	1530.40	294.49
11-Sep-13	8:48:51	Construction Boat	Travelling	90	48	20	3	41	40	22.3134	113.9718	1836.82	17.42
11-Sep-13	8:53:38	Transportation Boat	Travelling	90	57	20	292	22	40	22.3058	113.9543	1543.03	306.11
11-Sep-13	8:54:43	Transportation Boat	Travelling	91	8	30	306	50	30	22.3066	113.9584	1288.46	320.57
11-Sep-13	8:56:20	Transportation Boat	Travelling	90	56	50	331	16	20	22.3111	113.9625	1556.38	345.00

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Sep-13	8:58:02	Transportation Boat	Travelling	90	41	40	348	5	50	22.3168	113.9671	2136.51	1.83
11-Sep-13	9:02:22	Transportation Boat	Travelling	91	7	10	301	17	20	22.3060	113.9574	1313.30	315.02
11-Sep-13	9:02:28	Transportation Boat	Travelling	91	4	20	300	52	40	22.3063	113.9569	1371.80	314.61
11-Sep-13	9:03:22	Transportation Boat	Travelling	91	3	10	318	16	10	22.3087	113.9600	1397.31	332.00
11-Sep-13	9:03:28	Transportation Boat	Travelling	91	3	10	291	58	20	22.3050	113.9554	1397.30	305.70
11-Sep-13	9:04:19	Construction Boat	Travelling	91	4	30	287	47	50	22.3041	113.9551	1367.95	301.53
11-Sep-13	9:04:26	Transportation Boat	Travelling	91	1	40	283	21	50	22.3035	113.9540	1431.58	297.09
11-Sep-13	9:04:30	Transportation Boat	Travelling	90	59	30	283	45	20	22.3038	113.9536	1484.41	297.49
11-Sep-13	9:05:12	Transportation Boat	Travelling	90	50	0	342	23	10	22.3135	113.9652	1771.42	356.12
11-Sep-13	9:05:33	Transportation Boat	Travelling	91	1	10	290	26	30	22.3049	113.9548	1443.27	304.17
11-Sep-13	9:07:51	Transportation Boat	Travelling	91	1	20	305	29	30	22.3074	113.9573	1438.97	319.22
11-Sep-13	9:07:57	Construction Boat	Travelling	91	3	20	310	56	40	22.3078	113.9586	1392.95	324.67
11-Sep-13	9:10:37	Transportation Boat	Travelling	91	9	50	306	5	30	22.3063	113.9585	1261.58	319.82
11-Sep-13	9:10:44	Construction Boat	Travelling	90	58	30	327	21	10	22.3105	113.9616	1509.20	341.08
11-Sep-13	9:13:08	Transportation Boat	Travelling	91	48	40	309	25	20	22.3034	113.9617	808.04	323.15
11-Sep-13	9:14:07	Transportation Boat	Travelling	90	59	40	286	21	10	22.3043	113.9540	1478.77	300.08
11-Sep-13	9:14:15	Transportation Boat	Travelling	91	9	30	282	58	0	22.3027	113.9554	1267.22	296.70
11-Sep-13	9:14:19	Transportation Boat	Travelling	91	2	10	285	59	0	22.3039	113.9544	1418.50	299.71
11-Sep-13	9:15:08	Transportation Boat	Travelling	93	2	0	320	40	40	22.3015	113.9644	481.45	334.41
11-Sep-13	9:15:14	Transportation Boat	Travelling	91	2	20	294	50	40	22.3056	113.9556	1414.53	308.57
11-Sep-13	9:15:20	Transportation Boat	Travelling	91	16	10	290	28	10	22.3035	113.9571	1155.19	304.20
11-Sep-13	9:15:24	Transportation Boat	Travelling	91	5	40	300	43	20	22.3061	113.9571	1341.86	314.45
11-Sep-13	9:16:16	Transportation Boat	Travelling	90	56	0	305	59	30	22.3084	113.9565	1576.71	319.72
11-Sep-13	9:16:34	Transportation Boat	Travelling	91	1	20	305	18	30	22.3074	113.9572	1437.69	319.04
11-Sep-13	9:16:41	Transportation Boat	Travelling	91	19	0	302	5	20	22.3048	113.9589	1113.27	315.82
11-Sep-13	9:16:53	HSF High Speed Ferry	Travelling	90	38	10	351	1	0	22.3186	113.9683	2334.34	4.75
11-Sep-13	9:17:50	Transportation Boat	Stationary	95	31	30	358	36	10	22.2999	113.9669	263.55	12.33
11-Sep-13	9:18:34	HSF High Speed Ferry	Travelling	90	49	50	339	34	50	22.3135	113.9644	1775.05	353.31
11-Sep-13	9:18:50	Construction Boat	Travelling	90	35	40	352	21	50	22.3200	113.9690	2503.69	6.09
11-Sep-13	9:19:26	Transportation Boat	Travelling	91	16	10	326	5	40	22.3074	113.9625	1154.71	339.82
11-Sep-13	9:19:32	Transportation Boat	Travelling	90	59	40	292	45	20	22.3055	113.9548	1477.95	306.49
11-Sep-13	9:20:57	HSF High Speed Ferry	Travelling	91	4	10	305	6	10	22.3069	113.9576	1372.83	318.83
11-Sep-13	9:21:02	Transportation Boat	Travelling	90	56	20	305	50	40	22.3084	113.9565	1566.48	319.57
11-Sep-13	9:21:06	Transportation Boat	Travelling	91	5	50	336	50	0	22.3095	113.9643	1337.65	350.56
11-Sep-13	9:22:28	HSF High Speed Ferry	Travelling	90	57	40	280	35	50	22.3033	113.9528	1529.50	294.33
11-Sep-13	9:23:04	Transportation Boat	Travelling	90	56	0	346	6	10	22.3118	113.9664	1575.62	359.83
11-Sep-13	9:34:42	Dolphin	Surface	90	39	0	35	18	0	22.3111	113.9831	2278.64	49.03
11-Sep-13	9:34:48	Dolphin	Surface	90	39	10	35	21	20	22.3110	113.9831	2268.61	49.09
11-Sep-13	9:36:11	Dolphin	Surface	90	36	0	35	38	30	22.3121	113.9847	2475.18	49.37
11-Sep-13	9:37:07	Fishing Boat	Non-operate and stationary	90	33	20	37	39	10	22.3127	113.9868	2681.58	51.38
11-Sep-13	9:39:10	Speed Boat	Travelling	91	4	50	303	35	20	22.3066	113.9575	1356.03	317.32
11-Sep-13	9:40:27	Speed Boat	Travelling	91	9	20	321	44	10	22.3080	113.9613	1266.93	335.47
11-Sep-13	9:40:41	Transportation Boat	Travelling	91	3	0	288	34	40	22.3043	113.9549	1395.76	302.31
11-Sep-13	9:41:44	Speed Boat	Travelling	91	8	30	338	19	10	22.3090	113.9647	1282.33	352.05
11-Sep-13	9:41:50	Transportation Boat	Travelling	91	2	40	302	9	30	22.3067	113.9569	1403.11	315.89
11-Sep-13	9:42:54	Transportation Boat	Travelling	90	54	40	303	46	30	22.3083	113.9558	1611.41	317.50
11-Sep-13	9:43:02	Tug Boat	Travelling	90	49	10	352	21	0	22.3137	113.9682	1795.11	6.08
11-Sep-13	9:43:12	Speed Boat	Travelling	91	5	20	352	30	20	22.3097	113.9678	1344.98	6.24
11-Sep-13	9:43:27	Transportation Boat	Travelling	91	1	50	304	13	40	22.3071	113.9571	1422.03	317.96
11-Sep-13	9:44:04	Transportation Boat	Travelling	91	2	50	303	46	40	22.3069	113.9572	1399.03	317.51
11-Sep-13	9:44:09	Transportation Boat	Travelling	91	2	10	295	9	50	22.3056	113.9557	1414.21	308.89
11-Sep-13	9:44:17	Tug Boat	Stationary	90	48	20	346	24	0	22.3141	113.9664	1826.47	0.13
11-Sep-13	9:44:24	Speed Boat	Travelling	91	4	40	3	12	0	22.3093	113.9702	1358.85	16.93
11-Sep-13	9:44:33	Transportation Boat	Travelling	91	1	20	304	57	0	22.3073	113.9572	1433.61	318.68
11-Sep-13	9:44:40	Transportation Boat	Travelling	91	1	0	288	34	10	22.3046	113.9545	1441.53	302.30
11-Sep-13	9:44:43	Transportation Boat	Travelling	91	2	30	296	25	10	22.3058	113.9559	1406.49	310.15
11-Sep-13	9:44:47	Transportation Boat	Travelling	91	2	40	301	26	10	22.3066	113.9568	1402.69	315.17
11-Sep-13	9:45:20	Transportation Boat	Travelling	90	57	30	280	28	30	22.3033	113.9528	1530.43	294.20
11-Sep-13	9:45:25	Transportation Boat	Travelling	90	59	40	288	44	30	22.3047	113.9543	1474.07	302.47
11-Sep-13	9:45:29	Transportation Boat	Travelling	90	58	30	289	11	30	22.3050	113.9541	1503.87	302.92
11-Sep-13	9:49:48	HSF High Speed Ferry	Travelling	90	41	0	351	9	40	22.3170	113.9682	2160.78	4.89
11-Sep-13	9:50:08	Transportation Boat	Travelling	91	45	20	359	20	20	22.3049	113.9682	830.62	13.07
11-Sep-13	9:51:15	HSF High Speed Ferry	Travelling	90	51	0	339	36	0	22.3131	113.9644	1727.90	353.33
11-Sep-13	9:51:29	Transportation Boat	Travelling	92	27	30	359	6	10	22.3028	113.9677	592.29	12.83
11-Sep-13	9:51:52	Transportation Boat	Travelling	95	18	10	350	18	20	22.3001	113.9666	273.72	4.04
11-Sep-13	9:52:06	Transportation Boat	Travelling	91	2	50	300	40	50	22.3064	113.9567	1397.88	314.41
11-Sep-13	9:52:15	HSF High Speed Ferry	Travelling	90	58	10	327	22	30	22.3105	113.9616	1511.57	341.10
11-Sep-13	9:53:13	Transportation Boat	Travelling	93	0	0	322	30	50	22.3016	113.9645	484.94	336.24
11-Sep-13	9:53:20	Transportation Boat	Travelling	91	1	30	289	24	0	22.3046	113.9548	1428.40	303.13
11-Sep-13	9:53:31	Transportation Boat	Travelling	94	35	20	355	22	50	22.3004	113.9669	316.50	9.11
11-Sep-13	9:53:42	HSF High Speed Ferry	Travelling	91	3	50	304	29	20	22.3068	113.9575	1375.49	318.22
11-Sep-13	9:53:55	Transportation Boat	Travelling	91	0	40	283	13	40	22.3035	113.9538	1448.19	296.96
11-Sep-13	9:55:16	HSF High Speed Ferry	Travelling	90	56	30	279	40	10	22.3032	113.9525	1556.35	293.40
11-Sep-13	9:55:23	Transportation Boat	Travelling	91	36	30	312	58	50	22.3044	113.9616	906.59	326.71
11-Sep-13	9:55:29	Transportation Boat	Travelling	91	2	40	300	5	40	22.3064	113.9566	1401.16	313.82
11-Sep-13	9:55:36	Transportation Boat	Travelling	90	56	50	283	24	20	22.3040	113.9530	1547.03	297.14
11-Sep-13	9:55:48	Transportation Boat	Travelling	95	3	0	348	2	30	22.3002	113.9665	287.39	1.77
11-Sep-13	9:56:49	Transportation Boat	Travelling	90	52	30	305	48	20	22.3091	113.9558	1676.69	319.54
11-Sep-13	9:56:55	Transportation Boat	Travelling	91	1	10	295	27	40	22.3058	113.9556	1435.76	309.19
11-Sep-13	9:57:07	Transportation Boat	Travelling	92	53	10	350	42	0	22.3021	113.9668	503.95	4.43
11-Sep-13	9:58:49	Transportation Boat	Travelling	91	51	40	351	12	30	22.3046	113.9671	782.61	4.94
11-Sep-13	9:59:00	Transportation Boat	Travelling	90	50	50	307	25	40	22.3098	113.9558	1732.30	321.16
11-Sep-13	9:59:04	Transportation Boat	Travelling	90	52	10	307	29	30	22.3095	113.9561	1687.21	321.22
11-Sep-13	10:00:53	Speed Boat	Travelling	91	3	0	295	5	50	22.3055	113.9558	1392.89	308.83
11-Sep-13	10:02:24	Container Boat	Travelling	90	52	0	355	24	10	22.3127	113.9690	1692.13	9.13
11-Sep-13	10:02:30	Speed Boat	Travelling	90	32	20	354	58	30	22.3222	113.9705	2761.20	8.70
11-Sep-13	10:02:38	Transportation Boat	Travelling	91	2	10	354	3	0	22.3102	113.9683	1411.55	7.78
11-Sep-13	10:03:53	Speed Boat	Travelling	90	51	10	338	1	0	22.3129	113.9640	1719.94	351.75
11-Sep-13	10:04:11	Transportation Boat	Travelling	90	59	20	290	12	10	22.3051	113.9545	1479.63	303.93
11-Sep-13	10:04:20	Speed Boat	Travelling	90	57	30	325	29	30	22.3105	113.9611	1527.47	339.22
11-Sep-13	10:04:48	Speed Boat	Travelling	91	3	40	309	44	10	22.3076	113.9584	1377.58	323.47
11-Sep-13	10:04:53	Transportation Boat	Travelling	91	0	20	295	21	30	22.3059	113.9554	1454.67	309.09
11-Sep-13	10:04:59	Transportation Boat	Travelling	90	58	0	306	10	30	22.3080	113.9569	1514.01	319.90
11-Sep-13	10:05:15	Speed Boat	Travelling	91	1	20	292	32	0	22.3052	113.9552	1430.59	306.26
11-Sep-13	10:06:09	Government Boat	Travelling	90	40	40	22	7	50	22.3135	113.9788	2175.36	35.86
11-Sep-13	10:06:15	Government Boat	Travelling	90	42	10	21	13	50	22.3131	113.9781	2095.77	34.96
11-Sep-13	10:06:19	Government Boat	Travelling	90	41	40	20	24	30	22.3134	113.9780	2121.62	34.14
11-Sep-13	10:06:23	Government Boat	Travelling	90	35	30	23	53	40	22.3155	113.9813	2503.60	37.62
11-Sep-13	10:07:04	Government Boat	Travelling	91	14	10	2	5	30	22.3078	113.9695	1180.40	15.82
11-Sep-13	10:07:07	Government Boat	Travelling	91	16	30	2	5	30	22.3075	113.9694	1144.08	15.82
11-Sep-13	10:07:09	Government Boat	Travelling	91	15	30	0	1	50	22.3078	113.9691	1159.36	13.76
11-Sep-13	10:07:13	Government Boat	Travelling	90	56	50	12	58	0	22.3100	113.9732	1545.20	26.70
11-Sep-13	10:07:50	Fishing Boat	Operate and Stationary	90	44	10	23	26	0	22.3119	113.9781	1998.10	37.16
11-Sep-13	10:08:07	Government Boat	Travelling	91	16	40	292	42	10	22.3037	113.9575	1141.46	306.43
11-Sep-13	10:08:11	Government Boat	Travelling	91	15	40	291	22	50	22.3036	113.9572	1156.66	305.11
11-Sep-13	10:08:14	Government Boat	Travelling	91	12	10	289	45	40	22.3036	113.9566	1213.27	303.49
11-Sep-13	10:08:21	Government Boat	Travelling	91	27	10	308	34	10	22.3048	113.9604	1002.97	322.30
11-Sep-13	10:08:38	Transportation Boat	Travelling	91	41	10	305	1	30	22.3035	113.9609	863.39	318.75
11-Sep-13	10:10:24	Dolphin	Surface	90	31	50	31	59	10	22.3152	113.9859	2804.41	45.72
11-Sep-13	10:10:40	Dolphin	Surface	90	33	20	32	6	30	22.3144	113.9850	2672.28	45.84
11-Sep-13	10:11:06	Dolphin	Surface	90	33	10	32	29	0	22.3143	113.9853	2686.20	46.21
11-Sep-13	10:12:38	Transportation Boat	Travelling	95	21	30	345	8	10	22.3001	113.9663	270.30	358.87
11-Sep-13	10:16:26	Dolphin	Surface	90	44	30	34	51	10	22.3094	113.9809	1981.01	48.58
11-Sep-13	10:16:34	Dolphin	Surface	90	44	30	35	20	30	22.3093	113.9810	1980.98	49.07
11-Sep-13	10:17:41	Dolphin	Surface	90	38	40	37	9	30	22.3106	113.9837	2288.79	50.89
11-Sep-13	10:17:52	Dolphin	Surface	90	38	30	37	12	50	22.3107	113.9838	2298.98	50.94
11-Sep-13	10:18:04	Dolphin	Surface	90	36	40	37	21	40	22.3113	113.9847	2418.02	51.09

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Sep-13	10:18:17	Fishing Boat	Operate and stationary	90	33	0	37	35	50	22.3128	113.9869	2698.38	51.33
11-Sep-13	10:20:19	Dolphin	Surface	90	44	20	35	14	20	22.3094	113.9810	1987.85	48.97
11-Sep-13	10:20:32	Dolphin	Surface	90	44	10	35	27	50	22.3094	113.9811	1995.50	49.19
11-Sep-13	10:22:03	Transportation Boat	Travelling	91	4	10	291	53	10	22.3048	113.9556	1364.31	305.62
11-Sep-13	10:22:07	Transportation Boat	Travelling	90	57	0	286	44	0	22.3046	113.9535	1538.27	300.46
11-Sep-13	10:22:24	Transportation Boat	Travelling	91	7	40	309	28	10	22.3069	113.9589	1292.93	323.20
11-Sep-13	10:22:30	Transportation Boat	Travelling	91	0	10	312	45	0	22.3085	113.9586	1456.13	326.48
11-Sep-13	10:22:38	Transportation Boat	Travelling	90	58	50	283	10	40	22.3037	113.9535	1489.57	296.91
11-Sep-13	10:22:43	Transportation Boat	Travelling	90	59	30	292	42	0	22.3055	113.9549	1472.64	306.43
11-Sep-13	10:22:48	Transportation Boat	Travelling	91	6	50	305	23	20	22.3065	113.9581	1309.17	319.12
11-Sep-13	10:22:52	Transportation Boat	Travelling	90	58	30	309	35	10	22.3084	113.9577	1498.14	323.32
11-Sep-13	10:23:22	Fishing Boat	Non-operate and travelling	90	33	10	34	6	20	22.3138	113.9857	2682.78	47.84
11-Sep-13	10:24:05	Fishing Boat	Non-operate and travelling	90	33	10	31	44	40	22.3145	113.9850	2682.58	45.47
11-Sep-13	10:26:07	Dolphin	Surface	90	38	20	30	57	0	22.3124	113.9822	2307.35	44.68
11-Sep-13	10:26:30	Fishing Boat	Non-operate and travelling	90	34	10	23	18	20	22.3163	113.9816	2599.99	37.04
11-Sep-13	10:31:33	Dolphin	Surface	90	25	40	36	3	30	22.3181	113.9925	3518.41	49.79
11-Sep-13	10:31:43	Dolphin	Surface	90	25	50	36	3	20	22.3179	113.9924	3493.85	49.79
11-Sep-13	10:31:54	Dolphin	Surface	90	25	50	36	6	10	22.3179	113.9924	3493.78	49.83
11-Sep-13	10:33:47	Dolphin	Surface	90	39	30	37	51	20	22.3101	113.9834	2235.24	51.59
11-Sep-13	10:34:17	Dolphin	Surface	90	36	40	37	46	10	22.3111	113.9848	2413.97	51.50
11-Sep-13	10:34:24	Dolphin	Surface	90	36	40	37	45	0	22.3111	113.9848	2413.94	51.48
11-Sep-13	10:35:12	Dolphin	Surface	90	36	0	38	13	10	22.3113	113.9852	2460.14	51.95
11-Sep-13	10:35:48	Dolphin	Surface	90	35	30	38	46	30	22.3113	113.9857	2495.99	52.50
11-Sep-13	10:36:23	Dolphin	Surface	90	39	40	38	25	0	22.3099	113.9835	2224.95	52.15
11-Sep-13	10:36:33	Dolphin	Surface	90	39	30	38	31	10	22.3099	113.9836	2234.60	52.25
11-Sep-13	10:36:41	Dolphin	Surface	90	39	30	38	37	0	22.3099	113.9836	2234.57	52.35
11-Sep-13	10:37:31	Dolphin	Fluke Up	90	36	0	38	40	30	22.3111	113.9854	2459.55	52.40
11-Sep-13	10:39:43	Transportation Boat	Travelling	90	46	30	343	25	50	22.3146	113.9655	1889.31	357.16
11-Sep-13	10:42:28	Transportation Boat	Travelling	91	1	0	316	5	0	22.3088	113.9594	1433.05	329.81
11-Sep-13	10:43:26	Dolphin	Surface	90	39	20	38	51	30	22.3099	113.9837	2242.77	52.59
11-Sep-13	10:43:38	Dolphin	Surface	90	42	40	39	1	30	22.3089	113.9824	2062.60	52.75
11-Sep-13	10:45:04	Dolphin	Surface	90	27	10	37	35	50	22.3162	113.9915	3305.29	51.33
11-Sep-13	10:45:11	Dolphin	Surface	90	26	30	37	33	0	22.3167	113.9922	3394.49	51.28
11-Sep-13	10:45:27	Dolphin	Surface	90	26	30	37	28	30	22.3168	113.9921	3394.40	51.20
11-Sep-13	10:46:15	Dumping Guide Boat	Stationary	90	23	50	36	41	30	22.3194	113.9949	3807.59	50.42
11-Sep-13	10:48:31	Dolphin	Surface	90	45	10	37	22	10	22.3086	113.9811	1944.64	51.10
11-Sep-13	10:49:15	Dolphin	Surface	90	45	30	37	29	30	22.3085	113.9810	1929.91	51.22
11-Sep-13	10:51:19	Dumping Guide Boat	Travelling	90	24	30	37	40	30	22.3183	113.9945	3692.66	51.40
11-Sep-13	10:51:38	Dolphin	Surface	90	42	20	38	15	50	22.3091	113.9823	2077.56	51.99
11-Sep-13	10:52:17	Dumping Guide Boat	Travelling	90	25	20	36	47	0	22.3180	113.9931	3560.66	50.51
11-Sep-13	10:54:00	Dolphin	Surface	90	42	50	36	56	20	22.3093	113.9818	2052.16	50.67
11-Sep-13	10:54:07	Dumping Guide Boat	Travelling	90	29	20	35	27	50	22.3155	113.9888	3043.11	49.19
11-Sep-13	10:55:30	Dolphin	Surface	90	45	40	37	53	50	22.3084	113.9811	1921.46	51.63
11-Sep-13	10:55:37	Dumping Guide Boat	Travelling	90	33	0	33	3	40	22.3142	113.9855	2687.92	46.79
11-Sep-13	10:57:26	Dumping Guide Boat	Travelling	90	39	30	29	51	20	22.3122	113.9814	2229.78	43.59
11-Sep-13	10:58:24	Transportation Boat	Travelling	92	21	10	335	35	10	22.3031	113.9653	614.76	349.32
11-Sep-13	10:58:56	Dolphin	Surface	90	45	30	36	52	50	22.3086	113.9809	1927.99	50.61
11-Sep-13	10:59:32	Dolphin	Surface	90	44	20	37	27	20	22.3088	113.9814	1979.84	51.19
11-Sep-13	11:00:13	Dumping Guide Boat	Travelling	90	56	40	22	7	30	22.3089	113.9752	1541.42	35.85
11-Sep-13	11:00:18	Transportation Boat	Travelling	94	59	0	10	9	20	22.3000	113.9675	289.36	23.89
11-Sep-13	11:00:50	Dolphin	Surface	90	48	0	36	55	20	22.3080	113.9801	1825.04	50.65
11-Sep-13	11:02:13	Dolphin	Surface	90	36	40	36	4	40	22.3116	113.9843	2406.99	49.81
11-Sep-13	11:02:46	Dumping Guide Boat	Travelling	91	30	40	7	57	40	22.3056	113.9698	958.67	21.69
11-Sep-13	11:02:56	Construction Boat	Travelling	91	1	40	302	45	50	22.3069	113.9569	1414.39	316.49
11-Sep-13	11:03:50	Dumping Guide Boat	Travelling	91	57	20	357	23	50	22.3042	113.9678	739.74	11.13
11-Sep-13	11:03:57	Transportation Boat	Travelling	94	12	20	348	50	10	22.3007	113.9665	343.03	2.57
11-Sep-13	11:04:05	Construction Boat	Travelling	91	0	0	313	11	10	22.3086	113.9587	1454.03	326.92
11-Sep-13	11:04:28	Dolphin	Surface	90	45	40	36	11	10	22.3087	113.9807	1919.69	49.92
11-Sep-13	11:05:04	Dolphin	Surface	90	44	30	35	31	10	22.3092	113.9809	1971.12	49.25
11-Sep-13	11:05:39	Dumping Guide Boat	Travelling	93	40	0	326	38	40	22.3010	113.9651	393.59	340.37
11-Sep-13	11:05:47	Transportation Boat	Travelling	92	5	10	318	1	50	22.3031	113.9632	693.13	331.76
11-Sep-13	11:05:55	Transportation Boat	Travelling	90	48	50	340	52	50	22.3137	113.9648	1792.31	354.61
11-Sep-13	11:06:39	Dolphin	Surface	90	37	20	36	43	50	22.3111	113.9841	2361.39	50.46
11-Sep-13	11:06:50	Dolphin	Surface	90	37	0	36	39	50	22.3113	113.9843	2383.38	50.39
11-Sep-13	11:07:41	Dumping Guide Boat	Stationary	94	25	20	336	3	30	22.3005	113.9658	326.02	349.79
11-Sep-13	11:07:50	Transportation Boat	Travelling	91	16	20	303	37	50	22.3052	113.9589	1139.51	317.36
11-Sep-13	11:08:02	Construction Boat	Travelling	90	47	50	342	13	30	22.3140	113.9651	1830.17	355.95
11-Sep-13	11:08:42	Speed Boat	Travelling	94	55	40	320	42	0	22.3000	113.9652	292.39	334.43
11-Sep-13	11:09:04	Dolphin	Surface	90	40	20	34	56	50	22.3106	113.9823	2179.68	48.68
11-Sep-13	11:09:42	Fishing Boat	Non-operate and travelling	90	31	0	31	14	20	22.3159	113.9861	2865.94	44.97
11-Sep-13	11:12:17	Dolphin	Surface	90	41	30	35	57	40	22.3099	113.9821	2115.93	49.69
11-Sep-13	11:12:36	Dolphin	Surface	90	32	20	36	12	30	22.3135	113.9868	2741.11	49.94
11-Sep-13	11:12:48	Fishing Boat	Operate and stationary	90	30	50	36	17	30	22.3143	113.9879	2881.31	50.02
11-Sep-13	11:13:31	Dolphin	Surface	90	36	0	37	12	40	22.3115	113.9849	2450.37	50.94
11-Sep-13	11:14:09	Fishing Boat	Operate and stationary	90	30	40	38	38	10	22.3135	113.9887	2897.40	52.37
11-Sep-13	11:16:52	Dolphin	Surface	90	40	50	37	46	40	22.3097	113.9828	2150.46	51.51
11-Sep-13	11:17:29	HSF High Speed Ferry	Travelling	90	45	40	343	34	40	22.3149	113.9655	1917.11	357.31
11-Sep-13	11:17:41	Transportation Boat	Travelling	91	1	30	316	15	30	22.3087	113.9595	1416.12	329.99
11-Sep-13	11:17:54	Transportation Boat	Travelling	91	35	50	310	5	50	22.3042	113.9612	905.29	323.83
11-Sep-13	11:18:37	HSF High Speed Ferry	Travelling	90	54	10	331	14	0	22.3116	113.9623	1610.66	344.96
11-Sep-13	11:18:49	Transportation Boat	Travelling	91	59	0	312	7	40	22.3030	113.9624	728.22	325.86
11-Sep-13	11:20:09	Dolphin	Surface	90	40	0	38	29	10	22.3097	113.9833	2195.88	52.22
11-Sep-13	11:20:49	Dolphin	Surface	90	40	50	37	56	0	22.3096	113.9828	2149.58	51.66
11-Sep-13	11:21:05	HSF High Speed Ferry	Travelling	91	2	20	290	21	20	22.3047	113.9552	1396.47	304.09
11-Sep-13	11:21:13	Transportation Boat	Travelling	94	50	20	334	9	40	22.3002	113.9658	297.41	347.89
11-Sep-13	11:22:59	Dolphin	Surface	90	42	30	37	5	20	22.3093	113.9820	2062.50	50.82
11-Sep-13	11:23:22	Dolphin	Surface	90	43	0	36	53	10	22.3093	113.9817	2037.80	50.62
11-Sep-13	11:23:46	Dolphin	Surface	90	43	0	36	35	0	22.3093	113.9817	2037.72	50.31
11-Sep-13	11:24:00	Dolphin	Surface	90	43	0	36	26	10	22.3094	113.9816	2037.67	50.17
11-Sep-13	11:24:24	Transportation Boat	Travelling	93	18	10	324	8	50	22.3013	113.9648	436.28	337.88
11-Sep-13	11:24:31	Tug Boat	Travelling	91	6	30	299	41	0	22.3057	113.9572	1307.52	313.41
11-Sep-13	11:24:41	Dumping Guide Boat	Travelling	91	0	0	299	23	10	22.3065	113.9561	1450.95	313.12
11-Sep-13	11:25:20	Transportation Boat	Travelling	92	20	0	316	28	10	22.3024	113.9634	618.20	330.20
11-Sep-13	11:25:26	Tug Boat	Travelling	91	4	30	293	34	30	22.3050	113.9560	1348.40	307.30
11-Sep-13	11:25:37	Dumping Guide Boat	Travelling	92	43	0	294	6	50	22.3005	113.9623	530.68	307.84
11-Sep-13	11:25:53	HSF High Speed Ferry	Travelling	91	0	40	333	23	30	22.3102	113.9633	1434.62	347.12
11-Sep-13	11:26:00	Transportation Boat	Travelling	90	54	10	330	11	20	22.3115	113.9621	1609.44	343.92
11-Sep-13	11:26:54	Dolphin	Surface	90	42	20	36	41	0	22.3095	113.9819	2070.00	50.41
11-Sep-13	11:27:16	HSF High Speed Ferry	Travelling	90	56	50	348	9	30	22.3114	113.9669	1532.57	1.89
11-Sep-13	11:27:24	Tug Boat	Travelling	91	23	40	309	22	50	22.3051	113.9603	1036.82	323.11
11-Sep-13	11:27:31	Dumping Guide Boat	Travelling	93	0	30	295	4	50	22.3003	113.9628	478.98	308.81
11-Sep-13	11:27:44	Dumping Guide Boat	Travelling	91	2	40	325	53	50	22.3093	113.9617	1388.00	339.63
11-Sep-13	11:28:32	Dolphin	Surface	90	42	30	35	31	20	22.3097	113.9816	2061.32	49.25
11-Sep-13	11:28:49	Dolphin		90	43	0	35	50	40	22.3095	113.9815	2036.65	49.57
11-Sep-13	11:29:11	Tug Boat	Travelling	90	23	50	31	13	20	22.3218	113.9925	3790.18	44.95
11-Sep-13	11:29:20	HSF High Speed Ferry	Travelling	90	48	30	5	39	30	22.3129	113.9722	1800.53	19.39
11-Sep-13	11:29:29	HSF High Speed Ferry	Travelling	91	53	0	325	32	0	22.3041	113.9638	766.22	339.26
11-Sep-13	11:29:37	HSF High Speed Ferry	Travelling	91	2	0	342	10	10	22.3102	113.9654	1402.84	355.90
11-Sep-13	11:29:51	Transportation Boat	Travelling	90	58	0	295	29	0	22.3062	113.9551	1500.89	309.21
11-Sep-13	11:31:03	Dolphin	Surface	90	39	40	37	13	40	22.3102	113.9831	2212.40	50.96
11-Sep-13	11:31:20	Tug Boat	Travelling	90	29	0	27	41	10	22.3183	113.9861	3068.17	41.42
11-Sep-13	11:31:28	HSF High Speed Ferry	Travelling	90	38	40	18	38	30	22.3149	113.9782	2271.37	32.37
11-Sep-13	11:31:37	Dumping Guide Boat	Travelling	91	10	50	336	32	40	22.3085	113.9644	1225.83	350.27
11-Sep-13	11:31:43	Dumping Guide Boat	Travelling	90	52	40	355	40	20	22.3123	113.9690	1655.09	9.40
11-Sep-13	11:33:43	Fishing Boat	Operate and travelling	90	22	30	35	37	0	22.3213	113.9962	4036.08	49.35
11-Sep-13	11:33:54	Tug Boat	Travelling	90	39	20	17	33	50	22.3148	113.9777	2231.08	31.29
11-Sep-13	11:34:03	HSF High Speed Ferry	Travelling	90	31	10	27	46	10	22.3168	113.9847	2842.55	41.50

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Sep-13	11:37:08	Dumping Guide Boat	Travelling	90	51	20	8	7	50	22.3118	113.9725	1697.91	21.86
11-Sep-13	11:37:15	Tug Boat	Travelling	90	51	0	354	6	30	22.3129	113.9687	1709.19	7.84
11-Sep-13	11:43:08	Transportation Boat	Travelling	90	59	0	290	42	0	22.3051	113.9546	1473.08	304.43
11-Sep-13	11:43:16	Transportation Boat	Travelling	91	1	10	297	0	30	22.3060	113.9559	1420.20	310.74
11-Sep-13	11:43:23	Transportation Boat	Travelling	90	53	40	305	19	40	22.3086	113.9561	1621.78	319.06
11-Sep-13	11:43:38	Fishing Boat	Operate and stationary	90	49	30	297	4	40	22.3080	113.9534	1760.83	310.81
11-Sep-13	11:43:49	Fishing Boat	Operate and stationary	90	49	30	297	12	10	22.3080	113.9535	1760.80	310.93
11-Sep-13	11:43:56	Transportation Boat	Travelling	90	56	20	282	29	10	22.3038	113.9529	1543.73	296.22
11-Sep-13	11:44:02	Transportation Boat	Travelling	90	59	40	290	24	0	22.3050	113.9547	1456.26	304.13
11-Sep-13	11:44:08	Transportation Boat	Travelling	91	4	0	300	1	0	22.3061	113.9569	1356.45	313.75
11-Sep-13	11:44:15	Transportation Boat	Travelling	90	58	30	293	37	40	22.3057	113.9549	1485.68	307.36
11-Sep-13	11:44:21	Transportation Boat	Travelling	91	21	10	290	36	10	22.3030	113.9578	1067.13	304.33
11-Sep-13	11:44:44	Transportation Boat	Travelling	90	57	20	284	49	40	22.3041	113.9534	1516.27	298.56
11-Sep-13	11:44:47	Transportation Boat	Travelling	91	3	0	286	57	0	22.3039	113.9549	1378.14	300.68
11-Sep-13	11:44:52	Transportation Boat	Travelling	91	3	0	299	24	10	22.3061	113.9566	1378.13	313.13
11-Sep-13	11:44:57	Transportation Boat	Travelling	90	55	0	330	3	40	22.3113	113.9621	1581.57	343.79
11-Sep-13	11:45:02	Transportation Boat	Travelling	91	0	30	281	50	20	22.3032	113.9538	1435.79	295.57
11-Sep-13	11:45:10	Transportation Boat	Travelling	90	59	30	300	38	30	22.3068	113.9562	1460.23	314.37
11-Sep-13	11:45:19	Transportation Boat	Travelling	91	35	10	298	31	0	22.3031	113.9599	909.11	312.25
11-Sep-13	11:45:30	Transportation Boat	Travelling	91	1	10	287	14	10	22.3042	113.9546	1419.87	300.97
11-Sep-13	11:45:35	Transportation Boat	Travelling	91	0	40	320	1	20	22.3092	113.9602	1431.71	333.75
11-Sep-13	11:46:45	Transportation Boat	Travelling	91	2	40	298	10	40	22.3059	113.9564	1385.28	311.91
11-Sep-13	11:46:52	Transportation Boat	Travelling	90	58	50	306	49	0	22.3079	113.9573	1476.75	320.55
11-Sep-13	11:46:55	Transportation Boat	Travelling	90	58	50	306	14	20	22.3078	113.9572	1476.74	319.97
11-Sep-13	11:47:05	Transportation Boat	Travelling	92	16	0	318	17	10	22.3027	113.9635	635.03	332.02
11-Sep-13	11:47:19	Transportation Boat	Travelling	90	59	20	286	52	50	22.3043	113.9541	1464.06	300.61
11-Sep-13	11:47:24	Transportation Boat	Travelling	91	4	10	299	51	30	22.3060	113.9569	1352.43	313.59
11-Sep-13	11:47:27	Transportation Boat	Travelling	91	1	20	301	39	40	22.3067	113.9567	1415.68	315.39
11-Sep-13	11:47:42	Transportation Boat	Travelling	90	56	20	279	4	50	22.3030	113.9526	1543.12	292.81
11-Sep-13	11:48:16	Transportation Boat	Travelling	90	59	10	283	52	20	22.3037	113.9537	1468.10	297.60
11-Sep-13	11:48:21	Transportation Boat	Travelling	90	58	50	289	51	40	22.3050	113.9544	1476.52	303.59
11-Sep-13	11:48:31	Transportation Boat	Travelling	93	34	50	341	31	30	22.3012	113.9661	401.33	355.25
11-Sep-13	11:49:28	Transportation Boat	Travelling	90	55	40	282	39	30	22.3039	113.9528	1561.60	296.39
11-Sep-13	11:49:44	Transportation Boat	Stationary	95	37	50	358	53	30	22.2999	113.9669	254.61	12.62
11-Sep-13	11:50:00	Transportation Boat	Travelling	91	14	40	339	28	20	22.3080	113.9651	1160.14	353.20
11-Sep-13	11:50:28	Transportation Boat	Travelling	91	0	0	310	36	40	22.3082	113.9582	1447.11	324.34
11-Sep-13	11:50:36	Transportation Boat	Travelling	91	0	0	301	36	20	22.3069	113.9565	1447.09	315.34
11-Sep-13	11:51:23	Transportation Boat	Travelling	90	51	10	306	55	20	22.3095	113.9559	1701.03	320.65
11-Sep-13	11:51:34	Transportation Boat	Travelling	90	58	40	326	18	40	22.3101	113.9615	1480.28	340.04
11-Sep-13	11:51:46	Transportation Boat	Travelling	91	56	20	338	55	50	22.3042	113.9655	742.47	352.66
11-Sep-13	11:53:21	Transportation Boat	Travelling	93	54	50	342	24	30	22.3009	113.9662	366.84	356.14
11-Sep-13	11:53:28	Transportation Boat	Travelling	90	44	50	346	9	0	22.3151	113.9664	1946.34	359.88
11-Sep-13	11:56:15	Container Boat	Travelling	91	0	40	299	11	50	22.3064	113.9562	1430.14	312.93
11-Sep-13	11:59:21	Transportation Boat	Travelling	91	2	0	297	55	10	22.3060	113.9562	1398.55	311.65
11-Sep-13	12:00:22	Transportation Boat	Travelling	90	57	30	282	42	40	22.3037	113.9533	1509.38	296.44
11-Sep-13	12:03:28	Container Boat	Travelling	90	47	30	343	18	50	22.3141	113.9655	1832.76	357.04
11-Sep-13	12:05:34	Container Boat	Travelling	90	40	20	349	13	20	22.3171	113.9675	2166.93	2.95
11-Sep-13	12:08:19	Transportation Boat	Travelling	91	0	50	294	6	0	22.3055	113.9555	1424.40	307.83
11-Sep-13	12:09:44	Transportation Boat	Travelling	90	52	0	306	30	40	22.3092	113.9560	1670.11	320.24
11-Sep-13	12:14:23	Speed Boat	Travelling	90	57	30	289	2	40	22.3050	113.9541	1507.19	302.77
11-Sep-13	12:15:38	Speed Boat	Travelling	90	57	30	306	29	20	22.3080	113.9570	1507.00	320.22
11-Sep-13	12:23:07	Tug Boat	Travelling	91	3	30	290	14	40	22.3045	113.9554	1361.77	303.97
11-Sep-13	12:25:22	Tug Boat	Travelling	91	1	40	315	30	50	22.3085	113.9594	1402.43	329.24
11-Sep-13	12:25:32	Speed Boat	Travelling	92	56	10	284	18	30	22.2997	113.9622	487.89	298.04
11-Sep-13	12:26:32	Speed Boat	Travelling	95	29	0	336	4	50	22.2999	113.9660	260.51	349.81
11-Sep-13	12:27:01	Transportation Boat	Travelling	90	58	50	290	30	0	22.3051	113.9546	1470.63	304.23
11-Sep-13	12:27:09	Tug Boat	Travelling	90	54	10	332	55	30	22.3116	113.9628	1599.30	346.65
11-Sep-13	12:28:52	Transportation Boat	Travelling	90	59	20	318	38	30	22.3092	113.9598	1457.79	332.37
11-Sep-13	12:29:03	Tug Boat	Travelling	90	45	10	345	57	0	22.3149	113.9663	1924.50	359.68
11-Sep-13	12:31:44	Transportation Boat	Travelling	90	42	0	349	12	20	22.3162	113.9674	2072.87	2.94
11-Sep-13	12:31:51	Tug Boat	Travelling	90	35	50	355	21	0	22.3193	113.9701	2442.15	9.08
11-Sep-13	12:32:00	Transportation Boat	Travelling	91	0	10	302	35	40	22.3070	113.9567	1436.86	316.32
11-Sep-13	12:32:07	Speed Boat	Travelling	90	48	40	287	29	50	22.3059	113.9516	1782.61	301.23
11-Sep-13	12:38:27	Transportation Boat	Travelling	90	45	50	343	39	50	22.3146	113.9656	1894.01	357.39
11-Sep-13	12:39:36	Transportation Boat	Travelling	90	53	50	332	7	30	22.3116	113.9626	1607.29	345.85
11-Sep-13	12:40:55	Transportation Boat	Travelling	91	1	50	313	51	10	22.3082	113.9591	1396.35	327.58
11-Sep-13	12:42:56	Transportation Boat	Travelling	90	57	30	282	12	10	22.3035	113.9533	1502.74	295.93
11-Sep-13	12:43:01	Transportation Boat	Travelling	90	54	20	283	14	40	22.3041	113.9526	1591.69	296.97
11-Sep-13	12:43:55	Transportation Boat	Travelling	91	1	20	296	4	50	22.3057	113.9559	1407.44	309.81
11-Sep-13	12:45:56	Transportation Boat	Travelling	90	55	10	331	21	40	22.3112	113.9625	1566.80	345.09
11-Sep-13	12:48:12	Transportation Boat	Travelling	90	37	50	351	25	10	22.3183	113.9684	2304.56	5.15
11-Sep-13	12:56:48	Transportation Boat	Travelling	91	1	30	301	57	50	22.3066	113.9569	1401.70	315.69
11-Sep-13	12:56:54	Transportation Boat	Travelling	90	59	20	287	49	20	22.3045	113.9544	1453.56	301.55
11-Sep-13	12:57:49	Transportation Boat	Travelling	91	0	50	310	54	30	22.3080	113.9584	1417.11	324.64
11-Sep-13	12:57:53	Transportation Boat	Travelling	91	2	30	298	13	20	22.3059	113.9564	1378.84	311.95
11-Sep-13	12:59:36	Transportation Boat	Travelling	90	57	30	325	53	50	22.3103	113.9613	1500.14	339.63
11-Sep-13	12:59:44	Transportation Boat	Travelling	91	3	50	319	56	0	22.3085	113.9606	1349.44	333.66
11-Sep-13	13:01:38	Transportation Boat	Travelling	90	50	0	339	1	40	22.3131	113.9643	1728.83	352.76
11-Sep-13	13:01:42	Transportation Boat	Travelling	90	53	40	338	16	10	22.3120	113.9642	1608.67	352.00
11-Sep-13	13:04:48	Transportation Boat	Travelling	90	58	10	288	35	40	22.3047	113.9542	1481.91	302.32
11-Sep-13	13:07:20	Transportation Boat	Travelling	90	57	10	307	12	30	22.3082	113.9572	1507.81	320.94
11-Sep-13	13:17:32	Transportation Boat	Travelling	90	57	40	305	37	0	22.3078	113.9569	1492.96	319.35
11-Sep-13	13:18:40	Transportation Boat	Travelling	91	1	10	297	54	30	22.3060	113.9562	1406.24	311.64
11-Sep-13	13:19:44	Transportation Boat	Travelling	90	59	50	289	2	20	22.3046	113.9546	1437.83	302.77
11-Sep-13	13:21:32	Government Boat	Travelling	91	27	10	307	7	50	22.3045	113.9604	983.26	320.86
11-Sep-13	13:22:02	Government Boat	Travelling	91	30	10	338	9	30	22.3061	113.9651	950.29	351.89
11-Sep-13	13:22:32	Government Boat	Travelling	91	15	20	3	20	30	22.3074	113.9697	1138.84	17.07
11-Sep-13	13:23:09	Government Boat	Travelling	90	52	0	18	19	30	22.3103	113.9750	1657.42	32.05
11-Sep-13	13:23:17	Transportation Boat	Travelling	91	3	0	299	20	30	22.3060	113.9567	1364.16	313.07
11-Sep-13	13:23:44	Transportation Boat	Travelling	91	2	30	290	55	50	22.3047	113.9554	1375.15	304.66
11-Sep-13	13:24:07	Transportation Boat	Travelling	90	58	50	285	50	0	22.3041	113.9540	1461.94	299.56
11-Sep-13	13:24:12	Transportation Boat	Travelling	91	0	50	282	12	20	22.3032	113.9540	1413.23	295.94
11-Sep-13	13:25:18	Transportation Boat	Travelling	91	2	20	303	43	0	22.3068	113.9573	1378.64	317.45
11-Sep-13	13:28:17	Transportation Boat	Travelling	91	5	40	291	58	0	22.3045	113.9561	1307.46	305.70
11-Sep-13	13:29:43	Transportation Boat	Travelling	91	4	10	313	21	20	22.3077	113.9593	1338.17	327.09
11-Sep-13	13:31:28	Transportation Boat	Travelling	90	54	0	334	49	0	22.3117	113.9633	1593.62	348.55
11-Sep-13	13:33:10	Transportation Boat	Travelling	90	43	30	348	30	40	22.3155	113.9672	1986.73	2.24
11-Sep-13	13:33:26	Transportation Boat	Travelling	90	59	50	297	26	30	22.3061	113.9559	1435.78	311.17
11-Sep-13	13:34:46	Transportation Boat	Travelling	90	52	20	306	51	10	22.3091	113.9562	1644.68	320.58
11-Sep-13	13:38:21	Transportation Boat	Travelling	91	2	20	289	34	30	22.3044	113.9552	1376.77	303.30
11-Sep-13	13:39:55	Transportation Boat	Travelling	91	7	10	301	13	50	22.3057	113.9576	1276.40	314.96
11-Sep-13	13:40:03	Transportation Boat	Travelling	90	58	30	291	57	20	22.3053	113.9548	1467.95	305.69
11-Sep-13	13:41:40	Transportation Boat	Travelling	91	8	10	315	23	30	22.3073	113.9601	1257.25	329.12
11-Sep-13	13:41:45	Transportation Boat	Travelling	90	59	10	305	43	50	22.3075	113.9572	1450.92	319.46
11-Sep-13	13:43:08	Transportation Boat	Travelling	90	50	20	303	30	30	22.3089	113.9551	1709.74	317.24
11-Sep-13	13:43:13	Transportation Boat	Travelling	91	1	50	292	20	0	22.3050	113.9555	1387.34	306.06
11-Sep-13	13:43:22	Transportation Boat	Travelling	90	54	50	286	11	10	22.3047	113.9532	1567.07	299.92
11-Sep-13	13:43:29	Transportation Boat	Travelling	90	56	0	285	53	30	22.3044	113.9534	1533.90	299.62
11-Sep-13	13:43:41	Transportation Boat	Travelling	91	4	20	331	16	40	22.3092	113.9630	1332.73	345.01
11-Sep-13	13:44:08	Transportation Boat	Travelling	91	1	10	299	54	10	22.3063	113.9565	1402.52	313.63
11-Sep-13	13:44:16	Transportation Boat	Travelling	91	0	40	300	9	10	22.3064	113.9565	1414.21	313.88
11-Sep-13	13:44:21	Transportation Boat	Travelling	90	59	40	294	29	10	22.3056	113.9554	1438.21	308.22
11-Sep-13	13:45:30	Transportation Boat	Travelling	90	56	10	306	45	10	22.3082	113.9569	1528.96	320.48
11-Sep-13	13:45:37	Transportation Boat	Travelling	90	57	50	306	56	40	22.3080	113.9573	1484.24	320.67
11-Sep-13	13:46:09	Transportation Boat	Travelling	90	55	20	346	45	20	22.3116	113.9665	1552.24	0.49
11-Sep-13	13:46:17	Transportation Boat	Travelling	91	1	0	290	26	30	22.3047	113.9551	1406.08	304.17
11-Sep-13	13:48:52	Transportation Boat	Travelling	91	2	20	303	45	30	22.3067	113.9574	1375.26	317.49

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Sep-13	13:51:01	Transportation Boat	Travelling	91	0	20	305	7	30	22.3072	113.9573	1421.12	318.85
11-Sep-13	13:51:55	Transportation Boat	Travelling	91	0	0	293	42	20	22.3054	113.9554	1428.98	307.44
11-Sep-13	13:52:05	Transportation Boat	Travelling	91	3	0	354	42	0	22.3097	113.9683	1360.08	8.43
11-Sep-13	13:53:18	Transportation Boat	Travelling	90	53	30	278	42	20	22.3031	113.9520	1605.10	292.44
11-Sep-13	13:54:52	Transportation Boat	Travelling	91	35	0	351	4	50	22.3057	113.9671	898.60	4.81
11-Sep-13	13:57:19	Transportation Boat	Travelling	91	1	20	300	47	30	22.3064	113.9567	1396.73	314.52
11-Sep-13	13:58:12	Transportation Boat	Travelling	90	54	10	305	7	50	22.3084	113.9563	1584.21	318.86
11-Sep-13	13:59:38	Transportation Boat	Stationary	95	18	40	2	13	40	22.2999	113.9671	266.43	15.96
11-Sep-13	14:00:58	Transportation Boat	Travelling	92	53	40	359	0	30	22.3019	113.9675	490.07	12.74
11-Sep-13	14:03:52	Transportation Boat	Travelling	91	22	20	357	45	40	22.3068	113.9684	1036.82	11.49
11-Sep-13	14:05:10	Transportation Boat	Travelling	91	26	50	314	34	40	22.3051	113.9614	982.60	328.31
11-Sep-13	14:06:46	Transportation Boat	Travelling	92	1	50	320	27	0	22.3033	113.9634	699.00	334.18
11-Sep-13	14:06:56	Transportation Boat	Travelling	90	53	40	356	0	50	22.3118	113.9690	1597.75	9.74
11-Sep-13	14:09:55	Transportation Boat	Stationary	95	18	10	2	7	40	22.2999	113.9671	266.57	15.86
11-Sep-13	14:13:00	Transportation Boat	Stationary	91	5	0	290	28	50	22.3043	113.9558	1314.87	304.21
11-Sep-13	14:14:07	Transportation Boat	Travelling	90	57	30	306	56	0	22.3080	113.9572	1488.53	320.66
11-Sep-13	14:14:50	Other	Stationary	90	34	0	281	51	10	22.3075	113.9440	2551.41	295.58
11-Sep-13	14:14:58	Other	Stationary	90	31	40	291	35	40	22.3119	113.9446	2748.27	305.32
11-Sep-13	14:15:07	Other	Stationary	90	43	50	295	53	0	22.3089	113.9517	1962.58	309.61
11-Sep-13	14:15:13	Other	Stationary	90	57	20	303	53	0	22.3075	113.9566	1492.75	317.61
11-Sep-13	14:15:21	Other	Stationary	90	57	30	313	37	20	22.3089	113.9586	1488.34	327.35
11-Sep-13	14:15:25	Other	Stationary	90	56	10	319	5	0	22.3098	113.9596	1524.18	332.81
11-Sep-13	14:15:28	Other	Stationary	90	55	0	323	38	0	22.3106	113.9606	1557.01	337.36
11-Sep-13	14:15:32	Other	Stationary	90	53	40	326	17	10	22.3111	113.9611	1596.31	340.02
11-Sep-13	14:15:35	Other	Stationary	90	52	40	331	2	50	22.3117	113.9622	1627.13	344.78
11-Sep-13	14:15:39	Other	Stationary	90	49	10	336	2	50	22.3131	113.9634	1745.14	349.78
11-Sep-13	14:15:43	Other	Stationary	90	42	50	340	59	10	22.3156	113.9646	2009.45	354.72
11-Sep-13	14:15:46	Other	Stationary	90	40	10	345	2	20	22.3169	113.9660	2146.69	358.77
11-Sep-13	14:15:49	Other	Stationary	90	38	0	348	39	40	22.3181	113.9673	2273.06	2.39
11-Sep-13	14:15:53	Other	Stationary	90	33	10	350	45	20	22.3211	113.9684	2618.04	4.49
11-Sep-13	14:15:58	Other	Stationary	90	29	50	352	11	30	22.3238	113.9693	2925.99	5.92
11-Sep-13	14:16:17	Other	Stationary	90	58	20	304	51	20	22.3075	113.9570	1466.63	318.59
11-Sep-13	14:16:23	Other	Stationary	90	51	30	307	52	0	22.3094	113.9563	1664.50	321.60
11-Sep-13	14:16:35	Other	Stationary	90	29	20	348	25	30	22.3244	113.9675	2978.53	2.15
11-Sep-13	14:16:39	Other	Stationary	90	29	20	352	12	10	22.3243	113.9694	2978.51	5.93
11-Sep-13	14:17:15	Other	Stationary	91	10	20	324	26	10	22.3078	113.9620	1213.63	338.17
11-Sep-13	14:17:22	Other	Stationary	90	58	0	330	47	50	22.3104	113.9626	1475.01	344.53
11-Sep-13	14:17:43	Other	Stationary	90	47	10	350	16	10	22.3140	113.9676	1820.30	4.00
11-Sep-13	14:17:55	Other	Stationary	90	59	0	0	51	0	22.3102	113.9699	1449.59	14.58
11-Sep-13	14:18:13	Other	Stationary	90	37	20	357	5	20	22.3181	113.9706	2314.45	10.82
11-Sep-13	14:18:20	Other	Stationary	90	31	50	359	21	0	22.3216	113.9724	2732.20	13.08
11-Sep-13	14:18:37	Other	Stationary	90	42	20	5	36	30	22.3149	113.9729	2033.19	19.34
11-Sep-13	14:18:43	Other	Stationary	90	41	10	7	29	50	22.3152	113.9738	2092.40	21.23
12-Sep-13	8:07:52	Other		94	51	40	0	0	0	22.3002	113.9671	298.47	13.73
12-Sep-13	8:08:41	Other	Stationary	90	34	20	278	21	30	22.3064	113.9430	2593.95	292.09
12-Sep-13	8:08:47	Other	Stationary	90	34	30	283	56	20	22.3084	113.9442	2580.92	297.67
12-Sep-13	8:08:53	Other	Stationary	90	38	20	294	2	30	22.3104	113.9486	2313.63	307.77
12-Sep-13	8:08:57	Other	Stationary	90	49	10	297	55	10	22.3083	113.9534	1792.06	311.65
12-Sep-13	8:09:01	Other	Stationary	90	56	0	301	59	0	22.3077	113.9557	1569.77	315.71
12-Sep-13	8:09:09	Other	Stationary	91	1	0	304	51	40	22.3073	113.9571	1439.36	318.59
12-Sep-13	8:09:12	Other	Stationary	90	57	10	310	32	40	22.3088	113.9577	1537.28	324.27
12-Sep-13	8:09:18	Other	Stationary	90	59	50	314	21	40	22.3088	113.9589	1467.83	328.09
12-Sep-13	8:09:22	Other	Stationary	90	59	30	317	24	30	22.3093	113.9595	1476.18	331.14
12-Sep-13	8:09:26	Other	Stationary	90	58	50	320	9	40	22.3097	113.9600	1493.15	333.89
12-Sep-13	8:09:30	Other	Stationary	90	56	30	324	54	20	22.3107	113.9609	1555.75	338.64
12-Sep-13	8:09:35	Other	Stationary	90	54	0	328	50	10	22.3116	113.9617	1628.97	342.57
12-Sep-13	8:09:39	Other	Stationary	90	52	10	334	34	50	22.3125	113.9631	1687.24	348.31
12-Sep-13	8:09:42	Other	Stationary	90	47	40	338	56	10	22.3141	113.9641	1849.81	352.67
12-Sep-13	8:09:46	Other	Stationary	90	43	20	343	47	30	22.3160	113.9655	2039.42	357.52
12-Sep-13	8:09:50	Other	Stationary	90	38	10	349	13	30	22.3185	113.9676	2324.34	2.95
12-Sep-13	8:09:55	Other	Stationary	90	31	20	352	12	20	22.3232	113.9693	2854.96	5.94
12-Sep-13	8:10:19	Other	Stationary	91	1	0	304	53	10	22.3073	113.9571	1439.56	318.62
12-Sep-13	8:10:26	Other	Stationary	90	53	20	308	1	0	22.3093	113.9565	1649.84	321.75
12-Sep-13	8:10:39	Other	Stationary	90	31	50	348	29	10	22.3229	113.9675	2808.10	2.22
12-Sep-13	8:10:46	Other	Stationary	90	31	10	352	11	20	22.3233	113.9693	2871.32	5.92
12-Sep-13	8:12:10	Other	Stationary	91	13	20	324	26	10	22.3076	113.9621	1195.27	338.17
12-Sep-13	8:12:16	Other	Stationary	91	6	50	331	0	0	22.3090	113.9630	1312.76	344.73
12-Sep-13	8:12:23	Other	Stationary	90	41	40	346	16	40	22.3167	113.9664	2123.91	0.01
12-Sep-13	8:12:33	Other	Stationary	90	39	30	357	16	30	22.3174	113.9706	2244.05	11.00
12-Sep-13	8:12:38	Other	Stationary	90	33	10	359	18	50	22.3212	113.9723	2690.55	13.04
12-Sep-13	8:13:08	Other	Stationary	90	48	50	351	23	50	22.3138	113.9680	1805.42	5.13
12-Sep-13	8:13:14	Other	Stationary	91	1	30	0	46	50	22.3101	113.9699	1428.18	14.51
12-Sep-13	8:13:35	Other	Stationary	90	42	50	8	19	20	22.3148	113.9739	2064.78	22.05
12-Sep-13	8:13:41	Other	Stationary	90	30	30	14	5	10	22.3210	113.9797	2938.49	27.82
12-Sep-13	8:14:02	Other	Stationary	90	30	20	18	11	30	22.3202	113.9816	2955.65	31.92
12-Sep-13	8:14:30	Other	Stationary	91	5	10	316	39	50	22.3082	113.9599	1347.07	330.39
12-Sep-13	8:14:59	HSF High Speed Ferry	Travelling	90	38	10	352	9	0	22.3184	113.9687	2325.73	5.88
12-Sep-13	8:15:22	Transportation Boat	Travelling	91	3	0	316	51	20	22.3085	113.9597	1394.09	330.59
12-Sep-13	8:16:25	HSF High Speed Ferry	Travelling	90	49	0	342	1	30	22.3138	113.9651	1799.84	355.75
12-Sep-13	8:16:33	Transportation Boat	Travelling	90	59	20	325	15	40	22.3101	113.9612	1481.61	338.99
12-Sep-13	8:16:38	Transportation Boat	Travelling	90	59	20	288	4	20	22.3046	113.9542	1481.62	301.80
12-Sep-13	8:18:34	HSF High Speed Ferry	Travelling	91	3	50	308	15	10	22.3074	113.9582	1376.18	321.98
12-Sep-13	8:18:43	Transportation Boat	Travelling	90	58	20	306	37	10	22.3081	113.9570	1507.74	320.35
12-Sep-13	8:18:47	Transportation Boat	Travelling	91	5	10	295	37	0	22.3053	113.9563	1347.73	309.35
12-Sep-13	8:18:50	Transportation Boat	Travelling	91	0	10	287	14	10	22.3044	113.9542	1461.19	300.97
12-Sep-13	8:18:57	Transportation Boat	Travelling	90	57	0	333	4	40	22.3111	113.9630	1543.58	346.81
12-Sep-13	8:19:33	Transportation Boat	Travelling	91	4	40	303	3	20	22.3065	113.9574	1358.39	316.79
12-Sep-13	8:19:37	Transportation Boat	Travelling	91	3	40	296	25	50	22.3056	113.9561	1379.99	310.16
12-Sep-13	8:20:14	Transportation Boat	Travelling	90	58	40	307	10	50	22.3081	113.9572	1499.32	320.91
12-Sep-13	8:20:20	HSF High Speed Ferry	Travelling	90	55	30	278	1	40	22.3029	113.9521	1586.20	291.76
12-Sep-13	8:20:26	Transportation Boat	Travelling	91	2	20	306	20	40	22.3073	113.9576	1410.01	320.07
12-Sep-13	8:22:26	Transportation Boat	Travelling	90	55	40	285	2	20	22.3045	113.9529	1581.76	298.77
12-Sep-13	8:22:40	Transportation Boat	Travelling	90	42	30	348	24	30	22.3164	113.9672	2083.60	2.14
12-Sep-13	8:23:57	Transportation Boat	Travelling	91	2	40	300	28	30	22.3064	113.9566	1402.99	314.20
12-Sep-13	8:24:44	Transportation Boat	Travelling	91	5	10	309	32	20	22.3073	113.9586	1348.65	323.27
12-Sep-13	8:24:48	Transportation Boat	Travelling	91	2	10	305	5	40	22.3072	113.9573	1414.55	318.82
12-Sep-13	8:24:55	Transportation Boat	Travelling	91	5	10	286	0	40	22.3036	113.9550	1348.68	299.74
12-Sep-13	8:25:35	Transportation Boat	Travelling	91	2	0	291	27	10	22.3050	113.9551	1418.53	305.18
12-Sep-13	8:25:38	Transportation Boat	Travelling	91	6	50	294	28	10	22.3049	113.9563	1314.78	308.20
12-Sep-13	8:26:32	Transportation Boat	Travelling	90	56	0	276	26	20	22.3025	113.9520	1572.94	290.17
12-Sep-13	8:26:38	Transportation Boat	Travelling	91	5	50	306	27	10	22.3068	113.9581	1335.13	320.18
12-Sep-13	8:26:51	Transportation Boat	Travelling	90	57	40	332	6	0	22.3109	113.9628	1526.86	345.83
12-Sep-13	8:29:05	Transportation Boat	Travelling	90	45	20	346	55	0	22.3152	113.9666	1951.61	0.65
12-Sep-13	8:29:11	Transportation Boat	Travelling	90	56	0	333	17	0	22.3114	113.9630	1573.42	347.01
12-Sep-13	8:32:23	Transportation Boat	Travelling	90	41	0	352	59	50	22.3170	113.9689	2164.47	6.73
12-Sep-13	8:32:32	Transportation Boat	Travelling	91	2	20	304	42	0	22.3071	113.9573	1411.97	318.43
12-Sep-13	8:32:52	Transportation Boat	Travelling	90	46	50	345	49	40	22.3146	113.9663	1888.50	359.56
12-Sep-13	8:33:15	HSF High Speed Ferry	Travelling	91	2	0	284	18	0	22.3036	113.9542	1419.78	298.03
12-Sep-13	8:33:49	Speed Boat	Travelling	90	52	50	286	11	0	22.3051	113.9523	1670.22	299.91
12-Sep-13	8:34:04	Transportation Boat	Travelling	90	58	10	286	28	50	22.3045	113.9537	1514.80	300.21
12-Sep-13	8:34:15	HSF High Speed Ferry	Travelling	91	6	30	294	48	0	22.3050	113.9563	1322.75	308.53
12-Sep-13	8:34:26	Transportation Boat	Travelling	90	59	10	285	8	0	22.3041	113.9537	1488.90	298.86
12-Sep-13	8:34:35	Transportation Boat	Travelling	90	55	40	280	55	20	22.3036	113.9524	1583.97	294.65
12-Sep-13	8:35:33	Transportation Boat	Travelling	90	57	0	331	3	50	22.3110	113.9625	1546.53	344.79
12-Sep-13	8:35:40	HSF High Speed Ferry	Travelling	91	7	10	311	10	40	22.3073	113.9591	1309.69	324.91
12-Sep-13	8:35:51	Speed Boat	Travelling	90	53	50	307	8	10	22.3091	113.9563	1639.05	320.87
12-Sep-13	8:37:10	Transportation Boat	Travelling	91	0	30	306	6	50	22.3076	113.9573	1456.10	319.84

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Sep-13	8:37:16	HSF High Speed Ferry	Travelling	91	5	10	300	0	40	22.3060	113.9569	1350.59	313.74
12-Sep-13	8:37:22	HSF High Speed Ferry	Travelling	90	59	40	328	31	10	22.3103	113.9620	1476.75	342.25
12-Sep-13	8:37:37	Transportation Boat	Travelling	91	2	30	285	45	0	22.3039	113.9545	1408.98	299.48
12-Sep-13	8:38:33	Transportation Boat	Travelling	91	4	20	301	6	40	22.3063	113.9570	1368.50	314.84
12-Sep-13	8:39:04	HSF High Speed Ferry	Travelling	90	51	50	342	11	20	22.3129	113.9652	1704.05	355.92
12-Sep-13	8:39:13	Transportation Boat	Travelling	90	57	10	306	26	0	22.3083	113.9568	1542.60	320.16
12-Sep-13	8:39:28	HSF High Speed Ferry	Travelling	90	56	40	334	39	40	22.3113	113.9634	1556.46	348.39
12-Sep-13	8:39:38	Transportation Boat	Travelling	91	5	50	297	41	50	22.3056	113.9566	1337.12	311.43
12-Sep-13	8:43:24	Speed Boat	Travelling	95	14	30	337	20	10	22.3001	113.9660	277.80	351.07
12-Sep-13	8:45:37	Speed Boat	Travelling	93	41	40	306	42	40	22.3004	113.9640	394.90	320.44
12-Sep-13	8:48:03	Speed Boat	Travelling	92	35	0	288	0	10	22.3003	113.9617	565.59	301.73
12-Sep-13	8:49:35	Transportation Boat	Travelling	91	1	20	285	2	0	22.3038	113.9541	1438.10	298.76
12-Sep-13	8:49:50	Transportation Boat	Travelling	91	0	40	282	22	20	22.3034	113.9537	1454.16	296.10
12-Sep-13	8:50:44	Transportation Boat	Travelling	91	4	20	297	53	10	22.3058	113.9564	1370.41	311.62
12-Sep-13	8:50:48	Transportation Boat	Travelling	91	5	50	301	29	10	22.3062	113.9572	1338.84	315.22
12-Sep-13	8:50:53	Transportation Boat	Travelling	91	2	0	305	40	50	22.3073	113.9574	1422.65	319.41
12-Sep-13	8:51:51	Transportation Boat	Travelling	90	56	50	306	17	0	22.3083	113.9567	1554.04	320.01
12-Sep-13	8:51:57	Transportation Boat	Travelling	91	0	40	324	35	30	22.3098	113.9612	1454.51	338.32
12-Sep-13	8:52:03	Transportation Boat	Travelling	91	1	40	289	15	50	22.3046	113.9547	1430.63	302.99
12-Sep-13	8:52:11	Speed Boat	Travelling	91	4	20	301	44	30	22.3064	113.9571	1370.64	315.47
12-Sep-13	8:52:50	Transportation Boat	Travelling	90	58	20	278	1	0	22.3027	113.9527	1513.67	291.75
12-Sep-13	8:52:58	Transportation Boat	Travelling	91	3	10	285	59	50	22.3038	113.9546	1396.38	299.73
12-Sep-13	8:53:04	Speed Boat	Travelling	91	4	30	287	11	40	22.3039	113.9550	1367.19	300.92
12-Sep-13	8:54:04	Transportation Boat	Travelling	91	3	50	294	33	10	22.3053	113.9558	1381.80	308.28
12-Sep-13	8:54:10	Transportation Boat	Travelling	90	40	40	350	42	50	22.3173	113.9680	2188.24	4.44
12-Sep-13	8:55:46	Transportation Boat	Travelling	91	0	50	306	42	10	22.3077	113.9574	1451.11	320.43
12-Sep-13	8:57:31	Transportation Boat	Travelling	91	7	20	305	26	0	22.3065	113.9581	1309.69	319.16
12-Sep-13	8:57:41	Speed Boat	Travelling	95	23	50	331	26	40	22.3000	113.9657	270.19	345.17
12-Sep-13	8:58:22	Speed Boat	Travelling	93	23	0	285	9	20	22.2995	113.9627	431.98	298.89
12-Sep-13	8:58:29	Transportation Boat	Travelling	91	7	10	293	28	50	22.3048	113.9562	1313.12	307.21
12-Sep-13	9:03:48	Transportation Boat	Travelling	90	59	30	287	52	10	22.3046	113.9541	1485.44	301.60
12-Sep-13	9:05:14	Transportation Boat	Travelling	91	2	40	297	10	30	22.3059	113.9560	1409.64	310.90
12-Sep-13	9:06:33	Transportation Boat	Travelling	91	2	10	306	19	50	22.3074	113.9575	1421.34	320.06
12-Sep-13	9:07:42	Transportation Boat	Travelling	91	7	10	294	24	10	22.3049	113.9563	1314.50	308.13
12-Sep-13	9:07:46	Transportation Boat	Travelling	91	1	30	288	34	30	22.3045	113.9546	1437.14	302.30
12-Sep-13	9:08:24	Transportation Boat	Travelling	91	6	40	300	44	20	22.3060	113.9572	1324.58	314.47
12-Sep-13	9:08:30	Transportation Boat	Travelling	91	4	20	298	2	20	22.3059	113.9564	1373.20	311.77
12-Sep-13	9:08:41	Transportation Boat	Travelling	91	4	50	303	43	20	22.3067	113.9574	1362.51	317.45
12-Sep-13	9:09:41	Transportation Boat	Travelling	90	58	0	306	26	50	22.3082	113.9569	1525.43	320.18
12-Sep-13	9:09:49	Transportation Boat	Travelling	91	5	0	314	50	30	22.3081	113.9595	1359.15	328.57
12-Sep-13	9:09:54	Transportation Boat	Travelling	91	8	20	293	43	40	22.3047	113.9564	1292.15	307.46
12-Sep-13	9:10:06	Speed Boat	Travelling	93	14	0	299	5	50	22.3004	113.9632	452.69	312.83
12-Sep-13	9:11:26	Transportation Boat	Travelling	91	5	50	280	16	10	22.3025	113.9545	1341.89	294.00
12-Sep-13	9:11:38	Speed Boat	Travelling	92	32	0	18	9	40	22.3020	113.9694	578.28	31.89
12-Sep-13	9:12:03	Transportation Boat	Travelling	91	6	30	325	48	10	22.3088	113.9619	1328.23	339.53
12-Sep-13	9:12:14	Speed Boat	Travelling	91	0	0	286	1	50	22.3042	113.9540	1473.98	299.76
12-Sep-13	9:12:24	Speed Boat	Travelling	91	36	10	35	44	50	22.3030	113.9732	915.74	49.48
12-Sep-13	9:13:43	Speed Boat	Travelling	91	2	20	304	37	20	22.3072	113.9572	1417.95	318.35
12-Sep-13	9:13:54	Transportation Boat	Travelling	91	5	10	301	34	0	22.3063	113.9571	1355.56	315.30
12-Sep-13	9:14:27	Transportation Boat	Travelling	91	23	30	294	54	40	22.3036	113.9584	1055.47	308.64
12-Sep-13	9:15:43	Transportation Boat	Travelling	90	58	50	279	52	50	22.3030	113.9530	1503.27	293.61
12-Sep-13	9:15:50	Transportation Boat	Travelling	91	26	10	307	42	30	22.3048	113.9602	1022.48	321.44
12-Sep-13	9:16:52	Transportation Boat	Travelling	91	5	50	291	8	10	22.3045	113.9557	1341.40	304.87
12-Sep-13	9:17:34	Transportation Boat	Travelling	91	22	30	323	59	40	22.3065	113.9625	1068.14	337.72
12-Sep-13	9:17:51	Transportation Boat	Travelling	91	4	10	306	15	20	22.3071	113.9578	1376.57	319.99
12-Sep-13	9:18:00	HSF High Speed Ferry	Travelling	90	48	0	344	6	50	22.3142	113.9657	1848.84	357.84
12-Sep-13	9:18:13	Transportation Boat	Travelling	91	3	10	291	10	30	22.3048	113.9552	1398.59	304.90
12-Sep-13	9:18:44	Speed Boat	Travelling	91	4	0	291	40	20	22.3048	113.9555	1380.11	305.40
12-Sep-13	9:19:43	Transportation Boat	Travelling	91	1	10	306	11	10	22.3076	113.9574	1444.77	319.92
12-Sep-13	9:19:54	Transportation Boat	Travelling	91	7	30	340	30	30	22.3093	113.9651	1307.66	354.24
12-Sep-13	9:20:00	Speed Boat	Travelling	90	58	50	306	15	40	22.3080	113.9570	1502.84	319.99
12-Sep-13	9:20:06	HSF High Speed Ferry	Travelling	91	2	10	319	9	30	22.3090	113.9601	1421.19	332.89
12-Sep-13	9:32:39	Transportation Boat	Travelling	91	5	10	300	3	30	22.3060	113.9569	1353.85	313.79
12-Sep-13	9:33:28	Transportation Boat	Travelling	91	5	30	292	38	40	22.3048	113.9559	1346.81	306.37
12-Sep-13	9:39:07	Transportation Boat	Travelling	90	57	10	352	51	20	22.3114	113.9681	1545.31	6.59
12-Sep-13	9:40:13	Transportation Boat	Travelling	91	7	20	335	24	10	22.3092	113.9640	1309.14	349.13
12-Sep-13	9:41:02	Transportation Boat	Travelling	91	10	0	319	39	40	22.3077	113.9609	1258.69	333.39
12-Sep-13	9:41:08	Transportation Boat	Travelling	91	3	10	283	17	30	22.3033	113.9543	1396.44	297.02
12-Sep-13	9:41:58	Transportation Boat	Travelling	91	9	50	301	34	20	22.3057	113.9578	1261.64	315.30
12-Sep-13	9:42:03	Transportation Boat	Travelling	91	6	40	295	9	50	22.3051	113.9564	1322.21	308.89
12-Sep-13	9:42:50	Transportation Boat	Travelling	91	5	50	301	14	10	22.3061	113.9572	1339.07	314.97
12-Sep-13	9:42:59	Transportation Boat	Travelling	91	2	10	284	59	50	22.3038	113.9543	1419.01	298.73
12-Sep-13	9:43:53	Transportation Boat	Travelling	91	3	0	327	11	50	22.3095	113.9620	1399.92	340.93
12-Sep-13	9:43:59	Transportation Boat	Travelling	91	10	50	294	15	0	22.3045	113.9569	1243.49	307.98
12-Sep-13	9:44:22	Transportation Boat	Travelling	91	1	30	282	26	10	22.3033	113.9539	1434.46	296.17
12-Sep-13	9:45:41	Transportation Boat	Travelling	90	50	50	334	9	50	22.3129	113.9628	1740.52	347.89
12-Sep-13	9:45:48	Transportation Boat	Travelling	91	14	10	280	36	0	22.3020	113.9559	1186.94	294.33
12-Sep-13	9:45:55	Transportation Boat	Travelling	91	5	40	300	49	40	22.3061	113.9571	1342.23	314.56
12-Sep-13	9:48:38	Transportation Boat	Travelling	91	9	40	306	38	50	22.3064	113.9586	1264.13	320.38
12-Sep-13	9:49:24	Transportation Boat	Travelling	90	52	50	337	59	50	22.3125	113.9641	1673.04	351.73
12-Sep-13	9:53:07	Transportation Boat	Travelling	92	51	30	312	32	50	22.3014	113.9636	510.90	326.28
12-Sep-13	9:53:33	Transportation Boat	Travelling	90	50	30	357	9	50	22.3131	113.9696	1751.30	10.89
12-Sep-13	9:55:29	Transportation Boat	Travelling	95	47	10	354	49	10	22.2999	113.9668	251.54	8.55
12-Sep-13	9:55:45	Transportation Boat	Travelling	91	5	20	337	40	10	22.3096	113.9644	1348.26	351.40
12-Sep-13	9:55:55	Transportation Boat	Travelling	91	3	20	293	57	20	22.3053	113.9557	1391.34	307.69
12-Sep-13	9:56:01	Transportation Boat	Travelling	91	1	20	282	42	40	22.3034	113.9539	1437.28	296.44
12-Sep-13	9:57:06	Transportation Boat	Travelling	91	10	20	320	47	0	22.3078	113.9612	1251.31	334.51
12-Sep-13	9:57:12	Transportation Boat	Travelling	91	4	50	295	36	0	22.3054	113.9562	1358.65	309.33
12-Sep-13	9:57:16	Transportation Boat	Travelling	91	3	10	286	23	50	22.3039	113.9547	1394.93	300.13
12-Sep-13	9:58:12	Transportation Boat	Travelling	91	12	30	305	27	10	22.3059	113.9587	1213.47	319.18
12-Sep-13	9:58:16	Transportation Boat	Travelling	91	3	10	306	44	50	22.3073	113.9578	1394.83	320.48
12-Sep-13	9:58:22	Transportation Boat	Travelling	91	4	40	299	23	20	22.3060	113.9567	1362.09	313.12
12-Sep-13	10:00:40	Tug Boat	Travelling	91	5	30	312	4	30	22.3076	113.9591	1344.35	325.80
12-Sep-13	10:00:46	Construction Platform	Travelling	91	3	30	311	26	10	22.3079	113.9587	1387.19	325.17
12-Sep-13	10:02:23	Transportation Boat	Travelling	91	5	30	293	31	0	22.3049	113.9560	1344.20	307.25
12-Sep-13	10:04:17	Transportation Boat	Travelling	90	46	20	304	28	10	22.3104	113.9540	1910.86	318.20
12-Sep-13	10:04:22	Transportation Boat	Travelling	90	57	50	305	36	40	22.3080	113.9567	1524.64	319.34
12-Sep-13	10:04:32	Tug Boat	Travelling	91	6	0	327	28	50	22.3090	113.9622	1333.70	341.21
12-Sep-13	10:04:36	Construction Platform	Travelling	91	7	20	327	5	50	22.3087	113.9622	1307.00	340.83
12-Sep-13	10:05:23	Construction Boat	Travelling	90	58	20	351	34	50	22.3112	113.9678	1511.28	5.31
12-Sep-13	10:06:18	Transportation Boat	Travelling	91	2	40	283	37	30	22.3034	113.9543	1405.34	297.35
12-Sep-13	10:06:37	Construction Boat	Travelling	91	1	30	344	58	30	22.3105	113.9661	1432.31	358.70
12-Sep-13	10:09:43	Construction Boat	Travelling	91	9	20	326	27	10	22.3084	113.9622	1268.47	340.18
12-Sep-13	10:10:00	Tug Boat	Travelling	91	1	30	326	58	20	22.3098	113.9618	1431.99	340.70
12-Sep-13	10:10:12	Construction Platform	Stationary	90	58	30	330	49	50	22.3107	113.9625	1506.43	344.56
12-Sep-13	10:12:03	Tug Boat	Travelling	91	0	30	333	48	20	22.3104	113.9633	1455.77	347.54
12-Sep-13	10:13:51	Tug Boat	Travelling	91	3	10	314	40	20	22.3083	113.9593	1393.37	328.40
12-Sep-13	10:15:25	Tug Boat	Travelling	91	2	30	313	24	20	22.3083	113.9590	1408.27	327.14
12-Sep-13	10:18:36	Transportation Boat	Travelling	91	3	50	300	10	10	22.3062	113.9567	1378.20	313.90
12-Sep-13	10:22:04	Transportation Boat	Travelling	91	6	20	292	32	50	22.3047	113.9560	1325.36	306.28
12-Sep-13	10:23:18	Transportation Boat	Travelling	91	4	0	301	56	40	22.3065	113.9571	1374.14	315.67
12-Sep-13	10:26:01	Transportation Boat	Travelling	91	3	0	299	57	0	22.3063	113.9566	1395.96	313.68
12-Sep-13	10:27:23	Transportation Boat	Travelling	90	58	40	281	51	20	22.3034	113.9532	1500.35	295.59
12-Sep-13	10:34:14	Transportation Boat	Travelling	91	3	10	303	3	0	22.3067	113.9571	1391.46	316.78
12-Sep-13	10:34:26	Transportation Boat	Travelling	91	2	0	292	56	10	22.3052	113.9553	1417.96	306.67
12-Sep-13	10:34:47	Transportation Boat	Travelling	91	5	10	302	31	50	22.3064	113.9573	1348.21	316.26
12-Sep-13	10:35:29	Transportation Boat	Travelling	91	6	0	292	26	40	22.3047	113.9559	1330.93	306.17

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Sep-13	10:35:34	Transportation Boat	Travelling	91	3	10	310	29	0	22.3078	113.9585	1391.34	324.21
12-Sep-13	10:35:39	Transportation Boat	Travelling	91	6	10	284	54	10	22.3033	113.9551	1327.52	298.63
12-Sep-13	10:35:46	Transportation Boat	Travelling	91	3	20	284	6	10	22.3034	113.9545	1387.61	297.83
12-Sep-13	10:36:42	Transportation Boat	Travelling	91	4	40	282	13	40	22.3030	113.9545	1358.58	295.96
12-Sep-13	10:36:48	Transportation Boat	Travelling	91	5	50	297	59	10	22.3056	113.9567	1334.22	311.72
12-Sep-13	10:38:03	Transportation Boat	Travelling	91	2	20	287	14	30	22.3041	113.9546	1409.93	300.97
12-Sep-13	10:39:41	Transportation Boat	Travelling	91	0	0	306	20	40	22.3077	113.9573	1465.33	320.07
12-Sep-13	10:43:07	HSF High Speed Ferry	Travelling	91	0	50	286	34	20	22.3042	113.9543	1444.66	300.30
12-Sep-13	10:44:15	HSF High Speed Ferry	Travelling	91	4	50	304	22	10	22.3067	113.9576	1354.35	318.10
12-Sep-13	10:44:30	Speed Boat	Travelling	92	47	10	343	48	40	22.3023	113.9662	522.39	357.54
12-Sep-13	10:47:15	HSF High Speed Ferry	Travelling	90	47	40	344	35	10	22.3143	113.9659	1850.85	358.32
12-Sep-13	10:47:26	Speed Boat	Travelling	91	36	50	358	31	10	22.3056	113.9683	903.63	12.25
12-Sep-13	10:48:55	Transportation Boat	Travelling	91	1	0	288	16	10	22.3045	113.9545	1440.10	302.00
12-Sep-13	10:49:42	Speed Boat	Travelling	91	13	50	3	56	50	22.3078	113.9699	1187.24	17.68
12-Sep-13	10:49:52	HSF High Speed Ferry	Travelling	90	31	0	354	4	50	22.3234	113.9702	2888.33	7.81
12-Sep-13	10:49:59	Transportation Boat	Travelling	91	3	10	300	40	0	22.3064	113.9567	1389.98	314.40
12-Sep-13	10:50:04	Transportation Boat	Travelling	91	5	10	297	34	50	22.3056	113.9566	1346.82	311.31
12-Sep-13	10:50:15	Transportation Boat	Travelling	90	49	40	356	11	20	22.3133	113.9694	1774.45	9.92
12-Sep-13	10:50:28	Speed Boat	Travelling	91	5	40	305	29	50	22.3067	113.9579	1336.41	319.23
12-Sep-13	10:50:41	Transportation Boat	Travelling	91	1	0	283	49	40	22.3036	113.9540	1439.92	297.56
12-Sep-13	10:51:17	Speed Boat	Travelling	91	18	40	290	35	30	22.3033	113.9575	1113.57	304.32
12-Sep-13	10:51:38	Transportation Boat	Travelling	91	8	20	296	25	20	22.3051	113.9569	1283.60	310.15
12-Sep-13	10:52:43	Transportation Boat	Travelling	91	8	40	313	5	10	22.3072	113.9596	1277.21	326.82
12-Sep-13	10:54:54	Transportation Boat	Travelling	90	52	50	339	32	20	22.3125	113.9645	1665.65	353.27
12-Sep-13	10:55:05	Transportation Boat	Travelling	90	58	0	305	57	10	22.3080	113.9569	1515.01	319.68
12-Sep-13	10:55:09	Transportation Boat	Travelling	90	55	10	304	54	40	22.3084	113.9562	1594.03	318.64
12-Sep-13	10:55:38	Transportation Boat	Travelling	91	3	10	302	25	30	22.3066	113.9570	1389.45	316.15
12-Sep-13	10:55:47	Transportation Boat	Travelling	90	59	40	308	37	20	22.3081	113.9577	1472.03	322.35
12-Sep-13	10:56:27	Transportation Boat	Travelling	90	41	20	349	25	30	22.3169	113.9675	2140.73	3.15
12-Sep-13	10:56:35	Transportation Boat	Travelling	90	59	10	286	50	20	22.3044	113.9540	1484.56	300.57
12-Sep-13	10:56:47	Transportation Boat	Travelling	91	0	40	318	20	10	22.3091	113.9598	1447.34	332.07
12-Sep-13	10:56:57	Transportation Boat	Travelling	93	18	10	335	24	50	22.3015	113.9656	440.05	349.14
12-Sep-13	10:58:10	Transportation Boat	Travelling	91	6	0	296	8	40	22.3053	113.9565	1328.89	309.87
12-Sep-13	10:58:19	Transportation Boat	Travelling	90	56	30	332	50	10	22.3112	113.9629	1555.49	346.57
12-Sep-13	10:58:30	Transportation Boat	Travelling	91	57	30	320	56	10	22.3037	113.9633	743.44	334.67
12-Sep-13	10:59:42	Transportation Boat	Travelling	90	47	50	341	27	20	22.3141	113.9649	1842.71	355.19
12-Sep-13	10:59:47	Transportation Boat	Travelling	90	54	10	304	21	0	22.3085	113.9558	1623.43	318.08
12-Sep-13	10:59:57	Transportation Boat	Travelling	91	26	50	314	5	0	22.3053	113.9612	1007.52	327.81
12-Sep-13	11:01:18	Transportation Boat	Travelling	91	4	0	294	47	50	22.3053	113.9560	1370.62	308.53
12-Sep-13	11:01:22	Transportation Boat	Travelling	90	53	0	291	53	40	22.3063	113.9533	1659.60	305.62
12-Sep-13	11:01:29	Transportation Boat	Travelling	91	5	30	309	21	50	22.3073	113.9586	1338.85	323.09
12-Sep-13	11:02:25	Transportation Boat	Travelling	90	54	20	304	55	30	22.3086	113.9560	1618.08	318.65
12-Sep-13	11:02:29	Transportation Boat	Travelling	90	56	50	297	42	50	22.3068	113.9551	1545.80	311.44
12-Sep-13	11:04:14	Transportation Boat	Travelling	90	58	20	305	55	50	22.3079	113.9569	1505.29	319.66
12-Sep-13	11:08:27	Transportation Boat	Travelling	90	52	40	304	10	40	22.3088	113.9555	1669.49	317.91
12-Sep-13	11:10:04	Transportation Boat	Travelling	91	4	50	297	6	0	22.3056	113.9564	1352.00	310.83
12-Sep-13	11:10:13	Transportation Boat	Travelling	90	54	50	333	38	50	22.3117	113.9630	1602.24	347.38
12-Sep-13	11:10:39	Speed Boat	Travelling	91	10	0	288	45	20	22.3037	113.9561	1251.12	302.49
12-Sep-13	11:10:57	Transportation Boat	Travelling	91	1	40	284	50	40	22.3037	113.9543	1422.21	298.57
12-Sep-13	11:11:02	Transportation Boat	Travelling	91	4	10	306	39	20	22.3071	113.9579	1366.12	320.39
12-Sep-13	11:11:23	Speed Boat	Travelling	91	3	10	302	54	30	22.3067	113.9571	1387.98	316.64
12-Sep-13	11:11:32	Transportation Boat	Travelling	91	2	10	302	46	20	22.3068	113.9570	1410.57	316.50
12-Sep-13	11:12:19	Transportation Boat	Travelling	91	0	10	296	1	0	22.3060	113.9555	1458.00	309.75
12-Sep-13	11:12:29	Transportation Boat	Travelling	91	1	10	288	22	50	22.3045	113.9546	1433.84	302.11
12-Sep-13	11:13:36	Transportation Boat	Travelling	90	54	20	276	47	20	22.3027	113.9517	1616.85	290.52
12-Sep-13	11:13:41	Transportation Boat	Travelling	90	55	20	285	28	0	22.3046	113.9529	1587.15	299.20
12-Sep-13	11:18:02	HSF High Speed Ferry	Travelling	90	51	40	337	38	0	22.3128	113.9639	1701.28	351.36
12-Sep-13	11:19:13	HSF High Speed Ferry	Travelling	91	0	50	319	14	10	22.3092	113.9600	1441.14	332.97
12-Sep-13	11:19:21	Speed Boat	Travelling	91	41	0	34	45	50	22.3028	113.9727	864.29	48.49
12-Sep-13	11:20:05	HSF High Speed Ferry	Travelling	91	6	30	302	48	0	22.3062	113.9576	1316.84	316.53
12-Sep-13	11:20:13	Speed Boat	Travelling	92	50	10	20	3	30	22.3014	113.9692	511.92	33.79
12-Sep-13	11:21:20	HSF High Speed Ferry	Travelling	90	56	50	280	5	0	22.3032	113.9527	1543.83	293.81
12-Sep-13	11:27:15	Container Boat	Travelling	90	49	50	339	24	0	22.3134	113.9643	1763.97	353.13
12-Sep-13	11:33:33	Container Boat	Stationary	91	10	20	311	56	20	22.3069	113.9596	1243.21	325.67
12-Sep-13	11:35:33	Transportation Boat	Travelling	91	2	30	303	56	20	22.3069	113.9572	1400.67	317.67
12-Sep-13	11:36:06	Transportation Boat	Travelling	90	58	20	305	31	10	22.3079	113.9569	1502.05	319.25
12-Sep-13	11:36:21	Transportation Boat	Travelling	91	2	40	293	7	10	22.3052	113.9555	1396.83	306.85
12-Sep-13	11:37:22	Transportation Boat	Travelling	90	57	50	280	53	50	22.3033	113.9530	1515.09	294.63
12-Sep-13	11:37:29	Transportation Boat	Travelling	91	5	10	296	23	0	22.3054	113.9564	1342.51	310.11
12-Sep-13	11:37:37	Transportation Boat	Travelling	91	0	50	305	52	10	22.3075	113.9573	1439.35	319.60
12-Sep-13	11:37:57	Speed Boat	Travelling	91	9	30	30	1	10	22.3058	113.9749	1257.89	43.75
12-Sep-13	11:38:09	Transportation Boat	Travelling	91	4	20	297	31	30	22.3057	113.9565	1360.04	311.25
12-Sep-13	11:38:16	Transportation Boat	Travelling	91	1	30	288	21	50	22.3044	113.9547	1423.48	302.09
12-Sep-13	11:38:25	Transportation Boat	Travelling	91	3	20	302	26	50	22.3066	113.9571	1381.75	316.18
12-Sep-13	11:38:40	Transportation Boat	Travelling	91	1	20	282	38	0	22.3033	113.9540	1427.36	296.36
12-Sep-13	11:38:47	Transportation Boat	Travelling	90	59	20	283	8	20	22.3036	113.9536	1476.11	296.87
12-Sep-13	11:38:50	Transportation Boat	Travelling	91	0	50	286	16	50	22.3041	113.9543	1439.23	300.01
12-Sep-13	11:38:54	Transportation Boat	Travelling	91	2	30	293	5	0	22.3052	113.9555	1400.36	306.81
12-Sep-13	11:38:58	Transportation Boat	Travelling	91	2	40	285	29	40	22.3038	113.9545	1396.58	299.22
12-Sep-13	11:39:06	Speed Boat	Travelling	92	4	50	356	22	0	22.3038	113.9676	697.69	10.10
12-Sep-13	11:39:55	Transportation Boat	Travelling	91	4	40	295	17	10	22.3053	113.9562	1352.79	309.02
12-Sep-13	11:40:28	Speed Boat	Travelling	91	43	30	285	11	10	22.3013	113.9592	842.11	298.92
12-Sep-13	11:41:14	Transportation Boat	Travelling	90	57	30	306	49	30	22.3082	113.9570	1523.61	320.55
12-Sep-13	11:43:06	Transportation Boat	Travelling	90	57	30	306	8	50	22.3081	113.9569	1523.41	319.88
12-Sep-13	11:48:09	Transportation Boat	Travelling	91	5	20	300	17	0	22.3060	113.9570	1338.08	314.01
12-Sep-13	11:49:31	Transportation Boat	Travelling	91	4	50	287	37	30	22.3039	113.9552	1348.39	301.35
12-Sep-13	11:50:07	Transportation Boat	Travelling	90	57	40	284	9	0	22.3040	113.9533	1518.22	297.88
12-Sep-13	11:51:05	Transportation Boat	Travelling	91	1	10	293	22	10	22.3054	113.9553	1430.09	307.10
12-Sep-13	11:51:12	Transportation Boat	Travelling	90	56	50	306	4	30	22.3082	113.9567	1540.70	319.80
12-Sep-13	11:51:48	Transportation Boat	Travelling	91	3	0	300	52	20	22.3064	113.9568	1387.89	314.60
12-Sep-13	11:51:52	Transportation Boat	Travelling	91	4	30	302	48	10	22.3065	113.9573	1355.23	316.53
12-Sep-13	11:52:56	Transportation Boat	Travelling	90	55	50	306	40	10	22.3085	113.9567	1568.54	320.40
12-Sep-13	11:53:00	Transportation Boat	Travelling	91	1	20	287	15	20	22.3042	113.9545	1425.97	300.99
12-Sep-13	11:53:44	Transportation Boat	Travelling	91	2	0	304	1	40	22.3070	113.9572	1410.37	317.76
12-Sep-13	11:54:37	Transportation Boat	Travelling	91	0	0	289	42	50	22.3048	113.9546	1457.92	303.44
12-Sep-13	11:55:09	Transportation Boat	Travelling	90	56	30	282	25	20	22.3038	113.9529	1549.52	296.15
12-Sep-13	12:01:07	Transportation Boat	Travelling	91	1	40	304	22	0	22.3071	113.9572	1417.38	318.10
12-Sep-13	12:02:49	Transportation Boat	Travelling	91	5	10	290	35	10	22.3044	113.9556	1340.21	304.32
12-Sep-13	12:04:04	Transportation Boat	Travelling	91	1	30	280	7	10	22.3028	113.9538	1420.99	293.85
12-Sep-13	12:04:09	Transportation Boat	Travelling	91	1	30	293	53	10	22.3054	113.9555	1420.98	307.62
12-Sep-13	12:04:23	Transportation Boat	Travelling	90	44	10	346	2	10	22.3155	113.9663	1990.60	359.77
12-Sep-13	12:05:03	Transportation Boat	Travelling	90	56	30	278	21	40	22.3029	113.9524	1548.47	292.09
12-Sep-13	12:05:14	Transportation Boat	Travelling	90	50	40	337	54	0	22.3130	113.9640	1729.93	351.63
12-Sep-13	12:07:08	Transportation Boat	Travelling	91	3	50	310	55	30	22.3077	113.9587	1368.13	324.65
12-Sep-13	12:08:41	Transportation Boat	Travelling	91	0	0	284	56	10	22.3039	113.9540	1456.53	298.67
12-Sep-13	12:13:00	Transportation Boat	Travelling	90	53	20	337	30	0	22.3122	113.9640	1641.05	351.23
12-Sep-13	12:14:29	Transportation Boat	Travelling	91	2	30	284	23	50	22.3035	113.9544	1396.98	298.13
12-Sep-13	12:14:42	Transportation Boat	Travelling	91	2	50	320	1	20	22.3088	113.9604	1389.46	333.75
12-Sep-13	12:15:49	Transportation Boat	Travelling	91	4	20	305	33	20	22.3069	113.9578	1356.58	319.29
12-Sep-13	12:15:54	Transportation Boat	Travelling	91	7	50	302	58	0	22.3060	113.9578	1285.81	316.70
12-Sep-13	12:17:25	Transportation Boat	Travelling	90	51	10	305	12	50	22.3092	113.9555	1711.29	318.94
12-Sep-13	12:17:31	Transportation Boat	Travelling	90	57	30	284	52	10	22.3042	113.9534	1519.86	298.60
12-Sep-13	12:51:55	Other	Stationary	94	37	40	0	0	0	22.3003	113.9671	311.21	13.73
12-Sep-13	12:52:05	Transportation Boat	Travelling	91	4	0	301	21	40	22.3063	113.9571	1360.37	315.09
12-Sep-13	12:52:14	Transportation Boat	Travelling	91	56	40	286	6	10	22.3009	113.9601	743.05	299.83
12-Sep-13	12:52:28	Transportation Boat	Travelling	90	47	0	285	35	50	22.3058	113.9506	1861.74	299.33
12-Sep-13	12:53:32	Transportation Boat	Travelling	91	2	0	317	51	20	22.3087	113.9599	1404.66	331.59

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Sep-13	12:53:41	Transportation Boat	Travelling	93	0	40	297	58	20	22.3005	113.9629	479.04	311.70
12-Sep-13	12:53:52	Transportation Boat	Travelling	90	49	40	297	2	50	22.3080	113.9534	1759.59	310.78
12-Sep-13	12:54:22	Transportation Boat	Travelling	90	58	30	326	37	40	22.3102	113.9615	1489.77	340.36
12-Sep-13	12:55:09	Transportation Boat	Travelling	95	15	50	328	41	10	22.3000	113.9656	273.35	342.42
12-Sep-13	12:55:58	Transportation Boat	Travelling	95	52	50	345	21	20	22.2998	113.9664	244.49	359.09
12-Sep-13	12:56:10	Transportation Boat	Travelling	90	56	50	299	52	10	22.3071	113.9556	1533.91	313.60
12-Sep-13	12:56:16	Transportation Boat	Travelling	90	49	30	342	27	50	22.3135	113.9653	1765.35	356.19
12-Sep-13	12:57:01	Transportation Boat	Stationary	95	53	20	348	2	10	22.2998	113.9665	244.12	1.77
12-Sep-13	12:57:11	Transportation Boat	Travelling	90	44	20	347	27	10	22.3154	113.9668	1975.78	1.18
12-Sep-13	12:57:53	Transportation Boat	Travelling	90	53	40	306	40	20	22.3089	113.9563	1625.71	320.40
12-Sep-13	13:00:55	Transportation Boat	Travelling	90	43	0	346	35	30	22.3160	113.9665	2038.11	0.32
12-Sep-13	13:02:32	Transportation Boat	Travelling	90	52	10	335	55	0	22.3124	113.9635	1672.74	349.65
12-Sep-13	13:03:47	Transportation Boat	Travelling	90	55	40	305	51	10	22.3083	113.9565	1565.74	319.58
12-Sep-13	13:04:03	Transportation Boat	Travelling	91	0	10	320	43	40	22.3094	113.9603	1446.99	334.46
12-Sep-13	13:04:38	Transportation Boat	Travelling	91	4	50	299	18	30	22.3059	113.9569	1341.53	313.04
12-Sep-13	13:05:22	Transportation Boat	Travelling	91	3	0	304	15	0	22.3069	113.9574	1380.97	317.98
12-Sep-13	13:05:28	Transportation Boat	Travelling	90	59	50	286	7	10	22.3041	113.9541	1455.01	299.85
12-Sep-13	13:07:30	Transportation Boat	Travelling	93	29	50	333	36	40	22.3012	113.9655	411.86	347.34
12-Sep-13	13:08:26	Transportation Boat	Travelling	92	25	20	324	57	20	22.3026	113.9643	595.34	338.69
12-Sep-13	13:09:53	Transportation Boat	Travelling	91	36	0	318	25	50	22.3048	113.9623	902.79	332.16
12-Sep-13	13:11:46	Transportation Boat	Travelling	91	7	20	311	59	10	22.3072	113.9593	1290.56	325.72
12-Sep-13	13:12:41	Tug Boat	Travelling	90	40	50	3	4	20	22.3161	113.9724	2147.61	16.80
12-Sep-13	13:12:56	Other	Travelling	90	39	0	5	48	40	22.3167	113.9737	2251.70	19.54
12-Sep-13	13:14:43	Tug Boat	Travelling	90	43	10	356	44	40	22.3156	113.9700	2028.12	10.47
12-Sep-13	13:14:48	Other	Travelling	90	41	40	0	22	20	22.3160	113.9714	2103.13	14.10
12-Sep-13	13:14:57	Transportation Boat	Travelling	90	59	30	288	21	20	22.3046	113.9543	1462.33	302.09
12-Sep-13	13:16:17	Transportation Boat	Travelling	91	2	30	302	11	0	22.3066	113.9570	1391.12	315.91
12-Sep-13	13:17:02	Transportation Boat	Travelling	90	58	0	305	59	50	22.3079	113.9570	1500.47	319.73
12-Sep-13	13:17:10	Tug Boat	Travelling	90	45	0	348	8	10	22.3151	113.9670	1943.14	1.87
12-Sep-13	13:17:14	Construction Platform	Travelling	90	43	50	352	20	40	22.3155	113.9685	1996.14	6.07
12-Sep-13	13:20:01	Speed Boat	Travelling	93	10	50	287	9	10	22.2997	113.9626	452.63	300.88
12-Sep-13	13:20:18	Speed Boat	Travelling	92	37	0	280	7	50	22.2996	113.9615	550.51	293.86
12-Sep-13	13:20:23	Speed Boat	Travelling	92	28	40	278	29	20	22.2996	113.9612	581.47	292.22
12-Sep-13	13:20:31	Transportation Boat	Travelling	91	4	40	297	35	30	22.3056	113.9566	1343.58	311.32
12-Sep-13	13:20:52	Transportation Boat	Travelling	90	56	40	281	27	20	22.3035	113.9529	1535.90	295.19
12-Sep-13	13:21:19	Transportation Boat	Travelling	90	57	20	306	23	30	22.3081	113.9569	1517.73	320.12
12-Sep-13	13:21:25	Transportation Boat	Travelling	90	59	40	286	54	10	22.3043	113.9542	1457.55	300.63
12-Sep-13	13:22:49	Transportation Boat	Travelling	91	3	50	302	49	50	22.3065	113.9573	1361.11	316.56
12-Sep-13	13:22:58	Transportation Boat	Travelling	91	0	10	291	54	50	22.3052	113.9550	1445.12	305.64
12-Sep-13	13:23:22	Transportation Boat	Travelling	91	0	0	306	46	30	22.3077	113.9574	1449.15	320.50
12-Sep-13	13:24:12	Transportation Boat	Travelling	91	1	10	301	16	0	22.3067	113.9566	1421.07	315.00
12-Sep-13	13:24:23	Tug Boat	Travelling	90	59	10	325	34	30	22.3100	113.9613	1469.74	339.30
12-Sep-13	13:24:28	Construction Platform	Travelling	90	55	0	330	36	50	22.3113	113.9622	1582.79	344.34
12-Sep-13	13:27:55	Tug Boat	Travelling	91	3	20	311	9	50	22.3077	113.9587	1371.51	324.89
12-Sep-13	13:28:00	Construction Platform	Travelling	91	1	50	317	8	10	22.3087	113.9597	1405.19	330.87
12-Sep-13	13:32:19	Tug Boat	Travelling	91	2	50	292	7	40	22.3049	113.9555	1382.14	305.86
12-Sep-13	13:32:23	Construction Platform	Travelling	91	3	20	298	19	0	22.3059	113.9565	1371.09	312.05
12-Sep-13	13:34:29	Tug Boat	Travelling	91	12	30	316	22	50	22.3069	113.9606	1195.85	330.11
12-Sep-13	13:34:46	Container Boat	Travelling	91	10	40	315	54	10	22.3071	113.9604	1227.15	329.63
12-Sep-13	13:36:20	Tug Boat	Travelling	91	3	10	312	0	20	22.3078	113.9589	1374.38	325.74
12-Sep-13	13:36:27	Container Boat	Stationary	91	12	0	316	48	40	22.3071	113.9606	1204.07	330.54
12-Sep-13	13:37:06	Tug Boat	Travelling	91	12	40	317	2	30	22.3070	113.9607	1192.87	330.77
12-Sep-13	13:37:16	Transportation Boat	Travelling	91	3	30	303	25	0	22.3066	113.9574	1366.99	317.15
12-Sep-13	13:38:08	Transportation Boat	Travelling	91	2	20	313	54	40	22.3082	113.9591	1392.81	327.64
12-Sep-13	13:38:15	Tug Boat	Travelling	90	48	40	304	44	50	22.3097	113.9549	1791.03	318.48
12-Sep-13	13:38:44	Transportation Boat	Travelling	90	53	0	336	11	50	22.3122	113.9636	1641.92	349.93
12-Sep-13	13:40:08	Transportation Boat	Travelling	90	53	0	335	20	10	22.3121	113.9634	1641.76	349.07
12-Sep-13	13:40:17	Transportation Boat	Travelling	91	0	30	321	6	40	22.3093	113.9605	1435.36	334.84
12-Sep-13	13:41:40	Transportation Boat	Travelling	90	44	30	345	44	20	22.3153	113.9662	1962.20	359.47
12-Sep-13	13:41:46	Transportation Boat	Travelling	91	2	20	303	45	50	22.3069	113.9572	1392.47	317.49
12-Sep-13	13:52:40	Transportation Boat	Travelling	94	14	10	339	51	50	22.3006	113.9660	338.73	353.59
12-Sep-13	13:55:49	Transportation Boat	Stationary	95	40	20	359	28	50	22.2998	113.9670	252.51	13.21
12-Sep-13	14:00:13	Transportation Boat	Travelling	91	0	10	295	51	10	22.3059	113.9556	1441.45	309.58
12-Sep-13	14:01:20	Transportation Boat	Travelling	90	56	40	306	13	50	22.3082	113.9568	1531.66	319.96
12-Sep-13	14:01:35	Transportation Boat	Travelling	90	59	0	288	39	50	22.3047	113.9543	1470.20	302.39
12-Sep-13	14:03:15	Transportation Boat	Travelling	91	0	10	303	11	30	22.3071	113.9568	1441.15	316.92
12-Sep-13	14:03:23	Transportation Boat	Travelling	91	2	30	292	58	40	22.3051	113.9556	1386.66	306.71
12-Sep-13	14:04:24	Transportation Boat	Travelling	91	5	0	306	11	20	22.3068	113.9581	1332.61	319.92
12-Sep-13	14:05:04	Other	Stationary	90	33	40	279	42	0	22.3070	113.9431	2613.48	293.43
12-Sep-13	14:05:10	Other	Stationary	90	33	40	284	1	40	22.3086	113.9439	2613.46	297.76
12-Sep-13	14:05:14	Other	Stationary	90	32	20	287	52	10	22.3105	113.9438	2726.25	301.60
12-Sep-13	14:05:29	Other	Stationary	90	50	30	299	44	30	22.3083	113.9542	1721.55	313.47
12-Sep-13	14:05:32	Other	Stationary	90	53	10	307	56	20	22.3092	113.9565	1633.68	321.67
12-Sep-13	14:05:36	Other	Stationary	90	59	10	313	32	10	22.3087	113.9587	1465.60	327.27
12-Sep-13	14:05:40	Other	Stationary	90	57	10	321	1	40	22.3100	113.9601	1517.62	334.76
12-Sep-13	14:05:44	Other	Stationary	90	55	40	326	49	30	22.3108	113.9614	1559.13	340.55
12-Sep-13	14:05:47	Other	Stationary	90	53	20	331	26	10	22.3118	113.9623	1628.46	345.17
12-Sep-13	14:05:50	Other	Stationary	90	51	20	334	19	40	22.3125	113.9630	1693.04	348.06
12-Sep-13	14:05:53	Other	Stationary	90	47	30	338	14	30	22.3139	113.9639	1832.48	351.97
12-Sep-13	14:05:59	Other	Stationary	90	43	10	342	58	20	22.3158	113.9653	2020.98	356.70
12-Sep-13	14:06:03	Other	Stationary	90	41	40	345	28	10	22.3165	113.9661	2095.73	359.20
12-Sep-13	14:06:05	Other	Stationary	90	39	0	348	22	40	22.3178	113.9672	2243.47	2.11
12-Sep-13	14:06:08	Other	Stationary	90	36	20	349	46	20	22.3193	113.9678	2414.03	3.50
12-Sep-13	14:06:13	Other	Stationary	90	32	0	352	3	0	22.3223	113.9691	2755.84	5.78
12-Sep-13	14:06:38	Other	Stationary	91	0	0	304	57	10	22.3074	113.9571	1444.87	318.68
12-Sep-13	14:06:45	Other	Stationary	90	52	40	307	42	20	22.3092	113.9564	1649.32	321.44
12-Sep-13	14:06:59	Other	Stationary	90	30	50	348	10	40	22.3234	113.9673	2865.36	1.91
12-Sep-13	14:07:06	Other	Stationary	90	31	40	352	4	0	22.3226	113.9691	2786.12	5.80
12-Sep-13	14:08:16	Other	Stationary	90	48	20	351	22	40	22.3138	113.9680	1799.93	5.11
12-Sep-13	14:08:24	Other	Stationary	91	0	10	0	32	50	22.3102	113.9699	1440.64	14.28
12-Sep-13	14:08:37	Other	Stationary	91	12	10	312	14	40	22.3066	113.9599	1198.63	325.97
12-Sep-13	14:08:43	Other	Stationary	91	10	20	315	24	0	22.3071	113.9603	1230.17	329.13
12-Sep-13	14:08:55	Other	Stationary	90	31	10	11	32	10	22.3207	113.9782	2832.74	25.27
12-Sep-13	14:09:22	Other	Stationary	91	12	0	323	28	20	22.3076	113.9619	1201.37	337.20
12-Sep-13	14:09:31	Other	Stationary	91	5	20	329	53	40	22.3091	113.9628	1325.27	343.62
12-Sep-13	14:09:43	Other	Stationary	90	37	20	354	51	20	22.3185	113.9698	2346.48	8.59
12-Sep-13	14:09:51	Other	Stationary	90	34	50	356	26	0	22.3200	113.9707	2521.47	10.16
12-Sep-13	14:09:55	Other	Stationary	90	39	10	357	39	20	22.3173	113.9707	2233.03	11.39
12-Sep-13	14:10:00	Other	Stationary	90	33	10	359	21	10	22.3209	113.9722	2653.73	13.08
12-Sep-13	14:10:07	Other	Stationary	90	30	0	15	38	0	22.3207	113.9805	2948.70	29.36
13-Sep-13	8:03:43	Other	Stationary	94	34	20	0	0	0	22.3004	113.9671	316.60	13.73
13-Sep-13	8:06:01	Other	Stationary	90	34	20	277	46	50	22.3062	113.9430	2587.41	291.51
13-Sep-13	8:06:06	Other	Stationary	90	32	50	287	20	50	22.3102	113.9438	2711.02	301.08
13-Sep-13	8:06:11	Other	Stationary	90	46	30	296	38	30	22.3086	113.9524	1892.33	310.37
13-Sep-13	8:06:20	Other	Stationary	90	53	0	308	32	0	22.3094	113.9565	1655.97	322.26
13-Sep-13	8:06:25	Other	Stationary	90	59	0	314	39	30	22.3090	113.9588	1485.10	328.39
13-Sep-13	8:06:30	Other	Stationary	90	56	50	323	6	10	22.3104	113.9605	1542.57	336.83
13-Sep-13	8:06:35	Other	Stationary	90	53	20	331	35	20	22.3119	113.9623	1645.49	345.32
13-Sep-13	8:06:39	Other	Stationary	90	45	40	339	28	20	22.3148	113.9642	1927.75	353.20
13-Sep-13	8:06:45	Other	Stationary	90	41	40	345	9	50	22.3167	113.9660	2117.83	358.89
13-Sep-13	8:06:55	Other	Stationary	90	39	20	348	5	0	22.3178	113.9671	2247.40	1.81
13-Sep-13	8:07:00	Other	Stationary	90	36	50	349	32	0	22.3192	113.9677	2405.35	3.26
13-Sep-13	8:07:05	Other	Stationary	90	34	30	350	33	10	22.3207	113.9683	2574.66	4.28
13-Sep-13	8:07:10	Other	Stationary	90	30	20	352	14	40	22.3240	113.9694	2946.64	5.97
13-Sep-13	8:07:46	Other	Stationary	91	0	10	304	59	40	22.3075	113.9571	1456.11	318.72
13-Sep-13	8:07:54	Other	Stationary	90	52	20	308	8	10	22.3095	113.9563	1677.71	321.87
13-Sep-13	8:08:07	Other	Stationary	90	30	30	348	29	0	22.3240	113.9675	2929.94	2.21

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Sep-13	8:08:14	Other	Stationary	90	30	30	352	14	20	22.3238	113.9694	2929.97	5.97
13-Sep-13	8:08:55	Other	Stationary	91	13	40	323	43	20	22.3075	113.9620	1186.74	337.45
13-Sep-13	8:09:00	Other	Stationary	91	7	30	330	30	20	22.3088	113.9630	1296.28	344.24
13-Sep-13	8:09:08	Other	Stationary	90	37	20	354	51	40	22.3187	113.9698	2372.50	8.59
13-Sep-13	8:09:11	Other	Stationary	90	35	50	355	48	10	22.3196	113.9704	2475.60	9.53
13-Sep-13	8:09:14	Other	Stationary	90	33	20	356	51	10	22.3212	113.9712	2669.36	10.58
13-Sep-13	8:09:18	Other	Stationary	90	39	0	357	45	0	22.3176	113.9708	2267.78	11.48
13-Sep-13	8:09:21	Other	Stationary	90	32	20	359	24	20	22.3218	113.9725	2755.87	13.14
13-Sep-13	8:09:35	Other	Stationary	90	31	0	12	14	0	22.3209	113.9787	2880.59	25.96
13-Sep-13	8:09:41	Other	Stationary	90	26	40	23	25	50	22.3219	113.9863	3380.40	37.16
13-Sep-13	8:09:54	Other	Stationary	90	35	30	4	31	20	22.3190	113.9740	2499.94	18.25
13-Sep-13	8:10:27	Other	Stationary	90	47	30	351	48	30	22.3142	113.9681	1852.42	5.54
13-Sep-13	8:10:34	Other	Stationary	91	2	0	0	55	20	22.3099	113.9699	1412.90	14.65
13-Sep-13	8:10:58	Transportation Boat	Travelling	91	13	0	310	6	0	22.3063	113.9595	1197.92	323.83
13-Sep-13	8:11:07	Transportation Boat	Travelling	92	1	50	315	3	30	22.3031	113.9628	715.54	328.79
13-Sep-13	8:11:14	HSF High Speed Ferry	Travelling	91	3	10	316	46	10	22.3085	113.9598	1386.58	330.50
13-Sep-13	8:11:26	Transportation Boat	Travelling	91	0	40	290	18	10	22.3049	113.9548	1444.48	304.03
13-Sep-13	8:12:04	Transportation Boat	Travelling	91	8	40	320	14	10	22.3079	113.9610	1274.42	333.97
13-Sep-13	8:12:11	Transportation Boat	Travelling	91	31	40	308	21	30	22.3044	113.9607	952.46	322.09
13-Sep-13	8:12:18	Transportation Boat	Travelling	91	2	50	303	45	0	22.3069	113.9572	1394.17	317.48
13-Sep-13	8:12:22	HSF High Speed Ferry	Travelling	91	4	20	293	44	0	22.3051	113.9559	1361.29	307.46
13-Sep-13	8:12:44	Transportation Boat	Travelling	90	57	10	307	11	0	22.3083	113.9570	1534.41	320.91
13-Sep-13	8:12:52	HSF High Speed Ferry	Travelling	91	0	40	284	30	40	22.3038	113.9540	1444.70	298.24
13-Sep-13	8:13:02	Transportation Boat	Travelling	90	47	40	344	3	0	22.3142	113.9657	1846.28	357.78
13-Sep-13	8:13:07	Transportation Boat	Travelling	90	45	0	343	48	30	22.3152	113.9656	1958.28	357.54
13-Sep-13	8:14:01	Transportation Boat	Travelling	90	59	10	335	36	50	22.3107	113.9637	1482.00	349.34
13-Sep-13	8:14:06	Transportation Boat	Travelling	91	5	20	300	55	0	22.3061	113.9571	1340.45	314.65
13-Sep-13	8:14:12	Transportation Boat	Travelling	90	54	0	335	29	30	22.3120	113.9634	1626.09	349.22
13-Sep-13	8:14:16	Transportation Boat	Travelling	90	48	30	340	1	50	22.3138	113.9645	1814.13	353.76
13-Sep-13	8:16:53	Speed Boat	Travelling	94	46	0	328	0	50	22.3002	113.9655	304.02	341.74
13-Sep-13	8:17:04	Transportation Boat	Travelling	91	4	30	304	36	0	22.3068	113.9576	1358.37	318.33
13-Sep-13	8:17:14	Transportation Boat	Travelling	91	2	0	290	34	10	22.3048	113.9550	1413.85	304.30
13-Sep-13	8:17:18	Transportation Boat	Travelling	90	57	40	282	2	50	22.3036	113.9531	1521.61	295.78
13-Sep-13	8:17:24	HSF High Speed Ferry	Travelling	90	52	10	340	35	20	22.3127	113.9648	1684.78	354.32
13-Sep-13	8:17:32	Transportation Boat	Travelling	90	57	10	326	24	0	22.3106	113.9613	1535.15	340.13
13-Sep-13	8:17:48	Transportation Boat	Travelling	90	55	10	332	38	50	22.3115	113.9628	1591.72	346.38
13-Sep-13	8:17:55	Transportation Boat	Travelling	91	2	40	298	10	0	22.3060	113.9563	1398.72	311.90
13-Sep-13	8:17:59	Transportation Boat	Travelling	91	1	0	290	17	30	22.3049	113.9548	1437.44	304.02
13-Sep-13	8:18:03	Transportation Boat	Travelling	91	0	10	284	26	40	22.3038	113.9539	1457.63	298.17
13-Sep-13	8:18:11	Transportation Boat	Travelling	91	13	30	12	2	30	22.3073	113.9714	1190.56	25.77
13-Sep-13	8:18:22	Speed Boat	Travelling	93	14	20	302	34	0	22.3005	113.9634	448.20	316.30
13-Sep-13	8:18:28	Transportation Boat	Travelling	91	0	0	288	17	0	22.3046	113.9543	1461.79	302.01
13-Sep-13	8:19:43	Transportation Boat	Travelling	91	3	40	300	56	10	22.3063	113.9569	1376.74	314.67
13-Sep-13	8:19:49	Transportation Boat	Travelling	91	39	50	345	47	40	22.3055	113.9663	874.79	359.52
13-Sep-13	8:19:56	HSF High Speed Ferry	Travelling	91	5	20	299	7	50	22.3058	113.9568	1341.24	312.86
13-Sep-13	8:20:09	Transportation Boat	Travelling	90	45	30	344	47	10	22.3151	113.9659	1937.63	358.52
13-Sep-13	8:20:15	Transportation Boat	Travelling	91	0	30	312	5	30	22.3084	113.9585	1449.81	325.82
13-Sep-13	8:20:31	Speed Boat	Travelling	92	1	10	284	25	40	22.3007	113.9602	720.18	298.16
13-Sep-13	8:21:43	Transportation Boat	Travelling	90	42	10	304	28	30	22.3117	113.9528	2095.22	318.20
13-Sep-13	8:21:50	Transportation Boat	Travelling	91	38	20	301	47	40	22.3033	113.9603	888.39	315.52
13-Sep-13	8:21:57	Transportation Boat	Travelling	90	55	40	305	26	10	22.3084	113.9564	1577.86	319.17
13-Sep-13	8:26:21	Transportation Boat	Travelling	91	8	10	293	10	40	22.3046	113.9564	1285.72	306.91
13-Sep-13	8:26:26	HSF High Speed Ferry	Travelling	91	3	40	281	34	40	22.3029	113.9543	1377.67	295.31
13-Sep-13	8:29:32	Transportation Boat	Travelling	90	58	30	332	55	30	22.3108	113.9630	1501.48	346.65
13-Sep-13	8:29:36	HSF High Speed Ferry	Travelling	91	8	20	316	35	50	22.3077	113.9602	1282.97	330.33
13-Sep-13	8:29:51	Transportation Boat	Travelling	90	57	0	21	56	50	22.3089	113.9751	1541.62	35.68
13-Sep-13	8:30:03	Transportation Boat	Travelling	90	43	10	348	0	0	22.3160	113.9670	2047.11	1.73
13-Sep-13	8:30:53	Transportation Boat	Travelling	90	49	40	343	25	20	22.3136	113.9655	1773.65	357.15
13-Sep-13	8:31:02	Transportation Boat	Travelling	91	8	50	14	31	40	22.3077	113.9723	1273.74	28.26
13-Sep-13	8:31:08	Transportation Boat	Travelling	90	51	50	337	36	0	22.3127	113.9639	1698.17	351.33
13-Sep-13	8:32:17	HSF High Speed Ferry	Travelling	90	52	50	339	26	30	22.3125	113.9645	1665.66	353.17
13-Sep-13	8:32:53	Transportation Boat	Travelling	91	33	0	354	19	20	22.3060	113.9677	940.68	8.05
13-Sep-13	8:32:58	Transportation Boat	Travelling	91	5	0	308	4	20	22.3072	113.9583	1349.97	321.80
13-Sep-13	8:33:49	Transportation Boat	Travelling	91	11	10	291	55	20	22.3041	113.9567	1231.91	305.65
13-Sep-13	8:33:55	Transportation Boat	Travelling	90	57	50	285	42	10	22.3043	113.9535	1519.71	299.43
13-Sep-13	8:33:59	Transportation Boat	Travelling	91	13	40	284	34	10	22.3027	113.9562	1189.74	298.30
13-Sep-13	8:34:41	Transportation Boat	Travelling	90	57	0	279	25	10	22.3031	113.9526	1542.38	293.15
13-Sep-13	8:34:47	Transportation Boat	Travelling	91	13	10	312	44	30	22.3066	113.9600	1198.04	326.47
13-Sep-13	8:34:52	Transportation Boat	Travelling	91	1	10	295	23	20	22.3058	113.9556	1435.92	309.12
13-Sep-13	8:34:58	Transportation Boat	Travelling	91	20	40	292	18	20	22.3034	113.9579	1085.78	306.04
13-Sep-13	8:36:21	HSF High Speed Ferry	Travelling	91	0	0	289	6	10	22.3048	113.9544	1464.43	302.83
13-Sep-13	8:36:28	Transportation Boat	Travelling	91	23	30	295	54	0	22.3036	113.9585	1048.82	309.63
13-Sep-13	8:36:39	Transportation Boat	Travelling	90	48	0	342	41	50	22.3141	113.9653	1837.59	356.43
13-Sep-13	8:37:07	Transportation Boat	Travelling	91	3	50	336	5	20	22.3098	113.9640	1375.51	349.82
13-Sep-13	8:37:17	Transportation Boat	Travelling	91	29	40	314	37	40	22.3051	113.9614	976.30	328.36
13-Sep-13	8:37:30	Transportation Boat	Travelling	90	54	40	337	0	10	22.3119	113.9639	1609.72	350.73
13-Sep-13	8:37:40	HSF High Speed Ferry	Travelling	91	3	10	310	45	30	22.3078	113.9585	1390.28	324.49
13-Sep-13	8:37:47	Transportation Boat	Travelling	91	4	20	293	37	20	22.3051	113.9558	1364.78	307.35
13-Sep-13	8:39:24	HSF High Speed Ferry	Travelling	90	53	50	337	8	0	22.3121	113.9639	1635.37	350.86
13-Sep-13	8:39:34	Transportation Boat	Travelling	90	50	30	341	17	20	22.3133	113.9649	1745.34	355.02
13-Sep-13	8:39:40	Transportation Boat	Travelling	91	17	10	337	52	30	22.3077	113.9648	1135.96	351.60
13-Sep-13	8:39:44	Transportation Boat	Travelling	91	7	0	313	45	10	22.3076	113.9595	1310.12	327.48
13-Sep-13	8:39:49	Transportation Boat	Travelling	90	57	30	306	4	40	22.3081	113.9568	1529.56	319.81
13-Sep-13	8:41:05	Transportation Boat	Travelling	91	3	40	296	25	20	22.3056	113.9561	1379.70	310.15
13-Sep-13	8:52:14	Transportation Boat	Travelling	91	41	10	300	9	40	22.3030	113.9603	866.02	313.89
13-Sep-13	8:52:32	Speed Boat	Travelling	90	50	50	290	24	20	22.3064	113.9524	1735.96	304.14
13-Sep-13	8:54:08	Transportation Boat	Travelling	92	45	0	320	43	40	22.3019	113.9642	530.06	334.46
13-Sep-13	8:54:14	Transportation Boat	Travelling	91	2	30	296	45	30	22.3058	113.9560	1407.64	310.49
13-Sep-13	8:55:17	Transportation Boat	Travelling	91	0	50	285	28	10	22.3040	113.9541	1446.86	299.20
13-Sep-13	8:58:16	Speed Boat	Travelling	90	57	40	292	26	20	22.3057	113.9544	1527.91	306.17
13-Sep-13	8:58:23	Transportation Boat	Travelling	91	1	10	333	37	10	22.3103	113.9633	1439.32	347.35
13-Sep-13	8:58:34	Transportation Boat	Travelling	90	42	50	348	26	50	22.3162	113.9672	2069.45	2.18
13-Sep-13	8:59:34	Speed Boat	Travelling	90	53	10	336	28	20	22.3123	113.9637	1659.60	350.20
13-Sep-13	8:59:40	Transportation Boat	Travelling	91	4	30	325	47	10	22.3091	113.9618	1364.22	339.52
13-Sep-13	8:59:44	Transportation Boat	Travelling	90	49	20	346	52	30	22.3137	113.9666	1791.08	0.60
13-Sep-13	9:02:37	Construction Boat	Travelling	91	2	30	293	18	10	22.3053	113.9555	1408.83	307.03
13-Sep-13	9:03:34	Transportation Boat	Travelling	91	6	20	297	16	50	22.3055	113.9567	1326.61	311.01
13-Sep-13	9:03:42	Transportation Boat	Travelling	91	29	50	346	37	0	22.3064	113.9665	977.06	0.35
13-Sep-13	9:03:49	Construction Boat	Travelling	91	4	40	304	50	50	22.3068	113.9576	1361.23	318.58
13-Sep-13	9:06:23	Transportation Boat	Travelling	90	55	20	279	48	20	22.3033	113.9522	1594.65	293.54
13-Sep-13	9:06:31	Transportation Boat	Travelling	93	35	40	355	9	50	22.3012	113.9670	405.67	8.89
13-Sep-13	9:06:39	Transportation Boat	Travelling	91	1	30	286	6	0	22.3040	113.9543	1432.61	299.83
13-Sep-13	9:07:42	Transportation Boat	Travelling	90	48	40	341	43	40	22.3139	113.9650	1817.58	355.46
13-Sep-13	9:10:17	Transportation Boat	Travelling	90	58	50	328	27	10	22.3105	113.9619	1498.99	342.18
13-Sep-13	9:11:28	Transportation Boat	Travelling	90	48	20	342	21	0	22.3141	113.9652	1831.08	356.08
13-Sep-13	9:11:39	Transportation Boat	Travelling	91	41	0	310	40	0	22.3040	113.9615	869.14	324.40
13-Sep-13	9:13:26	Transportation Boat	Travelling	90	57	40	306	44	20	22.3082	113.9569	1530.24	320.47
13-Sep-13	9:13:31	Transportation Boat	Travelling	90	55	40	333	17	40	22.3115	113.9629	1586.09	347.02
13-Sep-13	9:13:39	Transportation Boat	Travelling	92	40	0	320	48	50	22.3021	113.9641	547.75	334.54
13-Sep-13	9:16:23	Transportation Boat	Stationary	95	42	20	359	33	0	22.2999	113.9670	255.23	13.28
13-Sep-13	9:16:33	Speed Boat	Travelling	92	24	50	357	11	40	22.3030	113.9675	605.49	10.92
13-Sep-13	9:16:46	Transportation Boat	Travelling	91	3	50	311	53	10	22.3079	113.9588	1381.00	325.62
13-Sep-13	9:16:52	Transportation Boat	Travelling	91	4	20	296	22	40	22.3056	113.9562	1370.16	310.11
13-Sep-13	9:16:57	Transportation Boat	Travelling	91	4	0	286	34	40	22.3039	113.9548	1377.39	300.31
13-Sep-13	9:17:52	Transportation Boat	Travelling	91	4	0	304	7	10	22.3068	113.9574	1377.52	317.85
13-Sep-13	9:17:59	Transportation Boat	Travelling	90	59	30	306	52	20	22.3079	113.9572	1483.11	320.60
13-Sep-13	9:18:03	Transportation Boat	Travelling	91	5	50	303	7	0	22.3064	113.9575	1338.74	316.85

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Sep-13	9:18:08	HSF High Speed Ferry	Travelling	90	50	30	340	0	0	22.3133	113.9645	1752.15	353.73
13-Sep-13	9:18:13	Transportation Boat	Travelling	90	55	10	333	29	30	22.3117	113.9630	1601.45	347.22
13-Sep-13	9:18:21	Tug Boat	Travelling	90	49	20	343	26	20	22.3137	113.9655	1794.45	357.17
13-Sep-13	9:18:27	Container Boat	Travelling	90	48	0	344	26	50	22.3142	113.9658	1845.36	358.18
13-Sep-13	9:20:16	HSF High Speed Ferry	Travelling	91	4	20	310	1	0	22.3076	113.9585	1370.62	323.75
13-Sep-13	9:20:37	Transportation Boat	Travelling	91	1	30	314	47	40	22.3086	113.9591	1434.62	328.52
13-Sep-13	9:20:41	Transportation Boat	Travelling	91	3	10	286	20	50	22.3039	113.9546	1396.31	300.08
13-Sep-13	9:21:37	Transportation Boat	Travelling	90	53	50	307	7	20	22.3091	113.9563	1642.34	320.85
13-Sep-13	9:21:42	Transportation Boat	Travelling	91	4	20	295	23	40	22.3054	113.9561	1370.82	309.12
13-Sep-13	9:21:47	HSF High Speed Ferry	Travelling	90	59	20	284	55	0	22.3040	113.9537	1487.90	298.65
13-Sep-13	9:26:28	Tug Boat	Travelling	91	4	50	309	22	0	22.3074	113.9585	1360.78	323.10
13-Sep-13	9:26:33	Container Boat	Travelling	91	4	30	311	34	50	22.3077	113.9588	1367.90	325.31
13-Sep-13	9:26:39	Transportation Boat	Travelling	91	4	30	294	25	30	22.3052	113.9559	1367.92	308.15
13-Sep-13	9:26:44	Transportation Boat	Travelling	91	10	50	283	52	40	22.3028	113.9557	1244.36	297.61
13-Sep-13	9:26:54	Transportation Boat	Travelling	91	7	20	308	18	40	22.3069	113.9586	1309.75	322.04
13-Sep-13	9:27:26	Transportation Boat	Travelling	91	1	30	310	11	10	22.3081	113.9582	1435.60	323.92
13-Sep-13	9:27:34	Transportation Boat	Travelling	91	3	0	305	16	40	22.3071	113.9575	1401.01	319.01
13-Sep-13	9:27:39	Transportation Boat	Travelling	91	15	50	291	3	40	22.3036	113.9571	1161.69	304.79
13-Sep-13	9:30:09	Transportation Boat	Travelling	91	24	20	314	13	40	22.3056	113.9610	1043.99	327.96
13-Sep-13	9:31:38	Tug Boat	Travelling	90	49	30	342	20	30	22.3137	113.9652	1790.68	356.07
13-Sep-13	9:33:03	Tug Boat	Travelling	90	56	20	336	6	10	22.3115	113.9637	1570.11	349.83
13-Sep-13	9:33:14	Transportation Boat	Travelling	91	7	0	339	24	0	22.3094	113.9649	1317.17	353.13
13-Sep-13	9:37:39	Tug Boat	Travelling	90	49	20	358	22	0	22.3134	113.9701	1797.94	12.10
13-Sep-13	9:40:23	Transportation Boat	Travelling	93	18	30	335	47	0	22.3015	113.9656	442.37	349.51
13-Sep-13	9:42:11	Transportation Boat	Travelling	91	54	10	320	41	50	22.3039	113.9632	770.80	334.43
13-Sep-13	9:42:16	Transportation Boat	Travelling	91	18	40	307	13	30	22.3055	113.9595	1121.14	320.95
13-Sep-13	9:45:00	Transportation Boat	Travelling	91	8	0	311	4	30	22.3072	113.9591	1299.12	324.80
13-Sep-13	9:45:55	Transportation Boat	Travelling	90	53	20	307	3	20	22.3092	113.9562	1662.05	320.79
13-Sep-13	9:46:04	Transportation Boat	Travelling	90	50	0	345	22	0	22.3136	113.9661	1774.99	359.10
13-Sep-13	9:48:24	Transportation Boat	Travelling	90	57	20	332	17	20	22.3111	113.9628	1544.68	346.02
13-Sep-13	9:49:04	Transportation Boat	Travelling	91	3	20	300	15	20	22.3063	113.9566	1396.55	313.99
13-Sep-13	9:49:13	Speed Boat	Travelling	91	5	20	297	50	0	22.3057	113.9566	1353.32	311.56
13-Sep-13	9:49:42	Speed Boat	Travelling	91	4	0	284	35	10	22.3035	113.9546	1381.92	298.32
13-Sep-13	9:49:49	Speed Boat	Travelling	91	3	0	281	44	50	22.3031	113.9541	1404.14	295.48
13-Sep-13	9:49:54	Transportation Boat	Travelling	91	3	0	292	58	30	22.3052	113.9554	1404.15	306.70
13-Sep-13	9:50:01	Transportation Boat	Travelling	91	0	40	321	17	0	22.3095	113.9604	1458.88	335.01
13-Sep-13	9:53:14	Transportation Boat	Travelling	91	6	30	287	53	30	22.3039	113.9554	1329.84	301.62
13-Sep-13	9:53:19	Transportation Boat	Travelling	91	2	30	297	52	50	22.3061	113.9561	1416.01	311.61
13-Sep-13	9:55:06	Transportation Boat	Travelling	91	9	50	311	56	20	22.3070	113.9595	1265.94	325.67
13-Sep-13	9:56:08	Transportation Boat	Travelling	90	54	40	279	10	30	22.3033	113.9519	1622.50	292.90
13-Sep-13	9:56:58	Transportation Boat	Stationary	91	9	20	329	9	20	22.3086	113.9627	1275.41	342.89
13-Sep-13	9:57:44	Transportation Boat	Travelling	91	9	50	327	10	10	22.3084	113.9624	1266.28	340.90
13-Sep-13	9:58:58	Transportation Boat	Travelling	91	6	40	313	50	0	22.3077	113.9595	1327.24	327.56
13-Sep-13	10:00:17	Transportation Boat	Travelling	90	55	30	304	19	10	22.3083	113.9560	1598.41	318.05
13-Sep-13	10:00:21	Transportation Boat	Travelling	90	55	30	340	57	50	22.3119	113.9650	1598.42	354.69
13-Sep-13	10:02:12	Transportation Boat	Stationary	91	8	50	329	23	40	22.3087	113.9628	1285.44	343.12
13-Sep-13	10:02:21	Transportation Boat	Travelling	91	10	20	306	38	40	22.3063	113.9586	1257.76	320.37
13-Sep-13	10:05:48	Transportation Boat	Travelling	92	27	50	314	48	30	22.3022	113.9634	596.08	328.54
13-Sep-13	10:07:54	Transportation Boat	Travelling	95	50	50	345	51	0	22.2999	113.9664	250.28	359.58
13-Sep-13	10:10:37	Transportation Boat	Travelling	92	44	0	324	38	20	22.3021	113.9645	537.39	338.37
13-Sep-13	10:11:58	Transportation Boat	Travelling	91	4	30	297	23	50	22.3058	113.9563	1374.13	311.13
13-Sep-13	10:12:01	Transportation Boat	Travelling	91	0	30	296	52	40	22.3062	113.9556	1466.18	310.61
13-Sep-13	10:12:56	Transportation Boat	Travelling	90	59	0	279	50	40	22.3030	113.9530	1504.11	293.57
13-Sep-13	10:13:02	Transportation Boat	Travelling	90	53	50	278	25	10	22.3032	113.9515	1650.83	292.15
13-Sep-13	10:13:10	Tug Boat	Travelling	91	3	20	286	12	30	22.3039	113.9546	1399.92	299.94
13-Sep-13	10:13:17	Other	Travelling	91	1	40	282	24	50	22.3033	113.9538	1438.26	296.14
13-Sep-13	10:13:30	Transportation Boat	Travelling	91	19	40	311	28	0	22.3058	113.9602	1110.41	325.20
13-Sep-13	10:13:42	Speed Boat	Travelling	91	6	50	299	1	40	22.3057	113.9569	1325.85	312.76
13-Sep-13	10:16:03	Speed Boat	Travelling	92	7	10	23	32	10	22.3026	113.9705	694.03	37.27
13-Sep-13	10:17:41	Speed Boat	Travelling	92	36	40	299	37	40	22.3011	113.9624	563.02	313.36
13-Sep-13	10:17:50	Transportation Boat	Travelling	91	1	40	288	47	20	22.3046	113.9546	1438.91	302.52
13-Sep-13	10:17:57	Tug Boat	Travelling	91	2	10	325	49	50	22.3097	113.9616	1427.21	339.56
13-Sep-13	10:18:03	Construction Platform	Travelling	91	2	30	321	49	0	22.3092	113.9607	1419.51	335.55
13-Sep-13	10:18:29	Speed Boat	Travelling	91	40	0	278	15	10	22.3006	113.9584	883.75	291.98
13-Sep-13	10:20:43	Transportation Boat	Travelling	91	5	10	315	2	20	22.3081	113.9595	1361.10	328.77
13-Sep-13	10:22:32	Tug Boat	Travelling	90	44	30	350	21	0	22.3156	113.9678	2006.89	4.08
13-Sep-13	10:22:37	Construction Platform	Travelling	90	46	10	347	51	0	22.3150	113.9669	1932.74	1.58
13-Sep-13	10:22:48	Transportation Boat	Stationary	91	8	20	329	7	20	22.3088	113.9627	1297.61	342.85
13-Sep-13	10:22:58	Transportation Boat	Travelling	91	5	30	298	30	50	22.3058	113.9566	1354.39	312.24
13-Sep-13	10:32:12	Transportation Boat	Travelling	91	2	0	310	36	50	22.3081	113.9583	1432.37	324.34
13-Sep-13	10:34:15	Transportation Boat	Travelling	91	8	20	324	58	40	22.3085	113.9618	1297.97	338.71
13-Sep-13	10:36:54	Transportation Boat	Stationary	91	8	20	326	58	50	22.3086	113.9622	1297.75	340.71
13-Sep-13	10:39:23	Transportation Boat	Travelling	91	15	40	307	10	30	22.3058	113.9592	1170.63	320.90
13-Sep-13	10:41:10	Transportation Boat	Travelling	91	48	0	310	4	50	22.3036	113.9617	818.19	323.81
13-Sep-13	10:43:53	Transportation Boat	Travelling	94	38	20	329	31	0	22.3003	113.9655	316.28	343.25
13-Sep-13	10:46:07	HSF High Speed Ferry	Travelling	91	4	10	305	5	30	22.3070	113.9575	1382.18	318.82
13-Sep-13	10:46:23	Transportation Boat	Travelling	94	39	20	328	14	10	22.3003	113.9655	315.09	341.97
13-Sep-13	10:47:41	HSF High Speed Ferry	Travelling	90	57	20	331	23	40	22.3111	113.9625	1549.10	345.12
13-Sep-13	10:50:38	HSF High Speed Ferry	Travelling	90	33	10	352	57	50	22.3219	113.9695	2718.07	6.69
13-Sep-13	10:50:47	Transportation Boat	Travelling	91	13	40	310	33	20	22.3064	113.9596	1201.82	324.29
13-Sep-13	10:52:08	Transportation Boat	Travelling	91	5	30	316	16	10	22.3082	113.9598	1353.19	330.00
13-Sep-13	10:52:15	Transportation Boat	Travelling	90	59	10	308	3	40	22.3082	113.9574	1499.97	321.79
13-Sep-13	10:53:34	Transportation Boat	Travelling	90	53	40	306	25	0	22.3091	113.9561	1656.06	320.15
13-Sep-13	11:06:45	Transportation Boat	Travelling	90	57	0	299	8	20	22.3071	113.9553	1556.37	312.87
13-Sep-13	11:07:28	Transportation Boat	Travelling	91	0	10	303	17	10	22.3073	113.9566	1473.24	317.02
13-Sep-13	11:09:29	Speed Boat	Travelling	95	44	20	311	46	40	22.2995	113.9650	254.91	325.51
13-Sep-13	11:10:08	Transportation Boat	Travelling	90	57	10	286	1	20	22.3045	113.9533	1551.42	299.75
13-Sep-13	11:11:09	Transportation Boat	Travelling	91	1	50	303	44	0	22.3071	113.9570	1432.67	317.46
13-Sep-13	11:11:16	Transportation Boat	Travelling	91	10	20	291	45	40	22.3042	113.9564	1257.68	305.49
13-Sep-13	11:11:39	Transportation Boat	Travelling	90	57	40	305	51	50	22.3082	113.9567	1537.62	319.59
13-Sep-13	11:11:45	Transportation Boat	Travelling	91	7	0	301	30	40	22.3061	113.9574	1320.88	315.24
13-Sep-13	11:11:51	Transportation Boat	Travelling	90	56	50	307	23	20	22.3086	113.9569	1560.49	321.12
13-Sep-13	11:12:49	Transportation Boat	Travelling	90	55	10	304	18	30	22.3084	113.9559	1608.28	318.04
13-Sep-13	11:12:55	Transportation Boat	Travelling	91	5	10	308	43	10	22.3073	113.9583	1358.36	322.45
13-Sep-13	11:14:43	Transportation Boat	Travelling	91	26	20	309	48	0	22.3050	113.9605	1022.62	323.53
13-Sep-13	11:15:18	Speed Boat	Travelling	90	43	10	345	53	50	22.3162	113.9663	2065.62	359.63
13-Sep-13	11:15:53	Speed Boat	Travelling	90	48	20	340	56	20	22.3141	113.9647	1839.79	354.67
13-Sep-13	11:16:24	Transportation Boat	Travelling	91	3	10	303	42	10	22.3069	113.9572	1401.58	317.43
13-Sep-13	11:16:30	Speed Boat	Travelling	90	51	50	337	55	20	22.3129	113.9640	1713.14	351.65
13-Sep-13	11:16:35	HSF High Speed Ferry	Travelling	90	43	50	345	45	30	22.3159	113.9662	2033.21	359.49
13-Sep-13	11:16:46	Transportation Boat	Travelling	92	19	40	313	54	50	22.3024	113.9631	630.57	327.64
13-Sep-13	11:17:26	Transportation Boat	Travelling	91	3	30	291	10	10	22.3048	113.9553	1394.04	304.90
13-Sep-13	11:17:31	Speed Boat	Travelling	91	1	0	320	44	0	22.3094	113.9603	1451.91	334.46
13-Sep-13	11:17:35	HSF High Speed Ferry	Travelling	90	53	0	335	49	10	22.3124	113.9634	1674.64	349.55
13-Sep-13	11:18:42	Transportation Boat	Travelling	90	57	30	277	54	0	22.3027	113.9525	1541.44	291.63
13-Sep-13	11:18:51	Speed Boat	Travelling	91	0	50	292	39	20	22.3054	113.9550	1455.81	306.39
13-Sep-13	11:18:57	HSF High Speed Ferry	Travelling	91	2	20	312	14	40	22.3082	113.9587	1420.32	325.97
13-Sep-13	11:19:09	Transportation Boat	Travelling	94	36	0	331	14	30	22.3004	113.9656	318.25	344.97
13-Sep-13	11:19:20	Tug Boat	Travelling	90	50	40	342	24	0	22.3134	113.9652	1753.01	356.13
13-Sep-13	11:19:39	Speed Boat	Travelling	90	55	20	277	50	40	22.3029	113.9519	1602.65	291.57
13-Sep-13	11:20:24	Transportation Boat	Stationary	95	15	0	341	28	40	22.3001	113.9662	278.62	355.21
13-Sep-13	11:20:32	HSF High Speed Ferry	Travelling	90	57	10	283	10	50	22.3039	113.9530	1550.38	296.91
13-Sep-13	11:20:43	Transportation Boat	Travelling	91	5	40	280	23	0	22.3026	113.9544	1347.22	294.11
13-Sep-13	11:20:49	Transportation Boat	Travelling	91	4	50	298	40	30	22.3059	113.9566	1364.73	312.40
13-Sep-13	11:20:53	Transportation Boat	Travelling	91	1	30	306	7	0	22.3075	113.9574	1439.63	319.85
13-Sep-13	11:20:59	Tug Boat	Travelling	91	3	40	333	8	10	22.3098	113.9633	1390.03	346.87
13-Sep-13	11:21:09	Transportation Boat	Travelling	91	4	50	292	20	30	22.3049	113.9557	1364.70	306.07

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Sep-13	11:21:14	Transportation Boat	Travelling	91	3	50	303	25	0	22.3068	113.9572	1386.33	317.15
13-Sep-13	11:21:40	Tug Boat	Travelling	91	8	40	332	45	50	22.3089	113.9635	1287.65	346.49
13-Sep-13	11:22:01	Transportation Boat	Travelling	91	0	10	276	14	0	22.3021	113.9529	1471.86	289.96
13-Sep-13	11:22:07	Transportation Boat	Travelling	91	2	30	294	17	10	22.3055	113.9555	1416.19	308.02
13-Sep-13	11:22:15	Transportation Boat	Travelling	91	14	10	289	1	40	22.3034	113.9567	1191.22	302.76
13-Sep-13	11:24:24	Transportation Boat	Travelling	92	51	20	325	54	0	22.3020	113.9647	513.42	339.63
13-Sep-13	11:24:34	Transportation Boat	Travelling	91	20	50	305	49	30	22.3051	113.9595	1092.03	319.55
13-Sep-13	11:24:43	Transportation Boat	Travelling	91	2	50	305	33	0	22.3072	113.9575	1408.35	319.28
13-Sep-13	11:25:49	Transportation Boat	Travelling	91	50	10	316	20	50	22.3039	113.9625	799.72	330.08
13-Sep-13	11:25:55	Transportation Boat	Travelling	91	21	50	316	42	50	22.3061	113.9612	1078.49	330.44
13-Sep-13	11:26:01	Transportation Boat	Travelling	91	2	30	289	11	40	22.3045	113.9548	1415.84	302.92
13-Sep-13	11:26:59	Transportation Boat	Travelling	90	58	10	278	4	10	22.3027	113.9526	1522.70	291.80
13-Sep-13	11:27:34	Tug Boat	Travelling	91	8	50	320	7	0	22.3080	113.9609	1284.01	333.85
13-Sep-13	11:27:42	Construction Platform	Travelling	91	9	50	321	15	30	22.3079	113.9612	1265.43	334.99
13-Sep-13	11:28:37	Transportation Boat	Travelling	91	4	10	308	37	0	22.3074	113.9582	1378.38	322.35
13-Sep-13	11:28:43	Transportation Boat	Travelling	91	12	40	337	31	40	22.3084	113.9646	1215.54	351.26
13-Sep-13	11:29:53	Tug Boat	Travelling	91	5	20	313	2	40	22.3078	113.9592	1353.37	326.77
13-Sep-13	11:29:57	Construction Platform	Travelling	91	6	30	313	48	0	22.3077	113.9595	1329.36	327.53
13-Sep-13	11:31:38	Transportation Boat	Travelling	90	58	20	352	10	20	22.3112	113.9679	1517.83	5.90
13-Sep-13	11:31:46	Tug Boat	Travelling	91	0	20	308	17	30	22.3080	113.9576	1466.81	322.02
13-Sep-13	11:31:49	Construction Platform	Travelling	91	1	10	308	44	50	22.3079	113.9578	1446.56	322.48
13-Sep-13	11:31:54	Transportation Boat	Travelling	91	4	10	303	18	50	22.3067	113.9573	1378.09	317.04
13-Sep-13	11:31:59	Transportation Boat	Travelling	91	3	20	286	38	50	22.3040	113.9547	1396.44	300.38
13-Sep-13	11:32:32	Transportation Boat	Travelling	91	1	10	284	4	40	22.3037	113.9540	1446.49	297.81
13-Sep-13	11:33:20	Transportation Boat	Travelling	91	0	0	286	4	0	22.3042	113.9540	1474.92	299.80
13-Sep-13	11:33:24	Transportation Boat	Travelling	91	5	50	301	58	0	22.3063	113.9573	1342.67	315.70
13-Sep-13	11:33:29	Transportation Boat	Travelling	91	5	20	294	41	0	22.3052	113.9561	1353.06	308.41
13-Sep-13	11:34:29	Transportation Boat	Travelling	91	4	30	313	47	40	22.3080	113.9592	1370.66	327.52
13-Sep-13	11:34:33	Transportation Boat	Travelling	91	1	50	306	31	40	22.3075	113.9575	1430.51	320.26
13-Sep-13	11:37:05	Transportation Boat	Travelling	90	52	50	336	59	50	22.3125	113.9638	1677.89	350.73
13-Sep-13	11:37:19	Transportation Boat	Travelling	91	9	0	298	37	30	22.3054	113.9572	1280.07	312.35
13-Sep-13	11:37:24	Transportation Boat	Travelling	91	3	0	303	43	30	22.3069	113.9572	1403.42	317.45
13-Sep-13	11:37:31	Speed Boat	Travelling	91	59	40	304	20	20	22.3025	113.9616	735.41	318.07
13-Sep-13	11:39:27	Transportation Boat	Travelling	90	58	50	284	8	30	22.3039	113.9535	1503.98	297.87
13-Sep-13	11:39:36	Speed Boat	Travelling	92	15	10	324	9	10	22.3030	113.9640	650.68	337.88
13-Sep-13	11:41:57	Speed Boat	Stationary	92	15	40	333	52	40	22.3033	113.9650	648.18	347.61
13-Sep-13	11:42:06	Transportation Boat	Stationary	91	25	0	309	0	10	22.3050	113.9603	1036.94	322.73
13-Sep-13	11:42:53	Speed Boat	Travelling	92	14	30	337	8	30	22.3034	113.9654	653.78	350.87
13-Sep-13	11:43:01	Transportation Boat	Travelling	91	42	40	310	18	0	22.3039	113.9615	857.48	324.03
13-Sep-13	11:44:25	Speed Boat	Travelling	92	4	0	351	45	30	22.3040	113.9671	709.29	5.49
13-Sep-13	11:44:33	Transportation Boat	Travelling	92	31	20	315	31	30	22.3021	113.9635	580.76	329.25
13-Sep-13	11:45:15	Speed Boat	Travelling	91	4	10	296	33	0	22.3056	113.9562	1376.90	310.28
13-Sep-13	11:45:48	Speed Boat	Travelling	91	50	30	2	47	30	22.3045	113.9686	796.27	16.52
13-Sep-13	11:46:12	Speed Boat	Travelling	91	1	0	281	27	10	22.3032	113.9536	1449.21	295.18
13-Sep-13	11:46:46	Transportation Boat	Travelling	95	54	10	353	7	40	22.2998	113.9667	247.19	6.86
13-Sep-13	11:48:27	Transportation Boat	Travelling	94	22	0	337	25	10	22.3006	113.9659	334.70	351.15
13-Sep-13	11:48:35	Speed Boat	Travelling	91	22	50	18	2	20	22.3058	113.9718	1063.82	31.77
13-Sep-13	11:53:51	Transportation Boat	Travelling	91	7	50	281	27	40	22.3026	113.9549	1300.93	295.19
13-Sep-13	11:57:56	Transportation Boat	Travelling	91	3	0	293	2	40	22.3052	113.9555	1401.56	306.77
13-Sep-13	11:59:37	Speed Boat	Travelling	91	3	10	301	18	40	22.3065	113.9568	1397.66	315.04
13-Sep-13	12:00:21	Transportation Boat	Travelling	91	3	10	314	28	0	22.3083	113.9592	1397.60	328.20
13-Sep-13	12:01:24	Speed Boat	Travelling	91	4	30	281	34	0	22.3029	113.9544	1368.27	295.30
13-Sep-13	12:01:31	Transportation Boat	Travelling	91	1	10	325	3	20	22.3097	113.9613	1443.77	338.79
13-Sep-13	12:02:47	Transportation Boat	Travelling	90	46	20	0	34	20	22.3143	113.9710	1915.14	14.30
13-Sep-13	12:02:55	Transportation Boat	Travelling	90	57	20	338	40	20	22.3114	113.9644	1541.56	352.40
13-Sep-13	12:03:44	Transportation Boat	Travelling	90	54	20	345	43	50	22.3123	113.9663	1627.97	359.46
13-Sep-13	12:03:49	Transportation Boat	Travelling	90	44	30	352	13	40	22.3155	113.9684	1995.83	5.96
13-Sep-13	12:03:53	Transportation Boat	Travelling	91	0	10	306	7	10	22.3077	113.9572	1467.87	319.85
13-Sep-13	12:05:31	Transportation Boat	Travelling	90	47	0	357	46	10	22.3143	113.9701	1887.03	11.50
13-Sep-13	12:05:37	Transportation Boat	Travelling	90	53	10	352	51	50	22.3125	113.9683	1664.10	6.59
13-Sep-13	12:05:42	Transportation Boat	Travelling	91	0	30	288	13	10	22.3046	113.9544	1459.50	301.95
13-Sep-13	12:07:11	Transportation Boat	Travelling	90	39	20	4	55	10	22.3169	113.9734	2265.42	18.65
13-Sep-13	12:07:21	Transportation Boat	Travelling	91	1	10	3	14	40	22.3100	113.9705	1443.23	16.97
13-Sep-13	12:08:31	Transportation Boat	Travelling	90	58	30	350	11	50	22.3112	113.9674	1509.82	3.93
13-Sep-13	12:10:24	Transportation Boat	Travelling	91	3	10	317	25	20	22.3086	113.9598	1396.69	331.15
13-Sep-13	12:10:35	Container Boat	Travelling	90	49	30	339	15	20	22.3136	113.9643	1789.17	352.99
13-Sep-13	12:12:06	Transportation Boat	Travelling	91	0	20	286	59	0	22.3043	113.9542	1462.98	300.71
13-Sep-13	12:12:13	Container Boat	Travelling	90	56	30	327	23	10	22.3109	113.9615	1563.70	341.12
13-Sep-13	12:15:44	Speed Boat	Travelling	91	4	50	302	10	30	22.3064	113.9572	1359.88	315.90
13-Sep-13	12:15:52	Transportation Boat	Travelling	90	51	10	350	34	20	22.3131	113.9677	1729.19	4.30
13-Sep-13	12:16:06	Container Boat	Travelling	90	56	30	304	26	0	22.3081	113.9563	1563.30	318.16
13-Sep-13	12:16:47	Speed Boat	Travelling	91	3	10	286	12	30	22.3039	113.9546	1396.11	299.94
13-Sep-13	12:16:56	Transportation Boat	Travelling	90	56	30	340	44	50	22.3116	113.9649	1563.22	354.48
13-Sep-13	12:18:36	Transportation Boat	Travelling	91	5	30	321	34	30	22.3086	113.9609	1345.63	335.30
13-Sep-13	12:20:06	Transportation Boat	Travelling	91	6	30	300	58	40	22.3060	113.9572	1325.04	314.71
13-Sep-13	12:20:47	Tug Boat	Travelling	91	2	20	314	42	20	22.3085	113.9592	1414.64	328.44
13-Sep-13	12:22:07	Transportation Boat	Travelling	90	56	50	277	3	30	22.3026	113.9523	1553.39	290.79
13-Sep-13	12:22:11	Tug Boat	Travelling	90	59	20	327	42	20	22.3103	113.9618	1487.00	341.44
13-Sep-13	12:24:30	Tug Boat	Travelling	90	48	10	342	54	30	22.3141	113.9654	1838.06	356.64
13-Sep-13	12:26:56	Tug Boat	Travelling	90	37	20	352	51	10	22.3190	113.9691	2387.92	6.58
13-Sep-13	12:27:09	Speed Boat	Travelling	91	12	0	310	59	0	22.3066	113.9595	1222.26	324.71
13-Sep-13	12:29:03	Speed Boat	Travelling	91	2	50	327	42	40	22.3096	113.9621	1402.49	341.44
13-Sep-13	12:30:16	Transportation Boat	Travelling	90	57	20	289	43	40	22.3053	113.9539	1538.82	303.46
13-Sep-13	12:30:26	Speed Boat	Travelling	90	55	50	336	19	50	22.3116	113.9637	1580.79	350.06
13-Sep-13	12:34:53	Other	Stationary	94	30	30	0	0	0	22.3004	113.9671	323.17	13.73
13-Sep-13	12:35:05	Transportation Boat	Travelling	91	1	20	315	50	50	22.3088	113.9593	1436.66	329.58
13-Sep-13	12:35:11	Transportation Boat	Travelling	91	0	10	292	13	0	22.3054	113.9549	1464.88	305.95
13-Sep-13	12:36:11	Transportation Boat	Travelling	90	58	40	326	53	40	22.3104	113.9616	1502.77	340.62
13-Sep-13	12:36:20	Transportation Boat	Travelling	91	2	30	304	29	40	22.3071	113.9573	1409.39	318.22
13-Sep-13	12:38:05	Transportation Boat	Travelling	90	49	0	341	0	10	22.3138	113.9648	1804.56	354.73
13-Sep-13	12:38:12	Transportation Boat	Travelling	90	47	40	332	35	50	22.3138	113.9621	1856.10	346.33
13-Sep-13	12:38:22	Transportation Boat	Travelling	91	4	30	298	30	30	22.3059	113.9566	1364.99	312.24
13-Sep-13	12:39:23	Transportation Boat	Travelling	91	0	40	280	52	10	22.3031	113.9536	1452.25	294.60
13-Sep-13	12:39:28	Transportation Boat	Travelling	91	4	0	348	18	30	22.3100	113.9669	1375.68	2.04
13-Sep-13	12:39:33	Transportation Boat	Travelling	90	41	40	348	25	10	22.3168	113.9672	2130.30	2.15
13-Sep-13	12:40:10	Dumping Guide Boat	Travelling	91	23	50	355	3	30	22.3069	113.9680	1047.53	8.79
13-Sep-13	12:40:16	Speed Boat	Travelling	91	16	30	355	14	20	22.3078	113.9681	1148.76	8.97
13-Sep-13	12:42:46	Transportation Boat	Travelling	91	21	20	321	34	10	22.3064	113.9620	1079.79	335.30
13-Sep-13	12:42:54	Dumping Guide Boat	Travelling	92	15	10	347	7	50	22.3035	113.9665	648.03	0.86
13-Sep-13	12:43:04	Speed Boat	Travelling	92	12	0	346	0	20	22.3036	113.9664	663.62	359.74
13-Sep-13	12:43:27	Dumping Guide Boat	Stationary	92	12	0	345	26	0	22.3036	113.9663	663.61	359.16
13-Sep-13	12:43:32	Speed Boat	Stationary	92	15	30	345	20	30	22.3034	113.9663	646.40	359.07
13-Sep-13	12:45:50	Transportation Boat	Travelling	91	15	30	290	59	50	22.3036	113.9571	1163.69	304.73
13-Sep-13	12:46:40	Transportation Boat	Travelling	91	0	30	289	15	50	22.3048	113.9545	1455.62	302.99
13-Sep-13	12:46:51	Speed Boat	Travelling	93	30	50	348	10	50	22.3013	113.9665	414.73	1.91
13-Sep-13	12:48:27	Transportation Boat	Travelling	91	2	30	303	17	0	22.3069	113.9571	1408.28	317.01
13-Sep-13	12:48:49	Transportation Boat	Travelling	91	6	20	291	35	50	22.3045	113.9559	1325.93	305.33
13-Sep-13	12:50:08	Transportation Boat	Travelling	91	6	30	315	42	30	22.3079	113.9599	1322.46	329.44
13-Sep-13	12:51:44	Transportation Boat	Travelling	90	54	0	338	52	20	22.3122	113.9644	1633.07	352.60
13-Sep-13	12:51:50	Dumping Guide Boat	Travelling	91	29	40	334	49	0	22.3062	113.9645	978.19	348.55
13-Sep-13	12:53:19	Dumping Guide Boat	Travelling	91	17	50	337	28	30	22.3077	113.9647	1127.96	351.20
13-Sep-13	12:53:27	Transportation Boat	Travelling	90	39	20	350	29	0	22.3179	113.9680	2258.55	4.21
13-Sep-13	12:55:19	Dumping Guide Boat	Stationary	91	14	0	338	25	10	22.3082	113.9648	1186.75	352.15
13-Sep-13	12:55:26	Transportation Boat	Travelling	94	19	20	349	37	50	22.3006	113.9666	336.70	3.36
13-Sep-13	12:55:32	Transportation Boat	Travelling	93	34	0	354	36	0	22.3013	113.9670	408.34	8.33
13-Sep-13	12:57:07	Transportation Boat	Travelling	92	9	0	326	5	10	22.3034	113.9641	678.50	339.82
13-Sep-13	12:57:12	Transportation Boat	Travelling	91	52	20	347	2	50	22.3046	113.9665	779.60	0.78

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Sep-13	13:00:04	Transportation Boat	Travelling	91	16	10	295	1	40	22.3041	113.9577	1152.35	308.76
13-Sep-13	13:00:12	Transportation Boat	Travelling	91	0	10	345	10	10	22.3108	113.9661	1462.50	358.90
13-Sep-13	13:01:53	Transportation Boat	Travelling	91	1	0	279	46	0	22.3028	113.9535	1442.10	293.50
13-Sep-13	13:02:00	Transportation Boat	Travelling	90	46	40	346	21	30	22.3147	113.9664	1893.81	0.09
13-Sep-13	13:07:43	Dumping Guide Boat	Travelling	91	17	10	334	28	30	22.3076	113.9641	1136.72	348.20
13-Sep-13	13:08:01	Transportation Boat	Travelling	90	56	30	292	44	30	22.3060	113.9542	1558.03	306.47
13-Sep-13	13:08:08	Transportation Boat	Travelling	90	56	40	281	52	30	22.3037	113.9528	1553.36	295.60
13-Sep-13	13:09:31	Transportation Boat	Travelling	91	3	50	308	49	50	22.3075	113.9583	1376.62	322.56
13-Sep-13	13:09:38	Transportation Boat	Travelling	91	1	30	295	22	20	22.3057	113.9556	1429.50	309.10
13-Sep-13	13:09:50	Dumping Guide Boat	Travelling	91	20	50	315	39	40	22.3060	113.9610	1084.61	329.39
13-Sep-13	13:11:25	Transportation Boat	Travelling	90	58	30	331	4	50	22.3107	113.9626	1503.65	344.81
13-Sep-13	13:11:34	Transportation Boat	Travelling	91	2	50	314	59	40	22.3084	113.9593	1398.61	328.72
13-Sep-13	13:11:39	Dumping Guide Boat	Stationary	91	21	20	315	47	0	22.3060	113.9611	1077.76	329.51
13-Sep-13	13:11:51	Tug Boat	Travelling	90	45	20	11	10	50	22.3135	113.9744	1949.56	24.91
13-Sep-13	13:12:05	Container Boat	Travelling	90	45	30	10	31	10	22.3136	113.9742	1942.22	24.25
13-Sep-13	13:12:25	Transportation Boat	Travelling	90	57	50	293	17	50	22.3059	113.9546	1521.14	307.03
13-Sep-13	13:14:21	Transportation Boat	Travelling	90	56	30	305	38	30	22.3083	113.9565	1557.38	319.37
13-Sep-13	13:14:29	Transportation Boat	Travelling	90	40	20	349	53	10	22.3174	113.9677	2197.79	3.62
13-Sep-13	13:14:35	Transportation Boat	Travelling	90	52	40	340	58	50	22.3126	113.9649	1672.64	354.71
13-Sep-13	13:14:48	Transportation Boat	Travelling	93	35	40	286	5	50	22.2994	113.9630	404.66	299.83
13-Sep-13	13:14:57	Transportation Boat	Travelling	90	58	40	283	59	40	22.3039	113.9535	1498.98	297.72
13-Sep-13	13:15:24	Tug Boat	Travelling	90	40	30	6	28	20	22.3161	113.9738	2188.34	20.20
13-Sep-13	13:15:31	Container Boat	Stationary	90	47	50	14	15	50	22.3123	113.9748	1844.98	27.99
13-Sep-13	13:15:38	Transportation Boat	Travelling	90	47	40	2	45	40	22.3136	113.9715	1851.56	16.49
13-Sep-13	13:16:17	Transportation Boat	Travelling	95	45	20	318	34	40	22.2996	113.9653	252.10	332.31
13-Sep-13	13:16:27	Transportation Boat	Travelling	91	2	10	304	41	10	22.3071	113.9573	1413.35	318.42
13-Sep-13	13:18:24	Transportation Boat	Travelling	91	13	20	333	48	50	22.3081	113.9639	1195.84	347.54
13-Sep-13	13:18:38	Speed Boat	Travelling	93	54	20	339	35	20	22.3009	113.9660	372.22	353.32
13-Sep-13	13:18:48	Transportation Boat	Travelling	94	34	30	0	50	30	22.3004	113.9672	317.53	14.57
13-Sep-13	13:18:59	Dumping Guide Boat	Travelling	91	18	0	304	13	0	22.3051	113.9591	1123.65	317.95
13-Sep-13	13:19:09	Transportation Boat	Travelling	91	56	20	288	36	20	22.3012	113.9602	751.61	302.34
13-Sep-13	13:19:38	Transportation Boat	Travelling	91	19	10	313	9	40	22.3060	113.9605	1106.92	326.89
13-Sep-13	13:19:43	Speed Boat	Travelling	92	32	40	310	9	40	22.3018	113.9631	572.14	323.89
13-Sep-13	13:20:58	Transportation Boat	Travelling	92	6	0	3	8	0	22.3036	113.9684	693.64	16.86
13-Sep-13	13:21:03	Transportation Boat	Travelling	91	8	0	293	5	20	22.3046	113.9564	1290.38	306.82
13-Sep-13	13:21:08	Transportation Boat	Travelling	93	33	40	303	54	0	22.3003	113.9637	408.30	317.63
13-Sep-13	13:21:13	Speed Boat	Travelling	91	32	30	294	41	50	22.3029	113.9592	946.24	308.43
13-Sep-13	13:21:21	Dumping Guide Boat	Stationary	91	9	50	289	57	50	22.3039	113.9562	1256.13	303.69
13-Sep-13	13:27:03	Transportation Boat	Travelling	91	2	20	303	23	40	22.3069	113.9571	1408.55	317.12
13-Sep-13	13:27:17	Dumping Guide Boat	Travelling	91	20	0	335	52	50	22.3073	113.9645	1094.75	349.61
13-Sep-13	13:27:33	Transportation Boat	Travelling	91	28	0	316	20	30	22.3054	113.9616	994.53	330.07
13-Sep-13	13:27:49	Transportation Boat	Travelling	90	47	0	342	23	0	22.3145	113.9652	1876.90	356.11
13-Sep-13	13:27:52	Transportation Boat	Travelling	90	47	40	342	47	0	22.3142	113.9653	1850.08	356.51
13-Sep-13	13:28:55	Transportation Boat	Travelling	91	7	50	310	51	30	22.3071	113.9591	1292.92	324.59
13-Sep-13	13:29:02	Dumping Guide Boat	Travelling	92	2	40	330	9	50	22.3038	113.9645	712.19	343.89
13-Sep-13	13:29:13	Transportation Boat	Travelling	90	53	20	278	5	40	22.3031	113.9515	1649.79	291.82
13-Sep-13	13:29:18	Transportation Boat	Travelling	90	56	50	328	33	20	22.3109	113.9618	1546.60	342.29
13-Sep-13	13:29:39	Transportation Boat	Travelling	90	57	10	327	35	10	22.3107	113.9616	1537.41	341.32
13-Sep-13	13:30:59	Dumping Guide Boat	Travelling	94	40	20	323	28	10	22.3002	113.9652	310.64	337.20
13-Sep-13	13:31:08	Transportation Boat	Travelling	91	2	40	303	27	20	22.3069	113.9571	1400.59	317.19
13-Sep-13	13:31:12	Transportation Boat	Travelling	91	0	10	309	15	30	22.3081	113.9579	1459.55	322.99
13-Sep-13	13:33:12	Dumping Guide Boat	Stationary	94	26	40	338	28	50	22.3005	113.9660	326.60	352.21
13-Sep-13	13:33:22	Transportation Boat	Travelling	91	1	30	294	0	40	22.3055	113.9554	1427.29	307.74
13-Sep-13	13:34:47	Transportation Boat	Travelling	90	59	10	307	18	10	22.3080	113.9573	1484.21	321.03
13-Sep-13	13:34:56	Transportation Boat	Travelling	91	3	10	301	57	0	22.3066	113.9570	1389.02	315.68
13-Sep-13	13:35:00	Transportation Boat	Travelling	91	1	10	297	47	20	22.3062	113.9559	1435.02	311.52
13-Sep-13	13:35:42	Transportation Boat	Travelling	90	57	20	306	40	10	22.3082	113.9569	1532.27	320.40
13-Sep-13	13:36:18	Transportation Boat	Travelling	91	1	10	288	57	10	22.3046	113.9547	1434.89	302.68
13-Sep-13	13:36:33	Dumping Guide Boat	Travelling	91	10	20	291	1	30	22.3040	113.9564	1245.88	304.75
13-Sep-13	13:37:56	Transportation Boat	Travelling	90	54	50	275	31	10	22.3024	113.9517	1603.00	289.25
13-Sep-13	13:38:06	Dumping Guide Boat	Travelling	90	57	30	280	7	40	22.3032	113.9528	1527.52	293.86
13-Sep-13	13:38:27	Dumping Guide Boat	Travelling	93	3	50	350	33	0	22.3019	113.9667	474.27	4.28
13-Sep-13	13:41:08	Dumping Guide Boat	Travelling	91	28	30	17	53	20	22.3052	113.9714	988.00	31.62
13-Sep-13	13:45:58	Dumping Guide Boat	Travelling	90	44	0	29	14	0	22.3108	113.9797	2005.62	42.96
13-Sep-13	13:46:08	Transportation Boat	Travelling	91	54	20	283	47	20	22.3008	113.9598	763.48	297.52
13-Sep-13	13:46:15	Transportation Boat	Travelling	91	0	30	298	42	0	22.3064	113.9560	1449.97	312.43
13-Sep-13	13:46:22	Transportation Boat	Travelling	90	56	0	298	28	0	22.3071	113.9551	1568.22	312.20
13-Sep-13	13:46:28	Transportation Boat	Travelling	90	58	10	295	38	50	22.3062	113.9551	1508.94	309.38
13-Sep-13	13:46:33	Transportation Boat	Travelling	91	2	0	288	12	10	22.3044	113.9547	1414.42	301.93
13-Sep-13	13:47:05	Transportation Boat	Travelling	92	53	30	296	20	50	22.3005	113.9627	502.33	310.08
13-Sep-13	13:47:12	Transportation Boat	Travelling	90	56	10	307	4	50	22.3085	113.9568	1563.41	320.81
13-Sep-13	13:47:18	Transportation Boat	Travelling	91	4	0	300	37	20	22.3062	113.9569	1369.61	314.35
13-Sep-13	13:47:22	Transportation Boat	Travelling	91	0	40	301	23	50	22.3068	113.9565	1445.83	315.13
13-Sep-13	13:47:27	Transportation Boat	Travelling	91	3	10	293	31	40	22.3052	113.9557	1387.89	307.26
13-Sep-13	13:48:08	Transportation Boat	Travelling	94	33	30	337	52	30	22.3005	113.9659	318.09	351.60
13-Sep-13	13:48:14	Transportation Boat	Travelling	90	59	10	306	24	40	22.3079	113.9572	1482.90	320.14
13-Sep-13	13:48:21	Transportation Boat	Travelling	91	17	0	303	14	40	22.3051	113.9589	1136.19	316.97
13-Sep-13	13:48:25	Transportation Boat	Travelling	91	3	40	299	26	10	22.3061	113.9566	1376.77	313.17
13-Sep-13	13:49:46	Transportation Boat	Travelling	91	3	40	303	23	10	22.3067	113.9573	1376.65	317.12
13-Sep-13	13:49:55	Transportation Boat	Travelling	91	45	10	310	4	0	22.3036	113.9616	830.14	323.80
13-Sep-13	13:50:04	Transportation Boat	Travelling	91	4	0	309	37	0	22.3075	113.9584	1369.36	323.35
13-Sep-13	13:50:18	Transportation Boat	Travelling	91	4	40	296	4	50	22.3054	113.9563	1355.06	309.81
13-Sep-13	13:51:47	Transportation Boat	Travelling	91	6	40	44	15	40	22.3039	113.9772	1313.83	57.99
13-Sep-13	13:52:02	Transportation Boat	Travelling	92	46	10	336	29	10	22.3023	113.9655	524.41	350.22
13-Sep-13	13:52:32	Other	Stationary	90	34	20	277	56	30	22.3062	113.9430	2590.40	291.67
13-Sep-13	13:52:36	Other	Stationary	90	33	20	284	55	20	22.3091	113.9436	2671.56	298.65
13-Sep-13	13:52:40	Other	Stationary	90	33	0	293	0	0	22.3121	113.9454	2699.77	306.73
13-Sep-13	13:52:47	Other	Stationary	90	54	20	301	45	20	22.3080	113.9554	1616.43	315.49
13-Sep-13	13:53:06	Other	Stationary	90	53	0	307	52	20	22.3093	113.9564	1657.75	321.60
13-Sep-13	13:53:14	Other	Stationary	90	57	10	311	8	50	22.3089	113.9578	1535.04	324.88
13-Sep-13	13:53:18	Other	Stationary	90	57	50	315	40	30	22.3094	113.9589	1517.08	329.40
13-Sep-13	13:53:21	Other	Stationary	90	57	10	320	10	0	22.3100	113.9598	1535.03	333.90
13-Sep-13	13:53:24	Other	Stationary	90	54	50	326	1	10	22.3111	113.9610	1601.38	339.75
13-Sep-13	13:53:28	Other	Stationary	90	52	10	332	12	50	22.3123	113.9624	1684.66	345.94
13-Sep-13	13:53:31	Other	Stationary	90	46	30	338	51	50	22.3145	113.9640	1894.34	352.59
13-Sep-13	13:53:34	Other	Stationary	90	43	0	343	22	20	22.3161	113.9654	2052.46	357.10
13-Sep-13	13:53:37	Other	Stationary	90	38	20	348	12	50	22.3184	113.9672	2310.25	1.94
13-Sep-13	13:53:41	Other	Stationary	90	32	20	351	10	30	22.3223	113.9687	2757.91	4.90
13-Sep-13	13:53:45	Other	Stationary	90	30	40	352	3	10	22.3237	113.9693	2915.67	5.78
13-Sep-13	13:54:16	Other	Stationary	91	0	0	304	55	30	22.3075	113.9570	1461.45	318.65
13-Sep-13	13:55:14	Other	Stationary	90	52	50	307	38	50	22.3093	113.9563	1662.84	321.38
13-Sep-13	13:55:24	Other	Stationary	90	29	50	348	11	40	22.3246	113.9674	3001.39	1.92
13-Sep-13	13:55:31	Other	Stationary	90	31	40	351	28	50	22.3229	113.9689	2818.53	5.21
13-Sep-13	13:56:09	Other	Stationary	90	47	40	351	51	10	22.3142	113.9681	1846.65	5.58
13-Sep-13	13:56:13	Other	Stationary	91	1	0	0	44	30	22.3101	113.9699	1436.99	14.47
13-Sep-13	13:56:31	Other	Stationary	91	12	20	323	25	10	22.3076	113.9618	1209.52	337.15
13-Sep-13	13:56:42	Other	Stationary	91	4	40	329	56	30	22.3093	113.9627	1354.49	343.67
13-Sep-13	13:56:53	Other	Stationary	90	36	0	354	59	50	22.3195	113.9700	2465.03	8.73
13-Sep-13	13:56:58	Other	Stationary	90	36	0	355	29	20	22.3195	113.9702	2465.02	9.22
13-Sep-13	13:57:04	Other	Stationary	90	32	50	358	14	30	22.3215	113.9719	2713.32	11.97
13-Sep-13	13:57:07	Other	Stationary	90	32	30	359	37	30	22.3216	113.9726	2742.47	13.35
13-Sep-13	13:57:20	Other	Stationary	90	31	50	0	18	30	22.3221	113.9730	2802.70	14.04
13-Sep-13	13:57:29	Other	Stationary	90	35	30	4	8	40	22.3190	113.9739	2501.01	17.87
13-Sep-13	13:58:05	Other	Stationary	90	31	10	9	40	0	22.3213	113.9775	2865.60	23.40
13-Sep-13	13:58:11	Other	Stationary	90	47	0	12	4	10	22.3128	113.9743	1873.17	25.80
13-Sep-13	13:58:16	Other	Stationary	90	26	20	20	1	30	22.3233	113.9849	3427.80	33.75
15-Sep-13	8:05:41	Other	Stationary	94	44	30	0	0	0	22.3002	113.9671	290.36	13.73

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
15-Sep-13	8:07:18	Other	Stationary	90	33	40	278	49	40	22.3063	113.9439	2509.00	292.56
15-Sep-13	8:07:24	Other	Stationary	90	32	0	289	17	50	22.3106	113.9448	2645.63	303.03
15-Sep-13	8:07:29	Other	Stationary	90	44	0	296	3	10	22.3086	113.9522	1903.34	309.78
15-Sep-13	8:07:34	Other	Stationary	90	54	10	302	21	10	22.3076	113.9560	1539.82	316.08
15-Sep-13	8:07:40	Other	Stationary	90	52	40	308	53	50	22.3090	113.9570	1584.40	322.63
15-Sep-13	8:07:45	Other	Stationary	90	57	40	315	26	50	22.3088	113.9592	1445.02	329.18
15-Sep-13	8:07:48	Other	Stationary	90	56	40	320	37	10	22.3096	113.9602	1470.89	334.35
15-Sep-13	8:07:53	Other	Stationary	90	55	0	325	29	50	22.3104	113.9612	1516.13	339.23
15-Sep-13	8:07:57	Other	Stationary	90	52	20	331	5	40	22.3115	113.9623	1594.66	344.82
15-Sep-13	8:08:02	Other	Stationary	90	49	40	336	21	20	22.3125	113.9636	1681.84	350.09
15-Sep-13	8:08:09	Other	Stationary	90	43	0	341	10	40	22.3151	113.9647	1948.70	354.91
15-Sep-13	8:08:12	Other	Stationary	90	40	10	346	48	10	22.3164	113.9666	2090.01	0.53
15-Sep-13	8:08:19	Other	Stationary	90	33	50	350	37	10	22.3200	113.9682	2496.13	4.35
15-Sep-13	8:08:25	Other	Stationary	90	29	50	352	14	30	22.3231	113.9693	2847.82	5.97
15-Sep-13	8:08:41	Other	Stationary	90	59	20	305	4	10	22.3071	113.9574	1403.89	318.80
15-Sep-13	8:08:48	Other	Stationary	90	51	50	308	11	10	22.3090	113.9567	1610.30	321.92
15-Sep-13	8:09:02	Other	Stationary	90	30	50	348	30	20	22.3224	113.9674	2750.70	2.24
15-Sep-13	8:09:07	Other	Stationary	90	30	10	352	14	40	22.3228	113.9693	2814.67	5.97
15-Sep-13	8:09:27	Other	Stationary	91	11	40	323	58	40	22.3073	113.9621	1159.88	337.71
15-Sep-13	8:09:31	Other	Stationary	91	4	0	324	30	30	22.3085	113.9617	1300.32	338.24
15-Sep-13	8:09:49	Other	Stationary	90	36	20	355	18	20	22.3182	113.9699	2318.00	9.04
15-Sep-13	8:09:55	Other	Stationary	90	38	50	356	46	10	22.3168	113.9702	2163.96	10.50
15-Sep-13	8:09:59	Other	Stationary	90	34	0	356	21	0	22.3196	113.9706	2483.39	10.08
15-Sep-13	8:10:07	Other	Stationary	90	32	30	359	27	40	22.3204	113.9722	2603.07	13.19
15-Sep-13	8:10:19	Other	Stationary	90	28	40	9	15	30	22.3222	113.9777	2970.44	22.99
15-Sep-13	8:10:31	Other	Stationary	90	44	0	5	20	20	22.3138	113.9724	1903.34	19.07
15-Sep-13	8:10:39	Other	Stationary	90	32	10	14	30	0	22.3185	113.9785	2631.28	28.23
15-Sep-13	8:10:46	Other	Stationary	90	30	50	12	16	30	22.3199	113.9781	2750.70	26.00
15-Sep-13	8:11:13	Other	Stationary	90	53	50	343	19	50	22.3115	113.9656	1549.51	357.06
15-Sep-13	8:11:18	Other	Stationary	90	59	10	0	57	50	22.3099	113.9699	1407.90	14.69
15-Sep-13	8:11:37	Speed Boat	Travelling	91	8	50	291	43	20	22.3039	113.9568	1208.09	305.45
15-Sep-13	8:11:48	Speed Boat	Travelling	92	26	20	302	11	40	22.3013	113.9626	565.90	315.92
15-Sep-13	8:11:57	Transportation Boat	Travelling	91	2	30	312	0	10	22.3075	113.9591	1331.90	325.73
15-Sep-13	8:12:27	Transportation Boat	Travelling	91	2	0	287	34	0	22.3039	113.9552	1342.77	301.30
15-Sep-13	8:12:33	Speed Boat	Travelling	91	14	30	307	57	10	22.3055	113.9597	1115.39	321.68
15-Sep-13	8:12:38	Speed Boat	Travelling	92	6	10	294	22	50	22.3013	113.9614	656.70	308.11
15-Sep-13	8:12:44	Transportation Boat	Travelling	91	3	20	300	15	0	22.3058	113.9572	1314.17	313.98
15-Sep-13	8:12:48	Transportation Boat	Travelling	91	4	30	292	50	20	22.3045	113.9563	1290.13	306.57
15-Sep-13	8:13:41	Speed Boat	Stationary	91	13	30	323	41	40	22.3070	113.9622	1130.70	337.42
15-Sep-13	8:13:48	Speed Boat	Travelling	91	43	30	287	8	40	22.3013	113.9597	801.18	300.87
15-Sep-13	8:13:54	Transportation Boat	Travelling	91	1	30	283	46	40	22.3032	113.9547	1353.82	297.51
15-Sep-13	8:13:58	Transportation Boat	Travelling	90	56	50	306	2	50	22.3077	113.9572	1466.51	319.78
15-Sep-13	8:14:22	Speed Boat	Travelling	94	8	20	334	12	40	22.3005	113.9657	332.86	347.94
15-Sep-13	8:14:29	Transportation Boat	Travelling	90	56	40	283	7	30	22.3036	113.9536	1470.89	296.85
15-Sep-13	8:15:17	Transportation Boat	Travelling	90	59	20	289	29	10	22.3045	113.9550	1403.89	303.22
15-Sep-13	8:15:32	Speed Boat	Travelling	91	21	0	280	19	30	22.3014	113.9573	1025.21	294.05
15-Sep-13	8:15:45	Speed Boat	Travelling	93	13	0	309	48	50	22.3007	113.9639	428.69	323.54
15-Sep-13	8:16:52	Transportation Boat	Travelling	90	59	30	286	57	40	22.3040	113.9547	1399.91	300.69
15-Sep-13	8:17:00	Transportation Boat	Travelling	91	2	30	305	23	30	22.3067	113.9579	1331.90	319.12
15-Sep-13	8:17:07	Transportation Boat	Travelling	91	1	20	281	38	30	22.3029	113.9545	1357.54	295.37
15-Sep-13	8:17:19	Speed Boat	Travelling	92	15	50	298	40	20	22.3013	113.9620	609.80	312.40
15-Sep-13	8:17:26	Speed Boat	Stationary	91	18	20	279	54	30	22.3014	113.9570	1060.38	293.64
15-Sep-13	8:17:34	Transportation Boat	Travelling	90	57	30	306	48	20	22.3077	113.9574	1449.27	320.54
15-Sep-13	8:17:40	Transportation Boat	Travelling	91	2	30	296	16	50	22.3053	113.9565	1331.90	310.01
15-Sep-13	8:17:44	Transportation Boat	Travelling	91	5	40	289	24	50	22.3039	113.9561	1266.96	303.14
15-Sep-13	8:18:31	Transportation Boat	Travelling	91	0	50	306	4	20	22.3070	113.9578	1368.84	319.80
15-Sep-13	8:18:35	Transportation Boat	Travelling	91	6	30	302	2	40	22.3057	113.9579	1250.92	315.77
15-Sep-13	8:18:47	Speed Boat	Travelling	91	52	30	22	19	30	22.3030	113.9706	736.81	36.05
15-Sep-13	8:19:30	Transportation Boat	Travelling	90	54	30	307	44	20	22.3084	113.9571	1530.25	321.47
15-Sep-13	8:19:35	Transportation Boat	Travelling	91	0	40	282	37	40	22.3031	113.9544	1372.64	296.36
15-Sep-13	8:19:43	Speed Boat	Travelling	91	30	30	290	42	30	22.3023	113.9590	916.93	304.44
15-Sep-13	8:19:54	Speed Boat	Travelling	91	38	30	23	59	20	22.3036	113.9714	842.06	37.72
15-Sep-13	8:20:49	Tug Boat	Travelling	91	1	0	316	34	10	22.3083	113.9598	1365.05	330.30
15-Sep-13	8:21:57	Speed Boat	Travelling	91	10	20	283	37	50	22.3025	113.9562	1182.08	297.36
15-Sep-13	8:22:05	Speed Boat	Travelling	91	21	0	24	25	20	22.3049	113.9726	1025.21	38.15
15-Sep-13	8:22:15	Transportation Boat	Travelling	91	6	20	317	23	20	22.3075	113.9605	1254.09	331.12
15-Sep-13	8:22:21	Tug Boat	Travelling	90	57	10	331	3	30	22.3103	113.9627	1457.84	344.79
15-Sep-13	8:23:48	Transportation Boat	Travelling	90	56	0	334	23	20	22.3107	113.9634	1488.65	348.12
15-Sep-13	8:23:59	Tug Boat	Travelling	90	48	0	342	1	10	22.3132	113.9651	1741.39	355.75
15-Sep-13	8:29:03	Speed Boat	Travelling	91	5	10	23	28	10	22.3068	113.9739	1276.79	37.20
15-Sep-13	8:29:16	Fishing Boat	Operate and stationary	90	53	10	23	33	40	22.3089	113.9756	1569.25	37.29
15-Sep-13	8:30:36	Transportation Boat	Travelling	91	1	40	299	31	20	22.3059	113.9568	1350.11	313.25
15-Sep-13	8:32:18	Transportation Boat	Travelling	90	42	20	348	59	40	22.3154	113.9673	1980.18	2.72
15-Sep-13	8:32:29	Transportation Boat	Travelling	91	0	10	287	8	30	22.3040	113.9548	1384.20	300.87
15-Sep-13	8:33:14	Speed Boat	Travelling	91	22	0	6	12	40	22.3062	113.9698	1012.62	19.94
15-Sep-13	8:33:24	Transportation Boat	Travelling	90	57	50	281	47	10	22.3032	113.9538	1440.80	295.52
15-Sep-13	8:33:30	Transportation Boat	Travelling	90	52	20	336	0	30	22.3117	113.9636	1594.66	349.74
15-Sep-13	8:33:52	Speed Boat	Travelling	91	41	20	339	4	20	22.3049	113.9654	818.40	352.80
15-Sep-13	8:34:07	Transportation Boat	Travelling	90	56	0	278	25	40	22.3027	113.9530	1488.65	292.16
15-Sep-13	8:34:14	Transportation Boat	Travelling	90	58	40	324	39	20	22.3095	113.9613	1420.06	338.39
15-Sep-13	8:34:23	Speed Boat	Travelling	91	38	10	313	22	20	22.3040	113.9619	844.93	327.10
15-Sep-13	8:35:11	Speed Boat	Travelling	91	11	10	284	11	10	22.3025	113.9564	1168.11	297.92
15-Sep-13	8:35:15	Transportation Boat	Travelling	91	2	20	305	13	30	22.3067	113.9579	1335.50	318.95
15-Sep-13	8:36:59	Container Boat	Travelling	91	2	10	287	47	20	22.3039	113.9553	1339.12	301.52
15-Sep-13	8:37:23	Transportation Boat	Travelling	90	36	40	351	41	10	22.3182	113.9685	2296.18	5.42
15-Sep-13	8:38:48	Transportation Boat	Travelling	90	57	40	285	16	10	22.3039	113.9541	1445.02	299.00
15-Sep-13	8:38:56	Transportation Boat	Travelling	90	43	50	345	32	30	22.3148	113.9662	1910.75	359.27
15-Sep-13	8:39:06	Container Boat	Travelling	91	3	30	308	49	20	22.3070	113.9586	1310.68	322.55
15-Sep-13	8:40:33	Transportation Boat	Travelling	91	1	50	291	0	50	22.3045	113.9556	1346.43	304.74
15-Sep-13	8:40:38	Transportation Boat	Travelling	90	52	20	334	59	50	22.3117	113.9634	1594.66	348.73
15-Sep-13	8:40:45	Transportation Boat	Travelling	91	1	50	299	30	10	22.3059	113.9569	1346.43	313.23
15-Sep-13	8:40:52	Container Boat	Travelling	90	59	20	325	19	30	22.3094	113.9615	1403.89	339.05
15-Sep-13	8:41:44	Transportation Boat	Travelling	91	0	40	306	17	0	22.3071	113.9578	1372.64	320.01
15-Sep-13	8:41:55	Transportation Boat	Travelling	90	59	0	306	47	40	22.3074	113.9577	1411.93	320.52
15-Sep-13	8:42:14	Transportation Boat	Travelling	90	42	10	348	40	30	22.3155	113.9672	1988.21	2.40
15-Sep-13	8:43:19	Transportation Boat	Travelling	91	2	10	307	54	10	22.3071	113.9583	1339.12	321.63
15-Sep-13	8:43:31	Transportation Boat	Travelling	90	46	50	342	54	50	22.3137	113.9654	1785.68	356.64
15-Sep-13	8:43:35	Container Boat	Travelling	90	48	40	342	21	10	22.3130	113.9653	1717.07	356.08
15-Sep-13	8:45:24	Transportation Boat	Travelling	90	57	20	285	19	40	22.3040	113.9540	1453.54	299.06
15-Sep-13	8:45:30	Transportation Boat	Travelling	90	55	30	332	33	30	22.3108	113.9629	1502.26	346.29
15-Sep-13	8:45:39	Container Boat	Travelling	90	44	10	351	27	20	22.3146	113.9681	1895.98	5.19
15-Sep-13	8:45:45	HSF High Speed Ferry	Travelling	90	34	10	353	30	20	22.3197	113.9694	2470.78	7.24
15-Sep-13	8:45:57	Tour Boat	Travelling	90	41	50	21	50	0	22.3123	113.9777	2004.48	35.56
15-Sep-13	8:46:34	Transportation Boat	Travelling	91	0	50	286	38	20	22.3038	113.9549	1368.84	300.37
15-Sep-13	8:46:39	Speed Boat	Travelling	90	51	50	287	13	50	22.3051	113.9530	1610.30	300.96
15-Sep-13	8:46:52	HSF High Speed Ferry	Travelling	90	40	40	349	16	10	22.3162	113.9675	2063.58	3.00
15-Sep-13	8:48:23	Transportation Boat	Travelling	91	4	0	309	1	50	22.3069	113.9587	1300.32	322.76
15-Sep-13	8:48:29	Transportation Boat	Travelling	91	1	30	302	28	0	22.3064	113.9573	1353.82	316.20
15-Sep-13	8:48:34	Speed Boat	Travelling	90	45	50	300	10	40	22.3090	113.9536	1825.49	313.91
15-Sep-13	8:48:40	HSF High Speed Ferry	Travelling	90	55	20	332	13	20	22.3108	113.9628	1506.86	345.95
15-Sep-13	8:48:46	Tour Boat	Travelling	90	58	20	12	25	30	22.3092	113.9725	1428.28	26.15
15-Sep-13	8:50:40	Transportation Boat	Travelling	91	1	50	288	57	40	22.3042	113.9554	1346.43	302.69
15-Sep-13	8:50:44	HSF High Speed Ferry	Travelling	91	1	40	298	2	10	22.3057	113.9566	1350.11	311.77
15-Sep-13	8:50:50	Tour Boat	Travelling	91	14	40	357	3	40	22.3075	113.9684	1112.88	10.79
15-Sep-13	8:52:04	HSF High Speed Ferry	Travelling	90	54	40	277	46	0	22.3026	113.9526	1525.52	291.50
15-Sep-13	8:52:10	Transportation Boat	Travelling	90	55	20	278	27	40	22.3027	113.9528	1506.86	292.19
15-Sep-13	8:52:17	Tour Boat	Travelling	91	21	10	340	14	20	22.3068	113.9654	1023.09	353.97

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
15-Sep-13	8:56:21	Transportation Boat	Travelling	91	6	50	295	22	0	22.3047	113.9570	1244.61	309.10
15-Sep-13	8:56:27	Transportation Boat	Travelling	91	3	20	295	52	10	22.3052	113.9566	1314.17	309.60
15-Sep-13	8:57:30	Transportation Boat	Travelling	91	1	30	303	30	40	22.3066	113.9575	1353.82	317.24
15-Sep-13	8:58:45	Transportation Boat	Travelling	90	54	40	306	7	40	22.3081	113.9568	1525.52	319.86
15-Sep-13	8:59:45	Transportation Boat	Travelling	91	2	40	303	39	0	22.3064	113.9577	1328.31	317.38
15-Sep-13	9:00:42	Transportation Boat	Travelling	91	2	40	300	26	40	22.3059	113.9571	1328.31	314.17
15-Sep-13	9:00:47	Transportation Boat	Travelling	91	1	30	292	57	20	22.3049	113.9558	1353.82	306.69
15-Sep-13	9:01:32	Transportation Boat	Travelling	90	59	10	286	5	20	22.3039	113.9545	1407.90	299.82
15-Sep-13	9:01:36	Transportation Boat	Travelling	91	0	10	289	45	30	22.3045	113.9552	1384.20	303.49
15-Sep-13	9:02:19	Transportation Boat	Travelling	90	56	40	278	58	10	22.3027	113.9532	1470.89	292.70
15-Sep-13	9:02:23	Transportation Boat	Travelling	90	56	20	281	42	30	22.3033	113.9534	1479.72	295.44
15-Sep-13	9:02:30	Speed Boat	Travelling	93	27	0	289	14	10	22.2996	113.9631	399.60	302.97
15-Sep-13	9:02:52	Speed Boat	Travelling	94	43	50	312	9	30	22.2998	113.9648	291.05	325.89
15-Sep-13	9:03:20	Speed Boat	Travelling	95	16	10	0	20	0	22.2999	113.9670	261.12	14.06
15-Sep-13	9:05:18	Transportation Boat	Travelling	90	49	30	15	33	0	22.3109	113.9744	1687.61	29.28
15-Sep-13	9:07:39	Transportation Boat	Travelling	91	10	50	352	34	50	22.3081	113.9677	1173.66	6.31
15-Sep-13	9:07:48	Tug Boat	Travelling	90	36	30	351	33	10	22.3183	113.9685	2307.04	5.28
15-Sep-13	9:07:52	Construction Platform	Travelling	90	35	40	352	33	10	22.3188	113.9689	2362.92	6.28
15-Sep-13	9:09:52	Transportation Boat	Travelling	91	18	0	317	6	10	22.3060	113.9614	1064.95	330.83
15-Sep-13	9:09:58	Transportation Boat	Travelling	91	2	30	283	59	30	22.3032	113.9549	1331.90	297.72
15-Sep-13	9:10:06	Tug Boat	Travelling	90	39	10	349	24	30	22.3169	113.9675	2144.98	3.14
15-Sep-13	9:10:10	Construction Platform	Travelling	90	38	20	350	15	20	22.3173	113.9679	2193.08	3.99
15-Sep-13	9:11:38	Transportation Boat	Travelling	91	10	20	294	22	20	22.3042	113.9574	1182.08	308.10
15-Sep-13	9:11:42	Transportation Boat	Travelling	91	6	50	303	34	50	22.3059	113.9582	1244.61	317.31
15-Sep-13	9:13:52	Transportation Boat	Travelling	91	1	40	327	8	20	22.3091	113.9621	1350.11	340.87
15-Sep-13	9:16:24	Transportation Boat	Travelling	90	54	50	349	53	50	22.3113	113.9673	1520.81	3.63
15-Sep-13	9:16:31	Tug Boat	Travelling	90	50	10	339	5	10	22.3125	113.9644	1664.77	352.82
15-Sep-13	9:16:35	Construction Platform	Travelling	90	48	0	340	10	30	22.3132	113.9646	1741.39	353.90
15-Sep-13	9:23:48	Transportation Boat	Travelling	91	2	20	304	16	0	22.3070	113.9573	1403.04	318.00
15-Sep-13	9:23:55	Tug Boat	Travelling	91	1	10	316	28	30	22.3088	113.9595	1430.15	330.20
15-Sep-13	9:23:59	Construction Platform	Travelling	91	1	10	318	23	20	22.3090	113.9599	1430.16	332.12
15-Sep-13	9:26:05	Transportation Boat	Travelling	90	57	50	279	59	0	22.3031	113.9529	1514.03	293.71
15-Sep-13	9:27:29	Tug Boat	Travelling	90	56	30	307	0	30	22.3084	113.9569	1550.48	320.74
15-Sep-13	9:27:36	Construction Platform	Travelling	90	58	20	307	24	0	22.3081	113.9572	1501.06	321.13
15-Sep-13	9:30:09	Transportation Boat	Travelling	90	51	50	338	5	20	22.3127	113.9641	1692.88	351.82
15-Sep-13	9:31:05	Tug Boat	Travelling	90	50	30	345	35	0	22.3133	113.9662	1738.56	359.31
15-Sep-13	9:31:21	Container Boat	Travelling	90	50	10	344	53	30	22.3134	113.9660	1750.37	358.62
15-Sep-13	9:31:28	Transportation Boat	Travelling	90	56	50	329	36	50	22.3109	113.9621	1541.78	343.34
15-Sep-13	9:31:52	Transportation Boat	Travelling	90	59	40	306	3	30	22.3077	113.9572	1467.59	319.79
15-Sep-13	9:32:38	Transportation Boat	Travelling	91	0	50	320	50	40	22.3093	113.9604	1439.16	334.57
15-Sep-13	9:32:44	Transportation Boat	Travelling	91	3	10	301	6	40	22.3064	113.9568	1385.35	314.84
15-Sep-13	9:33:02	Transportation Boat	Travelling	91	0	40	289	32	20	22.3047	113.9547	1443.22	303.27
15-Sep-13	9:33:13	Tug Boat	Travelling	90	49	40	352	43	20	22.3134	113.9683	1768.62	6.45
15-Sep-13	9:33:18	Container Boat	Travelling	90	49	20	351	39	0	22.3136	113.9680	1780.83	5.38
15-Sep-13	9:33:34	Transportation Boat	Travelling	91	2	30	313	22	50	22.3082	113.9590	1400.41	327.11
15-Sep-13	9:33:39	Transportation Boat	Travelling	91	3	50	294	22	30	22.3052	113.9559	1370.82	308.10
15-Sep-13	9:33:44	Transportation Boat	Travelling	91	3	0	299	6	0	22.3061	113.9565	1389.18	312.83
15-Sep-13	9:34:33	Transportation Boat	Travelling	91	0	10	308	4	40	22.3079	113.9576	1455.56	321.81
15-Sep-13	9:34:59	Transportation Boat	Travelling	90	50	40	355	0	20	22.3130	113.9690	1733.31	8.74
15-Sep-13	9:35:10	Transportation Boat	Travelling	91	1	50	300	6	10	22.3064	113.9565	1415.90	313.83
15-Sep-13	9:35:14	Transportation Boat	Travelling	91	1	50	282	56	20	22.3033	113.9541	1415.91	296.67
15-Sep-13	9:35:33	Research Vessel	Travelling	91	38	0	285	14	50	22.3015	113.9588	889.91	298.98
15-Sep-13	9:36:06	Transportation Boat	Travelling	90	58	30	345	51	0	22.3111	113.9663	1497.81	359.58
15-Sep-13	9:36:14	Research Vessel	Travelling	92	5	40	306	19	0	22.3024	113.9621	693.24	320.05
15-Sep-13	9:36:26	Container Boat	Travelling	90	57	50	282	4	0	22.3036	113.9531	1515.37	295.80
15-Sep-13	9:36:34	Tug Boat	Travelling	90	44	50	3	1	20	22.3145	113.9719	1964.26	16.75
15-Sep-13	9:36:42	Container Boat	Travelling	90	45	10	2	16	0	22.3145	113.9716	1949.44	16.00
15-Sep-13	9:36:55	Transportation Boat	Travelling	91	4	0	337	13	0	22.3098	113.9643	1367.59	350.95
15-Sep-13	9:37:03	Research Vessel	Travelling	92	9	30	342	33	0	22.3037	113.9660	672.69	356.28
15-Sep-13	9:37:14	Transportation Boat	Travelling	90	56	20	283	55	10	22.3041	113.9530	1556.44	297.65
15-Sep-13	9:37:22	Transportation Boat	Travelling	90	59	0	281	44	10	22.3034	113.9534	1485.10	295.47
15-Sep-13	9:37:39	Transportation Boat	Travelling	91	1	40	303	34	0	22.3070	113.9570	1420.07	317.30
15-Sep-13	9:37:44	Transportation Boat	Travelling	90	57	40	306	17	10	22.3081	113.9569	1519.98	320.02
15-Sep-13	9:38:11	Transportation Boat	Travelling	91	10	10	321	33	10	22.3078	113.9613	1246.28	335.28
15-Sep-13	9:38:16	Transportation Boat	Travelling	91	2	50	291	31	20	22.3049	113.9553	1393.45	305.25
15-Sep-13	9:38:20	Transportation Boat	Travelling	91	0	10	298	4	50	22.3064	113.9558	1456.03	311.81
15-Sep-13	9:38:28	Transportation Boat	Travelling	91	1	20	300	23	20	22.3066	113.9564	1427.99	314.12
15-Sep-13	9:38:39	Research Vessel	Travelling	91	9	10	20	13	0	22.3071	113.9733	1264.53	33.95
15-Sep-13	9:38:51	Container Boat	Travelling	91	3	20	308	11	30	22.3074	113.9581	1382.39	321.92
15-Sep-13	9:39:35	Transportation Boat	Travelling	91	11	50	302	17	50	22.3055	113.9582	1217.23	316.03
15-Sep-13	9:39:39	Transportation Boat	Travelling	91	1	10	306	35	20	22.3075	113.9575	1432.08	320.32
15-Sep-13	9:39:44	Transportation Boat	Travelling	90	54	40	287	10	50	22.3050	113.9530	1604.99	300.91
15-Sep-13	9:39:48	Transportation Boat	Travelling	90	58	10	284	35	20	22.3041	113.9535	1506.99	298.32
15-Sep-13	9:40:23	Transportation Boat	Travelling	90	59	50	282	24	10	22.3034	113.9536	1464.51	296.13
15-Sep-13	9:40:26	Transportation Boat	Travelling	91	8	40	280	57	20	22.3024	113.9551	1274.03	294.69
15-Sep-13	9:41:03	Container Boat	Travelling	90	57	10	331	35	20	22.3110	113.9626	1533.91	345.32
15-Sep-13	9:41:14	Transportation Boat	Travelling	90	59	50	283	16	40	22.3036	113.9537	1464.62	297.01
15-Sep-13	9:41:18	Transportation Boat	Travelling	91	3	0	295	34	40	22.3055	113.9559	1390.08	309.31
15-Sep-13	9:41:22	Transportation Boat	Travelling	91	19	10	290	19	20	22.3032	113.9575	1103.71	304.05
15-Sep-13	9:41:37	Transportation Boat	Travelling	91	2	10	288	8	50	22.3043	113.9548	1408.98	301.88
15-Sep-13	9:41:54	Transportation Boat	Travelling	91	2	10	299	31	40	22.3063	113.9564	1409.02	313.26
15-Sep-13	9:42:20	Transportation Boat	Travelling	90	58	20	307	21	40	22.3081	113.9572	1502.95	321.09
15-Sep-13	9:42:24	Transportation Boat	Travelling	91	30	0	304	36	30	22.3041	113.9601	970.06	318.34
15-Sep-13	9:42:33	Transportation Boat	Travelling	91	6	10	301	22	0	22.3061	113.9573	1322.93	315.10
15-Sep-13	9:42:38	Transportation Boat	Travelling	91	3	30	293	57	40	22.3052	113.9558	1379.16	307.69
15-Sep-13	9:44:00	Transportation Boat	Travelling	91	33	40	332	26	50	22.3058	113.9642	931.99	346.18
15-Sep-13	9:44:11	Transportation Boat	Travelling	90	50	40	303	28	0	22.3091	113.9549	1734.68	317.20
15-Sep-13	9:44:26	Transportation Boat	Travelling	91	2	40	279	25	20	22.3026	113.9539	1397.94	293.15
15-Sep-13	9:44:39	Transportation Boat	Travelling	91	1	40	305	4	10	22.3072	113.9573	1420.92	318.80
15-Sep-13	9:45:17	Container Boat	Travelling	90	37	0	352	23	40	22.3191	113.9689	2395.61	6.12
15-Sep-13	9:45:23	Tug Boat	Travelling	90	59	0	351	45	0	22.3109	113.9678	1486.12	5.48
15-Sep-13	9:45:31	Container Boat	Travelling	90	58	20	350	25	40	22.3111	113.9675	1503.36	4.16
15-Sep-13	9:45:39	Transportation Boat	Travelling	91	19	20	358	26	50	22.3073	113.9687	1101.77	12.18
15-Sep-13	9:45:44	Transportation Boat	Travelling	91	1	50	294	13	40	22.3055	113.9555	1417.17	307.96
15-Sep-13	9:45:56	Tug Boat	Travelling	90	59	20	310	24	40	22.3084	113.9580	1477.72	324.14
15-Sep-13	9:47:31	Transportation Boat	Travelling	90	56	50	277	25	0	22.3026	113.9524	1543.89	291.15
15-Sep-13	9:47:39	Transportation Boat	Travelling	90	55	40	15	6	50	22.3100	113.9738	1576.77	28.84
15-Sep-13	9:47:48	Tug Boat	Travelling	90	57	0	328	15	10	22.3108	113.9618	1539.35	341.98
15-Sep-13	9:49:12	Tug Boat	Stationary	90	54	40	343	48	10	22.3121	113.9657	1606.29	357.53
15-Sep-13	9:49:20	Container Boat	Stationary	90	54	20	343	15	50	22.3121	113.9656	1616.32	356.99
15-Sep-13	9:49:27	Tug Boat	Travelling	90	50	10	340	20	30	22.3133	113.9646	1753.09	354.07
15-Sep-13	9:51:18	Tour Boat	Travelling	91	1	10	282	37	50	22.3033	113.9539	1433.50	296.36
15-Sep-13	9:51:24	Transportation Boat	Travelling	91	2	30	300	43	10	22.3065	113.9567	1402.55	314.45
15-Sep-13	9:51:34	Tug Boat	Travelling	90	39	40	349	53	50	22.3177	113.9678	2230.53	3.63
15-Sep-13	9:52:41	Transportation Boat	Travelling	90	55	0	291	0	50	22.3058	113.9536	1596.87	304.74
15-Sep-13	9:52:53	Transportation Boat	Travelling	91	1	20	283	5	10	22.3034	113.9540	1429.75	296.82
15-Sep-13	9:53:13	Fishing Boat	Non-operate and travelling	91	3	0	26	36	50	22.3072	113.9752	1391.49	40.34
15-Sep-13	9:53:36	Tour Boat	Travelling	91	5	40	307	15	40	22.3070	113.9582	1334.38	320.99
15-Sep-13	9:53:46	Transportation Boat	Travelling	91	2	30	286	49	40	22.3040	113.9546	1402.83	300.56
15-Sep-13	9:53:50	Transportation Boat	Travelling	90	49	0	284	2	40	22.3052	113.9509	1796.34	297.77
15-Sep-13	9:53:55	Transportation Boat	Travelling	91	5	20	294	5	0	22.3050	113.9561	1341.30	307.81
15-Sep-13	9:54:11	Transportation Boat	Travelling	91	2	10	284	7	10	22.3035	113.9543	1410.49	297.85
15-Sep-13	9:54:22	Tug Boat	Travelling	90	57	50	339	57	20	22.3112	113.9648	1517.69	353.69
15-Sep-13	9:55:15	Transportation Boat	Travelling	90	58	50	306	34	20	22.3079	113.9571	1491.64	320.30
15-Sep-13	9:55:19	Transportation Boat	Travelling	91	8	10	306	59	50	22.3066	113.9585	1285.10	320.73
15-Sep-13	9:55:23	Transportation Boat	Travelling	91	3	40	293	49	20	22.3052	113.9558	1377.00	307.55
15-Sep-13	9:55:41	Transportation Boat	Travelling	91	3	10	285	13	10	22.3037	113.9546	1388.07	298.95

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
15-Sep-13	9:55:49	Tug Boat	Travelling	91	0	0	325	14	20	22.3099	113.9613	1462.31	338.97
15-Sep-13	9:55:56	Tour Boat	Travelling	90	59	30	331	12	20	22.3104	113.9627	1474.78	344.94
15-Sep-13	9:56:09	Fishing Boat	Operate and stationary	91	13	30	26	48	50	22.3058	113.9739	1191.05	40.54
15-Sep-13	9:57:12	Transportation Boat	Travelling	90	59	40	306	39	40	22.3078	113.9573	1470.76	320.39
15-Sep-13	9:57:17	Transportation Boat	Travelling	90	59	0	331	15	10	22.3105	113.9627	1487.62	344.98
15-Sep-13	9:57:23	Transportation Boat	Travelling	91	9	20	296	11	10	22.3049	113.9570	1263.48	309.92
15-Sep-13	9:57:30	Tug Boat	Travelling	91	2	20	305	56	20	22.3073	113.9575	1407.07	319.67
15-Sep-13	9:57:36	Transportation Boat	Travelling	91	2	0	285	29	50	22.3038	113.9544	1414.75	299.23
15-Sep-13	9:59:00	Transportation Boat	Travelling	91	4	30	306	30	10	22.3070	113.9579	1359.42	320.23
15-Sep-13	9:59:04	Transportation Boat	Travelling	91	4	30	298	8	40	22.3058	113.9566	1359.42	311.87
15-Sep-13	9:59:11	Tug Boat	Travelling	91	0	30	286	47	40	22.3042	113.9542	1450.48	300.52
15-Sep-13	9:59:18	Tour Boat	Travelling	90	42	0	349	4	20	22.3165	113.9674	2104.45	2.80
15-Sep-13	9:59:25	Transportation Boat	Travelling	90	47	50	350	31	10	22.3142	113.9677	1841.95	4.25
15-Sep-13	10:00:03	Transportation Boat	Travelling	91	1	20	305	57	0	22.3074	113.9574	1430.62	319.68
15-Sep-13	10:04:19	Transportation Boat	Travelling	91	2	10	289	51	20	22.3046	113.9550	1411.71	303.59
15-Sep-13	10:05:56	Transportation Boat	Travelling	91	4	0	305	1	10	22.3069	113.9576	1370.97	318.75
15-Sep-13	10:06:35	Transportation Boat	Travelling	90	58	0	306	12	20	22.3081	113.9569	1514.84	319.94
15-Sep-13	10:06:53	Fishing Boat	Operate and stationary	91	30	20	8	8	20	22.3057	113.9699	968.47	21.87
15-Sep-13	10:10:36	Tug Boat	Travelling	90	55	0	337	39	0	22.3118	113.9641	1599.31	351.38
15-Sep-13	10:10:47	Tug Boat	Travelling	90	59	20	308	27	20	22.3081	113.9576	1480.85	322.19
15-Sep-13	10:11:59	Tug Boat	Travelling	91	4	10	328	5	0	22.3093	113.9622	1368.07	341.81
15-Sep-13	10:12:05	Tug Boat	Travelling	91	4	20	319	7	40	22.3085	113.9603	1364.50	332.86
15-Sep-13	10:13:59	Tug Boat	Travelling	91	3	30	293	47	50	22.3052	113.9557	1382.84	307.53
15-Sep-13	10:14:19	Tug Boat	Travelling	91	3	30	319	18	30	22.3087	113.9603	1382.88	333.04
15-Sep-13	10:14:30	Transportation Boat	Travelling	90	41	10	348	58	10	22.3170	113.9674	2151.08	2.70
15-Sep-13	10:16:00	Transportation Boat	Travelling	90	55	50	332	56	30	22.3114	113.9629	1575.79	346.67
15-Sep-13	10:16:05	Tug Boat	Travelling	91	3	10	319	11	10	22.3088	113.9602	1390.48	332.92
15-Sep-13	10:16:13	Tug Boat	Travelling	90	55	20	307	0	50	22.3087	113.9566	1590.29	320.74
15-Sep-13	10:17:47	HSF High Speed Ferry	Travelling	91	2	10	287	34	50	22.3042	113.9547	1413.33	301.31
15-Sep-13	10:18:06	Fishing Boat	Non-operate and stationary	92	3	40	352	5	0	22.3039	113.9671	707.00	5.81
15-Sep-13	10:18:25	Transportation Boat	Travelling	91	1	50	312	29	0	22.3082	113.9587	1421.12	326.21
15-Sep-13	10:18:36	Tug Boat	Stationary	90	58	0	344	38	50	22.3113	113.9660	1516.39	358.38
15-Sep-13	10:20:28	Fishing Boat	Non-operate and travelling	91	58	20	338	7	10	22.3042	113.9654	739.14	351.85
15-Sep-13	10:20:38	HSF High Speed Ferry	Travelling	90	54	40	336	14	30	22.3119	113.9637	1610.60	349.97
15-Sep-13	10:21:53	Tug Boat	Travelling	91	8	40	318	22	30	22.3078	113.9606	1278.53	332.10
15-Sep-13	10:21:59	Construction Platform	Travelling	91	8	0	319	38	30	22.3080	113.9608	1291.21	333.37
15-Sep-13	10:22:05	HSF High Speed Ferry	Travelling	90	42	10	349	25	40	22.3165	113.9675	2099.99	3.16
15-Sep-13	10:23:35	Fishing Boat	Non-operate and travelling	92	7	30	318	11	10	22.3031	113.9633	685.98	331.92
15-Sep-13	10:23:45	Tug Boat	Travelling	91	7	10	315	3	10	22.3077	113.9598	1307.60	328.78
15-Sep-13	10:23:51	Construction Platform	Travelling	91	7	30	316	16	40	22.3078	113.9601	1301.08	330.01
15-Sep-13	10:25:01	Transportation Boat	Travelling	91	6	0	303	7	50	22.3064	113.9575	1331.11	316.86
15-Sep-13	10:25:24	Fishing Boat	Non-operate and stationary	92	43	40	290	27	30	22.3003	113.9621	534.01	304.19
15-Sep-13	10:25:37	Transportation Boat	Travelling	91	7	0	290	30	10	22.3043	113.9559	1311.09	304.23
15-Sep-13	10:26:19	Transportation Boat	Travelling	91	1	0	277	41	30	22.3024	113.9533	1441.76	291.42
15-Sep-13	10:26:41	Speed Boat	Travelling	95	32	40	337	15	20	22.2999	113.9660	261.96	350.99
15-Sep-13	10:26:54	Tug Boat	Travelling	91	2	20	310	6	30	22.3079	113.9583	1410.60	323.84
15-Sep-13	10:27:02	Construction Platform	Travelling	91	3	30	310	47	20	22.3078	113.9586	1384.38	324.52
15-Sep-13	10:27:08	Tug Boat	Travelling	91	1	0	332	40	40	22.3102	113.9631	1441.86	346.41
15-Sep-13	10:27:18	Speed Boat	Travelling	93	18	40	286	33	20	22.2996	113.9627	439.72	300.29
15-Sep-13	10:27:28	Speed Boat	Travelling	92	48	50	282	12	40	22.2997	113.9619	517.71	295.94
15-Sep-13	10:29:21	Tug Boat	Travelling	90	59	30	306	25	30	22.3078	113.9572	1478.98	320.15
15-Sep-13	10:29:27	Construction Platform	Travelling	90	59	30	306	53	20	22.3079	113.9573	1478.99	320.62
15-Sep-13	10:29:34	Tug Boat	Travelling	90	46	0	344	39	0	22.3149	113.9659	1921.98	358.38
15-Sep-13	10:30:16	Fishing Boat	Operate and stationary	92	37	50	307	15	50	22.3015	113.9630	554.04	320.99
15-Sep-13	10:32:18	Tug Boat	Travelling	90	35	30	352	17	20	22.3201	113.9690	2510.92	6.02
15-Sep-13	10:32:25	Transportation Boat	Travelling	90	59	30	288	5	40	22.3046	113.9542	1479.37	301.82
15-Sep-13	10:33:59	Transportation Boat	Travelling	91	1	50	305	35	30	22.3073	113.9574	1423.00	319.32
15-Sep-13	10:35:03	Fishing Boat	Non-operate and travelling	91	49	50	310	53	50	22.3035	113.9619	797.59	324.63
15-Sep-13	10:37:23	Fishing Boat	Non-operate and stationary	91	57	20	315	5	30	22.3034	113.9626	746.54	328.82
15-Sep-13	10:37:41	Construction Boat	Travelling	91	0	0	309	2	0	22.3081	113.9578	1467.53	322.76
15-Sep-13	10:37:49	Transportation Boat	Travelling	90	55	0	305	12	20	22.3085	113.9562	1603.02	318.94
15-Sep-13	10:38:48	Construction Boat	Travelling	91	2	50	318	23	50	22.3088	113.9600	1400.65	332.13
15-Sep-13	10:38:56	Transportation Boat	Travelling	91	3	10	303	15	20	22.3068	113.9572	1393.18	316.99
15-Sep-13	10:40:16	Construction Boat	Travelling	90	57	10	331	20	30	22.3110	113.9625	1541.66	345.07
15-Sep-13	10:40:21	Transportation Boat	Travelling	91	4	10	290	47	50	22.3046	113.9554	1371.37	304.53
15-Sep-13	10:44:19	Container Boat	Travelling	91	2	0	307	13	50	22.3075	113.9577	1420.37	320.96
15-Sep-13	10:44:28	Construction Boat	Travelling	90	39	20	351	59	40	22.3179	113.9686	2260.27	5.72
15-Sep-13	10:46:07	HSF High Speed Ferry	Travelling	90	44	40	347	10	50	22.3155	113.9667	1983.54	0.91
15-Sep-13	10:46:14	Container Boat	Travelling	91	15	0	311	43	30	22.3063	113.9599	1171.99	325.45
15-Sep-13	10:46:49	Fishing Boat	Non-operate and travelling	92	35	40	321	22	30	22.3022	113.9641	562.56	335.10
15-Sep-13	10:47:46	HSF High Speed Ferry	Travelling	90	57	50	330	26	40	22.3108	113.9624	1524.60	344.17
15-Sep-13	10:47:57	Container Boat	Stationary	91	16	30	312	31	10	22.3062	113.9602	1148.98	326.25
15-Sep-13	10:48:15	Fishing Boat	Operate and stationary	93	49	10	321	46	0	22.3007	113.9649	381.67	335.50
15-Sep-13	10:48:41	HSF High Speed Ferry	Travelling	91	3	10	316	28	50	22.3085	113.9597	1394.33	330.21
15-Sep-13	10:50:39	HSF High Speed Ferry	Travelling	90	59	30	283	30	0	22.3037	113.9536	1481.66	297.23
15-Sep-13	10:54:37	Transportation Boat	Travelling	91	2	50	298	14	0	22.3061	113.9563	1402.53	311.96
15-Sep-13	10:57:34	Fishing Boat	Operate and stationary	92	45	20	350	10	50	22.3024	113.9668	530.05	3.91
15-Sep-13	11:00:35	Transportation Boat	Travelling	90	51	10	340	16	40	22.3131	113.9646	1728.63	354.01
15-Sep-13	11:01:19	Transportation Boat	Travelling	90	56	10	333	23	0	22.3114	113.9630	1572.34	347.11
15-Sep-13	11:02:28	Government Boat	Travelling	90	42	30	1	5	10	22.3158	113.9716	2090.28	14.82
15-Sep-13	11:04:19	Transportation Boat	Travelling	91	4	40	292	50	40	22.3049	113.9557	1363.41	306.57
15-Sep-13	11:04:24	Government Boat	Travelling	90	53	0	336	23	50	22.3124	113.9636	1668.31	350.13
15-Sep-13	11:04:36	Dumping Guide Boat	Travelling	90	46	30	343	45	50	22.3148	113.9656	1906.52	357.49
15-Sep-13	11:05:17	Transportation Boat	Travelling	91	1	10	280	24	30	22.3029	113.9536	1442.54	294.14
15-Sep-13	11:05:25	Government Boat	Travelling	91	1	30	320	14	0	22.3092	113.9603	1434.64	333.96
15-Sep-13	11:05:31	Dumping Guide Boat	Travelling	90	53	50	337	1	20	22.3122	113.9638	1642.20	350.75
15-Sep-13	11:06:29	Government Boat	Travelling	91	5	0	298	10	40	22.3058	113.9566	1356.59	311.91
15-Sep-13	11:07:18	Dumping Guide Boat	Travelling	91	3	0	317	56	50	22.3087	113.9599	1400.27	331.68
15-Sep-13	11:10:18	Dumping Guide Boat	Travelling	90	59	20	280	57	10	22.3032	113.9532	1488.35	294.68
15-Sep-13	11:11:00	Container Boat	Stationary	91	16	20	312	57	30	22.3063	113.9602	1153.76	326.69
15-Sep-13	11:11:24	Fishing Boat	Operate and stationary	92	27	40	316	48	0	22.3023	113.9636	594.38	330.53
15-Sep-13	11:13:13	Tug Boat	Travelling	91	7	30	309	44	50	22.3071	113.9588	1306.53	323.48
15-Sep-13	11:13:59	Fishing Boat	Non-operate and travelling	92	0	30	299	44	20	22.3021	113.9613	729.08	313.47
15-Sep-13	11:14:43	Fishing Boat	Non-operate and travelling	91	24	40	278	6	0	22.3011	113.9570	1039.68	291.83
15-Sep-13	11:15:20	Tug Boat	Travelling	90	52	20	351	20	40	22.3128	113.9679	1691.51	5.07
15-Sep-13	11:15:29	Container Boat	Travelling	90	52	20	350	19	10	22.3128	113.9676	1691.53	4.05
15-Sep-13	11:16:48	Tug Boat	Travelling	90	50	30	356	9	0	22.3132	113.9693	1754.30	9.88
15-Sep-13	11:16:53	Container Boat	Travelling	90	50	40	354	59	50	22.3132	113.9690	1748.43	8.73
15-Sep-13	11:17:33	Tug Boat	Travelling	91	16	30	321	35	50	22.3070	113.9617	1151.86	335.33
15-Sep-13	11:19:36	Tug Boat	Travelling	90	59	0	337	50	20	22.3110	113.9643	1498.06	351.57
15-Sep-13	11:19:42	Tug Boat	Travelling	90	47	10	5	25	20	22.3136	113.9724	1881.39	19.15
15-Sep-13	11:19:48	Container Boat	Travelling	90	47	10	4	31	50	22.3137	113.9721	1881.41	18.26
15-Sep-13	11:19:59	Transportation Boat	Travelling	91	0	0	283	41	50	22.3037	113.9537	1472.80	297.43
15-Sep-13	11:21:55	Transportation Boat	Travelling	90	52	50	306	46	0	22.3093	113.9560	1676.16	320.50
15-Sep-13	11:22:01	Tug Boat	Travelling	90	44	10	347	36	20	22.3157	113.9669	2012.71	1.34
15-Sep-13	11:22:11	Tug Boat	Travelling	90	44	10	11	9	10	22.3141	113.9746	2012.74	24.88
15-Sep-13	11:22:15	Container Boat	Travelling	90	44	10	9	1	0	22.3143	113.9740	2012.75	22.75
15-Sep-13	11:22:25	Transportation Boat	Travelling	91	4	40	297	25	0	22.3057	113.9564	1365.50	311.15
15-Sep-13	11:24:11	Transportation Boat	Travelling	91	2	40	283	16	50	22.3034	113.9542	1409.83	297.01
15-Sep-13	11:26:47	Transportation Boat	Travelling	90	58	40	281	54	0	22.3035	113.9532	1507.61	295.63
15-Sep-13	11:27:45	Transportation Boat	Travelling	91	1	20	294	10	0	22.3056	113.9553	1441.31	307.90
15-Sep-13	11:29:02	Transportation Boat	Travelling	90	58	20	307	12	20	22.3082	113.9571	1516.64	320.94
15-Sep-13	11:29:16	Tug Boat	Travelling	90	48	50	4	31	0	22.3132	113.9719	1817.31	18.25
15-Sep-13	11:29:19	Container Boat	Travelling	90	53	10	3	35	40	22.3119	113.9712	1666.51	17.32
15-Sep-13	11:30:59	Transportation Boat	Travelling	91	4	0	302	8	40	22.3065	113.9570	1380.89	315.87
15-Sep-13	11:33:06	Transportation Boat	Travelling	91	2	30	286	26	40	22.3040	113.9545	1414.70	300.17
15-Sep-13	11:35:41	Transportation Boat	Travelling	91	0	0	307	34	10	22.3080	113.9574	1474.75	321.30

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
15-Sep-13	11:37:10	Transportation Boat	Travelling	91	4	30	293	5	50	22.3050	113.9557	1370.78	306.83
15-Sep-13	11:38:32	Transportation Boat	Travelling	91	1	10	278	52	40	22.3026	113.9534	1446.60	292.61
15-Sep-13	11:39:39	Transportation Boat	Travelling	91	4	20	300	41	30	22.3063	113.9568	1374.66	314.42
15-Sep-13	11:40:27	Transportation Boat	Travelling	91	3	10	288	25	20	22.3043	113.9549	1400.45	302.15
15-Sep-13	11:41:18	Transportation Boat	Travelling	90	58	50	277	2	30	22.3024	113.9527	1505.12	290.77
15-Sep-13	11:44:38	Transportation Boat	Travelling	91	4	10	304	4	30	22.3068	113.9574	1378.85	317.80
15-Sep-13	11:46:06	Transportation Boat	Travelling	91	3	40	295	24	0	22.3055	113.9559	1389.98	309.13
15-Sep-13	11:47:47	Transportation Boat	Travelling	91	1	0	286	9	50	22.3041	113.9542	1451.74	299.89
15-Sep-13	11:48:26	Fishing Boat	Non-operate and stationary	96	12	0	332	57	20	22.2997	113.9659	235.68	346.69
15-Sep-13	11:48:54	Fishing Boat	Non-operate and stationary	96	8	10	333	2	30	22.2997	113.9659	238.16	346.77
15-Sep-13	11:49:05	Transportation Boat	Travelling	90	58	0	280	0	50	22.3032	113.9528	1528.07	293.74
15-Sep-13	11:50:12	Transportation Boat	Travelling	91	2	20	305	42	20	22.3073	113.9574	1420.58	319.44
15-Sep-13	11:50:20	Transportation Boat	Travelling	90	59	20	307	16	30	22.3081	113.9573	1493.40	321.00
15-Sep-13	11:50:56	Transportation Boat	Travelling	91	4	0	301	15	20	22.3064	113.9569	1383.22	314.99
15-Sep-13	11:51:01	Transportation Boat	Travelling	91	6	40	310	31	40	22.3073	113.9589	1327.27	324.26
15-Sep-13	11:51:39	Fishing Boat	Operate and travelling	95	54	50	313	2	10	22.2995	113.9651	247.24	326.77
15-Sep-13	11:52:24	Transportation Boat	Stationary	91	21	10	313	28	10	22.3059	113.9607	1088.30	327.20
15-Sep-13	11:52:30	Transportation Boat	Travelling	91	3	30	290	19	50	22.3046	113.9552	1394.43	304.06
15-Sep-13	11:53:33	Transportation Boat	Travelling	91	23	10	308	15	50	22.3052	113.9600	1062.04	321.99
15-Sep-13	11:53:41	Transportation Boat	Travelling	91	2	0	282	20	10	22.3033	113.9539	1428.73	296.07
15-Sep-13	11:53:52	Fishing Boat	Operate and travelling	94	4	50	308	30	20	22.3002	113.9643	359.13	322.24
15-Sep-13	11:55:19	Transportation Boat	Travelling	91	11	20	286	57	30	22.3033	113.9560	1240.02	300.69
15-Sep-13	11:55:27	Transportation Boat	Travelling	90	57	50	283	26	10	22.3039	113.9531	1533.36	297.17
15-Sep-13	11:56:28	Transportation Boat	Travelling	90	57	20	330	7	0	22.3110	113.9622	1547.06	343.85
15-Sep-13	11:56:33	Transportation Boat	Travelling	91	1	50	295	23	40	22.3058	113.9556	1432.98	309.12
15-Sep-13	11:56:41	Fishing Boat	Operate and travelling	93	10	40	307	18	50	22.3009	113.9636	461.69	321.04
15-Sep-13	11:57:26	Transportation Boat	Travelling	91	2	30	305	38	20	22.3073	113.9574	1417.61	319.37
15-Sep-13	11:57:29	Transportation Boat	Travelling	91	2	10	315	56	20	22.3087	113.9594	1425.31	329.67
15-Sep-13	11:58:03	Transportation Boat	Travelling	90	56	10	306	29	50	22.3085	113.9566	1579.91	320.23
15-Sep-13	11:58:14	Fishing Boat	Operate and travelling	92	51	50	285	32	10	22.2999	113.9621	512.54	299.27
15-Sep-13	11:58:27	Transportation Boat	Travelling	91	4	20	300	59	10	22.3063	113.9569	1376.84	314.72
15-Sep-13	12:03:23	Transportation Boat	Travelling	91	38	40	287	6	10	22.3015	113.9594	840.88	300.83
15-Sep-13	12:04:11	Speed Boat	Travelling	90	56	50	287	16	40	22.3044	113.9542	1467.06	301.01
15-Sep-13	12:04:26	Speed Boat	Travelling	91	0	40	292	18	40	22.3049	113.9556	1373.19	306.04
15-Sep-13	12:04:58	Speed Boat	Travelling	91	4	30	304	15	30	22.3062	113.9580	1290.70	317.99
15-Sep-13	12:05:35	Transportation Boat	Travelling	92	8	30	311	15	20	22.3024	113.9628	645.05	324.99
15-Sep-13	12:06:37	Speed Boat	Travelling	90	53	40	339	40	10	22.3115	113.9647	1555.32	353.40
15-Sep-13	12:06:44	Transportation Boat	Travelling	92	12	40	328	51	50	22.3030	113.9646	624.78	342.59
15-Sep-13	12:07:16	Speed Boat	Travelling	90	46	10	347	54	0	22.3139	113.9669	1813.21	1.63
15-Sep-13	12:07:22	Tour Boat	Travelling	90	41	30	349	50	50	22.3158	113.9676	2022.36	3.58
15-Sep-13	12:08:35	Transportation Boat	Travelling	91	55	40	354	11	30	22.3040	113.9674	717.10	7.92
15-Sep-13	12:08:51	Tour Boat	Travelling	90	48	30	343	48	30	22.3131	113.9657	1724.46	357.54
15-Sep-13	12:11:29	Transportation Boat	Travelling	91	18	10	17	18	20	22.3058	113.9717	1063.75	31.04
15-Sep-13	12:11:38	Tour Boat	Travelling	90	59	50	324	8	40	22.3092	113.9613	1393.46	337.87
15-Sep-13	12:11:46	Transportation Boat	Travelling	91	2	40	290	17	40	22.3043	113.9557	1329.71	304.02
15-Sep-13	12:12:31	HSF High Speed Ferry	Travelling	91	0	40	284	18	10	22.3034	113.9546	1374.19	298.03
15-Sep-13	12:12:41	Transportation Boat	Travelling	91	5	0	300	45	30	22.3057	113.9575	1281.55	314.49
15-Sep-13	12:13:01	HSF High Speed Ferry	Travelling	91	4	50	291	43	10	22.3043	113.9562	1284.92	305.45
15-Sep-13	12:13:07	Tour Boat	Travelling	91	4	30	309	35	0	22.3069	113.9589	1291.65	323.31
15-Sep-13	12:13:19	Transportation Boat	Travelling	91	2	10	306	33	20	22.3069	113.9581	1340.72	320.29
15-Sep-13	12:14:39	Tour Boat	Travelling	91	3	40	294	0	20	22.3048	113.9563	1308.92	307.74
15-Sep-13	12:14:44	HSF High Speed Ferry	Travelling	91	4	0	320	14	50	22.3081	113.9608	1302.04	333.98
15-Sep-13	12:17:11	HSF High Speed Ferry	Travelling	90	45	0	347	35	30	22.3144	113.9668	1862.94	1.32
15-Sep-13	12:17:29	Speed Boat	Travelling	92	0	20	304	52	50	22.3023	113.9620	689.73	318.61
15-Sep-13	12:17:38	Transportation Boat	Travelling	91	0	50	305	58	20	22.3070	113.9578	1371.00	319.70
15-Sep-13	12:17:57	Transportation Boat	Travelling	91	3	50	282	25	10	22.3028	113.9550	1305.85	296.15
15-Sep-13	12:18:06	Transportation Boat	Travelling	91	10	50	304	38	50	22.3055	113.9588	1175.56	318.38
15-Sep-13	12:19:02	Transportation Boat	Travelling	91	15	20	282	32	30	22.3020	113.9568	1104.83	296.27
15-Sep-13	12:19:05	Transportation Boat	Travelling	91	10	20	295	51	10	22.3044	113.9575	1184.10	309.58
15-Sep-13	12:19:59	Transportation Boat	Travelling	91	4	20	305	34	30	22.3065	113.9582	1295.83	319.30
15-Sep-13	12:20:11	Speed Boat	Travelling	91	52	30	330	13	50	22.3040	113.9644	738.14	343.96
15-Sep-13	12:21:24	Transportation Boat	Travelling	91	5	10	325	19	50	22.3084	113.9620	1279.24	339.06
15-Sep-13	12:21:35	Transportation Boat	Travelling	91	2	0	290	58	30	22.3045	113.9556	1345.36	304.70
15-Sep-13	12:23:01	Transportation Boat	Travelling	90	53	40	339	53	10	22.3115	113.9647	1557.61	353.62
15-Sep-13	12:23:07	Transportation Boat	Travelling	90	54	50	279	5	20	22.3029	113.9527	1523.97	292.82
15-Sep-13	12:23:15	Speed Boat	Travelling	91	26	20	349	50	20	22.3063	113.9670	963.46	3.57
15-Sep-13	12:27:21	Transportation Boat	Travelling	91	9	40	298	11	20	22.3048	113.9577	1196.42	311.92
15-Sep-13	12:28:50	Transportation Boat	Travelling	91	11	40	325	36	20	22.3074	113.9624	1162.88	339.34
15-Sep-13	12:31:23	Transportation Boat	Travelling	90	52	0	0	51	40	22.3116	113.9703	1609.58	14.59
15-Sep-13	12:31:32	Transportation Boat	Travelling	91	4	50	303	6	20	22.3061	113.9578	1287.05	316.84
15-Sep-13	12:32:51	Transportation Boat	Travelling	91	4	40	302	57	20	22.3061	113.9578	1290.56	316.69
15-Sep-13	12:32:56	Transportation Boat	Travelling	91	3	10	286	19	30	22.3036	113.9553	1321.57	300.05
15-Sep-13	12:33:33	Transportation Boat	Travelling	91	0	50	279	43	0	22.3025	113.9541	1372.96	293.45
15-Sep-13	12:33:39	Transportation Boat	Travelling	91	6	0	296	1	30	22.3049	113.9569	1264.29	309.75
15-Sep-13	12:36:11	Other	Stationary	94	35	0	0	0	0	22.3003	113.9671	301.41	13.73
15-Sep-13	12:36:19	Transportation Boat	Travelling	91	4	50	299	51	10	22.3056	113.9573	1287.60	313.58
15-Sep-13	12:36:38	Tug Boat	Travelling	91	1	0	349	25	0	22.3099	113.9671	1369.54	3.15
15-Sep-13	12:37:54	Transportation Boat	Travelling	90	59	50	282	28	0	22.3032	113.9542	1396.74	296.20
15-Sep-13	12:38:02	Tug Boat	Stationary	90	56	20	342	3	30	22.3109	113.9653	1484.77	355.79
15-Sep-13	12:41:11	Tug Boat	Travelling	90	54	10	347	18	0	22.3115	113.9667	1545.52	1.03
15-Sep-13	12:41:15	Container Boat	Travelling	90	54	10	346	1	50	22.3115	113.9663	1545.53	359.76
15-Sep-13	12:41:25	Dumping Guide Boat	Travelling	90	55	30	352	3	50	22.3111	113.9679	1507.85	5.79
15-Sep-13	12:43:09	Tug Boat	Travelling	90	52	10	354	4	50	22.3119	113.9685	1606.04	7.81
15-Sep-13	12:43:14	Container Boat	Travelling	90	52	30	353	3	40	22.3119	113.9682	1595.69	6.79
15-Sep-13	12:43:19	Dumping Guide Boat	Stationary	90	56	40	346	44	50	22.3109	113.9665	1476.61	0.48
15-Sep-13	12:46:42	HSF High Speed Ferry	Travelling	90	48	40	342	30	50	22.3131	113.9653	1724.29	356.24
15-Sep-13	12:46:53	Transportation Boat	Travelling	91	6	40	297	54	50	22.3051	113.9573	1253.00	311.64
15-Sep-13	12:48:18	HSF High Speed Ferry	Travelling	91	0	30	324	37	50	22.3092	113.9614	1382.44	338.36
15-Sep-13	12:48:24	Transportation Boat	Travelling	90	59	10	306	46	50	22.3074	113.9577	1414.01	320.51
15-Sep-13	12:49:58	HSF High Speed Ferry	Travelling	91	4	10	297	17	10	22.3053	113.9568	1302.72	311.02
15-Sep-13	12:52:04	Transportation Boat	Travelling	91	2	0	287	59	30	22.3040	113.9552	1349.04	301.72
15-Sep-13	12:53:48	Transportation Boat	Travelling	91	2	40	305	57	30	22.3068	113.9580	1334.72	319.69
15-Sep-13	12:57:17	HSF High Speed Ferry	Travelling	90	50	20	342	52	50	22.3126	113.9654	1667.70	356.61
15-Sep-13	12:59:14	HSF High Speed Ferry	Travelling	91	2	50	317	20	40	22.3081	113.9601	1331.78	331.07
15-Sep-13	13:01:33	HSF High Speed Ferry	Travelling	90	58	30	279	2	0	22.3029	113.9527	1524.09	292.76
15-Sep-13	13:10:25	Other	Stationary	94	39	30	0	0	0	22.3004	113.9671	316.42	13.73
15-Sep-13	13:21:58	Transportation Boat	Travelling	91	7	30	294	9	0	22.3049	113.9563	1318.37	307.88
15-Sep-13	13:23:14	Transportation Boat	Travelling	90	57	50	278	20	0	22.3028	113.9525	1541.58	292.06
15-Sep-13	13:23:48	Transportation Boat	Travelling	91	3	10	295	55	40	22.3057	113.9558	1409.65	309.66
15-Sep-13	13:24:18	Tour Boat	Travelling	91	3	20	284	17	40	22.3036	113.9543	1405.83	298.02
15-Sep-13	13:24:23	Transportation Boat	Travelling	91	7	0	287	51	20	22.3039	113.9554	1328.01	301.59
15-Sep-13	13:24:28	Transportation Boat	Travelling	91	4	30	300	29	0	22.3063	113.9568	1380.07	314.21
15-Sep-13	13:25:37	Transportation Boat	Travelling	91	6	50	300	41	40	22.3060	113.9572	1331.20	314.42
15-Sep-13	13:25:41	Transportation Boat	Travelling	91	0	30	306	27	40	22.3078	113.9572	1472.34	320.19
15-Sep-13	13:25:55	Tour Boat	Travelling	91	6	50	300	1	0	22.3059	113.9570	1331.15	313.75
15-Sep-13	13:27:15	Transportation Boat	Travelling	90	54	20	306	46	50	22.3090	113.9562	1641.85	320.51
15-Sep-13	13:28:04	Tour Boat	Travelling	91	4	10	321	22	30	22.3089	113.9607	1386.84	335.10
15-Sep-13	13:30:03	Government Boat	Travelling	91	30	20	289	40	10	22.3025	113.9584	981.95	303.40
15-Sep-13	13:30:09	Transportation boat	Travelling	91	5	20	301	8	20	22.3063	113.9570	1361.50	314.87
15-Sep-13	13:30:54	Government Boat	Travelling	91	50	30	328	40	40	22.3045	113.9640	801.80	342.41
15-Sep-13	13:31:08	Tour Boat	Travelling	90	49	50	343	26	30	22.3137	113.9655	1792.26	357.17
15-Sep-13	13:31:17	Transportation Boat	Travelling	91	5	10	291	12	10	22.3047	113.9555	1364.88	304.93
15-Sep-13	13:31:26	Government Boat	Travelling	91	32	20	352	24	30	22.3062	113.9674	960.42	6.14
15-Sep-13	13:32:05	Government Boat	Travelling	91	10	50	11	57	30	22.3078	113.9717	1254.46	25.69
15-Sep-13	13:32:16	Transportation Boat	Travelling	91	3	0	283	9	0	22.3034	113.9541	1412.26	296.88
15-Sep-13	13:46:39	Transportation Boat	Travelling	91	6	50	290	22	0	22.3043	113.9557	1328.46	304.10
15-Sep-13	13:46:46	Transportation Boat	Travelling	91	4	30	285	45	50	22.3037	113.9547	1377.07	299.49

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
15-Sep-13	13:47:13	Transportation Boat	Travelling	91	10	0	301	36	20	22.3057	113.9577	1267.67	315.34
15-Sep-13	13:47:16	Transportation Boat	Travelling	91	7	10	290	48	40	22.3044	113.9558	1321.71	304.54
15-Sep-13	13:47:28	Transportation Boat	Travelling	91	4	30	303	36	20	22.3067	113.9573	1376.97	317.34
15-Sep-13	13:47:49	Transportation Boat	Travelling	91	1	20	306	36	30	22.3077	113.9574	1448.92	320.34
15-Sep-13	13:47:55	Transportation Boat	Travelling	91	9	50	297	48	40	22.3052	113.9571	1270.64	311.54
15-Sep-13	13:48:13	Transportation Boat	Travelling	90	56	40	304	40	10	22.3082	113.9563	1569.95	318.40
15-Sep-13	13:48:28	Transportation Boat	Travelling	91	11	40	304	20	20	22.3059	113.9584	1237.75	318.07
15-Sep-13	13:48:32	Transportation Boat	Travelling	91	3	0	297	56	50	22.3061	113.9562	1410.01	311.68
15-Sep-13	13:50:45	Transportation Boat	Travelling	91	9	10	331	39	20	22.3088	113.9633	1282.66	345.39
15-Sep-13	13:50:50	Transportation Boat	Travelling	90	58	40	286	40	10	22.3045	113.9537	1515.26	300.40
15-Sep-13	13:50:54	Transportation Boat	Travelling	91	2	50	283	52	10	22.3035	113.9542	1413.47	297.60
15-Sep-13	13:52:07	Transportation Boat	Travelling	91	4	50	346	19	30	22.3099	113.9664	1369.18	0.05
15-Sep-13	13:52:11	Transportation Boat	Travelling	91	4	50	294	11	30	22.3052	113.9559	1369.17	307.92
15-Sep-13	13:53:20	Transportation Boat	Travelling	90	56	20	354	27	20	22.3117	113.9686	1578.59	8.19
15-Sep-13	13:53:28	Transportation Boat	Travelling	91	3	50	304	43	50	22.3070	113.9574	1390.71	318.46
15-Sep-13	13:57:45	Transportation Boat	Travelling	90	59	10	289	7	20	22.3049	113.9541	1501.26	302.85
15-Sep-13	13:57:50	Transportation Boat	Travelling	91	5	10	292	26	40	22.3049	113.9557	1361.34	306.17
15-Sep-13	13:58:15	Container Boat	Travelling	90	58	30	357	13	20	22.3110	113.9692	1518.54	10.95
15-Sep-13	13:58:23	Transportation Boat	Travelling	91	5	10	297	3	0	22.3056	113.9564	1361.26	310.78
15-Sep-13	13:58:27	Transportation Boat	Travelling	91	3	10	297	59	0	22.3060	113.9562	1404.88	311.71
15-Sep-13	13:58:55	Transportation Boat	Travelling	91	5	10	304	19	30	22.3067	113.9575	1361.19	318.05
15-Sep-13	13:58:58	Transportation Boat	Travelling	91	4	10	301	52	50	22.3065	113.9570	1382.65	315.61
15-Sep-13	13:59:39	Transportation Boat	Travelling	90	55	0	305	54	30	22.3087	113.9562	1616.47	319.64
15-Sep-13	13:59:42	Transportation Boat	Travelling	91	2	0	306	31	40	22.3075	113.9575	1431.48	320.26
15-Sep-13	13:59:47	Container Boat	Travelling	91	2	0	348	59	50	22.3105	113.9671	1431.46	2.73
16-Sep-13	8:02:51	Other	Stationary	94	24	25	0	0	0	22.3004	113.9671	316.03	13.73
16-Sep-13	8:04:55	Other	Stationary	90	32	0	279	23	15	22.3071	113.9425	2676.93	293.12
16-Sep-13	8:04:59	Other	Stationary	90	31	20	286	54	25	22.3102	113.9435	2736.71	300.64
16-Sep-13	8:05:07	Other	Stationary	90	47	50	299	9	55	22.3084	113.9538	1768.05	312.90
16-Sep-13	8:05:12	Other	Stationary	90	53	10	302	40	40	22.3080	113.9558	1587.61	316.41
16-Sep-13	8:05:15	Other	Stationary	90	56	35	304	42	35	22.3077	113.9568	1490.32	318.44
16-Sep-13	8:05:21	Other	Stationary	90	53	0	310	19	20	22.3092	113.9573	1592.73	324.05
16-Sep-13	8:05:25	Other	Stationary	90	56	10	314	12	10	22.3091	113.9586	1501.58	327.93
16-Sep-13	8:05:28	Other	Stationary	90	54	55	320	11	5	22.3100	113.9598	1536.30	333.91
16-Sep-13	8:05:32	Other	Stationary	90	53	5	325	38	10	22.3110	113.9609	1590.24	339.37
16-Sep-13	8:05:36	Other	Stationary	90	50	20	330	12	55	22.3121	113.9619	1678.71	343.95
16-Sep-13	8:05:40	Other	Stationary	90	50	0	333	8	50	22.3124	113.9627	1690.13	346.88
16-Sep-13	8:05:45	Other	Stationary	90	47	40	336	0	20	22.3133	113.9633	1774.55	349.74
16-Sep-13	8:05:49	Other	Stationary	90	44	5	338	47	15	22.3148	113.9640	1922.18	352.52
16-Sep-13	8:06:14	Other	Stationary	90	34	45	349	21	15	22.3197	113.9677	2456.85	3.08
16-Sep-13	8:06:23	Other	Stationary	90	29	5	352	14	5	22.3241	113.9694	2960.99	5.96
16-Sep-13	8:06:38	Other	Stationary	90	57	15	304	59	30	22.3076	113.9569	1473.07	318.72
16-Sep-13	8:06:54	Other	Stationary	90	48	40	307	59	15	22.3099	113.9559	1737.71	321.72
16-Sep-13	8:07:38	Other	Stationary	90	28	55	348	26	50	22.3244	113.9675	2979.72	2.18
16-Sep-13	8:08:11	Other	Stationary	90	29	20	352	28	45	22.3239	113.9695	2935.24	6.21
16-Sep-13	8:09:03	Other	Stationary	91	9	5	323	30	55	22.3077	113.9618	1218.52	337.25
16-Sep-13	8:09:19	Other	Stationary	90	35	5	355	13	30	22.3193	113.9701	2433.91	8.95
16-Sep-13	8:09:26	Other	Stationary	90	37	10	356	41	0	22.3179	113.9704	2292.67	10.41
16-Sep-13	8:09:32	Other	Stationary	90	31	25	357	0	30	22.3218	113.9714	2731.28	10.74
16-Sep-13	8:09:36	Other	Stationary	90	32	45	357	49	35	22.3207	113.9715	2614.98	11.56
16-Sep-13	8:09:40	Other	Stationary	90	31	15	359	20	40	22.3217	113.9724	2746.64	13.07
16-Sep-13	8:09:59	Other	Stationary	90	53	5	343	32	25	22.3119	113.9657	1591.47	357.27
16-Sep-13	8:10:04	Other	Stationary	90	57	50	0	43	55	22.3103	113.9699	1458.87	14.46
16-Sep-13	8:10:28	Other	Stationary	90	44	25	10	1	25	22.3133	113.9739	1908.95	23.75
16-Sep-13	8:10:32	Other	Stationary	90	40	5	13	17	30	22.3146	113.9758	2121.13	27.02
16-Sep-13	8:10:45	Other	Stationary	90	29	50	11	17	0	22.3211	113.9783	2884.61	25.01
16-Sep-13	8:10:57	Transportation Boat	Travelling	90	55	55	286	8	25	22.3044	113.9537	1509.84	299.87
16-Sep-13	8:11:04	HSF High Speed Ferry	Travelling	90	48	15	339	35	25	22.3133	113.9644	1754.29	353.32
16-Sep-13	8:11:12	Transportation boat	Travelling	90	42	25	344	47	15	22.3156	113.9659	2001.52	358.52
16-Sep-13	8:11:21	Transportation Boat		91	1	20	305	20	30	22.3070	113.9576	1374.86	319.07
16-Sep-13	8:11:28	Construction Boat	Travelling	91	3	55	305	11	35	22.3066	113.9580	1318.67	318.92
16-Sep-13	8:11:36	Fishing Boat	Operate and travelling	90	57	25	293	35	15	22.3056	113.9550	1469.99	307.32
16-Sep-13	8:11:51	Transportation Boat	Travelling	90	45	30	341	12	25	22.3143	113.9648	1862.91	354.94
16-Sep-13	8:11:58	Transportation Boat	Travelling	90	48	25	338	49	15	22.3132	113.9642	1748.40	352.55
16-Sep-13	8:12:07	HSF High Speed Ferry	Travelling	90	43	45	345	5	10	22.3151	113.9660	1939.31	358.82
16-Sep-13	8:12:16	Transportation Boat	Travelling	90	58	30	288	5	10	22.3045	113.9545	1442.57	301.82
16-Sep-13	8:12:23	Fishing Boat	Non-operate and travelling	90	59	10	303	7	10	22.3070	113.9569	1426.12	316.85
16-Sep-13	8:12:32	HSF High Speed Ferry	Travelling	90	58	30	319	48	10	22.3092	113.9601	1442.63	333.53
16-Sep-13	8:12:44	Construction Boat	Travelling	91	2	40	294	30	35	22.3051	113.9561	1345.58	308.24
16-Sep-13	8:12:50	Transportation Boat	Travelling	90	54	45	278	50	40	22.3029	113.9525	1543.02	292.57
16-Sep-13	8:13:21	Transportation Boat	Travelling	91	2	15	287	45	20	22.3040	113.9552	1354.84	301.49
16-Sep-13	8:13:27	Transportation Boat	Travelling	90	53	30	329	50	20	22.3113	113.9621	1579.82	343.57
16-Sep-13	8:13:35	Transportation Boat	Travelling	90	55	10	330	17	30	22.3109	113.9623	1531.38	344.02
16-Sep-13	8:13:42	HSF High Speed Ferry	Travelling	90	52	50	332	2	40	22.3116	113.9626	1600.16	345.77
16-Sep-13	8:13:49	HSF High Speed Ferry	Travelling	91	0	25	296	49	25	22.3058	113.9561	1396.58	310.55
16-Sep-13	8:14:00	Construction Boat	Travelling	90	58	45	285	14	10	22.3039	113.9542	1436.78	298.97
16-Sep-13	8:14:12	Transportation Boat	Travelling	90	54	40	281	43	35	22.3036	113.9528	1545.77	295.46
16-Sep-13	8:14:17	Transportation Boat	Travelling	90	54	5	281	35	20	22.3036	113.9527	1562.73	295.32
16-Sep-13	8:14:25	Transportation Boat	Travelling	90	58	20	281	41	35	22.3032	113.9537	1447.28	295.42
16-Sep-13	8:14:55	Transportation Boat	Travelling	90	58	45	315	17	20	22.3087	113.9592	1437.00	329.02
16-Sep-13	8:14:59	Transportation Boat	Travelling	90	59	5	320	17	35	22.3092	113.9603	1428.80	334.02
16-Sep-13	8:15:05	Transportation Boat	Travelling	91	3	45	302	40	5	22.3062	113.9575	1322.98	316.40
16-Sep-13	8:15:12	Transportation Boat	Travelling	90	59	10	296	27	50	22.3059	113.9558	1426.82	310.19
16-Sep-13	8:15:17	Transportation Boat	Travelling	90	57	35	289	22	55	22.3048	113.9545	1466.62	303.11
16-Sep-13	8:15:24	Speed Boat	Travelling	91	8	0	286	19	10	22.3032	113.9560	1239.49	300.05
16-Sep-13	8:15:36	HSF High Speed Ferry	Travelling	90	59	30	310	20	50	22.3080	113.9583	1418.82	324.08
16-Sep-13	8:15:47	Tug Boat	Travelling	91	3	25	295	59	25	22.3053	113.9564	1330.18	309.72
16-Sep-13	8:16:37	HSF High Speed Ferry	Travelling	90	41	0	347	24	55	22.3163	113.9668	2074.55	1.15
16-Sep-13	8:16:47	Speed Boat	Travelling	91	14	45	314	26	50	22.3062	113.9606	1126.84	328.18
16-Sep-13	8:17:21	Transportation Boat	Travelling	90	55	0	289	49	30	22.3053	113.9539	1537.10	303.55
16-Sep-13	8:17:28	HSF High Speed Ferry	Travelling	90	57	10	289	1	55	22.3048	113.9543	1478.02	302.76
16-Sep-13	8:17:33	Transportation Boat	Travelling	91	0	55	299	56	55	22.3062	113.9567	1385.87	313.68
16-Sep-13	8:17:44	Transportation Boat	Travelling	90	48	55	309	15	0	22.3101	113.9563	1731.91	322.98
16-Sep-13	8:17:59	Tug Boat	Travelling	91	0	0	320	45	50	22.3091	113.9605	1407.42	334.49
16-Sep-13	8:18:05	HSF High Speed Ferry	Travelling	90	55	25	333	17	20	22.3110	113.9631	1525.56	347.02
16-Sep-13	8:18:18	Transportation Boat	Travelling	90	54	45	287	12	20	22.3048	113.9535	1544.48	300.94
16-Sep-13	8:18:34	Speed Boat	Travelling	91	0	55	302	26	40	22.3066	113.9571	1386.11	316.17
16-Sep-13	8:18:46	Tug Boat	Travelling	90	56	35	328	34	55	22.3104	113.9620	1493.81	342.31
16-Sep-13	8:18:56	HSF High Speed Ferry	Travelling	91	2	0	319	15	30	22.3085	113.9604	1361.68	332.99
16-Sep-13	8:19:18	Transportation Boat	Travelling	94	19	5	339	14	0	22.3005	113.9660	323.48	352.96
16-Sep-13	8:19:32	Transportation Boat	Travelling	90	58	45	300	25	40	22.3066	113.9564	1438.15	314.16
16-Sep-13	8:19:49	Fishing Boat	Operate and stationary	94	13	0	307	9	5	22.2999	113.9644	331.32	320.88
16-Sep-13	8:20:15	Transportation Boat	Travelling	90	57	30	288	12	55	22.3046	113.9543	1470.04	301.95
16-Sep-13	8:20:28	Transportation Boat	Travelling	90	59	40	283	0	45	22.3034	113.9541	1415.99	296.74
16-Sep-13	8:20:39	Transportation Boat	Travelling	90	49	45	280	10	20	22.3038	113.9513	1703.21	293.90
16-Sep-13	8:20:53	Transportation Boat	Travelling	90	51	10	306	41	45	22.3091	113.9561	1655.26	320.43
16-Sep-13	8:21:01	Transportation Boat	Travelling	92	6	15	321	50	55	22.3031	113.9637	665.70	335.58
16-Sep-13	8:21:07	Transportation Boat	Travelling	91	0	40	298	28	10	22.3060	113.9564	1392.51	312.20
16-Sep-13	8:21:17	Transportation Boat	Travelling	91	3	55	289	6	25	22.3041	113.9556	1320.91	302.84
16-Sep-13	8:21:21	Transportation Boat	Travelling	90	59	20	286	11	30	22.3040	113.9544	1424.27	299.92
16-Sep-13	8:21:30	Speed Boat	Stationary	91	0	10	289	10	5	22.3045	113.9549	1404.32	302.90
16-Sep-13	8:21:37	Tug Boat	Travelling	90	41	50	347	22	10	22.3159	113.9668	2033.87	1.10
16-Sep-13	8:22:26	Transportation Boat	Travelling	90	53	30	306	9	50	22.3085	113.9565	1582.28	319.89
16-Sep-13	8:22:33	Transportation Boat	Travelling	91	24	55	316	19	10	22.3054	113.9616	991.95	330.05
16-Sep-13	8:22:42	Transportation Boat	Stationary	91	2	30	289	28	10	22.3043	113.9554	1351.53	303.20
16-Sep-13	8:22:49	Transportation Boat	Stationary	91	4	10	303	35	25	22.3063	113.9577	1316.05	317.32
16-Sep-13	8:23:12	Tug Boat	Travelling	90	37	50	355	58	50	22.3176	113.9701	2256.33	9.71

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
16-Sep-13	8:23:52	Speed Boat	Travelling	91	3	0	306	14	35	22.3069	113.9580	1340.95	319.97
16-Sep-13	8:24:34	Transportation Boat	Travelling	91	0	40	310	52	25	22.3078	113.9585	1393.34	324.60
16-Sep-13	8:24:40	Transportation Boat	Travelling	90	59	15	326	37	20	22.3097	113.9617	1427.12	340.35
16-Sep-13	8:26:37	Speed Boat	Travelling	90	56	0	333	23	25	22.3109	113.9631	1511.66	347.12
16-Sep-13	8:26:49	Transportation Boat	Travelling	90	44	55	343	45	40	22.3146	113.9656	1892.58	357.49
16-Sep-13	8:28:12	Transportation Boat	Travelling	90	39	40	351	53	55	22.3169	113.9685	2150.69	5.63
16-Sep-13	8:29:48	Transportation Boat	Travelling	90	59	20	303	24	20	22.3070	113.9570	1426.35	317.14
16-Sep-13	8:29:56	Speed Boat	Travelling	90	40	40	351	46	20	22.3164	113.9684	2096.90	5.50
16-Sep-13	8:31:04	Transportation Boat	Travelling	90	56	30	280	28	0	22.3031	113.9531	1499.23	294.20
16-Sep-13	8:31:10	Transportation Boat	Travelling	90	56	55	285	13	40	22.3041	113.9537	1488.12	298.96
16-Sep-13	8:32:12	Transportation Boat	Travelling	91	0	45	297	15	40	22.3058	113.9562	1393.24	310.99
16-Sep-13	8:32:26	Speed Boat	Travelling	90	44	40	344	26	0	22.3148	113.9658	1905.27	358.16
16-Sep-13	8:32:34	Transportation Boat	Travelling	90	37	35	350	31	20	22.3180	113.9680	2275.56	4.25
16-Sep-13	8:33:22	Transportation Boat	Travelling	91	1	15	311	37	10	22.3079	113.9588	1382.00	325.35
16-Sep-13	8:33:28	Speed Boat	Travelling	90	55	35	333	35	55	22.3110	113.9631	1524.96	347.33
16-Sep-13	8:33:35	Transportation Boat	Travelling	90	43	5	344	25	0	22.3154	113.9658	1977.44	358.15
16-Sep-13	8:34:28	HSF High Speed Ferry	Travelling	90	59	35	285	0	10	22.3038	113.9543	1421.43	298.73
16-Sep-13	8:35:12	Transportation Boat	Travelling	90	54	45	332	6	55	22.3111	113.9627	1549.00	345.85
16-Sep-13	8:35:19	Transportation Boat	Travelling	90	55	15	329	20	10	22.3108	113.9621	1534.80	343.07
16-Sep-13	8:35:31	Speed Boat	Travelling	91	1	45	324	26	0	22.3091	113.9614	1371.18	338.16
16-Sep-13	8:35:39	HSF High Speed Ferry	Travelling	91	3	5	297	24	35	22.3056	113.9566	1341.88	311.14
16-Sep-13	8:36:31	HSF High Speed Ferry	Travelling	90	59	10	291	59	0	22.3051	113.9551	1432.08	305.71
16-Sep-13	8:37:07	Transportation Boat	Travelling	90	44	50	346	17	50	22.3147	113.9664	1899.57	0.03
16-Sep-13	8:37:12	Transportation Boat	Travelling	91	0	20	302	47	20	22.3068	113.9570	1404.19	316.52
16-Sep-13	8:37:20	HSF High Speed Ferry	Travelling	91	2	5	316	17	55	22.3083	113.9598	1364.15	330.03
16-Sep-13	8:37:25	HSF High Speed Ferry	Travelling	91	1	20	308	10	40	22.3074	113.9581	1381.06	321.91
16-Sep-13	8:37:32	Speed Boat	Travelling	91	5	0	308	38	50	22.3069	113.9587	1302.29	322.38
16-Sep-13	8:39:18	Transportation Boat	Travelling	90	59	55	294	20	45	22.3055	113.9556	1414.60	308.08
16-Sep-13	8:39:27	HSF High Speed Ferry	Travelling	90	49	20	339	11	55	22.3130	113.9643	1723.47	352.93
16-Sep-13	8:39:32	HSF High Speed Ferry	Travelling	90	52	30	336	29	25	22.3120	113.9637	1617.70	350.22
16-Sep-13	8:40:33	Speed Boat	Travelling	90	58	55	284	18	55	22.3037	113.9540	1439.24	298.05
16-Sep-13	8:40:41	Transportation Boat	Travelling	91	0	0	300	10	20	22.3064	113.9565	1412.94	313.90
16-Sep-13	8:40:46	Transportation Boat	Travelling	91	0	35	303	32	25	22.3069	113.9572	1399.18	317.27
16-Sep-13	8:40:52	Transportation Boat	Travelling	90	58	5	327	34	35	22.3101	113.9618	1460.25	341.31
16-Sep-13	8:41:52	Transportation Boat	Travelling	91	0	25	287	16	0	22.3041	113.9547	1403.36	301.00
16-Sep-13	8:41:57	Transportation Boat	Travelling	90	58	0	291	57	50	22.3053	113.9548	1462.66	305.69
16-Sep-13	8:42:01	Transportation Boat	Travelling	91	0	10	293	15	45	22.3053	113.9555	1409.30	306.99
16-Sep-13	8:44:06	Transportation Boat	Travelling	90	55	35	277	17	15	22.3025	113.9525	1527.76	291.02
16-Sep-13	8:44:11	Transportation Boat	Travelling	90	59	35	302	34	10	22.3069	113.9568	1423.81	316.30
16-Sep-13	8:44:22	Transportation Boat	Travelling	91	0	5	285	21	30	22.3038	113.9544	1411.85	299.09
16-Sep-13	8:45:14	Transportation Boat	Travelling	90	57	25	307	12	20	22.3080	113.9573	1478.56	320.94
16-Sep-13	8:45:19	Transportation Boat	Travelling	91	0	40	292	38	45	22.3051	113.9554	1398.33	306.38
16-Sep-13	8:47:08	Transportation Boat	Travelling	90	57	10	306	2	35	22.3078	113.9571	1485.61	319.77
16-Sep-13	8:55:11	Transportation Boat	Travelling	91	2	0	294	44	55	22.3053	113.9560	1370.21	308.48
16-Sep-13	8:56:55	Transportation Boat	Travelling	90	57	40	307	0	5	22.3079	113.9573	1475.02	320.73
16-Sep-13	8:57:37	Transportation Boat	Travelling	90	57	10	286	19	20	22.3043	113.9539	1488.29	300.05
16-Sep-13	8:59:09	Transportation Boat	Travelling	90	59	45	305	39	25	22.3073	113.9574	1423.45	319.39
16-Sep-13	9:00:53	Speed Boat	Travelling	90	49	10	286	9	30	22.3054	113.9518	1735.83	299.89
16-Sep-13	9:02:24	Speed Boat	Travelling	90	45	20	298	34	25	22.3090	113.9528	1886.36	312.30
16-Sep-13	9:07:36	HSF High Speed Ferry	Travelling	91	0	45	289	51	0	22.3046	113.9550	1401.74	303.58
16-Sep-13	9:07:43	Transportation Boat	Travelling	90	48	20	18	6	50	22.3111	113.9755	1768.44	31.84
16-Sep-13	9:07:57	Tug Boat	Travelling	90	41	40	349	14	0	22.3161	113.9674	2058.70	2.96
16-Sep-13	9:09:22	HSF High Speed Ferry	Travelling	91	1	40	315	20	15	22.3083	113.9595	1381.06	329.07
16-Sep-13	9:09:29	Transportation Boat	Travelling	91	17	50	354	47	15	22.3073	113.9680	1091.68	8.52
16-Sep-13	9:09:49	Transportation Boat	Travelling	91	0	50	292	10	30	22.3050	113.9554	1400.33	305.90
16-Sep-13	9:10:01	Tug Boat	Travelling	90	53	35	337	25	55	22.3118	113.9640	1592.79	351.16
16-Sep-13	9:11:02	Transportation Boat	Travelling	90	56	25	306	58	0	22.3081	113.9571	1511.84	320.70
16-Sep-13	9:11:11	Transportation Boat	Travelling	91	30	35	305	6	25	22.3040	113.9604	937.30	318.84
16-Sep-13	9:11:17	HSF High Speed Ferry	Travelling	90	51	30	337	43	20	22.3124	113.9640	1658.71	351.45
16-Sep-13	9:11:23	Tug Boat	Travelling	91	1	30	324	56	5	22.3092	113.9615	1385.33	338.66
16-Sep-13	9:12:21	Transportation Boat	Travelling	91	7	25	279	10	15	22.3020	113.9551	1262.63	292.90
16-Sep-13	9:13:23	HSF High Speed Ferry	Travelling	90	39	5	350	21	20	22.3174	113.9679	2200.97	4.09
16-Sep-13	9:15:50	Tug Boat	Travelling	90	52	0	276	30	40	22.3027	113.9514	1643.77	290.24
16-Sep-13	9:18:32	Transportation Boat	Travelling	90	55	20	334	37	30	22.3112	113.9634	1543.88	348.35
16-Sep-13	9:19:38	Construction Boat	Travelling	90	58	40	288	43	45	22.3046	113.9545	1455.19	302.46
16-Sep-13	9:19:52	HSF High Speed Ferry	Travelling	91	2	25	314	5	25	22.3080	113.9593	1366.72	327.82
16-Sep-13	9:21:01	HSF High Speed Ferry	Travelling	91	1	30	293	33	50	22.3052	113.9557	1387.62	307.29
16-Sep-13	9:21:06	Construction Boat	Travelling	91	1	50	303	9	15	22.3067	113.9572	1380.06	316.88
16-Sep-13	9:22:37	Transportation Boat	Travelling	91	0	30	296	26	55	22.3058	113.9559	1411.24	310.18
16-Sep-13	9:22:42	Transportation Boat	Travelling	91	1	20	304	54	30	22.3070	113.9575	1391.84	318.64
16-Sep-13	9:23:54	Transportation Boat	Travelling	90	59	35	286	31	35	22.3041	113.9544	1433.55	300.26
16-Sep-13	9:24:03	Transportation Boat	Travelling	90	59	30	288	53	15	22.3046	113.9546	1435.62	302.62
16-Sep-13	9:25:23	Transportation Boat	Travelling	91	13	35	281	50	35	22.3021	113.9562	1158.41	295.57
16-Sep-13	9:25:30	Construction Boat	Travelling	90	48	45	340	21	5	22.3134	113.9646	1758.38	354.08
16-Sep-13	9:26:29	Tug Boat	Travelling	90	53	5	336	5	30	22.3119	113.9636	1612.59	349.82
16-Sep-13	9:26:35	Transportation Boat	Travelling	91	18	5	291	52	20	22.3033	113.9578	1091.34	305.60
16-Sep-13	9:26:41	Transportation Boat	Travelling	90	57	30	285	17	35	22.3041	113.9538	1486.93	299.02
16-Sep-13	9:27:47	Transportation Boat	Travelling	91	22	5	302	45	30	22.3044	113.9594	1037.97	316.49
16-Sep-13	9:27:55	Transportation Boat	Travelling	91	2	15	301	0	30	22.3063	113.9569	1372.31	314.74
16-Sep-13	9:29:06	Transportation Boat	Travelling	90	51	25	307	43	15	22.3093	113.9563	1666.53	321.45
16-Sep-13	9:29:13	Tug Boat	Travelling	90	47	50	343	40	10	22.3137	113.9656	1793.92	357.40
16-Sep-13	9:33:23	Transportation Boat	Travelling	90	59	25	345	8	15	22.3106	113.9661	1439.96	358.87
16-Sep-13	9:33:41	Transportation Boat	Travelling	90	57	25	282	49	15	22.3036	113.9534	1490.90	296.55
16-Sep-13	9:35:08	Transportation Boat	Travelling	91	6	10	283	31	55	22.3029	113.9552	1291.76	297.26
16-Sep-13	9:36:06	Transportation Boat	Travelling	90	56	55	307	17	50	22.3081	113.9572	1504.81	321.03
16-Sep-13	9:36:12	Transportation Boat	Travelling	91	9	45	290	8	30	22.3038	113.9565	1224.95	303.87
16-Sep-13	9:39:27	HSF High Speed Ferry	Travelling	91	3	15	291	14	55	22.3046	113.9556	1353.01	304.98
16-Sep-13	9:39:38	Transportation Boat	Travelling	91	14	40	316	31	40	22.3066	113.9609	1144.24	330.26
16-Sep-13	9:39:47	Transportation Boat	Travelling	90	58	50	288	41	0	22.3046	113.9544	1456.02	302.41
16-Sep-13	9:40:00	HSF High Speed Ferry	Travelling	90	50	40	339	55	45	22.3128	113.9646	1694.81	353.66
16-Sep-13	9:41:27	HSF High Speed Ferry	Travelling	90	54	55	304	55	30	22.3082	113.9564	1561.88	318.65
16-Sep-13	9:41:31	HSF High Speed Ferry	Travelling	91	1	5	322	43	50	22.3092	113.9610	1402.10	336.46
16-Sep-13	9:41:39	Transportation Boat	Travelling	91	1	0	302	32	40	22.3068	113.9570	1404.07	316.27
16-Sep-13	9:41:50	Transportation Boat	Travelling	91	1	0	290	4	15	22.3046	113.9551	1404.12	303.80
16-Sep-13	9:43:22	HSF High Speed Ferry	Travelling	91	0	55	297	38	35	22.3060	113.9561	1406.43	311.37
16-Sep-13	9:43:32	Transportation Boat	Travelling	90	51	20	307	42	0	22.3094	113.9563	1673.41	321.43
16-Sep-13	9:43:39	Transportation Boat	Travelling	90	54	45	305	4	0	22.3082	113.9564	1567.31	318.80
16-Sep-13	9:43:48	Transportation Boat	Travelling	91	0	55	286	54	40	22.3041	113.9546	1406.54	300.64
16-Sep-13	9:44:45	Transportation Boat	Travelling	91	2	15	298	35	5	22.3060	113.9565	1376.25	312.31
16-Sep-13	9:46:14	Transportation Boat	Travelling	90	52	25	304	44	10	22.3087	113.9558	1638.98	318.47
16-Sep-13	9:46:21	Tug Boat	Travelling	91	1	55	294	7	45	22.3053	113.9558	1384.14	307.86
16-Sep-13	9:46:28	Transportation Boat	Travelling	91	9	30	295	51	25	22.3047	113.9572	1231.55	309.59
16-Sep-13	9:46:35	Transportation Boat	Travelling	91	5	0	295	58	20	22.3052	113.9565	1317.77	309.70
16-Sep-13	9:46:42	Transportation Boat	Travelling	91	0	50	298	22	35	22.3061	113.9562	1409.18	312.11
16-Sep-13	9:47:38	Transportation Boat	Travelling	91	6	5	286	3	55	22.3034	113.9555	1296.16	299.80
16-Sep-13	9:47:42	Transportation Boat	Travelling	91	1	0	282	55	15	22.3033	113.9542	1405.52	296.65
16-Sep-13	9:47:46	Transportation Boat	Travelling	91	1	20	289	30	45	22.3045	113.9550	1397.80	303.24
16-Sep-13	9:48:31	Tug Boat	Travelling	91	0	5	320	48	10	22.3092	113.9604	1427.45	334.53
16-Sep-13	9:51:03	Transportation Boat	Travelling	90	57	45	285	23	25	22.3041	113.9538	1486.57	299.12
16-Sep-13	9:51:08	Transportation Boat	Travelling	91	2	0	296	0	35	22.3056	113.9561	1383.38	309.74
16-Sep-13	9:52:09	Transportation Boat	Travelling	91	0	35	296	28	10	22.3058	113.9559	1416.38	310.20
16-Sep-13	9:52:13	Transportation Boat	Travelling	90	58	15	282	54	40	22.3036	113.9536	1473.92	296.64
16-Sep-13	9:53:34	Transportation Boat	Travelling	90	56	0	307	30	5	22.3084	113.9571	1534.38	321.23
16-Sep-13	9:53:44	Transportation Boat	Travelling	91	19	10	311	46	25	22.3056	113.9604	1081.27	325.50
16-Sep-13	9:56:18	Transportation Boat	Travelling	92	18	20	322	7	55	22.3027	113.9639	617.30	335.86
16-Sep-13	9:58:12	Transportation Boat	Travelling	94	48	15	342	10	35	22.3003	113.9662	295.53	355.91
16-Sep-13	10:00:34	Transportation Boat	Travelling	90	59	30	288	0	45	22.3045	113.9545	1444.59	301.74

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
16-Sep-13	10:01:52	Transportation Boat	Travelling	91	1	30	303	2	10	22.3068	113.9571	1397.31	316.77
16-Sep-13	10:01:58	Transportation Boat	Travelling	91	3	35	307	1	15	22.3070	113.9581	1351.00	320.75
16-Sep-13	10:02:34	Transportation Boat	Travelling	90	56	0	307	24	45	22.3084	113.9570	1536.73	321.14
16-Sep-13	10:03:16	Transportation Boat	Travelling	91	8	0	292	46	0	22.3044	113.9565	1262.59	306.50
16-Sep-13	10:04:09	Transportation Boat	Travelling	91	3	35	283	35	30	22.3032	113.9547	1351.50	297.32
16-Sep-13	10:04:20	Construction Boat	Travelling	91	1	25	336	23	35	22.3100	113.9641	1399.82	350.12
16-Sep-13	10:08:40	Construction Boat	Travelling	90	39	5	349	49	15	22.3176	113.9677	2222.01	3.55
16-Sep-13	10:10:27	Transportation Boat	Travelling	94	8	5	337	25	45	22.3007	113.9659	344.34	351.16
16-Sep-13	10:12:50	Transportation Boat	Travelling	91	49	5	319	14	25	22.3039	113.9629	785.76	332.97
16-Sep-13	10:15:58	Transportation Boat	Travelling	91	1	5	299	57	35	22.3064	113.9565	1410.34	313.69
16-Sep-13	10:16:05	Transportation Boat	Travelling	91	0	50	309	57	20	22.3079	113.9582	1416.24	323.69
16-Sep-13	10:18:30	Transportation Boat	Travelling	90	57	40	329	15	50	22.3105	113.9621	1495.71	342.99
16-Sep-13	10:18:45	Dumping Guide Boat	Travelling	90	49	45	351	33	40	22.3132	113.9680	1738.08	5.29
16-Sep-13	10:20:47	Transportation Boat	Travelling	90	45	15	345	33	45	22.3149	113.9662	1915.47	359.29
16-Sep-13	10:21:26	Dumping Guide Boat	Stationary	90	55	0	343	32	0	22.3117	113.9657	1570.13	357.26
16-Sep-13	10:22:08	Transportation Boat	Travelling	91	2	45	306	0	30	22.3071	113.9578	1373.85	319.74
16-Sep-13	10:22:57	Dumping Guide Boat	Travelling	91	26	45	21	50	50	22.3049	113.9720	990.98	35.58
16-Sep-13	10:24:03	Transportation Boat	Travelling	90	48	45	276	15	40	22.3031	113.9502	1776.05	289.99
16-Sep-13	10:26:08	Dumping Guide Boat	Travelling	90	48	20	352	17	45	22.3137	113.9682	1792.30	6.03
16-Sep-13	10:26:19	Dumping Guide Boat	Travelling	93	39	0	356	9	35	22.3011	113.9671	391.30	9.89
16-Sep-13	10:27:32	Transportation Boat	Travelling	91	4	55	294	14	40	22.3050	113.9562	1328.68	307.97
16-Sep-13	10:27:41	Transportation Boat	Travelling	91	21	20	329	33	0	22.3067	113.9634	1058.31	343.28
16-Sep-13	10:28:39	Transportation Boat	Travelling	91	1	0	302	36	45	22.3068	113.9569	1415.32	316.34
16-Sep-13	10:28:43	Transportation Boat	Travelling	91	2	0	304	48	15	22.3070	113.9574	1392.22	318.53
16-Sep-13	10:28:51	Transportation Boat	Travelling	91	43	20	325	58	55	22.3046	113.9636	831.94	339.71
16-Sep-13	10:30:34	Container Boat	Travelling	91	1	15	294	15	40	22.3054	113.9556	1409.93	307.99
16-Sep-13	10:30:41	Transportation Boat	Travelling	90	54	45	279	47	50	22.3033	113.9523	1579.89	293.53
16-Sep-13	10:30:53	Transportation Boat	Stationary	91	45	0	325	28	35	22.3045	113.9636	818.95	339.21
16-Sep-13	10:31:02	Dumping Guide Boat	Stationary	94	21	45	330	45	15	22.3005	113.9655	327.41	344.48
16-Sep-13	10:31:11	Transportation Boat	Travelling	90	58	15	344	52	10	22.3110	113.9660	1483.70	358.60
16-Sep-13	10:31:21	Transportation Boat	Travelling	91	0	30	302	43	25	22.3069	113.9568	1427.82	316.45
16-Sep-13	10:34:10	Transportation Boat	Travelling	94	13	25	2	12	40	22.3005	113.9673	338.41	15.94
16-Sep-13	10:34:28	Transportation Boat	Travelling	90	58	40	279	5	35	22.3028	113.9532	1473.83	292.82
16-Sep-13	10:34:58	Transportation Boat	Travelling	91	6	50	321	54	20	22.3082	113.9612	1291.78	335.64
16-Sep-13	10:35:10	Dumping Guide Boat	Travelling	91	31	10	334	33	10	22.3059	113.9645	944.62	348.28
16-Sep-13	10:35:28	Dumping Guide Boat	Travelling	91	12	10	0	40	5	22.3080	113.9693	1195.49	14.40
16-Sep-13	10:35:43	Transportation Boat	Travelling	90	59	5	287	3	55	22.3044	113.9542	1463.61	300.80
16-Sep-13	10:36:32	Transportation Boat	Travelling	91	0	0	280	39	15	22.3030	113.9536	1441.14	294.38
16-Sep-13	10:36:42	Transportation Boat	Travelling	91	7	30	295	41	0	22.3049	113.9568	1279.26	309.41
16-Sep-13	10:36:48	Transportation Boat	Travelling	91	3	5	302	18	50	22.3065	113.9572	1369.89	316.04
16-Sep-13	10:37:06	Dumping Guide Boat	Travelling	91	3	5	334	16	30	22.3097	113.9636	1369.96	348.00
16-Sep-13	10:37:13	Dumping Guide Boat	Travelling	91	16	0	341	15	10	22.3078	113.9654	1135.00	354.98
16-Sep-13	10:37:26	Transportation Boat	Travelling	91	3	20	297	46	30	22.3058	113.9565	1364.57	311.50
16-Sep-13	10:38:53	Transportation Boat	Travelling	94	6	50	343	48	0	22.3007	113.9663	347.75	357.53
16-Sep-13	10:40:23	Dumping Guide Boat	Stationary	91	5	0	335	57	15	22.3094	113.9641	1329.84	349.68
16-Sep-13	10:40:34	Dumping Guide Boat	Travelling	90	43	0	347	1	15	22.3158	113.9667	2025.05	0.75
16-Sep-13	10:40:43	HSF High Speed Ferry	Travelling	91	0	25	290	13	40	22.3048	113.9548	1432.08	303.96
16-Sep-13	10:40:53	Transportation Boat	Travelling	91	59	50	313	35	45	22.3031	113.9626	718.37	327.33
16-Sep-13	10:43:56	HSF High Speed Ferry	Travelling	90	49	25	339	5	15	22.3133	113.9643	1757.53	352.82
16-Sep-13	10:44:02	Transportation Boat	Travelling	91	3	20	299	6	15	22.3060	113.9567	1366.09	312.83
16-Sep-13	10:54:56	Transportation Boat	Travelling	90	52	10	11	21	15	22.3112	113.9733	1666.29	25.08
16-Sep-13	10:56:15	Transportation Boat	Travelling	90	48	40	2	21	20	22.3131	113.9712	1788.88	16.09
16-Sep-13	10:57:30	Transportation Boat	Travelling	92	1	0	312	18	10	22.3029	113.9625	713.39	326.03
16-Sep-13	10:58:52	Transportation Boat	Travelling	93	10	30	320	8	10	22.3013	113.9645	452.52	333.87
16-Sep-13	10:59:56	Transportation Boat	Travelling	95	4	5	340	25	10	22.3002	113.9661	282.98	354.15
16-Sep-13	11:01:42	Transportation Boat	Travelling	90	49	35	339	45	30	22.3133	113.9645	1756.77	353.49
16-Sep-13	11:04:16	Transportation Boat	Travelling	92	12	20	319	31	40	22.3029	113.9635	652.81	333.26
16-Sep-13	11:04:23	Transportation Boat	Travelling	91	1	50	314	18	35	22.3083	113.9592	1404.44	328.04
16-Sep-13	11:04:37	Transportation Boat	Travelling	90	57	10	21	2	25	22.3089	113.9748	1520.78	34.77
16-Sep-13	11:05:48	Transportation Boat	Travelling	90	54	0	304	20	20	22.3084	113.9559	1611.72	318.07
16-Sep-13	11:06:01	Transportation Boat	Travelling	91	29	20	314	16	30	22.3050	113.9614	969.13	328.00
16-Sep-13	11:08:21	Transportation Boat	Travelling	91	2	30	309	52	35	22.3077	113.9584	1390.20	323.61
16-Sep-13	11:08:27	Transportation Boat	Travelling	91	5	0	302	50	30	22.3064	113.9575	1336.13	316.57
16-Sep-13	11:09:52	Transportation Boat	Travelling	91	0	15	285	46	15	22.3040	113.9542	1443.16	299.50
16-Sep-13	11:09:59	Dumping Guide Boat	Travelling	90	51	25	343	56	15	22.3129	113.9657	1695.33	357.67
16-Sep-13	11:10:02	Dumping Guide Boat	Travelling	90	48	50	341	58	55	22.3137	113.9651	1786.80	355.71
16-Sep-13	11:10:15	Transportation Boat	Travelling	90	43	15	349	13	0	22.3158	113.9674	2023.19	2.95
16-Sep-13	11:12:39	Dumping Guide Boat	Travelling	90	41	25	352	12	5	22.3166	113.9685	2116.10	5.93
16-Sep-13	11:12:43	Dumping Guide Boat	Travelling	90	37	10	351	46	30	22.3188	113.9686	2366.26	5.50
16-Sep-13	11:13:46	HSF High Speed Ferry	Travelling	91	4	35	300	24	0	22.3061	113.9570	1346.05	314.13
16-Sep-13	11:13:56	Transportation Boat	Travelling	90	58	55	283	32	55	22.3037	113.9536	1477.28	297.28
16-Sep-13	11:14:13	Transportation Boat	Travelling	90	54	30	8	29	25	22.3109	113.9723	1598.95	22.22
16-Sep-13	11:14:20	Government Boat	Travelling	91	49	55	290	48	20	22.3016	113.9601	787.87	304.54
16-Sep-13	11:14:53	Government Boat	Travelling	92	15	55	334	20	0	22.3032	113.9651	636.67	348.06
16-Sep-13	11:15:02	HSF High Speed Ferry	Travelling	91	2	25	285	42	50	22.3038	113.9546	1393.64	299.44
16-Sep-13	11:15:08	Transportation Boat	Travelling	91	2	0	296	34	0	22.3058	113.9560	1403.15	310.30
16-Sep-13	11:15:17	Government Boat	Travelling	91	45	35	359	34	50	22.3048	113.9682	820.49	13.31
16-Sep-13	11:15:30	HSF High Speed Ferry	Travelling	91	0	40	280	49	45	22.3030	113.9537	1434.48	294.56
16-Sep-13	11:15:42	Government Boat	Travelling	91	13	25	10	45	55	22.3073	113.9712	1182.92	24.50
16-Sep-13	11:16:21	Transportation Boat	Travelling	90	56	35	305	47	45	22.3082	113.9567	1539.73	319.53
16-Sep-13	11:16:28	Government Boat	Travelling	90	45	10	21	8	55	22.3119	113.9772	1937.28	34.88
16-Sep-13	11:16:43	Transportation Boat	Travelling	90	59	50	20	27	55	22.3084	113.9744	1455.02	34.20
16-Sep-13	11:17:18	HSF High Speed Ferry	Travelling	90	50	5	339	57	20	22.3132	113.9645	1743.47	353.69
16-Sep-13	11:19:03	HSF High Speed Ferry	Travelling	91	2	5	316	0	40	22.3085	113.9595	1402.16	329.74
16-Sep-13	11:19:10	Transportation Boat	Travelling	90	55	35	305	38	20	22.3083	113.9565	1568.60	319.37
16-Sep-13	11:20:51	HSF High Speed Ferry	Travelling	90	59	30	281	58	55	22.3033	113.9536	1464.30	295.71
16-Sep-13	11:20:56	Transportation Boat	Travelling	91	5	50	293	37	5	22.3048	113.9562	1321.79	307.35
16-Sep-13	11:22:23	Transportation Boat	Travelling	91	0	10	276	33	10	22.3021	113.9532	1448.23	290.28
16-Sep-13	11:23:09	Transportation Boat	Travelling	90	46	5	351	13	50	22.3147	113.9680	1899.99	4.96
16-Sep-13	11:24:00	Transportation Boat	Travelling	91	2	10	301	17	15	22.3065	113.9568	1401.42	315.02
16-Sep-13	11:25:26	Transportation Boat	Travelling	91	3	50	303	53	15	22.3067	113.9575	1364.72	317.62
16-Sep-13	11:25:30	Transportation Boat	Travelling	90	58	0	287	59	5	22.3047	113.9540	1503.88	301.71
16-Sep-13	11:25:38	Transportation Boat	Travelling	90	53	55	4	46	45	22.3114	113.9714	1619.64	18.51
16-Sep-13	11:26:34	Transportation Boat	Travelling	90	55	10	279	18	40	22.3032	113.9522	1582.60	293.04
16-Sep-13	11:26:38	Transportation Boat	Travelling	91	1	25	289	51	10	22.3047	113.9549	1419.38	303.58
16-Sep-13	11:27:27	Transportation Boat	Travelling	91	1	30	281	3	0	22.3030	113.9539	1417.63	294.78
16-Sep-13	11:27:32	Transportation Boat	Travelling	90	57	40	280	37	10	22.3032	113.9530	1513.21	294.35
16-Sep-13	11:28:36	Transportation Boat	Travelling	91	3	55	302	4	50	22.3064	113.9572	1363.64	315.81
16-Sep-13	11:29:08	Transportation Boat	Travelling	90	57	45	306	20	20	22.3080	113.9570	1511.40	320.07
16-Sep-13	11:29:18	Transportation Boat	Travelling	90	59	50	15	41	0	22.3090	113.9734	1458.09	29.41
16-Sep-13	11:30:00	Transportation Boat	Travelling	90	59	50	290	29	0	22.3050	113.9547	1458.27	304.21
16-Sep-13	11:32:14	Transportation Boat	Travelling	90	51	40	306	41	20	22.3094	113.9559	1693.30	320.42
16-Sep-13	11:35:39	Transportation Boat	Travelling	90	59	30	308	12	10	22.3080	113.9576	1467.93	321.93
16-Sep-13	11:35:44	Transportation Boat	Travelling	90	59	50	306	46	50	22.3078	113.9574	1459.67	320.51
16-Sep-13	11:35:57	Transportation Boat	Travelling	90	50	40	356	5	10	22.3129	113.9693	1728.42	9.82
16-Sep-13	11:36:09	Transportation Boat	Travelling	91	16	20	349	35	20	22.3079	113.9670	1141.23	3.32
16-Sep-13	11:36:56	Transportation Boat	Travelling	91	6	35	291	22	20	22.3044	113.9560	1310.24	305.10
16-Sep-13	11:37:00	Transportation Boat	Travelling	91	4	20	293	32	20	22.3050	113.9559	1356.61	307.27
16-Sep-13	11:37:08	Transportation Boat	Travelling	91	37	10	349	49	25	22.3057	113.9669	895.20	3.55
16-Sep-13	11:38:17	Transportation Boat	Travelling	91	3	55	279	18	5	22.3024	113.9542	1365.85	293.03
16-Sep-13	11:38:27	Transportation Boat	Travelling	92	23	55	350	52	40	22.3030	113.9669	603.52	4.61
16-Sep-13	11:38:39	Transportation Boat	Travelling	91	0	35	13	38	10	22.3091	113.9728	1442.06	27.37
16-Sep-13	11:40:12	Transportation Boat	Travelling	90	58	50	292	38	10	22.3055	113.9548	1485.93	306.37
16-Sep-13	11:40:15	Transportation Boat	Travelling	91	4	30	292	32	20	22.3048	113.9558	1353.80	306.27
16-Sep-13	11:40:41	Transportation Boat	Travelling	94	58	55	358	31	25	22.3002	113.9670	289.87	12.25
16-Sep-13	11:41:22	Transportation Boat	Travelling	91	1	35	276	3	20	22.3019	113.9534	1418.98	289.79
16-Sep-13	11:41:32	Transportation Boat	Travelling	90	56	15	282	8	40	22.3037	113.9528	1555.54	295.87

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
16-Sep-13	11:41:41	Transportation Boat	Travelling	90	56	15	6	10	10	22.3108	113.9716	1555.58	19.90
16-Sep-13	11:41:49	Transportation Boat	Travelling	91	3	55	301	45	40	22.3064	113.9571	1366.66	315.49
16-Sep-13	11:43:00	Transportation Boat	Travelling	91	5	25	291	21	50	22.3045	113.9558	1335.22	305.09
16-Sep-13	11:43:56	Government Boat	Travelling	91	7	5	11	44	45	22.3082	113.9718	1301.89	25.48
16-Sep-13	11:44:18	Yacht	Travelling	90	55	55	348	35	40	22.3117	113.9670	1565.68	2.32
16-Sep-13	11:44:26	Transportation Boat	Travelling	91	2	0	279	37	45	22.3027	113.9538	1410.04	293.36
16-Sep-13	11:45:35	Government Boat	Travelling	91	24	35	350	38	20	22.3069	113.9672	1030.72	4.37
16-Sep-13	11:45:44	Speed Boat	Travelling	92	17	15	11	45	35	22.3028	113.9691	633.71	25.49
16-Sep-13	11:46:47	Speed Boat	Travelling	93	5	40	300	37	20	22.3006	113.9631	468.07	314.35
16-Sep-13	11:46:58	Government Boat	Travelling	91	33	5	326	25	20	22.3055	113.9633	936.23	340.15
16-Sep-13	11:47:05	Yacht	Travelling	91	24	55	331	42	15	22.3066	113.9639	1026.90	345.43
16-Sep-13	11:47:19	Transportation Boat	Travelling	90	53	50	355	12	5	22.3121	113.9689	1628.09	8.93
16-Sep-13	11:49:24	Government Boat	Travelling	91	13	55	289	22	55	22.3034	113.9568	1181.48	303.11
16-Sep-13	11:49:34	Yacht	Travelling	91	12	55	293	47	30	22.3042	113.9572	1197.86	307.52
16-Sep-13	11:52:05	Transportation Boat	Travelling	91	4	5	14	35	25	22.3084	113.9727	1365.40	28.32
16-Sep-13	11:52:26	Transportation Boat	Travelling	91	18	45	290	43	55	22.3033	113.9575	1108.93	304.46
16-Sep-13	11:53:52	Transportation Boat	Travelling	91	40	5	301	52	45	22.3032	113.9605	871.40	315.61
16-Sep-13	11:56:47	Transportation Boat	Travelling	93	38	30	340	19	0	22.3012	113.9660	398.17	354.05
16-Sep-13	11:59:32	Other	Stationary	94	38	20	0	0	0	22.3004	113.9671	312.39	13.73
16-Sep-13	11:59:46	Transportation Boat	Travelling	90	57	10	0	10	55	22.3110	113.9700	1534.89	13.91
16-Sep-13	12:02:47	Transportation Boat	Travelling	91	8	0	19	43	25	22.3073	113.9733	1288.19	33.45
16-Sep-13	12:06:16	Transportation Boat	Travelling	91	5	10	298	45	20	22.3058	113.9567	1345.61	312.49
16-Sep-13	12:06:26	Transportation Boat	Travelling	90	53	30	353	32	45	22.3123	113.9684	1643.65	7.28
16-Sep-13	12:06:56	Transportation Boat	Travelling	91	1	50	306	48	10	22.3075	113.9576	1419.21	320.53
16-Sep-13	12:09:04	Transportation Boat	Travelling	90	48	30	346	51	55	22.3140	113.9666	1817.24	0.60
16-Sep-13	12:09:26	Transportation Boat	Travelling	93	4	50	290	31	30	22.3000	113.9626	471.95	304.25
16-Sep-13	12:11:10	Transportation Boat	Travelling	93	55	35	332	34	20	22.3009	113.9655	370.07	346.30
16-Sep-13	12:11:25	Transportation Boat	Travelling	91	0	50	306	52	5	22.3077	113.9575	1443.92	320.60
16-Sep-13	12:12:46	Transportation Boat	Travelling	92	44	0	4	29	55	22.3022	113.9680	532.41	18.23
16-Sep-13	12:12:53	Transportation Boat	Travelling	91	5	10	294	50	15	22.3052	113.9562	1347.09	308.57
16-Sep-13	12:14:36	Transportation Boat	Travelling	91	8	35	19	26	45	22.3073	113.9732	1279.63	33.18
16-Sep-13	12:14:45	Transportation Boat	Travelling	91	2	10	279	17	25	22.3026	113.9537	1413.34	293.02
16-Sep-13	12:15:02	Transportation Boat	Travelling	91	40	35	23	35	10	22.3038	113.9715	870.09	37.32
16-Sep-13	12:15:14	Transportation Boat	Travelling	91	3	50	299	25	20	22.3061	113.9566	1376.10	313.15
16-Sep-13	12:16:10	Transportation Boat	Travelling	90	55	45	306	16	50	22.3085	113.9565	1578.81	320.01
16-Sep-13	12:20:55	Transportation Boat	Travelling	90	51	5	347	24	30	22.3132	113.9667	1726.99	1.14
16-Sep-13	12:22:38	Transportation Boat	Travelling	90	51	5	346	22	25	22.3132	113.9664	1727.48	0.10
16-Sep-13	12:25:28	Transportation Boat	Travelling	91	2	45	306	54	15	22.3074	113.9577	1402.53	320.63
16-Sep-13	12:26:56	Transportation Boat	Travelling	91	7	55	287	0	35	22.3036	113.9556	1294.97	300.74
16-Sep-13	12:27:21	Transportation Boat	Travelling	91	8	15	13	1	55	22.3080	113.9720	1288.66	26.76
16-Sep-13	12:27:38	Transportation Boat	Travelling	91	3	0	277	20	55	22.3021	113.9537	1397.40	291.08
16-Sep-13	12:32:31	Transportation Boat	Travelling	90	51	55	347	54	50	22.3129	113.9669	1702.04	1.64
16-Sep-13	12:36:54	Transportation Boat	Travelling	91	3	20	359	25	35	22.3098	113.9695	1392.09	13.16
16-Sep-13	12:39:50	Transportation Boat	Travelling	91	14	35	17	59	50	22.3067	113.9724	1180.65	31.73
16-Sep-13	12:43:06	Transportation Boat	Travelling	90	46	15	344	53	25	22.3149	113.9660	1918.47	358.62
16-Sep-13	12:43:13	Transportation Boat	Travelling	90	56	25	350	40	40	22.3117	113.9676	1566.87	4.41
16-Sep-13	12:44:51	Transportation Boat	Travelling	90	57	50	329	25	10	22.3108	113.9621	1528.34	343.15
16-Sep-13	12:47:09	Transportation Boat	Travelling	91	1	0	297	43	40	22.3062	113.9558	1448.48	311.46
16-Sep-13	12:47:15	Transportation Boat	Travelling	90	57	35	283	2	0	22.3038	113.9531	1535.68	296.76
16-Sep-13	12:48:07	Transportation Boat	Travelling	90	59	50	292	10	45	22.3054	113.9548	1477.34	305.91
16-Sep-13	12:48:48	Transportation Boat	Travelling	90	52	25	278	36	40	22.3034	113.9512	1690.07	292.34
16-Sep-13	12:49:06	Transportation Boat	Travelling	91	3	10	302	40	10	22.3067	113.9570	1398.62	316.40
16-Sep-13	12:50:29	Transportation Boat	Travelling	91	3	10	300	22	5	22.3064	113.9566	1398.94	314.10
16-Sep-13	12:51:38	Transportation Boat	Travelling	91	2	10	290	25	5	22.3048	113.9550	1422.00	304.15
16-Sep-13	12:51:46	Transportation Boat	Travelling	91	14	45	13	43	30	22.3070	113.9717	1180.32	27.45
16-Sep-13	12:53:27	Transportation Boat	Travelling	90	56	35	276	43	55	22.3025	113.9521	1564.84	290.46
16-Sep-13	12:55:56	Transportation Boat	Travelling	90	50	30	342	17	50	22.3134	113.9652	1757.50	356.03
16-Sep-13	13:00:35	Transportation Boat	Travelling	91	12	20	5	53	45	22.3080	113.9704	1221.90	19.63
16-Sep-13	13:01:37	Transportation Boat	Travelling	91	5	5	298	47	15	22.3059	113.9567	1359.75	312.52
16-Sep-13	13:02:42	Transportation Boat	Travelling	91	1	40	306	33	15	22.3076	113.9575	1436.30	320.28
16-Sep-13	13:02:56	Transportation Boat	Travelling	91	17	50	14	49	35	22.3066	113.9717	1135.25	28.56
16-Sep-13	13:03:12	Transportation Boat	Travelling	91	4	30	294	48	25	22.3053	113.9560	1372.55	308.54
16-Sep-13	13:03:45	Transportation Boat	Travelling	91	4	55	301	21	25	22.3063	113.9570	1363.76	315.09
16-Sep-13	13:06:23	Transportation Boat	Travelling	90	57	50	331	3	0	22.3109	113.9625	1533.79	344.78
16-Sep-13	13:09:36	Transportation Boat	Travelling	90	59	35	283	56	50	22.3038	113.9536	1488.89	297.68
16-Sep-13	13:09:48	Transportation Boat	Travelling	90	39	55	351	24	50	22.3177	113.9684	2241.64	5.14
16-Sep-13	13:09:58	Transportation Boat	Travelling	91	1	55	349	53	40	22.3105	113.9673	1432.14	3.62
16-Sep-13	13:11:10	Transportation Boat	Travelling	91	4	35	295	48	30	22.3055	113.9561	1372.56	309.54
16-Sep-13	13:14:22	Transportation Boat	Travelling	91	20	0	11	39	20	22.3066	113.9710	1106.34	25.39
16-Sep-13	13:14:38	Yacht	Travelling	91	14	25	302	9	55	22.3053	113.9583	1190.12	315.90
16-Sep-13	13:14:52	Transportation Boat	Travelling	91	1	5	325	43	30	22.3099	113.9614	1453.10	339.45
16-Sep-13	13:15:57	Yacht	Travelling	90	59	20	332	54	55	22.3107	113.9630	1496.82	346.65
16-Sep-13	13:16:03	Transportation Boat	Travelling	90	57	25	333	57	55	22.3112	113.9632	1547.55	347.70
16-Sep-13	13:17:23	Speed Boat	Travelling	95	38	55	330	14	0	22.2999	113.9657	259.56	343.96
16-Sep-13	13:17:37	Yacht	Travelling	90	40	20	353	3	20	22.3175	113.9690	2220.64	6.79
16-Sep-13	13:17:48	Transportation Boat	Travelling	90	51	50	344	33	50	22.3131	113.9659	1717.65	358.29
16-Sep-13	13:17:54	Transportation Boat	Travelling	90	55	30	343	16	20	22.3120	113.9656	1602.32	357.00
16-Sep-13	13:18:06	Speed Boat	Travelling	93	27	50	289	42	5	22.2997	113.9630	424.32	303.43
16-Sep-13	13:18:29	Speed Boat	Travelling	92	37	55	280	22	50	22.2997	113.9614	558.99	294.11
16-Sep-13	13:20:51	Transportation Boat	Travelling	91	7	45	292	34	50	22.3046	113.9561	1309.78	306.31
16-Sep-13	13:20:55	Transportation Boat	Travelling	91	1	25	291	12	25	22.3051	113.9549	1446.55	304.94
16-Sep-13	13:21:51	Tug Boat	Travelling	90	57	55	333	0	30	22.3111	113.9630	1535.45	346.74
16-Sep-13	13:21:58	Transportation Boat	Travelling	91	1	55	306	44	25	22.3076	113.9575	1434.97	320.47
16-Sep-13	13:22:02	Transportation Boat	Travelling	91	3	30	303	39	10	22.3069	113.9572	1398.75	317.38
16-Sep-13	13:22:58	Tug Boat	Travelling	91	2	55	320	42	0	22.3091	113.9605	1412.10	334.43
16-Sep-13	13:24:14	Speed Boat	Travelling	93	3	25	294	43	45	22.3003	113.9627	481.49	308.46
16-Sep-13	13:24:23	Tug Boat	Travelling	91	5	50	302	49	25	22.3064	113.9574	1349.13	316.55
16-Sep-13	13:24:42	Government Boat	Travelling	91	43	20	352	58	15	22.3053	113.9674	856.58	6.70
16-Sep-13	13:25:00	Speed Boat	Travelling	94	25	35	356	56	25	22.3006	113.9670	332.10	10.67
16-Sep-13	13:25:08	Government Boat	Travelling	92	57	0	4	25	45	22.3019	113.9679	499.08	18.16
16-Sep-13	13:25:28	Speed Boat	Stationary	93	37	45	21	2	20	22.3006	113.9686	405.41	34.77
16-Sep-13	13:25:37	Government Boat	Stationary	93	30	0	20	41	20	22.3007	113.9687	420.44	34.42
16-Sep-13	13:27:34	Transportation Boat	Travelling	91	0	0	306	44	55	22.3079	113.9572	1482.79	320.48
16-Sep-13	13:29:00	Transportation Boat	Travelling	91	7	25	288	31	20	22.3039	113.9556	1318.09	302.25
16-Sep-13	13:29:07	Transportation Boat	Travelling	90	59	40	289	18	10	22.3049	113.9542	1491.57	303.03
16-Sep-13	13:29:42	Transportation Boat	Travelling	91	1	40	278	18	25	22.3025	113.9534	1442.69	292.04
16-Sep-13	13:29:54	Speed Boat	Travelling	93	23	45	19	5	30	22.3009	113.9687	433.69	32.82
16-Sep-13	13:30:03	Government Boat	Travelling	94	5	45	339	36	35	22.3008	113.9660	359.32	353.34
16-Sep-13	13:30:27	Transportation Boat	Travelling	91	3	10	299	52	45	22.3064	113.9565	1408.17	313.61
16-Sep-13	13:30:39	Speed Boat	Travelling	92	0	5	39	50	50	22.3016	113.9722	737.31	53.58
16-Sep-13	13:30:48	Government Boat	Travelling	92	43	0	299	50	15	22.3010	113.9626	542.59	313.57
16-Sep-13	13:31:05	Transportation Boat	Travelling	90	54	50	339	52	0	22.3122	113.9646	1625.64	353.60
16-Sep-13	13:31:12	Transportation Boat	Travelling	91	2	0	305	54	30	22.3075	113.9574	1435.19	319.64
16-Sep-13	13:31:22	Government Boat	Travelling	91	44	25	284	32	55	22.3012	113.9591	848.57	298.28
16-Sep-13	13:33:04	Transportation Boat	Travelling	91	1	20	289	33	35	22.3048	113.9546	1451.43	303.29
16-Sep-13	13:34:45	Transportation Boat	Travelling	90	53	15	308	34	50	22.3096	113.9564	1675.82	322.31
16-Sep-13	13:34:56	Transportation Boat	Travelling	91	21	10	6	12	40	22.3069	113.9700	1093.99	19.94
16-Sep-13	13:38:01	Transportation Boat	Travelling	91	5	5	298	47	20	22.3059	113.9566	1367.90	312.52
16-Sep-13	13:41:54	Transportation Boat	Travelling	91	1	0	288	36	30	22.3047	113.9544	1461.59	302.34
16-Sep-13	13:42:52	Transportation Boat	Travelling	90	59	45	341	34	25	22.3110	113.9652	1492.82	355.30
16-Sep-13	13:44:00	Transportation Boat	Travelling	91	3	40	304	35	55	22.3070	113.9573	1400.08	318.33
16-Sep-13	13:46:28	Transportation Boat	Travelling	91	3	10	305	49	10	22.3073	113.9575	1411.87	319.55
16-Sep-13	13:47:04	Transportation Boat	Travelling	91	1	50	291	40	10	22.3051	113.9550	1442.85	305.40
16-Sep-13	13:47:11	Transportation Boat	Travelling	91	4	40	297	18	5	22.3058	113.9563	1378.89	311.03
16-Sep-13	13:47:24	Transportation Boat	Travelling	91	33	30	14	29	45	22.3052	113.9708	950.71	28.23
16-Sep-13	13:48:08	Transportation Boat	Travelling	91	3	30	303	35	35	22.3069	113.9571	1404.75	317.32
16-Sep-13	13:48:19	Transportation Boat	Travelling	91	1	35	283	36	15	22.3036	113.9539	1449.08	297.33

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
16-Sep-13	13:50:02	Transportation Boat	Travelling	91	4	15	291	22	0	22.3048	113.9553	1388.59	305.10
16-Sep-13	13:50:10	Transportation Boat	Travelling	90	57	55	285	44	0	22.3044	113.9533	1542.61	299.46
16-Sep-13	13:50:16	Transportation Boat	Travelling	91	12	35	308	56	25	22.3064	113.9592	1227.61	322.67
16-Sep-13	13:51:10	Transportation Boat	Travelling	91	1	55	281	33	25	22.3032	113.9537	1441.85	295.29
16-Sep-13	13:51:15	Transportation Boat	Travelling	91	0	35	293	3	30	22.3056	113.9549	1474.03	306.79
16-Sep-13	13:51:20	Transportation Boat	Travelling	91	26	35	310	14	40	22.3051	113.9605	1027.82	323.97
16-Sep-13	13:52:18	Transportation Boat	Travelling	91	2	0	300	34	30	22.3067	113.9564	1440.16	314.30
16-Sep-13	13:52:25	Transportation Boat	Travelling	91	44	40	313	8	10	22.3040	113.9619	849.45	326.87
16-Sep-13	13:54:16	Transportation Boat	Travelling	90	54	0	308	0	15	22.3093	113.9564	1657.44	321.73
16-Sep-13	13:54:23	Transportation Boat	Travelling	92	37	15	326	4	50	22.3024	113.9645	564.67	339.81
16-Sep-13	13:55:06	Transportation Boat	Travelling	91	6	10	344	59	45	22.3098	113.9661	1349.02	358.73
16-Sep-13	13:56:21	Transportation Boat	Travelling	94	7	30	343	0	25	22.3008	113.9662	358.30	356.74
16-Sep-13	13:56:28	Transportation Boat	Travelling	91	18	40	355	22	45	22.3077	113.9681	1133.02	9.11
16-Sep-13	13:57:02	Other	Stationary	90	35	10	278	55	10	22.3065	113.9433	2576.17	292.65
16-Sep-13	13:57:07	Other	Stationary	90	35	5	283	45	20	22.3083	113.9441	2582.58	297.49
16-Sep-13	13:57:11	Other	Stationary	90	33	5	290	47	25	22.3116	113.9444	2745.84	304.52
16-Sep-13	13:57:15	Other	Stationary	90	48	55	297	1	30	22.3084	113.9529	1833.99	310.75
16-Sep-13	13:57:19	Other	Stationary	90	58	0	302	41	25	22.3077	113.9561	1542.16	316.42
16-Sep-13	13:57:23	Other	Stationary	90	56	15	308	49	50	22.3090	113.9570	1590.90	322.56
16-Sep-13	13:57:26	Other	Stationary	90	59	55	316	24	15	22.3093	113.9592	1492.16	330.13
16-Sep-13	13:57:30	Other	Stationary	90	57	20	325	16	10	22.3107	113.9610	1560.41	339.00
16-Sep-13	13:57:33	Other	Stationary	90	54	5	330	34	15	22.3120	113.9620	1655.73	344.30
16-Sep-13	13:57:35	Other	Stationary	90	52	20	334	34	55	22.3127	113.9630	1712.10	348.31
16-Sep-13	13:57:40	Other	Stationary	90	48	0	338	18	10	22.3143	113.9639	1869.89	352.03
16-Sep-13	13:57:45	Other	Stationary	90	43	20	343	37	45	22.3163	113.9655	2076.39	357.36
16-Sep-13	13:57:47	Other	Stationary	90	41	40	346	4	50	22.3171	113.9663	2161.81	359.81
16-Sep-13	13:57:50	Other	Stationary	90	37	30	349	15	40	22.3193	113.9676	2410.22	2.99
16-Sep-13	13:58:03	Other	Stationary	90	31	50	352	14	25	22.3232	113.9693	2859.46	5.97
16-Sep-13	13:58:16	Other	Stationary	91	2	5	304	51	35	22.3073	113.9571	1439.60	318.59
16-Sep-13	13:58:26	Other	Stationary	90	54	30	307	41	5	22.3092	113.9564	1643.10	321.41
16-Sep-13	13:58:40	Other	Stationary	90	32	5	348	29	30	22.3231	113.9675	2836.34	2.22
16-Sep-13	13:58:47	Other	Stationary	90	31	30	352	13	40	22.3235	113.9693	2891.64	5.96
16-Sep-13	13:59:04	Other	Stationary	91	13	25	323	4	0	22.3077	113.9617	1215.29	336.80
16-Sep-13	13:59:18	Other	Stationary	90	36	45	355	44	25	22.3195	113.9703	2461.83	9.47
16-Sep-13	13:59:30	Other	Stationary	90	43	45	356	51	5	22.3158	113.9701	2056.68	10.58
16-Sep-13	13:59:36	Other	Stationary	90	35	10	357	50	30	22.3203	113.9714	2577.27	11.57
16-Sep-13	13:59:41	Other	Stationary	90	34	10	359	20	40	22.3209	113.9722	2655.99	13.07
16-Sep-13	13:59:45	Other	Stationary	90	32	45	0	36	0	22.3218	113.9731	2776.30	14.33
16-Sep-13	14:00:27	Other	Stationary	91	3	30	338	37	5	22.3102	113.9646	1407.58	352.35
16-Sep-13	14:00:32	Other	Stationary	91	1	40	0	40	45	22.3103	113.9699	1449.99	14.41
16-Sep-13	14:00:42	Other	Stationary	90	31	30	12	4	20	22.3211	113.9786	2892.56	25.80
16-Sep-13	14:00:53	Other	Stationary	90	44	45	4	25	45	22.3148	113.9725	2010.02	18.16
18-Sep-13	8:07:17	Other	Stationary	94	23	35	0	0	0	22.3003	113.9671	311.40	13.73
18-Sep-13	8:09:41	Other	Stationary	94	23	35	0	0	0	22.3003	113.9671	311.31	13.73
18-Sep-13	8:09:46	Other	Stationary	90	32	0	278	46	40	22.3067	113.9428	2626.50	292.51
18-Sep-13	8:09:50	Other	Stationary	90	31	30	284	57	40	22.3092	113.9436	2670.15	298.69
18-Sep-13	8:09:53	Other	Stationary	90	30	5	290	8	5	22.3117	113.9438	2802.37	303.86
18-Sep-13	8:09:57	Other	Stationary	90	36	5	294	21	0	22.3105	113.9487	2317.79	308.08
18-Sep-13	8:10:04	Other	Stationary	90	46	45	299	7	35	22.3085	113.9537	1776.09	312.86
18-Sep-13	8:10:08	Other	Stationary	90	50	0	307	56	20	22.3093	113.9564	1658.43	321.67
18-Sep-13	8:10:11	Other	Stationary	90	54	30	311	51	25	22.3089	113.9580	1519.28	325.59
18-Sep-13	8:10:15	Other	Stationary	90	54	45	315	26	40	22.3093	113.9589	1512.22	329.17
18-Sep-13	8:10:18	Other	Stationary	90	53	45	320	22	40	22.3101	113.9599	1540.79	334.11
18-Sep-13	8:10:21	Other	Stationary	90	51	45	326	9	55	22.3112	113.9610	1601.33	339.90
18-Sep-13	8:10:26	Other	Stationary	90	49	20	331	59	5	22.3123	113.9624	1681.20	345.71
18-Sep-13	8:10:29	Other	Stationary	90	46	5	337	5	40	22.3136	113.9636	1802.24	350.82
18-Sep-13	8:10:33	Other	Stationary	90	40	30	342	14	40	22.3161	113.9650	2057.26	355.97
18-Sep-13	8:10:37	Other	Stationary	90	38	15	346	33	5	22.3173	113.9665	2182.00	0.28
18-Sep-13	8:10:42	Other	Stationary	90	29	25	351	40	40	22.3233	113.9690	2869.07	5.41
18-Sep-13	8:11:06	Other	Stationary	90	29	25	352	8	40	22.3233	113.9693	2868.92	5.87
18-Sep-13	8:11:14	Other	Stationary	90	52	15	302	59	30	22.3080	113.9558	1585.57	316.72
18-Sep-13	8:11:28	Other	Stationary	90	50	5	307	45	45	22.3093	113.9564	1655.35	321.49
18-Sep-13	8:12:02	Other	Stationary	90	28	10	348	12	40	22.3246	113.9674	3003.48	1.94
18-Sep-13	8:12:32	Other	Stationary	90	29	10	352	4	5	22.3235	113.9692	2894.37	5.80
18-Sep-13	8:12:38	Other	Stationary	91	7	10	322	47	10	22.3078	113.9616	1229.14	336.52
18-Sep-13	8:12:45	Other	Stationary	91	5	10	325	27	40	22.3083	113.9620	1267.25	339.19
18-Sep-13	8:12:49	Other	Stationary	90	34	55	354	45	25	22.3190	113.9698	2397.30	8.49
18-Sep-13	8:12:54	Other	Stationary	90	34	10	355	38	20	22.3194	113.9703	2452.00	9.37
18-Sep-13	8:13:01	Other	Stationary	90	40	20	356	46	40	22.3159	113.9701	2065.37	10.51
18-Sep-13	8:13:07	Other	Stationary	90	36	45	357	21	50	22.3177	113.9707	2273.37	11.09
18-Sep-13	8:13:14	Other	Stationary	90	31	0	358	32	35	22.3215	113.9720	2714.17	12.27
18-Sep-13	8:13:24	Other	Stationary	90	32	50	359	20	40	22.3200	113.9720	2555.69	13.07
18-Sep-13	8:13:41	Other	Stationary	90	30	10	0	4	10	22.3220	113.9729	2792.87	13.80
18-Sep-13	8:13:49	Other	Stationary	91	1	55	303	44	20	22.3065	113.9576	1334.36	317.47
18-Sep-13	8:14:07	Other	Stationary	90	47	30	5	7	50	22.3125	113.9719	1746.58	18.86
18-Sep-13	8:14:13	Other	Stationary	91	1	20	340	45	0	22.3097	113.9651	1347.14	354.48
18-Sep-13	8:14:30	Other	Stationary	90	56	25	0	36	5	22.3104	113.9699	1466.12	14.33
18-Sep-13	8:14:50	HSF High Speed Ferry	Travelling	90	29	45	9	32	35	22.3210	113.9773	2833.68	23.27
18-Sep-13	8:15:03	Transportation Boat	Travelling	90	47	55	337	11	10	22.3130	113.9637	1730.89	350.92
18-Sep-13	8:15:12	Transportation Boat	Travelling	93	17	5	343	43	40	22.3014	113.9662	416.53	357.46
18-Sep-13	8:16:01	HSF High Speed Ferry	Travelling	90	54	15	287	0	5	22.3046	113.9536	1525.28	300.73
18-Sep-13	8:16:09	Transportation Boat	Travelling	90	56	10	319	50	15	22.3095	113.9600	1472.44	333.57
18-Sep-13	8:16:15	Transportation Boat	Travelling	92	15	55	328	42	30	22.3028	113.9646	604.63	342.44
18-Sep-13	8:17:05	Transportation Boat	Travelling	90	57	30	301	21	35	22.3068	113.9565	1437.65	315.09
18-Sep-13	8:17:12	HSF High Speed Ferry	Travelling	90	51	25	305	6	55	22.3085	113.9561	1610.51	318.85
18-Sep-13	8:17:31	Transportation Boat	Travelling	90	57	45	298	42	30	22.3063	113.9561	1431.26	312.44
18-Sep-13	8:18:36	Transportation Boat	Travelling	91	35	45	320	6	50	22.3046	113.9627	859.29	333.84
18-Sep-13	8:18:41	HSF High Speed Ferry	Travelling	90	53	20	283	22	45	22.3040	113.9530	1551.40	297.11
18-Sep-13	8:19:17	Transportation Boat	Travelling	90	49	45	277	20	20	22.3030	113.9513	1665.02	291.07
18-Sep-13	8:19:24	Transportation Boat	Travelling	91	8	45	312	57	35	22.3066	113.9600	1199.54	326.69
18-Sep-13	8:19:44	HSF High Speed Ferry	Travelling	90	56	25	291	37	35	22.3052	113.9548	1465.16	305.36
18-Sep-13	8:19:55	Transportation Boat	Travelling	90	46	20	342	32	10	22.3137	113.9653	1790.19	356.27
18-Sep-13	8:20:07	Transportation Boat	Travelling	90	40	0	19	17	20	22.3133	113.9774	2081.22	33.02
18-Sep-13	8:20:19	Transportation Boat	Travelling	90	58	20	285	17	55	22.3038	113.9544	1416.26	299.03
18-Sep-13	8:20:35	HSF High Speed Ferry	Travelling	90	58	5	302	7	0	22.3068	113.9568	1422.39	315.85
18-Sep-13	8:20:54	Transportation Boat	Travelling	90	52	40	332	40	0	22.3114	113.9628	1570.93	346.40
18-Sep-13	8:21:10	Transportation Boat	Travelling	90	55	0	307	58	50	22.3082	113.9573	1503.20	321.71
18-Sep-13	8:21:17	Transportation Boat	Travelling	90	54	20	306	17	0	22.3081	113.9569	1521.91	320.01
18-Sep-13	8:21:29	Transportation Boat	Travelling	90	49	40	11	28	25	22.3112	113.9733	1667.41	25.20
18-Sep-13	8:23:58	HSF High Speed Ferry	Travelling	90	51	20	278	37	40	22.3031	113.9519	1611.81	292.36
18-Sep-13	8:24:14	Transportation Boat	Travelling	91	19	40	333	40	55	22.3067	113.9642	1033.25	347.41
18-Sep-13	8:24:31	Transportation Boat	Travelling	90	47	55	344	33	10	22.3132	113.9659	1728.85	358.28
18-Sep-13	8:25:04	Transportation Boat	Travelling	90	55	5	283	54	5	22.3039	113.9535	1500.16	297.63
18-Sep-13	8:25:12	Transportation Boat	Travelling	90	59	45	308	24	30	22.3074	113.9582	1381.41	322.14
18-Sep-13	8:26:02	Transportation Boat	Travelling	91	15	35	299	49	35	22.3044	113.9587	1089.27	313.56
18-Sep-13	8:26:08	Transportation Boat	Travelling	90	38	20	354	49	15	22.3170	113.9695	2172.87	8.55
18-Sep-13	8:26:16	Transportation Boat	Travelling	90	57	35	296	14	40	22.3059	113.9557	1433.90	309.97
18-Sep-13	8:26:20	Transportation Boat	Travelling	90	57	50	322	14	40	22.3094	113.9607	1427.60	335.97
18-Sep-13	8:27:38	Transportation Boat	Travelling	91	0	0	278	7	30	22.3022	113.9540	1375.16	291.85
18-Sep-13	8:27:43	Transportation Boat	Travelling	90	59	10	312	17	10	22.3080	113.9588	1394.76	326.02
18-Sep-13	8:27:50	Transportation Boat	Travelling	90	51	30	337	58	10	22.3119	113.9641	1605.73	351.70
18-Sep-13	8:30:27	Transportation Boat	Travelling	90	49	10	337	44	35	22.3126	113.9640	1683.83	351.47
18-Sep-13	8:30:32	Transportation Boat	Travelling	90	37	30	354	3	5	22.3174	113.9693	2222.92	7.78
18-Sep-13	8:35:01	HSF High Speed Ferry	Travelling	90	57	30	288	37	55	22.3045	113.9546	1436.95	302.36
18-Sep-13	8:36:40	HSF High Speed Ferry	Travelling	90	52	40	280	50	25	22.3035	113.9525	1571.23	294.57
18-Sep-13	8:36:46	HSF High Speed Ferry	Travelling	90	59	35	314	29	45	22.3082	113.9593	1386.35	328.23
18-Sep-13	8:38:04	HSF High Speed Ferry	Travelling	90	54	15	331	46	30	22.3109	113.9627	1524.92	345.50

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
18-Sep-13	8:38:09	HSF High Speed Ferry	Travelling	90	59	45	306	32	30	22.3072	113.9578	1382.67	320.27
18-Sep-13	8:39:41	HSF High Speed Ferry	Travelling	90	44	55	345	25	50	22.3143	113.9661	1848.76	359.16
18-Sep-13	8:39:46	HSF High Speed Ferry	Travelling	90	51	55	334	16	5	22.3117	113.9632	1594.93	348.00
18-Sep-13	8:39:53	Transportation Boat	Travelling	90	41	25	346	48	5	22.3157	113.9666	2009.09	0.53
18-Sep-13	8:41:04	Speed Boat	Travelling	90	46	55	288	4	35	22.3060	113.9518	1768.57	301.81
18-Sep-13	8:41:23	HSF High Speed Ferry	Travelling	90	35	20	352	3	20	22.3188	113.9687	2367.43	5.79
18-Sep-13	8:41:27	HSF High Speed Ferry	Travelling	90	38	55	349	22	10	22.3169	113.9675	2142.41	3.10
18-Sep-13	8:41:35	Transportation Boat	Travelling	90	52	20	335	11	0	22.3116	113.9634	1582.38	348.91
18-Sep-13	8:42:30	Speed Boat	Travelling	90	44	25	298	39	30	22.3090	113.9530	1870.71	312.39
18-Sep-13	8:43:08	Transportation Boat	Travelling	90	58	45	287	50	35	22.3043	113.9547	1407.39	301.57
18-Sep-13	8:43:24	Transportation Boat	Travelling	90	57	45	310	41	0	22.3081	113.9583	1432.14	324.41
18-Sep-13	8:44:30	Transportation Boat	Travelling	90	54	15	306	27	30	22.3082	113.9569	1526.14	320.19
18-Sep-13	8:45:33	Transportation Boat	Travelling	90	52	10	280	48	15	22.3036	113.9523	1588.30	294.53
18-Sep-13	8:45:42	Transportation Boat	Travelling	90	44	30	343	54	5	22.3144	113.9656	1867.87	357.63
18-Sep-13	8:45:54	Tug Boat	Travelling	90	53	5	348	39	15	22.3117	113.9670	1560.49	2.38
18-Sep-13	8:46:02	Container Boat	Travelling	90	54	25	347	40	45	22.3113	113.9668	1521.68	1.41
18-Sep-13	8:46:21	Transportation Boat	Travelling	90	59	55	291	27	15	22.3048	113.9554	1380.18	305.18
18-Sep-13	8:46:32	Speed Boat	Travelling	91	5	10	288	15	25	22.3037	113.9559	1267.76	301.99
18-Sep-13	8:47:43	Transportation Boat	Travelling	90	58	5	316	44	35	22.3088	113.9596	1424.57	330.47
18-Sep-13	8:47:52	Transportation Boat	Travelling	90	54	10	307	59	0	22.3084	113.9572	1529.16	321.71
18-Sep-13	8:48:00	Speed Boat	Travelling	90	50	40	306	55	45	22.3090	113.9563	1636.65	320.66
18-Sep-13	8:49:28	Transportation Boat	Travelling	90	49	35	308	0	50	22.3094	113.9563	1673.37	321.74
18-Sep-13	8:49:35	Transportation Boat	Travelling	90	53	5	285	27	25	22.3045	113.9531	1561.21	299.19
18-Sep-13	8:49:43	Tug Boat	Travelling	90	46	40	357	49	30	22.3133	113.9699	1780.16	11.55
18-Sep-13	8:49:48	Container Boat	Travelling	90	47	30	356	41	35	22.3131	113.9695	1748.31	10.42
18-Sep-13	8:51:52	Construction Boat	Travelling	90	57	5	331	45	25	22.3103	113.9629	1450.62	345.49
18-Sep-13	8:52:04	Transportation Boat	Travelling	90	53	55	284	47	45	22.3042	113.9533	1537.17	298.53
18-Sep-13	8:53:20	Transportation Boat	Travelling	90	59	40	300	28	20	22.3063	113.9567	1387.24	314.20
18-Sep-13	8:53:36	Transportation Boat	Travelling	90	57	5	306	47	50	22.3077	113.9574	1450.93	320.53
18-Sep-13	8:53:50	Construction Boat	Travelling	90	46	55	341	25	10	22.3135	113.9649	1771.39	355.15
18-Sep-13	8:54:23	Tug Boat	Travelling	91	3	15	350	44	30	22.3094	113.9674	1307.89	4.47
18-Sep-13	8:55:17	Tug Boat	Travelling	90	45	0	3	8	50	22.3135	113.9716	1848.85	16.88
18-Sep-13	8:55:54	Container Boat	Stationary	90	40	40	7	25	20	22.3148	113.9736	2051.28	21.15
18-Sep-13	8:56:08	Transportation Boat	Travelling	90	50	10	336	0	35	22.3123	113.9635	1654.93	349.74
18-Sep-13	8:56:14	Transportation Boat	Travelling	90	56	50	288	28	5	22.3046	113.9544	1457.89	302.20
18-Sep-13	8:59:18	Transportation Boat	Travelling	90	58	25	302	48	40	22.3069	113.9569	1418.37	316.54
18-Sep-13	8:59:36	Tug Boat	Stationary	90	39	55	8	59	25	22.3150	113.9743	2091.90	22.72
18-Sep-13	8:59:42	Tug Boat	Stationary	90	55	30	359	52	45	22.3107	113.9698	1494.07	13.61
18-Sep-13	9:02:35	Transportation Boat	Travelling	90	49	35	337	21	55	22.3126	113.9639	1680.39	351.10
18-Sep-13	9:02:50	Tug Boat	Travelling	90	57	50	315	2	40	22.3087	113.9592	1437.18	328.77
18-Sep-13	9:03:42	Transportation Boat	Travelling	90	43	25	345	34	35	22.3149	113.9662	1925.00	359.31
18-Sep-13	9:04:05	Transportation Boat	Travelling	91	0	40	284	27	45	22.3034	113.9547	1369.54	298.19
18-Sep-13	9:04:49	Transportation Boat	Travelling	90	58	10	317	22	5	22.3089	113.9597	1429.39	331.10
18-Sep-13	9:04:54	Transportation Boat	Travelling	90	50	15	336	43	5	22.3123	113.9637	1658.45	350.45
18-Sep-13	9:05:01	Transportation Boat	Travelling	91	6	15	301	35	10	22.3056	113.9578	1253.07	315.32
18-Sep-13	9:05:11	Tug Boat	Travelling	91	6	35	326	26	50	22.3082	113.9623	1246.78	340.18
18-Sep-13	9:06:43	Transportation Boat	Travelling	90	57	40	317	48	45	22.3090	113.9597	1442.50	331.54
18-Sep-13	9:06:47	Transportation Boat	Travelling	90	55	0	332	38	50	22.3109	113.9629	1513.50	346.38
18-Sep-13	9:06:53	Transportation Boat	Travelling	90	48	25	301	27	45	22.3086	113.9546	1723.14	315.19
18-Sep-13	9:08:54	Transportation Boat	Travelling	90	59	25	290	48	0	22.3048	113.9552	1400.05	304.53
18-Sep-13	9:09:04	Transportation Boat	Travelling	90	35	50	351	9	40	22.3187	113.9683	2348.47	4.89
18-Sep-13	9:09:15	Transportation Boat	Travelling	90	54	30	283	29	50	22.3039	113.9532	1528.34	297.23
18-Sep-13	9:12:20	Container Boat	Travelling	90	56	10	294	49	50	22.3059	113.9551	1483.22	308.56
18-Sep-13	9:13:55	Tug Boat	Travelling	91	1	20	326	19	20	22.3091	113.9619	1357.09	340.05
18-Sep-13	9:14:05	Construction Platform	Travelling	91	2	20	327	37	20	22.3090	113.9622	1335.10	341.35
18-Sep-13	9:14:14	Construction Boat	Travelling	90	57	40	310	37	25	22.3082	113.9582	1444.63	324.35
18-Sep-13	9:15:33	HSF High Speed Ferry	Travelling	90	40	40	347	14	45	22.3162	113.9667	2063.56	0.98
18-Sep-13	9:17:23	Tug Boat	Travelling	90	58	30	315	57	55	22.3087	113.9594	1424.66	329.70
18-Sep-13	9:17:28	Construction Platform	Travelling	90	58	35	317	17	25	22.3088	113.9597	1422.62	331.02
18-Sep-13	9:17:36	HSF High Speed Ferry	Travelling	90	55	55	322	15	15	22.3099	113.9605	1491.49	335.98
18-Sep-13	9:17:50	Construction Boat	Travelling	90	50	30	338	32	15	22.3124	113.9642	1654.31	352.27
18-Sep-13	9:19:38	HSF High Speed Ferry	Travelling	90	54	55	285	38	5	22.3043	113.9535	1519.67	299.36
18-Sep-13	9:19:45	Construction Boat	Travelling	90	46	10	350	59	30	22.3139	113.9679	1813.50	4.72
18-Sep-13	9:21:05	Tug Boat	Travelling	90	55	20	307	20	55	22.3082	113.9572	1508.48	321.08
18-Sep-13	9:21:12	Construction Platform	Travelling	90	56	20	307	48	30	22.3081	113.9574	1481.35	321.54
18-Sep-13	9:24:18	Tug Boat	Travelling	90	54	0	334	58	50	22.3113	113.9635	1547.29	348.71
18-Sep-13	9:24:33	Transportation Boat	Travelling	90	56	30	287	9	40	22.3044	113.9541	1477.89	300.89
18-Sep-13	9:26:30	Transportation Boat	Travelling	90	53	45	307	37	20	22.3086	113.9570	1555.28	321.35
18-Sep-13	9:26:37	Tug Boat	Travelling	90	55	10	309	41	25	22.3086	113.9576	1514.76	323.42
18-Sep-13	9:27:18	Transportation Boat	Travelling	91	27	15	291	59	35	22.3026	113.9589	953.48	305.72
18-Sep-13	9:28:03	Tug Boat	Travelling	90	46	40	301	27	45	22.3091	113.9541	1796.60	315.19
18-Sep-13	9:28:13	Transportation Boat	Travelling	90	59	0	286	29	25	22.3040	113.9545	1415.43	300.22
18-Sep-13	9:28:21	Transportation Boat	Travelling	91	29	0	302	57	15	22.3037	113.9602	934.80	316.68
18-Sep-13	9:29:30	Transportation Boat	Travelling	90	56	50	285	27	20	22.3041	113.9539	1470.52	299.19
18-Sep-13	9:29:37	Transportation Boat	Travelling	90	59	10	303	51	50	22.3070	113.9571	1411.78	317.59
18-Sep-13	9:30:39	Transportation Boat	Travelling	90	51	25	304	0	25	22.3085	113.9557	1628.40	317.74
18-Sep-13	9:30:54	Transportation Boat	Travelling	90	59	10	304	24	35	22.3071	113.9572	1412.14	318.14
18-Sep-13	9:31:02	Transportation Boat	Travelling	91	18	20	328	24	45	22.3067	113.9632	1063.59	342.14
18-Sep-13	9:31:41	Transportation Boat	Travelling	90	59	45	283	5	40	22.3033	113.9543	1398.38	296.82
18-Sep-13	9:33:00	Transportation Boat	Travelling	90	58	15	305	51	20	22.3075	113.9573	1435.25	319.59
18-Sep-13	9:33:27	Transportation Boat	Stationary	91	2	35	340	13	15	22.3096	113.9650	1334.77	353.95
18-Sep-13	9:35:48	Transportation Boat	Travelling	90	58	40	301	56	15	22.3068	113.9567	1425.70	315.67
18-Sep-13	9:36:16	Construction Boat	Travelling	90	54	40	330	11	40	22.3109	113.9623	1531.73	343.92
18-Sep-13	9:37:56	Transportation Boat	Travelling	91	0	45	290	26	20	22.3046	113.9553	1376.76	304.17
18-Sep-13	9:38:01	Transportation Boat	Travelling	90	55	40	286	52	35	22.3045	113.9538	1504.31	300.61
18-Sep-13	9:38:11	Construction Boat	Travelling	90	58	20	316	7	40	22.3088	113.9594	1434.63	329.86
18-Sep-13	9:38:18	Transportation Boat	Travelling	90	58	50	302	37	35	22.3069	113.9569	1422.30	316.36
18-Sep-13	9:39:32	Transportation Boat	Travelling	90	55	55	306	5	10	22.3079	113.9570	1497.93	319.82
18-Sep-13	9:39:44	Transportation Boat	Travelling	90	57	5	283	10	40	22.3036	113.9537	1466.93	296.91
18-Sep-13	9:39:54	Construction Boat	Travelling	90	58	50	302	59	20	22.3069	113.9569	1422.75	316.72
18-Sep-13	9:40:08	HSF High Speed Ferry	Travelling	90	39	40	349	21	55	22.3167	113.9675	2127.44	3.10
18-Sep-13	9:41:07	HSF High Speed Ferry	Travelling	91	0	50	292	43	5	22.3050	113.9556	1375.71	306.45
18-Sep-13	9:41:20	Construction Boat	Travelling	90	53	5	336	35	25	22.3116	113.9638	1579.72	350.32
18-Sep-13	9:41:34	HSF High Speed Ferry	Travelling	90	49	45	338	57	35	22.3127	113.9643	1687.57	352.69
18-Sep-13	9:41:40	HSF High Speed Ferry	Travelling	91	0	0	299	18	5	22.3062	113.9565	1395.21	313.03
18-Sep-13	9:41:53	Transportation Boat	Travelling	91	0	25	285	47	5	22.3038	113.9547	1385.52	299.51
18-Sep-13	9:42:54	HSF High Speed Ferry	Travelling	90	57	35	321	25	15	22.3095	113.9605	1454.92	335.15
18-Sep-13	9:43:02	HSF High Speed Ferry	Travelling	90	52	50	306	5	25	22.3085	113.9564	1587.85	319.82
18-Sep-13	9:43:10	Transportation Boat	Travelling	90	59	55	302	51	20	22.3068	113.9571	1397.58	316.59
18-Sep-13	9:43:17	Construction Boat	Travelling	90	52	15	278	43	35	22.3031	113.9520	1605.96	292.46
18-Sep-13	9:43:22	Construction Boat	Travelling	91	1	35	324	19	35	22.3090	113.9615	1359.34	338.06
18-Sep-13	9:44:21	Transportation Boat	Travelling	90	51	10	335	51	15	22.3121	113.9635	1640.90	349.58
18-Sep-13	9:44:28	Transportation Boat	Travelling	90	48	35	302	54	20	22.3089	113.9548	1729.87	316.64
18-Sep-13	9:44:36	HSF High Speed Ferry	Travelling	90	58	40	294	56	5	22.3056	113.9556	1428.16	308.66
18-Sep-13	9:45:44	Construction Boat	Travelling	91	12	0	319	27	10	22.3069	113.9613	1161.29	333.18
18-Sep-13	9:45:52	Transportation Boat	Travelling	90	58	0	318	23	20	22.3091	113.9598	1445.16	332.12
18-Sep-13	9:46:48	Speed Boat	Travelling	91	16	55	341	38	20	22.3074	113.9655	1086.68	355.37
18-Sep-13	9:47:36	Transportation Boat	Travelling	90	59	45	295	29	55	22.3056	113.9558	1402.75	309.23
18-Sep-13	9:47:45	Speed Boat	Travelling	91	22	15	311	19	20	22.3051	113.9607	1015.89	325.05
18-Sep-13	9:48:11	Transportation Boat	Travelling	91	2	15	284	9	0	22.3033	113.9548	1345.88	297.88
18-Sep-13	9:48:18	Speed Boat	Travelling	91	15	15	294	1	5	22.3037	113.9579	1111.27	307.75
18-Sep-13	9:50:19	Transportation Boat	Travelling	91	20	20	312	9	25	22.3054	113.9607	1040.82	325.89
18-Sep-13	9:50:26	Transportation Boat	Travelling	91	7	10	298	51	50	22.3052	113.9575	1246.84	312.59
18-Sep-13	9:51:30	Transportation Boat	Travelling	90	59	35	288	57	10	22.3045	113.9549	1407.80	302.68
18-Sep-13	9:52:11	Transportation Boat	Travelling	91	6	55	311	23	20	22.3069	113.9594	1251.98	325.12
18-Sep-13	9:52:23	Transportation Boat	Travelling	91	55	55	318	33	20	22.3034	113.9631	720.15	332.29
18-Sep-13	9:52:31	Transportation Boat	Travelling	90	59	55	307	57	35	22.3075	113.9580	1400.14	321.69

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
18-Sep-13	9:54:12	Transportation Boat	Travelling	93	5	0	331	42	20	22.3015	113.9653	450.66	345.44
18-Sep-13	9:54:19	Transportation Boat	Travelling	90	51	25	337	22	10	22.3122	113.9639	1635.97	351.10
18-Sep-13	9:55:17	Transportation Boat	Travelling	94	28	45	346	44	0	22.3004	113.9664	309.85	0.46
18-Sep-13	9:55:39	Transportation Boat	Travelling	90	39	50	348	37	50	22.3167	113.9673	2124.76	2.36
18-Sep-13	9:55:50	Transportation Boat	Travelling	91	4	5	320	57	40	22.3083	113.9610	1308.88	334.69
18-Sep-13	10:00:15	Transportation Boat	Travelling	90	55	0	282	55	40	22.3038	113.9531	1529.46	296.66
18-Sep-13	10:01:51	Transportation Boat	Travelling	90	59	25	305	38	0	22.3073	113.9574	1414.65	319.36
18-Sep-13	10:05:19	Construction Boat	Travelling	90	43	40	345	44	0	22.3151	113.9662	1937.09	359.46
18-Sep-13	10:07:34	Construction Boat	Travelling	90	54	50	333	28	20	22.3111	113.9631	1536.37	347.20
18-Sep-13	10:08:07	Speed Boat	Travelling	91	41	25	5	14	30	22.3047	113.9690	826.13	18.97
18-Sep-13	10:09:02	Speed Boat	Travelling	91	55	45	304	48	15	22.3025	113.9617	723.53	318.53
18-Sep-13	10:09:16	Speed Boat	Travelling	91	41	50	292	7	15	22.3020	113.9599	822.92	305.85
18-Sep-13	10:09:34	Speed Boat	Travelling	91	23	30	280	40	55	22.3014	113.9575	1004.83	294.41
18-Sep-13	10:10:51	Transportation Boat	Travelling	90	58	55	292	57	50	22.3053	113.9553	1429.32	306.69
18-Sep-13	10:11:02	Transportation Boat	Travelling	91	0	20	285	41	40	22.3038	113.9546	1395.37	299.42
18-Sep-13	10:11:07	Construction Boat	Travelling	91	3	25	301	8	30	22.3060	113.9573	1326.74	314.87
18-Sep-13	10:12:03	Transportation Boat	Travelling	90	55	35	275	50	50	22.3022	113.9525	1516.65	289.58
18-Sep-13	10:12:10	Transportation Boat	Travelling	91	1	40	294	17	0	22.3052	113.9559	1365.13	308.01
18-Sep-13	10:12:18	Construction Boat	Travelling	90	59	25	289	51	55	22.3047	113.9549	1417.53	303.60
18-Sep-13	10:15:04	Transportation Boat	Travelling	90	50	40	307	7	55	22.3093	113.9562	1667.37	320.86
18-Sep-13	10:15:26	Transportation Boat	Travelling	93	50	50	339	2	15	22.3009	113.9660	362.39	352.77
18-Sep-13	10:15:35	Transportation Boat	Travelling	90	59	55	298	5	25	22.3061	113.9562	1406.45	311.82
18-Sep-13	10:16:51	Transportation Boat	Travelling	92	11	50	324	32	5	22.3029	113.9641	635.90	338.26
18-Sep-13	10:17:00	Transportation Boat	Travelling	90	51	35	276	3	0	22.3026	113.9514	1637.83	289.78
18-Sep-13	10:19:54	Transportation Boat	Travelling	91	6	55	312	27	25	22.3070	113.9596	1258.75	326.19
18-Sep-13	10:20:03	Tug Boat	Travelling	90	56	30	313	24	10	22.3089	113.9585	1494.01	327.13
18-Sep-13	10:22:35	Tug Boat	Travelling	90	48	50	335	43	35	22.3130	113.9633	1733.71	349.46
18-Sep-13	10:24:54	Transportation Boat	Travelling	90	58	35	297	46	55	22.3062	113.9559	1441.50	311.51
18-Sep-13	10:25:02	Tug Boat	Travelling	90	39	0	348	29	45	22.3173	113.9672	2184.12	2.23
18-Sep-13	10:26:07	Dumping Guide Boat	Travelling	90	47	30	17	6	45	22.3114	113.9753	1784.60	30.84
18-Sep-13	10:26:14	Transportation Boat	Travelling	90	56	20	282	14	25	22.3035	113.9533	1500.29	295.97
18-Sep-13	10:26:23	Transportation Boat	Travelling	90	54	35	287	52	40	22.3049	113.9536	1549.18	301.61
18-Sep-13	10:27:02	Transportation Boat	Travelling	90	57	35	295	42	15	22.3060	113.9554	1467.48	309.43
18-Sep-13	10:27:51	Construction Boat	Travelling	90	56	50	288	10	15	22.3047	113.9541	1487.37	301.90
18-Sep-13	10:28:22	Container Boat	Travelling	90	59	5	342	32	35	22.3105	113.9655	1430.09	356.27
18-Sep-13	10:28:54	Dumping Guide Boat	Travelling	91	0	35	10	39	15	22.3090	113.9720	1394.37	24.38
18-Sep-13	10:29:05	Construction Boat	Travelling	90	59	15	297	34	55	22.3061	113.9560	1426.22	311.31
18-Sep-13	10:30:00	Transportation Boat	Travelling	91	2	10	292	16	25	22.3048	113.9557	1358.71	306.00
18-Sep-13	10:30:27	Dumping Guide Boat	Stationary	91	0	45	9	52	15	22.3091	113.9718	1390.92	23.60
18-Sep-13	10:31:03	Construction Boat	Travelling	91	0	45	312	58	25	22.3081	113.9590	1391.08	326.70
18-Sep-13	10:31:14	Transportation Boat	Travelling	90	59	20	301	40	30	22.3067	113.9567	1424.78	315.40
18-Sep-13	10:31:49	Transportation Boat	Travelling	90	58	35	305	57	35	22.3075	113.9573	1443.43	319.69
18-Sep-13	10:31:53	Transportation Boat	Travelling	90	57	30	306	22	50	22.3078	113.9572	1471.03	320.11
18-Sep-13	10:32:04	Transportation Boat	Travelling	90	58	10	303	27	10	22.3072	113.9568	1453.98	317.18
18-Sep-13	10:32:34	Transportation Boat	Travelling	90	56	30	299	1	40	22.3068	113.9557	1497.64	312.76
18-Sep-13	10:32:39	Transportation Boat	Travelling	90	56	55	298	16	45	22.3066	113.9557	1486.54	312.01
18-Sep-13	10:32:49	Transportation Boat	Travelling	90	59	20	303	11	50	22.3070	113.9569	1425.22	316.93
18-Sep-13	10:33:00	Transportation Boat	Travelling	90	40	45	346	4	25	22.3164	113.9663	2090.84	359.80
18-Sep-13	10:33:26	Construction Boat	Travelling	90	58	40	331	43	25	22.3102	113.9629	1441.80	345.45
18-Sep-13	10:33:37	Transportation Boat	Travelling	90	54	5	287	37	5	22.3050	113.9534	1565.93	301.35
18-Sep-13	10:33:41	Transportation Boat	Travelling	90	54	5	289	27	15	22.3053	113.9537	1565.95	303.18
18-Sep-13	10:33:45	Transportation Boat	Travelling	90	59	35	285	29	20	22.3039	113.9544	1419.41	299.22
18-Sep-13	10:33:52	Transportation Boat	Travelling	90	46	5	339	40	5	22.3141	113.9643	1843.44	353.40
18-Sep-13	10:34:17	Transportation Boat	Travelling	90	52	5	280	17	50	22.3036	113.9519	1627.29	294.03
18-Sep-13	10:34:25	Transportation Boat	Travelling	90	51	35	283	41	20	22.3044	113.9522	1643.39	297.42
18-Sep-13	10:34:44	Transportation Boat	Travelling	90	57	25	287	35	25	22.3045	113.9542	1474.01	301.32
18-Sep-13	10:34:56	Transportation Boat	Travelling	90	54	25	328	48	30	22.3110	113.9619	1556.58	342.54
18-Sep-13	10:36:19	Transportation Boat	Travelling	90	58	40	308	10	50	22.3078	113.9577	1442.61	321.91
18-Sep-13	10:36:23	Transportation Boat	Travelling	90	56	20	307	11	10	22.3081	113.9572	1503.25	320.92
18-Sep-13	10:36:30	Transportation Boat	Travelling	90	48	20	353	22	30	22.3133	113.9685	1756.76	7.10
18-Sep-13	10:37:22	Transportation Boat	Travelling	90	58	10	291	2	25	22.3051	113.9548	1455.48	304.77
18-Sep-13	10:37:31	Transportation Boat	Travelling	90	49	10	309	18	40	22.3100	113.9563	1726.74	323.04
18-Sep-13	10:37:39	Transportation Boat	Travelling	90	57	15	346	8	35	22.3109	113.9664	1479.20	359.87
18-Sep-13	10:38:12	Construction Boat	Travelling	90	38	50	352	43	55	22.3173	113.9688	2199.45	6.46
18-Sep-13	10:38:23	Transportation Boat	Stationary	91	1	25	341	20	35	22.3100	113.9652	1377.74	355.07
18-Sep-13	10:38:29	HSF High Speed Ferry	Travelling	90	57	30	289	6	5	22.3048	113.9544	1472.91	302.83
18-Sep-13	10:39:33	Speed Boat	Travelling	92	10	35	290	6	30	22.3009	113.9612	644.83	303.84
18-Sep-13	10:39:53	HSF High Speed Ferry	Travelling	90	58	15	316	26	5	22.3090	113.9594	1454.08	330.16
18-Sep-13	10:41:08	Speed Boat	Travelling	92	31	40	2	33	50	22.3024	113.9679	555.07	16.29
18-Sep-13	10:41:25	Transportation Boat	Travelling	91	12	35	327	13	35	22.3075	113.9627	1164.39	340.96
18-Sep-13	10:41:32	HSF High Speed Ferry	Travelling	90	46	40	341	33	5	22.3140	113.9649	1822.61	355.28
18-Sep-13	10:41:51	Speed Boat	Travelling	91	48	45	23	6	35	22.3032	113.9709	775.20	36.84
18-Sep-13	10:42:53	HSF High Speed Ferry	Travelling	90	36	35	351	1	30	22.3186	113.9683	2341.56	4.75
18-Sep-13	10:43:04	Transportation Boat	Travelling	91	11	55	301	55	10	22.3052	113.9584	1175.66	315.65
18-Sep-13	10:46:30	Transportation Boat	Travelling	90	55	50	287	47	30	22.3048	113.9538	1519.89	301.52
18-Sep-13	10:46:51	Transportation Boat	Travelling	90	59	45	300	1	50	22.3065	113.9564	1419.00	313.76
18-Sep-13	10:47:11	Transportation Boat	Travelling	90	58	5	295	28	5	22.3059	113.9554	1460.37	309.20
18-Sep-13	10:47:14	Transportation Boat	Travelling	90	59	30	294	41	30	22.3056	113.9555	1425.14	308.42
18-Sep-13	10:47:47	Fishing Boat	Operate and travelling	96	1	25	321	22	25	22.2995	113.9654	232.33	335.10
18-Sep-13	10:47:58	Transportation Boat	Travelling	90	58	35	304	41	45	22.3074	113.9571	1447.95	318.43
18-Sep-13	10:48:03	Transportation Boat	Travelling	90	57	20	283	41	20	22.3038	113.9536	1479.99	297.42
18-Sep-13	10:48:09	Transportation Boat	Travelling	91	2	20	302	50	25	22.3065	113.9573	1359.80	316.57
18-Sep-13	10:48:30	Transportation Boat	Travelling	90	53	15	304	32	5	22.3083	113.9561	1595.44	318.26
18-Sep-13	10:48:47	Construction Boat	Travelling	91	7	55	319	38	35	22.3077	113.9610	1246.97	333.37
18-Sep-13	10:49:30	Fishing Boat	Operate and travelling	95	4	15	300	11	35	22.2993	113.9645	276.40	313.92
18-Sep-13	10:49:43	Transportation Boat	Travelling	91	3	20	289	49	30	22.3043	113.9556	1338.48	303.55
18-Sep-13	10:50:32	Transportation Boat	Travelling	90	53	5	282	47	15	22.3041	113.9525	1601.16	296.52
18-Sep-13	10:51:01	Government Boat	Travelling	90	39	30	350	28	0	22.3171	113.9679	2166.59	4.20
18-Sep-13	10:51:15	Transportation Boat	Travelling	90	59	55	277	47	45	22.3023	113.9536	1416.20	291.53
18-Sep-13	10:51:19	Transportation Boat	Travelling	90	56	25	288	53	0	22.3049	113.9541	1505.34	302.61
18-Sep-13	10:51:28	Construction Boat	Travelling	90	55	50	330	42	5	22.3108	113.9624	1521.35	344.43
18-Sep-13	10:52:49	Government Boat	Travelling	90	52	15	331	11	5	22.3118	113.9623	1627.85	344.91
18-Sep-13	10:52:57	Construction Boat	Travelling	90	50	25	338	52	5	22.3127	113.9643	1688.17	352.60
18-Sep-13	10:53:03	Transportation Boat	Travelling	90	58	25	305	15	15	22.3075	113.9571	1453.57	318.98
18-Sep-13	10:55:00	Government Boat	Travelling	90	59	20	303	10	35	22.3070	113.9569	1431.34	316.91
18-Sep-13	10:55:09	Construction Boat	Travelling	90	42	55	348	14	55	22.3155	113.9671	1991.05	1.98
18-Sep-13	10:57:22	Transportation Boat	Travelling	90	56	55	289	55	5	22.3051	113.9543	1493.67	303.65
18-Sep-13	10:57:37	Dumping Guide Boat	Travelling	90	46	50	16	47	35	22.3117	113.9754	1821.66	30.52
18-Sep-13	10:57:55	Construction Boat	Travelling	90	37	5	8	39	55	22.3169	113.9750	2315.67	22.40
18-Sep-13	10:58:10	Transportation Boat	Travelling	90	58	55	299	27	55	22.3065	113.9562	1442.49	313.20
18-Sep-13	10:58:47	Tug Boat	Travelling	90	44	40	342	5	25	22.3148	113.9650	1912.51	355.82
18-Sep-13	10:58:56	Construction Boat	Travelling	90	44	15	342	55	45	22.3150	113.9653	1931.01	356.66
18-Sep-13	10:59:28	Other	Stationary	90	42	35	22	41	15	22.3122	113.9780	2008.74	36.42
18-Sep-13	11:00:07	Construction Boat	Travelling	90	39	40	350	39	0	22.3170	113.9680	2161.04	4.38
18-Sep-13	11:00:15	Transportation Boat	Travelling	90	55	15	324	45	55	22.3105	113.9609	1540.27	338.50
18-Sep-13	11:01:24	Tug Boat	Travelling	90	51	35	333	40	30	22.3121	113.9629	1652.00	347.40
18-Sep-13	11:01:36	Construction Platform	Travelling	90	51	15	334	35	15	22.3123	113.9631	1663.00	348.32
18-Sep-13	11:01:45	Transportation Boat	Travelling	90	47	55	338	24	25	22.3135	113.9640	1781.04	352.14
18-Sep-13	11:01:52	Construction Boat	Travelling	90	49	30	337	11	40	22.3129	113.9638	1722.99	350.92
18-Sep-13	11:03:24	Transportation Boat	Travelling	90	38	55	347	30	35	22.3175	113.9669	2205.39	1.24
18-Sep-13	11:03:34	Construction Boat	Travelling	90	57	10	317	45	45	22.3094	113.9595	1488.82	331.49
18-Sep-13	11:03:42	Tug Boat	Travelling	90	56	5	323	11	30	22.3102	113.9606	1518.05	336.92
18-Sep-13	11:03:47	Construction Platform	Travelling	90	56	20	324	34	25	22.3103	113.9610	1511.23	338.30
18-Sep-13	11:06:59	Construction Boat	Stationary	90	53	10	293	59	50	22.3065	113.9541	1603.69	307.73
18-Sep-13	11:07:14	Tug Boat	Travelling	91	1	10	304	51	30	22.3070	113.9574	1391.17	318.59
18-Sep-13	11:07:18	Construction Platform	Travelling	91	1	10	306	24	30	22.3072	113.9577	1391.19	320.14
18-Sep-13	11:10:21	Tug Boat	Travelling	90	59	10	287	22	15	22.3043	113.9544	1439.68	301.10

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
18-Sep-13	11:10:26	Construction Platform	Travelling	90	59	55	288	30	5	22.3044	113.9547	1421.45	302.23
18-Sep-13	11:10:34	Construction Boat	Travelling	90	57	40	302	51	50	22.3073	113.9565	1477.72	316.59
18-Sep-13	11:12:24	Transportation Boat	Travelling	91	3	20	286	15	20	22.3037	113.9551	1344.34	299.99
18-Sep-13	11:12:34	Transportation Boat	Travelling	90	44	55	342	16	5	22.3147	113.9651	1906.69	356.00
18-Sep-13	11:12:52	Transportation Boat	Travelling	91	4	5	309	38	25	22.3072	113.9587	1328.54	323.37
18-Sep-13	11:14:01	Transportation Boat	Travelling	90	58	5	306	5	0	22.3077	113.9572	1467.94	319.81
18-Sep-13	11:14:06	Transportation Boat	Travelling	90	53	25	330	29	15	22.3115	113.9622	1598.25	344.22
18-Sep-13	11:14:17	Transportation Boat	Travelling	91	22	15	310	3	0	22.3051	113.9605	1033.02	323.78
18-Sep-13	11:14:33	Construction Boat	Travelling	90	43	20	347	50	50	22.3154	113.9669	1978.85	1.58
18-Sep-13	11:14:41	Transportation Boat	Travelling	90	51	25	303	40	0	22.3086	113.9555	1661.70	317.40
18-Sep-13	11:16:11	Transportation Boat	Travelling	90	59	40	309	29	20	22.3079	113.9581	1429.06	323.22
18-Sep-13	11:16:26	Transportation Boat	Travelling	92	18	15	316	53	40	22.3024	113.9635	613.27	330.62
18-Sep-13	11:16:36	HSF High Speed Ferry	Travelling	90	44	50	344	14	40	22.3148	113.9657	1911.81	357.97
18-Sep-13	11:17:44	Transportation Boat	Travelling	90	58	15	291	24	0	22.3052	113.9547	1464.73	305.13
18-Sep-13	11:17:58	Transportation Boat	Travelling	94	16	20	333	59	25	22.3005	113.9657	330.14	347.72
18-Sep-13	11:18:09	HSF High Speed Ferry	Travelling	90	57	0	324	9	50	22.3101	113.9609	1497.43	337.89
18-Sep-13	11:18:59	Transportation Boat	Travelling	90	54	15	305	39	5	22.3084	113.9564	1574.79	319.38
18-Sep-13	11:19:03	HSF High Speed Ferry	Travelling	91	1	50	306	12	55	22.3071	113.9578	1379.11	319.95
18-Sep-13	11:20:04	HSF High Speed Ferry	Travelling	90	56	0	286	9	50	22.3045	113.9535	1525.14	299.89
18-Sep-13	11:22:12	Transportation Boat	Travelling	92	20	50	327	37	50	22.3028	113.9645	602.65	341.36
18-Sep-13	11:22:50	HSF High Speed Ferry	Travelling	91	5	40	285	4	5	22.3032	113.9553	1298.63	298.80
18-Sep-13	11:23:12	Transportation Boat	Travelling	91	48	40	321	15	50	22.3040	113.9632	781.98	334.99
18-Sep-13	11:24:35	Transportation Boat	Travelling	91	20	45	315	48	20	22.3058	113.9612	1054.43	329.54
18-Sep-13	11:24:41	HSF High Speed Ferry	Travelling	91	24	25	310	4	0	22.3049	113.9606	1008.33	323.80
18-Sep-13	11:24:51	Container Boat	Travelling	90	55	30	285	2	35	22.3043	113.9533	1540.50	298.77
18-Sep-13	11:25:35	Transportation Boat	Travelling	90	58	10	296	42	10	22.3062	113.9555	1469.07	310.43
18-Sep-13	11:25:42	Transportation Boat	Travelling	90	58	30	306	33	35	22.3077	113.9573	1460.61	320.29
18-Sep-13	11:25:59	HSF High Speed Ferry	Travelling	91	31	45	333	49	50	22.3058	113.9645	927.47	347.56
18-Sep-13	11:26:04	Container Boat	Travelling	90	58	50	295	54	5	22.3060	113.9555	1452.33	309.63
18-Sep-13	11:26:09	Transportation Boat	Travelling	90	56	5	292	2	40	22.3056	113.9544	1524.62	305.77
18-Sep-13	11:26:15	Transportation Boat	Travelling	91	3	35	300	51	30	22.3061	113.9571	1342.56	314.59
18-Sep-13	11:26:23	Tug Boat	Travelling	91	5	5	308	58	10	22.3070	113.9587	1311.30	322.70
18-Sep-13	11:27:00	Transportation Boat	Travelling	91	2	0	285	6	30	22.3036	113.9547	1377.46	298.84
18-Sep-13	11:27:06	Transportation Boat	Travelling	90	53	15	284	34	35	22.3045	113.9526	1607.35	298.31
18-Sep-13	11:27:10	Transportation Boat	Travelling	91	1	10	287	49	30	22.3042	113.9548	1396.51	301.55
18-Sep-13	11:27:15	Tug Boat	Travelling	91	3	30	300	6	35	22.3060	113.9570	1344.60	313.84
18-Sep-13	11:27:19	Container Boat	Travelling	91	0	20	308	12	50	22.3077	113.9579	1416.09	321.94
18-Sep-13	11:27:29	HSF High Speed Ferry	Travelling	91	21	55	0	43	35	22.3067	113.9689	1039.88	14.46
18-Sep-13	11:27:44	Transportation Boat	Travelling	90	51	5	307	30	45	22.3094	113.9562	1676.95	321.24
18-Sep-13	11:27:51	Transportation Boat	Travelling	90	51	5	279	1	15	22.3035	113.9514	1676.99	292.75
18-Sep-13	11:27:55	Transportation Boat	Travelling	90	56	0	278	4	5	22.3027	113.9526	1527.44	291.80
18-Sep-13	11:28:03	Transportation Boat	Travelling	91	3	20	299	18	55	22.3059	113.9568	1348.38	313.05
18-Sep-13	11:30:07	HSF High Speed Ferry	Travelling	90	49	20	20	10	10	22.3106	113.9758	1738.37	33.90
18-Sep-13	11:30:53	Container Boat	Travelling	90	50	15	339	32	40	22.3129	113.9645	1706.31	353.27
18-Sep-13	11:33:38	Transportation Boat	Travelling	91	1	35	298	51	5	22.3061	113.9565	1388.66	312.58
18-Sep-13	11:33:46	Container Boat	Travelling	90	37	45	351	20	10	22.3181	113.9684	2289.26	5.07
18-Sep-13	11:36:27	HSF High Speed Ferry	Travelling	90	42	45	347	30	25	22.3157	113.9668	2015.06	1.24
18-Sep-13	11:36:32	Speed Boat	Travelling	91	0	20	331	19	55	22.3100	113.9628	1418.59	345.06
18-Sep-13	11:39:05	HSF High Speed Ferry	Travelling	90	59	30	321	56	20	22.3094	113.9606	1439.42	335.67
18-Sep-13	11:39:20	Transportation Boat	Travelling	93	54	15	306	44	5	22.3001	113.9642	362.87	320.46
18-Sep-13	11:40:47	HSF High Speed Ferry	Travelling	90	59	45	299	1	50	22.3064	113.9562	1433.79	312.76
18-Sep-13	11:40:54	Transportation Boat	Travelling	94	18	35	354	5	20	22.3005	113.9668	328.69	7.82
18-Sep-13	11:41:06	Transportation Boat	Travelling	91	2	35	300	32	35	22.3062	113.9569	1368.15	314.27
18-Sep-13	11:41:50	HSF High Speed Ferry	Travelling	90	55	15	286	13	10	22.3046	113.9533	1552.63	299.95
18-Sep-13	11:41:55	Transportation Boat	Travelling	91	3	20	286	41	25	22.3038	113.9551	1351.97	300.42
18-Sep-13	11:42:01	Transportation Boat	Travelling	91	0	5	305	37	0	22.3074	113.9574	1426.06	319.35
18-Sep-13	11:42:15	Transportation Boat	Travelling	92	39	45	7	19	20	22.3021	113.9683	533.09	21.05
18-Sep-13	11:44:49	Tug Boat	Travelling	91	1	10	297	29	25	22.3059	113.9561	1401.23	311.22
18-Sep-13	11:46:44	Tug Boat	Travelling	90	59	55	320	6	55	22.3092	113.9603	1431.37	333.85
18-Sep-13	11:47:00	Transportation Boat	Travelling	92	23	5	344	57	30	22.3030	113.9663	595.95	358.69
18-Sep-13	11:48:29	Transportation Boat	Travelling	92	8	10	324	17	45	22.3032	113.9640	665.75	338.03
18-Sep-13	11:48:36	Tug Boat	Travelling	90	51	15	338	18	25	22.3126	113.9641	1678.10	352.04
18-Sep-13	11:51:19	Transportation Boat	Travelling	90	59	50	302	31	55	22.3069	113.9568	1434.65	316.26
18-Sep-13	11:51:26	Transportation Boat	Travelling	91	13	20	306	0	35	22.3056	113.9591	1167.96	319.74
18-Sep-13	11:52:05	Dumping Guide Boat	Travelling	91	15	30	22	16	40	22.3059	113.9729	1134.29	36.01
18-Sep-13	11:53:19	Transportation Boat	Travelling	91	0	25	290	8	0	22.3047	113.9549	1421.16	303.86
18-Sep-13	11:53:52	Dumping Guide Boat	Travelling	91	53	40	15	35	50	22.3035	113.9700	751.81	29.33
18-Sep-13	11:54:58	Transportation Boat	Travelling	90	58	25	280	26	30	22.3030	113.9533	1470.95	294.17
18-Sep-13	11:55:18	Dumping Guide Boat	Travelling	93	5	35	5	31	20	22.3015	113.9679	459.80	19.25
18-Sep-13	11:55:45	Transportation Boat	Travelling	91	2	25	296	14	50	22.3056	113.9561	1375.69	309.98
18-Sep-13	11:56:47	Transportation Boat	Travelling	90	57	10	280	24	55	22.3032	113.9530	1504.09	294.15
18-Sep-13	11:56:57	Dumping Guide Boat	Travelling	94	41	15	341	31	5	22.3003	113.9662	303.00	355.25
18-Sep-13	11:57:12	Transportation Boat	Travelling	91	15	15	308	34	15	22.3057	113.9596	1139.20	322.30
18-Sep-13	11:57:20	Tug Boat	Travelling	91	1	50	280	50	35	22.3028	113.9541	1389.25	294.57
18-Sep-13	11:58:43	Transportation Boat	Travelling	91	46	0	311	15	10	22.3036	113.9619	807.18	324.98
18-Sep-13	11:58:51	Tug Boat	Travelling	91	3	55	291	10	5	22.3045	113.9557	1343.82	304.90
18-Sep-13	11:58:58	Dumping Guide Boat	Stationary	94	54	35	329	35	55	22.3001	113.9656	289.32	343.33
18-Sep-13	11:59:08	Transportation Boat	Travelling	91	1	10	301	23	45	22.3066	113.9568	1405.07	315.13
18-Sep-13	12:00:04	Transportation Boat	Travelling	91	1	20	285	8	25	22.3037	113.9545	1401.45	298.87
18-Sep-13	12:00:11	Transportation Boat	Travelling	92	47	10	318	16	50	22.3017	113.9641	511.10	332.01
18-Sep-13	12:00:19	Tug Boat	Travelling	91	6	5	299	52	55	22.3057	113.9572	1299.63	313.61
18-Sep-13	12:01:54	Transportation Boat	Travelling	95	51	0	352	55	25	22.2998	113.9667	242.69	6.65
18-Sep-13	12:02:49	HSF High Speed Ferry	Travelling	91	0	5	316	26	30	22.3088	113.9595	1431.74	330.17
18-Sep-13	12:03:16	Dumping Guide Boat	Travelling	95	3	30	316	8	30	22.2998	113.9650	281.01	329.87
18-Sep-13	12:03:27	Transportation Boat	Travelling	95	7	10	341	14	0	22.3001	113.9662	277.64	354.96
18-Sep-13	12:03:35	Tug Boat	Travelling	91	3	30	319	54	30	22.3085	113.9606	1353.96	333.64
18-Sep-13	12:03:43	HSF High Speed Ferry	Travelling	90	55	45	331	32	15	22.3111	113.9626	1544.94	345.27
18-Sep-13	12:05:00	HSF High Speed Ferry	Travelling	90	50	5	350	23	55	22.3131	113.9676	1723.32	4.13
18-Sep-13	12:05:11	Dumping Guide Boat	Travelling	91	3	55	8	19	10	22.3088	113.9713	1345.44	22.05
18-Sep-13	12:05:50	Dumping Guide Boat	Travelling	91	40	40	333	9	15	22.3051	113.9645	851.32	346.88
18-Sep-13	12:05:58	Transportation Boat	Travelling	91	51	35	318	8	10	22.3037	113.9629	767.67	331.87
18-Sep-13	12:06:07	Tug Boat	Travelling	90	56	25	334	18	5	22.3111	113.9633	1527.10	348.03
18-Sep-13	12:06:21	Transportation Boat	Travelling	90	59	30	304	0	50	22.3073	113.9569	1446.94	317.74
18-Sep-13	12:07:10	Transportation Boat	Travelling	91	24	40	315	11	35	22.3054	113.9613	1013.50	328.92
18-Sep-13	12:07:15	Transportation Boat	Travelling	91	0	45	297	31	50	22.3060	113.9560	1417.02	311.26
18-Sep-13	12:07:23	Dumping Guide Boat	Travelling	91	10	30	335	9	30	22.3084	113.9641	1219.04	348.89
18-Sep-13	12:07:28	Dumping Guide Boat	Travelling	91	18	30	346	44	0	22.3075	113.9665	1093.79	0.46
18-Sep-13	12:07:44	Tug Boat	Travelling	90	49	30	342	2	5	22.3133	113.9651	1744.94	355.76
18-Sep-13	12:10:05	Dumping Guide Boat	Travelling	90	48	30	343	1	10	22.3136	113.9654	1782.44	356.75
18-Sep-13	12:10:12	Dumping Guide Boat	Stationary	91	7	35	338	34	35	22.3090	113.9647	1272.87	352.31
18-Sep-13	12:10:21	Transportation Boat	Travelling	90	51	40	307	34	45	22.3094	113.9562	1671.25	321.31
18-Sep-13	12:10:32	Tug Boat	Travelling	90	39	50	352	43	0	22.3171	113.9688	2181.18	6.45
18-Sep-13	12:13:33	Construction Boat	Travelling	90	45	35	345	15	20	22.3147	113.9661	1900.30	358.99
18-Sep-13	12:13:39	Government Boat	Travelling	90	41	55	348	4	20	22.3162	113.9670	2070.95	1.80
18-Sep-13	12:13:48	Dumping Guide Boat	Travelling	90	34	10	352	46	20	22.3205	113.9692	2558.64	6.50
18-Sep-13	12:14:48	Transportation Boat	Travelling	90	57	20	283	47	5	22.3039	113.9534	1504.81	297.51
18-Sep-13	12:16:43	Government Boat	Travelling	91	3	10	308	29	20	22.3073	113.9583	1364.59	322.22
18-Sep-13	12:17:00	Construction Boat	Travelling	90	58	55	326	54	5	22.3101	113.9617	1464.42	340.63
18-Sep-13	12:17:53	Government Boat	Travelling	90	58	55	287	39	35	22.3045	113.9542	1464.67	301.39
18-Sep-13	12:18:04	Transportation Boat	Travelling	91	19	20	336	48	50	22.3072	113.9647	1084.38	350.54
18-Sep-13	12:18:40	Transportation Boat	Travelling	91	3	15	309	19	10	22.3074	113.9584	1363.28	323.05
18-Sep-13	12:18:53	Transportation Boat	Travelling	90	59	25	305	21	55	22.3075	113.9571	1452.45	319.10
18-Sep-13	12:18:59	Container Boat	Travelling	90	57	55	307	52	5	22.3081	113.9574	1490.63	321.60
18-Sep-13	12:19:06	Construction Boat	Travelling	90	47	55	344	30	45	22.3139	113.9659	1807.69	358.24
18-Sep-13	12:19:13	Construction Boat	Travelling	91	10	20	318	40	35	22.3074	113.9609	1224.70	332.41
18-Sep-13	12:19:30	Transportation Boat	Travelling	91	34	40	328	39	40	22.3054	113.9637	907.92	342.39
18-Sep-13	12:19:38	Transportation Boat	Travelling	91	13	10	310	42	35	22.3062	113.9597	1176.93	324.44

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
18-Sep-13	12:20:36	Transportation Boat	Stationary	91	10	35	323	43	55	22.3078	113.9618	1220.64	337.46
18-Sep-13	12:20:42	Transportation Boat	Travelling	90	55	20	337	22	40	22.3115	113.9641	1561.79	351.11
18-Sep-13	12:20:50	Dumping Guide Boat	Travelling	91	16	30	324	45	45	22.3070	113.9624	1125.47	338.49
18-Sep-13	12:20:55	Container Boat	Travelling	91	3	25	320	47	30	22.3087	113.9607	1360.23	334.52
18-Sep-13	12:21:03	Transportation Boat	Travelling	91	38	30	313	15	30	22.3042	113.9618	872.65	326.99
18-Sep-13	12:21:47	Transportation Boat	Travelling	91	51	10	332	6	35	22.3044	113.9646	772.87	345.84
18-Sep-13	12:22:04	Dumping Guide Boat	Stationary	91	13	35	314	56	10	22.3066	113.9605	1170.74	328.67
18-Sep-13	12:22:15	Construction Boat	Travelling	91	1	25	327	56	55	22.3096	113.9621	1405.44	341.68
18-Sep-13	12:22:19	Container Boat	Travelling	90	56	45	331	39	50	22.3109	113.9627	1522.69	345.39
18-Sep-13	12:22:29	Transportation Boat	Travelling	92	14	45	338	40	45	22.3033	113.9656	637.20	352.41
18-Sep-13	12:22:32	Transportation Boat	Travelling	92	25	45	319	57	5	22.3024	113.9639	588.96	333.68
18-Sep-13	12:24:00	Transportation Boat	Travelling	94	8	5	2	59	40	22.3006	113.9674	345.47	16.72
18-Sep-13	12:24:05	Transportation Boat	Travelling	94	43	30	340	4	0	22.3003	113.9661	302.13	353.80
18-Sep-13	12:24:15	Construction Boat	Travelling	91	4	35	312	20	15	22.3076	113.9591	1336.22	326.07
18-Sep-13	12:24:31	Transportation Boat	Travelling	90	47	30	344	24	5	22.3140	113.9658	1825.77	358.13
18-Sep-13	12:25:30	Transportation Boat	Travelling	90	54	5	332	49	10	22.3116	113.9628	1599.93	346.55
18-Sep-13	12:25:39	Container Boat	Travelling	90	41	10	348	18	35	22.3166	113.9671	2114.60	2.04
18-Sep-13	12:25:47	Construction Boat	Travelling	91	4	10	299	52	30	22.3060	113.9569	1345.39	313.60
18-Sep-13	12:26:36	Transportation Boat	Travelling	91	1	10	316	36	40	22.3087	113.9596	1412.42	330.34
18-Sep-13	12:27:43	Transportation Boat	Travelling	93	32	5	328	33	55	22.3011	113.9652	404.64	342.30
18-Sep-13	12:27:52	Construction Boat	Travelling	90	59	5	284	26	20	22.3038	113.9539	1463.25	298.17
18-Sep-13	12:27:58	Transportation Boat	Travelling	91	1	50	292	31	35	22.3051	113.9554	1397.36	306.26
18-Sep-13	12:31:04	Transportation Boat	Travelling	91	18	5	306	27	30	22.3053	113.9595	1104.60	320.19
18-Sep-13	12:33:26	Transportation Boat	Travelling	90	54	25	297	41	30	22.3071	113.9548	1592.37	311.42
18-Sep-13	12:34:48	Transportation Boat	Stationary	90	52	0	295	20	45	22.3071	113.9538	1668.09	309.08
18-Sep-13	12:36:45	Transportation Boat	Travelling	90	56	40	290	33	0	22.3054	113.9541	1529.14	304.28
18-Sep-13	12:36:50	Transportation Boat	Travelling	90	57	55	287	25	15	22.3046	113.9539	1495.68	301.15
18-Sep-13	12:37:51	Transportation Boat	Travelling	90	58	40	307	22	5	22.3080	113.9574	1476.58	321.10
18-Sep-13	12:37:55	Transportation Boat	Travelling	91	0	10	296	21	10	22.3060	113.9557	1439.29	310.08
18-Sep-13	12:39:11	Transportation Boat	Travelling	90	58	25	306	31	25	22.3079	113.9572	1483.36	320.25
18-Sep-13	12:41:01	Transportation Boat	Travelling	91	1	50	303	19	45	22.3068	113.9571	1400.82	317.06
18-Sep-13	12:42:40	Transportation Boat	Travelling	90	58	55	288	15	55	22.3046	113.9543	1471.56	302.00
18-Sep-13	12:44:01	Transportation Boat	Travelling	91	2	30	302	6	40	22.3066	113.9570	1386.48	315.84
18-Sep-13	12:44:06	Transportation Boat	Travelling	91	2	5	304	9	55	22.3069	113.9573	1395.92	317.90
18-Sep-13	12:44:57	Transportation Boat	Travelling	91	4	5	294	25	30	22.3051	113.9561	1352.05	308.15
18-Sep-13	12:45:03	Transportation Boat	Travelling	91	3	0	292	17	10	22.3049	113.9556	1375.60	306.02
18-Sep-13	12:46:28	Transportation Boat	Travelling	91	1	45	275	27	35	22.3018	113.9535	1404.18	289.19
18-Sep-13	12:46:32	Transportation Boat	Travelling	91	0	35	281	38	55	22.3031	113.9538	1431.59	295.38
18-Sep-13	12:48:40	Dumping Guide Boat	Travelling	90	57	40	329	41	5	22.3106	113.9622	1505.63	343.41
18-Sep-13	12:49:49	Dumping Guide Boat	Travelling	90	53	20	338	22	0	22.3122	113.9642	1630.31	352.10
18-Sep-13	12:54:38	Transportation Boat	Travelling	91	2	15	288	37	5	22.3043	113.9549	1394.91	302.35
18-Sep-13	12:55:54	Transportation Boat	Travelling	91	7	40	300	29	50	22.3057	113.9575	1282.32	314.23
18-Sep-13	12:57:35	Transportation Boat	Travelling	90	55	20	307	54	50	22.3087	113.9569	1572.74	321.64
18-Sep-13	12:57:39	Transportation Boat	Travelling	91	2	35	292	13	55	22.3050	113.9555	1388.17	305.96
18-Sep-13	12:58:56	Transportation Boat	Travelling	91	0	0	306	9	25	22.3076	113.9573	1449.07	319.89
18-Sep-13	12:59:44	Transportation Boat	Travelling	90	52	10	307	47	30	22.3094	113.9563	1670.53	321.52
18-Sep-13	13:06:31	Transportation Boat	Travelling	91	7	0	293	44	25	22.3047	113.9564	1297.81	307.47
18-Sep-13	13:06:36	Construction Boat	Travelling	91	4	15	293	25	40	22.3050	113.9559	1354.01	307.16
18-Sep-13	13:07:44	Transportation Boat	Travelling	91	8	5	304	48	55	22.3062	113.9582	1277.23	318.55
18-Sep-13	13:07:49	Construction Boat	Travelling	91	7	5	303	48	55	22.3062	113.9579	1296.50	317.55
18-Sep-13	13:10:06	Transportation Boat	Travelling	91	3	35	325	56	20	22.3092	113.9618	1369.28	339.67
18-Sep-13	13:10:16	Construction Boat	Travelling	91	4	30	324	30	40	22.3089	113.9615	1349.64	338.24
18-Sep-13	13:10:22	Transportation Boat	Travelling	91	19	0	284	15	30	22.3023	113.9570	1099.79	297.99
18-Sep-13	13:12:21	Transportation Boat	Travelling	90	49	30	349	9	45	22.3135	113.9673	1766.46	2.89
18-Sep-13	13:12:52	Transportation Boat	Travelling	90	50	30	342	38	10	22.3132	113.9653	1730.98	356.37
18-Sep-13	13:12:59	Transportation Boat	Travelling	92	15	35	308	39	10	22.3022	113.9626	639.31	322.38
18-Sep-13	13:13:07	Construction Boat	Travelling	90	53	40	342	55	5	22.3122	113.9655	1627.15	356.65
18-Sep-13	13:13:13	Transportation Boat	Travelling	90	55	35	349	0	55	22.3117	113.9671	1570.18	2.75
18-Sep-13	13:14:39	Transportation Boat	Travelling	93	22	10	339	17	30	22.3014	113.9659	428.31	353.02
18-Sep-13	13:14:47	Transportation Boat	Travelling	91	13	5	348	52	30	22.3083	113.9669	1190.60	2.60
18-Sep-13	13:14:58	Dumping Guide Boat	Travelling	90	51	35	350	12	15	22.3128	113.9675	1694.63	3.93
18-Sep-13	13:16:04	Transportation Boat	Travelling	95	9	5	359	3	30	22.3001	113.9670	279.70	12.79
18-Sep-13	13:16:12	Transportation Boat	Travelling	91	41	20	350	26	45	22.3053	113.9670	856.97	4.18
18-Sep-13	13:18:38	Transportation Boat	Travelling	91	6	25	301	51	40	22.3061	113.9575	1312.31	315.59
18-Sep-13	13:19:28	Transportation Boat	Travelling	91	6	0	317	15	35	22.3080	113.9602	1320.90	330.99
18-Sep-13	13:20:23	Dumping Guide Boat	Travelling	90	56	40	348	49	45	22.3115	113.9671	1541.78	2.56
18-Sep-13	13:20:31	Transportation Boat	Travelling	90	57	25	333	47	25	22.3110	113.9632	1521.38	347.52
18-Sep-13	13:20:41	Transportation Boat	Travelling	91	5	10	292	58	40	22.3048	113.9560	1338.29	306.71
18-Sep-13	13:21:56	Transportation Boat	Travelling	90	56	55	307	27	45	22.3084	113.9570	1535.35	321.19
18-Sep-13	13:22:04	Transportation Boat	Travelling	90	43	15	348	35	20	22.3159	113.9672	2031.68	2.32
18-Sep-13	13:22:11	Transportation Boat	Travelling	90	38	55	350	37	0	22.3179	113.9681	2264.93	4.35
18-Sep-13	13:22:19	Dumping Guide Boat	Travelling	90	47	50	357	34	20	22.3138	113.9699	1832.74	11.30
18-Sep-13	13:23:43	Transportation Boat	Travelling	90	46	30	346	1	0	22.3146	113.9663	1886.95	359.75
18-Sep-13	13:25:18	Transportation Boat	Travelling	90	56	50	337	7	55	22.3113	113.9640	1538.61	350.86
18-Sep-13	13:26:33	Transportation Boat	Travelling	91	5	0	326	39	5	22.3090	113.9620	1343.23	340.38
18-Sep-13	13:27:14	Transportation Boat	Travelling	91	2	5	283	38	5	22.3034	113.9542	1407.30	297.36
18-Sep-13	13:28:01	Transportation Boat	Travelling	91	11	55	310	27	0	22.3065	113.9595	1213.10	324.18
18-Sep-13	13:28:25	Transportation Boat	Travelling	91	4	40	298	56	15	22.3059	113.9567	1350.71	312.67
18-Sep-13	13:29:27	Transportation Boat	Travelling	90	56	30	305	21	55	22.3082	113.9565	1549.03	319.10
18-Sep-13	13:29:38	Transportation Boat	Travelling	91	12	5	290	33	40	22.3038	113.9567	1210.63	304.29
18-Sep-13	13:32:39	Transportation Boat	Travelling	90	59	55	311	31	25	22.3084	113.9583	1460.35	325.25
18-Sep-13	13:33:01	Transportation Boat	Travelling	91	2	35	284	33	45	22.3036	113.9544	1397.43	298.29
18-Sep-13	13:34:26	Transportation Boat	Travelling	91	0	25	313	44	10	22.3086	113.9588	1448.58	327.47
18-Sep-13	13:34:32	Transportation Boat	Travelling	91	4	20	296	53	5	22.3056	113.9564	1359.35	310.61
18-Sep-13	13:36:27	Transportation Boat	Travelling	90	56	15	308	18	20	22.3087	113.9571	1558.06	322.04
18-Sep-13	13:36:32	Transportation Boat	Travelling	90	52	15	308	30	5	22.3096	113.9564	1679.42	322.23
18-Sep-13	13:38:52	Transportation Boat	Travelling	90	57	30	282	3	50	22.3036	113.9530	1524.38	295.79
18-Sep-13	13:40:16	Transportation Boat	Travelling	91	3	20	297	26	50	22.3058	113.9563	1382.55	311.18
18-Sep-13	13:41:07	Transportation Boat	Travelling	91	0	0	306	16	15	22.3077	113.9573	1460.60	320.00
18-Sep-13	13:42:45	Transportation Boat	Travelling	91	3	5	305	2	50	22.3070	113.9575	1388.74	318.78
18-Sep-13	13:42:52	Transportation Boat	Travelling	90	57	5	348	42	40	22.3114	113.9670	1536.82	2.44
18-Sep-13	13:43:00	Transportation Boat	Travelling	91	25	20	288	17	40	22.3025	113.9580	1023.80	302.02
18-Sep-13	13:43:14	Transportation Boat	Travelling	90	57	10	281	25	35	22.3035	113.9529	1534.65	295.16
18-Sep-13	13:43:19	Transportation Boat	Travelling	91	0	20	280	29	0	22.3030	113.9535	1453.02	294.21
18-Sep-13	13:43:27	Transportation Boat	Travelling	91	3	45	295	55	55	22.3055	113.9561	1374.22	309.66
18-Sep-13	13:43:32	Transportation Boat	Travelling	91	2	10	343	54	35	22.3103	113.9658	1409.68	357.64
18-Sep-13	13:43:38	Transportation Boat	Travelling	91	28	30	292	39	25	22.3029	113.9587	987.05	306.39
18-Sep-13	13:43:43	Transportation Boat	Travelling	90	59	5	286	40	30	22.3044	113.9539	1484.30	300.40
18-Sep-13	13:43:48	Transportation Boat	Travelling	91	2	20	285	53	35	22.3039	113.9545	1405.93	299.62
18-Sep-13	13:44:08	Transportation Boat	Stationary	91	4	30	341	18	25	22.3098	113.9653	1358.23	355.04
18-Sep-13	13:44:56	Transportation Boat	Travelling	90	56	35	277	53	0	22.3028	113.9524	1551.21	291.61
18-Sep-13	13:45:03	Transportation Boat	Travelling	91	31	10	303	58	40	22.3040	113.9601	958.25	317.71
18-Sep-13	13:45:08	Transportation Boat	Travelling	91	1	25	303	4	10	22.3070	113.9569	1427.54	316.80
18-Sep-13	13:45:10	Transportation Boat	Travelling	91	4	15	303	4	5	22.3066	113.9573	1363.84	316.80
18-Sep-13	13:46:17	Transportation Boat	Travelling	90	52	0	304	0	35	22.3089	113.9553	1690.72	317.74
18-Sep-13	13:46:19	Transportation Boat	Travelling	90	53	45	303	27	50	22.3084	113.9556	1634.74	317.19
18-Sep-13	13:46:27	Transportation Boat	Travelling	91	29	5	315	6	20	22.3052	113.9615	981.06	328.84
18-Sep-13	13:48:56	Transportation Boat	Travelling	91	22	40	333	52	40	22.3069	113.9642	1058.24	347.61
18-Sep-13	13:50:21	Transportation Boat	Travelling	90	53	55	351	36	50	22.3122	113.9679	1630.84	5.34
18-Sep-13	13:53:12	Transportation Boat	Travelling	91	5	20	345	51	55	22.3097	113.9663	1342.97	359.60
18-Sep-13	13:53:20	Transportation Boat	Travelling	90	57	35	305	35	45	22.3080	113.9567	1526.26	319.33
18-Sep-13	13:53:57	Transportation Boat	Travelling	91	5	35	300	5	20	22.3060	113.9570	1337.98	313.82
18-Sep-13	13:55:01	Transportation Boat	Travelling	91	1	20	278	53	40	22.3026	113.9535	1432.15	292.62
18-Sep-13	13:56:41	Transportation Boat	Stationary	91	9	5	354	6	30	22.3089	113.9681	1270.13	7.84
18-Sep-13	13:58:17	Transportation Boat	Travelling	91	3	25	352	24	15	22.3100	113.9678	1385.36	6.13
18-Sep-13	13:59:47	Transportation Boat	Travelling	91	0	40	287	50	35	22.3044	113.9544	1449.38	301.57
18-Sep-13	13:59:57	Transportation Boat	Travelling	95	17	45	343	36	15	22.3001	113.9663	274.26	357.33

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
18-Sep-13	14:00:12	Speed Boat	Travelling	91	3	40	299	37	45	22.3061	113.9566	1380.35	313.36
18-Sep-13	14:00:51	Speed Boat	Travelling	91	3	35	286	6	5	22.3038	113.9547	1382.35	299.83
18-Sep-13	14:01:02	Transportation Boat	Travelling	91	2	5	304	56	40	22.3072	113.9573	1416.21	318.67
18-Sep-13	14:01:10	Transportation Boat	Travelling	93	2	15	325	51	55	22.3017	113.9648	479.42	339.60
18-Sep-13	14:01:36	Transportation Boat	Travelling	90	56	0	307	59	30	22.3087	113.9569	1572.50	321.72
18-Sep-13	14:02:04	Other	Stationary	90	34	20	279	17	40	22.3068	113.9431	2598.86	293.02
18-Sep-13	14:02:09	Other	Stationary	90	32	50	287	31	20	22.3103	113.9438	2723.07	301.25
18-Sep-13	14:02:12	Other	Stationary	90	33	50	292	15	10	22.3116	113.9456	2639.01	305.98
18-Sep-13	14:02:16	Other	Stationary	90	41	50	295	1	0	22.3096	113.9503	2118.36	308.75
18-Sep-13	14:02:19	Other	Stationary	90	51	45	299	36	45	22.3081	113.9543	1704.14	313.34
18-Sep-13	14:02:23	Other	Stationary	91	0	30	304	52	55	22.3074	113.9570	1454.13	318.61
18-Sep-13	14:02:26	Other	Stationary	90	57	15	311	2	55	22.3089	113.9578	1537.89	324.78
18-Sep-13	14:02:35	Other	Stationary	90	59	15	317	28	30	22.3093	113.9594	1485.29	331.20
18-Sep-13	14:02:40	Other	Stationary	90	56	10	323	24	40	22.3106	113.9605	1568.08	337.14
18-Sep-13	14:02:43	Other	Stationary	90	49	35	337	1	30	22.3134	113.9636	1780.19	350.75
18-Sep-13	14:02:47	Other	Stationary	90	44	30	340	27	30	22.3154	113.9644	1988.35	354.19
18-Sep-13	14:02:50	Other	Stationary	90	43	0	342	45	45	22.3161	113.9652	2059.55	356.49
18-Sep-13	14:02:53	Other	Stationary	90	40	40	346	52	15	22.3172	113.9666	2181.17	0.60
18-Sep-13	14:02:56	Other	Stationary	90	34	20	350	43	50	22.3209	113.9684	2599.29	4.46
18-Sep-13	14:03:19	Other	Stationary	91	0	30	304	56	50	22.3074	113.9571	1454.38	318.68
18-Sep-13	14:03:29	Other	Stationary	90	53	10	308	8	0	22.3094	113.9564	1658.30	321.86
18-Sep-13	14:03:39	Other	Stationary	90	30	45	348	29	5	22.3239	113.9675	2918.01	2.21
18-Sep-13	14:03:48	Other	Stationary	90	30	35	352	15	25	22.3239	113.9694	2934.87	5.99
18-Sep-13	14:04:14	Transportation Boat	Travelling	91	23	0	313	2	40	22.3056	113.9608	1056.96	326.77
18-Sep-13	14:04:27	Other	Stationary	91	12	35	323	30	30	22.3077	113.9618	1210.04	337.24
18-Sep-13	14:04:33	Other	Stationary	90	36	50	354	43	30	22.3191	113.9699	2416.86	8.45
18-Sep-13	14:04:37	Other	Stationary	90	45	10	356	25	25	22.3150	113.9698	1958.97	10.15
18-Sep-13	14:04:40	Other	Stationary	90	41	40	356	51	25	22.3164	113.9702	2128.02	10.59
18-Sep-13	14:04:49	Other	Stationary	90	35	50	355	27	45	22.3197	113.9703	2487.03	9.19
18-Sep-13	14:05:11	Other	Stationary	91	5	50	340	38	45	22.3096	113.9651	1335.63	354.38
18-Sep-13	14:05:15	Other	Stationary	90	58	25	0	32	35	22.3108	113.9700	1507.53	14.27
18-Sep-13	14:05:27	Other	Stationary	90	47	50	6	52	45	22.3132	113.9727	1847.63	20.61
18-Sep-13	14:05:39	Other	Stationary	90	31	25	11	52	15	22.3208	113.9784	2853.94	25.60
18-Sep-13	14:08:21	Speed Boat	Travelling	91	1	0	299	24	50	22.3065	113.9562	1443.65	313.14
18-Sep-13	14:08:33	Speed Boat	Travelling	91	1	15	302	49	40	22.3070	113.9568	1437.74	316.56
18-Sep-13	14:10:34	Transportation Boat	Travelling	90	59	35	306	38	35	22.3079	113.9572	1479.06	320.37
18-Sep-13	14:11:13	Transportation Boat	Travelling	91	5	25	300	28	0	22.3061	113.9570	1345.75	314.20
25-Sep-13	8:03:13	Other	Stationary	95	6	40	0	0	0	22.3001	113.9671	285.88	13.73
25-Sep-13	8:05:35	Other	Stationary	90	34	30	278	28	40	22.3065	113.9430	2600.77	292.21
25-Sep-13	8:05:39	Other	Stationary	90	34	30	282	38	50	22.3080	113.9437	2600.80	296.38
25-Sep-13	8:05:45	Other	Stationary	90	32	30	288	8	0	22.3108	113.9435	2768.36	301.86
25-Sep-13	8:05:52	Other	Stationary	90	46	40	296	24	20	22.3087	113.9522	1904.59	310.14
25-Sep-13	8:05:59	Other	Stationary	90	57	10	302	29	10	22.3077	113.9560	1548.95	316.22
25-Sep-13	8:06:04	Other	Stationary	90	56	30	310	28	0	22.3091	113.9575	1567.52	324.20
25-Sep-13	8:06:08	Other	Stationary	90	59	0	318	2	40	22.3095	113.9595	1500.15	331.77
25-Sep-13	8:06:12	Other	Stationary	90	56	30	325	0	40	22.3108	113.9609	1567.54	338.74
25-Sep-13	8:06:17	Other	Stationary	90	50	40	336	23	10	22.3131	113.9635	1751.31	350.12
25-Sep-13	8:06:22	Other	Stationary	90	41	0	347	0	40	22.3172	113.9667	2175.26	0.74
25-Sep-13	8:06:30	Other	Stationary	90	37	50	349	23	20	22.3189	113.9677	2363.47	3.12
25-Sep-13	8:06:34	Other	Stationary	90	34	0	351	6	30	22.3213	113.9686	2641.00	4.84
25-Sep-13	8:06:38	Other	Stationary	90	31	30	352	13	20	22.3232	113.9693	2861.01	5.95
25-Sep-13	8:06:50	Other	Stationary	91	1	10	304	53	0	22.3074	113.9571	1446.43	318.61
25-Sep-13	8:06:56	Other	Stationary	90	53	20	308	8	0	22.3094	113.9564	1662.33	321.86
25-Sep-13	8:07:11	Other	Stationary	90	31	30	348	22	40	22.3234	113.9674	2861.20	2.11
25-Sep-13	8:07:15	Other	Stationary	90	31	30	352	13	10	22.3232	113.9693	2861.22	5.95
25-Sep-13	8:07:40	Other	Stationary	90	56	30	349	34	10	22.3117	113.9673	1567.82	3.30
25-Sep-13	8:07:43	Other	Stationary	90	56	30	351	0	50	22.3117	113.9677	1567.83	4.74
25-Sep-13	8:07:48	Other	Stationary	91	12	0	1	36	40	22.3083	113.9696	1226.68	15.34
25-Sep-13	8:07:52	Other	Stationary	91	12	0	4	50	50	22.3081	113.9702	1226.69	18.58
25-Sep-13	8:08:05	Other	Stationary	90	43	0	359	59	0	22.3157	113.9712	2071.73	13.71
25-Sep-13	8:08:12	Other	Stationary	90	38	20	358	27	0	22.3181	113.9712	2332.07	12.18
25-Sep-13	8:08:16	Other	Stationary	90	34	30	357	48	10	22.3206	113.9715	2601.63	11.53
25-Sep-13	8:08:22	Other	Stationary	90	35	20	359	0	0	22.3199	113.9718	2537.79	12.73
25-Sep-13	8:08:25	Other	Stationary	90	35	20	359	27	50	22.3199	113.9720	2537.80	13.19
25-Sep-13	8:08:30	Other	Stationary	90	32	30	2	10	40	22.3216	113.9738	2769.29	15.91
25-Sep-13	8:08:33	Other	Stationary	90	30	0	3	46	10	22.3235	113.9752	3012.75	17.50
25-Sep-13	8:08:42	Other	Stationary	90	55	50	16	36	10	22.3099	113.9742	1587.03	30.33
25-Sep-13	8:08:53	Container Boat	Stationary	91	10	20	311	51	40	22.3069	113.9595	1256.20	325.59
25-Sep-13	8:09:03	Container Boat	Stationary	90	49	30	10	25	0	22.3124	113.9735	1794.01	24.15
25-Sep-13	8:09:07	Container Boat	Stationary	90	47	10	9	31	30	22.3132	113.9736	1884.69	23.25
25-Sep-13	8:09:10	Container Boat	Stationary	90	38	50	9	4	50	22.3167	113.9751	2301.31	22.81
25-Sep-13	8:09:20	Construction Boat	Stationary	90	30	50	18	28	0	22.3199	113.9816	2927.14	32.20
25-Sep-13	8:09:39	HSF High Speed Ferry	Travelling	90	50	20	341	6	20	22.3134	113.9649	1763.85	354.84
25-Sep-13	8:10:20	Tour Boat	Stationary	91	47	10	336	40	50	22.3049	113.9651	822.11	350.41
25-Sep-13	8:10:29	Transportation Boat	Travelling	94	8	0	338	24	0	22.3008	113.9659	354.15	352.13
25-Sep-13	8:10:38	HSF High Speed Ferry	Travelling	90	59	30	327	50	20	22.3103	113.9618	1487.98	341.57
25-Sep-13	8:11:49	HSF High Speed Ferry	Travelling	91	4	30	305	46	20	22.3070	113.9577	1371.07	319.50
25-Sep-13	8:11:58	Transportation Boat	Travelling	92	20	20	319	7	30	22.3026	113.9636	627.03	332.85
25-Sep-13	8:12:28	Transportation Boat	Travelling	90	54	50	337	5	10	22.3120	113.9639	1616.35	350.82
25-Sep-13	8:12:46	Tug Boat	Travelling	91	5	50	288	1	10	22.3040	113.9553	1342.87	301.75
25-Sep-13	8:12:53	Tug Boat	Travelling	90	57	10	281	26	10	22.3035	113.9528	1549.30	295.17
25-Sep-13	8:13:02	HSF High Speed Ferry	Travelling	90	57	40	284	42	30	22.3042	113.9533	1535.65	298.44
25-Sep-13	8:13:41	Transportation Boat	Travelling	90	57	30	283	45	10	22.3040	113.9531	1540.08	297.48
25-Sep-13	8:13:50	Transportation Boat	Travelling	91	28	30	310	4	10	22.3049	113.9607	996.27	323.80
25-Sep-13	8:13:57	Transportation Boat	Travelling	91	0	0	326	42	10	22.3101	113.9616	1474.98	340.43
25-Sep-13	8:14:05	Tug Boat	Travelling	91	9	10	302	33	20	22.3059	113.9578	1277.32	316.29
25-Sep-13	8:14:10	Tug Boat	Travelling	91	1	40	290	52	50	22.3050	113.9549	1434.57	304.61
25-Sep-13	8:15:21	Transportation Boat	Travelling	91	2	0	305	26	40	22.3073	113.9573	1426.61	319.17
25-Sep-13	8:15:30	Transportation Boat	Travelling	91	5	40	306	59	30	22.3070	113.9581	1346.00	320.72
25-Sep-13	8:15:33	Transportation Boat	Travelling	91	3	20	313	45	50	22.3082	113.9591	1396.18	327.49
25-Sep-13	8:15:38	Tug Boat	Travelling	91	6	0	320	15	0	22.3084	113.9607	1339.10	333.98
25-Sep-13	8:15:43	Tug Boat	Travelling	91	6	0	303	2	30	22.3064	113.9575	1339.10	316.77
25-Sep-13	8:15:52	HSF High Speed Ferry	Travelling	90	48	20	346	36	0	22.3142	113.9665	1837.47	0.33
25-Sep-13	8:17:14	HSF High Speed Ferry	Travelling	90	58	50	327	16	20	22.3104	113.9616	1504.21	341.00
25-Sep-13	8:17:22	Transportation Boat	Travelling	91	1	40	286	17	0	22.3041	113.9543	1434.16	300.01
25-Sep-13	8:18:37	Transportation Boat	Travelling	90	58	20	284	6	30	22.3040	113.9534	1517.10	297.84
25-Sep-13	8:18:41	Transportation Boat	Travelling	91	3	20	301	32	40	22.3065	113.9568	1395.79	315.27
25-Sep-13	8:18:46	HSF High Speed Ferry	Travelling	91	5	50	298	20	50	22.3057	113.9567	1342.16	312.08
25-Sep-13	8:18:51	Tug Boat	Travelling	90	48	0	345	6	30	22.3143	113.9660	1850.02	358.84
25-Sep-13	8:18:58	Tug Boat	Travelling	90	59	10	330	41	10	22.3106	113.9625	1495.38	344.42
25-Sep-13	8:19:09	Speed Boat	Travelling	91	7	40	286	26	30	22.3035	113.9554	1305.36	300.17
25-Sep-13	8:19:20	Transportation Boat	Travelling	90	55	20	286	9	0	22.3048	113.9529	1600.53	299.88
25-Sep-13	8:19:29	Transportation Boat	Travelling	90	55	50	283	1	10	22.3040	113.9526	1585.95	296.75
25-Sep-13	8:19:36	Transportation Boat	Travelling	90	57	30	306	58	30	22.3083	113.9569	1539.28	320.70
25-Sep-13	8:19:43	Transportation Boat	Travelling	91	3	30	296	35	40	22.3057	113.9561	1391.96	310.32
25-Sep-13	8:21:13	Tug Boat	Travelling	90	36	30	352	24	20	22.3196	113.9689	2451.59	6.14
25-Sep-13	8:21:22	Tug Boat	Travelling	90	48	30	344	52	50	22.3141	113.9660	1830.13	358.61
25-Sep-13	8:21:29	Transportation Boat	Travelling	90	52	50	304	15	0	22.3088	113.9555	1677.25	317.98
25-Sep-13	8:21:34	Transportation Boat	Travelling	91	7	50	286	47	30	22.3036	113.9555	1301.84	300.52
25-Sep-13	8:21:39	Transportation Boat	Travelling	91	2	0	299	1	30	22.3063	113.9562	1425.81	312.75
25-Sep-13	8:23:04	Transportation Boat	Travelling	91	14	10	308	31	10	22.3061	113.9593	1189.47	322.25
25-Sep-13	8:23:11	Transportation Boat	Travelling	90	58	10	305	40	40	22.3080	113.9568	1520.90	319.41
25-Sep-13	8:23:21	Speed Boat	Stationary	91	21	40	306	1	20	22.3050	113.9596	1079.34	319.75
25-Sep-13	8:25:04	Transportation Boat	Travelling	91	1	20	334	34	40	22.3103	113.9636	1441.08	348.31
25-Sep-13	8:25:19	Transportation Boat	Travelling	91	1	0	292	6	30	22.3053	113.9550	1449.03	305.84
25-Sep-13	8:26:38	Transportation Boat	Travelling	90	49	40	348	53	50	22.3137	113.9672	1785.44	2.63
25-Sep-13	8:26:44	Transportation Boat	Travelling	91	4	20	307	44	10	22.3073	113.9581	1372.86	321.47

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
25-Sep-13	8:27:01	Speed Boat	Travelling	90	48	30	347	51	20	22.3141	113.9669	1829.22	1.59
25-Sep-13	8:27:07	Transportation Boat	Travelling	90	44	40	348	22	20	22.3155	113.9671	1989.91	2.10
25-Sep-13	8:27:11	Transportation Boat	Travelling	90	45	0	350	55	10	22.3153	113.9680	1974.80	4.65
25-Sep-13	8:29:46	Speed Boat	Travelling	91	18	50	312	8	10	22.3059	113.9603	1117.81	325.87
25-Sep-13	8:29:51	Transportation Boat	Travelling	91	2	40	321	0	30	22.3091	113.9605	1409.43	334.74
25-Sep-13	8:29:57	Transportation Boat	Travelling	91	0	10	329	12	0	22.3103	113.9622	1468.76	342.93
25-Sep-13	8:30:04	Transportation Boat	Travelling	90	52	0	340	3	20	22.3129	113.9646	1703.32	353.79
25-Sep-13	8:31:32	Speed Boat	Travelling	91	10	10	279	0	30	22.3020	113.9551	1257.00	292.74
25-Sep-13	8:31:41	Transportation Boat	Travelling	91	3	40	293	10	40	22.3051	113.9556	1386.80	306.91
25-Sep-13	8:31:44	Transportation Boat	Travelling	91	5	30	306	53	20	22.3070	113.9581	1347.53	320.62
25-Sep-13	8:45:14	Speed Boat	Travelling	90	51	0	285	53	10	22.3053	113.9517	1735.01	299.62
25-Sep-13	8:46:54	Speed Boat	Stationary	90	48	40	297	32	20	22.3084	113.9531	1819.61	311.27
25-Sep-13	8:48:42	Transportation Boat	Travelling	91	2	20	292	57	40	22.3052	113.9554	1414.71	306.69
25-Sep-13	8:49:03	Transportation Boat	Travelling	91	7	40	351	13	30	22.3093	113.9675	1301.92	4.95
25-Sep-13	8:49:44	Transportation Boat	Travelling	90	59	20	306	25	30	22.3079	113.9571	1487.07	320.15
25-Sep-13	8:50:01	Transportation Boat	Travelling	91	14	0	338	55	50	22.3082	113.9649	1189.34	352.66
25-Sep-13	8:50:22	Transportation Boat	Travelling	90	53	50	343	38	30	22.3124	113.9657	1641.36	357.37
25-Sep-13	8:51:56	Transportation Boat	Travelling	91	17	10	310	11	30	22.3059	113.9599	1139.92	323.92
25-Sep-13	8:52:01	Transportation Boat	Travelling	91	1	30	327	52	10	22.3099	113.9620	1433.70	341.60
25-Sep-13	8:53:28	Transportation Boat	Travelling	90	59	0	285	15	10	22.3041	113.9537	1495.10	298.98
25-Sep-13	8:53:38	Transportation Boat	Travelling	91	6	30	288	4	50	22.3039	113.9555	1324.47	301.81
25-Sep-13	8:53:44	Transportation Boat	Travelling	91	11	40	349	7	0	22.3087	113.9670	1228.03	2.85
25-Sep-13	8:53:58	Transportation Boat	Travelling	91	1	10	294	34	0	22.3057	113.9554	1441.37	308.30
25-Sep-13	8:54:18	Tour Boat	Travelling	91	23	0	309	38	0	22.3053	113.9603	1058.98	323.36
25-Sep-13	8:54:27	Transportation Boat	Travelling	91	4	30	302	49	20	22.3065	113.9573	1365.92	316.55
25-Sep-13	8:54:34	Transportation Boat	Travelling	90	59	20	278	32	50	22.3027	113.9530	1486.44	292.28
25-Sep-13	8:54:40	Transportation Boat	Travelling	91	24	10	340	31	10	22.3070	113.9654	1044.16	354.25
25-Sep-13	8:54:47	Transportation Boat	Travelling	91	4	20	310	33	10	22.3076	113.9586	1369.46	324.28
25-Sep-13	8:54:55	Transportation Boat	Travelling	91	4	10	297	19	40	22.3057	113.9563	1373.04	311.06
25-Sep-13	8:56:13	Transportation Boat	Travelling	90	56	0	337	16	40	22.3116	113.9640	1576.03	351.01
25-Sep-13	8:56:19	Transportation Boat	Travelling	91	0	40	280	43	50	22.3030	113.9535	1453.10	294.46
25-Sep-13	8:56:35	Tour Boat	Travelling	91	13	40	295	23	30	22.3044	113.9574	1194.08	309.12
25-Sep-13	8:56:43	Transportation Boat	Travelling	91	38	10	308	40	0	22.3040	113.9611	894.23	322.40
25-Sep-13	9:02:15	Transportation Boat	Travelling	90	53	30	338	35	0	22.3123	113.9643	1650.02	352.31
25-Sep-13	9:02:49	Transportation Boat	Travelling	91	0	40	288	20	50	22.3046	113.9544	1452.27	302.08
25-Sep-13	9:03:29	Transportation Boat	Travelling	91	7	30	286	8	0	22.3035	113.9554	1303.50	299.86
25-Sep-13	9:03:35	Transportation Boat	Travelling	90	58	0	331	1	30	22.3108	113.9625	1519.89	344.75
25-Sep-13	9:03:40	Transportation Boat	Travelling	91	3	10	298	3	10	22.3060	113.9563	1393.97	311.78
25-Sep-13	9:04:37	Transportation Boat	Travelling	91	8	20	303	47	40	22.3062	113.9579	1287.31	317.52
25-Sep-13	9:04:43	Transportation Boat	Travelling	90	57	30	305	49	10	22.3081	113.9567	1533.14	319.55
25-Sep-13	9:04:48	Transportation Boat	Travelling	91	1	20	322	42	40	22.3095	113.9608	1436.02	336.44
25-Sep-13	9:06:45	Transportation Boat	Travelling	91	0	50	308	25	40	22.3079	113.9578	1447.73	322.16
25-Sep-13	9:06:51	Transportation Boat	Travelling	90	58	40	335	31	20	22.3109	113.9637	1501.93	349.25
25-Sep-13	9:09:46	Dumping Guide Boat	Travelling	90	52	30	26	39	0	22.3091	113.9770	1680.88	40.38
25-Sep-13	9:10:06	Transportation Boat	Travelling	90	36	40	357	8	40	22.3191	113.9709	2429.38	10.87
25-Sep-13	9:11:11	Transportation Boat	Travelling	91	1	30	287	27	0	22.3043	113.9545	1431.27	301.18
25-Sep-13	9:11:19	Speed Boat	Travelling	90	51	30	283	39	30	22.3047	113.9516	1713.88	297.39
25-Sep-13	9:13:09	Speed Boat	Stationary	90	47	20	298	47	0	22.3090	113.9530	1867.61	312.51
25-Sep-13	9:13:21	Transportation Boat	Travelling	91	6	20	305	53	10	22.3067	113.9580	1325.52	319.62
25-Sep-13	9:13:27	Transportation Boat	Travelling	91	2	0	301	48	50	22.3067	113.9567	1419.30	315.54
25-Sep-13	9:14:40	Transportation Boat	Travelling	90	56	50	306	10	30	22.3083	113.9567	1550.03	319.90
25-Sep-13	9:14:49	Transportation Boat	Travelling	91	17	10	307	38	10	22.3056	113.9595	1137.62	321.37
25-Sep-13	9:15:38	Tug Boat	Travelling	91	1	30	319	34	0	22.3091	113.9601	1430.71	333.30
25-Sep-13	9:15:48	HSF High Speed Ferry	Travelling	90	39	10	351	2	10	22.3180	113.9682	2267.96	4.77
25-Sep-13	9:17:13	Transportation Boat	Travelling	91	48	20	314	13	0	22.3038	113.9622	808.44	327.95
25-Sep-13	9:17:20	Tug Boat	Travelling	90	57	50	334	25	40	22.3110	113.9634	1522.47	348.16
25-Sep-13	9:17:24	HSF High Speed Ferry	Travelling	90	53	20	337	29	40	22.3123	113.9639	1653.04	351.22
25-Sep-13	9:19:21	Dumping Guide Boat	Travelling	91	29	50	3	33	50	22.3060	113.9692	975.74	17.29
25-Sep-13	9:19:31	HSF High Speed Ferry	Travelling	91	3	0	299	22	40	22.3062	113.9565	1395.74	313.11
25-Sep-13	9:19:37	Tug Boat	Travelling	90	49	10	350	35	0	22.3137	113.9677	1795.50	4.31
25-Sep-13	9:19:47	Transportation Boat	Travelling	93	4	40	329	42	10	22.3017	113.9651	473.23	343.43
25-Sep-13	9:20:01	Transportation Boat	Travelling	90	57	10	282	15	40	22.3037	113.9529	1540.12	295.99
25-Sep-13	9:20:06	Transportation Boat	Travelling	90	59	20	287	21	40	22.3045	113.9540	1483.08	301.09
25-Sep-13	9:20:51	HSF High Speed Ferry	Travelling	90	53	40	277	1	40	22.3029	113.9515	1642.10	290.76
25-Sep-13	9:21:45	Transportation Boat	Travelling	91	3	10	304	27	20	22.3070	113.9574	1391.73	318.19
25-Sep-13	9:21:49	Transportation Boat	Travelling	91	2	10	300	10	40	22.3064	113.9565	1414.39	313.91
25-Sep-13	9:22:02	HSF High Speed Ferry	Travelling	91	3	20	284	54	40	22.3036	113.9546	1387.99	298.64
25-Sep-13	9:22:11	Dumping Guide Boat	Travelling	91	0	40	347	14	20	22.3107	113.9666	1449.78	0.97
25-Sep-13	9:22:22	Transportation Boat	Stationary	94	36	40	349	34	50	22.3005	113.9666	315.30	3.31
25-Sep-13	9:22:31	Transportation Boat	Travelling	90	55	0	305	52	50	22.3086	113.9563	1601.40	319.61
25-Sep-13	9:22:58	Speed Boat	Travelling	91	43	0	286	56	50	22.3015	113.9593	850.08	300.68
25-Sep-13	9:23:05	Transportation Boat	Travelling	91	2	0	284	45	10	22.3037	113.9543	1418.09	298.48
25-Sep-13	9:23:15	HSF High Speed Ferry	Travelling	91	4	30	309	41	20	22.3075	113.9585	1362.44	323.42
25-Sep-13	9:24:58	Transportation Boat	Travelling	91	1	40	306	10	50	22.3074	113.9575	1425.61	319.91
25-Sep-13	9:25:03	Transportation Boat	Travelling	90	59	30	325	0	50	22.3100	113.9612	1478.22	338.74
25-Sep-13	9:25:09	HSF High Speed Ferry	Travelling	90	50	40	340	38	30	22.3132	113.9647	1740.46	354.37
25-Sep-13	9:25:17	Dumping Guide Boat	Stationary	91	2	0	348	33	20	22.3104	113.9670	1417.81	2.29
25-Sep-13	9:25:29	Speed Boat	Travelling	92	13	30	305	51	40	22.3021	113.9623	654.99	319.59
25-Sep-13	9:27:03	Transportation Boat	Travelling	91	51	20	288	5	30	22.3013	113.9599	785.87	301.82
25-Sep-13	9:27:15	HSF High Speed Ferry	Travelling	91	1	50	289	55	20	22.3047	113.9549	1421.43	303.65
25-Sep-13	9:27:25	HSF High Speed Ferry	Travelling	90	33	50	353	47	0	22.3211	113.9698	2637.30	7.51
25-Sep-13	9:27:35	Transportation Boat	Travelling	90	50	50	340	14	0	22.3131	113.9646	1734.27	353.96
25-Sep-13	9:27:47	Dumping Guide Boat	Travelling	91	45	50	347	49	20	22.3051	113.9666	826.86	1.55
25-Sep-13	9:27:53	Speed Boat	Travelling	92	1	30	337	0	40	22.3040	113.9653	719.79	350.74
25-Sep-13	9:28:39	HSF High Speed Ferry	Travelling	90	59	40	306	30	0	22.3078	113.9572	1473.56	320.23
25-Sep-13	9:29:24	Dumping Guide Boat	Stationary	91	54	30	345	55	0	22.3045	113.9664	763.88	359.65
25-Sep-13	9:29:32	Speed Boat	Stationary	91	54	30	346	11	30	22.3045	113.9664	763.88	359.92
25-Sep-13	9:29:47	Transportation Boat	Travelling	92	3	0	318	51	40	22.3033	113.9632	710.86	332.59
25-Sep-13	9:32:56	Transportation Boat	Travelling	91	40	20	351	55	50	22.3054	113.9672	872.02	5.66
25-Sep-13	9:33:02	Speed Boat	Travelling	93	41	40	354	41	10	22.3011	113.9670	393.53	8.42
25-Sep-13	9:33:10	Dumping Guide Boat	Travelling	91	23	40	333	55	40	22.3068	113.9642	1046.88	347.66
25-Sep-13	9:33:31	Transportation Boat	Travelling	91	3	30	288	4	0	22.3042	113.9550	1382.90	301.80
25-Sep-13	9:35:13	Construction Boat	Travelling	90	53	0	341	22	0	22.3125	113.9650	1660.98	355.10
25-Sep-13	9:35:22	Transportation Boat	Travelling	90	49	40	341	49	10	22.3135	113.9651	1774.57	355.55
25-Sep-13	9:35:26	Transportation Boat	Travelling	91	1	50	304	47	50	22.3072	113.9572	1420.40	318.53
25-Sep-13	9:35:42	Dumping Guide Boat	Stationary	91	3	40	335	39	10	22.3098	113.9639	1378.96	349.38
25-Sep-13	9:36:29	Transportation Boat	Travelling	90	52	40	306	35	20	22.3092	113.9560	1671.49	320.32
25-Sep-13	9:38:17	Transportation Boat	Travelling	91	4	20	312	33	40	22.3078	113.9590	1364.19	326.29
25-Sep-13	9:38:23	Transportation Boat	Travelling	91	5	10	345	9	30	22.3097	113.9661	1346.53	358.89
25-Sep-13	9:38:28	Construction Boat	Travelling	91	0	50	324	49	30	22.3097	113.9613	1443.66	338.55
25-Sep-13	9:40:18	Transportation Boat	Travelling	91	1	30	287	40	50	22.3043	113.9545	1427.58	301.41
25-Sep-13	9:40:23	Transportation Boat	Travelling	91	17	10	315	40	50	22.3064	113.9608	1135.05	329.41
25-Sep-13	9:42:42	Transportation Boat	Travelling	91	7	0	281	42	40	22.3027	113.9549	1308.78	295.44
25-Sep-13	9:42:47	Construction Boat	Travelling	90	52	10	305	9	30	22.3091	113.9556	1686.85	318.89
25-Sep-13	9:45:22	Transportation Boat	Travelling	90	52	0	336	38	50	22.3126	113.9636	1691.97	350.38
25-Sep-13	9:45:58	Dumping Guide Boat	Travelling	91	11	30	332	30	30	22.3083	113.9636	1225.24	346.24
25-Sep-13	9:47:32	Transportation Boat	Travelling	91	1	30	310	12	30	22.3080	113.9582	1426.66	323.94
25-Sep-13	9:47:38	Dumping Guide Boat	Travelling	91	18	20	313	20	0	22.3061	113.9605	1117.29	327.06
25-Sep-13	9:48:01	Transportation Boat	Travelling	94	20	10	341	42	0	22.3006	113.9661	334.63	355.43
25-Sep-13	9:49:26	Transportation Boat	Travelling	90	57	20	284	9	0	22.3041	113.9532	1531.57	297.88
25-Sep-13	9:49:31	Transportation Boat	Travelling	91	1	50	294	12	40	22.3055	113.9555	1418.62	307.94
25-Sep-13	9:49:46	Transportation Boat	Travelling	92	30	0	314	34	30	22.3021	113.9634	581.46	328.30
25-Sep-13	9:50:13	Speed Boat	Travelling	90	53	20	340	6	10	22.3124	113.9647	1648.22	353.83
25-Sep-13	9:51:47	Speed Boat	Travelling	91	9	20	320	25	50	22.3079	113.9610	1263.26	334.16
25-Sep-13	9:51:54	Transportation Boat	Travelling	91	3	40	294	32	20	22.3053	113.9559	1376.98	308.27
25-Sep-13	9:52:51	Speed Boat	Travelling	91	12	30	301	25	20	22.3053	113.9581	1207.44	315.15
25-Sep-13	9:52:57	Transportation Boat	Travelling	90	58	20	307	25	50	22.3082	113.9572	1504.47	321.16

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
25-Sep-13	9:53:05	Transportation Boat	Travelling	91	14	30	306	30	0	22.3057	113.9591	1174.71	320.23
25-Sep-13	9:53:19	Transportation Boat	Travelling	90	52	50	305	45	20	22.3090	113.9559	1663.63	319.49
25-Sep-13	9:53:27	Transportation Boat	Travelling	91	3	10	303	0	10	22.3067	113.9571	1387.82	316.73
25-Sep-13	9:53:37	HSF High Speed Ferry	Travelling	90	38	40	350	46	20	22.3182	113.9681	2290.47	4.50
25-Sep-13	9:55:23	Transportation Boat	Travelling	90	57	0	280	9	20	22.3032	113.9527	1539.84	293.89
25-Sep-13	9:55:29	Tour Boat	Travelling	91	0	0	283	11	40	22.3036	113.9537	1461.77	296.92
25-Sep-13	9:55:45	HSF High Speed Ferry	Travelling	90	59	40	324	25	50	22.3099	113.9611	1470.01	338.16
25-Sep-13	9:56:40	HSF High Speed Ferry	Travelling	91	3	10	303	47	40	22.3068	113.9573	1387.43	317.52
25-Sep-13	9:57:41	HSF High Speed Ferry	Travelling	90	57	20	281	52	40	22.3036	113.9530	1530.45	295.61
25-Sep-13	9:57:57	Tour Boat	Travelling	91	2	10	306	3	30	22.3073	113.9575	1409.86	319.79
25-Sep-13	10:01:54	Tour Boat	Travelling	90	52	0	338	53	50	22.3127	113.9643	1689.47	352.63
25-Sep-13	10:04:24	Tour Boat	Travelling	90	40	20	349	3	20	22.3173	113.9674	2190.76	2.79
25-Sep-13	10:04:32	Dumping Guide Boat	Stationary	91	0	50	294	27	40	22.3056	113.9554	1440.32	308.19
25-Sep-13	10:08:17	Transportation Boat	Travelling	91	3	20	288	44	40	22.3043	113.9551	1382.30	302.47
25-Sep-13	10:09:09	Transportation Boat	Travelling	91	5	10	299	33	10	22.3059	113.9569	1342.86	313.28
25-Sep-13	10:10:47	Transportation Boat	Travelling	90	51	20	307	9	10	22.3096	113.9559	1710.46	320.88
25-Sep-13	10:10:51	Transportation Boat	Travelling	90	59	0	287	58	30	22.3046	113.9541	1484.86	301.70
25-Sep-13	10:12:26	Transportation Boat	Travelling	91	1	10	305	2	30	22.3073	113.9572	1431.36	318.77
25-Sep-13	10:12:56	Transportation Boat	Travelling	90	56	30	305	57	40	22.3083	113.9566	1551.25	319.69
25-Sep-13	10:20:05	Transportation Boat	Travelling	91	6	20	307	54	10	22.3069	113.9584	1317.69	321.63
25-Sep-13	10:20:10	Transportation Boat	Travelling	90	59	50	306	4	20	22.3077	113.9572	1462.68	319.80
25-Sep-13	10:21:26	Transportation Boat	Travelling	91	24	50	309	31	50	22.3050	113.9604	1027.97	323.26
25-Sep-13	10:21:32	Transportation Boat	Travelling	91	1	50	293	24	0	22.3053	113.9554	1414.58	307.13
25-Sep-13	10:22:42	Transportation Boat	Travelling	90	57	30	281	38	40	22.3035	113.9530	1522.54	295.37
25-Sep-13	10:22:48	Speed Boat	Travelling	91	1	30	280	53	0	22.3029	113.9538	1422.19	294.61
25-Sep-13	10:23:01	Transportation Boat	Travelling	90	56	50	305	25	40	22.3081	113.9566	1540.63	319.16
25-Sep-13	10:23:07	Transportation Boat	Travelling	92	7	30	314	37	20	22.3028	113.9629	682.44	328.35
25-Sep-13	10:24:04	Speed Boat	Travelling	91	5	40	299	9	30	22.3058	113.9569	1330.75	312.89
25-Sep-13	10:24:14	Transportation Boat	Travelling	91	1	10	289	54	40	22.3047	113.9548	1429.86	303.64
25-Sep-13	10:25:09	Transportation Boat	Travelling	94	41	10	339	20	20	22.3004	113.9660	308.51	353.07
25-Sep-13	10:25:25	Speed Boat	Travelling	91	3	50	319	27	20	22.3086	113.9604	1369.25	333.19
25-Sep-13	10:26:54	Speed Boat	Travelling	90	52	30	336	36	50	22.3124	113.9637	1669.37	350.34
25-Sep-13	10:27:00	Transportation Boat	Travelling	90	57	40	307	8	30	22.3082	113.9571	1517.50	320.87
25-Sep-13	10:28:25	Transportation Boat	Travelling	93	22	30	322	1	30	22.3011	113.9647	428.81	335.75
25-Sep-13	10:28:36	Transportation Boat	Stationary	91	10	10	313	7	40	22.3070	113.9598	1244.02	326.86
25-Sep-13	10:28:48	Transportation Boat	Travelling	90	47	50	340	28	40	22.3141	113.9646	1835.23	354.21
25-Sep-13	10:29:33	Transportation Boat	Travelling	92	20	10	317	47	0	22.3025	113.9635	620.20	331.51
25-Sep-13	10:30:43	Tug Boat	Travelling	90	54	50	341	46	0	22.3119	113.9652	1596.61	355.50
25-Sep-13	10:30:49	Construction Platform	Travelling	90	53	40	342	39	10	22.3123	113.9654	1631.89	356.38
25-Sep-13	10:31:00	Transportation Boat	Travelling	93	46	40	332	40	10	22.3010	113.9655	382.85	346.40
25-Sep-13	10:31:07	Transportation Boat	Travelling	90	53	30	305	22	20	22.3088	113.9560	1637.01	319.10
25-Sep-13	10:31:12	Transportation Boat	Travelling	90	59	10	323	30	40	22.3099	113.9608	1477.93	337.24
25-Sep-13	10:34:13	Tug Boat	Travelling	91	7	50	326	17	50	22.3085	113.9621	1286.62	340.03
25-Sep-13	10:34:17	Construction Platform	Travelling	91	7	30	327	40	20	22.3086	113.9624	1293.03	341.40
25-Sep-13	10:34:22	Transportation Boat	Travelling	90	59	0	291	38	30	22.3053	113.9546	1481.74	305.37
25-Sep-13	10:37:56	HSF High Speed Ferry	Travelling	90	59	50	311	17	20	22.3084	113.9583	1460.36	325.02
25-Sep-13	10:38:02	Tug Boat	Travelling	91	11	20	300	52	0	22.3053	113.9579	1222.45	314.60
25-Sep-13	10:38:06	Construction Platform	Travelling	91	12	0	302	11	20	22.3054	113.9582	1211.02	315.92
25-Sep-13	10:38:12	Transportation Boat	Travelling	91	1	50	302	20	50	22.3068	113.9569	1412.48	316.08
25-Sep-13	10:39:37	Transportation Boat	Travelling	91	0	10	285	29	10	22.3040	113.9541	1451.94	299.22
25-Sep-13	10:40:04	HSF High Speed Ferry	Travelling	90	55	40	330	55	40	22.3113	113.9624	1571.02	344.66
25-Sep-13	10:40:13	HSF High Speed Ferry	Travelling	90	57	30	285	44	0	22.3043	113.9535	1520.16	299.46
25-Sep-13	10:40:27	Transportation Boat	Travelling	91	1	40	294	3	50	22.3054	113.9555	1416.07	307.79
25-Sep-13	10:41:31	Transportation Boat	Travelling	90	59	40	285	50	30	22.3041	113.9540	1464.03	299.57
25-Sep-13	10:41:46	Tug Boat	Travelling	91	3	20	279	15	0	22.3025	113.9541	1378.18	292.98
25-Sep-13	10:41:50	Construction Platform	Travelling	91	3	20	280	45	20	22.3028	113.9542	1378.17	294.49
25-Sep-13	10:41:56	HSF High Speed Ferry	Travelling	90	47	10	343	27	40	22.3143	113.9655	1859.54	357.19
25-Sep-13	10:42:03	HSF High Speed Ferry	Travelling	91	1	20	314	24	0	22.3085	113.9591	1423.66	328.13
25-Sep-13	10:44:15	HSF High Speed Ferry	Travelling	90	46	30	342	40	10	22.3146	113.9652	1886.40	356.40
25-Sep-13	10:44:43	Transportation Boat	Travelling	90	57	10	307	16	50	22.3083	113.9570	1528.54	321.01
25-Sep-13	10:46:37	Transportation Boat	Travelling	91	10	10	309	37	20	22.3066	113.9592	1242.03	323.35
25-Sep-13	10:46:44	Transportation Boat	Travelling	90	56	40	355	8	10	22.3113	113.9687	1541.96	8.87
25-Sep-13	10:46:49	Transportation Boat	Travelling	90	55	40	306	1	30	22.3084	113.9565	1570.07	319.75
25-Sep-13	10:46:53	Transportation Boat	Travelling	90	53	30	305	46	10	22.3088	113.9561	1634.71	319.50
25-Sep-13	10:48:04	Transportation Boat	Travelling	91	25	0	312	52	50	22.3053	113.9609	1023.51	326.61
25-Sep-13	10:48:10	Transportation Boat	Travelling	91	7	40	351	20	20	22.3092	113.9675	1288.22	5.07
25-Sep-13	10:48:14	Transportation Boat	Travelling	91	0	20	294	3	10	22.3056	113.9553	1446.76	307.78
25-Sep-13	10:48:18	Transportation Boat	Travelling	91	2	20	296	34	30	22.3058	113.9560	1399.75	310.30
25-Sep-13	10:49:18	Transportation Boat	Travelling	91	20	10	347	32	20	22.3074	113.9666	1085.57	1.27
25-Sep-13	10:49:25	Transportation Boat	Travelling	90	54	50	280	45	40	22.3036	113.9523	1593.94	294.49
25-Sep-13	10:49:28	Transportation Boat	Travelling	90	59	10	282	11	50	22.3034	113.9535	1475.52	295.93
25-Sep-13	10:49:39	Dumping Guide Boat	Travelling	90	54	50	285	44	40	22.3047	113.9529	1593.91	299.47
25-Sep-13	10:50:02	Transportation Boat	Travelling	91	55	10	319	35	20	22.3037	113.9631	754.03	333.32
25-Sep-13	10:51:15	Transportation Boat	Travelling	94	8	0	337	40	20	22.3007	113.9659	349.16	351.40
25-Sep-13	10:51:22	Transportation Boat	Travelling	91	56	0	338	17	40	22.3043	113.9654	748.50	352.02
25-Sep-13	10:51:31	Transportation Boat	Travelling	92	38	30	326	51	50	22.3023	113.9646	547.17	340.59
25-Sep-13	10:51:41	Dumping Guide Boat	Travelling	90	59	20	300	44	40	22.3069	113.9562	1471.03	314.47
25-Sep-13	10:51:57	Dumping Guide Boat	Travelling	90	56	0	27	47	40	22.3081	113.9765	1559.87	41.52
25-Sep-13	10:52:14	Transportation Boat	Travelling	91	1	10	282	22	0	22.3033	113.9539	1426.29	296.10
25-Sep-13	10:52:21	Transportation Boat	Travelling	90	53	20	283	9	40	22.3043	113.9522	1639.10	296.89
25-Sep-13	10:52:29	Transportation Boat	Travelling	90	59	30	283	53	10	22.3037	113.9538	1466.74	297.62
25-Sep-13	10:52:58	Transportation Boat	Travelling	92	5	50	316	14	0	22.3030	113.9630	689.69	329.96
25-Sep-13	10:53:09	Transportation Boat	Travelling	94	22	10	342	27	40	22.3006	113.9662	330.16	356.19
25-Sep-13	10:53:21	Transportation Boat	Stationary	92	14	30	327	41	50	22.3031	113.9644	645.06	341.43
25-Sep-13	10:53:33	Dumping Guide Boat	Travelling	91	0	50	316	52	20	22.3089	113.9596	1434.03	330.60
25-Sep-13	10:53:55	Transportation Boat	Travelling	91	4	30	300	32	50	22.3061	113.9570	1351.49	314.28
25-Sep-13	10:54:00	Transportation Boat	Travelling	90	58	40	295	10	50	22.3060	113.9551	1487.67	308.91
25-Sep-13	10:54:03	Transportation Boat	Travelling	91	1	10	294	0	40	22.3055	113.9554	1426.05	307.74
25-Sep-13	10:54:19	Dumping Guide Boat	Travelling	91	29	30	19	56	20	22.3049	113.9716	971.18	33.67
25-Sep-13	10:54:31	Transportation Boat	Travelling	91	3	20	307	7	20	22.3072	113.9579	1376.61	320.85
25-Sep-13	10:54:39	Transportation Boat	Travelling	91	0	0	300	35	40	22.3068	113.9563	1454.07	314.32
25-Sep-13	10:54:48	Transportation Boat	Travelling	91	1	30	298	51	0	22.3063	113.9562	1418.13	312.58
25-Sep-13	10:55:03	Transportation Boat	Travelling	91	15	20	308	20	50	22.3058	113.9595	1155.21	322.08
25-Sep-13	10:56:16	Transportation Boat	Travelling	94	11	40	328	10	10	22.3006	113.9654	343.90	341.90
25-Sep-13	10:56:31	Transportation Boat	Travelling	90	50	50	306	37	30	22.3095	113.9557	1720.54	320.35
25-Sep-13	10:56:37	Transportation Boat	Travelling	91	3	0	310	29	50	22.3077	113.9585	1383.72	324.23
25-Sep-13	10:56:42	Transportation Boat	Travelling	90	57	20	307	42	40	22.3083	113.9572	1522.40	321.44
25-Sep-13	10:56:50	Dumping Guide Boat	Travelling	90	48	20	338	48	20	22.3138	113.9641	1811.29	352.54
25-Sep-13	10:56:58	Dumping Guide Boat	Travelling	93	4	50	340	26	10	22.3018	113.9659	468.75	354.17
25-Sep-13	10:57:08	Transportation Boat	Travelling	90	55	30	333	0	0	22.3114	113.9629	1573.41	346.73
25-Sep-13	10:57:20	Transportation Boat	Travelling	90	59	30	296	6	20	22.3061	113.9554	1466.11	309.84
25-Sep-13	10:58:38	Dumping Guide Boat	Stationary	94	47	10	334	47	50	22.3003	113.9658	301.13	348.53
25-Sep-13	10:58:53	Transportation Boat	Travelling	90	53	20	306	42	30	22.3090	113.9563	1638.14	320.44
25-Sep-13	10:59:07	HSF High Speed Ferry	Travelling	90	52	50	336	11	20	22.3123	113.9636	1653.87	349.92
25-Sep-13	10:59:13	Transportation Boat	Travelling	90	44	20	345	28	30	22.3154	113.9661	1978.16	359.20
25-Sep-13	10:59:23	Transportation Boat	Travelling	91	36	40	306	41	20	22.3039	113.9608	898.36	320.42
25-Sep-13	11:01:54	HSF High Speed Ferry	Travelling	91	3	40	301	55	50	22.3064	113.9571	1368.41	315.66
25-Sep-13	11:02:03	Transportation Boat	Travelling	91	3	40	307	2	0	22.3072	113.9580	1368.39	320.76
25-Sep-13	11:02:16	Speed Boat	Travelling	90	57	50	293	49	50	22.3059	113.9548	1508.30	307.56
25-Sep-13	11:02:24	Tug Boat	Travelling	91	3	40	285	55	50	22.3037	113.9548	1368.35	299.66
25-Sep-13	11:02:39	Transportation Boat	Travelling	90	48	30	343	18	40	22.3138	113.9655	1803.99	357.04
25-Sep-13	11:02:50	Speed Boat	Travelling	90	52	50	283	41	10	22.3045	113.9521	1653.32	297.42
25-Sep-13	11:03:09	Speed Boat	Travelling	90	50	0	278	43	50	22.3036	113.9507	1748.73	292.46
25-Sep-13	11:03:13	HSF High Speed Ferry	Travelling	90	59	10	284	35	30	22.3039	113.9538	1473.71	298.32
25-Sep-13	11:03:21	Tug Boat	Travelling	91	5	10	294	43	40	22.3051	113.9562	1336.38	308.46
25-Sep-13	11:03:32	Transportation Boat	Travelling	91	0	20	337	43	20	22.3105	113.9643	1444.79	351.45
25-Sep-13	11:04:13	Transportation Boat	Travelling	91	1	30	301	22	40	22.3067	113.9567	1416.94	315.11

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
25-Sep-13	11:04:39	Other	Travelling	92	59	30	308	6	0	22.3010	113.9635	482.39	321.83
25-Sep-13	11:04:48	Transportation Boat	Travelling	90	59	50	291	47	0	22.3052	113.9549	1456.86	305.51
25-Sep-13	11:04:53	Transportation Boat	Travelling	91	16	10	333	22	0	22.3076	113.9639	1141.46	347.10
25-Sep-13	11:05:50	Transportation Boat	Travelling	90	56	0	278	48	20	22.3030	113.9524	1557.93	292.54
25-Sep-13	11:05:56	Transportation Boat	Travelling	91	35	20	327	7	10	22.3054	113.9635	910.46	340.85
25-Sep-13	11:06:07	Tug Boat	Travelling	90	59	50	323	3	0	22.3097	113.9608	1456.68	336.78
25-Sep-13	11:06:16	Dumping Guide Boat	Travelling	91	48	40	325	32	0	22.3043	113.9637	798.19	339.26
25-Sep-13	11:07:57	Tug Boat	Travelling	91	1	30	290	5	20	22.3047	113.9550	1416.46	303.82
25-Sep-13	11:08:09	Dumping Guide Boat	Travelling	91	11	30	333	35	30	22.3083	113.9638	1216.30	347.32
25-Sep-13	11:08:16	Tug Boat	Travelling	90	48	40	340	12	30	22.3137	113.9646	1796.78	353.94
25-Sep-13	11:10:31	Dumping Guide Boat	Travelling	90	47	50	2	16	20	22.3134	113.9713	1828.37	16.00
25-Sep-13	11:10:54	Dumping Guide Boat	Travelling	90	48	50	343	21	30	22.3137	113.9655	1790.10	357.09
25-Sep-13	11:12:24	Transportation Boat	Travelling	92	6	0	330	11	30	22.3036	113.9645	687.58	343.92
25-Sep-13	11:14:57	Transportation Boat	Stationary	93	47	50	356	4	10	22.3010	113.9670	379.39	9.80
25-Sep-13	11:15:07	Transportation Boat	Travelling	91	3	30	300	15	20	22.3062	113.9568	1370.43	313.99
25-Sep-13	11:15:31	Transportation Boat	Travelling	91	0	0	306	16	10	22.3076	113.9573	1451.36	320.00
25-Sep-13	11:15:42	Dumping Guide Boat	Travelling	91	8	40	6	48	50	22.3083	113.9707	1266.14	20.54
25-Sep-13	11:15:53	Transportation Boat	Travelling	90	54	30	305	12	30	22.3085	113.9562	1600.05	318.94
25-Sep-13	11:17:01	Dumping Guide Boat	Stationary	91	8	20	6	32	50	22.3084	113.9707	1272.23	20.28
25-Sep-13	11:17:10	Transportation Boat	Travelling	93	25	0	347	48	50	22.3014	113.9665	421.73	1.54
25-Sep-13	11:17:27	HSF High Speed Ferry	Travelling	90	41	0	349	1	10	22.3169	113.9674	2139.97	2.75
25-Sep-13	11:18:53	HSF High Speed Ferry	Travelling	90	52	40	336	56	10	22.3123	113.9638	1656.26	350.67
25-Sep-13	11:20:49	Transportation Boat	Travelling	91	17	50	304	34	10	22.3051	113.9592	1115.23	318.30
25-Sep-13	11:20:53	HSF High Speed Ferry	Travelling	91	3	20	303	54	50	22.3068	113.9574	1373.37	317.64
25-Sep-13	11:22:17	HSF High Speed Ferry	Travelling	90	56	40	280	8	40	22.3032	113.9527	1537.05	293.87
25-Sep-13	11:22:24	Transportation Boat	Travelling	90	58	20	298	28	40	22.3066	113.9556	1492.49	312.21
25-Sep-13	11:22:36	Transportation Boat	Travelling	90	43	40	348	14	20	22.3157	113.9671	2004.90	1.97
25-Sep-13	11:24:32	Transportation Boat	Travelling	90	55	0	334	15	40	22.3116	113.9632	1584.04	347.99
25-Sep-13	11:26:21	HSF High Speed Ferry	Travelling	90	57	30	288	34	30	22.3049	113.9540	1513.89	302.30
25-Sep-13	11:26:26	Transportation Boat	Travelling	90	59	20	312	14	50	22.3086	113.9584	1466.45	325.98
25-Sep-13	11:26:35	Transportation Boat	Travelling	91	1	30	307	3	30	22.3075	113.9577	1414.10	320.79
25-Sep-13	11:27:38	Transportation Boat	Travelling	90	57	40	326	55	40	22.3104	113.9615	1509.28	340.66
25-Sep-13	11:27:45	Tug Boat	Travelling	90	53	0	335	39	0	22.3122	113.9635	1644.35	349.38
25-Sep-13	11:27:52	HSF High Speed Ferry	Travelling	91	1	20	306	55	50	22.3075	113.9577	1417.83	320.66
25-Sep-13	11:27:58	Transportation Boat	Travelling	91	16	10	307	22	0	22.3056	113.9594	1139.11	321.10
25-Sep-13	11:28:06	Transportation Boat	Travelling	90	57	10	293	1	0	22.3058	113.9545	1522.61	306.75
25-Sep-13	11:28:10	Transportation Boat	Travelling	91	1	30	316	10	0	22.3086	113.9595	1413.90	329.90
25-Sep-13	11:28:22	Transportation Boat	Travelling	90	48	50	340	19	20	22.3136	113.9646	1787.29	354.05
25-Sep-13	11:29:00	Transportation Boat	Travelling	91	3	20	297	49	10	22.3058	113.9564	1372.37	311.55
25-Sep-13	11:29:05	Transportation Boat	Travelling	90	55	30	298	15	10	22.3071	113.9551	1568.90	311.98
25-Sep-13	11:29:12	Transportation Boat	Travelling	91	37	20	308	57	50	22.3040	113.9612	889.80	322.69
25-Sep-13	11:29:22	HSF High Speed Ferry	Travelling	90	58	10	324	57	10	22.3102	113.9611	1495.89	338.68
25-Sep-13	11:29:30	Transportation Boat	Travelling	90	56	10	333	53	20	22.3112	113.9632	1549.94	347.62
25-Sep-13	11:29:36	Transportation Boat	Travelling	91	9	30	308	13	20	22.3065	113.9589	1249.25	321.95
25-Sep-13	11:29:51	Tug Boat	Travelling	91	1	50	313	39	40	22.3083	113.9590	1405.97	327.39
25-Sep-13	11:29:57	Transportation Boat	Travelling	90	55	50	279	31	30	22.3032	113.9525	1559.27	293.25
25-Sep-13	11:30:02	HSF High Speed Ferry	Travelling	90	55	20	332	28	50	22.3114	113.9628	1573.57	346.21
25-Sep-13	11:30:08	Transportation Boat	Travelling	90	57	40	307	11	20	22.3082	113.9571	1508.94	320.92
25-Sep-13	11:30:19	Transportation Boat	Travelling	92	9	40	312	33	20	22.3026	113.9628	667.00	326.29
25-Sep-13	11:30:27	Transportation Boat	Travelling	90	59	20	324	15	30	22.3099	113.9611	1465.93	337.99
25-Sep-13	11:31:34	Tug Boat	Travelling	90	59	20	293	24	0	22.3056	113.9550	1465.78	307.13
25-Sep-13	11:31:43	HSF High Speed Ferry	Travelling	90	47	10	348	46	30	22.3143	113.9672	1851.23	2.50
25-Sep-13	11:31:53	Transportation Boat	Travelling	93	47	10	326	23	30	22.3008	113.9651	379.94	340.12
25-Sep-13	11:32:02	Transportation Boat	Travelling	91	1	20	305	42	30	22.3073	113.9574	1417.30	319.44
25-Sep-13	11:32:10	Transportation Boat	Travelling	91	43	10	314	21	40	22.3040	113.9621	839.01	328.09
25-Sep-13	11:32:31	Transportation Boat	Travelling	90	56	20	306	17	0	22.3083	113.9567	1544.86	320.01
25-Sep-13	11:33:36	Transportation Boat	Travelling	91	5	30	293	14	40	22.3048	113.9561	1325.90	306.97
25-Sep-13	11:33:42	Transportation Boat	Travelling	91	1	0	300	16	30	22.3065	113.9564	1424.93	314.00
25-Sep-13	11:33:52	Transportation Boat	Travelling	90	56	50	284	48	40	22.3042	113.9533	1530.88	298.54
25-Sep-13	11:34:00	Transportation Boat	Stationary	95	40	30	358	49	20	22.2998	113.9669	252.91	12.55
25-Sep-13	11:34:12	Transportation Boat	Travelling	92	42	50	323	55	10	22.3020	113.9644	530.54	337.65
25-Sep-13	11:35:17	Transportation Boat	Travelling	90	50	50	305	11	10	22.3092	113.9554	1714.56	318.92
25-Sep-13	11:35:24	Transportation Boat	Travelling	91	0	0	286	9	40	22.3041	113.9542	1448.77	299.89
25-Sep-13	11:37:22	Speed Boat	Travelling	91	0	20	300	7	10	22.3066	113.9563	1440.41	313.85
25-Sep-13	11:37:28	Transportation Boat	Travelling	91	0	30	303	45	40	22.3071	113.9570	1436.38	317.49
25-Sep-13	11:37:32	Transportation Boat	Travelling	90	58	50	305	18	0	22.3077	113.9570	1477.62	319.03
25-Sep-13	11:37:46	Transportation Boat	Stationary	95	43	40	356	12	30	22.2998	113.9668	250.47	9.94
25-Sep-13	11:37:59	Transportation Boat	Travelling	93	8	30	327	40	40	22.3015	113.9650	457.93	341.41
25-Sep-13	11:38:10	Speed Boat	Travelling	90	59	50	289	20	10	22.3048	113.9546	1452.50	303.07
25-Sep-13	11:38:23	Transportation Boat	Travelling	91	1	10	291	38	50	22.3050	113.9551	1420.40	305.38
25-Sep-13	11:38:27	Transportation Boat	Travelling	90	59	50	296	13	50	22.3060	113.9556	1452.47	309.96
25-Sep-13	11:39:28	Transportation Boat	Travelling	90	57	10	278	21	50	22.3028	113.9527	1521.06	292.09
25-Sep-13	11:39:32	Transportation Boat	Travelling	90	57	10	286	18	0	22.3045	113.9536	1521.05	300.03
25-Sep-13	11:39:37	Transportation Boat	Travelling	90	48	50	282	40	20	22.3048	113.9508	1785.48	296.40
25-Sep-13	11:39:49	Transportation Boat	Travelling	91	42	40	313	27	50	22.3040	113.9620	842.54	327.19
25-Sep-13	11:40:05	Transportation Boat	Travelling	91	7	10	352	56	0	22.3092	113.9679	1291.89	6.66
25-Sep-13	11:41:59	Transportation Boat	Travelling	91	43	20	348	57	40	22.3051	113.9668	836.91	2.69
25-Sep-13	11:42:06	Transportation Boat	Travelling	93	17	40	326	42	10	22.3013	113.9650	436.46	340.43
25-Sep-13	11:42:18	Transportation Boat	Travelling	91	1	40	308	13	20	22.3076	113.9580	1408.24	321.95
25-Sep-13	11:42:24	Transportation Boat	Travelling	90	56	50	297	21	50	22.3067	113.9552	1529.71	311.09
25-Sep-13	11:42:28	Transportation Boat	Travelling	90	59	50	294	25	30	22.3057	113.9553	1451.94	308.15
25-Sep-13	11:42:38	Transportation Boat	Travelling	92	8	50	349	20	40	22.3036	113.9667	670.59	3.07
25-Sep-13	11:42:59	Transportation Boat	Travelling	91	2	10	300	9	30	22.3063	113.9566	1396.69	313.89
25-Sep-13	11:43:48	Transportation Boat	Travelling	90	59	0	306	4	30	22.3077	113.9572	1472.56	319.80
25-Sep-13	11:43:52	Transportation Boat	Travelling	90	59	0	307	42	40	22.3080	113.9575	1472.55	321.44
25-Sep-13	11:44:00	Transportation Boat	Travelling	93	57	40	354	42	40	22.3008	113.9669	362.70	8.44
25-Sep-13	11:44:10	Transportation Boat	Travelling	90	58	50	278	55	20	22.3027	113.9531	1476.74	292.65
25-Sep-13	11:44:15	Transportation Boat	Travelling	90	53	30	281	50	10	22.3039	113.9521	1626.31	295.57
25-Sep-13	11:44:20	Transportation Boat	Travelling	91	0	50	304	41	40	22.3072	113.9572	1427.52	318.42
25-Sep-13	11:44:28	Transportation Boat	Travelling	91	51	30	311	35	30	22.3034	113.9621	775.17	325.32
25-Sep-13	11:44:43	Transportation Boat	Travelling	90	50	50	307	19	10	22.3096	113.9559	1713.10	321.05
25-Sep-13	11:44:57	Transportation Boat	Stationary	95	38	50	2	58	40	22.2998	113.9671	253.91	16.71
25-Sep-13	11:45:08	Transportation Boat	Travelling	90	56	40	290	47	30	22.3054	113.9541	1533.90	304.52
25-Sep-13	11:45:12	Transportation Boat	Travelling	91	1	0	291	38	30	22.3050	113.9551	1423.46	305.37
25-Sep-13	11:46:10	Transportation Boat	Travelling	91	1	0	301	31	30	22.3067	113.9567	1423.34	315.25
25-Sep-13	11:46:15	Transportation Boat	Travelling	90	55	30	276	46	10	22.3026	113.9521	1566.49	290.50
25-Sep-13	11:47:23	Transportation Boat	Travelling	90	52	0	304	45	50	22.3089	113.9556	1673.57	318.49
25-Sep-13	11:47:45	Transportation Boat	Travelling	91	6	30	306	30	10	22.3066	113.9583	1304.09	320.23
25-Sep-13	11:48:30	Government Boat	Travelling	91	7	10	292	30	0	22.3045	113.9563	1290.92	306.23
25-Sep-13	11:49:18	Government Boat	Travelling	91	5	40	328	12	50	22.3089	113.9624	1320.64	341.94
25-Sep-13	11:50:08	Government Boat	Travelling	90	44	30	346	17	10	22.3153	113.9664	1961.54	0.02
25-Sep-13	11:50:51	Government Boat	Travelling	90	33	40	353	34	0	22.3210	113.9696	2616.67	7.30
25-Sep-13	11:53:49	Transportation Boat	Travelling	90	55	0	305	55	30	22.3085	113.9565	1579.87	319.65
25-Sep-13	11:55:10	Transportation Boat	Travelling	91	1	10	296	46	40	22.3059	113.9559	1418.26	310.51
25-Sep-13	11:56:26	Transportation Boat	Travelling	90	57	0	282	49	50	22.3037	113.9531	1523.25	296.56
25-Sep-13	11:57:30	Transportation Boat	Travelling	91	10	10	283	1	20	22.3026	113.9557	1234.17	296.75
25-Sep-13	11:58:16	Transportation Boat	Travelling	90	56	50	284	45	0	22.3042	113.9533	1527.53	298.48
25-Sep-13	11:59:04	Transportation Boat	Travelling	91	31	50	290	49	10	22.3024	113.9589	940.89	304.55
25-Sep-13	11:59:12	Transportation Boat	Travelling	91	0	10	300	45	50	22.3067	113.9564	1441.62	314.49
25-Sep-13	11:59:20	Transportation Boat	Travelling	91	0	50	302	57	50	22.3070	113.9569	1425.60	316.69
25-Sep-13	12:00:42	Transportation Boat	Travelling	90	42	50	303	11	50	22.3110	113.9529	2037.90	316.93
25-Sep-13	12:00:51	Transportation Boat	Travelling	92	14	20	307	48	0	22.3021	113.9625	641.99	321.53
25-Sep-13	12:01:00	Transportation Boat	Travelling	91	18	20	304	26	50	22.3050	113.9592	1104.07	318.18
25-Sep-13	12:03:18	Transportation Boat	Travelling	94	49	30	357	6	20	22.3002	113.9669	296.97	10.84
25-Sep-13	12:03:43	Transportation Boat	Travelling	92	24	10	313	43	50	22.3022	113.9633	597.90	327.46
25-Sep-13	12:03:53	Transportation Boat	Travelling	90	58	20	289	39	30	22.3050	113.9543	1486.93	303.39
25-Sep-13	12:04:07	Transportation Boat	Stationary	95	38	20	1	49	50	22.2998	113.9671	253.85	15.56

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
25-Sep-13	12:04:28	Tug Boat	Travelling	90	52	0	338	41	40	22.3125	113.9643	1671.00	352.42
25-Sep-13	12:04:33	Construction Platform	Travelling	90	50	40	339	38	50	22.3130	113.9645	1715.77	353.38
25-Sep-13	12:04:40	Transportation Boat	Travelling	90	52	50	279	5	0	22.3034	113.9517	1644.15	292.81
25-Sep-13	12:06:18	Transportation Boat	Travelling	91	2	20	294	9	20	22.3053	113.9557	1389.99	307.89
25-Sep-13	12:06:31	Transportation Boat	Stationary	95	53	20	359	44	30	22.2997	113.9670	242.95	13.47
25-Sep-13	12:06:41	Transportation Boat	Travelling	91	1	20	286	57	20	22.3041	113.9546	1412.89	300.69
25-Sep-13	12:06:47	Tug Boat	Travelling	90	56	20	329	23	30	22.3109	113.9621	1540.11	343.12
25-Sep-13	12:06:51	Construction Platform	Travelling	90	55	10	330	45	10	22.3113	113.9623	1573.18	344.48
25-Sep-13	12:07:02	Tug Boat	Travelling	90	56	10	280	34	20	22.3033	113.9527	1544.71	294.30
25-Sep-13	12:07:05	Construction Platform	Travelling	90	54	40	279	22	50	22.3032	113.9522	1587.76	293.11
25-Sep-13	12:07:10	Transportation Boat	Travelling	90	58	10	278	39	50	22.3027	113.9530	1490.81	292.39
25-Sep-13	12:07:23	Government Boat	Travelling	90	42	0	349	36	40	22.3163	113.9676	2078.18	3.34
25-Sep-13	12:08:07	Government Boat	Travelling	90	57	10	333	52	40	22.3110	113.9632	1517.14	347.61
25-Sep-13	12:08:26	Dumping Guide Boat	Travelling	90	54	40	338	50	20	22.3118	113.9644	1587.57	352.57
25-Sep-13	12:08:43	Government Boat	Travelling	91	3	30	309	46	0	22.3075	113.9585	1363.85	323.50
25-Sep-13	12:09:24	Government Boat	Travelling	90	52	0	283	58	10	22.3046	113.9520	1670.25	297.70
25-Sep-13	12:09:33	Dumping Guide Boat	Travelling	91	2	0	330	32	50	22.3097	113.9627	1397.15	344.28
25-Sep-13	12:09:49	Tug Boat	Travelling	91	1	10	314	55	20	22.3085	113.9592	1416.39	328.65
25-Sep-13	12:09:51	Construction Platform	Travelling	91	1	10	316	35	10	22.3087	113.9596	1416.39	330.32
25-Sep-13	12:09:57	Tug Boat	Travelling	91	0	0	288	25	40	22.3045	113.9545	1444.28	302.16
25-Sep-13	12:10:01	Construction Platform	Travelling	90	59	20	287	5	50	22.3044	113.9542	1460.72	300.83
25-Sep-13	12:12:20	Dumping Guide Boat	Travelling	91	10	40	301	12	20	22.3054	113.9580	1223.72	314.94
25-Sep-13	12:12:27	Tug Boat	Travelling	91	0	50	300	58	50	22.3066	113.9566	1423.92	314.71
25-Sep-13	12:12:30	Construction Platform	Travelling	91	1	30	302	39	10	22.3068	113.9570	1408.28	316.38
25-Sep-13	12:12:35	Tug Boat	Travelling	91	3	40	296	20	30	22.3055	113.9563	1359.76	310.07
25-Sep-13	12:12:38	Construction Platform	Travelling	91	2	20	294	48	40	22.3054	113.9558	1389.20	308.54
25-Sep-13	12:14:56	Transportation Boat	Travelling	92	4	50	292	50	30	22.3013	113.9610	690.16	306.57
25-Sep-13	12:16:56	Transportation Boat	Travelling	92	31	0	317	17	20	22.3021	113.9637	570.07	331.02
25-Sep-13	12:17:08	Transportation Boat	Travelling	90	58	30	287	50	10	22.3046	113.9541	1480.87	301.57
25-Sep-13	12:17:18	Tug Boat	Travelling	90	51	40	279	23	20	22.3036	113.9514	1680.02	293.12
25-Sep-13	12:17:25	Construction Platform	Travelling	90	52	10	280	32	50	22.3038	113.9516	1663.62	294.28
25-Sep-13	12:18:39	Transportation Boat	Travelling	91	1	30	302	9	40	22.3067	113.9569	1407.50	315.89
25-Sep-13	12:21:09	Transportation Boat	Travelling	91	43	50	7	24	50	22.3046	113.9693	829.95	21.14
25-Sep-13	12:21:18	Transportation Boat	Travelling	90	57	10	327	21	0	22.3105	113.9616	1515.34	341.08
25-Sep-13	12:21:24	Tug Boat	Travelling	90	59	40	325	33	20	22.3098	113.9614	1450.96	339.29
25-Sep-13	12:21:27	Construction Platform	Travelling	90	59	40	324	7	0	22.3097	113.9611	1450.95	337.85
25-Sep-13	12:22:59	Transportation Boat	Travelling	90	49	40	339	10	40	22.3132	113.9643	1748.07	352.91
25-Sep-13	12:23:07	Transportation Boat	Travelling	90	58	30	307	16	10	22.3080	113.9573	1480.07	321.00
25-Sep-13	12:24:11	Transportation Boat	Stationary	91	14	40	16	50	20	22.3066	113.9721	1156.34	30.57
25-Sep-13	12:24:31	Transportation Boat	Travelling	91	5	20	296	36	50	22.3053	113.9566	1323.25	310.34
25-Sep-13	12:26:00	Transportation Boat	Travelling	91	5	10	292	52	30	22.3047	113.9560	1326.50	306.60
25-Sep-13	12:27:05	Transportation Boat	Travelling	90	58	40	278	2	40	22.3025	113.9531	1475.28	291.77
25-Sep-13	12:31:13	Tug Boat	Travelling	90	45	0	346	36	20	22.3150	113.9665	1932.02	0.34
25-Sep-13	12:31:17	Construction Platform	Travelling	90	46	0	346	8	50	22.3146	113.9664	1889.04	359.88
25-Sep-13	12:31:23	Tour Boat	Travelling	90	41	0	346	48	0	22.3167	113.9666	2125.67	0.53
25-Sep-13	12:31:33	Other	Travelling	91	12	10	285	43	40	22.3029	113.9563	1195.98	299.46
25-Sep-13	12:33:26	Transportation Boat	Travelling	91	1	20	301	10	50	22.3066	113.9567	1409.49	314.91
25-Sep-13	12:33:47	Dumping Guide Boat	Travelling	91	31	10	307	47	0	22.3043	113.9607	944.86	321.51
25-Sep-13	12:33:55	Tour Boat	Travelling	90	53	40	332	47	30	22.3117	113.9627	1613.92	346.52
25-Sep-13	12:35:59	Tour Boat	Travelling	91	0	20	313	7	0	22.3084	113.9588	1432.83	326.85
25-Sep-13	12:36:07	Dumping Guide Boat	Travelling	91	25	10	337	50	0	22.3066	113.9650	1011.66	351.56
25-Sep-13	12:38:03	Dumping Guide Boat	Travelling	91	9	0	355	35	50	22.3087	113.9684	1250.68	9.33
25-Sep-13	12:38:12	Tug Boat	Travelling	90	55	10	284	50	50	22.3044	113.9530	1568.73	298.58
25-Sep-13	12:39:03	Tour Boat	Travelling	90	54	40	281	48	50	22.3038	113.9525	1583.19	295.54
25-Sep-13	12:41:28	Tug Boat	Travelling	90	59	20	317	17	30	22.3091	113.9595	1456.58	331.02
25-Sep-13	12:45:40	Tug Boat	Travelling	90	42	0	347	15	0	22.3163	113.9667	2070.96	0.98
25-Sep-13	12:52:11	Tug Boat	Travelling	90	50	30	347	57	20	22.3130	113.9669	1714.14	1.69
25-Sep-13	12:52:16	Construction Platform	Travelling	90	49	20	348	33	50	22.3134	113.9671	1755.45	2.29
25-Sep-13	12:52:29	Transportation Boat	Travelling	90	58	20	285	57	50	22.3042	113.9539	1480.43	299.69
25-Sep-13	12:54:25	Transportation Boat	Travelling	91	0	0	303	15	20	22.3071	113.9569	1438.50	316.99
25-Sep-13	12:54:55	Research Vessel	Travelling	90	57	50	285	12	10	22.3041	113.9537	1493.08	298.93
25-Sep-13	12:55:03	Transportation Boat	Travelling	90	56	50	285	18	20	22.3043	113.9535	1519.72	299.04
25-Sep-13	12:55:10	Transportation Boat	Travelling	90	56	50	307	9	0	22.3082	113.9571	1519.70	320.88
25-Sep-13	12:56:27	Transportation Boat	Travelling	91	1	30	300	47	40	22.3065	113.9567	1402.70	314.52
25-Sep-13	12:56:51	Tug Boat	Travelling	91	9	40	329	48	50	22.3083	113.9630	1236.49	343.54
25-Sep-13	12:57:18	Construction Platform	Travelling	91	9	30	330	5	20	22.3083	113.9630	1239.44	343.82
25-Sep-13	12:57:24	Transportation Boat	Travelling	90	55	30	305	37	50	22.3082	113.9565	1556.46	319.36
25-Sep-13	12:57:35	Research Vessel	Travelling	91	2	20	310	41	20	22.3077	113.9586	1383.58	324.42
25-Sep-13	13:00:28	Tug Boat	Stationary	91	1	0	331	40	10	22.3099	113.9629	1413.83	345.40
25-Sep-13	13:00:33	Construction Platform	Stationary	91	5	50	330	49	30	22.3090	113.9630	1308.83	344.55
25-Sep-13	13:00:40	Research Vessel	Travelling	90	52	0	337	47	0	22.3124	113.9640	1662.52	351.51
25-Sep-13	13:05:05	Transportation Boat	Travelling	90	55	50	288	33	30	22.3051	113.9537	1545.95	302.29
25-Sep-13	13:06:44	Transportation Boat	Travelling	91	1	0	302	44	40	22.3068	113.9569	1413.03	316.47
25-Sep-13	13:07:52	Transportation Boat	Travelling	90	59	10	319	49	0	22.3094	113.9601	1457.26	333.55
25-Sep-13	13:08:02	Transportation Boat	Travelling	91	1	0	314	54	20	22.3085	113.9592	1412.87	328.64
25-Sep-13	13:08:43	Speed Boat	Travelling	91	1	0	301	16	0	22.3066	113.9567	1412.78	315.00
25-Sep-13	13:08:49	Transportation Boat	Travelling	90	57	0	329	42	0	22.3107	113.9622	1513.32	343.43
25-Sep-13	13:09:39	Speed Boat	Travelling	90	59	0	283	53	20	22.3037	113.9538	1461.19	297.62
25-Sep-13	13:09:46	Transportation Boat	Travelling	90	56	20	330	7	40	22.3109	113.9623	1531.37	343.86
25-Sep-13	13:09:51	Transportation Boat	Travelling	90	51	20	337	52	20	22.3126	113.9640	1683.10	351.60
25-Sep-13	13:10:32	Speed Boat	Travelling	90	49	0	280	4	40	22.3040	113.9507	1764.70	293.81
25-Sep-13	13:12:34	Transportation Boat	Travelling	90	43	30	345	31	20	22.3156	113.9661	1992.81	359.25
25-Sep-13	13:12:38	Transportation Boat	Travelling	90	38	30	352	34	10	22.3178	113.9688	2259.58	6.30
25-Sep-13	13:12:46	Transportation Boat	Travelling	91	2	0	299	11	0	22.3061	113.9565	1389.20	312.91
25-Sep-13	13:12:59	Transportation Boat	Travelling	90	37	0	350	7	20	22.3188	113.9679	2354.31	3.85
25-Sep-13	13:14:32	Transportation Boat	Travelling	90	57	0	283	33	10	22.3039	113.9533	1512.54	297.28
25-Sep-13	13:14:38	Transportation Boat	Travelling	90	47	50	340	26	50	22.3138	113.9646	1807.96	354.18
25-Sep-13	13:16:28	Transportation Boat	Travelling	90	59	50	318	26	30	22.3091	113.9599	1439.68	332.17
25-Sep-13	13:18:04	Transportation Boat	Travelling	91	1	0	292	53	0	22.3052	113.9554	1411.58	306.61
25-Sep-13	13:18:34	Transportation Boat	Travelling	90	59	0	285	9	20	22.3040	113.9540	1460.01	298.89
25-Sep-13	13:20:33	Transportation Boat	Travelling	90	52	20	306	0	40	22.3089	113.9560	1648.77	319.74
25-Sep-13	13:21:45	Transportation Boat	Travelling	90	58	20	284	34	30	22.3039	113.9538	1476.51	298.30
25-Sep-13	13:23:27	Transportation Boat	Travelling	91	0	50	303	41	30	22.3070	113.9571	1414.81	317.42
25-Sep-13	13:24:09	Transportation Boat	Travelling	90	54	30	305	31	40	22.3084	113.9564	1581.63	319.26
25-Sep-13	13:24:17	Transportation Boat	Travelling	91	0	30	289	42	50	22.3047	113.9549	1422.60	303.44
25-Sep-13	13:25:59	Transportation Boat	Travelling	90	57	50	306	11	20	22.3079	113.9571	1488.88	319.92
25-Sep-13	13:36:54	Speed Boat	Travelling	90	57	10	290	26	50	22.3052	113.9543	1505.01	304.18
25-Sep-13	13:37:03	Transportation Boat	Travelling	91	1	50	288	38	30	22.3043	113.9550	1389.93	302.37
25-Sep-13	13:37:10	Transportation Boat	Travelling	90	59	10	305	8	20	22.3075	113.9571	1453.39	318.87
25-Sep-13	13:37:38	Speed Boat	Travelling	91	1	10	316	34	20	22.3086	113.9596	1405.19	330.30
25-Sep-13	13:38:02	Transportation Boat	Travelling	91	0	10	296	8	50	22.3059	113.9557	1428.80	309.88
25-Sep-13	13:38:04	Transportation Boat	Travelling	91	0	50	297	45	20	22.3060	113.9561	1412.94	311.49
25-Sep-13	13:38:16	Speed Boat	Travelling	90	52	0	336	52	30	22.3123	113.9638	1656.86	350.60
25-Sep-13	13:39:11	Transportation Boat	Travelling	90	59	40	304	58	10	22.3074	113.9572	1440.78	318.70
25-Sep-13	13:39:16	Transportation Boat	Travelling	90	59	40	287	26	40	22.3043	113.9544	1440.77	301.17
25-Sep-13	13:39:23	Speed Boat	Travelling	90	34	30	353	12	40	22.3202	113.9694	2525.56	6.94
25-Sep-13	13:41:56	Transportation Boat	Travelling	91	0	40	301	56	0	22.3067	113.9568	1416.37	315.66
25-Sep-13	13:43:58	Transportation Boat	Travelling	93	4	30	331	10	30	22.3016	113.9652	462.62	344.90
25-Sep-13	13:44:09	Transportation Boat	Travelling	91	3	10	286	53	10	22.3038	113.9550	1359.36	300.62
25-Sep-13	13:45:23	Transportation Boat	Travelling	91	58	10	317	9	50	22.3033	113.9630	723.34	330.89
25-Sep-13	13:45:30	Transportation Boat	Travelling	91	10	40	296	22	0	22.3047	113.9574	1213.47	310.10
25-Sep-13	13:46:43	Transportation Boat	Travelling	91	24	50	312	4	50	22.3051	113.9609	1009.21	325.81
25-Sep-13	13:46:48	Transportation Boat	Travelling	91	11	0	305	47	40	22.3059	113.9588	1207.58	319.52
25-Sep-13	13:46:53	Transportation Boat	Travelling	91	3	0	300	53	0	22.3062	113.9570	1362.66	314.61
25-Sep-13	13:47:54	Transportation Boat	Travelling	91	0	0	287	14	50	22.3042	113.9545	1431.54	300.98
25-Sep-13	13:48:17	Transportation Boat	Travelling	90	59	0	282	3	0	22.3033	113.9536	1456.08	295.78
25-Sep-13	13:48:27	Transportation Boat	Travelling	91	2	30	307	43	50	22.3073	113.9581	1373.50	321.46

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
25-Sep-13	13:48:33	Transportation Boat	Travelling	91	0	20	310	31	10	22.3080	113.9583	1423.44	324.25
25-Sep-13	13:48:38	Transportation Boat	Travelling	91	3	20	298	37	10	22.3058	113.9567	1355.19	312.35
25-Sep-13	13:49:44	Transportation Boat	Travelling	90	52	20	305	33	30	22.3088	113.9560	1644.40	319.29
25-Sep-13	13:49:51	Transportation Boat	Travelling	91	2	0	287	51	20	22.3041	113.9549	1384.53	301.59
25-Sep-13	13:49:56	Transportation Boat	Travelling	91	2	50	313	59	30	22.3080	113.9593	1365.94	327.72
25-Sep-13	13:51:35	Transportation Boat	Travelling	90	55	20	297	22	40	22.3068	113.9550	1553.56	311.11
25-Sep-13	13:51:50	Transportation Boat	Travelling	91	2	10	318	56	0	22.3087	113.9602	1380.53	332.66
25-Sep-13	13:52:41	Transportation Boat	Travelling	91	3	50	307	21	50	22.3070	113.9582	1343.95	321.09
25-Sep-13	13:52:51	Other	Stationary	90	33	10	278	36	10	22.3066	113.9428	2628.28	292.33
25-Sep-13	13:52:55	Other	Stationary	90	34	10	281	45	50	22.3075	113.9440	2548.06	295.49
25-Sep-13	13:52:58	Other	Stationary	90	33	10	283	52	30	22.3086	113.9437	2628.25	297.60
25-Sep-13	13:53:00	Other	Stationary	90	31	30	288	8	40	22.3108	113.9435	2774.05	301.87
25-Sep-13	13:53:03	Other	Stationary	90	32	30	292	40	20	22.3120	113.9454	2684.63	306.40
25-Sep-13	13:53:09	Other	Stationary	90	45	50	296	46	10	22.3086	113.9525	1882.00	310.50
25-Sep-13	13:53:13	Other	Stationary	90	54	40	302	38	40	22.3079	113.9558	1572.57	316.37
25-Sep-13	13:53:16	Other	Stationary	90	58	0	313	36	50	22.3088	113.9586	1480.87	327.34
25-Sep-13	13:53:19	Other	Stationary	90	57	0	319	4	10	22.3097	113.9597	1507.22	332.80
25-Sep-13	13:53:22	Other	Stationary	90	55	10	324	18	40	22.3106	113.9607	1558.07	338.04
25-Sep-13	13:53:24	Other	Stationary	90	52	30	331	45	50	22.3119	113.9624	1638.54	345.49
25-Sep-13	13:53:26	Other	Stationary	90	49	20	336	18	10	22.3131	113.9635	1745.71	350.03
25-Sep-13	13:53:29	Other	Stationary	90	43	40	340	27	30	22.3153	113.9645	1977.61	354.19
25-Sep-13	13:53:32	Other	Stationary	90	40	40	345	7	30	22.3168	113.9660	2127.60	358.85
25-Sep-13	13:53:34	Other	Stationary	90	34	20	350	31	10	22.3204	113.9682	2535.01	4.25
25-Sep-13	13:54:14	Other	Stationary	90	30	40	352	12	20	22.3232	113.9693	2853.04	5.94
25-Sep-13	13:54:29	Other	Stationary	90	59	10	304	59	30	22.3074	113.9571	1451.11	318.72
25-Sep-13	13:54:34	Other	Stationary	90	51	50	307	49	50	22.3093	113.9564	1659.81	321.56
25-Sep-13	13:54:49	Other	Stationary	90	29	30	348	13	10	22.3244	113.9674	2972.07	1.95
25-Sep-13	13:54:53	Other	Stationary	90	30	0	352	3	30	22.3238	113.9693	2919.74	5.79
25-Sep-13	13:55:11	Other	Stationary	90	54	0	349	37	10	22.3119	113.9673	1592.02	3.35
25-Sep-13	13:55:15	Other	Stationary	90	54	50	351	3	50	22.3117	113.9677	1567.43	4.79
25-Sep-13	13:55:22	Other	Stationary	91	9	50	1	48	50	22.3083	113.9696	1226.99	15.54
25-Sep-13	13:55:25	Other	Stationary	91	9	50	4	13	50	22.3081	113.9701	1226.99	17.96
25-Sep-13	13:55:35	Other	Stationary	91	6	20	331	32	40	22.3089	113.9632	1292.40	345.27
25-Sep-13	13:55:37	Other	Stationary	90	44	0	331	32	40	22.3147	113.9615	1961.88	345.27
25-Sep-13	13:55:43	Other	Stationary	90	36	10	358	21	40	22.3187	113.9713	2401.11	12.09
25-Sep-13	13:55:46	Other	Stationary	90	33	10	357	44	20	22.3208	113.9715	2627.57	11.47
25-Sep-13	13:55:48	Other	Stationary	90	33	50	359	3	40	22.3202	113.9719	2573.54	12.79
25-Sep-13	13:55:53	Other	Stationary	90	31	30	6	43	0	22.3210	113.9758	2773.31	20.45
25-Sep-13	13:56:00	Other	Stationary	90	53	50	16	36	30	22.3100	113.9742	1596.91	30.34
25-Sep-13	13:56:10	Other	Stationary	91	8	0	311	54	10	22.3070	113.9595	1260.32	325.63
25-Sep-13	13:56:22	Other	Stationary	90	25	0	0	44	40	22.3285	113.9750	3547.04	14.47
25-Sep-13	13:56:30	Other	Stationary	90	25	0	0	45	30	22.3285	113.9750	3546.99	14.49
25-Sep-13	13:56:40	Other	Stationary	90	44	20	10	15	0	22.3136	113.9741	1946.58	23.98
27-Sep-13	8:05:29	Other	Stationary	94	32	10	0	0	0	22.3004	113.9671	317.20	13.73
27-Sep-13	8:09:07	Other	Stationary	90	34	10	278	57	40	22.3066	113.9432	2584.72	292.69
27-Sep-13	8:09:13	Other	Stationary	90	33	30	282	22	20	22.3081	113.9434	2638.44	296.10
27-Sep-13	8:09:17	Other	Stationary	90	32	0	288	48	40	22.3110	113.9437	2768.05	302.54
27-Sep-13	8:09:22	Other	Stationary	90	38	10	294	16	0	22.3104	113.9487	2304.16	308.00
27-Sep-13	8:09:27	Other	Stationary	90	52	50	300	53	30	22.3081	113.9550	1651.28	314.62
27-Sep-13	8:09:34	Other	Stationary	90	53	30	309	18	40	22.3093	113.9569	1630.37	323.04
27-Sep-13	8:09:39	Other	Stationary	90	58	40	313	21	40	22.3088	113.9586	1484.69	327.09
27-Sep-13	8:09:44	Other	Stationary	90	57	50	317	32	30	22.3095	113.9594	1506.40	331.27
27-Sep-13	8:09:48	Other	Stationary	90	55	20	324	41	10	22.3108	113.9608	1575.52	338.42
27-Sep-13	8:09:52	Other	Stationary	90	53	0	331	51	20	22.3120	113.9624	1646.06	345.59
27-Sep-13	8:09:55	Other	Stationary	90	45	0	339	16	20	22.3150	113.9641	1945.18	353.00
27-Sep-13	8:10:00	Other	Stationary	90	40	10	346	18	10	22.3173	113.9664	2185.97	0.03
27-Sep-13	8:10:05	Other	Stationary	90	34	0	350	33	10	22.3209	113.9683	2598.15	4.28
27-Sep-13	8:10:09	Other	Stationary	90	30	10	352	12	30	22.3240	113.9694	2945.56	5.94
27-Sep-13	8:10:29	Other	Stationary	90	59	40	305	0	40	22.3075	113.9570	1459.57	318.74
27-Sep-13	8:10:37	Other	Stationary	90	52	0	308	3	10	22.3095	113.9563	1678.38	321.78
27-Sep-13	8:10:47	Other	Stationary	90	30	40	348	20	0	22.3237	113.9674	2895.09	2.06
27-Sep-13	8:10:53	Other	Stationary	90	30	20	352	13	20	22.3238	113.9694	2928.67	5.95
27-Sep-13	8:11:22	Other	Stationary	91	12	30	315	15	20	22.3069	113.9604	1198.66	328.99
27-Sep-13	8:11:27	Other	Stationary	91	6	0	329	28	10	22.3090	113.9627	1317.98	343.20
27-Sep-13	8:11:32	Other	Stationary	91	8	10	333	53	50	22.3088	113.9637	1275.65	347.63
27-Sep-13	8:11:40	Other	Stationary	90	34	10	356	23	10	22.3205	113.9708	2585.28	10.12
27-Sep-13	8:11:44	Other	Stationary	90	36	30	358	26	40	22.3189	113.9714	2413.67	12.17
27-Sep-13	8:11:52	Other	Stationary	90	54	40	16	48	40	22.3100	113.9743	1595.32	30.54
27-Sep-13	8:13:07	Other	Stationary	90	53	20	351	6	30	22.3123	113.9677	1636.04	4.84
27-Sep-13	8:13:12	Other	Stationary	90	53	20	353	32	50	22.3122	113.9684	1636.06	7.28
27-Sep-13	8:13:19	Other	Stationary	91	10	30	359	21	50	22.3084	113.9691	1233.19	13.09
27-Sep-13	8:13:24	Other	Stationary	91	11	20	2	38	10	22.3081	113.9697	1218.66	16.37
27-Sep-13	8:13:37	Other	Stationary	91	12	30	325	0	30	22.3077	113.9622	1198.88	338.74
27-Sep-13	8:14:53	Tug Boat	Travelling	91	4	0	290	20	30	22.3045	113.9554	1360.04	304.07
27-Sep-13	8:15:09	Transportation Boat	Travelling	91	21	50	347	52	30	22.3072	113.9667	1061.21	1.60
27-Sep-13	8:15:18	HSF High Speed Ferry	Travelling	90	42	50	348	57	50	22.3160	113.9673	2047.06	2.69
27-Sep-13	8:16:06	Tug Boat	Travelling	91	4	40	305	14	50	22.3068	113.9578	1345.99	318.98
27-Sep-13	8:16:13	HSF High Speed Ferry	Travelling	90	49	10	341	16	0	22.3136	113.9649	1777.82	355.00
27-Sep-13	8:16:22	Transportation Boat	Travelling	91	33	20	348	19	20	22.3060	113.9667	929.74	2.05
27-Sep-13	8:16:29	Transportation Boat	Travelling	91	3	10	291	56	50	22.3049	113.9555	1378.38	305.68
27-Sep-13	8:16:58	Transportation Boat	Travelling	95	8	0	341	57	50	22.3001	113.9662	280.38	355.69
27-Sep-13	8:17:37	HSF High Speed Ferry	Travelling	90	58	40	323	33	30	22.3100	113.9608	1485.68	337.29
27-Sep-13	8:17:43	Tug Boat	Travelling	91	0	20	323	57	20	22.3096	113.9611	1444.10	337.69
27-Sep-13	8:18:25	Fishing Boat	Non-operate and travelling	92	13	0	313	50	20	22.3026	113.9630	651.50	327.57
27-Sep-13	8:18:44	Transportation Boat	Travelling	92	14	50	348	23	10	22.3034	113.9666	642.63	2.12
27-Sep-13	8:18:52	Transportation Boat	Travelling	91	5	0	313	36	0	22.3078	113.9594	1339.32	327.33
27-Sep-13	8:18:58	Transportation Boat	Travelling	92	28	10	317	50	10	22.3022	113.9637	584.62	331.57
27-Sep-13	8:19:06	HSF High Speed Ferry	Travelling	91	4	30	298	56	30	22.3059	113.9567	1349.85	312.67
27-Sep-13	8:19:11	Transportation Boat	Travelling	91	0	10	291	45	50	22.3052	113.9549	1448.33	305.49
27-Sep-13	8:19:15	Transportation Boat	Travelling	90	59	0	288	21	40	22.3047	113.9542	1477.38	302.09
27-Sep-13	8:20:04	Tug Boat	Travelling	90	47	40	342	37	0	22.3141	113.9653	1835.54	356.35
27-Sep-13	8:20:13	Transportation Boat	Travelling	91	1	0	303	57	40	22.3071	113.9570	1428.41	317.69
27-Sep-13	8:20:18	Transportation Boat	Travelling	91	1	20	300	8	30	22.3065	113.9564	1420.56	313.87
27-Sep-13	8:20:46	Fishing Boat	Operate and stationary	92	27	30	309	22	10	22.3018	113.9630	587.36	323.10
27-Sep-13	8:21:02	Transportation Boat	Travelling	90	55	30	306	12	10	22.3084	113.9566	1572.20	319.93
27-Sep-13	8:21:07	Transportation Boat	Travelling	90	57	20	307	5	50	22.3082	113.9571	1521.18	320.83
27-Sep-13	8:21:24	Transportation Boat	Travelling	91	10	40	299	4	30	22.3051	113.9576	1231.09	312.80
27-Sep-13	8:21:36	Transportation Boat	Stationary	93	52	50	351	27	40	22.3009	113.9667	371.54	5.19
27-Sep-13	8:21:43	Transportation Boat	Travelling	90	56	50	335	49	40	22.3112	113.9637	1534.84	349.56
27-Sep-13	8:21:49	Transportation Boat	Travelling	91	20	40	309	18	10	22.3054	113.9601	1077.28	323.03
27-Sep-13	8:22:16	Fishing Boat	Non-operate and travelling	92	21	40	359	59	10	22.3030	113.9678	611.71	13.72
27-Sep-13	8:23:25	Tug Boat	Travelling	91	5	50	294	35	30	22.3050	113.9563	1322.68	308.32
27-Sep-13	8:23:32	Transportation Boat	Travelling	90	57	0	292	39	40	22.3058	113.9544	1530.52	306.39
27-Sep-13	8:23:38	Speed Boat	Travelling	90	59	40	292	42	30	22.3054	113.9550	1461.18	306.44
27-Sep-13	8:24:23	Transportation Boat	Travelling	91	38	40	1	43	50	22.3053	113.9687	879.80	15.46
27-Sep-13	8:24:29	Transportation Boat	Travelling	90	54	20	341	58	10	22.3120	113.9652	1606.97	355.70
27-Sep-13	8:24:35	Transportation Boat	Travelling	91	0	40	303	45	40	22.3072	113.9570	1436.89	317.49
27-Sep-13	8:24:44	Speed Boat	Travelling	91	0	0	328	10	0	22.3100	113.9620	1453.09	341.90
27-Sep-13	8:25:20	Transportation Boat	Travelling	90	46	0	349	0	20	22.3147	113.9673	1904.39	2.74
27-Sep-13	8:25:26	Transportation Boat	Travelling	90	47	10	350	20	0	22.3143	113.9677	1856.26	4.06
27-Sep-13	8:25:34	Transportation Boat	Travelling	90	59	50	314	58	50	22.3088	113.9590	1457.29	328.71
27-Sep-13	8:25:41	Transportation Boat	Travelling	91	56	30	332	26	50	22.3041	113.9647	744.61	346.18
27-Sep-13	8:26:22	Tug Boat	Travelling	91	7	40	328	9	0	22.3086	113.9625	1286.77	341.88
27-Sep-13	8:27:13	Fishing Boat	Non-operate and travelling	92	42	30	29	57	30	22.3011	113.9700	533.26	43.69
27-Sep-13	8:27:49	Transportation Boat	Travelling	91	26	10	288	53	50	22.3025	113.9581	1008.54	302.63
27-Sep-13	8:27:54	Transportation Boat	Travelling	91	1	30	317	5	10	22.3088	113.9597	1417.56	330.82
27-Sep-13	8:28:01	Transportation Boat	Travelling	91	0	10	306	3	50	22.3076	113.9573	1449.41	319.79

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
27-Sep-13	8:28:20	Transportation Boat	Travelling	90	48	30	340	40	40	22.3138	113.9647	1804.60	354.41
27-Sep-13	8:28:36	Fishing Boat	Operate and stationary	92	10	20	299	21	0	22.3017	113.9617	665.45	313.08
27-Sep-13	8:28:49	Transportation Boat	Travelling	91	4	50	294	0	0	22.3050	113.9561	1343.92	307.73
27-Sep-13	8:28:53	Transportation Boat	Travelling	91	5	10	300	59	30	22.3061	113.9572	1336.98	314.72
27-Sep-13	8:29:44	Transportation Boat	Travelling	91	0	50	277	55	10	22.3024	113.9534	1433.52	291.65
27-Sep-13	8:29:50	Transportation Boat	Travelling	91	1	10	285	26	0	22.3039	113.9543	1425.62	299.16
27-Sep-13	8:30:17	Transportation Boat	Travelling	90	58	10	279	17	10	22.3029	113.9530	1500.23	293.02
27-Sep-13	8:30:26	Tug Boat	Stationary	91	1	40	333	30	20	22.3100	113.9634	1413.98	347.24
27-Sep-13	8:32:29	Transportation Boat	Travelling	90	45	50	346	16	30	22.3148	113.9664	1912.63	0.00
27-Sep-13	8:34:01	Transportation Boat	Travelling	90	56	50	328	31	50	22.3108	113.9618	1536.43	342.26
27-Sep-13	8:34:59	HSF High Speed Ferry	Travelling	90	59	40	285	50	20	22.3041	113.9540	1462.57	299.57
27-Sep-13	8:35:20	Transportation Boat	Travelling	91	21	10	11	8	10	22.3064	113.9708	1071.80	24.87
27-Sep-13	8:35:28	Transportation Boat	Travelling	91	4	30	304	52	30	22.3067	113.9577	1351.70	318.60
27-Sep-13	8:36:37	HSF High Speed Ferry	Travelling	91	1	40	291	50	50	22.3050	113.9552	1414.72	305.58
27-Sep-13	8:36:44	Transportation Boat	Travelling	91	1	30	284	22	50	22.3036	113.9542	1418.61	298.11
27-Sep-13	8:36:51	Transportation Boat	Travelling	91	43	40	357	39	10	22.3050	113.9680	838.02	11.38
27-Sep-13	8:37:00	HSF High Speed Ferry	Travelling	91	4	0	303	7	50	22.3066	113.9573	1362.56	316.86
27-Sep-13	8:37:46	HSF High Speed Ferry	Travelling	90	58	50	352	52	10	22.3109	113.9681	1483.92	6.60
27-Sep-13	8:38:18	Transportation Boat	Travelling	91	55	50	337	1	40	22.3043	113.9652	749.71	350.76
27-Sep-13	8:38:26	HSF High Speed Ferry	Travelling	91	2	40	319	13	0	22.3088	113.9602	1392.07	332.95
27-Sep-13	8:38:31	HSF High Speed Ferry	Travelling	91	2	0	317	15	30	22.3087	113.9598	1407.24	330.99
27-Sep-13	8:38:36	HSF High Speed Ferry	Travelling	91	11	30	338	58	20	22.3085	113.9649	1218.36	352.70
27-Sep-13	8:38:53	Fishing Boat	Operate and stationary	91	58	10	289	14	20	22.3012	113.9604	734.88	302.97
27-Sep-13	8:39:21	Fishing Boat	Operate and stationary	92	35	30	21	42	0	22.3017	113.9695	557.91	35.43
27-Sep-13	8:40:30	HSF High Speed Ferry	Travelling	90	47	40	343	42	40	22.3141	113.9656	1838.70	357.44
27-Sep-13	8:40:36	HSF High Speed Ferry	Travelling	90	53	40	336	46	40	22.3121	113.9638	1629.47	350.51
27-Sep-13	8:40:42	HSF High Speed Ferry	Travelling	91	8	0	289	43	20	22.3040	113.9560	1281.94	303.45
27-Sep-13	8:41:00	Transportation Boat	Travelling	91	43	0	296	34	30	22.3025	113.9601	843.77	310.30
27-Sep-13	8:43:05	Transportation Boat	Travelling	91	16	20	277	36	40	22.3014	113.9561	1140.97	291.34
27-Sep-13	8:43:13	Transportation Boat	Travelling	91	1	30	299	41	0	22.3064	113.9564	1419.38	313.41
27-Sep-13	8:43:31	Transportation Boat	Travelling	94	33	0	343	8	20	22.3005	113.9662	317.23	356.87
27-Sep-13	8:45:22	Transportation Boat	Travelling	90	57	20	283	6	40	22.3038	113.9532	1524.28	296.84
27-Sep-13	8:45:30	Transportation Boat	Travelling	92	11	40	329	7	30	22.3033	113.9645	659.61	342.85
27-Sep-13	8:45:54	Transportation Boat	Travelling	90	59	50	281	36	40	22.3032	113.9536	1459.78	295.34
27-Sep-13	8:46:05	Transportation Boat	Travelling	90	55	0	278	18	50	22.3030	113.9521	1590.06	292.04
27-Sep-13	8:47:02	Transportation Boat	Travelling	91	4	30	297	24	30	22.3056	113.9565	1353.01	311.14
27-Sep-13	8:47:12	Fishing Boat	Non-operate and travelling	91	45	50	289	7	0	22.3016	113.9597	821.49	302.85
27-Sep-13	8:47:20	Fishing Boat	Non-operate and travelling	91	42	0	25	53	50	22.3035	113.9717	852.53	39.63
27-Sep-13	8:48:23	Transportation Boat	Travelling	90	52	30	306	35	10	22.3092	113.9560	1667.40	320.32
27-Sep-13	8:48:38	Fishing Boat	Non-operate and stationary	91	45	40	288	1	30	22.3015	113.9596	822.89	301.75
27-Sep-13	8:49:02	Transportation Boat	Travelling	91	7	0	322	51	0	22.3084	113.9614	1302.18	336.58
27-Sep-13	8:51:24	Transportation Boat	Travelling	91	58	20	302	5	20	22.3024	113.9614	734.60	315.82
27-Sep-13	8:51:43	Fishing Boat	Operate and stationary	91	29	0	23	47	30	22.3046	113.9722	978.18	37.52
27-Sep-13	8:52:55	Transportation Boat	Travelling	90	59	0	284	32	40	22.3039	113.9537	1481.55	298.27
27-Sep-13	8:53:36	Transportation Boat	Travelling	93	34	40	337	38	0	22.3012	113.9658	404.18	351.36
27-Sep-13	8:53:44	Transportation Boat	Travelling	91	3	50	298	2	0	22.3058	113.9565	1368.07	311.76
27-Sep-13	8:53:48	Transportation Boat	Travelling	91	1	30	286	40	50	22.3041	113.9545	1420.64	300.41
27-Sep-13	8:54:50	Transportation Boat	Stationary	95	22	10	1	8	10	22.3000	113.9671	268.83	14.87
27-Sep-13	8:55:05	Transportation Boat	Travelling	91	2	40	322	13	0	22.3091	113.9609	1394.01	335.95
27-Sep-13	8:55:13	Transportation Boat	Travelling	90	57	10	307	26	10	22.3083	113.9571	1530.05	321.17
27-Sep-13	8:56:10	Transportation Boat	Travelling	90	49	40	307	15	40	22.3100	113.9556	1765.49	320.99
27-Sep-13	8:56:22	Transportation Boat	Travelling	90	51	40	338	52	40	22.3128	113.9643	1695.91	352.61
27-Sep-13	9:05:07	Transportation Boat	Travelling	91	2	40	300	52	0	22.3064	113.9567	1395.18	314.60
27-Sep-13	9:05:23	Transportation Boat	Travelling	91	10	50	304	9	40	22.3058	113.9584	1232.69	317.89
27-Sep-13	9:06:25	Transportation Boat	Travelling	90	59	40	282	53	40	22.3035	113.9536	1466.43	296.62
27-Sep-13	9:06:29	Transportation Boat	Travelling	91	12	0	295	3	50	22.3045	113.9572	1212.64	308.79
27-Sep-13	9:07:55	Transportation Boat	Travelling	90	58	40	283	0	50	22.3037	113.9534	1491.96	296.74
27-Sep-13	9:08:02	Transportation Boat	Travelling	91	7	50	283	0	50	22.3028	113.9552	1288.06	296.74
27-Sep-13	9:08:13	Transportation Boat	Travelling	90	52	10	345	0	10	22.3127	113.9660	1681.04	358.73
27-Sep-13	9:08:25	Fishing Boat	Operate and travelling	92	2	40	302	22	30	22.3022	113.9616	709.55	316.10
27-Sep-13	9:08:32	Fishing Boat	Operate and stationary	91	59	30	13	39	20	22.3034	113.9697	728.44	27.39
27-Sep-13	9:08:46	Transportation Boat	Travelling	91	5	0	277	52	10	22.3021	113.9542	1344.92	291.60
27-Sep-13	9:08:52	Transportation Boat	Travelling	91	5	0	297	3	40	22.3055	113.9565	1344.93	310.79
27-Sep-13	9:08:58	Transportation Boat	Travelling	90	59	10	344	29	20	22.3109	113.9660	1479.30	358.22
27-Sep-13	9:09:05	Transportation Boat	Travelling	90	57	20	280	56	40	22.3034	113.9529	1527.31	294.67
27-Sep-13	9:11:11	Transportation Boat	Travelling	90	55	50	333	22	50	22.3114	113.9630	1569.25	347.11
27-Sep-13	9:11:18	Transportation Boat	Travelling	91	31	20	346	2	40	22.3062	113.9664	954.59	359.77
27-Sep-13	9:11:25	Transportation Boat	Travelling	91	4	50	300	12	0	22.3060	113.9570	1348.72	313.93
27-Sep-13	9:11:29	Transportation Boat	Travelling	91	2	50	301	21	50	22.3065	113.9568	1392.18	315.09
27-Sep-13	9:11:59	Government Boat	Travelling	90	51	50	338	7	20	22.3127	113.9641	1692.58	351.85
27-Sep-13	9:12:26	Transportation Boat	Travelling	90	46	20	346	11	0	22.3147	113.9664	1897.88	359.91
27-Sep-13	9:12:35	Transportation Boat	Travelling	92	11	30	347	45	40	22.3036	113.9666	661.94	1.49
27-Sep-13	9:12:41	Transportation Boat	Travelling	91	4	30	311	58	40	22.3077	113.9590	1355.91	325.71
27-Sep-13	9:12:45	Transportation Boat	Travelling	91	0	50	289	27	50	22.3047	113.9547	1438.69	303.19
27-Sep-13	9:12:51	Government Boat	Travelling	91	2	10	310	25	20	22.3079	113.9584	1407.45	324.15
27-Sep-13	9:14:00	Transportation Boat	Travelling	90	55	30	278	56	20	22.3031	113.9522	1579.20	292.67
27-Sep-13	9:14:06	Transportation Boat	Travelling	91	0	0	281	1	10	22.3031	113.9535	1459.11	294.75
27-Sep-13	9:14:11	Government Boat	Stationary	90	57	40	295	13	50	22.3062	113.9549	1519.00	308.96
27-Sep-13	9:14:44	Transportation Boat	Stationary	94	57	50	0	19	40	22.3002	113.9671	291.41	14.06
27-Sep-13	9:15:08	Transportation Boat	Travelling	90	57	30	331	42	0	22.3109	113.9627	1523.59	345.43
27-Sep-13	9:15:13	Transportation Boat	Travelling	91	4	30	297	4	20	22.3056	113.9564	1356.20	310.80
27-Sep-13	9:16:26	Transportation Boat	Travelling	90	54	30	304	39	0	22.3084	113.9560	1608.97	318.38
27-Sep-13	9:16:38	Fishing Boat	Operate and stationary	92	8	20	312	32	40	22.3027	113.9627	678.57	326.27
27-Sep-13	9:16:49	Fishing Boat	Operate and stationary	92	19	0	8	19	10	22.3028	113.9687	626.32	22.05
27-Sep-13	9:16:58	Transportation Boat	Travelling	91	3	0	9	0	40	22.3091	113.9716	1389.08	22.74
27-Sep-13	9:19:30	HSF High Speed Ferry	Travelling	90	44	10	346	0	0	22.3156	113.9663	1994.45	359.73
27-Sep-13	9:20:08	Transportation Boat	Travelling	91	3	30	10	37	50	22.3089	113.9719	1378.38	24.36
27-Sep-13	9:20:21	Transportation Boat	Travelling	91	2	20	284	48	40	22.3037	113.9544	1404.52	298.54
27-Sep-13	9:21:28	Transportation Boat	Stationary	90	57	0	17	21	30	22.3095	113.9741	1537.97	31.09
27-Sep-13	9:21:34	Transportation Boat	Travelling	91	2	40	302	34	20	22.3067	113.9570	1397.10	316.30
27-Sep-13	9:21:48	Tug Boat	Travelling	91	9	0	282	30	20	22.3027	113.9553	1267.51	296.24
27-Sep-13	9:22:08	Other	Travelling	91	9	0	284	41	10	22.3030	113.9556	1267.54	298.42
27-Sep-13	9:22:26	HSF High Speed Ferry	Travelling	91	2	20	315	49	0	22.3085	113.9595	1404.77	329.55
27-Sep-13	9:22:33	Transportation Boat	Travelling	90	53	40	307	33	20	22.3091	113.9565	1635.21	321.29
27-Sep-13	9:23:59	HSF High Speed Ferry	Travelling	91	1	30	292	50	20	22.3053	113.9553	1424.23	306.57
27-Sep-13	9:24:07	Transportation Boat	Travelling	91	3	20	283	39	30	22.3033	113.9545	1382.51	297.39
27-Sep-13	9:24:17	Tug Boat	Travelling	91	10	0	292	51	20	22.3043	113.9566	1249.48	306.59
27-Sep-13	9:24:21	Other	Travelling	91	10	0	293	58	30	22.3045	113.9568	1249.49	307.70
27-Sep-13	9:26:21	Transportation Boat	Travelling	91	6	20	305	22	10	22.3066	113.9580	1319.52	319.10
27-Sep-13	9:29:16	Fishing Boat	Non-operate and travelling	91	59	10	317	37	20	22.3034	113.9630	731.75	331.35
27-Sep-13	9:29:26	Transportation Boat	Travelling	91	0	30	305	32	50	22.3075	113.9572	1448.74	319.28
27-Sep-13	9:29:50	Transportation Boat	Travelling	90	55	0	335	21	10	22.3117	113.9635	1595.89	349.08
27-Sep-13	9:30:06	Fishing Boat	Non-operate and travelling	91	51	50	300	23	50	22.3025	113.9610	780.00	314.13
27-Sep-13	9:30:17	Transportation Boat	Travelling	91	1	20	291	2	30	22.3050	113.9550	1428.90	304.77
27-Sep-13	9:32:05	Transportation Boat	Travelling	91	36	40	292	47	20	22.3025	113.9593	903.18	306.52
27-Sep-13	9:32:13	Fishing Boat	Operate and stationary	91	41	40	285	17	40	22.3014	113.9591	858.54	299.02
27-Sep-13	9:32:38	Transportation Boat	Travelling	90	43	20	346	12	20	22.3159	113.9664	2036.04	359.94
27-Sep-13	9:33:31	Transportation Boat	Travelling	91	49	30	308	14	40	22.3033	113.9616	796.92	321.97
27-Sep-13	9:34:38	Tug Boat	Travelling	90	56	0	336	9	30	22.3115	113.9637	1567.58	349.89
27-Sep-13	9:34:42	Other	Travelling	90	56	0	336	42	50	22.3115	113.9639	1567.59	350.44
27-Sep-13	9:34:50	Transportation Boat	Travelling	91	6	30	329	58	40	22.3090	113.9628	1317.11	343.71
27-Sep-13	9:35:04	Transportation Boat	Travelling	91	54	10	329	0	30	22.3042	113.9642	764.30	342.74
27-Sep-13	9:35:13	Transportation Boat	Stationary	91	6	10	328	26	20	22.3090	113.9625	1323.86	342.17
27-Sep-13	9:39:01	Transportation Boat	Travelling	91	14	40	5	22	40	22.3076	113.9701	1172.11	19.11
27-Sep-13	9:39:49	Transportation Boat	Stationary	91	10	20	2	11	50	22.3084	113.9697	1245.11	15.93
27-Sep-13	9:41:00	Speed Boat	Travelling	90	58	20	30	49	10	22.3073	113.9767	1504.76	44.55
27-Sep-13	9:41:46	Speed Boat	Travelling	91	30	0	18	11	30	22.3050	113.9714	971.28	31.92

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
27-Sep-13	9:42:50	Delete	Travelling	92	1	0	321	52	0	22.3035	113.9635	721.43	335.60
27-Sep-13	9:43:27	Speed Boat	Travelling	91	47	0	287	49	20	22.3015	113.9596	816.30	301.55
27-Sep-13	9:46:23	Transportation Boat	Travelling	91	13	50	2	49	40	22.3079	113.9697	1186.19	16.56
27-Sep-13	9:47:42	Transportation Boat	Travelling	91	3	10	282	54	40	22.3032	113.9543	1388.93	296.64
27-Sep-13	9:48:36	Transportation Boat	Travelling	91	5	30	293	40	0	22.3049	113.9561	1338.98	307.40
27-Sep-13	9:49:19	Transportation Boat	Travelling	91	5	30	302	33	50	22.3063	113.9574	1339.06	316.29
27-Sep-13	9:54:02	Transportation Boat	Travelling	91	1	10	306	24	30	22.3075	113.9574	1435.68	320.14
27-Sep-13	9:54:06	Transportation Boat	Travelling	90	55	10	306	23	40	22.3086	113.9565	1594.22	320.12
27-Sep-13	9:55:12	Transportation Boat	Travelling	91	4	40	288	52	0	22.3042	113.9553	1357.18	302.60
27-Sep-13	9:55:17	Transportation Boat	Travelling	91	4	30	300	41	50	22.3062	113.9569	1360.74	314.43
27-Sep-13	9:56:04	Transportation Boat	Travelling	91	1	30	275	22	40	22.3018	113.9533	1428.04	289.11
27-Sep-13	9:56:11	Transportation Boat	Travelling	91	1	50	290	40	30	22.3048	113.9550	1420.26	304.40
27-Sep-13	9:58:33	Transportation Boat	Travelling	91	1	10	283	32	40	22.3035	113.9540	1436.22	297.27
27-Sep-13	9:59:33	Transportation Boat	Travelling	91	3	20	294	59	40	22.3054	113.9559	1386.60	308.72
27-Sep-13	10:01:00	Transportation Boat	Travelling	90	57	40	307	4	40	22.3083	113.9570	1524.95	320.81
27-Sep-13	10:01:05	Transportation Boat	Travelling	91	2	50	304	19	20	22.3070	113.9573	1397.94	318.05
27-Sep-13	10:07:36	Transportation Boat	Travelling	91	28	50	312	43	40	22.3050	113.9611	986.23	326.46
27-Sep-13	10:10:04	Transportation Boat	Travelling	92	13	30	320	12	20	22.3029	113.9636	655.11	333.94
27-Sep-13	10:10:22	Speed Boat	Travelling	92	26	40	305	39	30	22.3017	113.9626	596.11	319.39
27-Sep-13	10:10:41	Speed Boat	Travelling	92	40	50	329	42	50	22.3023	113.9649	543.45	343.44
27-Sep-13	10:11:17	Speed Boat	Travelling	91	56	10	9	45	40	22.3038	113.9693	753.34	23.49
27-Sep-13	10:11:47	Speed Boat	Travelling	91	21	40	27	37	0	22.3049	113.9733	1073.78	41.35
27-Sep-13	10:11:59	Transportation Boat	Travelling	91	0	20	306	13	50	22.3077	113.9573	1457.95	319.96
27-Sep-13	10:12:11	Transportation Boat	Travelling	93	42	20	334	54	40	22.3011	113.9656	392.74	348.64
27-Sep-13	10:13:09	Transportation Boat	Travelling	95	12	20	349	39	30	22.3001	113.9666	279.15	3.39
27-Sep-13	10:13:18	Transportation Boat	Travelling	91	1	30	290	21	0	22.3048	113.9549	1430.09	304.08
27-Sep-13	10:13:24	Transportation Boat	Travelling	91	2	30	284	33	10	22.3036	113.9543	1406.93	298.28
27-Sep-13	10:13:49	Transportation Boat	Stationary	95	49	50	359	38	0	22.2998	113.9670	249.05	13.36
27-Sep-13	10:14:01	Transportation Boat	Travelling	90	59	50	282	31	20	22.3035	113.9536	1470.55	296.25
27-Sep-13	10:14:08	Transportation Boat	Travelling	91	4	10	293	16	50	22.3050	113.9558	1370.03	307.01
27-Sep-13	10:15:17	Transportation Boat	Travelling	91	0	50	306	38	10	22.3076	113.9574	1446.21	320.37
27-Sep-13	10:16:49	Transportation Boat	Travelling	91	0	20	287	8	10	22.3044	113.9542	1458.54	300.87
27-Sep-13	10:18:15	Transportation Boat	Travelling	90	55	50	306	6	50	22.3085	113.9565	1578.06	319.84
27-Sep-13	10:22:48	Transportation Boat	Travelling	93	44	50	327	51	40	22.3009	113.9652	388.46	341.59
27-Sep-13	10:23:12	Transportation Boat	Travelling	90	43	40	344	49	10	22.3159	113.9659	2027.25	358.55
27-Sep-13	10:24:09	Transportation Boat	Travelling	92	22	20	315	10	20	22.3024	113.9633	614.50	328.90
27-Sep-13	10:24:16	Transportation Boat	Travelling	90	49	10	338	58	0	22.3136	113.9642	1795.42	352.70
27-Sep-13	10:24:24	Transportation Boat	Travelling	91	1	0	286	26	0	22.3041	113.9543	1442.00	300.16
27-Sep-13	10:25:32	Transportation Boat	Travelling	91	41	0	311	15	10	22.3040	113.9616	867.13	324.98
27-Sep-13	10:25:41	Transportation Boat	Travelling	90	56	30	327	26	40	22.3109	113.9615	1558.38	341.17
27-Sep-13	10:25:45	Transportation Boat	Travelling	91	3	0	302	45	10	22.3067	113.9571	1395.50	316.48
27-Sep-13	10:27:33	Transportation Boat	Travelling	91	10	20	308	20	30	22.3065	113.9589	1248.28	322.07
27-Sep-13	10:27:38	Transportation Boat	Travelling	90	57	10	308	5	10	22.3085	113.9571	1539.68	321.82
27-Sep-13	10:27:44	Transportation Boat	Travelling	90	47	20	302	37	20	22.3098	113.9539	1865.92	316.35
27-Sep-13	10:27:48	Transportation Boat	Travelling	91	0	30	305	26	20	22.3075	113.9572	1453.67	319.17
27-Sep-13	10:27:53	Transportation Boat	Travelling	91	3	40	308	55	30	22.3075	113.9583	1380.46	322.65
27-Sep-13	10:31:39	Transportation Boat	Travelling	92	7	50	322	3	0	22.3032	113.9637	684.05	335.78
27-Sep-13	10:33:02	Transportation Boat	Travelling	93	23	30	332	55	30	22.3014	113.9654	428.97	346.65
27-Sep-13	10:35:28	Transportation Boat	Stationary	95	46	40	356	29	50	22.2998	113.9668	251.11	10.23
27-Sep-13	10:36:37	Transportation Boat	Travelling	91	2	30	300	34	10	22.3065	113.9566	1405.53	314.30
27-Sep-13	10:36:41	Transportation Boat	Travelling	90	59	50	302	7	0	22.3071	113.9564	1469.00	315.85
27-Sep-13	10:37:58	Transportation Boat	Travelling	91	4	40	291	3	20	22.3046	113.9556	1357.72	304.79
27-Sep-13	10:38:04	Transportation Boat	Travelling	90	58	20	283	16	50	22.3038	113.9533	1507.13	297.01
27-Sep-13	10:38:07	Transportation Boat	Travelling	90	58	20	290	56	0	22.3053	113.9543	1507.13	304.66
27-Sep-13	10:38:20	Transportation Boat	Travelling	91	0	30	304	10	40	22.3073	113.9569	1452.39	317.91
27-Sep-13	10:38:31	Transportation Boat	Travelling	90	56	40	278	31	10	22.3029	113.9524	1552.07	292.25
27-Sep-13	10:38:47	Transportation Boat	Travelling	91	5	40	302	41	20	22.3063	113.9574	1336.72	316.42
27-Sep-13	10:39:35	Transportation Boat	Travelling	90	57	10	280	7	30	22.3032	113.9527	1538.15	293.85
27-Sep-13	10:40:12	Transportation Boat	Travelling	91	2	20	288	43	40	22.3044	113.9548	1408.91	302.46
27-Sep-13	10:40:19	Transportation Boat	Travelling	90	47	0	302	40	30	22.3099	113.9538	1877.47	316.40
27-Sep-13	10:40:24	Transportation Boat	Travelling	91	0	40	304	13	20	22.3073	113.9570	1448.10	317.95
27-Sep-13	10:42:08	Transportation Boat	Travelling	91	0	10	289	15	10	22.3048	113.9545	1460.09	302.98
27-Sep-13	10:43:22	Transportation Boat	Travelling	90	56	20	279	57	50	22.3033	113.9525	1560.76	293.69
27-Sep-13	10:45:28	Transportation Boat	Travelling	90	59	40	280	41	30	22.3031	113.9534	1472.08	294.42
27-Sep-13	10:46:49	Transportation Boat	Travelling	91	2	40	297	8	20	22.3059	113.9561	1400.55	310.87
27-Sep-13	10:48:08	Transportation Boat	Travelling	90	53	40	305	14	30	22.3087	113.9559	1638.94	318.97
27-Sep-13	10:49:49	HSF High Speed Ferry	Travelling	91	2	0	287	0	20	22.3041	113.9546	1415.45	300.74
27-Sep-13	10:51:49	HSF High Speed Ferry	Travelling	90	59	0	327	29	0	22.3103	113.9617	1488.16	341.21
27-Sep-13	10:53:02	HSF High Speed Ferry	Travelling	90	46	50	344	59	0	22.3146	113.9660	1882.29	358.71
27-Sep-13	10:53:16	Transportation Boat	Travelling	91	4	0	299	34	0	22.3061	113.9567	1370.29	313.30
27-Sep-13	10:54:40	Transportation Boat	Travelling	91	2	10	282	9	10	22.3032	113.9541	1411.04	295.88
27-Sep-13	11:01:10	Transportation Boat	Travelling	90	42	10	346	49	20	22.3165	113.9666	2094.65	0.55
27-Sep-13	11:01:55	Transportation Boat	Travelling	91	3	30	287	47	0	22.3041	113.9550	1380.21	301.51
27-Sep-13	11:02:05	Transportation Boat	Travelling	90	48	40	340	38	50	22.3138	113.9647	1808.53	354.38
27-Sep-13	11:03:02	Transportation Boat	Travelling	90	55	30	330	42	40	22.3113	113.9623	1581.97	344.44
27-Sep-13	11:03:12	Transportation Boat	Travelling	91	6	0	303	25	40	22.3064	113.9576	1327.19	317.16
27-Sep-13	11:04:45	Transportation Boat	Travelling	90	59	0	311	20	30	22.3086	113.9581	1486.55	325.07
27-Sep-13	11:04:50	Transportation Boat	Travelling	91	4	20	305	11	10	22.3069	113.9577	1361.79	318.92
27-Sep-13	11:05:01	Transportation Boat	Travelling	93	1	40	3	37	40	22.3017	113.9678	479.44	17.36
27-Sep-13	11:05:09	Transportation Boat	Travelling	95	7	20	350	37	10	22.3002	113.9666	282.77	4.35
27-Sep-13	11:05:51	Transportation Boat	Travelling	90	51	20	306	31	0	22.3095	113.9557	1712.25	320.25
27-Sep-13	11:05:56	Transportation Boat	Travelling	91	4	30	287	41	20	22.3040	113.9551	1358.11	301.42
27-Sep-13	11:06:04	Transportation Boat	Travelling	92	15	40	6	30	20	22.3030	113.9686	642.57	20.24
27-Sep-13	11:06:12	Transportation Boat	Travelling	93	16	50	333	43	0	22.3015	113.9655	442.33	347.45
27-Sep-13	11:08:21	Transportation Boat	Travelling	91	24	50	8	25	0	22.3062	113.9702	1029.80	22.15
27-Sep-13	11:08:28	Transportation Boat	Travelling	91	42	50	316	25	40	22.3042	113.9623	848.56	330.16
27-Sep-13	11:10:06	Transportation Boat	Travelling	91	3	40	297	19	0	22.3057	113.9563	1375.62	311.05
27-Sep-13	11:10:21	Transportation Boat	Travelling	91	12	20	309	35	0	22.3063	113.9594	1209.13	323.31
27-Sep-13	11:10:41	Transportation Boat	Travelling	91	3	0	286	47	0	22.3040	113.9547	1390.28	300.51
27-Sep-13	11:12:55	Transportation Boat	Travelling	90	52	0	307	32	10	22.3095	113.9561	1688.90	321.27
27-Sep-13	11:16:30	HSF High Speed Ferry	Travelling	90	49	50	338	38	10	22.3133	113.9641	1763.22	352.37
27-Sep-13	11:17:15	HSF High Speed Ferry	Travelling	90	56	20	328	53	50	22.3110	113.9619	1556.35	342.63
27-Sep-13	11:18:19	HSF High Speed Ferry	Travelling	91	1	20	311	4	20	22.3081	113.9584	1427.64	324.80
27-Sep-13	11:19:25	HSF High Speed Ferry	Travelling	91	1	10	290	52	40	22.3049	113.9549	1431.45	304.61
27-Sep-13	11:24:31	Transportation Boat	Travelling	91	1	30	303	40	20	22.3070	113.9570	1422.98	317.40
27-Sep-13	11:26:14	Transportation Boat	Travelling	90	58	30	290	36	20	22.3052	113.9544	1496.75	304.34
27-Sep-13	11:27:32	Transportation Boat	Travelling	90	54	20	282	10	30	22.3040	113.9523	1613.18	295.90
27-Sep-13	11:30:21	Transportation Boat	Travelling	91	1	0	305	38	10	22.3074	113.9573	1434.10	319.37
27-Sep-13	11:30:26	Transportation Boat	Travelling	91	6	20	286	39	0	22.3036	113.9553	1317.45	300.38
27-Sep-13	11:31:50	Transportation Boat	Travelling	91	1	0	280	38	30	22.3029	113.9537	1433.92	294.37
27-Sep-13	11:31:53	Transportation Boat	Travelling	91	5	20	308	26	10	22.3071	113.9584	1337.69	322.17
27-Sep-13	11:34:41	Transportation Boat	Travelling	90	49	50	343	13	40	22.3134	113.9655	1760.53	356.96
27-Sep-13	11:36:47	Speed Boat	Travelling	91	4	30	298	52	50	22.3059	113.9567	1354.61	312.61
27-Sep-13	11:37:42	Speed Boat	Travelling	91	3	50	280	50	50	22.3027	113.9543	1368.83	294.58
27-Sep-13	11:38:00	Fishing Boat	Non-operate and travelling	94	29	40	338	23	0	22.3005	113.9660	321.61	352.11
27-Sep-13	11:39:50	Fishing Boat	Non-operate and travelling	93	10	50	288	36	20	22.2998	113.9627	455.02	302.34
27-Sep-13	11:43:04	Transportation Boat	Travelling	91	3	40	298	16	50	22.3059	113.9565	1371.84	312.01
27-Sep-13	11:44:06	Transportation Boat	Travelling	90	59	40	283	53	30	22.3037	113.9538	1464.89	297.62
27-Sep-13	11:44:12	Transportation Boat	Travelling	91	3	50	297	47	50	22.3058	113.9564	1368.08	311.53
27-Sep-13	11:44:45	Transportation Boat	Travelling	91	36	50	315	59	10	22.3046	113.9620	898.71	329.72
27-Sep-13	11:45:27	Transportation Boat	Travelling	91	1	10	286	39	40	22.3041	113.9544	1428.33	300.39
27-Sep-13	11:45:34	Transportation Boat	Travelling	91	54	20	319	24	20	22.3037	113.9631	760.48	333.14
27-Sep-13	11:46:53	Transportation Boat	Travelling	91	3	0	287	17	20	22.3040	113.9548	1386.09	301.02
27-Sep-13	11:46:56	Transportation Boat	Travelling	91	3	0	304	23	10	22.3069	113.9574	1386.08	318.12
27-Sep-13	11:47:01	Transportation Boat	Travelling	90	59	10	306	31	30	22.3078	113.9572	1477.08	320.25
27-Sep-13	11:47:09	Transportation Boat	Travelling	92	51	20	328	50	0	22.3020	113.9649	506.67	342.56
27-Sep-13	11:47:18	Transportation Boat	Travelling	91	5	20	294	27	30	22.3051	113.9562	1335.96	308.19

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
27-Sep-13	11:47:22	Transportation Boat	Travelling	91	2	10	297	52	50	22.3060	113.9562	1404.84	311.61
27-Sep-13	11:47:25	Transportation Boat	Travelling	91	3	20	306	50	0	22.3072	113.9579	1378.64	320.56
27-Sep-13	11:48:17	Transportation Boat	Travelling	91	5	40	309	9	40	22.3072	113.9586	1329.00	322.89
27-Sep-13	11:48:22	Transportation Boat	Travelling	91	0	10	282	33	50	22.3034	113.9537	1452.04	296.29
27-Sep-13	11:48:32	Transportation Boat	Travelling	91	5	0	293	4	40	22.3049	113.9559	1342.75	306.81
27-Sep-13	11:48:40	Transportation Boat	Travelling	95	20	20	349	9	30	22.3000	113.9665	270.25	2.89
27-Sep-13	11:49:30	Transportation Boat	Travelling	91	4	0	301	34	30	22.3063	113.9571	1363.87	315.30
27-Sep-13	11:50:32	Transportation Boat	Travelling	91	2	30	288	20	20	22.3043	113.9549	1396.89	302.07
27-Sep-13	11:50:40	Transportation Boat	Stationary	95	45	20	355	15	30	22.2998	113.9668	250.52	8.99
27-Sep-13	11:51:28	Transportation Boat	Travelling	90	59	20	276	57	30	22.3023	113.9530	1472.33	290.69
27-Sep-13	11:51:45	Transportation Boat	Travelling	94	47	40	344	8	50	22.3003	113.9663	301.05	357.88
27-Sep-13	11:54:46	Transportation Boat	Travelling	92	34	10	316	8	50	22.3020	113.9637	562.93	329.88
27-Sep-13	11:56:50	Transportation Boat	Travelling	91	41	10	310	6	20	22.3039	113.9615	859.15	323.84
27-Sep-13	12:01:15	Transportation Boat	Travelling	91	14	40	311	56	20	22.3063	113.9600	1166.04	325.67
27-Sep-13	12:01:20	Transportation Boat	Travelling	90	56	50	307	5	0	22.3083	113.9570	1536.77	320.81
27-Sep-13	12:04:00	Transportation Boat	Travelling	92	4	20	327	54	20	22.3036	113.9643	698.00	341.64
27-Sep-13	12:04:12	Transportation Boat	Travelling	90	56	20	305	10	20	22.3081	113.9565	1550.24	318.90
27-Sep-13	12:04:58	Transportation Boat	Travelling	91	2	30	298	32	10	22.3061	113.9564	1395.20	312.27
27-Sep-13	12:05:08	Transportation Boat	Travelling	92	55	40	338	7	40	22.3020	113.9657	493.40	351.86
27-Sep-13	12:06:04	Transportation Boat	Travelling	90	58	0	282	15	40	22.3036	113.9532	1504.81	295.99
27-Sep-13	12:06:14	Government Boat	Travelling	90	49	0	345	30	50	22.3137	113.9662	1786.33	359.24
27-Sep-13	12:06:30	Transportation Boat	Travelling	90	57	40	305	27	30	22.3079	113.9568	1513.58	319.19
27-Sep-13	12:06:48	Transportation Boat	stationary	95	46	40	359	18	40	22.2998	113.9669	249.21	13.04
27-Sep-13	12:07:12	Government Boat	Travelling	91	0	0	332	2	30	22.3103	113.9629	1453.83	345.77
27-Sep-13	12:07:22	Transportation Boat	Travelling	91	3	20	298	59	20	22.3060	113.9566	1376.34	312.72
27-Sep-13	12:08:28	Transportation Boat	Travelling	93	32	30	342	46	10	22.3013	113.9662	407.50	356.50
27-Sep-13	12:08:38	Government Boat	Travelling	91	6	30	302	9	0	22.3061	113.9575	1309.93	315.88
27-Sep-13	12:08:48	Transportation Boat	Travelling	90	58	0	282	13	50	22.3035	113.9532	1504.47	295.96
27-Sep-13	12:09:38	Government Boat	Travelling	90	59	10	281	46	30	22.3033	113.9535	1474.28	295.50
27-Sep-13	12:09:53	Transportation Boat	Travelling	92	7	20	330	2	30	22.3035	113.9645	681.16	343.77
27-Sep-13	12:13:17	Transportation Boat	Travelling	91	5	20	312	59	50	22.3076	113.9593	1333.06	326.73
27-Sep-13	12:22:46	Transportation Boat	Travelling	90	49	20	343	12	30	22.3135	113.9655	1771.55	356.94
27-Sep-13	12:23:37	Transportation Boat	Travelling	90	56	40	331	39	0	22.3110	113.9626	1538.48	345.38
27-Sep-13	12:24:22	Transportation Boat	Travelling	91	2	30	319	25	0	22.3088	113.9603	1392.93	333.15
27-Sep-13	12:24:52	Transportation Boat	Travelling	91	5	10	309	33	0	22.3073	113.9586	1335.21	323.28
27-Sep-13	12:25:53	Transportation Boat	Travelling	91	1	10	289	36	40	22.3047	113.9548	1423.50	303.34
27-Sep-13	12:29:02	Government Boat	Travelling	91	5	30	286	49	30	22.3037	113.9553	1327.87	300.55
27-Sep-13	12:29:58	Government Boat	Travelling	91	9	0	307	48	50	22.3065	113.9588	1259.71	321.54
27-Sep-13	12:30:46	Government Boat	Travelling	91	3	50	324	29	50	22.3090	113.9615	1362.75	338.23
27-Sep-13	12:31:46	Government Boat	Travelling	90	53	20	340	51	0	22.3123	113.9649	1635.10	354.58
27-Sep-13	12:32:57	Government Boat	Travelling	90	41	10	351	37	20	22.3167	113.9683	2130.43	5.35
27-Sep-13	12:44:44	Transportation Boat	Travelling	91	3	20	303	4	50	22.3066	113.9573	1372.03	316.81
27-Sep-13	12:46:01	Transportation Boat	Travelling	91	2	30	287	20	40	22.3041	113.9548	1390.40	301.07
27-Sep-13	12:46:44	Transportation Boat	Travelling	90	58	10	279	50	10	22.3030	113.9531	1495.32	293.57
27-Sep-13	12:48:54	Transportation Boat	Travelling	91	21	40	282	54	20	22.3019	113.9572	1061.08	296.64
27-Sep-13	12:50:46	Transportation Boat	Travelling	92	10	40	310	20	40	22.3024	113.9626	661.45	324.07
27-Sep-13	12:51:55	Transportation Boat	Travelling	92	33	0	344	10	20	22.3027	113.9662	564.54	357.90
27-Sep-13	12:53:57	Transportation Boat	Travelling	91	41	10	34	8	20	22.3028	113.9726	855.05	47.87
27-Sep-13	12:59:18	Speed Boat	Travelling	91	11	20	24	22	0	22.3062	113.9737	1215.11	38.10
27-Sep-13	12:59:37	Speed Boat	Travelling	91	12	50	29	3	0	22.3055	113.9743	1189.82	42.78
27-Sep-13	12:59:52	Speed Boat	Travelling	91	5	40	29	40	40	22.3063	113.9752	1321.04	43.41
27-Sep-13	13:01:18	Speed Boat	Stationary	91	6	50	25	28	40	22.3067	113.9744	1297.57	39.21
27-Sep-13	13:01:45	Transportation Boat	Travelling	91	3	20	296	13	20	22.3055	113.9562	1370.07	309.95
27-Sep-13	13:02:13	Transportation Boat	Travelling	90	57	30	285	11	40	22.3042	113.9535	1510.94	298.92
27-Sep-13	13:02:20	Transportation Boat	Travelling	91	1	0	285	51	40	22.3039	113.9544	1423.07	299.59
27-Sep-13	13:02:58	Transportation Boat	Travelling	90	55	50	278	14	30	22.3029	113.9524	1556.63	291.97
27-Sep-13	13:03:02	Transportation Boat	Travelling	91	1	30	294	26	40	22.3055	113.9556	1411.27	308.17
27-Sep-13	13:04:02	Transportation Boat	Travelling	91	3	10	306	46	40	22.3072	113.9579	1373.46	320.51
27-Sep-13	13:04:44	Transportation Boat	Travelling	90	56	50	306	7	40	22.3081	113.9568	1528.60	319.86
27-Sep-13	13:14:44	Transportation Boat	Travelling	91	15	10	309	4	0	22.3059	113.9596	1151.10	322.80
27-Sep-13	13:16:17	Transportation Boat	Travelling	91	13	0	314	19	0	22.3067	113.9603	1185.42	328.05
27-Sep-13	13:16:31	Transportation Boat	Travelling	91	9	20	308	16	50	22.3065	113.9589	1248.70	322.01
27-Sep-13	13:16:43	Transportation Boat	Travelling	91	14	20	317	1	30	22.3068	113.9609	1163.92	330.75
27-Sep-13	13:17:33	Transportation Boat	Travelling	91	11	40	326	57	10	22.3079	113.9625	1207.55	340.68
27-Sep-13	13:17:40	Transportation Boat	Travelling	91	23	20	309	19	50	22.3051	113.9603	1037.19	323.06
27-Sep-13	13:17:46	Transportation Boat	Travelling	91	0	20	310	34	10	22.3081	113.9582	1437.14	324.30
27-Sep-13	13:18:18	Transportation Boat	Stationary	91	7	0	328	41	30	22.3087	113.9626	1292.46	342.42
27-Sep-13	13:18:24	Transportation Boat	Travelling	91	1	20	296	18	40	22.3058	113.9559	1413.32	310.04
27-Sep-13	13:19:05	Transportation Boat	Travelling	91	47	50	311	54	10	22.3036	113.9620	800.25	325.63
27-Sep-13	13:19:11	Transportation Boat	Travelling	91	3	0	320	45	30	22.3088	113.9606	1375.38	334.49
27-Sep-13	13:19:21	Transportation Boat	Travelling	91	8	0	322	50	30	22.3081	113.9615	1273.14	336.57
27-Sep-13	13:19:25	Transportation Boat	Travelling	90	53	50	304	57	20	22.3085	113.9560	1613.16	318.69
27-Sep-13	13:20:49	Transportation Boat	Travelling	91	6	10	295	13	10	22.3050	113.9565	1308.64	308.95
27-Sep-13	13:20:56	Transportation Boat	Travelling	93	0	0	320	59	50	22.3015	113.9644	478.44	334.73
27-Sep-13	13:21:06	Transportation Boat	Travelling	90	56	0	333	59	50	22.3112	113.9632	1549.55	347.73
27-Sep-13	13:21:44	Transportation Boat	Travelling	90	59	30	279	58	30	22.3029	113.9534	1457.05	293.70
27-Sep-13	13:22:54	Transportation Boat	Stationary	95	43	50	358	32	20	22.2998	113.9669	249.69	12.27
27-Sep-13	13:24:40	Transportation Boat	Travelling	91	2	30	297	26	40	22.3058	113.9563	1385.88	311.17
27-Sep-13	13:24:57	Transportation Boat	Travelling	90	59	50	283	27	40	22.3036	113.9539	1448.43	297.19
27-Sep-13	13:25:18	Transportation Boat	Travelling	91	0	30	306	26	30	22.3075	113.9575	1432.21	320.17
27-Sep-13	13:25:41	Transportation Boat	Travelling	90	55	10	307	17	0	22.3086	113.9568	1572.72	321.01
27-Sep-13	13:25:47	Transportation Boat	Travelling	91	2	40	302	45	0	22.3066	113.9571	1382.02	316.48
27-Sep-13	13:25:54	Transportation Boat	Travelling	91	1	20	289	59	20	22.3047	113.9550	1412.43	303.72
27-Sep-13	13:27:01	Transportation Boat	Travelling	90	56	20	282	11	0	22.3037	113.9529	1539.47	295.91
27-Sep-13	13:27:15	Transportation Boat	Travelling	90	54	50	278	56	50	22.3031	113.9522	1582.22	292.68
27-Sep-13	13:27:22	Transportation Boat	Travelling	91	2	30	300	18	50	22.3063	113.9567	1385.57	314.04
27-Sep-13	13:28:51	Transportation Boat	Travelling	90	56	0	307	0	10	22.3084	113.9569	1548.54	320.73
27-Sep-13	13:34:08	Transportation Boat	Travelling	90	59	50	288	44	0	22.3046	113.9545	1447.30	302.46
27-Sep-13	13:34:15	Transportation Boat	Travelling	90	56	30	281	41	0	22.3035	113.9529	1533.92	295.41
27-Sep-13	13:35:15	Transportation Boat	Travelling	91	1	30	301	37	20	22.3066	113.9568	1407.44	315.35
27-Sep-13	13:35:19	Transportation Boat	Travelling	90	59	30	289	14	50	22.3047	113.9545	1455.38	302.98
27-Sep-13	13:35:57	Transportation Boat	Travelling	90	56	50	306	5	20	22.3081	113.9568	1524.57	319.82
27-Sep-13	13:36:41	Transportation Boat	Travelling	91	2	0	300	0	50	22.3063	113.9566	1395.78	313.74
27-Sep-13	13:37:04	Transportation Boat	Travelling	90	59	20	289	33	30	22.3048	113.9545	1459.30	303.29
27-Sep-13	13:37:35	Transportation Boat	Travelling	91	0	10	287	25	50	22.3043	113.9544	1438.76	301.16
27-Sep-13	13:37:42	Transportation Boat	Travelling	91	2	0	308	21	40	22.3075	113.9581	1395.66	322.09
27-Sep-13	13:38:27	Transportation Boat	Travelling	90	59	30	280	24	40	22.3030	113.9535	1454.99	294.14
27-Sep-13	13:38:34	Transportation Boat	Travelling	91	1	30	315	19	0	22.3085	113.9594	1407.05	329.05
27-Sep-13	13:41:39	Transportation Boat	Travelling	91	4	0	289	11	0	22.3042	113.9554	1351.08	302.91
27-Sep-13	13:41:45	Transportation Boat	Travelling	90	52	10	337	29	20	22.3124	113.9639	1662.45	351.22
27-Sep-13	13:42:24	Transportation Boat	Travelling	91	5	30	298	59	50	22.3057	113.9570	1319.70	312.73
27-Sep-13	13:43:17	Transportation Boat	Travelling	90	58	30	307	1	50	22.3079	113.9573	1479.60	320.76
27-Sep-13	13:43:49	Transportation Boat	Travelling	91	3	40	283	59	40	22.3033	113.9547	1357.98	297.72
27-Sep-13	13:43:53	Transportation Boat	Travelling	90	52	50	304	36	30	22.3087	113.9558	1640.81	318.34
27-Sep-13	13:44:05	Transportation Boat	Travelling	91	1	10	281	3	10	22.3030	113.9539	1414.16	294.78
27-Sep-13	13:44:13	Transportation Boat	Travelling	91	4	50	291	11	50	22.3045	113.9558	1333.22	304.93
27-Sep-13	13:45:00	Transportation Boat	Travelling	91	4	50	305	2	20	22.3066	113.9579	1333.13	318.77
27-Sep-13	13:45:04	Transportation Boat	Travelling	91	6	40	290	42	20	22.3042	113.9560	1296.06	304.44
27-Sep-13	13:45:58	Transportation Boat	Travelling	90	54	40	306	35	10	22.3086	113.9566	1584.61	320.32
27-Sep-13	13:46:02	Transportation Boat	Travelling	91	9	10	301	38	40	22.3056	113.9579	1248.63	315.37
27-Sep-13	13:47:19	Transportation Boat	Travelling	91	9	10	316	49	10	22.3074	113.9604	1248.50	330.55
27-Sep-13	13:47:25	Transportation Boat	Travelling	90	53	10	332	31	20	22.3119	113.9626	1629.86	346.25
27-Sep-13	13:48:29	Transportation Boat	Travelling	90	59	40	318	25	50	22.3092	113.9598	1449.64	332.16
27-Sep-13	13:48:35	Transportation Boat	Travelling	91	6	20	331	20	0	22.3089	113.9631	1302.26	345.06
27-Sep-13	13:49:18	Transportation Boat	Travelling	91	1	30	337	24	10	22.3101	113.9643	1405.77	351.13
27-Sep-13	13:49:24	Transportation Boat	Travelling	91	1	0	304	29	40	22.3071	113.9572	1417.43	318.22
27-Sep-13	13:49:30	Transportation Boat	Travelling	90	57	50	285	11	40	22.3041	113.9537	1496.12	298.92

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
27-Sep-13	13:51:01	Transportation Boat	Travelling	90	54	50	281	46	30	22.3037	113.9525	1579.04	295.50
27-Sep-13	13:51:07	Transportation Boat	Travelling	91	0	50	297	57	0	22.3061	113.9561	1421.16	311.68
27-Sep-13	13:52:37	Transportation Boat	Travelling	90	54	40	305	56	20	22.3085	113.9564	1583.72	319.67
27-Sep-13	13:55:14	Transportation Boat	Travelling	91	0	30	286	48	20	22.3042	113.9544	1428.59	300.54
27-Sep-13	13:55:46	Transportation Boat	Travelling	91	2	10	294	4	0	22.3053	113.9557	1389.75	307.80
27-Sep-13	13:56:35	Transportation Boat	Travelling	91	0	50	305	39	20	22.3073	113.9574	1420.50	319.39
27-Sep-13	13:57:17	Transportation Boat	Travelling	90	52	10	306	25	20	22.3091	113.9561	1660.26	320.15
27-Sep-13	13:57:25	Other	stationary	90	33	20	278	36	50	22.3066	113.9427	2632.17	292.34
27-Sep-13	13:57:29	Other	Stationary	90	33	20	284	9	10	22.3087	113.9438	2632.15	297.88
27-Sep-13	13:57:32	Other	Stationary	90	31	30	288	50	50	22.3112	113.9435	2792.81	302.58
27-Sep-13	13:57:37	Other	Stationary	90	48	50	298	37	30	22.3084	113.9536	1775.75	312.35
27-Sep-13	13:57:42	Other	Stationary	90	53	20	308	29	0	22.3092	113.9567	1623.27	322.21
27-Sep-13	13:57:45	Other	Stationary	90	56	50	311	53	50	22.3089	113.9580	1521.76	325.63
27-Sep-13	13:57:50	Other	Stationary	90	56	50	316	31	20	22.3095	113.9591	1521.75	330.25
27-Sep-13	13:57:54	Other	Stationary	90	55	30	321	8	50	22.3103	113.9600	1558.87	334.88
27-Sep-13	13:57:56	Other	Stationary	90	53	50	325	58	50	22.3112	113.9610	1607.91	339.71
27-Sep-13	13:57:59	Other	Stationary	90	52	40	330	21	40	22.3118	113.9620	1644.13	344.09
27-Sep-13	13:58:02	Other	Stationary	90	51	40	333	11	20	22.3123	113.9627	1676.51	346.92
27-Sep-13	13:58:05	Other	Stationary	90	50	20	335	32	30	22.3128	113.9633	1721.75	349.27
27-Sep-13	13:58:08	Other	Stationary	90	45	0	339	9	30	22.3149	113.9641	1930.39	352.89
27-Sep-13	13:58:12	Other	Stationary	90	41	30	343	31	40	22.3165	113.9654	2097.58	357.26
27-Sep-13	13:58:16	Other	Stationary	90	39	30	346	41	50	22.3175	113.9666	2207.00	0.43
27-Sep-13	13:58:23	Other	Stationary	90	30	0	352	0	20	22.3239	113.9693	2939.84	5.74
27-Sep-13	13:58:41	Other	Stationary	90	59	40	304	54	10	22.3074	113.9571	1448.39	318.63
27-Sep-13	13:58:46	Other	Stationary	90	51	50	307	29	40	22.3093	113.9562	1670.92	321.22
27-Sep-13	13:58:57	Other	Stationary	90	29	30	348	8	30	22.3245	113.9674	2992.38	1.87
27-Sep-13	13:59:04	Other	Stationary	90	30	10	352	0	40	22.3238	113.9692	2922.52	5.74
27-Sep-13	13:59:19	Other	Stationary	91	13	40	315	15	30	22.3066	113.9605	1170.34	328.99
27-Sep-13	13:59:23	Other	Stationary	91	8	0	329	3	50	22.3085	113.9627	1268.84	342.79
27-Sep-13	13:59:26	Other	Stationary	91	9	0	333	57	10	22.3086	113.9638	1250.26	347.68
27-Sep-13	13:59:34	Other	Stationary	90	36	20	358	18	50	22.3188	113.9713	2405.93	12.04
27-Sep-13	13:59:43	Other	Stationary	90	32	20	1	47	10	22.3212	113.9735	2716.85	15.52
27-Sep-13	13:59:48	Other	Stationary	90	53	10	16	35	30	22.3103	113.9744	1628.15	30.32
27-Sep-13	14:00:08	Other	Stationary	90	53	10	351	25	10	22.3122	113.9678	1628.11	5.15
27-Sep-13	14:00:14	Other	Stationary	90	53	50	353	54	30	22.3120	113.9685	1607.60	7.64
27-Sep-13	14:00:21	Other	Stationary	91	9	40	359	39	30	22.3085	113.9692	1238.08	13.39
27-Sep-13	14:00:25	Other	Stationary	91	9	40	1	43	50	22.3084	113.9696	1238.07	15.46
27-Sep-13	14:00:44	Other	Stationary	91	1	0	344	4	20	22.3104	113.9659	1416.07	357.80
27-Sep-13	14:00:49	Other	Stationary	90	49	0	359	24	50	22.3131	113.9703	1769.11	13.14
29-Sep-13	8:23:12	Other		94	25	50	0	0	0	22.3004	113.9671	314.95	13.73
29-Sep-13	8:25:12	Other	Stationary	90	33	20	279	4	20	22.3066	113.9434	2569.26	292.80
29-Sep-13	8:25:18	Other	Stationary	90	43	30	295	59	30	22.3088	113.9518	1951.42	309.72
29-Sep-13	8:25:21	Other	Stationary	90	49	30	299	36	30	22.3082	113.9543	1710.04	313.34
29-Sep-13	8:25:25	Other	Stationary	90	57	40	304	36	40	22.3075	113.9569	1464.18	318.34
29-Sep-13	8:25:29	Other	Stationary	90	52	10	308	54	20	22.3092	113.9568	1621.08	322.64
29-Sep-13	8:25:32	Other	Stationary	90	57	10	313	5	50	22.3087	113.9585	1477.17	326.83
29-Sep-13	8:25:35	Other	Stationary	90	57	10	318	49	0	22.3094	113.9598	1477.17	332.55
29-Sep-13	8:25:39	Other	Stationary	90	55	0	323	59	30	22.3104	113.9607	1536.24	337.72
29-Sep-13	8:25:42	Other	Stationary	90	52	50	328	46	40	22.3114	113.9617	1600.28	342.51
29-Sep-13	8:25:47	Other	Stationary	90	51	40	332	35	50	22.3119	113.9626	1637.04	346.33
29-Sep-13	8:25:51	Other	Stationary	90	45	40	338	6	0	22.3142	113.9638	1856.69	351.83
29-Sep-13	8:25:55	Other	Stationary	90	42	40	341	8	30	22.3155	113.9647	1990.51	354.87
29-Sep-13	8:25:58	Other	Stationary	90	40	40	344	39	20	22.3164	113.9658	2091.14	358.39
29-Sep-13	8:26:01	Other	Stationary	90	38	30	348	32	20	22.3175	113.9673	2212.49	2.27
29-Sep-13	8:26:08	Other	Stationary	90	30	0	352	14	0	22.3233	113.9693	2869.44	5.96
29-Sep-13	8:26:25	Other	Stationary	90	58	40	305	1	30	22.3074	113.9572	1438.88	318.75
29-Sep-13	8:26:35	Other	Stationary	90	51	0	308	8	10	22.3094	113.9564	1658.82	321.87
29-Sep-13	8:26:46	Other	Stationary	90	29	40	348	18	30	22.3237	113.9674	2903.46	2.04
29-Sep-13	8:26:53	Other	Stationary	90	30	0	352	13	50	22.3233	113.9693	2869.44	5.96
29-Sep-13	8:28:12	Other	Stationary	91	7	20	332	42	40	22.3086	113.9635	1251.62	346.44
29-Sep-13	8:28:22	Other	Stationary	91	4	10	334	38	40	22.3092	113.9638	1314.08	348.37
29-Sep-13	8:28:40	Other	Stationary	90	37	40	357	32	20	22.3176	113.9707	2263.07	11.27
29-Sep-13	8:28:47	Other	Stationary	90	37	40	358	47	20	22.3175	113.9712	2263.07	12.52
29-Sep-13	8:28:54	Other	Stationary	90	40	30	359	25	10	22.3160	113.9710	2099.99	13.15
29-Sep-13	8:28:59	Other	Stationary	90	40	30	0	23	10	22.3159	113.9714	2099.99	14.12
29-Sep-13	8:29:07	Other	Stationary	90	52	50	16	10	0	22.3101	113.9742	1600.28	29.90
29-Sep-13	8:29:11	Other	Stationary	90	53	30	17	16	20	22.3098	113.9743	1580.01	31.00
29-Sep-13	8:29:43	Other	Stationary	90	54	0	353	37	50	22.3116	113.9684	1565.14	7.36
29-Sep-13	8:29:47	Other	Stationary	90	54	20	355	9	20	22.3114	113.9687	1555.39	8.89
29-Sep-13	8:29:54	Other	Stationary	91	8	30	0	24	30	22.3084	113.9693	1230.09	14.14
29-Sep-13	8:29:58	Other	Stationary	91	8	30	3	32	20	22.3082	113.9700	1230.09	17.27
29-Sep-13	8:30:41	Container Boat	Stationary	90	33	20	5	45	0	22.3194	113.9747	2569.26	19.48
29-Sep-13	8:30:56	Container Boat	Stationary	90	31	40	6	17	40	22.3205	113.9754	2710.87	20.02
29-Sep-13	8:31:02	Container Boat	Stationary	90	29	50	6	32	0	22.3220	113.9761	2886.35	20.26
29-Sep-13	8:32:36	Transportation Boat	Travelling	90	45	30	343	14	10	22.3144	113.9654	1863.65	356.97
29-Sep-13	8:32:49	Transportation Boat	Travelling	91	2	40	305	12	0	22.3068	113.9578	1345.90	318.93
29-Sep-13	8:34:03	Transportation Boat	Travelling	90	59	20	326	59	40	22.3097	113.9618	1422.50	340.72
29-Sep-13	8:34:07	Transportation Boat	Travelling	91	3	0	292	34	30	22.3048	113.9559	1338.70	306.30
29-Sep-13	8:35:14	Transportation Boat	Travelling	91	5	50	305	56	30	22.3064	113.9583	1280.44	319.67
29-Sep-13	8:35:20	Transportation Boat	Travelling	90	57	40	282	26	50	22.3034	113.9536	1464.18	296.18
29-Sep-13	8:36:43	Transportation Boat	Travelling	90	59	30	279	16	0	22.3026	113.9537	1418.46	293.00
29-Sep-13	8:36:51	Transportation Boat	Travelling	90	55	40	284	33	40	22.3041	113.9534	1517.57	298.29
29-Sep-13	8:37:06	Tug Boat	Travelling	91	0	50	313	55	30	22.3082	113.9592	1386.97	327.65
29-Sep-13	8:38:34	Speed Boat	Travelling	94	13	0	317	49	40	22.3018	113.9640	522.99	331.56
29-Sep-13	8:38:44	Transportation Boat	Travelling	91	0	10	299	11	40	22.3113	113.9506	2224.15	312.92
29-Sep-13	8:38:52	Tug Boat	Travelling	90	57	10	329	47	0	22.3178	113.9599	2343.69	343.51
29-Sep-13	8:40:25	Transportation Boat	Travelling	90	53	30	307	11	20	22.3152	113.9510	2511.16	320.92
29-Sep-13	8:40:31	Tug Boat	Travelling	90	49	20	340	45	0	22.3221	113.9638	2729.73	354.48
29-Sep-13	8:41:55	Speed Boat	Travelling	92	33	0	295	32	50	22.3026	113.9599	868.71	309.28
29-Sep-13	8:43:39	Tug Boat	Travelling	90	36	40	354	44	50	22.3308	113.9717	3728.31	8.48
29-Sep-13	8:43:56	Speed Boat	Stationary	92	1	30	289	17	20	22.3030	113.9575	1096.74	303.02
29-Sep-13	8:44:23	Fishing Boat	Non-operate and travelling	91	19	30	32	50	0	22.3080	113.9783	1682.62	46.56
29-Sep-13	8:45:13	HSF High Speed Ferry	Travelling	90	37	20	351	36	20	22.3304	113.9697	3662.13	5.34
29-Sep-13	8:46:22	HSF High Speed Ferry	Travelling	90	45	0	345	34	40	22.3247	113.9660	3014.63	359.31
29-Sep-13	8:48:05	HSF High Speed Ferry	Travelling	90	57	30	326	48	0	22.3175	113.9588	2345.16	340.53
29-Sep-13	8:49:44	Transportation Boat	Travelling	91	5	40	297	40	30	22.3098	113.9514	2050.48	311.40
29-Sep-13	8:49:50	HSF High Speed Ferry	Travelling	91	2	20	298	13	0	22.3106	113.9508	2162.34	311.95
29-Sep-13	8:50:52	Transportation Boat	Travelling	90	56	30	306	31	50	22.3142	113.9515	2392.36	320.26
29-Sep-13	8:51:00	Transportation Boat	Travelling	90	53	50	287	30	20	22.3094	113.9455	2514.11	301.24
29-Sep-13	8:51:05	Transportation Boat	Travelling	91	6	50	286	6	40	22.3066	113.9494	2016.00	299.84
29-Sep-13	8:51:13	HSF High Speed Ferry	Travelling	90	55	10	277	32	40	22.3056	113.9442	2452.20	291.27
29-Sep-13	8:52:25	Container Boat	Travelling	90	48	30	346	7	10	22.3228	113.9663	2801.87	359.85
29-Sep-13	8:52:36	Transportation Boat	Travelling	90	56	50	297	42	0	22.3118	113.9490	2380.92	311.43
29-Sep-13	8:52:42	Transportation Boat	Travelling	91	6	30	297	15	0	22.3096	113.9515	2028.59	310.98
29-Sep-13	8:53:55	Transportation Boat	Travelling	90	59	30	306	18	40	22.3133	113.9522	2274.01	320.04
29-Sep-13	8:54:00	Transportation Boat	Travelling	91	0	40	305	3	20	22.3127	113.9521	2229.51	318.79
29-Sep-13	8:54:10	Container Boat	Travelling	90	54	50	335	55	30	22.3195	113.9621	2472.65	349.65
29-Sep-13	8:54:24	Tour Boat	Travelling	90	46	50	11	10	0	22.3214	113.9783	2909.09	24.90
29-Sep-13	8:56:07	HSF High Speed Ferry	Travelling	90	41	30	348	22	50	22.3273	113.9676	3302.76	2.11
29-Sep-13	8:56:15	Transportation Boat	Travelling	90	46	50	303	16	20	22.3168	113.9471	2912.92	317.00
29-Sep-13	8:56:18	Transportation Boat	Travelling	90	46	20	304	38	0	22.3174	113.9474	2945.54	318.36
29-Sep-13	8:56:28	Container Boat	Travelling	91	1	10	318	33	20	22.3153	113.9564	2214.77	332.29
29-Sep-13	8:56:35	Tour Boat	Travelling	90	59	10	359	47	10	22.3177	113.9716	2291.41	13.52
29-Sep-13	8:57:58	Transportation Boat	Travelling	90	57	50	286	14	20	22.3082	113.9466	2347.71	299.97
29-Sep-13	8:58:11	HSF High Speed Ferry	Travelling	90	57	50	327	0	10	22.3176	113.9589	2348.07	340.73
29-Sep-13	8:58:20	Container Boat	Travelling	90	57	40	307	15	0	22.3141	113.9520	2355.26	320.98
29-Sep-13	8:59:34	Transportation Boat	Travelling	91	0	0	299	38	20	22.3116	113.9504	2263.68	313.37

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
29-Sep-13	9:00:03	HSF High Speed Ferry	Travelling	91	2	50	295	5	30	22.3098	113.9500	2160.34	308.82
29-Sep-13	9:00:45	Tour Boat	Travelling	91	17	50	317	20	20	22.3113	113.9582	1739.04	331.07
29-Sep-13	9:00:53	Transportation Boat	Travelling	90	55	10	305	55	20	22.3146	113.9509	2469.03	319.65
29-Sep-13	9:01:09	HSF High Speed Ferry	Travelling	90	56	0	278	3	40	22.3057	113.9444	2431.85	291.79
29-Sep-13	9:04:03	Tour Boat	Travelling	91	3	40	282	30	50	22.3061	113.9478	2137.53	296.24
29-Sep-13	9:06:54	Transportation Boat	Travelling	91	4	50	287	1	0	22.3073	113.9488	2102.56	300.75
29-Sep-13	9:08:34	Transportation Boat	Travelling	90	51	40	306	16	20	22.3159	113.9498	2655.24	320.00
29-Sep-13	9:10:01	Research Vessel	Travelling	91	5	0	293	56	0	22.3092	113.9502	2101.65	307.66
29-Sep-13	9:10:07	Transportation Boat	Stationary	91	1	40	296	22	20	22.3105	113.9499	2217.62	310.10
29-Sep-13	9:11:36	Other	Stationary	94	27	40	0	0	0	22.3020	113.9676	505.76	13.73
29-Sep-13	9:11:53	Transportation Boat	Travelling	90	56	0	277	37	50	22.3056	113.9442	2450.25	291.36
29-Sep-13	9:12:04	Research Vessel	Travelling	91	8	30	315	26	50	22.3130	113.9565	1995.33	329.18
29-Sep-13	9:15:03	Research Vessel	Travelling	90	53	30	339	45	0	22.3206	113.9636	2573.41	353.48
29-Sep-13	9:18:24	Research Vessel	Travelling	90	37	40	351	29	20	22.3309	113.9697	3715.11	5.22
29-Sep-13	9:20:37	Transportation Boat	Travelling	90	45	40	350	6	0	22.3249	113.9684	3041.91	3.83
29-Sep-13	9:20:57	Water ski	Travelling	92	3	30	346	47	10	22.3076	113.9665	1107.11	0.52
29-Sep-13	9:21:08	Water ski	Travelling	93	54	30	2	30	10	22.3026	113.9680	581.46	16.23
29-Sep-13	9:21:40	Water ski	Travelling	91	35	30	8	37	30	22.3096	113.9717	1435.02	22.35
29-Sep-13	9:21:43	Water ski	Travelling	91	40	40	7	18	30	22.3090	113.9712	1360.82	21.04
29-Sep-13	9:21:53	Water ski	Stationary	92	3	30	337	11	40	22.3075	113.9647	1107.83	350.92
29-Sep-13	9:22:09	Water ski	Travelling	93	44	0	338	45	50	22.3031	113.9656	609.26	352.49
29-Sep-13	9:22:16	Water ski	Travelling	91	58	50	347	18	0	22.3080	113.9666	1151.90	1.03
29-Sep-13	9:22:21	Water ski	Travelling	92	9	10	341	52	10	22.3071	113.9656	1059.30	355.60
29-Sep-13	9:22:32	Water ski	Travelling	92	7	50	326	50	20	22.3067	113.9629	1070.54	340.57
29-Sep-13	9:22:44	Water ski	Travelling	92	35	10	311	36	30	22.3041	113.9615	881.24	325.34
29-Sep-13	9:22:49	Water ski	Travelling	92	13	0	320	50	10	22.3060	113.9621	1028.94	334.57
29-Sep-13	9:22:54	Water ski	Travelling	92	13	40	314	7	50	22.3054	113.9611	1023.84	327.86
29-Sep-13	9:23:07	Water ski	Travelling	91	47	40	300	10	20	22.3056	113.9575	1272.93	313.90
29-Sep-13	9:23:12	Water ski	Travelling	91	43	40	289	58	30	22.3042	113.9557	1322.49	303.70
29-Sep-13	9:23:18	Water ski	Travelling	91	50	10	296	5	20	22.3048	113.9571	1244.00	309.82
29-Sep-13	9:23:22	Water ski	Travelling	91	50	0	292	43	0	22.3043	113.9567	1245.96	306.45
29-Sep-13	9:23:39	Transportation Boat	Travelling	91	0	0	324	47	30	22.3169	113.9582	2302.09	338.52
29-Sep-13	9:26:06	Transportation Boat	Travelling	91	2	20	295	41	50	22.3103	113.9497	2217.94	309.43
29-Sep-13	9:26:14	HSF High Speed Ferry	Travelling	91	4	40	290	6	30	22.3083	113.9491	2136.61	303.84
29-Sep-13	9:28:17	HSF High Speed Ferry	Travelling	91	6	30	304	36	20	22.3116	113.9530	2079.61	318.34
29-Sep-13	9:31:26	Transportation Boat	Travelling	91	2	30	298	36	40	22.3111	113.9504	2220.06	312.34
29-Sep-13	9:33:25	Transportation Boat	Travelling	90	47	30	304	55	20	22.3175	113.9475	2946.50	318.65
29-Sep-13	9:34:12	Speed Boat	Travelling	91	1	50	298	1	10	22.3111	113.9501	2248.76	311.75
29-Sep-13	9:34:33	Transportation Boat	Travelling	91	1	10	10	38	50	22.3163	113.9755	2274.32	24.38
29-Sep-13	9:34:50	Speed Boat	Travelling	91	0	30	285	34	0	22.3077	113.9469	2300.36	299.30
29-Sep-13	9:35:53	Transportation Boat	Stationary	91	8	40	4	39	30	22.3149	113.9726	2023.44	18.39
29-Sep-13	9:44:40	Transportation Boat	Travelling	91	2	0	292	31	50	22.3096	113.9487	2258.73	306.26
29-Sep-13	9:44:46	Transportation Boat	Travelling	90	58	40	283	9	10	22.3073	113.9457	2390.07	296.88
29-Sep-13	9:44:51	Transportation Boat	Travelling	90	52	0	339	28	10	22.3218	113.9633	2705.02	353.20
29-Sep-13	9:45:38	Transportation Boat	Travelling	91	2	40	306	8	0	22.3130	113.9524	2235.70	319.86
29-Sep-13	9:45:41	Transportation Boat	Travelling	91	2	40	295	17	20	22.3103	113.9495	2235.78	309.02
29-Sep-13	9:45:45	Transportation Boat	Travelling	90	58	40	324	58	40	22.3177	113.9580	2391.67	338.71
29-Sep-13	9:46:25	HSF High Speed Ferry	Travelling	91	4	20	303	41	40	22.3121	113.9521	2177.81	317.42
29-Sep-13	9:46:34	Transportation Boat	Travelling	90	53	0	306	28	20	22.3160	113.9499	2655.66	320.20
29-Sep-13	9:46:38	Transportation Boat	Travelling	91	0	10	305	52	50	22.3136	113.9517	2332.15	319.61
29-Sep-13	9:46:42	Transportation Boat	Travelling	90	57	0	308	34	30	22.3152	113.9517	2464.86	322.30
29-Sep-13	9:46:48	Tour Boat	Travelling	91	3	0	292	25	10	22.3094	113.9489	2225.38	306.15
29-Sep-13	9:47:09	HSF High Speed Ferry	Travelling	91	4	10	290	59	40	22.3088	113.9489	2184.69	304.72
29-Sep-13	9:47:17	Transportation Boat	Travelling	90	53	20	305	28	30	22.3156	113.9496	2639.87	319.20
29-Sep-13	9:47:19	Transportation Boat	Travelling	90	48	20	304	30	30	22.3172	113.9475	2921.85	318.24
29-Sep-13	9:49:03	Tour Boat	Travelling	91	3	10	315	39	50	22.3148	113.9554	2222.83	329.39
29-Sep-13	9:51:54	Tour Boat	Travelling	90	52	50	339	13	50	22.3215	113.9632	2674.00	352.96
29-Sep-13	9:52:56	Transportation Boat	Travelling	91	4	30	292	25	30	22.3092	113.9493	2181.75	306.15
29-Sep-13	9:54:01	Transportation Boat	Travelling	91	1	30	307	5	0	22.3136	113.9523	2292.02	320.81
29-Sep-13	9:55:19	Transportation Boat	Travelling	91	1	50	304	8	10	22.3128	113.9515	2281.42	317.87
29-Sep-13	9:55:28	Tour Boat	Travelling	90	37	20	352	31	20	22.3320	113.9705	3848.66	6.25
29-Sep-13	9:57:12	Water ski	Travelling	91	9	0	303	34	20	22.3111	113.9529	2042.93	317.30
29-Sep-13	9:57:20	Water ski	Travelling	91	3	30	296	36	50	22.3106	113.9499	2223.39	310.34
29-Sep-13	9:57:26	Transportation Boat	Travelling	90	59	40	311	38	0	22.3152	113.9533	2369.46	325.36
29-Sep-13	9:58:46	Water ski	Travelling	91	2	30	325	16	30	22.3166	113.9585	2261.87	339.00
29-Sep-13	9:58:52	Water ski	Travelling	91	1	30	323	59	10	22.3168	113.9579	2299.56	337.72
29-Sep-13	9:58:56	Water ski	Travelling	91	8	30	304	50	20	22.3115	113.9531	2060.51	318.57
29-Sep-13	9:58:59	Water ski	Travelling	91	7	20	302	3	40	22.3111	113.9522	2096.89	315.79
29-Sep-13	9:59:04	Transportation Boat	Travelling	90	58	30	328	5	40	22.3183	113.9591	2420.47	341.82
29-Sep-13	9:59:50	Water ski	Travelling	90	45	40	348	4	20	22.3257	113.9674	3125.46	1.80
29-Sep-13	9:59:54	Water ski	Travelling	90	49	30	346	4	40	22.3235	113.9663	2875.34	359.81
29-Sep-13	9:59:59	Water ski	Travelling	91	3	40	327	23	30	22.3165	113.9594	2221.44	341.12
29-Sep-13	10:00:03	Water ski	Travelling	91	3	0	327	6	30	22.3167	113.9592	2245.51	340.84
29-Sep-13	10:00:11	Transportation Boat	Travelling	90	55	40	338	5	10	22.3203	113.9629	2548.66	351.82
29-Sep-13	10:01:26	Water ski	Travelling	90	47	20	347	14	20	22.3247	113.9669	3014.69	0.97
29-Sep-13	10:01:34	Water ski	Travelling	90	47	20	345	29	40	22.3247	113.9660	3014.96	359.22
29-Sep-13	10:01:41	Transportation Boat	Travelling	90	48	40	349	31	10	22.3239	113.9680	2929.77	3.25
29-Sep-13	10:08:15	Transportation Boat	Travelling	91	2	30	285	15	50	22.3075	113.9470	2276.38	298.99
29-Sep-13	10:09:17	Transportation Boat	Travelling	90	58	50	299	44	10	22.3126	113.9493	2423.09	313.47
29-Sep-13	10:09:23	Transportation Boat	Travelling	91	4	10	304	27	10	22.3125	113.9520	2217.79	318.18
29-Sep-13	10:10:26	Transportation Boat	Travelling	90	54	0	306	47	50	22.3160	113.9500	2647.70	320.53
29-Sep-13	10:10:32	Transportation Boat	Travelling	90	57	50	286	31	0	22.3088	113.9457	2468.05	300.25
29-Sep-13	10:10:40	HSF High Speed Ferry	Travelling	91	4	20	294	32	20	22.3100	113.9495	2213.84	308.27
29-Sep-13	10:11:32	Transportation Boat	Travelling	90	56	20	276	2	30	22.3053	113.9432	2537.10	289.77
29-Sep-13	10:11:38	HSF High Speed Ferry	Travelling	91	5	10	311	51	30	22.3139	113.9544	2186.41	325.59
29-Sep-13	10:13:49	HSF High Speed Ferry	Travelling	90	48	0	341	26	0	22.3245	113.9639	2996.38	355.16
29-Sep-13	10:18:32	Container Boat	Travelling	91	1	10	311	45	40	22.3150	113.9535	2343.13	325.49
29-Sep-13	10:22:46	Container Boat	Travelling	90	49	40	340	57	20	22.3237	113.9638	2909.94	354.69
29-Sep-13	10:25:17	Container Boat	Travelling	90	40	50	352	41	10	22.3296	113.9703	3573.73	6.42
29-Sep-13	10:26:14	Transportation Boat	Travelling	91	3	10	301	20	10	22.3121	113.9507	2279.09	315.07
29-Sep-13	10:26:21	Transportation Boat	Travelling	90	56	40	307	48	30	22.3156	113.9510	2546.92	321.54
29-Sep-13	10:27:08	Transportation Boat	Travelling	90	59	20	286	11	20	22.3085	113.9459	2431.04	299.92
29-Sep-13	10:27:12	Transportation Boat	Travelling	91	1	0	316	18	20	22.3160	113.9549	2363.27	330.04
29-Sep-13	10:29:00	Transportation Boat	Travelling	90	53	50	336	49	0	22.3215	113.9621	2689.31	350.55
29-Sep-13	10:30:53	Transportation Boat	Travelling	90	40	20	350	25	10	22.3302	113.9690	3633.95	4.15
29-Sep-13	10:38:09	Fishing Boat	Non-operate and travelling	92	47	20	353	24	10	22.3053	113.9674	859.24	7.13
29-Sep-13	10:38:20	Transportation Boat	Travelling	91	0	50	300	56	50	22.3127	113.9499	2387.42	314.68
29-Sep-13	10:39:26	Fishing Boat	Non-operate and travelling	92	47	20	306	45	0	22.3036	113.9611	859.96	320.48
29-Sep-13	10:39:33	Transportation Boat	Travelling	91	0	10	292	14	10	22.3104	113.9474	2416.40	305.97
29-Sep-13	10:40:59	Transportation Boat	Travelling	91	0	30	281	51	50	22.3070	113.9453	2405.06	295.59
29-Sep-13	10:45:26	Transportation Boat	Travelling	91	6	10	297	56	40	22.3108	113.9504	2201.52	311.67
29-Sep-13	10:45:48	HSF High Speed Ferry	Travelling	90	57	0	329	16	30	22.3197	113.9591	2564.44	343.00
29-Sep-13	10:47:15	HSF High Speed Ferry	Travelling	91	3	50	303	20	10	22.3127	113.9513	2286.29	317.07
29-Sep-13	10:47:26	Transportation Boat	Travelling	90	59	30	280	48	10	22.3068	113.9447	2456.79	294.53
29-Sep-13	10:47:55	Fishing Boat	Non-operate and travelling	93	2	30	0	59	20	22.3045	113.9684	792.57	14.72
29-Sep-13	10:48:04	HSF High Speed Ferry	Travelling	90	59	30	288	26	50	22.3094	113.9462	2457.81	302.18
29-Sep-13	10:51:37	Transportation Boat	Travelling	91	0	40	294	19	50	22.3110	113.9479	2415.09	308.06
29-Sep-13	10:51:51	Fishing Boat	Non-operate and travelling	92	40	30	313	27	20	22.3045	113.9616	904.00	327.19
29-Sep-13	10:52:52	Transportation Boat	Travelling	90	53	0	305	8	0	22.3164	113.9486	2776.27	318.86
29-Sep-13	10:57:01	Fishing Boat	Non-operate and travelling	91	40	50	291	0	0	22.3050	113.9548	1447.81	304.73
29-Sep-13	10:57:09	Transportation Boat	Travelling	91	0	50	285	58	40	22.3084	113.9460	2417.04	299.71
29-Sep-13	10:57:48	Transportation Boat	Travelling	91	2	10	303	51	50	22.3133	113.9509	2365.10	317.59
29-Sep-13	10:57:59	Transportation Boat	Travelling	91	4	10	294	21	30	22.3103	113.9489	2290.16	308.09
29-Sep-13	10:59:33	Transportation Boat	Travelling	91	3	50	311	23	10	22.3146	113.9536	2304.71	325.12
29-Sep-13	10:59:37	Transportation Boat	Travelling	91	3	50	288	28	40	22.3087	113.9474	2304.81	302.21
29-Sep-13	10:59:42	Transportation Boat	Travelling	90	59	50	338	22	40	22.3196	113.9631	2462.44	352.11
29-Sep-13	10:59:57	Fishing Boat	Non-operate and stationary	91	35	40	291	21	20	22.3055	113.9542	1529.59	305.09

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
29-Sep-13	11:01:15	Transportation Boat	Travelling	90	59	20	328	11	10	22.3189	113.9589	2486.18	341.92
29-Sep-13	11:01:20	Transportation Boat	Travelling	91	8	20	317	22	40	22.3146	113.9563	2152.67	331.11
29-Sep-13	11:01:49	Fishing Boat	Operate and stationary	94	19	40	331	55	40	22.3025	113.9650	561.18	345.66
29-Sep-13	11:02:32	Transportation Boat	Travelling	90	53	0	337	51	10	22.3225	113.9624	2793.87	351.58
29-Sep-13	11:02:49	Transportation Boat	Travelling	91	7	0	295	23	30	22.3101	113.9498	2198.40	309.12
29-Sep-13	11:03:44	Transportation Boat	Travelling	91	3	40	304	42	40	22.3132	113.9514	2317.15	318.44
29-Sep-13	11:03:52	Transportation Boat	Travelling	91	0	20	281	39	50	22.3071	113.9449	2448.19	295.39
29-Sep-13	11:05:56	Ferry	Travelling	90	55	0	337	20	30	22.3216	113.9623	2695.40	351.07
29-Sep-13	11:07:25	Ferry	Travelling	91	1	20	322	53	50	22.3176	113.9571	2412.92	336.63
29-Sep-13	11:09:54	Ferry	Travelling	91	5	30	293	40	50	22.3100	113.9489	2260.02	307.41
29-Sep-13	11:15:23	Transportation Boat	Travelling	91	5	30	293	29	40	22.3100	113.9488	2268.02	307.22
29-Sep-13	11:15:28	Transportation Boat	Travelling	91	2	30	303	46	10	22.3134	113.9508	2379.27	317.50
29-Sep-13	11:16:13	Transportation Boat	Travelling	90	59	20	306	16	40	22.3149	113.9507	2510.38	320.01
29-Sep-13	11:16:18	Transportation Boat	Travelling	91	1	10	292	8	0	22.3104	113.9472	2433.57	305.86
29-Sep-13	11:17:16	Transportation Boat	Travelling	90	56	20	279	41	50	22.3071	113.9428	2649.27	293.43
29-Sep-13	11:18:16	Transportation Boat	Travelling	91	3	0	281	42	50	22.3068	113.9456	2364.24	295.44
29-Sep-13	11:19:06	Transportation Boat	Travelling	91	6	40	296	34	0	22.3106	113.9498	2232.91	310.30
29-Sep-13	11:20:10	Transportation Boat	Travelling	90	55	10	307	0	10	22.3165	113.9497	2711.88	320.73
29-Sep-13	11:25:55	Transportation Boat	Travelling	90	58	0	286	38	50	22.3094	113.9447	2585.56	300.38
29-Sep-13	11:26:01	Transportation Boat	Travelling	91	3	40	283	58	40	22.3075	113.9462	2350.62	297.71
29-Sep-13	11:26:58	Transportation Boat	Travelling	91	0	20	294	42	30	22.3115	113.9475	2484.87	308.44
29-Sep-13	11:27:02	Transportation Boat	Travelling	91	6	40	298	20	30	22.3112	113.9502	2244.27	312.07
29-Sep-13	11:27:51	Transportation Boat	Travelling	90	49	30	341	57	10	22.3250	113.9642	3047.47	355.68
29-Sep-13	11:28:46	Transportation Boat	Travelling	90	57	40	307	26	0	22.3159	113.9505	2605.63	321.16
29-Sep-13	11:28:54	Transportation Boat	Travelling	91	6	10	326	16	30	22.3168	113.9589	2264.24	340.00
29-Sep-13	11:28:58	Transportation Boat	Travelling	90	57	0	334	29	40	22.3209	113.9612	2637.22	348.22
29-Sep-13	11:29:04	Transportation Boat	Travelling	90	58	50	306	28	30	22.3153	113.9505	2553.19	320.20
29-Sep-13	11:30:03	Transportation Boat	Travelling	90	57	20	339	16	50	22.3211	113.9633	2623.32	353.01
29-Sep-13	11:30:12	Transportation Boat	Travelling	91	2	30	322	9	30	22.3173	113.9569	2401.83	335.89
29-Sep-13	11:30:16	Transportation Boat	Travelling	91	1	10	288	38	50	22.3095	113.9462	2455.45	302.38
29-Sep-13	11:32:41	Transportation Boat	Travelling	91	4	20	293	30	20	22.3103	113.9483	2335.68	307.24
29-Sep-13	11:40:19	Tug Boat	Travelling	91	6	30	309	47	50	22.3140	113.9533	2269.08	323.53
29-Sep-13	11:40:25	Construction Platform	Travelling	91	4	40	309	15	10	22.3144	113.9527	2334.80	322.98
29-Sep-13	11:40:29	Tug Boat	Travelling	90	56	0	306	3	50	22.3162	113.9494	2705.36	319.79
29-Sep-13	11:40:38	Construction Platform	Travelling	90	55	10	305	47	50	22.3164	113.9491	2747.61	319.53
29-Sep-13	11:43:03	Tug Boat	Travelling	91	12	20	318	27	0	22.3142	113.9569	2086.62	332.18
29-Sep-13	11:43:07	Construction Platform	Travelling	91	12	20	317	7	10	22.3140	113.9565	2086.70	330.85
29-Sep-13	11:43:13	Tug Boat	Travelling	91	5	40	311	0	10	22.3145	113.9535	2302.65	324.73
29-Sep-13	11:43:23	Construction Platform	Travelling	91	3	50	310	9	30	22.3149	113.9528	2370.38	323.89
29-Sep-13	11:45:28	Tug Boat	Travelling	91	4	0	333	32	40	22.3184	113.9613	2367.19	347.27
29-Sep-13	11:45:32	Construction Platform	Stationary	91	12	40	319	41	0	22.3144	113.9573	2080.15	333.41
29-Sep-13	11:45:59	Tug Boat	Travelling	91	8	50	320	23	0	22.3154	113.9571	2198.62	334.11
29-Sep-13	11:46:05	Construction Platform	Travelling	91	6	30	318	34	50	22.3158	113.9561	2277.36	332.31
29-Sep-13	11:47:33	Transportation Boat	Travelling	91	0	40	289	38	10	22.3100	113.9461	2503.46	303.37
29-Sep-13	11:47:41	Tug Boat	Travelling	90	50	30	348	12	40	22.3248	113.9674	3023.14	1.94
29-Sep-13	11:47:51	Transportation Boat	Travelling	90	59	20	285	23	20	22.3088	113.9446	2561.54	299.12
29-Sep-13	11:50:25	Tug Boat	Stationary	91	3	50	331	9	0	22.3183	113.9604	2380.92	344.88
29-Sep-13	11:50:29	Construction Platform	Stationary	91	5	40	331	4	10	22.3177	113.9605	2313.22	344.80
29-Sep-13	11:51:53	Other	Travelling	94	56	20	0	0	0	22.3021	113.9676	507.21	13.73
29-Sep-13	11:52:57	Transportation Boat	Travelling	91	0	40	305	56	10	22.3149	113.9506	2511.99	319.67
29-Sep-13	11:53:31	Transportation Boat	Travelling	91	2	10	296	24	50	22.3118	113.9482	2450.91	310.14
29-Sep-13	11:54:13	Transportation Boat	Travelling	90	58	30	284	55	40	22.3089	113.9441	2609.35	298.66
29-Sep-13	12:06:31	Container Boat	Travelling	91	3	10	324	42	10	22.3089	113.9616	1344.91	338.43
29-Sep-13	12:08:07	Container Boat	Stationary	91	4	0	323	56	20	22.3087	113.9615	1329.56	337.67
29-Sep-13	12:08:54	Transportation Boat	Travelling	91	7	20	284	46	30	22.3030	113.9556	1264.14	298.50
29-Sep-13	12:09:05	HSF High Speed Ferry	Travelling	91	0	30	284	25	40	22.3036	113.9543	1408.96	298.16
29-Sep-13	12:10:20	Other	Travelling	94	51	30	58	0	30	22.2984	113.9691	290.40	71.74
29-Sep-13	12:10:32	Transportation Boat	Travelling	94	51	30	0	0	0	22.3002	113.9671	290.47	13.73
29-Sep-13	12:10:40	HSF High Speed Ferry	Travelling	91	16	40	320	0	40	22.3066	113.9616	1111.08	333.74
29-Sep-13	12:11:25	Transportation Boat	Stationary	91	2	10	317	28	20	22.3085	113.9600	1374.28	331.20
29-Sep-13	12:11:36	HSF High Speed Ferry	Travelling	91	8	10	327	51	30	22.3083	113.9626	1252.27	341.59
29-Sep-13	12:12:52	HSF High Speed Ferry	Travelling	90	56	0	333	21	0	22.3110	113.9631	1530.26	347.08
29-Sep-13	12:20:10	Transportation Boat	Travelling	90	46	20	346	44	10	22.3145	113.9665	1871.09	0.47
29-Sep-13	12:20:23	Tug Boat	Travelling	91	8	30	317	25	30	22.3075	113.9605	1258.26	331.15
29-Sep-13	12:20:32	Container Boat	Travelling	91	18	10	353	3	0	22.3075	113.9677	1101.51	6.78
29-Sep-13	12:20:43	Transportation Boat	Travelling	91	16	40	352	10	0	22.3077	113.9675	1123.47	5.90
29-Sep-13	12:22:10	Transportation Boat	Travelling	91	8	20	306	24	10	22.3063	113.9585	1263.81	320.13
29-Sep-13	12:23:54	Tug Boat	Stationary	91	0	30	280	30	20	22.3029	113.9537	1432.22	294.24
29-Sep-13	12:23:59	Container Boat	Stationary	91	19	50	355	58	10	22.3072	113.9682	1082.42	9.70
29-Sep-13	12:27:23	Transportation Boat	Travelling	91	23	40	357	8	40	22.3068	113.9683	1036.30	10.87
29-Sep-13	12:28:32	Transportation Boat	Travelling	91	4	40	295	32	20	22.3053	113.9563	1345.63	309.27
29-Sep-13	12:29:20	Transportation Boat	Travelling	91	2	30	285	33	10	22.3038	113.9546	1394.06	299.28
29-Sep-13	12:32:18	Tour Boat	Travelling	90	58	50	327	59	0	22.3103	113.9619	1486.91	341.71
29-Sep-13	12:33:20	Tour Boat	Travelling	90	59	0	324	9	10	22.3100	113.9610	1484.32	337.88
29-Sep-13	12:35:05	Tour Boat	Travelling	91	2	20	313	55	40	22.3083	113.9591	1406.59	327.66
29-Sep-13	12:39:59	Government Boat	Travelling	91	2	10	295	26	50	22.3057	113.9557	1417.89	309.18
29-Sep-13	12:40:48	Government Boat	Travelling	90	53	50	334	32	0	22.3121	113.9632	1642.28	348.26
29-Sep-13	12:42:18	Government Boat	Travelling	91	0	0	321	12	50	22.3096	113.9603	1473.44	334.94
29-Sep-13	12:46:31	Other	Travelling	91	3	10	293	32	10	22.3053	113.9556	1400.93	307.27
29-Sep-13	12:46:50	Construction Boat	Travelling	94	31	40	0	0	0	22.3004	113.9671	323.25	13.73
29-Sep-13	12:47:02	HSF High Speed Ferry	Travelling	91	1	0	313	23	50	22.3086	113.9587	1451.28	327.13
29-Sep-13	12:47:09	Transportation Boat	Travelling	90	45	10	346	17	10	22.3154	113.9664	1970.73	0.02
29-Sep-13	12:48:16	HSF High Speed Ferry	Travelling	90	55	50	307	7	10	22.3087	113.9567	1587.46	320.85
29-Sep-13	12:48:21	Transportation Boat	Travelling	90	54	10	334	14	50	22.3120	113.9631	1637.10	347.98
29-Sep-13	12:48:30	Construction Boat	Travelling	91	1	30	298	37	20	22.3063	113.9561	1439.17	312.35
29-Sep-13	12:49:35	HSF High Speed Ferry	Travelling	90	58	40	329	6	30	22.3106	113.9621	1509.52	342.84
29-Sep-13	12:49:44	Transportation Boat	Travelling	91	3	0	314	45	10	22.3084	113.9593	1404.35	328.48
29-Sep-13	12:49:55	Construction Boat	Travelling	90	57	30	283	21	30	22.3039	113.9531	1540.56	297.09
29-Sep-13	12:51:18	HSF High Speed Ferry	Travelling	90	51	10	338	44	50	22.3131	113.9642	1734.46	352.48
29-Sep-13	12:51:25	Construction Boat	Travelling	91	0	20	285	53	50	22.3041	113.9540	1467.05	299.63
29-Sep-13	12:54:17	Tour Boat	Travelling	90	44	30	345	56	30	22.3156	113.9663	1999.91	359.67
29-Sep-13	12:55:58	Tour Boat	Travelling	91	3	40	281	57	50	22.3030	113.9542	1388.81	295.69
29-Sep-13	12:56:06	Transportation Boat	Travelling	91	15	20	296	45	30	22.3045	113.9577	1171.68	310.49
29-Sep-13	12:56:57	HSF High Speed Ferry	Travelling	91	13	30	292	7	30	22.3040	113.9569	1201.09	305.85
29-Sep-13	12:57:05	Tour Boat	Travelling	90	58	50	323	30	0	22.3101	113.9607	1504.34	337.23
29-Sep-13	12:57:12	Transportation Boat	Travelling	91	21	50	309	3	20	22.3053	113.9601	1077.79	322.79
29-Sep-13	12:58:07	HSF High Speed Ferry	Travelling	91	18	40	304	10	50	22.3051	113.9591	1121.45	317.91
29-Sep-13	12:58:31	Transportation Boat	Stationary	91	5	0	303	9	0	22.3066	113.9574	1359.73	316.88
29-Sep-13	12:59:37	Tour Boat	Travelling	91	15	30	315	8	30	22.3066	113.9605	1168.76	328.87
29-Sep-13	13:00:26	Government Boat	Travelling	91	18	40	340	17	10	22.3077	113.9653	1121.26	354.02
29-Sep-13	13:00:36	Transportation Boat	Travelling	91	52	50	296	1	30	22.3021	113.9606	780.03	309.75
29-Sep-13	13:00:55	Government Boat	Travelling	91	19	50	313	1	40	22.3059	113.9605	1104.70	326.76
29-Sep-13	13:01:56	Government Boat	Travelling	92	14	10	334	27	40	22.3034	113.9651	655.48	348.19
29-Sep-13	13:02:30	Tour Boat	Travelling	91	8	40	25	51	20	22.3065	113.9744	1285.96	39.59
29-Sep-13	13:03:10	Transportation Boat	Travelling	90	59	10	2	45	0	22.3105	113.9705	1495.07	16.48
29-Sep-13	13:03:24	Speed Boat	Travelling	91	11	30	324	22	10	22.3079	113.9619	1234.41	338.10
29-Sep-13	13:04:49	Transportation Boat	Travelling	91	3	0	295	0	50	22.3055	113.9558	1402.76	308.74
29-Sep-13	13:06:01	Transportation Boat	Travelling	91	12	20	303	55	40	22.3057	113.9584	1219.82	317.66
29-Sep-13	13:06:07	Transportation Boat	Travelling	91	6	30	292	12	30	22.3046	113.9559	1327.96	305.94
29-Sep-13	13:07:07	Transportation Boat	Travelling	91	6	0	288	54	10	22.3041	113.9554	1338.03	302.63
29-Sep-13	13:10:01	Transportation Boat	Travelling	91	0	20	307	9	20	22.3078	113.9574	1465.01	320.89
29-Sep-13	13:11:00	Transportation Boat	Travelling	91	0	20	287	28	50	22.3045	113.9542	1464.90	301.21
29-Sep-13	13:11:07	Transportation Boat	Travelling	91	5	20	292	17	20	22.3048	113.9558	1351.44	306.02
29-Sep-13	13:11:12	Transportation Boat	Travelling	91	3	30	302	56	0	22.3067	113.9571	1390.92	316.66
29-Sep-13	13:11:58	Transportation Boat	Travelling	91	1	0	295	23	30	22.3058	113.9555	1448.57	309.12
29-Sep-13	13:12:04	Transportation Boat	Travelling	91	3	30	303	24	30	22.3068	113.9572	1390.82	317.14
29-Sep-13	13:12:11	Transportation Boat	Travelling	90	59	40	293	58	0	22.3058	113.9550	1481.36	307.70

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
29-Sep-13	13:12:15	Transportation Boat	Travelling	91	1	20	301	56	0	22.3069	113.9566	1440.57	315.66
29-Sep-13	13:12:39	Transportation Boat	Travelling	90	58	50	305	45	0	22.3079	113.9569	1502.59	319.48
29-Sep-13	13:12:45	Transportation Boat	Travelling	90	57	0	306	52	20	22.3084	113.9568	1551.62	320.60
29-Sep-13	13:12:53	Transportation Boat	Travelling	90	57	10	288	8	50	22.3050	113.9536	1547.02	301.88
29-Sep-13	13:13:09	Transportation Boat	Travelling	91	1	30	304	35	30	22.3073	113.9571	1436.52	318.32
29-Sep-13	13:14:23	Transportation Boat	Travelling	90	57	40	305	24	10	22.3081	113.9566	1533.23	319.13
29-Sep-13	13:14:29	Transportation Boat	Travelling	90	51	10	276	30	50	22.3030	113.9506	1731.44	290.24
29-Sep-13	13:17:34	Transportation Boat	Travelling	91	1	0	294	4	0	22.3056	113.9553	1447.97	307.80
29-Sep-13	13:19:00	Transportation Boat	Travelling	91	2	0	308	40	10	22.3078	113.9579	1424.16	322.40
29-Sep-13	13:21:07	Transportation Boat	Travelling	90	58	20	332	3	40	22.3108	113.9628	1514.69	345.79
29-Sep-13	13:30:11	Transportation Boat	Travelling	90	45	20	356	56	40	22.3149	113.9699	1956.95	10.67
29-Sep-13	13:30:14	Transportation Boat	Travelling	90	56	20	293	34	50	22.3062	113.9543	1568.21	307.31
29-Sep-13	13:30:27	Transportation Boat	Travelling	91	0	50	293	53	30	22.3056	113.9552	1450.58	307.62
29-Sep-13	13:31:10	Transportation Boat	Travelling	90	56	30	281	48	20	22.3037	113.9527	1563.40	295.54
29-Sep-13	13:31:14	Transportation Boat	Travelling	90	58	50	298	15	40	22.3067	113.9556	1500.49	311.99
29-Sep-13	13:31:18	Transportation Boat	Travelling	91	3	40	302	41	30	22.3066	113.9571	1385.14	316.42
29-Sep-13	13:32:25	Transportation Boat	Travelling	91	0	20	288	20	30	22.3046	113.9543	1462.55	302.07
29-Sep-13	13:32:29	Transportation Boat	Travelling	91	1	20	304	19	10	22.3072	113.9570	1438.38	318.05
29-Sep-13	13:32:33	Transportation Boat	Travelling	91	1	20	314	21	30	22.3086	113.9590	1438.38	328.09
29-Sep-13	13:33:29	Transportation Boat	Travelling	91	2	10	299	35	0	22.3064	113.9564	1418.75	313.31
29-Sep-13	13:33:45	Transportation Boat	Travelling	90	55	50	305	49	40	22.3085	113.9564	1582.05	319.56
29-Sep-13	13:33:50	Transportation Boat	Travelling	90	59	50	325	21	20	22.3100	113.9613	1474.78	339.09
29-Sep-13	13:35:01	Container Boat	Travelling	90	56	20	306	41	20	22.3085	113.9567	1567.64	320.42
29-Sep-13	13:35:08	Transportation Boat	Travelling	90	58	10	306	29	40	22.3081	113.9570	1517.49	320.22
29-Sep-13	13:35:18	Transportation Boat	Travelling	90	55	20	285	43	50	22.3047	113.9529	1596.39	299.46
29-Sep-13	13:36:13	Transportation Boat	Travelling	90	54	10	336	33	0	22.3121	113.9637	1631.23	350.28
29-Sep-13	13:37:56	Container Boat	Travelling	90	57	40	292	40	30	22.3058	113.9544	1530.52	306.40
29-Sep-13	13:38:02	Transportation Boat	Travelling	91	8	10	321	46	0	22.3082	113.9612	1292.05	335.50
29-Sep-13	13:47:49	Container Boat	Stationary	91	1	0	305	8	10	22.3074	113.9572	1444.68	318.87
29-Sep-13	13:49:30	Other	Stationary	94	31	40	0	0	0	22.3004	113.9671	321.74	13.73
29-Sep-13	13:49:57	Transportation Boat	Travelling	94	31	40	0	0	0	22.3004	113.9671	321.73	13.73
29-Sep-13	13:51:12	Transportation Boat	Travelling	91	8	40	289	44	0	22.3040	113.9560	1281.27	303.46
29-Sep-13	13:53:02	Transportation Boat	Travelling	91	14	50	304	12	20	22.3055	113.9587	1174.56	317.94
29-Sep-13	13:53:12	Transportation Boat	Travelling	91	12	30	327	26	50	22.3079	113.9626	1212.69	341.18
29-Sep-13	13:53:50	Transportation Boat	Stationary	91	0	40	306	39	0	22.3077	113.9574	1452.07	320.38
29-Sep-13	13:53:58	Transportation Boat	Travelling	91	9	20	327	56	40	22.3085	113.9625	1268.56	341.67
29-Sep-13	13:54:45	Transportation Boat	Travelling	91	6	0	297	15	30	22.3055	113.9566	1333.26	310.99
29-Sep-13	13:57:52	Transportation Boat	Travelling	91	2	10	285	59	20	22.3039	113.9544	1416.15	299.72
29-Sep-13	13:58:01	Transportation Boat	Travelling	91	14	10	322	6	20	22.3073	113.9617	1184.76	335.84
29-Sep-13	13:58:55	Transportation Boat	Travelling	90	59	0	305	40	20	22.3078	113.9569	1493.08	319.40
29-Sep-13	13:59:40	Transportation Boat	Stationary	91	3	50	297	17	20	22.3058	113.9563	1378.54	311.02
29-Sep-13	13:59:48	Transportation Boat	Travelling	91	17	0	317	10	10	22.3066	113.9610	1140.64	330.90
29-Sep-13	14:00:22	Transportation Boat	Travelling	91	0	20	286	48	40	22.3043	113.9542	1459.48	300.54
29-Sep-13	14:07:12	Other	Stationary	94	33	30	0	0	0	22.3004	113.9671	319.15	13.73
29-Sep-13	14:07:27	Transportation Boat	Travelling	91	1	30	298	57	20	22.3063	113.9562	1430.67	312.69
29-Sep-13	14:08:19	Transportation Boat	Travelling	91	0	40	291	19	50	22.3051	113.9549	1450.49	305.06
29-Sep-13	14:09:51	Transportation Boat	Travelling	90	57	20	278	43	40	22.3029	113.9526	1535.86	292.46
29-Sep-13	14:12:55	Other	Stationary	90	33	40	278	49	50	22.3068	113.9426	2652.56	292.56
29-Sep-13	14:13:00	Other	Stationary	90	34	10	282	19	40	22.3079	113.9436	2612.05	296.06
29-Sep-13	14:13:02	Other	Stationary	90	32	0	287	35	40	22.3107	113.9432	2797.36	301.32
29-Sep-13	14:13:06	Other	Stationary	90	36	40	293	48	50	22.3109	113.9477	2427.06	307.54
29-Sep-13	14:13:09	Other	Stationary	90	53	10	300	59	30	22.3081	113.9549	1657.81	314.72
29-Sep-13	14:13:13	Other	Stationary	90	53	0	307	44	50	22.3093	113.9563	1663.11	321.48
29-Sep-13	14:13:16	Other	Stationary	90	58	40	312	53	20	22.3089	113.9584	1500.06	326.62
29-Sep-13	14:13:19	Other	Stationary	90	57	50	319	24	30	22.3098	113.9597	1521.99	333.14
29-Sep-13	14:13:22	Other	Stationary	90	52	50	329	54	20	22.3120	113.9618	1668.43	343.64
29-Sep-13	14:13:27	Other	Stationary	90	46	50	338	2	40	22.3144	113.9638	1886.67	351.77
29-Sep-13	14:13:30	Other	Stationary	90	40	0	346	54	50	22.3176	113.9666	2218.18	0.64
29-Sep-13	14:13:35	Other	Stationary	90	34	20	349	50	0	22.3210	113.9680	2598.70	3.56
29-Sep-13	14:13:40	Other	Stationary	90	30	50	352	0	40	22.3237	113.9692	2908.63	5.74
29-Sep-13	14:13:57	Other	Stationary	91	0	0	304	51	50	22.3075	113.9570	1466.20	318.59
29-Sep-13	14:14:02	Other	Stationary	90	52	40	307	33	20	22.3094	113.9562	1673.72	321.29
29-Sep-13	14:14:13	Other	Stationary	90	29	30	348	9	0	22.3250	113.9674	3047.54	1.88
29-Sep-13	14:14:21	Other	Stationary	90	30	0	351	58	10	22.3244	113.9693	2993.80	5.70
29-Sep-13	14:14:39	Other	Stationary	90	55	30	353	34	20	22.3118	113.9684	1586.81	7.30
29-Sep-13	14:14:46	Other	Stationary	90	55	50	355	6	10	22.3116	113.9688	1577.17	8.83
29-Sep-13	14:14:53	Other	Stationary	91	10	20	2	4	30	22.3084	113.9697	1248.38	15.80
29-Sep-13	14:14:59	Other	Stationary	91	10	20	5	17	0	22.3082	113.9704	1248.37	19.01
29-Sep-13	14:15:09	Other	Stationary	91	12	40	314	22	20	22.3068	113.9602	1207.89	328.10
29-Sep-13	14:15:13	Other	Stationary	91	12	40	316	28	50	22.3071	113.9606	1207.89	330.21
29-Sep-13	14:15:24	Other	Stationary	91	7	30	327	7	10	22.3087	113.9622	1301.29	340.85
29-Sep-13	14:15:27	Other	Stationary	91	7	30	328	45	20	22.3088	113.9626	1301.28	342.49
29-Sep-13	14:15:33	Other	Stationary	91	8	0	332	26	10	22.3089	113.9634	1291.60	346.17
29-Sep-13	14:15:37	Other	Stationary	91	8	0	334	21	30	22.3090	113.9638	1291.60	348.09
29-Sep-13	14:15:49	Other	Stationary	90	39	30	358	53	50	22.3173	113.9712	2246.75	12.63
29-Sep-13	14:15:52	Other	Stationary	90	41	20	0	21	10	22.3163	113.9715	2144.14	14.08
29-Sep-13	14:15:58	Other	Stationary	90	37	30	357	32	40	22.3185	113.9709	2370.68	11.27
29-Sep-13	14:16:02	Other	Stationary	90	37	30	358	50	40	22.3184	113.9714	2370.66	12.57
29-Sep-13	14:16:10	Other	Stationary	90	40	10	359	35	0	22.3170	113.9713	2208.24	13.31
29-Sep-13	14:16:14	Other	Stationary	90	40	10	0	21	50	22.3169	113.9716	2208.23	14.09
29-Sep-13	14:16:20	Other	Stationary	90	53	20	16	10	40	22.3105	113.9744	1652.15	29.91
29-Sep-13	14:16:24	Other	Stationary	90	55	10	17	16	0	22.3099	113.9744	1596.34	31.00
29-Sep-13	14:16:33	Other	Stationary	91	3	40	325	53	30	22.3093	113.9617	1380.44	339.62
29-Sep-13	14:16:39	Other	Stationary	91	2	20	328	7	0	22.3097	113.9621	1410.32	341.85
29-Sep-13	14:18:30	Transportation Boat	Travelling	90	56	40	286	59	20	22.3048	113.9534	1553.19	300.72
29-Sep-13	14:18:43	Transportation Boat	Travelling	90	56	40	284	26	20	22.3042	113.9531	1553.16	298.17
29-Sep-13	14:19:02	Transportation Boat	Travelling	90	58	40	293	32	40	22.3058	113.9548	1499.41	307.27
29-Sep-13	14:19:06	Transportation Boat	Travelling	90	57	10	287	7	0	22.3047	113.9535	1539.33	300.85
29-Sep-13	14:19:53	Transportation Boat	Travelling	91	1	30	304	42	20	22.3072	113.9572	1429.33	318.44
29-Sep-13	14:19:59	Transportation Boat	Travelling	90	58	40	293	28	30	22.3058	113.9548	1499.30	307.20
29-Sep-13	14:21:12	Transportation Boat	Travelling	90	48	50	303	5	50	22.3095	113.9544	1806.72	316.83
29-Sep-13	14:21:18	Transportation Boat	Travelling	91	1	20	303	3	10	22.3070	113.9569	1433.11	316.78
29-Sep-13	14:22:20	Transportation Boat	Travelling	90	55	10	305	16	30	22.3085	113.9562	1595.62	319.00
30-Sep-13	9:31:50	Other		114	12	20	0	0	0	22.2981	113.9665	54.18	13.73
30-Sep-13	9:33:24	Other	Stationary	90	33	30	279	7	40	22.3065	113.9435	2551.65	292.86
30-Sep-13	9:33:30	Other	Stationary	90	33	30	282	58	50	22.3079	113.9442	2551.65	296.71
30-Sep-13	9:33:36	Other	Stationary	90	32	30	287	11	40	22.3098	113.9444	2633.70	300.92
30-Sep-13	9:33:42	Other	Stationary	90	40	50	295	11	30	22.3094	113.9507	2078.90	308.92
30-Sep-13	9:33:48	Other	Stationary	90	59	0	304	47	50	22.3072	113.9572	1428.28	318.53
30-Sep-13	9:33:52	Other	Stationary	90	57	20	313	11	30	22.3087	113.9586	1470.38	326.92
30-Sep-13	9:34:09	Other	Stationary	90	57	20	312	57	40	22.3087	113.9585	1470.38	326.69
30-Sep-13	9:34:13	Other	Stationary	90	55	10	324	24	30	22.3104	113.9609	1529.00	338.14
30-Sep-13	9:34:17	Other	Stationary	90	48	20	337	9	40	22.3132	113.9637	1749.23	350.89
30-Sep-13	9:34:21	Other	Stationary	90	39	30	347	26	10	22.3170	113.9668	2151.17	1.17
30-Sep-13	9:34:26	Other	Stationary	90	35	50	349	43	0	22.3190	113.9678	2379.08	3.45
30-Sep-13	9:34:30	Other	Stationary	90	31	10	351	49	0	22.3223	113.9690	2751.89	5.55
30-Sep-13	9:34:33	Other	Stationary	90	30	0	352	13	40	22.3233	113.9693	2864.60	5.96
30-Sep-13	9:34:50	Other	Stationary	90	59	10	305	0	50	22.3073	113.9573	1424.20	318.74
30-Sep-13	9:34:57	Other	Stationary	90	51	30	308	2	50	22.3092	113.9565	1639.72	321.78
30-Sep-13	9:35:06	Other	Stationary	90	30	10	348	20	0	22.3232	113.9674	2847.92	2.06
30-Sep-13	9:35:14	Other	Stationary	90	30	20	352	14	40	22.3230	113.9693	2831.44	5.97
30-Sep-13	9:35:39	Other	Stationary	91	13	10	314	33	50	22.3064	113.9605	1149.02	328.29
30-Sep-13	9:35:42	Other	Stationary	91	13	10	316	40	30	22.3066	113.9609	1149.02	330.40
30-Sep-13	9:35:46	Other	Stationary	91	7	40	326	39	30	22.3082	113.9623	1243.34	340.39
30-Sep-13	9:35:50	Other	Stationary	91	6	40	328	48	40	22.3085	113.9627	1262.18	342.54
30-Sep-13	9:35:54	Other	Stationary	91	7	20	332	46	30	22.3086	113.9636	1249.56	346.50
30-Sep-13	9:35:58	Other	Stationary	91	6	40	334	39	10	22.3087	113.9639	1262.18	348.38

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
30-Sep-13	9:36:10	Other	Stationary	90	37	40	357	32	0	22.3176	113.9707	2259.29	11.26
30-Sep-13	9:36:13	Other	Stationary	90	37	40	358	46	0	22.3175	113.9712	2259.29	12.50
30-Sep-13	9:36:16	Other	Stationary	90	39	30	358	53	0	22.3165	113.9710	2151.17	12.61
30-Sep-13	9:36:20	Other	Stationary	90	39	30	0	21	20	22.3164	113.9715	2151.17	14.09
30-Sep-13	9:36:24	Other	Stationary	90	30	0	359	52	30	22.3227	113.9730	2864.60	13.60
30-Sep-13	9:36:27	Other	Stationary	90	31	0	2	9	40	22.3216	113.9738	2767.43	15.89
30-Sep-13	9:36:35	Other	Stationary	90	52	10	16	19	20	22.3102	113.9743	1618.40	30.05
30-Sep-13	9:36:38	Other	Stationary	90	53	50	17	22	10	22.3097	113.9743	1567.47	31.10
30-Sep-13	9:36:53	Other	Stationary	90	54	30	353	35	10	22.3114	113.9683	1548.00	7.32
30-Sep-13	9:36:57	Other	Stationary	90	55	0	355	7	0	22.3113	113.9687	1533.70	8.85
30-Sep-13	9:37:03	Other	Stationary	91	8	30	3	40	50	22.3082	113.9700	1228.06	17.41
30-Sep-13	9:37:06	Other	Stationary	91	8	30	5	45	50	22.3080	113.9704	1228.06	19.49
30-Sep-13	9:37:22	Research Vessel	Travelling	91	37	10	24	27	50	22.3037	113.9716	863.52	38.19
30-Sep-13	9:37:31	Dumping Guide Boat	Travelling	91	45	40	14	42	50	22.3039	113.9701	793.72	28.44
30-Sep-13	9:37:44	Fishing Boat	Non-operate and travelling	92	2	10	22	15	30	22.3026	113.9703	686.10	35.99
30-Sep-13	9:37:58	Dumping Guide Boat	Travelling	90	39	50	19	34	50	22.3137	113.9778	2132.63	33.31
30-Sep-13	9:38:25	Fishing Boat	Operate and stationary	91	8	20	289	6	50	22.3036	113.9563	1231.08	302.84
30-Sep-13	9:38:35	Fishing Boat	Operate and stationary	91	8	20	288	42	50	22.3036	113.9563	1231.08	302.44
30-Sep-13	9:38:50	Transportation Boat	Travelling	90	59	0	289	15	20	22.3046	113.9547	1428.28	302.99
30-Sep-13	9:39:17	Dumping Guide Boat	Travelling	93	4	40	356	3	30	22.3016	113.9671	453.26	9.79
30-Sep-13	9:39:23	Dumping Guide Boat	Travelling	90	43	40	11	56	40	22.3134	113.9746	1940.56	25.67
30-Sep-13	9:39:34	Transportation Boat	Travelling	91	1	40	298	42	10	22.3059	113.9566	1365.74	312.43
30-Sep-13	9:39:43	Fishing Boat	Non-operate and travelling	91	3	40	36	44	10	22.3052	113.9763	1322.33	50.47
30-Sep-13	9:39:55	Research Vessel	Acoustic Recording	91	28	20	17	29	0	22.3049	113.9712	950.39	31.21
30-Sep-13	9:40:34	Transportation Boat	Travelling	91	2	20	287	32	20	22.3039	113.9552	1350.95	301.27
30-Sep-13	9:40:49	HSF High Speed Ferry	Travelling	90	58	10	283	21	20	22.3036	113.9539	1449.02	297.09
30-Sep-13	9:41:25	Transportation Boat	Travelling	91	0	0	323	39	50	22.3093	113.9611	1404.16	337.39
30-Sep-13	9:41:34	Fishing Boat	Non-operate and travelling	90	47	30	39	3	50	22.3073	113.9802	1780.55	52.79
30-Sep-13	9:41:52	Dumping Guide Boat	Stationary	94	58	10	332	20	10	22.3001	113.9657	280.17	346.07
30-Sep-13	9:41:59	Dumping Guide Boat	Travelling	90	47	0	354	8	20	22.3137	113.9688	1799.90	7.87
30-Sep-13	9:42:08	Transportation Boat	Travelling	91	4	10	299	30	10	22.3057	113.9571	1311.91	313.23
30-Sep-13	9:42:15	HSF High Speed Ferry	Travelling	91	2	20	298	50	10	22.3058	113.9567	1350.95	312.57
30-Sep-13	9:42:23	Transportation Boat	Travelling	91	0	50	286	35	50	22.3039	113.9548	1384.68	300.33
30-Sep-13	9:43:22	Transportation Boat	Travelling	90	59	50	307	0	50	22.3074	113.9577	1408.12	320.74
30-Sep-13	9:43:28	HSF High Speed Ferry	Travelling	90	57	0	306	45	0	22.3079	113.9572	1479.10	320.48
30-Sep-13	9:43:37	Transportation Boat	Travelling	91	2	30	302	24	20	22.3064	113.9573	1347.31	316.14
30-Sep-13	9:43:44	Transportation Boat	Travelling	90	54	40	286	0	0	22.3045	113.9534	1543.20	299.73
30-Sep-13	9:44:14	Dumping Guide Boat	Travelling	90	54	40	342	48	20	22.3115	113.9655	1543.20	356.54
30-Sep-13	9:44:35	Research Vessel	Stationary	91	28	30	16	1	50	22.3050	113.9710	948.59	29.76
30-Sep-13	9:45:33	Transportation Boat	Travelling	91	1	30	298	36	30	22.3059	113.9566	1369.49	312.34
30-Sep-13	9:45:43	Research Vessel	Travelling	91	22	30	7	36	20	22.3062	113.9700	1018.06	21.34
30-Sep-13	9:47:26	Speed Boat	Travelling	92	59	50	339	38	50	22.3019	113.9659	482.06	353.38
30-Sep-13	9:48:46	Speed Boat	Travelling	92	11	40	297	24	40	22.3015	113.9616	659.15	311.14
30-Sep-13	9:48:59	Dumping Guide Boat	Travelling	92	38	20	344	22	40	22.3025	113.9662	547.80	358.11
30-Sep-13	9:49:08	Research Vessel	Travelling	90	50	50	348	25	0	22.3131	113.9670	1721.49	2.15
30-Sep-13	9:50:27	Transportation Boat	Travelling	91	4	0	297	13	50	22.3057	113.9564	1362.71	310.96
30-Sep-13	9:50:37	Transportation Boat	Travelling	91	1	30	287	23	40	22.3042	113.9546	1418.81	301.12
30-Sep-13	9:50:58	Transportation Boat	Travelling	90	59	0	340	50	30	22.3109	113.9650	1479.78	354.57
30-Sep-13	9:51:13	Transportation Boat	Travelling	91	0	20	306	11	0	22.3076	113.9573	1446.66	319.91
30-Sep-13	9:51:26	Transportation Boat	Travelling	91	3	50	295	21	0	22.3054	113.9561	1366.39	309.08
30-Sep-13	9:51:33	Transportation Boat	Travelling	91	4	0	340	5	30	22.3098	113.9650	1362.79	353.82
30-Sep-13	9:51:41	Transportation Boat	Travelling	90	55	40	307	8	20	22.3086	113.9568	1569.81	320.87
30-Sep-13	9:54:13	Transportation Boat	Travelling	91	42	40	330	54	20	22.3050	113.9642	846.52	344.64
30-Sep-13	9:54:22	Dumping Guide Boat	Travelling	90	47	30	349	8	10	22.3142	113.9673	1845.38	2.87
30-Sep-13	9:56:03	Transportation Boat	Stationary	91	43	0	330	25	50	22.3049	113.9642	843.85	344.16
30-Sep-13	9:58:10	Transportation Boat	Travelling	92	37	50	344	14	30	22.3026	113.9662	549.83	357.97
30-Sep-13	9:59:09	Tug Boat	Travelling	91	1	10	288	28	40	22.3045	113.9547	1427.36	302.21
30-Sep-13	9:59:18	Container Boat	Travelling	91	1	10	287	37	40	22.3043	113.9545	1427.37	301.36
30-Sep-13	9:59:25	Transportation Boat	Stationary	94	9	40	5	27	20	22.3006	113.9675	347.05	19.19
30-Sep-13	9:59:37	Research Vessel	Travelling	91	1	50	32	58	40	22.3063	113.9764	1411.81	46.71
30-Sep-13	10:00:42	Speed Boat	Travelling	92	12	20	354	0	0	22.3035	113.9673	656.28	7.73
30-Sep-13	10:00:51	Tug Boat	Travelling	91	4	30	296	47	10	22.3055	113.9564	1352.85	310.52
30-Sep-13	10:00:57	Container Boat	Travelling	91	4	30	295	35	20	22.3053	113.9562	1352.86	309.32
30-Sep-13	10:01:05	Tug Boat	Travelling	91	1	50	296	14	0	22.3058	113.9559	1411.94	309.96
30-Sep-13	10:01:12	Speed Boat	Travelling	91	58	20	334	42	50	22.3041	113.9650	734.27	348.44
30-Sep-13	10:01:20	Research Vessel	Travelling	90	59	40	39	45	0	22.3055	113.9778	1463.92	53.48
30-Sep-13	10:02:44	Speed Boat	Travelling	91	16	40	299	28	30	22.3046	113.9583	1136.33	313.20
30-Sep-13	10:02:59	Transportation Boat	Travelling	92	59	50	340	40	0	22.3019	113.9659	482.50	354.40
30-Sep-13	10:03:11	Transportation Boat	Travelling	91	1	30	300	31	50	22.3065	113.9565	1419.86	314.26
30-Sep-13	10:03:18	Tug Boat	Travelling	91	4	30	287	29	30	22.3039	113.9551	1353.04	301.22
30-Sep-13	10:03:23	Tug Boat	Travelling	91	4	10	309	39	50	22.3074	113.9585	1360.16	323.39
30-Sep-13	10:03:29	Container Boat	Travelling	91	5	10	308	14	40	22.3071	113.9584	1339.06	321.97
30-Sep-13	10:03:38	Transportation Boat	Travelling	90	57	10	306	15	20	22.3082	113.9568	1529.07	319.99
30-Sep-13	10:03:46	Transportation Boat	Travelling	92	23	10	327	15	10	22.3028	113.9645	606.56	340.98
30-Sep-13	10:04:02	Research Vessel	Travelling	90	41	40	35	18	20	22.3101	113.9819	2111.76	49.04
30-Sep-13	10:05:20	Transportation Boat	Travelling	91	4	10	301	1	30	22.3062	113.9570	1360.32	314.75
30-Sep-13	10:05:32	Transportation Boat	Travelling	91	32	0	310	31	10	22.3045	113.9610	945.86	324.25
30-Sep-13	10:05:40	Tug Boat	Travelling	90	56	0	331	59	10	22.3112	113.9627	1561.60	345.72
30-Sep-13	10:05:44	Container Boat	Travelling	90	56	50	330	32	20	22.3109	113.9623	1538.37	344.27
30-Sep-13	10:05:56	Transportation Boat	Travelling	91	3	20	292	36	40	22.3050	113.9556	1378.48	306.34
30-Sep-13	10:06:49	Transportation Boat	Travelling	90	59	0	280	29	40	22.3031	113.9533	1481.16	294.22
30-Sep-13	10:06:57	Transportation Boat	Travelling	91	10	10	303	49	40	22.3059	113.9582	1242.91	317.56
30-Sep-13	10:07:11	Transportation Boat	Travelling	91	0	30	303	14	50	22.3071	113.9568	1443.98	316.98
30-Sep-13	10:09:15	Transportation Boat	Travelling	90	57	50	286	21	0	22.3044	113.9537	1511.69	300.08
30-Sep-13	10:09:24	Transportation Boat	Stationary	90	50	30	296	4	50	22.3076	113.9534	1735.14	309.81
30-Sep-13	10:11:39	Transportation Boat	Travelling	91	1	30	304	18	20	22.3071	113.9572	1420.57	318.04
30-Sep-13	10:13:42	Transportation Boat	Travelling	91	1	10	304	2	30	22.3071	113.9571	1428.58	317.77
30-Sep-13	10:13:56	Transportation Boat	Travelling	91	0	20	290	22	10	22.3049	113.9547	1448.60	304.10
30-Sep-13	10:14:12	Transportation Boat	Travelling	91	3	30	295	54	10	22.3055	113.9561	1375.49	309.63
30-Sep-13	10:15:12	Transportation Boat	Travelling	91	0	30	279	26	0	22.3027	113.9535	1444.66	293.16
30-Sep-13	10:15:18	Transportation Boat	Travelling	90	57	0	282	44	20	22.3038	113.9530	1534.66	296.47
30-Sep-13	10:16:16	Transportation Boat	Travelling	90	54	40	277	47	0	22.3029	113.9519	1601.30	291.51
30-Sep-13	10:16:27	Transportation Boat	Travelling	91	3	0	308	36	10	22.3075	113.9582	1386.72	322.33
30-Sep-13	10:16:33	Transportation Boat	Travelling	90	56	0	305	34	0	22.3083	113.9565	1562.60	319.30
30-Sep-13	10:18:42	Transportation Boat	Travelling	91	26	20	313	29	10	22.3053	113.9611	1009.14	327.22
30-Sep-13	10:18:49	Transportation Boat	Travelling	90	58	10	292	29	30	22.3056	113.9546	1503.75	306.22
30-Sep-13	10:20:26	Transportation Boat	Travelling	91	57	20	320	24	40	22.3036	113.9633	741.38	334.14
30-Sep-13	10:20:36	Transportation Boat	Travelling	90	53	20	280	55	30	22.3038	113.9519	1642.43	294.65
30-Sep-13	10:20:44	Transportation Boat	Travelling	91	11	20	287	32	20	22.3033	113.9562	1223.37	301.27
30-Sep-13	10:21:28	Transportation Boat	Travelling	91	16	30	302	9	30	22.3050	113.9587	1140.08	315.89
30-Sep-13	10:22:19	Transportation Boat	Travelling	93	0	10	333	52	20	22.3019	113.9654	482.15	347.60
30-Sep-13	10:22:35	Transportation Boat	Stationary	91	13	0	314	56	30	22.3068	113.9604	1195.31	328.67
30-Sep-13	10:24:37	Transportation Boat	Stationary	94	43	50	352	8	30	22.3004	113.9667	305.54	5.87
30-Sep-13	10:26:01	Transportation Boat	Travelling	91	1	10	330	23	20	22.3100	113.9626	1429.62	344.12
30-Sep-13	10:26:47	Tug Boat	Travelling	90	54	40	339	5	20	22.3119	113.9645	1602.29	352.82
30-Sep-13	10:26:54	Transportation Boat	Travelling	90	51	20	340	21	10	22.3129	113.9647	1708.21	354.08
30-Sep-13	10:27:54	Tug Boat	Travelling	91	0	50	330	58	50	22.3101	113.9627	1437.71	344.71
30-Sep-13	10:29:13	Tug Boat	Travelling	91	8	10	319	4	20	22.3079	113.9607	1281.43	332.80
30-Sep-13	10:30:01	Tug Boat	Stationary	91	12	0	317	31	0	22.3072	113.9607	1212.60	331.25
30-Sep-13	10:30:49	Transportation Boat	Travelling	94	19	0	339	43	20	22.3006	113.9660	335.11	353.45
30-Sep-13	10:33:25	Transportation Boat	Travelling	91	55	0	312	44	20	22.3033	113.9623	757.07	326.47
30-Sep-13	10:33:55	Transportation Boat	Travelling	90	55	50	334	59	50	22.3115	113.9634	1568.94	348.73
30-Sep-13	10:35:23	Transportation Boat	Travelling	91	18	10	307	53	40	22.3055	113.9597	1116.48	321.62
30-Sep-13	10:35:35	Transportation Boat	Travelling	91	1	10	319	18	10	22.3091	113.9601	1430.42	333.03
30-Sep-13	10:35:50	Tug Boat	Travelling	91	15	40	318	48	40	22.3068	113.9612	1153.71	332.54
30-Sep-13	10:37:32	Tug Boat	Travelling	91	6	30	332	47	40	22.3091	113.9634	1314.53	346.52
30-Sep-13	10:37:41	Transportation Boat	Travelling	91	5	0	298	22	30	22.3057	113.9567	1345.23	312.10

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
30-Sep-13	10:38:42	Transportation Boat	Travelling	91	1	40	285	58	40	22.3039	113.9544	1418.94	299.71
30-Sep-13	10:39:01	HSF High Speed Ferry	Travelling	91	2	0	303	12	50	22.3069	113.9570	1411.24	316.94
30-Sep-13	10:39:09	Transportation Boat	Travelling	91	2	20	307	43	10	22.3075	113.9579	1403.61	321.45
30-Sep-13	10:40:27	HSF High Speed Ferry	Travelling	91	0	30	286	31	20	22.3042	113.9542	1446.81	300.25
30-Sep-13	10:40:36	Transportation Boat	Travelling	91	19	0	308	28	30	22.3055	113.9598	1104.95	322.20
30-Sep-13	10:41:26	Transportation Boat	Travelling	91	0	10	283	36	40	22.3036	113.9538	1455.01	297.34
30-Sep-13	10:42:08	HSF High Speed Ferry	Travelling	90	57	30	284	29	10	22.3041	113.9533	1523.52	298.22
30-Sep-13	10:42:15	Transportation Boat	Travelling	91	1	20	290	5	10	22.3048	113.9549	1427.04	303.82
30-Sep-13	10:42:47	Transportation Boat	Travelling	92	13	30	314	42	0	22.3026	113.9631	652.13	328.43
30-Sep-13	10:42:56	Transportation Boat	Travelling	91	1	50	295	23	40	22.3057	113.9557	1415.41	309.12
30-Sep-13	10:43:08	HSF High Speed Ferry	Travelling	91	3	0	301	48	30	22.3065	113.9569	1388.89	315.54
30-Sep-13	10:44:33	Transportation Boat	Travelling	94	30	10	335	28	10	22.3005	113.9658	321.45	349.20
30-Sep-13	10:44:45	Transportation Boat	Travelling	90	56	40	306	49	30	22.3084	113.9568	1546.50	320.55
30-Sep-13	10:44:51	Transportation Boat	Travelling	91	3	30	297	17	30	22.3058	113.9563	1377.96	311.02
30-Sep-13	10:45:04	Transportation Boat	Travelling	91	25	0	289	23	20	22.3027	113.9580	1026.66	303.12
30-Sep-13	10:45:16	HSF High Speed Ferry	Travelling	90	52	40	337	10	0	22.3124	113.9638	1666.00	350.90
30-Sep-13	10:45:29	Transportation Boat	Travelling	91	3	20	306	11	40	22.3071	113.9577	1381.69	319.92
30-Sep-13	10:46:33	Transportation Boat	Travelling	90	50	30	304	13	10	22.3092	113.9551	1738.94	317.95
30-Sep-13	10:46:41	Transportation Boat	Travelling	92	1	10	303	14	20	22.3023	113.9616	718.94	316.97
30-Sep-13	10:46:49	HSF High Speed Ferry	Travelling	90	40	10	349	52	30	22.3174	113.9677	2198.55	3.60
30-Sep-13	10:46:58	Transportation Boat	Travelling	94	43	40	7	36	30	22.3002	113.9675	306.12	21.34
30-Sep-13	10:48:14	Transportation Boat	Travelling	93	16	20	326	39	40	22.3014	113.9650	442.99	340.39
30-Sep-13	10:48:27	Speed Boat	Travelling	91	5	10	301	0	50	22.3061	113.9571	1342.60	314.74
30-Sep-13	10:48:40	Transportation Boat	Travelling	92	36	50	33	46	0	22.3010	113.9704	554.99	47.50
30-Sep-13	10:48:58	Speed Boat	Travelling	91	4	50	291	17	10	22.3046	113.9556	1349.62	305.02
30-Sep-13	10:49:39	Speed Boat	Travelling	90	59	50	279	27	30	22.3028	113.9533	1463.94	293.19
30-Sep-13	10:49:51	Transportation Boat	Travelling	90	56	50	280	39	40	22.3034	113.9527	1542.36	294.39
30-Sep-13	10:50:05	Transportation Boat	Stationary	95	40	50	359	16	0	22.2999	113.9670	254.54	13.00
30-Sep-13	13:28:32	Other		109	38	30	0	0	0	22.2982	113.9666	71.61	13.73
30-Sep-13	13:29:17	Transportation Boat	Travelling	91	1	30	286	12	50	22.3041	113.9543	1437.65	299.94
30-Sep-13	13:30:29	Transportation Boat	Travelling	91	2	40	294	12	20	22.3054	113.9556	1410.64	307.94
30-Sep-13	13:31:43	Transportation Boat	Travelling	91	2	40	302	30	30	22.3068	113.9569	1410.74	316.24
30-Sep-13	13:32:23	Transportation Boat	Travelling	91	0	50	306	27	50	22.3077	113.9573	1453.87	320.19
30-Sep-13	13:36:53	Transportation Boat	Travelling	90	57	30	308	9	30	22.3085	113.9572	1538.91	321.89
30-Sep-13	13:37:04	Transportation Boat	Travelling	90	57	30	285	50	0	22.3045	113.9534	1538.89	299.56
30-Sep-13	13:38:33	Transportation Boat	Travelling	91	5	40	322	57	20	22.3087	113.9612	1345.00	336.69
30-Sep-13	13:38:39	Transportation Boat	Travelling	91	0	50	297	57	20	22.3063	113.9558	1453.22	311.69
30-Sep-13	13:39:03	Fishing Boat	Non-operate and travelling	93	31	20	350	50	0	22.3013	113.9667	415.35	4.56
30-Sep-13	13:39:26	Transportation Boat	Travelling	91	0	50	313	6	50	22.3086	113.9587	1453.12	326.84
30-Sep-13	13:39:31	Transportation Boat	Travelling	91	1	20	304	52	10	22.3073	113.9571	1441.11	318.60
30-Sep-13	13:39:39	Fishing Boat	Non-operate and travelling	93	47	0	326	14	20	22.3009	113.9651	386.56	339.97
30-Sep-13	13:40:23	Transportation Boat	Travelling	90	53	50	306	55	50	22.3091	113.9563	1644.95	320.66
30-Sep-13	13:40:28	Transportation Boat	Travelling	90	54	50	305	30	30	22.3086	113.9561	1614.45	319.24
30-Sep-13	13:40:40	Fishing Boat	Operate and stationary	93	29	20	304	41	10	22.3004	113.9637	419.27	318.42
30-Sep-13	13:42:46	Fishing Boat	Operate and travelling	92	48	30	307	8	20	22.3013	113.9632	521.16	320.87
30-Sep-13	13:43:39	Fishing Boat	Non-operate and travelling	92	23	0	298	6	30	22.3013	113.9619	614.38	311.84
30-Sep-13	13:45:50	Transportation Boat	Travelling	91	2	50	304	24	0	22.3070	113.9573	1405.50	318.13
30-Sep-13	13:46:04	Fishing Boat	Operate and travelling	92	41	30	297	29	30	22.3008	113.9624	543.67	311.22
30-Sep-13	13:46:50	Transportation Boat	Travelling	91	2	50	285	54	0	22.3039	113.9545	1405.38	299.63
30-Sep-13	13:47:01	Fishing Boat	Operate and travelling	92	52	30	298	25	10	22.3007	113.9627	508.85	312.15
30-Sep-13	13:47:15	Speed Boat	Travelling	91	57	40	293	41	10	22.3017	113.9606	746.98	307.42
30-Sep-13	13:47:46	Transportation Boat	Travelling	91	3	50	304	19	0	22.3069	113.9574	1382.99	318.05
30-Sep-13	13:47:52	Speed Boat	Travelling	92	24	40	324	58	40	22.3027	113.9643	607.06	338.71
30-Sep-13	13:48:01	Fishing Boat	Operate and travelling	92	30	50	297	32	20	22.3011	113.9621	582.15	311.27
30-Sep-13	13:48:35	Transportation Boat	Travelling	91	5	40	290	20	0	22.3044	113.9556	1343.84	304.06
30-Sep-13	13:48:44	Speed Boat	Travelling	91	50	50	7	17	0	22.3043	113.9692	793.14	21.01
30-Sep-13	13:48:53	Transportation Boat	Travelling	90	57	10	281	6	0	22.3035	113.9527	1546.42	294.83
30-Sep-13	13:49:00	Fishing Boat	Operate and travelling	92	38	10	290	58	20	22.3005	113.9620	555.03	304.70
30-Sep-13	13:49:16	Transportation Boat	Travelling	91	3	0	278	44	30	22.3024	113.9538	1401.32	292.47
30-Sep-13	13:49:31	Transportation Boat	Travelling	91	2	50	280	20	30	22.3028	113.9539	1405.06	294.07
30-Sep-13	13:49:41	Transportation Boat	Travelling	90	58	10	284	53	50	22.3042	113.9534	1519.34	298.63
30-Sep-13	13:49:50	Speed Boat	Travelling	91	3	50	26	57	20	22.3071	113.9752	1382.74	40.69
30-Sep-13	13:50:52	Transportation Boat	Travelling	91	11	50	293	52	10	22.3044	113.9569	1227.08	307.60
30-Sep-13	13:50:59	Transportation Boat	Travelling	90	59	40	291	19	0	22.3053	113.9546	1480.44	305.05
30-Sep-13	13:52:47	Transportation Boat	Stationary	91	14	10	312	55	20	22.3065	113.9600	1187.92	326.65
30-Sep-13	13:52:57	Transportation Boat	Travelling	91	1	0	301	29	0	22.3069	113.9565	1447.41	315.21
30-Sep-13	13:53:17	Transportation Boat	Travelling	91	11	20	287	13	10	22.3033	113.9561	1235.50	300.95
30-Sep-13	13:53:25	Transportation Boat	Travelling	90	51	20	338	10	50	22.3130	113.9640	1724.57	351.91
30-Sep-13	13:54:19	Transportation Boat	Travelling	91	10	40	320	55	30	22.3078	113.9612	1247.16	334.65
30-Sep-13	13:54:24	Transportation Boat	Travelling	91	17	50	300	51	10	22.3048	113.9586	1131.33	314.58
30-Sep-13	13:54:37	Transportation Boat	Travelling	91	0	0	325	28	0	22.3100	113.9613	1471.64	339.20
30-Sep-13	13:55:04	Transportation Boat	Travelling	91	2	10	288	39	30	22.3045	113.9547	1419.64	302.39
30-Sep-13	13:55:16	Fishing Boat	Operate and stationary	92	41	40	295	58	30	22.3007	113.9623	542.68	309.70
30-Sep-13	13:55:31	Transportation Boat	Stationary	91	12	50	312	57	50	22.3067	113.9599	1209.58	326.69
30-Sep-13	13:55:39	Transportation Boat	Travelling	91	1	20	333	20	20	22.3102	113.9633	1439.10	347.07
30-Sep-13	13:55:45	Transportation Boat	Travelling	91	3	50	309	33	50	22.3076	113.9584	1382.04	323.29
30-Sep-13	13:55:52	Transportation Boat	Travelling	91	3	0	302	15	40	22.3067	113.9569	1400.53	315.99
30-Sep-13	13:56:32	Transportation Boat	Travelling	91	12	20	309	51	30	22.3064	113.9594	1217.92	323.59
30-Sep-13	13:56:38	Transportation Boat	Travelling	91	2	20	296	41	20	22.3059	113.9559	1415.60	310.42
30-Sep-13	13:56:45	Transportation Boat	Travelling	90	53	20	306	33	20	22.3091	113.9561	1658.29	320.29
30-Sep-13	13:56:52	Transportation Boat	Travelling	91	1	10	289	32	10	22.3047	113.9547	1442.92	303.27
30-Sep-13	13:56:59	Transportation Boat	Travelling	90	49	30	342	35	20	22.3137	113.9653	1789.15	356.32
30-Sep-13	13:57:07	Transportation Boat	Travelling	90	54	20	14	13	0	22.3106	113.9738	1627.21	27.95
30-Sep-13	13:57:18	Transportation Boat	Travelling	91	1	0	307	10	30	22.3077	113.9575	1446.86	320.90
30-Sep-13	13:57:24	Transportation Boat	Travelling	90	57	30	286	52	50	22.3047	113.9535	1536.19	300.61
30-Sep-13	13:57:31	Transportation Boat	Travelling	91	2	20	296	39	20	22.3059	113.9559	1415.49	310.39
30-Sep-13	13:57:37	Transportation Boat	Stationary	90	55	10	16	29	10	22.3101	113.9742	1602.16	30.22
30-Sep-13	13:58:23	Fishing Boat	Non-operate and travelling	93	15	40	301	52	0	22.3005	113.9634	447.98	315.60
30-Sep-13	13:58:33	Transportation Boat	Travelling	90	58	40	305	36	10	22.3079	113.9569	1505.05	319.33
30-Sep-13	13:59:20	Fishing Boat	Non-operate and travelling	94	57	50	350	55	20	22.3003	113.9666	293.76	4.65
30-Sep-13	14:01:10	Transportation Boat	Travelling	91	4	0	293	32	0	22.3051	113.9557	1377.75	307.26
30-Sep-13	14:02:00	Transportation Boat	Travelling	91	0	20	306	27	10	22.3077	113.9573	1462.47	320.18
30-Sep-13	14:05:17	Transportation Boat	Travelling	91	2	40	295	32	40	22.3056	113.9558	1406.92	309.27
30-Sep-13	14:05:33	Tug Boat	Travelling	91	2	0	292	33	10	22.3052	113.9552	1422.21	306.28
30-Sep-13	14:06:46	Transportation Boat	Travelling	90	56	50	307	26	40	22.3085	113.9569	1553.22	321.17
30-Sep-13	14:06:52	Transportation Boat	Travelling	91	2	30	296	12	50	22.3058	113.9559	1410.53	309.94
30-Sep-13	14:06:58	Tug Boat	Travelling	91	4	40	303	36	40	22.3066	113.9574	1362.69	317.34
30-Sep-13	14:07:40	Transportation Boat	Travelling	90	59	50	283	56	10	22.3038	113.9537	1474.13	297.67
30-Sep-13	14:07:52	Transportation Boat	Travelling	91	2	50	303	56	20	22.3070	113.9572	1402.83	317.67
30-Sep-13	14:08:07	Transportation Boat	Travelling	90	56	50	277	59	50	22.3028	113.9524	1553.04	291.73
30-Sep-13	14:08:44	Tug Boat	Travelling	91	4	20	317	17	40	22.3084	113.9599	1369.63	331.02
30-Sep-13	14:09:17	Transportation Boat	Travelling	91	2	10	292	38	10	22.3052	113.9553	1417.89	306.37
30-Sep-13	14:09:36	Transportation Boat	Travelling	90	56	0	284	14	0	22.3043	113.9529	1576.30	297.96
30-Sep-13	14:11:09	Transportation Boat	Travelling	90	56	20	279	33	20	22.3032	113.9524	1566.62	293.29
30-Sep-13	14:11:13	Transportation Boat	Travelling	91	4	20	304	44	0	22.3068	113.9576	1369.34	318.46
30-Sep-13	14:11:16	Transportation Boat	Travelling	91	4	20	306	2	20	22.3070	113.9578	1369.33	319.77
30-Sep-13	14:11:20	Transportation Boat	Travelling	90	57	50	306	40	20	22.3082	113.9569	1525.36	320.40
30-Sep-13	14:11:28	Tug Boat	Travelling	90	56	30	335	51	20	22.3114	113.9637	1561.89	349.59
30-Sep-13	14:12:20	Transportation Boat	Travelling	91	4	20	320	59	20	22.3088	113.9607	1369.20	334.72
30-Sep-13	14:12:24	Transportation Boat	Travelling	91	7	0	291	22	20	22.3044	113.9559	1314.09	305.10
30-Sep-13	14:12:28	Transportation Boat	Travelling	91	4	10	294	43	0	22.3053	113.9559	1372.79	308.45
30-Sep-13	14:13:21	Transportation Boat	Travelling	91	1	10	334	53	10	22.3103	113.9636	1440.87	348.62
30-Sep-13	14:13:25	Transportation Boat	Travelling	91	3	20	278	40	0	22.3024	113.9539	1390.95	292.40
30-Sep-13	14:13:29	Transportation Boat	Travelling	90	59	0	281	37	50	22.3034	113.9533	1494.49	295.36
30-Sep-13	14:14:17	Transportation Boat	Travelling	91	2	30	284	7	50	22.3035	113.9543	1409.63	297.86
30-Sep-13	14:14:31	Transportation Boat	Travelling	90	55	10	348	3	20	22.3120	113.9669	1599.81	1.79
30-Sep-13	14:15:38	Transportation Boat	Travelling	91	7	30	303	49	30	22.3063	113.9578	1303.89	317.55

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
30-Sep-13	14:21:16	Transportation Boat	Travelling	91	3	50	303	23	0	22.3067	113.9573	1378.99	317.11
30-Sep-13	14:21:27	Transportation Boat	Travelling	94	45	10	344	59	40	22.3004	113.9663	306.30	358.72
30-Sep-13	14:21:39	Transportation Boat	Travelling	91	1	0	305	40	10	22.3075	113.9573	1443.82	319.40
30-Sep-13	14:22:21	Transportation Boat	Travelling	91	1	0	292	59	20	22.3054	113.9551	1443.73	306.72
30-Sep-13	14:22:27	Transportation Boat	Travelling	93	7	0	323	31	40	22.3015	113.9646	467.84	337.26
30-Sep-13	14:22:32	Transportation Boat	Travelling	91	4	0	298	48	30	22.3060	113.9565	1375.21	312.54
30-Sep-13	14:24:12	Transportation Boat	Travelling	90	54	40	277	45	10	22.3029	113.9518	1613.33	291.48
30-Sep-13	14:24:18	Transportation Boat	Travelling	91	44	50	311	23	40	22.3038	113.9617	836.20	325.12
30-Sep-13	14:24:26	Transportation Boat	Travelling	91	3	20	282	8	40	22.3031	113.9542	1389.63	295.87
30-Sep-13	14:25:41	Transportation Boat	Travelling	91	3	30	287	6	40	22.3040	113.9548	1385.79	300.84
30-Sep-13	14:27:04	Transportation Boat	Travelling	91	5	0	298	53	40	22.3059	113.9567	1353.27	312.62
30-Sep-13	14:27:11	Transportation Boat	Travelling	91	0	50	306	32	20	22.3076	113.9574	1447.13	320.27
30-Sep-13	14:28:52	Transportation Boat	Travelling	90	54	40	304	57	20	22.3085	113.9560	1612.68	318.69
30-Sep-13	14:28:59	Transportation Boat	Travelling	90	52	0	283	27	0	22.3046	113.9517	1696.82	297.18
30-Sep-13	14:33:00	Transportation Boat	Travelling	91	6	30	306	22	40	22.3067	113.9582	1321.72	320.11
30-Sep-13	14:33:06	Transportation Boat	Travelling	90	59	40	284	1	10	22.3038	113.9537	1475.06	297.75
30-Sep-13	14:33:43	Transportation Boat	Travelling	91	9	20	297	46	40	22.3052	113.9572	1267.07	311.51
30-Sep-13	14:33:54	Transportation Boat	Travelling	91	3	40	293	53	20	22.3052	113.9558	1381.13	307.62
30-Sep-13	14:34:04	Transportation Boat	Travelling	90	59	40	282	31	30	22.3035	113.9535	1474.93	296.25
30-Sep-13	14:35:14	Transportation Boat	Travelling	91	1	20	279	43	20	22.3028	113.9536	1434.18	293.45
30-Sep-13	14:35:20	Transportation Boat	Travelling	90	55	50	306	48	40	22.3086	113.9566	1577.56	320.54
30-Sep-13	14:35:24	Transportation Boat	Travelling	91	0	10	291	43	10	22.3053	113.9548	1462.34	305.45
30-Sep-13	14:37:12	Transportation Boat	Travelling	91	2	10	304	42	30	22.3071	113.9573	1414.47	318.44
30-Sep-13	14:38:01	HSF High Speed Ferry	Travelling	91	3	10	291	49	0	22.3049	113.9554	1391.70	305.55
30-Sep-13	14:38:09	Transportation Boat	Travelling	91	0	40	298	55	40	22.3065	113.9560	1449.79	312.66
30-Sep-13	14:38:58	HSF High Speed Ferry	Travelling	91	5	10	310	57	0	22.3075	113.9588	1348.38	324.68
30-Sep-13	14:39:04	Transportation Boat	Travelling	90	57	30	288	59	0	22.3051	113.9539	1530.65	302.71
30-Sep-13	14:40:54	HSF High Speed Ferry	Travelling	90	48	30	341	44	0	22.3139	113.9650	1819.85	355.46
30-Sep-13	14:44:07	Transportation Boat	Travelling	91	2	50	285	49	10	22.3038	113.9546	1398.44	299.55
30-Sep-13	14:44:14	Transportation Boat	Travelling	91	1	10	283	59	40	22.3036	113.9540	1437.02	297.72
30-Sep-13	14:44:54	Transportation Boat	Travelling	91	3	10	291	15	50	22.3048	113.9553	1390.87	304.99
30-Sep-13	14:44:57	Transportation Boat	Travelling	91	3	10	292	49	40	22.3051	113.9555	1390.87	306.56
30-Sep-13	14:46:12	Transportation Boat	Travelling	91	3	10	299	6	30	22.3061	113.9565	1390.72	312.84
30-Sep-13	14:46:18	Transportation Boat	Travelling	90	58	30	306	16	30	22.3080	113.9570	1503.17	320.00
30-Sep-13	14:47:13	Transportation Boat	Travelling	90	55	30	286	56	20	22.3049	113.9531	1585.55	300.67
30-Sep-13	14:47:18	Transportation Boat	Travelling	91	0	50	305	57	50	22.3075	113.9573	1444.61	319.69
30-Sep-13	14:49:01	Transportation Boat	Travelling	91	1	10	300	55	50	22.3067	113.9565	1436.42	314.66
30-Sep-13	14:49:59	Transportation Boat	Travelling	90	58	20	307	9	50	22.3081	113.9572	1507.04	320.89
30-Sep-13	14:50:07	Transportation Boat	Travelling	90	58	50	305	59	0	22.3079	113.9570	1494.04	319.71
30-Sep-13	14:51:10	Transportation Boat	Travelling	91	2	40	295	6	30	22.3055	113.9558	1401.35	308.84
30-Sep-13	14:51:46	Transportation Boat	Travelling	90	59	40	288	8	0	22.3046	113.9542	1472.67	301.86
30-Sep-13	14:51:54	Transportation Boat	Travelling	91	2	30	306	2	20	22.3073	113.9576	1405.04	319.77
30-Sep-13	14:52:52	Transportation Boat	Travelling	90	54	50	277	9	0	22.3028	113.9518	1604.35	290.88
30-Sep-13	14:52:57	Transportation Boat	Travelling	91	13	40	307	5	50	22.3059	113.9591	1189.86	320.83
30-Sep-13	14:56:06	Construction Boat	Travelling	91	7	20	307	47	40	22.3068	113.9585	1302.58	321.52
30-Sep-13	14:56:17	Tug Boat	Travelling	91	3	50	302	44	20	22.3066	113.9572	1374.81	316.47
30-Sep-13	14:56:23	Construction Platform	Travelling	91	3	50	304	31	30	22.3069	113.9575	1374.80	318.25
30-Sep-13	14:57:07	Transportation Boat	Travelling	93	12	10	328	11	50	22.3015	113.9650	453.86	341.93
30-Sep-13	14:58:01	Construction Boat	Travelling	91	0	30	287	29	10	22.3044	113.9543	1451.33	301.22
30-Sep-13	14:58:09	Tug Boat	Travelling	91	2	50	297	8	40	22.3058	113.9561	1396.74	310.87
30-Sep-13	14:58:13	Construction Platform	Travelling	91	2	50	299	2	50	22.3062	113.9564	1396.73	312.78
30-Sep-13	14:58:35	Transportation Boat	Stationary	95	25	40	1	45	50	22.2999	113.9671	267.14	15.49
30-Sep-13	14:59:10	Construction Boat	Travelling	90	55	40	277	29	10	22.3028	113.9521	1579.08	291.22
30-Sep-13	15:01:02	Transportation Boat	Travelling	93	6	50	325	17	20	22.3015	113.9648	466.71	339.02
30-Sep-13	15:02:12	Transportation Boat	Travelling	91	7	10	295	48	50	22.3051	113.9566	1305.16	309.54
30-Sep-13	15:02:17	Transportation Boat	Travelling	91	4	0	300	17	40	22.3062	113.9568	1370.48	314.02
30-Sep-13	15:02:26	Tug Boat	Travelling	90	57	40	286	5	40	22.3044	113.9535	1523.07	299.82
30-Sep-13	15:02:30	Construction Platform	Travelling	90	57	40	287	26	40	22.3047	113.9537	1523.06	301.17
30-Sep-13	15:02:38	Transportation Boat	Travelling	91	51	20	314	11	10	22.3036	113.9623	784.55	327.92
30-Sep-13	15:03:26	Transportation Boat	Travelling	91	3	30	282	21	0	22.3031	113.9543	1381.26	296.08
30-Sep-13	15:03:30	Transportation Boat	Travelling	91	3	20	289	22	20	22.3044	113.9551	1384.93	303.10
30-Sep-13	15:04:17	Tug Boat	Travelling	90	55	10	281	55	30	22.3038	113.9524	1592.92	295.65
30-Sep-13	15:04:20	Construction Platform	Travelling	90	55	10	283	20	30	22.3041	113.9526	1592.91	297.07
30-Sep-13	15:04:27	Transportation Boat	Travelling	91	16	0	309	7	0	22.3059	113.9596	1151.86	322.85
30-Sep-13	15:04:33	Transportation Boat	Travelling	91	1	0	280	19	20	22.3029	113.9536	1438.46	294.05
30-Sep-13	15:08:34	Transportation Boat	Travelling	92	50	20	343	23	10	22.3022	113.9661	511.74	357.12
30-Sep-13	15:10:20	Transportation Boat	Travelling	91	3	50	296	28	20	22.3056	113.9562	1373.14	310.20
30-Sep-13	15:10:26	Transportation Boat	Travelling	91	33	30	345	50	30	22.3060	113.9663	934.40	359.57
30-Sep-13	15:11:50	Transportation Boat	Travelling	93	45	50	337	10	50	22.3010	113.9658	385.49	350.91
30-Sep-13	15:12:01	Transportation Boat	Travelling	90	51	10	304	2	50	22.3091	113.9552	1718.52	317.78
30-Sep-13	15:13:17	Transportation Boat	Travelling	90	55	10	344	35	0	22.3119	113.9659	1591.67	358.31
30-Sep-13	15:13:26	Transportation Boat	Travelling	91	58	50	323	50	20	22.3037	113.9637	734.14	337.57
30-Sep-13	15:14:20	Transportation Boat	Stationary	91	52	40	321	0	20	22.3039	113.9632	774.44	334.74
30-Sep-13	15:16:58	Transportation Boat	Travelling	91	34	0	312	54	40	22.3046	113.9614	928.88	326.64
30-Sep-13	15:17:04	Transportation Boat	Travelling	90	55	10	332	57	0	22.3116	113.9628	1591.14	346.68
30-Sep-13	15:17:09	Transportation Boat	Travelling	90	52	10	336	35	10	22.3126	113.9636	1684.23	350.32
30-Sep-13	15:18:37	Transportation Boat	Travelling	91	14	10	296	8	30	22.3044	113.9576	1179.13	309.87
30-Sep-13	15:18:52	Transportation Boat	Travelling	91	3	30	305	28	40	22.3070	113.9576	1379.41	319.21
30-Sep-13	15:19:11	Transportation Boat	Travelling	90	59	10	325	30	20	22.3101	113.9613	1481.75	339.24
30-Sep-13	15:20:30	Transportation Boat	Travelling	90	59	20	278	38	10	22.3027	113.9531	1477.36	292.37
30-Sep-13	15:20:35	Transportation Boat	Travelling	91	3	10	315	47	40	22.3084	113.9596	1386.57	329.52
30-Sep-13	15:22:24	Transportation Boat	Travelling	91	5	20	301	35	20	22.3062	113.9572	1339.84	315.32
30-Sep-13	15:24:49	Transportation Boat	Travelling	91	1	40	283	6	50	22.3034	113.9541	1420.20	296.84
30-Sep-13	15:27:06	Transportation Boat	Travelling	90	59	20	286	14	10	22.3043	113.9540	1476.51	299.97
30-Sep-13	15:27:10	Transportation Boat	Travelling	91	1	50	287	0	10	22.3041	113.9546	1416.03	300.73
30-Sep-13	15:28:19	Transportation Boat	Travelling	91	1	40	295	42	30	22.3057	113.9557	1419.77	309.44
30-Sep-13	15:28:22	Transportation Boat	Travelling	91	1	40	305	20	40	22.3073	113.9574	1419.76	319.07
30-Sep-13	15:28:31	Transportation Boat	Travelling	90	56	30	285	3	0	22.3043	113.9532	1551.47	298.78
30-Sep-13	15:28:35	Transportation Boat	Travelling	90	57	10	285	6	10	22.3043	113.9533	1533.10	298.83
30-Sep-13	15:28:51	Transportation Boat	Travelling	90	57	0	304	53	0	22.3080	113.9565	1537.61	318.61
30-Sep-13	15:29:24	Tug Boat	Travelling	91	1	10	328	32	20	22.3099	113.9622	1431.39	342.27
30-Sep-13	15:29:43	Transportation Boat	Travelling	91	1	30	297	30	30	22.3061	113.9560	1423.49	311.24
30-Sep-13	15:29:46	Transportation Boat	Travelling	91	1	30	293	7	10	22.3053	113.9553	1423.49	306.85
30-Sep-13	15:29:51	Transportation Boat	Travelling	90	58	40	306	46	20	22.3080	113.9572	1493.17	320.50
30-Sep-13	15:30:06	Tug Boat	Travelling	91	5	0	320	37	20	22.3085	113.9607	1345.89	334.35
30-Sep-13	15:31:05	Transportation Boat	Travelling	90	54	30	305	11	10	22.3085	113.9561	1608.96	318.92
30-Sep-13	15:31:09	Transportation Boat	Travelling	91	2	10	303	23	40	22.3069	113.9571	1407.86	317.12
30-Sep-13	15:31:15	Tug Boat	Travelling	91	6	10	305	56	30	22.3067	113.9581	1321.76	319.67
30-Sep-13	15:31:58	Tug Boat	Travelling	91	4	50	296	45	40	22.3055	113.9564	1349.17	310.49
30-Sep-13	15:32:19	Transportation Boat	Travelling	90	52	50	336	15	30	22.3123	113.9636	1660.40	349.99
30-Sep-13	15:32:52	Dumping Guide Boat	Travelling	91	4	40	336	23	50	22.3096	113.9641	1352.58	350.13
30-Sep-13	15:33:35	Transportation Boat	Travelling	90	59	40	322	13	50	22.3097	113.9606	1467.32	335.96
30-Sep-13	15:33:45	Dumping Guide Boat	Stationary	91	4	50	337	44	0	22.3096	113.9645	1348.96	351.46
30-Sep-13	15:35:29	Transportation Boat	Travelling	91	2	20	295	53	40	22.3057	113.9559	1403.52	309.62
30-Sep-13	15:37:17	Transportation Boat	Travelling	90	58	10	286	24	50	22.3044	113.9537	1505.21	300.14
30-Sep-13	15:39:13	Transportation Boat	Travelling	91	0	20	296	25	30	22.3060	113.9556	1450.18	310.15
30-Sep-13	15:39:19	Transportation Boat	Travelling	91	1	0	304	40	20	22.3073	113.9571	1434.11	318.40
30-Sep-13	15:40:15	Speed Boat	Travelling	93	0	50	354	10	10	22.3019	113.9670	480.61	7.90
30-Sep-13	15:40:31	Transportation Boat	Travelling	91	0	30	302	56	10	22.3071	113.9567	1445.97	316.67
30-Sep-13	15:40:35	Transportation Boat	Travelling	90	58	50	282	51	30	22.3036	113.9535	1487.49	296.59
30-Sep-13	15:40:42	Speed Boat	Travelling	93	58	20	1	28	0	22.3008	113.9673	364.28	15.20
30-Sep-13	15:40:59	Speed Boat	Travelling	94	47	20	8	36	50	22.3001	113.9675	301.90	22.34
30-Sep-13	15:41:13	Dumping Guide Boat	Travelling	91	3	10	329	15	50	22.3095	113.9625	1384.08	342.99
30-Sep-13	15:41:32	Transportation Boat	Travelling	90	57	20	306	0	50	22.3081	113.9568	1526.85	319.74
30-Sep-13	15:44:01	Dumping Guide Boat	Stationary	91	14	50	316	44	0	22.3067	113.9608	1165.96	330.46
30-Sep-13	15:44:12	Transportation Boat	Travelling	91	0	50	291	52	20	22.3051	113.9550	1437.48	305.60
30-Sep-13	15:46:34	Transportation Boat	Travelling	90	51	50	307	11	50	22.3094	113.9560	1690.91	320.93

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
30-Sep-13	15:46:39	Transportation Boat	Travelling	91	11	10	307	59	10	22.3063	113.9590	1226.32	321.72
30-Sep-13	15:48:47	Transportation Boat	Travelling	91	46	20	312	15	20	22.3037	113.9619	818.34	325.99
30-Sep-13	15:49:47	Transportation Boat	Travelling	92	19	10	316	15	20	22.3025	113.9634	624.53	329.99
30-Sep-13	15:51:41	Transportation Boat	Travelling	95	7	20	339	58	50	22.3001	113.9661	281.88	353.71
30-Sep-13	15:52:20	Dumping Guide Boat	Travelling	92	8	50	337	33	20	22.3036	113.9654	674.66	351.29
30-Sep-13	15:53:27	Dumping Guide Boat	Travelling	91	8	10	294	6	30	22.3047	113.9566	1280.09	307.84
30-Sep-13	15:53:34	Dumping Guide Boat	Travelling	93	40	10	326	19	50	22.3010	113.9651	394.02	340.06
30-Sep-13	15:54:35	Container Boat	Travelling	91	1	0	311	27	40	22.3082	113.9584	1432.20	325.19
30-Sep-13	15:55:27	Dumping Guide Boat	Stationary	91	11	20	291	53	30	22.3040	113.9567	1222.49	305.62
30-Sep-13	15:55:35	Dumping Guide Boat	Stationary	94	43	40	335	48	0	22.3003	113.9659	305.43	349.53
30-Sep-13	15:55:43	Transportation Boat	Travelling	91	1	20	306	4	0	22.3074	113.9575	1424.18	319.80
30-Sep-13	15:55:51	Container Boat	Travelling	91	7	50	318	58	20	22.3079	113.9607	1286.18	332.70
30-Sep-13	15:56:03	Transportation Boat	Travelling	91	55	10	318	30	30	22.3036	113.9630	754.82	332.24
30-Sep-13	16:00:08	Other	Stationary	90	33	20	278	30	30	22.3067	113.9424	2660.56	292.24
30-Sep-13	16:00:19	Other	Stationary	90	32	50	285	35	20	22.3095	113.9435	2702.90	299.32
30-Sep-13	16:00:25	Other	Stationary	90	35	40	293	42	20	22.3112	113.9472	2479.39	307.44
30-Sep-13	16:00:30	Other	Stationary	90	48	20	298	11	30	22.3085	113.9533	1813.60	311.92
30-Sep-13	16:00:38	Other	Stationary	90	52	50	308	15	30	22.3094	113.9565	1656.30	321.99
30-Sep-13	16:00:49	Other	Stationary	90	55	50	321	59	10	22.3105	113.9601	1565.86	335.72
30-Sep-13	16:00:54	Other	Stationary	90	52	20	329	6	20	22.3120	113.9616	1672.36	342.84
30-Sep-13	16:00:59	Other	Stationary	90	48	40	336	37	10	22.3136	113.9635	1800.84	350.35
30-Sep-13	16:01:53	Other	Stationary	90	44	0	339	37	50	22.3155	113.9642	1996.26	353.36
30-Sep-13	16:01:57	Other	Stationary	90	39	50	345	43	0	22.3175	113.9662	2211.21	359.45
30-Sep-13	16:02:01	Other	Stationary	90	31	40	350	54	50	22.3228	113.9686	2806.97	4.64
30-Sep-13	16:02:07	Other	Stationary	90	29	30	352	2	10	22.3247	113.9694	3024.73	5.77
30-Sep-13	16:02:21	Other	Stationary	90	59	20	304	53	10	22.3076	113.9569	1471.98	318.62
30-Sep-13	16:02:28	Other	Stationary	90	52	10	307	32	10	22.3094	113.9562	1677.57	321.27
30-Sep-13	16:02:42	Other	Stationary	90	29	30	348	10	0	22.3248	113.9674	3024.58	1.90
30-Sep-13	16:02:50	Other	Stationary	90	30	20	351	39	20	22.3239	113.9691	2936.79	5.39
30-Sep-13	16:03:32	Other	Stationary	91	6	20	325	49	40	22.3087	113.9619	1314.70	339.56
30-Sep-13	16:03:37	Other	Stationary	91	6	20	328	49	20	22.3089	113.9626	1314.69	342.55
30-Sep-13	16:03:56	Other	Stationary	91	6	40	332	18	10	22.3090	113.9633	1308.01	346.03
30-Sep-13	16:04:01	Other	Stationary	91	6	40	334	11	0	22.3091	113.9637	1308.00	347.91
30-Sep-13	16:04:44	Other	Stationary	90	37	20	357	25	40	22.3185	113.9708	2363.78	11.16
30-Sep-13	16:04:49	Other	Stationary	90	37	0	358	56	0	22.3186	113.9715	2385.82	12.66
30-Sep-13	16:04:54	Other	Stationary	90	39	40	358	25	30	22.3172	113.9709	2220.21	12.15
30-Sep-13	16:05:00	Other	Stationary	90	39	40	359	32	20	22.3171	113.9714	2220.20	13.27
30-Sep-13	16:05:13	Other	Stationary	90	53	20	16	15	20	22.3104	113.9744	1639.85	29.99
30-Sep-13	16:05:17	Other	Stationary	90	53	20	17	14	40	22.3103	113.9746	1639.84	30.97
30-Sep-13	16:05:54	Other	Stationary	90	54	50	353	31	30	22.3119	113.9684	1594.16	7.25
30-Sep-13	16:05:59	Other	Stationary	90	54	50	355	57	10	22.3118	113.9690	1594.15	9.68
30-Sep-13	16:06:07	Other	Stationary	91	9	0	3	23	40	22.3085	113.9700	1263.07	17.12
30-Sep-13	16:06:13	Other	Stationary	91	9	0	5	33	50	22.3083	113.9705	1263.06	19.29
30-Sep-13	16:06:44	Other	Stationary	91	9	50	313	40	40	22.3071	113.9599	1247.78	327.41
30-Sep-13	16:06:49	Other	Stationary	91	7	30	328	58	40	22.3087	113.9627	1291.36	342.71
30-Sep-13	16:07:03	Research Vessel	Stationary	91	20	0	25	24	20	22.3052	113.9731	1087.87	39.14
30-Sep-13	16:07:58	Transportation Boat	Travelling	91	0	10	294	8	30	22.3056	113.9553	1450.61	307.87
30-Sep-13	16:08:43	Speed Boat	Travelling	91	41	30	322	54	30	22.3047	113.9631	856.02	336.64
30-Sep-13	16:09:27	Transportation Boat	Travelling	90	55	30	306	22	0	22.3085	113.9566	1574.22	320.10
30-Sep-13	16:09:31	Transportation Boat	Travelling	91	2	20	299	24	50	22.3062	113.9565	1399.36	313.14
30-Sep-13	16:09:40	Speed Boat	Travelling	92	18	10	330	56	50	22.3031	113.9648	627.98	344.68
30-Sep-13	16:11:05	Speed Boat	Travelling	94	16	0	0	21	10	22.3006	113.9672	338.15	14.08
30-Sep-13	16:11:15	Transportation Boat	Travelling	90	56	10	282	22	20	22.3038	113.9528	1555.00	296.10
30-Sep-13	16:14:22	Other	Travelling	91	1	20	285	28	0	22.3039	113.9543	1421.86	299.20
30-Sep-13	16:14:27	Other	Travelling	91	0	10	284	8	20	22.3037	113.9539	1449.79	297.87
30-Sep-13	16:16:34	Other	Travelling	91	2	40	292	11	20	22.3050	113.9554	1390.96	305.92
30-Sep-13	16:16:38	Other	Travelling	91	2	0	290	44	40	22.3048	113.9551	1406.10	304.47
30-Sep-13	16:16:49	Transportation Boat	Travelling	91	0	30	302	39	40	22.3070	113.9567	1441.39	316.39
30-Sep-13	16:18:39	Transportation Boat	Travelling	90	56	40	289	42	30	22.3053	113.9539	1540.08	303.44
30-Sep-13	16:19:17	Transportation Boat	Travelling	90	55	10	285	50	10	22.3046	113.9530	1582.52	299.57
30-Sep-13	16:19:24	HSF High Speed Ferry	Travelling	91	0	0	298	23	50	22.3064	113.9559	1453.24	312.13
30-Sep-13	16:20:33	HSF High Speed Ferry	Travelling	90	55	0	279	42	0	22.3033	113.9522	1587.22	293.43
30-Sep-13	16:20:42	Other	Travelling	91	3	30	305	1	30	22.3069	113.9576	1371.99	318.75
30-Sep-13	16:20:45	Other	Travelling	91	3	30	303	22	20	22.3067	113.9573	1371.99	317.10
30-Sep-13	16:20:58	Research Vessel	Travelling	92	26	20	0	45	0	22.3028	113.9678	592.24	14.48
30-Sep-13	16:21:54	Transportation Boat	Travelling	90	59	20	292	4	20	22.3054	113.9548	1469.47	305.80
30-Sep-13	16:24:03	Other	Travelling	91	2	0	315	25	50	22.3085	113.9594	1405.19	329.16
30-Sep-13	16:24:19	Other	Travelling	91	2	0	314	35	40	22.3084	113.9592	1405.15	328.32
30-Sep-13	16:24:44	Research Vessel	Stationary	93	23	10	345	31	20	22.3015	113.9663	425.96	359.25
02-Oct-13	8:06:56	Other	Stationary	95	3	20	0	0	0	22.3000	113.9670	274.79	13.73
02-Oct-13	8:09:07	Other	Stationary	90	33	10	278	36	40	22.3064	113.9432	2573.25	292.34
02-Oct-13	8:09:13	Other	Stationary	90	33	0	284	4	20	22.3085	113.9441	2586.84	297.80
02-Oct-13	8:09:19	Other	Stationary	90	31	0	288	24	50	22.3108	113.9437	2761.91	302.14
02-Oct-13	8:09:23	Other	Stationary	90	35	0	293	30	50	22.3109	113.9476	2433.09	307.24
02-Oct-13	8:09:28	Other	Stationary	90	53	0	302	15	20	22.3079	113.9557	1589.42	315.99
02-Oct-13	8:09:32	Other	Stationary	90	53	0	309	46	10	22.3091	113.9572	1589.43	323.50
02-Oct-13	8:09:35	Other	Stationary	90	55	50	318	15	40	22.3096	113.9595	1507.54	331.99
02-Oct-13	8:09:39	Other	Stationary	90	52	30	328	42	30	22.3114	113.9617	1604.83	342.44
02-Oct-13	8:09:44	Other	Stationary	90	49	10	335	12	10	22.3128	113.9632	1715.68	348.93
02-Oct-13	8:09:48	Other	Stationary	90	44	20	339	16	40	22.3147	113.9641	1906.98	353.01
02-Oct-13	8:09:52	Other	Stationary	90	40	10	344	19	30	22.3166	113.9657	2110.32	358.05
02-Oct-13	8:09:59	Other	Stationary	90	29	30	352	8	0	22.3237	113.9693	2910.18	5.86
02-Oct-13	8:10:11	Other	Stationary	90	58	30	304	59	0	22.3073	113.9572	1437.92	318.71
02-Oct-13	8:10:16	Other	Stationary	90	50	10	308	2	40	22.3095	113.9563	1680.91	321.77
02-Oct-13	8:10:28	Other	Stationary	90	29	0	348	9	40	22.3243	113.9674	2963.36	1.89
02-Oct-13	8:10:36	Other	Stationary	90	29	30	352	8	50	22.3237	113.9693	2910.31	5.88
02-Oct-13	8:10:53	Other	Stationary	91	5	50	326	19	40	22.3084	113.9622	1275.98	340.06
02-Oct-13	8:10:56	Other	Stationary	91	4	50	328	33	10	22.3087	113.9626	1295.88	342.28
02-Oct-13	8:11:02	Other	Stationary	91	5	50	332	50	30	22.3088	113.9635	1275.99	346.57
02-Oct-13	8:11:06	Other	Stationary	91	5	20	334	44	0	22.3090	113.9639	1285.87	348.46
02-Oct-13	8:12:39	Other	Stationary	90	36	40	357	24	40	22.3181	113.9708	2319.02	11.14
02-Oct-13	8:12:53	Other	Stationary	90	34	40	2	50	40	22.3188	113.9732	2458.03	16.57
02-Oct-13	8:13:08	Other	Stationary	90	52	30	354	19	10	22.3119	113.9686	1605.23	8.05
02-Oct-13	8:13:12	Other	Stationary	90	53	0	355	55	30	22.3117	113.9690	1589.84	9.65
02-Oct-13	8:13:17	Other	Stationary	91	5	30	6	33	10	22.3084	113.9707	1282.76	20.28
02-Oct-13	8:13:21	Other	Stationary	91	11	30	9	5	30	22.3074	113.9708	1174.08	22.82
02-Oct-13	8:13:39	Other	Stationary	90	51	0	17	19	0	22.3104	113.9747	1653.34	31.05
02-Oct-13	8:13:45	Other	Stationary	90	52	30	18	4	50	22.3099	113.9746	1605.30	31.81
02-Oct-13	8:15:26	Transportation Boat	Travelling	90	58	40	291	8	10	22.3050	113.9550	1434.31	304.87
02-Oct-13	8:15:33	Transportation Boat	Travelling	91	0	50	326	11	30	22.3093	113.9618	1382.58	339.92
02-Oct-13	8:15:41	Transportation Boat	Travelling	90	57	30	324	52	10	22.3099	113.9612	1463.85	338.60
02-Oct-13	8:15:56	Tug Boat	Travelling	91	1	50	322	3	0	22.3088	113.9610	1359.98	335.78
02-Oct-13	8:16:10	HSF High Speed Ferry	Travelling	90	39	20	349	58	50	22.3170	113.9678	2157.35	3.71
02-Oct-13	8:16:36	Transportation Boat	Travelling	90	59	50	302	24	20	22.3067	113.9569	1406.09	316.14
02-Oct-13	8:16:49	Transportation Boat	Travelling	90	55	50	335	51	40	22.3110	113.9637	1508.31	349.59
02-Oct-13	8:16:58	Transportation Boat	Travelling	91	1	10	315	10	40	22.3082	113.9595	1375.09	328.91
02-Oct-13	8:17:12	HSF High Speed Ferry	Travelling	90	47	10	343	2	10	22.3137	113.9654	1790.88	356.77
02-Oct-13	8:17:30	Tug Boat	Travelling	90	51	10	336	17	0	22.3122	113.9636	1648.31	350.01
02-Oct-13	8:17:36	Transportation Boat	Travelling	90	54	40	306	46	40	22.3083	113.9569	1541.08	320.51
02-Oct-13	8:17:43	Transportation Boat	Travelling	91	0	10	280	23	40	22.3028	113.9540	1398.31	294.12
02-Oct-13	8:18:05	Transportation Boat	Travelling	90	49	30	342	13	0	22.3130	113.9652	1708.35	355.95
02-Oct-13	8:18:11	Transportation Boat	Travelling	91	1	30	305	14	50	22.3069	113.9577	1370.42	318.98
02-Oct-13	8:18:16	Transportation Boat	Travelling	91	4	40	287	48	0	22.3037	113.9556	1302.55	301.53
02-Oct-13	8:18:21	HSF High Speed Ferry	Travelling	90	56	50	329	39	20	22.3104	113.9623	1484.55	343.39
02-Oct-13	8:18:29	Tug Boat	Travelling	90	47	50	340	41	20	22.3135	113.9647	1769.17	354.42
02-Oct-13	8:19:04	Transportation Boat	Travelling	91	0	50	298	3	10	22.3059	113.9563	1385.79	311.78
02-Oct-13	8:19:07	Transportation Boat	Travelling	91	7	20	301	18	40	22.3056	113.9578	1250.57	315.04

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	8:19:14	Transportation Boat	Travelling	90	55	10	281	0	30	22.3034	113.9529	1530.26	294.74
02-Oct-13	8:19:25	HSF High Speed Ferry	Travelling	91	1	10	312	37	40	22.3079	113.9590	1378.21	326.36
02-Oct-13	8:19:49	Tug Boat	Travelling	90	43	30	345	6	10	22.3152	113.9660	1949.96	358.83
02-Oct-13	8:20:58	Transportation Boat	Travelling	90	56	20	283	52	40	22.3039	113.9535	1498.46	297.61
02-Oct-13	8:21:03	Transportation Boat	Travelling	90	58	30	329	56	10	22.3101	113.9625	1442.21	343.67
02-Oct-13	8:21:09	Transportation Boat	Travelling	91	1	10	303	56	50	22.3068	113.9574	1378.55	317.68
02-Oct-13	8:21:15	HSF High Speed Ferry	Travelling	90	56	30	282	16	20	22.3035	113.9533	1494.04	296.00
02-Oct-13	8:22:52	Tug Boat	Travelling	90	57	10	283	14	0	22.3036	113.9536	1476.70	296.96
02-Oct-13	8:22:59	Transportation Boat	Travelling	90	44	20	348	36	10	22.3148	113.9672	1913.27	2.33
02-Oct-13	8:23:42	Speed Boat	Travelling	91	25	30	284	43	30	22.3018	113.9580	983.51	298.45
02-Oct-13	8:23:53	Tug Boat	Travelling	91	1	10	294	20	30	22.3053	113.9558	1379.07	308.07
02-Oct-13	8:24:04	Speed Boat	Travelling	91	42	40	300	21	0	22.3027	113.9607	818.25	314.08
02-Oct-13	8:25:43	Speed Boat	Travelling	91	2	40	3	42	40	22.3092	113.9703	1346.01	17.44
02-Oct-13	8:26:57	Speed Boat	Travelling	93	50	10	11	14	40	22.3006	113.9679	364.06	24.97
02-Oct-13	8:27:07	Tug Boat	Travelling	90	54	50	330	34	40	22.3110	113.9623	1541.40	344.31
02-Oct-13	8:27:15	Speed Boat	Travelling	92	32	40	26	31	30	22.3014	113.9699	549.66	40.25
02-Oct-13	8:28:37	Speed Boat	Travelling	90	59	30	43	33	0	22.3045	113.9780	1419.14	57.28
02-Oct-13	8:29:41	HSF High Speed Ferry	Travelling	91	6	40	299	33	40	22.3054	113.9574	1265.06	313.29
02-Oct-13	8:29:49	Transportation Boat	Travelling	90	47	30	343	44	10	22.3137	113.9656	1784.67	357.47
02-Oct-13	8:30:28	Transportation Boat	Travelling	93	43	0	341	24	20	22.3010	113.9661	375.99	355.14
02-Oct-13	8:30:36	Transportation Boat	Travelling	91	2	30	293	31	40	22.3050	113.9559	1350.55	307.26
02-Oct-13	8:30:42	HSF High Speed Ferry	Travelling	91	7	20	311	1	20	22.3068	113.9594	1252.58	324.75
02-Oct-13	8:30:48	Transportation Boat	Travelling	90	54	30	331	25	50	22.3111	113.9625	1551.78	345.16
02-Oct-13	8:30:55	Transportation Boat	Travelling	93	1	40	335	14	40	22.3017	113.9655	461.89	348.97
02-Oct-13	8:31:01	Transportation Boat	Travelling	91	2	30	298	42	20	22.3058	113.9567	1350.63	312.44
02-Oct-13	8:31:55	Transportation Boat	Travelling	90	58	10	305	45	20	22.3076	113.9572	1452.78	319.49
02-Oct-13	8:32:00	Transportation Boat	Travelling	91	2	40	312	7	30	22.3077	113.9590	1347.18	325.85
02-Oct-13	8:32:05	Transportation Boat	Travelling	92	1	30	325	19	0	22.3034	113.9640	691.67	339.05
02-Oct-13	8:32:12	Transportation Boat	Travelling	91	1	10	312	34	50	22.3080	113.9590	1380.67	326.31
02-Oct-13	8:32:17	Transportation Boat	Travelling	91	1	50	301	20	40	22.3063	113.9570	1365.61	315.07
02-Oct-13	8:32:27	HSF High Speed Ferry	Travelling	91	0	50	328	41	40	22.3095	113.9623	1388.38	342.42
02-Oct-13	8:33:24	Transportation Boat	Travelling	91	3	40	285	19	30	22.3034	113.9551	1326.03	299.05
02-Oct-13	8:33:34	Transportation Boat	Travelling	90	58	10	278	41	40	22.3026	113.9533	1453.12	292.42
02-Oct-13	8:33:43	Transportation Boat	Travelling	91	22	10	318	27	40	22.3058	113.9617	1025.12	332.19
02-Oct-13	8:33:49	Transportation Boat	Travelling	90	55	20	329	30	50	22.3108	113.9621	1528.69	343.24
02-Oct-13	8:33:55	HSF High Speed Ferry	Travelling	90	54	10	340	36	50	22.3116	113.9649	1562.15	354.34
02-Oct-13	8:34:03	Transportation Boat	Travelling	90	47	10	343	36	10	22.3138	113.9656	1798.61	357.33
02-Oct-13	8:34:15	Transportation Boat	Travelling	90	58	30	306	17	40	22.3076	113.9574	1444.86	320.02
02-Oct-13	8:35:14	HSF High Speed Ferry	Travelling	90	55	40	284	56	30	22.3042	113.9534	1519.69	298.67
02-Oct-13	8:35:21	Transportation Boat	Travelling	91	3	0	313	20	40	22.3077	113.9593	1340.59	327.07
02-Oct-13	8:35:26	Transportation Boat	Travelling	90	47	30	341	49	10	22.3136	113.9651	1786.07	355.55
02-Oct-13	8:35:32	Transportation Boat	Travelling	90	56	0	329	1	40	22.3106	113.9620	1510.58	342.76
02-Oct-13	8:35:36	Transportation Boat	Travelling	91	0	30	294	23	30	22.3054	113.9557	1396.74	308.12
02-Oct-13	8:35:42	HSF High Speed Ferry	Travelling	90	44	20	349	27	30	22.3148	113.9674	1916.67	3.19
02-Oct-13	8:36:18	Transportation Boat	Travelling	90	56	40	285	29	30	22.3042	113.9537	1492.70	299.22
02-Oct-13	8:36:33	Transportation Boat	Travelling	90	58	20	313	9	20	22.3085	113.9587	1449.51	326.89
02-Oct-13	8:36:39	Transportation Boat	Travelling	90	54	10	307	54	50	22.3086	113.9570	1562.75	321.64
02-Oct-13	8:36:49	Transportation Boat	Travelling	91	2	0	313	16	20	22.3079	113.9592	1362.76	327.00
02-Oct-13	8:36:54	Transportation Boat	Travelling	90	56	40	281	32	20	22.3034	113.9533	1492.82	295.27
02-Oct-13	8:37:03	Transportation Boat	Travelling	90	57	40	291	39	10	22.3053	113.9548	1466.60	305.38
02-Oct-13	8:37:16	HSF High Speed Ferry	Travelling	90	59	20	319	34	0	22.3091	113.9602	1424.89	333.30
02-Oct-13	8:37:25	Transportation Boat	Travelling	90	58	30	319	44	30	22.3093	113.9601	1445.49	333.47
02-Oct-13	8:37:51	Fishing Boat	Non-operate and travelling	94	45	10	334	1	10	22.3002	113.9658	294.01	347.75
02-Oct-13	8:38:46	Fishing Boat	Non-operate and travelling	93	11	0	280	19	30	22.2992	113.9625	439.72	294.05
02-Oct-13	8:38:55	HSF High Speed Ferry	Travelling	90	48	10	342	9	30	22.3134	113.9652	1761.70	355.89
02-Oct-13	8:39:01	Transportation Boat	Travelling	90	58	40	283	15	40	22.3035	113.9539	1441.65	296.99
02-Oct-13	8:39:06	Transportation Boat	Travelling	90	56	0	307	11	50	22.3082	113.9571	1511.33	320.93
02-Oct-13	8:39:11	Transportation Boat	Travelling	90	54	10	332	25	20	22.3113	113.9628	1563.30	346.15
02-Oct-13	8:39:19	Transportation Boat	Travelling	90	58	40	306	24	40	22.3076	113.9574	1441.71	320.14
02-Oct-13	8:40:41	Transportation Boat	Travelling	91	1	40	287	59	0	22.3041	113.9551	1370.95	301.71
02-Oct-13	8:40:46	Transportation Boat	Travelling	91	0	10	292	39	0	22.3051	113.9554	1405.58	306.38
02-Oct-13	8:41:51	Transportation Boat	Travelling	91	2	0	288	47	10	22.3042	113.9552	1363.71	302.52
02-Oct-13	8:41:58	Transportation Boat	Travelling	90	45	0	346	41	20	22.3146	113.9665	1889.26	0.42
02-Oct-13	8:42:03	Transportation Boat	Travelling	90	54	50	280	20	30	22.3033	113.9527	1544.61	294.07
02-Oct-13	8:42:09	Transportation Boat	Travelling	90	52	40	305	13	40	22.3085	113.9561	1609.23	318.96
02-Oct-13	8:42:12	Transportation Boat	Travelling	91	3	10	296	16	50	22.3054	113.9564	1338.29	310.01
02-Oct-13	8:43:28	Transportation Boat	Travelling	90	59	40	322	4	10	22.3093	113.9607	1418.05	335.80
02-Oct-13	8:47:07	Transportation Boat	Travelling	91	4	20	288	12	50	22.3039	113.9555	1314.63	301.94
02-Oct-13	8:47:14	Transportation Boat	Travelling	91	0	10	304	30	50	22.3071	113.9573	1406.84	318.24
02-Oct-13	8:47:26	Transportation Boat	Travelling	90	44	30	345	18	10	22.3148	113.9661	1912.45	359.03
02-Oct-13	8:48:21	Transportation Boat	Travelling	90	57	40	306	33	50	22.3078	113.9573	1468.91	320.29
02-Oct-13	8:48:29	Transportation Boat	Travelling	91	2	50	294	14	30	22.3051	113.9561	1346.64	307.97
02-Oct-13	8:48:34	Transportation Boat	Travelling	90	48	30	340	26	20	22.3133	113.9647	1751.70	354.17
02-Oct-13	8:49:31	Transportation Boat	Travelling	91	8	30	315	18	30	22.3071	113.9602	1234.25	329.04
02-Oct-13	8:49:41	Transportation Boat	Travelling	91	2	30	283	50	30	22.3033	113.9547	1354.14	297.57
02-Oct-13	8:49:58	Speed Boat	Travelling	91	49	0	25	57	10	22.3030	113.9712	773.25	39.68
02-Oct-13	8:50:18	Transportation Boat	Travelling	90	54	20	330	58	20	22.3112	113.9624	1560.84	344.70
02-Oct-13	8:50:25	Transportation Boat	Travelling	91	16	10	320	54	20	22.3066	113.9618	1109.08	334.64
02-Oct-13	8:50:44	Speed Boat	Travelling	93	26	40	343	15	0	22.3013	113.9662	406.95	356.98
02-Oct-13	8:52:11	Transportation Boat	Travelling	91	27	0	337	0	0	22.3062	113.9649	970.27	350.73
02-Oct-13	8:54:42	Transportation Boat	Travelling	91	0	0	299	7	50	22.3063	113.9563	1412.26	312.86
02-Oct-13	8:54:49	Transportation Boat	Travelling	91	30	50	5	44	20	22.3055	113.9694	929.41	19.47
02-Oct-13	8:55:05	Tour Boat	Travelling	90	47	30	9	49	20	22.3124	113.9734	1790.96	23.55
02-Oct-13	8:56:34	Transportation Boat	Travelling	90	59	50	284	32	40	22.3037	113.9543	1416.61	298.27
02-Oct-13	8:57:25	Other	Stationary	94	26	20	0	0	0	22.3004	113.9671	315.76	13.73
02-Oct-13	8:57:36	Transportation Boat	Travelling	91	6	40	25	52	50	22.3064	113.9743	1269.97	39.61
02-Oct-13	8:57:46	Transportation Boat	Travelling	91	6	30	314	12	30	22.3073	113.9598	1273.21	327.94
02-Oct-13	8:57:51	Transportation Boat	Travelling	90	59	20	290	29	30	22.3049	113.9549	1428.97	304.22
02-Oct-13	8:57:56	Transportation Boat	Travelling	90	41	30	347	43	40	22.3161	113.9669	2057.39	1.46
02-Oct-13	8:58:15	Tour Boat	Travelling	91	2	40	352	6	20	22.3097	113.9677	1352.09	5.84
02-Oct-13	9:00:10	Transportation Boat	Travelling	90	56	50	305	54	50	22.3079	113.9570	1493.20	319.64
02-Oct-13	9:00:15	Transportation Boat	Travelling	91	5	40	293	34	40	22.3047	113.9564	1289.99	307.31
02-Oct-13	9:00:21	Transportation Boat	Travelling	90	55	50	325	1	10	22.3104	113.9610	1520.38	338.75
02-Oct-13	9:00:32	Tug Boat	Travelling	90	50	50	336	37	20	22.3125	113.9637	1672.58	350.35
02-Oct-13	9:00:40	Transportation Boat	Travelling	90	47	50	34	2	0	22.3084	113.9792	1779.61	47.76
02-Oct-13	9:02:32	Transportation Boat	Travelling	90	59	20	292	29	20	22.3052	113.9552	1429.89	306.22
02-Oct-13	9:02:37	Tug Boat	Travelling	90	58	50	318	34	50	22.3091	113.9599	1442.23	332.31
02-Oct-13	9:02:44	Tour Boat	Travelling	91	12	40	308	59	30	22.3060	113.9595	1164.95	322.72
02-Oct-13	9:03:28	Transportation Boat	Travelling	91	30	10	283	13	0	22.3014	113.9583	937.44	296.95
02-Oct-13	9:05:25	Transportation Boat	Travelling	91	0	30	296	37	10	22.3058	113.9560	1402.52	310.35
02-Oct-13	9:05:36	Transportation Boat	Travelling	91	58	50	307	42	40	22.3026	113.9621	710.53	321.44
02-Oct-13	9:06:23	Tour Boat	Travelling	90	56	10	279	35	0	22.3030	113.9529	1512.49	293.31
02-Oct-13	9:06:40	Transportation Boat	Travelling	90	53	0	307	6	30	22.3088	113.9565	1604.39	320.84
02-Oct-13	9:07:29	Transportation Boat	Travelling	91	0	10	305	20	0	22.3072	113.9574	1410.80	319.06
02-Oct-13	9:08:15	Research Vessel	Travelling	90	53	50	282	40	40	22.3039	113.9526	1579.50	296.41
02-Oct-13	9:08:25	Transportation Boat	Travelling	90	58	50	285	12	20	22.3039	113.9541	1443.39	298.94
02-Oct-13	9:08:30	Transportation Boat	Travelling	91	3	30	291	2	0	22.3045	113.9557	1336.04	304.76
02-Oct-13	9:08:40	Transportation Boat	Travelling	91	40	40	351	23	10	22.3051	113.9671	839.74	5.12
02-Oct-13	9:09:15	Transportation Boat	Travelling	90	59	40	288	9	0	22.3044	113.9546	1423.12	301.88
02-Oct-13	9:09:23	Transportation Boat	Travelling	91	30	40	358	12	50	22.3058	113.9683	933.00	11.94
02-Oct-13	9:09:31	Transportation Boat	Travelling	91	2	20	285	10	30	22.3035	113.9548	1361.54	298.90
02-Oct-13	9:09:36	Transportation Boat	Travelling	91	0	20	294	30	30	22.3055	113.9556	1407.26	308.24
02-Oct-13	9:09:39	Transportation Boat	Travelling	91	0	30	294	33	30	22.3054	113.9557	1403.34	308.29
02-Oct-13	9:10:55	Transportation Boat	Travelling	90	52	50	306	35	40	22.3088	113.9564	1610.49	320.32
02-Oct-13	9:11:04	Research Vessel	Travelling	90	56	10	290	14	20	22.3052	113.9542	1513.47	303.97
02-Oct-13	9:11:12	Transportation Boat	Travelling	91	1	20	303	27	40	22.3068	113.9572	1384.33	317.19
02-Oct-13	9:11:26	Transportation Boat	Stationary	91	13	0	8	18	20	22.3073	113.9706	1160.98	22.04

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	9:11:41	Transportation Boat	Travelling	90	49	10	36	37	20	22.3076	113.9794	1733.04	50.35
02-Oct-13	9:12:19	Transportation Boat	Travelling	91	1	40	284	1	50	22.3034	113.9545	1376.97	297.76
02-Oct-13	9:13:29	Transportation Boat	Travelling	91	5	0	301	26	30	22.3060	113.9574	1305.76	315.17
02-Oct-13	9:13:33	Transportation Boat	Travelling	91	2	10	286	42	10	22.3038	113.9549	1365.99	300.43
02-Oct-13	9:13:43	Transportation Boat	Travelling	90	59	40	34	46	10	22.3061	113.9768	1424.00	48.50
02-Oct-13	9:14:01	Transportation Boat	Stationary	91	17	30	16	25	20	22.3061	113.9717	1093.40	30.15
02-Oct-13	9:14:09	Transportation Boat	Travelling	90	58	0	306	55	20	22.3078	113.9574	1465.58	320.65
02-Oct-13	9:14:14	Transportation Boat	Travelling	91	4	30	295	18	20	22.3051	113.9565	1316.13	309.04
02-Oct-13	9:16:13	Transportation Boat	Travelling	90	50	10	304	22	0	22.3090	113.9554	1698.91	318.10
02-Oct-13	9:16:22	Transportation Boat	Travelling	91	27	30	30	44	30	22.3038	113.9730	967.91	44.47
02-Oct-13	9:16:35	Research Vessel	Travelling	92	15	20	283	15	10	22.3002	113.9610	624.54	296.98
02-Oct-13	9:18:34	HSF High Speed Ferry	Travelling	90	47	40	342	3	30	22.3137	113.9651	1790.40	355.79
02-Oct-13	9:18:44	Transportation Boat	Travelling	92	26	20	21	22	0	22.3019	113.9696	577.61	35.10
02-Oct-13	9:18:55	Research Vessel	Travelling	91	24	10	307	33	10	22.3047	113.9603	1006.86	321.28
02-Oct-13	9:20:17	Speed Boat	Travelling	91	43	30	285	43	20	22.3012	113.9595	817.95	299.45
02-Oct-13	9:20:57	Speed Boat	Travelling	91	35	10	318	16	30	22.3047	113.9623	890.05	332.00
02-Oct-13	9:21:05	Research Vessel	Travelling	91	3	10	322	18	10	22.3087	113.9611	1345.51	336.03
02-Oct-13	9:21:10	HSF High Speed Ferry	Travelling	91	1	0	305	35	0	22.3071	113.9576	1393.91	319.31
02-Oct-13	9:21:24	Transportation Boat	Stationary	95	48	0	359	37	50	22.2997	113.9669	242.08	13.36
02-Oct-13	9:21:36	Speed Boat	Travelling	91	14	30	340	8	40	22.3078	113.9652	1138.99	353.87
02-Oct-13	9:22:53	HSF High Speed Ferry	Travelling	90	54	10	278	48	40	22.3030	113.9523	1572.80	292.54
02-Oct-13	9:23:00	Speed Boat	Travelling	90	44	50	1	54	30	22.3141	113.9714	1907.31	15.64
02-Oct-13	9:23:06	Research Vessel	Travelling	91	3	40	337	45	0	22.3095	113.9645	1335.19	351.48
02-Oct-13	9:26:49	Research Vessel	Acoustic Recording	92	5	30	340	52	50	22.3037	113.9658	674.61	354.61
02-Oct-13	9:28:51	Tug Boat	Travelling	91	2	10	314	10	10	22.3081	113.9593	1368.88	327.90
02-Oct-13	9:29:58	Tug Boat	Travelling	91	11	40	326	12	30	22.3076	113.9624	1185.80	339.94
02-Oct-13	9:33:11	Transportation Boat	Travelling	91	2	50	296	4	10	22.3054	113.9563	1354.99	309.80
02-Oct-13	9:33:22	Transportation Boat	Travelling	92	20	10	319	48	50	22.3025	113.9638	604.33	333.54
02-Oct-13	9:33:39	Tug Boat	Travelling	90	52	40	7	17	10	22.3112	113.9721	1620.76	21.02
02-Oct-13	9:34:04	Transportation Boat	Travelling	91	0	10	306	44	10	22.3074	113.9576	1415.99	320.47
02-Oct-13	9:34:15	Research Vessel	Travelling	92	53	40	344	43	50	22.3020	113.9663	487.47	358.46
02-Oct-13	9:34:35	Transportation Boat	Travelling	91	44	50	314	29	0	22.3038	113.9623	809.09	328.21
02-Oct-13	9:34:57	Research Vessel	Travelling	93	54	50	353	25	30	22.3008	113.9668	360.15	7.15
02-Oct-13	9:37:09	Transportation Boat	Travelling	91	6	20	285	28	40	22.3033	113.9555	1283.40	299.21
02-Oct-13	9:37:18	Transportation Boat	Travelling	91	7	40	309	11	20	22.3067	113.9590	1257.88	322.92
02-Oct-13	9:37:37	Research Vessel	Travelling	91	49	40	30	51	50	22.3026	113.9717	773.59	44.59
02-Oct-13	9:39:28	Transportation Boat	Travelling	91	7	20	320	21	0	22.3079	113.9610	1264.55	334.08
02-Oct-13	9:40:43	Research Vessel	Travelling	91	11	50	357	0	30	22.3081	113.9685	1184.78	10.74
02-Oct-13	9:40:53	Tour Boat	Travelling	91	4	50	287	18	40	22.3037	113.9554	1314.10	301.04
02-Oct-13	9:40:59	Transportation Boat	Travelling	91	4	50	282	9	50	22.3028	113.9549	1314.12	295.89
02-Oct-13	9:41:10	Transportation Boat	Travelling	91	5	10	317	58	50	22.3080	113.9604	1307.36	331.71
02-Oct-13	9:41:15	Transportation Boat	Travelling	91	12	20	317	37	50	22.3069	113.9609	1176.60	331.36
02-Oct-13	9:41:33	Transportation Boat	Travelling	90	59	50	286	31	10	22.3041	113.9544	1425.45	300.25
02-Oct-13	9:41:47	Transportation Boat	Travelling	90	59	50	311	10	50	22.3081	113.9584	1425.49	324.91
02-Oct-13	9:41:51	Transportation Boat	Travelling	91	5	50	293	59	50	22.3047	113.9564	1294.09	307.73
02-Oct-13	9:41:57	Transportation Boat	Travelling	91	13	20	310	49	40	22.3061	113.9599	1160.52	324.56
02-Oct-13	9:42:03	Transportation Boat	Travelling	91	1	20	290	54	10	22.3047	113.9553	1390.24	304.63
02-Oct-13	9:42:16	Transportation Boat	Travelling	90	54	20	307	44	10	22.3087	113.9569	1572.10	321.47
02-Oct-13	9:43:05	Transportation Boat	Travelling	90	58	0	306	49	0	22.3078	113.9573	1471.44	320.55
02-Oct-13	9:43:11	Transportation Boat	Travelling	91	13	20	298	14	10	22.3046	113.9580	1160.72	311.97
02-Oct-13	9:43:15	Transportation Boat	Travelling	91	1	50	301	53	50	22.3065	113.9570	1379.08	315.63
02-Oct-13	9:43:26	Tour Boat	Travelling	91	6	20	316	41	10	22.3077	113.9602	1284.51	330.42
02-Oct-13	9:43:35	Research Vessel	Travelling	90	49	10	347	34	50	22.3133	113.9668	1740.71	1.31
02-Oct-13	9:44:26	Transportation Boat	Travelling	91	0	40	285	34	10	22.3038	113.9545	1406.17	299.30
02-Oct-13	9:44:39	Transportation Boat	Travelling	91	8	40	284	27	0	22.3029	113.9558	1240.62	298.18
02-Oct-13	9:44:44	Transportation Boat	Travelling	90	52	40	304	21	40	22.3085	113.9559	1623.24	318.09
02-Oct-13	9:44:53	Transportation Boat	Travelling	91	2	20	309	26	20	22.3075	113.9584	1368.19	323.17
02-Oct-13	9:45:14	Tug Boat	Travelling	90	56	40	349	57	50	22.3112	113.9673	1507.01	3.69
02-Oct-13	9:45:27	Container Boat	Travelling	90	56	10	350	4	30	22.3113	113.9674	1520.67	3.80
02-Oct-13	9:45:42	Research Vessel	Travelling	90	46	50	0	45	0	22.3136	113.9709	1829.80	14.48
02-Oct-13	9:46:06	Transportation Boat	Travelling	91	2	40	304	45	20	22.3068	113.9576	1361.06	318.49
02-Oct-13	9:46:11	Transportation Boat	Travelling	91	17	10	310	30	20	22.3057	113.9601	1103.03	324.24
02-Oct-13	9:46:27	Transportation Boat	Travelling	91	2	10	285	41	50	22.3037	113.9548	1372.20	299.43
02-Oct-13	9:47:11	Transportation Boat	Travelling	91	33	0	313	59	10	22.3046	113.9617	914.19	327.72
02-Oct-13	9:47:17	Transportation Boat	Travelling	91	2	10	295	21	30	22.3054	113.9560	1372.36	309.09
02-Oct-13	9:47:25	Tour Boat	Travelling	90	45	40	347	46	20	22.3145	113.9669	1878.05	1.50
02-Oct-13	9:47:43	Dumping Guide Boat	Travelling	91	14	50	28	6	30	22.3052	113.9738	1137.95	41.84
02-Oct-13	9:48:10	Tug Boat	Travelling	91	21	30	357	48	30	22.3068	113.9684	1044.23	11.54
02-Oct-13	9:48:15	Container Boat	Travelling	91	19	40	356	50	50	22.3071	113.9683	1068.45	10.58
02-Oct-13	9:48:22	Research Vessel	Travelling	90	58	40	17	18	10	22.3088	113.9737	1455.55	31.03
02-Oct-13	9:48:29	Transportation Boat	Travelling	90	57	50	306	29	20	22.3078	113.9572	1476.84	320.22
02-Oct-13	9:48:53	Transportation Boat	Travelling	91	3	0	287	27	0	22.3039	113.9551	1354.29	301.18
02-Oct-13	9:49:01	Transportation Boat	Travelling	90	45	20	349	28	30	22.3146	113.9674	1892.60	3.20
02-Oct-13	9:49:15	Dumping Guide Boat	Travelling	91	50	10	24	58	10	22.3030	113.9711	771.29	38.70
02-Oct-13	9:49:23	Research Vessel	Travelling	91	4	10	24	43	50	22.3070	113.9744	1329.47	38.46
02-Oct-13	9:50:32	Transportation Boat	Travelling	94	42	20	342	51	40	22.3003	113.9662	299.95	356.59
02-Oct-13	9:50:41	Transportation Boat	Travelling	91	2	50	302	24	40	22.3064	113.9572	1358.26	316.14
02-Oct-13	9:50:49	Transportation Boat	Travelling	90	56	50	334	4	0	22.3108	113.9633	1503.68	347.80
02-Oct-13	9:50:59	Research Vessel	Travelling	91	10	10	39	23	40	22.3042	113.9759	1214.90	53.12
02-Oct-13	9:51:08	Dumping Guide Boat	Travelling	93	21	10	8	59	20	22.3011	113.9680	421.60	22.72
02-Oct-13	9:52:27	Tug Boat	Travelling	91	18	50	1	10	40	22.3070	113.9691	1080.46	14.91
02-Oct-13	9:52:32	Container Boat	Travelling	91	23	10	2	52	30	22.3064	113.9692	1023.77	16.60
02-Oct-13	9:52:42	Transportation Boat	Travelling	90	50	50	305	31	20	22.3091	113.9557	1684.69	319.25
02-Oct-13	9:52:46	Transportation Boat	Travelling	91	2	20	310	15	10	22.3076	113.9586	1369.68	323.98
02-Oct-13	9:52:50	Transportation Boat	Travelling	90	58	20	306	14	30	22.3077	113.9572	1464.88	319.97
02-Oct-13	9:53:03	Transportation Boat	Stationary	95	29	20	359	14	50	22.2999	113.9670	257.01	12.98
02-Oct-13	9:53:10	Dumping Guide Boat	Stationary	93	38	30	358	52	50	22.3010	113.9672	388.15	12.61
02-Oct-13	9:54:50	Transportation Boat	Travelling	90	58	0	283	14	20	22.3036	113.9536	1473.82	296.97
02-Oct-13	9:54:53	Transportation Boat	Travelling	90	56	0	283	27	50	22.3039	113.9532	1527.25	297.19
02-Oct-13	9:55:04	Transportation Boat	Travelling	93	48	50	343	27	10	22.3010	113.9662	370.65	357.18
02-Oct-13	9:55:35	Tug Boat	Travelling	90	51	10	345	2	10	22.3127	113.9660	1674.18	358.77
02-Oct-13	9:55:42	Construction Platform	Travelling	90	48	50	345	44	30	22.3134	113.9662	1755.76	359.47
02-Oct-13	9:55:52	Tug Boat	Stationary	91	13	10	7	34	20	22.3074	113.9705	1165.41	21.30
02-Oct-13	9:55:57	Container Boat	Stationary	91	15	0	8	47	40	22.3071	113.9706	1136.69	22.52
02-Oct-13	9:56:16	Transportation Boat	Travelling	91	51	40	326	46	20	22.3041	113.9639	761.61	340.50
02-Oct-13	9:58:54	Transportation Boat	Travelling	90	59	40	311	2	40	22.3082	113.9584	1432.90	324.77
02-Oct-13	9:59:07	Transportation Boat	Travelling	90	59	30	291	44	0	22.3051	113.9550	1437.01	305.46
02-Oct-13	9:59:17	Tug Boat	Travelling	90	59	0	329	11	30	22.3101	113.9623	1449.38	342.92
02-Oct-13	9:59:21	Construction Platform	Travelling	90	58	10	330	35	40	22.3104	113.9625	1470.45	344.32
02-Oct-13	10:00:14	Transportation Boat	Travelling	90	48	40	307	32	10	22.3100	113.9557	1763.00	321.27
02-Oct-13	10:00:19	Transportation Boat	Travelling	91	0	20	300	48	0	22.3066	113.9566	1417.13	314.53
02-Oct-13	10:01:56	Transportation Boat	Travelling	90	58	0	284	33	50	22.3039	113.9538	1475.26	298.29
02-Oct-13	10:02:02	Transportation Boat	Travelling	90	57	50	307	20	50	22.3080	113.9574	1479.59	321.08
02-Oct-13	10:02:35	Transportation Boat	Travelling	91	0	40	292	23	30	22.3051	113.9553	1409.68	306.12
02-Oct-13	10:02:43	Transportation Boat	Travelling	91	3	0	301	54	20	22.3063	113.9572	1356.86	315.64
02-Oct-13	10:03:57	Transportation Boat	Travelling	90	56	20	306	56	40	22.3082	113.9570	1519.97	320.67
02-Oct-13	10:04:03	Transportation Boat	Travelling	91	3	30	286	6	0	22.3036	113.9550	1346.30	299.83
02-Oct-13	10:04:08	Transportation Boat	Travelling	90	59	40	296	25	10	22.3059	113.9557	1433.93	310.15
02-Oct-13	10:04:16	Tug Boat	Travelling	91	2	30	302	17	20	22.3065	113.9572	1368.14	316.02
02-Oct-13	10:04:20	Construction Platform	Travelling	91	2	30	303	51	30	22.3067	113.9574	1368.15	317.59
02-Oct-13	10:04:33	Transportation Boat	Travelling	91	59	20	18	11	0	22.3031	113.9701	713.29	31.91
02-Oct-13	10:05:40	Transportation Boat	Travelling	90	56	30	284	43	0	22.3041	113.9534	1515.78	298.45
02-Oct-13	10:05:50	Transportation Boat	Travelling	92	47	20	11	58	40	22.3017	113.9685	508.17	25.71
02-Oct-13	10:07:33	Tug Boat	Travelling	90	58	30	284	29	0	22.3038	113.9539	1463.61	298.21
02-Oct-13	10:07:46	Construction Platform	Travelling	90	58	30	284	45	10	22.3039	113.9539	1463.65	298.48
02-Oct-13	10:10:05	Transportation Boat	Travelling	92	22	10	324	0	40	22.3026	113.9642	598.80	337.74
02-Oct-13	10:10:12	Transportation Boat	Travelling	92	24	0	9	10	40	22.3025	113.9686	591.16	22.91

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	10:11:12	Transportation Boat	Travelling	91	43	50	320	23	10	22.3043	113.9629	821.02	334.12
02-Oct-13	10:11:19	Transportation Boat	Travelling	91	47	10	8	54	30	22.3042	113.9694	795.38	22.64
02-Oct-13	10:11:31	Transportation Boat	Travelling	90	58	20	306	21	10	22.3078	113.9572	1468.64	320.08
02-Oct-13	10:11:58	Transportation Boat	Travelling	90	58	20	282	22	20	22.3034	113.9536	1468.74	296.10
02-Oct-13	10:12:32	Transportation Boat	Travelling	91	18	50	316	13	50	22.3061	113.9611	1083.43	329.96
02-Oct-13	10:12:38	Transportation Boat	Travelling	91	22	10	8	7	30	22.3063	113.9702	1039.17	21.85
02-Oct-13	10:12:46	Transportation Boat	Travelling	91	2	10	288	59	0	22.3043	113.9551	1377.17	302.71
02-Oct-13	10:12:50	Transportation Boat	Travelling	91	0	40	292	47	0	22.3052	113.9554	1411.67	306.51
02-Oct-13	10:13:52	Transportation Boat	Travelling	90	56	30	275	58	0	22.3022	113.9525	1517.49	289.70
02-Oct-13	10:13:58	Transportation Boat	Travelling	90	59	40	306	1	40	22.3075	113.9574	1435.86	319.76
02-Oct-13	10:14:03	Transportation Boat	Travelling	91	2	20	311	29	50	22.3078	113.9588	1373.68	325.23
02-Oct-13	10:14:12	Transportation Boat	Stationary	91	14	0	7	37	40	22.3073	113.9705	1155.07	21.36
02-Oct-13	10:16:26	Transportation Boat	Travelling	91	42	10	5	33	30	22.3047	113.9691	835.08	19.29
02-Oct-13	10:19:19	Transportation Boat	Travelling	93	1	0	5	30	20	22.3016	113.9679	470.54	19.24
02-Oct-13	10:23:13	Container Boat	Travelling	90	52	30	342	37	20	22.3123	113.9654	1637.13	356.35
02-Oct-13	10:23:28	Transportation Boat	Travelling	90	55	40	280	52	10	22.3034	113.9528	1542.58	294.60
02-Oct-13	10:25:00	Transportation Boat	Travelling	93	32	0	357	54	10	22.3012	113.9672	401.83	11.63
02-Oct-13	10:25:12	Transportation Boat	Travelling	91	0	50	302	51	0	22.3068	113.9570	1410.14	316.58
02-Oct-13	10:25:30	Government Boat	Travelling	90	42	40	347	6	40	22.3158	113.9667	2024.07	0.84
02-Oct-13	10:26:23	Transportation Boat	Travelling	90	51	10	306	19	0	22.3092	113.9559	1681.29	320.05
02-Oct-13	10:26:31	Transportation Boat	Travelling	90	52	30	306	7	20	22.3089	113.9561	1637.87	319.85
02-Oct-13	10:26:37	Transportation Boat	Travelling	90	46	50	348	44	50	22.3142	113.9672	1840.15	2.48
02-Oct-13	10:26:47	Transportation Boat	Travelling	91	53	50	0	42	50	22.3042	113.9682	750.17	14.44
02-Oct-13	10:26:55	Dumping Guide Boat	Travelling	92	32	20	4	20	10	22.3024	113.9681	559.99	18.07
02-Oct-13	10:27:07	Government Boat	Travelling	90	53	10	333	54	20	22.3118	113.9630	1617.12	347.64
02-Oct-13	10:27:20	Transportation Boat	Travelling	90	57	0	281	1	30	22.3033	113.9531	1506.76	294.75
02-Oct-13	10:27:52	Transportation Boat	Travelling	91	13	30	314	14	10	22.3065	113.9604	1165.17	327.97
02-Oct-13	10:27:58	Transportation Boat	Travelling	90	56	50	335	54	30	22.3110	113.9638	1511.37	349.64
02-Oct-13	10:28:03	Transportation Boat	Travelling	90	59	40	289	33	40	22.3047	113.9547	1438.64	303.29
02-Oct-13	10:28:15	Transportation Boat	Travelling	91	25	50	2	57	30	22.3062	113.9692	996.60	16.69
02-Oct-13	10:28:43	Container Boat	Stationary	90	58	0	342	42	0	22.3109	113.9655	1480.69	356.43
02-Oct-13	10:29:07	Transportation Boat	Travelling	91	3	20	290	21	30	22.3045	113.9555	1354.53	304.09
02-Oct-13	10:29:18	Transportation Boat	Stationary	91	19	20	4	50	0	22.3068	113.9697	1079.02	18.56
02-Oct-13	10:29:28	Transportation Boat	Travelling	92	12	0	327	45	20	22.3031	113.9644	646.79	341.49
02-Oct-13	10:29:48	Transportation Boat	Travelling	91	1	40	309	23	40	22.3076	113.9583	1391.72	323.12
02-Oct-13	10:29:55	Transportation Boat	Travelling	90	59	10	311	33	50	22.3084	113.9584	1451.33	325.29
02-Oct-13	10:30:01	Transportation Boat	Travelling	91	7	20	302	21	40	22.3059	113.9578	1273.34	316.09
02-Oct-13	10:30:18	Government Boat	Travelling	91	0	40	292	22	20	22.3051	113.9553	1415.05	306.10
02-Oct-13	10:31:03	Transportation Boat	Travelling	94	32	20	356	37	0	22.3004	113.9669	312.75	10.35
02-Oct-13	10:31:11	Transportation Boat	Travelling	90	59	20	289	42	0	22.3048	113.9546	1447.45	303.43
02-Oct-13	10:31:17	Transportation Boat	Travelling	90	59	20	328	57	40	22.3101	113.9622	1447.47	342.69
02-Oct-13	10:31:22	Transportation Boat	Travelling	91	5	30	321	47	20	22.3083	113.9611	1309.61	335.52
02-Oct-13	10:31:29	Government Boat	Travelling	90	55	20	277	39	40	22.3027	113.9523	1553.72	291.39
02-Oct-13	10:31:37	Dumping Guide Boat	Travelling	91	2	20	359	18	50	22.3097	113.9694	1376.99	13.04
02-Oct-13	10:35:04	Transportation Boat	Travelling	90	48	0	345	32	30	22.3138	113.9662	1796.57	359.27
02-Oct-13	10:35:11	Dumping Guide Boat	Stationary	90	50	10	358	2	0	22.3128	113.9698	1717.50	11.76
02-Oct-13	10:42:41	HSF High Speed Ferry	Travelling	90	57	30	282	8	10	22.3035	113.9533	1496.61	295.87
02-Oct-13	10:42:48	Transportation Boat	Travelling	90	56	40	306	22	50	22.3081	113.9569	1518.97	320.11
02-Oct-13	10:43:46	HSF High Speed Ferry	Travelling	91	4	20	301	56	0	22.3062	113.9573	1335.90	315.66
02-Oct-13	10:43:51	Transportation Boat	Travelling	91	1	20	301	5	50	22.3065	113.9567	1402.07	314.83
02-Oct-13	10:44:49	HSF High Speed Ferry	Travelling	91	0	0	322	21	10	22.3094	113.9607	1433.82	336.08
02-Oct-13	10:44:54	Transportation Boat	Travelling	90	57	50	292	5	30	22.3055	113.9547	1488.31	305.82
02-Oct-13	10:44:59	Transportation Boat	Travelling	91	3	50	285	32	30	22.3035	113.9550	1346.71	299.27
02-Oct-13	10:46:04	HSF High Speed Ferry	Travelling	90	49	50	340	32	10	22.3131	113.9647	1731.79	354.27
02-Oct-13	10:46:11	Transportation Boat	Travelling	90	52	10	282	40	40	22.3042	113.9520	1652.97	296.41
02-Oct-13	10:46:15	Transportation Boat	Travelling	91	0	50	305	47	30	22.3073	113.9575	1414.20	319.52
02-Oct-13	10:49:48	Government Boat	Travelling	90	55	20	281	30	0	22.3036	113.9527	1557.62	295.23
02-Oct-13	10:51:37	Government Boat	Travelling	91	1	50	299	20	40	22.3062	113.9565	1392.06	313.07
02-Oct-13	10:53:42	Government Boat	Travelling	91	3	40	316	7	40	22.3081	113.9598	1351.88	329.86
02-Oct-13	10:56:39	Transportation Boat	Travelling	91	0	10	303	4	10	22.3070	113.9569	1432.11	316.80
02-Oct-13	10:56:47	Government Boat	Stationary	91	2	30	316	29	40	22.3084	113.9597	1378.00	330.22
02-Oct-13	10:57:14	Dumping Guide Boat	Travelling	90	42	40	14	39	30	22.3137	113.9758	2032.92	28.39
02-Oct-13	10:59:25	Transportation Boat	Travelling	90	55	0	285	40	40	22.3046	113.9531	1569.27	299.41
02-Oct-13	10:59:41	Dumping Guide Boat	Stationary	90	42	30	15	55	40	22.3136	113.9762	2041.79	29.66
02-Oct-13	10:59:49	Dumping Guide Boat	Travelling	90	48	50	31	41	10	22.3088	113.9787	1771.29	45.42
02-Oct-13	11:00:03	Government Boat	Travelling	91	1	40	320	47	50	22.3090	113.9606	1397.48	334.53
02-Oct-13	11:01:48	Transportation Boat	Travelling	90	57	10	330	8	30	22.3107	113.9623	1509.40	343.87
02-Oct-13	11:01:55	Government Boat	Travelling	90	53	10	341	43	40	22.3122	113.9651	1624.83	355.46
02-Oct-13	11:02:03	Dumping Guide Boat	Travelling	91	6	50	25	44	40	22.3066	113.9744	1288.58	39.47
02-Oct-13	11:03:14	Transportation Boat	Travelling	91	3	0	304	12	10	22.3068	113.9575	1368.13	317.93
02-Oct-13	11:03:19	Transportation Boat	Travelling	90	53	40	284	37	40	22.3045	113.9526	1609.75	298.36
02-Oct-13	11:03:30	Dumping Guide Boat	Travelling	91	26	20	18	2	0	22.3052	113.9715	995.55	31.76
02-Oct-13	11:04:10	Transportation Boat	Travelling	90	58	50	287	43	40	22.3045	113.9542	1466.51	301.46
02-Oct-13	11:04:16	Transportation Boat	Travelling	90	57	10	292	25	30	22.3056	113.9545	1509.90	306.15
02-Oct-13	11:05:21	Transportation Boat	Travelling	91	0	30	302	9	10	22.3068	113.9567	1425.80	315.88
02-Oct-13	11:05:29	Dumping Guide Boat	Travelling	92	21	30	0	9	30	22.3029	113.9678	606.17	13.89
02-Oct-13	11:08:02	Transportation Boat	Travelling	91	7	40	312	11	50	22.3071	113.9595	1273.58	325.93
02-Oct-13	11:08:09	HSF High Speed Ferry	Travelling	90	50	20	342	21	40	22.3131	113.9653	1719.45	356.09
02-Oct-13	11:08:22	Dumping Guide Boat	Stationary	94	51	0	334	45	40	22.3002	113.9658	294.07	348.49
02-Oct-13	11:09:39	Transportation Boat	Travelling	91	28	0	317	29	50	22.3053	113.9618	977.39	331.23
02-Oct-13	11:09:46	Transportation Boat	Travelling	90	59	40	305	57	30	22.3075	113.9573	1446.85	319.69
02-Oct-13	11:09:52	HSF High Speed Ferry	Travelling	91	1	40	318	23	10	22.3088	113.9600	1399.35	332.12
02-Oct-13	11:11:12	Transportation Boat	Travelling	92	0	20	325	5	40	22.3036	113.9639	713.78	338.82
02-Oct-13	11:11:21	Transportation Boat	Travelling	91	0	0	279	48	10	22.3028	113.9536	1439.02	293.53
02-Oct-13	11:11:24	HSF High Speed Ferry	Travelling	91	1	50	292	59	50	22.3051	113.9555	1395.82	306.73
02-Oct-13	11:12:23	HSF High Speed Ferry	Travelling	90	56	50	278	44	50	22.3029	113.9527	1520.57	292.48
02-Oct-13	11:12:31	Transportation Boat	Travelling	92	54	20	335	19	10	22.3020	113.9655	492.14	349.05
02-Oct-13	11:12:40	Tug Boat	Travelling	90	37	20	351	35	20	22.3186	113.9685	2337.79	5.32
02-Oct-13	11:13:33	Transportation Boat	Travelling	90	41	30	349	10	30	22.3165	113.9674	2096.34	2.90
02-Oct-13	11:14:51	Transportation Boat	Stationary	95	54	0	354	6	10	22.2998	113.9667	241.65	7.83
02-Oct-13	11:15:04	Tug Boat	Travelling	90	48	20	340	22	10	22.3137	113.9646	1793.72	354.10
02-Oct-13	11:15:07	Transportation Boat	Travelling	90	47	40	340	29	0	22.3139	113.9646	1819.35	354.21
02-Oct-13	11:16:39	Transportation Boat	Travelling	94	29	20	326	40	50	22.3003	113.9654	318.21	340.41
02-Oct-13	11:16:48	Transportation Boat	Travelling	91	2	10	296	10	50	22.3056	113.9560	1389.26	309.91
02-Oct-13	11:16:53	Transportation Boat	Travelling	90	57	40	306	8	40	22.3079	113.9570	1499.19	319.87
02-Oct-13	11:17:04	Tug Boat	Travelling	90	59	0	324	17	10	22.3098	113.9611	1464.88	338.02
02-Oct-13	11:17:17	Transportation Boat	Travelling	91	4	0	285	55	10	22.3036	113.9550	1349.08	299.65
02-Oct-13	11:17:48	Transportation Boat	Travelling	91	5	10	292	49	30	22.3047	113.9560	1324.74	306.55
02-Oct-13	11:17:52	Transportation Boat	Travelling	91	2	50	298	18	30	22.3059	113.9565	1374.54	312.04
02-Oct-13	11:17:56	Transportation Boat	Travelling	90	57	50	281	38	50	22.3034	113.9533	1495.03	295.38
02-Oct-13	11:18:09	Dumping Guide Boat	Travelling	93	9	40	353	0	50	22.3017	113.9669	452.57	6.74
02-Oct-13	11:19:00	Transportation Boat	Travelling	90	59	20	321	52	20	22.3096	113.9605	1456.92	335.60
02-Oct-13	11:19:11	Transportation Boat	Travelling	91	3	40	284	5	20	22.3033	113.9547	1356.57	297.82
02-Oct-13	11:19:15	Transportation Boat	Travelling	90	57	50	306	43	30	22.3080	113.9571	1495.29	320.45
02-Oct-13	11:19:26	Dumping Guide Boat	Travelling	91	54	10	348	41	20	22.3044	113.9667	753.34	2.42
02-Oct-13	11:20:04	Transportation Boat	Travelling	92	7	40	316	39	30	22.3029	113.9632	673.43	330.39
02-Oct-13	11:20:22	Transportation Boat	Travelling	91	4	10	306	59	20	22.3070	113.9581	1346.10	320.72
02-Oct-13	11:20:30	Tug Boat	Travelling	91	1	30	286	34	40	22.3040	113.9546	1405.22	300.31
02-Oct-13	11:21:06	HSF High Speed Ferry	Travelling	90	44	0	345	37	10	22.3154	113.9662	1976.21	359.35
02-Oct-13	11:21:35	Transportation Boat	Travelling	91	1	10	281	41	50	22.3031	113.9540	1413.18	295.43
02-Oct-13	11:21:51	Transportation Boat	Travelling	91	30	10	313	4	40	22.3048	113.9613	955.33	326.81
02-Oct-13	11:21:56	Transportation Boat	Travelling	91	1	40	289	27	30	22.3045	113.9550	1401.64	303.19
02-Oct-13	11:23:00	Transportation Boat	Travelling	91	3	10	302	3	0	22.3064	113.9571	1368.15	315.78
02-Oct-13	11:23:34	Dumping Guide Boat	Travelling	90	49	10	349	59	40	22.3135	113.9675	1764.76	3.72
02-Oct-13	11:24:08	HSF High Speed Ferry	Travelling	91	3	30	306	39	20	22.3071	113.9580	1361.09	320.39
02-Oct-13	11:25:40	HSF High Speed Ferry	Travelling	90	57	40	282	20	40	22.3036	113.9533	1500.99	296.07
02-Oct-13	11:26:20	Transportation Boat	Travelling	91	2	40	302	41	10	22.3066	113.9571	1379.82	316.42

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	11:27:08	Transportation Boat	Travelling	90	59	30	288	45	40	22.3046	113.9545	1454.39	302.49
02-Oct-13	11:29:34	Transportation Boat	Travelling	94	27	10	344	18	0	22.3005	113.9663	321.36	358.03
02-Oct-13	11:30:36	Transportation Boat	Travelling	92	55	50	302	54	20	22.3008	113.9631	489.12	316.64
02-Oct-13	11:31:15	Transportation Boat	Travelling	91	5	20	287	46	30	22.3038	113.9554	1323.74	301.50
02-Oct-13	11:31:30	Transportation Boat	Travelling	91	1	30	306	4	0	22.3073	113.9576	1407.31	319.80
02-Oct-13	11:31:34	Transportation Boat	Travelling	90	58	20	306	33	50	22.3079	113.9572	1484.78	320.29
02-Oct-13	11:31:45	Transportation Boat	Travelling	91	48	20	283	27	50	22.3009	113.9595	795.41	297.19
02-Oct-13	11:31:50	Transportation Boat	Travelling	91	9	40	295	17	0	22.3046	113.9570	1240.65	309.01
02-Oct-13	11:31:56	Transportation Boat	Travelling	91	5	10	298	41	0	22.3057	113.9569	1327.29	312.41
02-Oct-13	11:31:59	Transportation Boat	Travelling	91	2	10	303	58	10	22.3069	113.9573	1392.13	317.70
02-Oct-13	11:32:49	Transportation Boat	Travelling	91	15	30	309	32	40	22.3059	113.9597	1144.10	323.27
02-Oct-13	11:32:53	Transportation Boat	Travelling	91	1	10	281	59	20	22.3031	113.9540	1415.35	295.72
02-Oct-13	11:32:57	Transportation Boat	Travelling	91	3	30	292	13	40	22.3048	113.9557	1362.72	305.96
02-Oct-13	11:33:07	Transportation Boat	Travelling	90	59	50	284	52	30	22.3039	113.9540	1447.35	298.60
02-Oct-13	11:33:56	Transportation Boat	Travelling	91	16	50	327	34	50	22.3072	113.9629	1124.24	341.31
02-Oct-13	11:34:01	Transportation Boat	Travelling	90	59	10	280	4	50	22.3029	113.9534	1464.06	293.81
02-Oct-13	11:34:06	Transportation Boat	Travelling	91	1	50	292	12	40	22.3050	113.9554	1400.13	305.94
02-Oct-13	11:34:11	Transportation Boat	Travelling	91	7	10	335	21	40	22.3090	113.9640	1287.73	349.09
02-Oct-13	11:35:13	Transportation Boat	Travelling	91	3	0	301	17	40	22.3064	113.9570	1374.09	315.02
02-Oct-13	11:35:18	Transportation Boat	Travelling	91	22	20	332	0	40	22.3068	113.9639	1048.77	345.74
02-Oct-13	11:35:24	Transportation Boat	Travelling	91	0	30	305	31	50	22.3074	113.9573	1431.64	319.26
02-Oct-13	11:35:28	Transportation Boat	Travelling	90	59	40	283	7	0	22.3035	113.9538	1451.91	296.85
02-Oct-13	11:35:38	Transportation Boat	Travelling	91	9	10	353	57	50	22.3088	113.9680	1250.35	7.69
02-Oct-13	11:37:11	Transportation Boat	Travelling	91	4	0	293	31	30	22.3050	113.9559	1352.73	307.25
02-Oct-13	11:37:15	Transportation Boat	Travelling	91	1	40	304	26	30	22.3070	113.9573	1404.56	318.17
02-Oct-13	11:37:26	Transportation Boat	Stationary	91	46	50	327	49	20	22.3045	113.9639	807.25	341.55
02-Oct-13	11:37:49	Transportation Boat	Travelling	90	56	50	306	9	40	22.3081	113.9568	1525.84	319.89
02-Oct-13	11:38:33	Transportation Boat	Travelling	90	44	40	17	26	10	22.3126	113.9762	1950.63	31.17
02-Oct-13	11:40:20	Transportation Boat	Travelling	92	31	0	340	28	40	22.3027	113.9658	570.59	354.21
02-Oct-13	11:40:30	Transportation Boat	Travelling	90	57	50	306	12	0	22.3079	113.9570	1499.61	319.93
02-Oct-13	11:40:59	Transportation Boat	Travelling	91	3	10	303	14	20	22.3066	113.9573	1371.49	316.97
02-Oct-13	11:41:35	Transportation Boat	Travelling	91	1	30	305	42	40	22.3073	113.9575	1409.24	319.44
02-Oct-13	11:42:27	Transportation Boat	Travelling	91	0	30	283	30	50	22.3035	113.9540	1433.00	297.24
02-Oct-13	11:42:30	Transportation Boat	Travelling	91	3	30	293	43	10	22.3051	113.9559	1364.49	307.45
02-Oct-13	11:42:39	Transportation Boat	Travelling	90	58	30	305	33	0	22.3077	113.9570	1482.72	319.28
02-Oct-13	11:42:44	Speed Boat	Travelling	91	3	30	297	43	20	22.3057	113.9565	1364.53	311.45
02-Oct-13	11:42:53	Transportation Boat	Travelling	94	2	0	4	47	10	22.3007	113.9675	355.57	18.52
02-Oct-13	11:43:07	Speed Boat	Travelling	91	4	50	290	21	20	22.3044	113.9556	1336.21	304.09
02-Oct-13	11:43:17	Transportation Boat	Travelling	91	2	10	283	37	10	22.3034	113.9544	1394.26	297.35
02-Oct-13	11:43:24	Transportation Boat	Travelling	91	2	20	298	45	0	22.3061	113.9564	1390.51	312.48
02-Oct-13	11:43:43	Speed Boat	Travelling	91	4	0	278	53	0	22.3023	113.9542	1353.92	292.61
02-Oct-13	11:43:49	Transportation Boat	Travelling	90	59	50	277	8	10	22.3023	113.9532	1449.45	290.87
02-Oct-13	11:43:55	Transportation Boat	Travelling	91	2	50	292	23	20	22.3049	113.9556	1379.40	306.12
02-Oct-13	11:44:06	Transportation Boat	Travelling	93	24	20	352	18	30	22.3014	113.9668	421.45	6.04
02-Oct-13	11:45:20	Transportation Boat	Travelling	90	58	50	275	29	20	22.3020	113.9529	1474.73	289.22
02-Oct-13	11:45:28	Transportation Boat	Travelling	91	0	50	306	54	10	22.3075	113.9576	1425.63	320.63
02-Oct-13	11:45:39	Transportation Boat	Travelling	92	13	20	323	59	40	22.3030	113.9640	646.94	337.72
02-Oct-13	11:47:16	Transportation Boat	Travelling	91	2	50	286	15	20	22.3038	113.9548	1380.03	299.99
02-Oct-13	11:47:24	Transportation Boat	Travelling	91	31	10	309	45	30	22.3045	113.9609	948.06	323.49
02-Oct-13	11:47:41	Tug Boat	Travelling	90	43	10	346	39	20	22.3158	113.9665	2022.66	0.39
02-Oct-13	11:47:47	Construction Platform	Travelling	90	43	0	347	37	0	22.3159	113.9669	2030.74	1.35
02-Oct-13	11:47:58	Transportation Boat	Travelling	90	59	30	278	45	10	22.3026	113.9533	1458.50	292.48
02-Oct-13	11:50:29	Tug Boat	Travelling	90	50	30	338	5	40	22.3130	113.9640	1723.57	351.82
02-Oct-13	11:50:39	Construction Platform	Travelling	90	51	20	338	59	0	22.3128	113.9643	1695.11	352.71
02-Oct-13	11:50:46	Transportation Boat	Travelling	90	53	40	296	18	30	22.3070	113.9543	1620.18	310.04
02-Oct-13	11:52:43	Tug Boat	Travelling	91	2	10	302	52	40	22.3067	113.9571	1396.04	316.61
02-Oct-13	11:52:50	Tug Boat	Travelling	90	57	30	327	37	40	22.3105	113.9617	1510.96	341.36
02-Oct-13	11:52:52	Construction Platform	Travelling	90	57	30	329	14	50	22.3106	113.9621	1510.96	342.98
02-Oct-13	11:54:26	Tug Boat	Travelling	91	0	30	325	20	50	22.3097	113.9614	1435.33	339.08
02-Oct-13	11:56:05	Transportation Boat	Travelling	90	58	50	306	20	50	22.3078	113.9572	1476.88	320.08
02-Oct-13	11:56:13	Tug Boat	Travelling	91	2	0	309	7	30	22.3077	113.9582	1400.50	322.85
02-Oct-13	11:56:17	Construction Platform	Travelling	91	1	50	310	38	50	22.3079	113.9584	1404.34	324.38
02-Oct-13	11:57:07	Tug Boat	Travelling	91	1	50	284	27	0	22.3036	113.9544	1404.50	298.18
02-Oct-13	11:57:10	Construction Platform	Travelling	91	0	40	282	51	20	22.3034	113.9539	1431.87	296.59
02-Oct-13	11:57:20	Speed Boat	Travelling	91	33	10	326	43	10	22.3055	113.9634	928.83	340.45
02-Oct-13	11:57:29	Tug Boat	Travelling	90	43	20	350	54	0	22.3157	113.9680	2017.37	4.63
02-Oct-13	11:58:05	Transportation Boat	Travelling	91	1	10	290	26	30	22.3048	113.9550	1420.19	304.17
02-Oct-13	11:58:14	Speed Boat	Travelling	91	23	0	294	58	10	22.3035	113.9585	1043.52	308.70
02-Oct-13	11:58:22	Transportation Boat	Travelling	90	59	10	283	39	20	22.3037	113.9537	1468.90	297.39
02-Oct-13	11:58:37	Speed Boat	Travelling	91	13	50	285	1	50	22.3027	113.9564	1174.24	298.76
02-Oct-13	11:58:45	Tug Boat	Travelling	90	59	40	294	13	40	22.3057	113.9552	1456.50	307.96
02-Oct-13	11:58:49	Construction Platform	Travelling	91	3	0	295	23	20	22.3054	113.9560	1378.48	309.12
02-Oct-13	11:58:54	Speed Boat	Travelling	91	8	20	278	41	30	22.3020	113.9550	1269.75	292.42
02-Oct-13	11:59:03	Transportation Boat	Travelling	91	3	50	291	49	10	22.3047	113.9556	1360.32	305.55
02-Oct-13	12:00:14	Transportation Boat	Travelling	91	3	50	270	43	10	22.3007	113.9536	1360.53	284.45
02-Oct-13	12:00:19	Transportation Boat	Travelling	90	59	40	305	47	30	22.3076	113.9572	1456.81	319.52
02-Oct-13	12:00:31	Tug Boat	Travelling	91	5	50	295	20	20	22.3051	113.9564	1318.78	309.07
02-Oct-13	12:00:34	Construction Platform	Travelling	91	5	20	293	28	0	22.3048	113.9561	1329.00	307.20
02-Oct-13	12:01:55	Transportation Boat	Travelling	91	0	50	289	58	40	22.3048	113.9548	1428.81	303.71
02-Oct-13	12:02:10	Tour Boat	Travelling	90	41	0	348	53	0	22.3168	113.9673	2136.78	2.61
02-Oct-13	12:03:22	Transportation Boat	Travelling	90	59	40	306	53	50	22.3078	113.9574	1457.41	320.63
02-Oct-13	12:09:01	Tour Boat	Travelling	91	5	20	297	42	50	22.3055	113.9567	1330.52	311.44
02-Oct-13	12:09:12	Tug Boat	Travelling	91	1	10	323	16	40	22.3094	113.9610	1422.32	337.01
02-Oct-13	12:09:17	Construction Platform	Travelling	91	1	40	321	49	10	22.3092	113.9607	1410.65	335.55
02-Oct-13	12:11:37	Tour Boat	Travelling	90	59	30	274	16	20	22.3017	113.9529	1463.18	288.00
02-Oct-13	12:15:36	Transportation Boat	Travelling	91	10	0	347	46	50	22.3088	113.9667	1242.00	1.51
02-Oct-13	12:15:54	Dumping Guide Boat	Travelling	91	2	50	313	8	10	22.3081	113.9590	1385.38	326.87
02-Oct-13	12:17:39	Transportation Boat	Travelling	91	54	30	350	9	10	22.3044	113.9669	757.05	3.88
02-Oct-13	12:17:55	Dumping Guide Boat	Stationary	91	3	20	312	42	40	22.3079	113.9590	1374.68	326.44
02-Oct-13	12:18:54	Tug Boat	Travelling	90	47	30	345	6	50	22.3142	113.9660	1841.77	358.84
02-Oct-13	12:18:58	Construction Platform	Travelling	90	48	20	344	26	20	22.3139	113.9658	1809.37	358.17
02-Oct-13	12:19:05	Tug Boat	Travelling	91	6	50	285	52	20	22.3034	113.9554	1302.09	299.60
02-Oct-13	12:19:14	Transportation Boat	Travelling	93	30	40	354	42	10	22.3013	113.9670	410.67	8.43
02-Oct-13	12:20:46	Transportation Boat	Travelling	91	1	50	302	44	30	22.3068	113.9570	1408.99	316.47
02-Oct-13	12:20:54	Tug Boat	Travelling	91	9	10	304	11	40	22.3060	113.9582	1258.02	317.92
02-Oct-13	12:21:06	Transportation Boat	Travelling	90	50	30	348	55	30	22.3132	113.9672	1730.73	2.65
02-Oct-13	12:21:35	Transportation Boat	Travelling	91	0	30	291	15	10	22.3051	113.9549	1440.60	304.98
02-Oct-13	12:21:46	Transportation Boat	Travelling	90	53	10	343	48	0	22.3124	113.9657	1642.55	357.53
02-Oct-13	12:21:54	Tug Boat	Travelling	91	11	50	316	48	30	22.3071	113.9606	1211.03	330.54
02-Oct-13	12:22:37	Transportation Boat	Travelling	90	55	0	278	6	0	22.3029	113.9521	1587.09	291.83
02-Oct-13	12:24:24	Transportation Boat	Travelling	91	9	30	316	44	20	22.3074	113.9604	1252.51	330.47
02-Oct-13	12:25:39	Transportation Boat	Travelling	91	9	10	288	8	0	22.3036	113.9560	1258.82	301.86
02-Oct-13	12:25:47	Transportation Boat	Travelling	91	9	20	298	46	50	22.3053	113.9574	1255.79	312.51
02-Oct-13	12:26:51	Transportation Boat	Travelling	91	5	10	285	34	0	22.3035	113.9551	1337.17	299.30
02-Oct-13	12:26:57	Transportation Boat	Travelling	91	23	10	298	42	10	22.3040	113.9589	1045.44	312.43
02-Oct-13	12:27:50	Dumping Guide Boat	Travelling	90	56	30	332	35	0	22.3111	113.9628	1545.39	346.31
02-Oct-13	12:29:03	Tour Boat	Travelling	91	4	40	291	51	0	22.3047	113.9557	1348.02	305.58
02-Oct-13	12:29:25	Transportation Boat	Travelling	92	29	20	322	41	20	22.3024	113.9641	580.80	336.42
02-Oct-13	12:32:08	Tour Boat	Travelling	91	4	40	325	43	30	22.3090	113.9618	1348.58	339.45
02-Oct-13	12:38:59	Tug Boat	Travelling	90	50	10	343	51	10	22.3133	113.9657	1746.66	357.58
02-Oct-13	12:39:02	Construction Platform	Travelling	90	48	20	346	17	10	22.3139	113.9664	1814.28	0.02
02-Oct-13	12:39:09	Transportation Boat	Travelling	91	2	20	290	39	50	22.3047	113.9552	1401.01	304.39
02-Oct-13	12:39:29	Construction Boat	Travelling	90	51	30	338	51	50	22.3128	113.9643	1700.72	352.59
02-Oct-13	12:39:37	Transportation Boat	Travelling	91	3	20	295	53	30	22.3055	113.9561	1378.70	309.62
02-Oct-13	12:40:56	Transportation Boat	Travelling	90	58	0	307	39	30	22.3082	113.9572	1507.50	321.39
02-Oct-13	12:41:03	Construction Boat	Travelling	90	58	0	327	50	0	22.3105	113.9618	1507.52	341.56
02-Oct-13	12:41:12	Tug Boat	Travelling	90	57	0	333	11	50	22.3111	113.9630	1534.39	346.93

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	12:41:16	Construction Platform	Travelling	90	54	30	335	54	20	22.3118	113.9636	1605.92	349.64
02-Oct-13	12:42:52	Construction Boat	Travelling	91	2	40	311	51	0	22.3080	113.9587	1394.15	325.58
02-Oct-13	12:44:35	Construction Boat	Travelling	91	2	40	295	13	20	22.3055	113.9559	1394.48	308.95
02-Oct-13	12:44:42	Tug Boat	Travelling	91	1	20	322	18	50	22.3093	113.9608	1425.20	336.04
02-Oct-13	12:44:47	Construction Platform	Travelling	90	59	40	323	31	10	22.3098	113.9609	1465.57	337.25
02-Oct-13	12:45:00	Government Boat	Travelling	90	43	30	349	50	0	22.3158	113.9676	2022.44	3.56
02-Oct-13	12:45:32	Transportation Boat	Travelling	90	58	40	287	58	30	22.3047	113.9541	1491.05	301.70
02-Oct-13	12:45:42	Government Boat	Travelling	90	50	10	343	13	30	22.3133	113.9655	1748.25	356.95
02-Oct-13	12:46:17	Transportation Boat	Travelling	91	1	0	296	22	0	22.3059	113.9557	1433.40	310.10
02-Oct-13	12:46:26	Construction Boat	Travelling	90	57	40	279	2	20	22.3029	113.9528	1517.46	292.77
02-Oct-13	12:47:29	Transportation Boat	Travelling	90	57	40	306	36	20	22.3081	113.9570	1517.67	320.34
02-Oct-13	12:47:37	Government Boat	Travelling	91	5	0	312	45	10	22.3077	113.9592	1344.38	326.48
02-Oct-13	12:48:38	Tug Boat	Travelling	90	59	0	307	22	30	22.3080	113.9573	1483.12	321.10
02-Oct-13	12:48:43	Construction Platform	Travelling	91	0	30	307	46	0	22.3078	113.9576	1445.87	321.50
02-Oct-13	12:48:52	Government Boat	Travelling	91	2	50	287	11	10	22.3041	113.9548	1391.53	300.92
02-Oct-13	12:52:29	Government Boat	Travelling	90	43	40	356	49	20	22.3155	113.9700	2016.56	10.55
02-Oct-13	12:52:52	Government Boat	Travelling	90	49	20	349	57	40	22.3136	113.9675	1780.08	3.69
02-Oct-13	12:53:51	Government Boat	Travelling	91	5	10	323	55	30	22.3088	113.9614	1342.02	337.65
02-Oct-13	12:55:10	Government Boat	Travelling	90	58	40	276	55	20	22.3024	113.9528	1492.98	290.65
02-Oct-13	13:04:07	Other	Stationary	94	25	0	0	0	0	22.3005	113.9672	328.13	13.73
02-Oct-13	13:04:19	Government Boat	Travelling	91	2	10	323	51	30	22.3093	113.9612	1409.56	337.59
02-Oct-13	13:04:40	Government Boat	Travelling	90	57	50	334	48	40	22.3110	113.9635	1516.73	348.54
02-Oct-13	13:05:45	Government Boat	Travelling	90	39	20	351	5	0	22.3178	113.9682	2249.47	4.81
02-Oct-13	13:09:17	Other	Stationary	94	27	20	0	0	0	22.3005	113.9672	325.48	13.73
02-Oct-13	13:09:31	Transportation Boat	Travelling	91	54	20	320	4	20	22.3038	113.9631	763.44	333.80
02-Oct-13	13:09:43	Transportation Boat	Travelling	95	8	0	358	4	20	22.3001	113.9670	282.31	11.80
02-Oct-13	13:11:04	Other	Stationary	94	29	50	0	0	0	22.3004	113.9671	322.53	13.73
02-Oct-13	13:11:17	Transportation Boat	Travelling	92	58	40	332	26	10	22.3019	113.9653	487.88	346.17
02-Oct-13	13:11:23	Transportation Boat	Travelling	92	31	20	10	2	10	22.3024	113.9687	576.32	23.77
02-Oct-13	13:11:39	Tug Boat	Travelling	90	59	50	308	33	0	22.3081	113.9577	1466.70	322.28
02-Oct-13	13:11:43	Construction Platform	Travelling	90	59	50	307	45	40	22.3079	113.9575	1466.72	321.49
02-Oct-13	13:12:43	Transportation Boat	Travelling	95	15	50	349	12	0	22.3001	113.9665	275.38	2.93
02-Oct-13	13:12:51	Transportation Boat	Travelling	91	41	50	12	36	50	22.3045	113.9701	858.00	26.34
02-Oct-13	13:14:52	Transportation Boat	Travelling	94	20	10	340	9	10	22.3006	113.9661	334.74	353.88
02-Oct-13	13:15:00	Transportation Boat	Stationary	91	13	10	7	34	50	22.3077	113.9706	1197.24	21.31
02-Oct-13	13:15:56	Government Boat	Travelling	91	38	50	319	9	40	22.3047	113.9625	884.55	332.89
02-Oct-13	13:16:04	Transportation Boat	Travelling	93	10	0	333	15	20	22.3016	113.9654	458.98	346.99
02-Oct-13	13:16:20	Government Boat	Travelling	91	23	20	343	8	30	22.3071	113.9658	1050.25	356.87
02-Oct-13	13:16:54	Government Boat	Travelling	90	59	30	3	20	30	22.3103	113.9706	1476.07	17.07
02-Oct-13	13:18:44	Tug Boat	Travelling	90	59	50	332	31	30	22.3105	113.9630	1468.10	346.25
02-Oct-13	13:18:47	Construction Platform	Travelling	91	1	20	331	12	20	22.3101	113.9628	1431.73	344.94
02-Oct-13	13:18:56	Transportation Boat	Travelling	91	2	10	292	24	20	22.3051	113.9553	1412.32	306.14
02-Oct-13	13:19:16	Transportation Boat	Travelling	90	52	40	337	54	50	22.3125	113.9640	1671.29	351.64
02-Oct-13	13:19:27	Transportation Boat	Travelling	91	4	20	298	29	10	22.3059	113.9566	1364.28	312.22
02-Oct-13	13:19:37	Transportation Boat	Travelling	91	47	50	319	2	40	22.3041	113.9628	810.76	332.77
02-Oct-13	13:20:31	Transportation Boat	Travelling	90	57	10	306	46	30	22.3083	113.9569	1537.94	320.50
02-Oct-13	13:20:37	Transportation Boat	Travelling	91	1	50	322	27	50	22.3093	113.9608	1420.35	336.19
02-Oct-13	13:22:43	Transportation Boat	Travelling	91	3	0	292	23	50	22.3050	113.9554	1394.11	306.13
02-Oct-13	13:22:54	Transportation Boat	Travelling	91	10	50	311	36	30	22.3068	113.9595	1238.37	325.34
02-Oct-13	13:23:02	Tug Boat	Travelling	91	4	30	341	5	10	22.3098	113.9652	1361.36	354.82
02-Oct-13	13:23:06	Construction Platform	Travelling	91	4	20	337	31	20	22.3098	113.9644	1364.94	351.25
02-Oct-13	13:23:20	Transportation Boat	Travelling	91	3	0	282	7	40	22.3031	113.9542	1394.23	295.86
02-Oct-13	13:23:27	Transportation Boat	Travelling	90	59	10	283	7	10	22.3037	113.9535	1485.80	296.85
02-Oct-13	13:23:39	Tug Boat	Travelling	91	3	30	343	49	0	22.3101	113.9658	1383.18	357.55
02-Oct-13	13:27:41	Transportation Boat	Travelling	90	54	10	305	44	50	22.3087	113.9561	1626.06	319.48
02-Oct-13	13:30:10	Transportation Boat	Travelling	91	3	30	305	43	30	22.3071	113.9576	1384.38	319.45
02-Oct-13	13:30:53	Transportation Boat	Travelling	91	5	30	297	1	30	22.3055	113.9565	1341.75	310.75
02-Oct-13	13:31:57	Transportation Boat	Travelling	91	4	0	283	38	0	22.3033	113.9545	1373.76	297.36
02-Oct-13	13:34:39	Transportation Boat	Travelling	91	2	50	289	54	30	22.3046	113.9551	1400.09	303.64
02-Oct-13	13:35:48	Transportation Boat	Travelling	91	1	0	306	13	0	22.3076	113.9574	1442.93	319.95
02-Oct-13	13:36:37	Transportation Boat	Travelling	91	2	10	305	35	30	22.3073	113.9574	1415.66	319.32
02-Oct-13	13:38:01	Transportation Boat	Travelling	91	3	10	293	6	10	22.3051	113.9556	1393.23	306.83
02-Oct-13	13:39:17	Transportation Boat	Travelling	91	0	10	282	22	0	22.3034	113.9536	1463.87	296.10
02-Oct-13	13:39:21	Transportation Boat	Travelling	91	0	10	284	32	50	22.3039	113.9539	1463.88	298.28
02-Oct-13	13:40:20	Transportation Boat	Travelling	91	2	0	295	35	20	22.3057	113.9557	1420.22	309.32
02-Oct-13	13:41:30	Transportation Boat	Travelling	90	59	20	306	33	20	22.3079	113.9572	1485.15	320.29
02-Oct-13	13:42:20	Transportation Boat	Travelling	91	5	0	286	7	0	22.3037	113.9550	1354.25	299.85
02-Oct-13	13:43:35	Transportation Boat	Travelling	91	5	10	302	6	40	22.3063	113.9572	1350.97	315.84
02-Oct-13	13:44:14	Transportation Boat	Travelling	91	0	20	306	30	30	22.3077	113.9573	1460.73	320.24
02-Oct-13	13:44:18	Transportation Boat	Travelling	91	1	0	283	22	30	22.3035	113.9539	1444.57	297.10
02-Oct-13	13:44:28	Transportation Boat	Travelling	90	43	30	283	50	10	22.3061	113.9488	2038.70	297.57
02-Oct-13	13:45:27	Transportation Boat	Travelling	91	6	0	296	43	10	22.3054	113.9565	1334.05	310.45
02-Oct-13	13:45:33	Transportation Boat	Travelling	90	43	40	288	16	30	22.3073	113.9496	2031.01	302.00
02-Oct-13	13:45:38	Transportation Boat	Travelling	91	1	50	283	42	10	22.3035	113.9541	1425.10	297.43
02-Oct-13	13:46:19	Transportation Boat	Travelling	91	1	50	306	8	50	22.3074	113.9575	1425.23	319.88
02-Oct-13	13:46:25	Transportation Boat	Travelling	90	44	0	291	17	20	22.3080	113.9503	2015.47	305.02
02-Oct-13	13:46:34	Transportation Boat	Travelling	91	4	0	290	29	10	22.3046	113.9553	1376.44	304.22
02-Oct-13	13:48:04	Construction Boat	Travelling	91	2	50	287	19	40	22.3041	113.9547	1402.59	301.06
02-Oct-13	13:48:15	Transportation Boat	Travelling	90	40	40	292	31	50	22.3093	113.9493	2185.96	306.26
02-Oct-13	13:48:21	Transportation Boat	Travelling	91	4	10	303	48	0	22.3067	113.9574	1373.15	317.53
02-Oct-13	13:49:20	Construction Boat	Travelling	91	5	40	299	33	40	22.3059	113.9569	1341.60	313.29
02-Oct-13	13:49:28	Transportation Boat	Travelling	91	2	40	281	44	40	22.3031	113.9540	1406.63	295.47
02-Oct-13	13:50:42	Transportation Boat	Travelling	91	5	20	290	49	30	22.3045	113.9556	1348.77	304.55
02-Oct-13	13:50:48	Transportation Boat	Travelling	91	3	40	288	27	10	22.3043	113.9550	1384.51	302.18
02-Oct-13	13:51:54	Transportation Boat	Travelling	91	6	20	300	35	50	22.3060	113.9572	1328.42	314.33
02-Oct-13	13:51:57	Transportation Boat	Travelling	91	4	30	301	23	0	22.3063	113.9570	1366.62	315.11
02-Oct-13	13:52:38	Transportation Boat	Travelling	91	3	10	305	33	30	22.3071	113.9575	1395.94	319.29
02-Oct-13	13:52:41	Transportation Boat	Travelling	90	58	40	306	4	0	22.3080	113.9570	1504.50	319.80
02-Oct-13	13:52:45	Transportation Boat	Travelling	91	1	10	305	34	10	22.3075	113.9573	1442.20	319.30
02-Oct-13	13:53:51	Transportation Boat	Travelling	91	6	0	292	42	10	22.3048	113.9559	1335.55	306.43
02-Oct-13	13:54:38	Transportation Boat	Travelling	91	8	30	294	51	40	22.3048	113.9566	1286.42	308.59
02-Oct-13	13:54:42	Transportation Boat	Travelling	91	3	30	289	25	40	22.3045	113.9551	1388.91	303.16
02-Oct-13	13:54:50	Transportation Boat	Travelling	91	3	0	279	44	30	22.3026	113.9539	1400.10	293.47
02-Oct-13	13:55:14	Transportation Boat	Travelling	91	5	0	303	11	30	22.3065	113.9574	1356.58	316.92
02-Oct-13	13:55:18	Transportation Boat	Travelling	91	5	20	297	2	10	22.3055	113.9565	1349.59	310.77
02-Oct-13	13:55:51	Transportation Boat	Travelling	90	57	20	306	58	40	22.3083	113.9569	1540.66	320.71
02-Oct-13	13:55:56	Transportation Boat	Travelling	91	4	10	304	54	0	22.3069	113.9576	1374.53	318.63
02-Oct-13	13:57:12	Transportation Boat	Travelling	91	9	30	290	40	10	22.3041	113.9562	1268.15	304.40
02-Oct-13	13:57:15	Transportation Boat	Travelling	91	8	30	290	12	20	22.3041	113.9560	1286.86	303.94
02-Oct-13	13:58:29	Transportation Boat	Travelling	91	7	10	299	31	50	22.3057	113.9571	1312.90	313.26
02-Oct-13	13:58:33	Transportation Boat	Travelling	91	0	40	307	2	10	22.3078	113.9574	1455.37	320.77
02-Oct-13	13:59:25	Transportation Boat	Travelling	91	18	10	308	54	50	22.3057	113.9598	1126.66	322.64
02-Oct-13	13:59:39	Other	Stationary	90	35	10	278	38	30	22.3063	113.9435	2544.65	292.37
02-Oct-13	13:59:42	Other	Stationary	90	35	10	282	27	40	22.3077	113.9442	2544.67	296.19
02-Oct-13	13:59:45	Other	Stationary	90	32	50	289	12	0	22.3110	113.9441	2733.74	302.93
02-Oct-13	13:59:49	Other	Stationary	90	51	0	298	39	50	22.3082	113.9539	1736.31	312.39
02-Oct-13	13:59:55	Other	Stationary	90	56	30	310	36	0	22.3091	113.9575	1564.58	324.33
02-Oct-13	13:59:58	Other	Stationary	90	59	40	318	45	0	22.3094	113.9597	1480.37	332.48
02-Oct-13	14:00:01	Other	Stationary	90	54	10	330	34	10	22.3118	113.9621	1633.10	344.30
02-Oct-13	14:00:21	Other	Stationary	90	53	20	332	12	10	22.3121	113.9625	1659.12	345.93
02-Oct-13	14:00:23	Other	Stationary	90	51	20	336	35	10	22.3129	113.9636	1724.95	350.32
02-Oct-13	14:00:27	Other	Stationary	90	44	40	341	35	20	22.3155	113.9648	1988.37	355.32
02-Oct-13	14:00:30	Other	Stationary	90	41	0	347	38	40	22.3172	113.9669	2171.23	1.37
02-Oct-13	14:00:33	Other	Stationary	90	35	10	350	20	50	22.3205	113.9682	2544.96	4.08
02-Oct-13	14:00:59	Other	Stationary	91	1	0	304	48	20	22.3074	113.9571	1447.78	318.54
02-Oct-13	14:01:03	Other	Stationary	90	53	50	307	57	20	22.3092	113.9565	1643.61	321.69
02-Oct-13	14:01:35	Other	Stationary	90	31	20	348	17	0	22.3234	113.9674	2871.96	2.01

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
02-Oct-13	14:01:39	Other	Stationary	90	31	20	352	9	40	22.3233	113.9693	2871.99	5.89
02-Oct-13	14:01:52	Transportation Boat	Stationary	92	15	0	316	26	30	22.3027	113.9633	650.65	330.17
02-Oct-13	14:02:06	Other	Stationary	91	10	20	326	35	50	22.3082	113.9623	1253.79	340.33
02-Oct-13	14:02:10	Other	Stationary	91	9	20	328	50	50	22.3085	113.9627	1272.07	342.58
02-Oct-13	14:02:16	Other	Stationary	91	9	20	332	42	20	22.3087	113.9635	1272.09	346.44
02-Oct-13	14:02:20	Other	Stationary	91	9	20	334	36	40	22.3088	113.9639	1272.10	348.34
02-Oct-13	14:02:28	Other	Stationary	90	55	30	17	5	30	22.3099	113.9743	1593.75	30.82
02-Oct-13	14:02:31	Other	Stationary	90	55	30	17	46	50	22.3098	113.9745	1593.76	31.51
02-Oct-13	14:02:59	Other	Stationary	90	29	40	356	33	30	22.3246	113.9717	3043.07	10.29
02-Oct-13	14:03:04	Other	Stationary	90	33	10	3	11	30	22.3209	113.9741	2706.20	16.92
02-Oct-13	14:03:16	Other	Stationary	90	54	10	353	24	10	22.3122	113.9684	1633.80	7.13
02-Oct-13	14:03:19	Other	Stationary	90	56	0	355	8	30	22.3117	113.9688	1579.48	8.87
02-Oct-13	14:03:25	Other	Stationary	91	14	10	4	8	10	22.3078	113.9699	1188.59	17.87
02-Oct-13	14:03:28	Other	Stationary	91	14	10	7	25	30	22.3076	113.9706	1188.60	21.15
02-Oct-13	14:03:52	Transportation Boat	Stationary	94	59	30	340	49	50	22.3002	113.9661	292.46	354.56
02-Oct-13	14:04:41	Other	Stationary	91	2	0	335	28	50	22.3102	113.9638	1424.83	349.21
02-Oct-13	14:04:45	Other	Stationary	91	1	0	337	39	40	22.3105	113.9643	1448.51	351.39
07-Oct-13	8:02:33	Other	Stationary	94	25	10	0	0	0	22.3005	113.9672	333.57	13.73
07-Oct-13	8:04:36	Other	Stationary	90	33	20	279	28	10	22.3073	113.9421	2717.62	293.20
07-Oct-13	8:04:44	Other	Stationary	90	31	20	288	24	40	22.3115	113.9425	2899.91	302.14
07-Oct-13	8:04:48	Other	Stationary	90	38	50	294	50	30	22.3106	113.9488	2318.74	308.57
07-Oct-13	8:04:52	Other	Stationary	90	49	30	299	3	50	22.3087	113.9535	1807.53	312.79
07-Oct-13	8:04:58	Other	Stationary	90	58	0	304	24	40	22.3079	113.9564	1538.41	318.14
07-Oct-13	8:05:01	Other	Stationary	90	57	40	314	21	30	22.3094	113.9584	1547.43	328.09
07-Oct-13	8:05:05	Other	Stationary	90	55	30	321	58	30	22.3108	113.9600	1608.80	335.70
07-Oct-13	8:05:09	Other	Stationary	90	52	20	330	0	30	22.3124	113.9617	1707.85	343.74
07-Oct-13	8:05:13	Other	Stationary	90	48	40	336	34	40	22.3139	113.9634	1839.13	350.31
07-Oct-13	8:05:17	Other	Stationary	90	41	10	343	56	10	22.3173	113.9655	2183.30	357.67
07-Oct-13	8:05:23	Other	Stationary	90	38	10	348	1	20	22.3189	113.9671	2360.63	1.75
07-Oct-13	8:05:44	Other	Stationary	90	30	40	351	30	10	22.3242	113.9690	2966.39	5.23
07-Oct-13	8:05:59	Other	Stationary	90	59	20	304	53	0	22.3078	113.9567	1503.35	318.61
07-Oct-13	8:06:10	Other	Stationary	90	52	30	307	39	0	22.3096	113.9561	1702.33	321.38
07-Oct-13	8:06:34	Other	Stationary	90	30	0	347	33	10	22.3249	113.9671	3036.07	1.28
07-Oct-13	8:06:54	Other	Stationary	90	29	50	351	57	0	22.3250	113.9693	3054.02	5.68
07-Oct-13	8:07:15	Other	Stationary	91	10	0	318	37	30	22.3078	113.9607	1271.74	332.35
07-Oct-13	8:07:20	Other	Stationary	91	9	0	320	34	40	22.3081	113.9610	1290.36	334.31
07-Oct-13	8:07:25	Other	Stationary	91	7	10	326	40	20	22.3089	113.9621	1325.96	340.40
07-Oct-13	8:07:29	Other	Stationary	91	7	40	329	29	50	22.3090	113.9627	1316.06	343.23
07-Oct-13	8:07:38	Other	Stationary	91	4	40	336	53	0	22.3099	113.9642	1377.82	350.61
07-Oct-13	8:07:41	Other	Stationary	91	5	30	338	50	50	22.3098	113.9647	1360.09	352.58
07-Oct-13	8:08:27	Other	Stationary	90	34	50	356	36	10	22.3206	113.9709	2595.56	10.33
07-Oct-13	8:08:34	Other	Stationary	90	30	10	5	58	40	22.3232	113.9763	3018.34	19.71
07-Oct-13	8:08:49	Other	Stationary	90	53	30	17	1	40	22.3105	113.9747	1669.96	30.76
07-Oct-13	8:08:55	Other	Stationary	90	53	30	17	57	20	22.3104	113.9749	1669.96	31.69
07-Oct-13	8:09:15	Other	Stationary	90	52	40	353	28	50	22.3128	113.9685	1696.85	7.21
07-Oct-13	8:09:23	Other	Stationary	90	53	30	356	3	20	22.3124	113.9692	1669.96	9.79
07-Oct-13	8:09:38	Other	Stationary	91	16	30	10	30	30	22.3072	113.9710	1162.71	24.24
07-Oct-13	8:09:42	Other	Stationary	91	15	40	14	28	20	22.3069	113.9718	1175.63	28.20
07-Oct-13	8:20:54	Transportation Boat	Travelling	90	58	20	288	41	30	22.3050	113.9538	1529.49	302.42
07-Oct-13	8:20:58	Transportation Boat	Travelling	91	4	50	288	6	50	22.3041	113.9550	1374.24	301.84
07-Oct-13	8:21:02	Transportation Boat	Travelling	90	59	20	286	51	10	22.3045	113.9538	1503.35	300.58
07-Oct-13	8:21:16	Tug Boat	Travelling	91	0	50	314	34	30	22.3088	113.9589	1465.77	328.30
07-Oct-13	8:22:08	Transportation Boat	Travelling	91	0	50	302	2	10	22.3071	113.9565	1465.77	315.77
07-Oct-13	8:22:12	Transportation Boat	Travelling	91	8	30	303	58	30	22.3063	113.9579	1299.88	317.70
07-Oct-13	8:22:17	Transportation Boat	Travelling	91	4	0	300	2	30	22.3063	113.9566	1392.35	313.77
07-Oct-13	8:24:22	Tug Boat	Travelling	90	51	20	340	15	20	22.3132	113.9646	1741.74	353.99
07-Oct-13	8:24:37	Transportation Boat	Travelling	90	57	40	329	42	0	22.3110	113.9621	1547.43	343.43
07-Oct-13	8:24:42	Transportation Boat	Travelling	90	58	50	334	25	0	22.3110	113.9634	1516.30	348.15
07-Oct-13	8:25:01	Transportation Boat	Travelling	91	0	30	329	49	50	22.3103	113.9623	1473.96	343.56
07-Oct-13	8:25:08	Transportation Boat	Travelling	90	57	50	334	33	40	22.3112	113.9634	1542.91	348.29
07-Oct-13	8:25:16	Transportation Boat	Travelling	90	59	40	295	15	40	22.3061	113.9551	1494.83	308.99
07-Oct-13	8:26:03	Tug Boat	Travelling	90	44	0	348	59	0	22.3159	113.9673	2038.96	2.71
07-Oct-13	8:26:09	Transportation Boat	Travelling	90	49	0	341	54	40	22.3140	113.9650	1826.36	355.64
07-Oct-13	8:26:13	Transportation Boat	Travelling	90	49	50	347	24	20	22.3138	113.9667	1795.20	1.14
07-Oct-13	8:26:17	Transportation Boat	Travelling	90	54	10	340	19	50	22.3124	113.9647	1649.06	354.06
07-Oct-13	8:26:21	Transportation Boat	Travelling	91	9	0	330	56	30	22.3088	113.9631	1290.36	344.67
07-Oct-13	8:26:32	Transportation Boat	Travelling	91	6	10	307	5	10	22.3070	113.9581	1346.23	320.82
07-Oct-13	8:27:19	Dumping Guide Boat	Travelling	92	29	50	18	46	30	22.3021	113.9695	591.56	32.50
07-Oct-13	8:27:33	Dumping Guide Boat	Stationary	92	34	10	18	50	40	22.3020	113.9694	574.88	32.57
07-Oct-13	8:27:51	Transportation Boat	Travelling	91	33	40	325	14	0	22.3056	113.9631	948.24	338.96
07-Oct-13	8:27:57	Transportation Boat	Travelling	91	5	30	322	33	20	22.3088	113.9611	1360.09	336.29
07-Oct-13	8:29:22	Transportation Boat	Travelling	91	12	40	289	24	50	22.3034	113.9568	1172.60	303.14
07-Oct-13	8:30:18	Transportation Boat	Stationary	91	53	40	321	19	0	22.3037	113.9633	747.48	335.05
07-Oct-13	8:30:27	Dumping Guide Boat	Travelling	93	29	10	343	30	40	22.3013	113.9662	405.33	357.24
07-Oct-13	8:30:33	Dumping Guide Boat	Travelling	93	44	50	9	6	20	22.3007	113.9678	376.99	22.84
07-Oct-13	8:30:45	Transportation Boat	Travelling	90	52	10	346	35	10	22.3124	113.9665	1640.12	0.32
07-Oct-13	8:30:52	Transportation Boat	Travelling	91	23	0	311	40	40	22.3052	113.9607	1025.38	325.41
07-Oct-13	8:32:25	Dumping Guide Boat	Stationary	95	6	10	339	53	10	22.3001	113.9661	276.40	353.62
07-Oct-13	8:32:33	Dumping Guide Boat	Stationary	94	55	20	359	57	30	22.3001	113.9671	286.59	13.69
07-Oct-13	8:32:41	Transportation Boat	Travelling	92	23	20	330	53	10	22.3028	113.9649	592.13	344.62
07-Oct-13	8:32:45	Transportation Boat	Travelling	91	18	20	343	24	20	22.3074	113.9659	1086.76	357.14
07-Oct-13	8:32:53	HSF High Speed Ferry	Travelling	91	1	40	290	49	0	22.3047	113.9553	1383.77	304.55
07-Oct-13	8:34:33	Transportation Boat	Travelling	91	1	30	295	54	10	22.3056	113.9560	1387.36	309.63
07-Oct-13	8:34:39	Transportation Boat	Travelling	91	1	20	301	41	30	22.3065	113.9569	1391.17	315.42
07-Oct-13	8:34:48	Transportation Boat	Travelling	94	52	30	12	30	0	22.3000	113.9676	289.33	26.23
07-Oct-13	8:35:29	Transportation Boat	Travelling	90	57	0	280	2	10	22.3031	113.9531	1498.31	293.77
07-Oct-13	8:35:32	Transportation Boat	Travelling	90	57	0	287	1	30	22.3045	113.9539	1498.30	300.75
07-Oct-13	8:35:39	HSF High Speed Ferry	Travelling	91	1	30	286	36	10	22.3039	113.9548	1387.23	300.33
07-Oct-13	8:35:45	HSF High Speed Ferry	Travelling	91	1	30	322	50	30	22.3091	113.9610	1387.22	336.57
07-Oct-13	8:36:03	HSF High Speed Ferry	Travelling	90	55	0	278	41	50	22.3030	113.9524	1553.55	292.43
07-Oct-13	8:37:37	Transportation Boat	Travelling	93	26	40	298	33	30	22.3001	113.9634	410.00	312.29
07-Oct-13	8:37:45	HSF High Speed Ferry	Travelling	90	51	40	340	58	40	22.3125	113.9649	1655.26	354.71
07-Oct-13	8:37:53	HSF High Speed Ferry	Travelling	90	56	50	330	25	20	22.3106	113.9624	1502.45	344.15
07-Oct-13	8:39:08	Transportation Boat	Travelling	91	47	0	280	56	10	22.3006	113.9594	793.66	294.67
07-Oct-13	8:39:17	HSF High Speed Ferry	Travelling	90	44	0	347	22	30	22.3152	113.9668	1949.98	1.10
07-Oct-13	8:39:24	Speed Boat	Travelling	91	0	0	295	58	30	22.3058	113.9558	1421.90	309.70
07-Oct-13	8:39:32	Transportation Boat	Travelling	94	19	40	344	50	0	22.3006	113.9663	325.97	358.56
07-Oct-13	8:40:27	Speed Boat	Travelling	90	45	10	303	42	0	22.3102	113.9539	1898.22	317.43
07-Oct-13	8:40:37	Transportation Boat	Travelling	90	57	20	291	21	0	22.3053	113.9545	1488.80	305.08
07-Oct-13	8:40:42	Transportation Boat	Travelling	92	49	30	318	35	30	22.3016	113.9641	500.09	332.32
07-Oct-13	8:40:52	Dumping Guide Boat	Travelling	93	19	0	347	49	10	22.3014	113.9665	425.73	1.55
07-Oct-13	8:42:25	Transportation Boat	Travelling	91	0	50	294	57	20	22.3055	113.9558	1401.80	308.69
07-Oct-13	8:42:31	Transportation Boat	Travelling	90	59	50	305	41	10	22.3074	113.9574	1425.52	319.42
07-Oct-13	8:42:38	Transportation Boat	Travelling	91	36	30	305	4	30	22.3036	113.9608	880.20	318.80
07-Oct-13	8:42:43	Dumping Guide Boat	Travelling	91	43	0	349	47	0	22.3050	113.9669	824.37	3.51
07-Oct-13	8:43:36	Transportation Boat	Travelling	90	52	30	306	42	0	22.3089	113.9563	1627.70	320.43
07-Oct-13	8:43:41	Transportation Boat	Travelling	90	52	10	307	19	30	22.3091	113.9564	1638.27	321.05
07-Oct-13	8:43:51	Dumping Guide Boat	Travelling	92	11	40	18	44	30	22.3025	113.9698	644.16	32.47
07-Oct-13	8:44:22	Dumping Guide Boat	Travelling	91	11	30	348	26	30	22.3083	113.9668	1190.35	2.17
07-Oct-13	8:44:38	Transportation Boat	Travelling	90	58	40	297	57	50	22.3063	113.9558	1453.98	311.69
07-Oct-13	8:45:59	Transportation Boat	Travelling	90	54	50	284	11	10	22.3042	113.9530	1557.00	297.92
07-Oct-13	8:46:05	Dumping Guide Boat	Travelling	90	54	30	349	17	20	22.3117	113.9672	1566.66	3.02
07-Oct-13	8:46:13	Dumping Guide Boat	Travelling	91	13	30	24	59	20	22.3057	113.9734	1157.49	38.72
07-Oct-13	8:46:31	Transportation Boat	Travelling	90	53	50	279	12	20	22.3032	113.9522	1586.31	292.94
07-Oct-13	8:46:38	Transportation Boat	Travelling	90	49	50	295	14	30	22.3073	113.9534	1715.96	308.97
07-Oct-13	8:53:35	Speed Boat	Travelling	91	1	10	296	55	20	22.3058	113.9561	1392.70	310.65
07-Oct-13	8:54:25	Speed Boat	Travelling	90	55	40	305	48	20	22.3081	113.9567	1532.20	319.54

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
07-Oct-13	8:54:36	Transportation Boat	Travelling	90	41	10	346	51	30	22.3164	113.9666	2085.04	0.59
07-Oct-13	8:55:49	Government Boat	Travelling	90	54	10	5	18	40	22.3110	113.9714	1575.11	19.04
07-Oct-13	8:56:05	Transportation Boat	Travelling	90	52	10	334	46	10	22.3121	113.9632	1636.49	348.50
07-Oct-13	8:56:26	Government Boat	Travelling	91	12	20	351	42	0	22.3081	113.9675	1175.28	5.43
07-Oct-13	8:57:26	Government Boat	Travelling	91	8	50	304	15	30	22.3059	113.9584	1235.52	317.99
07-Oct-13	8:58:37	Government Boat	Travelling	90	55	10	294	15	30	22.3062	113.9545	1545.73	307.99
07-Oct-13	8:58:45	Transportation Boat	Travelling	91	4	50	295	14	50	22.3050	113.9565	1312.43	308.98
07-Oct-13	8:58:54	Transportation Boat	Travelling	90	55	10	330	2	20	22.3110	113.9622	1545.69	343.77
07-Oct-13	8:59:58	Transportation Boat	Travelling	90	59	10	277	13	40	22.3023	113.9533	1439.60	290.96
07-Oct-13	9:00:05	Transportation Boat	Travelling	90	58	30	317	26	30	22.3091	113.9596	1456.22	331.17
07-Oct-13	9:00:13	Transportation Boat	Travelling	90	59	0	317	11	10	22.3090	113.9596	1443.69	330.92
07-Oct-13	9:01:42	Transportation Boat	Travelling	91	2	10	295	47	10	22.3055	113.9561	1369.05	309.52
07-Oct-13	9:01:47	Transportation Boat	Travelling	90	50	40	303	40	0	22.3088	113.9553	1684.97	317.40
07-Oct-13	9:01:54	Transportation Boat	Travelling	90	55	0	329	1	50	22.3109	113.9619	1550.04	342.76
07-Oct-13	9:02:02	Transportation Boat	Travelling	91	2	30	301	29	40	22.3063	113.9571	1361.62	315.22
07-Oct-13	9:03:29	Transportation Boat	Travelling	90	48	50	338	53	0	22.3132	113.9642	1749.20	352.61
07-Oct-13	9:03:35	Transportation Boat	Travelling	90	52	10	311	25	40	22.3097	113.9573	1635.41	325.16
07-Oct-13	9:03:43	Transportation Boat	Travelling	90	59	20	283	38	10	22.3036	113.9540	1435.03	297.37
07-Oct-13	9:03:51	Speed Boat	Travelling	90	59	50	305	41	10	22.3073	113.9574	1422.86	319.42
07-Oct-13	9:04:33	Speed Boat	Travelling	91	3	10	283	0	20	22.3031	113.9547	1346.78	296.74
07-Oct-13	9:04:44	Speed Boat	Travelling	91	0	30	278	27	30	22.3024	113.9537	1406.87	292.19
07-Oct-13	9:04:57	Transportation Boat	Travelling	91	1	10	298	40	20	22.3061	113.9564	1391.32	312.40
07-Oct-13	9:05:09	Construction Boat	Travelling	90	46	20	345	45	40	22.3142	113.9662	1845.35	359.49
07-Oct-13	9:06:11	Transportation Boat	Travelling	90	52	0	305	27	50	22.3088	113.9560	1640.37	319.19
07-Oct-13	9:08:22	Research Vessel	Travelling	90	48	30	279	45	40	22.3039	113.9507	1760.71	293.49
07-Oct-13	9:08:32	Transportation Boat	travelling	91	38	40	281	45	30	22.3009	113.9589	858.84	295.49
07-Oct-13	9:08:44	Construction Boat	Travelling	91	4	50	336	10	50	22.3092	113.9642	1311.28	349.91
07-Oct-13	9:10:23	Transportation Boat	Travelling	92	12	20	301	15	40	22.3017	113.9620	639.43	314.99
07-Oct-13	9:10:39	Research Vessel	Travelling	91	4	10	277	7	30	22.3019	113.9544	1324.84	290.85
07-Oct-13	9:12:39	Transportation Boat	Travelling	90	58	10	291	28	20	22.3052	113.9548	1463.07	305.20
07-Oct-13	9:12:46	Transportation Boat	Travelling	91	0	50	302	56	40	22.3068	113.9571	1398.08	316.67
07-Oct-13	9:12:53	Transportation Boat	Travelling	91	9	10	348	45	30	22.3087	113.9669	1227.84	2.49
07-Oct-13	9:13:13	Transportation Boat	Travelling	92	16	10	348	35	50	22.3032	113.9666	621.21	2.33
07-Oct-13	9:13:23	Transportation Boat	Travelling	91	0	40	302	2	20	22.3067	113.9569	1401.89	315.77
07-Oct-13	9:13:28	Transportation Boat	Travelling	91	1	50	296	52	0	22.3057	113.9562	1375.10	310.60
07-Oct-13	9:13:38	Transportation Boat	Travelling	91	21	40	349	0	40	22.3070	113.9669	1038.37	2.74
07-Oct-13	9:14:50	Research Vessel	Travelling	91	50	50	291	28	50	22.3016	113.9603	763.71	305.21
07-Oct-13	9:14:59	Transportation Boat	Travelling	91	43	30	8	32	20	22.3044	113.9694	818.07	22.27
07-Oct-13	9:15:12	Transportation Boat	Travelling	90	44	0	300	48	10	22.3099	113.9529	1943.82	314.53
07-Oct-13	9:15:19	Transportation Boat	Travelling	90	58	0	282	23	10	22.3034	113.9536	1466.99	296.12
07-Oct-13	9:15:28	Transportation Boat	Travelling	92	16	50	351	38	20	22.3032	113.9670	618.05	5.37
07-Oct-13	9:15:36	HSF High Speed Ferry	Travelling	90	40	50	347	34	50	22.3165	113.9669	2098.65	1.31
07-Oct-13	9:15:50	Research Vessel	Travelling	91	32	20	300	22	0	22.3034	113.9600	917.50	314.10
07-Oct-13	9:16:58	HSF High Speed Ferry	Travelling	90	53	0	334	51	30	22.3118	113.9633	1607.37	348.59
07-Oct-13	9:17:15	Transportation Boat	Travelling	94	59	50	358	55	30	22.3001	113.9670	281.17	12.65
07-Oct-13	9:17:23	Transportation Boat	Stationary	91	12	50	14	4	50	22.3069	113.9717	1165.00	27.81
07-Oct-13	9:17:32	Research Vessel	Travelling	91	12	0	313	12	0	22.3065	113.9601	1178.59	326.93
07-Oct-13	9:18:25	Construction Boat	Travelling	90	51	20	303	45	40	22.3086	113.9555	1660.27	317.49
07-Oct-13	9:19:01	HSF High Speed Ferry	Travelling	91	4	20	300	13	0	22.3059	113.9572	1320.40	313.95
07-Oct-13	9:20:07	Transportation Boat	Travelling	91	3	30	280	39	30	22.3026	113.9545	1337.80	294.39
07-Oct-13	9:20:13	HSF High Speed Ferry	Travelling	90	58	10	279	32	50	22.3028	113.9533	1462.10	293.28
07-Oct-13	9:20:21	Research Vessel	Travelling	91	4	10	333	5	50	22.3092	113.9635	1323.72	346.83
07-Oct-13	9:21:24	Transportation Boat	Travelling	91	16	20	287	31	50	22.3028	113.9572	1110.75	301.26
07-Oct-13	9:22:07	Transportation Boat	Travelling	91	3	10	300	33	50	22.3061	113.9570	1344.71	314.29
07-Oct-13	9:22:19	Research Vessel	Travelling	91	32	40	333	40	20	22.3056	113.9645	913.66	347.40
07-Oct-13	9:24:55	Transportation Boat	Travelling	92	37	40	322	58	20	22.3020	113.9643	535.69	336.70
07-Oct-13	9:25:08	Transportation Boat	Travelling	92	5	0	281	29	40	22.3002	113.9604	676.21	295.22
07-Oct-13	9:25:14	Transportation Boat	Travelling	90	56	0	285	47	20	22.3044	113.9535	1518.83	299.52
07-Oct-13	9:25:19	Transportation Boat	Travelling	91	0	10	290	37	0	22.3048	113.9551	1412.22	304.35
07-Oct-13	9:25:35	Research Vessel	Travelling	93	16	50	8	12	30	22.3012	113.9680	428.76	21.94
07-Oct-13	9:27:00	Transportation Boat	Travelling	94	46	20	320	26	30	22.3000	113.9652	294.25	334.17
07-Oct-13	9:27:15	Transportation Boat	Travelling	91	0	50	301	40	50	22.3066	113.9569	1396.31	315.41
07-Oct-13	9:27:52	Research Vessel	Travelling	91	42	50	25	6	0	22.3034	113.9714	822.47	38.83
07-Oct-13	9:28:28	Transportation Boat	Travelling	95	20	10	350	14	0	22.3000	113.9666	262.96	3.96
07-Oct-13	9:28:48	Transportation Boat	Travelling	90	51	20	306	32	10	22.3091	113.9561	1658.76	320.27
07-Oct-13	9:31:51	Transportation Boat	Travelling	91	58	30	328	11	40	22.3037	113.9642	713.04	341.92
07-Oct-13	9:31:58	Transportation Boat	Travelling	93	9	10	343	56	10	22.3016	113.9662	445.95	357.67
07-Oct-13	9:32:08	Transportation Boat	Travelling	90	59	30	294	4	50	22.3055	113.9554	1427.40	307.81
07-Oct-13	9:32:21	Research Vessel	Acoustic Recording	91	12	30	0	16	40	22.3078	113.9692	1168.88	14.01
07-Oct-13	9:32:39	Transportation Boat	Travelling	91	0	40	314	31	40	22.3083	113.9592	1399.53	328.26
07-Oct-13	9:33:35	Transportation Boat	Travelling	91	20	30	323	37	10	22.3064	113.9625	1051.69	337.35
07-Oct-13	9:33:43	Transportation Boat	Travelling	91	47	20	331	37	50	22.3045	113.9645	787.43	345.36
07-Oct-13	9:33:51	Transportation Boat	Travelling	90	50	10	303	17	0	22.3088	113.9551	1697.29	317.01
07-Oct-13	9:34:05	Transportation Boat	Travelling	90	55	10	329	55	10	22.3109	113.9622	1540.93	343.65
07-Oct-13	9:34:58	Transportation Boat	Travelling	91	9	20	319	34	20	22.3074	113.9611	1222.50	333.30
07-Oct-13	9:35:05	Transportation Boat	Travelling	91	21	50	323	39	40	22.3062	113.9625	1034.30	337.39
07-Oct-13	9:36:42	Transportation Boat	Travelling	91	9	20	319	40	30	22.3075	113.9611	1222.31	333.40
07-Oct-13	9:36:51	Research Vessel	Travelling	91	14	20	0	3	20	22.3076	113.9690	1139.34	13.79
07-Oct-13	9:39:44	Research Vessel	Travelling	90	49	40	356	58	20	22.3128	113.9695	1713.82	10.70
07-Oct-13	9:39:51	Transportation Boat	Travelling	91	0	10	283	36	20	22.3034	113.9542	1410.42	297.34
07-Oct-13	9:41:48	Transportation Boat	Travelling	91	1	30	306	23	40	22.3071	113.9578	1379.22	320.12
07-Oct-13	9:42:13	Speed Boat	Travelling	92	4	20	312	6	40	22.3027	113.9627	678.84	325.84
07-Oct-13	9:42:24	Transportation Boat	Travelling	91	1	50	302	2	0	22.3065	113.9571	1371.62	315.76
07-Oct-13	9:42:39	Transportation Boat	Travelling	90	54	50	305	38	30	22.3082	113.9566	1549.28	319.37
07-Oct-13	9:42:44	Transportation Boat	Travelling	90	56	10	305	25	10	22.3079	113.9568	1511.93	319.15
07-Oct-13	9:44:04	Transportation Boat	Travelling	90	57	0	281	20	10	22.3033	113.9533	1489.33	295.07
07-Oct-13	9:44:10	Transportation Boat	Travelling	91	0	40	293	52	20	22.3053	113.9556	1398.12	307.60
07-Oct-13	9:44:16	Speed Boat	Travelling	92	46	20	316	19	30	22.3016	113.9639	506.83	330.05
07-Oct-13	9:46:17	Transportation Boat	Travelling	91	1	40	285	24	40	22.3036	113.9547	1374.90	299.14
07-Oct-13	9:46:55	Speed Boat	Stationary	92	52	30	315	47	0	22.3014	113.9640	488.54	329.51
07-Oct-13	9:47:04	Transportation Boat	Stationary	91	3	10	291	59	10	22.3047	113.9558	1341.77	305.72
07-Oct-13	9:47:16	Research Vessel	Travelling	90	55	0	23	57	40	22.3086	113.9756	1543.88	37.69
07-Oct-13	9:49:13	Transportation Boat	Stationary	90	56	50	305	47	20	22.3078	113.9570	1493.09	319.52
07-Oct-13	9:49:25	Research Vessel	Travelling	91	6	30	38	6	0	22.3047	113.9761	1273.52	51.83
07-Oct-13	9:53:45	Transportation Boat	Stationary	90	59	0	292	21	20	22.3052	113.9551	1436.93	306.09
07-Oct-13	9:54:07	Speed Boat	Travelling	92	23	40	303	55	30	22.3015	113.9626	586.57	317.65
07-Oct-13	9:55:30	Transportation Boat	Travelling	91	0	40	296	37	10	22.3058	113.9560	1396.72	310.35
07-Oct-13	9:55:35	Transportation Boat	Travelling	90	57	40	306	18	50	22.3078	113.9572	1470.38	320.04
07-Oct-13	9:55:46	Speed Boat	Travelling	92	23	40	304	26	40	22.3016	113.9626	586.49	318.17
07-Oct-13	9:57:02	Transportation Boat	Travelling	90	52	0	307	13	20	22.3090	113.9564	1633.05	320.95
07-Oct-13	9:57:44	Transportation Boat	Travelling	90	58	10	290	49	10	22.3051	113.9547	1457.29	304.55
07-Oct-13	9:59:18	Tug Boat	Travelling	91	1	10	313	19	10	22.3081	113.9591	1384.70	327.05
07-Oct-13	9:59:24	Transportation Boat	Travelling	90	54	10	305	5	20	22.3082	113.9564	1566.34	318.82
07-Oct-13	9:59:31	Transportation Boat	Travelling	93	44	10	339	51	30	22.3010	113.9660	375.19	353.59
07-Oct-13	9:59:46	Speed Boat	Stationary	92	27	10	305	24	10	22.3015	113.9628	572.29	319.13
07-Oct-13	10:02:00	Transportation Boat	Travelling	91	22	30	313	3	40	22.3053	113.9609	1023.46	326.79
07-Oct-13	10:02:09	Tug Boat	Stationary	91	5	50	318	20	0	22.3078	113.9605	1285.11	332.06
07-Oct-13	10:06:34	Transportation Boat	Travelling	91	9	30	298	49	40	22.3050	113.9577	1216.16	312.56
07-Oct-13	10:07:41	Transportation Boat	Travelling	91	5	40	316	59	30	22.3077	113.9603	1287.79	330.72
07-Oct-13	10:09:32	Transportation Boat	Travelling	90	52	50	341	39	20	22.3120	113.9651	1605.09	355.39
07-Oct-13	10:12:00	Transportation Boat	Travelling	91	0	40	314	36	30	22.3083	113.9593	1394.70	328.34
07-Oct-13	10:13:39	Transportation Boat	Stationary	91	6	30	328	4	50	22.3085	113.9625	1270.81	341.81
07-Oct-13	10:15:42	Transportation Boat	Travelling	90	59	20	314	52	20	22.3086	113.9592	1425.99	328.60
07-Oct-13	10:17:36	Transportation Boat	Travelling	90	49	20	312	2	10	22.3104	113.9570	1719.87	325.77
07-Oct-13	10:20:44	Fishing Boat	Travelling	95	44	30	319	24	20	22.2996	113.9653	243.15	333.14
07-Oct-13	10:22:27	Fishing Boat	Travelling	93	34	30	287	27	50	22.2994	113.9631	391.38	301.19
07-Oct-13	10:23:20	Transportation Boat	Travelling	91	30	10	27	3	10	22.3040	113.9723	934.14	40.78

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
07-Oct-13	10:23:35	Transportation Boat	Travelling	90	52	20	26	11	40	22.3088	113.9765	1618.68	39.92
07-Oct-13	10:24:55	Transportation Boat	Travelling	91	54	40	20	19	0	22.3031	113.9704	733.56	34.05
07-Oct-13	10:25:03	Transportation Boat	Travelling	91	18	10	23	58	50	22.3053	113.9728	1078.45	37.71
07-Oct-13	10:26:26	Transportation Boat	Travelling	92	38	20	11	3	20	22.3020	113.9686	530.56	24.79
07-Oct-13	10:26:33	Transportation Boat	Travelling	92	4	30	1	55	10	22.3035	113.9682	675.30	15.65
07-Oct-13	10:28:16	Transportation Boat	Travelling	91	2	10	296	35	20	22.3055	113.9563	1358.68	310.32
07-Oct-13	10:28:30	Transportation Boat	Travelling	94	56	0	2	10	20	22.3001	113.9672	283.07	15.90
07-Oct-13	10:28:44	Transportation Boat	Travelling	91	51	50	298	29	30	22.3022	113.9610	751.97	312.22
07-Oct-13	10:28:59	Transportation Boat	Travelling	90	58	0	283	30	40	22.3036	113.9538	1457.52	297.24
07-Oct-13	10:29:29	Transportation Boat	Travelling	90	54	10	275	2	10	22.3021	113.9520	1562.19	288.77
07-Oct-13	10:29:34	Transportation Boat	Travelling	90	54	40	279	59	50	22.3032	113.9526	1547.66	293.73
07-Oct-13	10:29:42	Transportation Boat	Travelling	91	25	10	283	41	40	22.3017	113.9579	988.79	297.42
07-Oct-13	10:32:49	Transportation Boat	Travelling	92	25	0	358	4	20	22.3027	113.9676	579.19	11.80
07-Oct-13	10:35:31	Transportation Boat	Travelling	91	1	20	299	31	10	22.3061	113.9566	1376.49	313.25
07-Oct-13	10:40:12	Fishing Boat	Travelling	91	37	0	336	58	40	22.3053	113.9650	866.69	350.71
07-Oct-13	10:40:20	Fishing Boat	Travelling	91	26	10	334	53	30	22.3062	113.9645	976.33	348.62
07-Oct-13	10:40:37	Speed Boat	Stationary	92	37	0	303	27	0	22.3011	113.9629	534.42	317.18
07-Oct-13	10:41:32	Fishing Boat	travelling	91	47	50	286	21	50	22.3011	113.9598	779.12	300.09
07-Oct-13	10:41:39	Fishing Boat	travelling	91	3	30	302	56	10	22.3063	113.9575	1328.25	316.67
07-Oct-13	10:41:50	HSF High Speed Ferry	travelling	90	56	10	281	34	0	22.3034	113.9532	1504.08	295.30
07-Oct-13	10:42:29	Transportation Boat	Travelling	90	57	40	306	47	30	22.3078	113.9573	1464.31	320.52
07-Oct-13	10:42:37	HSF High Speed Ferry	Travelling	91	1	10	294	41	20	22.3053	113.9559	1379.43	308.42
07-Oct-13	10:43:42	HSF High Speed Ferry	travelling	91	0	10	314	30	10	22.3084	113.9592	1402.51	328.23
07-Oct-13	10:43:48	Transportation Boat	travelling	91	5	30	295	0	0	22.3049	113.9566	1287.00	308.73
07-Oct-13	10:45:07	Transportation Boat	travelling	91	1	0	280	50	0	22.3028	113.9542	1382.94	294.56
07-Oct-13	10:45:18	HSF High Speed Ferry	Travelling	90	50	20	339	8	20	22.3126	113.9644	1680.93	352.87
07-Oct-13	10:46:34	HSF High Speed Ferry	Travelling	90	40	0	348	16	20	22.3167	113.9671	2126.44	2.00
07-Oct-13	10:48:18	Transportation Boat	Travelling	91	0	40	294	41	10	22.3054	113.9558	1390.24	308.42
07-Oct-13	10:49:02	Fishing Boat	Operate and travelling	91	6	10	286	51	20	22.3034	113.9557	1273.30	300.59
07-Oct-13	10:49:09	Fishing Boat	Operate and travelling	91	12	30	291	20	30	22.3036	113.9572	1161.02	305.07
07-Oct-13	10:49:21	Fishing Boat	Operate and travelling	91	0	10	285	19	40	22.3037	113.9545	1401.81	299.06
07-Oct-13	10:54:35	Transportation Boat	Travelling	90	57	20	292	4	10	22.3054	113.9548	1471.37	305.80
07-Oct-13	10:54:43	Transportation Boat	Travelling	91	3	40	308	2	50	22.3070	113.9584	1323.21	321.78
07-Oct-13	10:56:06	Transportation Boat	Travelling	90	56	40	306	2	0	22.3078	113.9570	1488.73	319.76
07-Oct-13	10:56:14	Transportation Boat	Travelling	91	23	0	311	27	10	22.3051	113.9608	1012.42	325.18
07-Oct-13	10:58:43	Transportation Boat	Travelling	92	48	0	322	31	30	22.3017	113.9644	498.53	336.25
07-Oct-13	11:00:00	Transportation Boat	Travelling	95	6	40	345	30	50	22.3001	113.9664	272.41	359.24
07-Oct-13	11:01:25	Transportation Boat	Travelling	95	13	20	347	55	10	22.3000	113.9665	266.55	1.65
07-Oct-13	11:02:55	Transportation Boat	Travelling	92	46	20	327	37	0	22.3019	113.9648	503.35	341.35
07-Oct-13	11:03:01	Transportation Boat	Travelling	90	58	30	281	0	30	22.3030	113.9537	1440.55	294.74
07-Oct-13	11:03:14	Fishing Boat	Operate and travelling	91	10	10	288	24	50	22.3034	113.9565	1198.50	302.14
07-Oct-13	11:03:20	Fishing Boat	Operate and travelling	91	6	0	284	40	20	22.3031	113.9555	1274.94	298.40
07-Oct-13	11:03:28	Fishing Boat	Operate and travelling	91	14	40	280	21	50	22.3018	113.9564	1125.61	294.09
07-Oct-13	11:04:20	Transportation Boat	Travelling	91	1	0	299	0	40	22.3061	113.9565	1380.59	312.74
07-Oct-13	11:04:27	Transportation Boat	Travelling	91	2	50	299	57	50	22.3059	113.9570	1339.81	313.69
07-Oct-13	11:05:45	Transportation Boat	Travelling	91	22	40	315	20	30	22.3055	113.9613	1015.67	329.07
07-Oct-13	11:05:52	Transportation Boat	Travelling	90	49	0	304	48	30	22.3092	113.9553	1724.41	318.54
07-Oct-13	11:05:59	Transportation Boat	Travelling	90	58	20	280	54	40	22.3030	113.9536	1444.34	294.64
07-Oct-13	11:06:06	Transportation Boat	Travelling	90	56	50	306	4	10	22.3078	113.9571	1482.99	319.80
07-Oct-13	11:07:06	Transportation Boat	Travelling	90	59	10	299	34	50	22.3064	113.9563	1423.59	313.31
07-Oct-13	11:08:01	Fishing Boat	Non-operate and travelling	92	50	0	300	14	20	22.3007	113.9630	492.24	313.97
07-Oct-13	11:08:14	Fishing Boat	Operate and stationary	92	43	40	9	40	10	22.3018	113.9684	511.34	23.40
07-Oct-13	11:08:24	Transportation Boat	Travelling	90	57	10	290	2	30	22.3050	113.9545	1473.92	303.77
07-Oct-13	11:08:56	Fishing Boat	Non-operate and travelling	92	30	30	0	25	20	22.3025	113.9677	556.19	14.15
07-Oct-13	11:10:30	Fishing Boat	Non-operate and travelling	91	4	50	35	41	20	22.3052	113.9760	1297.32	49.42
07-Oct-13	11:10:56	Transportation Boat	Travelling	91	13	40	310	17	10	22.3059	113.9599	1140.27	324.02
07-Oct-13	11:12:30	Transportation Boat	Travelling	92	0	30	324	41	0	22.3034	113.9639	694.99	338.41
07-Oct-13	11:13:42	Container Boat	Travelling	91	9	0	309	57	30	22.3065	113.9594	1217.84	323.69
07-Oct-13	11:13:50	Transportation Boat	Travelling	91	0	20	297	30	20	22.3059	113.9562	1394.87	311.24
07-Oct-13	11:14:03	Fishing Boat	Non-operate and travelling	91	55	50	311	29	50	22.3030	113.9624	723.01	325.23
07-Oct-13	11:14:09	Fishing Boat	Non-operate and travelling	91	21	20	295	47	0	22.3035	113.9587	1031.68	309.51
07-Oct-13	11:14:15	Fishing Boat	Non-operate and travelling	91	35	50	288	11	40	22.3018	113.9592	874.67	301.92
07-Oct-13	11:14:26	Transportation Boat	Stationary	95	10	10	2	13	50	22.2999	113.9671	268.98	15.96
07-Oct-13	11:14:33	Transportation Boat	Travelling	90	59	0	289	28	10	22.3046	113.9548	1426.72	303.20
07-Oct-13	11:14:43	Fishing Boat	Non-operate and travelling	92	4	30	346	8	50	22.3037	113.9664	672.45	359.88
07-Oct-13	11:14:51	Fishing Boat	Non-operate and travelling	91	36	50	310	31	0	22.3039	113.9615	865.54	324.25
07-Oct-13	11:14:56	Fishing Boat	Non-operate and travelling	92	24	10	310	56	10	22.3019	113.9631	580.40	324.67
07-Oct-13	11:15:06	HSF High Speed Ferry	Travelling	90	47	20	342	37	40	22.3136	113.9653	1784.91	356.36
07-Oct-13	11:15:16	Speed Boat	Travelling	91	2	20	298	13	0	22.3057	113.9566	1349.40	311.95
07-Oct-13	11:15:20	Transportation Boat	Travelling	90	56	20	281	26	40	22.3033	113.9532	1495.12	295.17
07-Oct-13	11:15:26	Speed Boat	Travelling	91	2	20	292	31	10	22.3048	113.9558	1349.38	306.25
07-Oct-13	11:15:33	Container Boat	Travelling	91	12	20	307	42	30	22.3058	113.9594	1161.01	321.44
07-Oct-13	11:15:39	Speed Boat	Travelling	91	0	40	284	46	50	22.3036	113.9545	1386.88	298.51
07-Oct-13	11:15:49	Speed Boat	Travelling	90	59	10	279	20	20	22.3026	113.9537	1422.49	293.07
07-Oct-13	11:15:59	Fishing Boat	Non-operate and travelling	91	7	0	25	36	30	22.3063	113.9741	1254.31	39.34
07-Oct-13	11:16:09	Fishing Boat	Non-operate and travelling	91	32	40	346	42	30	22.3058	113.9665	904.58	0.44
07-Oct-13	11:16:14	Fishing Boat	Non-operate and travelling	91	42	20	19	30	50	22.3038	113.9708	818.69	33.24
07-Oct-13	11:16:56	Fishing Boat	Non-operate and travelling	91	15	40	1	52	0	22.3072	113.9693	1109.29	15.60
07-Oct-13	11:17:01	Fishing Boat	Non-operate and travelling	91	8	0	31	30	50	22.3054	113.9749	1235.56	45.24
07-Oct-13	11:17:08	HSF High Speed Ferry	Travelling	91	1	10	309	36	10	22.3075	113.9584	1375.22	323.33
07-Oct-13	11:17:36	Transportation Boat	Travelling	95	9	30	341	4	0	22.3000	113.9662	269.49	354.80
07-Oct-13	11:18:17	HSF High Speed Ferry	Travelling	90	58	50	287	21	10	22.3043	113.9545	1430.34	301.08
07-Oct-13	11:18:22	Transportation Boat	Travelling	93	44	20	306	44	20	22.3002	113.9641	372.33	320.47
07-Oct-13	11:18:52	HSF High Speed Ferry	Travelling	90	54	20	277	48	20	22.3027	113.9524	1550.53	291.54
07-Oct-13	11:19:56	Container Boat	Stationary	91	12	40	308	3	50	22.3058	113.9595	1155.19	321.79
07-Oct-13	11:20:12	Transportation Boat	Travelling	91	42	20	282	22	50	22.3009	113.9593	818.40	296.11
07-Oct-13	11:25:39	Transportation Boat	Travelling	91	0	10	302	49	10	22.3067	113.9571	1397.32	316.55
07-Oct-13	11:25:57	Transportation Boat	Travelling	91	1	30	307	26	0	22.3072	113.9581	1366.61	321.16
07-Oct-13	11:26:04	Speed Boat	Travelling	91	4	20	301	26	30	22.3060	113.9574	1305.72	315.17
07-Oct-13	11:26:27	Transportation Boat	Travelling	91	0	0	292	43	50	22.3051	113.9554	1401.15	306.46
07-Oct-13	11:26:42	Speed Boat	Travelling	91	9	0	282	32	50	22.3025	113.9558	1216.44	296.28
07-Oct-13	11:26:57	Speed Boat	Travelling	91	8	30	279	20	20	22.3019	113.9554	1225.38	293.07
07-Oct-13	11:27:11	Transportation Boat	Travelling	91	0	20	292	24	10	22.3050	113.9555	1393.22	306.13
07-Oct-13	11:28:33	Transportation Boat	Travelling	90	54	0	278	13	40	22.3029	113.9523	1558.91	291.96
07-Oct-13	11:32:43	Transportation Boat	Travelling	90	59	20	287	15	10	22.3042	113.9546	1416.32	300.98
07-Oct-13	11:32:52	Transportation Boat	Travelling	90	59	20	303	22	50	22.3070	113.9570	1416.30	317.11
07-Oct-13	11:33:30	Transportation Boat	Travelling	91	1	10	296	17	50	22.3056	113.9562	1373.23	310.03
07-Oct-13	11:33:34	Transportation Boat	Travelling	90	59	50	298	8	20	22.3061	113.9562	1404.22	311.87
07-Oct-13	11:34:33	Transportation Boat	Travelling	90	56	50	307	3	20	22.3079	113.9573	1479.26	320.79
07-Oct-13	11:34:39	Transportation Boat	Travelling	91	1	0	289	58	20	22.3045	113.9553	1376.89	303.70
07-Oct-13	11:35:48	Transportation Boat	Travelling	90	59	30	281	24	20	22.3030	113.9540	1411.91	295.14
07-Oct-13	11:39:37	Transportation Boat	Travelling	91	1	50	297	31	30	22.3057	113.9565	1357.51	311.25
07-Oct-13	11:40:13	Transportation Boat	Travelling	90	59	0	307	6	20	22.3076	113.9577	1423.48	320.84
07-Oct-13	11:40:59	Transportation Boat	Travelling	90	51	30	306	47	50	22.3090	113.9563	1634.08	320.53
07-Oct-13	11:43:29	Transportation Boat	Travelling	91	0	20	304	9	40	22.3069	113.9573	1392.00	317.89
07-Oct-13	11:45:46	Transportation Boat	Travelling	90	56	10	276	52	40	22.3024	113.9528	1497.22	290.61
07-Oct-13	11:45:55	Transportation Boat	Travelling	90	59	20	299	40	0	22.3064	113.9564	1416.25	313.40
07-Oct-13	11:47:14	Tug Boat	Travelling	90	56	50	324	48	10	22.3100	113.9611	1479.70	338.53
07-Oct-13	11:47:18	Construction Platform	Travelling	90	55	40	326	19	40	22.3104	113.9614	1511.19	340.06
07-Oct-13	11:47:23	Transportation Boat	Travelling	90	57	40	286	27	40	22.3042	113.9541	1458.05	300.19
07-Oct-13	11:48:39	Transportation Boat	Travelling	90	53	50	276	18	10	22.3024	113.9521	1563.76	290.03
07-Oct-13	11:49:01	Tug Boat	Travelling	90	59	10	314	41	30	22.3085	113.9592	1420.91	328.42
07-Oct-13	11:49:04	Construction Platform	Travelling	90	59	10	316	32	20	22.3087	113.9595	1420.92	330.27
07-Oct-13	11:50:21	Transportation Boat	Travelling	90	59	20	304	48	10	22.3072	113.9573	1417.12	318.53
07-Oct-13	11:50:26	Tug Boat	Travelling	91	1	20	306	11	30	22.3071	113.9578	1370.35	319.92
07-Oct-13	11:50:30	Construction Platform	Travelling	91	1	20	307	56	50	22.3073	113.9581	1370.36	321.68
07-Oct-13	11:52:17	Transportation Boat	Travelling	90	54	10	278	37	30	22.3029	113.9524	1554.78	292.35

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
07-Oct-13	11:53:41	Transportation Boat	Travelling	91	1	10	300	46	10	22.3063	113.9569	1374.75	314.50
07-Oct-13	11:53:54	Fishing Boat	Non-operate and travelling	92	12	30	333	45	20	22.3032	113.9651	631.37	347.49
07-Oct-13	11:54:29	Transportation Boat	Travelling	90	59	30	286	23	50	22.3040	113.9545	1413.92	300.13
07-Oct-13	11:54:34	Tug Boat	Travelling	90	55	50	283	30	50	22.3038	113.9534	1508.14	297.24
07-Oct-13	11:54:38	Construction Platform	Travelling	90	57	10	284	52	10	22.3040	113.9538	1472.47	298.60
07-Oct-13	11:56:24	Transportation Boat	Travelling	91	0	0	300	21	50	22.3064	113.9566	1402.36	314.09
07-Oct-13	11:57:20	Transportation Boat	Travelling	90	53	40	307	4	0	22.3086	113.9567	1570.61	320.80
07-Oct-13	11:57:24	Transportation Boat	Travelling	90	54	50	305	54	0	22.3082	113.9567	1536.68	319.63
07-Oct-13	11:59:03	Transportation Boat	Travelling	91	3	30	290	33	0	22.3043	113.9558	1324.63	304.28
07-Oct-13	11:59:15	Fishing Boat	Operate and stationary	91	59	40	308	42	50	22.3026	113.9623	699.87	322.44
07-Oct-13	12:00:05	Transportation Boat	Travelling	91	0	40	277	45	30	22.3022	113.9538	1387.47	291.49
07-Oct-13	12:09:06	Fishing Boat	Non-operate and travelling	91	42	30	281	51	10	22.3008	113.9592	818.76	295.58
07-Oct-13	12:18:00	Transportation Boat	Travelling	91	1	10	301	42	50	22.3065	113.9570	1379.42	315.44
07-Oct-13	12:19:28	Transportation Boat	Travelling	90	59	50	318	43	10	22.3089	113.9601	1410.85	332.45
07-Oct-13	12:21:06	Transportation Boat	Travelling	90	59	50	326	55	50	22.3096	113.9619	1411.17	340.66
07-Oct-13	12:21:12	Transportation Boat	Travelling	90	59	20	295	0	40	22.3056	113.9556	1423.24	308.74
07-Oct-13	12:22:05	Transportation Boat	Travelling	90	59	0	316	3	10	22.3088	113.9594	1431.56	329.78
07-Oct-13	12:22:09	Transportation Boat	Travelling	90	53	0	281	31	30	22.3037	113.9524	1596.21	295.25
07-Oct-13	12:22:16	Transportation Boat	Travelling	91	32	20	321	9	10	22.3050	113.9626	911.08	334.88
07-Oct-13	12:23:02	Transportation Boat	Travelling	90	55	0	307	15	0	22.3084	113.9570	1537.44	320.98
07-Oct-13	12:23:09	Transportation Boat	Travelling	91	35	20	331	23	20	22.3053	113.9642	882.36	345.12
07-Oct-13	12:24:27	Transportation Boat	Travelling	91	28	10	345	22	30	22.3062	113.9663	954.70	359.10
07-Oct-13	12:24:34	Dumping Guide Boat	Travelling	90	56	0	348	29	40	22.3112	113.9670	1509.89	2.22
07-Oct-13	12:27:41	Dumping Guide Boat	Travelling	91	49	50	346	39	30	22.3045	113.9665	765.81	0.39
07-Oct-13	12:29:04	Dumping Guide Boat	Travelling	93	7	50	357	57	30	22.3016	113.9673	447.04	11.69
07-Oct-13	12:31:38	Dumping Guide Boat	Stationary	94	53	0	358	17	40	22.3001	113.9670	286.17	12.02
07-Oct-13	12:37:37	Dumping Guide Boat	Travelling	91	50	50	24	4	50	22.3030	113.9709	759.92	37.81
07-Oct-13	12:37:47	Transportation Boat	Travelling	90	59	40	290	19	30	22.3048	113.9550	1418.45	304.05
07-Oct-13	12:39:12	Transportation Boat	Travelling	90	57	0	306	35	40	22.3079	113.9572	1486.04	320.32
07-Oct-13	12:39:19	Dumping Guide Boat	Travelling	91	12	40	24	43	40	22.3058	113.9734	1162.42	38.46
07-Oct-13	12:44:06	Tug Boat	Travelling	90	58	10	286	34	20	22.3042	113.9542	1456.80	300.30
07-Oct-13	12:44:10	Construction Platform	Travelling	90	57	30	283	58	0	22.3038	113.9537	1473.95	297.70
07-Oct-13	12:44:16	Transportation Boat	Travelling	90	51	0	285	12	50	22.3049	113.9522	1665.03	298.94
07-Oct-13	12:45:39	Transportation Boat	Travelling	90	58	20	298	23	10	22.3064	113.9559	1452.90	312.12
07-Oct-13	12:45:45	Tug Boat	Travelling	91	0	10	291	36	50	22.3049	113.9552	1408.06	305.34
07-Oct-13	12:45:48	Construction Platform	Travelling	90	59	0	288	45	50	22.3046	113.9546	1436.29	302.49
07-Oct-13	12:46:18	Transportation Boat	Travelling	91	10	20	312	22	30	22.3066	113.9599	1202.51	326.10
07-Oct-13	12:46:23	Transportation Boat	Travelling	90	59	40	305	51	30	22.3074	113.9574	1420.14	319.59
07-Oct-13	12:48:07	Transportation Boat	Travelling	90	54	30	305	34	0	22.3082	113.9565	1557.19	319.30
07-Oct-13	12:48:12	Transportation Boat	Travelling	92	10	0	331	2	20	22.3032	113.9647	648.41	344.77
07-Oct-13	12:49:53	Transportation Boat	Travelling	94	51	0	4	22	50	22.3001	113.9673	288.87	18.11
07-Oct-13	12:50:03	Transportation Boat	Travelling	91	29	10	289	50	0	22.3023	113.9587	947.27	303.56
07-Oct-13	12:50:11	Other	Travelling	91	2	0	306	41	0	22.3071	113.9579	1366.75	320.41
07-Oct-13	12:50:14	Construction Platform	Travelling	91	2	0	303	34	0	22.3067	113.9574	1366.76	317.30
07-Oct-13	12:50:22	Transportation Boat	Travelling	91	39	0	306	25	50	22.3035	113.9611	852.71	320.16
07-Oct-13	12:51:28	Transportation Boat	Travelling	91	8	30	357	8	10	22.3085	113.9687	1235.90	10.87
07-Oct-13	12:51:36	Tug Boat	Travelling	91	1	10	289	52	30	22.3045	113.9552	1385.87	303.60
07-Oct-13	12:51:55	Transportation Boat	Travelling	90	55	10	6	22	30	22.3106	113.9715	1538.89	20.10
07-Oct-13	12:52:35	Transportation Boat	Travelling	94	51	20	352	1	50	22.3002	113.9667	288.64	5.76
07-Oct-13	12:52:51	Tug Boat	Travelling	91	0	40	315	46	0	22.3085	113.9595	1397.68	329.50
07-Oct-13	12:52:54	Construction Platform	Travelling	91	1	30	312	51	30	22.3080	113.9590	1378.51	326.59
07-Oct-13	12:52:58	Tug Boat	Travelling	91	3	0	306	27	0	22.3069	113.9580	1345.31	320.18
07-Oct-13	12:54:15	Transportation Boat	Travelling	92	32	40	296	9	20	22.3008	113.9623	552.30	309.89
07-Oct-13	12:54:24	Tug Boat	Travelling	91	0	10	316	9	10	22.3086	113.9595	1409.75	329.88
07-Oct-13	12:55:34	Transportation Boat	Travelling	91	37	0	281	45	0	22.3010	113.9588	871.01	295.48
07-Oct-13	12:58:15	Government Boat	Travelling	91	22	20	292	8	50	22.3030	113.9583	1027.60	305.88
07-Oct-13	12:58:41	Tug Boat	Travelling	90	51	30	337	18	0	22.3123	113.9639	1651.88	351.03
07-Oct-13	12:58:46	Construction Platform	Travelling	90	53	0	335	44	10	22.3118	113.9635	1604.35	349.47
07-Oct-13	12:58:50	Tug Boat	Travelling	90	53	0	334	23	40	22.3117	113.9632	1604.37	348.12
07-Oct-13	12:59:00	Government Boat	Travelling	91	23	50	336	17	50	22.3066	113.9647	1009.19	350.03
07-Oct-13	13:00:31	Government Boat	Travelling	90	35	20	354	14	50	22.3193	113.9697	2432.75	7.98
07-Oct-13	13:05:11	Transportation Boat	Travelling	90	55	10	287	25	30	22.3048	113.9536	1541.72	301.15
07-Oct-13	13:09:00	Dumping Guide Boat	Travelling	92	4	30	21	41	0	22.3026	113.9702	679.11	35.41
07-Oct-13	13:10:28	Transportation Boat	Travelling	91	1	0	299	35	50	22.3062	113.9565	1393.34	313.33
07-Oct-13	13:10:35	Dumping Guide Boat	Travelling	93	16	50	10	47	20	22.3011	113.9681	428.98	24.52
07-Oct-13	13:13:09	Transportation Boat	Travelling	90	56	30	277	55	0	22.3026	113.9528	1506.45	291.65
07-Oct-13	13:13:18	Dumping Guide Boat	Stationary	93	54	0	8	3	30	22.3006	113.9677	360.75	21.79
07-Oct-13	13:16:28	Dumping Guide Boat	Travelling	92	35	50	27	28	20	22.3013	113.9699	542.69	41.20
07-Oct-13	13:17:57	Container Boat	Travelling	90	54	30	339	5	10	22.3116	113.9645	1563.63	352.82
07-Oct-13	13:18:08	Dumping Guide Boat	Travelling	91	30	0	33	34	30	22.3034	113.9731	942.09	47.30
07-Oct-13	13:18:29	Dumping Guide Boat	Travelling	90	59	0	346	38	10	22.3106	113.9665	1442.80	0.37
07-Oct-13	13:21:26	Dumping Guide Boat	Travelling	91	41	10	351	33	0	22.3051	113.9672	837.93	5.28
07-Oct-13	13:21:31	Dumping Guide Boat	Travelling	90	47	40	33	6	10	22.3087	113.9791	1793.05	46.83
07-Oct-13	13:25:22	Container Boat	Stationary	90	54	50	340	18	10	22.3115	113.9648	1555.57	354.03
07-Oct-13	13:25:30	Dumping Guide Boat	Stationary	92	38	20	1	48	50	22.3023	113.9678	534.76	15.54
07-Oct-13	13:30:37	Transportation Boat	Travelling	91	1	20	289	19	40	22.3044	113.9551	1389.53	303.06
07-Oct-13	13:31:32	Transportation Boat	Travelling	90	59	10	306	6	20	22.3075	113.9574	1441.27	319.84
07-Oct-13	13:32:32	Transportation Boat	Travelling	90	46	0	302	7	20	22.3096	113.9538	1862.29	315.85
07-Oct-13	13:33:42	Transportation Boat	Travelling	91	1	20	313	5	0	22.3081	113.9590	1390.12	326.81
07-Oct-13	13:33:51	Dumping Guide Boat	Travelling	95	37	30	345	40	50	22.2999	113.9664	250.35	359.41
07-Oct-13	13:35:41	Tug Boat	Travelling	90	58	30	328	55	40	22.3102	113.9622	1458.76	342.66
07-Oct-13	13:36:00	Construction Boat	Travelling	90	58	10	329	20	10	22.3103	113.9622	1467.30	343.07
07-Oct-13	13:36:07	Transportation Boat	Travelling	90	59	0	291	21	0	22.3051	113.9549	1446.31	305.08
07-Oct-13	13:36:15	Dumping Guide Boat	Stationary	94	31	50	334	4	10	22.3004	113.9658	311.32	347.80
07-Oct-13	13:37:17	Transportation Boat	Travelling	91	1	20	301	33	50	22.3065	113.9569	1390.80	315.29
07-Oct-13	13:37:44	Transportation Boat	Travelling	90	56	0	306	33	30	22.3082	113.9569	1525.27	320.29
07-Oct-13	13:37:49	Transportation Boat	Travelling	91	0	0	305	33	20	22.3073	113.9574	1422.22	319.29
07-Oct-13	13:37:55	Tug Boat	Travelling	91	7	40	325	26	40	22.3082	113.9620	1259.32	339.17
07-Oct-13	13:38:02	Construction Boat	Travelling	91	5	10	325	15	0	22.3086	113.9618	1308.18	338.98
07-Oct-13	13:38:23	Transportation Boat	Travelling	91	20	0	331	9	40	22.3069	113.9637	1063.66	344.89
07-Oct-13	13:38:28	Transportation Boat	Travelling	91	3	50	316	20	30	22.3080	113.9599	1335.90	330.07
07-Oct-13	13:39:13	Transportation Boat	Travelling	91	1	40	329	6	20	22.3095	113.9624	1383.56	342.84
07-Oct-13	13:39:22	Transportation Boat	Travelling	91	20	10	307	13	10	22.3050	113.9599	1061.57	320.95
07-Oct-13	13:41:00	Transportation Boat	Travelling	90	57	50	284	1	30	22.3038	113.9537	1476.89	297.75
07-Oct-13	13:41:06	Tug Boat	Travelling	91	8	50	323	50	10	22.3079	113.9618	1238.30	337.57
07-Oct-13	13:41:12	Construction Boat	Stationary	91	8	10	326	37	30	22.3082	113.9623	1250.55	340.35
07-Oct-13	13:41:22	Dumping Guide Boat	Travelling	93	6	20	16	27	30	22.3012	113.9686	455.15	30.19
07-Oct-13	13:43:16	Dumping Guide Boat	Travelling	91	41	20	36	11	30	22.3025	113.9726	839.06	49.92
07-Oct-13	13:43:45	Transportation Boat	Travelling	91	4	20	300	54	0	22.3060	113.9572	1326.37	314.63
07-Oct-13	13:43:53	Container Boat	Travelling	91	5	10	308	2	10	22.3069	113.9585	1309.24	321.77
07-Oct-13	13:45:16	Transportation Boat	Travelling	90	56	30	280	5	50	22.3031	113.9529	1513.14	293.83
07-Oct-13	13:45:21	Transportation Boat	Travelling	91	1	30	295	17	40	22.3055	113.9559	1388.53	309.02
07-Oct-13	13:45:24	Transportation Boat	Travelling	91	0	0	292	17	10	22.3052	113.9552	1423.70	306.02
07-Oct-13	13:45:30	Transportation Boat	Travelling	91	5	30	283	44	30	22.3030	113.9552	1302.79	297.47
07-Oct-13	13:45:37	Container Boat	Travelling	90	55	10	305	45	10	22.3082	113.9566	1550.35	319.48
07-Oct-13	13:45:44	Transportation Boat	Travelling	91	11	30	311	57	40	22.3065	113.9599	1192.44	325.69
07-Oct-13	13:46:37	Transportation Boat	Travelling	91	3	10	306	39	10	22.3070	113.9580	1351.68	320.38
07-Oct-13	13:46:44	Transportation Boat	Travelling	90	58	20	306	38	40	22.3078	113.9573	1465.21	320.37
07-Oct-13	13:46:50	Transportation Boat	Travelling	91	5	40	294	42	0	22.3049	113.9565	1299.68	308.43
07-Oct-13	13:46:54	Transportation Boat	Travelling	91	28	30	314	50	0	22.3050	113.9615	961.95	328.56
07-Oct-13	13:47:00	Container Boat	Travelling	90	50	20	303	42	50	22.3089	113.9552	1702.22	317.44
07-Oct-13	13:47:53	Transportation Boat	Travelling	90	49	40	307	20	30	22.3097	113.9559	1725.71	321.07
07-Oct-13	13:48:37	Transportation Boat	Travelling	91	1	0	324	51	30	22.3094	113.9614	1400.68	338.59
07-Oct-13	13:48:42	Transportation Boat	Travelling	91	3	20	309	27	30	22.3073	113.9585	1348.47	323.19
07-Oct-13	13:48:47	Transportation Boat	Travelling	92	16	40	323	51	30	22.3028	113.9641	621.83	337.59
07-Oct-13	13:52:00	Transportation Boat	Travelling	90	55	40	333	17	10	22.3111	113.9630	1537.56	347.02
07-Oct-13	13:52:09	Transportation Boat	Stationary	95	22	30	1	26	30	22.2999	113.9671	262.73	15.17

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
07-Oct-13	13:52:16	Transportation Boat	Travelling	91	1	20	301	0	40	22.3064	113.9568	1393.67	314.74
07-Oct-13	13:52:26	Transportation Boat	Travelling	91	18	50	308	41	30	22.3053	113.9600	1081.60	322.42
07-Oct-13	13:53:37	Transportation Boat	Travelling	95	1	0	351	6	10	22.3001	113.9666	281.67	4.83
07-Oct-13	13:53:44	Transportation Boat	Travelling	91	0	10	289	21	20	22.3046	113.9548	1421.33	303.09
07-Oct-13	13:53:49	Transportation Boat	Travelling	91	47	50	318	7	50	22.3039	113.9628	789.38	331.86
07-Oct-13	13:53:54	Transportation Boat	Travelling	91	2	20	284	43	30	22.3035	113.9547	1371.35	298.45
07-Oct-13	13:54:55	Transportation Boat	Stationary	91	50	40	320	36	20	22.3039	113.9632	769.20	334.34
07-Oct-13	13:55:30	Transportation Boat	Travelling	92	46	40	323	48	50	22.3019	113.9645	510.03	337.54
07-Oct-13	13:55:48	Transportation Boat	Travelling	91	23	50	275	58	50	22.3007	113.9571	1017.10	289.71
07-Oct-13	13:55:56	Transportation Boat	Travelling	91	5	10	300	4	0	22.3058	113.9572	1311.41	313.80
07-Oct-13	13:55:59	Transportation Boat	Travelling	91	2	50	302	29	0	22.3065	113.9572	1360.69	316.21
07-Oct-13	13:57:37	Transportation Boat	Travelling	90	55	30	274	26	30	22.3020	113.9521	1543.44	288.17
07-Oct-13	13:57:46	Transportation Boat	Travelling	90	58	50	286	46	10	22.3043	113.9542	1454.79	300.50
07-Oct-13	13:57:55	Transportation Boat	Travelling	91	39	10	313	2	30	22.3041	113.9618	859.21	326.77
07-Oct-13	13:58:02	Transportation Boat	Travelling	90	56	10	304	56	20	22.3079	113.9566	1524.93	318.67
07-Oct-13	13:59:37	Transportation Boat	Travelling	91	24	30	330	2	20	22.3063	113.9637	1009.55	343.77
07-Oct-13	13:59:42	Transportation Boat	Travelling	90	56	40	307	20	10	22.3082	113.9572	1511.62	321.07
07-Oct-13	13:59:51	Transportation Boat	Travelling	91	14	50	309	20	40	22.3058	113.9597	1141.06	323.07
07-Oct-13	14:00:29	Other	Stationary	90	33	50	279	28	30	22.3067	113.9435	2566.50	293.20
07-Oct-13	14:00:32	Other	Stationary	90	33	10	285	52	20	22.3093	113.9442	2620.38	299.60
07-Oct-13	14:00:36	Other	Stationary	90	32	20	290	31	30	22.3112	113.9448	2691.08	304.25
07-Oct-13	14:00:39	Other	Stationary	90	43	50	295	43	20	22.3089	113.9516	1964.19	309.45
07-Oct-13	14:00:43	Other	Stationary	90	55	50	302	54	0	22.3077	113.9561	1534.74	316.63
07-Oct-13	14:00:46	Other	Stationary	90	54	40	310	27	40	22.3091	113.9575	1568.02	324.19
07-Oct-13	14:00:49	Other	Stationary	90	58	20	315	29	30	22.3090	113.9591	1468.05	329.22
07-Oct-13	14:00:52	Other	Stationary	90	57	20	320	52	50	22.3098	113.9602	1494.03	334.61
07-Oct-13	14:00:55	Other	Stationary	90	56	10	324	31	50	22.3104	113.9609	1525.54	338.26
07-Oct-13	14:00:58	Other	Stationary	90	53	0	330	58	30	22.3117	113.9622	1618.19	344.70
07-Oct-13	14:01:01	Other	Stationary	90	49	10	337	21	30	22.3131	113.9638	1746.76	351.09
07-Oct-13	14:01:08	Other	Stationary	90	42	30	343	27	10	22.3158	113.9654	2027.56	357.18
07-Oct-13	14:01:12	Other	Stationary	90	39	20	348	19	30	22.3174	113.9672	2195.70	2.05
07-Oct-13	14:01:15	Other	Stationary	90	32	20	351	23	50	22.3217	113.9687	2691.32	5.13
07-Oct-13	14:01:19	Other	Stationary	90	31	0	352	15	10	22.3228	113.9693	2812.94	5.98
07-Oct-13	14:01:34	Other	Stationary	90	59	20	305	5	50	22.3074	113.9572	1443.12	318.83
07-Oct-13	14:01:40	Other	Stationary	90	52	10	308	8	50	22.3093	113.9565	1644.65	321.88
07-Oct-13	14:01:53	Other	Stationary	90	30	40	348	21	10	22.3232	113.9674	2845.34	2.08
07-Oct-13	14:02:01	Other	Stationary	90	30	30	352	14	20	22.3232	113.9693	2861.77	5.97
07-Oct-13	14:02:23	Other	Stationary	91	13	20	313	8	0	22.3064	113.9602	1165.01	326.86
07-Oct-13	14:02:26	Other	Stationary	91	13	20	315	22	50	22.3066	113.9606	1165.02	329.11
07-Oct-13	14:02:34	Other	Stationary	91	4	30	337	17	10	22.3094	113.9644	1326.32	351.02
07-Oct-13	14:02:38	Other	Stationary	91	5	40	339	17	40	22.3093	113.9649	1302.51	353.02
07-Oct-13	14:02:43	Other	Stationary	91	1	10	342	28	30	22.3102	113.9655	1399.52	356.20
07-Oct-13	14:02:47	Other	Stationary	91	2	20	344	18	40	22.3100	113.9659	1373.02	358.04
07-Oct-13	14:02:52	Other	Stationary	90	53	40	17	17	0	22.3099	113.9744	1598.18	31.01
07-Oct-13	14:02:55	Other	Stationary	90	53	40	18	10	50	22.3098	113.9746	1598.19	31.91
07-Oct-13	14:03:05	Other	Stationary	91	8	10	325	38	40	22.3082	113.9621	1254.31	339.37
07-Oct-13	14:03:12	Other	Stationary	91	9	10	326	46	40	22.3081	113.9624	1236.02	340.51
07-Oct-13	14:03:40	Other	Stationary	90	35	10	356	33	10	22.3195	113.9707	2466.37	10.28
07-Oct-13	14:03:49	Other	Stationary	90	30	30	6	3	50	22.3219	113.9758	2862.49	19.79
07-Oct-13	14:04:00	Other	Stationary	90	53	30	352	18	20	22.3120	113.9680	1603.49	6.04
07-Oct-13	14:04:05	Other	Stationary	90	53	50	354	40	40	22.3118	113.9687	1593.41	8.41
07-Oct-13	14:04:11	Other	Stationary	91	17	10	11	27	50	22.3066	113.9710	1106.93	25.19
07-Oct-13	14:04:14	Other	Stationary	91	17	10	14	50	40	22.3064	113.9716	1106.94	28.57
08-Oct-13	8:06:23	Other		94	24	0	0	0	0	22.3006	113.9672	336.91	13.73
08-Oct-13	8:07:22	Other	Stationary	90	33	40	278	19	30	22.3068	113.9420	2704.75	292.05
08-Oct-13	8:07:34	Other	Stationary	90	31	50	291	7	20	22.3124	113.9435	2868.26	304.85
08-Oct-13	8:07:38	Other	Stationary	90	49	40	298	42	0	22.3086	113.9534	1811.44	312.43
08-Oct-13	8:07:42	Other	Stationary	90	56	50	302	43	10	22.3079	113.9558	1579.25	316.45
08-Oct-13	8:07:50	Other	Stationary	91	0	20	304	45	50	22.3076	113.9568	1486.34	318.49
08-Oct-13	8:07:54	Other	Stationary	90	56	40	309	19	40	22.3090	113.9571	1583.96	323.06
08-Oct-13	8:08:01	Other	Stationary	90	58	20	314	30	30	22.3094	113.9585	1538.04	328.24
08-Oct-13	8:08:05	Other	Stationary	90	57	50	316	38	0	22.3098	113.9589	1551.53	330.36
08-Oct-13	8:08:09	Other	Stationary	90	56	50	321	18	10	22.3105	113.9599	1579.25	335.03
08-Oct-13	8:08:15	Other	Stationary	90	54	0	328	45	50	22.3119	113.9615	1663.49	342.49
08-Oct-13	8:08:21	Other	Stationary	90	50	20	336	8	20	22.3135	113.9633	1786.97	349.87
08-Oct-13	8:08:27	Other	Stationary	90	43	20	342	1	20	22.3163	113.9649	2082.80	355.75
08-Oct-13	8:08:32	Other	Stationary	90	41	40	344	52	40	22.3171	113.9659	2168.48	358.61
08-Oct-13	8:08:36	Other	Stationary	90	38	0	348	43	40	22.3191	113.9674	2384.73	2.46
08-Oct-13	8:08:44	Other	Stationary	90	30	50	352	1	10	22.3242	113.9693	2966.29	5.75
08-Oct-13	8:08:58	Other	Stationary	91	0	30	304	51	50	22.3076	113.9569	1482.19	318.59
08-Oct-13	8:09:04	Other	Stationary	90	53	0	307	39	0	22.3095	113.9561	1695.43	321.38
08-Oct-13	8:09:24	Other	Stationary	90	30	20	348	7	10	22.3248	113.9673	3017.94	1.85
08-Oct-13	8:09:42	Other	Stationary	90	31	10	352	12	0	22.3239	113.9693	2932.86	5.93
08-Oct-13	8:10:00	Other	Stationary	91	8	10	313	5	20	22.3075	113.9594	1313.59	326.82
08-Oct-13	8:10:08	Other	Stationary	91	12	40	315	16	30	22.3071	113.9602	1231.45	329.00
08-Oct-13	8:10:14	Other	Stationary	91	9	10	325	42	50	22.3085	113.9620	1294.40	339.44
08-Oct-13	8:10:19	Other	Stationary	91	9	20	326	58	10	22.3086	113.9622	1291.25	340.70
08-Oct-13	8:10:27	Other	Stationary	91	6	30	336	44	50	22.3096	113.9642	1346.88	350.48
08-Oct-13	8:10:33	Other	Stationary	91	6	30	338	44	0	22.3096	113.9647	1346.88	352.46
08-Oct-13	8:10:40	Other	Stationary	91	2	10	340	59	20	22.3105	113.9651	1441.94	354.72
08-Oct-13	8:10:46	Other	Stationary	91	3	30	343	2	30	22.3103	113.9656	1411.28	356.77
08-Oct-13	8:10:59	Other	Stationary	90	55	0	17	0	50	22.3102	113.9745	1632.74	30.74
08-Oct-13	8:11:05	Other	Stationary	90	55	0	17	57	40	22.3101	113.9747	1632.74	31.69
08-Oct-13	8:11:50	Other	Stationary	90	35	30	356	31	20	22.3203	113.9708	2559.24	10.25
08-Oct-13	8:11:56	Other	Stationary	90	31	40	5	58	50	22.3221	113.9759	2884.13	19.71
08-Oct-13	8:12:11	Other	Stationary	90	54	20	353	53	20	22.3124	113.9685	1653.11	7.62
08-Oct-13	8:12:20	Other	Stationary	90	55	10	356	11	0	22.3120	113.9691	1627.73	9.91
08-Oct-13	8:12:32	Other	Stationary	91	18	0	7	12	10	22.3073	113.9704	1146.52	20.93
08-Oct-13	8:12:37	Other	Stationary	91	18	0	10	43	30	22.3070	113.9710	1146.52	24.45
08-Oct-13	8:13:06	Transportation Boat	Travelling	90	59	30	292	0	50	22.3055	113.9545	1507.45	305.74
08-Oct-13	8:13:12	Transportation Boat	Travelling	90	56	10	290	48	10	22.3058	113.9536	1598.29	304.53
08-Oct-13	8:14:10	Transportation Boat	Travelling	90	59	50	306	11	10	22.3079	113.9570	1498.94	319.92
08-Oct-13	8:14:16	Transportation Boat	Travelling	90	58	10	296	57	40	22.3067	113.9550	1542.51	310.69
08-Oct-13	8:15:05	Transportation Boat	Travelling	91	9	30	284	24	0	22.3031	113.9554	1288.12	298.13
08-Oct-13	8:15:10	Transportation Boat	Travelling	91	0	50	302	39	50	22.3072	113.9565	1473.96	316.39
08-Oct-13	8:16:03	Transportation Boat	Travelling	90	56	40	305	54	30	22.3085	113.9564	1583.96	319.64
08-Oct-13	8:16:08	Transportation Boat	Travelling	91	13	0	293	9	30	22.3042	113.9569	1225.77	306.89
08-Oct-13	8:16:17	Tug Boat	Travelling	90	53	50	338	49	40	22.3125	113.9643	1668.73	352.56
08-Oct-13	8:16:23	Construction Platform	Travelling	90	52	40	339	49	50	22.3129	113.9645	1706.35	353.56
08-Oct-13	8:16:34	HSF High Speed Ferry	Travelling	90	52	50	334	51	40	22.3126	113.9631	1700.87	348.59
08-Oct-13	8:17:39	Transportation Boat	Travelling	91	16	0	306	20	10	22.3057	113.9591	1176.95	320.07
08-Oct-13	8:17:50	HSF High Speed Ferry	Travelling	91	2	20	313	29	40	22.3085	113.9588	1438.03	327.22
08-Oct-13	8:18:41	HSF High Speed Ferry	Travelling	91	2	10	297	10	30	22.3061	113.9558	1441.94	310.90
08-Oct-13	8:18:52	Tug Boat	Travelling	90	58	50	325	36	40	22.3105	113.9612	1524.78	339.34
08-Oct-13	8:18:57	Construction Platform	Travelling	90	58	50	326	52	40	22.3106	113.9615	1524.78	340.61
08-Oct-13	8:19:44	HSF High Speed Ferry	Travelling	90	55	0	279	16	20	22.3034	113.9518	1632.74	293.00
08-Oct-13	8:19:52	Transportation Boat	Travelling	90	58	10	281	34	30	22.3036	113.9528	1542.51	295.30
08-Oct-13	8:19:57	Transportation Boat	Travelling	90	54	40	282	6	50	22.3041	113.9520	1642.86	295.84
08-Oct-13	8:20:43	Transportation Boat	Travelling	91	10	20	332	42	0	22.3088	113.9635	1272.71	346.43
08-Oct-13	8:20:50	Transportation Boat	Travelling	90	59	50	291	57	50	22.3055	113.9546	1498.94	305.69
08-Oct-13	8:20:56	Transportation Boat	Travelling	90	59	10	290	41	20	22.3053	113.9542	1516.06	304.42
08-Oct-13	8:22:12	Transportation Boat	Travelling	90	59	50	306	20	10	22.3080	113.9570	1498.94	320.07
08-Oct-13	8:22:16	Transportation Boat	Travelling	91	0	50	303	0	30	22.3073	113.9566	1473.96	316.74
08-Oct-13	8:22:28	Tug Boat	Travelling	91	4	20	303	0	30	22.3067	113.9571	1392.78	316.74
08-Oct-13	8:22:32	Construction Platform	Travelling	91	4	20	304	38	0	22.3070	113.9574	1392.78	318.36
08-Oct-13	8:23:44	Transportation Boat	Travelling	91	8	10	289	34	30	22.3041	113.9557	1313.59	303.30
08-Oct-13	8:23:57	Transportation Boat	Travelling	90	44	50	303	3	10	22.3108	113.9530	2011.35	316.78

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
08-Oct-13	8:24:03	Transportation Boat	Travelling	90	57	40	308	30	30	22.3087	113.9571	1556.08	322.24
08-Oct-13	8:24:11	Transportation Boat	Travelling	90	58	0	347	37	40	22.3115	113.9668	1547.01	1.36
08-Oct-13	8:25:47	Transportation Boat	Travelling	91	6	40	316	11	40	22.3081	113.9599	1343.47	329.92
08-Oct-13	8:25:52	Transportation Boat	Travelling	91	5	10	325	30	10	22.3092	113.9617	1374.76	339.23
08-Oct-13	8:26:03	Transportation Boat	Travelling	91	0	20	293	24	20	22.3057	113.9549	1486.34	307.14
08-Oct-13	8:26:22	Tug Boat	Travelling	90	59	20	278	59	30	22.3029	113.9528	1511.75	292.72
08-Oct-13	8:26:27	Construction Platform	Travelling	90	59	30	280	8	20	22.3031	113.9530	1507.45	293.87
08-Oct-13	8:28:00	HSF High Speed Ferry	Travelling	90	59	50	287	36	50	22.3046	113.9539	1498.94	301.34
08-Oct-13	8:28:12	Transportation Boat	Travelling	90	57	0	305	39	30	22.3084	113.9564	1574.56	319.39
08-Oct-13	8:28:30	Transportation Boat	Stationary	91	10	10	338	31	20	22.3090	113.9647	1275.76	352.25
08-Oct-13	8:28:35	Transportation Boat	Travelling	90	51	10	344	27	50	22.3134	113.9659	1757.31	358.19
08-Oct-13	8:29:16	Transportation Boat	Travelling	91	8	40	330	45	30	22.3089	113.9630	1303.92	344.49
08-Oct-13	8:29:23	Transportation Boat	Travelling	90	47	0	350	23	0	22.3148	113.9677	1916.48	4.11
08-Oct-13	8:29:32	HSF High Speed Ferry	Travelling	91	3	30	300	46	50	22.3065	113.9566	1411.28	314.51
08-Oct-13	8:32:13	HSF High Speed Ferry	Travelling	91	0	10	324	42	40	22.3101	113.9611	1490.52	338.44
08-Oct-13	8:32:21	Transportation Boat	Travelling	90	51	40	307	44	40	22.3099	113.9559	1739.99	321.47
08-Oct-13	8:32:29	Transportation Boat	Travelling	90	55	40	304	57	40	22.3085	113.9560	1612.87	318.69
08-Oct-13	8:33:07	Construction Boat	Travelling	91	0	0	287	12	10	22.3045	113.9539	1494.71	300.93
08-Oct-13	8:33:12	Transportation Boat	Travelling	91	1	30	297	34	10	22.3063	113.9557	1457.77	311.30
08-Oct-13	8:33:23	Transportation Boat	Travelling	90	56	20	283	46	50	22.3042	113.9527	1593.48	297.51
08-Oct-13	8:34:28	Transportation Boat	Travelling	90	53	0	276	41	0	22.3029	113.9509	1695.43	290.41
08-Oct-13	8:34:37	HSF High Speed Ferry	Travelling	90	50	30	340	31	20	22.3136	113.9647	1780.96	354.25
08-Oct-13	8:34:49	Transportation Boat	Travelling	90	59	10	293	55	50	22.3060	113.9547	1516.06	307.66
08-Oct-13	8:35:52	HSF High Speed Ferry	Travelling	90	58	30	286	54	50	22.3047	113.9536	1533.59	300.64
08-Oct-13	8:36:00	Construction Boat	Travelling	91	2	40	313	7	40	22.3084	113.9588	1430.29	326.86
08-Oct-13	8:37:21	Transportation Boat	Travelling	90	52	50	307	0	0	22.3095	113.9559	1700.87	320.73
08-Oct-13	8:37:45	HSF High Speed Ferry	Travelling	91	2	20	318	18	50	22.3091	113.9598	1438.03	332.04
08-Oct-13	8:37:58	Construction Boat	Travelling	90	58	40	330	21	50	22.3109	113.9623	1529.17	344.09
08-Oct-13	8:38:09	Transportation Boat	Travelling	90	58	10	290	44	0	22.3055	113.9540	1542.51	304.46
08-Oct-13	8:39:36	Transportation Boat	Travelling	91	1	0	346	32	50	22.3108	113.9665	1469.88	0.28
08-Oct-13	8:39:53	Transportation Boat	Travelling	91	1	50	308	46	0	22.3080	113.9578	1449.81	322.50
08-Oct-13	8:40:02	HSF High Speed Ferry	Travelling	90	44	50	345	16	10	22.3157	113.9661	2011.35	359.00
08-Oct-13	8:40:33	Transportation Boat	Travelling	91	2	20	303	59	30	22.3072	113.9570	1438.03	317.72
08-Oct-13	8:40:48	Transportation Boat	Stationary	91	4	0	341	55	30	22.3102	113.9654	1400.12	355.65
08-Oct-13	8:40:55	Transportation Boat	Travelling	91	1	20	319	55	30	22.3094	113.9601	1461.79	333.65
08-Oct-13	8:41:55	Transportation Boat	Travelling	91	1	0	290	46	10	22.3051	113.9546	1469.88	304.50
08-Oct-13	8:42:17	Transportation Boat	Travelling	91	1	0	328	9	10	22.3102	113.9620	1469.88	341.88
08-Oct-13	8:42:22	Transportation Boat	Travelling	90	54	50	333	15	0	22.3120	113.9628	1637.79	346.98
08-Oct-13	8:42:29	Tug Boat	Travelling	91	1	30	285	14	40	22.3040	113.9540	1457.77	298.97
08-Oct-13	8:42:32	Construction Platform	Travelling	91	1	30	283	35	10	22.3036	113.9538	1457.77	297.32
08-Oct-13	8:42:39	Transportation Boat	Travelling	90	56	0	306	20	30	22.3087	113.9564	1603.12	320.07
08-Oct-13	8:43:08	Transportation Boat	Travelling	90	56	10	279	8	20	22.3032	113.9521	1598.29	292.87
08-Oct-13	8:43:14	Transportation Boat	Travelling	91	3	40	313	5	50	22.3082	113.9589	1407.54	326.83
08-Oct-13	8:43:22	Transportation Boat	Travelling	90	50	0	340	49	0	22.3137	113.9647	1799.12	354.55
08-Oct-13	8:43:29	Transportation Boat	Travelling	91	1	50	303	9	20	22.3071	113.9568	1449.81	316.89
08-Oct-13	8:44:37	Transportation Boat	Travelling	91	5	30	291	21	20	22.3047	113.9555	1367.68	305.09
08-Oct-13	8:44:43	Transportation Boat	Travelling	90	58	40	291	28	40	22.3056	113.9542	1529.17	305.21
08-Oct-13	8:44:49	Tug Boat	Travelling	91	1	30	297	10	20	22.3062	113.9557	1457.77	310.90
08-Oct-13	8:44:53	Construction Platform	Travelling	91	2	10	295	33	30	22.3058	113.9555	1441.94	309.29
08-Oct-13	8:45:03	Transportation Boat	Travelling	90	58	50	286	42	30	22.3046	113.9536	1524.78	300.44
08-Oct-13	8:46:06	Transportation Boat	Travelling	90	54	40	278	52	50	22.3033	113.9516	1642.86	292.61
08-Oct-13	8:46:11	Transportation Boat	Travelling	91	1	0	305	26	20	22.3076	113.9571	1469.88	319.17
08-Oct-13	8:46:50	Transportation Boat	Travelling	90	52	30	307	0	10	22.3095	113.9559	1711.86	320.73
08-Oct-13	8:48:10	Transportation Boat	Travelling	90	56	40	286	58	0	22.3049	113.9532	1583.96	300.70
08-Oct-13	8:48:21	Tug Boat	Travelling	91	17	20	311	27	50	22.3062	113.9600	1156.49	325.19
08-Oct-13	8:48:24	Construction Platform	Travelling	91	16	10	309	30	20	22.3061	113.9596	1174.35	323.24
08-Oct-13	8:49:54	Transportation Boat	Travelling	91	0	0	297	43	0	22.3065	113.9555	1494.71	311.45
08-Oct-13	8:51:44	Transportation Boat	Travelling	90	56	0	305	48	0	22.3086	113.9563	1603.12	319.53
08-Oct-13	8:51:52	Tug Boat	Travelling	91	21	40	332	25	30	22.3072	113.9639	1094.64	346.15
08-Oct-13	8:51:58	Construction Platform	Travelling	91	24	10	330	51	40	22.3068	113.9637	1061.89	344.59
08-Oct-13	8:55:08	Transportation Boat	Travelling	91	4	50	297	53	40	22.3059	113.9564	1381.91	311.62
08-Oct-13	8:55:13	Transportation Boat	Travelling	91	3	30	285	11	50	22.3038	113.9544	1411.28	298.93
08-Oct-13	8:55:22	Tug Boat	Travelling	91	5	50	338	33	10	22.3098	113.9646	1360.67	352.28
08-Oct-13	8:55:26	Construction Platform	Travelling	91	6	40	339	39	50	22.3096	113.9649	1343.47	353.39
08-Oct-13	8:56:26	Transportation Boat	Travelling	91	3	50	286	1	20	22.3039	113.9545	1403.82	299.75
08-Oct-13	8:56:30	Transportation Boat	Travelling	91	3	30	295	12	10	22.3056	113.9557	1411.28	308.93
08-Oct-13	8:57:26	Transportation Boat	Travelling	91	1	40	277	17	10	22.3023	113.9532	1453.78	291.02
08-Oct-13	8:57:31	Transportation Boat	Travelling	91	1	40	302	31	20	22.3071	113.9566	1453.78	316.25
08-Oct-13	8:58:48	Transportation Boat	Travelling	91	1	10	287	46	40	22.3045	113.9542	1465.82	301.51
08-Oct-13	8:59:00	Tug Boat	Stationary	91	4	50	338	14	40	22.3099	113.9645	1381.91	351.97
08-Oct-13	8:59:06	Construction Platform	Stationary	90	58	40	336	59	40	22.3112	113.9640	1529.17	350.72
08-Oct-13	8:59:43	Transportation Boat	Travelling	91	2	40	298	32	50	22.3063	113.9561	1430.29	312.28
08-Oct-13	9:01:14	Transportation Boat	Travelling	90	53	10	304	37	30	22.3090	113.9555	1690.02	318.35
08-Oct-13	9:01:19	Transportation Boat	Travelling	90	55	40	305	42	10	22.3086	113.9562	1612.87	319.43
08-Oct-13	9:02:14	Transportation Boat	Travelling	91	4	20	302	14	30	22.3066	113.9570	1392.78	315.97
08-Oct-13	9:03:47	Transportation Boat	Travelling	91	0	0	282	27	10	22.3036	113.9534	1494.71	296.18
08-Oct-13	9:04:09	Dumping Guide Boat	Travelling	93	7	50	13	56	50	22.3014	113.9685	474.15	27.68
08-Oct-13	9:06:04	Transportation Boat	Travelling	91	0	40	313	13	30	22.3088	113.9586	1478.07	326.95
08-Oct-13	9:06:23	Dumping Guide Boat	Stationary	94	48	20	331	30	0	22.3003	113.9656	308.34	345.23
08-Oct-13	9:07:39	Transportation Boat	Travelling	90	58	0	331	12	0	22.3111	113.9625	1547.01	344.93
08-Oct-13	9:09:49	Transportation Boat	Travelling	90	49	40	351	41	50	22.3138	113.9681	1811.44	5.43
08-Oct-13	9:10:13	Dumping Guide Boat	Travelling	93	49	40	331	12	0	22.3010	113.9654	387.51	344.93
08-Oct-13	9:11:12	Transportation Boat	Travelling	90	57	0	286	46	40	22.3048	113.9532	1574.56	300.51
08-Oct-13	9:12:01	Dumping Guide Boat	Travelling	91	49	30	322	25	20	22.3043	113.9632	814.96	336.15
08-Oct-13	9:12:29	Transportation Boat	Travelling	91	1	50	298	36	20	22.3064	113.9560	1449.81	312.34
08-Oct-13	9:12:45	Speed Boat	Travelling	91	1	10	304	19	20	22.3074	113.9569	1465.82	318.05
08-Oct-13	9:13:17	Transportation Boat	Travelling	91	0	40	306	2	50	22.3078	113.9571	1478.07	319.78
08-Oct-13	9:13:22	Speed Boat	Travelling	91	5	20	295	45	0	22.3055	113.9561	1371.21	309.48
08-Oct-13	9:13:29	Transportation Boat	Travelling	90	52	40	345	39	20	22.3130	113.9662	1706.35	359.39
08-Oct-13	9:13:37	Speed Boat	Travelling	91	9	0	30	48	20	22.3059	113.9753	1297.56	44.54
08-Oct-13	9:13:49	Transportation Boat	Travelling	90	55	10	305	32	50	22.3087	113.9561	1627.73	319.28
08-Oct-13	9:13:57	Speed Boat	Travelling	91	2	30	287	37	40	22.3043	113.9545	1434.15	301.36
08-Oct-13	9:14:18	Transportation Boat	Stationary	90	53	40	343	8	30	22.3127	113.9655	1674.00	356.87
08-Oct-13	9:14:27	Speed Boat	Travelling	91	32	50	22	59	40	22.3046	113.9720	962.12	36.72
08-Oct-13	9:14:40	Speed Boat	Stationary	91	2	30	286	34	50	22.3041	113.9544	1434.15	300.31
08-Oct-13	9:14:49	Transportation Boat	Travelling	91	2	0	307	11	30	22.3077	113.9575	1445.86	320.92
08-Oct-13	9:14:55	Transportation Boat	Travelling	90	58	20	308	56	30	22.3086	113.9573	1538.04	322.67
08-Oct-13	9:15:33	HSF High Speed Ferry	Travelling	90	50	40	338	46	20	22.3135	113.9641	1774.99	352.50
08-Oct-13	9:15:40	Speed Boat	Travelling	92	31	0	352	48	30	22.3029	113.9671	590.24	6.54
08-Oct-13	9:15:53	Transportation Boat	Travelling	91	1	20	284	57	30	22.3039	113.9539	1461.79	298.69
08-Oct-13	9:15:56	Transportation Boat	Travelling	90	58	40	285	26	30	22.3043	113.9534	1529.17	299.17
08-Oct-13	9:16:08	Transportation Boat	Travelling	91	17	40	308	24	40	22.3058	113.9595	1151.48	322.14
08-Oct-13	9:16:17	Transportation Boat	Travelling	91	4	10	318	0	30	22.3087	113.9600	1396.44	331.74
08-Oct-13	9:16:28	HSF High Speed Ferry	Travelling	90	57	50	325	40	20	22.3107	113.9611	1551.53	339.40
08-Oct-13	9:16:34	Speed Boat	Travelling	92	42	40	311	28	50	22.3017	113.9634	547.77	325.21
08-Oct-13	9:16:40	Transportation Boat	Travelling	91	4	30	293	10	40	22.3051	113.9556	1389.14	306.91
08-Oct-13	9:16:44	Transportation Boat	Travelling	91	1	30	294	14	30	22.3057	113.9552	1457.77	307.97
08-Oct-13	9:17:04	Dumping Guide Boat	Stationary	91	2	40	322	55	40	22.3094	113.9609	1430.29	336.66
08-Oct-13	9:17:21	Speed Boat	Travelling	92	3	50	284	9	50	22.3007	113.9602	720.25	297.89
08-Oct-13	9:17:32	Transportation Boat	Travelling	91	43	50	311	3	40	22.3039	113.9616	859.66	324.79
08-Oct-13	9:17:40	Transportation Boat	Travelling	91	6	10	328	58	0	22.3093	113.9625	1353.74	342.70
08-Oct-13	9:17:44	Transportation Boat	Travelling	91	4	10	304	44	20	22.3070	113.9574	1396.44	318.47
08-Oct-13	9:17:48	Transportation Boat	Travelling	91	0	10	305	31	50	22.3078	113.9569	1490.52	319.26
08-Oct-13	9:17:54	HSF High Speed Ferry	Travelling	91	2	40	297	54	20	22.3062	113.9560	1430.29	311.64
08-Oct-13	9:18:09	Transportation Boat	Travelling	91	1	10	306	41	20	22.3078	113.9573	1465.82	320.42
08-Oct-13	9:18:14	Transportation Boat	Travelling	90	55	30	304	47	40	22.3085	113.9560	1617.79	318.52
08-Oct-13	9:18:19	Transportation Boat	Travelling	91	2	50	289	15	0	22.3046	113.9548	1426.44	302.98

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
08-Oct-13	9:18:32	HSF High Speed Ferry	Travelling	90	58	10	285	46	30	22.2987	113.9643	248.15	299.50
08-Oct-13	9:18:40	Transportation Boat	Travelling	91	42	20	287	10	20	22.2983	113.9652	140.74	300.90
08-Oct-13	9:19:12	Transportation Boat	Travelling	92	50	40	319	38	50	22.2983	113.9660	83.91	333.38
08-Oct-13	9:19:18	Transportation Boat	Travelling	91	2	30	304	22	10	22.2992	113.9649	229.26	318.10
08-Oct-13	9:19:25	Transportation Boat	Travelling	91	53	30	294	34	40	22.2983	113.9654	125.99	308.31
08-Oct-13	9:19:32	Speed Boat	Travelling	91	6	20	301	33	40	22.2990	113.9649	215.52	315.29
08-Oct-13	9:19:53	Transportation Boat	Travelling	90	54	40	306	52	40	22.2994	113.9648	260.81	320.61
08-Oct-13	9:20:01	Speed Boat	Travelling	91	8	50	288	57	40	22.2986	113.9647	206.73	302.69
08-Oct-13	9:20:29	Speed Boat	Travelling	91	4	0	278	21	0	22.2984	113.9644	221.40	292.08
08-Oct-13	9:20:37	Transportation Boat	Travelling	91	2	20	285	19	30	22.2986	113.9645	227.05	299.05
08-Oct-13	9:20:44	Transportation Boat	Travelling	95	19	50	348	38	0	22.2980	113.9664	44.04	2.36
08-Oct-13	9:20:49	Transportation Boat	Travelling	92	9	50	312	40	0	22.2984	113.9658	108.68	326.40
08-Oct-13	9:22:09	Transportation Boat	Travelling	92	14	10	333	4	20	22.2985	113.9662	103.83	346.80
08-Oct-13	9:22:15	Transportation Boat	Travelling	91	4	40	313	11	0	22.2992	113.9653	215.46	326.91
08-Oct-13	9:24:06	Transportation Boat	Travelling	91	53	20	359	11	0	22.2987	113.9667	120.65	12.91
08-Oct-13	9:24:14	Transportation Boat	Travelling	91	2	40	340	32	30	22.2996	113.9662	218.11	354.27
08-Oct-13	9:24:54	Transportation Boat	Stationary	91	2	40	340	47	20	22.2996	113.9662	216.68	354.52
08-Oct-13	9:26:00	Transportation Boat	Travelling	91	0	40	331	12	40	22.2995	113.9658	221.41	344.94
08-Oct-13	9:26:46	Transportation Boat	Travelling	91	22	0	14	19	10	22.2989	113.9671	162.47	28.05
08-Oct-13	9:27:00	Transportation Boat	Travelling	91	0	50	315	52	20	22.2993	113.9653	218.60	329.60
08-Oct-13	9:27:15	Dumping Guide Boat	Travelling	91	17	30	326	55	40	22.2991	113.9658	171.09	340.66
08-Oct-13	9:27:31	Transportation Boat	Travelling	90	56	30	282	36	20	22.2986	113.9644	234.22	296.34
08-Oct-13	9:28:54	Transportation Boat	Travelling	91	0	20	299	13	40	22.2989	113.9649	216.20	312.96
08-Oct-13	9:29:02	Dumping Guide Boat	Travelling	91	57	30	334	42	50	22.2986	113.9662	110.75	348.44
08-Oct-13	9:30:53	Transportation Boat	Travelling	91	4	10	299	16	10	22.2988	113.9650	199.12	313.00
08-Oct-13	9:31:09	Dumping Guide Boat	Stationary	93	31	10	351	37	20	22.2982	113.9665	60.22	5.35
08-Oct-13	9:32:47	Transportation Boat	Travelling	90	15	50	275	25	50	22.3000	113.9590	801.27	289.16
08-Oct-13	9:38:01	Transportation Boat	Travelling	92	21	40	321	53	30	22.2983	113.9661	83.36	335.62
08-Oct-13	9:39:23	Transportation Boat	Travelling	91	37	30	314	25	40	22.2985	113.9658	119.30	328.16
08-Oct-13	9:40:40	Transportation Boat	Travelling	91	14	50	310	42	10	22.2987	113.9655	153.20	324.43
08-Oct-13	9:42:16	Transportation Boat	Travelling	90	58	40	307	4	50	22.2990	113.9652	191.84	320.81
08-Oct-13	9:44:32	Transportation Boat	Travelling	90	59	10	292	49	30	22.2986	113.9650	185.09	306.55
08-Oct-13	9:44:42	Transportation Boat	Travelling	91	2	50	286	5	0	22.2984	113.9649	173.91	299.81
08-Oct-13	9:45:37	Transportation Boat	Travelling	91	3	40	302	23	0	22.2987	113.9653	169.71	316.11
08-Oct-13	9:45:49	Transportation Boat	Travelling	90	59	10	306	40	40	22.2989	113.9653	182.18	320.41
08-Oct-13	9:45:55	Transportation Boat	Travelling	91	4	50	295	39	30	22.2986	113.9652	166.03	309.39
08-Oct-13	9:45:58	Transportation Boat	Travelling	91	2	50	295	55	10	22.2986	113.9651	171.21	309.65
08-Oct-13	9:46:37	Transportation Boat	Travelling	90	50	0	305	50	40	22.2991	113.9651	213.52	319.57
08-Oct-13	9:46:44	Transportation Boat	Travelling	91	3	30	301	26	10	22.2987	113.9652	167.80	315.17
08-Oct-13	9:46:49	Transportation Boat	Travelling	90	59	30	281	24	40	22.2983	113.9648	178.91	295.14
08-Oct-13	9:48:29	Transportation Boat	Travelling	90	53	0	306	57	40	22.2990	113.9652	196.69	320.69
08-Oct-13	9:55:23	Transportation Boat	Travelling	91	1	30	302	6	30	22.2986	113.9654	154.43	315.84
08-Oct-13	9:55:32	Transportation Boat	Travelling	90	56	0	305	44	10	22.2988	113.9653	169.27	319.47
08-Oct-13	9:56:33	Transportation Boat	Travelling	90	59	0	291	41	30	22.2984	113.9651	158.34	305.42
08-Oct-13	9:56:44	HSF High Speed Ferry	Travelling	91	0	50	285	39	30	22.2983	113.9651	153.16	299.39
08-Oct-13	9:56:58	Transportation Boat	Travelling	91	0	50	288	52	50	22.2984	113.9651	152.65	302.61
08-Oct-13	9:57:04	Transportation Boat	Travelling	90	54	40	285	42	10	22.2984	113.9650	169.65	299.43
08-Oct-13	9:57:10	Transportation Boat	Travelling	91	1	30	296	37	20	22.2985	113.9653	150.55	310.35
08-Oct-13	9:57:16	HSF High Speed Ferry	Travelling	91	1	40	291	48	40	22.2984	113.9652	149.93	305.54
08-Oct-13	9:57:56	Transportation Boat	Travelling	90	56	50	281	57	40	22.2982	113.9650	161.13	295.69
08-Oct-13	9:58:02	Transportation Boat	Travelling	91	1	10	304	11	0	22.2986	113.9654	149.48	317.91
08-Oct-13	9:58:41	HSF High Speed Ferry	Travelling	90	59	30	306	19	0	22.2987	113.9654	152.21	320.05
08-Oct-13	9:59:25	Transportation Boat	Travelling	90	59	10	288	48	30	22.2984	113.9652	151.41	302.54
08-Oct-13	10:00:31	Speed Boat	Travelling	92	27	10	342	54	0	22.2982	113.9664	59.81	356.63
08-Oct-13	10:00:40	Transportation Boat	Travelling	91	0	40	304	22	0	22.2986	113.9655	144.90	318.10
08-Oct-13	10:01:17	Transportation Boat	Travelling	90	54	30	306	6	0	22.2987	113.9654	159.81	319.83
08-Oct-13	10:01:35	Speed Boat	Travelling	91	24	30	314	54	50	22.2984	113.9659	102.54	328.64
08-Oct-13	10:02:31	Speed Boat	Travelling	90	57	30	306	27	50	22.2986	113.9655	148.63	320.19
08-Oct-13	10:02:39	Dumping Guide Boat	Travelling	92	21	20	355	21	0	22.2982	113.9665	60.26	9.08
08-Oct-13	10:04:11	Dumping Guide Boat	Travelling	91	30	10	355	55	0	22.2984	113.9666	92.23	9.65
08-Oct-13	10:25:05	Speed Boat	Travelling	95	4	20	354	18	40	22.2978	113.9664	18.10	8.04
08-Oct-13	10:25:53	Speed Boat	Travelling	94	29	30	320	44	40	22.2978	113.9663	20.05	334.47
08-Oct-13	10:26:45	Speed Boat	Travelling	92	51	10	295	25	50	22.2978	113.9662	30.93	309.16
08-Oct-13	10:28:08	Tug Boat	Travelling	91	7	50	316	49	20	22.2982	113.9660	75.40	330.55
08-Oct-13	10:28:12	Construction Platform	Travelling	91	10	40	316	14	50	22.2982	113.9660	72.25	329.98
08-Oct-13	10:30:15	Transportation Boat	Travelling	91	1	20	291	26	10	22.2980	113.9658	78.79	305.17
08-Oct-13	10:31:12	Transportation Boat	Travelling	91	3	10	303	55	30	22.2981	113.9659	74.48	317.65
08-Oct-13	10:31:22	Tug Boat	Travelling	90	57	20	330	9	50	22.2983	113.9662	81.68	343.89
08-Oct-13	10:31:27	Construction Platform	Travelling	90	57	20	329	9	10	22.2983	113.9662	81.49	342.88
08-Oct-13	10:31:37	Transportation Boat	Travelling	91	0	30	307	20	30	22.2982	113.9659	76.85	321.07
08-Oct-13	10:34:45	Fishing Boat	Non-operate and travelling	92	23	10	299	57	30	22.2978	113.9662	29.53	313.69
08-Oct-13	10:34:57	Transportation Boat	Travelling	91	2	40	299	14	50	22.2980	113.9659	67.08	312.98
08-Oct-13	10:35:13	Transportation Boat	Travelling	90	58	30	289	39	20	22.2980	113.9658	71.25	303.39
08-Oct-13	10:35:25	Tug Boat	Travelling	90	46	0	344	15	40	22.2984	113.9664	90.10	357.99
08-Oct-13	10:35:27	Construction Platform	Travelling	90	46	0	343	43	40	22.2984	113.9664	89.95	357.46
08-Oct-13	10:36:46	Fishing Boat	Non-operate and travelling	91	36	40	35	54	50	22.2979	113.9667	40.98	49.64
08-Oct-13	10:37:10	Transportation Boat		90	59	30	280	16	50	22.2979	113.9658	65.67	294.01
08-Oct-13	10:37:14	Transportation Boat		90	59	40	305	37	20	22.2981	113.9660	65.33	319.35
08-Oct-13	10:37:32	HSF High Speed Ferry	Travelling	91	4	30	298	29	10	22.2980	113.9660	59.81	312.22
08-Oct-13	10:37:43	Transportation Boat	Travelling	91	1	30	295	13	10	22.2980	113.9659	62.33	308.95
08-Oct-13	10:37:59	Transportation Boat	Travelling	90	54	40	306	32	0	22.2981	113.9660	69.48	320.26
08-Oct-13	10:38:12	HSF High Speed Ferry	Travelling	91	3	40	291	34	30	22.2979	113.9659	59.19	305.30
08-Oct-13	10:38:18	HSF High Speed Ferry	Travelling	91	1	10	291	39	10	22.2979	113.9659	61.40	305.38
08-Oct-13	10:38:46	Transportation Boat	Travelling	90	59	20	306	18	50	22.2980	113.9660	62.28	320.04
08-Oct-13	10:39:41	HSF High Speed Ferry	Travelling	90	58	0	278	26	30	22.2978	113.9658	61.56	292.17
08-Oct-13	10:39:47	Transportation Boat	Travelling	91	0	30	287	54	50	22.2979	113.9659	58.79	301.64
08-Oct-13	10:39:52	HSF High Speed Ferry	Travelling	91	0	30	322	3	0	22.2981	113.9662	58.61	335.78
08-Oct-13	10:40:43	Transportation Boat	Travelling	91	3	10	299	26	40	22.2980	113.9660	54.33	313.17
08-Oct-13	10:41:23	HSF High Speed Ferry	Travelling	90	47	10	343	13	50	22.2983	113.9664	70.89	356.96
08-Oct-13	10:41:35	Transportation Boat	Travelling	90	58	10	306	44	0	22.2980	113.9660	57.02	320.46
08-Oct-13	10:41:42	Transportation Boat	Travelling	91	1	40	302	35	20	22.2980	113.9660	53.52	316.32
08-Oct-13	10:43:00	HSF High Speed Ferry	Travelling	90	57	10	278	34	20	22.2978	113.9659	54.70	292.30
08-Oct-13	10:44:13	Transportation Boat	Travelling	90	59	10	294	9	50	22.2979	113.9660	50.14	307.89
08-Oct-13	10:45:11	Transportation Boat	Travelling	90	56	40	287	0	0	22.2978	113.9660	50.03	300.73
08-Oct-13	10:45:56	Fishing Boat	Non-operate and travelling	93	59	40	2	35	20	22.2977	113.9664	11.39	16.32
08-Oct-13	10:46:19	Transportation Boat	Travelling	90	53	20	279	14	40	22.2978	113.9659	50.32	292.97
08-Oct-13	10:46:47	Fishing Boat	Non-operate and travelling	94	44	0	338	28	30	22.2977	113.9664	9.21	352.20
08-Oct-13	10:48:21	Transportation Boat	Travelling	91	0	10	308	52	30	22.2979	113.9662	40.08	322.60
08-Oct-13	10:48:32	Fishing Boat	Non-operate and travelling	93	14	0	282	18	10	22.2977	113.9663	12.29	296.03
08-Oct-13	10:48:43	Transportation Boat	Travelling	91	2	30	285	38	40	22.2978	113.9661	37.80	299.37
08-Oct-13	10:49:34	Transportation Boat	Travelling	91	21	30	312	47	10	22.2978	113.9663	27.59	326.52
08-Oct-13	10:49:40	Transportation Boat	Travelling	91	4	20	305	20	0	22.2979	113.9662	34.74	319.06
08-Oct-13	10:50:57	Transportation Boat	Travelling	92	5	0	327	1	20	22.2978	113.9663	16.50	340.75
08-Oct-13	10:51:07	Transportation Boat	Travelling	90	55	20	331	21	20	22.2979	113.9663	36.89	345.09
08-Oct-13	10:53:41	Transportation Boat	Stationary	95	43	40	0	16	30	22.2977	113.9664	4.92	14.00
08-Oct-13	10:55:10	Transportation Boat	Travelling	95	18	20	351	29	40	22.2977	113.9664	4.70	5.22
08-Oct-13	10:55:18	Transportation Boat	Travelling	91	4	30	302	5	20	22.2978	113.9662	22.98	315.82
08-Oct-13	10:56:08	Transportation Boat	Travelling	91	4	0	281	36	40	22.2977	113.9662	21.42	295.34
08-Oct-13	10:57:21	Transportation Boat	Travelling	91	33	50	330	17	0	22.2977	113.9664	12.87	344.01
08-Oct-13	10:57:29	Transportation Boat	Travelling	90	56	40	289	51	10	22.2977	113.9662	21.04	303.58
08-Oct-13	10:59:01	Transportation Boat	Travelling	91	8	10	322	54	20	22.2977	113.9663	14.45	336.64
08-Oct-13	10:59:06	Transportation Boat	Travelling	90	59	30	302	31	40	22.2977	113.9663	16.37	316.26
08-Oct-13	10:59:10	Transportation Boat	Travelling	91	2	30	304	53	50	22.2977	113.9663	15.44	318.63
08-Oct-13	11:00:13	Transportation Boat	Travelling	91	1	0	310	50	20	22.2977	113.9663	13.52	324.57
08-Oct-13	11:00:19	Transportation Boat	Travelling	90	53	0	306	22	10	22.2977	113.9663	15.31	320.10
08-Oct-13	11:00:22	Transportation Boat	Travelling	90	57	30	291	4	0	22.2977	113.9663	13.99	304.80
08-Oct-13	11:01:34	Transportation Boat	Travelling	90	50	50	280	3	40	22.2977	113.9663	12.67	293.79

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
08-Oct-13	11:03:07	Transportation Boat	Travelling	91	2	40	287	54	50	22.2977	113.9663	6.97	301.64
08-Oct-13	11:04:02	Transportation Boat	Travelling	91	3	40	297	2	0	22.2976	113.9664	4.94	310.76
08-Oct-13	11:05:10	Transportation Boat	Travelling	90	59	20	306	43	30	22.2976	113.9664	2.75	320.45
08-Oct-13	14:09:56	Other	Stationary	94	24	50	0	0	0	22.3004	113.9671	320.90	13.73
08-Oct-13	14:12:05	Transportation Boat	Travelling	91	2	20	302	45	40	22.3066	113.9572	1373.99	316.49
08-Oct-13	14:12:43	Research Vessel	Travelling	90	52	40	30	35	0	22.3081	113.9775	1630.29	44.31
08-Oct-13	14:13:51	Transportation Boat	Travelling	91	4	0	291	44	20	22.3046	113.9558	1338.04	305.47
08-Oct-13	14:14:53	Research Vessel	Travelling	91	14	40	24	52	0	22.3057	113.9733	1145.24	38.60
08-Oct-13	14:15:10	Transportation Boat	Travelling	91	3	10	283	56	50	22.3033	113.9547	1356.10	297.68
08-Oct-13	14:16:29	HSF High Speed Ferry	Travelling	90	53	50	333	54	50	22.3116	113.9631	1595.01	347.64
08-Oct-13	14:17:15	HSF High Speed Ferry	Travelling	90	59	10	322	5	0	22.3095	113.9606	1449.31	335.81
08-Oct-13	14:17:40	Tug Boat	Travelling	91	8	0	334	21	40	22.3087	113.9639	1259.01	348.09
08-Oct-13	14:17:45	Construction Platform	Travelling	91	7	0	336	8	30	22.3089	113.9642	1278.01	349.87
08-Oct-13	14:17:54	Research Vessel	Travelling	92	28	40	356	33	10	22.3027	113.9674	573.32	10.28
08-Oct-13	14:18:21	HSF High Speed Ferry	Travelling	91	2	50	301	49	20	22.3064	113.9571	1363.84	315.55
08-Oct-13	14:18:34	Research Vessel	Travelling	92	24	50	346	13	50	22.3029	113.9664	588.59	359.96
08-Oct-13	14:19:37	HSF High Speed Ferry	Travelling	90	57	20	279	4	40	22.3028	113.9530	1496.69	292.81
08-Oct-13	14:20:14	Transportation Boat	Travelling	91	3	50	297	17	50	22.3055	113.9565	1342.49	311.03
08-Oct-13	14:20:23	Research Vessel	Travelling	91	25	50	348	8	40	22.3066	113.9667	995.77	1.87
08-Oct-13	14:21:11	Transportation Boat	Travelling	90	56	40	283	18	50	22.3038	113.9533	1514.81	297.04
08-Oct-13	14:22:05	Tug Boat	Travelling	91	8	30	308	39	0	22.3065	113.9590	1250.31	322.38
08-Oct-13	14:22:09	Construction Platform	Travelling	91	9	20	310	24	30	22.3066	113.9594	1235.14	324.14
08-Oct-13	14:24:40	Tug Boat	Travelling	91	6	50	291	17	30	22.3042	113.9562	1282.18	305.02
08-Oct-13	14:24:44	Construction Platform	Travelling	91	8	30	292	42	40	22.3043	113.9566	1250.67	306.44
08-Oct-13	14:25:02	Container Boat	Travelling	91	3	0	310	18	20	22.3075	113.9586	1361.16	324.04
08-Oct-13	14:26:32	Container Boat	Travelling	91	15	0	318	3	10	22.3067	113.9611	1141.52	331.78
08-Oct-13	14:28:11	Container Boat	Travelling	91	14	10	334	31	50	22.3078	113.9641	1154.67	348.26
08-Oct-13	14:30:02	Tug Boat	Travelling	90	59	30	287	10	30	22.3043	113.9544	1443.05	300.90
08-Oct-13	14:30:06	Tug Boat	Travelling	90	59	30	285	43	40	22.3040	113.9542	1443.06	299.46
08-Oct-13	14:30:12	Construction Platform	Travelling	90	55	40	281	31	10	22.3035	113.9528	1543.92	295.25
08-Oct-13	14:30:20	Container Boat	Travelling	91	5	10	343	28	10	22.3094	113.9658	1316.13	357.20
08-Oct-13	14:31:55	Tug Boat	Travelling	91	2	10	304	50	40	22.3069	113.9575	1380.64	318.57
08-Oct-13	14:31:59	Tug Boat	Travelling	91	2	10	303	9	40	22.3067	113.9572	1380.65	316.89
08-Oct-13	14:32:05	Construction Platform	Travelling	91	2	40	298	6	0	22.3058	113.9565	1369.52	311.83
08-Oct-13	14:33:16	Transportation Boat	Travelling	91	1	10	298	19	50	22.3061	113.9563	1403.70	312.06
08-Oct-13	14:34:54	Transportation Boat	Travelling	90	55	0	279	56	0	22.3033	113.9525	1563.72	293.66
08-Oct-13	14:35:35	Tug Boat	Travelling	90	53	30	336	12	30	22.3119	113.9637	1608.40	349.94
08-Oct-13	14:35:38	Tug Boat	Travelling	90	53	50	335	1	0	22.3117	113.9634	1598.28	348.75
08-Oct-13	14:35:45	Construction Platform	Travelling	90	56	50	331	12	0	22.3108	113.9626	1512.65	344.93
08-Oct-13	14:38:20	Tug Boat	Travelling	90	44	0	353	5	20	22.3152	113.9687	1964.07	6.82
08-Oct-13	14:38:24	Tug Boat	Travelling	90	44	30	352	6	10	22.3150	113.9683	1941.48	5.83
08-Oct-13	14:38:32	Construction Platform	Travelling	90	47	0	349	19	50	22.3141	113.9674	1835.93	3.06
08-Oct-13	14:40:41	Transportation Boat	Travelling	91	0	40	302	44	30	22.3069	113.9569	1416.54	316.47
08-Oct-13	14:40:46	Transportation Boat	Travelling	91	3	0	303	12	30	22.3066	113.9573	1363.44	316.94
08-Oct-13	14:41:48	Transportation Boat	Travelling	91	3	50	282	6	50	22.3029	113.9546	1345.58	295.84
08-Oct-13	14:41:54	Transportation Boat	Travelling	91	1	20	293	41	0	22.3053	113.9556	1401.13	307.41
08-Oct-13	14:42:01	Tug Boat	Travelling	90	55	50	289	9	0	22.3051	113.9538	1541.19	302.88
08-Oct-13	14:42:38	Transportation Boat	Travelling	90	58	30	284	38	50	22.3039	113.9538	1470.03	298.38
08-Oct-13	14:42:43	Transportation Boat	Travelling	90	58	0	305	39	20	22.3077	113.9570	1482.89	319.39
08-Oct-13	14:43:29	Transportation Boat	Travelling	91	0	20	282	44	0	22.3033	113.9540	1424.89	296.46
08-Oct-13	14:43:33	Transportation Boat	Travelling	91	0	30	294	52	0	22.3056	113.9556	1420.93	308.60
08-Oct-13	14:43:38	Transportation Boat	Travelling	91	5	10	294	34	30	22.3050	113.9563	1318.00	308.30
08-Oct-13	14:43:50	Tug Boat	Travelling	90	58	0	292	23	30	22.3055	113.9547	1483.07	306.12
08-Oct-13	14:44:24	Transportation Boat	Travelling	91	0	40	303	51	30	22.3070	113.9571	1417.10	317.59
08-Oct-13	14:44:29	Transportation Boat	Travelling	90	58	10	280	55	30	22.3032	113.9533	1478.86	294.65
08-Oct-13	14:45:26	Transportation Boat	Travelling	90	51	50	306	47	50	22.3092	113.9561	1662.77	320.53
08-Oct-13	14:45:41	Tug Boat	Stationary	90	58	40	293	38	30	22.3056	113.9551	1466.27	307.37
08-Oct-13	14:55:26	Speed Boat	Travelling	91	1	30	295	4	40	22.3055	113.9558	1399.30	308.81
08-Oct-13	14:55:39	Transportation Boat	Travelling	90	56	20	295	7	40	22.3063	113.9548	1529.52	308.86
08-Oct-13	14:55:43	Transportation Boat	Travelling	90	54	50	305	9	10	22.3083	113.9563	1572.03	318.88
08-Oct-13	14:56:01	Speed Boat	Travelling	91	0	50	285	21	30	22.3038	113.9544	1414.92	299.09
08-Oct-13	14:56:18	Transportation Boat	Travelling	90	54	10	292	0	20	22.3060	113.9538	1591.79	305.74
08-Oct-13	14:56:22	Transportation Boat	Travelling	91	1	0	297	23	40	22.3060	113.9561	1411.06	311.12
08-Oct-13	14:56:35	Speed Boat	Travelling	90	58	40	275	45	20	22.3020	113.9529	1467.98	289.49
08-Oct-13	14:57:03	Tug Boat	Travelling	91	4	30	303	7	30	22.3064	113.9575	1333.68	316.85
08-Oct-13	14:57:10	Transportation Boat	Travelling	90	58	30	282	55	50	22.3036	113.9536	1472.31	296.66
08-Oct-13	14:57:36	Tug Boat	Travelling	91	3	40	308	44	40	22.3073	113.9584	1351.42	322.47
08-Oct-13	14:57:44	Transportation Boat	Travelling	90	50	10	285	57	50	22.3053	113.9519	1721.30	299.69
08-Oct-13	14:59:36	Tug Boat	Travelling	90	56	40	328	28	10	22.3107	113.9619	1521.03	342.20
08-Oct-13	14:59:42	Tug Boat	Travelling	90	57	40	322	20	40	22.3099	113.9605	1494.29	336.07
08-Oct-13	15:01:19	Tug Boat	Travelling	91	0	20	303	3	20	22.3070	113.9569	1427.60	316.79
08-Oct-13	15:01:30	Transportation Boat	Travelling	90	56	0	330	14	20	22.3109	113.9623	1539.73	343.97
08-Oct-13	15:02:51	Tug Boat	Travelling	90	56	20	285	30	10	22.3043	113.9534	1530.69	299.23
08-Oct-13	15:03:10	Transportation Boat	Travelling	90	59	40	319	33	0	22.3092	113.9601	1444.05	333.28
08-Oct-13	15:03:14	Transportation Boat	Travelling	91	0	20	303	12	40	22.3070	113.9569	1427.89	316.94
08-Oct-13	15:03:18	Transportation Boat	Travelling	90	56	20	305	53	30	22.3081	113.9568	1530.77	319.62
08-Oct-13	15:04:06	Transportation Boat	Travelling	91	0	0	313	25	0	22.3085	113.9588	1436.06	327.15
08-Oct-13	15:04:11	Transportation Boat	Travelling	90	59	20	287	49	40	22.3045	113.9544	1452.43	301.56
08-Oct-13	15:04:15	Transportation Boat	Travelling	91	1	0	296	52	20	22.3059	113.9560	1412.24	310.60
08-Oct-13	15:04:55	Transportation Boat	Travelling	90	54	50	277	9	0	22.3027	113.9521	1573.57	290.88
08-Oct-13	15:05:00	Transportation Boat	Travelling	90	59	40	287	34	0	22.3044	113.9544	1444.33	301.30
08-Oct-13	15:05:07	Transportation Boat	Travelling	90	58	10	308	58	30	22.3082	113.9577	1482.12	322.70
08-Oct-13	15:10:38	Research Vessel	Travelling	91	28	0	284	46	40	22.3018	113.9581	976.29	298.51
08-Oct-13	15:11:59	Research Vessel	Travelling	91	53	30	300	35	20	22.3024	113.9611	756.04	314.32
08-Oct-13	15:13:42	Research Vessel	Travelling	92	35	30	332	10	30	22.3024	113.9651	551.30	345.90
08-Oct-13	15:15:45	Research Vessel	Travelling	92	0	30	5	46	20	22.3037	113.9687	712.23	19.50
08-Oct-13	15:17:07	Transportation Boat	Travelling	91	11	50	300	47	50	22.3052	113.9581	1198.73	314.53
08-Oct-13	15:17:55	Transportation Boat	Travelling	91	0	30	308	9	50	22.3077	113.9578	1426.13	321.89
08-Oct-13	15:18:21	Research Vessel	Travelling	91	51	10	33	27	50	22.3023	113.9719	772.50	47.19
08-Oct-13	15:18:47	Transportation Boat	Travelling	90	48	50	303	50	50	22.3094	113.9548	1773.20	317.58
08-Oct-13	15:22:41	Research Vessel	Travelling	91	54	30	35	7	20	22.3021	113.9719	750.26	48.85
08-Oct-13	15:24:04	Transportation Boat	Travelling	91	11	40	357	28	20	22.3082	113.9687	1202.43	11.20
08-Oct-13	15:27:19	Transportation Boat	Travelling	91	24	10	311	32	50	22.3052	113.9607	1022.87	325.28
08-Oct-13	15:28:42	Research Vessel	Stationary	91	57	30	33	21	30	22.3021	113.9716	731.49	47.09
08-Oct-13	15:29:12	Speed Boat	Travelling	94	20	50	304	1	20	22.2998	113.9643	328.59	317.75
08-Oct-13	15:29:31	Transportation Boat	Travelling	91	7	20	285	1	40	22.3032	113.9555	1281.36	298.76
08-Oct-13	15:29:49	Speed Boat	Travelling	95	40	0	340	58	20	22.2999	113.9662	251.72	354.70
08-Oct-13	15:31:04	Speed Boat	Stationary	95	23	50	354	54	30	22.3000	113.9668	264.41	8.64
08-Oct-13	15:32:13	Transportation Boat	Travelling	91	1	0	298	33	20	22.3062	113.9562	1416.44	312.29
08-Oct-13	15:32:19	Transportation Boat	Travelling	91	1	0	305	35	10	22.3073	113.9574	1416.45	319.32
08-Oct-13	15:33:52	Transportation Boat	Travelling	90	58	40	286	38	0	22.3043	113.9540	1473.80	300.36
08-Oct-13	15:33:56	Transportation Boat	Travelling	91	1	10	284	20	40	22.3036	113.9543	1412.79	298.07
08-Oct-13	15:36:54	Research Vessel	Acoustic Recording	91	57	10	33	8	40	22.3021	113.9716	734.21	46.87
08-Oct-13	15:41:48	Transportation Boat	Travelling	91	0	50	304	58	10	22.3072	113.9573	1421.81	318.70
08-Oct-13	15:42:42	Transportation Boat	Travelling	91	0	40	294	5	50	22.3055	113.9554	1425.91	307.83
08-Oct-13	15:43:31	Fishing Boat	Non-operate and travelling	92	37	40	290	6	30	22.3004	113.9620	545.41	303.84
08-Oct-13	15:43:38	Transportation Boat	Travelling	90	58	20	283	34	30	22.3037	113.9536	1483.88	297.30
08-Oct-13	15:43:50	Container Boat	Travelling	90	59	30	313	16	20	22.3086	113.9587	1454.42	327.00
08-Oct-13	15:43:59	Transportation Boat	Travelling	91	3	20	298	6	40	22.3058	113.9565	1365.32	311.84
08-Oct-13	15:44:36	Transportation Boat	Travelling	91	2	50	293	20	0	22.3051	113.9557	1376.40	307.06
08-Oct-13	15:44:50	Fishing Boat	Non-operate and travelling	92	30	50	303	54	20	22.3014	113.9627	570.28	317.64
08-Oct-13	15:47:13	Fishing Boat	Non-operate and travelling	92	41	0	301	6	10	22.3010	113.9627	534.29	314.83
08-Oct-13	15:47:21	Container Boat	Travelling	90	53	40	336	20	30	22.3119	113.9637	1615.61	350.07
08-Oct-13	15:48:49	Container Boat	Stationary	90	54	30	335	51	0	22.3117	113.9636	1590.76	349.58
08-Oct-13	15:48:56	Container Boat	Travelling	90	55	20	338	18	10	22.3116	113.9643	1566.44	352.03
08-Oct-13	15:49:07	Fishing Boat	Non-operate and travelling	92	41	50	298	59	40	22.3009	113.9626	531.63	312.72
08-Oct-13	15:50:31	Government Boat	Travelling	91	30	20	321	51	50	22.3054	113.9626	954.93	335.59

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
08-Oct-13	15:51:07	Government Boat	Travelling	91	13	0	349	34	20	22.3083	113.9671	1183.65	3.30
08-Oct-13	15:52:07	Government Boat	Travelling	90	46	10	8	15	20	22.3133	113.9733	1884.55	21.99
08-Oct-13	15:53:21	Container Boat	Travelling	90	46	20	337	3	0	22.3143	113.9635	1877.87	350.78
08-Oct-13	15:54:55	Research Vessel	Acoustic Recording	92	11	0	28	8	10	22.3020	113.9707	657.64	41.87
08-Oct-13	15:56:09	Transportation Boat	Travelling	90	56	30	291	23	20	22.3056	113.9542	1534.77	305.12
08-Oct-13	15:56:15	Transportation Boat	Travelling	90	56	50	285	56	10	22.3044	113.9535	1525.65	299.67
08-Oct-13	15:57:23	Transportation Boat	Travelling	90	59	20	299	24	50	22.3066	113.9560	1460.65	313.14
08-Oct-13	15:57:25	Transportation Boat	Travelling	91	0	30	299	19	40	22.3064	113.9562	1432.11	313.06
08-Oct-13	15:58:46	Transportation Boat	Travelling	90	56	10	306	4	30	22.3082	113.9567	1544.45	319.80
08-Oct-13	15:58:50	Transportation Boat	Travelling	90	51	10	307	35	0	22.3095	113.9561	1698.04	321.31
08-Oct-13	15:59:08	Transportation Boat	Travelling	90	59	10	287	46	10	22.3045	113.9542	1465.09	301.50
08-Oct-13	16:00:18	Transportation Boat	Travelling	91	0	20	302	35	20	22.3070	113.9567	1436.56	316.32
08-Oct-13	16:01:02	Transportation Boat	Travelling	90	54	20	305	21	30	22.3085	113.9562	1597.78	319.09
08-Oct-13	16:03:29	Fishing Boat	Non-operate and travelling	92	28	50	355	15	0	22.3028	113.9673	579.10	8.98
08-Oct-13	16:04:34	Speed Boat	Travelling	91	0	0	325	29	30	22.3098	113.9614	1445.30	339.22
08-Oct-13	16:04:41	Fishing Boat	Non-operate and travelling	91	26	30	24	4	40	22.3047	113.9724	999.02	37.81
08-Oct-13	16:05:40	Speed Boat	Travelling	90	58	30	294	40	30	22.3059	113.9551	1483.05	308.40
08-Oct-13	16:05:49	Fishing Boat	Non-operate and travelling	91	5	50	28	46	40	22.3063	113.9750	1315.92	42.51
08-Oct-13	16:06:08	Research Vessel	Stationary	92	3	0	30	49	50	22.3021	113.9712	701.41	44.56
08-Oct-13	16:09:15	Transportation Boat	Travelling	91	1	50	286	24	30	22.3040	113.9546	1402.59	300.14
08-Oct-13	16:09:57	Research Vessel	Acoustic Recording	92	1	40	30	3	0	22.3022	113.9712	709.41	43.78
08-Oct-13	16:10:05	Transportation Boat	Travelling	91	3	20	300	39	50	22.3062	113.9569	1369.09	314.39
08-Oct-13	16:10:45	Transportation Boat	Travelling	90	57	0	306	31	0	22.3082	113.9569	1523.46	320.25
08-Oct-13	16:11:15	Tug Boat	Travelling	91	18	20	4	20	10	22.3071	113.9697	1104.74	18.07
08-Oct-13	16:11:26	Transportation Boat	Travelling	90	48	40	303	30	10	22.3094	113.9546	1789.38	317.23
08-Oct-13	16:13:56	Tug Boat	Travelling	91	16	40	5	36	20	22.3072	113.9700	1129.27	19.34
08-Oct-13	16:15:09	Tug Boat	Travelling	91	10	20	3	49	20	22.3082	113.9700	1232.08	17.55
08-Oct-13	16:15:18	Container Boat	Travelling	91	12	20	3	50	30	22.3079	113.9699	1197.71	17.57
08-Oct-13	16:17:20	Transportation Boat	Travelling	91	17	20	288	47	10	22.3030	113.9572	1119.86	302.52
08-Oct-13	16:17:31	Tug Boat	Travelling	90	56	20	2	11	30	22.3110	113.9705	1542.87	15.92
08-Oct-13	16:17:35	Container Boat	Travelling	90	58	20	2	22	40	22.3105	113.9704	1489.22	16.11
08-Oct-13	16:18:32	Transportation Boat	Travelling	91	29	30	303	21	10	22.3040	113.9600	966.73	317.08
08-Oct-13	16:20:50	Transportation Boat	Travelling	91	32	20	338	28	50	22.3060	113.9652	937.11	352.21
08-Oct-13	16:22:21	Research Vessel	Acoustic Recording	92	24	10	20	38	30	22.3021	113.9697	599.10	34.37
08-Oct-13	16:22:38	Transportation Boat		91	14	10	0	2	30	22.3078	113.9691	1168.74	13.77
08-Oct-13	16:24:00	Transportation Boat	Travelling	91	0	50	305	23	0	22.3073	113.9573	1428.17	319.11
08-Oct-13	16:24:30	Transportation Boat	Travelling	91	0	10	293	18	50	22.3054	113.9552	1444.28	307.04
08-Oct-13	16:25:11	Transportation Boat	Travelling	91	4	40	294	44	40	22.3051	113.9562	1342.67	308.47
08-Oct-13	16:25:17	Transportation Boat	Travelling	90	58	40	306	1	30	22.3078	113.9571	1481.84	319.75
08-Oct-13	16:25:37	Research Vessel	Travelling	92	28	20	11	8	40	22.3024	113.9688	582.41	24.87
08-Oct-13	16:26:44	Transportation Boat	Travelling	90	58	40	279	4	10	22.3028	113.9531	1482.07	292.80
08-Oct-13	16:31:39	Transportation Boat	Travelling	91	1	20	300	42	50	22.3066	113.9566	1417.52	314.44
08-Oct-13	16:32:16	Research Vessel	Stationary	92	35	10	10	30	40	22.3022	113.9686	557.07	24.24
08-Oct-13	16:32:48	Transportation Boat	Travelling	90	58	0	281	45	20	22.3034	113.9532	1500.30	295.49
08-Oct-13	16:36:15	Transportation Boat	Travelling	91	3	40	289	43	10	22.3044	113.9553	1365.60	303.45
08-Oct-13	16:37:13	Transportation Boat	Travelling	91	4	20	297	56	50	22.3057	113.9566	1351.42	311.68
08-Oct-13	16:37:40	Research Vessel	Travelling	92	38	40	356	11	20	22.3025	113.9673	545.05	9.92
08-Oct-13	16:37:53	Transportation Boat	Travelling	91	0	50	285	47	50	22.3040	113.9543	1430.26	299.53
08-Oct-13	16:38:31	Transportation Boat	Travelling	90	59	0	306	34	40	22.3078	113.9572	1475.41	320.31
08-Oct-13	16:38:37	Transportation Boat	Travelling	91	1	20	294	57	50	22.3056	113.9556	1418.56	308.69
08-Oct-13	16:39:49	Transportation Boat	Travelling	91	2	10	288	20	50	22.3043	113.9549	1399.48	302.08
08-Oct-13	16:39:55	Transportation Boat	Travelling	90	56	0	307	48	30	22.3086	113.9570	1555.86	321.54
08-Oct-13	16:40:58	Transportation Boat	Travelling	91	0	40	302	58	30	22.3070	113.9568	1434.71	316.70
08-Oct-13	16:41:03	Transportation Boat	Travelling	91	2	40	304	15	0	22.3069	113.9574	1388.36	317.98
08-Oct-13	16:41:22	Construction Boat	Travelling	91	24	40	12	43	30	22.3059	113.9708	1024.75	26.45
08-Oct-13	16:41:43	Transportation Boat	Travelling	90	56	40	307	9	0	22.3084	113.9570	1537.57	320.88
08-Oct-13	16:41:47	Transportation Boat	Travelling	91	0	30	289	51	40	22.3048	113.9547	1438.83	303.59
08-Oct-13	16:42:10	Research Vessel	Acoustic Recording	92	41	0	349	1	30	22.3024	113.9667	537.38	2.75
08-Oct-13	16:45:08	Construction Boat	Stationary	91	15	20	10	7	50	22.3071	113.9709	1153.21	23.86
08-Oct-13	16:45:22	Transportation Boat	Travelling	90	55	20	287	32	0	22.3050	113.9533	1575.81	301.26
08-Oct-13	16:45:26	Transportation Boat	Travelling	91	0	10	286	12	30	22.3041	113.9542	1447.47	299.94
08-Oct-13	16:46:54	Transportation Boat	Travelling	90	59	30	297	45	0	22.3063	113.9557	1464.13	311.48
08-Oct-13	16:46:58	Transportation Boat	Travelling	91	1	0	301	48	50	22.3068	113.9567	1427.66	315.54
08-Oct-13	16:48:53	Transportation Boat	Travelling	90	54	40	306	21	20	22.3086	113.9564	1595.92	320.09
08-Oct-13	16:49:04	Transportation Boat	Travelling	90	51	20	308	59	0	22.3098	113.9564	1701.43	322.71
08-Oct-13	16:49:19	Research Vessel	Travelling	92	56	0	5	17	50	22.3018	113.9680	491.80	19.03
08-Oct-13	16:49:58	Transportation Boat	Travelling	91	0	0	299	52	10	22.3066	113.9562	1452.23	313.60
08-Oct-13	16:50:03	Transportation Boat	Travelling	90	56	50	287	37	0	22.3048	113.9537	1534.34	301.35
08-Oct-13	16:50:32	Transportation Boat	Travelling	91	0	0	287	59	20	22.3045	113.9544	1452.32	301.72
08-Oct-13	16:50:51	Transportation Boat	Travelling	90	59	0	294	0	20	22.3058	113.9550	1477.33	307.74
08-Oct-13	16:50:58	Transportation Boat	Travelling	90	59	40	301	9	50	22.3069	113.9563	1460.61	314.89
08-Oct-13	16:51:02	Transportation Boat	Travelling	91	2	20	296	2	40	22.3057	113.9560	1397.34	309.77
08-Oct-13	16:52:02	Transportation Boat	Travelling	90	57	0	286	55	0	22.3046	113.9536	1530.11	300.65
08-Oct-13	16:52:09	Transportation Boat	Travelling	90	50	40	308	33	30	22.3099	113.9561	1724.80	322.29
08-Oct-13	16:52:12	Transportation Boat	Travelling	90	53	30	305	1	30	22.3087	113.9559	1631.88	318.75
08-Oct-13	16:52:17	Transportation Boat	Travelling	91	2	10	290	12	0	22.3047	113.9551	1401.32	303.93
08-Oct-13	16:52:22	Transportation Boat	Travelling	90	58	0	286	16	0	22.3044	113.9537	1503.40	300.00
08-Oct-13	16:52:43	Research Vessel	Stationary	91	58	10	41	25	30	22.3014	113.9723	733.79	55.15
08-Oct-13	16:53:44	Transportation Boat	Travelling	91	1	50	297	26	40	22.3060	113.9561	1409.18	311.17
08-Oct-13	16:53:48	Transportation Boat	Travelling	90	57	0	306	17	10	22.3082	113.9568	1530.39	320.02
08-Oct-13	16:55:30	Transportation Boat	Travelling	91	2	0	313	26	40	22.3082	113.9590	1405.60	327.17
08-Oct-13	16:57:46	Transportation Boat	Travelling	90	56	0	331	45	10	22.3112	113.9626	1558.79	345.48
08-Oct-13	17:01:17	Other	Stationary	90	33	50	278	25	0	22.3065	113.9428	2616.36	292.15
08-Oct-13	17:01:27	Other	Stationary	90	32	10	287	18	50	22.3104	113.9434	2758.38	301.04
08-Oct-13	17:01:31	Other	Stationary	90	32	30	291	52	10	22.3119	113.9448	2728.76	305.60
08-Oct-13	17:01:34	Other	Stationary	90	45	50	296	59	20	22.3088	113.9523	1912.59	310.72
08-Oct-13	17:01:38	Other	Stationary	90	58	0	304	31	50	22.3077	113.9567	1504.87	318.26
08-Oct-13	17:01:41	Other	Stationary	90	52	40	309	20	30	22.3096	113.9567	1659.80	323.07
08-Oct-13	17:01:44	Other	Stationary	90	57	10	313	53	30	22.3092	113.9584	1527.14	327.62
08-Oct-13	17:01:47	Other	Stationary	90	57	10	318	0	0	22.3097	113.9594	1527.15	331.73
08-Oct-13	17:01:51	Other	Stationary	90	55	0	322	3	20	22.3107	113.9601	1588.26	335.79
08-Oct-13	17:01:55	Other	Stationary	90	54	40	324	45	40	22.3110	113.9607	1598.12	338.49
08-Oct-13	17:02:03	Other	Stationary	90	50	50	332	59	40	22.3127	113.9626	1720.84	346.72
08-Oct-13	17:02:06	Other	Stationary	90	47	20	338	16	10	22.3141	113.9639	1850.75	352.00
08-Oct-13	17:02:09	Other	Stationary	90	41	40	342	41	30	22.3166	113.9651	2109.12	356.42
08-Oct-13	17:02:12	Other	Stationary	90	40	10	345	35	40	22.3173	113.9661	2190.25	359.32
08-Oct-13	17:02:16	Other	Stationary	90	38	20	348	8	20	22.3183	113.9671	2298.44	1.87
08-Oct-13	17:02:21	Other	Stationary	90	29	40	352	13	40	22.3245	113.9694	3003.99	5.96
08-Oct-13	17:02:50	Other	Stationary	90	58	30	304	53	30	22.3077	113.9568	1492.01	318.62
08-Oct-13	17:02:59	Other	Stationary	90	51	30	308	12	20	22.3097	113.9562	1698.32	321.94
08-Oct-13	17:03:37	Other	Stationary	90	29	20	348	21	0	22.3250	113.9675	3040.55	2.08
08-Oct-13	17:03:43	Other	Stationary	90	29	20	352	15	0	22.3248	113.9695	3040.58	5.98
08-Oct-13	17:04:10	Other	Stationary	91	6	50	325	44	10	22.3086	113.9620	1303.99	339.47
08-Oct-13	17:04:22	Other	Stationary	91	7	0	326	59	20	22.3087	113.9622	1300.74	340.72
08-Oct-13	17:04:30	Other	Stationary	91	0	20	341	34	0	22.3106	113.9652	1446.31	355.30
08-Oct-13	17:04:35	Other	Stationary	91	0	50	343	57	20	22.3105	113.9658	1434.28	357.69
08-Oct-13	17:04:44	Other	Stationary	90	52	10	17	13	30	22.3106	113.9748	1676.53	30.95
08-Oct-13	17:04:49	Other	Stationary	90	52	50	17	59	10	22.3103	113.9749	1655.02	31.72
08-Oct-13	17:05:38	Other	Stationary	90	38	0	357	49	30	22.3181	113.9709	2320.11	11.55
08-Oct-13	17:06:02	Other	Stationary	90	29	40	6	3	30	22.3231	113.9763	3005.18	19.79
08-Oct-13	17:06:41	Other	Stationary	90	52	30	354	40	30	22.3125	113.9688	1666.04	8.40
08-Oct-13	17:06:48	Other	Stationary	90	52	50	356	12	50	22.3123	113.9692	1655.37	9.94
08-Oct-13	17:07:00	Other	Stationary	91	13	40	9	58	10	22.3074	113.9710	1182.24	23.70
08-Oct-13	17:07:06	Other	Stationary	91	16	40	12	53	20	22.3068	113.9713	1135.60	26.62
11-Oct-13	8:06:18	Other	Stationary	94	26	30	0	0	10	22.3005	113.9672	332.23	13.73
11-Oct-13	8:06:36	Other	Stationary	91	4	0	278	48	50	22.3024	113.9539	1393.76	292.54
11-Oct-13	8:06:40	Other	Stationary	91	4	25	283	3	40	22.3032	113.9544	1384.64	296.79

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Oct-13	8:06:47	Other	Stationary	91	5	55	292	0	35	22.3047	113.9557	1352.77	305.74
11-Oct-13	8:06:52	Other	Stationary	90	56	0	301	42	20	22.3079	113.9555	1595.82	315.44
11-Oct-13	8:06:59	Other	Stationary	90	59	50	315	8	5	22.3091	113.9589	1492.12	328.86
11-Oct-13	8:07:04	Other	Stationary	90	55	50	328	29	45	22.3113	113.9616	1600.66	342.23
11-Oct-13	8:07:08	Other	Stationary	90	54	15	331	52	30	22.3120	113.9624	1648.16	345.60
11-Oct-13	8:07:12	Other	Stationary	90	52	35	335	35	5	22.3127	113.9633	1701.32	349.31
11-Oct-13	8:07:16	Other	Stationary	90	45	50	340	5	10	22.3151	113.9643	1957.43	353.82
11-Oct-13	8:07:20	Other	Stationary	90	42	35	345	21	30	22.3166	113.9661	2110.79	359.09
11-Oct-13	8:07:26	Other	Stationary	90	39	10	348	48	5	22.3183	113.9674	2300.71	2.53
11-Oct-13	8:07:31	Other	Stationary	90	33	20	351	35	0	22.3220	113.9689	2720.43	5.31
11-Oct-13	8:07:35	Other	Stationary	90	31	25	352	13	5	22.3235	113.9693	2894.81	5.95
11-Oct-13	8:08:05	Other	Stationary	91	1	15	304	59	35	22.3075	113.9570	1457.15	318.72
11-Oct-13	8:08:16	Other	Stationary	90	53	55	308	6	50	22.3094	113.9564	1658.52	321.84
11-Oct-13	8:08:30	Other	Stationary	90	31	35	348	21	15	22.3235	113.9674	2878.74	2.08
11-Oct-13	8:08:48	Other	Stationary	90	32	0	352	17	55	22.3230	113.9693	2839.36	6.03
11-Oct-13	8:09:06	Other	Stationary	91	17	20	308	37	50	22.3058	113.9596	1151.24	322.36
11-Oct-13	8:09:12	Other	Stationary	91	17	45	310	51	10	22.3060	113.9599	1145.02	324.58
11-Oct-13	8:09:21	Other	Stationary	91	10	25	325	43	15	22.3083	113.9621	1265.42	339.45
11-Oct-13	8:09:27	Other	Stationary	91	10	45	326	58	0	22.3083	113.9624	1259.40	340.70
11-Oct-13	8:09:40	Other	Stationary	90	55	45	17	2	5	22.3100	113.9744	1603.09	30.76
11-Oct-13	8:09:43	Other	Stationary	90	55	45	17	58	10	22.3099	113.9746	1603.09	31.70
11-Oct-13	8:10:04	Other	Stationary	90	35	25	356	28	50	22.3202	113.9708	2553.69	10.21
11-Oct-13	8:10:09	Other	Stationary	90	32	45	7	31	5	22.3209	113.9762	2771.18	21.25
11-Oct-13	8:10:28	Other	Stationary	90	55	40	354	37	10	22.3119	113.9687	1605.53	8.35
11-Oct-13	8:10:33	Other	Stationary	90	55	35	356	10	0	22.3119	113.9691	1607.98	9.90
11-Oct-13	8:10:41	Other	Stationary	91	28	10	8	52	45	22.3060	113.9702	1008.79	22.61
11-Oct-13	8:10:45	Other	Stationary	91	28	10	12	50	30	22.3057	113.9708	1008.79	26.57
11-Oct-13	8:11:03	Tug Boat	Travelling	90	55	10	11	13	10	22.3108	113.9730	1620.32	24.95
11-Oct-13	8:11:10	Tug Boat	Travelling	91	5	45	290	42	45	22.3045	113.9555	1356.23	304.44
11-Oct-13	8:11:21	Transportation Boat	Travelling	91	3	0	282	31	5	22.3033	113.9540	1416.16	296.25
11-Oct-13	8:11:26	Transportation Boat	Travelling	90	57	10	282	8	40	22.3038	113.9527	1562.76	295.87
11-Oct-13	8:11:35	Transportation Boat	Travelling	90	59	10	330	28	25	22.3107	113.9624	1509.17	344.20
11-Oct-13	8:11:43	Transportation Boat	Travelling	90	45	10	349	21	45	22.3155	113.9674	1987.02	3.09
11-Oct-13	8:12:44	Transportation Boat	Travelling	91	5	50	294	4	35	22.3051	113.9560	1354.50	307.81
11-Oct-13	8:12:48	Transportation Boat	Travelling	91	2	35	296	20	35	22.3059	113.9558	1425.71	310.07
11-Oct-13	8:13:12	Transportation Boat	Travelling	91	4	35	312	48	30	22.3080	113.9590	1381.02	326.54
11-Oct-13	8:13:18	Transportation Boat	Travelling	90	52	30	342	53	0	22.3129	113.9654	1704.07	356.61
11-Oct-13	8:13:29	Transportation Boat	Travelling	91	25	50	317	23	50	22.3058	113.9615	1036.41	331.13
11-Oct-13	8:13:35	Transportation Boat	Travelling	91	0	25	292	20	40	22.3054	113.9548	1477.52	306.07
11-Oct-13	8:13:39	Construction Boat	Travelling	91	1	50	291	2	0	22.3050	113.9549	1443.22	304.76
11-Oct-13	8:14:01	Transportation Boat	Travelling	91	7	25	286	14	20	22.3036	113.9553	1322.33	299.97
11-Oct-13	8:14:07	Tug Boat	Travelling	90	50	25	341	10	30	22.3135	113.9649	1775.83	354.90
11-Oct-13	8:14:12	Tug Boat	Travelling	91	2	10	325	19	55	22.3097	113.9614	1435.39	339.06
11-Oct-13	8:14:17	Transportation Boat	Travelling	91	1	50	306	27	10	22.3076	113.9574	1443.22	320.18
11-Oct-13	8:14:20	Transportation Boat	Travelling	90	56	5	306	8	0	22.3086	113.9564	1593.42	319.86
11-Oct-13	8:14:26	Transportation Boat	Travelling	91	4	55	298	12	35	22.3059	113.9565	1373.85	311.94
11-Oct-13	8:14:31	Transportation Boat	Travelling	90	58	10	335	43	30	22.3112	113.9637	1535.49	349.45
11-Oct-13	8:14:37	Transportation Boat	Travelling	92	3	50	328	6	0	22.3038	113.9642	716.99	341.83
11-Oct-13	8:14:44	Transportation Boat	Travelling	91	1	45	306	27	55	22.3076	113.9574	1445.20	320.20
11-Oct-13	8:14:49	Transportation Boat	Travelling	91	9	40	294	52	40	22.3048	113.9567	1279.18	308.61
11-Oct-13	8:14:53	Construction Boat	Travelling	91	4	15	301	14	35	22.3064	113.9568	1388.27	314.97
11-Oct-13	8:15:02	HSF High Speed Ferry	Travelling	90	44	55	347	20	5	22.3156	113.9668	1998.35	1.06
11-Oct-13	8:15:08	Transportation Boat	Travelling	90	42	45	349	0	30	22.3165	113.9674	2102.33	2.74
11-Oct-13	8:15:48	Construction Boat	Travelling	91	0	45	305	53	45	22.3077	113.9571	1469.30	319.63
11-Oct-13	8:15:55	Transportation Boat	Travelling	93	53	0	347	30	10	22.3010	113.9665	380.21	1.23
11-Oct-13	8:16:00	Transportation Boat	Travelling	90	58	25	281	37	35	22.3035	113.9530	1528.83	295.36
11-Oct-13	8:16:16	Transportation Boat	Travelling	90	50	10	341	43	40	22.3136	113.9650	1784.85	355.46
11-Oct-13	8:16:22	Transportation Boat	Travelling	91	4	45	321	47	40	22.3089	113.9608	1377.43	335.52
11-Oct-13	8:16:28	Transportation Boat	Travelling	91	6	40	289	33	55	22.3042	113.9555	1337.38	303.30
11-Oct-13	8:16:35	Tug Boat	Travelling	90	50	55	344	25	45	22.3134	113.9659	1758.06	358.16
11-Oct-13	8:16:50	Tug Boat	Travelling	91	2	5	316	48	50	22.3089	113.9595	1437.34	330.54
11-Oct-13	8:17:01	HSF High Speed Ferry	Travelling	91	3	5	320	20	35	22.3091	113.9604	1414.27	334.07
11-Oct-13	8:17:07	Transportation Boat	Travelling	90	59	20	287	32	10	22.3046	113.9539	1504.87	301.27
11-Oct-13	8:17:13	Transportation Boat	Travelling	91	8	15	295	36	25	22.3051	113.9566	1306.01	309.34
11-Oct-13	8:17:39	Transportation Boat	Travelling	91	3	30	324	54	50	22.3094	113.9614	1404.87	338.64
11-Oct-13	8:17:42	Transportation Boat	Travelling	90	59	35	327	17	10	22.3104	113.9617	1498.47	341.02
11-Oct-13	8:17:49	Transportation Boat	Travelling	91	10	10	300	38	15	22.3056	113.9576	1269.97	314.37
11-Oct-13	8:17:53	Transportation Boat	Travelling	91	1	45	295	40	45	22.3059	113.9555	1445.20	309.41
11-Oct-13	8:18:04	HSF High Speed Ferry	Travelling	91	7	15	299	10	45	22.3057	113.9570	1325.65	312.91
11-Oct-13	8:18:10	Tug Boat	Travelling	91	3	45	302	6	40	22.3067	113.9569	1399.29	315.84
11-Oct-13	8:18:17	Transportation Boat	Travelling	91	8	20	305	8	30	22.3065	113.9581	1304.40	318.87
11-Oct-13	8:18:36	Transportation Boat	Travelling	93	48	10	335	51	10	22.3011	113.9657	388.30	349.58
11-Oct-13	8:19:22	Transportation Boat	Travelling	90	57	50	305	20	40	22.3081	113.9566	1544.48	319.07
11-Oct-13	8:19:37	Transportation Boat	Travelling	91	6	55	315	46	35	22.3080	113.9598	1332.32	329.51
11-Oct-13	8:19:44	Transportation Boat	Travelling	91	7	15	298	56	20	22.3057	113.9569	1325.65	312.67
11-Oct-13	8:19:50	Transportation Boat	Travelling	91	12	15	294	56	35	22.3046	113.9570	1233.00	308.67
11-Oct-13	8:19:56	Tug Boat	Travelling	90	59	10	283	27	30	22.3038	113.9533	1509.17	297.19
11-Oct-13	8:20:00	Tug Boat	Travelling	90	52	20	343	5	40	22.3130	113.9655	1709.59	356.82
11-Oct-13	8:20:09	Transportation Boat	Travelling	92	12	40	322	30	5	22.3031	113.9638	669.07	336.23
11-Oct-13	8:20:23	Transportation Boat	Travelling	91	3	10	287	11	15	22.3041	113.9546	1412.38	300.92
11-Oct-13	8:20:28	Transportation Boat	Travelling	90	57	30	283	59	35	22.3041	113.9530	1553.56	297.72
11-Oct-13	8:20:34	Transportation Boat	Travelling	91	12	30	304	41	35	22.3059	113.9585	1228.70	318.42
11-Oct-13	8:21:46	Transportation Boat	Travelling	91	30	20	315	59	15	22.3053	113.9616	984.44	329.72
11-Oct-13	8:21:55	Transportation Boat	Travelling	91	5	35	321	49	30	22.3088	113.9609	1359.72	335.55
11-Oct-13	8:22:05	Transportation Boat	Travelling	91	3	15	301	47	0	22.3067	113.9568	1410.49	315.51
11-Oct-13	8:22:15	Tug Boat	Travelling	90	54	15	357	9	45	22.3122	113.9694	1648.16	10.89
11-Oct-13	8:22:56	Transportation Boat	Travelling	90	57	5	306	9	40	22.3084	113.9566	1565.07	319.89
11-Oct-13	8:23:36	Transportation Boat	Travelling	91	6	10	310	35	20	22.3075	113.9588	1347.60	324.32
11-Oct-13	8:23:42	Transportation Boat	Travelling	90	54	5	339	51	0	22.3124	113.9646	1653.32	353.58
11-Oct-13	8:23:57	Fishing Boat	Non-operate and stationary	91	44	50	25	23	30	22.3035	113.9716	847.57	39.12
11-Oct-13	8:24:15	Transportation Boat	Travelling	91	0	35	288	57	10	22.3048	113.9543	1473.40	302.68
11-Oct-13	8:24:22	Transportation Boat	Travelling	90	50	50	345	59	5	22.3135	113.9663	1760.99	359.71
11-Oct-13	8:25:20	Transportation Boat	Travelling	91	4	5	295	49	55	22.3056	113.9560	1391.93	309.56
11-Oct-13	8:26:27	Speed Boat	Travelling	91	4	0	302	39	55	22.3067	113.9570	1393.76	316.40
11-Oct-13	8:26:34	Transportation Boat	Travelling	91	7	50	304	36	35	22.3065	113.9579	1314.12	318.34
11-Oct-13	8:27:40	Speed Boat	Travelling	91	2	15	297	20	25	22.3061	113.9559	1433.44	311.07
11-Oct-13	8:28:08	Transportation Boat	Travelling	91	3	25	283	39	5	22.3034	113.9542	1406.74	297.38
11-Oct-13	8:29:31	Transportation Boat	Travelling	91	7	35	302	34	25	22.3062	113.9575	1319.04	316.30
11-Oct-13	8:29:39	Transportation Boat	Travelling	90	47	15	346	16	35	22.3147	113.9664	1897.41	0.01
11-Oct-13	8:29:47	Tug Boat	Travelling	91	0	30	358	11	20	22.3106	113.9694	1475.46	11.92
11-Oct-13	8:31:04	Transportation Boat	Travelling	91	2	25	324	23	35	22.3096	113.9612	1429.56	338.12
11-Oct-13	8:31:09	Transportation Boat	Travelling	90	56	55	333	48	55	22.3114	113.9631	1569.73	347.55
11-Oct-13	8:31:15	Tug Boat	Travelling	91	0	50	286	28	35	22.3043	113.9541	1467.26	300.21
11-Oct-13	8:33:43	Transportation Boat	Travelling	90	45	10	348	13	15	22.3155	113.9671	1987.02	1.95
11-Oct-13	8:33:49	Transportation Boat	Travelling	91	2	15	299	3	35	22.3064	113.9562	1433.44	312.79
11-Oct-13	8:34:00	Transportation Boat	Travelling	90	55	25	340	53	0	22.3121	113.9649	1612.89	354.61
11-Oct-13	8:34:11	HSF High Speed Ferry	Travelling	91	4	50	296	55	10	22.3057	113.9562	1375.63	310.65
11-Oct-13	8:34:18	Tug Boat	Travelling	91	3	40	318	59	30	22.3088	113.9602	1401.15	332.72
11-Oct-13	8:35:28	Transportation Boat	Travelling	90	55	25	279	9	15	22.3033	113.9519	1612.89	292.88
11-Oct-13	8:35:34	Transportation Boat	Travelling	91	7	50	316	24	55	22.3079	113.9600	1314.12	330.15
11-Oct-13	8:35:39	HSF High Speed Ferry	Travelling	91	4	50	313	8	25	22.3080	113.9591	1375.63	326.87
11-Oct-13	8:35:46	Tug Boat	Travelling	90	58	15	332	38	45	22.3110	113.9629	1533.27	346.38
11-Oct-13	8:36:52	HSF High Speed Ferry	Travelling	91	3	10	320	59	45	22.3091	113.9605	1412.38	334.73
11-Oct-13	8:37:02	Transportation Boat	Travelling	91	6	5	291	9	35	22.3046	113.9556	1349.31	304.89
11-Oct-13	8:37:09	Transportation Boat	Travelling	90	58	10	281	48	25	22.3036	113.9529	1535.49	295.54
11-Oct-13	8:37:16	Tug Boat	Travelling	90	50	20	342	38	30	22.3136	113.9653	1778.83	356.37
11-Oct-13	8:37:21	HSF High Speed Ferry	Travelling	91	0	15	330	43	30	22.3105	113.9625	1481.66	344.45

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Oct-13	8:39:06	HSF High Speed Ferry	Travelling	90	43	25	348	32	5	22.3162	113.9672	2069.19	2.26
11-Oct-13	8:39:15	HSF High Speed Ferry	Travelling	90	48	15	345	7	25	22.3143	113.9660	1857.24	358.85
11-Oct-13	8:39:21	Transportation Boat	Travelling	91	2	20	279	32	0	22.3027	113.9536	1431.50	293.26
11-Oct-13	8:39:26	Transportation Boat	Travelling	91	2	35	299	12	40	22.3064	113.9562	1425.71	312.94
11-Oct-13	8:40:32	Transportation Boat	Travelling	90	59	45	306	10	30	22.3079	113.9570	1494.23	319.90
11-Oct-13	8:40:42	Transportation Boat	Travelling	90	44	45	348	16	20	22.3157	113.9671	2005.98	2.00
11-Oct-13	8:40:48	Transportation Boat	Travelling	91	5	30	282	52	50	22.3031	113.9546	1361.47	296.61
11-Oct-13	8:43:02	Speed Boat	Travelling	92	12	30	3	14	40	22.3034	113.9683	669.92	16.97
11-Oct-13	8:43:12	Transportation Boat	Travelling	91	0	20	323	4	45	22.3099	113.9607	1479.59	336.81
11-Oct-13	8:43:18	Transportation Boat	Travelling	91	5	30	301	27	50	22.3063	113.9571	1361.47	315.19
11-Oct-13	8:43:26	Speed Boat	Travelling	92	40	20	336	36	50	22.3025	113.9655	553.25	350.34
11-Oct-13	8:43:34	Tug Boat	Travelling	91	19	20	19	1	0	22.3061	113.9723	1121.99	32.75
11-Oct-13	8:44:09	Transportation Boat	Travelling	91	4	30	311	33	15	22.3078	113.9587	1382.83	325.28
11-Oct-13	8:44:13	Transportation Boat	Travelling	90	59	20	309	13	40	22.3084	113.9576	1504.87	322.96
11-Oct-13	8:44:17	Transportation Boat	Travelling	91	1	50	306	42	45	22.3076	113.9575	1443.22	320.44
11-Oct-13	8:44:25	Speed Boat	Travelling	91	41	30	281	3	30	22.3009	113.9587	875.55	294.79
11-Oct-13	8:45:16	Transportation Boat	Travelling	91	5	5	302	35	5	22.3065	113.9572	1370.29	316.31
11-Oct-13	8:45:24	Construction Boat	Travelling	90	58	40	307	20	15	22.3083	113.9571	1522.22	321.07
11-Oct-13	8:45:40	Transportation Boat	Travelling	90	59	40	327	23	25	22.3104	113.9617	1496.35	341.12
11-Oct-13	8:45:49	Transportation Boat	Travelling	91	4	0	287	43	0	22.3042	113.9548	1393.76	301.45
11-Oct-13	8:45:56	Transportation Boat	Travelling	91	4	5	296	0	45	22.3056	113.9560	1391.93	309.74
11-Oct-13	8:47:47	Transportation Boat	Travelling	90	49	15	343	58	15	22.3140	113.9657	1818.75	357.70
11-Oct-13	8:47:51	Transportation Boat	Travelling	90	56	25	278	53	35	22.3031	113.9522	1583.85	292.62
11-Oct-13	8:48:20	Tug Boat	Travelling	91	7	10	329	27	10	22.3091	113.9627	1327.31	343.18
11-Oct-13	8:49:06	Construction Boat	Travelling	91	18	55	312	12	50	22.3060	113.9603	1127.96	325.94
11-Oct-13	8:52:44	Tug Boat	Travelling	90	54	35	4	35	55	22.3116	113.9714	1637.92	18.33
11-Oct-13	8:52:54	Transportation Boat	Travelling	91	3	35	330	24	5	22.3098	113.9627	1403.01	344.13
11-Oct-13	8:53:01	Tug Boat	Travelling	91	6	10	0	33	25	22.3094	113.9696	1347.60	14.29
11-Oct-13	8:53:10	Tour Boat	Travelling	91	7	10	2	16	15	22.3091	113.9700	1327.31	16.00
11-Oct-13	8:54:37	Transportation Boat	Travelling	91	10	45	313	5	35	22.3071	113.9597	1259.40	326.82
11-Oct-13	8:54:43	Construction Boat	Stationary	91	17	20	308	52	55	22.3059	113.9596	1151.24	322.61
11-Oct-13	8:54:54	Tug Boat	Travelling	90	45	10	15	18	20	22.3133	113.9758	1987.02	29.04
11-Oct-13	8:55:19	Tour Boat	Travelling	90	47	40	14	50	20	22.3125	113.9751	1880.46	28.57
11-Oct-13	8:56:19	Transportation Boat	Travelling	91	8	35	294	8	50	22.3048	113.9564	1299.60	307.88
11-Oct-13	8:56:27	Tour Boat	Travelling	91	22	40	325	20	5	22.3067	113.9627	1076.40	339.06
11-Oct-13	8:56:36	Tour Boat	Travelling	90	52	40	10	26	50	22.3116	113.9732	1698.58	24.18
11-Oct-13	8:59:03	Transportation Boat	Travelling	91	4	30	300	2	40	22.3062	113.9567	1382.83	313.77
11-Oct-13	8:59:06	Transportation Boat	Travelling	91	3	25	286	52	5	22.3041	113.9546	1406.74	300.60
11-Oct-13	8:59:25	Tour Boat	Travelling	91	10	10	290	46	55	22.3041	113.9562	1269.97	304.51
11-Oct-13	8:59:31	Tour Boat	Travelling	91	5	40	356	25	20	22.3096	113.9687	1357.97	10.15
11-Oct-13	8:59:39	Tug Boat	Travelling	91	14	20	1	9	55	22.3080	113.9694	1198.12	14.90
11-Oct-13	9:00:14	Transportation Boat	Travelling	91	5	5	286	58	0	22.3039	113.9549	1370.29	300.70
11-Oct-13	9:00:19	Transportation Boat	Travelling	91	2	5	284	57	15	22.3038	113.9541	1437.34	298.68
11-Oct-13	9:00:28	Transportation Boat	Travelling	91	5	30	312	57	20	22.3079	113.9591	1361.47	326.69
11-Oct-13	9:00:52	Transportation Boat	Travelling	90	44	45	347	5	50	22.3157	113.9667	2005.98	0.83
11-Oct-13	9:01:50	Transportation Boat	Travelling	90	57	15	336	32	25	22.3115	113.9638	1560.45	350.27
11-Oct-13	9:01:55	Transportation Boat	Travelling	91	5	45	301	14	25	22.3062	113.9571	1356.23	314.97
11-Oct-13	9:02:02	Transportation Boat	Travelling	90	52	50	337	49	35	22.3127	113.9640	1693.12	351.56
11-Oct-13	9:02:23	Tour Boat	Travelling	91	16	45	332	42	0	22.3078	113.9638	1160.07	346.43
11-Oct-13	9:02:49	Transportation Boat	Travelling	91	0	25	306	29	5	22.3078	113.9572	1477.52	320.21
11-Oct-13	9:02:55	Transportation Boat	Travelling	90	55	50	280	36	40	22.3036	113.9522	1600.66	294.34
11-Oct-13	9:03:13	Transportation Boat	Travelling	90	43	25	349	15	5	22.3162	113.9674	2069.19	2.98
11-Oct-13	9:03:36	Transportation Boat	Travelling	91	1	45	316	41	40	22.3089	113.9595	1445.20	330.42
11-Oct-13	9:06:51	Tour Boat	Travelling	91	5	40	294	0	30	22.3051	113.9560	1357.97	307.74
11-Oct-13	9:08:13	Transportation Boat	Travelling	91	4	35	288	12	40	22.3042	113.9550	1381.02	301.94
11-Oct-13	9:08:18	Transportation Boat	Travelling	91	2	40	283	15	0	22.3034	113.9541	1423.79	296.98
11-Oct-13	9:10:00	Transportation Boat	Travelling	91	3	5	287	25	50	22.3042	113.9546	1414.27	301.16
11-Oct-13	9:10:06	Transportation Boat	Travelling	91	0	35	306	44	25	22.3078	113.9573	1473.40	320.47
11-Oct-13	9:10:08	Transportation Boat	Travelling	91	5	50	306	56	25	22.3070	113.9580	1354.50	320.67
11-Oct-13	9:11:02	Transportation Boat	Travelling	91	4	20	315	38	55	22.3084	113.9595	1386.45	329.38
11-Oct-13	9:11:06	Transportation Boat	Travelling	91	4	0	304	7	10	22.3069	113.9573	1393.76	317.85
11-Oct-13	9:14:53	Transportation Boat	Travelling	91	1	50	324	13	5	22.3097	113.9611	1443.22	337.95
11-Oct-13	9:15:50	HSF High Speed Ferry	Travelling	90	53	20	336	32	55	22.3125	113.9636	1676.97	350.28
11-Oct-13	9:16:43	HSF High Speed Ferry	Travelling	91	1	40	322	7	35	22.3095	113.9606	1447.17	335.86
11-Oct-13	9:16:59	Transportation Boat	Travelling	90	50	50	342	50	30	22.3134	113.9654	1760.99	356.57
11-Oct-13	9:18:31	Transportation Boat	Travelling	90	41	45	349	27	55	22.3170	113.9676	2154.12	3.20
11-Oct-13	9:18:35	HSF High Speed Ferry	Travelling	91	1	45	284	7	20	22.3037	113.9540	1445.20	297.85
11-Oct-13	9:20:42	Research Vessel	Travelling	90	53	40	285	13	30	22.3049	113.9522	1666.38	298.95
11-Oct-13	9:22:40	Research Vessel	Travelling	91	4	20	288	22	45	22.3043	113.9550	1386.45	302.11
11-Oct-13	9:22:47	Transportation Boat	Travelling	90	54	30	340	29	25	22.3123	113.9648	1640.47	354.22
11-Oct-13	9:22:57	Speed Boat	Travelling	91	15	45	306	48	0	22.3058	113.9591	1175.52	320.53
11-Oct-13	9:23:40	Transportation Boat	Travelling	90	56	20	278	42	15	22.3031	113.9521	1586.23	292.43
11-Oct-13	9:23:48	Transportation Boat	Travelling	90	59	15	331	46	35	22.3107	113.9627	1507.02	345.51
11-Oct-13	9:24:18	Speed Boat	Travelling	91	19	25	306	7	40	22.3053	113.9594	1120.80	319.86
11-Oct-13	9:24:28	Transportation Boat	Travelling	90	58	30	284	6	5	22.3040	113.9533	1526.62	297.83
11-Oct-13	9:25:27	Speed Boat	Travelling	91	11	50	284	6	35	22.3028	113.9557	1240.22	297.84
11-Oct-13	9:26:28	Transportation Boat	Travelling	90	56	50	307	28	10	22.3086	113.9568	1572.06	321.20
11-Oct-13	9:26:33	Transportation Boat	Travelling	91	2	15	299	33	25	22.3065	113.9563	1433.44	313.29
11-Oct-13	9:27:58	Transportation Boat	Travelling	91	6	0	290	32	15	22.3045	113.9555	1351.04	304.27
11-Oct-13	9:28:01	Transportation Boat	Travelling	92	4	0	290	32	25	22.3012	113.9606	716.02	304.27
11-Oct-13	9:28:06	Transportation Boat	Travelling	91	3	50	286	20	25	22.3039	113.9546	1397.45	300.07
11-Oct-13	9:28:23	Transportation Boat	Travelling	91	3	50	304	9	45	22.3069	113.9573	1397.45	317.89
11-Oct-13	9:28:54	Research Vessel	Travelling	92	14	35	287	31	45	22.3007	113.9609	659.51	301.26
11-Oct-13	9:29:01	Transportation Boat	Travelling	91	5	40	302	29	55	22.3064	113.9573	1357.97	316.23
11-Oct-13	9:29:10	Transportation Boat	Travelling	92	17	10	305	31	40	22.3020	113.9623	647.04	319.26
11-Oct-13	9:29:16	Transportation Boat	Travelling	91	6	0	292	55	35	22.3049	113.9559	1351.04	306.66
11-Oct-13	9:29:21	Transportation Boat	Travelling	91	4	40	295	39	45	22.3055	113.9560	1379.22	309.39
11-Oct-13	9:29:57	Container Boat	Travelling	91	1	15	285	43	5	22.3041	113.9541	1457.15	299.45
11-Oct-13	9:30:08	Transportation Boat	Travelling	90	55	20	303	26	35	22.3083	113.9557	1615.36	317.17
11-Oct-13	9:30:16	Transportation Boat	Travelling	92	37	25	318	47	5	22.3021	113.9639	563.54	332.51
11-Oct-13	9:30:28	Transportation Boat	Travelling	91	6	15	299	35	10	22.3059	113.9569	1345.88	313.32
11-Oct-13	9:30:34	Transportation Boat	Travelling	91	4	20	284	28	30	22.3035	113.9545	1386.45	298.20
11-Oct-13	9:30:41	Transportation Boat	Travelling	91	36	15	308	16	5	22.3042	113.9609	923.57	322.00
11-Oct-13	9:30:50	Research Vessel	Travelling	91	34	0	307	29	20	22.3043	113.9606	945.81	321.22
11-Oct-13	9:32:56	Transportation Boat	Stationary	95	58	5	356	19	50	22.2998	113.9668	246.82	10.06
11-Oct-13	9:33:02	Transportation Boat	Travelling	92	22	50	319	34	15	22.3026	113.9637	621.28	333.30
11-Oct-13	9:33:14	Research Vessel	Travelling	91	6	15	321	1	0	22.3086	113.9608	1345.88	334.75
11-Oct-13	9:33:20	Container Boat	Travelling	91	1	35	323	0	20	22.3096	113.9608	1449.16	336.74
11-Oct-13	9:33:31	Transportation Boat	Travelling	91	2	0	305	27	0	22.3074	113.9572	1439.29	319.18
11-Oct-13	9:34:26	Transportation Boat	Travelling	94	29	40	2	58	45	22.3004	113.9673	328.31	16.71
11-Oct-13	9:34:43	Transportation Boat	Travelling	93	14	0	328	55	25	22.3015	113.9651	456.95	342.65
11-Oct-13	9:34:52	Transportation Boat	Travelling	91	0	30	281	59	25	22.3034	113.9535	1475.46	295.72
11-Oct-13	9:37:51	Transportation Boat	Travelling	91	40	35	23	30	25	22.3039	113.9716	883.57	37.24
11-Oct-13	9:38:00	Transportation Boat	Stationary	94	39	5	343	16	25	22.3005	113.9662	317.18	357.00
11-Oct-13	9:38:06	Research Vessel	Travelling	91	40	50	341	42	45	22.3055	113.9657	881.37	355.44
11-Oct-13	9:40:22	Research Vessel	Travelling	93	36	10	349	24	50	22.3013	113.9666	409.94	3.14
11-Oct-13	9:41:45	Transportation Boat	Travelling	91	1	10	287	5	0	22.3043	113.9542	1459.16	300.81
11-Oct-13	9:41:54	Tour Boat	Travelling	91	0	35	282	55	50	22.3036	113.9536	1473.40	296.66
11-Oct-13	9:42:33	Transportation Boat	Travelling	91	0	5	283	26	30	22.3037	113.9535	1485.83	297.17
11-Oct-13	9:43:57	Transportation Boat	Travelling	91	3	30	303	43	45	22.3069	113.9572	1404.87	317.46
11-Oct-13	9:44:01	Transportation Boat	Travelling	91	1	35	304	12	55	22.3073	113.9570	1449.16	317.95
11-Oct-13	9:44:06	Transportation Boat	Travelling	91	0	25	286	22	0	22.3043	113.9540	1477.52	300.10
11-Oct-13	9:44:14	Tour Boat	Travelling	91	6	0	305	41	30	22.3069	113.9579	1351.04	319.42
11-Oct-13	9:44:25	Research Vessel	Travelling	91	27	55	25	42	40	22.3047	113.9727	1011.68	39.44
11-Oct-13	9:45:38	Transportation Boat	Travelling	90	53	45	303	42	30	22.3086	113.9555	1663.75	317.44
11-Oct-13	9:45:42	Transportation Boat	Travelling	90	46	20	302	36	0	22.3102	113.9534	1935.81	316.33
11-Oct-13	9:45:48	Transportation Boat	Travelling	91	0	55	305	35	40	22.3076	113.9571	1465.23	319.32

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Oct-13	9:46:09	Research Vessel	Stationary	91	19	25	25	34	55	22.3054	113.9733	1120.80	39.31
11-Oct-13	9:46:57	Transportation Boat	Travelling	93	30	15	327	46	35	22.3012	113.9651	421.52	341.51
11-Oct-13	9:48:12	Tour Boat	Travelling	90	51	50	340	46	15	22.3131	113.9648	1726.39	354.50
11-Oct-13	9:48:21	Tour Boat	Travelling	91	1	20	284	19	0	22.3038	113.9539	1455.14	298.05
11-Oct-13	9:48:37	Research Vessel	Stationary	91	20	20	25	49	30	22.3053	113.9733	1107.91	39.55
11-Oct-13	9:50:30	Transportation Boat	Travelling	91	23	50	324	1	40	22.3065	113.9625	1061.31	337.76
11-Oct-13	9:51:01	Tour Boat	Travelling	90	40	15	351	9	45	22.3177	113.9683	2236.84	4.89
11-Oct-13	9:51:18	Tour Boat	Travelling	91	5	20	313	36	30	22.3080	113.9592	1364.98	327.34
11-Oct-13	9:52:53	Research Vessel	Travelling	91	28	35	23	10	10	22.3048	113.9723	1004.02	36.90
11-Oct-13	9:54:14	Transportation Boat	Travelling	91	2	45	280	17	0	22.3028	113.9538	1421.87	294.01
11-Oct-13	9:54:26	Research Vessel	Travelling	91	16	30	9	46	5	22.3072	113.9709	1163.89	23.50
11-Oct-13	9:54:41	Tour Boat	Travelling	90	51	30	340	30	35	22.3132	113.9647	1737.77	354.24
11-Oct-13	9:55:17	Transportation Boat	Travelling	91	6	40	290	54	5	22.3045	113.9557	1337.38	304.63
11-Oct-13	9:57:12	Transportation Boat	Travelling	91	6	55	311	33	20	22.3075	113.9590	1332.32	325.29
11-Oct-13	9:59:13	Transportation Boat	Travelling	90	59	5	330	57	55	22.3107	113.9625	1511.33	344.70
11-Oct-13	9:59:19	Transportation Boat	Travelling	91	6	45	299	34	30	22.3059	113.9569	1335.69	313.30
11-Oct-13	10:00:21	Transportation Boat	Travelling	91	6	15	287	44	25	22.3039	113.9552	1345.88	301.47
11-Oct-13	10:00:57	Transportation Boat	Travelling	90	50	30	343	40	10	22.3136	113.9656	1772.84	357.40
11-Oct-13	10:01:04	Transportation Boat	Travelling	91	3	40	280	3	35	22.3027	113.9539	1401.15	293.79
11-Oct-13	10:04:19	Transportation Boat	Travelling	90	53	50	338	46	45	22.3124	113.9643	1661.13	352.51
11-Oct-13	10:05:27	Research Vessel	Travelling	90	56	55	26	36	50	22.3084	113.9763	1569.73	40.34
11-Oct-13	10:05:41	Transportation Boat	Travelling	91	2	35	323	29	40	22.3094	113.9610	1425.71	337.22
11-Oct-13	10:07:05	Transportation Boat	Travelling	91	5	40	303	49	40	22.3066	113.9575	1357.97	317.56
11-Oct-13	10:07:16	Research Vessel	Travelling	91	0	40	37	22	15	22.3059	113.9775	1471.35	51.10
11-Oct-13	10:10:34	Other	Stationary	94	23	45	0	0	0	22.3006	113.9672	335.71	13.73
11-Oct-13	10:10:48	Speed Boat	Travelling	91	59	5	6	43	0	22.3039	113.9689	745.71	20.45
11-Oct-13	10:11:55	Speed Boat	Travelling	92	10	50	334	35	0	22.3036	113.9651	678.48	348.31
11-Oct-13	10:12:04	Transportation Boat	Travelling	93	40	45	331	12	25	22.3011	113.9654	401.40	344.94
11-Oct-13	10:13:31	Speed Boat	Travelling	91	29	15	300	43	5	22.3039	113.9595	996.47	314.45
11-Oct-13	10:13:36	Transportation Boat	Travelling	91	5	0	300	26	10	22.3062	113.9568	1372.07	314.17
11-Oct-13	10:13:45	Transportation Boat	Travelling	91	34	45	315	23	30	22.3049	113.9617	938.28	329.12
11-Oct-13	10:13:58	Tug Boat	Travelling	90	42	40	348	6	35	22.3166	113.9671	2106.55	1.84
11-Oct-13	10:14:45	Transportation Boat	Travelling	91	10	55	311	52	5	22.3069	113.9595	1256.41	325.60
11-Oct-13	10:14:50	Transportation Boat	Travelling	91	3	35	290	24	5	22.3047	113.9551	1403.01	304.13
11-Oct-13	10:14:58	Transportation Boat	Travelling	91	37	10	318	52	15	22.3049	113.9623	914.81	332.60
11-Oct-13	10:15:07	Speed Boat	Travelling	91	1	50	283	49	0	22.3036	113.9540	1443.22	297.55
11-Oct-13	10:16:42	Transportation Boat	Travelling	90	48	5	302	38	50	22.3098	113.9539	1863.81	316.38
11-Oct-13	10:17:03	Transportation Boat	Travelling	92	39	35	324	43	25	22.3023	113.9644	555.86	338.45
11-Oct-13	10:17:08	Tug Boat	Travelling	91	2	25	322	46	5	22.3094	113.9609	1429.56	336.50
11-Oct-13	10:18:31	Transportation Boat	Travelling	94	34	35	339	47	0	22.3005	113.9660	322.40	353.51
11-Oct-13	10:18:48	Construction Boat	Travelling	90	50	45	284	27	25	22.3051	113.9513	1763.94	298.19
11-Oct-13	10:18:58	Tug Boat	Travelling	91	6	25	302	35	20	22.3064	113.9574	1342.47	316.32
11-Oct-13	10:20:27	Transportation Boat	Travelling	90	56	55	330	41	35	22.3112	113.9623	1569.73	344.42
11-Oct-13	10:20:40	Transportation Boat	Stationary	95	41	55	354	56	5	22.2999	113.9668	258.58	8.66
11-Oct-13	10:20:59	Tug Boat	Stationary	91	5	55	294	58	10	22.3052	113.9561	1352.77	308.70
11-Oct-13	10:21:05	Construction Boat	Stationary	91	4	20	295	21	0	22.3055	113.9559	1386.45	309.08
11-Oct-13	10:22:30	Transportation Boat	Travelling	91	3	45	311	12	25	22.3079	113.9586	1399.29	324.94
11-Oct-13	10:22:42	Transportation Boat	Travelling	92	44	40	330	47	55	22.3023	113.9650	538.65	344.53
11-Oct-13	10:24:27	Speed Boat	Travelling	91	5	55	297	26	0	22.3056	113.9565	1352.77	311.16
11-Oct-13	10:24:35	Transportation Boat	Travelling	91	48	40	322	46	35	22.3044	113.9632	817.52	336.51
11-Oct-13	10:24:43	Transportation Boat	Travelling	90	59	0	289	47	0	22.3051	113.9541	1513.50	303.51
11-Oct-13	10:25:18	Speed Boat	Travelling	91	2	40	280	9	10	22.3028	113.9537	1423.79	293.88
11-Oct-13	10:29:34	Transportation Boat	Travelling	91	11	35	304	53	50	22.3060	113.9584	1244.59	318.63
11-Oct-13	10:32:17	Transportation Boat	Travelling	93	0	5	328	39	55	22.3018	113.9650	492.39	342.40
11-Oct-13	10:33:34	Transportation Boat	Stationary	95	25	45	1	40	35	22.3000	113.9671	271.50	15.41
11-Oct-13	10:36:19	Transportation Boat	Travelling	93	38	5	303	59	5	22.3003	113.9637	406.32	317.71
11-Oct-13	10:36:26	Transportation Boat	Travelling	91	3	40	295	35	55	22.3056	113.9559	1401.15	309.33
11-Oct-13	10:37:28	Transportation Boat	Travelling	91	54	50	282	44	55	22.3007	113.9597	773.43	296.48
11-Oct-13	10:37:35	Transportation Boat	Travelling	91	0	40	284	16	40	22.3038	113.9538	1471.35	298.01
11-Oct-13	10:37:53	Fishing Boat	Operate and travelling	92	58	30	16	56	10	22.3015	113.9689	496.77	30.67
11-Oct-13	10:38:35	Transportation Boat	Travelling	93	55	0	354	34	15	22.3010	113.9669	376.97	8.30
11-Oct-13	10:39:44	Fishing Boat	Operate and travelling	94	19	15	346	7	50	22.3007	113.9664	341.56	359.86
11-Oct-13	10:39:57	Transportation Boat	Travelling	91	2	50	299	21	30	22.3063	113.9563	1419.96	313.09
11-Oct-13	10:40:08	Transportation Boat	Travelling	92	13	15	352	29	20	22.3036	113.9671	666.13	6.22
11-Oct-13	10:40:31	Transportation Boat	Travelling	90	54	15	282	23	50	22.3042	113.9520	1648.16	296.13
11-Oct-13	10:41:45	Fishing Boat	Non-operate and travelling	93	16	30	285	14	35	22.2996	113.9626	451.12	298.97
11-Oct-13	10:41:56	Transportation Boat	Travelling	90	57	10	283	53	25	22.3041	113.9529	1562.76	297.62
11-Oct-13	10:42:01	Transportation Boat	Travelling	90	58	25	291	56	55	22.3056	113.9543	1528.83	305.68
11-Oct-13	10:42:06	Transportation Boat	Travelling	90	58	35	289	3	50	22.3050	113.9539	1524.41	302.79
11-Oct-13	10:42:17	Transportation Boat	Travelling	91	24	30	353	2	5	22.3070	113.9676	1052.88	6.76
11-Oct-13	10:42:24	Transportation Boat	Travelling	91	5	30	299	51	35	22.3061	113.9568	1361.47	313.59
11-Oct-13	10:43:02	HSF High Speed Ferry	Travelling	90	59	55	282	53	40	22.3036	113.9534	1490.02	296.62
11-Oct-13	10:43:10	Transportation Boat	Travelling	91	1	30	299	48	20	22.3066	113.9562	1451.15	313.54
11-Oct-13	10:43:15	Transportation Boat	Travelling	91	2	50	298	42	35	22.3062	113.9562	1419.96	312.44
11-Oct-13	10:43:19	Transportation Boat	Travelling	91	3	25	286	46	35	22.3040	113.9546	1406.74	300.51
11-Oct-13	10:44:12	Transportation Boat	Travelling	91	3	30	276	26	30	22.3020	113.9536	1404.87	290.17
11-Oct-13	10:44:23	Transportation Boat	Travelling	90	59	5	306	34	15	22.3081	113.9570	1511.33	320.30
11-Oct-13	10:44:26	Transportation Boat	Travelling	91	0	30	306	8	0	22.3078	113.9571	1475.46	319.86
11-Oct-13	10:44:47	HSF High Speed Ferry	Travelling	91	4	55	317	34	25	22.3085	113.9600	1373.85	331.30
11-Oct-13	10:44:56	Transportation Boat	Travelling	90	58	15	353	49	25	22.3113	113.9684	1533.27	7.55
11-Oct-13	10:45:18	Transportation Boat	Travelling	90	45	45	345	23	55	22.3153	113.9661	1961.08	359.13
11-Oct-13	10:46:42	HSF High Speed Ferry	Travelling	90	46	50	346	23	50	22.3149	113.9664	1914.67	0.13
11-Oct-13	10:46:48	Transportation Boat	Travelling	90	56	25	331	35	45	22.3114	113.9625	1583.85	345.33
11-Oct-13	10:48:36	Transportation Boat	Travelling	91	6	35	306	8	5	22.3068	113.9580	1339.07	319.86
11-Oct-13	10:48:42	Transportation Boat	Travelling	91	3	45	304	18	0	22.3070	113.9573	1399.29	318.03
11-Oct-13	10:49:57	Transportation Boat	Travelling	91	3	55	284	5	55	22.3035	113.9544	1395.60	297.83
11-Oct-13	10:50:00	Transportation Boat	Travelling	91	1	35	285	46	25	22.3040	113.9541	1449.16	299.50
11-Oct-13	10:50:07	Transportation Boat	Travelling	90	59	50	282	56	55	22.3036	113.9534	1492.12	296.68
11-Oct-13	10:51:10	Transportation Boat	Travelling	91	3	35	294	12	50	22.3054	113.9556	1403.01	307.94
11-Oct-13	10:52:40	Transportation Boat	Travelling	90	57	55	306	22	35	22.3083	113.9568	1542.22	320.11
11-Oct-13	10:56:39	Transportation Boat	Travelling	91	8	20	302	56	5	22.3062	113.9577	1304.40	316.66
11-Oct-13	10:58:18	Transportation Boat	Travelling	91	1	25	327	27	25	22.3100	113.9618	1453.14	341.19
11-Oct-13	11:01:36	Transportation Boat	Travelling	90	35	10	351	44	45	22.3207	113.9688	2572.59	5.48
11-Oct-13	11:05:40	Transportation Boat	Travelling	91	9	5	351	37	5	22.3092	113.9676	1290.09	5.35
11-Oct-13	11:07:14	Transportation Boat	Travelling	91	1	0	282	4	55	22.3034	113.9536	1463.20	295.81
11-Oct-13	11:07:20	Transportation Boat	Travelling	90	56	30	282	23	50	22.3039	113.9526	1581.48	296.13
11-Oct-13	11:08:38	Transportation Boat	Travelling	91	6	20	291	56	30	22.3047	113.9558	1344.17	305.67
11-Oct-13	11:08:42	Transportation Boat	Travelling	91	0	30	292	20	35	22.3054	113.9548	1475.46	306.07
11-Oct-13	11:08:59	Transportation Boat	Travelling	92	25	15	352	48	15	22.3031	113.9671	610.91	6.53
11-Oct-13	11:09:18	Transportation Boat	Travelling	90	52	25	337	58	0	22.3128	113.9640	1706.82	351.70
11-Oct-13	11:09:44	Tug Boat	Travelling	90	54	20	341	17	10	22.3124	113.9650	1645.59	355.02
11-Oct-13	11:10:02	Construction Platform	Travelling	90	54	0	340	56	55	22.3125	113.9649	1655.92	354.68
11-Oct-13	11:10:29	Transportation Boat	Travelling	90	59	45	286	41	20	22.3044	113.9539	1494.23	300.42
11-Oct-13	11:10:35	Transportation Boat	Travelling	91	13	35	306	32	30	22.3060	113.9589	1210.45	320.27
11-Oct-13	11:10:41	Transportation Boat	Travelling	90	59	10	305	51	20	22.3080	113.9569	1509.17	319.59
11-Oct-13	11:10:47	Transportation Boat	Travelling	90	57	15	326	20	55	22.3108	113.9612	1560.45	340.08
11-Oct-13	11:10:52	Transportation Boat	Travelling	91	1	45	290	46	25	22.3050	113.9548	1445.20	304.50
11-Oct-13	11:11:02	Transportation Boat	Stationary	95	43	5	1	34	30	22.2999	113.9671	257.69	15.30
11-Oct-13	11:12:26	Transportation Boat	Travelling	90	57	50	305	57	30	22.3082	113.9567	1544.48	319.69
11-Oct-13	11:12:37	Transportation Boat	Travelling	91	10	10	325	28	25	22.3083	113.9620	1269.97	339.20
11-Oct-13	11:12:45	Transportation Boat	Travelling	90	58	55	308	32	50	22.3084	113.9574	1515.67	322.28
11-Oct-13	11:12:55	Tug Boat	Travelling	91	3	40	326	58	20	22.3095	113.9619	1401.15	340.70
11-Oct-13	11:13:03	Construction Platform	Travelling	91	3	0	328	0	40	22.3097	113.9621	1416.16	341.74
11-Oct-13	11:13:50	Transportation Boat	Travelling	91	3	0	304	5	30	22.3071	113.9572	1416.16	317.82
11-Oct-13	11:14:17	Transportation Boat	Travelling	92	25	15	358	24	20	22.3030	113.9676	610.91	12.14
11-Oct-13	11:14:57	Transportation Boat	Travelling	90	58	0	286	37	0	22.3046	113.9535	1539.97	300.35
11-Oct-13	11:15:16	Transportation Boat	Travelling	90	58	40	284	20	5	22.3041	113.9533	1522.22	298.06

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Oct-13	11:15:20	Transportation Boat	Travelling	90	58	40	290	36	5	22.3053	113.9542	1522.22	304.33
11-Oct-13	11:15:28	HSF High Speed Ferry	Travelling	90	44	10	346	14	35	22.3159	113.9664	2033.15	359.97
11-Oct-13	11:15:45	Tug Boat	Stationary	91	8	5	316	54	5	22.3079	113.9602	1309.25	330.63
11-Oct-13	11:15:52	Construction Platform	Stationary	91	8	5	318	18	50	22.3080	113.9604	1309.25	332.04
11-Oct-13	11:16:25	Transportation Boat	Travelling	91	2	45	302	54	30	22.3069	113.9569	1421.87	316.64
11-Oct-13	11:16:53	HSF High Speed Ferry	Travelling	90	56	5	331	54	25	22.3115	113.9626	1593.42	345.64
11-Oct-13	11:17:04	Transportation Boat	Travelling	91	36	20	353	28	15	22.3059	113.9675	922.77	7.20
11-Oct-13	11:17:12	Transportation Boat	Travelling	90	55	50	305	31	10	22.3085	113.9562	1600.66	319.25
11-Oct-13	11:17:23	Tug Boat	Travelling	91	4	30	325	41	10	22.3093	113.9617	1382.83	339.42
11-Oct-13	11:17:33	Construction Platform	Stationary	91	7	5	319	28	40	22.3083	113.9606	1328.98	333.21
11-Oct-13	11:17:43	HSF High Speed Ferry	Travelling	91	1	40	319	18	10	22.3092	113.9600	1447.17	333.03
11-Oct-13	11:19:33	HSF High Speed Ferry	Travelling	90	58	45	287	40	15	22.3047	113.9538	1520.03	301.40
11-Oct-13	11:19:47	Transportation Boat	Travelling	91	7	45	353	57	30	22.3094	113.9681	1315.76	7.69
11-Oct-13	11:19:56	Tug Boat	Travelling	90	51	30	345	6	40	22.3133	113.9661	1737.77	358.84
11-Oct-13	11:20:47	Transportation Boat	Travelling	91	1	0	287	47	10	22.3045	113.9543	1463.20	301.52
11-Oct-13	11:22:30	Transportation Boat	Travelling	91	0	0	284	43	25	22.3040	113.9537	1487.92	298.45
11-Oct-13	11:22:36	Transportation Boat	Travelling	90	57	50	306	28	30	22.3083	113.9568	1544.48	320.20
11-Oct-13	11:24:18	Transportation Boat	Travelling	90	59	50	306	49	15	22.3080	113.9572	1492.12	320.55
11-Oct-13	11:25:29	Tug Boat	Travelling	91	1	0	290	19	35	22.3050	113.9546	1463.20	304.06
11-Oct-13	11:25:34	Construction Platform	Travelling	90	59	20	284	20	30	22.3040	113.9535	1504.87	298.07
11-Oct-13	11:29:05	Tug Boat	Travelling	91	2	40	317	1	10	22.3088	113.9596	1423.79	330.75
11-Oct-13	11:29:13	Construction Platform	Travelling	91	3	35	310	59	15	22.3079	113.9585	1403.01	324.72
11-Oct-13	11:29:23	Transportation Boat	Travelling	91	6	5	293	37	50	22.3050	113.9560	1349.31	307.36
11-Oct-13	11:29:31	Transportation Boat	Travelling	91	2	20	304	52	45	22.3073	113.9572	1431.50	318.61
11-Oct-13	11:30:17	Transportation Boat	Travelling	91	4	5	286	11	15	22.3039	113.9547	1391.93	299.92
11-Oct-13	11:30:22	Transportation Boat	Travelling	91	3	45	297	17	30	22.3059	113.9561	1399.29	311.02
11-Oct-13	11:31:51	Transportation Boat	Travelling	90	59	10	284	5	40	22.3040	113.9534	1509.17	297.82
11-Oct-13	11:33:48	Transportation Boat	Travelling	91	3	15	304	50	15	22.3071	113.9573	1410.49	318.57
11-Oct-13	11:33:53	Transportation Boat	Travelling	91	2	10	306	11	45	22.3075	113.9574	1435.39	319.93
11-Oct-13	11:34:03	Tug Boat	Travelling	90	58	15	351	26	50	22.3114	113.9677	1533.27	5.18
11-Oct-13	11:34:10	Construction Platform	Travelling	90	59	10	345	48	55	22.3112	113.9663	1509.17	359.55
11-Oct-13	11:35:07	Transportation Boat	Travelling	91	0	20	288	35	45	22.3047	113.9542	1479.59	302.33
11-Oct-13	11:35:11	Transportation Boat	Travelling	91	2	10	289	41	55	22.3047	113.9547	1435.39	303.43
11-Oct-13	11:36:01	Transportation Boat	Travelling	90	55	25	278	34	55	22.3031	113.9519	1612.89	292.31
11-Oct-13	11:36:05	Transportation Boat	Travelling	90	57	5	279	27	30	22.3032	113.9524	1565.07	293.19
11-Oct-13	11:36:11	Transportation Boat	Travelling	91	2	10	301	22	10	22.3068	113.9565	1435.39	315.10
11-Oct-13	11:37:39	Transportation Boat	Travelling	91	1	0	285	16	40	22.3040	113.9540	1463.20	299.01
11-Oct-13	11:37:47	Tug Boat	Travelling	90	53	0	12	55	5	22.3112	113.9738	1687.71	26.65
11-Oct-13	11:37:52	Construction Platform	Travelling	90	55	30	8	36	25	22.3110	113.9724	1610.43	22.34
11-Oct-13	11:43:40	Transportation Boat	Travelling	91	5	10	289	46	30	22.3044	113.9553	1368.52	303.50
11-Oct-13	11:43:53	Transportation Boat	Travelling	91	1	55	302	35	20	22.3070	113.9567	1441.26	316.32
11-Oct-13	11:44:30	Transportation Boat	Travelling	91	6	5	300	8	50	22.3060	113.9569	1349.31	313.88
11-Oct-13	11:44:36	Transportation Boat	Travelling	91	1	15	297	51	50	22.3063	113.9558	1457.15	311.59
11-Oct-13	11:45:23	Transportation Boat	Travelling	90	59	0	307	7	0	22.3082	113.9571	1513.50	320.85
11-Oct-13	11:45:29	Transportation Boat	Travelling	91	0	0	291	59	0	22.3054	113.9546	1487.92	305.71
11-Oct-13	11:46:31	Transportation Boat	Travelling	91	3	10	303	39	0	22.3070	113.9571	1412.38	317.38
11-Oct-13	11:46:39	Transportation Boat	Travelling	90	58	35	284	35	0	22.3041	113.9533	1524.41	298.31
11-Oct-13	11:47:02	Speed Boat	Travelling	91	1	40	299	26	0	22.3065	113.9561	1447.17	313.16
11-Oct-13	11:47:09	Transportation Boat	Travelling	90	57	45	305	54	35	22.3082	113.9567	1546.74	319.64
11-Oct-13	11:47:53	Transportation Boat	Travelling	91	1	40	286	0	45	22.3041	113.9542	1447.17	299.74
11-Oct-13	11:47:57	Transportation Boat	Travelling	91	3	15	299	32	10	22.3063	113.9564	1410.49	313.27
11-Oct-13	11:48:03	Speed Boat	Travelling	91	0	35	286	47	0	22.3044	113.9541	1473.40	300.51
11-Oct-13	11:48:38	Transportation Boat	Travelling	90	59	10	277	6	15	22.3024	113.9527	1509.17	290.83
11-Oct-13	11:48:42	Transportation Boat	Travelling	91	1	40	290	4	45	22.3049	113.9547	1447.17	303.81
11-Oct-13	11:48:46	Speed Boat	Travelling	90	57	55	278	15	10	22.3028	113.9525	1542.22	291.98
11-Oct-13	12:01:07	Transportation Boat	Travelling	91	1	5	301	31	0	22.3070	113.9564	1461.18	315.25
11-Oct-13	12:01:15	Transportation Boat	Travelling	90	58	25	285	34	55	22.3044	113.9534	1528.83	299.31
11-Oct-13	12:02:27	Transportation Boat	Travelling	90	57	25	289	38	55	22.3053	113.9538	1555.85	303.38
11-Oct-13	12:02:32	Transportation Boat	Travelling	91	0	5	293	1	45	22.3056	113.9548	1485.83	306.76
11-Oct-13	12:03:47	Transportation Boat	Travelling	90	51	40	279	26	40	22.3038	113.9509	1732.06	293.17
11-Oct-13	12:03:55	Transportation Boat	Travelling	91	2	15	301	2	25	22.3067	113.9565	1433.44	314.77
11-Oct-13	12:07:07	Other	Stationary	94	43	35	0	0	0	22.3003	113.9671	312.12	13.73
11-Oct-13	12:07:20	Transportation Boat	Travelling	90	58	45	305	58	15	22.3081	113.9568	1520.03	319.70
11-Oct-13	12:08:17	Transportation Boat	Travelling	91	2	25	294	15	5	22.3055	113.9554	1429.56	307.98
11-Oct-13	12:08:27	Transportation Boat	Travelling	91	4	10	304	4	25	22.3069	113.9573	1390.10	317.80
11-Oct-13	12:10:11	Transportation Boat	Travelling	90	57	30	276	28	30	22.3024	113.9522	1553.56	290.20
11-Oct-13	12:14:32	Dumping Guide Boat	Travelling	90	54	30	338	38	40	22.3123	113.9643	1640.47	352.37
11-Oct-13	12:16:27	Dumping Guide Boat	Travelling	90	59	40	324	33	45	22.3101	113.9610	1496.35	338.29
11-Oct-13	12:16:51	Tour Boat	Travelling	90	40	10	348	31	10	22.3178	113.9673	2241.62	2.25
11-Oct-13	12:16:59	Transportation Boat	Travelling	90	50	55	337	56	25	22.3133	113.9639	1758.06	351.67
11-Oct-13	12:17:10	Dumping Guide Boat	Stationary	91	2	5	324	44	15	22.3097	113.9613	1437.34	338.47
11-Oct-13	12:18:34	Transportation boat	Travelling	90	54	10	333	19	15	22.3121	113.9628	1650.73	347.05
11-Oct-13	12:18:41	Tour Boat	Travelling	90	49	10	340	39	35	22.3139	113.9647	1821.89	354.39
11-Oct-13	12:19:00	Transportation Boat	Travelling	91	30	45	12	49	15	22.3055	113.9707	979.89	26.55
11-Oct-13	12:20:21	Dumping Guide Boat	Travelling	91	2	10	330	12	15	22.3100	113.9625	1435.39	343.93
11-Oct-13	12:20:35	Transportation Boat	Stationary	91	19	55	18	22	10	22.3061	113.9722	1113.73	32.10
11-Oct-13	12:20:54	Tour Boat	Travelling	90	59	40	323	50	5	22.3101	113.9608	1496.35	337.56
11-Oct-13	12:22:47	Dumping Guide Boat	Travelling	91	41	0	331	45	50	22.3053	113.9643	879.90	345.49
11-Oct-13	12:24:59	Tour Boat	Travelling	90	56	50	282	5	20	22.3038	113.9526	1572.06	295.82
11-Oct-13	12:25:09	Dumping Guide Boat	Travelling	94	19	50	324	56	35	22.3005	113.9652	340.79	338.67
11-Oct-13	12:26:41	Transportation Boat	Travelling	91	41	10	351	28	25	22.3055	113.9672	878.45	5.20
11-Oct-13	12:28:18	Transportation Boat	Stationary	91	46	30	320	48	35	22.3044	113.9629	834.24	334.54
11-Oct-13	12:28:46	Dumping Guide Boat	Stationary	94	59	20	350	13	0	22.3003	113.9666	295.61	3.95
11-Oct-13	12:28:56	Transportation Boat	Travelling	91	39	25	322	4	25	22.3050	113.9628	893.99	335.80
11-Oct-13	12:29:02	Transportation Boat	Travelling	91	53	0	320	52	15	22.3040	113.9631	786.03	334.60
11-Oct-13	12:31:00	Transportation Boat	Travelling	91	24	35	299	42	55	22.3041	113.9590	1051.83	313.45
11-Oct-13	12:31:06	Transportation Boat	Travelling	93	23	30	344	58	55	22.3015	113.9663	435.55	358.71
11-Oct-13	12:32:49	Transportation Boat	Travelling	91	13	5	284	15	55	22.3028	113.9559	1218.81	298.00
11-Oct-13	12:32:57	Transportation Boat	Stationary	95	44	55	1	31	25	22.2998	113.9671	256.31	15.25
11-Oct-13	12:35:24	Dumping Guide Boat	Travelling	92	48	15	19	38	5	22.3016	113.9692	527.14	33.36
11-Oct-13	12:38:24	Dumping Guide Boat	Stationary	91	32	15	20	38	15	22.3048	113.9717	963.86	34.37
11-Oct-13	12:38:42	Transportation Boat	Travelling	93	12	45	329	19	15	22.3016	113.9651	459.93	343.05
11-Oct-13	12:39:01	Tug Boat	Travelling	90	55	35	281	10	40	22.3037	113.9522	1607.98	294.91
11-Oct-13	12:39:07	Construction Platform	Travelling	90	54	45	279	52	5	22.3035	113.9518	1632.85	293.60
11-Oct-13	12:39:16	Tour Boat	Travelling	90	59	55	318	10	50	22.3094	113.9596	1490.02	331.91
11-Oct-13	12:40:54	Transportation Boat	Travelling	91	40	15	306	35	50	22.3038	113.9609	886.52	320.33
11-Oct-13	12:41:02	Tour Boat	Travelling	91	0	5	299	51	30	22.3065	113.9563	1427.86	313.59
11-Oct-13	12:41:19	Tour Boat	Travelling	91	0	30	284	42	0	22.3037	113.9543	1417.90	298.43
11-Oct-13	12:42:09	Dumping Guide Boat	Stationary	91	31	35	23	36	30	22.3043	113.9719	933.18	37.34
11-Oct-13	12:43:20	Tour Boat	Travelling	91	9	45	304	40	40	22.3059	113.9585	1227.87	318.41
11-Oct-13	12:43:26	Tour Boat	Travelling	90	53	0	277	33	55	22.3029	113.9517	1621.74	291.30
11-Oct-13	12:43:38	Tug Boat	Travelling	91	1	40	293	36	20	22.3052	113.9556	1390.73	307.34
11-Oct-13	12:43:43	Construction Platform	Travelling	90	59	35	292	0	10	22.3052	113.9550	1440.00	305.73
11-Oct-13	12:44:00	Dumping Guide Boat	Travelling	91	17	5	28	17	20	22.3050	113.9736	1110.06	42.02
11-Oct-13	12:48:48	Tour Boat	Travelling	91	0	50	3	7	55	22.3098	113.9704	1410.03	16.86
11-Oct-13	12:49:01	Tug Boat	Travelling	91	2	35	309	41	50	22.3075	113.9585	1370.11	323.43
11-Oct-13	12:49:05	Construction Platform	Travelling	91	2	35	307	51	55	22.3073	113.9581	1370.11	321.60
11-Oct-13	12:53:40	Tug Boat	Travelling	91	0	55	323	4	40	22.3093	113.9610	1408.07	336.81
11-Oct-13	12:53:44	Construction Platform	Travelling	91	0	55	321	24	45	22.3091	113.9606	1408.07	335.14
11-Oct-13	12:54:01	Tour Boat	Travelling	90	34	55	25	7	35	22.3151	113.9816	2489.30	38.86
11-Oct-13	12:54:13	Dumping Guide Boat	Travelling	91	56	40	23	24	30	22.3029	113.9707	731.66	37.14
11-Oct-13	12:55:32	Transportation Boat	Travelling	91	6	20	297	39	20	22.3053	113.9570	1291.79	311.39
11-Oct-13	12:57:11	Government Boat	Travelling	94	14	20	313	37	45	22.3002	113.9646	334.69	327.36
11-Oct-13	12:57:29	Government Boat	Travelling	92	46	40	289	31	20	22.3001	113.9622	511.52	303.25
11-Oct-13	12:58:28	Dumping Guide Boat	Stationary	94	2	30	9	35	35	22.3005	113.9678	351.10	23.32
11-Oct-13	13:03:13	Tour Boat	Travelling	91	26	35	331	20	40	22.3062	113.9639	987.42	345.07
11-Oct-13	13:03:25	Dumping Guide Boat	Travelling	92	1	0	21	55	0	22.3028	113.9704	705.36	35.65

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
11-Oct-13	13:05:14	Fishing Boat	Operate and travelling	93	23	55	335	15	10	22.3013	113.9656	417.80	348.98
11-Oct-13	13:06:12	Tour Boat	Travelling	91	12	20	8	8	25	22.3075	113.9707	1183.61	21.87
11-Oct-13	13:07:11	Fishing Boat	Operate and travelling	92	49	55	4	17	35	22.3019	113.9679	501.70	18.02
11-Oct-13	13:17:06	Transportation Boat	Travelling	91	0	55	297	2	5	22.3059	113.9560	1408.07	310.76
11-Oct-13	13:17:54	Transportation Boat	Travelling	91	12	40	348	3	5	22.3082	113.9668	1178.13	1.78
11-Oct-13	13:19:33	Transportation Boat	Travelling	91	46	40	347	21	25	22.3048	113.9665	800.58	1.09
11-Oct-13	13:22:41	Transportation Boat	Stationary	95	31	55	1	13	15	22.2998	113.9670	256.09	14.95
11-Oct-13	13:23:27	Transportation Boat	Stationary	91	28	20	286	0	30	22.3019	113.9582	967.73	299.74
11-Oct-13	13:24:35	Transportation Boat	Travelling	91	1	15	289	23	10	22.3045	113.9550	1400.31	303.12
11-Oct-13	13:24:40	Transportation Boat	Travelling	91	1	50	295	31	55	22.3055	113.9560	1386.94	309.26
11-Oct-13	13:24:44	Transportation Boat	Travelling	90	58	0	285	35	15	22.3041	113.9538	1479.86	299.32
11-Oct-13	13:25:21	Transportation Boat	Travelling	92	8	20	303	16	15	22.3020	113.9620	664.90	317.00
11-Oct-13	13:25:24	Transportation Boat	Travelling	91	2	10	303	16	20	22.3067	113.9572	1379.41	317.00
11-Oct-13	13:25:31	Transportation Boat	Travelling	91	1	0	289	51	40	22.3046	113.9550	1406.13	303.59
11-Oct-13	13:25:35	Transportation Boat	Travelling	90	59	10	291	2	0	22.3051	113.9548	1450.28	304.76
11-Oct-13	13:26:11	Transportation Boat	Travelling	91	3	55	286	10	35	22.3036	113.9551	1341.19	299.91
11-Oct-13	13:26:22	Transportation Boat	Travelling	92	48	45	318	36	20	22.3016	113.9641	505.18	332.34
11-Oct-13	13:26:33	Transportation Boat	Travelling	91	0	10	322	21	25	22.3093	113.9608	1425.86	336.09
11-Oct-13	13:26:37	Transportation Boat	Travelling	90	58	25	282	28	55	22.3035	113.9536	1469.16	296.21
11-Oct-13	13:26:42	Transportation Boat	Travelling	91	1	15	298	24	30	22.3061	113.9563	1400.31	312.14
11-Oct-13	13:26:47	Transportation Boat	Travelling	91	5	30	293	49	40	22.3048	113.9563	1308.41	307.56
11-Oct-13	13:27:06	Transportation Boat	Travelling	93	32	25	334	13	40	22.3011	113.9656	401.02	347.96
11-Oct-13	13:27:13	Transportation Boat	Travelling	90	55	20	332	13	10	22.3112	113.9627	1552.26	345.95
11-Oct-13	13:27:17	Transportation Boat	Travelling	90	55	20	278	39	40	22.3029	113.9524	1552.26	292.39
11-Oct-13	13:27:22	Transportation Boat	Travelling	91	1	0	302	50	45	22.3068	113.9570	1406.13	316.58
11-Oct-13	13:27:26	Transportation Boat	Travelling	91	4	55	302	10	25	22.3062	113.9575	1320.30	315.90
11-Oct-13	13:28:56	Transportation Boat	Stationary	95	20	10	2	24	10	22.2999	113.9671	265.55	16.13
11-Oct-13	13:29:05	Transportation Boat	Travelling	90	52	50	305	37	15	22.3087	113.9561	1626.94	319.35
11-Oct-13	13:29:09	Transportation Boat	Stationary	90	48	20	304	22	50	22.3096	113.9548	1781.37	318.11
11-Oct-13	13:30:41	Transportation Boat	Travelling	91	0	15	294	6	35	22.3055	113.9555	1423.86	307.84
11-Oct-13	13:30:46	Transportation Boat	Travelling	91	3	0	301	23	55	22.3063	113.9571	1360.94	315.13
11-Oct-13	13:32:00	Transportation Boat	Travelling	90	52	50	307	14	25	22.3090	113.9564	1626.94	320.97
11-Oct-13	13:32:05	Transportation Boat	Travelling	91	4	10	290	49	40	22.3044	113.9557	1335.91	304.56
11-Oct-13	13:32:09	Transportation Boat	Travelling	90	58	30	285	45	40	22.3041	113.9540	1467.04	299.49
11-Oct-13	13:33:11	Transportation Boat	Travelling	91	1	35	282	6	50	22.3031	113.9542	1392.64	295.84
11-Oct-13	13:33:24	Transportation Boat	Travelling	91	3	15	299	42	0	22.3060	113.9568	1355.50	313.43
11-Oct-13	13:34:12	Transportation Boat	Travelling	90	59	5	306	45	25	22.3077	113.9574	1452.35	320.49
11-Oct-13	13:36:22	Transportation Boat	Travelling	91	5	0	294	19	20	22.3049	113.9563	1318.59	308.05
11-Oct-13	13:36:31	Transportation Boat	Travelling	91	0	45	293	11	10	22.3053	113.9554	1411.99	306.92
11-Oct-13	13:37:13	Container Boat	Travelling	91	2	0	314	10	20	22.3082	113.9593	1383.16	327.90
11-Oct-13	13:37:21	Transportation Boat	Travelling	90	57	30	281	40	25	22.3034	113.9533	1492.91	295.40
11-Oct-13	13:37:27	Transportation Boat	Travelling	91	2	35	303	35	20	22.3067	113.9574	1370.11	317.32
11-Oct-13	13:37:31	Transportation Boat	Travelling	91	0	55	304	56	0	22.3071	113.9574	1408.07	318.66
11-Oct-13	13:38:58	Transportation Boat	Travelling	90	52	30	305	1	35	22.3087	113.9559	1637.45	318.76
11-Oct-13	13:39:02	Transportation Boat	Travelling	90	47	25	307	22	55	22.3103	113.9553	1816.54	321.11
11-Oct-13	13:39:06	Transportation Boat	Travelling	90	56	25	291	33	50	22.3055	113.9543	1522.01	305.29
11-Oct-13	13:39:24	Transportation Boat	Travelling	90	57	35	286	41	15	22.3044	113.9539	1490.72	300.42
11-Oct-13	13:40:23	Transportation Boat	Travelling	90	59	45	298	10	30	22.3062	113.9560	1435.93	311.90
11-Oct-13	13:40:27	Transportation Boat	Travelling	91	2	0	303	5	40	22.3067	113.9572	1383.16	316.82
11-Oct-13	13:41:24	Transportation Boat	Travelling	91	1	10	304	2	0	22.3070	113.9572	1402.25	317.76
11-Oct-13	13:41:27	Transportation Boat	Travelling	90	52	5	303	46	55	22.3086	113.9556	1650.78	317.51
11-Oct-13	13:49:40	Transportation Boat	Travelling	91	52	0	286	5	15	22.3010	113.9600	762.28	299.82
11-Oct-13	13:51:55	Transportation Boat	Travelling	92	36	50	312	34	30	22.3017	113.9635	543.70	326.30
11-Oct-13	13:52:01	Transportation Boat	Travelling	91	3	0	297	10	20	22.3056	113.9564	1360.94	310.90
11-Oct-13	13:52:52	Transportation Boat	Travelling	91	1	45	285	24	5	22.3037	113.9546	1388.83	299.13
11-Oct-13	13:54:17	Transportation Boat	Travelling	92	15	0	349	31	20	22.3033	113.9667	631.95	3.25
11-Oct-13	13:55:50	Other	Stationary	90	34	5	278	28	25	22.3063	113.9434	2552.70	292.20
11-Oct-13	13:55:55	Other	Stationary	90	33	5	281	43	15	22.3078	113.9433	2633.27	295.45
11-Oct-13	13:55:59	Other	Stationary	90	33	45	284	52	50	22.3087	113.9444	2578.99	298.61
11-Oct-13	13:56:02	Other	Stationary	90	32	40	287	32	55	22.3101	113.9442	2668.40	301.28
11-Oct-13	13:56:04	Other	Stationary	90	31	55	289	29	25	22.3111	113.9442	2734.11	303.22
11-Oct-13	13:56:07	Other	Stationary	90	33	25	292	47	5	22.3116	113.9460	2605.84	306.51
11-Oct-13	13:56:10	Other	Stationary	90	43	5	295	42	10	22.3091	113.9513	2003.74	309.43
11-Oct-13	13:56:14	Other	Stationary	90	51	45	300	25	25	22.3080	113.9548	1661.60	314.15
11-Oct-13	13:56:18	Other	Stationary	90	58	55	304	21	55	22.3074	113.9569	1456.52	318.10
11-Oct-13	13:56:21	Other	Stationary	90	53	10	307	49	55	22.3090	113.9566	1616.57	321.56
11-Oct-13	13:56:24	Other	Stationary	90	57	25	311	34	55	22.3087	113.9581	1495.11	325.31
11-Oct-13	13:56:26	Other	Stationary	90	58	0	317	47	25	22.3093	113.9595	1479.86	331.52
11-Oct-13	13:56:29	Other	Stationary	90	56	55	322	43	0	22.3101	113.9605	1508.44	336.45
11-Oct-13	13:56:32	Other	Stationary	90	54	55	328	33	5	22.3110	113.9618	1564.23	342.28
11-Oct-13	13:56:34	Other	Stationary	90	51	50	333	44	20	22.3122	113.9629	1658.88	347.47
11-Oct-13	13:56:38	Other	Stationary	90	44	10	340	55	55	22.3151	113.9646	1953.37	354.66
11-Oct-13	13:56:42	Other	Stationary	90	40	45	345	52	45	22.3167	113.9663	2121.71	359.61
11-Oct-13	13:56:45	Other	Stationary	90	36	0	349	40	50	22.3193	113.9678	2411.53	3.41
11-Oct-13	13:56:50	Other	Stationary	90	31	5	352	0	30	22.3228	113.9691	2811.12	5.74
11-Oct-13	13:57:09	Other	Stationary	91	0	10	304	55	45	22.3073	113.9572	1425.86	318.66
11-Oct-13	13:57:14	Other	Stationary	90	52	55	307	32	0	22.3090	113.9565	1624.33	321.26
11-Oct-13	13:57:24	Other	Stationary	90	30	20	348	10	35	22.3236	113.9673	2884.34	1.91
11-Oct-13	13:57:34	Other	Stationary	90	30	45	352	2	10	22.3231	113.9692	2843.18	5.77
11-Oct-13	13:57:59	Other	Stationary	91	16	10	308	36	55	22.3056	113.9597	1123.53	322.35
11-Oct-13	13:58:14	Other	Stationary	91	16	50	310	53	30	22.3058	113.9601	1113.70	324.62
11-Oct-13	13:58:23	Other	Stationary	91	8	0	325	42	40	22.3082	113.9621	1259.80	339.44
11-Oct-13	13:58:32	Other	Stationary	91	8	30	326	57	55	22.3082	113.9624	1250.51	340.70
11-Oct-13	13:58:44	Other	Stationary	90	53	35	17	13	40	22.3100	113.9744	1603.79	30.96
11-Oct-13	13:58:47	Other	Stationary	90	53	35	17	56	50	22.3099	113.9746	1603.79	31.68
11-Oct-13	13:59:10	Other	Stationary	90	31	0	1	35	15	22.3221	113.9736	2819.06	15.32
11-Oct-13	13:59:14	Other	Stationary	90	33	0	8	13	20	22.3197	113.9760	2640.22	21.95
11-Oct-13	13:59:27	Other	Stationary	90	52	20	352	11	30	22.3123	113.9680	1642.75	5.92
11-Oct-13	13:59:32	Other	Stationary	90	52	20	354	29	40	22.3123	113.9687	1642.75	8.22
11-Oct-13	13:59:40	Other	Stationary	91	20	45	19	8	15	22.3056	113.9720	1059.27	32.87
11-Oct-13	13:59:49	Other	Stationary	91	20	45	21	33	30	22.3054	113.9724	1059.27	35.29
13-Oct-13	8:02:24	Other	Stationary	94	42	0	0	0	0	22.3004	113.9671	312.40	13.73
13-Oct-13	8:02:59	Other	Stationary	94	42	0	0	0	0	22.3004	113.9671	312.40	13.73
13-Oct-13	8:05:39	Other		94	25	30	0	0	0	22.3005	113.9672	331.91	13.73
13-Oct-13	8:07:55	Other	Stationary	90	34	20	278	32	0	22.3066	113.9428	2624.96	292.26
13-Oct-13	8:08:00	Other	Stationary	90	32	20	289	2	40	22.3112	113.9435	2795.03	302.77
13-Oct-13	8:08:06	Other	Stationary	90	53	30	301	45	0	22.3083	113.9551	1663.69	315.48
13-Oct-13	8:08:10	Other	Stationary	90	55	10	311	22	40	22.3095	113.9574	1612.60	325.11
13-Oct-13	8:08:13	Other	Stationary	90	58	0	315	34	50	22.3095	113.9588	1532.64	329.31
13-Oct-13	8:08:16	Other	Stationary	90	58	0	319	19	50	22.3099	113.9596	1532.64	333.06
13-Oct-13	8:08:25	Other	Stationary	90	55	40	324	50	50	22.3110	113.9607	1597.88	338.58
13-Oct-13	8:08:30	Other	Stationary	90	50	40	334	14	50	22.3131	113.9628	1758.46	347.98
13-Oct-13	8:08:35	Other	Stationary	90	42	30	343	13	50	22.3165	113.9653	2104.90	356.96
13-Oct-13	8:08:39	Other	Stationary	90	36	40	349	34	40	22.3196	113.9678	2451.42	3.31
13-Oct-13	8:08:49	Other	Stationary	90	31	0	352	14	50	22.3238	113.9694	2921.55	5.98
13-Oct-13	8:09:05	Other	Stationary	90	59	50	305	2	50	22.3077	113.9569	1485.02	318.78
13-Oct-13	8:09:10	Other	Stationary	90	52	20	308	5	40	22.3097	113.9562	1701.43	321.82
13-Oct-13	8:09:21	Other	Stationary	90	31	0	348	21	40	22.3239	113.9674	2921.55	2.09
13-Oct-13	8:09:24	Other	Stationary	90	31	0	352	15	10	22.3238	113.9694	2921.55	5.98
13-Oct-13	8:09:43	Other	Stationary	91	14	10	308	25	40	22.3061	113.9593	1195.14	322.16
13-Oct-13	8:09:46	Other	Stationary	91	14	10	310	37	30	22.3064	113.9596	1195.14	324.35
13-Oct-13	8:09:51	Other	Stationary	91	13	0	315	45	30	22.3070	113.9604	1214.41	329.49
13-Oct-13	8:09:54	Other	Stationary	91	13	0	317	57	0	22.3072	113.9608	1214.41	331.68
13-Oct-13	8:10:02	Other	Stationary	90	59	40	338	36	10	22.3109	113.9645	1489.22	352.33
13-Oct-13	8:10:08	Other	Stationary	91	0	50	340	12	30	22.3107	113.9649	1460.28	353.94
13-Oct-13	8:10:17	Other	Stationary	90	35	50	1	4	40	22.3195	113.9726	2510.65	14.81
13-Oct-13	8:10:21	Other	Stationary	90	36	50	3	27	0	22.3186	113.9734	2439.92	17.18

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Oct-13	8:10:26	Other	Stationary	90	32	30	3	58	40	22.3215	113.9746	2780.00	17.71
13-Oct-13	8:10:29	Other	Stationary	90	32	30	5	29	30	22.3212	113.9753	2780.00	19.22
13-Oct-13	8:10:34	Other	Stationary	90	33	10	6	15	10	22.3206	113.9754	2721.50	19.98
13-Oct-13	8:10:37	Other	Stationary	90	33	10	7	45	50	22.3204	113.9761	2721.50	21.49
13-Oct-13	8:10:44	Other	Stationary	90	53	30	17	17	50	22.3104	113.9747	1663.69	31.03
13-Oct-13	8:10:47	Other	Stationary	90	53	30	17	57	20	22.3104	113.9749	1663.69	31.69
13-Oct-13	8:10:52	Other	Stationary	91	55	20	27	1	10	22.3028	113.9713	766.41	40.75
13-Oct-13	8:10:56	Other	Stationary	91	51	20	30	1	50	22.3028	113.9717	794.07	43.76
13-Oct-13	8:11:16	Other	Stationary	90	31	40	357	8	50	22.3229	113.9716	2856.85	10.88
13-Oct-13	8:11:21	Other	Stationary	90	37	0	359	56	30	22.3189	113.9720	2428.52	13.67
13-Oct-13	8:11:38	Other	Stationary	90	51	40	352	19	20	22.3130	113.9682	1723.79	6.05
13-Oct-13	8:11:42	Other	Stationary	90	51	40	354	32	20	22.3130	113.9688	1723.79	8.27
13-Oct-13	8:11:54	Other	Stationary	91	14	40	7	17	40	22.3076	113.9705	1187.06	21.02
13-Oct-13	8:11:59	Other	Stationary	91	13	50	9	57	40	22.3075	113.9711	1200.58	23.69
13-Oct-13	8:12:12	Other	Stationary	91	18	10	298	5	20	22.3044	113.9582	1133.46	311.82
13-Oct-13	8:13:20	Transportation Boat	Travelling	90	57	0	328	34	40	22.3110	113.9618	1559.93	342.31
13-Oct-13	8:15:07	Transportation Boat	Travelling	91	4	20	301	38	0	22.3065	113.9570	1379.86	315.36
13-Oct-13	8:15:13	Transportation Boat	Travelling	90	59	50	287	59	0	22.3046	113.9541	1485.02	301.71
13-Oct-13	8:15:15	Transportation Boat	Travelling	91	0	30	285	46	30	22.3041	113.9540	1468.43	299.50
13-Oct-13	8:16:07	Transportation Boat	Travelling	90	57	40	279	35	10	22.3031	113.9526	1541.63	293.32
13-Oct-13	8:16:11	Transportation Boat	Travelling	91	0	40	280	45	20	22.3031	113.9534	1464.34	294.49
13-Oct-13	8:16:16	Transportation Boat	Travelling	91	2	10	299	24	10	22.3064	113.9563	1428.55	313.13
13-Oct-13	8:16:19	Transportation Boat	Travelling	91	4	0	299	13	40	22.3061	113.9565	1387.13	312.96
13-Oct-13	8:16:25	Transportation Boat	Travelling	91	1	10	286	6	40	22.3041	113.9541	1452.22	299.84
13-Oct-13	8:16:44	Tug Boat	Travelling	91	0	30	0	5	20	22.3105	113.9698	1468.43	13.82
13-Oct-13	8:17:21	Transportation Boat	Travelling	91	0	30	283	29	10	22.3037	113.9537	1468.43	297.22
13-Oct-13	8:17:26	Transportation Boat	Travelling	90	55	20	305	52	50	22.3086	113.9563	1607.66	319.61
13-Oct-13	8:17:29	Transportation Boat	Travelling	90	55	40	307	40	30	22.3089	113.9567	1597.88	321.40
13-Oct-13	8:17:46	Transportation Boat	Travelling	91	2	50	291	38	10	22.3050	113.9552	1413.21	305.37
13-Oct-13	8:17:57	Transportation Boat	Travelling	91	2	50	294	5	50	22.3054	113.9555	1413.21	307.83
13-Oct-13	8:19:02	Transportation Boat	Travelling	91	0	30	306	39	10	22.3078	113.9573	1468.43	320.38
13-Oct-13	8:19:06	Transportation Boat	Travelling	91	1	50	302	56	0	22.3070	113.9568	1436.36	316.66
13-Oct-13	8:19:11	Transportation Boat	Travelling	91	2	10	284	16	50	22.3037	113.9541	1428.55	298.01
13-Oct-13	8:20:47	Other	Stationary	94	26	10	0	0	0	22.3005	113.9672	331.07	13.73
13-Oct-13	8:20:58	Transportation Boat	Travelling	91	7	30	308	17	10	22.3069	113.9585	1314.40	322.02
13-Oct-13	8:21:04	Transportation Boat	Travelling	91	3	0	281	27	30	22.3030	113.9540	1409.42	295.19
13-Oct-13	8:22:29	Transportation Boat	Travelling	90	58	50	327	44	30	22.3105	113.9617	1510.62	341.47
13-Oct-13	8:22:35	Transportation Boat	Travelling	91	8	0	296	48	10	22.3052	113.9568	1304.64	310.53
13-Oct-13	8:25:19	Transportation Boat	Travelling	90	42	0	351	14	50	22.3167	113.9682	2130.67	4.98
13-Oct-13	8:25:24	Transportation Boat	Travelling	91	1	50	326	40	10	22.3098	113.9617	1436.36	340.40
13-Oct-13	8:26:15	Speed Boat	Travelling	95	16	30	335	55	20	22.3001	113.9659	278.16	349.65
13-Oct-13	8:27:16	Transportation Boat	Travelling	90	42	40	348	2	10	22.3165	113.9670	2096.46	1.77
13-Oct-13	8:27:26	Transportation Boat	Travelling	90	51	20	341	50	20	22.3132	113.9651	1735.19	355.57
13-Oct-13	8:27:35	Speed Boat	Travelling	94	17	0	304	6	0	22.2999	113.9642	342.94	317.83
13-Oct-13	8:28:57	Transportation Boat	Travelling	90	44	20	349	49	10	22.3157	113.9676	2015.61	3.55
13-Oct-13	8:29:03	Transportation Boat	Travelling	90	55	50	327	7	0	22.3112	113.9613	1593.03	340.85
13-Oct-13	8:29:09	Speed Boat	Travelling	92	59	10	283	28	50	22.2996	113.9621	492.58	297.21
13-Oct-13	8:30:22	Transportation Boat	Travelling	91	1	40	304	26	50	22.3073	113.9571	1440.29	318.18
13-Oct-13	8:30:27	Speed Boat	Travelling	91	1	20	300	44	0	22.3067	113.9563	1448.22	314.46
13-Oct-13	8:30:35	Tug Boat	Travelling	90	53	0	347	12	50	22.3127	113.9667	1679.65	0.94
13-Oct-13	8:31:31	Speed Boat	Travelling	91	1	10	284	35	40	22.3038	113.9540	1452.22	298.32
13-Oct-13	8:31:38	Transportation Boat	Travelling	90	55	40	283	5	10	22.3041	113.9525	1597.88	296.82
13-Oct-13	8:32:04	Speed Boat	Travelling	90	59	10	277	33	40	22.3025	113.9528	1501.99	291.29
13-Oct-13	8:38:59	Transportation Boat	Travelling	91	0	20	285	32	20	22.3041	113.9539	1472.54	299.27
13-Oct-13	8:39:06	Transportation Boat	Travelling	91	2	40	304	38	0	22.3071	113.9572	1417.01	318.36
13-Oct-13	8:40:22	Transportation Boat	Travelling	91	2	0	297	22	50	22.3061	113.9559	1432.44	311.11
13-Oct-13	8:40:26	Transportation Boat	Travelling	91	7	0	296	38	20	22.3053	113.9566	1324.32	310.37
13-Oct-13	8:41:34	Speed Boat	Travelling	91	44	50	35	0	50	22.3026	113.9726	843.55	48.74
13-Oct-13	8:41:42	Transportation Boat	Travelling	90	57	20	306	15	0	22.3083	113.9567	1550.72	319.98
13-Oct-13	8:41:53	Transportation Boat	Stationary	91	7	20	291	48	40	22.3045	113.9560	1317.69	305.54
13-Oct-13	8:42:03	Transportation Boat	Travelling	91	2	0	284	54	20	22.3038	113.9542	1432.44	298.64
13-Oct-13	8:42:22	Speed Boat	Stationary	91	36	30	32	43	30	22.3033	113.9729	916.80	46.45
13-Oct-13	8:44:00	Transportation Boat	Travelling	91	5	20	286	30	0	22.3038	113.9550	1358.49	300.23
13-Oct-13	8:44:05	Transportation Boat	Travelling	91	4	0	301	6	20	22.3064	113.9568	1387.13	314.84
13-Oct-13	8:44:12	Speed Boat	Travelling	90	59	50	38	51	30	22.3057	113.9779	1485.02	52.59
13-Oct-13	8:44:24	Transportation Boat	Travelling	90	50	0	342	0	40	22.3136	113.9651	1782.37	355.74
13-Oct-13	8:44:31	HSF High Speed Ferry	Travelling	90	50	10	339	59	20	22.3135	113.9645	1776.33	353.72
13-Oct-13	8:45:30	Transportation Boat	Travelling	91	2	0	312	6	10	22.3083	113.9586	1432.44	325.83
13-Oct-13	8:45:34	Transportation Boat	Travelling	90	56	20	331	6	50	22.3113	113.9624	1578.67	344.84
13-Oct-13	8:45:39	HSF High Speed Ferry	Travelling	90	59	10	325	42	20	22.3103	113.9613	1501.99	339.44
13-Oct-13	8:47:01	Transportation Boat	Travelling	90	54	0	306	51	30	22.3091	113.9562	1648.02	320.59
13-Oct-13	8:47:06	Transportation Boat	Travelling	91	2	0	312	55	0	22.3084	113.9587	1432.44	326.65
13-Oct-13	8:47:12	HSF High Speed Ferry	Travelling	91	3	10	299	23	50	22.3063	113.9564	1405.66	313.13
13-Oct-13	8:47:36	Tug Boat	Travelling	91	4	10	1	57	50	22.3096	113.9700	1383.49	15.69
13-Oct-13	8:48:05	Speed Boat	Travelling	90	50	0	283	21	20	22.3049	113.9510	1782.37	297.09
13-Oct-13	8:48:14	HSF High Speed Ferry	Travelling	90	57	50	282	39	0	22.3038	113.9530	1537.12	296.38
13-Oct-13	8:48:29	Speed Boat	Travelling	90	52	10	289	16	30	22.3060	113.9525	1706.97	303.00
13-Oct-13	8:49:42	Speed Boat	Stationary	90	52	10	292	9	10	22.3066	113.9529	1706.97	305.88
13-Oct-13	8:49:48	Transportation Boat	Travelling	90	55	20	279	20	20	22.3033	113.9520	1607.66	293.07
13-Oct-13	8:51:09	Container Boat	Travelling	91	3	30	305	40	0	22.3072	113.9575	1398.19	319.40
13-Oct-13	8:52:54	Transportation Boat	Travelling	91	6	20	287	15	50	22.3038	113.9552	1337.78	300.99
13-Oct-13	8:53:12	Container Boat	Travelling	90	58	30	305	17	40	22.3079	113.9567	1519.35	319.02
13-Oct-13	8:54:12	Transportation Boat	Travelling	91	6	20	303	57	40	22.3065	113.9576	1337.78	317.69
13-Oct-13	8:54:21	HSF High Speed Ferry	Travelling	90	40	40	350	6	10	22.3174	113.9678	2202.60	3.83
13-Oct-13	8:54:33	Container Boat	Travelling	90	54	0	304	8	10	22.3086	113.9556	1648.02	317.87
13-Oct-13	8:54:59	Transportation Boat	Travelling	90	57	10	307	6	20	22.3085	113.9568	1555.31	320.84
13-Oct-13	8:56:09	Transportation Boat	Travelling	91	2	50	287	56	30	22.3043	113.9547	1413.21	301.67
13-Oct-13	8:56:23	HSF High Speed Ferry	Travelling	90	56	0	331	50	30	22.3115	113.9626	1588.22	345.57
13-Oct-13	8:57:47	Transportation Boat	Travelling	91	4	20	307	11	20	22.3073	113.9579	1379.86	320.92
13-Oct-13	8:57:55	HSF High Speed Ferry	Travelling	91	2	50	307	37	0	22.3076	113.9578	1413.21	321.35
13-Oct-13	8:58:07	Tour Boat	Travelling	90	43	0	15	49	20	22.3139	113.9764	2079.77	29.55
13-Oct-13	8:59:44	HSF High Speed Ferry	Travelling	90	55	20	278	49	10	22.3032	113.9520	1607.66	292.55
13-Oct-13	9:00:11	Transportation Boat	Travelling	90	55	0	332	50	50	22.3118	113.9627	1617.56	346.58
13-Oct-13	9:00:48	Tour Boat	Travelling	90	57	30	4	53	50	22.3108	113.9712	1546.16	18.63
13-Oct-13	9:01:53	Transportation Boat	Travelling	91	2	0	283	39	10	22.3035	113.9540	1432.44	297.38
13-Oct-13	9:02:01	Transportation Boat	Travelling	91	6	0	355	27	20	22.3096	113.9685	1344.61	9.19
13-Oct-13	9:02:11	Transportation Boat	Travelling	90	43	50	346	10	10	22.3160	113.9664	2039.19	359.90
13-Oct-13	9:03:55	Transportation Boat	Travelling	91	8	20	308	0	50	22.3068	113.9586	1298.20	321.74
13-Oct-13	9:04:00	Transportation Boat	Travelling	91	22	10	328	18	30	22.3068	113.9632	1077.86	342.04
13-Oct-13	9:04:09	Tour Boat	Travelling	91	24	50	337	34	30	22.3069	113.9649	1043.74	351.30
13-Oct-13	9:05:27	Transportation Boat	Travelling	91	3	20	326	58	20	22.3095	113.9619	1401.91	340.70
13-Oct-13	9:05:44	Transportation Boat	Travelling	91	18	30	299	51	30	22.3046	113.9584	1128.61	313.59
13-Oct-13	9:05:52	Tour Boat	Travelling	91	30	30	314	39	10	22.3051	113.9614	977.96	328.38
13-Oct-13	9:07:29	Transportation Boat	Travelling	90	51	30	345	49	10	22.3132	113.9663	1729.47	359.55
13-Oct-13	9:07:34	Transportation Boat	Travelling	91	1	40	278	16	50	22.3025	113.9534	1440.29	292.01
13-Oct-13	9:07:38	Tour Boat	Travelling	91	19	30	292	29	40	22.3035	113.9577	1114.30	306.22
13-Oct-13	9:13:35	Transportation Boat	Travelling	91	6	20	281	39	20	22.3028	113.9546	1337.78	295.39
13-Oct-13	9:17:06	Transportation Boat	Travelling	90	52	0	343	25	0	22.3130	113.9656	1712.54	357.15
13-Oct-13	9:19:13	Transportation Boat	Travelling	90	34	50	354	24	0	22.3207	113.9700	2585.69	8.13
13-Oct-13	9:22:59	Government Boat	Travelling	91	1	10	1	27	30	22.3102	113.9701	1452.22	15.19
13-Oct-13	9:23:09	Speed Boat	Travelling	91	47	50	5	2	40	22.3046	113.9690	819.97	18.77
13-Oct-13	9:23:52	Government Boat	Travelling	91	34	30	324	0	20	22.3054	113.9629	936.32	337.74
13-Oct-13	9:24:09	Speed Boat	Travelling	92	12	30	314	15	50	22.3027	113.9630	666.75	327.99
13-Oct-13	9:24:31	Government Boat	Travelling	91	19	20	287	30	30	22.3028	113.9571	1116.66	301.24
13-Oct-13	9:24:38	Speed Boat	Travelling	91	50	30	291	4	0	22.3017	113.9600	800.09	304.80
13-Oct-13	9:24:47	Government Boat	Travelling	91	8	50	279	7	30	22.3021	113.9548	1288.67	292.85
13-Oct-13	9:24:52	Speed Boat	Travelling	91	38	0	283	18	10	22.3013	113.9586	902.69	297.03

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Oct-13	9:31:58	Fishing Boat	Non-operate and travelling	91	15	30	359	21	0	22.3079	113.9690	1173.84	13.08
13-Oct-13	9:34:01	Fishing Boat	Non-operate and travelling	92	54	50	337	32	50	22.3021	113.9657	504.82	351.28
13-Oct-13	9:34:10	Transportation Boat	Travelling	91	5	30	302	26	50	22.3064	113.9573	1355.00	316.18
13-Oct-13	9:34:16	Transportation Boat	Travelling	90	49	10	346	48	10	22.3139	113.9666	1813.19	0.53
13-Oct-13	9:35:09	Transportation Boat	Travelling	91	2	30	281	30	10	22.3031	113.9539	1420.84	295.23
13-Oct-13	9:35:14	Transportation Boat	Travelling	90	52	10	340	35	40	22.3129	113.9648	1706.97	354.32
13-Oct-13	9:36:25	Fishing Boat	Operate and travelling	95	12	50	300	42	50	22.2994	113.9644	281.44	314.44
13-Oct-13	9:39:29	Transportation Boat	Travelling	90	56	50	331	54	10	22.3113	113.9626	1564.57	345.63
13-Oct-13	9:39:45	Transportation Boat	Travelling	91	3	20	304	3	20	22.3070	113.9572	1401.91	317.79
13-Oct-13	9:41:04	Tour Boat	Travelling	91	2	50	284	54	40	22.3037	113.9543	1413.21	298.64
13-Oct-13	9:41:10	Transportation Boat	Travelling	91	0	40	291	26	50	22.3052	113.9548	1464.34	305.18
13-Oct-13	9:41:16	Transportation Boat	Travelling	91	4	10	311	59	0	22.3079	113.9588	1383.49	325.71
13-Oct-13	9:41:21	Transportation Boat	Travelling	91	2	40	303	47	40	22.3070	113.9571	1417.01	317.52
13-Oct-13	9:43:25	Transportation Boat	Travelling	90	59	0	286	13	20	22.3044	113.9537	1506.29	299.95
13-Oct-13	9:43:29	Transportation Boat	Travelling	90	59	20	279	17	40	22.3029	113.9530	1497.71	293.02
13-Oct-13	9:45:08	Container Boat	Travelling	91	0	10	323	24	10	22.3099	113.9608	1476.68	337.13
13-Oct-13	9:45:13	Tour Boat	Travelling	91	2	10	325	35	30	22.3096	113.9615	1428.55	339.32
13-Oct-13	9:45:58	Speed Boat	Travelling	91	56	30	297	58	50	22.3022	113.9609	758.70	311.71
13-Oct-13	9:46:54	Speed Boat	Travelling	92	3	40	348	39	10	22.3040	113.9667	714.56	2.38
13-Oct-13	9:48:11	Speed Boat	Travelling	91	8	10	27	55	30	22.3064	113.9748	1301.41	41.65
13-Oct-13	9:48:39	Tour Boat	Travelling	90	44	30	347	20	30	22.3157	113.9668	2007.87	1.07
13-Oct-13	9:48:45	Container Boat	Travelling	90	51	0	341	9	10	22.3133	113.9649	1746.75	354.88
13-Oct-13	9:52:15	Transportation Boat	Travelling	91	4	30	294	44	10	22.3053	113.9559	1376.25	308.47
13-Oct-13	9:52:50	Transportation Boat	Travelling	91	0	50	285	49	30	22.3041	113.9540	1460.28	299.55
13-Oct-13	9:53:00	Transportation Boat	Travelling	91	3	30	305	50	30	22.3072	113.9576	1398.19	319.57
13-Oct-13	9:53:20	Transportation Boat	Travelling	91	2	10	293	30	50	22.3054	113.9553	1428.55	307.24
13-Oct-13	9:54:02	Transportation Boat	Travelling	90	52	30	308	52	20	22.3097	113.9564	1695.94	322.60
13-Oct-13	9:54:07	Transportation Boat	Travelling	91	1	30	305	40	40	22.3075	113.9573	1444.24	319.41
13-Oct-13	9:54:49	Transportation Boat	Travelling	91	0	20	284	36	10	22.3039	113.9538	1472.54	298.33
13-Oct-13	9:55:34	Transportation Boat	Travelling	91	2	20	292	57	10	22.3053	113.9553	1424.69	306.68
13-Oct-13	9:57:06	Transportation Boat	Travelling	90	56	30	305	38	10	22.3084	113.9564	1573.95	319.37
13-Oct-13	9:57:10	Transportation Boat	Travelling	91	4	50	293	22	0	22.3051	113.9558	1369.09	307.10
13-Oct-13	9:58:07	Transportation Boat	Travelling	91	7	20	305	38	10	22.3066	113.9581	1317.69	319.37
13-Oct-13	9:59:38	Transportation Boat	Travelling	91	2	30	324	38	0	22.3095	113.9613	1420.84	338.36
13-Oct-13	10:02:03	Transportation Boat	Travelling	90	48	30	345	48	40	22.3142	113.9663	1838.63	359.54
13-Oct-13	10:03:10	Tug Boat	Travelling	90	55	20	307	39	30	22.3089	113.9566	1607.66	321.39
13-Oct-13	10:03:13	Tug Boat	Travelling	90	51	30	306	48	0	22.3096	113.9557	1729.47	320.53
13-Oct-13	10:03:58	Tug Boat	Stationary	91	16	50	8	40	30	22.3072	113.9707	1153.30	22.40
13-Oct-13	10:05:43	Tug Boat	Travelling	90	56	10	330	41	0	22.3113	113.9623	1583.43	344.41
13-Oct-13	10:05:51	Tug Boat	Travelling	90	58	10	325	45	0	22.3105	113.9612	1528.18	339.48
13-Oct-13	10:08:12	Tug Boat	Travelling	90	45	30	348	20	0	22.3153	113.9671	1962.67	2.06
13-Oct-13	10:08:17	Tug Boat	Travelling	90	48	40	343	32	10	22.3141	113.9655	1832.21	357.27
13-Oct-13	10:10:28	Fishing Boat	Non-operate and travelling	92	42	40	359	18	0	22.3024	113.9676	542.71	13.03
13-Oct-13	10:12:50	HSF High Speed Ferry	Travelling	90	58	20	283	23	10	22.3039	113.9532	1523.75	297.12
13-Oct-13	10:13:47	Construction Boat	Travelling	90	56	0	336	24	50	22.3117	113.9638	1588.22	350.14
13-Oct-13	10:13:56	HSF High Speed Ferry	Travelling	91	3	40	301	12	50	22.3065	113.9568	1394.48	314.94
13-Oct-13	10:14:21	Tug Boat	Travelling	91	15	0	5	19	40	22.3077	113.9702	1181.74	19.06
13-Oct-13	10:14:59	HSF High Speed Ferry	Travelling	91	2	20	319	46	40	22.3091	113.9602	1424.69	333.51
13-Oct-13	10:15:28	Transportation Boat	Travelling	91	30	40	2	15	40	22.3061	113.9690	976.15	15.99
13-Oct-13	10:16:04	HSF High Speed Ferry	Travelling	90	55	10	336	4	30	22.3119	113.9636	1612.60	349.80
13-Oct-13	10:17:40	HSF High Speed Ferry	Travelling	90	42	0	349	21	20	22.3168	113.9675	2130.67	3.09
13-Oct-13	10:17:45	Construction Boat	Travelling	90	49	0	352	2	50	22.3139	113.9682	1819.48	5.78
13-Oct-13	10:17:51	Transportation Boat	Travelling	91	46	0	336	38	30	22.3050	113.9650	834.22	350.37
13-Oct-13	10:19:23	Tug Boat	Stationary	90	59	50	10	2	30	22.3098	113.9722	1485.02	23.77
13-Oct-13	10:19:38	Transportation Boat	Travelling	91	43	10	315	0	0	22.3042	113.9621	857.25	328.73
13-Oct-13	10:21:18	Research Vessel	Travelling	90	55	40	25	37	50	22.3087	113.9763	1597.88	39.36
13-Oct-13	10:21:32	Transportation Boat	Travelling	91	28	40	296	1	20	22.3034	113.9589	998.31	309.75
13-Oct-13	10:23:09	Transportation Boat	Travelling	91	14	10	284	27	40	22.3027	113.9562	1195.14	298.19
13-Oct-13	10:23:41	Research Vessel	Acoustic Recording	90	52	10	21	55	20	22.3101	113.9761	1706.97	35.65
13-Oct-13	10:25:05	Speed Boat	Travelling	90	49	0	345	36	0	22.3140	113.9662	1819.48	359.33
13-Oct-13	10:26:47	Speed Boat	Travelling	91	4	0	311	26	0	22.3079	113.9587	1387.13	325.16
13-Oct-13	10:26:57	Research Vessel	Acoustic Recording	90	53	0	21	54	40	22.3099	113.9759	1679.65	35.64
13-Oct-13	10:28:02	Speed Boat	Travelling	90	57	50	281	57	30	22.3036	113.9529	1537.12	295.69
13-Oct-13	10:31:08	Research Vessel	Travelling	90	47	20	15	21	30	22.3124	113.9753	1884.94	29.09
13-Oct-13	10:31:28	Speed Boat	Travelling	91	2	40	301	34	30	22.3067	113.9567	1417.01	315.30
13-Oct-13	10:36:13	Research Vessel	Travelling	91	24	20	5	54	30	22.3065	113.9698	1049.97	19.64
13-Oct-13	10:36:49	Transportation Boat	Travelling	90	44	20	345	17	20	22.3158	113.9661	2015.61	359.02
13-Oct-13	10:38:18	Construction Boat	Travelling	91	3	50	316	13	10	22.3085	113.9596	1390.80	329.95
13-Oct-13	10:38:35	Tug Boat	Travelling	90	52	40	340	47	40	22.3128	113.9648	1690.47	354.52
13-Oct-13	10:38:40	Container Boat	Travelling	90	52	0	342	13	0	22.3130	113.9652	1712.54	355.95
13-Oct-13	10:38:57	Research Vessel	Travelling	92	39	10	22	28	40	22.3016	113.9696	554.69	36.21
13-Oct-13	10:39:47	Transportation Boat	Travelling	90	59	30	322	20	20	22.3099	113.9605	1493.45	336.07
13-Oct-13	10:39:53	Construction Boat	Travelling	90	59	0	331	24	10	22.3107	113.9626	1506.29	345.13
13-Oct-13	10:40:04	Government Boat	Travelling	90	45	10	346	37	50	22.3154	113.9665	1977.51	0.36
13-Oct-13	10:40:20	Speed Boat	Travelling	93	9	30	326	6	40	22.3016	113.9648	465.63	339.84
13-Oct-13	10:41:55	Transportation Boat	Travelling	91	0	40	298	4	50	22.3064	113.9558	1464.34	311.81
13-Oct-13	10:42:50	Government Boat	Travelling	91	2	10	315	53	20	22.3087	113.9594	1428.55	329.62
13-Oct-13	10:42:57	Speed Boat	Travelling	90	54	40	36	3	50	22.3071	113.9785	1627.59	49.79
13-Oct-13	10:43:04	Tug Boat	Travelling	91	2	30	298	29	30	22.3062	113.9562	1420.84	312.22
13-Oct-13	10:43:10	Container Boat	Travelling	91	3	30	300	4	20	22.3063	113.9566	1398.19	313.80
13-Oct-13	10:43:20	Construction Boat	Travelling	90	42	40	350	33	10	22.3164	113.9679	2096.46	4.28
13-Oct-13	10:43:24	Research Vessel	Travelling	91	32	50	341	6	50	22.3062	113.9656	953.23	354.84
13-Oct-13	10:45:10	Tug Boat	Travelling	90	57	0	278	24	0	22.3029	113.9523	1559.93	292.13
13-Oct-13	10:45:17	Container Boat	Travelling	90	58	30	279	34	40	22.3030	113.9528	1519.35	293.31
13-Oct-13	10:45:22	Government Boat	Travelling	90	56	30	286	32	30	22.3048	113.9532	1573.95	300.27
13-Oct-13	10:45:45	Research Vessel	Travelling	91	4	40	330	59	0	22.3095	113.9629	1372.66	344.71
13-Oct-13	10:45:51	Transportation Boat	Travelling	91	3	20	305	15	20	22.3071	113.9575	1401.91	318.99
13-Oct-13	10:45:59	Transportation Boat	Travelling	90	58	0	281	50	20	22.3036	113.9530	1532.64	295.57
13-Oct-13	10:47:01	Transportation Boat	Travelling	91	4	10	291	23	20	22.3048	113.9554	1383.49	305.12
13-Oct-13	10:47:05	Transportation Boat	Travelling	91	3	0	298	8	50	22.3061	113.9562	1409.42	311.88
13-Oct-13	10:47:41	HSF High Speed Ferry	Travelling	90	45	20	346	39	50	22.3153	113.9665	1970.06	0.39
13-Oct-13	10:48:00	Transportation Boat	Travelling	91	0	40	279	56	50	22.3029	113.9534	1464.34	293.68
13-Oct-13	10:48:07	Transportation Boat	Travelling	91	3	10	315	7	0	22.3084	113.9593	1405.66	328.85
13-Oct-13	10:48:28	Speed Boat	Travelling	91	9	40	282	38	30	22.3027	113.9553	1273.10	296.37
13-Oct-13	10:49:08	HSF High Speed Ferry	Travelling	90	56	0	331	58	0	22.3115	113.9626	1588.22	345.70
13-Oct-13	10:49:17	Speed Boat	Travelling	91	7	30	293	50	30	22.3048	113.9563	1314.40	307.57
13-Oct-13	10:50:42	Research Vessel	Travelling	91	56	50	293	58	0	22.3018	113.9606	756.53	307.70
13-Oct-13	10:50:50	Speed Boat	Travelling	90	54	40	305	14	40	22.3087	113.9560	1627.59	318.97
13-Oct-13	10:51:04	HSF High Speed Ferry	Travelling	91	4	0	302	33	40	22.3066	113.9571	1387.13	316.29
13-Oct-13	10:52:35	Transportation Boat	Travelling	91	3	10	283	4	30	22.3033	113.9542	1405.66	296.80
13-Oct-13	10:52:44	HSF High Speed Ferry	Travelling	90	56	50	277	35	0	22.3027	113.9522	1564.57	291.31
13-Oct-13	10:52:51	Research Vessel	Travelling	91	21	10	281	54	40	22.3019	113.9568	1091.24	295.64
13-Oct-13	10:54:19	Transportation Boat	Travelling	91	6	40	304	7	20	22.3065	113.9577	1331.02	317.85
13-Oct-13	10:54:40	Tug Boat	Travelling	90	57	50	281	45	40	22.3036	113.9529	1537.12	295.49
13-Oct-13	10:56:47	Tug Boat	Travelling	91	6	0	306	32	20	22.3069	113.9580	1344.61	320.27
13-Oct-13	10:56:55	Research Vessel	Travelling	90	49	50	279	9	30	22.3039	113.9504	1788.45	292.89
13-Oct-13	10:57:03	Transportation Boat	Travelling	90	55	0	335	16	40	22.3119	113.9634	1617.56	349.01
13-Oct-13	11:01:30	Tug Boat	Travelling	90	44	10	353	12	10	22.3157	113.9688	2023.41	6.93
13-Oct-13	11:02:15	Transportation Boat	Travelling	91	2	30	304	24	30	22.3071	113.9572	1420.84	318.14
13-Oct-13	11:02:20	Transportation Boat	Travelling	90	54	30	306	0	10	22.3088	113.9561	1632.65	319.73
13-Oct-13	11:02:29	Transportation Boat	Travelling	90	43	40	349	42	20	22.3160	113.9676	2047.18	3.44
13-Oct-13	11:03:39	Transportation Boat	Travelling	91	0	30	287	15	0	22.3044	113.9542	1468.43	300.98
13-Oct-13	11:03:44	Transportation Boat	Travelling	91	3	10	294	59	20	22.3055	113.9557	1405.66	308.72
13-Oct-13	11:03:51	Transportation Boat	Travelling	90	50	40	341	26	50	22.3134	113.9650	1758.46	355.18
13-Oct-13	11:04:47	Transportation Boat	Travelling	90	55	50	275	8	40	22.3023	113.9517	1593.03	288.87
13-Oct-13	11:04:53	Transportation Boat	Travelling	90	58	20	282	0	40	22.3036	113.9530	1523.75	295.74
13-Oct-13	11:04:58	Transportation Boat	Travelling	90	53	20	336	56	30	22.3124	113.9638	1668.97	350.67

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Oct-13	11:06:08	HSF High Speed Ferry	Travelling	90	44	50	343	29	40	22.3155	113.9655	1992.57	357.22
13-Oct-13	11:06:17	Tug Boat	Travelling	90	48	30	343	57	20	22.3142	113.9657	1838.63	357.69
13-Oct-13	11:06:23	Dumping Guide Boat	Travelling	90	44	30	347	31	40	22.3157	113.9668	2007.87	1.26
13-Oct-13	11:06:32	Transportation Boat	Travelling	90	59	10	329	37	30	22.3106	113.9622	1501.99	343.35
13-Oct-13	11:07:53	Transportation Boat	Travelling	91	1	20	317	31	10	22.3090	113.9596	1448.22	331.25
13-Oct-13	11:08:00	HSF High Speed Ferry	Travelling	90	59	10	319	26	40	22.3097	113.9598	1501.99	333.17
13-Oct-13	11:08:06	Tug Boat	Travelling	90	56	10	330	45	30	22.3114	113.9623	1583.43	344.49
13-Oct-13	11:08:10	Dumping Guide Boat	Travelling	90	54	20	332	3	30	22.3119	113.9625	1637.74	345.79
13-Oct-13	11:09:13	Transportation Boat	Travelling	91	0	0	296	59	0	22.3063	113.9555	1480.84	310.71
13-Oct-13	11:09:19	HSF High Speed Ferry	Travelling	91	2	30	295	36	10	22.3057	113.9557	1420.84	309.33
13-Oct-13	11:09:35	Dumping Guide Boat	Travelling	91	0	50	316	18	10	22.3090	113.9593	1460.28	330.03
13-Oct-13	11:10:06	Tug Boat	Travelling	91	1	10	312	28	50	22.3085	113.9585	1452.22	326.21
13-Oct-13	11:10:46	Speed Boat	Travelling	91	4	10	305	20	10	22.3070	113.9576	1383.49	319.07
13-Oct-13	11:10:58	Tug Boat	Travelling	90	55	10	307	13	20	22.3089	113.9565	1612.60	320.95
13-Oct-13	11:11:16	Speed Boat	Travelling	91	10	0	296	33	50	22.3050	113.9570	1266.98	310.29
13-Oct-13	11:11:31	Dumping Guide Boat	Travelling	91	1	50	291	27	50	22.3051	113.9550	1436.36	305.19
13-Oct-13	11:11:47	Transportation Boat	Travelling	90	59	0	279	17	40	22.3029	113.9529	1506.29	293.02
13-Oct-13	11:11:52	Transportation Boat	Travelling	91	2	0	304	15	50	22.3072	113.9571	1432.44	317.99
13-Oct-13	11:12:06	Speed Boat	Travelling	91	6	0	273	30	50	22.3012	113.9539	1344.61	287.24
13-Oct-13	11:12:49	Dumping Guide Boat	Travelling	90	55	30	277	12	10	22.3028	113.9518	1602.76	290.93
13-Oct-13	11:13:00	Transportation Boat	Travelling	90	59	0	280	11	10	22.3031	113.9530	1506.29	293.92
13-Oct-13	11:13:06	Transportation Boat	Travelling	91	2	10	290	44	20	22.3049	113.9549	1428.55	304.47
13-Oct-13	11:13:10	Transportation Boat	Travelling	91	7	30	294	13	30	22.3049	113.9563	1314.40	307.95
13-Oct-13	11:13:36	Research Vessel	Travelling	90	51	40	281	33	20	22.3042	113.9512	1723.79	295.29
13-Oct-13	11:14:02	Transportation Boat	Travelling	91	2	30	301	22	40	22.3067	113.9566	1420.84	315.11
13-Oct-13	11:14:07	Transportation Boat	Travelling	91	6	10	285	51	30	22.3036	113.9551	1341.19	299.59
13-Oct-13	11:14:12	Transportation Boat	Travelling	91	2	10	293	40	0	22.3054	113.9554	1428.55	307.40
13-Oct-13	11:14:29	Research Vessel	Travelling	90	53	50	287	27	30	22.3053	113.9526	1653.21	301.19
13-Oct-13	11:15:52	Transportation Boat	Travelling	90	54	50	305	2	50	22.3086	113.9560	1622.56	318.78
13-Oct-13	11:17:58	Transportation Boat	Travelling	91	3	20	300	44	50	22.3065	113.9567	1401.91	314.48
13-Oct-13	11:20:11	Transportation Boat	Travelling	91	2	20	284	53	0	22.3038	113.9542	1424.69	298.61
13-Oct-13	11:20:43	Transportation Boat	Travelling	91	0	30	322	5	50	22.3097	113.9606	1468.43	335.83
13-Oct-13	11:21:21	Research Vessel	Travelling	92	2	50	288	24	50	22.3011	113.9605	719.43	302.14
13-Oct-13	11:21:44	Transportation Boat	Travelling	90	51	10	340	4	50	22.3132	113.9646	1740.95	353.81
13-Oct-13	11:22:37	Transportation Boat	Travelling	90	42	50	349	17	40	22.3164	113.9675	2088.08	3.02
13-Oct-13	11:22:51	Research Vessel	Stationary	91	40	10	300	52	40	22.3032	113.9603	883.06	314.61
13-Oct-13	11:23:13	Transportation Boat	Travelling	91	4	40	285	40	20	22.3037	113.9548	1372.66	299.40
13-Oct-13	11:23:44	Transportation Boat	Travelling	90	55	30	279	50	0	22.3034	113.9521	1602.76	293.56
13-Oct-13	11:24:16	Transportation Boat	Travelling	91	8	50	293	49	10	22.3047	113.9565	1288.67	307.55
13-Oct-13	11:24:22	Transportation Boat	Travelling	90	58	20	286	51	30	22.3046	113.9536	1523.75	300.59
13-Oct-13	11:25:20	Research Vessel	Travelling	91	21	20	321	51	50	22.3065	113.9620	1088.99	335.59
13-Oct-13	11:25:27	Transportation Boat	Travelling	91	7	50	302	35	30	22.3061	113.9576	1307.88	316.32
13-Oct-13	11:25:33	Transportation Boat	Travelling	91	2	10	301	10	50	22.3067	113.9566	1428.55	314.91
13-Oct-13	11:26:46	Transportation Boat	Travelling	90	52	10	305	1	20	22.3092	113.9555	1706.97	318.75
13-Oct-13	11:26:50	Transportation Boat	Travelling	90	58	20	305	49	20	22.3081	113.9568	1523.75	319.55
13-Oct-13	11:27:02	Research Vessel	Travelling	91	6	20	335	7	10	22.3094	113.9639	1337.78	348.85
13-Oct-13	11:29:46	Research Vessel	Travelling	90	46	10	346	5	10	22.3150	113.9663	1933.67	359.82
13-Oct-13	11:37:16	Transportation Boat	Travelling	91	3	0	303	6	40	22.3069	113.9570	1409.42	316.84
13-Oct-13	11:38:13	Transportation Boat	Travelling	91	1	0	285	55	40	22.3041	113.9541	1456.24	299.66
13-Oct-13	11:38:59	Transportation Boat	Travelling	90	56	20	274	10	30	22.3020	113.9518	1578.67	287.90
13-Oct-13	11:40:08	Transportation Boat	Travelling	91	4	10	299	22	0	22.3061	113.9566	1383.49	313.10
13-Oct-13	11:41:13	Transportation Boat	Travelling	90	59	30	284	47	20	22.3040	113.9536	1493.45	298.52
13-Oct-13	11:41:45	Transportation Boat	Travelling	90	57	10	277	56	20	22.3028	113.9523	1555.31	291.67
13-Oct-13	11:44:54	Transportation Boat	Travelling	91	1	30	294	24	20	22.3056	113.9554	1444.24	308.14
13-Oct-13	11:45:58	Transportation Boat	Travelling	90	57	40	305	59	10	22.3082	113.9567	1541.63	319.72
13-Oct-13	11:46:07	Tug Boat	Travelling	90	54	40	359	17	50	22.3119	113.9700	1627.59	13.03
13-Oct-13	11:49:55	Tug Boat	Travelling	90	46	50	351	7	30	22.3147	113.9680	1905.52	4.85
13-Oct-13	11:52:00	Speed Boat	Travelling	91	2	0	304	48	10	22.3073	113.9572	1432.44	318.53
13-Oct-13	11:52:48	Speed Boat	Travelling	91	7	40	291	56	10	22.3045	113.9560	1311.13	305.67
13-Oct-13	11:53:30	Speed Boat	Travelling	91	6	10	278	50	40	22.3023	113.9544	1341.19	292.57
13-Oct-13	11:57:46	Transportation Boat	Travelling	91	4	10	300	19	30	22.3063	113.9567	1383.49	314.05
13-Oct-13	11:58:38	Transportation Boat	Travelling	91	2	0	283	6	30	22.3034	113.9540	1432.44	296.84
13-Oct-13	12:08:01	Transportation Boat	Travelling	90	39	20	351	48	20	22.3180	113.9685	2279.64	5.54
13-Oct-13	12:08:58	Transportation Boat	Travelling	90	55	20	305	7	20	22.3085	113.9561	1607.66	318.85
13-Oct-13	12:09:04	Transportation Boat	Travelling	90	47	10	344	20	30	22.3146	113.9658	1891.75	358.07
13-Oct-13	12:09:52	Transportation Boat	Travelling	90	53	0	336	12	40	22.3125	113.9635	1679.65	349.94
13-Oct-13	12:09:58	Transportation Boat	Travelling	91	2	50	295	56	40	22.3057	113.9558	1413.21	309.67
13-Oct-13	12:10:50	Transportation Boat	Travelling	91	0	10	323	13	10	22.3098	113.9608	1476.68	336.95
13-Oct-13	12:10:56	Transportation Boat	Travelling	90	56	50	281	32	40	22.3036	113.9526	1564.57	295.27
13-Oct-13	12:13:08	Transportation Boat	Travelling	91	1	10	285	43	50	22.3040	113.9541	1452.22	299.46
13-Oct-13	12:13:14	HSF High Speed Ferry	Travelling	90	59	50	287	32	10	22.3046	113.9541	1485.02	301.27
13-Oct-13	12:14:42	HSF High Speed Ferry	Travelling	91	2	0	315	22	50	22.3087	113.9592	1432.44	329.11
13-Oct-13	12:16:25	HSF High Speed Ferry	Travelling	90	48	50	341	30	20	22.3140	113.9649	1825.82	355.24
13-Oct-13	12:18:31	Fishing Boat	Operate and travelling	95	28	50	305	39	30	22.2994	113.9647	267.67	319.39
13-Oct-13	12:20:36	Fishing Boat	Operate and travelling	94	18	0	314	11	10	22.3002	113.9646	341.60	327.92
13-Oct-13	12:22:27	Fishing Boat	Operate and travelling	92	45	50	332	51	50	22.3023	113.9652	532.31	346.59
13-Oct-13	12:26:21	Fishing Boat	Non-operate and travelling	91	13	20	341	41	20	22.3085	113.9655	1208.84	355.42
13-Oct-13	12:29:48	Tug Boat	Travelling	90	53	30	338	2	50	22.3124	113.9641	1663.69	351.78
13-Oct-13	12:29:56	Construction Platform	Travelling	90	51	40	341	11	10	22.3131	113.9649	1723.79	354.92
13-Oct-13	12:32:58	Government Boat	Travelling	90	59	10	345	18	30	22.3111	113.9662	1501.99	359.04
13-Oct-13	12:34:06	Government Boat	Travelling	91	19	50	301	41	30	22.3047	113.9588	1109.61	315.42
13-Oct-13	12:35:27	Transportation Boat	Travelling	91	4	10	297	11	30	22.3058	113.9562	1383.49	310.92
13-Oct-13	12:36:19	Transportation Boat	Travelling	91	0	20	282	19	40	22.3034	113.9535	1472.54	296.06
13-Oct-13	12:36:47	Tug Boat	Travelling	91	2	20	300	46	10	22.3066	113.9565	1424.69	314.50
13-Oct-13	12:36:52	Construction Platform	Travelling	91	3	0	305	15	10	22.3072	113.9574	1409.42	318.98
13-Oct-13	12:39:46	Tug Boat	Travelling	90	58	50	284	54	50	22.3041	113.9535	1510.62	298.64
13-Oct-13	12:39:50	Construction Platform	Travelling	91	0	30	288	55	20	22.3047	113.9544	1468.43	302.65
13-Oct-13	12:51:36	HSF High Speed Ferry	Travelling	90	41	30	348	54	20	22.3170	113.9674	2157.07	2.64
13-Oct-13	12:52:40	Transportation Boat	Travelling	91	3	0	302	42	20	22.3068	113.9570	1409.42	316.44
13-Oct-13	12:53:35	Transportation Boat	Travelling	91	2	40	290	39	30	22.3048	113.9550	1417.01	304.39
13-Oct-13	12:53:42	HSF High Speed Ferry	Travelling	90	58	10	328	32	10	22.3107	113.9619	1528.18	342.27
13-Oct-13	12:54:43	Transportation Boat	Travelling	90	57	20	277	35	30	22.3027	113.9523	1550.72	291.32
13-Oct-13	12:54:54	HSF High Speed Ferry	Travelling	91	3	0	309	25	20	22.3078	113.9582	1409.42	323.15
13-Oct-13	12:55:55	HSF High Speed Ferry	Travelling	91	4	0	292	31	40	22.3050	113.9555	1387.13	306.26
13-Oct-13	12:58:29	Transportation Boat	Travelling	90	57	10	329	36	50	22.3110	113.9621	1555.31	343.34
13-Oct-13	13:00:01	Transportation Boat	Travelling	91	0	0	286	32	30	22.3043	113.9540	1480.84	300.27
13-Oct-13	13:00:09	Transportation Boat	Travelling	91	4	0	312	1	40	22.3079	113.9588	1387.13	325.76
13-Oct-13	13:00:29	Yacht	Travelling	90	48	20	11	44	50	22.3126	113.9741	1845.11	25.48
13-Oct-13	13:00:46	Transportation Boat	Travelling	90	56	30	282	46	10	22.3039	113.9527	1573.95	296.50
13-Oct-13	13:00:52	Transportation Boat	Travelling	91	5	20	303	32	10	22.3066	113.9574	1358.49	317.27
13-Oct-13	13:00:56	Transportation Boat	Travelling	91	7	30	298	49	40	22.3056	113.9570	1314.40	312.56
13-Oct-13	13:01:01	Transportation Boat	Travelling	90	57	0	286	33	20	22.3047	113.9533	1559.93	300.29
13-Oct-13	13:01:30	Yacht	Travelling	90	57	0	4	13	20	22.3110	113.9711	1559.93	17.95
13-Oct-13	13:01:38	Transportation Boat	Travelling	91	5	10	294	22	30	22.3052	113.9560	1362.01	308.10
13-Oct-13	13:01:46	Transportation Boat	Stationary	91	12	0	308	38	40	22.3064	113.9591	1231.44	322.37
13-Oct-13	13:01:52	Transportation Boat	Travelling	91	0	50	299	25	0	22.3066	113.9560	1460.28	313.15
13-Oct-13	13:02:41	Speed Boat	Travelling	91	20	50	303	27	0	22.3049	113.9592	1095.78	317.18
13-Oct-13	13:02:47	Transportation Boat	Travelling	91	0	50	281	37	0	22.3032	113.9536	1460.28	295.35
13-Oct-13	13:02:53	Transportation Boat	Travelling	90	56	40	306	21	20	22.3085	113.9566	1569.25	320.09
13-Oct-13	13:03:00	Yacht	Travelling	91	8	40	345	40	40	22.3092	113.9663	1291.84	359.41
13-Oct-13	13:03:08	Speed Boat	Travelling	91	35	40	316	42	10	22.3049	113.9620	924.83	330.43
13-Oct-13	13:04:14	Speed Boat	Travelling	91	39	50	3	38	10	22.3052	113.9690	886.02	17.37
13-Oct-13	13:04:21	Yacht	Travelling	91	1	40	327	22	20	22.3099	113.9619	1440.29	341.10
13-Oct-13	13:05:50	Speed Boat	Travelling	90	52	0	33	19	0	22.3081	113.9786	1712.54	47.05
13-Oct-13	13:07:23	Tour Boat	Travelling	90	44	40	345	21	10	22.3156	113.9661	2000.19	359.08
13-Oct-13	13:07:31	Yacht	Travelling	90	59	0	282	43	20	22.3037	113.9533	1506.29	296.45
13-Oct-13	13:10:21	Transportation Boat	Travelling	91	1	10	316	1	0	22.3089	113.9593	1452.22	329.75

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
13-Oct-13	13:10:27	Transportation Boat	Travelling	91	3	40	287	33	50	22.3041	113.9548	1394.48	301.29
13-Oct-13	13:12:18	Transportation Boat	Travelling	90	48	40	342	11	0	22.3141	113.9651	1832.21	355.91
13-Oct-13	13:12:26	Transportation Boat	Travelling	91	6	10	309	53	10	22.3073	113.9587	1341.19	323.62
13-Oct-13	13:12:33	Tour Boat	Travelling	91	3	40	299	18	50	22.3062	113.9565	1394.48	313.04
13-Oct-13	13:14:22	Transportation Boat	Travelling	90	59	20	330	10	50	22.3106	113.9624	1497.71	343.91
13-Oct-13	13:14:27	Transportation Boat	Travelling	90	50	30	337	46	0	22.3133	113.9639	1764.38	351.50
13-Oct-13	13:15:58	Transportation Boat	Travelling	90	50	30	343	1	20	22.3135	113.9654	1764.38	356.75
13-Oct-13	13:16:03	Transportation Boat	Travelling	91	1	30	316	8	50	22.3089	113.9593	1444.24	329.88
13-Oct-13	13:28:06	Transportation Boat	Travelling	91	3	0	295	4	50	22.3056	113.9557	1409.42	308.81
13-Oct-13	13:28:11	Tug Boat	Travelling	91	7	20	292	7	40	22.3046	113.9560	1317.69	305.86
13-Oct-13	13:28:16	Construction Platform	Travelling	91	6	0	286	30	30	22.3037	113.9551	1344.61	300.24
13-Oct-13	13:29:58	Tug Boat	Travelling	91	4	40	307	22	30	22.3072	113.9580	1372.66	321.10
13-Oct-13	13:30:02	Construction Platform	Travelling	91	5	30	301	43	20	22.3063	113.9572	1355.00	315.45
13-Oct-13	13:30:23	Speed Boat	Travelling	91	28	40	10	18	50	22.3058	113.9704	998.31	24.04
13-Oct-13	13:34:20	Tour Boat	Travelling	91	17	20	302	33	20	22.3051	113.9587	1145.78	316.29
13-Oct-13	13:34:32	Tug Boat	Travelling	90	52	50	342	18	0	22.3127	113.9653	1685.05	356.03
13-Oct-13	13:34:42	Construction Platform	Travelling	90	54	50	338	39	40	22.3121	113.9643	1622.56	352.39
13-Oct-13	13:36:37	Tour Boat	Travelling	91	21	30	330	58	20	22.3071	113.9636	1086.74	344.70
13-Oct-13	13:36:50	Transportation Boat	Travelling	91	24	10	285	23	10	22.3022	113.9575	1052.06	299.12
13-Oct-13	13:37:03	Tug Boat	Travelling	90	45	20	356	55	40	22.3150	113.9699	1970.06	10.66
13-Oct-13	13:37:10	Construction Platform	Travelling	90	46	30	353	34	50	22.3148	113.9688	1919.49	7.31
13-Oct-13	13:38:13	Transportation Boat	Travelling	91	2	50	291	41	50	22.3050	113.9552	1413.21	305.43
13-Oct-13	13:38:21	Transportation Boat	Travelling	91	34	10	297	21	40	22.3032	113.9595	939.65	311.09
13-Oct-13	13:39:01	Transportation Boat	Travelling	91	38	30	303	34	50	22.3036	113.9605	898.08	317.31
13-Oct-13	13:39:08	Transportation Boat	Travelling	91	3	0	301	48	40	22.3067	113.9568	1409.42	315.54
13-Oct-13	13:39:19	Tour Boat	Travelling	91	4	30	358	27	40	22.3097	113.9692	1376.25	12.19
13-Oct-13	13:41:39	Transportation Boat	Travelling	91	40	50	330	31	20	22.3052	113.9641	877.19	344.25
13-Oct-13	13:41:52	Speed Boat	Travelling	91	17	10	23	0	30	22.3059	113.9731	1148.27	36.74
13-Oct-13	13:42:05	Tour Boat	Travelling	90	48	0	15	34	20	22.3122	113.9752	1858.20	29.30
13-Oct-13	13:42:45	Speed Boat	Travelling	91	41	0	11	58	30	22.3047	113.9701	875.73	25.70
13-Oct-13	13:43:57	Speed Boat	Travelling	92	14	40	354	33	50	22.3035	113.9673	655.98	8.29
13-Oct-13	13:44:07	Transportation Boat	Travelling	91	24	30	351	57	20	22.3070	113.9674	1047.88	5.69
13-Oct-13	13:45:10	Speed Boat	Travelling	92	0	0	293	56	50	22.3017	113.9607	736.48	307.68
13-Oct-13	13:45:20	Transportation Boat	Travelling	91	15	0	359	37	30	22.3080	113.9691	1181.74	13.35
13-Oct-13	13:51:47	Construction Boat	Travelling	90	52	10	341	38	40	22.3129	113.9651	1706.97	355.37
13-Oct-13	13:54:15	Construction Boat	Travelling	90	58	0	328	2	20	22.3107	113.9617	1532.64	341.77
13-Oct-13	13:55:37	Transportation Boat	Travelling	91	5	30	292	43	10	22.3049	113.9558	1355.00	306.45
13-Oct-13	13:55:47	Dumping Guide Boat	Travelling	90	58	0	328	35	10	22.3108	113.9619	1532.64	342.32
13-Oct-13	13:55:56	Construction Boat	Travelling	90	55	20	332	32	20	22.3117	113.9627	1607.66	346.27
13-Oct-13	13:56:03	Speed Boat	Travelling	90	58	50	298	51	0	22.3068	113.9556	1510.62	312.58
13-Oct-13	13:56:11	Transportation Boat	Travelling	91	0	40	282	55	40	22.3035	113.9537	1464.34	296.66
13-Oct-13	13:56:22	Dumping Guide Boat	Travelling	91	0	30	321	42	20	22.3096	113.9605	1468.43	335.44
13-Oct-13	13:56:33	Speed Boat	Travelling	90	55	40	290	0	50	22.3056	113.9535	1597.88	303.74
13-Oct-13	13:56:43	Construction Boat	Travelling	91	0	50	312	25	0	22.3085	113.9585	1460.28	326.15
13-Oct-13	13:57:00	Speed Boat	Travelling	90	52	30	282	6	0	22.3043	113.9516	1695.94	295.83
13-Oct-13	13:57:08	Construction Boat	Travelling	91	0	20	322	0	10	22.3097	113.9605	1472.54	335.73
13-Oct-13	13:57:43	Dumping Guide Boat	Travelling	91	4	40	303	59	40	22.3068	113.9574	1372.66	317.72
13-Oct-13	13:57:50	Construction Boat	Travelling	90	56	50	307	19	30	22.3086	113.9568	1564.57	321.05
13-Oct-13	13:57:57	Construction Boat	Travelling	91	3	0	313	53	40	22.3083	113.9591	1409.42	327.62
13-Oct-13	14:00:19	Construction Boat	Travelling	91	2	20	289	22	40	22.3046	113.9548	1424.69	303.11
13-Oct-13	14:02:55	Other	Stationary	90	34	40	279	17	20	22.3068	113.9431	2598.65	293.02
13-Oct-13	14:02:59	Other	Stationary	90	34	30	284	4	30	22.3086	113.9439	2611.74	297.80
13-Oct-13	14:03:02	Other	Stationary	90	32	50	287	17	10	22.3104	113.9435	2750.43	301.02
13-Oct-13	14:03:05	Other	Stationary	90	33	10	291	55	40	22.3119	113.9449	2721.50	305.66
13-Oct-13	14:03:11	Other	Stationary	90	50	30	299	40	0	22.3085	113.9539	1764.38	313.40
13-Oct-13	14:03:15	Other	Stationary	90	56	10	310	5	0	22.3091	113.9573	1583.43	323.81
13-Oct-13	14:03:18	Other	Stationary	90	58	0	316	48	20	22.3096	113.9591	1532.64	330.54
13-Oct-13	14:03:21	Other	Stationary	90	56	50	322	43	20	22.3105	113.9603	1564.57	336.45
13-Oct-13	14:03:23	Other	Stationary	90	55	20	325	50	40	22.3112	113.9609	1607.66	339.57
13-Oct-13	14:03:26	Other	Stationary	90	53	20	329	34	50	22.3120	113.9617	1668.97	343.31
13-Oct-13	14:03:33	Other	Stationary	90	51	0	334	2	40	22.3130	113.9628	1746.75	347.77
13-Oct-13	14:03:36	Other	Stationary	90	44	20	339	57	50	22.3156	113.9642	2015.61	353.69
13-Oct-13	14:03:39	Other	Stationary	90	40	50	345	21	40	22.3174	113.9661	2193.34	359.09
13-Oct-13	14:03:43	Other	Stationary	90	36	0	349	22	50	22.3201	113.9677	2498.57	3.11
13-Oct-13	14:03:48	Other	Stationary	90	30	20	352	2	30	22.3244	113.9693	2989.32	5.77
13-Oct-13	14:03:58	Other	Stationary	91	0	30	304	55	0	22.3075	113.9570	1468.43	318.65
13-Oct-13	14:04:03	Other	Stationary	90	53	30	307	34	50	22.3093	113.9563	1663.69	321.31
13-Oct-13	14:04:12	Other	Stationary	90	30	0	348	11	50	22.3248	113.9674	3024.44	1.93
13-Oct-13	14:04:16	Other	Stationary	90	30	20	352	2	10	22.3244	113.9693	2989.32	5.77
13-Oct-13	14:04:29	Other	Stationary	91	14	50	308	29	0	22.3060	113.9593	1184.39	322.21
13-Oct-13	14:04:33	Other	Stationary	91	15	50	310	42	30	22.3062	113.9598	1168.64	324.44
13-Oct-13	14:04:38	Other	Stationary	91	14	20	315	34	10	22.3068	113.9605	1192.43	329.30
13-Oct-13	14:04:42	Other	Stationary	91	14	20	317	46	50	22.3071	113.9609	1192.43	331.51
13-Oct-13	14:04:46	Other	Stationary	91	9	10	325	44	0	22.3084	113.9620	1282.40	339.46
13-Oct-13	14:04:49	Other	Stationary	91	9	10	326	59	30	22.3085	113.9623	1282.40	340.72
13-Oct-13	14:04:55	Other	Stationary	90	59	40	338	40	0	22.3109	113.9645	1489.22	352.40
13-Oct-13	14:05:01	Other	Stationary	91	1	0	340	16	10	22.3107	113.9649	1456.24	354.00
13-Oct-13	14:05:22	Other	Stationary	90	38	10	357	29	40	22.3184	113.9709	2351.69	11.22
13-Oct-13	14:05:26	Other	Stationary	90	38	10	358	36	0	22.3183	113.9713	2351.69	12.33
13-Oct-13	14:05:32	Other	Stationary	90	35	0	358	45	40	22.3202	113.9718	2572.87	12.49
13-Oct-13	14:05:37	Other	Stationary	90	36	0	359	55	0	22.3195	113.9721	2498.57	13.65
13-Oct-13	14:05:41	Other	Stationary	90	35	40	1	4	50	22.3196	113.9727	2522.85	14.81
13-Oct-13	14:05:44	Other	Stationary	90	35	40	2	38	20	22.3194	113.9733	2522.85	16.37
13-Oct-13	14:05:49	Other	Stationary	90	35	40	3	17	10	22.3193	113.9736	2522.85	17.02
13-Oct-13	14:05:58	Other	Stationary	90	33	10	7	44	0	22.3204	113.9761	2721.50	21.46
13-Oct-13	14:06:09	Other	Stationary	90	53	0	17	13	0	22.3106	113.9748	1679.65	30.95
13-Oct-13	14:06:13	Other	Stationary	90	54	0	17	58	40	22.3102	113.9748	1648.02	31.71
13-Oct-13	14:06:24	Other	Stationary	91	55	40	27	0	30	22.3028	113.9713	764.19	40.74
13-Oct-13	14:06:45	Other	Stationary	91	52	10	30	5	30	22.3027	113.9717	788.15	43.82
13-Oct-13	14:07:00	Other	Stationary	90	52	0	353	7	0	22.3129	113.9684	1712.54	6.85
13-Oct-13	14:07:04	Other	Stationary	90	52	30	355	18	50	22.3127	113.9690	1695.94	9.04
13-Oct-13	14:07:11	Other	Stationary	91	14	40	7	13	30	22.3076	113.9705	1187.06	20.95
13-Oct-13	14:07:14	Other	Stationary	91	14	40	9	33	10	22.3074	113.9710	1187.06	23.28
14-Oct-13	8:03:40	Other	Stationary	94	42	0	0	0	0	22.3002	113.9671	294.26	13.73
14-Oct-13	8:05:14	Other	Stationary	90	32	40	279	53	50	22.3070	113.9432	2601.06	293.63
14-Oct-13	8:05:21	Other	Stationary	90	32	40	284	39	0	22.3087	113.9441	2601.06	298.38
14-Oct-13	8:05:25	Other	Stationary	90	30	45	288	50	40	22.3110	113.9437	2771.22	302.57
14-Oct-13	8:05:30	Other	Stationary	90	32	20	292	11	45	22.3115	113.9457	2629.10	305.93
14-Oct-13	8:05:36	Other	Stationary	90	45	10	296	58	25	22.3085	113.9527	1861.45	310.70
14-Oct-13	8:05:42	Other	Stationary	90	55	20	303	35	20	22.3076	113.9564	1513.67	317.32
14-Oct-13	8:05:47	Other	Stationary	90	52	0	309	2	50	22.3092	113.9569	1612.31	322.78
14-Oct-13	8:05:55	Other	Stationary	90	56	55	315	57	10	22.3090	113.9592	1470.95	329.68
14-Oct-13	8:06:00	Other	Stationary	90	54	30	323	4	30	22.3103	113.9605	1537.17	336.80
14-Oct-13	8:06:04	Other	Stationary	90	51	0	330	51	45	22.3119	113.9621	1644.49	344.59
14-Oct-13	8:06:08	Other	Stationary	90	48	0	336	56	45	22.3132	113.9636	1749.28	350.68
14-Oct-13	8:06:13	Other	Stationary	90	41	40	342	39	15	22.3158	113.9652	2021.86	356.38
14-Oct-13	8:06:19	Other	Stationary	90	37	0	348	49	40	22.3182	113.9674	2285.16	2.56
14-Oct-13	8:06:27	Other	Stationary	90	30	5	352	13	0	22.3230	113.9693	2835.89	5.95
14-Oct-13	8:06:47	Other	Stationary	90	58	5	305	2	45	22.3074	113.9572	1440.99	318.78
14-Oct-13	8:06:56	Other	Stationary	90	50	50	308	6	50	22.3093	113.9565	1649.98	321.84
14-Oct-13	8:07:07	Other	Stationary	90	29	50	348	21	20	22.3233	113.9674	2860.94	2.09
14-Oct-13	8:07:11	Other	Stationary	90	29	50	352	13	45	22.3232	113.9693	2860.94	5.96
14-Oct-13	8:07:28	Other	Stationary	91	12	10	308	22	5	22.3058	113.9595	1156.96	322.10
14-Oct-13	8:07:32	Other	Stationary	91	12	10	310	32	30	22.3061	113.9598	1156.96	324.27
14-Oct-13	8:07:39	Other	Stationary	91	10	10	315	51	5	22.3069	113.9605	1190.25	329.58
14-Oct-13	8:07:42	Other	Stationary	91	10	10	318	2	35	22.3071	113.9609	1190.25	331.77
14-Oct-13	8:07:50	Other	Stationary	91	6	25	325	42	50	22.3082	113.9621	1258.15	339.44

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Oct-13	8:07:53	Other	Stationary	91	6	20	326	58	35	22.3083	113.9624	1259.75	340.71
14-Oct-13	8:07:58	Other	Stationary	90	58	5	338	34	15	22.3105	113.9645	1440.99	352.30
14-Oct-13	8:08:03	Other	Stationary	90	58	55	340	9	50	22.3103	113.9649	1420.34	353.89
14-Oct-13	8:08:20	Other	Stationary	90	34	45	1	3	50	22.3188	113.9725	2438.77	14.79
14-Oct-13	8:08:24	Other	Stationary	90	34	45	2	35	5	22.3187	113.9731	2438.77	16.31
14-Oct-13	8:08:29	Other	Stationary	90	32	40	2	17	40	22.3201	113.9734	2601.06	16.02
14-Oct-13	8:08:33	Other	Stationary	90	33	25	3	26	20	22.3195	113.9737	2540.15	17.17
14-Oct-13	8:08:37	Other	Stationary	90	35	5	3	17	35	22.3184	113.9733	2414.69	17.02
14-Oct-13	8:08:40	Other	Stationary	90	35	5	4	53	5	22.3182	113.9739	2414.69	18.61
14-Oct-13	8:08:45	Other	Stationary	90	32	50	6	7	10	22.3195	113.9749	2587.27	19.85
14-Oct-13	8:08:49	Other	Stationary	90	32	10	7	33	10	22.3198	113.9757	2643.36	21.28
14-Oct-13	8:08:52	Other	Stationary	90	34	35	6	49	15	22.3183	113.9748	2450.99	20.55
14-Oct-13	8:08:55	Other	Stationary	90	34	35	7	49	20	22.3181	113.9752	2450.99	21.55
14-Oct-13	8:09:06	Other	Stationary	90	52	30	17	17	35	22.3099	113.9744	1596.70	31.02
14-Oct-13	8:09:09	Other	Stationary	90	52	30	18	0	15	22.3098	113.9746	1596.70	31.73
14-Oct-13	8:09:20	Other	Stationary	91	53	25	26	59	40	22.3026	113.9711	734.11	40.72
14-Oct-13	8:09:25	Other	Stationary	91	49	35	30	3	25	22.3026	113.9715	759.90	43.79
14-Oct-13	8:09:51	Other	Stationary	90	49	55	353	0	30	22.3126	113.9683	1680.83	6.74
14-Oct-13	8:09:55	Other	Stationary	90	49	55	355	12	20	22.3126	113.9689	1680.83	8.94
14-Oct-13	8:10:02	Other	Stationary	91	13	25	7	6	0	22.3072	113.9703	1137.09	20.83
14-Oct-13	8:10:06	Other	Stationary	91	13	25	9	22	15	22.3070	113.9707	1137.09	23.10
14-Oct-13	8:10:34	Other	Stationary	91	11	15	299	20	50	22.3048	113.9581	1171.99	313.08
14-Oct-13	8:10:41	Other	Stationary	90	43	15	12	42	20	22.3133	113.9748	1945.95	26.44
14-Oct-13	8:10:56	Other	Stationary	90	37	40	356	56	0	22.3175	113.9704	2243.36	10.66
14-Oct-13	8:11:03	Other	Stationary	90	35	25	359	49	0	22.3185	113.9718	2391.10	13.55
14-Oct-13	8:11:39	Construction Boat	Travelling	90	59	55	299	47	50	22.3063	113.9566	1396.32	313.53
14-Oct-13	8:12:40	Transportation Boat	Travelling	90	59	45	311	9	5	22.3079	113.9586	1400.27	324.88
14-Oct-13	8:12:53	Construction Boat	Travelling	91	1	15	312	4	10	22.3078	113.9589	1365.54	325.80
14-Oct-13	8:13:03	Transportation Boat	Travelling	91	3	55	308	36	35	22.3069	113.9586	1307.91	322.34
14-Oct-13	8:13:51	Transportation Boat	Travelling	90	55	0	331	42	50	22.3109	113.9627	1522.98	345.44
14-Oct-13	8:14:07	Transportation Boat	Travelling	90	54	15	284	36	50	22.3042	113.9532	1544.37	298.34
14-Oct-13	8:14:14	Transportation Boat	Travelling	90	57	45	322	59	0	22.3096	113.9608	1449.42	336.71
14-Oct-13	8:14:19	Transportation Boat	Travelling	90	59	50	321	6	5	22.3090	113.9606	1398.29	334.83
14-Oct-13	8:15:09	Transportation Boat	Travelling	90	57	50	322	17	20	22.3095	113.9607	1447.31	336.02
14-Oct-13	8:15:14	Transportation Boat	Travelling	91	0	0	295	10	5	22.3055	113.9558	1394.36	308.90
14-Oct-13	8:15:22	Construction Boat	Travelling	90	55	0	334	58	15	22.3111	113.9635	1522.98	348.70
14-Oct-13	8:15:30	Transportation Boat	Travelling	90	53	30	331	19	15	22.3112	113.9625	1566.36	345.05
14-Oct-13	8:15:32	Transportation Boat	Travelling	90	55	25	332	35	15	22.3108	113.9629	1511.36	346.32
14-Oct-13	8:16:50	Transportation Boat	Travelling	91	0	30	288	2	30	22.3042	113.9550	1382.69	301.77
14-Oct-13	8:16:57	Transportation Boat	Travelling	90	53	30	305	5	5	22.3082	113.9564	1566.36	318.81
14-Oct-13	8:17:03	Transportation Boat	Travelling	90	59	50	307	25	45	22.3074	113.9579	1398.29	321.16
14-Oct-13	8:17:10	Construction Boat	Travelling	90	45	15	346	53	10	22.3143	113.9666	1857.94	0.62
14-Oct-13	8:17:16	Transportation Boat	Travelling	90	49	0	341	37	5	22.3130	113.9650	1712.88	355.35
14-Oct-13	8:17:20	Transportation Boat	Travelling	90	47	35	344	53	40	22.3135	113.9660	1764.91	358.62
14-Oct-13	8:17:52	Transportation Boat	Travelling	91	2	0	301	4	0	22.3062	113.9571	1348.82	314.80
14-Oct-13	8:18:00	Transportation Boat	Travelling	90	59	20	285	41	55	22.3039	113.9545	1410.23	299.43
14-Oct-13	8:18:35	Transportation Boat	Travelling	90	58	30	286	41	45	22.3041	113.9544	1430.59	300.43
14-Oct-13	8:18:40	Transportation Boat	Travelling	90	56	45	306	43	55	22.3079	113.9573	1475.33	320.46
14-Oct-13	8:18:45	Transportation Boat	Travelling	91	2	10	295	5	25	22.3052	113.9562	1345.16	308.82
14-Oct-13	8:18:52	Transportation Boat	Travelling	90	51	55	297	3	20	22.3071	113.9545	1614.95	310.79
14-Oct-13	8:19:33	Transportation Boat	Travelling	91	1	30	305	5	25	22.3068	113.9577	1359.92	318.82
14-Oct-13	8:19:36	Transportation Boat	Travelling	91	1	50	299	8	0	22.3059	113.9568	1352.50	312.86
14-Oct-13	8:22:28	Transportation Boat	Travelling	90	52	10	339	40	35	22.3120	113.9646	1607.07	353.41
14-Oct-13	8:22:35	Transportation Boat	Travelling	90	53	30	333	53	15	22.3114	113.9631	1566.36	347.62
14-Oct-13	8:24:30	Transportation Boat	Travelling	90	42	40	355	12	50	22.3152	113.9694	1973.24	8.94
14-Oct-13	8:24:35	Transportation Boat	Travelling	91	1	55	310	25	10	22.3075	113.9587	1350.66	324.15
14-Oct-13	8:26:41	Transportation Boat	Travelling	90	54	45	283	43	55	22.3040	113.9532	1530.04	297.46
14-Oct-13	8:30:00	Container Boat	Travelling	91	1	25	293	10	55	22.3050	113.9558	1361.79	306.91
14-Oct-13	8:30:25	Transportation Boat	Travelling	90	59	50	302	34	0	22.3067	113.9570	1398.29	316.30
14-Oct-13	8:31:51	Transportation Boat	Travelling	90	57	25	282	39	25	22.3035	113.9537	1457.96	296.39
14-Oct-13	8:32:03	Container Boat	Travelling	91	1	10	314	39	40	22.3081	113.9594	1367.43	328.39
14-Oct-13	8:34:46	Dumping Guide Boat	Travelling	91	36	0	18	20	20	22.3042	113.9709	867.99	32.07
14-Oct-13	8:34:59	Transportation Boat	Travelling	90	57	0	298	43	25	22.3065	113.9559	1468.77	312.45
14-Oct-13	8:35:04	Container Boat	Travelling	90	50	45	340	54	20	22.3124	113.9649	1652.73	354.64
14-Oct-13	8:36:21	Transportation Boat	Travelling	90	48	0	289	28	50	22.3062	113.9522	1749.28	303.21
14-Oct-13	8:36:37	Dumping Guide Boat	Travelling	92	32	0	7	1	45	22.3022	113.9683	547.18	20.76
14-Oct-13	8:37:58	Transportation Boat	Travelling	91	1	20	295	24	35	22.3054	113.9561	1363.67	309.14
14-Oct-13	8:38:02	Transportation Boat	Travelling	91	1	55	288	15	50	22.3041	113.9553	1350.66	301.99
14-Oct-13	8:38:16	Transportation Boat	Travelling	90	40	25	277	33	0	22.3044	113.9475	2086.16	291.28
14-Oct-13	8:38:34	Transportation Boat	Travelling	91	0	40	288	53	10	22.3043	113.9551	1378.84	302.62
14-Oct-13	8:38:39	Transportation Boat	Travelling	91	2	35	299	44	55	22.3059	113.9570	1336.10	313.48
14-Oct-13	8:38:51	Dumping Guide Boat	Stationary	94	45	55	337	5	30	22.3002	113.9659	290.21	350.82
14-Oct-13	8:39:01	Dumping Guide Boat	Travelling	91	1	25	27	50	55	22.3068	113.9752	1361.79	41.58
14-Oct-13	8:39:14	Transportation Boat	Travelling	90	59	55	281	1	10	22.3029	113.9541	1396.32	294.75
14-Oct-13	8:39:19	Transportation Boat	Travelling	90	54	55	306	53	50	22.3082	113.9570	1525.33	320.63
14-Oct-13	8:42:38	Dumping Guide Boat	Travelling	92	18	55	7	55	40	22.3026	113.9685	598.90	21.66
14-Oct-13	8:42:48	Transportation Boat	Travelling	90	44	45	346	56	50	22.3145	113.9666	1879.18	0.68
14-Oct-13	8:45:01	Transportation Boat	Travelling	90	57	0	327	32	50	22.3101	113.9618	1468.77	341.28
14-Oct-13	8:46:44	Transportation Boat	Travelling	91	2	35	306	14	10	22.3068	113.9580	1336.10	319.97
14-Oct-13	8:46:51	HSF High Speed Ferry	Travelling	90	47	55	342	6	50	22.3133	113.9652	1752.38	355.84
14-Oct-13	8:47:01	Dumping Guide Boat	Travelling	92	10	20	350	42	55	22.3033	113.9669	638.48	4.45
14-Oct-13	8:47:17	Dumping Guide Boat	Travelling	95	11	30	342	47	15	22.3000	113.9662	266.25	356.52
14-Oct-13	8:47:53	Transportation Boat	Travelling	91	1	35	290	40	40	22.3045	113.9555	1358.06	304.41
14-Oct-13	8:48:00	HSF High Speed Ferry	Travelling	90	55	45	329	5	5	22.3105	113.9621	1502.18	342.81
14-Oct-13	8:48:52	Transportation Boat	Travelling	90	57	15	278	55	25	22.3027	113.9533	1462.26	292.65
14-Oct-13	8:49:02	Dumping Guide Boat	Stationary	91	28	10	355	46	15	22.3060	113.9679	945.58	9.50
14-Oct-13	8:50:43	HSF High Speed Ferry	Travelling	90	58	40	286	53	35	22.3042	113.9545	1426.47	300.62
14-Oct-13	8:52:15	Fishing Boat	Non-operate and travelling	93	50	50	306	2	20	22.3001	113.9641	359.81	319.77
14-Oct-13	8:52:31	Dumping Guide Boat	Travelling	91	19	25	350	31	50	22.3076	113.9672	1115.91	4.26
14-Oct-13	8:53:27	Fishing Boat	Non-operate and travelling	94	29	35	340	21	10	22.3005	113.9661	326.98	354.08
14-Oct-13	8:54:05	Transportation Boat	Travelling	90	57	35	284	11	10	22.3041	113.9531	1544.50	297.92
14-Oct-13	8:54:10	Transportation Boat	Travelling	91	0	20	280	28	50	22.3031	113.9533	1473.12	294.21
14-Oct-13	8:55:36	Transportation Boat	Travelling	91	0	45	295	35	10	22.3060	113.9554	1462.88	309.32
14-Oct-13	8:55:51	Transportation Boat	Travelling	91	6	40	301	26	25	22.3061	113.9573	1331.54	315.17
14-Oct-13	8:56:05	Dumping Guide Boat	Travelling	90	52	20	352	4	10	22.3129	113.9681	1702.10	5.80
14-Oct-13	8:57:27	Transportation Boat	Travelling	90	55	50	306	34	10	22.3087	113.9565	1593.66	320.30
14-Oct-13	8:57:32	Transportation Boat	Travelling	91	1	10	322	42	0	22.3096	113.9607	1452.78	336.43
14-Oct-13	8:59:43	Transportation Boat	Travelling	90	48	25	341	52	55	22.3142	113.9650	1842.59	355.61
14-Oct-13	9:01:41	Ferry	Travelling	90	41	0	351	4	5	22.3172	113.9682	2185.02	4.80
14-Oct-13	9:03:34	Transportation Boat	Travelling	90	43	0	349	36	35	22.3163	113.9676	2080.59	3.34
14-Oct-13	9:03:41	Ferry	Travelling	90	51	35	337	59	55	22.3130	113.9640	1727.31	351.73
14-Oct-13	9:05:21	Speed Boat	Travelling	90	52	20	10	28	5	22.3116	113.9732	1702.10	24.20
14-Oct-13	9:05:32	Transportation Boat	Travelling	90	55	25	331	11	45	22.3116	113.9623	1605.83	344.93
14-Oct-13	9:05:37	Ferry	Travelling	91	0	45	317	45	10	22.3092	113.9596	1462.88	331.48
14-Oct-13	9:05:48	Speed Boat	Travelling	91	2	15	1	47	45	22.3100	113.9701	1427.18	15.53
14-Oct-13	9:07:00	Speed Boat	Travelling	91	26	20	320	2	35	22.3059	113.9620	1025.88	333.77
14-Oct-13	9:07:10	Transportation Boat	Travelling	91	1	30	308	3	5	22.3078	113.9577	1444.81	321.78
14-Oct-13	9:07:17	Ferry	Travelling	91	1	40	296	50	25	22.3061	113.9558	1440.85	310.57
14-Oct-13	9:09:08	Transportation Boat	Travelling	90	54	55	279	37	30	22.3034	113.9519	1620.69	293.35
14-Oct-13	9:13:00	Dumping Guide Boat	Travelling	92	5	10	352	37	20	22.3039	113.9672	706.24	6.35
14-Oct-13	9:13:09	Speed Boat	Travelling	93	9	15	358	37	45	22.3017	113.9674	466.43	12.36
14-Oct-13	9:13:26	Construction Boat	Travelling	90	45	25	351	6	25	22.3153	113.9680	1967.14	4.84
14-Oct-13	9:14:47	Dumping Guide Boat	Stationary	92	45	40	359	24	20	22.3023	113.9676	533.06	13.14
14-Oct-13	9:14:57	Speed Boat	Stationary	92	40	0	359	52	55	22.3024	113.9677	552.00	13.61
14-Oct-13	9:15:16	Construction Boat	Travelling	90	52	15	340	11	30	22.3129	113.9646	1704.87	353.92
14-Oct-13	9:17:15	Dumping Guide Boat	Travelling	92	22	30	334	10	20	22.3031	113.9651	620.04	347.90
14-Oct-13	9:18:31	Construction Boat	Travelling	91	1	0	313	44	55	22.3087	113.9588	1456.81	327.48

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Oct-13	9:18:37	Dumping Guide Boat	Travelling	91	43	45	322	45	35	22.3047	113.9631	852.74	336.49
14-Oct-13	9:19:48	Dumping Guide Boat	Stationary	91	47	15	325	42	0	22.3046	113.9636	824.77	339.43
14-Oct-13	9:20:27	Construction Boat	Travelling	90	49	20	304	32	40	22.3098	113.9547	1807.65	318.27
14-Oct-13	9:20:38	Tug Boat	Travelling	91	29	40	1	37	30	22.3062	113.9689	987.49	15.35
14-Oct-13	9:21:45	Transportation Boat	Travelling	90	59	5	280	53	20	22.3033	113.9531	1504.72	294.62
14-Oct-13	9:23:51	Tug Boat	Travelling	91	11	25	11	46	20	22.3077	113.9716	1242.08	25.50
14-Oct-13	9:24:00	Transportation Boat	Travelling	91	2	30	292	25	50	22.3052	113.9552	1421.40	306.16
14-Oct-13	9:24:29	Transportation Boat	Travelling	90	58	0	284	17	55	22.3041	113.9532	1533.24	298.03
14-Oct-13	9:26:06	Dumping Guide Boat	Travelling	91	35	25	329	49	10	22.3056	113.9638	927.63	343.55
14-Oct-13	9:26:11	Transportation Boat	Travelling	91	1	25	304	8	55	22.3073	113.9570	1446.79	317.88
14-Oct-13	9:26:18	Transportation Boat	Travelling	91	1	25	298	47	45	22.3064	113.9560	1446.79	312.53
14-Oct-13	9:27:52	Transportation Boat	Travelling	90	55	0	305	50	5	22.3087	113.9562	1618.20	319.56
14-Oct-13	9:27:55	Transportation Boat	Travelling	90	55	0	306	21	5	22.3088	113.9563	1618.20	320.08
14-Oct-13	9:28:04	Dumping Guide Boat	Travelling	91	8	5	345	13	40	22.3093	113.9662	1303.53	358.96
14-Oct-13	9:28:11	Tug Boat	Stationary	91	15	40	11	20	5	22.3072	113.9712	1171.69	25.06
14-Oct-13	9:30:49	Transportation Boat	Travelling	91	1	5	303	11	20	22.3072	113.9567	1454.79	316.92
14-Oct-13	9:30:58	Dumping Guide Boat	Travelling	90	44	45	352	45	55	22.3155	113.9686	1997.16	6.50
14-Oct-13	9:32:50	Transportation Boat	Travelling	90	59	25	286	57	30	22.3045	113.9539	1496.16	300.69
14-Oct-13	9:35:37	Transportation Boat	Travelling	91	0	25	289	6	35	22.3048	113.9544	1471.06	302.84
14-Oct-13	9:35:44	Transportation Boat	Travelling	90	52	0	347	24	10	22.3130	113.9667	1713.21	1.13
14-Oct-13	9:37:33	Transportation Boat	Travelling	90	53	25	306	41	5	22.3092	113.9561	1666.98	320.41
14-Oct-13	9:37:39	Transportation Boat	Travelling	91	8	30	343	27	15	22.3093	113.9658	1295.52	357.18
14-Oct-13	9:40:12	Transportation Boat	Stationary	91	34	45	334	31	15	22.3059	113.9645	934.20	348.25
14-Oct-13	9:42:31	Transportation Boat	Travelling	91	47	15	336	24	40	22.3049	113.9650	824.77	350.14
14-Oct-13	9:42:42	Tug Boat	Stationary	90	51	50	359	8	0	22.3127	113.9701	1718.82	12.86
14-Oct-13	9:44:00	Transportation Boat	Travelling	91	2	5	290	49	0	22.3049	113.9549	1431.06	304.55
14-Oct-13	9:44:50	Transportation Boat	Travelling	91	3	25	304	45	50	22.3071	113.9574	1400.60	318.49
14-Oct-13	9:45:15	Transportation Boat	Travelling	90	54	10	337	28	0	22.3122	113.9640	1643.51	351.20
14-Oct-13	9:45:40	Transportation Boat	Stationary	94	15	40	4	51	50	22.3006	113.9675	344.87	18.59
14-Oct-13	9:45:55	Transportation Boat	Travelling	90	49	45	304	18	55	22.3096	113.9547	1792.21	318.05
14-Oct-13	9:46:02	Transportation Boat	Travelling	90	57	20	332	3	45	22.3112	113.9627	1551.33	345.79
14-Oct-13	9:46:10	Container Boat	Travelling	91	12	35	302	54	25	22.3056	113.9582	1221.93	316.64
14-Oct-13	9:47:29	Speed Boat	Travelling	91	9	20	359	21	50	22.3088	113.9692	1279.79	13.09
14-Oct-13	9:47:42	Container Boat	Travelling	91	10	10	312	6	5	22.3070	113.9595	1264.43	325.83
14-Oct-13	9:47:48	Transportation Boat	Travelling	91	2	10	318	8	0	22.3090	113.9598	1429.11	331.86
14-Oct-13	9:48:54	Speed Boat	Travelling	92	2	5	328	53	55	22.3038	113.9643	724.15	342.63
14-Oct-13	9:49:22	Transportation Boat	Travelling	92	43	45	326	8	55	22.3022	113.9646	539.32	339.88
14-Oct-13	9:49:28	Transportation Boat	Travelling	91	5	40	303	17	25	22.3065	113.9574	1352.05	317.02
14-Oct-13	9:49:32	Transportation Boat	Travelling	91	0	35	284	7	55	22.3038	113.9538	1466.96	297.86
14-Oct-13	9:50:39	Transportation Boat	Travelling	91	2	20	298	11	35	22.3062	113.9561	1425.24	311.92
14-Oct-13	9:50:47	Fishing Boat	Operate and Travelling	91	49	55	300	18	25	22.3027	113.9608	804.67	314.04
14-Oct-13	9:50:59	Transportation Boat	Travelling	91	43	55	310	23	25	22.3038	113.9615	851.36	324.12
14-Oct-13	9:51:50	Transportation Boat	Travelling	90	58	45	283	33	0	22.3039	113.9533	1513.38	297.28
14-Oct-13	9:52:01	Transportation Boat	Travelling	90	52	20	306	6	10	22.3093	113.9557	1702.10	319.83
14-Oct-13	9:52:07	Transportation Boat	Travelling	91	21	20	305	32	20	22.3050	113.9595	1089.41	319.27
14-Oct-13	9:53:24	Fishing Boat	Operate and stationary	91	46	5	298	6	40	22.3026	113.9604	833.89	311.84
14-Oct-13	9:53:50	Transportation Boat	Travelling	91	1	5	292	23	15	22.3053	113.9550	1454.79	306.12
14-Oct-13	9:53:56	Transportation Boat	Travelling	91	1	0	299	19	15	22.3066	113.9560	1456.81	313.05
14-Oct-13	9:55:30	Transportation Boat	Stationary	90	51	45	295	5	35	22.3073	113.9534	1721.64	308.82
14-Oct-13	9:55:35	Transportation Boat	Travelling	91	1	50	303	49	55	22.3072	113.9570	1436.92	317.56
14-Oct-13	9:56:53	Transportation Boat	Travelling	90	55	15	306	45	0	22.3088	113.9564	1610.76	320.48
14-Oct-13	9:57:41	Transportation Boat	Travelling	90	55	50	283	53	10	22.3043	113.9527	1593.66	297.62
14-Oct-13	9:59:49	Transportation Boat	Travelling	90	59	25	308	23	15	22.3082	113.9575	1496.16	322.12
14-Oct-13	10:07:54	Transportation Boat	Travelling	90	57	30	306	7	30	22.3083	113.9567	1546.77	319.85
14-Oct-13	10:08:43	Transportation Boat	Travelling	91	4	0	299	39	10	22.3062	113.9566	1387.68	313.38
14-Oct-13	10:09:32	Transportation Boat	Travelling	91	1	45	305	36	15	22.3074	113.9573	1438.88	319.33
14-Oct-13	10:09:38	Transportation Boat	Travelling	91	2	35	287	43	40	22.3043	113.9546	1419.48	301.46
14-Oct-13	10:09:45	HSF High Speed Ferry	Travelling	90	57	20	281	45	10	22.3036	113.9528	1551.33	295.48
14-Oct-13	10:09:54	Fishing Boat	Operate and stationary	91	26	55	281	34	20	22.3015	113.9574	1018.94	295.30
14-Oct-13	10:10:02	Transportation Boat	Travelling	91	1	20	300	54	15	22.3068	113.9564	1448.79	314.63
14-Oct-13	10:10:29	Transportation Boat	Travelling	90	57	55	278	9	20	22.3028	113.9525	1535.48	291.89
14-Oct-13	10:10:41	HSF High Speed Ferry	Travelling	91	3	55	298	27	45	22.3060	113.9564	1389.51	312.19
14-Oct-13	10:12:42	Transportation Boat	Travelling	90	49	35	276	27	0	22.3032	113.9500	1798.35	290.18
14-Oct-13	10:12:49	HSF High Speed Ferry	Travelling	90	53	20	337	13	40	22.3125	113.9638	1669.63	350.96
14-Oct-13	10:14:24	HSF High Speed Ferry	Travelling	90	39	45	351	17	40	22.3178	113.9683	2255.87	5.02
14-Oct-13	10:18:08	Transportation Boat	Travelling	91	2	55	296	50	10	22.3059	113.9560	1411.87	310.57
14-Oct-13	10:19:28	Transportation Boat	Travelling	90	59	25	280	39	55	22.3032	113.9531	1496.16	294.40
14-Oct-13	10:25:00	Transportation Boat	Travelling	91	0	35	287	39	55	22.3045	113.9542	1466.96	301.40
14-Oct-13	10:26:08	Transportation Boat	Travelling	91	4	20	301	7	50	22.3064	113.9569	1380.40	314.86
14-Oct-13	10:26:15	Construction Boat	Travelling	90	56	30	306	15	10	22.3085	113.9566	1574.56	319.98
14-Oct-13	10:27:36	Transportation Boat	Travelling	91	2	45	319	18	55	22.3090	113.9602	1415.66	333.05
14-Oct-13	10:28:09	Construction Boat	Travelling	91	1	50	317	16	35	22.3089	113.9596	1436.92	331.01
14-Oct-13	10:29:55	Transportation Boat	Travelling	90	51	55	342	39	15	22.3130	113.9653	1716.01	356.38
14-Oct-13	10:30:04	Construction Boat	Travelling	90	58	20	329	41	45	22.3108	113.9622	1524.35	343.43
14-Oct-13	10:33:57	Transportation Boat	Travelling	91	42	0	293	11	50	22.3023	113.9597	867.44	306.93
14-Oct-13	10:34:05	Construction Boat	Travelling	90	48	45	350	53	10	22.3140	113.9678	1829.73	4.62
14-Oct-13	10:36:27	Transportation Boat	Travelling	92	42	35	332	43	50	22.3024	113.9652	543.20	346.46
14-Oct-13	10:37:41	Transportation Boat	Travelling	91	7	0	288	47	20	22.3040	113.9555	1324.84	302.52
14-Oct-13	10:37:55	Fishing Boat	Operate and stationary	91	50	40	292	13	25	22.3018	113.9601	799.19	305.95
14-Oct-13	10:38:06	Transportation Boat	Travelling	94	58	0	357	54	0	22.3002	113.9670	295.65	11.63
14-Oct-13	10:39:20	Transportation Boat	Travelling	91	23	25	312	0	15	22.3055	113.9606	1062.00	325.73
14-Oct-13	10:39:52	Transportation Boat	Travelling	91	1	10	293	4	50	22.3055	113.9551	1452.78	306.81
14-Oct-13	10:41:00	Transportation Boat	Travelling	91	19	5	341	46	35	22.3077	113.9655	1120.66	355.51
14-Oct-13	10:41:06	Transportation Boat	Travelling	91	2	40	306	3	10	22.3074	113.9575	1417.57	319.78
14-Oct-13	10:53:04	Transportation Boat	Travelling	91	22	0	332	31	25	22.3071	113.9639	1080.49	346.25
14-Oct-13	10:53:09	Transportation Boat	Travelling	91	22	0	345	47	20	22.3073	113.9663	1080.49	359.52
14-Oct-13	10:54:36	Transportation Boat	Travelling	91	22	20	307	20	30	22.3052	113.9598	1076.08	321.07
14-Oct-13	10:54:42	Transportation Boat	Travelling	92	3	40	346	35	50	22.3041	113.9664	714.84	0.33
14-Oct-13	10:56:35	Transportation Boat	Travelling	91	5	50	282	29	25	22.3030	113.9546	1348.58	296.22
14-Oct-13	10:56:44	Transportation Boat	Travelling	94	44	50	358	30	10	22.3003	113.9670	309.39	12.23
14-Oct-13	10:56:56	Transportation Boat	Travelling	91	2	40	297	13	55	22.3060	113.9560	1417.57	310.96
14-Oct-13	10:58:23	Transportation Boat	Stationary	95	42	15	3	24	25	22.2998	113.9671	257.20	17.14
14-Oct-13	10:58:32	Transportation Boat	Travelling	91	1	10	284	55	25	22.3039	113.9540	1452.78	298.65
14-Oct-13	10:59:41	Transportation Boat	Travelling	90	57	0	277	4	30	22.3026	113.9522	1560.54	290.80
14-Oct-13	11:04:48	Ferry	Travelling	90	46	40	343	30	50	22.3148	113.9655	1913.23	357.24
14-Oct-13	11:06:15	Ferry	Travelling	90	55	25	332	21	50	22.3116	113.9626	1605.83	346.09
14-Oct-13	11:08:55	Ferry	Travelling	91	2	30	300	2	15	22.3065	113.9564	1421.40	313.77
14-Oct-13	11:09:51	Transportation Boat	Travelling	91	3	25	300	35	40	22.3064	113.9567	1400.60	314.32
14-Oct-13	11:10:58	Transportation Boat	Travelling	91	3	25	291	51	20	22.3050	113.9553	1400.60	305.59
14-Oct-13	11:11:03	Ferry	Travelling	90	54	40	275	49	0	22.3025	113.9515	1628.23	289.55
14-Oct-13	11:12:12	Transportation Boat	Travelling	90	49	5	342	54	10	22.3139	113.9654	1817.05	356.63
14-Oct-13	11:12:25	Transportation Boat	Travelling	90	59	45	281	9	45	22.3033	113.9533	1487.70	294.89
14-Oct-13	11:13:37	Transportation Boat	Travelling	90	58	50	328	54	5	22.3106	113.9620	1511.21	342.63
14-Oct-13	11:14:39	Transportation Boat	Travelling	90	58	40	306	24	40	22.3081	113.9570	1515.56	320.14
14-Oct-13	11:15:10	Transportation Boat	Travelling	91	5	50	307	31	50	22.3071	113.9582	1348.58	321.26
14-Oct-13	11:15:15	Transportation Boat	Travelling	91	4	5	302	13	15	22.3066	113.9570	1385.85	315.95
14-Oct-13	11:15:20	Transportation Boat	Travelling	90	59	30	306	12	55	22.3079	113.9570	1494.04	319.95
14-Oct-13	11:15:54	Transportation Boat	Travelling	91	2	50	296	14	30	22.3058	113.9559	1413.76	309.97
14-Oct-13	11:15:58	Transportation Boat	Travelling	91	3	35	292	26	30	22.3050	113.9554	1396.88	306.17
14-Oct-13	11:16:03	Transportation Boat	Travelling	91	4	15	298	28	50	22.3060	113.9564	1382.21	312.21
14-Oct-13	11:16:50	Transportation Boat	Travelling	90	57	55	283	45	25	22.3040	113.9532	1535.48	297.49
14-Oct-13	11:16:54	Transportation Boat	Travelling	90	58	55	280	49	45	22.3033	113.9530	1509.04	294.56
14-Oct-13	11:16:57	Transportation Boat	Travelling	91	0	0	286	9	45	22.3043	113.9539	1481.42	299.89
14-Oct-13	11:17:03	HSF High Speed Ferry	Travelling	90	45	25	344	42	0	22.3153	113.9659	1967.14	358.43
14-Oct-13	11:18:38	Transportation Boat	Travelling	90	59	10	281	57	15	22.3035	113.9532	1502.57	295.68
14-Oct-13	11:18:44	HSF High Speed Ferry	Travelling	90	55	30	332	29	30	22.3116	113.9627	1603.38	346.22
14-Oct-13	11:19:53	Transportation Boat	Travelling	91	4	30	297	0	0	22.3057	113.9563	1376.79	310.73

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Oct-13	11:19:59	HSF High Speed Ferry	Travelling	91	0	55	320	42	15	22.3095	113.9603	1458.83	334.43
14-Oct-13	11:20:49	Transportation Boat	Travelling	90	59	50	306	54	15	22.3080	113.9572	1485.60	320.63
14-Oct-13	11:22:10	HSF High Speed Ferry	Travelling	91	2	25	299	23	15	22.3064	113.9563	1423.32	313.12
14-Oct-13	11:23:23	HSF High Speed Ferry	Travelling	90	59	30	287	11	45	22.3045	113.9539	1494.04	300.93
14-Oct-13	11:26:08	Container Boat	Travelling	91	1	40	306	26	50	22.3076	113.9574	1440.85	320.18
14-Oct-13	11:27:27	Speed Boat	Travelling	91	11	20	287	52	55	22.3035	113.9561	1243.55	301.61
14-Oct-13	11:27:33	Container Boat	Travelling	91	10	40	305	25	0	22.3062	113.9584	1255.40	319.15
14-Oct-13	11:28:26	Speed Boat	Travelling	91	8	55	295	4	40	22.3049	113.9566	1287.60	308.81
14-Oct-13	11:28:34	Speed Boat	Travelling	91	29	20	31	55	5	22.3039	113.9733	991.20	45.65
14-Oct-13	11:28:43	Speed Boat	Travelling	91	3	45	302	23	55	22.3067	113.9570	1393.18	316.13
14-Oct-13	11:28:47	Speed Boat	Travelling	91	11	40	283	47	10	22.3028	113.9557	1237.71	297.52
14-Oct-13	11:28:55	Speed Boat	Travelling	91	10	10	279	10	35	22.3020	113.9551	1264.43	292.91
14-Oct-13	11:29:05	Transportation Boat	Travelling	91	3	40	296	40	5	22.3058	113.9561	1395.03	310.40
14-Oct-13	11:29:15	Speed Boat	Travelling	91	47	10	23	27	15	22.3035	113.9713	825.42	37.18
14-Oct-13	11:29:24	Speed Boat	Travelling	90	57	10	305	22	40	22.3082	113.9565	1555.92	319.11
14-Oct-13	11:29:33	Container Boat	Stationary	91	16	35	301	11	30	22.3050	113.9584	1157.55	314.92
14-Oct-13	11:30:05	Transportation Boat	Travelling	91	0	35	284	52	5	22.3039	113.9539	1466.96	298.60
14-Oct-13	11:30:14	Transportation Boat	Travelling	90	58	15	286	26	20	22.3045	113.9536	1526.56	300.17
14-Oct-13	11:30:23	Speed Boat	Travelling	93	1	30	1	56	30	22.3018	113.9677	486.41	15.67
14-Oct-13	11:31:03	Transportation Boat	Travelling	90	54	55	280	7	0	22.3035	113.9520	1620.69	293.85
14-Oct-13	11:31:19	Transportation Boat	Travelling	91	3	15	294	25	30	22.3054	113.9557	1404.33	308.15
14-Oct-13	11:31:24	Transportation Boat	Travelling	91	3	20	288	32	50	22.3044	113.9549	1402.46	302.28
14-Oct-13	11:31:31	Speed Boat	Travelling	95	10	0	309	17	55	22.2997	113.9647	284.14	323.03
14-Oct-13	11:32:20	Transportation Boat	Travelling	90	58	0	307	27	10	22.3084	113.9571	1533.24	321.18
14-Oct-13	11:32:26	Transportation Boat	Travelling	91	2	50	303	26	35	22.3070	113.9571	1413.76	317.17
14-Oct-13	11:32:28	Transportation Boat	Travelling	91	6	15	303	18	30	22.3064	113.9575	1340.01	317.04
14-Oct-13	11:32:38	Speed Boat	Travelling	92	33	35	285	36	20	22.3002	113.9615	575.14	299.34
14-Oct-13	11:33:35	Transportation Boat	Travelling	90	55	50	305	19	0	22.3085	113.9562	1593.66	319.05
14-Oct-13	11:33:43	Transportation Boat	Travelling	91	4	5	314	25	50	22.3082	113.9593	1385.85	328.16
14-Oct-13	11:33:52	Transportation Boat	Travelling	91	8	10	308	44	10	22.3069	113.9587	1301.92	322.47
14-Oct-13	11:34:51	Transportation Boat	Travelling	91	0	0	329	17	0	22.3104	113.9622	1481.42	343.01
14-Oct-13	11:34:56	Transportation Boat	Travelling	91	4	15	295	57	45	22.3056	113.9561	1382.21	309.69
14-Oct-13	11:36:41	Transportation Boat	Travelling	90	56	10	278	9	55	22.3029	113.9521	1584.05	291.90
14-Oct-13	11:36:47	Transportation Boat	Travelling	90	46	20	344	46	0	22.3150	113.9659	1927.31	358.50
14-Oct-13	11:38:49	Transportation Boat	Travelling	91	3	25	306	15	30	22.3073	113.9576	1400.60	319.99
14-Oct-13	11:39:57	Transportation Boat	Stationary	91	13	35	299	10	10	22.3050	113.9578	1205.17	312.90
14-Oct-13	11:40:05	Transportation Boat	Travelling	91	2	25	304	46	0	22.3072	113.9572	1423.32	318.50
14-Oct-13	11:41:24	Transportation Boat	Travelling	90	58	15	282	55	20	22.3038	113.9531	1526.56	296.65
14-Oct-13	11:41:39	Transportation Boat	Travelling	90	56	50	279	14	5	22.3031	113.9524	1565.19	292.96
14-Oct-13	11:46:46	Other	Stationary	94	42	55	0	0	0	22.3003	113.9671	311.50	13.73
14-Oct-13	11:46:56	Speed Boat	Travelling	91	21	35	287	58	15	22.3028	113.9574	1086.05	301.70
14-Oct-13	11:47:02	Transportation Boat	Travelling	90	59	5	286	44	45	22.3045	113.9538	1504.72	300.48
14-Oct-13	11:48:02	Speed Boat	Travelling	91	47	25	299	30	5	22.3027	113.9606	823.49	313.23
14-Oct-13	11:48:08	Transportation Boat	Travelling	91	3	10	296	28	45	22.3058	113.9560	1406.21	310.21
14-Oct-13	11:49:05	Speed Boat	Travelling	91	52	30	318	22	55	22.3039	113.9628	786.11	332.11
14-Oct-13	11:49:13	Transportation Boat	Travelling	91	3	40	307	36	45	22.3074	113.9579	1395.03	321.34
14-Oct-13	11:50:27	Speed Boat	Travelling	91	51	5	353	46	5	22.3047	113.9674	796.18	7.50
14-Oct-13	11:50:34	Transportation Boat	Travelling	91	2	0	320	56	30	22.3093	113.9604	1433.01	334.67
14-Oct-13	11:50:46	Transportation Boat	Travelling	90	59	40	281	44	25	22.3034	113.9533	1489.81	295.47
14-Oct-13	11:51:37	Speed Boat	Travelling	91	24	45	19	47	0	22.3055	113.9720	1045.18	33.51
14-Oct-13	11:51:44	Transportation Boat	Travelling	90	56	55	331	10	50	22.3112	113.9624	1562.86	344.91
14-Oct-13	11:51:52	Transportation Boat	Travelling	91	3	25	293	21	5	22.3052	113.9555	1400.60	307.08
14-Oct-13	11:53:08	Transportation Boat	Travelling	90	51	5	340	43	30	22.3132	113.9648	1744.53	354.45
14-Oct-13	11:53:14	Transportation Boat	Travelling	90	59	55	306	16	0	22.3078	113.9571	1483.51	320.00
14-Oct-13	12:06:54	Speed Boat	Travelling	91	0	0	305	40	40	22.3077	113.9570	1481.42	319.41
14-Oct-13	12:07:58	Speed Boat	Travelling	91	5	15	291	46	0	22.3047	113.9556	1360.78	305.50
14-Oct-13	12:15:47	HSF High Speed Ferry	Travelling	90	59	55	283	6	45	22.3036	113.9535	1483.51	296.84
14-Oct-13	12:17:11	Transportation Boat	Travelling	90	59	45	280	14	55	22.3031	113.9532	1487.70	293.98
14-Oct-13	12:17:23	HSF High Speed Ferry	Travelling	90	57	10	281	46	55	22.3036	113.9527	1555.92	295.51
14-Oct-13	12:17:42	HSF High Speed Ferry	Travelling	91	3	20	318	48	30	22.3088	113.9601	1402.46	332.54
14-Oct-13	12:18:11	HSF High Speed Ferry	Travelling	91	1	0	327	31	0	22.3100	113.9618	1456.81	341.25
14-Oct-13	12:18:15	HSF High Speed Ferry	Travelling	91	1	25	291	30	45	22.3051	113.9549	1446.79	305.24
14-Oct-13	12:18:30	Transportation Boat	Travelling	91	3	55	293	36	50	22.3052	113.9557	1389.51	307.34
14-Oct-13	12:19:18	HSF High Speed Ferry	Travelling	90	50	35	343	8	40	22.3135	113.9655	1762.11	356.87
14-Oct-13	12:19:23	HSF High Speed Ferry	Travelling	91	3	55	305	37	30	22.3071	113.9576	1389.51	319.35
14-Oct-13	12:19:29	Transportation Boat	Travelling	91	5	15	303	32	45	22.3066	113.9574	1360.78	317.28
14-Oct-13	12:20:30	Transportation Boat	Travelling	90	57	15	306	42	10	22.3084	113.9568	1553.62	320.43
14-Oct-13	12:21:19	HSF High Speed Ferry	Travelling	90	59	15	328	49	5	22.3105	113.9620	1500.43	342.55
14-Oct-13	12:23:12	HSF High Speed Ferry	Travelling	90	48	55	345	8	45	22.3140	113.9661	1823.36	358.88
14-Oct-13	12:27:28	Transportation Boat	Travelling	91	0	40	286	22	20	22.3042	113.9541	1464.92	300.10
14-Oct-13	12:28:23	Transportation Boat	Travelling	91	16	15	279	50	35	22.3018	113.9560	1162.65	293.57
14-Oct-13	12:28:30	Transportation Boat	Travelling	91	2	55	294	37	45	22.3055	113.9556	1411.87	308.36
14-Oct-13	12:29:50	Transportation Boat	Travelling	91	31	10	292	33	35	22.3028	113.9588	971.14	306.29
14-Oct-13	12:29:55	Transportation Boat	Travelling	91	2	10	305	44	45	22.3074	113.9574	1429.11	319.48
14-Oct-13	12:31:03	Transportation Boat	Travelling	91	42	40	307	23	10	22.3037	113.9611	861.78	321.12
14-Oct-13	12:32:31	Transportation Boat	Travelling	91	44	30	328	42	5	22.3049	113.9639	846.58	342.43
14-Oct-13	12:34:47	Transportation Boat	Travelling	91	24	10	356	13	20	22.3069	113.9682	1052.47	9.95
14-Oct-13	12:38:58	Transportation Boat	Travelling	91	0	0	279	58	30	22.3030	113.9532	1481.42	293.70
14-Oct-13	12:40:05	Transportation Boat	Travelling	91	2	45	292	10	10	22.3051	113.9552	1415.66	305.90
14-Oct-13	12:40:36	Dumping Guide Boat	Travelling	91	28	55	7	36	5	22.3060	113.9699	995.87	21.33
14-Oct-13	12:41:19	Transportation Boat	Travelling	91	1	25	305	56	15	22.3075	113.9573	1446.79	319.67
14-Oct-13	12:41:32	Dumping Guide Boat	Stationary	91	25	40	11	18	30	22.3060	113.9707	1033.91	25.04
14-Oct-13	12:44:57	HSF High Speed Ferry	Travelling	90	44	55	345	50	55	22.3155	113.9663	1989.57	359.58
14-Oct-13	12:46:03	HSF High Speed Ferry	Travelling	90	54	30	333	9	50	22.3119	113.9628	1633.29	346.89
14-Oct-13	12:47:48	HSF High Speed Ferry	Travelling	91	4	45	300	41	5	22.3063	113.9569	1371.41	314.41
14-Oct-13	12:48:51	HSF High Speed Ferry	Travelling	90	57	50	280	37	20	22.3033	113.9528	1537.72	294.35
14-Oct-13	12:50:10	Government Boat	Travelling	90	55	5	329	29	0	22.3115	113.9619	1615.71	343.21
14-Oct-13	12:50:41	Government Boat	Travelling	91	0	15	315	39	55	22.3090	113.9591	1475.19	329.40
14-Oct-13	12:51:25	Government Boat	Travelling	91	0	55	299	10	30	22.3066	113.9560	1458.83	312.90
14-Oct-13	12:52:09	Government Boat	Travelling	90	59	55	289	43	25	22.3050	113.9544	1483.51	303.45
14-Oct-13	12:52:24	Government Boat	Travelling	90	58	5	282	9	40	22.3036	113.9530	1531.01	295.89
14-Oct-13	12:53:05	Transportation Boat	Travelling	90	51	50	6	4	10	22.3122	113.9721	1718.82	19.80
14-Oct-13	12:54:06	Transportation Boat	Travelling	91	2	35	357	39	30	22.3101	113.9691	1419.48	11.39
14-Oct-13	12:55:24	Transportation Boat	Travelling	91	16	40	339	54	5	22.3080	113.9652	1156.28	353.63
14-Oct-13	12:56:51	Transportation Boat	Travelling	91	27	0	312	23	5	22.3052	113.9609	1017.96	326.11
14-Oct-13	12:57:35	Speed Boat	Travelling	91	2	45	302	24	45	22.3068	113.9569	1415.66	316.14
14-Oct-13	12:58:06	Speed Boat	Travelling	91	2	50	294	12	55	22.3054	113.9556	1413.76	307.95
14-Oct-13	12:58:13	Transportation Boat	Travelling	91	10	15	287	12	35	22.3035	113.9559	1262.92	300.94
14-Oct-13	12:59:26	Speed Boat	Travelling	90	57	35	274	29	20	22.3020	113.9521	1544.50	288.22
14-Oct-13	13:07:35	Ferry	Travelling	90	45	25	347	35	55	22.3153	113.9668	1967.14	1.33
14-Oct-13	13:08:25	Transportation Boat	Travelling	90	58	25	283	47	5	22.3039	113.9533	1522.14	297.51
14-Oct-13	13:08:34	Ferry	Travelling	90	50	0	340	23	55	22.3136	113.9646	1783.07	354.13
14-Oct-13	13:09:28	Transportation Boat	Travelling	91	3	25	300	45	20	22.3065	113.9567	1400.60	314.49
14-Oct-13	13:09:58	Transportation Boat	Travelling	90	58	30	306	1	45	22.3081	113.9568	1519.94	319.76
14-Oct-13	13:10:05	Ferry	Travelling	90	57	45	326	4	10	22.3106	113.9612	1539.97	339.80
14-Oct-13	13:11:59	Ferry	Travelling	91	2	25	302	48	50	22.3069	113.9569	1423.32	316.54
14-Oct-13	13:14:09	Ferry	Travelling	90	55	0	277	54	20	22.3030	113.9518	1618.20	291.64
14-Oct-13	13:16:53	Transportation Boat	Travelling	90	57	25	306	57	0	22.3084	113.9569	1549.05	320.68
14-Oct-13	13:18:29	Transportation Boat	Travelling	91	2	25	294	6	10	22.3055	113.9555	1423.32	307.83
14-Oct-13	13:19:57	Transportation Boat	Travelling	90	58	40	279	1	20	22.3029	113.9528	1515.56	292.75
14-Oct-13	13:26:48	Fishing Boat	Non-operate and travelling	91	15	45	283	37	15	22.3025	113.9563	1170.39	297.35
14-Oct-13	13:29:06	Fishing Boat	Non-operate and stationary	91	30	25	296	25	5	22.3033	113.9591	979.25	310.15
14-Oct-13	13:29:20	Transportation Boat	Travelling	90	59	10	283	28	0	22.3038	113.9534	1502.57	297.20
14-Oct-13	13:30:28	Transportation Boat	Travelling	91	0	30	289	23	30	22.3048	113.9544	1469.01	303.12
14-Oct-13	13:30:39	Fishing Boat	Non-operate and travelling	91	21	0	289	47	25	22.3031	113.9575	1093.93	303.52
14-Oct-13	13:32:09	Fishing Boat	Non-operate and travelling	91	10	55	283	14	30	22.3027	113.9556	1250.93	296.97
14-Oct-13	13:32:15	Transportation Boat	Travelling	91	1	50	299	14	0	22.3064	113.9562	1436.92	312.96

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Oct-13	13:33:09	Transportation Boat	Travelling	91	1	55	305	20	5	22.3074	113.9573	1434.96	319.06
14-Oct-13	13:33:44	Transportation Boat	Travelling	90	59	5	306	10	5	22.3080	113.9570	1504.72	319.90
14-Oct-13	13:33:49	Transportation Boat	Travelling	91	2	35	293	7	40	22.3053	113.9554	1419.48	306.86
14-Oct-13	13:34:43	Transportation Boat	Travelling	90	58	5	277	42	20	22.3027	113.9525	1531.01	291.44
14-Oct-13	13:36:37	Transportation Boat	Travelling	91	2	30	289	46	45	22.3047	113.9549	1421.40	303.51
14-Oct-13	13:37:19	Transportation Boat	Travelling	91	4	35	297	54	55	22.3058	113.9564	1374.99	311.65
14-Oct-13	13:38:05	Transportation Boat	Travelling	91	1	10	306	34	15	22.3077	113.9574	1452.78	320.30
14-Oct-13	13:39:33	Transportation Boat	Travelling	90	58	50	285	23	15	22.3042	113.9536	1511.21	299.12
14-Oct-13	13:41:00	Transportation Boat	Travelling	90	57	20	306	45	25	22.3084	113.9568	1551.33	320.49
14-Oct-13	13:45:10	Transportation Boat	Travelling	91	3	0	295	52	20	22.3057	113.9558	1409.97	309.60
14-Oct-13	13:46:05	Transportation Boat	Travelling	90	58	0	280	45	0	22.3033	113.9528	1533.24	294.48
14-Oct-13	13:46:17	Transportation Boat	Travelling	90	56	25	277	41	15	22.3028	113.9521	1576.93	291.42
14-Oct-13	13:46:27	Other	Stationary	90	33	40	279	30	40	22.3071	113.9424	2680.32	293.24
14-Oct-13	13:46:31	Other	Stationary	90	33	20	285	44	45	22.3096	113.9435	2708.34	299.48
14-Oct-13	13:46:35	Other	Stationary	90	32	15	291	27	50	22.3122	113.9441	2803.73	305.19
14-Oct-13	13:46:40	Other	Stationary	90	57	10	303	9	10	22.3078	113.9561	1555.92	316.88
14-Oct-13	13:46:44	Other	Stationary	90	57	30	311	23	10	22.3090	113.9578	1546.77	325.12
14-Oct-13	13:46:47	Other	Stationary	90	56	45	319	43	45	22.3102	113.9596	1567.52	333.46
14-Oct-13	13:46:53	Other	Stationary	90	52	0	330	51	25	22.3125	113.9620	1713.21	344.59
14-Oct-13	13:46:56	Other	Stationary	90	50	40	334	23	5	22.3131	113.9629	1759.15	348.11
14-Oct-13	13:46:59	Other	Stationary	90	46	50	337	56	45	22.3146	113.9637	1906.27	351.68
14-Oct-13	13:47:03	Other	Stationary	90	43	15	341	5	45	22.3162	113.9646	2068.24	354.83
14-Oct-13	13:47:05	Other	Stationary	90	41	35	343	37	20	22.3170	113.9654	2153.48	357.35
14-Oct-13	13:47:09	Other	Stationary	90	39	50	346	12	50	22.3179	113.9664	2251.00	359.94
14-Oct-13	13:47:12	Other	Stationary	90	36	50	348	56	55	22.3196	113.9675	2440.89	2.68
14-Oct-13	13:47:16	Other	Stationary	90	31	20	351	26	25	22.3235	113.9689	2889.98	5.17
14-Oct-13	13:47:20	Other	Stationary	90	30	10	352	5	10	22.3245	113.9694	3007.98	5.82
14-Oct-13	13:47:39	Other	Stationary	90	59	55	304	53	40	22.3076	113.9569	1483.51	318.62
14-Oct-13	13:47:44	Other	Stationary	90	52	45	307	35	35	22.3095	113.9561	1688.42	321.32
14-Oct-13	13:48:00	Other	Stationary	90	29	30	348	12	15	22.3253	113.9674	3079.97	1.93
14-Oct-13	13:48:07	Other	Stationary	90	30	10	352	4	45	22.3246	113.9694	3007.98	5.81
14-Oct-13	13:48:24	Other	Stationary	91	14	0	308	26	25	22.3061	113.9593	1198.32	322.17
14-Oct-13	13:48:28	Other	Stationary	91	14	45	310	37	10	22.3063	113.9597	1186.19	324.35
14-Oct-13	13:48:32	Other	Stationary	91	12	25	315	58	25	22.3071	113.9604	1224.77	329.70
14-Oct-13	13:48:36	Other	Stationary	91	12	25	318	9	10	22.3073	113.9608	1224.77	331.88
14-Oct-13	13:48:44	Other	Stationary	91	8	25	325	43	55	22.3086	113.9620	1297.11	339.46
14-Oct-13	13:48:49	Other	Stationary	91	8	55	326	58	45	22.3086	113.9623	1287.60	340.71
14-Oct-13	13:48:55	Other	Stationary	90	59	40	338	35	10	22.3109	113.9645	1489.81	352.32
14-Oct-13	13:49:00	Other	Stationary	91	0	50	340	11	20	22.3107	113.9649	1460.85	353.92
14-Oct-13	13:49:21	Other	Stationary	90	35	35	1	4	10	22.3196	113.9727	2530.00	14.80
14-Oct-13	13:49:24	Other	Stationary	90	35	35	2	38	20	22.3195	113.9733	2530.00	16.37
14-Oct-13	13:49:27	Other	Stationary	90	33	40	2	37	40	22.3208	113.9737	2680.32	16.36
14-Oct-13	13:49:32	Other	Stationary	90	33	40	3	28	15	22.3207	113.9741	2680.32	17.20
14-Oct-13	13:49:37	Other	Stationary	90	36	5	3	13	50	22.3191	113.9735	2493.57	16.96
14-Oct-13	13:49:43	Other	Stationary	90	36	5	4	52	25	22.3189	113.9741	2493.57	18.60
14-Oct-13	13:49:48	Other	Stationary	90	33	15	6	14	55	22.3206	113.9754	2715.44	19.98
14-Oct-13	13:49:51	Other	Stationary	90	33	15	7	39	45	22.3204	113.9760	2715.44	21.39
14-Oct-13	13:49:56	Other	Stationary	90	36	5	7	28	40	22.3185	113.9752	2493.57	21.21
14-Oct-13	13:49:58	Other	Stationary	90	36	5	8	23	50	22.3184	113.9755	2493.57	22.13
14-Oct-13	13:50:06	Other	Stationary	90	53	20	17	11	55	22.3105	113.9747	1669.63	30.93
14-Oct-13	13:50:09	Other	Stationary	90	54	15	17	57	15	22.3102	113.9748	1640.94	31.68
14-Oct-13	13:50:17	Other	Stationary	91	57	40	27	0	40	22.3027	113.9712	751.44	40.74
14-Oct-13	13:50:20	Other	Stationary	91	53	50	30	11	20	22.3027	113.9716	776.86	43.92
14-Oct-13	13:50:32	Other	Stationary	90	52	25	354	40	30	22.3127	113.9688	1699.35	8.40
14-Oct-13	13:50:36	Other	Stationary	90	52	15	356	12	15	22.3127	113.9693	1704.87	9.93
14-Oct-13	13:50:46	Other	Stationary	91	22	15	10	34	10	22.3065	113.9707	1077.18	24.30
14-Oct-13	13:50:49	Other	Stationary	91	22	15	13	1	35	22.3063	113.9711	1077.18	26.76
14-Oct-13	13:51:02	Other	Stationary	90	38	55	357	3	50	22.3180	113.9706	2305.76	10.79
14-Oct-13	13:51:09	Other	Stationary	90	36	50	359	50	45	22.3190	113.9720	2440.89	13.58
14-Oct-13	13:51:20	Other	Stationary	91	15	20	300	1	25	22.3049	113.9581	1176.92	313.75
14-Oct-13	13:51:29	Other	Stationary	90	51	40	11	32	50	22.3117	113.9736	1724.47	25.28
14-Oct-13	13:52:49	Transportation Boat	Travelling	91	1	10	299	55	35	22.3066	113.9562	1452.78	313.66
14-Oct-13	13:53:33	Transportation Boat	Travelling	90	59	5	289	49	5	22.3051	113.9542	1504.72	303.55
14-Sep-13	8:02:06	Other	Stationary	94	33	40	0	0	5	22.3004	113.9671	315.60	13.73
14-Sep-13	8:03:45	Other	Stationary	90	34	50	280	21	50	22.3069	113.9439	2534.00	294.09
14-Sep-13	8:03:57	Other	Stationary	90	32	55	286	2	15	22.3096	113.9437	2688.21	299.77
14-Sep-13	8:04:05	Other	Stationary	90	31	45	291	41	20	22.3122	113.9443	2791.85	305.42
14-Sep-13	8:04:14	Other	Stationary	90	41	5	295	17	45	22.3097	113.9503	2136.37	309.03
14-Sep-13	8:04:22	Other	Stationary	90	47	55	297	56	20	22.3085	113.9531	1824.75	311.67
14-Sep-13	8:04:29	Other	Stationary	90	51	5	300	20	5	22.3083	113.9545	1709.48	314.06
14-Sep-13	8:04:39	Other	Stationary	90	58	30	304	29	0	22.3076	113.9567	1489.50	318.21
14-Sep-13	8:05:16	Other	Stationary	90	59	15	304	54	0	22.3076	113.9569	1470.46	318.63
14-Sep-13	8:05:27	Other	Stationary	90	51	40	308	12	50	22.3096	113.9563	1689.98	321.94
14-Sep-13	8:05:38	Other	Stationary	90	51	40	308	12	50	22.3096	113.9563	1690.00	321.94
14-Sep-13	8:05:47	Other	Stationary	90	55	50	311	20	15	22.3091	113.9577	1561.87	325.07
14-Sep-13	8:05:54	Other	Stationary	90	57	45	316	21	0	22.3094	113.9591	1509.29	330.08
14-Sep-13	8:06:01	Other	Stationary	90	55	50	321	58	0	22.3104	113.9601	1561.90	335.70
14-Sep-13	8:06:07	Other	Stationary	90	55	15	325	3	15	22.3109	113.9608	1578.67	338.78
14-Sep-13	8:06:15	Other	Stationary	90	53	15	328	36	15	22.3117	113.9616	1638.97	342.33
14-Sep-13	8:06:22	Other	Stationary	90	51	40	332	55	10	22.3124	113.9626	1690.11	346.65
14-Sep-13	8:06:30	Other	Stationary	90	48	55	336	43	45	22.3135	113.9635	1787.02	350.46
14-Sep-13	8:06:38	Other	Stationary	90	44	5	339	44	15	22.3154	113.9642	1987.64	353.47
14-Sep-13	8:06:47	Other	Stationary	90	41	40	343	9	35	22.3165	113.9653	2106.10	356.89
14-Sep-13	8:06:52	Other	Stationary	90	39	30	347	2	20	22.3176	113.9667	2225.17	0.77
14-Sep-13	8:07:02	Other	Stationary	90	34	15	350	14	0	22.3208	113.9681	2579.74	3.96
14-Sep-13	8:07:10	Other	Stationary	90	29	50	352	13	20	22.3243	113.9694	2981.95	5.95
14-Sep-13	8:07:29	Other	Stationary	90	30	5	348	27	15	22.3242	113.9675	2955.86	2.18
14-Sep-13	8:07:42	Other	Stationary	90	29	45	352	13	55	22.3244	113.9694	2990.93	5.96
14-Sep-13	8:07:51	Other	Stationary	90	29	55	348	27	0	22.3244	113.9675	2973.36	2.18
14-Sep-13	8:07:59	Other	Stationary	90	28	35	346	48	20	22.3257	113.9667	3120.56	0.54
14-Sep-13	8:08:05	Other	Stationary	90	28	15	344	26	25	22.3260	113.9654	3159.77	358.17
14-Sep-13	8:08:14	Other	Stationary	90	27	55	339	47	5	22.3262	113.9629	3200.01	353.51
14-Sep-13	8:08:23	Other	Stationary	90	27	45	336	43	15	22.3262	113.9612	3220.55	350.45
14-Sep-13	8:08:31	Other	Stationary	90	27	40	334	32	45	22.3261	113.9600	3230.95	348.28
14-Sep-13	8:08:41	Other	Stationary	90	26	40	328	38	0	22.3264	113.9565	3360.82	342.36
14-Sep-13	8:08:51	Other	Stationary	90	27	55	324	23	15	22.3243	113.9548	3200.19	338.12
14-Sep-13	8:09:01	Other	Stationary	90	26	0	318	36	55	22.3251	113.9508	3453.66	332.35
14-Sep-13	8:09:10	Other	Stationary	90	26	35	313	41	50	22.3232	113.9487	3372.28	327.43
14-Sep-13	8:09:19	Other	Stationary	90	27	50	310	23	10	22.3210	113.9481	3210.54	324.12
14-Sep-13	8:09:27	Other	Stationary	90	28	25	309	6	45	22.3201	113.9479	3140.45	322.84
14-Sep-13	8:10:06	Container Boat	Stationary	91	15	30	314	2	15	22.3064	113.9604	1151.40	327.77
14-Sep-13	8:10:36	Construction Boat	Stationary	91	12	0	322	31	5	22.3076	113.9617	1207.94	336.25
14-Sep-13	8:10:47	Construction Boat	Stationary	91	4	45	329	34	40	22.3092	113.9626	1344.71	343.31
14-Sep-13	8:11:02	Tug Boat	Stationary	91	13	10	323	21	45	22.3075	113.9619	1188.55	337.09
14-Sep-13	8:11:35	Other	Stationary	90	50	45	342	27	15	22.3131	113.9653	1722.02	356.18
14-Sep-13	8:11:44	Other	Stationary	90	51	20	344	42	0	22.3129	113.9659	1702.11	358.43
14-Sep-13	8:12:03	Container Boat	Stationary	90	51	25	343	43	30	22.3129	113.9657	1699.35	357.45
14-Sep-13	8:12:32	Other	Stationary	90	30	35	342	52	50	22.3237	113.9647	2906.23	356.61
14-Sep-13	8:12:41	Other	Stationary	90	31	25	344	19	30	22.3230	113.9655	2825.19	358.05
14-Sep-13	8:12:58	Construction Boat	Stationary	90	28	35	346	43	40	22.3257	113.9666	3121.99	0.46
14-Sep-13	8:13:08	Construction Boat	Stationary	90	35	30	354	47	10	22.3198	113.9700	2486.64	8.52
14-Sep-13	8:13:22	Construction Boat	Stationary	90	34	20	356	20	0	22.3204	113.9708	2574.69	10.06
14-Sep-13	8:13:43	Construction Boat	Stationary	90	37	35	358	11	45	22.3183	113.9711	2343.96	11.93
14-Sep-13	8:14:01	Construction Boat	Stationary	90	32	45	357	35	10	22.3215	113.9716	2705.00	11.32
14-Sep-13	8:14:14	Construction Boat	Stationary	90	31	35	0	22	0	22.3221	113.9731	2809.92	14.10
14-Sep-13	8:14:23	Construction Boat	Stationary	90	30	45	0	49	5	22.3228	113.9735	2890.12	14.55
14-Sep-13	8:14:47	Construction Boat	Stationary	90	59	20	0	58	30	22.3104	113.9700	1469.62	14.70

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Sep-13	8:15:03	Other	Stationary	90	59	25	1	5	35	22.3104	113.9701	1467.56	14.82
14-Sep-13	8:15:10	Other	Stationary	90	58	50	1	43	15	22.3105	113.9702	1482.33	15.45
14-Sep-13	8:15:24	Other	Stationary	90	33	55	3	48	45	22.3200	113.9740	2608.16	17.54
14-Sep-13	8:15:30	Other	Stationary	90	34	25	4	26	55	22.3196	113.9742	2568.69	18.18
14-Sep-13	8:15:45	Construction Boat	Stationary	90	29	15	2	33	15	22.3239	113.9747	3047.31	16.28
14-Sep-13	8:15:53	Construction Boat	Stationary	90	27	45	6	54	35	22.3248	113.9775	3222.77	20.64
14-Sep-13	8:16:09	Container Boat	Stationary	90	42	50	8	48	25	22.3146	113.9740	2048.91	22.54
14-Sep-13	8:16:24	Tug Boat	Stationary	90	42	55	9	37	35	22.3145	113.9743	2044.87	23.36
14-Sep-13	8:16:40	Construction Boat	Stationary	90	29	55	11	45	35	22.3218	113.9789	2975.75	25.49
14-Sep-13	8:17:07	HSF High Speed Ferry	Travelling	90	54	25	332	22	20	22.3116	113.9627	1604.81	346.10
14-Sep-13	8:17:44	Transportation Boat	Travelling	90	51	20	346	44	25	22.3129	113.9665	1703.02	0.47
14-Sep-13	8:18:00	Transportation Boat	Travelling	90	59	5	290	27	30	22.3051	113.9545	1476.34	304.19
14-Sep-13	8:18:36	HSF High Speed Ferry	Travelling	91	3	45	309	15	30	22.3074	113.9584	1367.01	322.99
14-Sep-13	8:19:06	Transportation Boat	Travelling	90	55	20	339	11	50	22.3117	113.9645	1578.08	352.93
14-Sep-13	8:19:16	Transportation Boat	Travelling	90	59	30	306	9	25	22.3077	113.9572	1466.03	319.89
14-Sep-13	8:19:43	Transportation Boat	Travelling	90	55	15	306	32	20	22.3086	113.9566	1580.59	320.27
14-Sep-13	8:20:10	Transportation Boat	Travelling	91	11	10	293	10	10	22.3042	113.9569	1223.27	306.90
14-Sep-13	8:20:40	Transportation Boat	Travelling	90	57	55	329	11	20	22.3106	113.9621	1506.87	342.92
14-Sep-13	8:23:15	Transportation Boat	Travelling	90	55	35	331	37	25	22.3113	113.9625	1571.46	345.35
14-Sep-13	8:23:30	Transportation Boat	Travelling	91	3	0	324	54	55	22.3092	113.9615	1384.08	338.65
14-Sep-13	8:25:07	Transportation Boat	Travelling	90	54	30	335	50	55	22.3118	113.9636	1603.47	349.58
14-Sep-13	8:25:14	Transportation Boat	Travelling	90	43	30	346	54	35	22.3158	113.9666	2018.34	0.64
14-Sep-13	8:26:30	Transportation Boat	Travelling	90	37	50	353	35	20	22.3184	113.9693	2330.62	7.32
14-Sep-13	8:26:52	Tug Boat	Travelling	90	58	20	334	21	30	22.3108	113.9634	1496.78	348.09
14-Sep-13	8:27:04	Transportation Boat	Travelling	90	46	50	346	33	50	22.3145	113.9665	1871.69	0.29
14-Sep-13	8:27:48	Transportation Boat	Travelling	91	2	45	309	59	5	22.3077	113.9584	1390.20	323.71
14-Sep-13	8:28:42	Transportation Boat	Travelling	90	41	0	353	54	40	22.3168	113.9692	2145.56	7.64
14-Sep-13	8:29:09	Transportation Boat	Travelling	90	59	20	325	29	15	22.3100	113.9613	1471.50	339.22
14-Sep-13	8:29:19	Tug Boat	Travelling	90	42	30	347	33	25	22.3162	113.9669	2067.86	1.29
14-Sep-13	8:30:36	Tug Boat	Travelling	90	36	25	351	30	25	22.3194	113.9686	2425.50	5.24
14-Sep-13	8:30:51	Transportation Boat	Travelling	90	49	30	340	3	0	22.3134	113.9645	1769.40	353.78
14-Sep-13	8:32:03	Transportation Boat	Travelling	90	43	15	347	1	25	22.3159	113.9667	2031.55	0.75
14-Sep-13	8:32:16	Tug Boat	Travelling	90	30	50	353	31	35	22.3234	113.9699	2886.58	7.26
14-Sep-13	8:33:14	Transportation Boat	Travelling	90	37	40	352	3	10	22.3186	113.9687	2342.71	5.78
14-Sep-13	8:36:27	HSF High Speed Ferry	Travelling	91	4	15	306	17	55	22.3070	113.9579	1358.40	320.03
14-Sep-13	8:36:42	Transportation Boat	Travelling	90	41	10	349	34	5	22.3168	113.9676	2138.16	3.30
14-Sep-13	8:37:12	Tug Boat	Travelling	91	1	30	282	59	5	22.3034	113.9541	1420.00	296.71
14-Sep-13	8:37:22	Construction Boat	Travelling	91	0	15	282	26	10	22.3034	113.9537	1449.87	296.17
14-Sep-13	8:38:21	HSF High Speed Ferry	Travelling	90	54	20	336	14	25	22.3119	113.9637	1610.37	349.97
14-Sep-13	8:38:30	Transportation Boat	Travelling	90	52	40	335	58	25	22.3123	113.9635	1662.22	349.70
14-Sep-13	8:39:44	HSF High Speed Ferry	Travelling	90	42	25	347	24	15	22.3163	113.9668	2073.97	1.13
14-Sep-13	8:39:58	Transportation Boat	Travelling	91	1	20	318	32	40	22.3090	113.9600	1424.26	332.27
14-Sep-13	8:40:32	Tug Boat	Travelling	91	4	40	304	43	25	22.3067	113.9577	1350.04	318.45
14-Sep-13	8:40:43	Construction Boat	Travelling	91	4	5	303	50	45	22.3067	113.9575	1362.49	317.58
14-Sep-13	8:41:00	HSF High Speed Ferry	Travelling	90	34	15	352	45	0	22.3208	113.9692	2587.68	6.48
14-Sep-13	8:41:09	Transportation Boat	Travelling	91	2	5	301	14	30	22.3066	113.9567	1406.99	314.97
14-Sep-13	8:42:28	Transportation Boat	Travelling	90	56	35	283	15	30	22.3039	113.9530	1545.91	296.99
14-Sep-13	8:42:42	Transportation Boat	Travelling	90	51	15	337	17	45	22.3128	113.9638	1709.65	351.03
14-Sep-13	8:46:12	Transportation Boat	Travelling	91	1	0	317	29	55	22.3089	113.9597	1432.94	331.23
14-Sep-13	8:46:23	Tug Boat	Travelling	90	53	35	336	22	50	22.3121	113.9637	1634.46	350.11
14-Sep-13	8:46:30	Construction Boat	Travelling	90	53	50	335	22	45	22.3120	113.9634	1626.75	349.11
14-Sep-13	8:48:02	Transportation Boat	Travelling	91	2	40	305	12	20	22.3071	113.9575	1394.58	318.94
14-Sep-13	8:50:14	Transportation Boat	Travelling	90	59	50	290	16	25	22.3050	113.9546	1461.78	304.00
14-Sep-13	8:51:51	Tug Boat	Travelling	90	38	40	350	57	30	22.3181	113.9682	2283.92	4.69
14-Sep-13	8:52:01	Construction Boat	Travelling	90	39	25	350	40	25	22.3177	113.9681	2239.10	4.40
14-Sep-13	8:52:20	Transportation Boat	Travelling	91	2	40	290	13	30	22.3046	113.9551	1395.11	303.95
14-Sep-13	8:58:12	Transportation Boat	Travelling	90	59	50	292	24	30	22.3054	113.9549	1462.82	306.14
14-Sep-13	8:59:02	Transportation Boat	Travelling	90	59	10	311	27	35	22.3086	113.9582	1479.64	325.19
14-Sep-13	9:01:59	Transportation Boat	Travelling	90	55	40	334	3	45	22.3115	113.9632	1574.49	347.79
14-Sep-13	9:02:32	Construction Boat	Travelling	90	56	0	331	58	5	22.3113	113.9626	1565.06	345.70
14-Sep-13	9:04:49	Transportation Boat	Travelling	90	43	45	348	17	30	22.3157	113.9671	2013.64	2.02
14-Sep-13	9:04:56	Construction Boat	Travelling	90	45	0	345	38	20	22.3152	113.9662	1956.36	359.37
14-Sep-13	9:05:10	Transportation Boat	Travelling	91	7	55	291	41	15	22.3043	113.9562	1287.55	305.42
14-Sep-13	9:10:11	Transportation Boat	Travelling	91	17	25	323	4	55	22.3070	113.9621	1128.67	336.81
14-Sep-13	9:10:28	HSF High Speed Ferry	Travelling	90	38	10	350	53	35	22.3184	113.9682	2318.72	4.62
14-Sep-13	9:12:06	HSF High Speed Ferry	Travelling	90	50	10	339	47	10	22.3133	113.9645	1751.87	353.52
14-Sep-13	9:12:16	Transportation Boat	Travelling	91	12	5	336	28	5	22.3084	113.9644	1213.17	350.20
14-Sep-13	9:12:25	Transportation Boat	Travelling	91	8	0	293	4	40	22.3046	113.9564	1286.78	306.81
14-Sep-13	9:14:09	HSF High Speed Ferry	Travelling	91	3	55	310	43	40	22.3077	113.9587	1370.15	324.46
14-Sep-13	9:14:26	Transportation Boat	Travelling	91	6	5	348	38	10	22.3095	113.9669	1324.75	2.37
14-Sep-13	9:14:41	Transportation Boat	Travelling	91	10	20	313	58	50	22.3071	113.9599	1243.91	327.71
14-Sep-13	9:15:38	HSF High Speed Ferry	Travelling	90	59	5	284	1	45	22.3038	113.9536	1483.94	297.76
14-Sep-13	9:15:53	HSF High Speed Ferry	Travelling	90	33	50	353	15	55	22.3211	113.9695	2629.20	7.00
14-Sep-13	9:16:18	Transportation Boat	Travelling	90	59	10	356	53	30	22.3107	113.9691	1481.91	10.62
14-Sep-13	9:16:28	Transportation Boat	Travelling	91	8	35	330	2	30	22.3086	113.9629	1276.18	343.77
14-Sep-13	9:19:55	HSF High Speed Ferry	Travelling	91	2	40	315	58	55	22.3085	113.9595	1398.53	329.71
14-Sep-13	9:20:09	Transportation Boat	Travelling	90	47	15	9	3	35	22.3131	113.9734	1863.63	22.79
14-Sep-13	9:20:27	Transportation Boat	Travelling	90	52	35	344	25	25	22.3127	113.9659	1671.14	358.15
14-Sep-13	9:20:42	Transportation Boat	Travelling	91	8	5	299	20	0	22.3055	113.9573	1286.14	313.06
14-Sep-13	9:21:29	Transportation Boat	Travelling	90	58	15	306	44	15	22.3081	113.9571	1506.25	320.47
14-Sep-13	9:21:44	HSF High Speed Ferry	Travelling	90	58	5	285	4	30	22.3042	113.9535	1510.67	298.80
14-Sep-13	9:21:58	Container Boat	Travelling	91	13	55	310	19	55	22.3062	113.9596	1183.82	324.06
14-Sep-13	9:23:49	Transportation Boat	Travelling	90	46	20	354	12	40	22.3146	113.9690	1901.96	7.94
14-Sep-13	9:24:15	Tug Boat	Travelling	90	52	35	341	2	55	22.3126	113.9649	1671.71	354.78
14-Sep-13	9:24:33	Container Boat	Travelling	90	58	20	307	33	35	22.3082	113.9572	1504.48	321.29
14-Sep-13	9:25:51	Tug Boat	Travelling	90	55	35	342	2	40	22.3118	113.9653	1580.24	355.77
14-Sep-13	9:26:03	Container Boat	Travelling	90	53	50	341	19	30	22.3123	113.9650	1632.49	355.05
14-Sep-13	9:27:32	Transportation Boat	Travelling	90	36	20	4	40	55	22.3185	113.9739	2443.76	18.41
14-Sep-13	9:30:54	Tug Boat	Travelling	90	52	50	356	8	35	22.3124	113.9692	1664.64	9.87
14-Sep-13	9:31:02	Container Boat	Travelling	90	53	10	354	59	20	22.3123	113.9688	1654.04	8.72
14-Sep-13	9:31:14	Speed Boat	Travelling	91	17	55	302	31	15	22.3049	113.9588	1123.46	316.25
14-Sep-13	9:33:17	Speed Boat	Travelling	91	10	15	325	22	55	22.3081	113.9621	1247.46	339.11
14-Sep-13	9:33:50	Tug Boat	Travelling	90	47	20	2	22	35	22.3137	113.9714	1862.55	16.11
14-Sep-13	9:33:59	Container Boat	Travelling	90	48	40	1	57	45	22.3133	113.9712	1810.48	15.69
14-Sep-13	9:38:04	Tug Boat	Travelling	90	44	55	9	40	15	22.3139	113.9740	1965.88	23.40
14-Sep-13	9:38:11	Container Boat	Travelling	90	44	55	8	56	25	22.3139	113.9738	1965.90	22.67
14-Sep-13	9:38:31	Government Boat	Travelling	90	38	20	350	59	35	22.3184	113.9683	2314.11	4.72
14-Sep-13	9:40:32	Government Boat	Travelling	91	1	20	325	3	5	22.3096	113.9614	1431.94	338.78
14-Sep-13	9:41:02	Tug Boat	Stationary	90	45	0	9	2	45	22.3139	113.9738	1962.67	22.78
14-Sep-13	9:41:09	Container Boat	Stationary	90	44	55	8	22	5	22.3140	113.9736	1966.42	22.10
14-Sep-13	9:41:30	Government Boat	Stationary	91	6	20	295	14	15	22.3051	113.9564	1322.87	308.97
14-Sep-13	9:41:48	Tug Boat	Travelling	91	0	45	315	43	25	22.3088	113.9593	1446.04	329.45
14-Sep-13	9:42:00	Tug Boat	Travelling	90	59	40	310	42	20	22.3084	113.9581	1472.67	324.44
14-Sep-13	9:42:33	Transportation Boat	Travelling	91	33	20	312	51	55	22.3047	113.9614	937.64	326.60
14-Sep-13	9:43:09	Construction Boat	Travelling	91	11	35	331	54	30	22.3083	113.9634	1225.07	345.64
14-Sep-13	9:45:25	Tug Boat	Travelling	90	45	50	343	38	55	22.3149	113.9655	1926.89	357.38
14-Sep-13	9:45:32	Tug Boat	Travelling	90	49	50	341	48	25	22.3135	113.9651	1769.07	355.54
14-Sep-13	9:45:41	Construction Boat	Travelling	90	59	10	344	22	35	22.3110	113.9659	1485.78	358.11
14-Sep-13	9:45:57	Transportation Boat	Travelling	93	59	50	338	37	30	22.3009	113.9659	363.66	352.35
14-Sep-13	9:46:06	Tug Boat	Travelling	90	55	20	10	13	40	22.3107	113.9727	1590.35	23.96
14-Sep-13	9:46:49	Transportation Boat	Travelling	95	18	40	352	33	55	22.3001	113.9667	273.33	6.30
14-Sep-13	9:47:57	Transportation Boat	Travelling	91	38	15	295	49	15	22.3027	113.9597	890.88	309.55
14-Sep-13	9:48:44	Tug Boat	Travelling	91	3	20	1	3	45	22.3097	113.9698	1387.17	14.79
14-Sep-13	9:49:01	Tug Boat	Travelling	90	34	35	352	10	35	22.3207	113.9690	2577.44	5.91
14-Sep-13	9:49:08	Tug Boat	Travelling	90	36	55	352	58	45	22.3191	113.9691	2408.38	6.71
14-Sep-13	9:49:17	Construction Boat	Travelling	90	42	30	350	17	45	22.3163	113.9678	2082.70	4.03
14-Sep-13	9:49:38	Transportation Boat	Travelling	91	52	5	314	44	45	22.3036	113.9624	780.54	328.48

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Sep-13	9:57:57	Other	Stationary	94	36	30	0	0	0	22.3004	113.9671	315.57	13.73
14-Sep-13	9:58:11	Transportation Boat	Travelling	90	55	40	25	26	25	22.3087	113.9761	1582.37	39.17
14-Sep-13	9:58:38	Tug Boat	Travelling	91	4	50	359	12	55	22.3095	113.9694	1355.88	12.95
14-Sep-13	10:02:33	Transportation Boat	Travelling	95	25	15	346	41	0	22.3000	113.9664	268.13	0.41
14-Sep-13	10:02:43	Tug Boat	Travelling	91	0	0	347	55	30	22.3108	113.9668	1467.07	1.65
14-Sep-13	10:04:38	Transportation Boat	Travelling	92	13	0	320	3	10	22.3029	113.9636	658.20	333.78
14-Sep-13	10:04:52	Tug Boat	Travelling	90	55	45	344	35	35	22.3118	113.9659	1580.90	358.32
14-Sep-13	10:09:00	Transportation Boat	Travelling	90	57	30	307	45	30	22.3084	113.9571	1532.63	321.49
14-Sep-13	10:10:47	Tug Boat	Travelling	90	54	45	348	11	40	22.3121	113.9669	1611.09	1.92
14-Sep-13	10:14:32	Tug Boat	Travelling	90	43	25	8	45	20	22.3146	113.9740	2042.15	22.49
14-Sep-13	10:14:55	Speed Boat	Travelling	91	32	30	25	19	30	22.3043	113.9722	948.84	39.05
14-Sep-13	10:17:29	Speed Boat	Travelling	92	27	15	351	47	30	22.3029	113.9670	594.96	5.52
14-Sep-13	10:17:42	Transportation Boat	Travelling	90	53	30	335	6	35	22.3122	113.9633	1650.38	348.84
14-Sep-13	10:19:18	Transportation Boat	Travelling	91	2	15	318	13	5	22.3089	113.9599	1415.43	331.95
14-Sep-13	10:19:31	Speed Boat	Travelling	92	29	25	307	16	10	22.3017	113.9628	586.41	321.00
14-Sep-13	10:19:42	Tug Boat	Stationary	90	43	25	8	51	50	22.3146	113.9740	2043.09	22.59
14-Sep-13	10:20:47	Speed Boat	Travelling	91	58	20	286	52	55	22.3010	113.9602	741.17	300.61
14-Sep-13	10:20:58	Speed Boat	Travelling	92	29	50	10	52	10	22.3024	113.9688	584.85	24.60
14-Sep-13	10:21:42	Transportation Boat	Travelling	91	2	35	286	58	30	22.3041	113.9546	1408.10	300.70
14-Sep-13	10:22:35	Speed Boat	Travelling	91	46	30	9	6	25	22.3045	113.9695	824.04	22.84
14-Sep-13	10:27:27	Speed Boat	Travelling	90	57	0	8	24	45	22.3105	113.9721	1548.79	22.14
14-Sep-13	10:31:03	Transportation Boat	Travelling	90	45	15	345	17	20	22.3153	113.9661	1960.26	359.02
14-Sep-13	10:31:41	Research Vessel	Travelling	91	13	5	14	42	30	22.3072	113.9720	1204.83	28.44
14-Sep-13	10:32:43	Research Vessel	Travelling	91	35	0	354	8	50	22.3059	113.9676	925.17	7.88
14-Sep-13	10:33:55	Research Vessel	Travelling	91	41	25	316	31	15	22.3044	113.9622	866.42	330.25
14-Sep-13	10:34:03	Transportation Boat	Travelling	91	1	30	321	39	40	22.3094	113.9606	1434.78	335.39
14-Sep-13	10:35:00	Research Vessel	Travelling	91	18	55	288	31	15	22.3030	113.9572	1115.36	302.25
14-Sep-13	10:35:08	Transportation Boat	Travelling	91	4	55	309	28	20	22.3074	113.9585	1358.49	323.20
14-Sep-13	10:35:33	Construction Boat	Travelling	90	52	20	338	33	15	22.3127	113.9642	1690.49	352.28
14-Sep-13	10:36:29	Transportation Boat	Travelling	91	3	35	293	14	30	22.3051	113.9556	1387.49	306.97
14-Sep-13	10:36:39	Construction Boat	Travelling	90	57	40	332	40	5	22.3110	113.9629	1531.87	346.40
14-Sep-13	10:40:38	Construction Boat	Travelling	91	16	15	322	57	5	22.3072	113.9620	1155.27	336.68
14-Sep-13	10:42:18	Speed Boat	Travelling	95	36	5	324	0	35	22.2998	113.9654	260.34	337.74
14-Sep-13	10:43:04	Speed Boat	Travelling	93	7	25	284	9	35	22.2996	113.9624	468.12	297.89
14-Sep-13	10:44:48	HSF High Speed Ferry	Travelling	91	4	10	303	44	55	22.3067	113.9574	1375.73	317.48
14-Sep-13	10:45:09	Tug Boat	Travelling	90	47	0	2	35	45	22.3139	113.9716	1887.97	16.33
14-Sep-13	10:47:00	HSF High Speed Ferry	Travelling	90	50	10	340	33	0	22.3134	113.9647	1766.68	354.28
14-Sep-13	10:47:09	Tug Boat	Travelling	90	52	10	348	32	5	22.3129	113.9671	1697.72	2.26
14-Sep-13	10:47:22	Transportation Boat	Travelling	91	20	40	310	46	50	22.3056	113.9602	1092.16	324.51
14-Sep-13	10:48:41	HSF High Speed Ferry	Travelling	90	37	0	352	41	40	22.3192	113.9690	2415.57	6.42
14-Sep-13	10:48:57	Transportation Boat	Travelling	91	50	0	314	45	20	22.3038	113.9623	799.54	328.49
14-Sep-13	10:51:56	Transportation Boat	Travelling	95	9	55	342	27	45	22.3002	113.9662	282.70	356.19
14-Sep-13	10:52:05	Tug Boat	Travelling	90	50	10	348	41	50	22.3135	113.9671	1767.47	2.43
14-Sep-13	10:52:22	Container Boat	Travelling	90	50	30	347	42	10	22.3134	113.9668	1755.62	1.43
14-Sep-13	10:54:40	Transportation Boat	Travelling	93	4	50	328	29	40	22.3017	113.9650	475.17	342.22
14-Sep-13	10:58:19	Transportation Boat	Travelling	91	14	5	312	23	55	22.3065	113.9599	1191.21	326.13
14-Sep-13	10:58:29	Tug Boat	Travelling	90	46	5	3	40	35	22.3142	113.9720	1928.66	17.41
14-Sep-13	10:58:34	Container Boat	Travelling	90	47	5	2	51	50	22.3139	113.9716	1886.79	16.59
14-Sep-13	11:01:39	Tug Boat	Travelling	90	45	20	346	53	55	22.3153	113.9666	1961.88	0.63
14-Sep-13	11:03:20	Tug Boat	Travelling	90	53	55	336	27	25	22.3122	113.9637	1644.01	350.19
14-Sep-13	11:03:32	Tug Boat	Travelling	90	44	25	11	3	50	22.3140	113.9746	2003.70	24.79
14-Sep-13	11:03:44	Container Boat	Stationary	90	42	25	9	12	0	22.3150	113.9744	2100.76	22.93
14-Sep-13	11:06:25	Tug Boat	Travelling	91	5	30	303	47	15	22.3066	113.9575	1349.96	317.52
14-Sep-13	11:06:38	Tug Boat	Travelling	90	50	10	15	2	0	22.3116	113.9747	1769.74	28.76
14-Sep-13	11:08:43	Tug Boat	Travelling	90	57	15	278	54	5	22.3030	113.9525	1547.55	292.63
14-Sep-13	11:15:32	HSF High Speed Ferry	Travelling	90	39	35	350	55	40	22.3179	113.9682	2258.11	4.66
14-Sep-13	11:16:14	Container Boat	Travelling	90	53	50	346	54	55	22.3125	113.9666	1648.48	0.65
14-Sep-13	11:18:03	HSF High Speed Ferry	Travelling	90	58	0	328	24	55	22.3107	113.9618	1528.50	342.15
14-Sep-13	11:18:46	Transportation Boat	Travelling	90	53	45	337	20	45	22.3123	113.9639	1651.44	351.08
14-Sep-13	11:20:35	Container Boat	Stationary	90	53	50	342	42	20	22.3124	113.9654	1649.11	356.44
14-Sep-13	11:20:48	HSF High Speed Ferry	Travelling	90	59	55	284	8	5	22.3038	113.9537	1479.28	297.86
14-Sep-13	11:21:04	Tug Boat	Travelling	90	49	15	350	40	5	22.3138	113.9677	1805.64	4.40
14-Sep-13	11:23:18	Tug Boat	Travelling	90	43	5	5	11	30	22.3152	113.9729	2070.96	18.92
14-Sep-13	11:26:29	Tug Boat	Stationary	90	41	55	7	4	20	22.3155	113.9738	2130.81	20.80
14-Sep-13	11:26:42	Tug Boat	Stationary	90	40	25	350	48	35	22.3175	113.9681	2212.30	4.54
14-Sep-13	11:26:51	Construction Boat	Travelling	90	39	25	351	15	30	22.3180	113.9683	2270.24	4.99
14-Sep-13	11:35:29	Tug Boat	Travelling	90	54	15	335	52	0	22.3121	113.9635	1638.37	349.60
14-Sep-13	11:35:36	Construction Boat	Travelling	90	53	15	337	13	10	22.3125	113.9638	1669.69	350.95
14-Sep-13	11:43:16	Tug Boat	Travelling	91	10	0	318	25	5	22.3077	113.9606	1266.36	332.15
14-Sep-13	11:43:27	Construction Boat	Travelling	91	7	55	321	10	25	22.3083	113.9610	1305.64	334.90
14-Sep-13	11:43:53	Fishing Boat	Operate and travelling	91	10	20	12	26	50	22.3078	113.9718	1260.37	26.18
14-Sep-13	11:44:35	Fishing Boat	Operate and travelling	91	9	5	15	9	0	22.3077	113.9724	1283.48	28.88
14-Sep-13	11:44:55	Fishing Boat	Operate and travelling	91	12	50	13	36	10	22.3073	113.9718	1216.80	27.33
14-Sep-13	11:45:09	Fishing Boat	Operate and travelling	91	7	40	14	42	5	22.3080	113.9725	1310.71	28.43
14-Sep-13	11:45:17	Fishing Boat	Operate and travelling	91	11	40	11	51	5	22.3077	113.9716	1236.84	25.58
14-Sep-13	11:45:31	Fishing Boat	Operate and travelling	91	10	0	14	59	45	22.3076	113.9723	1266.61	28.73
14-Sep-13	11:45:43	Fishing Boat	Operate and travelling	91	7	5	17	0	35	22.3078	113.9730	1322.30	30.74
14-Sep-13	11:45:54	Fishing Boat	Operate and travelling	91	7	15	17	32	50	22.3078	113.9731	1319.00	31.28
14-Sep-13	11:46:52	Tug Boat	Travelling	90	48	40	341	8	30	22.3140	113.9648	1831.88	354.87
14-Sep-13	11:47:00	Construction Boat	Stationary	91	6	0	329	5	5	22.3092	113.9625	1344.40	342.81
14-Sep-13	11:47:19	Fishing Boat	Operate and stationary	91	7	10	16	49	55	22.3079	113.9729	1320.82	30.56
14-Sep-13	11:47:31	Speed Boat	Stationary	91	9	0	9	51	5	22.3082	113.9714	1285.38	23.58
14-Sep-13	11:49:00	Speed Boat	Travelling	91	33	15	311	1	30	22.3046	113.9611	948.96	324.75
14-Sep-13	11:49:13	Tug Boat	Stationary	90	38	5	351	40	55	22.3187	113.9686	2357.09	5.41
14-Sep-13	11:49:52	Speed Boat	Travelling	91	10	20	280	7	0	22.3022	113.9552	1261.03	293.85
14-Sep-13	11:50:18	Tug Boat	Travelling	90	34	10	354	41	35	22.3211	113.9702	2638.66	8.42
14-Sep-13	11:57:28	Government Boat	Travelling	90	35	10	9	55	10	22.3187	113.9764	2561.52	23.65
14-Sep-13	11:58:47	Government Boat	Travelling	90	56	35	353	41	55	22.3116	113.9684	1572.25	7.43
14-Sep-13	12:00:02	Government Boat	Travelling	91	34	0	322	23	10	22.3054	113.9627	941.63	336.12
14-Sep-13	12:01:02	Government Boat	Travelling	91	6	50	282	8	55	22.3028	113.9548	1328.00	295.88
14-Sep-13	12:21:51	Fishing Boat	Operate and travelling	91	49	30	333	27	35	22.3047	113.9647	806.39	347.19
14-Sep-13	12:22:05	Tug Boat	Travelling	91	3	45	309	17	55	22.3076	113.9583	1390.82	323.03
14-Sep-13	12:22:14	Construction Boat	Travelling	91	2	30	308	37	35	22.3077	113.9580	1418.97	322.36
14-Sep-13	12:23:49	Fishing Boat	Operate and travelling	91	37	40	322	54	20	22.3051	113.9629	904.49	336.64
14-Sep-13	12:26:06	Fishing Boat	Operate and stationary	91	36	20	326	41	0	22.3054	113.9634	916.93	340.41
14-Sep-13	12:32:13	Government Boat	Travelling	91	19	20	305	49	0	22.3053	113.9594	1114.37	319.55
14-Sep-13	12:32:25	Tug Boat	Travelling	90	54	15	340	14	55	22.3123	113.9647	1636.89	353.98
14-Sep-13	12:32:33	Construction Boat	Travelling	91	2	25	339	6	20	22.3103	113.9647	1419.80	352.84
14-Sep-13	12:33:01	Government Boat	Travelling	91	3	45	328	45	55	22.3095	113.9623	1389.69	342.50
14-Sep-13	12:34:02	Delete	Travelling	91	2	0	337	5	25	22.3103	113.9642	1429.31	350.82
14-Sep-13	12:34:13	Tug Boat	Travelling	90	44	50	347	22	20	22.3155	113.9668	1988.15	1.10
14-Sep-13	12:34:24	Construction Boat	Stationary	91	2	0	338	51	5	22.3104	113.9646	1429.27	352.58
14-Sep-13	12:35:06	Government Boat	Stationary	91	2	0	337	52	0	22.3103	113.9644	1429.19	351.60
14-Sep-13	12:35:32	Construction Boat	Travelling	91	5	20	311	45	20	22.3077	113.9589	1355.37	325.49
14-Sep-13	12:43:25	Construction Boat	Travelling	91	4	55	332	56	40	22.3096	113.9633	1363.37	346.67
14-Sep-13	12:43:40	Transportation Boat	Travelling	90	46	5	0	22	15	22.3145	113.9710	1931.59	14.10
14-Sep-13	12:46:12	Transportation Boat	Travelling	91	8	45	338	23	10	22.3091	113.9647	1286.27	352.12
14-Sep-13	12:46:25	Fishing Boat	Non-operate and travelling	91	21	0	297	4	45	22.3040	113.9584	1090.11	310.81
14-Sep-13	12:47:10	Transportation Boat	Travelling	91	17	10	324	17	30	22.3072	113.9622	1144.65	338.02
14-Sep-13	12:47:19	Fishing Boat	Non-operate and travelling	91	26	40	287	26	35	22.3024	113.9579	1018.27	301.17
14-Sep-13	12:47:35	Construction Boat	Travelling	90	44	30	344	37	10	22.3156	113.9658	2001.42	358.35
14-Sep-13	12:47:48	Fishing Boat	Non-operate and travelling	91	47	45	295	0	10	22.3022	113.9602	817.98	308.73
14-Sep-13	12:51:44	Fishing Boat	Non-operate and travelling	92	16	0	18	23	40	22.3026	113.9697	647.26	32.12
14-Sep-13	12:52:05	Construction Boat	Travelling	90	36	30	353	19	15	22.3195	113.9693	2454.24	7.05
14-Sep-13	12:52:26	Tug Boat	Travelling	91	6	25	295	54	5	22.3053	113.9564	1331.34	309.63
14-Sep-13	12:52:51	Fishing Boat	Non-operate and travelling	91	39	20	21	32	0	22.3041	113.9714	887.33	35.26
14-Sep-13	12:56:56	Fishing Boat	Non-operate and travelling	91	52	20	354	50	10	22.3046	113.9675	783.93	8.57

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
14-Sep-13	12:57:18	Tug Boat	Travelling	90	52	20	338	42	25	22.3127	113.9642	1694.76	352.44
14-Sep-13	13:00:17	Tug Boat	Travelling	90	39	5	351	27	40	22.3181	113.9684	2285.11	5.19
14-Sep-13	13:07:20	Tug Boat	Travelling	90	54	10	341	24	30	22.3123	113.9651	1635.19	355.14
14-Sep-13	13:07:44	Transportation Boat	Travelling	92	1	45	304	0	50	22.3024	113.9617	722.47	317.74
14-Sep-13	13:09:29	Transportation Boat	Travelling	93	17	50	318	28	10	22.3012	113.9644	443.81	332.20
14-Sep-13	13:09:37	Fishing Boat	Non-operate and travelling	91	50	0	343	49	10	22.3048	113.9661	799.88	357.55
14-Sep-13	13:09:51	Tug Boat	Travelling	91	2	50	338	57	45	22.3102	113.9647	1406.36	352.69
14-Sep-13	13:11:17	Transportation Boat	Travelling	96	0	15	352	24	5	22.2998	113.9667	242.96	6.13
14-Sep-13	13:12:11	Tug Boat	Travelling	91	2	25	341	49	55	22.3103	113.9653	1415.62	355.56
14-Sep-13	13:12:21	Construction Boat	Travelling	91	1	50	340	19	20	22.3104	113.9650	1429.13	354.05
14-Sep-13	13:12:56	Transportation Boat	Travelling	94	7	15	344	12	15	22.3008	113.9663	354.72	357.93
14-Sep-13	13:13:04	Fishing Boat	Non-operate and travelling	91	49	15	350	16	45	22.3048	113.9669	805.19	4.01
14-Sep-13	13:15:49	Transportation Boat	Travelling	91	37	10	319	13	50	22.3049	113.9624	905.68	332.96
14-Sep-13	13:16:00	Fishing Boat	Non-operate and travelling	91	58	5	348	34	55	22.3043	113.9667	744.54	2.31
14-Sep-13	13:16:09	Tug Boat	Travelling	91	0	10	350	39	10	22.3108	113.9675	1468.83	4.38
14-Sep-13	13:16:16	Construction Boat	Travelling	91	0	45	349	17	55	22.3107	113.9671	1454.53	3.03
14-Sep-13	13:24:00	Tug Boat	Travelling	90	48	40	7	7	0	22.3129	113.9727	1821.36	20.85
14-Sep-13	13:24:07	Construction Boat	Travelling	90	49	20	6	32	10	22.3128	113.9725	1796.23	20.27
14-Sep-13	13:24:16	Tug Boat	Travelling	90	51	50	345	16	0	22.3130	113.9661	1707.96	359.00
14-Sep-13	13:25:41	Tug Boat	Travelling	90	53	50	342	49	45	22.3124	113.9654	1643.24	356.56
14-Sep-13	13:31:05	Tug Boat	Travelling	90	58	25	343	30	25	22.3112	113.9657	1511.77	357.24
14-Sep-13	13:31:30	Tug Boat	Travelling	90	35	40	18	36	20	22.3167	113.9794	2506.36	32.34
14-Sep-13	13:31:37	Construction Boat	Travelling	90	36	35	18	26	0	22.3162	113.9790	2441.15	32.16
14-Sep-13	13:36:56	Tug Boat	Travelling	90	53	10	358	56	0	22.3122	113.9699	1662.80	12.66
14-Sep-13	13:37:08	Transportation Boat	Travelling	90	53	20	337	32	50	22.3124	113.9640	1657.49	351.28
14-Sep-13	13:37:23	Fishing Boat	Non-operate and travelling	91	36	50	346	43	20	22.3058	113.9665	907.36	0.45
14-Sep-13	13:40:09	Fishing Boat	Non-operate and travelling	91	16	0	313	24	10	22.3064	113.9603	1157.80	327.13
14-Sep-13	13:40:22	Transportation Boat	Travelling	91	3	20	286	35	45	22.3039	113.9547	1391.95	300.33
14-Sep-13	13:46:49	Transportation Boat	Travelling	91	31	35	313	13	30	22.3049	113.9613	959.01	326.95
14-Sep-13	13:50:00	Transportation Boat	Travelling	93	51	5	329	36	0	22.3009	113.9653	378.60	343.33
14-Sep-13	13:51:02	Transportation Boat	Travelling	95	54	15	352	32	55	22.2998	113.9667	246.38	6.28
14-Sep-13	13:57:38	Transportation Boat	Travelling	91	11	25	312	45	10	22.3069	113.9598	1231.20	326.48
14-Sep-13	14:02:41	Tug Boat	Stationary	91	14	55	322	27	30	22.3073	113.9618	1172.72	336.19
14-Sep-13	14:02:50	Construction Boat	Stationary	91	13	55	324	18	25	22.3075	113.9621	1188.72	338.04
14-Sep-13	14:03:10	Other	Stationary	90	54	15	343	30	45	22.3122	113.9656	1625.84	357.24
14-Sep-13	14:03:17	Other	Stationary	90	54	45	345	38	15	22.3121	113.9662	1610.74	359.37
14-Sep-13	14:03:44	Other	Stationary	90	30	10	342	49	55	22.3244	113.9647	2979.62	356.56
14-Sep-13	14:03:51	Other	Stationary	90	30	20	343	55	55	22.3243	113.9652	2962.31	357.66
14-Sep-13	14:04:25	Other	Stationary	91	1	10	359	48	0	22.3102	113.9697	1439.31	13.53
14-Sep-13	14:04:31	Other	Stationary	91	1	10	1	36	25	22.3101	113.9701	1439.29	15.34
14-Sep-13	14:05:03	Other	Stationary	90	30	10	347	17	40	22.3244	113.9669	2979.32	1.02
14-Sep-13	14:05:20	Construction Boat	Stationary	90	40	40	349	50	10	22.3172	113.9677	2182.70	3.57
14-Sep-13	14:05:26	Construction Boat	Stationary	90	41	25	351	43	15	22.3168	113.9684	2142.01	5.45
14-Sep-13	14:05:32	Construction Boat	Stationary	90	37	10	354	47	30	22.3189	113.9699	2395.29	8.52
14-Sep-13	14:05:39	Construction Boat	Stationary	90	39	35	356	2	30	22.3175	113.9701	2244.25	9.77
14-Sep-13	14:05:50	Construction Boat	Stationary	90	34	55	358	15	20	22.3201	113.9716	2555.74	11.99
14-Sep-13	14:05:59	Construction Boat	Stationary	90	33	15	359	46	15	22.3212	113.9725	2689.52	13.50
14-Sep-13	14:06:04	Construction Boat	Stationary	90	32	30	0	46	15	22.3216	113.9731	2754.51	14.50
14-Sep-13	14:06:16	Construction Boat	Stationary	90	30	10	1	25	30	22.3235	113.9740	2979.05	15.15
14-Sep-13	14:06:43	Construction Boat	Stationary	90	31	35	10	33	45	22.3209	113.9778	2838.33	24.29
14-Sep-13	14:07:20	Other	Stationary	90	28	15	353	37	5	22.3261	113.9704	3193.58	7.35
14-Sep-13	14:07:41	Other	Stationary	90	32	35	3	28	55	22.3212	113.9743	2746.79	17.21
14-Sep-13	14:07:50	Other	Stationary	90	42	45	6	19	15	22.3151	113.9733	2072.99	20.05
14-Sep-13	14:07:56	Other	Stationary	90	34	20	8	49	55	22.3192	113.9761	2600.58	22.56
14-Sep-13	14:08:05	Other	Stationary	90	46	45	8	25	10	22.3134	113.9733	1891.42	22.15
17-Sep-13	8:11:35	Other	Stationary	94	36	50	0	0	0	22.3002	113.9671	297.52	13.73
17-Sep-13	8:14:06	Other	Stationary	90	30	40	286	33	20	22.3102	113.9432	2766.36	300.29
17-Sep-13	8:14:17	Other	Stationary	90	31	30	292	23	40	22.3119	113.9453	2689.68	306.12
17-Sep-13	8:14:24	Other	Stationary	90	35	40	294	10	30	22.3107	113.9483	2363.01	307.90
17-Sep-13	8:14:30	Other	Stationary	90	40	40	295	42	0	22.3094	113.9509	2063.70	309.43
17-Sep-13	8:14:36	Other	Stationary	90	46	20	298	31	30	22.3085	113.9534	1805.50	312.25
17-Sep-13	8:14:44	Other	Stationary	90	53	30	303	25	50	22.3079	113.9561	1559.47	317.16
17-Sep-13	8:14:54	Other	Stationary	90	56	30	305	4	0	22.3076	113.9569	1475.48	318.80
17-Sep-13	8:15:03	Other	Stationary	90	56	30	305	4	0	22.3076	113.9569	1475.53	318.80
17-Sep-13	8:15:13	Other	Stationary	90	49	20	307	57	0	22.3096	113.9562	1693.75	321.68
17-Sep-13	8:15:24	Other	Stationary	90	49	20	307	57	0	22.3096	113.9562	1693.81	321.68
17-Sep-13	8:15:35	Other	Stationary	90	52	40	311	46	50	22.3094	113.9577	1584.81	325.51
17-Sep-13	8:15:42	Other	Stationary	90	54	30	317	13	40	22.3097	113.9592	1530.69	330.96
17-Sep-13	8:15:50	Other	Stationary	90	52	30	322	57	10	22.3108	113.9603	1590.01	336.68
17-Sep-13	8:15:57	Other	Stationary	90	50	20	328	31	50	22.3118	113.9615	1659.71	342.26
17-Sep-13	8:16:02	Other	Stationary	90	48	30	333	0	0	22.3127	113.9626	1723.69	346.73
17-Sep-13	8:16:08	Other	Stationary	90	46	30	336	22	10	22.3136	113.9634	1799.41	350.10
17-Sep-13	8:16:13	Other	Stationary	90	42	10	339	46	0	22.3154	113.9642	1988.98	353.50
17-Sep-13	8:16:19	Other	Stationary	90	39	30	342	47	0	22.3167	113.9651	2127.19	356.51
17-Sep-13	8:16:24	Other	Stationary	90	37	0	347	37	50	22.3181	113.9669	2275.75	1.36
17-Sep-13	8:16:29	Other	Stationary	90	33	30	349	41	10	22.3203	113.9679	2523.13	3.42
17-Sep-13	8:16:34	Other	Stationary	90	29	50	351	32	20	22.3232	113.9689	2849.12	5.27
17-Sep-13	8:16:44	Other	Stationary	90	28	10	352	13	30	22.3247	113.9695	3027.88	5.95
17-Sep-13	8:17:05	Other	Stationary	90	28	30	348	25	40	22.3245	113.9675	2990.53	2.16
17-Sep-13	8:17:14	Other	Stationary	90	28	10	352	12	50	22.3247	113.9695	3028.18	5.94
17-Sep-13	8:17:28	Other	Stationary	90	28	10	348	25	30	22.3249	113.9675	3028.32	2.15
17-Sep-13	8:17:34	Other	Stationary	90	26	50	344	54	10	22.3263	113.9657	3188.90	358.63
17-Sep-13	8:17:42	Other	Stationary	90	26	20	340	28	0	22.3268	113.9632	3253.81	354.20
17-Sep-13	8:17:52	Other	Stationary	90	26	10	337	10	0	22.3267	113.9614	3276.14	350.90
17-Sep-13	8:18:10	Other	Stationary	90	26	20	328	35	50	22.3255	113.9568	3254.11	342.33
17-Sep-13	8:18:22	Other	Stationary	90	26	20	323	39	30	22.3247	113.9542	3254.24	337.39
17-Sep-13	8:18:29	Other	Stationary	90	27	10	321	20	20	22.3233	113.9535	3147.70	335.07
17-Sep-13	8:18:37	Other	Stationary	90	28	40	318	58	0	22.3214	113.9531	2972.99	332.70
17-Sep-13	8:18:57	Other	Stationary	90	24	30	315	49	40	22.3249	113.9491	3517.79	329.56
17-Sep-13	8:19:03	Other	Stationary	90	24	40	313	44	20	22.3241	113.9481	3492.12	327.47
17-Sep-13	8:19:09	Other	Stationary	90	25	50	311	14	30	22.3221	113.9478	3322.37	324.97
17-Sep-13	8:19:15	Other	Stationary	90	26	40	308	47	20	22.3206	113.9474	3211.27	322.52
17-Sep-13	8:19:25	Other	Stationary	90	27	40	306	17	40	22.3189	113.9471	3087.70	320.02
17-Sep-13	8:19:32	Other	Stationary	90	27	50	304	22	20	22.3182	113.9465	3068.10	318.10
17-Sep-13	8:20:06	Other	Stationary	91	8	10	308	0	40	22.3063	113.9590	1221.39	321.74
17-Sep-13	8:20:46	Other	Stationary	90	57	50	336	13	50	22.3104	113.9640	1442.60	349.96
17-Sep-13	8:21:40	Other	Stationary	91	7	10	324	18	40	22.3080	113.9619	1240.13	338.04
17-Sep-13	8:21:50	Other	Stationary	91	8	10	323	35	20	22.3078	113.9618	1221.80	337.32
17-Sep-13	8:21:57	Other	Stationary	91	3	30	326	41	0	22.3087	113.9621	1312.62	340.41
17-Sep-13	8:22:22	Other	Stationary	90	27	50	343	56	30	22.3252	113.9652	3069.80	357.67
17-Sep-13	8:22:29	Other	Stationary	90	26	50	347	6	50	22.3263	113.9669	3191.97	0.84
17-Sep-13	8:22:41	Other	Stationary	90	34	20	355	11	0	22.3195	113.9701	2462.34	8.91
17-Sep-13	8:22:54	Other	Stationary	90	33	10	356	17	30	22.3202	113.9707	2552.75	10.02
17-Sep-13	8:23:04	Other	Stationary	90	39	30	357	15	10	22.3164	113.9703	2129.96	10.98
17-Sep-13	8:23:13	Other	Stationary	90	27	50	357	28	10	22.3247	113.9722	3070.31	11.20
17-Sep-13	8:23:17	Other	Stationary	90	30	10	357	52	0	22.3225	113.9719	2819.65	11.60
17-Sep-13	8:23:25	Other	Stationary	90	29	30	359	24	0	22.3229	113.9728	2886.96	13.13
17-Sep-13	8:23:31	Other	Stationary	90	31	20	359	46	0	22.3213	113.9726	2709.53	13.50
17-Sep-13	8:23:41	Other	Stationary	90	30	30	1	8	40	22.3219	113.9734	2787.44	14.87
17-Sep-13	8:24:09	Other	Stationary	90	29	0	9	49	10	22.3219	113.9778	2940.00	23.55
17-Sep-13	8:24:24	Other	Stationary	90	58	20	337	12	20	22.3103	113.9642	1431.06	350.94
17-Sep-13	8:24:30	Other	Stationary	90	59	40	338	49	20	22.3101	113.9646	1398.69	352.55
17-Sep-13	8:24:38	Other	Stationary	90	27	20	343	16	40	22.3258	113.9648	3131.01	357.01
17-Sep-13	8:24:45	Other	Stationary	90	26	50	344	24	30	22.3263	113.9654	3193.39	358.14
17-Sep-13	8:25:03	Other	Stationary	90	31	0	0	43	0	22.3215	113.9731	2740.93	14.45
17-Sep-13	8:25:08	Other	Stationary	90	30	20	1	9	30	22.3220	113.9734	2804.34	14.89
17-Sep-13	8:25:15	Other	Stationary	90	56	10	359	41	30	22.3106	113.9698	1487.30	13.42

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
17-Sep-13	8:25:22	Other	Stationary	90	55	50	1	27	0	22.3106	113.9702	1496.35	15.18
17-Sep-13	8:25:41	Other	Stationary	90	44	40	5	13	10	22.3136	113.9723	1878.39	18.95
17-Sep-13	8:25:46	Other	Stationary	90	45	10	6	13	20	22.3133	113.9726	1857.15	19.95
17-Sep-13	8:26:15	Tug Boat	Travelling	91	1	0	346	34	30	22.3099	113.9665	1368.18	0.30
17-Sep-13	8:26:22	Container Boat	Travelling	91	2	40	345	29	30	22.3096	113.9662	1331.39	359.22
17-Sep-13	8:26:38	HSF High Speed Ferry	Travelling	90	59	30	301	7	20	22.3065	113.9567	1403.23	314.85
17-Sep-13	8:26:46	Transportation Boat	Travelling	90	58	0	321	34	0	22.3094	113.9605	1440.05	335.30
17-Sep-13	8:28:45	Transportation Boat	Travelling	90	47	30	339	33	50	22.3134	113.9644	1765.00	353.29
17-Sep-13	8:28:55	Tug Boat	Travelling	90	53	0	352	58	20	22.3117	113.9682	1578.70	6.70
17-Sep-13	8:29:01	Container Boat	Travelling	90	54	50	352	26	40	22.3113	113.9680	1525.11	6.17
17-Sep-13	8:29:10	HSF High Speed Ferry	Travelling	90	55	20	327	23	10	22.3105	113.9616	1511.17	341.12
17-Sep-13	8:30:34	Transportation Boat	Travelling	90	38	30	348	40	50	22.3173	113.9673	2190.17	2.41
17-Sep-13	8:30:45	HSF High Speed Ferry	Travelling	90	47	50	339	27	0	22.3133	113.9644	1753.12	353.18
17-Sep-13	8:30:52	Tug Boat	Travelling	90	47	20	356	38	40	22.3133	113.9695	1772.06	10.37
17-Sep-13	8:30:58	Container Boat	Travelling	90	48	50	356	15	20	22.3128	113.9693	1716.59	9.99
17-Sep-13	8:31:53	Tug Boat	Travelling	91	1	0	287	14	0	22.3040	113.9550	1369.66	300.96
17-Sep-13	8:31:59	Construction Boat	Travelling	91	0	50	285	56	30	22.3037	113.9548	1373.48	299.67
17-Sep-13	8:32:13	Transportation Boat	Travelling	90	32	20	353	49	10	22.3210	113.9698	2626.24	7.55
17-Sep-13	8:32:19	HSF High Speed Ferry	Travelling	90	40	20	347	3	30	22.3164	113.9667	2088.38	0.79
17-Sep-13	8:32:29	Tug Boat	Travelling	90	44	0	359	40	0	22.3143	113.9707	1910.01	13.40
17-Sep-13	8:32:34	Container Boat	Travelling	90	44	50	359	11	30	22.3141	113.9705	1873.71	12.92
17-Sep-13	8:35:03	Transportation Boat	Travelling	90	44	0	342	11	20	22.3148	113.9651	1910.95	355.92
17-Sep-13	8:36:09	Transportation Boat	Travelling	90	55	10	328	7	10	22.3106	113.9618	1517.82	341.85
17-Sep-13	8:36:16	Tug Boat	Travelling	90	59	40	313	50	10	22.3083	113.9591	1401.82	327.57
17-Sep-13	8:36:21	Construction Boat	Travelling	90	59	30	312	25	10	22.3081	113.9588	1405.83	326.15
17-Sep-13	8:36:31	Tug Boat	Travelling	90	39	20	8	3	50	22.3155	113.9741	2144.79	21.79
17-Sep-13	8:36:39	Container Boat	Travelling	90	38	50	7	21	10	22.3159	113.9740	2173.32	21.08
17-Sep-13	8:36:52	HSF High Speed Ferry	Travelling	91	0	40	303	42	50	22.3068	113.9573	1378.58	317.44
17-Sep-13	8:37:22	Transportation Boat	Travelling	91	2	20	305	36	40	22.3068	113.9579	1341.40	319.34
17-Sep-13	8:38:26	Container Boat	Travelling	91	0	20	324	29	50	22.3092	113.9614	1386.71	338.23
17-Sep-13	8:38:43	Transportation Boat	Travelling	90	54	50	280	39	50	22.3033	113.9529	1527.93	294.39
17-Sep-13	8:38:50	HSF High Speed Ferry	Travelling	90	50	0	336	2	0	22.3125	113.9635	1678.29	349.76
17-Sep-13	8:39:38	Container Boat	Travelling	90	53	50	334	51	10	22.3114	113.9634	1557.04	348.58
17-Sep-13	8:39:45	Tug Boat	Travelling	90	53	30	332	52	20	22.3113	113.9629	1566.93	346.60
17-Sep-13	8:39:50	Construction Boat	Travelling	90	53	50	331	40	0	22.3112	113.9626	1557.10	345.40
17-Sep-13	8:40:06	HSF High Speed Ferry	Travelling	90	39	40	347	59	30	22.3168	113.9670	2127.69	1.72
17-Sep-13	8:40:16	Tug Boat	Travelling	90	39	20	10	21	30	22.3153	113.9749	2146.33	24.09
17-Sep-13	8:40:26	Container Boat	Travelling	90	39	40	12	3	0	22.3149	113.9754	2127.82	25.78
17-Sep-13	8:40:41	Speed Boat	Travelling	93	19	30	4	17	0	22.3012	113.9677	416.76	18.01
17-Sep-13	8:40:59	Transportation Boat	Travelling	90	56	50	316	20	30	22.3091	113.9592	1474.01	330.07
17-Sep-13	8:41:24	HSF High Speed Ferry	Travelling	90	31	20	352	42	0	22.3219	113.9694	2718.93	6.43
17-Sep-13	8:41:52	Container Boat	Travelling	90	41	10	346	45	10	22.3161	113.9666	2048.66	0.48
17-Sep-13	8:42:18	Tug Boat	Travelling	90	47	30	343	48	0	22.3135	113.9657	1769.57	357.53
17-Sep-13	8:42:26	Construction Boat	Travelling	90	47	50	342	58	0	22.3134	113.9654	1757.03	356.70
17-Sep-13	8:42:49	Transportation Boat	Travelling	90	53	0	327	46	30	22.3111	113.9615	1582.88	341.50
17-Sep-13	8:43:03	Speed Boat	Travelling	92	0	10	356	34	20	22.3038	113.9676	693.39	10.30
17-Sep-13	8:44:16	Tug Boat	Travelling	90	39	10	14	57	0	22.3147	113.9765	2157.40	28.68
17-Sep-13	8:44:24	Container Boat	Travelling	90	41	20	15	39	50	22.3136	113.9761	2041.16	29.39
17-Sep-13	8:44:38	Container Boat	Travelling	90	32	30	351	40	50	22.3211	113.9688	2618.42	5.41
17-Sep-13	8:44:46	Tug Boat	Travelling	90	41	20	351	0	40	22.3159	113.9680	2041.31	4.74
17-Sep-13	8:44:52	Construction Boat	Travelling	90	41	40	350	21	0	22.3158	113.9678	2024.57	4.08
17-Sep-13	8:45:22	Transportation Boat	Travelling	90	46	0	339	35	30	22.3140	113.9643	1829.59	353.32
17-Sep-13	8:45:48	Speed Boat	Travelling	91	21	20	353	30	20	22.3068	113.9677	1027.12	7.24
17-Sep-13	8:46:15	Construction Boat	Travelling	90	56	50	285	52	40	22.3042	113.9539	1475.48	299.61
17-Sep-13	8:48:20	Tug Boat	Travelling	90	34	40	0	13	10	22.3190	113.9721	2449.79	13.95
17-Sep-13	8:48:25	Construction Boat	Travelling	90	35	10	359	35	0	22.3188	113.9718	2413.65	13.31
17-Sep-13	8:48:35	Construction Boat	Travelling	90	59	0	304	5	0	22.3071	113.9571	1421.19	317.81
17-Sep-13	8:48:44	Transportation Boat	Travelling	90	36	50	349	54	10	22.3183	113.9678	2300.66	3.63
17-Sep-13	8:48:59	Tug Boat	Travelling	90	41	30	10	38	50	22.3143	113.9746	2034.52	24.38
17-Sep-13	8:49:07	Container Boat	Travelling	90	43	30	9	34	50	22.3136	113.9739	1938.66	23.31
17-Sep-13	8:49:25	Construction Boat	Travelling	90	55	10	306	9	20	22.3081	113.9569	1521.65	319.89
17-Sep-13	8:50:15	Transportation Boat	Travelling	90	33	20	352	26	20	22.3205	113.9691	2552.87	6.17
17-Sep-13	8:50:29	Construction Boat	Travelling	90	47	20	304	8	20	22.3095	113.9548	1778.70	317.87
17-Sep-13	8:52:56	Speed Boat	Travelling	90	44	10	350	11	50	22.3148	113.9677	1910.08	3.93
17-Sep-13	8:53:24	Government Boat	Travelling	90	35	0	350	47	30	22.3194	113.9683	2427.91	4.52
17-Sep-13	8:53:52	Speed Boat	Travelling	93	4	20	11	59	30	22.3013	113.9683	452.29	25.72
17-Sep-13	8:54:11	Tug Boat	Travelling	90	41	30	4	39	50	22.3150	113.9727	2036.54	18.39
17-Sep-13	8:54:21	Container Boat	Stationary	90	43	20	6	10	50	22.3141	113.9729	1948.24	19.91
17-Sep-13	8:54:33	Government Boat	Travelling	90	53	20	328	55	20	22.3112	113.9618	1576.33	342.65
17-Sep-13	8:54:44	Speed Boat	Travelling	91	44	10	6	3	30	22.3044	113.9690	802.16	19.79
17-Sep-13	8:55:47	Government Boat	Travelling	90	52	30	295	46	20	22.3068	113.9544	1602.15	309.50
17-Sep-13	8:56:03	Speed Boat	Travelling	90	56	30	358	10	10	22.3107	113.9694	1487.08	11.90
17-Sep-13	8:56:39	Government Boat	Stationary	90	51	50	294	7	0	22.3066	113.9539	1623.38	307.85
17-Sep-13	8:57:53	Speed Boat	Travelling	90	34	30	2	56	0	22.3189	113.9733	2466.62	16.66
17-Sep-13	9:02:29	Transportation Boat	Travelling	90	37	30	349	20	50	22.3180	113.9676	2264.31	3.08
17-Sep-13	9:02:56	Tug Boat	Travelling	90	50	10	14	55	30	22.3109	113.9742	1680.29	28.65
17-Sep-13	9:04:19	Transportation Boat	Travelling	90	46	30	340	33	0	22.3139	113.9646	1816.03	354.28
17-Sep-13	9:04:34	Container Boat	Travelling	90	55	40	9	23	40	22.3101	113.9722	1512.11	23.12
17-Sep-13	9:04:42	Tug Boat	Travelling	90	56	10	9	50	50	22.3100	113.9722	1498.49	23.58
17-Sep-13	9:08:04	Transportation Boat	Travelling	91	0	20	304	1	0	22.3069	113.9573	1394.51	317.75
17-Sep-13	9:08:19	Construction Boat	Travelling	91	8	30	320	15	20	22.3075	113.9612	1226.54	333.99
17-Sep-13	9:08:28	Tug Boat	Travelling	91	9	40	354	0	50	22.3084	113.9680	1205.83	7.74
17-Sep-13	9:08:34	Container Boat	Travelling	91	9	30	352	15	30	22.3084	113.9676	1208.78	5.99
17-Sep-13	9:09:55	Transportation Boat	Travelling	90	55	20	283	28	10	22.3039	113.9532	1522.90	297.20
17-Sep-13	9:10:09	Construction Boat	Travelling	90	59	40	313	17	30	22.3083	113.9589	1410.85	327.02
17-Sep-13	9:11:58	Tug Boat	Travelling	91	4	50	338	43	50	22.3092	113.9647	1297.56	352.46
17-Sep-13	9:12:04	Container Boat	Travelling	91	3	50	338	23	30	22.3094	113.9646	1318.14	352.12
17-Sep-13	9:12:13	Construction Boat	Travelling	90	48	0	305	26	30	22.3096	113.9552	1760.74	319.17
17-Sep-13	9:15:50	HSF High Speed Ferry	Travelling	90	43	50	342	2	50	22.3150	113.9650	1933.36	355.78
17-Sep-13	9:15:59	Tug Boat	Travelling	90	59	50	336	30	0	22.3101	113.9641	1408.42	350.23
17-Sep-13	9:16:12	Container Boat	Travelling	90	58	50	336	40	20	22.3103	113.9641	1432.74	350.40
17-Sep-13	9:18:13	HSF High Speed Ferry	Travelling	90	59	10	306	31	10	22.3075	113.9575	1425.10	320.25
17-Sep-13	9:18:22	Construction Boat	Travelling	90	56	0	311	1	0	22.3087	113.9579	1506.90	324.75
17-Sep-13	9:19:42	HSF High Speed Ferry	Travelling	90	53	20	280	35	40	22.3035	113.9524	1583.86	294.32
17-Sep-13	9:20:06	Construction Boat	Travelling	90	56	0	319	43	50	22.3098	113.9598	1507.39	333.46
17-Sep-13	9:20:13	Tug Boat	Travelling	90	54	20	342	41	20	22.3116	113.9655	1554.38	356.42
17-Sep-13	9:20:23	Container Boat	Travelling	90	55	10	341	33	10	22.3113	113.9652	1530.59	355.28
17-Sep-13	9:20:59	Transportation Boat	Travelling	90	34	30	351	5	50	22.3198	113.9684	2477.55	4.83
17-Sep-13	9:23:09	Transportation Boat	Travelling	90	51	50	334	29	30	22.3120	113.9632	1631.54	348.22
17-Sep-13	9:23:17	Construction Boat	Travelling	90	50	30	334	29	30	22.3124	113.9631	1675.44	348.22
17-Sep-13	9:23:33	Tug Boat	Travelling	90	49	20	351	32	50	22.3130	113.9679	1715.90	5.28
17-Sep-13	9:23:40	Container Boat	Travelling	90	50	30	350	32	20	22.3127	113.9676	1675.56	4.27
17-Sep-13	9:24:27	Transportation Boat	Travelling	90	58	30	314	21	50	22.3086	113.9590	1443.26	328.09
17-Sep-13	9:26:04	Transportation Boat	Travelling	90	55	50	285	30	40	22.3043	113.9536	1513.66	299.24
17-Sep-13	9:26:15	Construction Boat	Travelling	90	45	10	348	18	10	22.3145	113.9670	1878.65	2.03
17-Sep-13	9:26:23	Transportation Boat	Travelling	90	51	30	334	56	50	22.3121	113.9633	1643.29	348.68
17-Sep-13	9:26:34	Tug Boat	Travelling	90	44	20	358	57	0	22.3144	113.9705	1914.92	12.68
17-Sep-13	9:26:40	Container Boat	Travelling	90	45	0	357	59	10	22.3142	113.9701	1885.92	11.72
17-Sep-13	9:29:51	Transportation Boat	Travelling	90	58	40	296	50	0	22.3060	113.9558	1440.56	310.56
17-Sep-13	9:30:05	Construction Boat	Travelling	90	38	0	3	7	30	22.3170	113.9727	2245.31	16.85
17-Sep-13	9:30:12	Tug Boat	Travelling	90	39	20	6	31	40	22.3159	113.9737	2166.86	20.26
17-Sep-13	9:30:19	Container Boat	Travelling	90	39	40	5	32	30	22.3159	113.9733	2148.15	19.27
17-Sep-13	9:31:55	Tug Boat	Travelling	90	43	10	4	34	40	22.3145	113.9724	1969.96	18.31
17-Sep-13	9:32:14	Container Boat	Stationary	90	38	20	5	52	10	22.3165	113.9737	2226.06	19.60
17-Sep-13	9:32:41	Construction Boat	Travelling	90	34	0	9	42	20	22.3184	113.9762	2521.12	23.44
17-Sep-13	9:33:39	Tug Boat	Travelling	90	51	10	352	9	50	22.3124	113.9681	1656.45	5.89
17-Sep-13	9:36:55	Tug Boat	Travelling	90	56	50	344	9	0	22.3110	113.9659	1489.68	357.88

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
17-Sep-13	9:39:37	Tug Boat	Travelling	90	40	10	1	39	50	22.3161	113.9719	2124.36	15.39
17-Sep-13	9:40:45	Transportation Boat	Travelling	90	59	0	314	19	50	22.3086	113.9590	1435.26	328.06
17-Sep-13	9:41:42	Tug Boat	Travelling	90	32	50	4	58	30	22.3199	113.9746	2619.15	18.70
17-Sep-13	9:42:27	Transportation Boat	Travelling	90	48	0	343	39	0	22.3135	113.9656	1770.83	357.38
17-Sep-13	9:44:16	Transportation Boat	Travelling	90	33	30	352	44	0	22.3206	113.9692	2566.01	6.46
17-Sep-13	9:44:42	Transportation Boat	Travelling	91	20	30	285	11	40	22.3022	113.9575	1049.40	298.92
17-Sep-13	9:44:59	Tug Boat	Travelling	90	40	30	9	11	30	22.3151	113.9744	2108.51	22.92
17-Sep-13	9:50:50	Transportation Boat	Travelling	91	7	40	339	52	30	22.3088	113.9650	1251.76	353.60
17-Sep-13	9:51:00	Tug Boat	Travelling	90	44	0	7	9	10	22.3139	113.9731	1938.70	20.88
17-Sep-13	9:55:13	Construction Boat	Travelling	91	9	20	318	30	40	22.3074	113.9609	1222.38	332.24
17-Sep-13	9:55:33	Transportation Boat	Travelling	90	50	10	354	33	50	22.3127	113.9688	1697.06	8.29
17-Sep-13	10:00:35	Transportation Boat	Travelling	90	36	10	4	55	40	22.3179	113.9738	2376.91	18.66
17-Sep-13	10:01:01	Container Boat	Travelling	90	56	40	1	44	50	22.3106	113.9703	1500.89	15.48
17-Sep-13	10:01:16	Tug Boat	Travelling	90	52	0	0	34	50	22.3119	113.9703	1637.92	14.31
17-Sep-13	10:01:31	Transportation Boat	Travelling	92	50	0	320	10	20	22.3016	113.9643	496.80	333.90
17-Sep-13	10:01:53	Transportation Boat	Travelling	90	59	0	311	57	0	22.3083	113.9585	1440.95	325.68
17-Sep-13	10:04:07	Construction Boat	Stationary	91	9	10	323	39	40	22.3078	113.9618	1227.39	337.39
17-Sep-13	10:04:23	Transportation Boat	Travelling	93	38	30	337	57	20	22.3011	113.9659	386.41	351.69
17-Sep-13	10:04:40	Tug Boat	Travelling	90	48	10	4	9	50	22.3128	113.9717	1771.96	17.89
17-Sep-13	10:04:50	Container Boat	Stationary	90	45	50	3	31	10	22.3136	113.9718	1864.22	17.25
17-Sep-13	10:05:13	Transportation Boat	Travelling	91	10	10	314	39	0	22.3069	113.9602	1209.97	328.38
17-Sep-13	10:05:23	Tug Boat	Travelling	90	46	30	341	25	30	22.3141	113.9649	1837.09	355.15
17-Sep-13	10:05:42	Transportation Boat	Travelling	95	9	0	353	30	20	22.3001	113.9667	272.87	7.24
17-Sep-13	10:05:55	Tug Boat	Travelling	90	46	0	2	56	0	22.3136	113.9716	1857.69	16.66
17-Sep-13	10:06:30	Transportation Boat	Travelling	91	10	30	301	46	30	22.3054	113.9582	1204.49	315.50
17-Sep-13	10:06:38	Tug Boat	Travelling	90	52	20	332	54	30	22.3119	113.9627	1628.95	346.64
17-Sep-13	10:08:21	Transportation Boat	Travelling	91	5	10	284	42	0	22.3032	113.9552	1304.58	298.43
17-Sep-13	10:08:31	Tug Boat	Travelling	90	58	30	316	24	10	22.3090	113.9594	1455.24	330.13
17-Sep-13	10:09:53	Tug Boat	Travelling	90	46	10	3	27	40	22.3135	113.9717	1852.21	17.19
17-Sep-13	10:10:00	Container Boat	Travelling	90	45	30	3	14	40	22.3138	113.9717	1880.01	16.97
17-Sep-13	10:10:18	Tug Boat	Travelling	90	59	20	297	52	10	22.3062	113.9560	1435.01	311.60
17-Sep-13	10:10:30	Container Boat	Travelling	90	30	20	353	48	0	22.3232	113.9700	2861.76	7.53
17-Sep-13	10:10:56	Transportation Boat	Travelling	90	51	10	354	9	0	22.3125	113.9686	1668.09	7.88
17-Sep-13	10:11:07	Government Boat	Travelling	90	48	0	356	7	10	22.3134	113.9694	1780.39	9.85
17-Sep-13	10:11:32	Government Boat	Travelling	90	51	20	347	16	20	22.3126	113.9667	1662.77	1.00
17-Sep-13	10:11:58	Tug Boat	Travelling	90	54	20	282	21	10	22.3038	113.9527	1569.57	296.08
17-Sep-13	10:12:11	Government Boat	Travelling	90	56	30	330	1	0	22.3107	113.9623	1508.54	343.75
17-Sep-13	10:12:24	Transportation Boat	Travelling	90	55	40	346	23	0	22.3114	113.9664	1531.52	0.11
17-Sep-13	10:12:32	Container Boat	Travelling	90	35	40	351	32	50	22.3193	113.9686	2416.95	5.28
17-Sep-13	10:13:20	Government Boat	Travelling	90	56	0	296	22	40	22.3064	113.9551	1522.54	310.11
17-Sep-13	10:13:36	Container Boat	Travelling	90	46	50	1	50	40	22.3135	113.9712	1826.54	15.57
17-Sep-13	10:13:45	Transportation Boat	Travelling	91	1	0	341	14	30	22.3101	113.9652	1396.19	354.97
17-Sep-13	10:13:54	Government Boat	Travelling	90	49	40	282	17	0	22.3044	113.9514	1720.38	296.01
17-Sep-13	10:14:05	Container Boat	Travelling	90	40	40	346	50	20	22.3166	113.9666	2111.17	0.57
17-Sep-13	10:15:48	Transportation Boat	Travelling	93	58	10	341	18	0	22.3008	113.9661	355.13	355.03
17-Sep-13	10:16:01	Container Boat	Travelling	90	53	50	352	30	0	22.3118	113.9681	1585.59	6.23
17-Sep-13	10:16:11	Container Boat	Travelling	90	49	40	336	7	0	22.3129	113.9634	1721.12	349.85
17-Sep-13	10:16:22	Transportation Boat	Travelling	91	4	0	337	15	40	22.3094	113.9644	1330.61	350.99
17-Sep-13	10:16:36	Tug Boat	Travelling	90	53	20	350	36	30	22.3120	113.9676	1600.87	4.34
17-Sep-13	10:17:14	Transportation Boat	Travelling	92	14	10	326	40	20	22.3030	113.9643	631.82	340.40
17-Sep-13	10:17:23	Transportation Boat	Travelling	91	3	30	338	53	0	22.3096	113.9647	1341.47	352.61
17-Sep-13	10:19:35	Transportation Boat	Travelling	91	17	0	316	39	50	22.3063	113.9611	1104.64	330.39
17-Sep-13	10:19:43	Container Boat	Travelling	91	1	50	339	44	10	22.3099	113.9649	1378.67	353.47
17-Sep-13	10:19:52	Tug Boat	Travelling	90	58	20	340	17	10	22.3107	113.9649	1462.55	354.02
17-Sep-13	10:20:01	Container Boat	Travelling	90	54	40	306	36	40	22.3084	113.9567	1562.20	320.34
17-Sep-13	10:21:44	Transportation Boat	Travelling	90	56	10	309	1	10	22.3085	113.9574	1520.33	322.75
17-Sep-13	10:21:52	Container Boat	Travelling	90	47	40	302	38	10	22.3093	113.9543	1796.72	316.37
17-Sep-13	10:22:17	Transportation Boat	Travelling	90	58	30	285	35	40	22.3040	113.9540	1458.99	299.32
17-Sep-13	10:24:39	Transportation Boat	Travelling	91	3	50	335	54	0	22.3094	113.9641	1336.19	349.63
17-Sep-13	10:24:45	Transportation Boat	Travelling	90	56	0	306	39	30	22.3082	113.9569	1525.78	320.39
17-Sep-13	10:25:36	Transportation Boat	Travelling	90	50	0	303	29	10	22.3089	113.9551	1712.44	317.22
17-Sep-13	10:25:52	Transportation Boat	Travelling	90	55	50	335	58	0	22.3112	113.9637	1530.73	349.70
17-Sep-13	10:26:45	Transportation Boat	Travelling	90	52	20	341	32	50	22.3123	113.9651	1635.08	355.28
17-Sep-13	10:31:28	Transportation Boat	Travelling	90	44	10	358	59	50	22.3147	113.9706	1945.94	12.73
17-Sep-13	10:31:58	Transportation Boat	Travelling	91	4	10	331	17	30	22.3092	113.9631	1330.98	345.02
17-Sep-13	10:33:54	Transportation Boat	Travelling	90	56	20	347	10	40	22.3113	113.9666	1519.21	0.91
17-Sep-13	10:35:14	Transportation Boat	Travelling	90	59	20	339	48	20	22.3105	113.9648	1441.68	353.54
17-Sep-13	10:35:56	Transportation Boat	Travelling	91	7	0	333	17	40	22.3088	113.9636	1275.03	347.02
17-Sep-13	10:36:04	Transportation Boat	Travelling	91	2	20	337	9	30	22.3098	113.9643	1371.64	350.89
17-Sep-13	10:37:26	Tug Boat	Travelling	90	59	10	336	39	20	22.3105	113.9641	1446.40	350.39
17-Sep-13	10:37:40	Transportation Boat	Travelling	91	3	40	338	57	30	22.3096	113.9647	1342.98	352.69
17-Sep-13	10:37:47	Transportation Boat	Travelling	91	11	30	338	41	10	22.3083	113.9649	1194.41	352.42
17-Sep-13	10:38:07	HSF High Speed Ferry	Travelling	91	1	40	297	51	20	22.3059	113.9563	1387.18	311.59
17-Sep-13	10:38:47	Transportation Boat	Travelling	91	5	30	343	48	20	22.3094	113.9659	1305.24	357.54
17-Sep-13	10:38:59	Transportation Boat	Travelling	91	0	50	336	59	20	22.3101	113.9642	1406.66	350.72
17-Sep-13	10:39:10	Tug Boat	Travelling	90	59	50	335	12	20	22.3103	113.9637	1430.53	348.94
17-Sep-13	10:39:19	HSF High Speed Ferry	Travelling	90	59	50	317	34	40	22.3089	113.9597	1430.57	331.31
17-Sep-13	10:40:33	Transportation Boat	Travelling	90	56	0	344	24	30	22.3114	113.9659	1530.27	358.14
17-Sep-13	10:40:40	Transportation Boat	Travelling	90	52	30	356	21	10	22.3121	113.9692	1634.04	10.08
17-Sep-13	10:40:50	HSF High Speed Ferry	Travelling	90	50	40	338	15	30	22.3127	113.9641	1694.29	351.99
17-Sep-13	10:42:30	Transportation Boat	Travelling	90	49	20	352	11	30	22.3132	113.9681	1741.50	5.92
17-Sep-13	10:42:37	Transportation Boat	Travelling	90	44	40	4	25	10	22.3141	113.9722	1927.65	18.15
17-Sep-13	10:42:47	HSF High Speed Ferry	Travelling	90	36	20	351	12	40	22.3190	113.9684	2384.51	4.94
17-Sep-13	10:42:58	Tug Boat	Travelling	91	2	40	334	57	20	22.3097	113.9638	1366.01	348.69
17-Sep-13	10:43:15	Transportation Boat	Travelling	90	46	20	4	43	0	22.3135	113.9721	1856.95	18.45
17-Sep-13	10:43:24	HSF High Speed Ferry	Travelling	90	32	50	353	28	10	22.3213	113.9696	2649.99	7.20
17-Sep-13	10:44:46	Transportation Boat	Travelling	90	42	0	359	42	50	22.3156	113.9710	2054.09	13.44
17-Sep-13	10:44:52	Transportation Boat	Travelling	90	55	10	358	17	0	22.3113	113.9695	1555.00	12.01
17-Sep-13	10:44:59	Tug Boat	Travelling	91	8	20	336	24	10	22.3087	113.9643	1251.99	350.13
17-Sep-13	10:45:08	Container Boat	Travelling	91	6	30	334	50	0	22.3090	113.9639	1286.91	348.56
17-Sep-13	10:48:44	Transportation Boat	Travelling	91	19	10	345	31	20	22.3073	113.9663	1079.99	359.25
17-Sep-13	10:48:52	Tug Boat	Travelling	91	0	10	348	22	10	22.3104	113.9669	1425.06	2.10
17-Sep-13	10:48:59	Container Boat	Travelling	91	2	20	347	46	30	22.3100	113.9668	1374.94	1.50
17-Sep-13	10:51:05	Transportation Boat	Travelling	91	0	0	0	44	40	22.3101	113.9699	1429.66	14.47
17-Sep-13	10:51:11	Tug Boat	Travelling	90	53	0	354	40	40	22.3121	113.9687	1621.53	8.41
17-Sep-13	10:51:16	Container Boat	Travelling	90	54	10	353	51	0	22.3118	113.9684	1586.05	7.58
17-Sep-13	10:52:09	Tug Boat	Travelling	90	39	40	348	42	40	22.3172	113.9673	2181.52	2.44
17-Sep-13	10:52:22	Transportation Boat	Travelling	90	53	30	4	10	40	22.3114	113.9712	1606.47	17.91
17-Sep-13	10:54:30	Transportation Boat	Travelling	90	49	20	10	23	0	22.3120	113.9733	1745.40	24.11
17-Sep-13	10:54:42	Tug Boat	Travelling	90	45	40	2	40	20	22.3139	113.9716	1888.70	16.40
17-Sep-13	10:54:49	Container Boat	Travelling	90	46	20	2	0	30	22.3137	113.9713	1860.95	15.74
17-Sep-13	10:54:55	Tug Boat	Travelling	90	52	30	334	13	30	22.3120	113.9631	1638.37	347.95
17-Sep-13	10:57:41	Transportation Boat	Travelling	91	16	40	355	19	10	22.3075	113.9681	1117.34	9.05
17-Sep-13	10:58:00	Transportation Boat	Travelling	90	49	30	350	55	0	22.3132	113.9678	1740.54	4.65
17-Sep-13	10:58:06	Tug Boat	Travelling	90	41	30	8	58	50	22.3149	113.9742	2084.70	22.71
17-Sep-13	10:58:12	Container Boat	Travelling	90	41	10	7	23	30	22.3153	113.9738	2102.10	21.12
17-Sep-13	10:59:15	Transportation Boat	Travelling	91	35	30	349	10	10	22.3057	113.9668	895.91	2.90
17-Sep-13	11:01:41	Transportation Boat	Travelling	91	5	50	7	26	30	22.3086	113.9710	1304.07	21.17
17-Sep-13	11:01:50	Tug Boat	Travelling	90	52	0	6	11	30	22.3116	113.9719	1656.52	19.92
17-Sep-13	11:02:03	Container Boat	Stationary	90	40	30	7	59	20	22.3155	113.9741	2139.25	21.72
17-Sep-13	11:02:17	Transportation Boat	Travelling	91	3	20	339	48	50	22.3097	113.9649	1356.30	353.54
17-Sep-13	11:04:34	Transportation Boat	Travelling	90	50	40	17	8	50	22.3108	113.9749	1701.78	30.88
17-Sep-13	11:04:48	Tug Boat	Travelling	90	56	0	1	27	30	22.3110	113.9703	1537.18	15.19
17-Sep-13	11:05:00	Government Boat	Travelling	91	24	0	307	42	50	22.3048	113.9602	1020.47	321.44
17-Sep-13	11:05:42	Government Boat	Travelling	91	23	30	331	48	30	22.3066	113.9639	1026.75	345.54
17-Sep-13	11:05:51	Transportation Boat	Travelling	91	0	40	341	8	0	22.3103	113.9652	1417.61	354.86
17-Sep-13	11:06:25	Government Boat	Travelling	91	10	40	352	3	10	22.3085	113.9676	1215.05	5.78

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
17-Sep-13	11:06:36	Transportation Boat	Travelling	91	2	10	342	9	40	22.3100	113.9654	1383.17	355.89
17-Sep-13	11:06:43	Transportation Boat	Travelling	91	8	50	10	27	50	22.3079	113.9714	1247.81	24.19
17-Sep-13	11:07:01	Government Boat	Travelling	90	59	40	4	36	0	22.3099	113.9708	1442.00	18.33
17-Sep-13	11:07:13	Transportation Boat	Travelling	91	5	30	307	25	10	22.3068	113.9584	1312.12	321.15
17-Sep-13	11:07:51	Tug Boat	Travelling	90	55	50	308	7	10	22.3085	113.9571	1542.71	321.85
17-Sep-13	11:08:03	Construction Boat	Travelling	90	55	10	307	41	0	22.3086	113.9569	1561.70	321.41
17-Sep-13	11:08:14	Government Boat	Travelling	90	42	10	18	52	40	22.3132	113.9772	2054.72	32.61
17-Sep-13	11:08:25	Transportation Boat	Travelling	91	3	30	346	6	30	22.3098	113.9664	1354.23	359.84
17-Sep-13	11:08:31	Transportation Boat	Travelling	91	37	20	0	12	0	22.3053	113.9685	880.44	13.93
17-Sep-13	11:08:39	Transportation Boat	Travelling	91	24	30	309	46	0	22.3050	113.9605	1015.07	323.50
17-Sep-13	11:09:23	Tug Boat	Travelling	90	54	10	355	51	0	22.3117	113.9690	1591.39	9.58
17-Sep-13	11:10:01	Container Boat	Travelling	90	53	50	355	11	50	22.3119	113.9688	1601.59	8.93
17-Sep-13	11:10:22	Transportation Boat	Travelling	91	18	20	348	24	10	22.3075	113.9668	1095.94	2.13
17-Sep-13	11:10:28	Transportation Boat	Travelling	91	22	10	351	46	30	22.3070	113.9674	1044.45	5.50
17-Sep-13	11:10:37	Transportation Boat	Travelling	92	17	30	317	13	0	22.3025	113.9635	622.56	330.95
17-Sep-13	11:10:47	Tug Boat	Travelling	90	59	50	318	22	40	22.3091	113.9599	1438.93	332.11
17-Sep-13	11:10:56	Construction Boat	Travelling	91	0	10	317	32	30	22.3089	113.9597	1430.89	331.27
17-Sep-13	11:12:12	Transportation Boat	Travelling	94	21	40	334	29	0	22.3005	113.9658	326.49	348.21
17-Sep-13	11:12:21	Transportation Boat	Travelling	91	13	30	304	21	10	22.3054	113.9588	1169.06	318.08
17-Sep-13	11:13:15	Transportation Boat	Travelling	92	9	0	350	29	30	22.3036	113.9669	664.06	4.22
17-Sep-13	11:13:24	Transportation Boat	Travelling	90	48	40	351	29	0	22.3135	113.9680	1776.01	5.21
17-Sep-13	11:13:35	Transportation Boat	Travelling	91	13	40	315	18	30	22.3066	113.9606	1166.66	329.04
17-Sep-13	11:13:48	Transportation Boat	Travelling	91	0	50	301	51	0	22.3067	113.9568	1415.76	315.58
17-Sep-13	11:14:05	Transportation Boat	Travelling	90	40	20	348	52	30	22.3170	113.9674	2153.17	2.60
17-Sep-13	11:14:21	Transportation Boat	Travelling	94	11	50	336	49	50	22.3006	113.9659	339.43	350.56
17-Sep-13	11:14:42	Transportation Boat	Travelling	91	10	50	323	8	10	22.3077	113.9618	1214.02	336.87
17-Sep-13	11:14:58	Transportation Boat	Travelling	90	53	50	305	34	30	22.3086	113.9562	1603.05	319.30
17-Sep-13	11:15:08	Transportation Boat	Travelling	90	45	0	343	38	20	22.3149	113.9655	1924.64	357.37
17-Sep-13	11:15:29	Transportation Boat	Travelling	94	9	40	351	30	0	22.3007	113.9667	342.46	5.23
17-Sep-13	11:15:39	Transportation Boat	Travelling	90	39	50	0	55	50	22.3166	113.9718	2181.66	14.66
17-Sep-13	11:15:49	HSF High Speed Ferry	Travelling	90	47	20	340	24	20	22.3140	113.9646	1827.91	354.14
17-Sep-13	11:17:09	Transportation Boat	Travelling	90	55	10	328	22	30	22.3110	113.9617	1564.33	342.10
17-Sep-13	11:17:24	Tug Boat	Travelling	90	53	50	341	10	40	22.3120	113.9650	1603.78	354.91
17-Sep-13	11:17:44	Container Boat	Travelling	90	54	0	339	2	30	22.3119	113.9644	1598.85	352.77
17-Sep-13	11:18:55	Transportation Boat	Travelling	91	11	0	313	14	50	22.3068	113.9600	1212.08	326.98
17-Sep-13	11:19:11	Transportation Boat	Travelling	90	54	40	308	6	40	22.3088	113.9569	1579.46	321.84
17-Sep-13	11:19:23	HSF High Speed Ferry	Travelling	90	56	50	283	0	40	22.3038	113.9532	1518.39	296.74
17-Sep-13	11:19:39	Transportation Boat	Travelling	90	51	30	305	9	30	22.3090	113.9557	1678.42	318.89
17-Sep-13	11:19:50	Tug Boat	Travelling	90	49	40	341	24	20	22.3132	113.9650	1741.62	355.14
17-Sep-13	11:19:56	Construction Boat	Travelling	90	50	10	340	27	50	22.3131	113.9647	1723.96	354.19
17-Sep-13	11:20:07	Tug Boat	Travelling	90	59	10	329	42	0	22.3102	113.9624	1457.87	343.43
17-Sep-13	11:20:14	Container Boat	Travelling	91	0	10	328	49	0	22.3099	113.9622	1433.35	342.55
17-Sep-13	11:20:31	Transportation Boat	Travelling	92	33	50	355	12	40	22.3026	113.9672	557.26	8.94
17-Sep-13	11:20:58	Transportation Boat	Travelling	91	0	30	303	56	0	22.3071	113.9571	1425.54	317.66
17-Sep-13	11:21:18	Tug Boat	Travelling	90	42	30	344	24	10	22.3160	113.9658	2043.13	358.13
17-Sep-13	11:21:58	Transportation Boat	Travelling	90	53	40	306	42	20	22.3088	113.9564	1610.20	320.44
17-Sep-13	11:22:26	Transportation Boat	Travelling	90	50	0	308	48	0	22.3100	113.9562	1730.61	322.53
17-Sep-13	11:22:43	Transportation Boat	Travelling	91	36	0	351	55	30	22.3056	113.9673	895.07	5.65
17-Sep-13	11:22:55	Tug Boat	Travelling	90	45	40	345	46	10	22.3147	113.9662	1898.63	359.50
17-Sep-13	11:23:02	Construction Boat	Travelling	90	46	30	345	8	10	22.3144	113.9660	1863.88	358.87
17-Sep-13	11:23:10	Tug Boat	Travelling	90	46	50	343	53	40	22.3143	113.9657	1850.36	357.62
17-Sep-13	11:23:25	Container Boat	Travelling	91	2	30	331	58	30	22.3097	113.9631	1379.97	345.70
17-Sep-13	11:23:34	Tug Boat	Travelling	90	58	20	331	54	30	22.3105	113.9628	1479.93	345.64
17-Sep-13	11:25:17	Transportation Boat	Travelling	90	59	40	289	23	40	22.3047	113.9546	1446.87	303.12
17-Sep-13	11:25:32	Transportation Boat	Travelling	91	7	0	355	34	0	22.3090	113.9684	1286.77	9.30
17-Sep-13	11:25:47	Tug Boat	Travelling	91	3	40	335	15	10	22.3096	113.9639	1354.97	348.98
17-Sep-13	11:25:55	Container Boat	Travelling	91	4	30	335	57	30	22.3095	113.9641	1337.30	349.69
17-Sep-13	11:26:09	Tug Boat	Travelling	90	40	10	352	33	40	22.3170	113.9687	2167.22	6.29
17-Sep-13	11:26:15	Construction Boat	Travelling	90	40	30	351	53	40	22.3169	113.9684	2148.90	5.62
17-Sep-13	11:26:22	Tug Boat	Travelling	90	40	50	350	27	10	22.3167	113.9679	2130.89	4.18
17-Sep-13	11:26:40	Transportation Boat	Travelling	91	0	40	306	15	20	22.3074	113.9575	1423.06	319.99
17-Sep-13	11:27:15	Transportation Boat	Travelling	90	53	40	307	9	30	22.3089	113.9565	1611.77	320.89
17-Sep-13	11:27:38	Transportation Boat	Travelling	91	1	20	303	37	50	22.3069	113.9571	1407.65	317.36
17-Sep-13	11:27:55	Transportation Boat	Travelling	90	49	20	305	15	50	22.3095	113.9552	1756.23	318.99
17-Sep-13	11:28:10	Transportation Boat	Travelling	91	1	40	294	13	20	22.3054	113.9557	1400.08	307.95
17-Sep-13	11:28:43	Research Vessel	Travelling	90	53	20	29	58	30	22.3082	113.9773	1622.45	43.70
17-Sep-13	11:29:07	Transportation Boat	Travelling	90	57	50	278	27	20	22.3027	113.9529	1494.43	292.19
17-Sep-13	11:29:17	Transportation Boat	Travelling	91	1	20	356	58	10	22.3101	113.9689	1408.08	10.70
17-Sep-13	11:29:36	Tug Boat	Travelling	90	34	30	341	23	20	22.3204	113.9643	2538.46	355.12
17-Sep-13	11:29:44	Tug Boat	Travelling	90	39	0	357	53	30	22.3173	113.9708	2235.59	11.62
17-Sep-13	11:29:52	Construction Boat	Travelling	90	41	30	357	15	0	22.3161	113.9703	2097.05	10.98
17-Sep-13	11:30:00	Tug Boat	Travelling	90	40	0	354	34	0	22.3170	113.9695	2178.09	8.30
17-Sep-13	11:30:10	Research Vessel	Travelling	90	55	30	24	30	50	22.3086	113.9758	1558.52	38.24
17-Sep-13	11:30:33	Transportation Boat	Travelling	90	59	30	306	39	20	22.3077	113.9574	1452.38	320.39
17-Sep-13	11:32:04	Transportation Boat	Travelling	90	58	40	284	34	30	22.3039	113.9538	1473.71	298.30
17-Sep-13	11:32:17	Research Vessel	Travelling	90	43	10	16	35	10	22.3133	113.9763	2014.84	30.32
17-Sep-13	11:33:26	Speed Boat	Travelling	90	44	0	345	34	0	22.3154	113.9662	1976.14	359.30
17-Sep-13	11:34:08	Tug Boat	Travelling	90	36	10	354	56	0	22.3191	113.9699	2419.02	8.66
17-Sep-13	11:34:14	Construction Boat	Travelling	90	36	10	355	35	30	22.3191	113.9702	2419.07	9.32
17-Sep-13	11:34:21	Tug Boat	Travelling	90	38	30	355	32	0	22.3178	113.9700	2267.52	9.26
17-Sep-13	11:34:37	Research Vessel	Travelling	90	34	50	10	28	30	22.3183	113.9764	2515.53	24.20
17-Sep-13	11:34:47	Speed Boat	Travelling	90	53	50	332	19	50	22.3117	113.9626	1608.93	346.06
17-Sep-13	11:34:56	Tug Boat	Stationary	91	4	0	336	24	10	22.3096	113.9641	1350.11	350.13
17-Sep-13	11:35:06	Container Boat	Stationary	91	4	0	336	48	0	22.3096	113.9642	1350.15	350.53
17-Sep-13	11:35:24	Transportation Boat	Travelling	91	3	40	348	57	20	22.3098	113.9670	1357.38	2.69
17-Sep-13	11:35:35	Speed Boat	Travelling	90	59	20	318	45	40	22.3093	113.9598	1457.87	332.49
17-Sep-13	11:35:50	Tug Boat	Travelling	90	59	50	286	26	30	22.3042	113.9542	1445.59	300.17
17-Sep-13	11:36:01	Transportation Boat	Travelling	90	59	40	289	48	0	22.3048	113.9546	1449.72	303.53
17-Sep-13	11:37:32	Transportation Boat	Travelling	90	51	10	304	15	30	22.3090	113.9554	1695.14	317.99
17-Sep-13	11:37:41	Tug Boat	Travelling	91	2	50	307	45	50	22.3073	113.9581	1376.17	321.49
17-Sep-13	11:37:50	Speed Boat	Travelling	90	51	20	298	0	50	22.3077	113.9541	1689.63	311.74
17-Sep-13	11:38:52	Tug Boat	Stationary	90	36	30	353	30	40	22.3190	113.9693	2398.23	7.24
17-Sep-13	11:39:35	Transportation Boat	Travelling	90	50	30	303	0	20	22.3089	113.9549	1718.58	316.74
17-Sep-13	11:40:24	Tug Boat	Travelling	90	53	50	335	49	50	22.3119	113.9636	1610.59	349.56
17-Sep-13	11:40:36	Transportation Boat	Travelling	91	0	10	305	56	0	22.3075	113.9573	1438.73	319.66
17-Sep-13	11:40:55	Tug Boat	Travelling	90	39	30	350	35	20	22.3175	113.9680	2210.98	4.32
17-Sep-13	11:41:59	Transportation Boat	Travelling	91	1	30	289	45	10	22.3046	113.9550	1407.50	303.48
17-Sep-13	11:42:13	Tug Boat	Travelling	90	46	40	342	51	40	22.3144	113.9653	1863.67	356.59
17-Sep-13	11:42:19	Tug Boat	Travelling	90	44	0	347	29	30	22.3154	113.9668	1979.39	1.22
17-Sep-13	11:43:40	Transportation Boat	Travelling	91	2	20	304	2	30	22.3069	113.9573	1388.87	317.77
17-Sep-13	11:43:55	Tug Boat	Travelling	90	58	20	329	43	0	22.3104	113.9623	1485.48	343.45
17-Sep-13	11:44:03	Tug Boat	Travelling	90	36	20	352	19	40	22.3192	113.9689	2411.96	6.06
17-Sep-13	11:44:23	Container Boat	Travelling	90	50	40	304	28	50	22.3091	113.9553	1714.34	318.21
17-Sep-13	11:44:39	Transportation Boat	Travelling	91	1	10	289	57	10	22.3047	113.9549	1415.96	303.68
17-Sep-13	11:44:45	Speed Boat	Travelling	90	49	10	290	12	10	22.3065	113.9521	1767.79	303.93
17-Sep-13	11:45:09	Transportation Boat	Travelling	90	59	10	305	37	50	22.3076	113.9571	1464.60	319.36
17-Sep-13	11:45:27	Transportation Boat	Travelling	90	56	30	279	37	40	22.3031	113.9527	1534.83	293.36
17-Sep-13	11:45:32	Speed Boat	Travelling	90	50	30	277	47	20	22.3033	113.9508	1720.47	291.52
17-Sep-13	11:45:45	Container Boat	Travelling	90	58	50	311	31	20	22.3085	113.9582	1473.18	325.25
17-Sep-13	11:46:26	Tug Boat	Travelling	90	29	50	351	54	30	22.3242	113.9692	2965.69	5.64
17-Sep-13	11:46:46	Container Boat	Travelling	90	59	20	320	32	30	22.3095	113.9602	1460.86	334.27
17-Sep-13	11:47:10	Tug Boat	Travelling	90	58	30	334	0	10	22.3107	113.9633	1482.07	347.73
17-Sep-13	11:47:24	Tug Boat	Travelling	91	0	40	339	34	50	22.3104	113.9648	1428.50	353.31
17-Sep-13	11:47:44	Transportation Boat	Travelling	90	57	30	288	45	0	22.3049	113.9540	1508.38	302.48
17-Sep-13	11:47:58	Tug Boat	Travelling	90	32	0	346	31	50	22.3224	113.9665	2755.49	0.26
17-Sep-13	11:48:08	Tug Boat	Travelling	90	52	20	341	14	20	22.3125	113.9650	1659.92	354.97
17-Sep-13	11:48:45	Container Boat	Travelling	90	51	30	336	24	20	22.3126	113.9636	1687.45	350.14

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
17-Sep-13	11:48:55	Tug Boat	Travelling	90	58	20	342	55	50	22.3110	113.9656	1486.84	356.66
17-Sep-13	11:49:22	Container Boat	Travelling	90	59	20	342	37	40	22.3107	113.9655	1461.56	356.36
17-Sep-13	11:50:11	Tug Boat	Travelling	90	40	10	350	39	0	22.3172	113.9680	2176.90	4.38
17-Sep-13	11:51:13	Container Boat	Travelling	90	40	20	349	15	0	22.3171	113.9675	2168.05	2.98
17-Sep-13	11:51:21	Tug Boat	Travelling	90	53	50	350	4	50	22.3121	113.9674	1613.84	3.81
17-Sep-13	11:51:28	Container Boat	Travelling	90	54	50	348	57	50	22.3119	113.9671	1583.97	2.69
17-Sep-13	11:52:41	Container Boat	Travelling	90	35	0	352	41	50	22.3201	113.9691	2511.50	6.43
17-Sep-13	11:52:56	Tug Boat	Travelling	90	51	10	354	30	50	22.3128	113.9688	1699.95	8.24
17-Sep-13	11:53:05	Container Boat	Travelling	90	51	50	353	31	20	22.3126	113.9685	1677.73	7.25
17-Sep-13	11:58:28	Tug Boat	Travelling	90	42	20	4	43	30	22.3153	113.9728	2065.54	18.45
17-Sep-13	11:58:35	Container Boat	Travelling	90	43	20	4	41	40	22.3148	113.9726	2016.67	18.42
17-Sep-13	11:58:47	Construction Boat	Travelling	90	35	0	10	12	40	22.3183	113.9763	2514.34	23.94
17-Sep-13	12:01:54	Construction Boat	Travelling	90	44	0	356	21	50	22.3152	113.9698	1986.55	10.09
17-Sep-13	12:02:05	Transportation Boat	Travelling	91	0	0	310	27	0	22.3082	113.9582	1448.47	324.18
17-Sep-13	12:03:26	Transportation Boat	Travelling	91	7	40	325	25	0	22.3084	113.9620	1282.84	339.15
17-Sep-13	12:03:45	Construction Boat	Travelling	90	48	50	344	17	10	22.3137	113.9658	1786.33	358.02
17-Sep-13	12:04:12	Container Boat	Stationary	90	42	10	3	36	50	22.3155	113.9724	2076.12	17.34
17-Sep-13	12:04:23	Tug Boat	Stationary	90	38	40	3	44	20	22.3171	113.9730	2270.01	17.47
17-Sep-13	12:04:40	Transportation Boat	Travelling	90	58	50	305	51	40	22.3077	113.9571	1478.29	319.59
17-Sep-13	12:05:18	Transportation Boat	Travelling	91	7	30	318	44	20	22.3079	113.9606	1286.47	332.47
17-Sep-13	12:05:23	Transportation Boat	Travelling	91	2	20	297	47	40	22.3059	113.9562	1394.41	311.52
17-Sep-13	12:05:42	Container Boat	Travelling	90	46	20	1	25	0	22.3140	113.9712	1885.51	15.15
17-Sep-13	12:06:34	Transportation Boat	Travelling	91	6	20	292	53	50	22.3047	113.9562	1309.65	306.63
17-Sep-13	12:06:43	Transportation Boat	Travelling	90	59	20	281	46	40	22.3033	113.9535	1466.21	295.51
17-Sep-13	12:07:05	Construction Boat	Travelling	91	0	20	317	10	0	22.3090	113.9596	1441.68	330.90
17-Sep-13	12:07:21	Transportation Boat	Travelling	91	1	30	278	48	50	22.3025	113.9537	1414.05	292.54
17-Sep-13	12:07:58	Construction Boat	Travelling	91	2	0	308	26	0	22.3076	113.9580	1402.66	322.16
17-Sep-13	12:08:10	Container Boat	Travelling	90	56	10	354	28	50	22.3114	113.9686	1550.52	8.21
17-Sep-13	12:08:19	Tug Boat	Travelling	91	0	10	354	12	30	22.3105	113.9683	1446.06	7.94
17-Sep-13	12:10:28	Construction Boat	Travelling	90	57	10	284	35	30	22.3041	113.9534	1523.63	298.32
17-Sep-13	12:10:40	Container Boat	Travelling	91	4	0	342	11	10	22.3098	113.9655	1358.97	355.92
17-Sep-13	12:10:51	Tug Boat	Travelling	91	7	0	342	17	10	22.3093	113.9655	1297.49	356.02
17-Sep-13	12:12:55	Container Boat	Stationary	91	4	20	338	53	30	22.3097	113.9647	1352.40	352.62
17-Sep-13	12:13:03	Tug Boat	Stationary	91	3	30	339	27	40	22.3099	113.9648	1370.40	353.19
17-Sep-13	12:22:17	Transportation Boat	Travelling	90	53	0	305	55	30	22.3089	113.9560	1648.96	319.65
17-Sep-13	12:22:32	Transportation Boat	Travelling	91	9	40	339	11	40	22.3088	113.9649	1249.98	352.92
17-Sep-13	12:22:52	Research Vessel	Travelling	90	33	30	352	41	30	22.3213	113.9693	2643.58	6.42
17-Sep-13	12:24:35	Transportation Boat	Travelling	90	59	10	280	4	20	22.3030	113.9533	1475.20	293.80
17-Sep-13	12:24:47	Transportation Boat	Travelling	91	4	30	339	49	10	22.3097	113.9649	1351.78	353.55
17-Sep-13	12:26:19	Transportation Boat	Travelling	90	58	0	348	41	10	22.3112	113.9670	1505.78	2.42
17-Sep-13	12:26:31	Research Vessel	Travelling	90	48	30	348	50	50	22.3139	113.9672	1806.37	2.58
17-Sep-13	12:26:56	Speed Boat	Travelling	90	56	10	26	7	50	22.3084	113.9761	1555.85	39.86
17-Sep-13	12:29:57	Speed Boat	Travelling	91	38	30	7	32	40	22.3050	113.9695	882.99	21.27
17-Sep-13	12:30:08	Research Vessel	Travelling	91	27	40	347	20	0	22.3066	113.9666	992.84	1.06
17-Sep-13	12:30:27	Transportation Boat	Travelling	90	41	50	2	16	30	22.3158	113.9720	2103.24	16.00
17-Sep-13	12:30:42	Construction Boat	Travelling	90	58	10	287	20	20	22.3046	113.9539	1502.60	301.07
17-Sep-13	12:30:55	Research Vessel	Travelling	91	34	30	340	33	50	22.3059	113.9655	920.75	354.29
17-Sep-13	12:31:29	Research Vessel	Travelling	91	24	40	343	11	30	22.3069	113.9659	1028.51	356.92
17-Sep-13	12:32:18	Speed Boat	Travelling	92	22	0	321	36	20	22.3026	113.9639	611.81	335.34
17-Sep-13	12:32:31	Construction Boat	Travelling	91	2	10	304	25	20	22.3070	113.9573	1405.12	318.15
17-Sep-13	12:33:34	Research Vessel	Travelling	90	58	30	349	46	20	22.3110	113.9673	1494.69	3.50
17-Sep-13	12:33:42	Speed Boat	Travelling	91	58	50	290	42	0	22.3013	113.9605	731.76	304.43
17-Sep-13	12:33:50	Construction Boat	Travelling	91	2	0	317	28	50	22.3087	113.9598	1409.29	331.21
17-Sep-13	12:34:39	Speed Boat	Travelling	91	38	20	278	28	10	22.3006	113.9584	885.26	292.20
17-Sep-13	12:34:53	Research Vessel	Travelling	90	48	0	350	37	30	22.3140	113.9678	1828.38	4.35
17-Sep-13	12:35:16	Construction Boat	Travelling	90	57	50	330	37	40	22.3107	113.9624	1512.64	344.36
17-Sep-13	12:38:28	Research Vessel	Travelling	90	33	20	353	27	30	22.3214	113.9696	2665.07	7.19
17-Sep-13	12:38:51	Construction Boat	Travelling	90	40	30	349	8	20	22.3172	113.9675	2177.87	2.87
17-Sep-13	12:40:39	Transportation Boat	Travelling	90	54	20	347	43	10	22.3121	113.9668	1613.22	1.45
17-Sep-13	12:40:52	Construction Boat	Travelling	90	33	30	353	10	0	22.3213	113.9695	2652.40	6.90
17-Sep-13	12:41:04	Research Vessel	Travelling	90	29	0	348	35	40	22.3254	113.9676	3087.33	2.32
17-Sep-13	12:43:55	Transportation Boat	Travelling	91	4	20	339	59	40	22.3098	113.9650	1360.05	353.72
17-Sep-13	12:47:24	Transportation Boat	Travelling	91	6	20	316	41	40	22.3079	113.9601	1319.41	330.42
17-Sep-13	12:49:40	Transportation Boat	Travelling	91	4	50	298	15	10	22.3058	113.9566	1350.85	311.98
17-Sep-13	12:50:03	Tug Boat	Travelling	90	38	50	18	34	40	22.3150	113.9782	2279.01	32.31
17-Sep-13	12:50:40	Tug Boat	Travelling	91	1	50	341	3	50	22.3103	113.9651	1417.46	354.79
17-Sep-13	12:51:25	Container Boat	Travelling	90	37	30	351	26	30	22.3188	113.9685	2363.45	5.17
17-Sep-13	12:51:47	Transportation Boat	Travelling	91	13	0	292	22	0	22.3040	113.9570	1198.71	306.10
17-Sep-13	12:51:56	Transportation Boat	Travelling	90	56	30	283	8	40	22.3039	113.9529	1553.58	296.87
17-Sep-13	12:52:56	Tug Boat	Travelling	90	47	40	356	13	50	22.3140	113.9695	1847.51	9.96
17-Sep-13	12:53:04	Tug Boat	Travelling	90	51	20	3	13	10	22.3124	113.9713	1713.05	16.95
17-Sep-13	12:53:16	Container Boat	Travelling	90	43	30	347	33	10	22.3159	113.9668	2028.98	1.28
17-Sep-13	12:55:27	Tug Boat	Travelling	90	36	0	3	12	0	22.3189	113.9734	2467.45	16.93
17-Sep-13	12:55:38	Tug Boat	Travelling	90	58	20	343	7	40	22.3111	113.9656	1505.05	356.86
17-Sep-13	12:55:55	Transportation Boat	Travelling	92	42	20	319	50	0	22.3019	113.9641	537.22	333.56
17-Sep-13	12:56:10	Container Boat	Travelling	90	55	0	334	32	0	22.3117	113.9632	1597.84	348.26
17-Sep-13	12:57:45	Transportation Boat	Travelling	95	33	40	350	25	50	22.3000	113.9666	260.65	4.16
17-Sep-13	12:57:56	Tug Boat	Travelling	90	39	10	6	12	40	22.3168	113.9739	2262.25	19.94
17-Sep-13	12:58:05	Tug Boat	Travelling	91	4	30	327	29	50	22.3092	113.9621	1359.98	341.23
17-Sep-13	12:58:12	Container Boat	Travelling	91	1	10	320	14	20	22.3092	113.9603	1435.07	333.97
17-Sep-13	13:06:19	Tug Boat	Travelling	91	6	10	336	54	0	22.3094	113.9643	1327.32	350.63
17-Sep-13	13:06:46	Ferry	Travelling	90	53	40	352	27	20	22.3123	113.9681	1641.35	6.19
17-Sep-13	13:08:43	Tug Boat	Travelling	91	9	50	338	52	10	22.3088	113.9648	1257.45	352.60
17-Sep-13	13:08:50	Ferry	Travelling	91	3	50	339	32	20	22.3099	113.9648	1377.03	353.27
17-Sep-13	13:10:53	Ferry	Travelling	91	4	50	335	3	0	22.3096	113.9638	1356.05	348.78
17-Sep-13	13:11:13	Tug Boat	Travelling	91	4	20	339	21	50	22.3098	113.9648	1366.79	353.09
17-Sep-13	13:12:53	Ferry	Travelling	91	5	30	337	38	50	22.3096	113.9644	1342.57	351.38
17-Sep-13	13:13:01	Tug Boat	Travelling	91	4	0	338	51	50	22.3099	113.9647	1374.44	352.59
17-Sep-13	13:15:50	Tug Boat	Travelling	91	0	50	341	57	40	22.3106	113.9653	1447.65	355.69
17-Sep-13	13:16:03	Speed Boat	Travelling	93	15	40	1	33	30	22.3015	113.9675	447.04	15.29
17-Sep-13	13:19:40	Tug Boat	Travelling	90	49	50	0	33	10	22.3131	113.9707	1774.16	14.28
17-Sep-13	13:19:58	Speed Boat	Travelling	91	34	0	352	5	0	22.3060	113.9673	933.91	5.81
17-Sep-13	13:20:44	Ferry	Travelling	90	58	0	336	36	40	22.3111	113.9639	1520.71	350.34
17-Sep-13	13:20:58	Tug Boat	Travelling	90	43	40	4	42	20	22.3150	113.9726	2031.25	18.44
17-Sep-13	13:21:15	Ferry	Travelling	90	56	20	340	28	20	22.3116	113.9649	1566.53	354.20
17-Sep-13	13:21:31	Construction Boat	Travelling	90	41	20	348	18	0	22.3170	113.9671	2149.36	2.03
17-Sep-13	13:23:59	Ferry	Travelling	90	46	40	357	29	0	22.3144	113.9700	1898.65	11.21
17-Sep-13	13:24:06	Construction Boat	Travelling	90	44	0	345	54	10	22.3158	113.9663	2016.61	359.63
17-Sep-13	13:24:27	Tug Boat	Stationary	90	43	10	4	44	50	22.3152	113.9727	2056.70	18.48
17-Sep-13	13:26:08	Construction Boat	Travelling	90	36	0	352	50	50	22.3198	113.9692	2481.35	6.58
17-Sep-13	13:26:17	Ferry	Travelling	90	37	0	3	20	20	22.3184	113.9733	2411.86	17.07
17-Sep-13	13:26:31	Transportation Boat	Travelling	90	41	0	348	34	50	22.3171	113.9673	2169.32	2.31
17-Sep-13	13:26:47	Government Boat	Travelling	91	21	50	294	17	40	22.3036	113.9582	1075.06	308.02
17-Sep-13	13:27:14	Speed Boat	Travelling	95	43	10	323	18	20	22.2997	113.9654	254.73	337.04
17-Sep-13	13:27:31	Government Boat	Travelling	91	34	30	333	29	0	22.3058	113.9644	930.20	347.21
17-Sep-13	13:27:40	Speed Boat	Travelling	94	13	50	295	23	20	22.2996	113.9638	344.98	309.12
17-Sep-13	13:27:58	Speed Boat	Travelling	93	23	20	283	41	10	22.2994	113.9627	431.05	297.42
17-Sep-13	13:28:08	Government Boat	Travelling	91	13	50	3	26	10	22.3079	113.9698	1192.85	17.17
17-Sep-13	13:28:36	Transportation Boat	Travelling	90	53	20	335	9	40	22.3123	113.9633	1658.33	348.89
17-Sep-13	13:28:52	Government Boat	Travelling	90	46	50	14	39	30	22.3126	113.9752	1893.42	28.39
17-Sep-13	13:30:06	Transportation Boat	Travelling	93	20	40	332	50	30	22.3014	113.9654	436.97	346.57
17-Sep-13	13:30:18	Transportation Boat	Travelling	91	1	50	317	8	10	22.3088	113.9596	1427.65	330.87
17-Sep-13	13:31:04	Transportation Boat	Travelling	91	4	0	307	32	20	22.3073	113.9580	1378.92	321.27
17-Sep-13	13:31:12	Transportation Boat	Travelling	92	17	30	323	33	0	22.3029	113.9640	638.64	337.28
17-Sep-13	13:33:07	Transportation Boat	Travelling	90	58	40	281	58	0	22.3035	113.9532	1506.55	295.70
17-Sep-13	13:33:19	Transportation Boat	Travelling	91	24	0	314	54	40	22.3057	113.9611	1048.36	328.64
17-Sep-13	13:33:28	Transportation Boat	Travelling	90	57	40	305	31	10	22.3081	113.9567	1533.15	319.25

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
17-Sep-13	13:33:55	Transportation Boat	Travelling	91	2	20	305	50	10	22.3073	113.9575	1416.98	319.57
17-Sep-13	13:34:17	Tug Boat	Travelling	90	42	20	7	2	10	22.3153	113.9736	2102.03	20.77
17-Sep-13	13:34:54	Transportation Boat	Travelling	91	5	10	310	31	0	22.3075	113.9587	1354.88	324.25
17-Sep-13	13:34:59	Transportation Boat	Travelling	91	2	40	294	18	0	22.3054	113.9556	1409.61	308.03
17-Sep-13	13:35:18	Tug Boat	Travelling	90	45	50	2	56	0	22.3143	113.9718	1937.95	16.66
17-Sep-13	13:35:40	Transportation Boat	Travelling	90	59	10	308	13	40	22.3082	113.9574	1494.32	321.96
17-Sep-13	13:35:48	Transportation Boat	Travelling	91	1	20	285	18	0	22.3039	113.9541	1440.87	299.03
17-Sep-13	13:35:54	Transportation Boat	Travelling	91	2	0	306	13	0	22.3074	113.9575	1425.20	319.95
17-Sep-13	13:36:25	Transportation Boat	Travelling	91	5	30	300	20	0	22.3061	113.9570	1348.27	314.06
17-Sep-13	13:36:33	Transportation Boat	Travelling	91	6	20	285	37	40	22.3035	113.9551	1331.17	299.36
17-Sep-13	13:37:08	Tug Boat	Travelling	90	53	0	350	10	30	22.3126	113.9675	1671.51	3.90
17-Sep-13	13:37:17	Transportation Boat	Travelling	91	4	50	286	44	20	22.3038	113.9550	1362.51	300.47
17-Sep-13	13:37:24	Transportation Boat	Travelling	91	6	50	304	10	10	22.3064	113.9578	1321.31	317.90
17-Sep-13	13:37:48	Transportation Boat	Travelling	91	4	50	279	11	0	22.3024	113.9542	1362.63	292.91
17-Sep-13	13:37:54	Transportation Boat	Travelling	90	59	20	308	48	0	22.3083	113.9576	1490.66	322.53
17-Sep-13	13:38:33	Transportation Boat	Travelling	90	52	30	304	26	50	22.3089	113.9554	1688.14	318.18
17-Sep-13	13:38:39	Tug Boat	Travelling	91	0	40	339	16	20	22.3106	113.9647	1457.66	353.00
17-Sep-13	13:40:17	Transportation Boat	Travelling	91	23	10	308	55	0	22.3052	113.9601	1060.27	322.65
17-Sep-13	13:40:24	Tug Boat	Travelling	91	6	0	335	10	20	22.3094	113.9639	1338.90	348.90
17-Sep-13	13:42:37	Tug Boat	Travelling	91	4	0	332	44	10	22.3097	113.9633	1381.79	346.47
17-Sep-13	13:42:48	Container Boat	Travelling	91	5	30	333	56	10	22.3095	113.9636	1349.82	347.67
17-Sep-13	13:44:45	Transportation Boat	Travelling	94	57	40	337	26	50	22.3002	113.9660	294.85	351.18
17-Sep-13	13:46:15	Tug Boat	Travelling	90	57	20	338	38	30	22.3114	113.9644	1545.75	352.37
17-Sep-13	13:46:21	Container Boat	Travelling	90	57	30	337	2	40	22.3113	113.9640	1541.23	350.77
17-Sep-13	13:47:24	Transportation Boat	Travelling	90	59	10	328	22	50	22.3104	113.9619	1497.48	342.11
17-Sep-13	13:47:42	Tug Boat	Travelling	90	56	10	341	52	0	22.3118	113.9652	1578.76	355.60
17-Sep-13	13:47:49	Container Boat	Travelling	90	57	10	340	29	20	22.3115	113.9649	1550.75	354.22
17-Sep-13	13:49:12	Transportation Boat	Travelling	90	52	40	338	51	10	22.3127	113.9643	1685.94	352.58
17-Sep-13	13:49:20	Transportation Boat	Travelling	91	4	40	303	51	10	22.3067	113.9574	1369.02	317.58
17-Sep-13	13:49:56	Transportation Boat	Travelling	90	42	30	0	29	30	22.3159	113.9714	2099.50	14.22
17-Sep-13	13:50:17	Transportation Boat	Travelling	90	48	20	343	36	40	22.3142	113.9656	1840.51	357.34
17-Sep-13	13:50:25	Transportation Boat	Travelling	90	59	40	282	30	40	22.3035	113.9534	1485.56	296.24
17-Sep-13	13:50:35	Transportation Boat	Travelling	90	46	0	358	1	10	22.3147	113.9702	1936.10	11.75
17-Sep-13	13:50:47	Tug Boat	Travelling	90	56	10	347	3	20	22.3118	113.9666	1579.64	0.79
17-Sep-13	13:50:54	Container Boat	Travelling	90	54	10	346	9	0	22.3124	113.9664	1638.96	359.88
17-Sep-13	13:52:34	Transportation Boat	Travelling	90	40	10	350	17	0	22.3176	113.9679	2226.18	4.01
17-Sep-13	13:52:40	Transportation Boat	Travelling	91	3	40	347	51	40	22.3101	113.9668	1391.61	1.59
17-Sep-13	13:52:46	Transportation Boat	Travelling	91	9	40	318	18	50	22.3077	113.9606	1270.51	332.04
17-Sep-13	13:53:53	Transportation Boat	Travelling	91	12	50	340	40	0	22.3085	113.9652	1214.98	354.40
17-Sep-13	13:54:00	Transportation Boat	Travelling	91	9	10	325	2	20	22.3084	113.9619	1280.07	338.77
17-Sep-13	13:54:42	Transportation Boat	Travelling	91	8	20	320	41	20	22.3081	113.9610	1296.01	334.42
17-Sep-13	13:54:56	Transportation Boat	Travelling	91	8	20	341	17	20	22.3092	113.9653	1296.06	355.02
17-Sep-13	13:55:54	Transportation Boat	Travelling	91	2	30	346	41	10	22.3104	113.9665	1418.74	0.42
17-Sep-13	13:56:02	Transportation Boat	Travelling	90	59	50	307	13	50	22.3080	113.9573	1482.85	320.96
17-Sep-13	13:56:51	Transportation Boat	Travelling	94	21	20	339	6	40	22.3006	113.9660	336.79	352.84
17-Sep-13	13:58:26	Transportation Boat	Travelling	92	20	0	320	55	20	22.3027	113.9638	630.26	334.65
17-Sep-13	13:58:44	Tug Boat	Travelling	90	49	10	355	29	50	22.3137	113.9692	1811.42	9.23
17-Sep-13	13:58:50	Container Boat	Travelling	90	48	20	356	22	20	22.3140	113.9695	1843.34	10.10
17-Sep-13	13:59:38	Transportation Boat	Travelling	91	40	0	315	41	20	22.3045	113.9620	883.82	329.42
17-Sep-13	14:01:09	Other	Stationary	91	12	30	324	25	0	22.3078	113.9620	1222.21	338.15
17-Sep-13	14:01:15	Other	Stationary	91	8	30	326	42	20	22.3086	113.9622	1294.34	340.44
17-Sep-13	14:01:23	Other	Stationary	91	13	0	322	20	20	22.3076	113.9616	1213.81	336.07
17-Sep-13	14:01:36	Other	Stationary	90	29	20	347	18	10	22.3255	113.9669	3095.83	1.03
17-Sep-13	14:01:49	Other	Stationary	90	37	20	354	11	20	22.3191	113.9696	2405.03	7.92
17-Sep-13	14:02:00	Other	Stationary	90	36	0	356	20	20	22.3197	113.9706	2497.59	10.07
17-Sep-13	14:02:07	Other	Stationary	90	43	0	355	55	30	22.3161	113.9698	2078.99	9.65
17-Sep-13	14:02:15	Other	Stationary	90	33	20	357	49	40	22.3215	113.9717	2706.32	11.56
17-Sep-13	14:02:21	Other	Stationary	90	34	30	359	6	40	22.3205	113.9720	2610.88	12.84
17-Sep-13	14:02:36	Other	Stationary	90	33	50	1	14	20	22.3208	113.9731	2664.71	14.97
17-Sep-13	14:02:51	Other	Stationary	90	32	0	11	50	40	22.3206	113.9783	2824.92	25.57
17-Sep-13	14:03:04	Other	Stationary	90	40	40	342	12	40	22.3174	113.9649	2202.16	355.94
17-Sep-13	14:03:14	Other	Stationary	90	29	0	353	39	10	22.3256	113.9703	3134.54	7.38
17-Sep-13	14:03:23	Other	Stationary	90	29	20	356	52	10	22.3250	113.9719	3096.84	10.60
17-Sep-13	14:03:33	Other	Stationary	90	27	40	1	30	50	22.3262	113.9748	3295.90	15.24
17-Sep-13	14:03:42	Other	Stationary	90	44	40	2	27	50	22.3149	113.9718	2000.03	16.19
17-Sep-13	14:03:49	Other	Stationary	90	44	30	3	57	40	22.3148	113.9723	2007.75	17.69
17-Sep-13	14:03:56	Other	Stationary	90	30	40	5	45	50	22.3227	113.9760	2954.91	19.49
17-Sep-13	14:04:10	Other	Stationary	91	7	10	337	22	10	22.3094	113.9644	1321.00	351.10
17-Sep-13	14:04:16	Other	Stationary	91	8	50	339	21	30	22.3091	113.9649	1288.70	353.09
17-Sep-13	14:04:24	Other	Stationary	90	30	0	343	34	40	22.3248	113.9650	3024.57	357.31
17-Sep-13	14:04:31	Other	Stationary	90	30	0	344	41	30	22.3248	113.9656	3024.63	358.42
17-Sep-13	14:04:44	Other	Stationary	90	34	0	0	2	50	22.3208	113.9725	2652.09	13.78
17-Sep-13	14:04:49	Other	Stationary	90	34	0	1	13	50	22.3207	113.9731	2652.14	14.96
17-Sep-13	14:05:00	Other	Stationary	91	0	50	359	47	0	22.3104	113.9697	1460.50	13.51
17-Sep-13	14:05:08	Other	Stationary	91	1	0	1	33	10	22.3103	113.9701	1456.49	15.28
19-Sep-13	8:00:59	Other	Stationary	94	25	40	0	0	0	22.3003	113.9671	312.06	13.73
19-Sep-13	8:03:16	Other	Stationary	90	30	50	292	51	20	22.3124	113.9448	2759.06	306.59
19-Sep-13	8:03:22	Other	Stationary	90	36	50	294	40	0	22.3104	113.9489	2292.29	308.40
19-Sep-13	8:03:28	Other	Stationary	90	44	40	297	18	20	22.3087	113.9526	1879.83	311.04
19-Sep-13	8:03:35	Other	Stationary	90	51	30	301	51	0	22.3081	113.9553	1625.68	315.58
19-Sep-13	8:03:44	Other	Stationary	90	56	30	304	51	10	22.3076	113.9569	1479.60	318.58
19-Sep-13	8:03:54	Other	Stationary	90	56	30	304	51	10	22.3076	113.9569	1479.57	318.58
19-Sep-13	8:04:03	Other	Stationary	90	49	50	307	37	0	22.3094	113.9562	1680.96	321.35
19-Sep-13	8:04:11	Other	Stationary	90	49	50	307	37	20	22.3094	113.9562	1680.93	321.35
19-Sep-13	8:04:15	Other	Stationary	90	53	10	309	48	50	22.3090	113.9573	1573.74	323.54
19-Sep-13	8:04:21	Other	Stationary	90	55	10	313	23	10	22.3091	113.9584	1515.78	327.12
19-Sep-13	8:04:26	Other	Stationary	90	54	30	319	36	20	22.3100	113.9597	1534.60	333.34
19-Sep-13	8:04:36	Other	Stationary	90	52	40	324	32	0	22.3109	113.9607	1588.86	338.26
19-Sep-13	8:04:43	Other	Stationary	90	51	20	327	48	10	22.3115	113.9614	1630.82	341.53
19-Sep-13	8:04:51	Other	Stationary	90	49	10	333	21	20	22.3126	113.9627	1704.01	347.09
19-Sep-13	8:04:58	Other	Stationary	90	44	50	337	19	0	22.3143	113.9636	1872.32	351.05
19-Sep-13	8:05:05	Other	Stationary	90	40	50	341	56	10	22.3161	113.9649	2060.62	355.67
19-Sep-13	8:05:14	Other	Stationary	90	39	0	345	30	0	22.3171	113.9661	2160.37	359.23
19-Sep-13	8:05:20	Other	Stationary	90	36	0	348	27	30	22.3187	113.9673	2346.67	2.19
19-Sep-13	8:05:26	Other	Stationary	90	30	10	351	11	30	22.3229	113.9688	2822.44	4.92
19-Sep-13	8:05:36	Other	Stationary	90	28	40	352	4	40	22.3243	113.9693	2978.60	5.81
19-Sep-13	8:05:49	Other	Stationary	90	27	50	348	10	50	22.3253	113.9674	3073.25	1.91
19-Sep-13	8:06:03	Other	Stationary	90	28	40	352	4	50	22.3243	113.9693	2978.43	5.81
19-Sep-13	8:06:15	Other	Stationary	90	28	0	348	10	40	22.3251	113.9674	3053.65	1.91
19-Sep-13	8:06:21	Other	Stationary	90	27	30	343	9	10	22.3256	113.9648	3112.70	356.88
19-Sep-13	8:06:28	Other	Stationary	90	26	50	339	12	40	22.3262	113.9626	3195.22	352.94
19-Sep-13	8:06:37	Other	Stationary	90	27	20	329	19	40	22.3246	113.9575	3132.82	343.06
19-Sep-13	8:06:47	Other	Stationary	90	29	20	325	9	0	22.3220	113.9562	2906.58	338.88
19-Sep-13	8:07:01	Other	Stationary	90	28	20	323	14	30	22.3226	113.9549	3015.22	336.97
19-Sep-13	8:07:11	Other	Stationary	90	28	30	319	58	30	22.3218	113.9535	2996.45	333.70
19-Sep-13	8:07:18	Other	Stationary	90	24	50	317	3	0	22.3249	113.9499	3472.29	330.78
19-Sep-13	8:07:25	Other	Stationary	90	25	10	314	12	20	22.3237	113.9487	3422.57	327.94
19-Sep-13	8:07:37	Other	Stationary	90	26	50	310	33	20	22.3210	113.9483	3194.75	324.29
19-Sep-13	8:07:44	Other	Stationary	90	28	30	304	58	30	22.3179	113.9472	2996.23	318.70
19-Sep-13	8:07:55	Other	Stationary	90	28	50	302	43	40	22.3169	113.9466	2959.49	316.46
19-Sep-13	8:08:10	Other	Stationary	90	30	50	298	30	50	22.3143	113.9465	2757.31	312.24
19-Sep-13	8:08:32	Other	Stationary	91	9	10	324	23	30	22.3077	113.9620	1204.98	338.12
19-Sep-13	8:08:46	Other	Stationary	90	27	20	346	30	50	22.3258	113.9665	3131.95	0.24
19-Sep-13	8:08:55	Other	Stationary	90	34	50	354	4	10	22.3193	113.9696	2427.18	7.80
19-Sep-13	8:09:01	Other	Stationary	90	33	50	355	9	0	22.3199	113.9702	2501.82	8.88
19-Sep-13	8:09:06	Other	Stationary	90	42	20	355	37	20	22.3152	113.9695	1984.65	9.35
19-Sep-13	8:09:14	Other	Stationary	90	40	0	357	17	50	22.3162	113.9703	2103.68	11.03

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
19-Sep-13	8:09:25	Other	Stationary	90	32	10	357	40	40	22.3209	113.9715	2637.16	11.41
19-Sep-13	8:09:36	Other	Stationary	90	31	20	359	10	0	22.3214	113.9723	2710.63	12.90
19-Sep-13	8:09:40	Other	Stationary	90	31	0	359	18	20	22.3217	113.9724	2741.20	13.04
19-Sep-13	8:09:47	Other	Stationary	90	29	50	0	26	30	22.3225	113.9732	2854.08	14.17
19-Sep-13	8:10:15	Other	Stationary	91	2	10	340	40	50	22.3096	113.9651	1341.92	354.41
19-Sep-13	8:10:23	Other	Stationary	91	3	10	343	23	10	22.3095	113.9658	1320.41	357.12
19-Sep-13	8:10:35	Other	Stationary	90	52	40	359	7	20	22.3115	113.9698	1587.65	12.85
19-Sep-13	8:10:42	Other	Stationary	90	52	50	1	29	20	22.3114	113.9704	1582.54	15.22
19-Sep-13	8:10:53	Other	Stationary	90	33	10	3	54	10	22.3195	113.9739	2553.66	17.63
19-Sep-13	8:10:58	Other	Stationary	90	33	30	4	24	0	22.3192	113.9740	2527.14	18.13
19-Sep-13	8:11:16	Container Boat	Stationary	90	23	30	341	43	50	22.3307	113.9636	3685.03	355.46
19-Sep-13	8:11:26	Container Boat	Stationary	90	53	50	14	39	50	22.3099	113.9736	1552.52	28.39
19-Sep-13	8:11:32	Container Boat	Stationary	90	50	40	18	37	50	22.3102	113.9750	1651.23	32.36
19-Sep-13	8:11:56	Tug Boat	Stationary	91	11	10	323	50	40	22.3074	113.9621	1170.30	337.57
19-Sep-13	8:12:05	Tug Boat	Stationary	90	54	0	1	5	10	22.3111	113.9702	1547.52	14.82
19-Sep-13	8:13:16	Tug Boat	Travelling	90	54	0	6	12	10	22.3107	113.9715	1547.29	19.93
19-Sep-13	8:13:26	Transportation Boat	Travelling	93	39	20	337	22	20	22.3010	113.9658	377.68	351.10
19-Sep-13	8:14:10	HSF High Speed Ferry	Travelling	90	34	20	351	3	30	22.3197	113.9684	2462.28	4.79
19-Sep-13	8:14:30	Transportation Boat	Travelling	90	58	30	313	34	10	22.3084	113.9589	1426.37	327.30
19-Sep-13	8:14:45	Tug Boat	Travelling	90	54	30	14	33	10	22.3098	113.9735	1532.59	28.28
19-Sep-13	8:15:25	Transportation Boat	Travelling	91	50	0	319	22	20	22.3037	113.9631	754.70	333.10
19-Sep-13	8:16:09	HSF High Speed Ferry	Travelling	90	49	20	338	0	10	22.3127	113.9640	1695.70	351.73
19-Sep-13	8:16:21	Tug Boat	Travelling	90	49	0	17	44	40	22.3107	113.9751	1707.42	31.47
19-Sep-13	8:16:40	Transportation Boat	Travelling	90	54	10	328	16	40	22.3108	113.9618	1541.79	342.01
19-Sep-13	8:17:23	Transportation Boat	Travelling	90	55	50	287	4	30	22.3045	113.9539	1494.94	300.80
19-Sep-13	8:17:56	Tug Boat	Travelling	90	44	0	12	15	20	22.3130	113.9745	1905.48	25.99
19-Sep-13	8:18:06	Transportation Boat	Travelling	91	4	50	310	43	20	22.3070	113.9591	1284.83	324.45
19-Sep-13	8:18:13	Transportation Boat	Travelling	90	49	10	336	51	40	22.3127	113.9637	1701.11	350.59
19-Sep-13	8:18:20	Transportation Boat	Travelling	90	58	0	297	16	40	22.3061	113.9558	1438.14	311.01
19-Sep-13	8:18:57	HSF High Speed Ferry	Travelling	90	58	10	290	22	30	22.3049	113.9549	1433.85	304.10
19-Sep-13	8:19:15	Tug Boat	Travelling	90	36	20	7	6	50	22.3171	113.9744	2320.23	20.84
19-Sep-13	8:19:29	Transportation Boat	Travelling	90	53	40	307	51	40	22.3086	113.9570	1555.83	321.59
19-Sep-13	8:19:38	Transportation Boat	Travelling	90	44	20	342	54	50	22.3146	113.9653	1890.40	356.64
19-Sep-13	8:19:46	Transportation Boat	Travelling	90	53	50	306	42	10	22.3084	113.9568	1550.88	320.43
19-Sep-13	8:20:05	Transportation Boat	Travelling	91	2	30	283	41	10	22.3031	113.9549	1333.02	297.42
19-Sep-13	8:20:26	Transportation Boat	Travelling	90	49	50	307	3	30	22.3093	113.9561	1677.46	320.79
19-Sep-13	8:22:28	Transportation Boat	Travelling	90	37	0	353	6	20	22.3180	113.9690	2276.02	6.84
19-Sep-13	8:22:40	Transportation Boat	Travelling	91	3	40	321	7	30	22.3083	113.9610	1307.88	334.85
19-Sep-13	8:22:48	Transportation Boat	Travelling	91	0	20	297	49	30	22.3059	113.9563	1381.01	311.55
19-Sep-13	8:23:12	Tug Boat	Travelling	90	37	40	7	54	0	22.3163	113.9744	2234.18	21.63
19-Sep-13	8:23:34	Transportation Boat	Travelling	90	57	30	306	18	30	22.3076	113.9573	1449.85	320.04
19-Sep-13	8:24:05	Transportation Boat	Travelling	90	51	40	306	2	20	22.3087	113.9562	1616.13	319.77
19-Sep-13	8:24:33	Transportation Boat	Travelling	90	49	40	341	20	50	22.3127	113.9650	1682.30	355.08
19-Sep-13	8:24:40	Tug Boat	Travelling	90	44	30	12	21	40	22.3128	113.9745	1881.94	26.09
19-Sep-13	8:26:32	Transportation Boat	Travelling	90	37	50	352	55	40	22.3175	113.9689	2223.06	6.66
19-Sep-13	8:26:43	HSF High Speed Ferry	Travelling	90	56	40	286	18	50	22.3042	113.9540	1470.89	300.04
19-Sep-13	8:31:44	HSF High Speed Ferry	Travelling	90	54	30	331	49	50	22.3109	113.9627	1529.28	345.56
19-Sep-13	8:31:51	Transportation Boat	Travelling	90	43	50	344	24	10	22.3148	113.9658	1909.50	358.13
19-Sep-13	8:32:05	Container Boat	Travelling	91	2	30	348	53	20	22.3096	113.9670	1330.99	2.62
19-Sep-13	8:32:20	Tug Boat	Travelling	91	0	0	348	34	30	22.3101	113.9669	1387.10	2.30
19-Sep-13	8:34:13	Transportation Boat	Travelling	91	0	0	306	59	0	22.3073	113.9579	1386.77	320.71
19-Sep-13	8:34:25	HSF High Speed Ferry	Travelling	90	42	20	346	14	50	22.3154	113.9664	1978.24	359.98
19-Sep-13	8:34:50	Container Boat	Travelling	90	57	20	343	19	0	22.3107	113.9657	1452.04	357.05
19-Sep-13	8:34:57	Tug Boat	Travelling	91	1	0	343	45	50	22.3099	113.9658	1363.62	357.49
19-Sep-13	8:35:19	HSF High Speed Ferry	Travelling	90	58	0	286	41	50	22.3042	113.9544	1435.03	300.43
19-Sep-13	8:35:36	HSF High Speed Ferry	Travelling	90	37	30	349	34	40	22.3178	113.9677	2240.87	3.31
19-Sep-13	8:35:47	Transportation Boat	Travelling	90	52	50	280	8	40	22.3034	113.9524	1577.49	293.87
19-Sep-13	8:36:17	Container Boat	Stationary	91	1	50	343	24	40	22.3097	113.9657	1344.80	357.14
19-Sep-13	8:36:27	Speed Boat	Travelling	91	2	30	7	34	10	22.3088	113.9711	1330.25	21.30
19-Sep-13	8:37:12	Tug Boat	Travelling	90	59	20	344	52	10	22.3102	113.9661	1402.02	358.60
19-Sep-13	8:38:02	Speed Boat	Travelling	91	28	0	9	1	20	22.3054	113.9699	941.78	22.75
19-Sep-13	8:38:10	Speed Boat	Travelling	90	52	40	17	31	20	22.3098	113.9744	1582.09	31.25
19-Sep-13	8:38:24	HSF High Speed Ferry	Travelling	90	48	50	338	55	0	22.3129	113.9643	1708.54	352.65
19-Sep-13	8:38:41	Transportation Boat	Travelling	90	59	50	288	39	10	22.3043	113.9550	1389.89	302.38
19-Sep-13	8:38:53	Transportation Boat	Travelling	90	59	50	284	1	20	22.3034	113.9544	1389.85	297.75
19-Sep-13	8:39:23	Speed Boat	Travelling	91	22	20	340	49	0	22.3066	113.9655	1006.87	354.55
19-Sep-13	8:39:33	Speed Boat	Travelling	91	34	50	9	0	40	22.3049	113.9697	873.37	22.74
19-Sep-13	8:40:08	Speed Boat	Travelling	91	20	50	306	17	50	22.3047	113.9600	1025.60	320.03
19-Sep-13	8:40:23	Transportation Boat	Travelling	91	14	20	316	43	10	22.3064	113.9610	1115.98	330.45
19-Sep-13	8:40:35	Transportation Boat	Travelling	90	59	20	304	4	40	22.3070	113.9572	1401.42	317.81
19-Sep-13	8:40:49	Tug Boat	Travelling	90	58	30	345	52	10	22.3104	113.9663	1421.60	359.60
19-Sep-13	8:40:57	Speed Boat	Travelling	91	1	0	278	45	10	22.3023	113.9542	1362.58	292.48
19-Sep-13	8:41:07	Transportation Boat	Travelling	90	55	50	306	5	0	22.3079	113.9570	1490.43	319.81
19-Sep-13	8:41:22	Transportation Boat	Travelling	91	21	0	343	45	30	22.3068	113.9660	1023.31	357.49
19-Sep-13	8:41:33	Transportation Boat	Travelling	90	58	10	306	15	0	22.3075	113.9575	1429.73	319.98
19-Sep-13	8:42:15	Speed Boat	Travelling	91	23	50	11	4	30	22.3057	113.9704	988.38	24.80
19-Sep-13	8:42:58	Speed Boat	Travelling	91	8	30	16	21	0	22.3071	113.9723	1211.52	30.08
19-Sep-13	8:43:07	Transportation Boat	Travelling	90	54	10	20	4	50	22.3091	113.9747	1536.60	33.81
19-Sep-13	8:43:20	Transportation Boat	Travelling	91	0	40	290	54	20	22.3046	113.9554	1369.75	304.64
19-Sep-13	8:44:14	Speed Boat	Travelling	91	12	50	292	52	50	22.3037	113.9575	1138.60	306.61
19-Sep-13	8:44:29	Transportation Boat	Travelling	90	59	50	280	37	0	22.3028	113.9541	1388.86	294.35
19-Sep-13	8:44:39	Transportation Boat	Travelling	90	37	30	31	58	30	22.3117	113.9820	2238.26	45.70
19-Sep-13	8:44:47	Speed Boat	Travelling	90	40	0	30	37	20	22.3111	113.9806	2094.11	44.35
19-Sep-13	8:45:42	Speed Boat	Travelling	91	16	20	301	23	10	22.3045	113.9589	1085.76	315.12
19-Sep-13	8:48:00	Speed Boat	Travelling	90	59	50	299	29	30	22.3062	113.9566	1388.24	313.22
19-Sep-13	8:48:29	Speed Boat	Stationary	91	15	30	301	1	50	22.3046	113.9588	1097.46	314.76
19-Sep-13	8:49:17	Speed Boat	Travelling	90	51	20	333	41	10	22.3119	113.9630	1621.59	347.42
19-Sep-13	8:50:14	Speed Boat	Travelling	90	39	0	347	36	10	22.3169	113.9669	2147.93	1.33
19-Sep-13	8:50:54	Speed Boat	Travelling	90	32	10	351	28	0	22.3211	113.9687	2623.06	5.20
19-Sep-13	8:51:01	Tug Boat	Travelling	91	2	20	343	25	0	22.3096	113.9658	1331.38	357.15
19-Sep-13	8:55:30	Tug Boat	Travelling	90	50	10	0	55	50	22.3121	113.9705	1658.66	14.66
19-Sep-13	8:55:58	Speed Boat	Stationary	91	11	30	300	6	50	22.3048	113.9583	1158.30	313.84
19-Sep-13	9:01:49	Transportation Boat	Travelling	90	58	20	295	4	50	22.3056	113.9556	1421.91	308.81
19-Sep-13	9:01:56	Transportation Boat	Travelling	91	1	30	295	23	10	22.3053	113.9562	1347.76	309.12
19-Sep-13	9:02:07	Tug Boat	Travelling	90	59	50	339	34	40	22.3100	113.9648	1385.75	353.31
19-Sep-13	9:02:21	Transportation Boat	Travelling	90	33	40	351	31	50	22.3200	113.9686	2497.48	5.26
19-Sep-13	9:02:47	Transportation Boat	Travelling	90	56	30	305	51	30	22.3077	113.9571	1468.52	319.59
19-Sep-13	9:03:00	Transportation Boat	Travelling	90	59	0	304	39	50	22.3071	113.9573	1405.42	318.39
19-Sep-13	9:03:21	Transportation Boat	Travelling	90	50	10	305	19	30	22.3089	113.9558	1657.00	319.05
19-Sep-13	9:03:32	Transportation Boat	Travelling	90	54	50	305	54	0	22.3080	113.9569	1513.68	319.63
19-Sep-13	9:03:43	Transportation Boat	Travelling	90	43	0	353	50	30	22.3149	113.9689	1939.49	7.57
19-Sep-13	9:04:26	Transportation Boat	Travelling	90	42	10	355	50	20	22.3152	113.9696	1978.62	9.57
19-Sep-13	9:05:07	Transportation Boat	Travelling	91	5	20	311	47	40	22.3070	113.9594	1267.28	325.52
19-Sep-13	9:05:23	Tug Boat	Travelling	90	59	20	338	27	0	22.3101	113.9646	1396.99	352.18
19-Sep-13	9:05:33	Container Boat	Travelling	91	0	0	339	24	20	22.3100	113.9648	1381.24	353.14
19-Sep-13	9:06:47	Transportation Boat	Travelling	90	49	40	338	30	40	22.3125	113.9642	1673.25	352.24
19-Sep-13	9:07:09	Transportation Boat	Travelling	91	6	40	329	40	50	22.3083	113.9630	1241.35	343.41
19-Sep-13	9:07:51	Transportation Boat	Travelling	90	56	0	320	37	50	22.3096	113.9602	1480.86	334.36
19-Sep-13	9:08:08	Transportation Boat	Travelling	91	7	0	338	35	20	22.3086	113.9648	1234.96	352.32
19-Sep-13	9:08:16	Tug Boat	Travelling	90	53	10	347	3	30	22.3117	113.9666	1560.95	0.79
19-Sep-13	9:08:22	Container Boat	Travelling	90	54	0	345	47	20	22.3114	113.9663	1536.46	359.52
19-Sep-13	9:08:42	Transportation Boat	Travelling	90	52	40	306	6	20	22.3085	113.9565	1575.93	319.84
19-Sep-13	9:08:54	Transportation Boat	Travelling	90	50	10	304	20	50	22.3087	113.9556	1655.82	318.08
19-Sep-13	9:09:02	Transportation Boat	Travelling	91	6	10	346	43	30	22.3089	113.9665	1250.53	0.45
19-Sep-13	9:10:48	Transportation Boat	Travelling	90	58	40	0	7	30	22.3100	113.9697	1412.10	13.85
19-Sep-13	9:10:55	Tug Boat	Travelling	90	47	50	355	6	40	22.3131	113.9690	1737.73	8.84
19-Sep-13	9:11:00	Container Boat	Travelling	90	48	50	354	4	0	22.3128	113.9686	1701.43	7.80

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
19-Sep-13	9:13:28	Transportation Boat	Travelling	90	47	0	13	47	30	22.3117	113.9743	1768.60	27.52
19-Sep-13	9:13:41	Transportation Boat	Travelling	90	48	30	337	57	30	22.3129	113.9640	1712.77	351.69
19-Sep-13	9:13:58	Speed Boat	Stationary	90	47	30	297	4	20	22.3079	113.9535	1749.49	310.80
19-Sep-13	9:14:17	HSF High Speed Ferry	Travelling	90	32	50	352	27	10	22.3205	113.9691	2559.66	6.18
19-Sep-13	9:15:19	Transportation Boat	Travelling	90	57	30	323	13	0	22.3095	113.9609	1440.32	336.95
19-Sep-13	9:16:01	HSF High Speed Ferry	Travelling	90	44	20	343	49	30	22.3145	113.9656	1876.79	357.55
19-Sep-13	9:16:57	Transportation Boat	Travelling	91	0	50	305	14	40	22.3069	113.9577	1360.10	318.97
19-Sep-13	9:17:20	Tug Boat	Travelling	90	42	10	11	55	10	22.3136	113.9747	1975.34	25.65
19-Sep-13	9:17:26	Container Boat	Travelling	90	41	20	9	40	10	22.3143	113.9742	2016.21	23.40
19-Sep-13	9:17:41	Transportation Boat	Travelling	90	59	20	296	36	50	22.3057	113.9561	1394.80	310.34
19-Sep-13	9:17:46	Transportation Boat	Travelling	90	58	20	301	48	40	22.3067	113.9567	1419.01	315.54
19-Sep-13	9:17:54	HSF High Speed Ferry	Travelling	90	58	0	319	30	30	22.3091	113.9601	1427.26	333.24
19-Sep-13	9:18:10	Container Boat	Stationary	90	41	30	10	4	20	22.3142	113.9743	2007.70	23.80
19-Sep-13	9:18:17	Tug Boat	Travelling	90	44	40	16	16	30	22.3121	113.9755	1861.92	30.00
19-Sep-13	9:19:23	Transportation Boat	Travelling	90	53	30	279	19	20	22.3031	113.9525	1549.01	293.05
19-Sep-13	9:19:28	Transportation Boat	Travelling	90	52	40	283	13	50	22.3040	113.9528	1573.94	296.96
19-Sep-13	9:19:35	HSF High Speed Ferry	Travelling	90	57	40	289	27	20	22.3047	113.9547	1435.52	303.19
19-Sep-13	9:19:58	Transportation Boat	Travelling	90	59	40	299	56	10	22.3062	113.9566	1386.84	313.67
19-Sep-13	9:20:15	HSF High Speed Ferry	Travelling	90	53	30	278	45	30	22.3030	113.9525	1549.18	292.49
19-Sep-13	9:22:55	Transportation Boat	Travelling	90	54	0	277	31	20	22.3026	113.9525	1535.14	291.25
19-Sep-13	9:23:11	Tug Boat	Travelling	90	53	20	16	29	20	22.3097	113.9740	1554.69	30.22
19-Sep-13	9:23:21	Container Boat	Travelling	90	54	40	15	30	40	22.3095	113.9736	1516.21	29.24
19-Sep-13	9:27:22	Tug Boat	Travelling	91	8	40	356	57	30	22.3083	113.9686	1204.30	10.69
19-Sep-13	9:27:29	Container Boat	Travelling	91	8	40	355	17	20	22.3083	113.9682	1204.32	9.02
19-Sep-13	9:27:47	Transportation Boat	Travelling	90	57	30	305	37	50	22.3075	113.9573	1441.25	319.36
19-Sep-13	9:28:06	Transportation Boat	Travelling	91	8	20	282	24	40	22.3024	113.9558	1210.34	296.14
19-Sep-13	9:30:08	Transportation Boat	Travelling	90	55	30	278	28	50	22.3027	113.9529	1494.40	292.21
19-Sep-13	9:30:17	Transportation Boat	Travelling	91	21	50	300	9	10	22.3039	113.9593	1009.43	313.88
19-Sep-13	9:31:19	Tug Boat	Travelling	91	3	40	342	23	50	22.3093	113.9655	1300.57	356.13
19-Sep-13	9:31:28	Container Boat	Travelling	91	2	0	341	43	10	22.3096	113.9654	1335.97	355.45
19-Sep-13	9:35:12	Transportation Boat	Travelling	91	16	40	339	2	20	22.3072	113.9651	1078.66	352.77
19-Sep-13	9:35:20	Tug Boat	Travelling	90	59	30	338	53	30	22.3101	113.9647	1393.51	352.62
19-Sep-13	9:35:29	Container Boat	Stationary	91	0	0	340	22	30	22.3100	113.9650	1381.77	354.10
19-Sep-13	9:36:11	Tug Boat	Travelling	90	56	0	345	33	10	22.3110	113.9662	1482.01	359.28
19-Sep-13	9:37:42	Transportation Boat	Travelling	91	1	10	343	42	40	22.3098	113.9658	1355.48	357.44
19-Sep-13	9:37:54	Tug Boat	Travelling	90	51	10	0	20	20	22.3118	113.9702	1624.71	14.07
19-Sep-13	9:38:10	Government Boat	Travelling	90	38	0	18	6	40	22.3145	113.9777	2203.53	31.84
19-Sep-13	9:38:20	Transportation Boat	Travelling	91	4	0	307	1	50	22.3066	113.9584	1294.88	320.76
19-Sep-13	9:38:25	Transportation Boat	Travelling	90	58	40	300	3	10	22.3064	113.9565	1414.12	313.78
19-Sep-13	9:39:10	Transportation Boat	Travelling	90	59	30	346	43	0	22.3102	113.9665	1394.19	0.45
19-Sep-13	9:39:16	Transportation Boat	Travelling	90	56	20	327	49	40	22.3102	113.9619	1473.69	341.56
19-Sep-13	9:39:21	Transportation Boat	Travelling	90	54	20	306	16	30	22.3082	113.9568	1528.78	320.00
19-Sep-13	9:39:35	Government Boat	Travelling	90	50	20	15	14	0	22.3106	113.9742	1652.45	28.96
19-Sep-13	9:39:52	Transportation Boat	Travelling	90	50	20	304	6	40	22.3086	113.9556	1652.51	317.84
19-Sep-13	9:40:02	Speed Boat	Travelling	95	27	40	324	29	20	22.2997	113.9655	250.91	338.22
19-Sep-13	9:40:38	Transportation Boat	Travelling	90	58	10	353	28	20	22.3104	113.9681	1426.85	7.20
19-Sep-13	9:40:46	Transportation Boat	Travelling	90	41	10	346	12	0	22.3159	113.9664	2029.86	359.93
19-Sep-13	9:41:33	Speed Boat	Travelling	93	51	30	291	40	30	22.2995	113.9636	355.82	305.40
19-Sep-13	9:41:50	Tug Boat	Travelling	90	47	30	357	58	50	22.3131	113.9699	1753.48	11.71
19-Sep-13	9:42:02	Transportation Boat	Travelling	90	33	10	352	24	40	22.3203	113.9690	2538.83	6.14
19-Sep-13	9:42:12	Transportation Boat	Travelling	90	58	0	354	38	50	22.3104	113.9684	1431.29	8.38
19-Sep-13	9:42:25	Government Boat	Travelling	90	54	20	14	0	40	22.3098	113.9733	1529.38	27.74
19-Sep-13	9:42:35	Transportation Boat	Travelling	90	42	0	19	52	30	22.3125	113.9771	1988.98	33.60
19-Sep-13	9:44:14	Transportation Boat	Travelling	91	6	0	5	34	40	22.3083	113.9704	1256.16	19.31
19-Sep-13	9:44:20	Transportation Boat	Travelling	91	0	0	314	6	10	22.3082	113.9592	1383.34	327.83
19-Sep-13	9:44:31	Transportation Boat	Travelling	90	57	50	355	39	50	22.3104	113.9687	1435.90	9.39
19-Sep-13	9:44:38	Tug Boat	Travelling	90	49	10	355	19	0	22.3127	113.9690	1693.50	9.05
19-Sep-13	9:44:47	Government Boat	Travelling	91	1	30	17	25	0	22.3080	113.9732	1349.25	31.15
19-Sep-13	9:46:59	Transportation Boat	Travelling	91	13	50	292	14	50	22.3036	113.9576	1124.17	305.98
19-Sep-13	9:47:08	Transportation Boat	Travelling	90	48	30	340	58	20	22.3130	113.9649	1721.02	354.70
19-Sep-13	9:47:29	Government Boat	Stationary	91	1	50	18	17	30	22.3079	113.9733	1344.91	32.02
19-Sep-13	9:47:37	Tug Boat	Travelling	90	50	30	358	13	20	22.3122	113.9697	1651.75	11.95
19-Sep-13	9:49:05	Transportation Boat	Travelling	90	38	50	350	24	0	22.3170	113.9679	2162.17	4.13
19-Sep-13	9:51:11	Government Boat	Travelling	91	6	20	18	50	50	22.3071	113.9730	1253.58	32.58
19-Sep-13	9:52:42	Government Boat	Travelling	91	27	30	11	22	10	22.3053	113.9703	948.45	25.10
19-Sep-13	9:52:50	Tug Boat	Travelling	90	51	40	0	15	30	22.3117	113.9702	1615.44	13.99
19-Sep-13	9:52:59	Transportation Boat	Travelling	90	59	0	358	14	20	22.3100	113.9692	1411.84	11.97
19-Sep-13	9:56:16	Tug Boat	Travelling	90	48	10	5	0	40	22.3124	113.9718	1736.24	18.74
19-Sep-13	9:56:25	Government Boat	Stationary	91	28	30	10	24	10	22.3053	113.9701	938.34	24.13
19-Sep-13	9:56:35	Transportation Boat	Travelling	90	59	20	359	35	30	22.3099	113.9695	1404.78	13.32
19-Sep-13	9:59:26	Tug Boat	Travelling	90	45	30	7	48	20	22.3130	113.9730	1841.35	21.54
19-Sep-13	9:59:37	Container Boat	Travelling	90	46	0	7	58	0	22.3128	113.9729	1820.95	21.70
19-Sep-13	10:06:30	Transportation Boat	Travelling	91	56	0	316	50	50	22.3032	113.9630	716.30	330.58
19-Sep-13	10:06:45	Transportation Boat	Travelling	91	0	10	2	55	10	22.3096	113.9703	1387.80	16.65
19-Sep-13	10:06:54	Government Boat	Travelling	91	31	10	13	37	0	22.3049	113.9705	912.57	27.35
19-Sep-13	10:08:48	Transportation Boat	Travelling	94	15	50	340	15	40	22.3005	113.9661	324.02	353.99
19-Sep-13	10:08:56	Government Boat	Stationary	91	23	50	8	8	40	22.3059	113.9700	993.31	21.87
19-Sep-13	10:09:33	Transportation Boat	Stationary	95	32	0	356	32	40	22.2998	113.9668	249.37	10.27
19-Sep-13	10:10:54	Government Boat	Travelling	90	57	0	16	8	40	22.3091	113.9735	1467.15	29.87
19-Sep-13	10:12:15	Government Boat	Travelling	90	34	40	25	10	0	22.3147	113.9813	2442.77	38.90
19-Sep-13	10:16:05	Transportation Boat	Travelling	90	54	10	285	32	30	22.3044	113.9533	1546.62	299.27
19-Sep-13	10:17:03	Tug Boat	Travelling	91	2	0	310	52	0	22.3075	113.9588	1348.94	324.60
19-Sep-13	10:17:12	Construction Boat	Travelling	91	0	20	310	21	40	22.3077	113.9585	1386.71	324.09
19-Sep-13	10:18:27	Transportation Boat	Travelling	90	56	20	306	5	30	22.3078	113.9571	1486.93	319.82
19-Sep-13	10:19:06	Transportation Boat	Travelling	90	51	30	304	44	30	22.3086	113.9559	1629.02	318.47
19-Sep-13	10:19:15	Tug Boat	Travelling	90	36	50	352	30	0	22.3182	113.9688	2297.03	6.23
19-Sep-13	10:22:31	Tug Boat	Travelling	91	3	50	329	28	40	22.3089	113.9627	1311.13	343.21
19-Sep-13	10:22:37	Construction Boat	Travelling	91	2	30	327	54	10	22.3091	113.9623	1339.45	341.63
19-Sep-13	10:22:43	Tug Boat	Travelling	90	51	20	332	1	0	22.3119	113.9625	1635.55	345.75
19-Sep-13	10:22:51	Tug Boat	Travelling	91	0	40	334	50	0	22.3098	113.9637	1380.50	348.56
19-Sep-13	10:28:58	Transportation Boat	Travelling	92	38	0	333	27	40	22.3022	113.9653	527.59	347.19
19-Sep-13	10:30:37	Transportation Boat	Travelling	91	38	0	321	13	20	22.3046	113.9629	852.47	334.95
19-Sep-13	10:33:39	Transportation Boat	Travelling	90	58	10	310	26	20	22.3082	113.9582	1443.63	324.17
19-Sep-13	10:33:50	Speed Boat	Travelling	92	14	30	318	48	40	22.3026	113.9636	620.68	332.54
19-Sep-13	10:35:33	Speed Boat	Travelling	92	44	10	338	55	10	22.3022	113.9658	508.34	352.65
19-Sep-13	10:38:50	Speed Boat	Travelling	91	35	40	5	31	20	22.3051	113.9692	874.75	19.25
19-Sep-13	10:39:12	Speed Boat	Travelling	91	58	0	23	17	10	22.3027	113.9705	708.54	37.02
19-Sep-13	10:39:26	Transportation Boat	Travelling	91	9	10	11	40	20	22.3075	113.9715	1212.93	25.40
19-Sep-13	10:39:37	HSF High Speed Ferry	Travelling	90	57	10	290	44	0	22.3051	113.9546	1470.92	304.46
19-Sep-13	10:40:22	Speed Boat	Travelling	91	35	50	290	38	0	22.3021	113.9594	873.47	304.36
19-Sep-13	10:40:32	Transportation Boat	Travelling	91	22	30	344	52	10	22.3068	113.9662	1015.62	358.60
19-Sep-13	10:40:44	Speed Boat	Travelling	91	19	30	279	47	20	22.3014	113.9570	1054.27	293.52
19-Sep-13	10:40:55	Speed Boat	Travelling	91	29	20	29	2	20	22.3038	113.9726	937.51	42.77
19-Sep-13	10:41:09	HSF High Speed Ferry	Travelling	90	56	40	321	11	40	22.3097	113.9603	1484.53	334.92
19-Sep-13	10:41:56	Transportation Boat	Travelling	91	16	10	307	16	30	22.3053	113.9597	1101.03	321.00
19-Sep-13	10:43:38	HSF High Speed Ferry	Travelling	90	36	0	350	14	40	22.3188	113.9680	2363.32	3.97
19-Sep-13	10:45:23	Tug Boat	Travelling	90	46	30	351	57	30	22.3139	113.9682	1816.97	5.69
19-Sep-13	10:47:00	Tug Boat	Travelling	90	52	50	337	54	20	22.3118	113.9641	1595.76	351.64
19-Sep-13	10:48:08	Tug Boat	Travelling	90	46	40	338	57	20	22.3138	113.9642	1811.30	352.69
19-Sep-13	10:48:46	Tug Boat	Travelling	90	57	40	318	28	20	22.3092	113.9598	1460.55	332.20
19-Sep-13	10:48:54	Tug Boat	Travelling	90	50	10	333	26	0	22.3124	113.9628	1682.74	347.16
19-Sep-13	10:50:01	Tug Boat	Travelling	90	53	50	309	34	30	22.3089	113.9573	1566.55	323.30
19-Sep-13	10:50:19	Tug Boat	Travelling	90	55	10	321	36	20	22.3101	113.9602	1528.18	335.34
19-Sep-13	10:50:32	Tug Boat	Travelling	91	2	20	285	48	50	22.3036	113.9550	1350.29	299.54
19-Sep-13	10:50:40	Construction Boat	Travelling	91	3	30	284	33	0	22.3033	113.9550	1325.23	298.28
19-Sep-13	10:51:28	Tug Boat	Travelling	90	48	40	306	32	30	22.3096	113.9556	1736.47	320.27
19-Sep-13	10:51:36	Tug Boat	Travelling	90	54	40	309	49	30	22.3088	113.9575	1542.76	323.55

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
19-Sep-13	10:52:11	Tug Boat	Travelling	90	52	10	307	0	20	22.3089	113.9564	1618.12	320.74
19-Sep-13	10:56:52	Tug Boat	Travelling	90	59	0	321	39	10	22.3093	113.9606	1429.31	335.38
19-Sep-13	10:56:58	Construction Boat	Travelling	91	0	50	321	4	30	22.3089	113.9607	1385.71	334.80
19-Sep-13	10:58:58	Tug Boat	Travelling	90	49	20	359	59	30	22.3126	113.9704	1715.02	13.72
19-Sep-13	11:00:17	Tug Boat	Travelling	90	50	20	355	16	50	22.3126	113.9690	1680.74	9.01
19-Sep-13	11:02:58	Tug Boat	Travelling	90	42	30	345	11	40	22.3156	113.9660	1999.00	358.92
19-Sep-13	11:03:04	Construction Boat	Travelling	90	44	0	345	15	30	22.3150	113.9661	1929.20	358.99
19-Sep-13	11:05:38	Tug Boat	Travelling	90	54	0	344	25	10	22.3117	113.9659	1566.32	358.15
19-Sep-13	11:05:52	Container Boat	Travelling	90	55	20	343	39	50	22.3114	113.9657	1528.06	357.39
19-Sep-13	11:06:01	Transportation Boat	Travelling	91	10	10	309	58	50	22.3063	113.9595	1201.57	323.71
19-Sep-13	11:06:13	Tug Boat	Travelling	90	37	10	354	3	40	22.3181	113.9694	2296.55	7.79
19-Sep-13	11:06:25	Construction Boat	Travelling	90	38	0	353	52	30	22.3176	113.9693	2244.59	7.60
19-Sep-13	11:07:08	Tug Boat	Travelling	90	56	50	310	47	50	22.3085	113.9580	1487.49	324.53
19-Sep-13	11:10:32	Transportation Boat	Travelling	94	17	10	336	43	0	22.3005	113.9659	326.16	350.45
19-Sep-13	11:10:38	Tug Boat	Travelling	90	44	10	2	8	50	22.3143	113.9715	1924.54	15.88
19-Sep-13	11:10:44	Container Boat	Travelling	90	44	40	1	0	30	22.3142	113.9711	1902.52	14.74
19-Sep-13	11:10:52	Tug Boat	Travelling	90	36	30	1	16	20	22.3180	113.9723	2342.09	15.00
19-Sep-13	11:11:04	Construction Boat	Travelling	90	37	10	0	47	20	22.3176	113.9720	2298.70	14.52
19-Sep-13	11:11:13	Tug Boat	Travelling	90	42	50	347	34	20	22.3155	113.9668	1986.19	1.30
19-Sep-13	11:11:40	Transportation Boat	Travelling	90	47	40	338	37	40	22.3135	113.9641	1780.54	352.36
19-Sep-13	11:12:58	Tug Boat	Travelling	90	34	40	351	52	30	22.3198	113.9687	2471.79	5.60
19-Sep-13	11:13:04	Tug Boat	Travelling	90	33	40	353	8	20	22.3204	113.9694	2548.34	6.87
19-Sep-13	11:13:16	Construction Boat	Stationary	90	36	40	359	49	20	22.3180	113.9717	2332.15	13.55
19-Sep-13	11:13:36	Transportation Boat	Travelling	90	59	10	319	18	30	22.3091	113.9601	1429.79	333.04
19-Sep-13	11:13:45	Transportation Boat	Travelling	91	7	50	286	45	20	22.3033	113.9560	1245.15	300.49
19-Sep-13	11:14:44	Transportation Boat	Travelling	90	59	0	303	47	40	22.3071	113.9570	1434.20	317.52
19-Sep-13	11:14:49	Transportation Boat	Travelling	91	2	10	302	54	30	22.3065	113.9573	1360.26	316.64
19-Sep-13	11:15:17	Tug Boat	Travelling	90	45	0	11	22	20	22.3130	113.9742	1889.75	25.10
19-Sep-13	11:15:23	Container Boat	Stationary	90	41	10	16	32	20	22.3137	113.9766	2070.46	30.27
19-Sep-13	11:15:41	Transportation Boat	Travelling	90	59	0	294	24	10	22.3056	113.9554	1434.46	308.13
19-Sep-13	11:15:48	Transportation Boat	Travelling	90	52	10	305	45	10	22.3087	113.9561	1625.45	319.48
19-Sep-13	11:16:00	Transportation Boat	Travelling	90	58	20	306	37	40	22.3077	113.9574	1451.17	320.36
19-Sep-13	11:16:16	Speed Boat	Travelling	90	33	20	351	32	40	22.3207	113.9687	2576.52	5.27
19-Sep-13	11:16:52	Tug Boat	Travelling	90	46	40	6	45	30	22.3130	113.9726	1821.31	20.49
19-Sep-13	11:17:03	Transportation Boat	Travelling	90	55	10	281	39	20	22.3035	113.9529	1536.03	295.39
19-Sep-13	11:17:11	Transportation Boat	Travelling	91	2	40	293	28	0	22.3050	113.9559	1349.88	307.20
19-Sep-13	11:17:29	Speed Boat	Travelling	90	40	40	346	50	50	22.3165	113.9666	2097.49	0.58
19-Sep-13	11:18:22	Transportation Boat	Travelling	90	58	20	279	53	40	22.3029	113.9535	1451.82	293.62
19-Sep-13	11:18:35	Speed Boat	Travelling	90	48	40	337	24	30	22.3131	113.9638	1745.53	351.14
19-Sep-13	11:18:44	Transportation Boat	Travelling	90	34	0	351	19	20	22.3203	113.9686	2525.07	5.05
19-Sep-13	11:20:50	Speed Boat	Travelling	91	0	0	305	47	0	22.3073	113.9575	1411.62	319.51
19-Sep-13	11:20:58	Transportation Boat	Travelling	90	47	10	339	35	30	22.3137	113.9644	1803.02	353.32
19-Sep-13	11:22:13	Tug Boat	Travelling	90	55	0	327	58	40	22.3108	113.9617	1542.27	341.71
19-Sep-13	11:22:21	Speed Boat	Travelling	90	55	20	282	16	40	22.3037	113.9530	1532.88	296.01
19-Sep-13	11:22:59	Transportation Boat	Travelling	90	57	40	316	39	30	22.3091	113.9593	1470.13	330.39
19-Sep-13	11:23:08	Container Boat	Travelling	90	55	10	357	36	20	22.3112	113.9693	1537.81	11.34
19-Sep-13	11:23:16	Tug Boat	Travelling	91	0	0	357	28	20	22.3101	113.9691	1412.27	11.20
19-Sep-13	11:23:52	Transportation Boat	Travelling	90	52	20	307	21	40	22.3090	113.9565	1622.68	321.09
19-Sep-13	11:24:06	Tug Boat	Travelling	91	2	10	353	58	10	22.3098	113.9682	1362.66	7.70
19-Sep-13	11:24:15	Container Boat	Travelling	90	58	30	352	38	0	22.3106	113.9680	1449.25	6.36
19-Sep-13	11:24:20	Tug Boat	Travelling	90	45	20	343	41	40	22.3145	113.9656	1878.78	357.42
19-Sep-13	11:26:26	Tug Boat	Travelling	91	3	10	343	45	40	22.3097	113.9658	1341.43	357.49
19-Sep-13	11:26:33	Container Boat	Travelling	90	59	40	342	39	10	22.3104	113.9655	1421.16	356.38
19-Sep-13	11:26:45	Tug Boat	Travelling	90	34	40	352	29	20	22.3198	113.9690	2478.37	6.22
19-Sep-13	11:27:27	Transportation Boat	Travelling	90	55	0	333	57	0	22.3112	113.9632	1543.81	347.68
19-Sep-13	11:28:36	Transportation Boat	Travelling	90	57	0	325	37	30	22.3102	113.9613	1489.17	339.35
19-Sep-13	11:29:02	Tug Boat	Travelling	90	58	30	342	54	0	22.3107	113.9656	1450.57	356.63
19-Sep-13	11:31:31	Transportation Boat	Travelling	91	1	20	303	15	10	22.3067	113.9572	1383.36	316.98
19-Sep-13	11:31:59	Tug Boat	Travelling	91	1	20	340	51	10	22.3100	113.9651	1383.48	354.58
19-Sep-13	11:34:08	Transportation Boat	Travelling	91	0	10	282	7	40	22.3032	113.9540	1411.22	295.86
19-Sep-13	11:34:19	Tug Boat	Travelling	90	58	0	337	45	20	22.3107	113.9643	1464.72	351.49
19-Sep-13	11:34:37	Container Boat	Travelling	90	59	0	338	26	20	22.3105	113.9645	1439.64	352.17
19-Sep-13	11:35:07	Transportation Boat	Travelling	91	1	50	316	17	50	22.3083	113.9597	1372.97	330.03
19-Sep-13	11:37:31	Tug Boat	Travelling	90	51	20	350	14	10	22.3125	113.9675	1659.16	3.97
19-Sep-13	11:37:36	Container Boat	Travelling	90	51	50	348	52	20	22.3124	113.9671	1642.91	2.60
19-Sep-13	11:40:06	Tug Boat	Travelling	90	44	20	359	53	10	22.3145	113.9708	1927.97	13.62
19-Sep-13	11:40:11	Container Boat	Travelling	90	45	20	358	55	40	22.3142	113.9704	1884.48	12.66
19-Sep-13	11:42:33	Tug Boat	Travelling	90	40	0	7	36	50	22.3156	113.9740	2143.76	21.34
19-Sep-13	11:42:40	Container Boat	Travelling	90	40	40	6	32	40	22.3154	113.9735	2107.64	20.27
19-Sep-13	11:44:47	Tug Boat	Travelling	90	34	0	6	52	50	22.3190	113.9751	2537.79	20.61
19-Sep-13	11:45:03	Container Boat	Stationary	90	37	50	8	26	30	22.3166	113.9747	2271.62	22.17
19-Sep-13	11:47:30	Tug Boat	Travelling	90	36	0	6	32	20	22.3178	113.9745	2392.63	20.27
19-Sep-13	11:48:38	Tug Boat	Travelling	90	40	20	10	57	0	22.3150	113.9750	2127.99	24.68
19-Sep-13	11:51:10	Transportation Boat	Travelling	95	29	10	349	9	10	22.2999	113.9665	256.44	2.88
19-Sep-13	11:53:22	Transportation Boat	Travelling	92	5	50	322	28	0	22.3032	113.9638	673.68	336.20
19-Sep-13	11:56:13	Transportation Boat	Travelling	91	6	50	312	35	10	22.3072	113.9595	1274.21	326.32
19-Sep-13	11:56:22	Transportation Boat	Travelling	91	27	20	305	23	40	22.3042	113.9602	972.95	319.12
19-Sep-13	12:02:54	Transportation Boat	Travelling	90	58	50	5	28	20	22.3100	113.9710	1451.54	19.20
19-Sep-13	12:03:10	Tug Boat	Travelling	90	41	10	10	47	50	22.3147	113.9748	2089.47	24.53
19-Sep-13	12:06:36	Transportation Boat	Travelling	90	41	40	19	8	10	22.3132	113.9773	2065.05	32.87
19-Sep-13	12:13:08	Transportation Boat	Travelling	91	2	40	306	25	0	22.3070	113.9579	1364.27	320.15
19-Sep-13	12:13:28	Tug Boat	Travelling	90	43	10	13	22	0	22.3136	113.9752	1994.02	27.10
19-Sep-13	12:16:10	Transportation Boat	Travelling	90	44	50	345	45	40	22.3149	113.9662	1919.08	359.49
19-Sep-13	12:18:21	Transportation Boat	Travelling	90	31	40	353	58	0	22.3222	113.9700	2751.29	7.70
19-Sep-13	12:23:56	Tug Boat	Travelling	90	36	0	10	22	50	22.3174	113.9760	2409.35	24.11
19-Sep-13	12:24:03	Construction Boat	Travelling	90	34	50	12	24	30	22.3178	113.9771	2493.29	26.14
19-Sep-13	12:29:47	Tug Boat	Travelling	90	50	50	345	42	20	22.3128	113.9662	1692.46	359.44
19-Sep-13	12:29:52	Construction Boat	Travelling	90	49	10	349	13	10	22.3134	113.9673	1750.97	2.95
19-Sep-13	12:32:00	Speed Boat	Travelling	90	49	10	338	49	40	22.3133	113.9642	1751.68	352.56
19-Sep-13	12:32:22	Tug Boat	Travelling	90	57	10	329	45	30	22.3106	113.9622	1502.79	343.49
19-Sep-13	12:32:30	Construction Boat	Travelling	90	55	10	333	41	30	22.3113	113.9631	1558.15	347.42
19-Sep-13	12:32:35	Speed Boat	Travelling	90	56	20	325	58	0	22.3105	113.9613	1525.41	339.70
19-Sep-13	12:33:26	Speed Boat	Travelling	91	0	0	302	49	20	22.3070	113.9568	1431.15	316.55
19-Sep-13	12:34:56	Tug Boat	Travelling	91	1	30	311	13	40	22.3079	113.9586	1396.19	324.96
19-Sep-13	12:35:04	Construction Boat	Travelling	91	1	0	315	48	10	22.3085	113.9595	1407.81	329.53
19-Sep-13	12:38:27	Tug Boat	Travelling	90	58	50	284	14	40	22.3038	113.9538	1461.29	297.97
19-Sep-13	12:38:34	Construction Boat	Travelling	91	0	40	288	50	20	22.3045	113.9548	1416.58	302.57
19-Sep-13	12:38:44	Transportation Boat	Travelling	91	4	10	307	10	50	22.3070	113.9582	1338.43	320.91
19-Sep-13	12:38:52	Transportation Boat	Travelling	90	59	20	310	15	0	22.3082	113.9581	1448.92	323.98
19-Sep-13	12:42:04	Transportation Boat	Travelling	92	7	30	314	19	0	22.3027	113.9629	670.94	328.05
19-Sep-13	12:42:14	Transportation Boat	Travelling	91	9	30	321	47	30	22.3077	113.9614	1235.47	335.52
19-Sep-13	12:44:13	Transportation Boat	Travelling	94	58	20	341	5	0	22.3002	113.9661	285.94	354.81
19-Sep-13	12:44:22	Transportation Boat	Travelling	91	9	10	305	13	50	22.3060	113.9585	1241.98	318.96
19-Sep-13	12:48:39	Transportation Boat	Travelling	91	0	10	316	58	50	22.3089	113.9596	1431.21	330.71
19-Sep-13	12:51:00	Transportation Boat	Travelling	90	50	30	339	34	40	22.3129	113.9645	1710.66	353.31
19-Sep-13	12:52:48	Transportation Boat	Travelling	90	41	10	348	49	20	22.3166	113.9673	2109.22	2.55
19-Sep-13	12:59:04	Transportation Boat	Travelling	90	41	20	348	37	30	22.3165	113.9672	2102.95	2.35
19-Sep-13	13:01:26	Transportation Boat	Travelling	90	51	30	337	51	30	22.3126	113.9640	1680.12	351.59
19-Sep-13	13:05:32	Transportation Boat	Travelling	90	55	50	307	24	0	22.3085	113.9569	1548.82	321.13
19-Sep-13	13:05:46	Transportation Boat	Travelling	91	3	10	295	20	20	22.3054	113.9561	1366.77	309.07
19-Sep-13	13:07:17	Transportation Boat	Travelling	91	1	0	322	13	10	22.3093	113.9608	1416.33	335.95
19-Sep-13	13:07:24	Transportation Boat	Travelling	91	1	0	298	0	30	22.3061	113.9561	1416.37	311.74
19-Sep-13	13:09:50	Transportation Boat	Travelling	91	5	0	277	39	50	22.3020	113.9544	1328.78	291.39
19-Sep-13	13:10:01	Transportation Boat	Travelling	90	39	30	350	28	50	22.3174	113.9680	2208.09	4.21
19-Sep-13	13:11:04	Transportation Boat	Travelling	90	33	50	353	8	20	22.3208	113.9694	2593.17	6.87
19-Sep-13	13:12:48	Transportation Boat	Travelling	90	35	20	351	25	30	22.3198	113.9686	2479.46	5.15
19-Sep-13	13:16:33	Tug Boat	Travelling	90	53	0	5	43	10	22.3115	113.9717	1636.37	19.45

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
19-Sep-13	13:16:39	Container Boat	Travelling	90	53	50	5	10	0	22.3113	113.9715	1610.64	18.90
19-Sep-13	13:16:51	Transportation Boat	Travelling	90	50	30	336	1	50	22.3128	113.9634	1718.96	349.76
19-Sep-13	13:19:52	Transportation Boat	Travelling	91	0	40	313	8	40	22.3084	113.9588	1427.56	326.87
19-Sep-13	13:20:00	Tug Boat	Travelling	91	7	0	354	49	50	22.3091	113.9683	1291.13	8.56
19-Sep-13	13:20:09	Container Boat	Travelling	91	8	10	353	33	10	22.3089	113.9680	1268.83	7.28
19-Sep-13	13:23:24	Transportation Boat	Travelling	90	54	20	282	8	40	22.3039	113.9524	1597.59	295.87
19-Sep-13	13:23:35	Tug Boat	Travelling	91	6	20	341	58	50	22.3093	113.9655	1305.12	355.71
19-Sep-13	13:23:40	Container Boat	Travelling	91	5	10	341	19	20	22.3095	113.9653	1328.77	355.05
19-Sep-13	13:23:54	Tug Boat	Travelling	91	2	0	309	16	10	22.3077	113.9582	1397.52	323.00
19-Sep-13	13:25:48	Transportation Boat	Travelling	91	0	50	305	41	30	22.3074	113.9574	1425.17	319.42
19-Sep-13	13:25:57	Tug Boat	Travelling	90	52	50	333	41	30	22.3121	113.9629	1644.50	347.42
19-Sep-13	13:26:05	Tug Boat	Travelling	91	2	40	339	37	10	22.3100	113.9648	1383.04	353.35
19-Sep-13	13:26:10	Container Boat	Travelling	91	1	30	339	22	40	22.3102	113.9648	1409.62	353.11
19-Sep-13	13:28:50	Tug Boat	Travelling	90	36	0	351	6	0	22.3195	113.9684	2439.15	4.83
19-Sep-13	13:29:00	Container Boat	Stationary	91	1	20	339	16	50	22.3103	113.9647	1414.25	353.01
19-Sep-13	13:31:52	Tug Boat	Travelling	90	53	30	348	48	20	22.3122	113.9671	1625.45	2.54
19-Sep-13	13:31:59	Container Boat	Travelling	90	55	0	347	28	0	22.3118	113.9667	1580.44	1.20
19-Sep-13	13:33:21	Tug Boat	Travelling	90	52	0	356	9	10	22.3125	113.9692	1673.63	9.88
19-Sep-13	13:33:27	Container Boat	Travelling	90	52	10	354	54	30	22.3125	113.9688	1668.22	8.64
19-Sep-13	13:37:06	Tug Boat	Travelling	90	47	10	13	57	30	22.3124	113.9748	1849.97	27.69
19-Sep-13	13:37:12	Container Boat	Travelling	90	47	0	12	48	0	22.3126	113.9745	1856.71	26.53
19-Sep-13	13:40:20	Tug Boat	Travelling	90	46	40	12	16	20	22.3128	113.9744	1871.36	26.00
19-Sep-13	13:40:30	Container Boat	Stationary	90	45	50	17	46	40	22.3122	113.9761	1906.22	31.51
19-Sep-13	13:42:53	Tug Boat	Travelling	90	45	50	9	32	30	22.3134	113.9737	1907.07	23.27
19-Sep-13	13:43:10	Tug Boat	Travelling	90	41	30	347	23	40	22.3166	113.9668	2111.68	1.12
19-Sep-13	13:46:12	Tug Boat	Travelling	90	56	20	326	48	10	22.3107	113.9614	1546.54	340.53
19-Sep-13	13:46:20	Speed Boat	Travelling	91	11	20	5	11	30	22.3080	113.9702	1217.86	18.92
19-Sep-13	13:47:18	Speed Boat	Travelling	91	59	40	17	53	0	22.3032	113.9701	723.74	31.61
19-Sep-13	13:47:48	Speed Boat	Travelling	92	32	40	27	48	0	22.3014	113.9701	566.85	41.53
19-Sep-13	13:48:01	Tug Boat	Travelling	91	0	50	307	38	0	22.3077	113.9577	1431.07	321.36
19-Sep-13	13:48:59	Speed Boat	Travelling	92	45	20	24	26	10	22.3013	113.9695	523.40	38.17
19-Sep-13	13:50:08	Tug Boat	Travelling	90	57	30	284	22	20	22.3040	113.9534	1515.80	298.10
19-Sep-13	13:53:06	Speed Boat	Stationary	92	53	10	12	41	30	22.3016	113.9686	500.03	26.42
19-Sep-13	13:56:44	Other	Stationary	91	11	30	323	49	40	22.3077	113.9619	1217.33	337.56
19-Sep-13	13:56:52	Other	Stationary	90	58	50	2	50	40	22.3104	113.9705	1482.81	16.57
19-Sep-13	13:57:08	Other	Stationary	91	2	20	339	33	50	22.3101	113.9648	1398.55	353.29
19-Sep-13	13:57:18	Other	Stationary	91	3	40	342	10	30	22.3099	113.9654	1368.95	355.90
19-Sep-13	13:57:32	Other	Stationary	90	29	30	343	2	40	22.3248	113.9647	3021.19	356.77
19-Sep-13	13:57:37	Other	Stationary	90	29	30	344	28	40	22.3248	113.9655	3021.24	358.21
19-Sep-13	13:57:50	Other	Stationary	90	55	10	356	15	30	22.3117	113.9691	1583.17	9.99
19-Sep-13	13:58:11	Other	Stationary	90	55	10	357	55	0	22.3116	113.9695	1583.27	11.65
19-Sep-13	13:58:22	Other	Stationary	90	30	30	1	39	20	22.3229	113.9739	2917.10	15.39
19-Sep-13	13:58:27	Other	Stationary	90	30	30	3	2	30	22.3228	113.9746	2917.15	16.77
19-Sep-13	13:58:35	Other	Stationary	90	35	0	3	45	10	22.3193	113.9738	2525.70	17.48
19-Sep-13	13:58:41	Other	Stationary	90	35	20	4	22	30	22.3190	113.9740	2500.97	18.10
19-Sep-13	13:59:00	Other	Stationary	90	27	50	348	58	50	22.3265	113.9679	3214.63	2.71
19-Sep-13	13:59:11	Other	Stationary	91	2	20	339	34	10	22.3101	113.9648	1399.08	353.30
19-Sep-13	13:59:15	Other	Stationary	91	1	50	349	28	40	22.3103	113.9672	1410.56	3.21
19-Sep-13	13:59:23	Other	Stationary	90	41	20	5	25	40	22.3157	113.9732	2126.86	19.16
19-Sep-13	13:59:30	Other	Stationary	90	46	10	15	34	40	22.3125	113.9754	1898.85	29.31
19-Sep-13	13:59:41	Other	Stationary	91	10	10	324	56	30	22.3080	113.9620	1241.37	338.67
19-Sep-13	13:59:47	Other	Stationary	91	5	30	325	26	50	22.3088	113.9618	1330.81	339.18
19-Sep-13	13:59:56	Other	Stationary	90	28	40	346	45	50	22.3257	113.9667	3115.82	0.49
19-Sep-13	14:00:04	Other	Stationary	90	36	30	353	59	10	22.3192	113.9696	2418.63	7.72
19-Sep-13	14:00:10	Other	Stationary	90	35	10	355	7	30	22.3200	113.9702	2513.99	8.85
19-Sep-13	14:00:16	Other	Stationary	90	44	10	355	22	10	22.3153	113.9695	1987.22	9.10
19-Sep-13	14:00:26	Other	Stationary	90	42	20	357	15	0	22.3160	113.9702	2075.64	10.98
19-Sep-13	14:00:34	Other	Stationary	90	37	50	358	8	30	22.3181	113.9711	2330.61	11.87
19-Sep-13	14:00:39	Other	Stationary	90	33	40	358	34	0	22.3208	113.9719	2631.06	12.30
19-Sep-13	14:00:46	Other	Stationary	90	32	40	359	3	30	22.3214	113.9722	2715.40	12.79
19-Sep-13	14:00:52	Other	Stationary	90	31	30	359	30	50	22.3223	113.9727	2821.03	13.24
19-Sep-13	14:00:57	Other	Stationary	90	39	30	359	44	50	22.3171	113.9715	2229.27	13.48
19-Sep-13	14:01:12	Other	Stationary	90	25	40	7	28	10	22.3271	113.9787	3508.11	21.20
21-Sep-13	8:06:31	Other	Stationary	112	0	0	0	0	0	22.2981	113.9665	60.69	13.73
21-Sep-13	8:11:41	Other	Stationary	90	31	40	292	14	50	22.3120	113.9450	2723.38	305.98
21-Sep-13	8:11:47	Other	Stationary	90	36	10	293	49	50	22.3106	113.9481	2371.09	307.56
21-Sep-13	8:11:52	Other	Stationary	90	40	0	295	13	10	22.3097	113.9502	2136.70	308.95
21-Sep-13	8:12:02	Other	Stationary	90	48	30	299	1	10	22.3083	113.9539	1753.87	312.75
21-Sep-13	8:12:09	Other	Stationary	90	52	40	301	35	50	22.3079	113.9554	1612.65	315.33
21-Sep-13	8:12:18	Other	Stationary	90	58	20	304	48	0	22.3074	113.9570	1453.68	318.53
21-Sep-13	8:12:27	Other	Stationary	90	58	20	304	48	0	22.3074	113.9570	1453.66	318.53
21-Sep-13	8:12:38	Other	Stationary	90	51	10	307	35	50	22.3093	113.9563	1660.67	321.33
21-Sep-13	8:12:45	Other	Stationary	90	51	10	307	36	0	22.3093	113.9563	1660.65	321.33
21-Sep-13	8:12:50	Other	Stationary	90	54	50	309	28	50	22.3088	113.9574	1547.79	323.21
21-Sep-13	8:12:56	Other	Stationary	90	57	0	312	51	10	22.3088	113.9584	1488.07	326.58
21-Sep-13	8:13:03	Other	Stationary	90	56	0	316	44	20	22.3095	113.9591	1515.03	330.47
21-Sep-13	8:13:11	Other	Stationary	90	54	30	322	23	40	22.3104	113.9603	1557.35	336.12
21-Sep-13	8:13:18	Other	Stationary	90	53	20	326	24	30	22.3111	113.9611	1591.96	340.14
21-Sep-13	8:13:25	Other	Stationary	90	50	0	332	44	50	22.3125	113.9625	1700.00	346.48
21-Sep-13	8:13:34	Other	Stationary	90	47	20	337	14	50	22.3136	113.9637	1797.71	350.98
21-Sep-13	8:13:41	Other	Stationary	90	43	40	339	32	40	22.3151	113.9642	1952.23	353.27
21-Sep-13	8:13:48	Other	Stationary	90	40	30	343	56	0	22.3166	113.9656	2109.11	357.66
21-Sep-13	8:13:55	Other	Stationary	90	38	0	347	45	20	22.3179	113.9670	2252.29	1.49
21-Sep-13	8:14:03	Other	Stationary	90	32	50	350	31	20	22.3211	113.9683	2621.49	4.25
21-Sep-13	8:14:15	Other	Stationary	90	29	20	352	1	50	22.3240	113.9693	2951.13	5.76
21-Sep-13	8:14:29	Other	Stationary	90	28	40	348	9	20	22.3248	113.9674	3023.77	1.89
21-Sep-13	8:14:36	Other	Stationary	90	29	20	352	0	50	22.3240	113.9693	2951.01	5.74
21-Sep-13	8:14:49	Other	Stationary	90	28	40	348	8	40	22.3248	113.9674	3023.66	1.87
21-Sep-13	8:14:56	Other	Stationary	90	28	10	345	52	20	22.3253	113.9662	3080.63	359.60
21-Sep-13	8:15:04	Other	Stationary	90	27	40	342	12	20	22.3258	113.9642	3139.87	355.94
21-Sep-13	8:15:13	Other	Stationary	90	27	20	337	57	40	22.3259	113.9619	3180.65	351.69
21-Sep-13	8:15:21	Other	Stationary	90	27	30	333	8	40	22.3253	113.9594	3160.05	346.87
21-Sep-13	8:15:30	Other	Stationary	90	28	0	329	3	50	22.3243	113.9575	3099.95	342.79
21-Sep-13	8:15:41	Other	Stationary	90	24	40	323	39	40	22.3271	113.9531	3551.67	337.39
21-Sep-13	8:15:49	Other	Stationary	90	25	0	320	39	50	22.3260	113.9517	3500.36	334.39
21-Sep-13	8:15:57	Other	Stationary	90	25	40	316	25	30	22.3242	113.9499	3402.28	330.15
21-Sep-13	8:16:03	Other	Stationary	90	26	50	312	8	30	22.3218	113.9487	3243.71	325.87
21-Sep-13	8:16:11	Other	Stationary	90	28	0	308	21	20	22.3196	113.9479	3099.71	322.09
21-Sep-13	8:16:19	Other	Stationary	90	28	40	306	26	10	22.3185	113.9476	3023.17	320.17
21-Sep-13	8:16:59	Container Boat	Stationary	91	10	40	316	3	50	22.3069	113.9605	1196.73	329.79
21-Sep-13	8:17:11	Container Boat	Stationary	91	9	20	324	41	40	22.3078	113.9620	1219.94	338.42
21-Sep-13	8:17:28	Container Boat	Stationary	91	0	40	343	1	0	22.3102	113.9656	1396.27	356.75
21-Sep-13	8:17:45	Container Boat	Stationary	91	7	20	358	1	50	22.3087	113.9689	1256.48	11.76
21-Sep-13	8:18:12	Construction Boat	Stationary	91	6	20	322	43	50	22.3081	113.9614	1275.56	336.46
21-Sep-13	8:18:21	Construction Boat	Stationary	91	3	50	325	36	50	22.3088	113.9618	1326.06	339.34
21-Sep-13	8:18:33	Construction Boat	Stationary	90	28	10	346	30	30	22.3253	113.9665	3079.41	0.24
21-Sep-13	8:18:41	Construction Boat	Stationary	90	35	30	354	1	0	22.3192	113.9696	2415.50	7.75
21-Sep-13	8:18:49	Construction Boat	Stationary	90	33	20	355	45	10	22.3205	113.9705	2579.10	9.48
21-Sep-13	8:18:56	Construction Boat	Stationary	90	32	40	355	26	50	22.3210	113.9705	2634.07	9.18
21-Sep-13	8:19:06	Construction Boat	Stationary	90	43	20	355	17	40	22.3151	113.9694	1966.48	9.02
21-Sep-13	8:19:22	Construction Boat	Stationary	90	36	50	358	15	40	22.3181	113.9711	2324.74	11.99
21-Sep-13	8:19:31	Construction Boat	Stationary	90	31	30	359	7	30	22.3216	113.9723	2736.16	12.85
21-Sep-13	8:19:59	Construction Boat	Stationary	90	29	50	16	38	40	22.3201	113.9807	2897.09	30.37
21-Sep-13	8:20:15	Other	Stationary	91	0	30	343	0	50	22.3102	113.9656	1399.75	356.74
21-Sep-13	8:20:22	Other	Stationary	91	1	50	345	32	40	22.3099	113.9662	1369.18	359.27
21-Sep-13	8:20:33	Other	Stationary	90	48	40	355	48	10	22.3131	113.9692	1746.15	9.53
21-Sep-13	8:20:39	Other	Stationary	90	49	20	357	29	20	22.3128	113.9697	1722.08	11.22

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
21-Sep-13	8:20:50	Other	Stationary	90	30	50	359	23	50	22.3221	113.9726	2797.94	13.13
21-Sep-13	8:20:56	Other	Stationary	90	30	30	0	22	40	22.3223	113.9731	2830.09	14.11
21-Sep-13	8:21:03	Other	Stationary	90	29	40	1	39	50	22.3229	113.9739	2913.93	15.39
21-Sep-13	8:21:10	Other	Stationary	90	29	30	3	3	20	22.3229	113.9746	2931.30	16.79
21-Sep-13	8:21:18	Other	Stationary	90	34	10	3	35	20	22.3192	113.9737	2512.88	17.32
21-Sep-13	8:21:24	Other	Stationary	90	34	10	4	16	20	22.3191	113.9740	2512.85	18.00
21-Sep-13	8:21:52	Tug Boat	Stationary	91	9	40	323	51	50	22.3077	113.9619	1213.44	337.59
21-Sep-13	8:22:13	Tug Boat	Stationary	91	6	20	357	38	30	22.3089	113.9688	1275.01	11.37
21-Sep-13	8:22:42	Tug Boat	Travelling	90	39	40	349	46	30	22.3170	113.9677	2152.68	3.50
21-Sep-13	8:22:49	Tug Boat	Travelling	90	58	30	354	6	20	22.3105	113.9683	1447.86	7.84
21-Sep-13	8:23:53	Other	Stationary	90	47	20	1	6	50	22.3132	113.9709	1795.72	14.84
21-Sep-13	8:24:35	Tug Boat	Travelling	90	48	10	341	40	50	22.3134	113.9650	1763.88	355.41
21-Sep-13	8:24:43	Tug Boat	Travelling	90	45	10	355	41	20	22.3143	113.9694	1883.64	9.42
21-Sep-13	8:27:10	Tug Boat	Travelling	90	58	30	320	51	50	22.3094	113.9604	1447.18	334.59
21-Sep-13	8:28:17	Transportation Boat	Travelling	91	1	20	316	3	0	22.3083	113.9596	1379.31	329.78
21-Sep-13	8:28:46	Transportation Boat	Travelling	90	35	0	351	29	40	22.3196	113.9686	2448.68	5.22
21-Sep-13	8:29:00	Tug Boat	Travelling	91	0	30	302	6	30	22.3066	113.9569	1398.44	315.84
21-Sep-13	8:30:14	Speed Boat	Travelling	95	29	50	346	28	20	22.2999	113.9664	254.17	0.20
21-Sep-13	8:30:22	Transportation Boat	Travelling	90	51	40	337	14	50	22.3122	113.9639	1641.20	350.98
21-Sep-13	8:30:29	Transportation Boat	Travelling	90	47	0	340	17	20	22.3138	113.9646	1807.44	354.02
21-Sep-13	8:30:42	Transportation Boat	Travelling	90	59	30	305	24	40	22.3073	113.9574	1422.00	319.14
21-Sep-13	8:31:07	Tug Boat	Travelling	90	55	20	279	3	50	22.3030	113.9527	1530.59	292.79
21-Sep-13	8:31:27	Dumping Guide Boat	Travelling	90	40	10	8	3	0	22.3154	113.9741	2123.09	21.78
21-Sep-13	8:31:48	Transportation Boat	Travelling	90	43	20	345	33	20	22.3153	113.9662	1963.80	359.29
21-Sep-13	8:31:55	Transportation Boat	Travelling	90	58	30	321	9	10	22.3094	113.9604	1446.45	334.88
21-Sep-13	8:32:01	Transportation Boat	Travelling	91	0	30	286	56	10	22.3040	113.9547	1397.99	300.67
21-Sep-13	8:33:01	Transportation Boat	Travelling	90	37	10	350	13	40	22.3183	113.9679	2299.77	3.96
21-Sep-13	8:33:08	Transportation Boat	Travelling	91	1	40	299	17	10	22.3060	113.9566	1371.05	313.02
21-Sep-13	8:33:46	Speed Boat	Travelling	93	53	30	294	25	10	22.2996	113.9636	359.53	308.15
21-Sep-13	8:34:11	Transportation Boat	Travelling	90	33	20	353	26	20	22.3206	113.9695	2574.80	7.17
21-Sep-13	8:34:18	Transportation Boat	Travelling	90	54	40	282	50	50	22.3039	113.9529	1549.02	296.58
21-Sep-13	8:34:30	Dumping Guide Boat	Travelling	90	38	30	9	45	40	22.3159	113.9750	2217.16	23.49
21-Sep-13	8:35:13	HSF High Speed Ferry	Travelling	90	57	10	285	51	10	22.3042	113.9539	1480.14	299.58
21-Sep-13	8:38:57	HSF High Speed Ferry	Travelling	90	46	10	342	53	30	22.3141	113.9653	1839.11	356.62
21-Sep-13	8:39:11	Transportation Boat	Travelling	91	1	20	307	26	10	22.3073	113.9580	1377.70	321.17
21-Sep-13	8:39:49	Transportation Boat	Travelling	90	56	50	310	46	50	22.3085	113.9580	1488.21	324.51
21-Sep-13	8:40:07	Transportation Boat	Travelling	91	0	40	296	28	20	22.3057	113.9561	1392.90	310.20
21-Sep-13	8:40:28	HSF High Speed Ferry	Travelling	90	35	20	351	25	30	22.3193	113.9685	2421.61	5.15
21-Sep-13	8:41:32	Transportation Boat	Travelling	90	44	10	345	31	40	22.3149	113.9662	1923.82	359.26
21-Sep-13	8:41:40	Transportation Boat	Travelling	90	56	50	322	26	40	22.3099	113.9606	1487.92	336.17
21-Sep-13	8:42:57	Transportation Boat	Travelling	90	32	50	352	23	0	22.3210	113.9691	2613.26	6.11
21-Sep-13	8:43:05	Transportation Boat	Travelling	90	53	10	330	44	40	22.3114	113.9623	1591.94	344.47
21-Sep-13	8:43:11	Transportation Boat	Travelling	91	1	40	318	27	30	22.3085	113.9602	1369.58	332.19
21-Sep-13	8:43:55	Transportation Boat	Travelling	90	55	0	308	48	0	22.3086	113.9573	1537.90	322.53
21-Sep-13	8:44:21	Transportation Boat	Travelling	90	49	30	306	29	40	22.3095	113.9557	1711.81	320.22
21-Sep-13	8:46:39	Dumping Guide Boat	Travelling	90	33	20	8	56	0	22.3190	113.9760	2571.32	22.66
21-Sep-13	8:46:49	Transportation Boat	Travelling	91	0	30	305	14	50	22.3071	113.9575	1395.78	318.98
21-Sep-13	8:49:18	Transportation Boat	Travelling	91	3	0	319	56	0	22.3084	113.9606	1339.37	333.66
21-Sep-13	8:49:59	Tug Boat	Travelling	91	5	20	321	44	20	22.3082	113.9612	1290.90	335.47
21-Sep-13	8:50:22	Transportation Boat	Travelling	90	51	50	305	47	10	22.3088	113.9561	1632.32	319.52
21-Sep-13	8:50:39	Transportation Boat	Travelling	90	41	50	344	45	0	22.3159	113.9659	2031.95	358.48
21-Sep-13	8:52:44	Transportation Boat	Travelling	90	49	20	337	11	0	22.3129	113.9638	1716.16	350.91
21-Sep-13	8:53:08	Tug Boat	Travelling	91	12	50	313	50	40	22.3064	113.9604	1156.33	327.57
21-Sep-13	8:53:55	Tug Boat	Travelling	91	10	10	322	36	40	22.3075	113.9617	1200.59	336.34
21-Sep-13	8:54:09	Construction Boat	Travelling	91	12	30	323	36	0	22.3073	113.9620	1161.57	337.33
21-Sep-13	8:55:16	Construction Boat	Travelling	91	5	30	334	24	30	22.3090	113.9638	1286.85	348.14
21-Sep-13	8:55:34	Transportation Boat	Travelling	90	57	10	320	36	0	22.3096	113.9602	1476.91	334.33
21-Sep-13	8:56:14	Tug Boat	Travelling	91	6	30	329	27	40	22.3085	113.9628	1267.16	343.19
21-Sep-13	8:56:25	Construction Boat	Travelling	91	6	50	328	29	0	22.3084	113.9627	1260.75	342.21
21-Sep-13	8:56:38	Construction Boat	Travelling	90	59	50	338	46	50	22.3102	113.9646	1410.05	352.51
21-Sep-13	8:57:19	Tug Boat	Travelling	90	45	40	344	22	30	22.3143	113.9658	1856.02	358.10
21-Sep-13	8:57:34	Construction Boat	Travelling	90	45	10	344	23	40	22.3145	113.9658	1876.99	358.12
21-Sep-13	8:58:08	Transportation Boat	Travelling	90	52	20	305	32	50	22.3086	113.9562	1615.11	319.28
21-Sep-13	8:59:41	Container Boat	Travelling	91	2	40	309	3	10	22.3073	113.9585	1345.08	322.78
21-Sep-13	9:00:15	Tug Boat	Travelling	90	53	30	342	13	40	22.3118	113.9653	1578.94	355.96
21-Sep-13	9:00:24	Construction Boat	Travelling	90	54	20	341	29	20	22.3116	113.9651	1554.32	355.22
21-Sep-13	9:00:33	Tug Boat	Travelling	90	52	0	338	41	0	22.3121	113.9643	1625.22	352.41
21-Sep-13	9:00:42	Construction Boat	Travelling	90	51	0	339	8	0	22.3124	113.9644	1657.62	352.86
21-Sep-13	9:00:56	Construction Boat	Travelling	90	45	30	345	53	50	22.3144	113.9663	1862.25	359.63
21-Sep-13	9:03:07	Tug Boat	Travelling	90	54	20	353	27	10	22.3115	113.9683	1553.86	7.18
21-Sep-13	9:04:49	Tug Boat	Travelling	91	1	10	345	55	30	22.3100	113.9663	1377.71	359.65
21-Sep-13	9:05:02	Tug Boat	Travelling	90	40	30	348	23	50	22.3165	113.9672	2097.48	2.13
21-Sep-13	9:05:09	Construction Boat	Travelling	90	40	50	347	52	20	22.3163	113.9670	2079.85	1.60
21-Sep-13	9:05:19	Construction Boat	Travelling	90	36	0	350	38	10	22.3189	113.9682	2368.70	4.37
21-Sep-13	9:05:36	Container Boat	Travelling	90	49	30	305	38	40	22.3093	113.9556	1707.90	319.37
21-Sep-13	9:06:38	Tug Boat	Travelling	90	59	30	321	34	30	22.3092	113.9606	1416.53	335.30
21-Sep-13	9:06:45	Construction Boat	Travelling	90	59	40	322	34	20	22.3093	113.9609	1412.51	336.30
21-Sep-13	9:08:06	Transportation Boat	Travelling	90	50	50	350	34	40	22.3125	113.9676	1661.84	4.31
21-Sep-13	9:09:30	Transportation Boat	Travelling	91	1	50	343	32	40	22.3099	113.9658	1361.99	357.27
21-Sep-13	9:09:45	Tug Boat	Travelling	90	56	10	348	42	20	22.3111	113.9670	1501.31	2.44
21-Sep-13	9:09:55	Container Boat	Travelling	90	57	30	347	52	10	22.3108	113.9668	1465.97	1.60
21-Sep-13	9:11:18	Transportation Boat	Travelling	91	2	10	345	3	20	22.3098	113.9661	1354.34	358.79
21-Sep-13	9:11:26	Tug Boat	Travelling	90	30	20	353	26	50	22.3229	113.9698	2830.80	7.18
21-Sep-13	9:11:35	Construction Boat	Travelling	90	30	50	353	4	20	22.3225	113.9696	2782.47	6.80
21-Sep-13	9:11:44	Tug Boat	Travelling	91	2	40	305	25	20	22.3068	113.9579	1343.34	319.15
21-Sep-13	9:11:50	Construction Boat	Travelling	91	2	40	306	35	0	22.3069	113.9581	1343.33	320.31
21-Sep-13	9:12:06	HSF High Speed Ferry	Travelling	90	34	20	351	31	50	22.3199	113.9686	2486.42	5.26
21-Sep-13	9:12:24	Speed Boat	Travelling	91	33	50	3	49	10	22.3053	113.9690	894.07	17.55
21-Sep-13	9:12:44	Tug Boat	Travelling	90	48	40	352	58	20	22.3131	113.9684	1736.38	6.70
21-Sep-13	9:12:52	Container Boat	Travelling	90	50	0	352	27	0	22.3127	113.9682	1689.18	6.18
21-Sep-13	9:13:07	Speed Boat	Travelling	91	5	30	356	36	40	22.3090	113.9686	1284.39	10.34
21-Sep-13	9:14:29	Speed Boat	Travelling	90	42	20	351	45	0	22.3156	113.9683	2002.15	5.48
21-Sep-13	9:14:51	HSF High Speed Ferry	Travelling	90	56	0	329	6	20	22.3106	113.9621	1505.02	342.84
21-Sep-13	9:15:50	Tug Boat	Travelling	90	44	50	0	12	30	22.3141	113.9708	1887.54	13.94
21-Sep-13	9:15:56	Container Boat	Travelling	90	45	20	359	1	50	22.3140	113.9704	1866.23	12.76
21-Sep-13	9:16:12	HSF High Speed Ferry	Travelling	91	0	40	305	51	20	22.3071	113.9576	1387.51	319.59
21-Sep-13	9:16:22	Tug Boat	Travelling	91	2	10	290	12	20	22.3044	113.9555	1353.60	303.94
21-Sep-13	9:16:29	Construction Boat	Travelling	91	2	10	291	19	30	22.3046	113.9556	1353.59	305.05
21-Sep-13	9:16:52	Government Boat	Travelling	90	35	20	351	5	40	22.3192	113.9684	2412.05	4.82
21-Sep-13	9:17:34	HSF High Speed Ferry	Travelling	90	55	20	282	36	50	22.3037	113.9531	1522.98	296.34
21-Sep-13	9:17:44	HSF High Speed Ferry	Travelling	90	36	30	350	22	10	22.3186	113.9680	2331.93	4.10
21-Sep-13	9:18:10	Transportation Boat	Travelling	91	9	20	283	14	20	22.3026	113.9559	1212.01	296.97
21-Sep-13	9:18:44	Government Boat	Travelling	90	55	10	341	14	0	22.3113	113.9651	1527.46	354.96
21-Sep-13	9:20:02	Tug Boat	Travelling	90	59	20	278	45	40	22.3025	113.9537	1418.52	292.49
21-Sep-13	9:20:12	Construction Boat	Travelling	91	0	0	279	32	30	22.3026	113.9539	1402.53	293.27
21-Sep-13	9:20:22	Government Boat	Travelling	91	17	30	310	13	50	22.3055	113.9602	1082.97	323.96
21-Sep-13	9:20:37	HSF High Speed Ferry	Travelling	90	57	10	322	53	40	22.3098	113.9607	1472.95	336.62
21-Sep-13	9:20:50	Transportation Boat	Travelling	91	23	50	305	44	30	22.3045	113.9601	1000.52	319.47
21-Sep-13	9:21:01	Tug Boat	Travelling	90	38	30	9	0	30	22.3159	113.9747	2206.01	22.74
21-Sep-13	9:21:07	Container Boat	Travelling	90	40	50	11	21	30	22.3145	113.9750	2076.25	25.09
21-Sep-13	9:21:34	Government Boat	Travelling	91	10	30	279	27	20	22.3018	113.9557	1191.32	293.19
21-Sep-13	9:21:42	HSF High Speed Ferry	Travelling	91	1	0	304	36	30	22.3069	113.9575	1379.02	318.34
21-Sep-13	9:21:53	Tug Boat	Travelling	90	36	10	4	0	20	22.3178	113.9734	2353.14	17.74
21-Sep-13	9:22:00	Container Boat	Stationary	90	40	0	11	43	30	22.3149	113.9753	2120.57	25.45
21-Sep-13	9:23:16	HSF High Speed Ferry	Travelling	90	53	10	279	19	50	22.3032	113.9522	1585.08	293.06
21-Sep-13	9:24:55	Government Boat	Travelling	90	49	10	27	44	30	22.3092	113.9775	1716.12	41.47
21-Sep-13	9:25:38	Tug Boat	Travelling	90	36	30	8	0	10	22.3171	113.9748	2329.93	21.73

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
21-Sep-13	9:25:55	Transportation Boat	Travelling	91	1	20	346	53	50	22.3100	113.9665	1370.81	0.63
21-Sep-13	9:26:16	Government Boat	Travelling	91	55	40	342	10	0	22.3041	113.9659	723.50	355.90
21-Sep-13	9:27:19	Government Boat	Travelling	91	10	20	278	15	20	22.3016	113.9556	1193.44	291.99
21-Sep-13	9:27:31	Transportation Boat	Travelling	91	1	20	346	3	10	22.3100	113.9663	1370.58	359.78
21-Sep-13	9:27:40	Transportation Boat	Travelling	91	0	40	313	29	50	22.3081	113.9591	1385.80	327.23
21-Sep-13	9:28:43	Dumping Guide Boat	Travelling	90	52	50	21	28	10	22.3093	113.9753	1594.31	35.20
21-Sep-13	9:28:52	Transportation Boat	Travelling	90	57	30	327	16	10	22.3101	113.9618	1462.98	341.00
21-Sep-13	9:31:06	Transportation Boat	Travelling	90	48	0	347	57	50	22.3134	113.9669	1757.50	1.69
21-Sep-13	9:31:20	Container Boat	Travelling	90	54	0	307	10	10	22.3085	113.9568	1558.86	320.90
21-Sep-13	9:31:33	Tug Boat	Travelling	90	39	10	10	45	0	22.3153	113.9751	2164.82	24.48
21-Sep-13	9:31:48	Dumping Guide Boat	Travelling	91	39	30	13	57	40	22.3043	113.9702	841.14	27.69
21-Sep-13	9:32:28	Transportation Boat	Travelling	90	42	50	355	30	10	22.3152	113.9695	1974.33	9.23
21-Sep-13	9:32:39	Container Boat	Travelling	90	58	0	312	28	10	22.3085	113.9586	1449.61	326.20
21-Sep-13	9:34:41	Dumping Guide Boat	Travelling	94	53	10	359	31	10	22.3001	113.9670	284.20	13.25
21-Sep-13	9:35:11	Transportation Boat	Travelling	90	35	40	3	24	0	22.3181	113.9732	2383.90	17.13
21-Sep-13	9:35:29	Transportation Boat	Travelling	90	50	50	335	21	10	22.3123	113.9633	1656.94	349.08
21-Sep-13	9:35:36	Container Boat	Travelling	90	53	30	333	2	0	22.3114	113.9629	1572.95	346.76
21-Sep-13	9:35:51	Tug Boat	Travelling	90	45	40	340	8	50	22.3142	113.9645	1848.31	353.88
21-Sep-13	9:38:36	Transportation Boat	Travelling	90	50	40	306	45	30	22.3092	113.9561	1661.93	320.49
21-Sep-13	9:38:50	Dumping Guide Boat	Stationary	94	17	10	355	12	10	22.3005	113.9669	324.05	8.93
21-Sep-13	9:39:04	Tug Boat	Travelling	90	59	40	323	2	50	22.3093	113.9610	1407.60	336.78
21-Sep-13	9:39:32	Container Boat	Travelling	90	38	40	349	28	40	22.3173	113.9676	2191.79	3.21
21-Sep-13	9:40:23	Container Boat	Travelling	90	42	40	6	22	0	22.3144	113.9730	1980.54	20.10
21-Sep-13	9:40:32	Tug Boat	Travelling	90	44	40	6	14	30	22.3136	113.9727	1889.70	19.97
21-Sep-13	9:41:49	Government Boat	Travelling	90	49	50	338	58	30	22.3127	113.9643	1689.64	352.70
21-Sep-13	9:42:54	Government Boat	Travelling	90	59	50	313	27	50	22.3082	113.9590	1403.05	327.19
21-Sep-13	9:43:05	Dumping Guide Boat	Travelling	93	42	50	342	5	0	22.3010	113.9661	374.03	355.81
21-Sep-13	9:43:20	Tug Boat	Travelling	90	55	30	359	37	20	22.3109	113.9698	1514.13	13.35
21-Sep-13	9:43:27	Container Boat	Travelling	90	52	40	358	46	10	22.3116	113.9698	1596.89	12.50
21-Sep-13	9:43:49	Tug Boat	Travelling	90	59	40	318	47	40	22.3089	113.9601	1406.89	332.52
21-Sep-13	9:44:01	Transportation Boat	Travelling	91	0	40	309	51	10	22.3076	113.9584	1383.37	323.58
21-Sep-13	9:44:28	Transportation Boat	Travelling	91	12	10	308	51	20	22.3059	113.9595	1160.70	322.59
21-Sep-13	9:44:37	Government Boat	Travelling	90	51	50	283	16	30	22.3043	113.9523	1622.81	297.00
21-Sep-13	9:44:49	Dumping Guide Boat	Stationary	94	13	40	335	17	0	22.3005	113.9658	328.33	349.01
21-Sep-13	9:46:01	Tug Boat	Travelling	90	55	10	308	22	10	22.3084	113.9573	1522.97	322.10
21-Sep-13	9:46:14	Transportation Boat	Travelling	91	3	0	323	59	0	22.3087	113.9615	1331.20	337.71
21-Sep-13	9:46:21	Transportation Boat	Travelling	91	47	0	314	8	50	22.3036	113.9624	780.68	327.88
21-Sep-13	9:46:28	Transportation Boat	Travelling	90	59	40	311	43	50	22.3080	113.9586	1406.48	325.46
21-Sep-13	9:46:38	Container Boat	Travelling	91	0	10	345	56	0	22.3102	113.9663	1394.62	359.66
21-Sep-13	9:46:49	Tug Boat	Travelling	91	2	40	346	34	10	22.3097	113.9665	1338.28	0.30
21-Sep-13	9:47:08	Transportation Boat	Travelling	91	3	20	314	29	10	22.3077	113.9596	1323.98	328.22
21-Sep-13	9:47:15	Transportation Boat	Travelling	92	17	10	320	21	30	22.3025	113.9638	608.33	334.09
21-Sep-13	9:47:23	Transportation Boat	Travelling	90	53	30	306	44	50	22.3085	113.9567	1570.95	320.48
21-Sep-13	9:47:39	Dumping Guide Boat	Travelling	93	37	20	335	26	10	22.3010	113.9657	383.34	349.17
21-Sep-13	9:48:06	Transportation Boat	Travelling	91	0	40	297	32	20	22.3058	113.9563	1382.76	311.27
21-Sep-13	9:48:12	Transportation Boat	Travelling	93	12	20	330	19	20	22.3014	113.9652	433.32	344.05
21-Sep-13	9:48:22	Transportation Boat	Travelling	90	50	10	309	18	50	22.3097	113.9566	1677.02	323.04
21-Sep-13	9:48:53	Tug Boat	Travelling	91	1	0	347	8	40	22.3100	113.9666	1374.99	0.87
21-Sep-13	9:49:02	Container Boat	Stationary	91	1	30	346	18	0	22.3099	113.9664	1363.65	0.03
21-Sep-13	9:49:21	Transportation Boat	Travelling	95	34	50	354	17	40	22.2998	113.9667	248.25	8.02
21-Sep-13	9:49:51	Dumping Guide Boat	Travelling	92	32	0	336	20	50	22.3025	113.9655	548.63	350.08
21-Sep-13	9:55:27	Transportation Boat	Travelling	93	20	30	331	54	0	22.3012	113.9654	415.29	345.63
21-Sep-13	9:56:58	Transportation Boat	Travelling	91	0	30	314	1	50	22.3082	113.9592	1385.29	327.76
21-Sep-13	9:57:11	Sand barge	Travelling	90	57	30	311	0	10	22.3083	113.9582	1458.52	324.73
21-Sep-13	9:57:20	Container Boat	Travelling	90	57	0	310	38	40	22.3084	113.9581	1471.48	324.37
21-Sep-13	9:57:52	Government Boat	Travelling	90	39	20	350	33	10	22.3169	113.9680	2149.20	4.28
21-Sep-13	9:58:23	Transportation Boat	Travelling	90	46	30	340	43	40	22.3138	113.9647	1810.04	354.46
21-Sep-13	9:59:19	Transportation Boat	Travelling	91	12	0	313	24	10	22.3064	113.9603	1161.55	327.13
21-Sep-13	9:59:30	Transportation Boat	Travelling	90	43	40	346	35	30	22.3150	113.9665	1930.05	0.32
21-Sep-13	9:59:38	Transportation Boat	Travelling	90	56	50	328	0	50	22.3102	113.9619	1475.49	341.74
21-Sep-13	9:59:46	Government Boat	Travelling	90	54	20	327	14	30	22.3108	113.9615	1544.40	340.97
21-Sep-13	10:00:00	Transportation Boat	Travelling	90	57	50	316	17	20	22.3089	113.9594	1449.56	330.02
21-Sep-13	10:00:20	Government Boat	Travelling	91	34	20	356	24	30	22.3055	113.9679	884.75	10.14
21-Sep-13	10:00:37	Transportation Boat	Travelling	90	58	30	309	40	50	22.3080	113.9581	1432.72	323.41
21-Sep-13	10:00:45	Transportation Boat	Travelling	90	34	30	351	25	20	22.3197	113.9685	2460.81	5.15
21-Sep-13	10:00:52	Transportation Boat	Travelling	91	1	30	309	14	30	22.3074	113.9584	1361.91	322.97
21-Sep-13	10:01:09	Transportation Boat	Travelling	90	56	50	325	52	30	22.3101	113.9614	1475.24	339.60
21-Sep-13	10:01:25	Government Boat	Travelling	90	58	10	296	28	20	22.3060	113.9557	1440.92	310.20
21-Sep-13	10:01:30	Government Boat	Travelling	91	37	30	303	11	50	22.3032	113.9607	855.75	316.93
21-Sep-13	10:01:48	Dumping Guide Boat	Stationary	93	4	40	344	54	20	22.3017	113.9663	450.72	358.64
21-Sep-13	10:01:56	Sand barge	Travelling	90	53	30	333	55	10	22.3114	113.9631	1568.48	347.65
21-Sep-13	10:02:02	Container Boat	Travelling	90	54	30	333	26	50	22.3111	113.9631	1539.23	347.18
21-Sep-13	10:02:18	Government Boat	Travelling	91	12	20	278	28	40	22.3016	113.9560	1155.78	292.21
21-Sep-13	10:02:25	Government Boat	Travelling	90	52	20	278	40	20	22.3031	113.9520	1603.95	292.40
21-Sep-13	10:02:38	Transportation Boat	Travelling	90	57	0	281	46	20	22.3033	113.9535	1470.63	295.50
21-Sep-13	10:02:44	Transportation Boat	Travelling	90	53	0	333	2	0	22.3115	113.9629	1583.38	346.76
21-Sep-13	10:02:56	Dumping Guide Boat	Travelling	93	26	20	357	31	50	22.3012	113.9672	403.19	11.26
21-Sep-13	10:04:56	Transportation Boat	Travelling	90	55	40	331	52	20	22.3107	113.9628	1506.01	345.60
21-Sep-13	10:08:35	Sand barge	Travelling	90	42	0	353	40	50	22.3155	113.9689	2006.65	7.41
21-Sep-13	10:08:48	Container Boat	Travelling	90	41	0	352	53	30	22.3160	113.9687	2056.90	6.62
21-Sep-13	10:08:58	Transportation Boat	Travelling	90	56	0	309	30	40	22.3084	113.9577	1496.25	323.24
21-Sep-13	10:09:13	Transportation Boat	Travelling	90	53	0	353	7	20	22.3118	113.9682	1582.27	6.85
21-Sep-13	10:09:28	Dumping Guide Boat	Travelling	94	2	10	3	32	20	22.3006	113.9674	343.08	17.27
21-Sep-13	10:12:17	Transportation Boat	Travelling	91	3	30	329	46	20	22.3090	113.9628	1316.89	343.50
21-Sep-13	10:12:45	Dumping Guide Boat	Travelling	93	10	0	13	20	30	22.3011	113.9683	437.51	27.07
21-Sep-13	10:13:14	Tug Boat	Travelling	91	0	50	347	0	10	22.3100	113.9666	1375.18	0.73
21-Sep-13	10:14:55	Transportation Boat	Travelling	91	3	0	306	6	20	22.3067	113.9581	1327.08	319.84
21-Sep-13	10:15:06	Tug Boat	Travelling	91	3	10	343	56	10	22.3095	113.9659	1323.52	357.67
21-Sep-13	10:18:07	Tug Boat	Travelling	90	57	40	340	18	30	22.3106	113.9649	1450.96	354.04
21-Sep-13	10:18:16	Container Boat	Travelling	90	59	10	340	20	0	22.3103	113.9650	1413.66	354.06
21-Sep-13	10:18:34	Sand barge	Travelling	90	46	30	344	3	0	22.3139	113.9657	1806.08	357.78
21-Sep-13	10:19:17	Transportation Boat	Travelling	91	13	20	307	59	0	22.3057	113.9595	1137.79	321.71
21-Sep-13	10:22:29	Transportation Boat	Travelling	92	59	30	321	54	0	22.3014	113.9645	462.70	335.63
21-Sep-13	10:22:39	Sand barge	Travelling	90	53	0	308	38	0	22.3089	113.9570	1579.97	322.36
21-Sep-13	10:22:47	Tug Boat	Travelling	90	52	10	356	14	30	22.3119	113.9691	1605.61	9.97
21-Sep-13	10:22:54	Container Boat	Travelling	90	52	50	354	56	50	22.3117	113.9687	1584.99	8.68
21-Sep-13	10:23:57	Transportation Boat	Travelling	95	36	40	355	24	20	22.2998	113.9668	245.97	9.14
21-Sep-13	10:26:30	Transportation Boat	Travelling	92	56	20	323	43	40	22.3015	113.9646	470.84	337.46
21-Sep-13	10:26:41	Tug Boat	Travelling	90	43	40	6	5	30	22.3139	113.9727	1924.35	19.82
21-Sep-13	10:26:48	Container Boat	Travelling	90	44	10	5	15	50	22.3138	113.9724	1902.02	18.99
21-Sep-13	10:30:08	Tug Boat	Travelling	90	47	10	339	21	0	22.3135	113.9643	1777.78	353.08
21-Sep-13	10:30:23	Transportation Boat	Travelling	91	10	20	312	31	20	22.3065	113.9600	1185.35	326.25
21-Sep-13	10:30:33	Transportation Boat	Travelling	90	58	10	315	33	10	22.3087	113.9593	1436.38	329.28
21-Sep-13	10:31:02	Tug Boat	Travelling	90	32	30	4	26	10	22.3199	113.9743	2610.22	18.17
21-Sep-13	10:31:09	Container Boat	Travelling	90	40	0	5	20	30	22.3155	113.9731	2104.67	19.07
21-Sep-13	10:33:44	Tug Boat	Travelling	91	7	10	354	5	30	22.3087	113.9680	1241.35	7.82
21-Sep-13	10:33:53	Container Boat	Travelling	91	7	50	352	26	30	22.3086	113.9677	1229.01	6.17
21-Sep-13	10:34:15	Tug Boat	Travelling	90	58	20	294	12	0	22.3055	113.9554	1431.65	307.93
21-Sep-13	10:34:36	Dumping Guide Boat	Stationary	92	17	40	25	18	10	22.3018	113.9701	603.04	39.03
21-Sep-13	10:35:19	Container Boat	Stationary	90	40	0	5	34	0	22.3155	113.9732	2103.71	19.30
21-Sep-13	10:38:14	Dumping Guide Boat	Travelling	92	19	20	41	7	50	22.3007	113.9711	595.57	54.86
21-Sep-13	10:40:01	Tug Boat	Travelling	91	1	40	344	14	40	22.3098	113.9659	1352.44	357.97
21-Sep-13	10:40:12	Container Boat	Stationary	91	0	0	344	19	40	22.3101	113.9659	1390.46	358.06
21-Sep-13	10:41:27	Tug Boat	Travelling	90	44	40	2	29	20	22.3138	113.9715	1877.23	16.22
21-Sep-13	10:41:34	Tug Boat	Travelling	91	0	40	351	38	50	22.3099	113.9677	1374.79	5.38
21-Sep-13	10:42:06	Tug Boat	Travelling	90	57	10	285	7	30	22.3040	113.9540	1460.03	298.85
21-Sep-13	10:42:19	Construction Boat	Travelling	90	55	50	282	32	50	22.3036	113.9534	1495.37	296.28

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
21-Sep-13	10:44:22	Tug Boat	Travelling	91	1	0	346	26	20	22.3099	113.9664	1366.77	0.17
21-Sep-13	10:44:31	Tug Boat	Travelling	90	46	20	358	56	10	22.3135	113.9703	1807.61	12.67
21-Sep-13	10:47:35	Dumping Guide Boat	Travelling	92	55	0	36	37	0	22.3003	113.9699	473.36	50.35
21-Sep-13	10:47:44	Tug Boat	Travelling	90	47	10	355	37	10	22.3134	113.9692	1774.38	9.35
21-Sep-13	10:47:54	Tug Boat	Travelling	90	43	10	357	3	30	22.3148	113.9699	1942.69	10.79
21-Sep-13	10:48:10	Tug Boat	Travelling	90	56	0	322	26	40	22.3099	113.9605	1489.91	336.17
21-Sep-13	10:48:20	Construction Boat	Travelling	90	57	50	320	18	0	22.3093	113.9603	1441.99	334.03
21-Sep-13	10:49:56	Dumping Guide Boat	Travelling	94	45	20	10	50	0	22.3000	113.9676	289.70	24.56
21-Sep-13	10:50:09	Tug Boat	Travelling	90	44	20	358	42	0	22.3142	113.9704	1889.88	12.43
21-Sep-13	10:50:16	Tug Boat	Travelling	90	42	0	353	17	40	22.3155	113.9688	1997.55	7.02
21-Sep-13	10:51:56	HSF High Speed Ferry	Travelling	91	0	10	310	32	20	22.3077	113.9585	1384.80	324.27
21-Sep-13	10:52:40	Tug Boat	Travelling	90	41	40	3	6	30	22.3150	113.9721	2013.43	16.84
21-Sep-13	10:52:47	Tug Boat	Travelling	90	44	10	355	31	10	22.3145	113.9694	1896.63	9.25
21-Sep-13	10:52:53	Tug Boat	Travelling	90	43	30	344	50	40	22.3150	113.9659	1926.39	358.57
21-Sep-13	10:54:30	Tug Boat	Travelling	90	38	50	348	27	20	22.3171	113.9672	2164.54	2.19
21-Sep-13	10:54:37	Construction Boat	Travelling	90	40	20	347	58	30	22.3163	113.9670	2081.70	1.70
21-Sep-13	10:54:46	HSF High Speed Ferry	Travelling	90	40	30	348	53	40	22.3163	113.9673	2072.93	2.62
21-Sep-13	10:55:48	HSF High Speed Ferry	Travelling	90	33	10	352	40	40	22.3204	113.9692	2549.50	6.41
21-Sep-13	10:56:22	Tug Boat	Travelling	90	37	30	7	42	40	22.3164	113.9744	2244.49	21.44
21-Sep-13	10:56:29	Tug Boat	Travelling	90	45	10	355	58	40	22.3141	113.9694	1853.93	9.71
21-Sep-13	10:56:39	Tug Boat	Travelling	90	34	0	351	31	30	22.3199	113.9686	2484.64	5.25
21-Sep-13	10:56:45	Construction Boat	Travelling	90	35	20	351	13	30	22.3190	113.9684	2387.28	4.95
21-Sep-13	10:57:08	Dumping Guide Boat	Travelling	91	38	10	44	22	20	22.3016	113.9734	845.39	58.10
21-Sep-13	11:01:07	Tug Boat	Travelling	90	50	20	350	58	40	22.3125	113.9677	1660.79	4.71
21-Sep-13	11:02:37	Tug Boat	Travelling	90	48	0	349	48	30	22.3133	113.9674	1744.28	3.54
21-Sep-13	11:09:18	Transportation Boat	Travelling	91	11	10	309	24	0	22.3061	113.9596	1171.35	323.13
21-Sep-13	11:09:42	Ferry	Travelling	91	11	50	294	21	20	22.3041	113.9575	1160.46	308.09
21-Sep-13	11:10:05	Tug Boat	Travelling	90	48	0	356	33	30	22.3131	113.9694	1746.48	10.29
21-Sep-13	11:12:37	Transportation Boat	Travelling	93	7	50	327	5	30	22.3014	113.9650	441.98	340.82
21-Sep-13	11:12:47	Ferry	Travelling	91	7	10	329	42	30	22.3083	113.9630	1242.53	343.44
21-Sep-13	11:13:02	Dumping Guide Boat	Travelling	91	7	0	45	33	20	22.3033	113.9768	1245.71	59.29
21-Sep-13	11:13:55	Transportation Boat	Travelling	95	40	50	355	54	50	22.2998	113.9668	242.96	9.64
21-Sep-13	11:14:11	HSF High Speed Ferry	Travelling	90	36	10	349	55	30	22.3186	113.9678	2337.55	3.65
21-Sep-13	11:14:41	Ferry	Travelling	90	52	20	342	41	0	22.3120	113.9654	1600.55	356.41
21-Sep-13	11:16:02	HSF High Speed Ferry	Travelling	90	51	50	333	39	50	22.3118	113.9630	1616.62	347.39
21-Sep-13	11:16:13	Tug Boat	Travelling	90	48	0	358	59	30	22.3130	113.9701	1748.28	12.72
21-Sep-13	11:16:21	Tug Boat	Travelling	90	45	10	4	59	20	22.3135	113.9722	1860.43	18.72
21-Sep-13	11:17:10	Ferry	Travelling	90	40	50	353	45	0	22.3160	113.9690	2063.42	7.48
21-Sep-13	11:17:19	Tug Boat	Travelling	90	51	40	358	24	40	22.3119	113.9697	1622.27	12.14
21-Sep-13	11:17:30	Tug Boat	Travelling	90	50	10	358	16	0	22.3123	113.9698	1671.71	12.00
21-Sep-13	11:17:42	Dumping Guide Boat	Travelling	90	56	20	43	7	40	22.3049	113.9785	1485.93	56.86
21-Sep-13	11:17:53	HSF High Speed Ferry	Travelling	91	1	0	301	38	40	22.3064	113.9570	1370.81	315.37
21-Sep-13	11:19:12	HSF High Speed Ferry	Travelling	90	53	0	279	41	50	22.3033	113.9523	1581.27	293.43
21-Sep-13	11:19:20	Tug Boat	Travelling	91	1	50	346	55	50	22.3098	113.9666	1352.44	0.66
21-Sep-13	11:22:49	Transportation Boat	Travelling	90	59	40	290	46	10	22.3048	113.9552	1403.00	304.50
21-Sep-13	11:23:17	Tug Boat	Travelling	90	55	30	350	40	0	22.3112	113.9675	1509.98	4.40
21-Sep-13	11:23:34	Container Boat	Travelling	90	56	20	349	56	10	22.3110	113.9673	1487.39	3.67
21-Sep-13	11:23:47	Tug Boat	Travelling	90	51	10	356	7	30	22.3122	113.9691	1640.18	9.85
21-Sep-13	11:23:59	Ferry	Travelling	90	43	40	4	24	50	22.3141	113.9722	1928.35	18.14
21-Sep-13	11:24:14	Transportation Boat	Travelling	90	55	0	307	33	10	22.3083	113.9571	1524.16	321.28
21-Sep-13	11:26:22	Ferry	Travelling	90	57	0	353	20	50	22.3108	113.9682	1470.43	7.08
21-Sep-13	11:26:29	Tug Boat	Travelling	90	49	0	2	4	10	22.3125	113.9709	1714.86	15.80
21-Sep-13	11:26:35	Container Boat	Travelling	90	49	40	1	2	50	22.3123	113.9706	1691.43	14.78
21-Sep-13	11:26:44	Tug Boat	Travelling	90	49	40	352	32	10	22.3128	113.9682	1691.47	6.27
21-Sep-13	11:26:54	Dumping Guide Boat	Travelling	91	5	20	46	23	0	22.3034	113.9772	1280.79	60.11
21-Sep-13	11:29:20	Ferry	Travelling	90	57	0	354	22	40	22.3107	113.9684	1471.16	8.11
21-Sep-13	11:31:31	Other	Stationary	94	26	30	0	0	10	22.3003	113.9671	312.08	13.73
21-Sep-13	11:31:44	Tug Boat	Travelling	90	38	30	9	39	10	22.3158	113.9749	2197.73	23.38
21-Sep-13	11:32:12	Container Boat	Stationary	90	42	10	8	58	40	22.3142	113.9739	2001.48	22.71
21-Sep-13	11:32:31	Tug Boat	Travelling	90	44	10	1	44	40	22.3142	113.9714	1908.73	15.47
21-Sep-13	11:33:08	Dumping Guide Boat	Travelling	90	53	30	41	56	30	22.3056	113.9790	1569.91	55.67
21-Sep-13	11:33:26	Tug Boat	Travelling	90	32	10	4	48	50	22.3202	113.9746	2649.57	18.54
21-Sep-13	11:33:32	Tug Boat	Travelling	90	38	20	2	49	30	22.3167	113.9725	2208.26	16.55
21-Sep-13	11:33:45	Ferry	Travelling	90	41	20	6	47	40	22.3148	113.9734	2043.47	20.52
21-Sep-13	11:36:32	Tug Boat	Travelling	90	36	20	8	4	50	22.3171	113.9748	2335.25	21.81
21-Sep-13	11:36:41	Tug Boat	Travelling	90	32	20	3	8	10	22.3203	113.9738	2636.74	16.87
21-Sep-13	11:36:58	Government Boat	Travelling	90	48	0	13	50	0	22.3116	113.9743	1754.37	27.56
21-Sep-13	11:37:09	Dumping Guide Boat	Travelling	91	3	0	45	7	10	22.3038	113.9775	1331.05	58.85
21-Sep-13	11:37:21	Transportation Boat	Travelling	90	49	40	340	9	20	22.3128	113.9646	1694.48	353.89
21-Sep-13	11:38:16	Government Boat	Travelling	91	28	40	338	55	0	22.3060	113.9652	943.14	352.65
21-Sep-13	11:38:52	Tug Boat	Travelling	90	43	0	9	18	50	22.3139	113.9739	1963.90	23.04
21-Sep-13	11:39:07	Transportation Boat	Travelling	90	58	50	318	33	10	22.3090	113.9599	1427.02	332.28
21-Sep-13	11:39:17	Government Boat	Travelling	91	15	40	288	11	20	22.3029	113.9573	1106.62	301.92
21-Sep-13	11:39:50	Transportation Boat	Travelling	90	33	30	352	53	40	22.3203	113.9693	2542.27	6.62
21-Sep-13	11:40:03	Ferry	Travelling	90	44	20	13	59	50	22.3128	113.9750	1903.78	27.73
21-Sep-13	11:40:10	Tug Boat	Travelling	90	44	50	5	14	40	22.3136	113.9724	1882.09	18.97
21-Sep-13	11:41:20	Dumping Guide Boat	Travelling	90	54	10	33	28	40	22.3071	113.9775	1552.41	47.21
21-Sep-13	11:41:35	Transportation Boat	Travelling	90	49	20	341	50	50	22.3129	113.9651	1707.36	355.58
21-Sep-13	11:42:18	Tug Boat	Travelling	90	57	0	311	53	10	22.3086	113.9583	1474.35	325.62
21-Sep-13	11:42:29	Construction Boat	Travelling	90	57	30	310	19	30	22.3083	113.9581	1461.39	324.05
21-Sep-13	11:43:22	Tug Boat	Travelling	91	3	40	313	14	0	22.3076	113.9594	1318.32	326.96
21-Sep-13	11:43:31	Construction Boat	Travelling	91	2	40	313	10	40	22.3077	113.9593	1339.64	326.91
21-Sep-13	11:44:54	Transportation Boat	Travelling	90	55	20	278	56	10	22.3029	113.9528	1520.08	292.67
21-Sep-13	11:45:21	Transportation Boat	Travelling	91	8	50	308	54	50	22.3063	113.9592	1218.75	322.64
21-Sep-13	11:46:58	Dumping Guide Boat	Travelling	93	6	40	31	28	50	22.3005	113.9695	447.30	45.21
21-Sep-13	11:47:44	Tug Boat	Travelling	90	46	30	2	11	50	22.3133	113.9712	1815.44	15.93
21-Sep-13	11:47:55	Container Boat	Travelling	90	44	40	1	48	10	22.3140	113.9713	1891.73	15.53
21-Sep-13	11:48:08	Transportation Boat	Travelling	91	2	30	288	47	50	22.3041	113.9554	1344.28	302.53
21-Sep-13	11:48:18	Tug Boat	Travelling	91	13	0	331	47	0	22.3076	113.9636	1149.12	345.51
21-Sep-13	11:48:28	Construction Boat	Travelling	91	6	50	330	9	30	22.3085	113.9630	1256.25	343.89
21-Sep-13	11:48:42	Tug Boat	Travelling	91	10	50	323	53	0	22.3075	113.9620	1184.67	337.61
21-Sep-13	11:48:54	Construction Boat	Travelling	91	16	10	329	48	10	22.3071	113.9634	1101.05	343.53
21-Sep-13	11:49:23	Government Boat	Travelling	91	15	0	293	56	20	22.3038	113.9578	1118.41	307.67
21-Sep-13	11:49:46	HSF High Speed Ferry	Travelling	90	41	0	348	11	30	22.3162	113.9671	2066.09	1.92
21-Sep-13	11:50:10	Tug Boat	Travelling	91	9	20	326	22	30	22.3079	113.9624	1210.84	340.10
21-Sep-13	11:50:18	Tug Boat	Travelling	91	6	0	317	8	50	22.3076	113.9604	1272.67	330.88
21-Sep-13	11:50:36	Construction Boat	Stationary	91	19	10	332	31	30	22.3069	113.9640	1059.30	346.25
21-Sep-13	11:50:45	Construction Boat	Stationary	91	20	0	331	27	50	22.3067	113.9638	1048.21	345.19
21-Sep-13	11:50:59	Government Boat	Travelling	91	7	0	321	20	30	22.3078	113.9613	1253.62	335.07
21-Sep-13	11:51:05	HSF High Speed Ferry	Travelling	90	51	30	337	5	50	22.3122	113.9639	1636.83	350.83
21-Sep-13	11:51:21	Tug Boat	Travelling	90	51	20	359	51	30	22.3120	113.9702	1642.32	13.59
21-Sep-13	11:51:30	Container Boat	Travelling	90	51	40	359	9	40	22.3119	113.9699	1631.57	12.89
21-Sep-13	11:52:57	HSF High Speed Ferry	Travelling	91	0	40	308	47	40	22.3075	113.9582	1386.53	322.52
21-Sep-13	11:53:10	Government Boat	Travelling	90	45	40	348	11	30	22.3143	113.9670	1850.99	1.92
21-Sep-13	11:53:29	Tug Boat	Travelling	90	52	0	308	21	0	22.3091	113.9567	1621.47	322.08
21-Sep-13	11:53:50	Transportation Boat	Travelling	90	50	40	339	15	10	22.3125	113.9644	1665.01	352.98
21-Sep-13	11:54:10	Dumping Guide Boat	Travelling	90	53	0	32	21	20	22.3075	113.9775	1590.55	46.09
21-Sep-13	11:54:27	HSF High Speed Ferry	Travelling	90	57	0	283	59	10	22.3038	113.9537	1477.33	297.72
21-Sep-13	11:55:20	Transportation Boat	Travelling	91	0	10	315	18	10	22.3084	113.9594	1398.75	329.03
21-Sep-13	11:56:52	Transportation Boat	Travelling	91	0	50	282	58	40	22.3032	113.9544	1383.58	296.71
21-Sep-13	11:57:00	Tug Boat	Travelling	90	54	10	356	3	50	22.3114	113.9690	1556.47	9.79
21-Sep-13	11:57:18	Tug Boat	Travelling	90	40	10	349	14	30	22.3166	113.9675	2112.87	2.97
21-Sep-13	11:57:35	Dumping Guide Boat	Travelling	90	41	30	15	20	10	22.3137	113.9761	2043.19	29.07
21-Sep-13	12:01:30	Tug Boat	Travelling	90	54	20	334	22	40	22.3113	113.9633	1552.78	348.11
21-Sep-13	12:01:41	Tug Boat	Travelling	91	12	10	333	8	0	22.3078	113.9638	1165.09	346.86
21-Sep-13	12:01:56	Dumping Guide Boat	Travelling	90	36	20	352	56	40	22.3186	113.9691	2345.26	6.67
21-Sep-13	12:02:29	Tug Boat	Travelling	90	57	0	310	49	0	22.3085	113.9581	1479.31	324.55

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
21-Sep-13	12:02:45	Construction Boat	Travelling	90	56	40	310	21	40	22.3085	113.9579	1488.20	324.09
21-Sep-13	12:03:00	Tug Boat	Travelling	90	58	20	312	7	40	22.3084	113.9585	1445.15	325.86
21-Sep-13	12:03:17	Container Boat	Travelling	90	59	20	311	59	50	22.3082	113.9586	1420.54	325.73
21-Sep-13	12:03:51	Dumping Guide Boat	Travelling	90	41	10	345	29	10	22.3162	113.9661	2062.36	359.22
21-Sep-13	12:05:01	Tug Boat	Travelling	90	57	10	341	30	20	22.3109	113.9652	1475.56	355.24
21-Sep-13	12:05:17	Tug Boat	Travelling	91	21	50	332	42	10	22.3066	113.9641	1027.03	346.43
21-Sep-13	12:05:30	Transportation Boat	Travelling	91	19	0	324	55	10	22.3065	113.9626	1064.18	338.65
21-Sep-13	12:05:56	Tug Boat	Travelling	90	56	0	326	19	10	22.3104	113.9614	1506.98	340.05
21-Sep-13	12:06:04	Construction Boat	Travelling	90	56	10	325	46	20	22.3103	113.9613	1502.48	339.50
21-Sep-13	12:06:13	Tug Boat	Travelling	90	57	20	327	26	10	22.3102	113.9618	1471.50	341.17
21-Sep-13	12:06:20	Container Boat	Travelling	90	57	50	326	50	0	22.3100	113.9617	1458.63	340.56
21-Sep-13	12:06:38	Transportation Boat	Travelling	91	19	40	330	31	30	22.3068	113.9636	1055.41	344.25
21-Sep-13	12:06:56	Tug Boat	Travelling	90	59	20	348	16	30	22.3104	113.9669	1421.40	2.00
21-Sep-13	12:08:31	Tug Boat	Travelling	91	19	10	343	33	10	22.3072	113.9659	1062.46	357.28
21-Sep-13	12:08:39	Tug Boat	Travelling	91	20	50	333	1	50	22.3067	113.9641	1040.41	346.76
21-Sep-13	12:08:48	Transportation Boat	Stationary	91	18	10	331	8	40	22.3070	113.9637	1076.20	344.87
21-Sep-13	12:08:58	Dumping Guide Boat	Travelling	90	51	50	334	14	20	22.3120	113.9631	1630.97	347.97
21-Sep-13	12:09:06	Tug Boat	Travelling	90	51	20	338	55	20	22.3123	113.9644	1647.18	352.65
21-Sep-13	12:09:23	Construction Boat	Travelling	90	50	20	339	2	30	22.3126	113.9643	1680.58	352.77
21-Sep-13	12:09:33	Tug Boat	Travelling	90	51	20	340	30	30	22.3124	113.9648	1647.30	354.24
21-Sep-13	12:09:42	Container Boat	Travelling	90	51	20	340	6	10	22.3124	113.9647	1647.34	353.83
21-Sep-13	12:10:13	Transportation Boat	Travelling	91	14	50	326	17	50	22.3071	113.9627	1124.81	340.03
21-Sep-13	12:10:38	Tug Boat	Travelling	91	13	30	340	15	20	22.3079	113.9652	1145.47	353.99
21-Sep-13	12:10:49	Tug Boat	Travelling	90	58	30	286	19	30	22.3041	113.9543	1442.85	300.05
21-Sep-13	12:11:10	Construction Boat	Travelling	90	57	10	284	47	10	22.3040	113.9538	1477.07	298.52
21-Sep-13	12:11:27	Transportation Boat	Travelling	90	53	30	340	54	0	22.3118	113.9650	1579.97	354.63
21-Sep-13	12:13:24	Tug Boat	Travelling	90	44	10	356	19	20	22.3146	113.9697	1921.83	10.05
21-Sep-13	12:13:41	Construction Boat	Stationary	90	44	30	347	25	40	22.3148	113.9668	1907.18	1.16
21-Sep-13	12:13:52	Tug Boat	Travelling	90	43	20	351	45	10	22.3152	113.9682	1959.86	5.48
21-Sep-13	12:14:13	Container Boat	Stationary	90	47	40	349	10	40	22.3136	113.9673	1777.92	2.91
21-Sep-13	12:14:25	Tug Boat	Travelling	90	56	50	349	0	10	22.3110	113.9671	1486.66	2.73
21-Sep-13	12:14:35	Transportation Boat	Travelling	93	25	20	340	0	20	22.3013	113.9660	408.36	353.74
21-Sep-13	12:15:10	Tug Boat	Travelling	91	1	20	307	49	10	22.3073	113.9581	1376.34	321.55
21-Sep-13	12:15:18	Construction Boat	Travelling	91	2	40	304	43	0	22.3067	113.9577	1346.73	318.45
21-Sep-13	12:15:28	Dumping Guide Boat	Travelling	91	6	40	311	12	30	22.3069	113.9593	1265.08	324.94
21-Sep-13	12:15:47	Construction Boat	Travelling	91	7	40	336	37	50	22.3087	113.9644	1246.26	350.36
21-Sep-13	12:15:54	Construction Boat	Travelling	91	7	40	338	7	20	22.3087	113.9647	1246.28	351.85
21-Sep-13	12:18:35	Dumping Guide Boat	Travelling	91	10	50	289	3	10	22.3034	113.9567	1190.56	302.78
21-Sep-13	12:18:46	Transportation Boat	Travelling	91	12	30	315	24	50	22.3066	113.9606	1162.97	329.14
21-Sep-13	12:19:15	Tug Boat	Travelling	90	56	30	327	15	20	22.3104	113.9617	1496.75	340.99
21-Sep-13	12:19:23	Construction Boat	Travelling	90	57	50	324	41	20	22.3099	113.9612	1461.79	338.42
21-Sep-13	12:19:37	Tug Boat	Travelling	90	52	20	2	56	30	22.3116	113.9709	1617.99	16.67
21-Sep-13	12:21:51	Dumping Guide Boat	Travelling	91	2	10	320	2	0	22.3086	113.9606	1359.17	333.76
21-Sep-13	12:22:04	Tug Boat	Travelling	90	45	40	345	59	40	22.3144	113.9663	1859.93	359.72
21-Sep-13	12:22:16	Construction Boat	Travelling	90	46	20	346	8	40	22.3141	113.9664	1832.64	359.87
21-Sep-13	12:24:39	Tug Boat	Travelling	90	39	20	4	17	30	22.3162	113.9729	2168.90	18.02
21-Sep-13	12:24:48	Dumping Guide Boat	Travelling	90	48	20	338	10	10	22.3133	113.9640	1755.99	351.90
21-Sep-13	12:24:58	Tug Boat	Travelling	90	41	10	352	1	10	22.3162	113.9684	2069.65	5.75
21-Sep-13	12:25:15	Construction Boat	Travelling	90	41	20	352	22	0	22.3161	113.9685	2061.17	6.10
21-Sep-13	12:25:25	Tug Boat	Travelling	90	43	50	345	58	0	22.3151	113.9663	1940.68	359.70
21-Sep-13	12:25:33	Construction Boat	Travelling	90	45	50	344	57	10	22.3143	113.9660	1854.09	358.68
21-Sep-13	12:28:32	Ferry	Travelling	90	46	10	359	15	0	22.3138	113.9704	1841.32	12.98
21-Sep-13	12:29:47	Government Boat	Travelling	91	24	50	329	30	40	22.3062	113.9636	994.48	343.24
21-Sep-13	12:30:00	Tug Boat	Travelling	90	31	0	2	40	40	22.3216	113.9740	2780.71	16.41
21-Sep-13	12:30:39	Government Boat	Travelling	90	57	40	5	57	20	22.3101	113.9712	1468.81	19.69
21-Sep-13	12:31:06	Tug Boat	Travelling	90	37	10	352	52	20	22.3182	113.9690	2302.07	6.60
21-Sep-13	12:31:21	Construction Boat	Travelling	90	35	10	352	29	40	22.3194	113.9690	2438.04	6.22
21-Sep-13	12:31:55	Construction Boat	Travelling	90	33	50	356	49	10	22.3201	113.9709	2538.34	10.55
21-Sep-13	12:32:39	Dumping Guide Boat	Travelling	90	40	40	351	47	20	22.3164	113.9684	2098.50	5.52
21-Sep-13	12:32:46	Ferry	Travelling	90	54	30	354	18	0	22.3115	113.9685	1556.01	8.03
21-Sep-13	12:33:08	Speed Boat	Travelling	91	2	10	319	33	30	22.3086	113.9604	1361.71	333.29
21-Sep-13	12:34:45	Speed Boat	Travelling	90	48	40	339	55	0	22.3132	113.9645	1746.60	353.65
21-Sep-13	12:35:16	Ferry	Travelling	90	48	20	3	46	30	22.3127	113.9715	1759.04	17.50
21-Sep-13	12:35:30	Dumping Guide Boat	Travelling	90	38	40	352	24	0	22.3174	113.9687	2211.47	6.13
21-Sep-13	12:35:40	Tug Boat	Travelling	90	46	20	348	58	20	22.3141	113.9672	1836.72	2.70
21-Sep-13	12:36:03	Government Boat	Travelling	91	42	30	306	14	20	22.3033	113.9613	823.02	319.97
21-Sep-13	12:36:26	Speed Boat	Travelling	90	38	0	351	10	10	22.3178	113.9683	2251.89	4.90
21-Sep-13	12:38:12	Government Boat	Travelling	91	11	20	11	9	30	22.3073	113.9713	1185.97	24.89
21-Sep-13	12:38:47	Dumping Guide Boat	Travelling	90	48	10	338	41	20	22.3134	113.9641	1766.28	352.42
21-Sep-13	12:39:18	Government Boat	Travelling	90	53	10	21	19	10	22.3094	113.9753	1597.40	35.05
21-Sep-13	12:50:06	Dumping Guide Boat	Travelling	91	8	30	307	33	50	22.3063	113.9589	1237.93	321.29
21-Sep-13	12:50:18	Tug Boat	Travelling	90	54	50	351	10	40	22.3115	113.9677	1550.90	4.91
21-Sep-13	12:53:54	Tug Boat	Travelling	91	42	40	348	1	20	22.3050	113.9666	824.09	1.75
21-Sep-13	12:54:09	Container Boat	Travelling	90	40	0	350	58	20	22.3168	113.9681	2142.16	4.70
21-Sep-13	12:54:47	Transportation Boat	Travelling	91	3	50	296	14	10	22.3053	113.9565	1330.48	309.97
21-Sep-13	12:57:06	Tug Boat	Travelling	94	36	40	331	29	50	22.3003	113.9656	304.83	345.23
21-Sep-13	12:57:17	Transportation Boat	Travelling	90	54	10	340	16	0	22.3117	113.9648	1572.10	354.00
21-Sep-13	12:57:28	Container Boat	Travelling	90	52	20	334	0	50	22.3119	113.9630	1628.15	347.74
21-Sep-13	12:59:04	Transportation Boat	Travelling	90	43	10	355	25	20	22.3152	113.9695	1982.46	9.15
21-Sep-13	12:59:13	Container Boat	Travelling	90	58	0	320	6	30	22.3095	113.9601	1467.16	333.84
21-Sep-13	12:59:24	Tug Boat	Travelling	95	1	20	335	12	10	22.3001	113.9659	279.85	348.93
21-Sep-13	13:03:17	Transportation Boat	Travelling	90	57	0	327	59	10	22.3104	113.9618	1494.27	341.72
21-Sep-13	13:03:24	Container Boat	Travelling	90	56	10	282	56	50	22.3037	113.9532	1516.79	296.68
21-Sep-13	13:03:35	Tug Boat	Travelling	94	8	20	356	20	50	22.3006	113.9670	340.13	10.08
21-Sep-13	13:04:32	Transportation Boat	Travelling	90	59	50	305	53	0	22.3074	113.9574	1422.84	319.61
21-Sep-13	13:06:13	Transportation Boat	Travelling	90	49	30	279	15	20	22.3037	113.9509	1725.59	292.99
21-Sep-13	13:06:26	Tug Boat	Travelling	91	31	50	29	19	50	22.3037	113.9725	923.76	43.06
21-Sep-13	13:09:51	Tug Boat	Travelling	90	46	30	343	25	0	22.3142	113.9655	1840.39	357.15
21-Sep-13	13:11:58	Tug Boat	Travelling	90	59	30	326	7	40	22.3097	113.9616	1432.67	339.86
21-Sep-13	13:14:45	Tug Boat	Travelling	91	0	0	293	4	40	22.3053	113.9553	1421.22	306.81
21-Sep-13	13:16:10	Tug Boat	Travelling	90	53	10	278	12	40	22.3030	113.9519	1607.15	291.94
21-Sep-13	13:16:23	Transportation Boat	Travelling	91	8	30	291	0	10	22.3040	113.9565	1243.29	304.73
21-Sep-13	13:19:28	Transportation Boat	Travelling	91	7	0	319	5	0	22.3078	113.9607	1272.06	332.81
21-Sep-13	13:19:36	Speed Boat	Travelling	90	58	0	322	55	30	22.3098	113.9607	1472.08	336.65
21-Sep-13	13:20:44	Speed Boat	Travelling	90	49	20	338	9	50	22.3131	113.9640	1735.68	351.89
21-Sep-13	13:21:13	Transportation Boat	Travelling	91	0	10	332	19	10	22.3100	113.9631	1418.74	346.05
21-Sep-13	13:22:14	Speed Boat	Travelling	90	36	10	351	37	40	22.3190	113.9686	2388.28	5.36
21-Sep-13	13:25:00	Transportation Boat	Travelling	90	44	10	349	53	20	22.3151	113.9676	1944.78	3.62
21-Sep-13	13:33:36	Tug Boat	Travelling	91	3	50	323	21	30	22.3087	113.9613	1338.98	337.09
21-Sep-13	13:33:48	Dumping Guide Boat	Travelling	93	35	0	6	56	20	22.3009	113.9678	395.03	20.67
21-Sep-13	13:35:55	Dumping Guide Boat	Travelling	91	38	10	28	39	10	22.3034	113.9721	868.01	42.38
21-Sep-13	13:36:24	Tug Boat	Travelling	90	44	50	347	4	50	22.3149	113.9667	1918.77	0.81
21-Sep-13	13:37:49	Tug Boat	Travelling	90	37	30	354	9	40	22.3182	113.9695	2306.34	7.89
21-Sep-13	13:38:00	Dumping Guide Boat	Travelling	91	1	40	31	16	50	22.3064	113.9759	1387.60	45.01
21-Sep-13	13:39:22	Construction Boat	Travelling	91	1	20	310	6	0	22.3078	113.9584	1395.55	323.83
21-Sep-13	13:42:41	Construction Boat	Travelling	90	47	50	341	25	0	22.3137	113.9649	1797.69	355.15
21-Sep-13	13:44:49	Construction Boat	Travelling	90	38	10	352	46	20	22.3179	113.9689	2267.32	6.50
21-Sep-13	13:45:05	Container Boat	Travelling	91	1	40	296	50	40	22.3058	113.9561	1389.21	310.57
21-Sep-13	13:48:13	Container Boat	Travelling	90	55	20	331	56	20	22.3111	113.9627	1551.36	345.67
21-Sep-13	14:02:54	Other	Stationary	91	7	0	328	42	10	22.3086	113.9626	1281.11	342.43
21-Sep-13	14:03:35	Other	Stationary	90	29	20	346	36	10	22.3246	113.9666	2994.16	0.33
21-Sep-13	14:03:44	Other	Stationary	90	33	20	348	39	40	22.3212	113.9675	2617.81	2.39
21-Sep-13	14:03:56	Other	Stationary	90	29	0	353	44	50	22.3247	113.9702	3030.80	7.48
21-Sep-13	14:04:09	Other	Stationary	90	36	0	354	49	0	22.3191	113.9699	2416.44	8.55
21-Sep-13	14:04:16	Other	Stationary	90	43	50	355	28	50	22.3151	113.9695	1972.63	9.21
21-Sep-13	14:04:22	Other	Stationary	90	45	10	355	32	40	22.3146	113.9694	1913.04	9.27
21-Sep-13	14:04:32	Other	Stationary	90	35	30	357	41	30	22.3192	113.9711	2451.95	11.42

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
21-Sep-13	14:04:45	Other	Stationary	90	45	10	356	51	20	22.3145	113.9698	1913.15	10.59
21-Sep-13	14:04:55	Other	Stationary	90	31	10	17	30	30	22.3192	113.9806	2809.33	31.24
21-Sep-13	14:05:18	Other	Stationary	90	30	50	357	45	40	22.3227	113.9719	2841.47	11.49
21-Sep-13	14:05:24	Other	Stationary	90	31	10	359	7	30	22.3223	113.9725	2809.56	12.85
21-Sep-13	14:05:41	Other	Stationary	90	45	0	355	31	50	22.3147	113.9694	1920.70	9.26
21-Sep-13	14:05:51	Other	Stationary	90	45	0	356	58	10	22.3146	113.9699	1920.75	10.70
21-Sep-13	14:06:12	Other	Stationary	90	33	20	354	59	50	22.3209	113.9703	2618.88	8.73
21-Sep-13	14:06:20	Other	Stationary	90	43	0	7	23	10	22.3145	113.9735	2012.52	21.12
21-Sep-13	14:06:27	Other	Stationary	90	45	0	10	12	50	22.3134	113.9740	1920.94	23.94
21-Sep-13	14:06:33	Other	Stationary	90	32	40	10	8	30	22.3196	113.9769	2674.93	23.87
21-Sep-13	14:06:40	Other	Stationary	90	36	30	21	29	0	22.3151	113.9798	2383.12	35.21
24-Sep-13	8:04:22	Other	Stationary	94	23	50	0	0	0	22.3005	113.9672	334.01	13.73
24-Sep-13	8:06:25	Other	Stationary	90	32	0	289	30	50	22.3116	113.9434	2825.59	303.24
24-Sep-13	8:06:30	Other	Stationary	90	33	10	291	59	0	22.3119	113.9449	2721.50	305.71
24-Sep-13	8:06:35	Other	Stationary	90	35	10	293	14	50	22.3115	113.9465	2560.18	306.98
24-Sep-13	8:06:43	Other	Stationary	90	42	0	295	16	50	22.3097	113.9503	2130.67	309.01
24-Sep-13	8:06:53	Other	Stationary	90	49	0	297	44	20	22.3085	113.9531	1819.48	311.47
24-Sep-13	8:06:59	Other	Stationary	90	55	10	301	40	30	22.3080	113.9554	1612.60	315.40
24-Sep-13	8:07:12	Other	Stationary	91	0	40	304	46	40	22.3075	113.9570	1464.34	318.51
24-Sep-13	8:07:24	Other	Stationary	91	0	40	304	46	40	22.3075	113.9570	1464.34	318.51
24-Sep-13	8:07:38	Other	Stationary	90	53	20	307	32	0	22.3093	113.9562	1668.97	321.26
24-Sep-13	8:07:46	Other	Stationary	90	53	20	307	32	0	22.3093	113.9562	1668.97	321.26
24-Sep-13	8:07:52	Other	Stationary	90	58	0	311	6	30	22.3089	113.9578	1532.64	324.84
24-Sep-13	8:08:00	Other	Stationary	90	58	20	315	57	40	22.3095	113.9589	1523.75	329.69
24-Sep-13	8:08:07	Other	Stationary	90	56	50	322	29	40	22.3105	113.9603	1564.57	336.22
24-Sep-13	8:08:13	Other	Stationary	90	54	40	327	44	50	22.3115	113.9614	1627.59	341.48
24-Sep-13	8:08:20	Other	Stationary	90	52	0	332	44	0	22.3126	113.9625	1712.54	346.46
24-Sep-13	8:08:28	Other	Stationary	90	47	0	338	6	50	22.3145	113.9638	1898.61	351.84
24-Sep-13	8:08:37	Other	Stationary	90	42	30	343	33	30	22.3165	113.9654	2104.90	357.29
24-Sep-13	8:08:44	Other	Stationary	90	38	10	348	44	0	22.3188	113.9674	2351.69	2.46
24-Sep-13	8:08:50	Other	Stationary	90	31	20	351	55	30	22.3235	113.9692	2888.83	5.65
24-Sep-13	8:09:04	Other	Stationary	90	31	0	352	0	0	22.3238	113.9692	2921.55	5.73
24-Sep-13	8:09:16	Other	Stationary	90	30	0	348	14	40	22.3248	113.9674	3024.44	1.97
24-Sep-13	8:09:27	Other	Stationary	90	30	0	348	14	30	22.3248	113.9674	3024.44	1.97
24-Sep-13	8:09:36	Other	Stationary	90	30	50	351	58	20	22.3239	113.9692	2938.19	5.70
24-Sep-13	8:09:56	Other	Stationary	90	29	50	348	14	10	22.3250	113.9674	3042.32	1.97
24-Sep-13	8:10:02	Other	Stationary	90	29	0	344	53	50	22.3258	113.9657	3135.08	358.63
24-Sep-13	8:10:09	Other	Stationary	90	28	50	339	32	20	22.3258	113.9628	3154.33	353.27
24-Sep-13	8:10:17	Other	Stationary	90	28	20	337	8	10	22.3262	113.9614	3213.59	350.87
24-Sep-13	8:10:34	Other	Stationary	90	29	40	331	48	0	22.3243	113.9590	3060.41	345.53
24-Sep-13	8:10:41	Other	Stationary	90	28	40	328	18	30	22.3248	113.9569	3173.83	342.04
24-Sep-13	8:10:49	Other	Stationary	90	27	0	325	33	0	22.3261	113.9548	3383.49	339.28
24-Sep-13	8:10:58	Other	Stationary	90	25	30	322	46	50	22.3273	113.9524	3598.41	336.51
24-Sep-13	8:11:09	Other	Stationary	90	26	30	317	12	30	22.3248	113.9501	3452.11	330.94
24-Sep-13	8:11:19	Other	Stationary	90	26	50	313	42	50	22.3235	113.9486	3406.05	327.44
24-Sep-13	8:11:26	Other	Stationary	90	28	10	310	54	0	22.3213	113.9482	3233.86	324.63
24-Sep-13	8:11:33	Other	Stationary	90	28	40	309	7	40	22.3204	113.9478	3173.83	322.86
24-Sep-13	8:12:01	Container Boat	Stationary	91	10	0	310	53	20	22.3069	113.9593	1266.98	324.62
24-Sep-13	8:12:10	Container Boat	Stationary	91	16	20	317	10	0	22.3067	113.9609	1160.92	330.90
24-Sep-13	8:12:20	Container Boat	Stationary	90	27	10	350	59	50	22.3278	113.9691	3361.25	4.73
24-Sep-13	8:12:41	Container Boat	Stationary	90	38	40	0	32	50	22.3179	113.9720	2320.25	14.28
24-Sep-13	8:13:05	Construction Boat	Stationary	91	5	50	329	33	10	22.3092	113.9626	1348.06	343.28
24-Sep-13	8:13:23	Construction Boat	Stationary	90	45	30	352	11	10	22.3152	113.9684	1962.67	5.92
24-Sep-13	8:13:34	Construction Boat	Stationary	90	29	20	354	44	40	22.3252	113.9708	3097.28	8.47
24-Sep-13	8:13:41	Construction Boat	Stationary	90	28	10	356	3	0	22.3263	113.9717	3233.86	9.78
24-Sep-13	8:13:53	Construction Boat	Stationary	90	28	10	356	56	30	22.3262	113.9722	3233.86	10.67
24-Sep-13	8:14:01	Construction Boat	Stationary	90	40	20	357	2	30	22.3173	113.9704	2221.36	10.77
24-Sep-13	8:14:09	Construction Boat	Stationary	90	36	10	358	35	20	22.3195	113.9716	2486.61	12.32
24-Sep-13	8:14:20	Construction Boat	Stationary	90	31	50	357	43	0	22.3227	113.9719	2841.14	11.45
24-Sep-13	8:14:32	Construction Boat	Stationary	90	42	0	358	41	30	22.3163	113.9709	2130.67	12.42
24-Sep-13	8:14:50	Construction Boat	Stationary	90	30	10	17	21	0	22.3208	113.9815	3006.78	31.08
24-Sep-13	8:15:16	Tug Boat	Stationary	90	41	50	359	17	20	22.3164	113.9711	2139.40	13.02
24-Sep-13	8:15:29	Tug Boat	Stationary	91	8	40	1	33	20	22.3088	113.9697	1291.84	15.29
24-Sep-13	8:15:46	Other	Stationary	90	57	0	350	16	0	22.3116	113.9675	1559.93	4.00
24-Sep-13	8:15:57	Other	Stationary	90	57	50	352	14	50	22.3114	113.9680	1537.12	5.98
24-Sep-13	8:16:07	Other	Stationary	90	29	30	353	43	40	22.3251	113.9703	3078.73	7.46
24-Sep-13	8:16:14	Other	Stationary	90	29	30	354	46	30	22.3250	113.9708	3078.73	8.50
24-Sep-13	8:16:36	Other	Stationary	90	41	30	358	43	30	22.3166	113.9709	2157.07	12.45
24-Sep-13	8:16:46	Other	Stationary	90	41	30	359	56	10	22.3165	113.9714	2157.07	13.67
24-Sep-13	8:16:58	Other	Stationary	90	31	40	1	14	50	22.3225	113.9736	2856.85	14.98
24-Sep-13	8:17:05	Other	Stationary	90	31	40	2	39	30	22.3223	113.9742	2856.85	16.39
24-Sep-13	8:17:12	Other	Stationary	90	29	0	2	47	0	22.3247	113.9751	3135.08	16.51
24-Sep-13	8:17:18	Other	Stationary	90	29	0	4	7	0	22.3245	113.9757	3135.08	17.85
24-Sep-13	8:17:31	Other	Stationary	91	7	40	0	38	0	22.3090	113.9696	1311.13	14.36
24-Sep-13	8:17:41	Other	Stationary	91	8	10	2	37	40	22.3089	113.9700	1301.41	16.36
24-Sep-13	8:18:03	Tug Boat	Travelling	91	4	10	350	33	40	22.3100	113.9674	1383.49	4.29
24-Sep-13	8:18:32	Transportation Boat	Travelling	91	8	50	14	57	30	22.3078	113.9724	1288.67	28.69
24-Sep-13	8:18:49	Transportation Boat	Travelling	90	47	40	344	1	50	22.3144	113.9657	1871.47	357.76
24-Sep-13	8:19:19	Tug Boat	Travelling	90	59	50	342	32	20	22.3110	113.9655	1485.02	356.27
24-Sep-13	8:20:30	Tug Boat	Travelling	90	58	40	348	47	30	22.3112	113.9670	1514.97	2.52
24-Sep-13	8:20:53	Transportation Boat	Travelling	91	38	20	344	10	40	22.3057	113.9661	899.61	357.91
24-Sep-13	8:21:02	Transportation Boat	Travelling	91	0	10	321	29	50	22.3097	113.9604	1476.68	335.23
24-Sep-13	8:21:20	Transportation Boat	Travelling	91	2	50	292	10	20	22.3051	113.9553	1413.21	305.90
24-Sep-13	8:22:08	Tug Boat	Travelling	90	58	0	350	5	10	22.3114	113.9674	1532.64	3.82
24-Sep-13	8:22:20	Transportation Boat	Travelling	91	42	50	316	16	0	22.3043	113.9622	860.04	330.00
24-Sep-13	8:22:28	Transportation Boat	Travelling	91	5	20	302	12	20	22.3064	113.9572	1358.49	315.94
24-Sep-13	8:22:34	Transportation Boat	Travelling	91	2	40	308	45	0	22.3077	113.9580	1417.01	322.48
24-Sep-13	8:23:07	Transportation Boat	Travelling	90	40	10	349	4	50	22.3177	113.9675	2230.86	2.81
24-Sep-13	8:24:45	Transportation Boat	Travelling	91	14	50	282	31	30	22.3023	113.9561	1184.39	296.25
24-Sep-13	8:24:51	Transportation Boat	Travelling	90	50	30	277	22	10	22.3033	113.9504	1764.38	291.10
24-Sep-13	8:25:00	Transportation Boat	Travelling	90	52	10	336	24	0	22.3128	113.9636	1706.97	350.13
24-Sep-13	8:25:06	Transportation Boat	Travelling	90	48	40	342	19	40	22.3141	113.9652	1832.21	356.06
24-Sep-13	8:25:20	HSF High Speed Ferry	Travelling	90	58	40	286	5	20	22.3044	113.9536	1514.97	299.82
24-Sep-13	8:25:43	Speed Boat	Travelling	90	51	40	337	35	20	22.3130	113.9639	1723.79	351.32
24-Sep-13	8:26:51	Speed Boat	Travelling	90	59	10	323	45	10	22.3101	113.9608	1501.99	337.48
24-Sep-13	8:26:59	Transportation Boat	Travelling	90	40	20	350	24	0	22.3176	113.9680	2221.36	4.13
24-Sep-13	8:27:18	Transportation Boat	Travelling	90	57	30	327	42	40	22.3108	113.9616	1546.16	341.44
24-Sep-13	8:27:35	Speed Boat	Travelling	95	33	30	334	5	10	22.2999	113.9659	263.90	347.82
24-Sep-13	8:28:17	Speed Boat	Travelling	91	5	40	301	39	10	22.3063	113.9572	1351.52	315.38
24-Sep-13	8:28:25	Speed Boat	Travelling	93	30	0	17	33	10	22.3008	113.9685	420.03	31.28
24-Sep-13	8:28:39	HSF High Speed Ferry	Travelling	91	2	0	318	31	20	22.3090	113.9599	1432.44	332.25
24-Sep-13	8:28:57	Transportation Boat	Travelling	91	1	20	313	27	20	22.3086	113.9588	1448.22	327.19
24-Sep-13	8:29:05	Transportation Boat	Travelling	90	48	10	341	39	20	22.3142	113.9650	1851.63	355.39
24-Sep-13	8:29:24	Speed Boat	Travelling	91	1	50	283	39	0	22.3036	113.9540	1436.36	297.38
24-Sep-13	8:29:38	Speed Boat	Travelling	92	18	10	30	17	40	22.3018	113.9707	639.30	44.02
24-Sep-13	8:30:28	Transportation Boat	Travelling	91	2	20	299	18	10	22.3064	113.9563	1424.69	313.03
24-Sep-13	8:30:37	Transportation Boat	Travelling	90	55	50	332	26	50	22.3115	113.9627	1593.03	346.18
24-Sep-13	8:31:00	Tug Boat	Travelling	90	58	20	350	20	20	22.3113	113.9675	1523.75	4.07
24-Sep-13	8:31:09	HSF High Speed Ferry	Travelling	90	53	0	339	37	30	22.3126	113.9645	1679.65	353.35
24-Sep-13	8:31:40	Speed Boat	Travelling	91	0	10	298	35	10	22.3066	113.9558	1476.68	312.32
24-Sep-13	8:32:14	Speed Boat	Travelling	90	58	0	307	19	0	22.3083	113.9570	1532.64	321.05
24-Sep-13	8:32:40	Speed Boat	Travelling	90	52	0	307	19	10	22.3096	113.9559	1712.54	321.05
24-Sep-13	8:32:49	Transportation Boat	Travelling	90	55	10	279	54	0	22.3034	113.9520	1612.60	293.63
24-Sep-13	8:33:05	Transportation Boat	Travelling	91	3	50	310	22	10	22.3078	113.9585	1390.80	324.10
24-Sep-13	8:33:16	HSF High Speed Ferry	Travelling	90	42	10	348	47	0	22.3167	113.9673	2122.01	2.51
24-Sep-13	8:36:28	Tug Boat	Travelling	90	59	10	340	56	30	22.3111	113.9650	1501.99	354.67
24-Sep-13	8:36:38	Transportation Boat	Travelling	90	54	30	280	25	40	22.3036	113.9519	1632.65	294.16

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
24-Sep-13	8:36:50	HSF High Speed Ferry	Travelling	91	1	30	291	12	20	22.3051	113.9549	1444.24	304.94
24-Sep-13	8:37:01	Transportation Boat	Travelling	91	17	10	286	32	50	22.3028	113.9568	1148.27	300.28
24-Sep-13	8:39:16	Other	Stationary	94	25	10	0	0	10	22.3005	113.9672	332.33	13.73
24-Sep-13	8:39:39	Tug Boat	Travelling	91	1	10	310	19	50	22.3082	113.9581	1452.22	324.06
24-Sep-13	8:39:48	HSF High Speed Ferry	Travelling	90	49	40	340	36	40	22.3137	113.9647	1794.57	354.34
24-Sep-13	8:39:56	Transportation Boat	Travelling	91	39	0	332	6	40	22.3054	113.9643	893.52	345.84
24-Sep-13	8:40:07	Construction Boat	Travelling	91	2	10	300	17	0	22.3066	113.9564	1428.55	314.01
24-Sep-13	8:40:36	Transportation Boat	Travelling	90	37	50	354	10	0	22.3188	113.9696	2373.13	7.90
24-Sep-13	8:40:56	Tug Boat	Travelling	91	0	30	296	28	20	22.3061	113.9555	1468.43	310.20
24-Sep-13	8:41:18	Transportation Boat	Travelling	91	26	0	355	22	40	22.3068	113.9680	1029.48	9.11
24-Sep-13	8:41:26	Transportation Boat	Travelling	90	42	30	356	19	20	22.3163	113.9700	2104.90	10.05
24-Sep-13	8:41:46	HSF High Speed Ferry	Travelling	90	34	40	352	25	20	22.3209	113.9691	2598.65	6.15
24-Sep-13	8:42:06	Construction Boat	Travelling	91	0	20	318	15	40	22.3093	113.9597	1472.54	331.99
24-Sep-13	8:42:38	Tug Boat	Travelling	90	55	0	280	2	10	22.3035	113.9520	1617.56	293.77
24-Sep-13	8:43:08	Transportation Boat	Travelling	91	2	50	13	55	30	22.3089	113.9728	1413.21	27.65
24-Sep-13	8:43:23	Tug Boat	Travelling	90	38	20	11	22	10	22.3167	113.9761	2341.11	25.10
24-Sep-13	8:43:33	Container Boat	Travelling	90	37	30	11	11	20	22.3172	113.9762	2394.97	24.92
24-Sep-13	8:45:32	Transportation Boat	Travelling	90	42	50	24	50	0	22.3123	113.9791	2088.08	38.56
24-Sep-13	8:45:41	Transportation Boat	Travelling	90	45	40	343	0	30	22.3152	113.9653	1955.34	356.74
24-Sep-13	8:45:55	Construction Boat	Travelling	90	46	20	343	45	50	22.3149	113.9656	1926.55	357.49
24-Sep-13	8:46:03	Tug Boat	Travelling	90	44	10	19	40	30	22.3128	113.9772	2023.41	33.40
24-Sep-13	8:46:10	Container Boat	Travelling	90	44	10	18	46	0	22.3130	113.9770	2023.41	32.50
24-Sep-13	8:47:59	Tug Boat	Travelling	90	51	0	10	16	30	22.3120	113.9733	1746.75	24.00
24-Sep-13	8:48:10	Container Boat	Stationary	90	45	30	21	12	30	22.3121	113.9773	1962.67	34.94
24-Sep-13	8:48:32	Transportation Boat	Travelling	91	3	0	310	8	10	22.3079	113.9583	1409.42	323.87
24-Sep-13	8:48:52	Construction Boat	Travelling	90	35	10	351	52	30	22.3205	113.9688	2560.18	5.60
24-Sep-13	8:49:58	Transportation Boat	Travelling	90	36	0	352	16	40	22.3200	113.9689	2498.57	6.01
24-Sep-13	8:50:12	Transportation Boat	Travelling	90	57	10	284	47	20	22.3043	113.9531	1555.31	298.52
24-Sep-13	8:51:29	Transportation Boat	Travelling	90	41	40	348	11	50	22.3169	113.9671	2148.20	1.93
24-Sep-13	8:53:35	Tug Boat	Travelling	90	40	0	7	30	40	22.3164	113.9743	2240.45	21.24
24-Sep-13	8:54:00	Transportation Boat	Travelling	90	54	40	335	25	20	22.3120	113.9634	1627.59	349.15
24-Sep-13	8:55:13	Tug Boat	Travelling	90	35	40	16	1	0	22.3173	113.9786	2522.85	29.75
24-Sep-13	8:56:57	Transportation Boat	Travelling	91	4	30	306	1	20	22.3071	113.9578	1376.25	319.75
24-Sep-13	8:57:25	Tug Boat	Travelling	90	29	20	23	23	30	22.3198	113.9846	3097.28	37.12
24-Sep-13	8:57:39	Tug Boat	Travelling	90	57	30	284	28	30	22.3042	113.9531	1546.16	298.20
24-Sep-13	8:59:10	Transportation Boat	Travelling	90	59	0	282	19	0	22.3036	113.9532	1506.29	296.05
24-Sep-13	8:59:26	Tug Boat	Travelling	91	2	0	300	46	0	22.3067	113.9565	1432.44	314.50
24-Sep-13	9:02:20	Speed Boat	Travelling	91	52	20	297	56	10	22.3023	113.9607	786.97	311.67
24-Sep-13	9:02:36	Tug Boat	Travelling	91	1	0	331	25	30	22.3103	113.9628	1456.24	345.15
24-Sep-13	9:03:25	Speed Boat	Travelling	91	56	20	353	2	50	22.3044	113.9673	759.80	6.78
24-Sep-13	9:04:15	Speed Boat	Travelling	91	17	30	17	25	30	22.3064	113.9722	1143.29	31.15
24-Sep-13	9:04:24	Tug Boat	Travelling	91	5	40	348	6	20	22.3098	113.9668	1351.52	1.84
24-Sep-13	9:04:55	Speed Boat	Travelling	90	57	30	26	57	20	22.3082	113.9762	1546.16	40.69
24-Sep-13	9:06:10	Tug Boat	Travelling	91	8	10	1	18	40	22.3089	113.9697	1301.41	15.04
24-Sep-13	9:06:59	Transportation Boat	Travelling	91	4	30	288	45	50	22.3043	113.9551	1376.25	302.49
24-Sep-13	9:08:14	Tug Boat	Stationary	91	8	0	1	24	10	22.3090	113.9697	1304.64	15.13
24-Sep-13	9:08:38	Transportation Boat	Travelling	91	2	20	306	52	40	22.3075	113.9576	1424.69	320.61
24-Sep-13	9:09:31	Transportation Boat	Travelling	90	51	20	305	14	0	22.3094	113.9553	1735.19	318.96
24-Sep-13	9:17:27	Transportation Boat	Travelling	90	59	40	309	6	10	22.3083	113.9576	1489.22	322.83
24-Sep-13	9:17:41	HSF High Speed Ferry	Travelling	90	46	0	343	24	50	22.3151	113.9655	1940.84	357.14
24-Sep-13	9:19:15	HSF High Speed Ferry	Travelling	90	58	10	323	25	40	22.3103	113.9606	1528.18	337.16
24-Sep-13	9:19:25	Transportation Boat	Travelling	90	56	0	336	32	40	22.3117	113.9638	1588.22	350.27
24-Sep-13	9:20:35	Transportation Boat	Travelling	90	46	40	346	48	10	22.3148	113.9666	1912.48	0.53
24-Sep-13	9:20:43	HSF High Speed Ferry	Travelling	91	0	50	296	40	30	22.3061	113.9556	1460.28	310.40
24-Sep-13	9:21:26	HSF High Speed Ferry	Travelling	90	56	20	284	13	0	22.3043	113.9528	1578.67	297.95
24-Sep-13	9:21:36	Transportation Boat	Travelling	90	40	0	352	37	10	22.3177	113.9688	2240.45	6.35
24-Sep-13	9:21:42	Transportation Boat	Travelling	90	41	0	347	58	30	22.3173	113.9670	2184.16	1.70
24-Sep-13	9:22:26	Speed Boat	Travelling	90	50	0	5	35	20	22.3128	113.9721	1782.37	19.32
24-Sep-13	9:23:34	Speed Boat	Travelling	91	12	50	16	19	30	22.3071	113.9723	1217.22	30.05
24-Sep-13	9:23:51	Transportation Boat	Travelling	90	56	50	327	1	50	22.3109	113.9614	1564.57	340.76
24-Sep-13	9:24:26	Tug Boat	Travelling	91	8	10	357	44	10	22.3091	113.9689	1301.41	11.47
24-Sep-13	9:24:57	Speed Boat	Travelling	91	37	20	26	6	40	22.3039	113.9721	908.91	39.84
24-Sep-13	9:25:08	Transportation Boat	Travelling	91	1	0	306	27	20	22.3077	113.9573	1456.24	320.19
24-Sep-13	9:26:35	Tug Boat	Travelling	90	55	0	11	27	0	22.3108	113.9731	1617.56	25.18
24-Sep-13	9:26:46	Transportation Boat	Travelling	90	53	0	281	48	0	22.3041	113.9517	1679.65	295.53
24-Sep-13	9:27:00	Transportation Boat	Travelling	91	2	10	288	23	0	22.3045	113.9546	1428.55	302.11
24-Sep-13	9:27:11	Transportation Boat	Travelling	91	0	50	289	35	50	22.3048	113.9545	1460.28	303.33
24-Sep-13	9:28:26	Transportation Boat	Travelling	90	56	50	305	19	40	22.3083	113.9564	1564.57	319.06
24-Sep-13	9:28:41	Transportation Boat	Travelling	90	52	50	304	8	50	22.3089	113.9554	1685.05	317.88
24-Sep-13	9:28:49	Transportation Boat	Travelling	91	4	50	308	26	0	22.3073	113.9582	1369.09	322.16
24-Sep-13	9:29:04	Tug Boat	Travelling	90	46	0	19	3	40	22.3123	113.9766	1940.84	32.79
24-Sep-13	9:30:05	Speed Boat	Stationary	92	24	30	25	38	40	22.3019	113.9702	611.19	39.37
24-Sep-13	9:32:32	Tug Boat	Travelling	90	52	0	12	8	30	22.3115	113.9737	1712.54	25.87
24-Sep-13	9:32:43	Transportation Boat	Travelling	90	46	10	343	48	10	22.3150	113.9656	1933.67	357.53
24-Sep-13	9:32:58	Container Boat	Travelling	91	15	40	321	22	50	22.3072	113.9616	1171.23	335.11
24-Sep-13	9:34:00	Transportation Boat	Travelling	90	50	40	27	52	40	22.3095	113.9778	1758.46	41.61
24-Sep-13	9:34:12	Tug Boat	Travelling	91	5	20	3	56	0	22.3093	113.9704	1358.49	17.66
24-Sep-13	9:34:23	Transportation Boat	Travelling	90	41	10	355	0	40	22.3170	113.9696	2175.05	8.74
24-Sep-13	9:34:38	Container Boat	Travelling	91	10	40	330	11	50	22.3085	113.9630	1254.91	343.93
24-Sep-13	9:35:59	Tug Boat	Travelling	91	7	20	2	45	40	22.3090	113.9700	1317.69	16.49
24-Sep-13	9:36:10	Transportation Boat	Travelling	90	38	30	355	38	50	22.3183	113.9701	2330.63	9.38
24-Sep-13	9:36:20	Transportation Boat	Travelling	91	17	40	21	43	50	22.3060	113.9728	1140.82	35.46
24-Sep-13	9:38:13	Container Boat	Travelling	90	50	30	342	51	10	22.3135	113.9654	1764.38	356.58
24-Sep-13	9:38:23	Transportation Boat	Travelling	90	47	40	351	0	0	22.3144	113.9679	1871.47	4.73
24-Sep-13	9:38:31	Transportation Boat	Travelling	92	30	30	8	17	10	22.3025	113.9685	586.74	22.02
24-Sep-13	9:40:24	Transportation Boat	Travelling	90	59	0	333	2	10	22.3108	113.9630	1506.29	346.77
24-Sep-13	9:41:02	Government Boat	Travelling	91	2	20	353	22	20	22.3103	113.9681	1424.69	7.10
24-Sep-13	9:41:12	Container Boat	Travelling	90	39	30	349	56	0	22.3180	113.9678	2269.71	3.66
24-Sep-13	9:41:25	Transportation Boat	Travelling	95	13	50	356	35	30	22.3001	113.9669	280.54	10.32
24-Sep-13	9:41:49	Government Boat	Travelling	91	20	50	321	35	50	22.3066	113.9620	1095.78	335.33
24-Sep-13	9:42:34	Government Boat	Travelling	91	7	10	284	10	30	22.3032	113.9550	1321.00	297.90
24-Sep-13	9:42:47	Transportation Boat	Travelling	91	1	10	315	35	0	22.3089	113.9592	1452.22	329.31
24-Sep-13	9:42:59	Transportation Boat	Travelling	91	5	20	289	5	10	22.3042	113.9553	1358.49	302.82
24-Sep-13	9:43:30	Container Boat	Travelling	90	29	50	354	31	30	22.3247	113.9706	3042.32	8.25
24-Sep-13	9:43:46	Transportation Boat	Travelling	90	54	40	306	35	20	22.3089	113.9563	1627.59	320.32
24-Sep-13	9:43:52	Transportation Boat	Travelling	91	6	40	302	53	20	22.3063	113.9575	1331.02	316.62
24-Sep-13	9:44:41	Transportation Boat	Travelling	90	54	50	306	41	30	22.3089	113.9563	1622.56	320.42
24-Sep-13	9:45:04	Speed Boat	Travelling	92	14	50	12	3	40	22.3029	113.9692	655.16	25.79
24-Sep-13	9:45:39	Transportation Boat	Travelling	91	21	40	351	10	10	22.3073	113.9673	1084.51	4.90
24-Sep-13	9:45:58	Speed Boat	Travelling	91	18	10	359	34	20	22.3075	113.9689	1133.46	13.30
24-Sep-13	9:46:45	Transportation Boat	Travelling	94	35	40	320	9	40	22.3002	113.9650	319.61	333.89
24-Sep-13	9:46:53	Transportation Boat	Travelling	91	50	20	347	54	40	22.3048	113.9666	801.30	1.64
24-Sep-13	9:47:09	Speed Boat	Travelling	90	49	0	353	29	40	22.3139	113.9686	1819.48	7.22
24-Sep-13	9:48:32	Transportation Boat	Travelling	93	21	40	344	34	50	22.3016	113.9663	437.44	358.31
24-Sep-13	9:49:16	Transportation Boat	Travelling	95	4	20	348	34	10	22.3002	113.9665	289.35	2.30
24-Sep-13	9:49:27	Transportation Boat	Travelling	93	42	20	309	29	50	22.3005	113.9641	396.64	323.23
24-Sep-13	9:51:34	Transportation Boat	Travelling	94	34	20	325	29	20	22.3003	113.9653	321.17	339.22
24-Sep-13	9:51:41	Transportation Boat	Travelling	93	10	0	333	56	0	22.3017	113.9654	464.40	347.66
24-Sep-13	9:56:19	Transportation Boat	Travelling	91	1	40	309	59	0	22.3081	113.9581	1440.29	323.71
24-Sep-13	10:04:13	Transportation Boat	Travelling	90	54	30	331	47	10	22.3118	113.9624	1632.65	345.52
24-Sep-13	10:04:39	Transportation Boat	Travelling	91	4	0	291	9	40	22.3048	113.9553	1387.13	304.89
24-Sep-13	10:04:51	Transportation Boat	Travelling	92	27	10	279	42	40	22.2998	113.9610	600.07	293.44
24-Sep-13	10:05:26	Transportation Boat	Travelling	91	1	40	313	42	0	22.3085	113.9589	1440.29	327.43
24-Sep-13	10:05:53	Transportation Boat	Travelling	91	6	0	310	41	40	22.3075	113.9588	1344.61	324.42
24-Sep-13	10:07:23	Transportation Boat	Travelling	90	56	30	282	1	40	22.3038	113.9526	1573.95	295.76
24-Sep-13	10:07:37	Transportation Boat	Travelling	90	58	50	310	14	30	22.3086	113.9578	1510.62	323.97
24-Sep-13	10:07:48	Transportation Boat	Travelling	95	12	20	321	57	50	22.2999	113.9653	281.90	335.69

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
24-Sep-13	10:08:15	Transportation Boat	Travelling	90	51	10	306	11	20	22.3096	113.9555	1740.95	319.92
24-Sep-13	10:10:03	Transportation Boat	Travelling	93	48	0	24	11	40	22.3004	113.9687	386.75	37.92
24-Sep-13	10:15:49	Transportation Boat	Travelling	91	28	0	309	9	0	22.3046	113.9607	972.27	322.88
24-Sep-13	10:19:13	Transportation Boat	Travelling	91	12	40	305	46	40	22.3057	113.9590	1178.94	319.51
24-Sep-13	10:23:25	Transportation Boat	Travelling	93	0	30	329	44	10	22.3017	113.9651	472.40	343.47
24-Sep-13	10:23:34	Transportation Boat	Travelling	90	59	50	314	25	50	22.3086	113.9590	1434.54	328.16
24-Sep-13	10:25:11	Tug Boat	Travelling	91	6	30	319	46	50	22.3080	113.9608	1288.97	333.51
24-Sep-13	10:25:33	Transportation Boat	Travelling	94	50	0	19	14	20	22.2998	113.9680	293.44	32.97
24-Sep-13	10:25:43	Transportation Boat	Travelling	90	52	20	336	18	10	22.3122	113.9636	1643.28	350.03
24-Sep-13	10:27:32	Transportation Boat	Travelling	90	42	0	347	20	50	22.3161	113.9668	2057.26	1.08
24-Sep-13	10:28:16	Tug Boat	Travelling	91	5	50	329	33	50	22.3088	113.9628	1301.94	343.29
24-Sep-13	10:29:35	Transportation Boat	Travelling	90	32	50	352	53	0	22.3213	113.9694	2654.50	6.61
24-Sep-13	10:29:59	Transportation Boat	Travelling	92	39	20	322	37	50	22.3020	113.9643	535.18	336.36
24-Sep-13	10:34:27	Transportation Boat	Travelling	91	5	0	303	11	50	22.3063	113.9576	1318.36	316.93
24-Sep-13	10:34:37	Tug Boat	Travelling	91	8	40	315	45	40	22.3073	113.9602	1247.21	329.49
24-Sep-13	10:34:52	Transportation Boat	Travelling	91	4	20	296	34	50	22.3054	113.9565	1332.14	310.31
24-Sep-13	10:35:47	Transportation Boat	Travelling	91	2	40	308	18	20	22.3073	113.9582	1367.93	322.04
24-Sep-13	10:36:00	Tug Boat	Travelling	91	7	40	312	9	40	22.3071	113.9595	1265.74	325.89
24-Sep-13	10:37:46	Transportation Boat	Travelling	90	57	20	332	16	0	22.3107	113.9629	1496.78	346.00
24-Sep-13	10:38:32	Construction Boat	Travelling	90	33	40	354	30	30	22.3206	113.9700	2584.59	8.24
24-Sep-13	10:38:51	Tug Boat	Travelling	90	32	10	355	15	10	22.3217	113.9705	2710.68	8.98
24-Sep-13	10:39:46	Transportation Boat	Travelling	90	45	10	346	55	20	22.3148	113.9666	1908.19	0.65
24-Sep-13	10:40:01	Construction Boat	Travelling	90	31	50	354	46	40	22.3220	113.9703	2740.25	8.51
24-Sep-13	10:40:10	Tug Boat	Travelling	90	30	40	355	25	20	22.3229	113.9708	2849.87	9.15
24-Sep-13	10:40:36	Transportation Boat	Travelling	93	12	10	329	18	10	22.3014	113.9651	443.21	343.03
24-Sep-13	10:41:50	Tug Boat	Travelling	91	4	10	317	56	20	22.3082	113.9602	1335.12	331.67
24-Sep-13	10:41:59	HSF High Speed Ferry	Travelling	91	1	50	298	46	20	22.3060	113.9565	1386.11	312.50
24-Sep-13	10:42:11	Tug Boat	Travelling	90	29	20	351	10	10	22.3244	113.9689	2986.42	4.90
24-Sep-13	10:42:17	Construction Boat	Travelling	90	29	30	351	30	30	22.3242	113.9690	2968.56	5.24
24-Sep-13	10:43:25	Transportation Boat	Travelling	94	11	30	13	53	20	22.3003	113.9679	338.25	27.62
24-Sep-13	10:43:47	Transportation Boat	Travelling	90	46	20	345	2	40	22.3143	113.9660	1858.63	358.77
24-Sep-13	10:43:57	HSF High Speed Ferry	Travelling	90	54	50	331	41	40	22.3113	113.9626	1565.53	345.42
24-Sep-13	10:44:06	Tug Boat	Travelling	91	5	10	328	58	10	22.3089	113.9626	1314.23	342.70
24-Sep-13	10:44:29	Tug Boat	Travelling	90	31	40	348	38	50	22.3224	113.9675	2754.67	2.38
24-Sep-13	10:44:38	Construction Boat	Travelling	90	31	0	348	40	50	22.3229	113.9676	2816.91	2.41
24-Sep-13	10:45:57	HSF High Speed Ferry	Travelling	90	38	20	349	34	40	22.3179	113.9677	2257.86	3.31
24-Sep-13	10:46:06	Transportation Boat	Travelling	90	57	40	333	24	0	22.3107	113.9632	1487.30	347.13
24-Sep-13	10:46:13	Tug Boat	Travelling	90	31	50	344	19	50	22.3223	113.9655	2739.27	358.06
24-Sep-13	10:46:19	Construction Boat	Travelling	90	31	50	344	48	20	22.3223	113.9657	2739.26	358.54
24-Sep-13	10:48:37	Transportation Boat	Travelling	92	11	10	314	13	10	22.3026	113.9630	649.85	327.95
24-Sep-13	10:48:55	Transportation Boat	Travelling	91	6	0	309	7	0	22.3069	113.9588	1297.10	322.85
24-Sep-13	10:51:00	Tug Boat	Travelling	90	48	50	15	44	10	22.3114	113.9748	1760.81	29.47
24-Sep-13	10:51:12	Construction platform	Travelling	90	49	20	15	21	30	22.3113	113.9746	1742.59	29.09
24-Sep-13	10:51:54	Transportation Boat	Travelling	90	50	10	340	58	0	22.3130	113.9649	1713.02	354.70
24-Sep-13	10:52:08	Transportation Boat	Travelling	91	1	0	279	59	30	22.3027	113.9539	1404.48	293.72
24-Sep-13	10:52:22	Transportation Boat	Travelling	91	9	10	303	6	30	22.3057	113.9582	1236.87	316.84
24-Sep-13	10:53:31	Transportation Boat	Travelling	90	59	40	323	23	20	22.3095	113.9610	1436.17	337.12
24-Sep-13	10:53:41	Tug Boat	Travelling	90	52	20	20	24	30	22.3098	113.9754	1640.68	34.14
24-Sep-13	10:53:51	Construction platform	Travelling	90	54	0	19	55	20	22.3095	113.9750	1589.19	33.65
24-Sep-13	10:54:51	Transportation Boat	Travelling	91	4	0	305	10	20	22.3067	113.9578	1337.65	318.90
24-Sep-13	10:55:01	Transportation Boat	Travelling	91	47	20	309	47	20	22.3034	113.9618	794.52	323.52
24-Sep-13	10:56:49	Transportation Boat	Travelling	91	16	0	278	21	40	22.3014	113.9563	1124.40	292.09
24-Sep-13	11:00:53	Transportation Boat	Travelling	90	50	0	336	54	50	22.3129	113.9637	1717.97	350.64
24-Sep-13	11:01:14	Tug Boat	Travelling	90	44	50	17	51	30	22.3123	113.9762	1920.37	31.59
24-Sep-13	11:01:24	Construction platform	Travelling	90	52	0	17	22	40	22.3103	113.9747	1650.66	31.11
24-Sep-13	11:01:38	Tug Boat	Travelling	90	55	0	333	33	0	22.3113	113.9631	1559.15	347.28
24-Sep-13	11:02:14	Transportation Boat	Travelling	95	8	20	352	54	10	22.3001	113.9667	275.33	6.63
24-Sep-13	11:02:23	Transportation Boat	Travelling	90	59	20	320	3	40	22.3093	113.9602	1443.62	333.79
24-Sep-13	11:02:36	Tug Boat	Travelling	90	50	40	339	2	50	22.3128	113.9643	1694.78	352.78
24-Sep-13	11:04:43	Transportation Boat	Travelling	92	12	40	313	7	30	22.3025	113.9630	641.90	326.85
24-Sep-13	11:04:56	Transportation Boat	Travelling	90	57	20	283	55	50	22.3039	113.9535	1494.48	297.66
24-Sep-13	11:05:16	Tug Boat	Travelling	90	38	40	349	23	50	22.3177	113.9676	2235.30	3.13
24-Sep-13	11:05:31	Transportation Boat	Travelling	90	38	10	352	39	50	22.3179	113.9689	2265.52	6.39
24-Sep-13	11:05:42	Transportation Boat	Travelling	90	34	10	354	17	0	22.3203	113.9698	2541.20	8.01
24-Sep-13	11:06:10	Tug Boat	Stationary	90	50	10	18	44	40	22.3106	113.9753	1711.64	32.47
24-Sep-13	11:06:21	Construction platform	Stationary	90	52	10	16	23	30	22.3104	113.9744	1644.83	30.12
24-Sep-13	11:06:48	Transportation Boat	Travelling	90	47	0	346	23	30	22.3141	113.9664	1829.31	0.12
24-Sep-13	11:06:56	Transportation Boat	Travelling	90	42	50	348	31	50	22.3157	113.9672	2011.67	2.26
24-Sep-13	11:07:10	Tug Boat	Travelling	90	33	0	353	39	10	22.3211	113.9697	2634.80	7.38
24-Sep-13	11:08:11	Transportation Boat	Travelling	91	17	40	303	32	20	22.3049	113.9591	1099.37	317.27
24-Sep-13	11:08:22	Transportation Boat	Travelling	90	57	50	330	5	20	22.3104	113.9624	1481.09	343.82
24-Sep-13	11:08:33	Transportation Boat	Travelling	90	56	0	327	28	0	22.3107	113.9616	1530.28	341.20
24-Sep-13	11:10:40	Transportation Boat	Travelling	92	9	0	312	12	40	22.3025	113.9628	659.99	325.94
24-Sep-13	11:10:57	Transportation Boat	Travelling	91	1	20	297	26	0	22.3059	113.9562	1395.26	311.16
24-Sep-13	11:11:06	Transportation Boat	Travelling	90	54	30	278	53	10	22.3031	113.9523	1572.84	292.62
24-Sep-13	11:11:15	Transportation Boat	Travelling	90	42	10	345	27	50	22.3160	113.9661	2043.82	359.19
24-Sep-13	11:11:32	Transportation Boat	Travelling	90	50	40	305	15	50	22.3091	113.9556	1693.92	318.99
24-Sep-13	11:13:01	Transportation Boat	Travelling	90	55	20	329	47	20	22.3110	113.9621	1548.61	343.52
24-Sep-13	11:13:08	Transportation Boat	Travelling	91	2	50	301	19	40	22.3063	113.9570	1361.38	315.06
24-Sep-13	11:13:20	Transportation Boat	Travelling	95	24	30	354	15	40	22.2999	113.9668	261.37	7.99
24-Sep-13	11:14:34	Transportation Boat	Travelling	91	0	30	306	3	20	22.3073	113.9575	1414.44	319.79
24-Sep-13	11:14:42	Transportation Boat	Travelling	90	57	0	284	50	10	22.3041	113.9536	1502.51	298.57
24-Sep-13	11:15:00	HSF High Speed Ferry	Travelling	90	37	10	350	43	20	22.3185	113.9682	2327.32	4.45
24-Sep-13	11:16:10	Transportation Boat	Travelling	90	52	30	282	40	0	22.3042	113.9522	1633.30	296.40
24-Sep-13	11:16:18	Transportation Boat	Travelling	91	2	30	289	42	20	22.3044	113.9553	1368.48	303.44
24-Sep-13	11:16:31	HSF High Speed Ferry	Travelling	90	48	50	339	11	10	22.3133	113.9643	1758.26	352.92
24-Sep-13	11:16:50	Transportation Boat	Travelling	92	48	10	316	36	0	22.3016	113.9640	505.65	330.33
24-Sep-13	11:17:51	Transportation Boat	Travelling	91	6	0	309	43	40	22.3070	113.9589	1294.98	323.46
24-Sep-13	11:18:02	HSF High Speed Ferry	Travelling	90	59	40	316	0	30	22.3088	113.9594	1434.18	329.74
24-Sep-13	11:18:20	Transportation Boat	Travelling	91	6	10	310	41	30	22.3071	113.9591	1291.65	324.42
24-Sep-13	11:19:37	Transportation Boat	Travelling	91	1	10	317	16	30	22.3086	113.9598	1398.43	331.00
24-Sep-13	11:19:45	Transportation Boat	Travelling	91	36	20	304	58	0	22.3036	113.9607	884.50	318.70
24-Sep-13	11:19:57	HSF High Speed Ferry	Travelling	90	53	50	282	4	40	22.3039	113.9525	1591.83	295.81
24-Sep-13	11:21:37	Transportation Boat	Travelling	90	47	0	341	20	20	22.3140	113.9649	1827.77	355.07
24-Sep-13	11:21:48	Transportation Boat	Travelling	90	58	50	313	36	50	22.3086	113.9588	1454.46	327.34
24-Sep-13	11:21:59	Transportation Boat	Travelling	92	54	0	316	56	20	22.3015	113.9641	488.50	330.67
24-Sep-13	11:22:43	Transportation Boat	Travelling	91	2	40	317	24	40	22.3084	113.9600	1364.31	331.14
24-Sep-13	11:23:35	Transportation Boat	Travelling	95	40	50	351	18	10	22.2998	113.9666	248.62	5.03
24-Sep-13	11:23:43	Transportation Boat	Travelling	90	33	20	352	26	50	22.3209	113.9691	2604.80	6.18
24-Sep-13	11:23:51	Transportation Boat	Travelling	90	57	10	308	31	10	22.3083	113.9575	1497.29	322.25
24-Sep-13	11:29:12	Transportation Boat	Travelling	91	32	0	303	2	0	22.3037	113.9602	925.91	316.76
24-Sep-13	11:34:43	Transportation Boat	Travelling	95	18	20	333	13	10	22.3000	113.9658	266.14	346.95
24-Sep-13	11:36:11	Transportation Boat	Travelling	90	57	50	291	28	10	22.3053	113.9546	1478.75	305.20
24-Sep-13	11:38:10	Transportation Boat	Travelling	90	50	50	305	55	40	22.3092	113.9558	1685.71	319.66
24-Sep-13	11:38:21	Transportation Boat	Travelling	91	37	40	304	18	30	22.3035	113.9607	871.44	318.04
24-Sep-13	11:38:41	Transportation Boat	Travelling	90	46	30	305	27	10	22.3102	113.9547	1846.06	319.18
24-Sep-13	11:41:28	Tug Boat	Travelling	90	49	20	20	45	20	22.3105	113.9760	1737.63	34.49
24-Sep-13	11:42:45	Transportation Boat	Travelling	96	19	50	343	25	20	22.2996	113.9663	222.66	357.15
24-Sep-13	11:43:00	Tug Boat	Travelling	90	53	40	18	4	20	22.3098	113.9746	1594.77	31.80
24-Sep-13	11:45:41	Container Boat	Travelling	90	45	50	350	58	10	22.3144	113.9679	1872.77	4.70
24-Sep-13	11:46:40	Transportation Boat	Travelling	91	59	30	299	5	50	22.3020	113.9613	711.23	312.83
24-Sep-13	11:46:53	Container Boat	Travelling	90	48	30	346	32	0	22.3135	113.9665	1767.53	0.26
24-Sep-13	11:48:51	Transportation Boat	Travelling	90	42	20	349	55	20	22.3159	113.9677	2031.20	3.65
24-Sep-13	11:49:06	Tug Boat	Travelling	90	40	20	351	9	20	22.3168	113.9682	2134.79	4.89
24-Sep-13	11:49:21	Construction Boat	Travelling	90	39	10	351	30	0	22.3173	113.9684	2200.31	5.23
24-Sep-13	11:49:36	Container Boat	Travelling	90	55	30	331	31	0	22.3110	113.9626	1540.69	345.25
24-Sep-13	11:49:48	Transportation Boat	Travelling	96	11	40	332	51	0	22.2996	113.9659	227.51	346.58

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
24-Sep-13	11:50:03	Transportation Boat	Travelling	90	52	30	338	32	40	22.3122	113.9643	1630.16	352.27
24-Sep-13	11:51:53	Transportation Boat	Travelling	91	2	30	310	9	0	22.3075	113.9586	1365.73	323.88
24-Sep-13	11:52:02	Container Boat	Travelling	91	0	0	319	33	50	22.3091	113.9602	1423.36	333.29
24-Sep-13	11:53:11	Tug Boat	Travelling	90	51	10	339	25	30	22.3126	113.9645	1673.10	353.15
24-Sep-13	11:53:16	Construction Boat	Travelling	90	49	40	341	9	40	22.3131	113.9649	1724.58	354.89
24-Sep-13	11:53:24	Transportation Boat	Travelling	90	59	0	283	59	30	22.3037	113.9539	1447.70	297.72
24-Sep-13	11:53:34	Transportation Boat	Travelling	95	41	40	337	30	30	22.2998	113.9660	247.59	351.24
24-Sep-13	11:53:43	Transportation Boat	Stationary	95	39	20	337	14	50	22.2998	113.9660	249.30	350.98
24-Sep-13	11:55:31	Transportation Boat	Travelling	94	48	50	338	21	50	22.3002	113.9660	293.15	352.09
24-Sep-13	11:55:42	Container Boat	Travelling	91	4	40	307	22	10	22.3069	113.9583	1319.16	321.10
24-Sep-13	11:56:04	Transportation Boat	Travelling	95	36	50	355	10	40	22.2999	113.9668	251.13	8.91
24-Sep-13	11:56:23	Tug Boat	Travelling	90	57	10	323	55	30	22.3101	113.9609	1494.54	337.65
24-Sep-13	11:56:28	Construction Boat	Travelling	90	56	20	326	29	0	22.3105	113.9614	1516.96	340.21
24-Sep-13	11:57:30	Government Boat	Travelling	90	40	50	352	34	30	22.3165	113.9687	2106.88	6.30
24-Sep-13	11:59:07	Government Boat	Travelling	91	44	10	356	33	50	22.3048	113.9678	815.84	10.29
24-Sep-13	11:59:25	Container Boat	Travelling	91	4	40	309	12	10	22.3071	113.9587	1318.88	322.93
24-Sep-13	11:59:40	Government Boat	Travelling	94	2	20	5	30	10	22.3006	113.9675	349.60	19.23
24-Sep-13	12:00:58	Transportation Boat	Travelling	92	0	30	299	12	40	22.3021	113.9612	733.38	312.94
24-Sep-13	12:01:08	Tug Boat	Travelling	91	0	50	297	56	40	22.3064	113.9558	1460.19	311.67
24-Sep-13	12:01:14	Construction Boat	Travelling	91	0	0	300	36	0	22.3069	113.9561	1480.74	314.33
24-Sep-13	12:02:01	Government Boat	Travelling	93	11	50	2	40	40	22.3016	113.9677	459.90	16.41
24-Sep-13	12:02:50	Government Boat	Travelling	91	20	0	353	30	30	22.3075	113.9678	1107.11	7.24
24-Sep-13	12:03:14	Transportation Boat	Travelling	91	0	10	316	15	40	22.3091	113.9592	1476.42	329.99
24-Sep-13	12:03:51	Government Boat	Travelling	90	45	50	352	43	0	22.3150	113.9685	1947.65	6.45
24-Sep-13	12:04:21	Tug Boat	Travelling	91	0	0	279	44	20	22.3029	113.9532	1480.49	293.47
24-Sep-13	12:04:26	Construction Boat	Travelling	91	1	0	282	31	50	22.3034	113.9537	1455.88	296.26
24-Sep-13	12:04:37	Transportation Boat	Stationary	91	46	20	299	43	40	22.3028	113.9605	831.38	313.46
24-Sep-13	12:04:47	Transportation Boat	Travelling	90	56	30	333	51	10	22.3114	113.9631	1573.54	347.58
24-Sep-13	12:04:56	Container Boat	Stationary	91	6	0	310	16	0	22.3074	113.9587	1344.25	324.00
24-Sep-13	12:05:19	Tug Boat	Travelling	90	50	0	8	54	20	22.3124	113.9731	1781.85	22.64
24-Sep-13	12:06:57	Transportation Boat	Travelling	90	43	40	347	30	50	22.3160	113.9668	2046.40	1.24
24-Sep-13	12:09:19	Transportation Boat	Travelling	90	34	10	355	50	40	22.3210	113.9707	2636.96	9.57
24-Sep-13	12:09:30	Tug Boat	Travelling	90	52	0	15	59	50	22.3110	113.9747	1711.65	29.73
24-Sep-13	12:14:56	Tug Boat	Travelling	90	55	30	5	36	20	22.3112	113.9716	1601.45	19.34
24-Sep-13	12:15:26	Transportation Boat	Travelling	90	46	40	0	15	0	22.3143	113.9709	1910.86	13.98
24-Sep-13	12:16:16	Tug Boat	Travelling	90	56	20	352	9	40	22.3117	113.9680	1577.27	5.89
24-Sep-13	12:16:26	Transportation Boat	Travelling	90	54	0	354	10	40	22.3123	113.9686	1646.54	7.91
24-Sep-13	12:18:22	Tug Boat	Travelling	90	56	30	331	2	50	22.3113	113.9624	1572.37	344.78
24-Sep-13	12:18:28	Transportation Boat	Travelling	91	8	40	331	56	10	22.3089	113.9633	1290.54	345.67
24-Sep-13	12:20:31	Transportation Boat	Travelling	91	11	20	302	12	0	22.3056	113.9580	1241.67	315.93
24-Sep-13	12:20:37	Tug Boat	Travelling	90	59	0	307	3	30	22.3081	113.9571	1504.59	320.79
24-Sep-13	12:22:01	Transportation Boat	Travelling	91	27	10	300	0	40	22.3039	113.9593	1014.39	313.74
24-Sep-13	12:22:11	Transportation Boat	Travelling	91	0	20	281	59	20	22.3034	113.9535	1470.76	295.72
24-Sep-13	12:22:18	Tug Boat	Travelling	90	56	30	289	46	10	22.3054	113.9536	1572.03	303.50
24-Sep-13	12:23:39	Tug Boat	Travelling	90	37	0	351	8	10	22.3194	113.9684	2425.35	4.87
24-Sep-13	12:23:46	Tug Boat	Travelling	90	35	0	352	1	40	22.3206	113.9689	2569.49	5.76
24-Sep-13	12:25:01	Transportation Boat	Stationary	91	24	40	301	27	50	22.3043	113.9592	1044.38	315.19
24-Sep-13	12:25:13	Tug Boat	Travelling	90	45	0	344	25	10	22.3154	113.9658	1982.27	358.15
24-Sep-13	12:25:18	Tug Boat	Travelling	90	39	50	348	41	40	22.3178	113.9673	2246.98	2.42
24-Sep-13	12:29:29	Tug Boat	Travelling	90	59	30	329	15	40	22.3105	113.9622	1491.05	342.99
24-Sep-13	12:29:34	Tug Boat	Travelling	90	58	10	331	6	30	22.3109	113.9625	1525.72	344.84
24-Sep-13	12:29:44	Tug Boat	Travelling	90	50	0	346	1	50	22.3136	113.9663	1779.47	359.76
24-Sep-13	12:30:49	Tug Boat	Travelling	90	51	10	343	39	30	22.3132	113.9656	1738.02	357.39
24-Sep-13	12:30:57	Tug Boat	Travelling	90	52	20	341	17	10	22.3128	113.9650	1698.56	355.02
24-Sep-13	12:31:43	Tug Boat	Travelling	91	1	30	328	39	40	22.3100	113.9622	1441.74	342.39
24-Sep-13	12:32:00	Transportation Boat	Travelling	91	0	10	297	12	10	22.3063	113.9556	1474.10	310.93
24-Sep-13	12:34:44	Transportation Boat	Travelling	91	1	30	324	2	20	22.3096	113.9611	1441.51	337.77
24-Sep-13	12:34:53	Tug Boat	Travelling	91	0	30	324	0	10	22.3098	113.9610	1465.64	337.73
24-Sep-13	12:34:59	Tug Boat	Travelling	90	58	50	325	16	20	22.3103	113.9611	1507.74	339.00
24-Sep-13	12:38:00	Transportation Boat	Travelling	90	45	10	346	14	20	22.3154	113.9664	1973.39	359.97
24-Sep-13	12:38:09	Tug Boat	Travelling	90	51	30	8	44	10	22.3120	113.9728	1725.87	22.47
24-Sep-13	12:38:19	Tug Boat	Travelling	91	2	0	298	48	30	22.3063	113.9562	1429.45	312.54
24-Sep-13	12:38:27	Tug Boat	Travelling	91	13	40	310	38	20	22.3064	113.9596	1200.81	324.37
24-Sep-13	12:38:43	Tug Boat	Travelling	91	13	30	312	10	0	22.3066	113.9598	1203.53	325.90
24-Sep-13	12:39:33	Tug Boat	Travelling	90	42	20	17	47	10	22.3138	113.9771	2108.83	31.52
24-Sep-13	12:39:49	Transportation Boat	Travelling	90	37	50	352	42	30	22.3188	113.9690	2367.92	6.44
24-Sep-13	12:40:23	Container Boat	Travelling	91	0	50	308	31	20	22.3080	113.9577	1457.06	322.25
24-Sep-13	12:41:26	Tug Boat	Travelling	90	59	20	321	37	20	22.3098	113.9603	1494.32	335.35
24-Sep-13	12:41:40	Tug Boat	Travelling	91	1	30	297	57	50	22.3062	113.9559	1440.96	311.69
24-Sep-13	12:41:46	Tug Boat	Travelling	91	3	40	299	5	30	22.3061	113.9565	1391.31	312.82
24-Sep-13	12:41:53	Container Boat	Travelling	90	57	40	306	57	20	22.3083	113.9569	1538.10	320.69
24-Sep-13	12:43:22	Transportation Boat	Travelling	91	18	40	302	20	50	22.3049	113.9588	1123.54	316.08
24-Sep-13	12:43:40	Container Boat	Travelling	90	52	0	304	4	10	22.3090	113.9552	1708.45	317.80
24-Sep-13	12:43:51	Tug Boat	Travelling	91	0	40	337	25	0	22.3106	113.9642	1460.84	351.15
24-Sep-13	12:51:14	Tug Boat	Travelling	91	7	50	1	17	20	22.3090	113.9697	1304.23	15.02
24-Sep-13	12:51:30	Tug Boat	Travelling	90	56	40	300	9	50	22.3074	113.9554	1564.84	313.89
24-Sep-13	12:51:40	Tug Boat	Travelling	91	2	20	300	19	30	22.3065	113.9565	1420.68	314.05
24-Sep-13	12:57:33	Tug Boat	Travelling	91	6	30	320	59	40	22.3084	113.9609	1330.21	334.72
24-Sep-13	12:57:45	Transportation Boat	Travelling	90	58	20	289	27	40	22.3051	113.9540	1518.95	303.19
24-Sep-13	13:01:10	Transportation Boat	Travelling	90	55	30	276	34	50	22.3024	113.9524	1534.43	290.31
24-Sep-13	13:01:25	Tug Boat	Travelling	90	58	30	280	47	20	22.3031	113.9535	1454.61	294.52
24-Sep-13	13:05:11	Tug Boat	Travelling	91	2	20	291	45	50	22.3047	113.9556	1363.74	305.49
24-Sep-13	13:05:20	Tug Boat	Stationary	90	59	10	300	45	30	22.3067	113.9564	1437.67	314.49
24-Sep-13	13:05:27	Tug Boat	Stationary	91	2	20	300	11	40	22.3061	113.9568	1363.72	313.92
24-Sep-13	13:05:50	Tug Boat	Travelling	90	56	20	349	21	10	22.3112	113.9672	1510.99	3.08
24-Sep-13	13:06:10	Tug Boat	Travelling	90	56	20	280	46	0	22.3033	113.9530	1510.96	294.50
24-Sep-13	13:16:47	Transportation Boat	Travelling	92	15	30	303	23	50	22.3017	113.9623	624.25	317.13
24-Sep-13	13:18:49	Transportation Boat	Travelling	95	26	0	322	11	10	22.2997	113.9654	258.60	335.92
24-Sep-13	13:23:53	Transportation Boat	Travelling	92	36	0	305	41	30	22.3013	113.9630	542.26	319.42
24-Sep-13	13:25:38	Transportation Boat	Travelling	96	14	50	322	10	0	22.2995	113.9655	224.80	335.90
24-Sep-13	13:27:46	Government Boat	Travelling	91	54	30	327	18	10	22.3039	113.9641	739.86	341.03
24-Sep-13	13:28:24	Government Boat	Travelling	91	31	30	11	3	10	22.3052	113.9702	926.93	24.78
24-Sep-13	13:28:59	Government Boat	Travelling	90	58	40	25	0	0	22.3078	113.9752	1451.70	38.73
24-Sep-13	13:29:16	Transportation Boat	Travelling	92	46	0	302	54	50	22.3010	113.9630	509.71	316.64
24-Sep-13	13:32:29	Transportation Boat	Travelling	90	47	10	345	1	50	22.3139	113.9660	1812.95	358.76
24-Sep-13	13:32:47	Tug Boat	Travelling	91	0	20	283	25	20	22.3034	113.9542	1411.50	297.15
24-Sep-13	13:32:56	Construction Boat	Travelling	90	59	10	282	34	10	22.3034	113.9538	1439.72	296.30
24-Sep-13	13:34:07	Transportation Boat	Travelling	93	29	20	301	32	30	22.3002	113.9636	404.04	315.27
24-Sep-13	13:38:20	Transportation Boat	Travelling	95	2	0	315	22	20	22.2998	113.9650	279.71	329.10
24-Sep-13	13:38:28	Transportation Boat	Travelling	91	15	40	315	10	20	22.3063	113.9608	1123.30	328.90
24-Sep-13	13:38:36	Tug Boat	Travelling	91	3	10	310	21	20	22.3074	113.9587	1348.04	324.09
24-Sep-13	13:38:44	Construction Boat	Travelling	91	4	0	308	57	10	22.3071	113.9586	1330.29	322.68
24-Sep-13	13:38:52	Tug Boat	Travelling	91	4	30	307	28	10	22.3069	113.9584	1319.88	321.20
24-Sep-13	13:39:37	Transportation Boat	Travelling	90	53	50	289	32	0	22.3054	113.9535	1585.42	303.26
24-Sep-13	13:39:48	Transportation Boat	Travelling	91	4	0	334	32	30	22.3093	113.9638	1330.41	348.27
24-Sep-13	13:40:59	Transportation Boat	Travelling	90	48	50	279	59	0	22.3040	113.9508	1751.01	293.71
24-Sep-13	13:41:08	Transportation Boat	Travelling	90	50	10	345	38	10	22.3129	113.9662	1703.60	359.37
24-Sep-13	13:41:18	Transportation Boat	Stationary	94	59	40	312	43	0	22.2997	113.9649	281.96	326.45
24-Sep-13	13:41:40	Transportation Boat	Travelling	95	32	50	320	7	0	22.2997	113.9653	253.71	333.85
24-Sep-13	13:42:20	Transportation Boat	Travelling	90	40	40	352	32	40	22.3165	113.9686	2112.17	6.27
24-Sep-13	13:43:03	Transportation Boat	Travelling	94	9	0	16	52	50	22.3003	113.9681	339.69	30.61
24-Sep-13	13:43:48	Tug Boat	Travelling	90	54	30	333	17	40	22.3114	113.9630	1566.23	347.02
24-Sep-13	13:44:13	Construction Boat	Travelling	90	55	0	333	26	0	22.3112	113.9630	1551.82	347.16
24-Sep-13	13:44:21	Tug Boat	Travelling	90	55	40	332	8	30	22.3110	113.9628	1532.97	345.87
24-Sep-13	13:44:56	Transportation Boat	Travelling	92	5	50	40	45	30	22.3011	113.9717	673.89	54.49
24-Sep-13	13:49:25	Tug Boat	Travelling	90	42	30	348	23	0	22.3158	113.9671	2019.73	2.11
24-Sep-13	13:49:32	Construction Boat	Travelling	90	43	40	348	9	50	22.3153	113.9670	1964.42	1.89

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
24-Sep-13	13:49:40	Tug Boat	Travelling	90	44	20	347	47	10	22.3150	113.9669	1934.18	1.52
24-Sep-13	13:50:27	Transportation Boat	Travelling	91	27	30	25	5	20	22.3044	113.9723	971.26	38.82
24-Sep-13	13:53:11	Transportation Boat	Travelling	91	20	50	356	52	0	22.3069	113.9683	1052.17	10.60
24-Sep-13	13:53:21	Tug Boat	Travelling	90	35	10	351	47	20	22.3196	113.9687	2456.70	5.52
24-Sep-13	13:53:28	Construction Boat	Travelling	90	35	50	351	44	20	22.3192	113.9686	2409.28	5.47
24-Sep-13	13:53:36	Tug Boat	Travelling	90	36	10	351	9	40	22.3190	113.9684	2386.27	4.89
24-Sep-13	13:54:00	Speed Boat	Travelling	91	14	10	354	13	0	22.3078	113.9679	1147.62	7.95
24-Sep-13	13:55:21	Speed Boat	Travelling	92	58	40	359	11	0	22.3018	113.9674	474.44	12.91
24-Sep-13	13:56:28	Speed Boat	Travelling	94	26	50	3	44	10	22.3003	113.9673	317.23	17.47
24-Sep-13	13:56:35	Transportation Boat	Travelling	90	59	20	332	45	20	22.3102	113.9631	1438.31	346.49
24-Sep-13	13:56:55	Other	Stationary	91	7	30	310	42	40	22.3069	113.9593	1262.39	324.44
24-Sep-13	13:57:10	Other	Stationary	90	29	0	355	19	20	22.3244	113.9710	3008.05	9.05
24-Sep-13	13:57:23	Other	Stationary	90	37	50	0	24	50	22.3175	113.9718	2278.22	14.14
24-Sep-13	13:57:32	Other	Stationary	90	44	10	6	5	20	22.3141	113.9728	1942.88	19.82
24-Sep-13	13:57:39	Other	Stationary	90	45	10	9	16	40	22.3133	113.9736	1898.86	23.01
24-Sep-13	13:57:57	Other	Stationary	91	3	50	329	34	50	22.3091	113.9627	1335.84	343.31
24-Sep-13	13:58:08	Other	Stationary	90	30	0	352	55	10	22.3236	113.9697	2902.37	6.65
24-Sep-13	13:58:17	Other	Stationary	90	29	0	354	48	50	22.3244	113.9707	3008.32	8.54
24-Sep-13	13:58:33	Other	Stationary	90	27	50	357	0	40	22.3254	113.9721	3142.49	10.74
24-Sep-13	13:58:41	Other	Stationary	90	39	20	357	4	50	22.3170	113.9704	2188.81	10.81
24-Sep-13	13:58:47	Other	Stationary	90	32	20	358	36	20	22.3212	113.9720	2682.81	12.34
24-Sep-13	13:58:54	Other	Stationary	90	40	40	358	41	50	22.3162	113.9708	2114.97	12.43
24-Sep-13	13:59:11	Other	Stationary	90	31	10	2	35	10	22.3217	113.9740	2788.33	16.32
24-Sep-13	13:59:19	Other	Stationary	90	29	20	16	58	40	22.3206	113.9812	2972.39	30.71
24-Sep-13	13:59:34	Other	Stationary	90	56	0	348	33	30	22.3113	113.9670	1525.55	2.29
24-Sep-13	13:59:38	Other	Stationary	90	55	50	351	4	0	22.3113	113.9676	1530.18	4.80
24-Sep-13	13:59:44	Other	Stationary	91	1	50	299	42	20	22.3062	113.9567	1379.77	313.44
24-Sep-13	13:59:49	Other	Stationary	91	1	50	301	44	40	22.3065	113.9570	1379.78	315.47
24-Sep-13	14:00:06	Other	Stationary	90	31	10	1	10	40	22.3219	113.9734	2788.54	14.91
24-Sep-13	14:00:13	Other	Stationary	90	30	40	2	35	30	22.3221	113.9742	2836.40	16.32
24-Sep-13	14:00:22	Other	Stationary	91	5	40	0	37	10	22.3089	113.9695	1298.38	14.35
24-Sep-13	14:00:27	Other	Stationary	91	6	0	2	37	50	22.3088	113.9699	1291.76	16.36
24-Sep-13	14:00:34	Other	Stationary	90	52	20	15	10	50	22.3105	113.9741	1634.35	28.91
24-Sep-13	14:00:53	Other	Stationary	90	52	50	16	49	30	22.3102	113.9744	1618.66	30.55
26-Sep-13	8:04:50	Other	Stationary	94	43	10	0	0	0	22.3003	113.9671	308.23	13.73
26-Sep-13	8:05:55	Other	Stationary	90	32	10	290	39	0	22.3118	113.9440	2783.97	304.38
26-Sep-13	8:06:04	Other	Stationary	90	35	40	293	5	30	22.3111	113.9469	2499.43	306.82
26-Sep-13	8:06:10	Other	Stationary	90	38	50	294	17	50	22.3103	113.9489	2288.60	308.03
26-Sep-13	8:06:15	Other	Stationary	90	46	20	296	30	40	22.3087	113.9522	1908.85	310.24
26-Sep-13	8:06:20	Other	Stationary	90	51	40	299	38	50	22.3082	113.9543	1708.00	313.38
26-Sep-13	8:06:26	Other	Stationary	90	56	10	302	22	10	22.3078	113.9558	1568.97	316.10
26-Sep-13	8:06:33	Other	Stationary	91	0	20	304	49	20	22.3075	113.9570	1459.12	318.55
26-Sep-13	8:06:41	Other	Stationary	91	0	20	304	49	20	22.3075	113.9570	1459.14	318.55
26-Sep-13	8:06:52	Other	Stationary	90	52	40	308	3	30	22.3095	113.9563	1675.09	321.79
26-Sep-13	8:07:00	Other	Stationary	90	52	40	308	3	30	22.3095	113.9563	1675.11	321.79
26-Sep-13	8:07:08	Other	Stationary	90	58	40	312	26	20	22.3088	113.9583	1501.24	326.17
26-Sep-13	8:07:13	Other	Stationary	90	58	40	315	22	50	22.3092	113.9589	1501.25	329.11
26-Sep-13	8:07:19	Other	Stationary	90	58	10	319	17	0	22.3098	113.9597	1514.36	333.01
26-Sep-13	8:07:25	Other	Stationary	90	56	40	323	45	10	22.3105	113.9606	1555.06	337.48
26-Sep-13	8:07:31	Other	Stationary	90	54	30	328	0	50	22.3114	113.9615	1617.90	341.74
26-Sep-13	8:07:37	Other	Stationary	90	53	10	331	53	50	22.3121	113.9624	1659.18	345.63
26-Sep-13	8:07:42	Other	Stationary	90	50	0	336	7	40	22.3133	113.9634	1766.28	349.86
26-Sep-13	8:07:48	Other	Stationary	90	44	40	339	52	30	22.3153	113.9643	1982.11	353.60
26-Sep-13	8:07:53	Other	Stationary	90	42	30	343	25	40	22.3164	113.9654	2085.87	357.16
26-Sep-13	8:07:58	Other	Stationary	90	39	10	348	38	30	22.3180	113.9673	2268.91	2.37
26-Sep-13	8:08:03	Other	Stationary	90	32	50	351	7	0	22.3221	113.9686	2725.35	4.85
26-Sep-13	8:08:12	Other	Stationary	90	30	50	352	12	10	22.3237	113.9693	2911.37	5.93
26-Sep-13	8:08:24	Other	Stationary	90	30	40	348	24	20	22.3240	113.9675	2928.10	2.14
26-Sep-13	8:08:29	Other	Stationary	90	30	40	348	24	20	22.3240	113.9675	2928.13	2.14
26-Sep-13	8:08:38	Other	Stationary	90	30	30	352	11	20	22.3240	113.9694	2945.05	5.92
26-Sep-13	8:08:53	Other	Stationary	90	29	30	347	7	40	22.3251	113.9668	3050.76	0.86
26-Sep-13	8:09:01	Other	Stationary	90	28	50	344	31	20	22.3257	113.9655	3125.67	358.25
26-Sep-13	8:09:09	Other	Stationary	90	28	30	338	43	0	22.3259	113.9624	3164.59	352.45
26-Sep-13	8:09:18	Other	Stationary	90	29	0	332	59	40	22.3248	113.9595	3106.70	346.72
26-Sep-13	8:09:26	Other	Stationary	90	28	40	328	20	20	22.3245	113.9570	3145.12	342.07
26-Sep-13	8:09:38	Other	Stationary	90	26	0	321	6	30	22.3261	113.9520	3491.65	334.84
26-Sep-13	8:09:49	Other	Stationary	90	26	30	316	21	20	22.3243	113.9498	3420.84	330.09
26-Sep-13	8:09:57	Other	Stationary	90	27	10	313	40	10	22.3229	113.9489	3330.90	327.40
26-Sep-13	8:10:03	Other	Stationary	90	27	50	311	6	10	22.3215	113.9482	3245.72	324.83
26-Sep-13	8:10:16	Other	Stationary	90	30	20	304	14	10	22.3174	113.9471	2962.63	317.97
26-Sep-13	8:10:23	Other	Stationary	90	29	50	301	47	0	22.3170	113.9458	3015.16	315.51
26-Sep-13	8:10:30	Other	Stationary	90	29	30	299	58	0	22.3166	113.9449	3051.27	313.70
26-Sep-13	8:10:52	Other	Stationary	91	12	20	315	58	50	22.3071	113.9604	1215.09	329.71
26-Sep-13	8:10:59	Other	Stationary	91	9	30	331	17	30	22.3086	113.9632	1265.13	345.02
26-Sep-13	8:11:10	Other	Stationary	90	29	10	347	16	50	22.3254	113.9669	3088.46	1.01
26-Sep-13	8:11:20	Other	Stationary	90	35	30	356	56	20	22.3198	113.9709	2512.98	10.67
26-Sep-13	8:11:28	Other	Stationary	90	36	40	357	58	50	22.3190	113.9712	2430.03	11.71
26-Sep-13	8:11:38	Other	Stationary	90	37	30	358	17	50	22.3185	113.9712	2374.13	12.03
26-Sep-13	8:11:58	Other	Stationary	90	34	40	5	38	20	22.3195	113.9747	2576.05	19.37
26-Sep-13	8:12:22	Other	Stationary	90	55	0	349	36	20	22.3120	113.9673	1603.74	3.34
26-Sep-13	8:12:27	Other	Stationary	90	55	30	351	14	50	22.3119	113.9677	1589.07	4.98
26-Sep-13	8:12:39	Other	Stationary	90	31	50	1	13	30	22.3221	113.9735	2816.52	14.95
26-Sep-13	8:12:46	Other	Stationary	90	32	10	1	58	40	22.3218	113.9737	2785.93	15.71
26-Sep-13	8:12:56	Other	Stationary	90	28	40	3	3	40	22.3247	113.9752	3146.25	16.79
26-Sep-13	8:13:03	Other	Stationary	90	28	50	4	23	50	22.3244	113.9759	3126.97	18.13
26-Sep-13	8:13:13	Other	Stationary	91	9	30	1	43	10	22.3086	113.9697	1265.42	15.45
26-Sep-13	8:13:21	Other	Stationary	91	11	20	3	57	0	22.3082	113.9700	1232.59	17.68
26-Sep-13	8:13:31	Other	Stationary	90	53	30	16	5	20	22.3105	113.9744	1649.65	29.82
26-Sep-13	8:13:39	Other	Stationary	90	54	20	17	17	0	22.3101	113.9745	1623.95	31.01
26-Sep-13	8:14:00	Other	Stationary	90	28	50	359	29	30	22.3250	113.9734	3127.28	13.22
26-Sep-13	8:14:13	Other	Stationary	91	9	0	1	42	50	22.3087	113.9697	1274.81	15.44
26-Sep-13	8:14:22	Other	Stationary	90	42	40	9	16	50	22.3148	113.9743	2078.86	23.01
26-Sep-13	8:14:28	Other	Stationary	90	46	0	12	17	10	22.3132	113.9746	1924.60	26.02
26-Sep-13	8:14:54	Other	Stationary	91	9	10	332	44	10	22.3087	113.9635	1271.79	346.47
26-Sep-13	8:15:08	Other	Stationary	90	37	30	358	49	40	22.3185	113.9714	2374.98	12.56
26-Sep-13	8:15:19	Other	Stationary	90	47	0	13	4	0	22.3127	113.9747	1882.89	26.80
26-Sep-13	8:15:35	HSF High Speed Ferry	Travelling	90	48	10	341	41	30	22.3141	113.9650	1836.36	355.42
26-Sep-13	8:15:44	Transportation Boat	Travelling	90	51	10	338	17	30	22.3130	113.9641	1726.64	352.02
26-Sep-13	8:15:57	Transportation Boat	Travelling	90	57	0	334	0	20	22.3112	113.9632	1547.16	347.74
26-Sep-13	8:16:13	Transportation Boat	Travelling	90	59	30	282	3	30	22.3034	113.9534	1481.28	295.79
26-Sep-13	8:17:01	HSF High Speed Ferry	Travelling	91	0	20	320	46	50	22.3095	113.9603	1460.66	334.51
26-Sep-13	8:17:10	Transportation Boat	Travelling	90	59	50	323	30	30	22.3098	113.9609	1473.05	337.24
26-Sep-13	8:17:16	Transportation Boat	Travelling	91	3	50	325	3	40	22.3092	113.9615	1379.61	338.79
26-Sep-13	8:17:22	Transportation Boat	Travelling	91	2	50	294	1	40	22.3053	113.9556	1401.86	307.76
26-Sep-13	8:17:28	Transportation Boat	Travelling	91	5	40	313	30	0	22.3078	113.9593	1340.68	327.23
26-Sep-13	8:18:15	HSF High Speed Ferry	Travelling	91	5	0	297	24	30	22.3056	113.9565	1354.70	311.14
26-Sep-13	8:18:22	Transportation Boat	Travelling	91	4	20	308	20	40	22.3073	113.9582	1368.92	322.07
26-Sep-13	8:18:37	Transportation Boat	Travelling	90	59	30	306	12	40	22.3078	113.9571	1481.64	319.94
26-Sep-13	8:18:53	Transportation Boat	Travelling	90	56	40	305	53	40	22.3083	113.9566	1556.86	319.62
26-Sep-13	8:19:01	Transportation Boat	Travelling	91	8	40	309	56	10	22.3069	113.9590	1281.68	323.67
26-Sep-13	8:19:09	Transportation Boat	Travelling	91	1	50	326	58	10	22.3097	113.9618	1425.07	340.70
26-Sep-13	8:19:15	HSF High Speed Ferry	Travelling	90	57	0	279	58	0	22.3032	113.9526	1547.68	293.70
26-Sep-13	8:20:21	Speed Boat	Travelling	92	48	50	5	52	0	22.3020	113.9681	518.80	19.60
26-Sep-13	8:20:31	Transportation Boat	Travelling	90	57	0	281	32	0	22.3036	113.9528	1547.87	295.26
26-Sep-13	8:20:38	Transportation Boat	Travelling	91	7	0	295	18	20	22.3051	113.9565	1314.12	309.04
26-Sep-13	8:20:43	Transportation Boat	Travelling	90	55	40	337	44	40	22.3117	113.9641	1585.56	351.47
26-Sep-13	8:20:50	Transportation Boat	Travelling	91	3	40	290	39	0	22.3047	113.9553	1383.77	304.38

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
26-Sep-13	8:21:01	Tug Boat	Travelling	91	6	20	291	28	40	22.3045	113.9558	1327.53	305.21
26-Sep-13	8:21:22	Transportation Boat	Travelling	91	0	50	320	3	30	22.3093	113.9602	1449.13	333.79
26-Sep-13	8:21:32	Transportation Boat	Travelling	91	3	40	312	51	0	22.3080	113.9590	1383.86	326.58
26-Sep-13	8:21:57	Speed Boat	Travelling	93	35	40	336	13	10	22.3012	113.9657	405.87	349.95
26-Sep-13	8:22:12	Research Vessel	Travelling	90	45	50	356	6	20	22.3148	113.9696	1933.27	9.84
26-Sep-13	8:22:34	Transportation Boat	Travelling	90	59	30	279	56	0	22.3030	113.9532	1482.22	293.66
26-Sep-13	8:22:48	Transportation Boat	Travelling	90	47	30	348	5	40	22.3144	113.9670	1864.05	1.82
26-Sep-13	8:23:12	Transportation Boat	Travelling	91	1	10	326	22	30	22.3098	113.9616	1441.39	340.10
26-Sep-13	8:23:22	Transportation Boat	Travelling	90	53	40	336	30	40	22.3122	113.9637	1646.07	350.24
26-Sep-13	8:23:30	Transportation Boat	Travelling	91	2	20	324	45	10	22.3095	113.9614	1414.11	338.48
26-Sep-13	8:23:44	Tug Boat	Travelling	91	0	0	322	24	0	22.3097	113.9606	1469.88	336.13
26-Sep-13	8:23:51	Speed Boat	Travelling	92	58	40	297	29	0	22.3005	113.9628	490.33	311.21
26-Sep-13	8:24:14	Transportation Boat	Travelling	91	21	30	309	5	50	22.3054	113.9601	1078.78	322.83
26-Sep-13	8:24:43	Speed Boat	Travelling	92	33	40	283	32	10	22.3000	113.9615	570.43	297.27
26-Sep-13	8:24:53	Research Vessel	Travelling	90	54	50	338	5	10	22.3120	113.9642	1610.72	351.82
26-Sep-13	8:25:13	Transportation Boat	Travelling	90	39	50	357	19	0	22.3173	113.9706	2233.65	11.05
26-Sep-13	8:25:25	Transportation Boat	Travelling	90	55	10	342	9	50	22.3120	113.9653	1600.92	355.89
26-Sep-13	8:25:31	Transportation Boat	Travelling	90	44	0	347	24	50	22.3158	113.9668	2016.51	1.14
26-Sep-13	8:25:38	Transportation Boat	Travelling	90	48	40	343	46	40	22.3140	113.9656	1818.95	357.51
26-Sep-13	8:25:51	Transportation Boat	Travelling	91	44	40	312	12	40	22.3039	113.9618	838.85	325.94
26-Sep-13	8:27:17	Transportation Boat	Travelling	90	48	30	352	15	20	22.3140	113.9683	1825.63	5.99
26-Sep-13	8:27:22	Transportation Boat	Travelling	90	36	40	351	37	50	22.3194	113.9686	2433.96	5.36
26-Sep-13	8:27:28	Transportation Boat	Travelling	90	39	20	353	51	0	22.3178	113.9693	2263.47	7.58
26-Sep-13	8:27:40	Tug Boat	Travelling	90	41	40	350	23	50	22.3168	113.9679	2133.03	4.13
26-Sep-13	8:27:52	HSF High Speed Ferry	Travelling	91	4	50	292	34	50	22.3049	113.9557	1359.53	306.31
26-Sep-13	8:28:04	Research Vessel	Travelling	91	2	50	309	57	30	22.3078	113.9583	1403.36	323.69
26-Sep-13	8:28:14	Tug Boat	Travelling	90	44	20	346	4	10	22.3156	113.9663	2001.52	359.80
26-Sep-13	8:28:22	Construction Boat	Travelling	90	44	0	346	29	30	22.3158	113.9665	2017.09	0.22
26-Sep-13	8:28:36	Transportation Boat	Travelling	93	4	30	330	28	30	22.3017	113.9651	475.00	344.20
26-Sep-13	8:30:20	Transportation Boat	Travelling	95	36	10	352	48	20	22.2999	113.9667	260.03	6.54
26-Sep-13	8:30:38	HSF High Speed Ferry	Travelling	91	3	0	317	22	0	22.3086	113.9598	1399.96	331.10
26-Sep-13	8:32:13	Tug Boat	Travelling	90	56	10	332	36	10	22.3114	113.9628	1573.04	346.33
26-Sep-13	8:32:20	Construction Boat	Travelling	90	55	0	333	34	40	22.3117	113.9630	1606.96	347.31
26-Sep-13	8:32:31	Tug Boat	Travelling	90	58	40	337	15	50	22.3110	113.9641	1505.08	350.99
26-Sep-13	8:32:39	Construction Boat	Travelling	91	0	0	336	27	0	22.3107	113.9640	1471.19	350.18
26-Sep-13	8:34:35	Research Vessel	Travelling	90	48	0	279	11	10	22.3041	113.9499	1846.41	292.92
26-Sep-13	8:34:45	HSF High Speed Ferry	Travelling	90	47	40	344	29	40	22.3143	113.9658	1859.63	358.22
26-Sep-13	8:35:29	Transportation Boat	Travelling	91	46	10	311	34	0	22.3037	113.9618	827.74	325.30
26-Sep-13	8:36:11	HSF High Speed Ferry	Travelling	91	5	20	292	11	30	22.3047	113.9558	1350.13	305.92
26-Sep-13	8:36:48	Tug Boat	Travelling	91	3	40	307	17	20	22.3073	113.9579	1385.99	321.02
26-Sep-13	8:36:55	Construction Boat	Travelling	91	3	20	308	45	40	22.3076	113.9581	1393.38	322.49
26-Sep-13	8:37:05	Tug Boat	Travelling	90	44	50	347	45	20	22.3154	113.9669	1980.41	1.49
26-Sep-13	8:37:12	Construction Boat	Travelling	90	46	10	347	30	30	22.3149	113.9668	1921.90	1.24
26-Sep-13	8:37:22	HSF High Speed Ferry	Travelling	90	37	50	352	5	20	22.3187	113.9687	2358.64	5.82
26-Sep-13	8:37:30	HSF High Speed Ferry	Travelling	91	5	30	319	1	10	22.3084	113.9604	1346.83	332.75
26-Sep-13	8:38:04	Transportation Boat	Travelling	90	56	20	285	59	0	22.3046	113.9531	1569.24	299.71
26-Sep-13	8:39:21	Transportation Boat	Travelling	91	0	20	307	18	20	22.3079	113.9574	1463.94	321.04
26-Sep-13	8:39:39	Transportation Boat	Travelling	91	1	20	302	4	0	22.3069	113.9566	1439.80	315.80
26-Sep-13	8:39:57	HSF High Speed Ferry	Travelling	90	42	40	347	50	30	22.3164	113.9670	2084.25	1.57
26-Sep-13	8:40:29	Transportation Boat	Travelling	90	56	40	305	44	40	22.3083	113.9565	1560.25	319.47
26-Sep-13	8:40:51	Tug Boat	Travelling	90	58	10	284	7	10	22.3040	113.9533	1519.48	297.85
26-Sep-13	8:41:14	Construction Boat	Travelling	90	58	50	283	49	10	22.3039	113.9534	1502.07	297.55
26-Sep-13	8:41:24	Tug Boat	Travelling	90	36	20	352	38	20	22.3196	113.9691	2460.64	6.37
26-Sep-13	8:41:40	Construction Boat	Travelling	90	37	0	352	43	10	22.3192	113.9690	2414.74	6.45
26-Sep-13	8:42:04	HSF High Speed Ferry	Travelling	90	29	20	354	56	0	22.3250	113.9709	3079.62	8.66
26-Sep-13	8:43:40	Government Boat	Travelling	91	26	20	295	5	20	22.3034	113.9587	1019.94	308.82
26-Sep-13	8:44:16	Transportation Boat	Travelling	90	42	30	351	16	10	22.3164	113.9682	2093.56	5.00
26-Sep-13	8:44:37	Government Boat	Travelling	91	30	50	331	41	20	22.3061	113.9640	969.19	345.42
26-Sep-13	8:45:09	Government Boat	Travelling	91	17	40	349	13	30	22.3078	113.9670	1134.83	2.95
26-Sep-13	8:45:15	Transportation Boat	Travelling	90	48	10	343	30	10	22.3142	113.9655	1841.86	357.23
26-Sep-13	8:45:36	Government Boat	Travelling	91	6	10	359	9	50	22.3093	113.9693	1334.20	12.89
26-Sep-13	8:46:17	Government Boat	Travelling	90	52	30	9	18	50	22.3116	113.9728	1687.18	23.04
26-Sep-13	8:46:27	Transportation Boat	Travelling	90	56	40	331	39	40	22.3112	113.9626	1561.18	345.39
26-Sep-13	8:46:51	Government Boat	Travelling	90	44	40	14	51	50	22.3133	113.9757	1989.94	28.59
26-Sep-13	8:47:16	Tug Boat	Travelling	90	47	0	347	35	30	22.3146	113.9668	1888.97	1.32
26-Sep-13	8:47:48	Transportation Boat	Travelling	91	2	20	313	1	0	22.3083	113.9588	1417.57	326.75
26-Sep-13	8:49:43	Transportation Boat	Travelling	91	0	50	284	47	40	22.3039	113.9540	1453.26	298.52
26-Sep-13	8:49:52	Transportation Boat	Travelling	90	56	50	307	6	40	22.3085	113.9568	1557.07	320.84
26-Sep-13	8:50:00	Tug Boat	Travelling	90	58	10	328	53	10	22.3107	113.9620	1520.87	342.62
26-Sep-13	8:50:27	Transportation Boat	Travelling	91	1	50	306	26	50	22.3075	113.9575	1429.56	320.18
26-Sep-13	8:52:09	Transportation Boat	Travelling	91	2	50	298	31	0	22.3061	113.9563	1406.76	312.25
26-Sep-13	8:52:17	Tug Boat	Travelling	90	57	0	308	21	50	22.3086	113.9571	1552.82	322.09
26-Sep-13	8:52:46	Tug Boat	Travelling	90	53	30	306	48	40	22.3091	113.9562	1656.18	320.54
26-Sep-13	8:53:03	Transportation Boat	Travelling	91	1	30	296	29	0	22.3060	113.9557	1437.78	310.21
26-Sep-13	8:53:29	Fishing Boat	Non-operate and travelling	92	5	40	292	19	0	22.3013	113.9609	700.04	306.05
26-Sep-13	8:54:52	Transportation Boat	Travelling	90	56	10	279	14	30	22.3032	113.9523	1576.63	292.97
26-Sep-13	8:55:30	Fishing Boat	Non-operate and travelling	92	5	50	324	46	30	22.3035	113.9639	699.25	338.50
26-Sep-13	9:00:25	Fishing Boat	Operate and travelling	91	40	30	281	26	10	22.3010	113.9587	876.84	295.17
26-Sep-13	9:00:38	Transportation Boat	Travelling	90	56	50	283	37	30	22.3041	113.9529	1558.75	297.35
26-Sep-13	9:03:03	Transportation Boat	Travelling	90	56	30	305	20	30	22.3083	113.9564	1568.47	319.07
26-Sep-13	9:03:14	Tug Boat	Travelling	91	3	30	295	57	20	22.3056	113.9560	1393.35	309.69
26-Sep-13	9:03:24	Fishing Boat	Operate and travelling	91	59	20	288	51	0	22.3012	113.9604	738.08	302.58
26-Sep-13	9:07:08	Tug Boat	Travelling	90	57	0	333	51	10	22.3113	113.9631	1555.14	347.58
26-Sep-13	9:07:18	Fishing Boat	Operate and travelling	92	17	10	317	37	30	22.3027	113.9634	642.02	331.35
26-Sep-13	9:09:13	Fishing Boat	Non-operate and travelling	91	50	20	299	36	20	22.3026	113.9607	799.02	313.34
26-Sep-13	9:09:24	Tug Boat	Travelling	90	46	40	349	37	40	22.3148	113.9675	1907.01	3.36
26-Sep-13	9:09:47	Fishing Boat	Non-operate and travelling	91	29	30	279	21	10	22.3011	113.9576	986.19	293.08
26-Sep-13	9:10:03	Transportation Boat	Travelling	91	4	40	310	38	40	22.3076	113.9586	1368.84	324.37
26-Sep-13	9:10:56	Tug Boat	Travelling	90	41	20	357	9	30	22.3167	113.9704	2159.81	10.89
26-Sep-13	9:11:15	Transportation Boat	Travelling	91	13	10	314	26	40	22.3069	113.9602	1208.15	328.17
26-Sep-13	9:13:37	Tug Boat	Travelling	90	35	10	6	18	10	22.3192	113.9749	2552.28	20.03
26-Sep-13	9:13:50	Transportation Boat	Travelling	91	14	50	313	48	40	22.3066	113.9602	1180.78	327.54
26-Sep-13	9:13:57	Transportation Boat	Travelling	91	1	20	313	36	20	22.3086	113.9588	1443.78	327.34
26-Sep-13	9:14:11	HSF High Speed Ferry	Travelling	90	34	10	353	5	0	22.3211	113.9694	2630.06	6.81
26-Sep-13	9:14:36	Research Vessel	Travelling	91	9	10	281	32	20	22.3025	113.9552	1278.41	295.27
26-Sep-13	9:16:40	Research Vessel	Travelling	90	58	40	291	14	50	22.3054	113.9544	1510.03	304.98
26-Sep-13	9:16:49	HSF High Speed Ferry	Travelling	90	53	0	334	53	40	22.3124	113.9632	1674.15	348.62
26-Sep-13	9:16:56	Transportation Boat	Travelling	90	57	20	333	25	30	22.3112	113.9631	1545.63	347.15
26-Sep-13	9:17:10	Transportation Boat	Travelling	91	15	10	311	38	0	22.3063	113.9599	1175.22	325.36
26-Sep-13	9:17:42	Research Vessel	Stationary	90	58	40	290	51	30	22.3053	113.9543	1509.91	304.59
26-Sep-13	9:18:59	HSF High Speed Ferry	Travelling	91	4	0	298	44	50	22.3060	113.9565	1382.38	312.48
26-Sep-13	9:19:25	Transportation Boat	Travelling	91	0	30	288	13	10	22.3046	113.9543	1463.36	301.95
26-Sep-13	9:19:40	Transportation Boat	Travelling	90	46	20	344	17	20	22.3149	113.9658	1919.82	358.02
26-Sep-13	9:19:53	Speed Boat	Travelling	91	4	30	20	58	40	22.3078	113.9740	1371.45	34.71
26-Sep-13	9:20:04	HSF High Speed Ferry	Travelling	90	56	30	279	46	20	22.3032	113.9524	1568.42	293.50
26-Sep-13	9:20:11	Transportation Boat	Travelling	91	2	40	296	52	40	22.3059	113.9560	1412.04	310.61
26-Sep-13	9:20:37	Research Vessel	Acoustic Recording	90	57	50	289	32	0	22.3052	113.9539	1531.67	303.26
26-Sep-13	9:21:19	Transportation Boat	Travelling	90	58	0	307	59	30	22.3084	113.9572	1527.13	321.72
26-Sep-13	9:21:30	Transportation Boat	Travelling	90	41	10	348	46	40	22.3171	113.9673	2167.14	2.51
26-Sep-13	9:21:44	Transportation Boat	Travelling	90	53	30	306	10	10	22.3090	113.9560	1657.64	319.90
26-Sep-13	9:21:57	Speed Boat	Travelling	91	23	0	28	16	30	22.3047	113.9733	1063.09	42.00
26-Sep-13	9:22:39	Transportation Boat	Travelling	90	58	10	283	21	30	22.3039	113.9532	1522.54	297.09
26-Sep-13	9:23:40	Transportation Boat	Travelling	91	33	10	283	6	0	22.3015	113.9582	946.24	296.83
26-Sep-13	9:24:02	Transportation Boat	Stationary	91	15	20	306	45	30	22.3058	113.9591	1172.02	320.49
26-Sep-13	9:24:29	Speed Boat	Travelling	92	9	30	346	52	20	22.3037	113.9665	679.66	0.60
26-Sep-13	9:25:01	Speed Boat	Travelling	92	31	30	347	38	50	22.3028	113.9665	580.61	1.38
26-Sep-13	9:25:27	Transportation Boat	Travelling	91	1	50	298	55	30	22.3063	113.9562	1430.77	312.65

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
26-Sep-13	9:25:34	Transportation Boat	Travelling	91	52	0	303	4	30	22.3028	113.9612	786.26	316.80
26-Sep-13	9:27:00	Transportation Boat	Travelling	90	58	50	306	16	20	22.3080	113.9570	1504.57	320.00
26-Sep-13	9:27:13	Transportation Boat	Travelling	91	57	30	325	19	50	22.3039	113.9638	749.21	339.06
26-Sep-13	9:27:24	Transportation Boat	Travelling	91	4	0	283	53	20	22.3034	113.9545	1381.55	297.62
26-Sep-13	9:27:37	Research Vessel	Stationary	90	55	20	286	43	30	22.3049	113.9530	1601.15	300.45
26-Sep-13	9:29:08	Transportation Boat	Travelling	91	1	0	307	34	30	22.3078	113.9576	1450.19	321.30
26-Sep-13	9:29:21	Research Vessel	Travelling	90	58	30	283	32	10	22.3039	113.9533	1513.01	297.27
26-Sep-13	9:29:32	Transportation Boat	Travelling	90	55	50	306	9	40	22.3085	113.9565	1586.37	319.89
26-Sep-13	9:29:40	Transportation Boat	Travelling	91	32	40	352	30	0	22.3061	113.9674	950.96	6.23
26-Sep-13	9:29:48	Transportation Boat	Travelling	91	4	30	22	31	40	22.3076	113.9743	1370.47	36.26
26-Sep-13	9:30:00	Speed Boat	Travelling	92	8	10	350	18	10	22.3038	113.9669	686.48	4.03
26-Sep-13	9:30:14	Transportation Boat	Travelling	91	11	10	298	42	10	22.3052	113.9575	1240.74	312.43
26-Sep-13	9:30:20	Research Vessel	Travelling	91	5	10	277	53	10	22.3021	113.9541	1356.24	291.62
26-Sep-13	9:32:59	Transportation Boat	Travelling	91	14	20	3	25	40	22.3078	113.9698	1187.16	17.16
26-Sep-13	9:33:05	Transportation Boat	Travelling	91	35	20	287	33	10	22.3019	113.9587	923.98	301.28
26-Sep-13	9:33:14	Transportation Boat	Travelling	91	42	40	297	25	0	22.3027	113.9601	857.63	311.15
26-Sep-13	9:33:30	Transportation Boat	Travelling	91	23	0	297	44	10	22.3039	113.9587	1062.21	311.47
26-Sep-13	9:34:31	Research Vessel	Travelling	91	40	40	281	41	10	22.3010	113.9587	874.68	295.42
26-Sep-13	9:34:40	Transportation Boat	Travelling	91	57	50	337	8	0	22.3043	113.9652	746.69	350.86
26-Sep-13	9:37:15	Transportation Boat	Travelling	91	6	30	24	14	50	22.3070	113.9743	1328.08	37.98
26-Sep-13	9:37:23	Research Vessel	Travelling	91	6	30	303	26	40	22.3064	113.9576	1328.07	317.17
26-Sep-13	9:39:45	Research Vessel	Travelling	91	13	50	321	47	50	22.3074	113.9616	1194.69	335.53
26-Sep-13	9:40:01	Transportation Boat	Travelling	91	22	20	292	26	40	22.3033	113.9580	1070.37	306.17
26-Sep-13	9:40:49	Speed Boat	Travelling	92	26	20	353	19	10	22.3030	113.9671	600.51	7.05
26-Sep-13	9:41:06	Transportation Boat	Travelling	91	15	10	311	26	0	22.3063	113.9599	1173.20	325.16
26-Sep-13	9:42:55	Transportation Boat	Travelling	91	2	40	289	27	50	22.3046	113.9549	1409.73	303.19
26-Sep-13	9:43:27	Transportation Boat	Travelling	91	5	20	290	44	50	22.3045	113.9556	1351.46	304.48
26-Sep-13	9:43:38	Research Vessel	Travelling	94	16	50	332	18	0	22.3006	113.9656	341.39	346.03
26-Sep-13	9:44:42	Transportation Boat	Travelling	90	57	50	306	3	30	22.3081	113.9568	1529.01	319.79
26-Sep-13	9:44:48	Transportation Boat	Travelling	91	5	0	307	50	20	22.3072	113.9582	1358.34	321.57
26-Sep-13	9:45:07	Transportation Boat	Travelling	90	54	40	305	3	30	22.3086	113.9560	1618.95	318.79
26-Sep-13	9:45:11	Transportation Boat	Travelling	91	0	40	308	12	0	22.3079	113.9577	1456.58	321.93
26-Sep-13	9:45:20	Transportation Boat	Travelling	92	37	40	328	14	30	22.3024	113.9647	557.02	341.97
26-Sep-13	9:46:25	Research Vessel	Travelling	92	14	50	29	16	20	22.3019	113.9707	651.65	43.00
26-Sep-13	9:48:05	Transportation Boat	Travelling	94	26	0	342	19	40	22.3006	113.9662	329.47	356.06
26-Sep-13	9:51:50	Research Vessel	Acoustic Recording	91	18	0	345	44	0	22.3078	113.9663	1129.35	359.46
26-Sep-13	9:52:06	Research Vessel	Other	91	18	50	346	27	0	22.3077	113.9664	1117.30	0.18
26-Sep-13	9:52:20	Transportation Boat	Travelling	92	55	0	330	2	10	22.3020	113.9650	501.43	343.77
26-Sep-13	9:52:29	Speed Boat	Travelling	92	37	0	333	10	10	22.3025	113.9652	559.11	346.90
26-Sep-13	9:54:53	Transportation Boat	Travelling	95	46	20	356	12	40	22.2999	113.9668	252.54	9.94
26-Sep-13	10:04:34	Transportation Boat	Travelling	94	45	50	342	54	20	22.3004	113.9662	306.14	356.64
26-Sep-13	10:04:52	Speed Boat	Travelling	92	3	30	290	31	10	22.3012	113.9607	710.75	304.25
26-Sep-13	10:05:53	Transportation Boat	Travelling	91	4	30	290	31	40	22.3045	113.9554	1366.92	304.26
26-Sep-13	10:06:15	Speed Boat	Travelling	91	27	0	278	35	50	22.3011	113.9573	1010.65	292.33
26-Sep-13	10:07:33	Transportation Boat	Travelling	91	6	10	308	41	0	22.3071	113.9585	1331.93	322.41
26-Sep-13	10:07:44	Transportation Boat	Travelling	91	47	40	312	17	30	22.3037	113.9620	815.59	326.02
26-Sep-13	10:10:24	Research Vessel	Travelling	91	26	0	332	4	0	22.3065	113.9640	1022.18	345.80
26-Sep-13	10:10:32	Transportation Boat	Travelling	90	54	0	336	4	40	22.3121	113.9636	1636.26	349.81
26-Sep-13	10:10:43	Transportation Boat	Travelling	91	5	0	306	32	30	22.3070	113.9580	1355.81	320.27
26-Sep-13	10:12:36	Transportation Boat	Travelling	90	52	20	307	41	40	22.3095	113.9562	1689.04	321.42
26-Sep-13	10:12:48	Transportation Boat	Travelling	90	42	30	347	20	10	22.3164	113.9668	2089.47	1.07
26-Sep-13	10:13:02	Research Vessel	Travelling	90	58	20	342	59	30	22.3112	113.9656	1512.62	356.72
26-Sep-13	10:16:12	Fishing Boat	Non-operate and travelling	92	8	20	300	36	0	22.3019	113.9616	683.32	314.33
26-Sep-13	10:16:24	Transportation Boat	Travelling	90	47	20	341	27	20	22.3144	113.9649	1870.67	355.19
26-Sep-13	10:16:36	Research Vessel	Travelling	90	48	10	1	33	20	22.3136	113.9711	1837.58	15.29
26-Sep-13	10:18:27	Fishing Boat	Non-operate and travelling	91	49	0	1	50	40	22.3046	113.9685	804.94	15.57
26-Sep-13	10:18:48	Transportation Boat	Travelling	90	58	20	324	43	0	22.3103	113.9610	1511.99	338.45
26-Sep-13	10:19:07	Transportation Boat	Travelling	91	0	10	290	21	50	22.3050	113.9546	1465.25	304.09
26-Sep-13	10:19:36	Research Vessel	Travelling	91	2	50	22	45	30	22.3078	113.9745	1402.23	36.49
26-Sep-13	10:20:36	Transportation Boat	Travelling	91	2	30	307	8	40	22.3075	113.9577	1409.70	320.87
26-Sep-13	10:20:47	Transportation Boat	Travelling	91	1	20	308	31	30	22.3078	113.9578	1436.84	322.25
26-Sep-13	10:21:06	Fishing Boat	Operate and travelling	92	7	0	347	57	40	22.3038	113.9666	690.28	1.69
26-Sep-13	10:22:15	Research Vessel	Acoustic Recording	91	7	30	34	14	50	22.3055	113.9758	1303.96	47.98
26-Sep-13	10:22:34	Research Vessel	Other	91	8	20	33	41	40	22.3055	113.9756	1287.86	47.42
26-Sep-13	10:23:32	Transportation Boat	Travelling	90	52	10	281	24	20	22.3041	113.9515	1693.19	295.14
26-Sep-13	10:23:45	Transportation Boat	Travelling	90	52	40	335	28	20	22.3124	113.9633	1676.81	349.20
26-Sep-13	10:24:08	Fishing Boat	Operate and travelling	92	31	30	323	59	30	22.3024	113.9643	578.16	337.72
26-Sep-13	10:24:29	Fishing Boat	Non-operate and travelling	91	15	20	299	7	50	22.3048	113.9581	1166.93	312.86
26-Sep-13	10:26:58	Transportation Boat	Travelling	90	38	10	349	53	30	22.3186	113.9678	2331.97	3.62
26-Sep-13	10:27:18	Fishing Boat	Operate and travelling	92	16	40	298	18	50	22.3015	113.9618	640.99	312.04
26-Sep-13	10:27:29	Fishing Boat	Non-operate and travelling	93	3	10	329	44	50	22.3017	113.9651	477.79	343.48
26-Sep-13	10:27:43	Transportation Boat	Travelling	90	59	40	307	28	10	22.3080	113.9574	1476.78	321.20
26-Sep-13	10:29:33	Transportation Boat	Travelling	90	57	20	277	22	50	22.3026	113.9524	1537.56	291.11
26-Sep-13	10:29:58	Fishing Boat	Operate and travelling	92	18	20	296	26	10	22.3013	113.9617	633.12	310.17
26-Sep-13	10:30:07	Fishing Boat	Non-operate and travelling	92	32	20	26	0	50	22.3016	113.9700	574.74	39.74
26-Sep-13	10:32:51	Fishing Boat	Non-operate and travelling	92	55	0	332	51	50	22.3020	113.9653	499.97	346.59
26-Sep-13	10:33:02	Fishing Boat	Non-operate and travelling	91	22	0	40	24	40	22.3033	113.9748	1070.66	54.14
26-Sep-13	10:35:49	Fishing Boat	Operate and travelling	92	7	40	358	20	0	22.3037	113.9678	685.93	12.06
26-Sep-13	10:36:01	Fishing Boat	Non-operate and stationary	91	13	0	35	15	30	22.3047	113.9752	1203.57	48.99
26-Sep-13	10:40:44	Research Vessel	Travelling	91	23	50	40	35	30	22.3031	113.9747	1046.50	54.32
26-Sep-13	10:41:47	HSF High Speed Ferry	Travelling	91	1	0	295	1	40	22.3057	113.9555	1442.61	308.76
26-Sep-13	10:42:04	Fishing Boat	Operate and travelling	92	10	10	358	35	0	22.3035	113.9678	672.41	12.31
26-Sep-13	10:42:19	Fishing Boat	Non-operate and stationary	91	22	20	38	34	20	22.3035	113.9746	1065.58	52.30
26-Sep-13	10:43:07	Government Boat	Travelling	90	48	10	27	26	0	22.3100	113.9781	1834.05	41.16
26-Sep-13	10:43:48	Transportation Boat	Travelling	91	3	20	293	3	40	22.3051	113.9556	1388.60	306.79
26-Sep-13	10:44:18	HSF High Speed Ferry	Travelling	90	54	50	335	53	40	22.3118	113.9636	1607.06	349.62
26-Sep-13	10:44:30	Research Vessel	Travelling	90	47	40	36	55	10	22.3082	113.9803	1853.52	50.65
26-Sep-13	10:45:19	Government Boat	Travelling	91	17	30	12	38	0	22.3067	113.9713	1132.33	26.36
26-Sep-13	10:46:11	Research Vessel	Travelling	90	40	10	35	14	0	22.3107	113.9826	2209.09	48.96
26-Sep-13	10:46:32	HSF High Speed Ferry	Travelling	90	38	0	351	50	10	22.3186	113.9686	2339.20	5.57
26-Sep-13	10:46:44	Transportation Boat	Travelling	91	6	40	321	0	30	22.3083	113.9609	1318.10	334.74
26-Sep-13	10:47:04	Transportation Boat	Travelling	91	2	10	14	3	10	22.3089	113.9728	1414.65	27.78
26-Sep-13	10:47:26	Government Boat	Travelling	91	54	0	328	41	20	22.3042	113.9641	767.88	342.42
26-Sep-13	10:47:38	Fishing Boat	Operate and travelling	92	25	10	355	59	10	22.3030	113.9674	602.45	9.72
26-Sep-13	10:47:49	Fishing Boat	Non-operate and stationary	91	32	40	40	45	20	22.3026	113.9739	945.64	54.49
26-Sep-13	10:48:25	Transportation Boat	Travelling	90	58	30	334	38	0	22.3109	113.9634	1504.40	348.36
26-Sep-13	10:48:33	Transportation Boat	Travelling	91	13	10	3	6	0	22.3080	113.9698	1199.72	16.83
26-Sep-13	10:48:49	Fishing Boat	Non-operate and travelling	92	41	50	0	57	40	22.3023	113.9677	540.17	14.69
26-Sep-13	10:49:06	Research Vessel	Travelling	90	34	30	30	33	50	22.3143	113.9840	2585.55	44.29
26-Sep-13	10:49:31	Government Boat	Travelling	91	14	10	281	32	20	22.3022	113.9560	1183.31	295.27
26-Sep-13	10:49:43	Transportation Boat	Travelling	92	10	50	283	41	30	22.3004	113.9606	668.60	297.42
26-Sep-13	10:50:40	Transportation Boat	Travelling	90	46	50	346	40	40	22.3146	113.9665	1886.38	0.41
26-Sep-13	10:50:57	Transportation Boat	Stationary	91	14	40	2	9	10	22.3078	113.9695	1175.20	15.88
26-Sep-13	10:51:03	Transportation Boat	Travelling	93	11	0	296	1	40	22.3003	113.9630	457.36	309.76
26-Sep-13	10:51:13	Transportation Boat	Travelling	90	51	20	336	41	0	22.3129	113.9636	1717.74	350.41
26-Sep-13	10:51:32	Fishing Boat	Operate and travelling	92	48	20	20	51	0	22.3015	113.9693	519.14	34.58
26-Sep-13	10:52:20	Fishing Boat	Non-operate and travelling	91	56	50	32	47	20	22.3023	113.9717	748.91	46.52
26-Sep-13	10:52:46	Transportation Boat	Travelling	90	39	10	353	12	10	22.3179	113.9691	2266.20	6.93
26-Sep-13	10:52:58	Transportation Boat	Travelling	95	11	40	344	23	20	22.3001	113.9663	279.65	358.12
26-Sep-13	10:53:06	Transportation Boat	Travelling	91	1	0	318	24	20	22.3091	113.9598	1441.43	332.14
26-Sep-13	10:53:26	Fishing Boat	Operate and travelling	92	22	30	16	5	30	22.3024	113.9694	613.51	29.82
26-Sep-13	10:53:39	Fishing Boat	Operate and travelling	92	2	0	16	52	10	22.3032	113.9700	717.00	30.60
26-Sep-13	10:55:08	Transportation Boat	Travelling	91	3	50	293	9	10	22.3051	113.9557	1376.46	306.88
26-Sep-13	10:55:28	Research Vessel	Travelling	90	45	0	29	31	40	22.3105	113.9795	1964.38	43.26
26-Sep-13	10:56:15	Transportation Boat	Travelling	90	59	30	279	52	30	22.3029	113.9532	1477.93	293.60
26-Sep-13	10:56:43	Fishing Boat	Operate and travelling	92	50	0	21	1	40	22.3014	113.9692	513.84	34.76
26-Sep-13	10:56:54	Fishing Boat	Operate and travelling	92	4	10	26	44	40	22.3024	113.9708	704.28	40.47

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
26-Sep-13	10:57:05	Research Vessel	Travelling	90	54	20	24	4	40	22.3091	113.9761	1620.59	37.81
26-Sep-13	11:00:19	Transportation Boat	Travelling	90	44	0	345	46	20	22.3157	113.9662	2009.43	359.50
26-Sep-13	11:00:29	Research Vessel	Travelling	91	30	30	0	16	50	22.3061	113.9687	967.53	14.01
26-Sep-13	11:01:28	Research Vessel	Travelling	91	38	10	348	49	50	22.3056	113.9668	891.48	2.56
26-Sep-13	11:02:00	Transportation Boat	Travelling	90	54	50	332	10	40	22.3116	113.9626	1605.00	345.91
26-Sep-13	11:02:34	Fishing Boat	Operate and travelling	92	37	10	11	22	10	22.3021	113.9687	555.71	25.10
26-Sep-13	11:02:44	Fishing Boat	Operate and travelling	92	6	30	15	54	20	22.3030	113.9697	690.94	29.64
26-Sep-13	11:03:53	Transportation Boat	Travelling	91	2	30	308	0	10	22.3075	113.9579	1405.30	321.73
26-Sep-13	11:04:04	Research Vessel	Travelling	91	0	20	347	36	40	22.3107	113.9667	1456.41	1.34
26-Sep-13	11:06:08	Transportation Boat	Travelling	90	55	50	278	8	50	22.3029	113.9522	1575.32	291.88
26-Sep-13	11:06:22	Research Vessel	Travelling	90	45	40	349	7	40	22.3150	113.9673	1933.49	2.86
26-Sep-13	11:09:34	Transportation Boat	Travelling	92	6	30	317	23	30	22.3031	113.9632	690.60	331.12
26-Sep-13	11:10:20	Fishing Boat	Operate and travelling	93	22	0	17	50	0	22.3009	113.9686	431.77	31.56
26-Sep-13	11:10:32	Fishing Boat	Operate and travelling	92	21	0	22	41	10	22.3021	113.9700	619.30	36.42
26-Sep-13	11:11:17	Transportation Boat	Travelling	93	26	0	330	0	30	22.3013	113.9652	423.33	343.74
26-Sep-13	11:14:25	Transportation Boat	Travelling	95	31	50	345	43	0	22.3000	113.9664	262.15	359.45
26-Sep-13	11:14:53	HSF High Speed Ferry	Travelling	90	36	10	351	59	40	22.3196	113.9688	2457.08	5.72
26-Sep-13	11:15:54	Fishing Boat	Operate and travelling	93	5	20	23	41	0	22.3010	113.9692	470.54	37.41
26-Sep-13	11:16:05	Fishing Boat	Operate and travelling	92	37	30	15	58	10	22.3020	113.9691	553.99	29.70
26-Sep-13	11:16:39	HSF High Speed Ferry	Travelling	90	51	0	340	14	0	22.3131	113.9646	1725.98	353.96
26-Sep-13	11:16:50	Transportation Boat	Travelling	93	26	10	309	44	50	22.3007	113.9640	422.81	323.48
26-Sep-13	11:18:17	Transportation Boat	Travelling	90	43	10	347	12	10	22.3160	113.9667	2046.55	0.93
26-Sep-13	11:18:26	HSF High Speed Ferry	Travelling	91	3	20	309	55	40	22.3077	113.9584	1385.12	323.66
26-Sep-13	11:20:00	HSF High Speed Ferry	Travelling	90	57	0	279	42	10	22.3031	113.9526	1541.04	293.43
26-Sep-13	11:20:11	Transportation Boat	Travelling	91	41	20	306	33	20	22.3036	113.9610	862.31	320.29
26-Sep-13	11:20:28	Transportation Boat	Travelling	90	55	10	331	40	40	22.3115	113.9625	1593.01	345.41
26-Sep-13	11:22:39	Transportation Boat	Travelling	91	2	50	306	44	30	22.3073	113.9578	1395.85	320.47
26-Sep-13	11:25:33	Transportation Boat	Travelling	92	38	30	289	6	50	22.3003	113.9619	550.11	302.84
26-Sep-13	11:41:18	Transportation Boat	Travelling	91	2	40	313	39	40	22.3082	113.9591	1397.72	327.39
26-Sep-13	11:41:29	Speed Boat	Travelling	91	6	0	356	31	30	22.3094	113.9687	1326.30	10.25
26-Sep-13	11:43:37	Speed Boat	Travelling	91	55	0	3	29	40	22.3041	113.9686	758.09	17.22
26-Sep-13	11:45:00	Transportation Boat	Travelling	90	45	40	345	12	30	22.3150	113.9661	1928.04	358.94
26-Sep-13	11:45:13	Fishing Boat	Non-operate and travelling	93	35	0	351	23	30	22.3012	113.9668	404.55	5.12
26-Sep-13	11:45:30	Fishing Boat	Operate and travelling	92	16	20	39	41	20	22.3010	113.9714	638.96	53.42
26-Sep-13	11:45:45	Speed Boat	Travelling	92	28	10	6	33	10	22.3026	113.9684	587.75	20.28
26-Sep-13	11:47:06	Transportation Boat	Travelling	90	36	0	351	47	30	22.3197	113.9687	2463.05	5.52
26-Sep-13	11:47:16	Speed Boat	Travelling	91	47	30	10	58	20	22.3043	113.9697	811.02	24.70
26-Sep-13	11:48:29	Fishing Boat	Non-operate and travelling	92	17	10	280	9	0	22.2999	113.9608	634.92	293.88
26-Sep-13	11:49:33	Delete	Operate and travelling	91	57	20	1	41	0	22.3041	113.9683	742.64	15.41
26-Sep-13	11:51:17	Fishing Boat	Non-operate and travelling	94	55	50	357	54	10	22.3002	113.9670	293.47	11.63
26-Sep-13	11:51:28	Speed Boat	Stationary	92	24	20	9	35	30	22.3026	113.9687	603.16	23.32
26-Sep-13	11:56:19	Speed Boat	Travelling	91	10	40	28	4	0	22.3059	113.9744	1236.49	41.80
26-Sep-13	11:57:18	Speed Boat	Travelling	92	23	10	355	21	10	22.3030	113.9673	607.83	9.08
26-Sep-13	11:57:48	Speed Boat	Travelling	92	37	0	313	11	0	22.3018	113.9635	554.09	326.91
26-Sep-13	11:58:00	Transportation Boat	Travelling	91	18	10	296	34	0	22.3041	113.9581	1116.71	310.30
26-Sep-13	11:58:15	Speed Boat	Travelling	91	51	50	285	15	0	22.3010	113.9598	778.83	298.98
26-Sep-13	11:58:29	Tug Boat	Travelling	90	44	50	345	5	40	22.3153	113.9660	1962.81	358.82
26-Sep-13	11:58:45	Speed Boat	Stationary	92	29	0	9	54	0	22.3024	113.9687	583.90	23.63
26-Sep-13	12:00:21	Speed Boat	Stationary	92	27	0	8	55	30	22.3025	113.9686	591.80	22.65
26-Sep-13	12:00:44	Other	Stationary	92	28	10	8	50	10	22.3025	113.9686	587.11	22.57
26-Sep-13	12:01:06	Transportation Boat	Travelling	91	4	0	334	31	40	22.3097	113.9637	1366.28	348.26
26-Sep-13	12:01:16	Tug Boat	Travelling	91	0	10	322	19	30	22.3096	113.9607	1454.45	336.05
26-Sep-13	12:03:25	Tug Boat	Travelling	91	1	30	296	39	40	22.3059	113.9559	1422.28	310.39
26-Sep-13	12:03:32	Transportation Boat	Travelling	90	44	30	347	31	10	22.3154	113.9668	1977.14	1.25
26-Sep-13	12:05:04	Tug Boat	Travelling	90	54	30	279	9	20	22.3032	113.9520	1607.59	292.89
26-Sep-13	12:05:17	Transportation Boat	Travelling	90	36	10	352	30	20	22.3195	113.9690	2448.00	6.24
26-Sep-13	12:06:03	Speed Boat	Travelling	92	23	10	6	16	10	22.3028	113.9684	607.45	20.00
26-Sep-13	12:07:57	Speed Boat	Travelling	91	15	40	350	59	30	22.3080	113.9673	1153.09	4.72
26-Sep-13	12:09:15	Speed Boat	Travelling	90	56	0	347	58	40	22.3117	113.9669	1563.37	1.71
26-Sep-13	12:11:14	Fishing Boat	Non-Operate and travelling	91	26	30	340	30	20	22.3066	113.9654	1007.40	354.24
26-Sep-13	12:11:34	Speed Boat	Travelling	90	37	50	351	27	50	22.3185	113.9685	2335.26	5.19
26-Sep-13	12:13:07	Fishing Boat	Non-operate and travelling	91	23	0	13	42	50	22.3060	113.9711	1050.04	27.44
26-Sep-13	12:14:28	Fishing Boat	Non-operate and travelling	91	7	30	29	15	40	22.3061	113.9750	1293.40	42.99
26-Sep-13	12:16:05	Fishing Boat	Non-operate and travelling	90	56	30	34	25	40	22.3069	113.9776	1548.56	48.16
26-Sep-13	12:22:59	Tug Boat	Travelling	91	1	50	298	12	20	22.3061	113.9562	1412.50	311.94
26-Sep-13	12:23:12	Tug Boat	Travelling	90	53	0	8	35	50	22.3114	113.9725	1651.68	22.33
26-Sep-13	12:25:44	Tug Boat	Travelling	90	39	50	354	18	10	22.3173	113.9694	2211.96	8.03
26-Sep-13	12:26:05	Tug Boat	Travelling	90	57	50	329	19	30	22.3106	113.9621	1511.23	343.05
26-Sep-13	12:28:11	Tug Boat	Travelling	90	48	40	344	11	50	22.3138	113.9658	1800.98	357.93
26-Sep-13	12:28:26	Tug Boat	Travelling	90	47	40	348	57	40	22.3142	113.9672	1839.53	2.69
26-Sep-13	12:30:45	Delete	Travelling	90	36	40	351	50	40	22.3192	113.9687	2408.85	5.57
26-Sep-13	12:30:54	Tug Boat	Travelling	90	58	20	329	11	40	22.3105	113.9621	1497.57	342.92
26-Sep-13	12:31:15	Transportation Boat	Travelling	91	1	0	289	19	10	22.3046	113.9547	1431.19	303.05
26-Sep-13	12:33:15	Transportation Boat	Travelling	90	55	50	305	17	30	22.3083	113.9564	1565.37	319.02
26-Sep-13	12:33:23	Tug Boat	Travelling	91	1	50	304	8	0	22.3070	113.9572	1411.43	317.86
26-Sep-13	12:34:33	Tug Boat	Travelling	90	45	20	352	58	40	22.3149	113.9686	1935.53	6.71
26-Sep-13	12:34:43	Construction Boat	Travelling	90	44	10	353	29	10	22.3154	113.9688	1987.89	7.22
26-Sep-13	12:35:59	Tug Boat	Travelling	90	56	30	284	28	50	22.3042	113.9531	1546.31	298.21
26-Sep-13	12:36:07	Transportation Boat	Travelling	90	49	40	340	3	0	22.3134	113.9645	1762.97	353.78
26-Sep-13	12:36:36	Government Boat	Travelling	91	21	20	32	25	40	22.3043	113.9739	1069.89	46.16
26-Sep-13	12:37:43	Government Boat	Travelling	93	27	50	9	35	0	22.3011	113.9680	416.97	23.31
26-Sep-13	12:38:07	Government Boat	Travelling	94	29	0	7	10	0	22.3003	113.9675	321.81	20.90
26-Sep-13	12:38:22	Transportation Boat	Travelling	91	3	20	321	43	40	22.3089	113.9608	1377.10	335.46
26-Sep-13	12:38:34	Tug Boat	Travelling	90	50	10	342	0	20	22.3133	113.9651	1744.75	355.74
26-Sep-13	12:38:43	Construction Boat	Travelling	90	49	10	342	45	10	22.3136	113.9653	1780.92	356.48
26-Sep-13	12:42:04	Transportation Boat	Travelling	90	58	20	280	5	40	22.3031	113.9531	1496.34	293.82
26-Sep-13	12:47:32	Tug Boat	Travelling	91	8	20	318	50	50	22.3078	113.9607	1274.39	332.58
26-Sep-13	12:47:40	Construction Boat	Travelling	91	6	50	320	8	30	22.3081	113.9608	1303.29	333.87
26-Sep-13	12:47:52	Tug Boat	Travelling	91	4	10	308	11	10	22.3072	113.9583	1358.06	321.92
26-Sep-13	12:56:18	Tug Boat	Travelling	90	36	20	354	7	40	22.3193	113.9696	2427.19	7.86
26-Sep-13	12:59:24	Transportation Boat	Travelling	92	13	20	312	21	40	22.3025	113.9629	649.89	326.09
26-Sep-13	13:00:42	Speed Boat	Travelling	90	53	20	337	21	50	22.3122	113.9639	1636.68	351.09
26-Sep-13	13:01:31	Speed Boat	Travelling	91	1	20	319	24	50	22.3090	113.9602	1420.17	333.14
26-Sep-13	13:01:42	Transportation Boat	Travelling	95	32	50	346	50	40	22.3000	113.9664	259.33	0.57
26-Sep-13	13:02:06	Speed Boat	Travelling	91	0	30	304	28	20	22.3073	113.9571	1439.93	318.20
26-Sep-13	13:03:01	Speed Boat	Travelling	90	52	0	284	4	20	22.3047	113.9520	1679.11	297.80
26-Sep-13	13:09:34	Transportation Boat	Travelling	90	40	30	348	48	40	22.3171	113.9673	2167.45	2.54
26-Sep-13	13:12:45	Government Boat	Travelling	94	59	0	337	43	20	22.3002	113.9660	288.64	351.45
26-Sep-13	13:13:19	Transportation Boat	Travelling	90	57	0	328	33	40	22.3107	113.9619	1528.37	342.29
26-Sep-13	13:14:04	Fishing Boat	Non-operate and travelling	92	9	20	26	3	20	22.3022	113.9706	669.36	39.79
26-Sep-13	13:14:16	Government Boat	Travelling	94	25	40	311	40	10	22.3000	113.9646	325.01	325.40
26-Sep-13	13:15:52	Transportation Boat	Travelling	91	3	10	304	10	40	22.3068	113.9574	1377.00	317.91
26-Sep-13	13:16:02	Speed Boat	Travelling	93	0	0	350	35	20	22.3019	113.9668	480.34	4.32
26-Sep-13	13:16:09	Government Boat	Travelling	93	6	20	292	19	40	22.3001	113.9628	463.95	306.06
26-Sep-13	13:16:55	Government Boat	Travelling	91	40	50	277	51	40	22.3005	113.9586	859.30	291.59
26-Sep-13	13:18:12	Fishing Boat	Non-operate and travelling	92	22	0	298	2	20	22.3013	113.9620	609.26	311.77
26-Sep-13	13:18:23	Transportation Boat	Travelling	90	53	50	281	43	50	22.3039	113.9522	1619.13	295.46
26-Sep-13	13:18:55	Fishing Boat	Non-operate and travelling	91	52	0	280	17	10	22.3005	113.9595	773.13	294.02
26-Sep-13	13:19:09	Container Boat	Travelling	90	48	30	343	8	20	22.3138	113.9654	1800.56	356.87
26-Sep-13	13:24:13	Container Boat	Travelling	90	54	40	305	51	50	22.3085	113.9564	1593.36	319.59
26-Sep-13	13:25:35	Transportation Boat	Travelling	91	32	50	314	46	40	22.3048	113.9617	933.20	328.51
26-Sep-13	13:25:46	Container Boat	Travelling	90	47	50	302	32	20	22.3095	113.9541	1825.29	316.27
26-Sep-13	13:26:39	Speed Boat	Travelling	93	28	50	317	2	30	22.3009	113.9644	413.49	330.77
26-Sep-13	13:27:10	Speed Boat	Travelling	92	37	50	358	0	50	22.3024	113.9675	547.59	11.74
26-Sep-13	13:27:27	Transportation Boat	Travelling	91	31	10	334	29	50	22.3060	113.9645	950.23	348.23
26-Sep-13	13:27:38	Speed Boat	Travelling	91	46	40	15	47	20	22.3040	113.9703	811.45	29.52
26-Sep-13	13:28:24	Speed Boat	Travelling	91	7	20	29	7	40	22.3061	113.9749	1289.67	42.86

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
26-Sep-13	13:28:53	Transportation Boat	Travelling	91	21	50	346	50	0	22.3072	113.9665	1059.27	0.56
26-Sep-13	13:29:05	Speed Boat	Travelling	90	50	20	35	10	20	22.3079	113.9791	1732.43	48.90
26-Sep-13	13:30:13	Tug Boat	Travelling	90	44	0	347	1	30	22.3155	113.9667	1987.49	0.75
26-Sep-13	13:31:03	Transportation Boat	Travelling	91	7	20	0	58	0	22.3088	113.9696	1289.42	14.70
26-Sep-13	13:32:01	Tug Boat	Travelling	90	51	50	335	21	40	22.3125	113.9633	1681.02	349.09
26-Sep-13	13:32:51	Transportation Boat	Travelling	90	54	20	288	1	50	22.3052	113.9531	1602.28	301.76
26-Sep-13	13:33:01	Container Boat	Travelling	90	59	0	288	29	40	22.3047	113.9543	1473.70	302.22
26-Sep-13	13:33:54	Transportation Boat	Travelling	90	56	30	15	3	50	22.3098	113.9736	1539.78	28.79
26-Sep-13	13:34:23	Tug Boat	Travelling	91	1	50	312	55	40	22.3082	113.9589	1405.16	326.66
26-Sep-13	13:34:36	Tug Boat	Travelling	90	43	50	347	24	10	22.3156	113.9668	1994.59	1.13
26-Sep-13	13:35:13	Container Boat	Travelling	91	0	30	307	52	50	22.3078	113.9577	1436.44	321.61
26-Sep-13	13:35:33	Transportation Boat	Travelling	91	4	10	305	47	20	22.3069	113.9579	1353.34	319.52
26-Sep-13	13:35:45	Transportation Boat	Travelling	90	51	20	344	15	40	22.3129	113.9658	1697.23	357.99
26-Sep-13	13:36:15	Transportation Boat	Stationary	90	54	30	16	29	50	22.3100	113.9742	1596.91	30.23
26-Sep-13	13:37:30	Tug Boat	Travelling	90	54	20	279	44	30	22.3034	113.9521	1601.74	293.47
26-Sep-13	13:37:42	Tug Boat	Travelling	90	58	10	323	45	30	22.3100	113.9608	1494.60	337.49
26-Sep-13	13:37:58	Transportation Boat	Travelling	91	1	10	327	27	0	22.3097	113.9619	1420.30	341.18
26-Sep-13	13:38:06	Transportation Boat	Travelling	91	6	0	320	5	30	22.3082	113.9608	1315.07	333.82
26-Sep-13	13:38:26	Other	Travelling	90	56	10	334	38	40	22.3113	113.9634	1548.54	348.37
26-Sep-13	13:41:06	Transportation Boat	Travelling	94	21	50	346	36	30	22.3006	113.9664	329.15	0.34
26-Sep-13	13:41:13	Transportation Boat	Travelling	90	44	40	344	53	10	22.3152	113.9659	1955.51	358.62
26-Sep-13	13:41:25	Transportation Boat	Travelling	90	59	20	279	49	30	22.3029	113.9533	1464.41	293.55
26-Sep-13	13:41:39	Tug Boat	Travelling	90	56	0	280	5	50	22.3033	113.9526	1552.85	293.83
26-Sep-13	13:41:51	Container Boat	Travelling	90	44	50	355	34	30	22.3149	113.9695	1947.98	9.30
26-Sep-13	13:42:10	Transportation Boat	Travelling	90	42	40	348	40	10	22.3160	113.9672	2049.43	2.40
26-Sep-13	13:45:32	Transportation Boat	Travelling	91	10	30	311	32	20	22.3067	113.9596	1229.62	325.27
26-Sep-13	13:45:55	Transportation Boat	Travelling	91	1	30	319	46	20	22.3090	113.9603	1411.68	333.50
26-Sep-13	13:46:14	Government Boat	Travelling	90	49	10	342	38	30	22.3135	113.9653	1772.12	356.37
26-Sep-13	13:46:27	Container Boat	Travelling	90	34	0	15	5	40	22.3180	113.9786	2591.03	28.82
26-Sep-13	13:47:01	Transportation Boat	Travelling	90	55	40	307	30	0	22.3086	113.9569	1561.68	321.23
26-Sep-13	13:48:14	Transportation Boat	Travelling	91	2	50	290	56	30	22.3047	113.9554	1381.12	304.67
26-Sep-13	13:48:23	Government Boat	Travelling	91	2	10	312	36	0	22.3081	113.9589	1396.10	326.33
26-Sep-13	13:50:04	Government Boat	Travelling	90	57	40	284	28	10	22.3040	113.9535	1506.38	298.20
26-Sep-13	13:51:55	Tug Boat	Travelling	90	36	0	352	11	30	22.3195	113.9688	2440.44	5.92
26-Sep-13	13:56:54	Tug Boat	Travelling	90	56	20	329	35	10	22.3109	113.9621	1541.80	343.32
26-Sep-13	13:57:48	Other	Stationary	91	10	30	316	1	0	22.3072	113.9604	1228.51	329.75
26-Sep-13	13:58:00	Other	Stationary	90	29	30	347	55	40	22.3247	113.9672	3005.02	1.66
26-Sep-13	13:58:15	Other	Stationary	90	35	30	356	53	0	22.3195	113.9708	2474.99	10.61
26-Sep-13	13:58:26	Other	Stationary	90	37	0	357	51	10	22.3185	113.9710	2370.93	11.58
26-Sep-13	13:58:37	Other	Stationary	90	37	20	358	21	30	22.3183	113.9712	2348.98	12.09
26-Sep-13	13:58:52	Other	Stationary	90	34	10	358	57	20	22.3202	113.9719	2575.47	12.69
26-Sep-13	13:59:09	Other	Stationary	90	54	40	349	36	10	22.3119	113.9673	1589.28	3.33
26-Sep-13	13:59:16	Other	Stationary	90	55	0	351	13	0	22.3118	113.9677	1579.49	4.95
26-Sep-13	13:59:32	Other	Stationary	91	8	50	1	41	30	22.3085	113.9697	1258.40	15.42
26-Sep-13	13:59:39	Other	Stationary	91	11	10	3	56	50	22.3081	113.9700	1216.73	17.68
26-Sep-13	13:59:48	Other	Stationary	90	31	20	0	25	10	22.3222	113.9731	2819.52	14.15
26-Sep-13	13:59:54	Other	Stationary	90	31	50	2	5	20	22.3216	113.9738	2773.01	15.82
26-Sep-13	14:00:01	Other	Stationary	90	29	20	2	51	30	22.3237	113.9748	3022.64	16.59
26-Sep-13	14:00:05	Other	Stationary	90	29	20	4	10	30	22.3235	113.9754	3022.63	17.90
26-Sep-13	14:00:17	Other	Stationary	90	53	10	16	10	30	22.3104	113.9743	1634.74	29.90
26-Sep-13	14:00:22	Other	Stationary	90	54	10	17	16	30	22.3100	113.9744	1604.05	31.00
26-Sep-13	14:00:52	Other	Stationary	90	29	0	357	18	0	22.3246	113.9721	3059.27	11.03
26-Sep-13	14:01:00	Other	Stationary	91	9	20	1	41	30	22.3085	113.9696	1249.10	15.42
26-Sep-13	14:01:10	Other	Stationary	90	33	0	8	58	0	22.3198	113.9764	2670.15	22.70
26-Sep-13	14:01:20	Other	Stationary	90	43	30	7	59	50	22.3144	113.9736	2006.31	21.73
26-Sep-13	14:01:31	Other	Stationary	90	47	0	9	44	0	22.3129	113.9736	1853.47	23.46
03-Oct-13	8:03:05	Other	Stationary	94	26	0	0	0	0	22.3004	113.9671	312.92	13.73
03-Oct-13	8:05:24	Other	Stationary	90	30	10	290	18	30	22.3119	113.9435	2835.10	304.04
03-Oct-13	8:05:33	Other	Stationary	90	37	30	294	43	50	22.3103	113.9492	2259.53	308.46
03-Oct-13	8:05:41	Other	Stationary	90	41	20	295	46	10	22.3093	113.9511	2043.87	309.50
03-Oct-13	8:05:47	Other	Stationary	90	46	30	298	3	40	22.3085	113.9533	1811.54	311.79
03-Oct-13	8:05:54	Other	Stationary	90	49	40	300	33	0	22.3083	113.9546	1693.77	314.28
03-Oct-13	8:05:59	Other	Stationary	90	54	20	303	28	20	22.3078	113.9562	1545.88	317.20
03-Oct-13	8:06:06	Other	Stationary	90	57	10	304	53	50	22.3075	113.9570	1468.12	318.63
03-Oct-13	8:06:17	Other	Stationary	90	57	10	304	54	0	22.3075	113.9570	1468.10	318.63
03-Oct-13	8:06:34	Other	Stationary	90	49	50	308	7	30	22.3096	113.9563	1687.89	321.85
03-Oct-13	8:06:45	Other	Stationary	90	49	50	308	7	20	22.3096	113.9563	1687.87	321.85
03-Oct-13	8:06:50	Other	Stationary	90	54	0	310	8	20	22.3089	113.9575	1555.45	323.87
03-Oct-13	8:06:57	Other	Stationary	90	55	50	313	50	10	22.3090	113.9586	1503.59	327.57
03-Oct-13	8:07:04	Other	Stationary	90	54	30	317	37	0	22.3098	113.9592	1540.92	331.35
03-Oct-13	8:07:12	Other	Stationary	90	53	30	322	49	30	22.3106	113.9603	1570.17	336.55
03-Oct-13	8:07:17	Other	Stationary	90	52	10	326	36	0	22.3113	113.9611	1610.97	340.33
03-Oct-13	8:07:24	Other	Stationary	90	50	30	330	31	0	22.3120	113.9620	1665.08	344.25
03-Oct-13	8:07:30	Other	Stationary	90	48	0	335	7	20	22.3131	113.9631	1753.50	348.85
03-Oct-13	8:07:35	Other	Stationary	90	44	10	338	35	10	22.3146	113.9639	1909.17	352.32
03-Oct-13	8:07:40	Other	Stationary	90	41	0	341	26	10	22.3161	113.9647	2060.58	355.17
03-Oct-13	8:07:46	Other	Stationary	90	39	30	344	26	30	22.3169	113.9657	2141.13	358.17
03-Oct-13	8:07:51	Other	Stationary	90	37	50	347	38	30	22.3178	113.9669	2238.49	1.37
03-Oct-13	8:08:01	Other	Stationary	90	32	0	350	38	20	22.3215	113.9684	2664.13	4.37
03-Oct-13	8:08:10	Other	Stationary	90	29	0	352	1	30	22.3241	113.9693	2954.92	5.75
03-Oct-13	8:08:26	Other	Stationary	90	28	10	348	10	30	22.3250	113.9674	3047.60	1.90
03-Oct-13	8:08:33	Other	Stationary	90	28	10	348	10	30	22.3250	113.9674	3047.56	1.90
03-Oct-13	8:08:42	Other	Stationary	90	28	50	352	2	30	22.3242	113.9693	2972.85	5.77
03-Oct-13	8:09:03	Other	Stationary	90	28	10	348	7	0	22.3250	113.9674	3047.43	1.85
03-Oct-13	8:09:12	Other	Stationary	90	27	50	347	0	10	22.3254	113.9668	3086.19	0.73
03-Oct-13	8:09:18	Other	Stationary	90	27	20	345	2	10	22.3259	113.9657	3146.32	358.77
03-Oct-13	8:09:24	Other	Stationary	90	27	20	342	20	20	22.3259	113.9643	3146.29	356.07
03-Oct-13	8:09:34	Other	Stationary	90	26	50	337	42	30	22.3262	113.9618	3208.87	351.44
03-Oct-13	8:09:46	Other	Stationary	90	27	0	333	11	30	22.3256	113.9594	3187.65	346.92
03-Oct-13	8:09:53	Other	Stationary	90	25	10	326	15	10	22.3267	113.9550	3437.59	339.98
03-Oct-13	8:10:00	Other	Stationary	90	24	0	323	31	0	22.3277	113.9528	3619.06	337.25
03-Oct-13	8:10:10	Other	Stationary	90	24	30	320	10	40	22.3262	113.9513	3538.83	333.91
03-Oct-13	8:10:19	Other	Stationary	90	24	50	316	46	50	22.3249	113.9497	3487.36	330.51
03-Oct-13	8:10:28	Other	Stationary	90	25	20	313	51	50	22.3235	113.9486	3413.01	327.59
03-Oct-13	8:10:33	Other	Stationary	90	26	20	311	42	30	22.3219	113.9483	3273.84	325.44
03-Oct-13	8:10:41	Other	Stationary	90	26	20	310	34	0	22.3215	113.9478	3273.81	324.30
03-Oct-13	8:11:20	Other	Stationary	91	5	10	332	37	0	22.3089	113.9634	1285.18	346.35
03-Oct-13	8:11:37	Other	Stationary	90	27	40	347	21	50	22.3256	113.9670	3105.29	1.09
03-Oct-13	8:11:46	Other	Stationary	90	27	40	357	14	40	22.3251	113.9722	3105.25	10.97
03-Oct-13	8:11:53	Other	Stationary	90	30	40	357	21	30	22.3222	113.9716	2784.83	11.09
03-Oct-13	8:12:01	Other	Stationary	90	36	10	357	28	30	22.3183	113.9708	2344.43	11.20
03-Oct-13	8:12:24	Other	Stationary	90	37	50	358	8	40	22.3173	113.9709	2237.58	11.87
03-Oct-13	8:12:37	Other	Stationary	90	29	40	0	18	20	22.3228	113.9732	2883.61	14.04
03-Oct-13	8:12:50	Other	Stationary	90	32	10	2	38	10	22.3205	113.9737	2648.53	16.37
03-Oct-13	8:12:59	Other	Stationary	90	31	0	3	41	10	22.3213	113.9744	2753.09	17.42
03-Oct-13	8:13:12	Other	Stationary	90	27	40	3	13	50	22.3243	113.9752	3104.85	16.96
03-Oct-13	8:13:29	Other	Stationary	90	51	50	352	36	50	22.3121	113.9681	1620.61	6.34
03-Oct-13	8:13:37	Other	Stationary	90	51	30	354	59	0	22.3121	113.9688	1631.27	8.71
03-Oct-13	8:14:11	Other	Stationary	91	11	10	6	32	40	22.3075	113.9704	1175.48	20.27
03-Oct-13	8:14:17	Other	Stationary	91	11	10	9	19	40	22.3074	113.9709	1175.47	23.06
03-Oct-13	8:14:29	Other	Stationary	90	52	0	17	9	30	22.3101	113.9745	1615.18	30.89
03-Oct-13	8:14:36	Other	Stationary	90	51	40	17	50	50	22.3101	113.9747	1625.77	31.58
03-Oct-13	8:14:52	Other	Stationary	91	4	10	328	45	10	22.3088	113.9626	1305.02	342.48
03-Oct-13	8:15:06	Other	Stationary	90	51	30	352	36	20	22.3122	113.9682	1631.05	6.34
03-Oct-13	8:15:15	Other	Stationary	91	11	10	5	57	50	22.3076	113.9703	1175.37	19.69
03-Oct-13	8:15:36	Tug Boat	Travelling	90	54	40	337	16	20	22.3113	113.9641	1534.99	351.00
03-Oct-13	8:15:42	Tug Boat	Travelling	90	58	50	9	18	0	22.3094	113.9718	1424.75	23.03

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
03-Oct-13	8:15:51	HSF High Speed Ferry	Travelling	90	48	20	339	0	0	22.3132	113.9643	1739.86	352.73
03-Oct-13	8:16:24	Transportation Boat	Travelling	94	34	20	342	55	50	22.3003	113.9662	303.01	356.66
03-Oct-13	8:16:48	HSF High Speed Ferry	Travelling	90	56	0	325	10	0	22.3102	113.9612	1497.73	338.90
03-Oct-13	8:17:06	Tug Boat	Travelling	90	46	50	347	46	0	22.3138	113.9669	1796.55	1.50
03-Oct-13	8:17:13	Tug Boat	Travelling	91	10	20	5	13	30	22.3077	113.9702	1189.22	18.95
03-Oct-13	8:17:46	Transportation Boat	Travelling	92	27	10	326	12	20	22.3024	113.9645	566.05	339.94
03-Oct-13	8:18:00	Tug Boat	Travelling	90	57	50	292	3	0	22.3052	113.9550	1449.43	305.78
03-Oct-13	8:18:11	HSF High Speed Ferry	Travelling	91	1	50	299	27	50	22.3060	113.9568	1354.46	313.19
03-Oct-13	8:19:16	HSF High Speed Ferry	Travelling	90	53	20	281	36	50	22.3037	113.9526	1573.46	295.34
03-Oct-13	8:20:17	Tug Boat	Travelling	91	11	40	1	0	0	22.3078	113.9693	1166.57	14.73
03-Oct-13	8:20:23	Other	Travelling	91	13	30	2	11	30	22.3075	113.9694	1137.21	15.92
03-Oct-13	8:21:06	Tug Boat	Travelling	90	57	40	321	37	50	22.3095	113.9605	1453.27	335.36
03-Oct-13	8:21:15	Transportation Boat	Travelling	91	5	20	312	19	40	22.3072	113.9594	1280.74	326.06
03-Oct-13	8:21:47	Transportation Boat	Travelling	91	7	20	316	31	50	22.3073	113.9604	1242.24	330.26
03-Oct-13	8:22:11	Transportation Boat	Travelling	90	57	0	309	46	10	22.3083	113.9579	1470.37	323.50
03-Oct-13	8:22:27	Speed Boat	Travelling	91	11	30	313	45	40	22.3065	113.9603	1169.09	327.49
03-Oct-13	8:23:32	Tug Boat	Travelling	90	53	10	359	20	40	22.3115	113.9699	1577.88	13.07
03-Oct-13	8:23:42	Other	Travelling	90	57	40	359	11	40	22.3104	113.9696	1452.93	12.92
03-Oct-13	8:23:51	Tug Boat	Travelling	90	48	0	342	57	40	22.3134	113.9654	1750.93	356.69
03-Oct-13	8:24:03	Transportation Boat	Travelling	90	44	40	344	11	50	22.3146	113.9657	1884.52	357.93
03-Oct-13	8:24:11	Transportation Boat	Travelling	90	49	10	343	32	30	22.3130	113.9656	1708.52	357.27
03-Oct-13	8:24:37	Speed Boat	Travelling	91	3	40	332	7	20	22.3091	113.9633	1314.25	345.85
03-Oct-13	8:25:15	Transportation Boat	Travelling	90	43	10	352	39	0	22.3151	113.9685	1951.41	6.38
03-Oct-13	8:25:26	Transportation Boat	Travelling	90	53	40	331	57	40	22.3112	113.9626	1562.67	345.69
03-Oct-13	8:25:34	Transportation Boat	Travelling	90	46	0	341	28	50	22.3140	113.9649	1828.42	355.21
03-Oct-13	8:26:00	Speed Boat	Travelling	91	0	50	323	35	10	22.3090	113.9612	1376.04	337.32
03-Oct-13	8:27:00	Speed Boat	Travelling	90	55	30	310	14	10	22.3086	113.9578	1510.05	323.97
03-Oct-13	8:27:11	Transportation Boat	Travelling	91	0	20	309	37	0	22.3076	113.9583	1387.45	323.35
03-Oct-13	8:27:21	Transportation Boat	Travelling	90	53	10	331	31	10	22.3113	113.9625	1577.34	345.25
03-Oct-13	8:28:04	Transportation Boat	Travelling	90	39	10	356	40	0	22.3167	113.9702	2155.98	10.40
03-Oct-13	8:28:38	Tug Boat	Travelling	90	37	20	355	0	40	22.3178	113.9697	2265.24	8.74
03-Oct-13	8:28:47	Other	Travelling	90	40	0	354	56	40	22.3164	113.9695	2109.59	8.67
03-Oct-13	8:28:56	Tug Boat	Travelling	90	31	40	357	7	10	22.3214	113.9713	2688.42	10.85
03-Oct-13	8:29:09	Transportation Boat	Travelling	90	53	30	284	25	30	22.3043	113.9530	1567.10	298.15
03-Oct-13	8:29:17	Transportation Boat	Travelling	90	58	50	316	0	0	22.3087	113.9594	1423.02	329.73
03-Oct-13	8:29:24	Transportation Boat	Travelling	90	45	20	345	41	10	22.3143	113.9662	1855.28	359.42
03-Oct-13	8:29:47	Transportation Boat	Travelling	90	43	30	350	47	0	22.3150	113.9679	1935.30	4.51
03-Oct-13	8:31:13	Transportation Boat	Travelling	91	0	0	298	42	30	22.3061	113.9564	1394.75	312.44
03-Oct-13	8:31:19	Transportation Boat	Travelling	90	56	0	324	54	40	22.3102	113.9611	1495.79	338.64
03-Oct-13	8:31:25	Transportation Boat	Travelling	90	51	40	334	25	40	22.3119	113.9632	1623.33	348.16
03-Oct-13	8:31:53	Transportation Boat	Travelling	90	41	40	351	49	0	22.3157	113.9683	2022.32	5.55
03-Oct-13	8:32:54	HSF High Speed Ferry	Travelling	90	54	50	284	6	0	22.3040	113.9533	1527.89	297.83
03-Oct-13	8:33:05	Transportation Boat	Travelling	90	56	20	282	43	30	22.3036	113.9535	1486.60	296.45
03-Oct-13	8:33:10	Transportation Boat	Travelling	90	58	20	298	21	0	22.3063	113.9560	1434.93	312.08
03-Oct-13	8:33:16	Transportation Boat	Travelling	90	59	20	309	58	50	22.3079	113.9583	1410.44	323.71
03-Oct-13	8:33:22	Transportation Boat	Travelling	90	52	0	335	46	0	22.3119	113.9635	1612.57	349.50
03-Oct-13	8:34:41	Transportation Boat	Travelling	90	52	40	278	59	10	22.3032	113.9521	1592.00	292.72
03-Oct-13	8:34:49	Transportation Boat	Travelling	90	55	40	288	11	30	22.3048	113.9540	1504.90	301.92
03-Oct-13	8:34:54	Transportation Boat	Travelling	91	1	50	312	3	40	22.3077	113.9590	1352.90	325.79
03-Oct-13	8:35:06	HSF High Speed Ferry	Travelling	90	59	30	305	0	10	22.3071	113.9574	1406.67	318.73
03-Oct-13	8:35:39	Transportation Boat	Travelling	90	45	10	346	12	0	22.3144	113.9664	1862.12	359.93
03-Oct-13	8:35:56	HSF High Speed Ferry	Travelling	90	57	0	291	50	50	22.3053	113.9548	1469.33	305.58
03-Oct-13	8:36:48	Transportation Boat	Travelling	90	59	10	279	40	30	22.3027	113.9538	1414.91	293.40
03-Oct-13	8:36:57	Transportation Boat	Travelling	90	52	0	340	17	30	22.3121	113.9648	1613.08	354.02
03-Oct-13	8:37:06	HSF High Speed Ferry	Travelling	90	57	20	325	1	40	22.3099	113.9613	1460.82	338.76
03-Oct-13	8:37:12	HSF High Speed Ferry	Travelling	90	59	20	313	50	50	22.3083	113.9590	1410.93	327.58
03-Oct-13	8:39:31	HSF High Speed Ferry	Travelling	90	46	30	343	6	20	22.3139	113.9654	1808.18	356.84
03-Oct-13	8:39:35	HSF High Speed Ferry	Travelling	90	43	0	344	53	40	22.3152	113.9659	1958.95	358.62
03-Oct-13	8:39:44	Transportation Boat	Travelling	91	3	40	316	28	50	22.3079	113.9600	1314.05	330.21
03-Oct-13	8:39:58	Transportation Boat	Travelling	90	57	40	291	39	40	22.3052	113.9549	1452.63	305.39
03-Oct-13	8:41:34	HSF High Speed Ferry	Travelling	90	36	30	350	36	50	22.3184	113.9681	2319.65	4.34
03-Oct-13	8:41:40	HSF High Speed Ferry	Travelling	90	30	10	354	35	50	22.3228	113.9704	2830.23	8.33
03-Oct-13	8:41:51	Transportation Boat	Travelling	91	0	40	294	44	10	22.3053	113.9559	1380.10	308.47
03-Oct-13	8:41:57	Transportation Boat	Travelling	90	57	40	315	22	50	22.3088	113.9591	1452.89	329.11
03-Oct-13	8:43:28	Transportation Boat	Travelling	91	0	10	295	21	40	22.3055	113.9559	1391.92	309.09
03-Oct-13	8:43:38	Transportation Boat	Travelling	90	53	30	279	9	50	22.3031	113.9523	1568.05	292.89
03-Oct-13	8:43:49	Transportation Boat	Travelling	90	51	40	335	9	50	22.3120	113.9634	1624.67	348.89
03-Oct-13	8:44:19	Transportation Boat	Travelling	90	55	10	306	25	0	22.3081	113.9569	1520.03	320.15
03-Oct-13	8:44:35	Transportation Boat	Travelling	90	59	30	293	19	50	22.3053	113.9555	1407.86	307.06
03-Oct-13	8:44:50	Transportation Boat	Travelling	90	49	20	304	28	40	22.3090	113.9554	1703.10	318.21
03-Oct-13	8:45:01	Construction Boat	Travelling	90	57	40	313	15	30	22.3086	113.9587	1453.29	326.99
03-Oct-13	8:45:22	Transportation Boat	Travelling	90	42	40	345	53	50	22.3154	113.9663	1975.68	359.63
03-Oct-13	8:45:43	Transportation Boat	Travelling	90	57	40	306	27	30	22.3077	113.9573	1453.38	320.19
03-Oct-13	8:46:17	Transportation Boat	Travelling	90	51	20	305	20	40	22.3087	113.9560	1635.76	319.07
03-Oct-13	8:46:25	Transportation Boat	Travelling	90	38	30	351	38	30	22.3173	113.9684	2196.16	5.37
03-Oct-13	8:52:14	Other	Stationary	94	28	0	0	0	0	22.3003	113.9671	310.28	13.73
03-Oct-13	8:52:30	Government Boat	Travelling	91	9	30	359	1	30	22.3082	113.9690	1205.59	12.75
03-Oct-13	8:52:40	Construction Boat	Travelling	90	40	50	350	32	40	22.3162	113.9679	2070.92	4.27
03-Oct-13	8:53:03	Government Boat	Travelling	91	42	10	322	27	50	22.3044	113.9632	817.98	336.19
03-Oct-13	8:53:31	Government Boat	Travelling	91	23	10	282	11	0	22.3016	113.9576	1006.14	295.91
03-Oct-13	8:53:54	Construction Boat	Travelling	90	38	0	354	55	0	22.3175	113.9697	2230.65	8.65
03-Oct-13	9:00:09	Tug Boat	Travelling	90	35	20	355	11	0	22.3190	113.9700	2407.57	8.91
03-Oct-13	9:01:21	Tug Boat	Travelling	90	38	20	357	50	40	22.3171	113.9707	2213.21	11.57
03-Oct-13	9:02:28	Speed Boat	Travelling	91	0	0	310	11	20	22.3078	113.9584	1400.96	323.92
03-Oct-13	9:02:40	Tug Boat	Stationary	90	38	20	358	46	10	22.3171	113.9711	2213.67	12.50
03-Oct-13	9:03:28	Speed Boat	Travelling	90	55	10	316	48	40	22.3096	113.9591	1525.74	330.54
03-Oct-13	9:04:28	Tug Boat	Travelling	90	35	30	1	25	30	22.3184	113.9725	2397.47	15.15
03-Oct-13	9:06:10	Transportation Boat	Travelling	90	37	50	23	16	10	22.3138	113.9795	2245.13	37.00
03-Oct-13	9:08:43	Transportation Boat	Travelling	90	52	50	7	2	0	22.3110	113.9719	1595.54	20.76
03-Oct-13	9:08:54	Transportation Boat	Travelling	91	2	20	291	13	50	22.3046	113.9556	1349.22	304.96
03-Oct-13	9:09:12	Transportation Boat	Travelling	90	34	30	11	27	30	22.3177	113.9766	2471.56	25.19
03-Oct-13	9:11:24	Transportation Boat	Travelling	91	15	30	335	42	30	22.3075	113.9644	1112.21	349.44
03-Oct-13	9:11:32	Transportation Boat	Travelling	90	58	30	330	52	30	22.3101	113.9627	1439.39	344.60
03-Oct-13	9:11:44	Transportation Boat	Travelling	90	43	0	356	29	0	22.3151	113.9698	1969.73	10.21
03-Oct-13	9:13:32	Transportation Boat	Travelling	91	14	0	300	15	50	22.3047	113.9585	1135.33	313.99
03-Oct-13	9:13:39	Transportation Boat	Travelling	90	41	30	347	50	20	22.3160	113.9669	2043.46	1.57
03-Oct-13	9:13:47	Transportation Boat	Travelling	90	51	50	340	14	40	22.3122	113.9647	1628.13	353.97
03-Oct-13	9:13:56	Transportation Boat	Travelling	90	39	40	347	53	20	22.3169	113.9670	2140.77	1.62
03-Oct-13	9:15:45	Transportation Boat	Travelling	90	59	50	319	23	30	22.3089	113.9602	1407.82	333.12
03-Oct-13	9:15:51	Transportation Boat	Travelling	90	52	0	336	29	40	22.3120	113.9637	1623.34	350.22
03-Oct-13	9:15:59	HSF High Speed Ferry	Travelling	90	43	30	344	51	40	22.3151	113.9659	1947.82	358.59
03-Oct-13	9:16:21	Transportation Boat	Travelling	91	0	30	312	18	20	22.3080	113.9588	1392.23	326.04
03-Oct-13	9:16:28	Transportation Boat	Travelling	90	55	30	330	13	0	22.3108	113.9623	1519.51	343.95
03-Oct-13	9:18:27	HSF High Speed Ferry	Travelling	91	0	40	311	25	10	22.3079	113.9587	1388.81	325.15
03-Oct-13	9:18:38	Transportation Boat	Travelling	90	55	50	285	31	30	22.3043	113.9536	1510.81	299.25
03-Oct-13	9:18:44	Transportation Boat	Travelling	91	1	0	301	7	40	22.3064	113.9569	1381.19	314.86
03-Oct-13	9:19:53	Transportation Boat	Travelling	91	40	30	293	9	30	22.3021	113.9599	835.08	306.89
03-Oct-13	9:20:06	HSF High Speed Ferry	Travelling	90	55	30	282	41	0	22.3037	113.9532	1520.37	296.41
03-Oct-13	9:21:00	Tug Boat	Travelling	90	43	0	350	56	20	22.3153	113.9680	1972.59	4.67
03-Oct-13	9:21:13	Container Boat	Travelling	90	42	50	351	3	40	22.3154	113.9680	1980.52	4.79
03-Oct-13	9:26:44	Transportation Boat	Travelling	91	16	40	12	6	20	22.3065	113.9711	1097.76	25.84
03-Oct-13	9:26:55	Tug Boat	Travelling	91	26	40	357	40	50	22.3062	113.9683	970.25	11.41
03-Oct-13	9:27:03	Container Boat	Travelling	91	25	0	356	42	10	22.3064	113.9681	989.42	10.43
03-Oct-13	9:28:40	Tug Boat	Travelling	91	32	30	0	51	40	22.3055	113.9686	908.95	14.59
03-Oct-13	9:28:49	Container Boat	Travelling	91	35	40	1	2	0	22.3053	113.9686	878.71	14.76
03-Oct-13	9:29:13	Transportation Boat	Travelling	91	9	50	9	43	0	22.3076	113.9711	1206.64	23.45
03-Oct-13	9:29:31	Transportation Boat	Travelling	90	41	40	25	35	30	22.3118	113.9790	2040.12	39.32

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
03-Oct-13	9:29:47	Transportation Boat	Travelling	95	5	10	352	11	50	22.3001	113.9667	274.24	5.93
03-Oct-13	9:31:00	Transportation Boat	Travelling	91	14	0	14	19	20	22.3067	113.9716	1138.40	28.05
03-Oct-13	9:31:08	Transportation Boat	Travelling	91	10	0	23	30	40	22.3062	113.9735	1204.09	37.24
03-Oct-13	9:31:21	Transportation Boat	Travelling	92	12	10	317	58	10	22.3027	113.9635	635.39	331.70
03-Oct-13	9:32:43	Transportation Boat	Travelling	91	27	20	20	7	50	22.3048	113.9716	963.66	33.86
03-Oct-13	9:33:03	Transportation Boat	Travelling	92	2	40	329	50	20	22.3035	113.9645	684.97	343.57
03-Oct-13	9:33:09	Transportation Boat	Travelling	91	14	10	312	12	40	22.3061	113.9602	1136.20	325.94
03-Oct-13	9:33:32	Tug Boat	Travelling	91	19	0	5	53	40	22.3067	113.9699	1066.20	19.62
03-Oct-13	9:33:40	Container Boat	Travelling	91	16	0	7	15	20	22.3069	113.9703	1108.65	20.99
03-Oct-13	9:33:58	Transportation Boat	Stationary	91	26	40	20	58	0	22.3048	113.9718	971.31	34.70
03-Oct-13	9:34:34	Transportation Boat	Stationary	91	16	10	282	59	10	22.3021	113.9568	1106.36	296.72
03-Oct-13	9:34:42	Transportation Boat	Stationary	90	55	10	306	11	50	22.3082	113.9568	1533.17	319.93
03-Oct-13	9:36:10	Tug Boat	Stationary	91	13	0	7	14	50	22.3073	113.9704	1155.06	20.98
03-Oct-13	9:36:18	Container Boat	Stationary	91	11	40	6	26	50	22.3076	113.9703	1176.77	20.18
03-Oct-13	9:39:52	Tug Boat	Travelling	91	9	10	13	24	10	22.3074	113.9718	1220.39	27.13
03-Oct-13	9:40:01	Transportation Boat	Travelling	91	4	10	317	22	30	22.3080	113.9602	1316.57	331.10
03-Oct-13	9:40:09	Transportation Boat	Travelling	90	59	0	290	51	20	22.3049	113.9549	1433.38	304.59
03-Oct-13	9:41:48	Transportation Boat	Travelling	90	50	0	339	43	50	22.3128	113.9645	1696.30	353.46
03-Oct-13	9:41:54	Transportation Boat	Travelling	90	55	50	306	48	30	22.3082	113.9570	1516.28	320.54
03-Oct-13	9:42:57	Transportation Boat	Travelling	90	42	10	347	44	30	22.3158	113.9669	2019.50	1.47
03-Oct-13	9:43:09	Tug Boat	Travelling	91	9	30	329	26	10	22.3081	113.9630	1215.09	343.17
03-Oct-13	9:43:19	Construction Boat	Travelling	91	8	50	330	41	30	22.3083	113.9632	1227.01	344.42
03-Oct-13	9:44:24	Transportation Boat	Travelling	90	33	20	352	31	0	22.3207	113.9691	2575.98	6.25
03-Oct-13	9:44:42	Tug Boat	Travelling	90	55	50	5	52	50	22.3105	113.9714	1516.94	19.61
03-Oct-13	9:44:50	Container Boat	Travelling	90	56	50	6	14	0	22.3102	113.9713	1489.89	19.96
03-Oct-13	9:48:29	Tug Boat	Travelling	90	45	50	358	34	30	22.3139	113.9702	1855.75	12.30
03-Oct-13	9:48:37	Container Boat	Travelling	90	46	40	358	48	40	22.3136	113.9702	1821.93	12.54
03-Oct-13	9:48:51	Tug Boat	Travelling	91	5	30	296	45	20	22.3052	113.9568	1291.23	310.49
03-Oct-13	9:49:01	Container boat	Travelling	91	6	50	297	46	40	22.3052	113.9572	1265.23	311.51
03-Oct-13	9:51:38	Transportation Boat	Travelling	91	37	50	313	26	20	22.3041	113.9619	862.18	327.17
03-Oct-13	9:53:53	Transportation Boat	Travelling	94	27	50	342	5	0	22.3004	113.9662	313.84	355.81
03-Oct-13	9:54:26	Transportation Boat	Travelling	95	38	0	355	0	30	22.2998	113.9668	248.38	8.74
03-Oct-13	9:56:25	Transportation Boat	Travelling	94	7	30	338	10	50	22.3006	113.9659	339.88	351.91
03-Oct-13	9:57:02	Transportation Boat	Travelling	90	47	10	343	6	50	22.3138	113.9654	1804.56	356.84
03-Oct-13	9:59:01	Transportation Boat	Travelling	91	18	20	312	51	30	22.3057	113.9606	1079.58	326.59
03-Oct-13	9:59:09	Transportation Boat	Travelling	90	55	0	331	21	40	22.3110	113.9625	1543.72	345.09
03-Oct-13	10:00:55	Transportation Boat	Travelling	90	52	0	306	24	50	22.3089	113.9562	1634.74	320.14
03-Oct-13	10:01:01	Transportation Boat	Travelling	90	59	50	318	24	10	22.3089	113.9600	1417.72	332.13
03-Oct-13	10:03:04	Tug Boat	Travelling	90	43	20	345	37	10	22.3153	113.9662	1969.89	359.35
03-Oct-13	10:03:14	Construction Boat	Travelling	90	42	30	346	11	40	22.3157	113.9664	2009.57	359.92
03-Oct-13	10:03:24	Transportation Boat	Travelling	90	43	50	348	9	50	22.3151	113.9670	1946.97	1.89
03-Oct-13	10:03:54	Transportation Boat	Travelling	90	58	50	295	50	40	22.3059	113.9556	1442.78	309.57
03-Oct-13	10:05:23	Transportation Boat	Travelling	90	53	30	285	54	50	22.3047	113.9530	1589.24	299.64
03-Oct-13	10:05:33	Government Boat	Travelling	91	0	0	296	11	30	22.3058	113.9558	1414.72	309.92
03-Oct-13	10:05:48	Transportation Boat	Travelling	91	0	10	319	56	30	22.3090	113.9603	1410.80	333.67
03-Oct-13	10:05:57	Transportation Boat	Travelling	91	3	10	319	34	0	22.3084	113.9605	1343.02	333.30
03-Oct-13	10:06:06	Government Boat	Travelling	90	53	30	326	12	50	22.3111	113.9611	1589.41	339.94
03-Oct-13	10:06:50	Government Boat	Travelling	90	38	20	349	22	10	22.3177	113.9676	2236.00	3.10
03-Oct-13	10:07:20	Transportation Boat	Travelling	91	1	50	294	22	30	22.3052	113.9559	1372.62	308.10
03-Oct-13	10:07:31	Transportation Boat	Travelling	90	57	50	332	15	10	22.3104	113.9629	1468.89	345.98
03-Oct-13	10:07:39	Tug Boat	Travelling	90	54	30	329	56	0	22.3111	113.9621	1560.15	343.66
03-Oct-13	10:07:46	Construction Boat	Travelling	90	53	30	331	3	30	22.3114	113.9623	1589.82	344.79
03-Oct-13	10:08:28	Transportation Boat	Travelling	90	53	50	278	3	10	22.3029	113.9521	1579.99	291.78
03-Oct-13	10:08:37	Transportation Boat	Travelling	90	52	0	338	52	30	22.3122	113.9644	1636.68	352.60
03-Oct-13	10:11:32	Transportation Boat	Travelling	90	39	50	349	51	10	22.3169	113.9677	2150.79	3.58
03-Oct-13	10:11:46	Tug Boat	Travelling	91	1	0	309	58	30	22.3077	113.9584	1392.56	323.70
03-Oct-13	10:11:52	Construction Boat	Travelling	91	0	20	311	30	0	22.3080	113.9586	1408.17	325.23
03-Oct-13	10:12:15	Tug Boat	Travelling	90	57	30	311	49	50	22.3086	113.9583	1478.61	325.56
03-Oct-13	10:18:02	Tug Boat	Travelling	90	58	50	277	22	40	22.3023	113.9533	1445.93	291.11
03-Oct-13	10:18:09	Construction Boat	Travelling	90	58	50	278	19	50	22.3025	113.9534	1445.96	292.06
03-Oct-13	10:18:21	Tug Boat	Travelling	91	4	30	326	44	50	22.3088	113.9621	1317.45	340.48
03-Oct-13	10:21:06	Tug Boat	Travelling	90	50	20	337	41	30	22.3127	113.9639	1695.13	351.42
03-Oct-13	10:23:23	Tug Boat	Travelling	91	3	10	324	55	30	22.3089	113.9616	1346.63	338.65
03-Oct-13	10:23:29	Tug Boat	Travelling	90	58	30	318	50	20	22.3092	113.9599	1455.50	332.57
03-Oct-13	10:26:13	Speed Boat	Travelling	90	55	10	349	45	10	22.3115	113.9673	1545.42	3.48
03-Oct-13	10:26:26	Speed Boat	Travelling	90	39	40	350	43	20	22.3170	113.9680	2165.11	4.45
03-Oct-13	10:26:43	Tug Boat	Travelling	90	49	20	305	49	40	22.3095	113.9555	1731.65	319.56
03-Oct-13	10:26:51	Tug Boat	Travelling	90	56	0	287	51	10	22.3048	113.9538	1522.23	301.58
03-Oct-13	10:27:03	Speed Boat	Travelling	90	47	20	349	49	10	22.3138	113.9675	1806.44	3.55
03-Oct-13	10:27:12	Speed Boat	Travelling	90	42	50	345	29	40	22.3156	113.9661	2000.95	359.22
03-Oct-13	10:27:19	Speed Boat	Travelling	91	54	10	330	50	30	22.3041	113.9645	742.34	344.57
03-Oct-13	10:27:26	Speed Boat	Travelling	91	7	50	340	20	10	22.3088	113.9651	1253.77	354.07
03-Oct-13	10:27:30	Speed Boat	Travelling	90	54	10	341	56	30	22.3118	113.9652	1574.72	355.67
03-Oct-13	10:27:38	Speed Boat	Travelling	90	48	40	337	26	20	22.3132	113.9638	1756.10	351.17
03-Oct-13	10:28:22	Speed Boat	Travelling	91	45	0	283	23	10	22.3009	113.9594	807.58	297.12
03-Oct-13	10:28:31	Speed Boat	Travelling	91	6	30	301	25	10	22.3058	113.9576	1279.39	315.15
03-Oct-13	10:28:40	Speed Boat	Travelling	91	0	0	307	30	20	22.3076	113.9578	1419.76	321.24
03-Oct-13	10:28:47	Speed Boat	Travelling	90	57	40	304	28	30	22.3075	113.9568	1478.04	318.20
03-Oct-13	10:29:25	Speed Boat	Travelling	90	54	20	283	55	30	22.3042	113.9529	1570.28	297.65
03-Oct-13	10:29:38	Speed Boat	Travelling	90	41	0	288	17	10	22.3076	113.9491	2093.69	302.02
03-Oct-13	10:29:46	Speed Boat	Travelling	90	46	20	288	19	50	22.3064	113.9512	1847.05	302.06
03-Oct-13	10:29:51	Speed Boat	Travelling	90	45	0	284	34	40	22.3057	113.9501	1903.07	298.31
03-Oct-13	10:39:01	Speed Boat	Travelling	91	21	0	292	56	0	22.3033	113.9582	1050.20	306.66
03-Oct-13	10:39:12	HSF High Speed Ferry	Travelling	90	58	40	288	28	0	22.3046	113.9544	1454.82	302.20
03-Oct-13	10:39:44	Speed Boat	Travelling	90	56	10	300	6	20	22.3071	113.9557	1520.65	313.84
03-Oct-13	10:41:10	HSF High Speed Ferry	Travelling	90	56	0	326	43	40	22.3106	113.9614	1525.58	340.46
03-Oct-13	10:42:29	HSF High Speed Ferry	Travelling	90	44	40	344	51	40	22.3149	113.9659	1921.35	358.59
03-Oct-13	10:42:38	Tug Boat	Travelling	90	39	30	347	59	50	22.3172	113.9670	2179.98	1.73
03-Oct-13	10:43:32	HSF High Speed Ferry	Travelling	90	36	0	351	17	20	22.3191	113.9684	2399.81	5.02
03-Oct-13	10:45:44	Tug Boat	Travelling	90	55	0	329	4	40	22.3110	113.9619	1554.84	342.81
03-Oct-13	10:47:42	Tug Boat	Travelling	91	0	50	309	30	40	22.3077	113.9582	1404.16	323.24
03-Oct-13	10:49:16	Tug Boat	Travelling	90	59	20	291	58	10	22.3052	113.9550	1440.47	305.70
03-Oct-13	10:51:21	Transportation Boat	Travelling	91	5	20	13	7	20	22.3081	113.9721	1307.06	26.85
03-Oct-13	10:51:40	Research Vessel	Travelling	90	57	50	23	27	30	22.3082	113.9751	1478.90	37.19
03-Oct-13	10:51:59	Transportation Boat	Travelling	91	12	30	9	35	10	22.3073	113.9709	1176.73	23.32
03-Oct-13	10:52:51	Transportation Boat	Stationary	91	12	40	9	28	50	22.3073	113.9709	1174.16	23.21
03-Oct-13	10:53:00	Research Vessel	Travelling	91	27	40	6	19	0	22.3058	113.9696	971.88	20.05
03-Oct-13	10:54:42	Research Vessel	Travelling	91	31	40	315	16	0	22.3048	113.9617	929.45	329.00
03-Oct-13	10:55:56	Research Vessel	Travelling	91	7	20	289	2	50	22.3038	113.9560	1268.70	302.78
03-Oct-13	10:56:07	Transportation Boat	Stationary	91	8	40	11	42	10	22.3077	113.9716	1243.85	25.43
03-Oct-13	10:56:25	Research Vessel	Travelling	91	0	0	281	24	0	22.3031	113.9538	1425.82	295.13
03-Oct-13	10:56:34	Tug Boat	Travelling	90	51	30	3	21	50	22.3119	113.9712	1665.10	17.09
03-Oct-13	10:56:44	Container Boat	Travelling	90	50	20	3	7	40	22.3123	113.9712	1704.45	16.86
03-Oct-13	10:59:13	Tug Boat	Travelling	90	56	0	10	22	0	22.3102	113.9725	1529.80	24.10
03-Oct-13	10:59:19	Container Boat	Travelling	90	55	30	11	24	0	22.3102	113.9728	1543.82	25.13
03-Oct-13	10:59:28	Transportation Boat	Travelling	91	0	50	314	43	10	22.3084	113.9592	1406.68	328.45
03-Oct-13	11:01:22	Transportation Boat	Travelling	90	47	10	342	12	0	22.3140	113.9651	1822.55	355.93
03-Oct-13	11:01:34	Speed Boat	Travelling	90	49	40	344	52	40	22.3132	113.9660	1729.05	358.61
03-Oct-13	11:02:34	Transportation Boat	Travelling	90	37	20	350	55	30	22.3184	113.9682	2317.90	4.65
03-Oct-13	11:02:41	Speed Boat	Travelling	91	15	20	335	13	40	22.3076	113.9643	1133.94	348.96
03-Oct-13	11:02:50	Construction Boat	Travelling	91	0	20	305	17	50	22.3073	113.9573	1419.23	319.03
03-Oct-13	11:03:07	Tug Boat	Travelling	90	56	20	14	3	40	22.3097	113.9733	1521.53	27.79
03-Oct-13	11:03:13	Container Boat	Travelling	90	59	20	14	5	40	22.3091	113.9730	1443.55	27.82
03-Oct-13	11:04:53	Speed Boat	Travelling	92	23	30	319	44	20	22.3024	113.9638	593.48	333.47
03-Oct-13	11:05:05	Construction Boat	Travelling	90	59	40	288	32	30	22.3045	113.9546	1435.79	302.27
03-Oct-13	11:05:51	Tug Boat	Travelling	91	12	0	9	42	30	22.3074	113.9710	1187.48	23.44
03-Oct-13	11:06:07	Container Boat	Travelling	91	10	40	8	28	50	22.3077	113.9708	1210.15	22.21

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
03-Oct-13	11:06:24	Transportation Boat	Travelling	90	59	10	313	18	0	22.3086	113.9587	1448.37	327.03
03-Oct-13	11:06:31	Speed Boat	Travelling	92	7	50	315	41	20	22.3028	113.9631	666.65	329.42
03-Oct-13	11:07:29	Container Boat	Stationary	91	9	30	7	27	0	22.3079	113.9707	1230.93	21.18
03-Oct-13	11:07:55	Speed Boat	Travelling	92	24	30	303	13	50	22.3015	113.9625	589.63	316.96
03-Oct-13	11:08:02	Transportation Boat	Travelling	90	55	10	332	26	50	22.3112	113.9628	1555.37	346.18
03-Oct-13	11:08:10	Transportation Boat	Travelling	90	38	10	350	35	40	22.3180	113.9681	2267.55	4.32
03-Oct-13	11:08:22	Tug Boat	Travelling	90	40	20	352	4	50	22.3168	113.9685	2142.09	5.81
03-Oct-13	11:09:07	Speed Boat	Travelling	92	40	10	315	59	0	22.3018	113.9638	531.87	329.71
03-Oct-13	11:09:25	Transportation Boat	Travelling	90	48	0	344	54	30	22.3137	113.9660	1792.46	358.64
03-Oct-13	11:09:31	Transportation Boat	Travelling	90	48	40	341	5	10	22.3135	113.9648	1767.44	354.82
03-Oct-13	11:10:34	Transportation Boat	Travelling	90	42	0	351	38	30	22.3160	113.9683	2055.41	5.37
03-Oct-13	11:10:46	Transportation Boat	Travelling	90	58	10	324	54	0	22.3100	113.9612	1474.61	338.63
03-Oct-13	11:11:01	Tug Boat	Travelling	90	49	10	341	12	10	22.3133	113.9649	1749.51	354.93
03-Oct-13	11:11:44	Transportation Boat	Travelling	91	2	10	308	47	40	22.3075	113.9582	1378.72	322.52
03-Oct-13	11:12:13	Tug Boat	Stationary	91	12	50	9	36	10	22.3073	113.9709	1174.91	23.33
03-Oct-13	11:12:59	Transportation Boat	Travelling	90	58	30	286	52	30	22.3043	113.9541	1466.58	300.60
03-Oct-13	11:13:08	Tug Boat	Travelling	90	56	10	334	12	20	22.3111	113.9633	1528.45	347.94
03-Oct-13	11:13:15	Tug Boat	Travelling	90	44	0	349	59	0	22.3152	113.9676	1960.43	3.71
03-Oct-13	11:13:52	Tug Boat	Travelling	91	8	40	282	49	0	22.3026	113.9555	1247.22	296.55
03-Oct-13	11:14:01	Construction Boat	Travelling	91	6	50	281	22	30	22.3025	113.9551	1281.83	295.10
03-Oct-13	11:14:37	Speed Boat	Stationary	92	10	0	307	23	20	22.3022	113.9624	656.31	321.12
03-Oct-13	11:14:50	HSF High Speed Ferry	Travelling	90	30	30	355	7	0	22.3231	113.9707	2867.66	8.85
03-Oct-13	11:17:33	Tug Boat	Stationary	91	0	0	332	46	10	22.3101	113.9632	1430.43	346.50
03-Oct-13	11:17:44	Tug Boat	Travelling	90	52	40	339	40	10	22.3122	113.9646	1632.86	353.40
03-Oct-13	11:17:53	Tug Boat	Travelling	91	3	40	309	42	0	22.3074	113.9586	1347.12	323.43
03-Oct-13	11:18:02	Construction Boat	Stationary	91	9	20	279	37	40	22.3020	113.9554	1235.90	293.36
03-Oct-13	11:18:08	HSF High Speed Ferry	Stationary	90	55	10	331	23	50	22.3112	113.9625	1557.77	345.13
03-Oct-13	11:19:22	HSF High Speed Ferry	Travelling	91	0	50	308	4	40	22.3076	113.9579	1410.96	321.81
03-Oct-13	11:20:08	Tug Boat	Stationary	90	54	10	338	17	30	22.3118	113.9643	1587.48	352.02
03-Oct-13	11:20:16	Tug Boat	Travelling	90	54	50	332	22	30	22.3113	113.9627	1567.90	346.10
03-Oct-13	11:20:34	Transportation Boat	Travelling	91	6	40	321	18	0	22.3081	113.9611	1286.35	335.03
03-Oct-13	11:20:43	HSF High Speed Ferry	Travelling	90	55	30	282	24	20	22.3038	113.9529	1548.88	296.14
03-Oct-13	11:21:32	Transportation Boat	Travelling	90	59	20	334	31	40	22.3104	113.9635	1447.59	348.26
03-Oct-13	11:21:40	Transportation Boat	Travelling	90	42	20	345	0	50	22.3160	113.9660	2042.28	358.74
03-Oct-13	11:21:51	Tug Boat	Travelling	90	45	50	342	50	0	22.3145	113.9653	1882.67	356.56
03-Oct-13	11:23:22	Transportation Boat	Travelling	90	45	40	352	38	20	22.3145	113.9684	1890.14	6.37
03-Oct-13	11:23:30	Transportation Boat	Travelling	90	52	0	334	10	10	22.3122	113.9630	1655.62	347.90
03-Oct-13	11:23:50	Tug Boat	Travelling	90	37	20	351	7	30	22.3185	113.9683	2325.51	4.85
03-Oct-13	11:25:30	Tug Boat	Travelling	91	4	20	0	20	50	22.3093	113.9696	1334.54	14.08
03-Oct-13	11:26:01	Container Boat	Travelling	91	4	20	0	18	30	22.3093	113.9695	1334.65	14.04
03-Oct-13	11:26:25	Transportation Boat	Travelling	91	0	10	304	0	30	22.3071	113.9571	1428.34	317.74
03-Oct-13	11:26:35	Tug Boat	Travelling	91	5	40	305	1	0	22.3065	113.9580	1307.35	318.75
03-Oct-13	11:27:20	Tug Boat	Travelling	90	55	20	359	37	10	22.3112	113.9699	1555.19	13.35
03-Oct-13	11:27:28	Container Boat	Travelling	90	57	10	0	0	10	22.3108	113.9699	1504.60	13.73
03-Oct-13	11:27:54	Speed Boat	Stationary	92	23	50	319	30	20	22.3024	113.9638	594.17	333.24
03-Oct-13	11:28:34	Tug Boat	Travelling	91	0	0	326	37	30	22.3098	113.9617	1432.83	340.35
03-Oct-13	11:30:02	Tug Boat	Travelling	90	48	40	342	55	0	22.3135	113.9654	1773.00	356.65
03-Oct-13	11:30:12	Tug Boat	Travelling	90	47	0	345	43	40	22.3142	113.9662	1837.25	359.46
03-Oct-13	11:30:45	Tug Boat	Travelling	90	48	0	344	29	30	22.3138	113.9659	1798.33	358.22
03-Oct-13	11:30:50	Construction platform	Travelling	90	48	50	341	57	30	22.3135	113.9651	1767.04	355.69
03-Oct-13	11:31:17	Tug Boat	Travelling	90	48	10	349	28	10	22.3137	113.9674	1792.12	3.20
03-Oct-13	11:31:24	Tug Boat	Travelling	90	42	20	356	18	50	22.3157	113.9699	2045.33	10.04
03-Oct-13	11:31:31	Container Boat	Travelling	90	43	0	356	27	20	22.3154	113.9699	2012.82	10.19
03-Oct-13	11:32:33	Tug Boat	Travelling	90	42	10	356	27	10	22.3158	113.9699	2053.99	10.18
03-Oct-13	11:32:45	Speed Boat	Travelling	92	12	0	301	58	10	22.3018	113.9620	648.11	315.70
03-Oct-13	11:33:01	Tug Boat	Travelling	90	53	30	335	54	50	22.3119	113.9636	1610.75	349.64
03-Oct-13	11:33:07	Tug Boat	Travelling	90	51	30	339	6	0	22.3126	113.9644	1674.44	352.83
03-Oct-13	11:33:12	Construction platform	Travelling	90	52	30	336	24	20	22.3122	113.9637	1642.00	350.14
03-Oct-13	11:38:52	Tug Boat	Travelling	90	59	0	322	10	10	22.3096	113.9606	1459.73	335.90
03-Oct-13	11:38:59	Tug Boat	Travelling	90	57	40	326	37	30	22.3103	113.9615	1493.99	340.35
03-Oct-13	11:39:04	Construction platform	Travelling	90	57	40	323	20	10	22.3100	113.9607	1494.01	337.07
03-Oct-13	11:40:08	Tug Boat	Travelling	90	59	30	330	59	10	22.3102	113.9627	1447.57	344.72
03-Oct-13	11:40:21	Research Vessel	Travelling	90	51	20	32	47	20	22.3080	113.9783	1681.82	46.52
03-Oct-13	11:40:50	Fishing Boat	Operate and stationary	92	33	20	292	40	40	22.3006	113.9620	558.33	306.41
03-Oct-13	11:41:03	Fishing Boat	Operate and stationary	92	44	50	285	44	50	22.2999	113.9620	519.27	299.48
03-Oct-13	11:44:07	Tug Boat	Travelling	91	1	0	315	10	30	22.3085	113.9593	1412.37	328.90
03-Oct-13	11:44:13	Tug Boat	Travelling	91	1	0	320	3	0	22.3090	113.9603	1412.39	333.78
03-Oct-13	11:44:21	Construction platform	Travelling	91	0	30	316	45	50	22.3088	113.9596	1424.25	330.49
03-Oct-13	11:44:31	Tug Boat	Travelling	90	59	50	324	59	50	22.3097	113.9613	1440.36	338.73
03-Oct-13	11:44:46	Research Vessel	Travelling	91	23	10	18	58	20	22.3054	113.9718	1032.93	32.70
03-Oct-13	11:53:50	Tug Boat	Travelling	90	59	40	325	46	40	22.3098	113.9615	1446.49	339.51
03-Oct-13	11:54:15	Tug Boat	Travelling	90	53	40	338	6	20	22.3120	113.9642	1610.86	351.84
03-Oct-13	11:54:25	Construction platform	Travelling	90	59	0	308	50	30	22.3081	113.9577	1463.18	322.57
03-Oct-13	11:54:35	Tug Boat	Travelling	90	57	0	307	55	10	22.3083	113.9573	1515.31	321.65
03-Oct-13	11:55:08	Research Vessel	Travelling	91	1	0	277	6	40	22.3021	113.9535	1414.74	290.84
03-Oct-13	11:55:23	Transportation Boat	Travelling	90	48	10	359	18	30	22.3134	113.9703	1798.72	13.04
03-Oct-13	11:55:39	Fishing Boat	Operate and stationary	92	19	30	294	20	40	22.3010	113.9617	615.27	308.07
03-Oct-13	11:56:01	Fishing Boat	Operate and stationary	92	42	20	279	43	10	22.2995	113.9617	528.49	293.45
03-Oct-13	11:59:51	Tug Boat	Travelling	90	49	10	308	53	50	22.3102	113.9560	1762.60	322.63
03-Oct-13	11:59:59	Construction platform	Travelling	90	49	40	308	3	20	22.3100	113.9559	1744.55	321.79
03-Oct-13	12:00:18	Speed Boat	Travelling	92	37	40	313	44	0	22.3018	113.9636	544.53	327.46
03-Oct-13	12:00:35	Speed Boat	Travelling	92	48	50	330	9	10	22.3020	113.9650	508.42	343.88
03-Oct-13	12:01:08	Speed Boat	Travelling	91	55	30	316	55	30	22.3035	113.9629	744.27	330.65
03-Oct-13	12:01:54	Speed Boat	Travelling	91	24	20	19	18	20	22.3053	113.9718	1021.18	33.04
03-Oct-13	12:01:58	Speed Boat	Travelling	91	27	50	27	22	40	22.3043	113.9727	980.23	41.11
03-Oct-13	12:02:09	Speed Boat	Travelling	91	37	50	4	20	20	22.3051	113.9691	879.50	18.07
03-Oct-13	12:03:22	Speed Boat	Travelling	90	47	20	32	51	20	22.3090	113.9794	1833.29	46.59
03-Oct-13	12:03:29	Speed Boat	Travelling	90	46	40	36	38	30	22.3083	113.9803	1860.09	50.37
03-Oct-13	12:03:35	Speed Boat	Travelling	90	49	40	28	31	40	22.3092	113.9778	1745.50	42.26
03-Oct-13	12:04:41	Fishing Boat	Non-operate and travelling	95	33	30	317	48	10	22.2997	113.9652	256.79	331.53
03-Oct-13	12:04:52	Fishing Boat	Operate and stationary	92	36	0	294	12	50	22.3007	113.9622	550.75	307.94
03-Oct-13	12:06:44	Fishing Boat	Non-operate and travelling	93	17	50	18	15	10	22.3009	113.9686	434.07	31.98
03-Oct-13	12:11:24	Fishing Boat	Non-operate and travelling	92	28	20	33	42	30	22.3011	113.9706	579.88	47.44
03-Oct-13	12:12:10	Research Vessel	Travelling	91	9	10	286	27	50	22.3033	113.9559	1249.12	300.19
03-Oct-13	12:13:08	Fishing Boat	Non-operate and travelling	93	26	30	331	45	20	22.3012	113.9654	416.19	345.49
03-Oct-13	12:13:25	Tug Boat	Travelling	91	2	20	284	42	20	22.3036	113.9545	1387.93	298.44
03-Oct-13	12:13:40	Container Boat	Travelling	91	0	20	284	1	10	22.3036	113.9541	1434.59	297.75
03-Oct-13	12:14:27	Fishing Boat	Non-operate and travelling	92	38	30	1	9	40	22.3023	113.9678	542.81	14.89
03-Oct-13	12:14:39	Fishing Boat	Non-operate and travelling	91	11	40	32	54	30	22.3051	113.9749	1205.58	46.64
03-Oct-13	12:14:50	Research Vessel	Travelling	91	22	30	319	35	0	22.3060	113.9618	1046.07	333.31
03-Oct-13	12:17:22	Fishing Boat	Non-operate and travelling	91	49	50	302	50	50	22.3027	113.9612	784.75	316.58
03-Oct-13	12:17:34	Fishing Boat	Non-operate and travelling	90	53	50	33	30	50	22.3075	113.9779	1611.48	47.24
03-Oct-13	12:17:44	Research Vessel	Travelling	91	10	20	357	8	10	22.3085	113.9687	1229.22	10.87
03-Oct-13	12:17:55	Tug Boat	Travelling	91	6	20	296	53	10	22.3053	113.9568	1304.18	310.62
03-Oct-13	12:18:02	Container Boat	Travelling	91	6	20	295	33	40	22.3051	113.9566	1304.20	309.29
03-Oct-13	12:18:12	Tug Boat	Travelling	91	3	50	289	10	10	22.3042	113.9553	1355.91	302.90
03-Oct-13	12:19:33	Tug Boat	Travelling	91	5	40	301	7	50	22.3060	113.9573	1317.89	314.86
03-Oct-13	12:19:39	Tug Boat	Travelling	91	7	10	297	41	30	22.3053	113.9570	1288.16	311.42
03-Oct-13	12:19:45	Container Boat	Travelling	91	6	20	300	0	50	22.3057	113.9572	1304.54	313.74
03-Oct-13	12:20:37	Fishing Boat	Non-operate and travelling	90	54	30	291	21	30	22.3059	113.9537	1592.18	305.09
03-Oct-13	12:21:00	Research Vessel	Travelling	90	51	0	25	18	0	22.3095	113.9768	1703.50	39.03
03-Oct-13	12:23:19	Research Vessel	Travelling	90	39	20	34	24	20	22.3110	113.9825	2223.62	48.14
03-Oct-13	12:29:01	Construction platform	Travelling	90	59	50	325	46	20	22.3098	113.9615	1450.10	339.50
03-Oct-13	12:29:05	Tug Boat	Travelling	91	1	10	322	29	30	22.3093	113.9608	1418.10	336.22
03-Oct-13	12:29:11	Container Boat	Travelling	91	0	40	324	48	50	22.3096	113.9613	1429.95	338.54
03-Oct-13	12:30:50	Tug Boat	Travelling	90	43	30	351	43	30	22.3156	113.9683	2007.16	5.45
03-Oct-13	12:30:56	Container Boat	Travelling	90	43	0	351	56	10	22.3158	113.9684	2031.14	5.67

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
03-Oct-13	12:31:37	Transportation Boat	Travelling	91	19	0	312	28	0	22.3058	113.9605	1095.55	326.20
03-Oct-13	12:34:09	Transportation Boat	Travelling	92	8	50	323	43	0	22.3032	113.9639	670.27	337.45
03-Oct-13	12:34:21	Tug Boat	Travelling	91	2	20	349	1	10	22.3101	113.9670	1392.32	2.75
03-Oct-13	12:34:37	Container Boat	Travelling	91	1	10	349	18	10	22.3104	113.9671	1419.28	3.03
03-Oct-13	12:36:10	Tug Boat	Travelling	90	50	10	343	19	40	22.3132	113.9655	1736.32	357.06
03-Oct-13	12:36:15	Tug Boat	Travelling	90	51	40	341	8	30	22.3127	113.9649	1685.01	354.87
03-Oct-13	12:36:27	Container Boat	Travelling	90	50	30	343	6	40	22.3131	113.9655	1724.72	356.84
03-Oct-13	12:36:37	Transportation Boat	Travelling	94	58	30	349	0	40	22.3002	113.9665	288.47	2.74
03-Oct-13	12:38:26	Tug Boat	Travelling	91	32	30	358	21	10	22.3059	113.9683	935.60	12.08
03-Oct-13	12:38:35	Container Boat	Travelling	91	36	30	358	15	40	22.3055	113.9682	896.62	11.99
03-Oct-13	12:38:46	Transportation Boat	Travelling	94	37	40	338	41	40	22.3004	113.9660	310.34	352.42
03-Oct-13	12:40:18	Container Boat	Stationary	91	32	30	0	24	50	22.3058	113.9686	935.86	14.14
03-Oct-13	12:40:39	Container Boat	Travelling	90	54	40	333	8	40	22.3116	113.9629	1592.06	346.87
03-Oct-13	12:41:01	Tug Boat	Travelling	90	42	0	349	26	20	22.3163	113.9675	2084.01	3.17
03-Oct-13	12:41:08	Tug Boat	Travelling	90	43	50	348	59	0	22.3155	113.9673	1994.62	2.71
03-Oct-13	12:41:18	Container Boat	Travelling	90	43	10	349	30	0	22.3158	113.9675	2026.28	3.23
03-Oct-13	12:41:50	Container Boat	Travelling	90	59	30	324	30	50	22.3098	113.9611	1461.15	338.24
03-Oct-13	12:42:16	Container Boat	Travelling	91	26	0	4	10	10	22.3062	113.9694	1007.36	17.90
03-Oct-13	12:44:31	Tug Boat	Travelling	91	16	30	7	4	50	22.3072	113.9703	1133.84	20.81
03-Oct-13	12:44:40	Container Boat	Stationary	91	15	40	6	33	30	22.3073	113.9703	1146.46	20.29
03-Oct-13	12:44:54	Container Boat	Travelling	90	55	50	305	49	20	22.3083	113.9566	1559.27	319.55
03-Oct-13	12:45:05	Transportation Boat	Travelling	91	12	0	311	13	0	22.3065	113.9597	1205.46	324.95
03-Oct-13	12:46:16	Tug Boat	Travelling	90	41	30	350	51	40	22.3166	113.9680	2111.50	4.59
03-Oct-13	12:46:28	Container Boat	Travelling	90	50	10	302	4	40	22.3088	113.9546	1739.03	315.81
03-Oct-13	12:46:53	Transportation Boat	Travelling	90	59	50	308	0	10	22.3079	113.9576	1454.01	321.73
03-Oct-13	12:50:29	Tug Boat	Travelling	91	10	40	5	54	20	22.3080	113.9704	1229.42	19.64
03-Oct-13	12:50:43	Tug Boat	Travelling	91	1	10	322	1	0	22.3093	113.9607	1422.72	335.75
03-Oct-13	12:53:07	Tug Boat	Travelling	91	15	50	9	25	10	22.3071	113.9708	1145.37	23.15
03-Oct-13	12:53:15	Tug Boat	Travelling	91	3	30	295	48	50	22.3055	113.9561	1370.33	309.54
03-Oct-13	12:53:37	Research Vessel	Travelling	90	38	30	33	8	10	22.3117	113.9826	2283.83	46.87
03-Oct-13	12:54:09	Transportation Boat	Travelling	91	1	40	318	3	40	22.3088	113.9599	1411.77	331.79
03-Oct-13	12:54:41	Research Vessel	Travelling	90	42	0	35	48	50	22.3098	113.9819	2088.33	49.54
03-Oct-13	12:56:48	Transportation Boat	Travelling	90	49	40	342	32	30	22.3134	113.9653	1759.62	356.27
03-Oct-13	12:57:03	Research Vessel	Travelling	90	55	10	36	43	50	22.3067	113.9783	1581.31	50.46
03-Oct-13	12:57:21	Speed Boat	Travelling	90	49	10	342	22	20	22.3136	113.9652	1778.01	356.10
03-Oct-13	12:58:49	Research Vessel	Travelling	91	4	40	31	11	0	22.3062	113.9756	1346.44	44.91
03-Oct-13	12:59:03	Speed Boat	Travelling	91	13	40	324	5	50	22.3075	113.9621	1180.41	337.83
03-Oct-13	12:59:15	Transportation Boat	Travelling	90	37	10	354	58	50	22.3187	113.9699	2370.66	8.71
03-Oct-13	13:00:41	Speed Boat	Travelling	90	52	0	293	20	40	22.3067	113.9534	1680.20	307.07
03-Oct-13	13:00:51	Research Vessel	Travelling	90	51	20	20	14	30	22.3103	113.9757	1702.46	33.97
03-Oct-13	13:01:35	Research Vessel	Acoustic Recording	90	51	20	20	15	40	22.3103	113.9757	1702.64	33.99
03-Oct-13	13:02:36	Research Vessel	Other	90	50	40	20	58	30	22.3104	113.9760	1725.73	34.70
03-Oct-13	13:07:58	Research Vessel	Travelling	90	48	10	15	49	10	22.3119	113.9751	1818.59	29.55
03-Oct-13	13:08:08	Speed Boat	Travelling	91	6	20	24	8	30	22.3070	113.9742	1314.07	37.87
03-Oct-13	13:08:44	Tug Boat	Travelling	90	59	10	358	36	0	22.3106	113.9695	1475.45	12.33
03-Oct-13	13:11:06	Speed Boat	Travelling	91	56	10	9	46	30	22.3038	113.9693	747.78	23.50
03-Oct-13	13:11:15	Tug Boat	Travelling	90	55	0	355	32	0	22.3117	113.9689	1589.56	9.26
03-Oct-13	13:11:24	Research Vessel	Travelling	90	42	10	356	26	30	22.3161	113.9700	2085.11	10.17
03-Oct-13	13:13:49	Tug Boat	Travelling	90	54	0	15	47	40	22.3103	113.9742	1620.11	29.52
03-Oct-13	13:13:58	Research Vessel	Travelling	90	53	20	346	17	50	22.3124	113.9664	1640.74	0.03
03-Oct-13	13:14:07	Speed Boat	Travelling	92	56	50	0	16	50	22.3019	113.9676	490.73	14.01
03-Oct-13	13:15:11	Transportation Boat	Travelling	91	7	50	318	12	10	22.3078	113.9605	1286.05	331.93
03-Oct-13	13:15:46	Speed Boat	Travelling	92	21	0	20	9	10	22.3022	113.9697	616.05	33.88
03-Oct-13	13:15:54	Tug Boat	Travelling	90	56	30	16	6	20	22.3097	113.9739	1547.79	29.84
03-Oct-13	13:16:09	Research Vessel	Travelling	91	15	50	354	34	40	22.3079	113.9680	1149.33	8.31
03-Oct-13	13:17:13	Transportation Boat	Travelling	90	58	30	335	5	0	22.3108	113.9636	1494.41	348.81
03-Oct-13	13:17:21	Speed Boat	Travelling	92	39	0	7	57	0	22.3022	113.9684	546.22	21.68
03-Oct-13	13:18:11	Tug Boat	Travelling	91	12	30	288	53	0	22.3035	113.9565	1203.02	302.61
03-Oct-13	13:18:19	Construction Boat	Travelling	91	12	30	287	27	10	22.3032	113.9564	1203.04	301.18
03-Oct-13	13:18:31	Construction Boat	Travelling	91	2	20	290	53	50	22.3048	113.9552	1401.59	304.63
03-Oct-13	13:19:16	Research Vessel	Travelling	92	22	40	22	9	40	22.3021	113.9699	609.15	35.89
03-Oct-13	13:19:23	Transportation Boat	Travelling	90	48	30	346	40	40	22.3139	113.9665	1808.95	0.41
03-Oct-13	13:19:32	Transportation Boat	Travelling	91	11	10	304	25	0	22.3058	113.9584	1226.02	318.15
03-Oct-13	13:19:47	Speed Boat	Travelling	92	8	0	16	26	30	22.3029	113.9697	679.27	30.17
03-Oct-13	13:21:25	Research Vessel	Travelling	93	32	50	340	21	40	22.3013	113.9660	407.91	354.09
03-Oct-13	13:21:34	Construction Boat	Travelling	91	1	0	306	47	30	22.3076	113.9575	1433.28	320.52
03-Oct-13	13:21:53	Speed Boat	Travelling	91	5	40	348	55	50	22.3096	113.9670	1330.29	2.66
03-Oct-13	13:22:10	Transportation Boat	Travelling	91	11	40	326	53	40	22.3080	113.9625	1217.86	340.62
03-Oct-13	13:22:46	Construction Boat	Travelling	90	55	50	305	16	50	22.3083	113.9564	1568.17	319.01
03-Oct-13	13:22:53	Tug Boat	Travelling	91	11	40	312	40	10	22.3067	113.9598	1218.00	326.40
03-Oct-13	13:23:01	Construction Boat	Travelling	91	11	0	311	57	40	22.3068	113.9597	1229.57	325.69
03-Oct-13	13:23:12	Speed Boat	Travelling	91	22	0	312	37	10	22.3056	113.9607	1063.35	326.35
03-Oct-13	13:23:19	Transportation Boat	Travelling	91	14	50	305	28	10	22.3056	113.9590	1166.07	319.20
03-Oct-13	13:23:31	Research Vessel	Travelling	91	40	20	334	2	10	22.3053	113.9646	867.99	347.77
03-Oct-13	13:24:32	Speed Boat	Travelling	91	4	50	277	34	50	22.3020	113.9542	1348.12	291.31
03-Oct-13	13:24:38	Transportation Boat	Travelling	91	3	0	281	59	0	22.3030	113.9542	1387.85	295.71
03-Oct-13	13:24:57	Tug Boat	Travelling	91	13	30	316	28	20	22.3069	113.9607	1187.70	330.20
03-Oct-13	13:25:06	Construction Boat	Travelling	91	13	10	316	41	20	22.3070	113.9607	1193.19	330.42
03-Oct-13	13:25:21	Speed Boat	Stationary	91	59	0	9	1	20	22.3037	113.9692	731.46	22.75
03-Oct-13	13:26:04	Research Vessel	Travelling	91	3	20	332	11	50	22.3097	113.9631	1380.75	345.93
03-Oct-13	13:27:05	Research Vessel	Acoustic Recording	91	2	50	331	43	30	22.3097	113.9630	1392.09	345.45
03-Oct-13	13:27:21	Research Vessel	Other	91	2	50	332	34	30	22.3098	113.9632	1392.14	346.30
03-Oct-13	13:29:08	Tug Boat	Stationary	91	13	20	313	47	20	22.3067	113.9602	1191.17	327.52
03-Oct-13	13:29:22	Construction Boat	Stationary	91	12	30	312	53	40	22.3067	113.9600	1205.03	326.62
03-Oct-13	13:33:07	Research Vessel	Travelling	91	4	30	335	1	0	22.3096	113.9638	1356.91	348.75
03-Oct-13	13:34:52	Research Vessel	Travelling	91	1	20	322	31	50	22.3094	113.9608	1428.23	336.26
03-Oct-13	13:36:39	Research Vessel	Travelling	91	7	20	308	1	10	22.3068	113.9586	1299.87	321.75
03-Oct-13	13:39:51	Research Vessel	Travelling	92	2	40	283	4	50	22.3005	113.9602	711.04	296.81
03-Oct-13	13:43:20	Transportation Boat	Travelling	90	52	50	339	51	50	22.3125	113.9646	1663.84	353.59
03-Oct-13	13:45:44	Transportation Boat	Travelling	91	3	10	325	16	20	22.3093	113.9616	1388.51	339.00
03-Oct-13	13:46:43	Container Boat	Travelling	91	1	50	313	57	30	22.3084	113.9590	1419.04	327.69
03-Oct-13	13:47:33	Transportation Boat	Travelling	91	7	20	311	0	40	22.3072	113.9591	1301.99	324.74
03-Oct-13	13:49:21	Container Boat	Travelling	90	54	30	335	41	20	22.3119	113.9635	1613.56	349.42
03-Oct-13	13:49:36	Transportation Boat	Travelling	91	5	30	293	51	50	22.3050	113.9561	1339.24	307.59
03-Oct-13	13:51:33	Transportation Boat	Travelling	90	59	10	279	30	30	22.3029	113.9531	1484.94	293.24
03-Oct-13	13:51:46	Container Boat	Travelling	90	44	20	349	27	20	22.3155	113.9675	1992.67	3.19
03-Oct-13	14:01:29	Other	Stationary	91	12	50	312	57	20	22.3067	113.9600	1205.21	326.69
03-Oct-13	14:01:37	Other	Stationary	91	9	10	328	58	40	22.3085	113.9627	1269.77	342.71
03-Oct-13	14:01:48	Other	Stationary	90	30	20	347	28	40	22.3242	113.9670	2959.30	1.21
03-Oct-13	14:02:05	Other	Stationary	90	30	0	357	36	10	22.3240	113.9721	2994.17	11.33
03-Oct-13	14:02:15	Other	Stationary	90	38	10	357	37	40	22.3182	113.9709	2328.47	11.36
03-Oct-13	14:02:23	Other	Stationary	90	40	20	358	19	40	22.3170	113.9709	2199.51	12.06
03-Oct-13	14:02:33	Other	Stationary	90	34	0	1	4	50	22.3205	113.9729	2625.64	14.81
03-Oct-13	14:02:54	Other	Stationary	90	35	10	2	41	50	22.3195	113.9734	2535.06	16.43
03-Oct-13	14:03:06	Other	Stationary	90	34	0	3	52	50	22.3201	113.9741	2625.85	17.61
03-Oct-13	14:03:33	Other	Stationary	90	55	0	353	27	20	22.3119	113.9683	1602.04	7.19
03-Oct-13	14:03:38	Other	Stationary	90	55	40	355	3	40	22.3117	113.9688	1582.58	8.79
03-Oct-13	14:04:04	Other	Stationary	91	16	40	6	15	10	22.3073	113.9702	1144.87	19.98
03-Oct-13	14:04:10	Other	Stationary	91	17	0	8	30	40	22.3071	113.9706	1139.89	22.24
03-Oct-13	14:04:19	Other	Stationary	90	55	30	17	12	20	22.3099	113.9743	1587.57	30.94
03-Oct-13	14:04:24	Other	Stationary	90	55	30	17	53	30	22.3098	113.9745	1587.59	31.62
03-Oct-13	14:04:43	Other	Stationary	91	5	20	328	23	10	22.3091	113.9624	1345.73	342.12
03-Oct-13	14:04:51	Other	Stationary	90	50	0	0	10	40	22.3130	113.9705	1765.58	13.91
03-Oct-13	14:05:01	Other	Stationary	90	29	40	5	40	30	22.3233	113.9762	3031.11	19.40
03-Oct-13	14:05:09	Other	Stationary	91	16	50	5	4	0	22.3074	113.9700	1142.55	18.80
04-Oct-13	8:07:08	Other	Stationary	94	26	10	0	0	0	22.3004	113.9671	314.59	13.73
04-Oct-13	8:09:55	Other	Stationary	90	34	45	293	41	40	22.3111	113.9474	2459.91	307.42

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
04-Oct-13	8:10:10	Other	Stationary	90	47	50	299	1	45	22.3084	113.9538	1770.53	312.76
04-Oct-13	8:10:16	Other	Stationary	90	55	45	304	4	15	22.3077	113.9565	1515.00	317.80
04-Oct-13	8:10:46	Other	Stationary	90	57	25	304	51	15	22.3075	113.9569	1470.32	318.58
04-Oct-13	8:11:02	Other	Stationary	90	57	25	304	51	15	22.3075	113.9569	1470.28	318.58
04-Oct-13	8:11:26	Other	Stationary	90	50	30	307	39	20	22.3094	113.9562	1675.07	321.39
04-Oct-13	8:11:34	Other	Stationary	90	53	55	309	29	0	22.3089	113.9573	1567.13	323.21
04-Oct-13	8:11:45	Other	Stationary	90	55	25	315	44	10	22.3094	113.9589	1524.03	329.47
04-Oct-13	8:11:53	Other	Stationary	90	53	40	321	45	15	22.3105	113.9600	1574.50	335.48
04-Oct-13	8:12:01	Other	Stationary	90	51	25	328	53	20	22.3117	113.9616	1644.58	342.62
04-Oct-13	8:12:09	Other	Stationary	90	50	25	332	26	5	22.3123	113.9625	1677.77	346.16
04-Oct-13	8:12:15	Other	Stationary	90	47	55	335	37	25	22.3132	113.9632	1767.04	349.35
04-Oct-13	8:12:20	Other	Stationary	90	45	10	337	42	20	22.3143	113.9637	1877.02	351.44
04-Oct-13	8:12:28	Other	Stationary	90	41	45	341	15	5	22.3159	113.9647	2034.60	354.98
04-Oct-13	8:12:45	Other	Stationary	90	40	5	344	16	55	22.3167	113.9657	2121.58	358.01
04-Oct-13	8:12:50	Other	Stationary	90	38	50	346	18	45	22.3173	113.9664	2191.97	0.04
04-Oct-13	8:12:57	Other	Stationary	90	35	55	348	45	30	22.3190	113.9674	2376.29	2.49
04-Oct-13	8:13:05	Other	Stationary	90	30	15	351	27	10	22.3231	113.9689	2843.16	5.18
04-Oct-13	8:13:32	Other	Stationary	90	30	0	351	36	15	22.3233	113.9690	2868.01	5.33
04-Oct-13	8:14:07	Other	Stationary	91	8	40	315	0	55	22.3071	113.9602	1226.41	328.75
04-Oct-13	8:14:46	Other	Stationary	91	5	30	326	35	35	22.3085	113.9622	1286.25	340.32
04-Oct-13	8:15:03	Other	Stationary	90	40	10	357	54	35	22.3163	113.9706	2116.58	11.64
04-Oct-13	8:15:29	Other	Stationary	90	52	0	353	15	30	22.3121	113.9683	1625.27	6.99
04-Oct-13	8:15:36	Other	Stationary	90	51	55	354	50	30	22.3121	113.9688	1627.90	8.57
04-Oct-13	8:15:52	Other	Stationary	91	9	5	3	51	45	22.3081	113.9700	1218.73	17.59
04-Oct-13	8:16:00	Other	Stationary	91	12	15	6	23	20	22.3075	113.9703	1164.80	20.12
04-Oct-13	8:16:29	Other	Stationary	90	48	5	2	45	5	22.3128	113.9713	1760.07	16.48
04-Oct-13	8:16:39	Other	Stationary	91	12	0	2	58	10	22.3077	113.9697	1168.81	16.70
04-Oct-13	8:16:51	Other	Stationary	91	5	30	11	52	0	22.3081	113.9718	1285.99	25.60
04-Oct-13	8:17:14	Tug Boat	Stationary	91	9	50	313	34	20	22.3067	113.9601	1205.36	327.30
04-Oct-13	8:17:24	Tug Boat	Stationary	91	7	20	11	12	0	22.3078	113.9715	1250.55	24.93
04-Oct-13	8:17:49	Fishing Boat	Operate and travelling	92	5	10	292	42	5	22.3012	113.9612	670.09	306.43
04-Oct-13	8:18:06	HSF High Speed Ferry	Travelling	90	55	50	328	30	35	22.3106	113.9619	1511.56	342.24
04-Oct-13	8:18:45	Fishing Boat	Operate and travelling	92	18	10	284	42	15	22.3002	113.9612	606.77	298.43
04-Oct-13	8:19:13	HSF High Speed Ferry	Travelling	90	59	55	308	20	0	22.3076	113.9580	1407.01	322.06
04-Oct-13	8:22:49	Other	Stationary	94	26	5	0	0	15	22.3004	113.9671	314.22	13.73
04-Oct-13	8:23:19	Fishing Boat	Non-operate and stationary	92	20	0	285	32	50	22.3003	113.9613	598.54	299.28
04-Oct-13	8:23:37	Transportation Boat	Travelling	91	2	35	289	57	20	22.3043	113.9555	1345.76	303.69
04-Oct-13	8:24:59	Transportation Boat	Travelling	91	4	55	307	14	40	22.3067	113.9585	1296.66	320.97
04-Oct-13	8:25:15	Tug Boat	Travelling	90	57	50	283	44	35	22.3037	113.9538	1457.54	297.47
04-Oct-13	8:26:20	Transportation Boat	Travelling	91	0	0	323	39	45	22.3093	113.9611	1404.07	337.39
04-Oct-13	8:26:41	Tug Boat	Travelling	91	0	30	300	28	10	22.3064	113.9567	1392.27	314.20
04-Oct-13	8:26:50	HSF High Speed Ferry	Travelling	90	59	5	286	18	20	22.3040	113.9544	1426.07	300.04
04-Oct-13	8:27:27	Tug Boat	Travelling	91	5	5	6	45	35	22.3085	113.9708	1293.00	20.49
04-Oct-13	8:27:45	Transportation Boat	Travelling	90	52	30	337	24	40	22.3119	113.9640	1607.62	351.14
04-Oct-13	8:28:18	Fishing Boat	Non-operate and travelling	91	41	0	19	5	20	22.3039	113.9708	830.36	32.82
04-Oct-13	8:28:31	Tug Boat	Travelling	91	11	25	6	25	0	22.3076	113.9703	1177.11	20.15
04-Oct-13	8:28:45	Tug Boat	Travelling	90	57	45	324	22	0	22.3098	113.9611	1459.18	338.10
04-Oct-13	8:28:54	HSF High Speed Ferry	Travelling	91	2	10	305	3	55	22.3068	113.9577	1354.19	318.80
04-Oct-13	8:29:06	Transportation Boat	Travelling	90	44	45	346	42	30	22.3146	113.9665	1891.83	0.44
04-Oct-13	8:29:22	Fishing Boat	Non-operate and travelling	92	7	50	282	54	50	22.3003	113.9607	655.34	296.64
04-Oct-13	8:29:59	Fishing Boat	Non-operate and travelling	92	12	10	22	15	35	22.3022	113.9700	633.73	35.99
04-Oct-13	8:30:36	Tug Boat	Travelling	91	7	20	14	1	30	22.3076	113.9721	1248.96	27.75
04-Oct-13	8:31:00	Tug Boat	Travelling	90	46	20	342	37	25	22.3140	113.9653	1825.41	356.35
04-Oct-13	8:31:12	HSF High Speed Ferry	Travelling	90	57	15	325	13	40	22.3100	113.9613	1471.76	338.96
04-Oct-13	8:31:30	Fishing Boat	Operate and stationary	92	5	0	284	51	35	22.3005	113.9607	670.11	298.59
04-Oct-13	8:32:16	Fishing Boat	Non-operate and travelling	92	32	45	6	39	45	22.3022	113.9683	547.95	20.39
04-Oct-13	8:32:50	Fishing Boat	Operate and travelling	92	22	30	1	11	40	22.3027	113.9679	587.47	14.92
04-Oct-13	8:33:32	HSF High Speed Ferry	Travelling	90	49	5	341	7	0	22.3130	113.9649	1720.67	354.85
04-Oct-13	8:34:07	Tug Boat	Travelling	90	56	30	6	31	15	22.3102	113.9714	1491.17	20.25
04-Oct-13	8:34:29	Fishing Boat	Operate and travelling	92	22	25	358	41	55	22.3028	113.9676	587.72	12.43
04-Oct-13	8:35:43	Tug Boat	Travelling	91	10	50	2	16	50	22.3079	113.9696	1186.07	16.01
04-Oct-13	8:36:16	HSF High Speed Ferry	Travelling	91	1	5	296	54	45	22.3057	113.9562	1377.53	310.64
04-Oct-13	8:37:26	Transportation Boat	Travelling	90	44	15	347	14	10	22.3148	113.9667	1912.17	0.97
04-Oct-13	8:37:56	HSF High Speed Ferry	Travelling	90	56	55	325	15	55	22.3100	113.9612	1479.54	339.00
04-Oct-13	8:38:56	Tug Boat	Travelling	91	16	35	9	9	35	22.3067	113.9705	1095.93	22.89
04-Oct-13	8:39:05	Container Boat	Travelling	91	15	25	7	33	45	22.3070	113.9703	1113.01	21.29
04-Oct-13	8:39:32	Speed Boat	Travelling	91	31	35	8	4	10	22.3053	113.9697	915.25	21.80
04-Oct-13	8:39:51	HSF High Speed Ferry	Travelling	90	42	40	346	17	20	22.3155	113.9664	1984.47	0.02
04-Oct-13	8:40:00	Transportation Boat	Travelling	90	58	5	318	25	40	22.3092	113.9598	1449.12	332.16
04-Oct-13	8:40:21	Speed Boat	Travelling	92	10	25	330	3	5	22.3032	113.9647	641.63	343.78
04-Oct-13	8:40:39	Tug Boat	Travelling	91	13	0	4	2	0	22.3075	113.9698	1150.00	17.76
04-Oct-13	8:40:46	Container Boat	Travelling	91	11	50	3	31	10	22.3077	113.9698	1168.84	17.25
04-Oct-13	8:41:04	Transportation Boat	Travelling	90	47	0	345	15	0	22.3138	113.9661	1797.21	358.98
04-Oct-13	8:41:19	Transportation Boat	Travelling	91	0	45	298	56	5	22.3061	113.9565	1384.51	312.66
04-Oct-13	8:41:37	Speed Boat	Travelling	91	14	25	279	26	10	22.3016	113.9563	1127.82	293.17
04-Oct-13	8:42:54	Transportation Boat	Travelling	90	52	50	277	54	20	22.3029	113.9520	1594.98	291.64
04-Oct-13	8:43:06	Transportation Boat	Travelling	90	55	5	329	26	35	22.3108	113.9621	1528.77	343.17
04-Oct-13	8:43:25	Transportation Boat	Travelling	90	58	50	291	49	25	22.3051	113.9551	1429.93	305.55
04-Oct-13	8:43:46	Container Boat	Stationary	91	11	20	3	7	10	22.3078	113.9697	1176.77	16.85
04-Oct-13	8:43:53	Tug Boat	Travelling	91	9	20	1	12	25	22.3081	113.9694	1211.03	14.94
04-Oct-13	8:44:06	Tug Boat	Travelling	90	46	0	356	49	15	22.3139	113.9697	1836.60	10.55
04-Oct-13	8:44:19	Transportation Boat	Travelling	90	57	10	305	40	50	22.3077	113.9571	1472.07	319.41
04-Oct-13	8:45:05	Tour Boat	Travelling	90	53	10	4	15	10	22.3112	113.9712	1584.48	17.98
04-Oct-13	8:45:36	Transportation Boat	Travelling	91	0	45	302	18	50	22.3066	113.9571	1383.94	316.04
04-Oct-13	8:46:11	Fishing Boat	Operate and stationary	92	12	25	291	50	40	22.3009	113.9614	631.55	305.57
04-Oct-13	8:46:29	Fishing Boat	Operate and stationary	92	26	50	0	47	50	22.3026	113.9678	569.33	14.53
04-Oct-13	8:46:56	Tug Boat	Travelling	90	47	35	3	35	25	22.3129	113.9715	1773.71	17.32
04-Oct-13	8:47:19	Transportation Boat	Travelling	90	55	30	284	12	45	22.3040	113.9534	1516.50	297.94
04-Oct-13	8:47:36	Tour Boat	Travelling	91	1	20	342	58	55	22.3099	113.9656	1370.35	356.71
04-Oct-13	8:51:05	Tour Boat	Travelling	91	0	15	309	29	35	22.3077	113.9583	1394.83	323.22
04-Oct-13	8:53:49	Tour Boat	Travelling	90	55	15	284	23	45	22.3041	113.9533	1522.51	298.13
04-Oct-13	8:54:23	Tug Boat	Travelling	90	51	45	354	46	5	22.3121	113.9687	1627.13	8.50
04-Oct-13	8:54:46	Fishing Boat	Operate and travelling	93	43	15	294	41	10	22.2997	113.9636	373.63	308.42
04-Oct-13	8:55:24	Transportation Boat	Travelling	91	0	55	283	41	25	22.3033	113.9545	1378.80	297.42
04-Oct-13	8:55:40	Fishing Boat	Operate and travelling	93	0	50	306	1	50	22.3008	113.9635	461.56	319.76
04-Oct-13	8:56:38	Transportation Boat	Travelling	91	1	20	293	39	35	22.3051	113.9558	1369.16	307.39
04-Oct-13	8:56:56	Fishing Boat	Operate and travelling	93	21	35	294	11	25	22.2999	113.9632	413.85	307.92
04-Oct-13	8:57:51	Transportation Boat	Travelling	90	59	20	302	51	50	22.3069	113.9569	1415.74	316.59
04-Oct-13	8:58:37	Transportation Boat	Travelling	90	55	25	306	5	0	22.3080	113.9569	1517.16	319.81
04-Oct-13	8:58:56	Fishing Boat	Operate and travelling	93	0	15	339	59	40	22.3018	113.9659	462.92	353.72
04-Oct-13	9:07:53	Other	Stationary	94	43	30	0	0	0	22.3002	113.9671	293.55	13.73
04-Oct-13	9:09:14	Container Boat	Travelling	90	53	30	327	35	55	22.3110	113.9615	1570.77	341.33
04-Oct-13	9:10:16	Fishing Boat	Operate and stationary	93	20	50	306	9	50	22.3005	113.9638	414.87	319.89
04-Oct-13	9:11:13	Fishing Boat	Operate and stationary	93	15	35	346	43	30	22.3015	113.9664	426.01	0.45
04-Oct-13	9:11:36	Container Boat	Travelling	90	55	55	308	25	0	22.3083	113.9574	1501.51	322.15
04-Oct-13	9:12:16	Container Boat	Travelling	90	52	10	305	57	25	22.3087	113.9563	1611.12	319.69
04-Oct-13	9:13:26	Tug Boat	Travelling	91	5	30	315	15	45	22.3075	113.9600	1279.01	328.99
04-Oct-13	9:13:34	Construction Boat	Travelling	91	7	5	313	50	35	22.3071	113.9599	1248.48	327.57
04-Oct-13	9:16:11	HSF High Speed Ferry	Travelling	90	48	50	336	53	45	22.3129	113.9637	1722.52	350.63
04-Oct-13	9:16:27	Transportation Boat	Travelling	91	34	10	285	27	40	22.3015	113.9589	886.84	299.19
04-Oct-13	9:16:40	Tug Boat	Travelling	90	55	15	330	51	45	22.3108	113.9625	1519.15	344.59
04-Oct-13	9:16:47	Construction Boat	Travelling	90	56	25	329	54	30	22.3105	113.9623	1487.25	343.64
04-Oct-13	9:17:12	Fishing Boat	Non-operate and travelling	92	41	5	330	43	10	22.3021	113.9651	517.28	344.45
04-Oct-13	9:18:15	HSF High Speed Ferry	Travelling	91	1	10	304	4	5	22.3068	113.9574	1370.13	317.80
04-Oct-13	9:18:29	Transportation Boat	Travelling	92	0	45	311	26	0	22.3027	113.9626	690.73	325.16
04-Oct-13	9:18:40	HSF High Speed Ferry	Travelling	90	46	30	344	41	5	22.3139	113.9659	1810.57	358.41
04-Oct-13	9:19:16	HSF High Speed Ferry	Travelling	90	58	15	285	28	0	22.3039	113.9542	1439.80	299.20

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
04-Oct-13	9:19:27	HSF High Speed Ferry	Travelling	90	54	20	334	25	0	22.3112	113.9633	1545.20	348.15
04-Oct-13	9:19:37	Tug Boat	Travelling	90	46	10	341	58	15	22.3140	113.9651	1824.10	355.70
04-Oct-13	9:19:44	Construction Boat	Travelling	90	46	50	341	26	45	22.3137	113.9649	1797.59	355.18
04-Oct-13	9:20:00	Fishing Boat	Operate and travelling	91	50	10	327	13	0	22.3041	113.9640	757.48	340.95
04-Oct-13	9:20:11	Transportation Boat	Travelling	91	58	45	339	6	45	22.3039	113.9655	702.52	352.84
04-Oct-13	9:21:12	Transportation Boat	Travelling	91	46	0	353	9	45	22.3047	113.9673	787.48	6.89
04-Oct-13	9:21:27	HSF High Speed Ferry	Travelling	91	1	50	294	45	45	22.3052	113.9561	1355.60	308.49
04-Oct-13	9:21:41	Tug Boat	Travelling	90	40	25	347	17	40	22.3164	113.9668	2091.02	1.02
04-Oct-13	9:21:48	Construction Boat	Travelling	90	41	35	346	53	35	22.3159	113.9666	2030.76	0.62
04-Oct-13	9:25:39	Transportation Boat	Travelling	91	10	45	7	43	45	22.3075	113.9706	1183.52	21.46
04-Oct-13	9:25:58	Fishing Boat	Non-operate and travelling	92	26	50	282	54	40	22.2999	113.9615	568.04	296.64
04-Oct-13	9:26:23	Government Boat	Travelling	91	17	40	38	27	15	22.3036	113.9747	1077.84	52.18
04-Oct-13	9:27:11	Government Boat	Travelling	92	49	40	358	10	15	22.3019	113.9674	491.67	11.90
04-Oct-13	9:27:47	Government Boat	Travelling	92	4	50	331	33	10	22.3034	113.9647	669.01	345.28
04-Oct-13	9:28:06	Transportation Boat	Travelling	91	6	45	1	0	50	22.3086	113.9695	1256.17	14.74
04-Oct-13	9:28:22	Transportation Boat	Travelling	91	10	15	312	39	0	22.3066	113.9600	1193.03	326.38
04-Oct-13	9:28:36	Government Boat	Travelling	91	56	35	323	56	30	22.3036	113.9638	716.63	337.67
04-Oct-13	9:28:59	Fishing Boat	Operate and stationary	91	53	40	324	33	15	22.3038	113.9638	735.14	338.28
04-Oct-13	9:29:32	Government Boat	Travelling	91	25	35	316	26	35	22.3053	113.9617	977.92	330.17
04-Oct-13	9:30:14	Transportation Boat	Travelling	91	26	0	314	19	15	22.3051	113.9614	973.25	328.05
04-Oct-13	9:30:23	Government Boat	Travelling	91	26	40	314	18	50	22.3050	113.9614	965.73	328.04
04-Oct-13	9:30:38	Transportation Boat	Travelling	91	18	25	2	13	30	22.3069	113.9693	1068.14	15.95
04-Oct-13	9:31:25	Transportation Boat	Travelling	91	14	50	5	42	55	22.3071	113.9700	1119.84	19.45
04-Oct-13	9:33:57	Government Boat	Travelling	92	46	40	9	28	45	22.3018	113.9683	501.06	23.21
04-Oct-13	9:34:11	Transportation Boat	Travelling	91	49	35	316	18	10	22.3036	113.9627	763.26	330.03
04-Oct-13	9:34:22	Transportation Boat	Travelling	91	30	35	4	21	0	22.3055	113.9692	924.28	18.08
04-Oct-13	9:34:31	Government Boat	Travelling	91	11	35	32	17	20	22.3049	113.9746	1171.69	46.02
04-Oct-13	9:34:43	Transportation Boat	Travelling	91	0	15	315	24	55	22.3084	113.9594	1394.76	329.15
04-Oct-13	9:34:57	Government Boat	Travelling	90	49	20	32	55	15	22.3082	113.9785	1708.85	46.65
04-Oct-13	9:35:29	Transportation Boat	Travelling	91	45	45	2	36	0	22.3045	113.9686	791.21	16.33
04-Oct-13	9:35:37	Transportation Boat	Travelling	92	35	45	324	55	0	22.3021	113.9645	536.44	338.65
04-Oct-13	9:35:43	Transportation Boat	Travelling	91	4	40	326	23	45	22.3086	113.9621	1298.59	340.13
04-Oct-13	9:36:01	Transportation Boat	Travelling	91	1	35	309	43	15	22.3075	113.9585	1364.46	323.45
04-Oct-13	9:36:19	Tug Boat	Travelling	90	40	55	350	14	55	22.3162	113.9678	2069.82	3.98
04-Oct-13	9:36:28	Construction Boat	Travelling	90	39	55	350	50	30	22.3167	113.9680	2123.24	4.57
04-Oct-13	9:36:41	Transportation Boat	Travelling	91	4	10	321	29	20	22.3083	113.9611	1309.02	335.22
04-Oct-13	9:37:33	Transportation Boat	Travelling	92	13	10	2	58	20	22.3030	113.9682	627.92	16.70
04-Oct-13	9:37:40	Transportation Boat	Travelling	95	34	10	357	12	10	22.2998	113.9669	249.30	10.93
04-Oct-13	9:37:54	Transportation Boat	Travelling	90	55	10	309	17	40	22.3086	113.9575	1525.91	323.02
04-Oct-13	9:38:01	Transportation Boat	Travelling	90	55	30	330	39	45	22.3108	113.9624	1516.63	344.39
04-Oct-13	9:39:13	Delete	stationary	92	17	40	4	46	25	22.3028	113.9683	607.48	18.50
04-Oct-13	9:39:23	Transportation Boat	Travelling	94	1	55	339	8	25	22.3007	113.9660	345.04	352.87
04-Oct-13	9:39:32	Transportation Boat	Travelling	90	47	20	340	46	45	22.3136	113.9647	1783.78	354.51
04-Oct-13	9:40:23	Tug Boat	Travelling	90	50	15	337	28	10	22.3125	113.9639	1678.48	351.20
04-Oct-13	9:40:29	Construction Boat	Travelling	90	49	30	338	24	0	22.3128	113.9641	1704.42	352.13
04-Oct-13	9:40:39	Transportation Boat	Travelling	93	27	15	0	38	5	22.3011	113.9674	403.07	14.36
04-Oct-13	9:40:53	Transportation Boat	Travelling	92	25	15	321	21	20	22.3023	113.9640	575.80	335.09
04-Oct-13	9:41:03	Transportation Boat	Travelling	90	40	5	348	13	35	22.3166	113.9671	2115.64	1.96
04-Oct-13	9:41:22	Fishing Boat	Operate and stationary	92	6	50	322	33	0	22.3031	113.9638	659.77	336.28
04-Oct-13	9:41:33	Transportation Boat	Stationary	95	22	30	356	9	35	22.2999	113.9668	258.53	9.89
04-Oct-13	9:43:32	Transportation Boat	Travelling	93	54	15	2	25	40	22.3007	113.9674	356.60	16.16
04-Oct-13	9:43:42	Transportation Boat	Travelling	91	18	25	311	23	35	22.3055	113.9604	1070.26	325.12
04-Oct-13	9:44:21	Tour Boat	Travelling	90	58	30	289	44	50	22.3048	113.9547	1439.15	303.48
04-Oct-13	9:44:41	Transportation Boat	Travelling	92	31	25	9	46	20	22.3022	113.9685	552.60	23.50
04-Oct-13	9:44:54	Transportation Boat	Travelling	91	5	10	309	15	50	22.3069	113.9588	1290.32	322.99
04-Oct-13	9:45:08	Tug Boat	Travelling	90	59	20	314	46	30	22.3085	113.9592	1418.84	328.50
04-Oct-13	9:45:15	Construction Boat	Travelling	90	59	0	316	8	50	22.3087	113.9594	1426.98	329.88
04-Oct-13	9:50:24	Tour Boat	Travelling	90	45	35	343	21	40	22.3143	113.9655	1856.85	357.09
04-Oct-13	9:50:41	Tug Boat	Travelling	90	55	30	285	17	5	22.3043	113.9535	1519.56	299.01
04-Oct-13	9:50:52	Construction Boat	Travelling	90	56	5	285	56	5	22.3043	113.9537	1503.56	299.66
04-Oct-13	9:51:15	Tug Boat	Travelling	90	41	5	349	29	30	22.3162	113.9675	2065.90	3.22
04-Oct-13	9:52:23	Tour Boat	Travelling	90	37	5	350	39	5	22.3182	113.9681	2296.47	4.38
04-Oct-13	9:52:37	Fishing Boat	Non-Operate and travelling	92	21	55	304	30	50	22.3016	113.9626	590.42	318.24
04-Oct-13	9:52:50	Tug Boat	Travelling	90	49	55	338	39	25	22.3127	113.9642	1693.11	352.39
04-Oct-13	9:54:40	Fishing Boat	Non-operate and travelling	91	46	15	280	23	0	22.3005	113.9594	789.76	294.11
04-Oct-13	9:54:51	Tug Boat	Travelling	90	58	30	316	49	20	22.3089	113.9595	1441.45	330.55
04-Oct-13	9:55:20	HSF High Speed Ferry	Travelling	91	2	40	289	24	25	22.3042	113.9554	1344.53	303.14
04-Oct-13	9:56:18	Tug Boat	Travelling	90	52	20	306	55	0	22.3089	113.9564	1614.40	320.65
04-Oct-13	9:56:31	HSF High Speed Ferry	Travelling	91	3	55	313	54	20	22.3076	113.9595	1318.16	327.64
04-Oct-13	9:57:35	Tug Boat	Travelling	90	56	15	1	55	45	22.3106	113.9703	1500.56	15.66
04-Oct-13	9:57:42	Container Boat	Travelling	90	57	45	2	11	40	22.3103	113.9703	1461.06	15.92
04-Oct-13	10:00:02	HSF High Speed Ferry	Travelling	90	34	35	352	23	25	22.3197	113.9690	2471.81	6.12
04-Oct-13	10:00:15	Tug Boat	Travelling	90	47	30	358	13	45	22.3133	113.9700	1783.01	11.96
04-Oct-13	10:00:22	Container Boat	Travelling	90	48	50	358	36	40	22.3129	113.9700	1733.38	12.34
04-Oct-13	10:01:44	Transportation Boat	Travelling	91	45	0	4	42	10	22.3044	113.9689	800.06	18.43
04-Oct-13	10:04:07	Transportation Boat	Travelling	92	40	5	343	23	55	22.3023	113.9661	524.12	357.13
04-Oct-13	10:04:17	Transportation Boat	Travelling	91	30	5	303	50	35	22.3038	113.9603	933.66	317.57
04-Oct-13	10:05:57	Transportation Boat	Travelling	92	25	30	320	13	40	22.3023	113.9639	576.99	333.96
04-Oct-13	10:06:09	Transportation Boat	Travelling	92	19	40	320	12	50	22.3025	113.9638	601.19	333.94
04-Oct-13	10:08:57	Tug Boat	Travelling	90	49	15	340	47	25	22.3130	113.9648	1720.68	354.52
04-Oct-13	10:09:11	Transportation Boat	Stationary	92	34	15	318	52	40	22.3020	113.9640	544.42	332.61
04-Oct-13	10:09:18	Transportation Boat	Stationary	92	32	15	318	0	40	22.3020	113.9639	551.61	331.74
04-Oct-13	10:11:20	Transportation Boat	Travelling	93	5	15	323	32	25	22.3014	113.9647	453.20	337.27
04-Oct-13	10:11:29	Transportation Boat	Travelling	92	2	30	322	54	5	22.3033	113.9638	686.32	336.63
04-Oct-13	10:11:39	Transportation Boat	Travelling	90	57	20	316	9	15	22.3091	113.9592	1474.95	329.88
04-Oct-13	10:12:46	Transportation Boat	Travelling	95	26	35	353	34	50	22.2999	113.9667	256.48	7.31
04-Oct-13	10:12:57	Transportation Boat	Travelling	91	19	10	334	41	45	22.3070	113.9643	1064.74	348.43
04-Oct-13	10:13:05	Transportation Boat	Travelling	90	56	25	324	5	50	22.3101	113.9609	1499.59	337.83
04-Oct-13	10:15:03	Transportation Boat	Travelling	92	49	10	10	55	25	22.3017	113.9684	496.71	24.65
04-Oct-13	10:15:11	Transportation Boat	Travelling	90	48	50	344	28	25	22.3132	113.9659	1737.29	358.20
04-Oct-13	10:15:19	Transportation Boat	Travelling	90	49	25	337	29	0	22.3129	113.9638	1716.42	351.21
04-Oct-13	10:15:26	Transportation Boat	Travelling	90	49	55	344	56	45	22.3129	113.9660	1698.94	358.68
04-Oct-13	10:15:45	Transportation Boat	Travelling	90	59	45	297	6	5	22.3059	113.9560	1415.37	310.83
04-Oct-13	10:16:44	Transportation Boat	Travelling	90	57	25	306	26	15	22.3078	113.9572	1473.91	320.17
04-Oct-13	10:17:03	Transportation Boat	Travelling	91	37	20	17	36	55	22.3043	113.9708	865.40	31.35
04-Oct-13	10:17:29	Transportation Boat	Travelling	90	51	30	306	48	5	22.3091	113.9562	1646.28	320.53
04-Oct-13	10:17:35	Transportation Boat	Travelling	90	34	55	351	9	5	22.3196	113.9684	2453.88	4.88
04-Oct-13	10:17:41	Transportation Boat	Travelling	90	41	25	346	49	25	22.3161	113.9666	2057.10	0.55
04-Oct-13	10:17:50	Transportation Boat	Travelling	90	58	40	318	53	30	22.3091	113.9599	1442.31	332.62
04-Oct-13	10:17:58	Transportation Boat	Travelling	90	51	5	342	45	30	22.3125	113.9654	1660.07	356.49
04-Oct-13	10:18:57	Transportation Boat	Travelling	90	59	45	304	42	20	22.3072	113.9573	1416.06	318.44
04-Oct-13	10:19:11	Transportation Boat	Travelling	91	6	15	330	54	50	22.3087	113.9631	1275.59	344.64
04-Oct-13	10:19:59	Transportation Boat	Travelling	90	57	55	291	53	25	22.3053	113.9548	1461.73	305.62
04-Oct-13	10:20:05	Transportation Boat	Travelling	91	7	50	325	53	20	22.3081	113.9622	1245.68	339.62
04-Oct-13	10:20:17	Transportation Boat	Travelling	90	56	25	17	10	20	22.3092	113.9739	1501.22	30.90
04-Oct-13	10:20:45	Tug Boat	Travelling	91	4	35	324	12	35	22.3085	113.9616	1309.19	337.94
04-Oct-13	10:21:02	Transportation Boat	Travelling	90	53	45	280	7	35	22.3034	113.9524	1577.07	293.86
04-Oct-13	10:21:15	Transportation Boat	Travelling	91	10	25	307	37	0	22.3061	113.9591	1199.75	321.35
04-Oct-13	10:21:29	Tug Boat	Travelling	90	47	15	346	6	35	22.3138	113.9664	1798.43	359.84
04-Oct-13	10:21:48	Transportation Boat	Stationary	90	51	25	18	11	5	22.3102	113.9749	1650.07	31.91
04-Oct-13	10:22:00	Tug Boat	Travelling	90	58	35	312	55	25	22.3085	113.9587	1445.30	326.65
04-Oct-13	10:22:06	Tug Boat	Travelling	90	50	0	340	39	30	22.3128	113.9648	1697.77	354.39
04-Oct-13	10:22:17	Tug Boat	Travelling	90	37	45	349	47	0	22.3180	113.9678	2264.89	3.51
04-Oct-13	10:22:26	Construction Boat	Travelling	90	36	55	349	44	55	22.3184	113.9678	2317.84	3.48
04-Oct-13	10:23:11	Transportation Boat	Travelling	90	58	25	279	33	5	22.3028	113.9534	1449.74	293.28
04-Oct-13	10:23:35	Tug Boat	Travelling	90	47	55	305	17	55	22.3097	113.9551	1773.46	319.03
04-Oct-13	10:23:41	Tug Boat	Travelling	90	57	0	324	30	10	22.3100	113.9610	1486.40	338.23

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
04-Oct-13	10:24:02	Tug Boat	Travelling	90	42	35	346	8	25	22.3156	113.9664	2001.18	359.87
04-Oct-13	10:24:14	Construction Boat	Travelling	90	41	5	345	59	25	22.3163	113.9663	2076.33	359.72
04-Oct-13	10:25:17	Tug Boat	Travelling	91	0	45	304	49	30	22.3070	113.9574	1393.78	318.55
04-Oct-13	10:25:30	Transportation Boat	Travelling	90	59	55	14	59	25	22.3088	113.9730	1413.46	28.72
04-Oct-13	10:27:20	Other	Travelling	90	57	5	279	17	15	22.3028	113.9531	1485.02	293.02
04-Oct-13	10:27:29	Tug Boat	Travelling	90	53	20	336	5	50	22.3117	113.9637	1591.14	349.83
04-Oct-13	10:27:40	Construction Boat	Travelling	90	52	25	336	37	10	22.3120	113.9638	1619.48	350.35
04-Oct-13	10:27:57	Transportation Boat	Travelling	91	13	15	6	49	50	22.3073	113.9703	1154.09	20.56
04-Oct-13	10:32:49	Transportation Boat	Travelling	91	10	20	14	3	0	22.3072	113.9719	1203.28	27.78
04-Oct-13	10:32:58	Transportation Boat	Travelling	90	42	0	345	0	5	22.3159	113.9660	2032.48	358.73
04-Oct-13	10:33:08	Tug Boat	Travelling	91	4	5	304	36	30	22.3065	113.9579	1321.99	318.34
04-Oct-13	10:33:14	Construction Boat	Travelling	91	4	5	305	58	35	22.3067	113.9581	1322.01	319.71
04-Oct-13	10:33:32	Transportation Boat	Travelling	90	58	5	313	36	0	22.3087	113.9587	1460.46	327.33
04-Oct-13	10:34:11	Tug Boat	Travelling	90	40	35	349	20	25	22.3165	113.9675	2105.83	3.07
04-Oct-13	10:34:54	Transportation Boat	Travelling	90	50	55	333	20	30	22.3123	113.9628	1669.87	347.07
04-Oct-13	10:35:00	Transportation Boat	Travelling	90	56	45	328	11	15	22.3104	113.9619	1495.60	341.92
04-Oct-13	10:35:06	Transportation Boat	Travelling	91	2	30	315	42	55	22.3081	113.9597	1356.28	329.45
04-Oct-13	10:36:50	Transportation Boat	Travelling	90	58	35	315	11	5	22.3088	113.9591	1448.54	328.91
04-Oct-13	10:36:55	Transportation Boat	Travelling	90	53	15	345	9	25	22.3120	113.9661	1595.95	358.89
04-Oct-13	10:37:01	Transportation Boat	Travelling	91	5	0	327	40	55	22.3087	113.9624	1303.90	341.41
04-Oct-13	10:37:11	Transportation Boat	Travelling	91	17	55	311	55	20	22.3057	113.9604	1085.91	325.65
04-Oct-13	10:37:44	Tug Boat	Travelling	90	58	5	281	20	40	22.3032	113.9535	1461.39	295.07
04-Oct-13	10:37:53	Construction Boat	Travelling	90	58	5	282	21	10	22.3034	113.9536	1461.42	296.08
04-Oct-13	10:38:03	HSF High Speed Ferry	Travelling	90	57	25	290	58	5	22.3052	113.9546	1478.66	304.70
04-Oct-13	10:38:20	Tug Boat	Travelling	90	58	15	321	20	40	22.3095	113.9604	1457.28	335.07
04-Oct-13	10:38:28	Transportation Boat	Travelling	91	2	0	296	31	45	22.3056	113.9562	1368.05	310.26
04-Oct-13	10:38:40	Transportation Boat	Travelling	90	45	35	356	10	55	22.3142	113.9695	1870.53	9.91
04-Oct-13	10:38:50	Transportation Boat	Travelling	91	9	30	323	21	25	22.3077	113.9618	1218.95	337.09
04-Oct-13	10:38:58	Transportation Boat	Travelling	92	39	55	322	26	50	22.3020	113.9643	527.42	336.18
04-Oct-13	10:39:29	HSF High Speed Ferry	Travelling	91	0	30	322	26	55	22.3092	113.9609	1402.62	336.18
04-Oct-13	10:39:49	Transportation Boat	Travelling	90	58	0	281	40	15	22.3033	113.9535	1463.97	295.40
04-Oct-13	10:39:54	Transportation Boat	Travelling	90	41	5	3	3	25	22.3156	113.9722	2081.28	16.79
04-Oct-13	10:40:02	Transportation Boat	Travelling	91	5	40	317	37	40	22.3078	113.9604	1291.11	331.36
04-Oct-13	10:40:09	Transportation Boat	Travelling	95	10	40	344	59	20	22.3001	113.9663	270.82	358.72
04-Oct-13	10:40:29	Tug Boat	Travelling	90	58	25	293	13	50	22.3055	113.9551	1453.54	306.96
04-Oct-13	10:40:39	Tug Boat	Travelling	91	4	10	286	42	35	22.3036	113.9553	1321.75	300.44
04-Oct-13	10:40:47	Construction Boat	Travelling	91	3	25	283	51	45	22.3032	113.9549	1337.59	297.59
04-Oct-13	10:41:13	HSF High Speed Ferry	Travelling	90	41	35	346	47	25	22.3161	113.9666	2055.98	0.52
04-Oct-13	10:41:27	Transportation Boat	Travelling	91	0	50	311	41	45	22.3080	113.9587	1395.25	325.43
04-Oct-13	10:43:00	Transportation Boat	Travelling	90	54	45	307	12	55	22.3085	113.9569	1552.95	320.95
04-Oct-13	10:48:02	Tug Boat	Travelling	90	56	0	334	45	25	22.3110	113.9635	1518.91	348.49
04-Oct-13	10:48:10	Construction Boat	Travelling	90	58	0	332	29	5	22.3104	113.9630	1465.82	346.21
04-Oct-13	10:49:31	Transportation Boat	Travelling	91	0	25	311	25	35	22.3080	113.9586	1406.70	325.16
04-Oct-13	10:50:34	Container Boat	Travelling	90	52	10	306	23	15	22.3089	113.9562	1633.02	320.12
04-Oct-13	10:52:13	Transportation Boat	Travelling	90	46	55	340	7	40	22.3139	113.9645	1819.93	353.86
04-Oct-13	10:52:27	Container Boat	Travelling	91	1	0	315	14	0	22.3084	113.9594	1393.69	328.96
04-Oct-13	10:52:42	Tug Boat	Travelling	90	42	30	355	12	55	22.3155	113.9694	2013.95	8.95
04-Oct-13	10:52:51	Construction Boat	Travelling	90	42	50	353	55	5	22.3154	113.9690	1997.92	7.65
04-Oct-13	10:53:49	Transportation Boat	Travelling	90	38	40	349	6	5	22.3176	113.9675	2220.09	2.83
04-Oct-13	10:54:04	Container Boat	Travelling	91	4	35	324	30	25	22.3086	113.9617	1315.78	338.24
04-Oct-13	10:54:16	Tug Boat	Travelling	90	39	40	1	25	50	22.3164	113.9719	2162.54	15.16
04-Oct-13	10:54:23	Construction Boat	Travelling	90	40	50	359	58	25	22.3160	113.9712	2099.00	13.70
04-Oct-13	10:56:25	Tug Boat	Travelling	90	49	25	341	14	40	22.3131	113.9649	1727.13	354.97
04-Oct-13	10:57:25	Container Boat	Stationary	91	5	10	326	45	45	22.3087	113.9622	1304.53	340.49
04-Oct-13	10:58:28	Tug Boat	Travelling	90	58	15	320	29	10	22.3095	113.9602	1461.71	334.22
04-Oct-13	11:00:18	Tug Boat	Travelling	91	1	0	297	51	55	22.3060	113.9562	1395.34	311.60
04-Oct-13	11:00:30	Tug Boat	Travelling	91	3	25	288	47	35	22.3041	113.9554	1341.57	302.52
04-Oct-13	11:01:08	Tug Boat	Travelling	90	51	50	358	31	40	22.3121	113.9698	1646.32	12.26
04-Oct-13	11:01:18	Container Boat	Travelling	90	50	45	358	40	45	22.3124	113.9699	1682.14	12.41
04-Oct-13	11:02:36	Tug Boat	Travelling	91	1	20	304	34	10	22.3069	113.9574	1388.13	318.30
04-Oct-13	11:02:45	Tug Boat	Travelling	90	59	45	356	29	10	22.3102	113.9689	1425.44	10.22
04-Oct-13	11:02:53	Container Boat	Travelling	90	58	25	356	55	35	22.3105	113.9690	1458.44	10.66
04-Oct-13	11:05:41	Tug Boat	Travelling	90	53	10	335	14	40	22.3118	113.9634	1605.44	348.97
04-Oct-13	11:05:50	Construction Boat	Travelling	90	52	40	335	57	55	22.3120	113.9636	1620.97	349.70
04-Oct-13	11:06:02	Tug Boat	Travelling	90	53	25	330	34	35	22.3115	113.9622	1597.88	344.31
04-Oct-13	11:06:10	Tug Boat	Travelling	91	21	5	359	36	35	22.3068	113.9688	1047.73	13.34
04-Oct-13	11:06:18	Container Boat	Travelling	91	19	15	358	1	20	22.3071	113.9685	1072.18	11.75
04-Oct-13	11:08:27	Tug Boat	Travelling	90	45	15	345	13	20	22.3147	113.9661	1893.13	358.95
04-Oct-13	11:08:39	Tug Boat	Travelling	90	42	25	346	18	10	22.3158	113.9664	2022.89	0.03
04-Oct-13	11:09:24	Government Boat	Travelling	90	41	20	347	54	30	22.3163	113.9670	2077.61	1.64
04-Oct-13	11:10:45	Tug Boat	Travelling	91	10	5	313	59	30	22.3069	113.9601	1214.51	327.72
04-Oct-13	11:10:54	Construction Boat	Travelling	91	8	45	316	15	25	22.3073	113.9604	1238.33	329.99
04-Oct-13	11:11:11	Tug Boat	Travelling	91	21	35	3	21	25	22.3066	113.9694	1042.05	17.09
04-Oct-13	11:11:20	Container Boat	Travelling	91	22	50	4	47	50	22.3064	113.9696	1026.23	18.53
04-Oct-13	11:12:14	Government Boat	Travelling	90	56	50	325	44	50	22.3103	113.9613	1501.77	339.48
04-Oct-13	11:12:27	Tug Boat	Travelling	90	59	55	307	35	35	22.3076	113.9577	1423.49	321.32
04-Oct-13	11:14:04	Tug Boat	Travelling	91	15	25	4	21	25	22.3073	113.9698	1128.44	18.09
04-Oct-13	11:14:11	Container Boat	Travelling	91	15	25	5	34	0	22.3072	113.9700	1128.46	19.30
04-Oct-13	11:14:26	Tug Boat	Travelling	91	7	40	319	47	35	22.3078	113.9609	1259.03	333.52
04-Oct-13	11:14:42	Construction Boat	Stationary	91	2	45	320	15	50	22.3086	113.9606	1358.88	333.99
04-Oct-13	11:15:04	Government Boat	Travelling	90	57	50	292	5	15	22.3054	113.9548	1476.06	305.82
04-Oct-13	11:15:26	HSF High Speed Ferry	Travelling	90	38	45	349	29	55	22.3176	113.9676	2222.43	3.23
04-Oct-13	11:15:53	Container Boat	Stationary	91	13	40	7	20	35	22.3073	113.9704	1155.79	21.07
04-Oct-13	11:17:40	HSF High Speed Ferry	Travelling	90	54	15	329	37	50	22.3112	113.9620	1575.69	343.36
04-Oct-13	11:17:49	HSF High Speed Ferry	Travelling	90	33	25	352	42	0	22.3208	113.9692	2592.45	6.43
04-Oct-13	11:20:13	HSF High Speed Ferry	Travelling	90	57	45	288	0	40	22.3046	113.9542	1479.36	301.74
04-Oct-13	11:20:22	HSF High Speed Ferry	Travelling	90	52	15	333	42	40	22.3120	113.9629	1637.70	347.44
04-Oct-13	11:20:38	Tug Boat	Travelling	91	5	50	359	8	20	22.3090	113.9692	1295.67	12.87
04-Oct-13	11:21:20	Tug Boat	Travelling	91	0	40	4	38	30	22.3096	113.9707	1407.54	18.37
04-Oct-13	11:22:26	Tug Boat	Travelling	91	11	0	8	27	35	22.3076	113.9708	1200.78	22.19
04-Oct-13	11:22:40	HSF High Speed Ferry	Travelling	90	59	10	296	2	20	22.3059	113.9556	1443.99	309.77
04-Oct-13	11:23:05	Tug Boat	Stationary	91	7	55	319	57	30	22.3078	113.9610	1255.97	333.69
04-Oct-13	11:23:17	Tug Boat	Stationary	91	12	5	8	8	20	22.3075	113.9707	1182.72	21.87
04-Oct-13	11:23:28	HSF High Speed Ferry	Travelling	90	56	15	282	37	0	22.3037	113.9531	1520.14	296.35
04-Oct-13	11:26:54	Tug Boat	Travelling	90	59	35	301	51	10	22.3068	113.9566	1434.66	315.58
04-Oct-13	11:27:03	Construction Boat	Travelling	90	58	45	297	10	5	22.3062	113.9557	1455.32	310.90
04-Oct-13	11:30:51	Transportation Boat	Travelling	95	6	0	345	1	25	22.3001	113.9663	277.06	358.75
04-Oct-13	11:31:15	Tug Boat	Travelling	90	53	25	335	24	0	22.3118	113.9635	1603.94	349.13
04-Oct-13	11:31:21	Construction Boat	Travelling	90	56	10	331	18	30	22.3109	113.9626	1524.22	345.04
04-Oct-13	11:32:17	Transportation Boat	Travelling	92	56	45	299	43	40	22.3006	113.9630	480.85	313.46
04-Oct-13	11:34:00	Transportation Boat	Travelling	91	42	10	281	53	30	22.3009	113.9591	833.81	295.62
04-Oct-13	11:34:14	Tug Boat	Travelling	90	43	55	352	2	35	22.3152	113.9683	1959.60	5.77
04-Oct-13	11:34:23	Construction Boat	Travelling	90	46	20	349	13	10	22.3143	113.9673	1855.10	2.95
04-Oct-13	11:36:23	Transportation Boat	Travelling	90	43	5	348	38	10	22.3156	113.9672	1999.12	2.37
04-Oct-13	11:37:47	Tug Boat	Travelling	90	35	50	7	30	0	22.3179	113.9749	2418.06	21.23
04-Oct-13	11:37:56	Construction Boat	Travelling	90	38	5	6	9	40	22.3168	113.9739	2270.32	19.89
04-Oct-13	11:38:16	Transportation Boat	Travelling	90	59	30	341	28	30	22.3105	113.9652	1439.14	355.20
04-Oct-13	11:43:34	Transportation Boat	Travelling	91	12	40	298	0	40	22.3047	113.9579	1176.70	311.74
04-Oct-13	11:43:45	Transportation Boat	Travelling	90	41	45	345	44	15	22.3162	113.9662	2066.98	359.47
04-Oct-13	11:45:13	Government Boat	Travelling	91	1	40	294	7	35	22.3053	113.9557	1389.37	307.86
04-Oct-13	11:45:38	Transportation Boat	Travelling	90	57	20	322	4	35	22.3099	113.9604	1495.95	335.81
04-Oct-13	11:47:26	Government Boat	Travelling	90	58	20	323	25	35	22.3098	113.9608	1470.33	337.16
04-Oct-13	11:47:37	Transportation Boat	Travelling	90	59	20	285	15	10	22.3039	113.9541	1445.25	298.98
04-Oct-13	11:50:50	Government Boat	Travelling	90	39	40	349	43	55	22.3172	113.9677	2181.11	3.46
04-Oct-13	11:56:42	Speed Boat	Travelling	92	22	45	22	23	0	22.3020	113.9698	597.96	36.11
04-Oct-13	11:58:21	Speed Boat	Travelling	91	40	5	19	2	0	22.3041	113.9709	854.34	32.76
04-Oct-13	11:59:36	HSF High Speed Ferry	Travelling	90	59	35	292	37	35	22.3053	113.9551	1441.69	306.36

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
04-Oct-13	12:02:40	HSF High Speed Ferry	Travelling	90	45	25	343	50	50	22.3147	113.9656	1901.45	357.58
04-Oct-13	12:03:52	HSF High Speed Ferry	Travelling	90	36	10	352	7	20	22.3191	113.9688	2404.39	5.85
04-Oct-13	12:04:03	Transportation Boat	Travelling	90	35	30	351	39	10	22.3196	113.9686	2451.34	5.38
04-Oct-13	12:09:01	Transportation Boat	Travelling	91	0	35	317	45	0	22.3088	113.9598	1419.57	331.48
04-Oct-13	12:09:40	Speed Boat	Travelling	94	54	35	6	36	30	22.3001	113.9674	289.52	20.34
04-Oct-13	12:09:55	Speed Boat	Stationary	91	12	5	18	54	20	22.3066	113.9726	1190.96	32.64
04-Oct-13	12:11:59	Transportation Boat	Travelling	90	55	40	283	8	25	22.3039	113.9530	1547.48	296.87
04-Oct-13	12:12:09	Tug Boat	Travelling	90	59	20	285	21	15	22.3040	113.9541	1450.55	299.08
04-Oct-13	12:12:18	Construction Boat	Travelling	90	58	15	284	16	40	22.3039	113.9537	1477.94	298.01
04-Oct-13	12:16:21	Dumping Guide Boat	Travelling	91	21	55	24	48	0	22.3050	113.9727	1047.89	38.53
04-Oct-13	12:17:05	Transportation Boat	Travelling	90	39	35	349	34	25	22.3173	113.9676	2194.47	3.30
04-Oct-13	12:17:20	Tug Boat	Travelling	91	1	40	309	17	0	22.3077	113.9582	1396.03	323.01
04-Oct-13	12:17:27	Construction Boat	Travelling	91	2	50	308	5	50	22.3073	113.9582	1369.82	321.83
04-Oct-13	12:17:40	Container Boat	Travelling	90	51	0	303	46	50	22.3089	113.9553	1693.01	317.51
04-Oct-13	12:19:17	Dumping Guide Boat	Travelling	93	17	50	3	44	45	22.3013	113.9677	432.45	17.48
04-Oct-13	12:19:34	Transportation Boat	Travelling	90	55	5	333	56	30	22.3114	113.9631	1565.89	347.67
04-Oct-13	12:19:59	Container Boat	Travelling	90	59	25	312	22	40	22.3085	113.9585	1450.17	326.11
04-Oct-13	12:21:36	Tour Boat	Travelling	90	46	45	343	53	35	22.3143	113.9657	1851.24	357.62
04-Oct-13	12:21:49	Transportation Boat	Travelling	91	3	35	307	43	5	22.3072	113.9582	1354.34	321.45
04-Oct-13	12:21:59	Dumping Guide Boat	Stationary	93	31	20	0	32	50	22.3012	113.9674	404.89	14.28
04-Oct-13	12:22:12	Container Boat	Travelling	90	53	35	333	52	15	22.3118	113.9630	1611.08	347.60
04-Oct-13	12:23:02	Dumping Guide Boat	Travelling	91	3	30	30	37	35	22.3063	113.9756	1356.39	44.36
04-Oct-13	12:23:23	Transportation Boat	Travelling	90	57	20	288	33	5	22.3048	113.9540	1504.38	302.28
04-Oct-13	12:23:35	Tour Boat	Travelling	90	57	0	332	11	55	22.3108	113.9628	1513.35	345.93
04-Oct-13	12:23:48	Tug Boat	Travelling	90	53	5	337	9	15	22.3121	113.9639	1626.90	350.88
04-Oct-13	12:23:55	Construction Boat	Travelling	90	53	35	336	27	35	22.3119	113.9637	1611.49	350.19
04-Oct-13	12:24:19	Container Boat	Travelling	90	43	20	349	11	15	22.3156	113.9674	2001.61	2.92
04-Oct-13	12:24:38	Dumping Guide Boat	Travelling	91	26	20	26	0	10	22.3045	113.9726	995.14	39.73
04-Oct-13	12:27:32	Dumping Guide Boat	Travelling	93	1	25	8	4	10	22.3016	113.9681	472.29	21.80
04-Oct-13	12:27:49	Tour Boat	Travelling	90	59	40	291	36	45	22.3051	113.9549	1445.70	305.34
04-Oct-13	12:28:17	Container Boat	Travelling	90	29	10	354	10	5	22.3246	113.9704	3023.12	7.90
04-Oct-13	12:28:50	Tug Boat	Travelling	90	42	55	350	4	5	22.3158	113.9677	2022.92	3.80
04-Oct-13	12:28:58	Construction Boat	Travelling	90	43	25	349	47	25	22.3156	113.9676	1999.07	3.52
04-Oct-13	12:29:20	Dumping Guide Boat	Travelling	92	55	5	13	12	10	22.3015	113.9686	489.56	26.93
04-Oct-13	12:29:30	Dumping Guide Boat	Travelling	93	48	40	349	50	35	22.3010	113.9666	374.51	3.57
04-Oct-13	12:31:15	Dumping Guide Boat	Travelling	93	50	10	3	24	30	22.3008	113.9675	372.15	17.14
04-Oct-13	12:31:26	Dumping Guide Boat	Travelling	95	1	35	333	38	50	22.3001	113.9658	283.68	347.38
04-Oct-13	12:36:10	Dumping Guide Boat	Stationary	93	57	45	354	40	0	22.3008	113.9669	360.50	8.40
04-Oct-13	12:36:20	Dumping Guide Boat	Stationary	95	5	50	347	46	5	22.3001	113.9665	279.91	1.50
04-Oct-13	12:41:31	Dumping Guide Boat	Travelling	93	30	30	5	5	10	22.3011	113.9677	407.67	18.82
04-Oct-13	12:41:49	Transportation Boat	Travelling	91	1	20	340	23	25	22.3102	113.9650	1408.82	354.12
04-Oct-13	12:45:28	Dumping Guide Boat	Travelling	91	2	45	357	33	5	22.3098	113.9690	1377.37	11.28
04-Oct-13	12:46:28	Transportation Boat	Travelling	91	38	50	328	19	15	22.3051	113.9638	871.38	342.05
04-Oct-13	12:48:53	Dumping Guide Boat	Travelling	90	39	45	355	46	25	22.3171	113.9699	2195.40	9.50
04-Oct-13	12:49:00	Dumping Guide Boat	Travelling	91	46	15	353	48	10	22.3049	113.9674	810.56	7.53
04-Oct-13	12:49:09	Transportation Boat	Travelling	93	37	50	354	21	45	22.3011	113.9669	394.34	8.09
04-Oct-13	12:49:20	Tour Boat	Travelling	91	22	55	314	19	35	22.3056	113.9610	1040.22	328.06
04-Oct-13	12:54:18	Dumping Guide Boat	Stationary	91	25	15	348	45	40	22.3067	113.9668	1012.29	2.49
04-Oct-13	12:54:32	Tour Boat	Travelling	90	51	15	8	59	30	22.3117	113.9728	1693.85	22.72
04-Oct-13	12:54:46	Transportation Boat	Travelling	92	51	50	333	2	45	22.3020	113.9653	500.72	346.78
04-Oct-13	12:59:08	Tour Boat	Travelling	90	32	10	26	11	0	22.3165	113.9835	2739.56	39.91
04-Oct-13	12:59:29	Dumping Guide Boat	Travelling	91	29	55	332	45	25	22.3060	113.9642	960.15	346.49
04-Oct-13	12:59:39	Transportation Boat	Travelling	91	1	20	299	47	50	22.3064	113.9564	1412.54	313.53
04-Oct-13	13:00:10	Tug Boat	Travelling	90	56	20	332	33	15	22.3111	113.9628	1539.86	346.28
04-Oct-13	13:02:33	Tug Boat	Travelling	90	41	20	348	6	5	22.3166	113.9671	2113.16	1.83
04-Oct-13	13:02:45	Transportation Boat	Travelling	90	56	10	343	57	10	22.3115	113.9658	1545.08	357.68
04-Oct-13	13:03:02	Dumping Guide Boat	Stationary	91	30	40	318	50	25	22.3052	113.9621	952.66	332.57
04-Oct-13	13:03:17	Transportation Boat	Travelling	91	18	30	312	17	35	22.3058	113.9604	1101.46	326.02
04-Oct-13	13:07:03	Transportation Boat	Travelling	90	57	35	308	5	25	22.3083	113.9573	1507.47	321.82
04-Oct-13	13:07:11	Transportation Boat	Travelling	90	47	30	350	32	0	22.3141	113.9677	1833.76	4.26
04-Oct-13	13:07:44	Tug Boat	Travelling	91	2	15	309	6	10	22.3076	113.9582	1393.14	322.83
04-Oct-13	13:08:38	Transportation Boat	Travelling	90	42	20	2	34	20	22.3154	113.9720	2063.74	16.30
04-Oct-13	13:09:02	Dumping Guide Boat	Travelling	91	20	45	327	34	10	22.3068	113.9631	1071.44	341.30
04-Oct-13	13:11:02	Tug Boat	Travelling	90	49	35	341	10	0	22.3134	113.9649	1756.17	354.90
04-Oct-13	13:11:11	Dumping Guide Boat	Travelling	90	58	35	342	3	15	22.3109	113.9653	1482.28	355.78
04-Oct-13	13:23:33	Research Vessel	Travelling	90	48	40	343	53	45	22.3137	113.9657	1793.23	357.63
04-Oct-13	13:30:57	Research Vessel	Travelling	90	59	25	285	54	45	22.3041	113.9540	1465.46	299.64
04-Oct-13	13:35:11	Transportation Boat	Travelling	91	19	45	355	20	30	22.3073	113.9681	1089.16	9.07
04-Oct-13	13:39:15	Transportation Boat	Travelling	95	6	20	358	50	0	22.3001	113.9670	282.04	12.56
04-Oct-13	13:47:58	Transportation Boat	Travelling	91	22	50	287	58	20	22.3026	113.9577	1050.28	301.70
04-Oct-13	13:52:39	Transportation Boat	Travelling	94	35	20	357	15	35	22.3004	113.9670	314.59	10.99
04-Oct-13	13:53:17	Research Vessel	Travelling	90	54	15	287	30	50	22.3051	113.9530	1612.50	301.24
04-Oct-13	13:54:53	Research Vessel	Travelling	91	7	25	280	46	50	22.3025	113.9549	1294.12	294.51
04-Oct-13	13:59:02	Research Vessel	Travelling	92	14	50	288	1	55	22.3007	113.9611	644.68	301.76
04-Oct-13	14:01:50	Research Vessel	Travelling	91	15	45	310	10	5	22.3060	113.9598	1151.63	323.90
04-Oct-13	14:03:46	Research Vessel	Travelling	91	3	40	325	41	30	22.3092	113.9617	1373.01	339.42
04-Oct-13	14:05:32	Construction Boat	Stationary	91	11	25	318	23	55	22.3073	113.9608	1222.82	332.13
04-Oct-13	14:05:42	Construction Boat	Stationary	91	8	40	326	18	20	22.3084	113.9622	1272.32	340.04
04-Oct-13	14:06:00	Construction Boat	Stationary	90	30	25	347	27	0	22.3240	113.9670	2934.79	1.18
04-Oct-13	14:06:14	Construction Boat	Stationary	90	40	20	358	17	20	22.3169	113.9708	2187.65	12.02
04-Oct-13	14:06:30	Construction Boat	Stationary	90	32	30	359	43	20	22.3216	113.9726	2737.56	13.45
04-Oct-13	14:06:43	Construction Boat	Stationary	90	37	35	3	28	15	22.3179	113.9732	2353.29	17.20
04-Oct-13	14:06:52	Construction Boat	Stationary	90	34	0	3	53	0	22.3200	113.9741	2611.56	17.61
04-Oct-13	14:07:13	Construction Boat	Stationary	90	55	10	353	2	40	22.3118	113.9682	1588.52	6.77
04-Oct-13	14:07:22	Construction Boat	Stationary	90	55	45	354	35	15	22.3116	113.9686	1571.67	8.32
04-Oct-13	14:07:40	Construction Boat	Stationary	91	15	50	6	49	55	22.3073	113.9703	1151.33	20.56
04-Oct-13	14:07:47	Construction Boat	Stationary	91	17	55	9	13	25	22.3069	113.9706	1120.31	22.95
04-Oct-13	14:07:57	Construction Boat	Stationary	90	55	35	17	14	10	22.3098	113.9743	1576.60	30.97
04-Oct-13	14:08:04	Construction Boat	Stationary	90	55	45	17	55	35	22.3097	113.9744	1571.83	31.66
04-Oct-13	14:08:18	Container Boat	Stationary	91	9	15	329	12	20	22.3085	113.9628	1261.98	342.94
04-Oct-13	14:08:30	Container Boat	Stationary	91	18	20	5	48	20	22.3071	113.9700	1114.42	19.54
04-Oct-13	14:08:40	Container Boat	Stationary	90	58	0	9	29	30	22.3101	113.9722	1510.10	23.22
05-Oct-13	8:03:14	Other	Stationary	94	39	10	0	0	0	22.3003	113.9671	300.95	13.73
05-Oct-13	8:04:18	Other	Stationary	90	30	50	291	39	10	22.3122	113.9442	2798.22	305.38
05-Oct-13	8:04:24	Other	Stationary	90	36	50	294	27	30	22.3106	113.9486	2324.58	308.19
05-Oct-13	8:04:33	Other	Stationary	90	45	40	297	30	10	22.3087	113.9528	1863.47	311.23
05-Oct-13	8:04:39	Other	Stationary	90	53	0	302	9	20	22.3080	113.9556	1600.95	315.89
05-Oct-13	8:04:50	Other	Stationary	90	57	20	304	48	20	22.3076	113.9569	1478.12	318.54
05-Oct-13	8:04:59	Other	Stationary	90	51	0	307	36	40	22.3093	113.9563	1664.79	321.34
05-Oct-13	8:05:14	Other	Stationary	90	57	30	304	48	30	22.3076	113.9569	1473.72	318.54
05-Oct-13	8:05:20	Other	Stationary	90	50	50	307	36	50	22.3094	113.9563	1670.29	321.34
05-Oct-13	8:05:36	Other	Stationary	90	54	10	309	32	20	22.3089	113.9573	1565.77	323.27
05-Oct-13	8:05:44	Other	Stationary	90	56	10	315	12	10	22.3093	113.9588	1509.15	328.93
05-Oct-13	8:05:51	Other	Stationary	90	54	40	320	27	10	22.3102	113.9598	1551.19	334.18
05-Oct-13	8:05:58	Other	Stationary	90	52	40	326	5	40	22.3112	113.9610	1611.05	339.82
05-Oct-13	8:06:04	Other	Stationary	90	50	50	330	59	40	22.3121	113.9621	1670.18	344.72
05-Oct-13	8:06:10	Other	Stationary	90	48	40	335	45	0	22.3131	113.9633	1745.96	349.48
05-Oct-13	8:06:20	Other	Stationary	90	43	20	339	35	10	22.3152	113.9642	1965.93	353.32
05-Oct-13	8:06:27	Other	Stationary	90	39	40	345	15	20	22.3170	113.9660	2152.89	358.99
05-Oct-13	8:06:32	Other	Stationary	90	36	30	348	28	20	22.3187	113.9673	2346.10	2.20
05-Oct-13	8:06:38	Other	Stationary	90	30	10	351	35	0	22.3233	113.9690	2862.72	5.31
05-Oct-13	8:06:54	Other	Stationary	90	29	30	352	1	40	22.3239	113.9693	2930.96	5.76
05-Oct-13	8:07:15	Other	Stationary	90	30	40	347	12	10	22.3229	113.9668	2813.42	0.93
05-Oct-13	8:07:22	Other	Stationary	90	30	40	347	12	10	22.3229	113.9668	2813.39	0.93
05-Oct-13	8:07:32	Other	Stationary	90	29	30	351	58	10	22.3239	113.9692	2930.77	5.70
05-Oct-13	8:07:43	Other	Stationary	90	28	20	346	26	0	22.3251	113.9665	3058.70	0.16
05-Oct-13	8:07:50	Other	Stationary	90	27	50	344	30	40	22.3257	113.9655	3117.12	358.24

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
05-Oct-13	8:07:56	Other	Stationary	90	27	30	341	19	40	22.3259	113.9638	3157.35	355.06
05-Oct-13	8:08:02	Other	Stationary	90	27	20	337	41	40	22.3259	113.9618	3177.86	351.42
05-Oct-13	8:08:09	Other	Stationary	90	27	20	333	25	50	22.3255	113.9595	3177.82	347.16
05-Oct-13	8:08:18	Other	Stationary	90	28	0	330	13	30	22.3244	113.9581	3097.24	343.95
05-Oct-13	8:08:23	Other	Stationary	90	26	50	326	43	30	22.3251	113.9559	3241.05	340.45
05-Oct-13	8:08:32	Other	Stationary	90	24	30	322	48	50	22.3271	113.9526	3574.72	336.54
05-Oct-13	8:08:45	Other	Stationary	90	25	10	317	18	10	22.3250	113.9500	3472.21	331.03
05-Oct-13	8:08:51	Other	Stationary	90	25	40	313	43	10	22.3234	113.9486	3399.27	327.45
05-Oct-13	8:08:56	Other	Stationary	90	26	20	311	34	20	22.3221	113.9481	3306.83	325.30
05-Oct-13	8:09:10	Other	Stationary	90	26	40	311	14	30	22.3217	113.9482	3262.48	324.97
05-Oct-13	8:09:28	Other	Stationary	91	6	40	319	49	10	22.3078	113.9609	1268.26	333.55
05-Oct-13	8:09:46	Other	Stationary	90	28	10	347	22	20	22.3253	113.9670	3077.32	1.10
05-Oct-13	8:09:53	Other	Stationary	90	34	40	356	25	0	22.3195	113.9706	2474.21	10.15
05-Oct-13	8:10:05	Other	Stationary	90	38	30	358	5	0	22.3172	113.9708	2219.42	11.81
05-Oct-13	8:10:14	Other	Stationary	90	40	50	359	11	20	22.3159	113.9709	2088.84	12.92
05-Oct-13	8:10:26	Other	Stationary	90	32	0	3	52	20	22.3207	113.9743	2689.65	17.60
05-Oct-13	8:10:38	Other	Stationary	90	28	40	5	9	50	22.3233	113.9759	3020.12	18.89
05-Oct-13	8:11:08	Other	Stationary	90	50	40	352	31	40	22.3126	113.9682	1674.96	6.26
05-Oct-13	8:11:20	Other	Stationary	90	51	50	354	11	0	22.3122	113.9686	1636.56	7.91
05-Oct-13	8:11:39	Other	Stationary	91	11	30	11	7	20	22.3073	113.9712	1181.46	24.85
05-Oct-13	8:11:45	Other	Stationary	91	11	50	14	8	40	22.3070	113.9717	1175.91	27.87
05-Oct-13	8:11:54	Other	Stationary	90	52	10	16	57	10	22.3102	113.9745	1625.83	30.68
05-Oct-13	8:12:01	Other	Stationary	90	52	30	17	54	40	22.3100	113.9746	1615.32	31.64
05-Oct-13	8:12:17	Other	Stationary	91	4	30	328	28	0	22.3089	113.9625	1310.98	342.20
05-Oct-13	8:12:25	Other	Stationary	91	1	30	335	34	40	22.3098	113.9639	1375.70	349.31
05-Oct-13	8:12:37	Other	Stationary	91	2	30	332	50	30	22.3095	113.9633	1353.39	346.57
05-Oct-13	8:12:53	Other	Stationary	90	59	20	9	11	0	22.3094	113.9718	1426.53	22.91
05-Oct-13	8:13:02	Other	Stationary	91	12	20	10	50	20	22.3072	113.9711	1167.57	24.57
05-Oct-13	8:13:37	Tug Boat	Travelling	90	59	0	306	54	0	22.3076	113.9575	1434.59	320.63
05-Oct-13	8:13:56	Transportation Boat	Travelling	92	25	0	322	26	30	22.3024	113.9641	580.22	336.17
05-Oct-13	8:14:18	Research Vessel	Travelling	90	48	50	283	50	40	22.3049	113.9514	1738.53	297.57
05-Oct-13	8:14:33	Tug Boat	Travelling	90	51	50	305	38	0	22.3088	113.9560	1636.06	319.36
05-Oct-13	8:14:45	Speed Boat	Travelling	91	10	50	300	59	20	22.3052	113.9582	1192.33	314.72
05-Oct-13	8:15:06	HSF High Speed Ferry	Travelling	90	35	10	351	23	30	22.3195	113.9685	2436.42	5.12
05-Oct-13	8:15:34	Speed Boat	Travelling	91	3	10	289	25	40	22.3042	113.9555	1338.56	303.16
05-Oct-13	8:15:44	Transportation Boat	Travelling	91	17	20	310	22	40	22.3056	113.9602	1091.17	324.11
05-Oct-13	8:15:55	Transportation Boat	Travelling	91	1	30	312	11	50	22.3079	113.9589	1375.23	325.93
05-Oct-13	8:16:14	HSF High Speed Ferry	Travelling	90	42	30	346	6	30	22.3157	113.9663	2003.58	359.84
05-Oct-13	8:16:23	Speed Boat	Travelling	90	56	20	279	44	50	22.3030	113.9530	1503.09	293.48
05-Oct-13	8:16:43	Transportation Boat	Travelling	91	0	30	307	13	0	22.3074	113.9578	1398.15	320.95
05-Oct-13	8:17:08	Research Vessel	Travelling	90	58	10	293	7	50	22.3055	113.9551	1454.94	306.86
05-Oct-13	8:17:32	Transportation Boat	Travelling	90	56	30	323	15	40	22.3100	113.9607	1498.42	336.99
05-Oct-13	8:17:55	Transportation Boat	Travelling	90	58	30	311	59	10	22.3084	113.9585	1446.43	325.72
05-Oct-13	8:18:23	Fishing Boat	Operate and travelling	91	29	10	31	41	30	22.3036	113.9729	945.17	45.42
05-Oct-13	8:18:38	HSF High Speed Ferry	Travelling	91	0	10	316	53	10	22.3086	113.9597	1405.74	330.62
05-Oct-13	8:19:09	Research Vessel	Travelling	91	12	50	278	40	10	22.3016	113.9560	1158.81	292.40
05-Oct-13	8:19:47	Transportation Boat	Travelling	90	51	20	337	21	0	22.3123	113.9639	1651.45	351.08
05-Oct-13	8:19:52	Transportation Boat	Travelling	90	52	10	332	26	30	22.3118	113.9626	1624.59	346.17
05-Oct-13	8:20:25	HSF High Speed Ferry	Travelling	90	56	10	286	23	0	22.3044	113.9537	1507.03	300.11
05-Oct-13	8:21:25	Transportation Boat	Travelling	91	5	40	285	26	30	22.3033	113.9555	1286.31	299.17
05-Oct-13	8:21:42	Transportation Boat	Travelling	90	46	10	347	16	0	22.3142	113.9667	1839.80	1.00
05-Oct-13	8:21:50	Transportation Boat	Travelling	90	41	50	345	38	0	22.3159	113.9662	2035.27	359.36
05-Oct-13	8:22:19	Fishing Boat	Operate and travelling	91	33	10	34	14	10	22.3031	113.9729	904.02	47.97
05-Oct-13	8:23:03	Tug Boat	Travelling	90	53	50	0	4	30	22.3114	113.9701	1572.99	13.80
05-Oct-13	8:23:15	Research Vessel	Travelling	92	29	10	287	5	40	22.3002	113.9617	563.46	300.82
05-Oct-13	8:23:38	Transportation Boat	Travelling	91	5	40	315	17	20	22.3075	113.9600	1286.04	329.02
05-Oct-13	8:24:08	Transportation Boat	Travelling	90	44	50	343	53	50	22.3147	113.9656	1895.34	357.63
05-Oct-13	8:24:20	Tug Boat	Travelling	90	52	20	352	56	0	22.3121	113.9682	1618.64	6.66
05-Oct-13	8:24:51	Research Vessel	Stationary	92	8	30	296	7	0	22.3014	113.9615	654.32	309.85
05-Oct-13	8:25:54	Transportation Boat	Travelling	91	1	0	309	50	40	22.3077	113.9584	1385.33	323.57
05-Oct-13	8:26:03	Transportation Boat	Travelling	90	51	30	341	28	0	22.3124	113.9651	1645.02	355.20
05-Oct-13	8:26:09	Transportation Boat	Travelling	90	56	50	324	7	40	22.3100	113.9609	1488.28	337.86
05-Oct-13	8:27:15	Transportation Boat	Travelling	90	45	10	350	34	40	22.3145	113.9678	1880.47	4.31
05-Oct-13	8:27:20	Transportation Boat	Travelling	91	1	0	308	20	40	22.3075	113.9581	1385.14	322.07
05-Oct-13	8:27:36	Transportation Boat	Travelling	90	56	50	328	41	50	22.3104	113.9620	1488.08	342.43
05-Oct-13	8:28:43	Tug Boat	Travelling	90	57	40	358	52	50	22.3105	113.9695	1466.11	12.61
05-Oct-13	8:29:00	Research Vessel	Acoustic Recording	92	4	0	293	2	20	22.3013	113.9611	677.89	306.77
05-Oct-13	8:29:05	Research Vessel	Other	92	6	0	292	53	30	22.3012	113.9612	667.09	306.62
05-Oct-13	8:29:24	Transportation Boat	Travelling	90	54	40	280	46	50	22.3034	113.9527	1547.69	294.51
05-Oct-13	8:29:31	Transportation Boat	Travelling	90	45	40	343	0	10	22.3143	113.9654	1859.01	356.73
05-Oct-13	8:29:38	Transportation Boat	Travelling	90	42	0	348	3	0	22.3158	113.9670	2025.45	1.78
05-Oct-13	8:31:11	Transportation Boat	Travelling	90	53	0	332	19	0	22.3116	113.9627	1596.89	346.05
05-Oct-13	8:31:31	Fishing Boat	Operate and stationary	91	32	30	33	4	30	22.3032	113.9729	909.77	46.80
05-Oct-13	8:31:41	Tug Boat	Travelling	91	5	10	12	50	30	22.3080	113.9720	1295.02	26.57
05-Oct-13	8:32:37	Research Vessel	Travelling	91	53	10	293	36	20	22.3017	113.9607	742.81	307.34
05-Oct-13	8:32:54	Transportation Boat	Travelling	90	53	50	306	36	0	22.3085	113.9566	1571.51	320.33
05-Oct-13	8:33:18	Transportation Boat	Travelling	90	48	0	303	26	30	22.3093	113.9547	1766.11	317.17
05-Oct-13	8:33:49	Tug Boat	Stationary	91	11	20	14	40	20	22.3070	113.9719	1181.74	28.40
05-Oct-13	8:34:00	Transportation Boat	Travelling	90	57	50	305	39	20	22.3076	113.9571	1461.08	319.39
05-Oct-13	8:35:26	Transportation Boat	Travelling	90	59	20	279	6	20	22.3026	113.9536	1423.45	292.84
05-Oct-13	8:35:32	HSF High Speed Ferry	Travelling	90	56	10	287	38	30	22.3047	113.9539	1504.85	301.37
05-Oct-13	8:35:43	Research Vessel	Travelling	91	5	30	315	40	50	22.3076	113.9600	1287.86	329.41
05-Oct-13	8:37:28	Fuel Boat	Travelling	90	56	50	348	12	10	22.3110	113.9669	1486.67	1.93
05-Oct-13	8:37:49	Transportation Boat	Travelling	90	50	10	340	16	30	22.3127	113.9647	1687.64	354.00
05-Oct-13	8:38:03	HSF High Speed Ferry	Travelling	90	55	40	328	38	20	22.3106	113.9619	1518.21	342.37
05-Oct-13	8:38:15	Tug Boat	Travelling	90	56	50	286	4	50	22.3043	113.9539	1486.56	299.81
05-Oct-13	8:38:22	Construction Boat	Travelling	90	54	10	281	0	50	22.3035	113.9526	1560.86	294.74
05-Oct-13	8:38:43	Research Vessel	Travelling	91	2	10	341	11	50	22.3098	113.9652	1357.34	354.93
05-Oct-13	8:38:56	Fuel Boat	Travelling	90	56	50	335	40	10	22.3108	113.9637	1486.46	349.40
05-Oct-13	8:39:33	Transportation Boat	Travelling	90	57	50	329	20	50	22.3102	113.9623	1460.31	343.08
05-Oct-13	8:39:43	Tug Boat	Travelling	90	53	30	11	10	30	22.3105	113.9729	1580.43	24.90
05-Oct-13	8:40:07	HSF High Speed Ferry	Travelling	90	39	50	347	54	10	22.3168	113.9670	2136.66	1.63
05-Oct-13	8:40:19	Research Vessel	Travelling	91	25	10	343	32	50	22.3065	113.9659	987.79	357.28
05-Oct-13	8:41:14	Transportation Boat	Travelling	91	4	0	315	29	20	22.3078	113.9598	1317.69	329.22
05-Oct-13	8:41:21	Fuel Boat	Travelling	90	58	30	314	51	20	22.3087	113.9591	1443.19	328.59
05-Oct-13	8:41:42	Tug Boat	Travelling	91	0	0	312	33	20	22.3081	113.9588	1406.59	326.29
05-Oct-13	8:41:47	Construction Boat	Travelling	91	0	50	306	24	20	22.3072	113.9578	1387.06	320.14
05-Oct-13	8:41:56	Tug Boat	Travelling	90	56	0	5	41	10	22.3104	113.9713	1508.47	19.42
05-Oct-13	8:42:04	Container Boat	Travelling	90	55	10	6	56	40	22.3105	113.9717	1531.59	20.67
05-Oct-13	8:42:26	Research Vessel	Travelling	92	48	40	345	45	50	22.3021	113.9664	497.21	359.49
05-Oct-13	8:43:23	Fuel Boat	Travelling	90	48	40	303	10	50	22.3091	113.9548	1739.74	316.91
05-Oct-13	8:43:31	Transportation Boat	Travelling	91	3	30	293	43	50	22.3049	113.9561	1327.90	307.46
05-Oct-13	8:43:56	Transportation Boat	Travelling	91	8	20	322	14	10	22.3078	113.9615	1232.94	335.97
05-Oct-13	8:44:38	Research Vessel	Travelling	92	0	30	22	58	10	22.3026	113.9704	696.62	36.70
05-Oct-13	8:44:47	Tug Boat	Travelling	90	48	30	359	45	50	22.3129	113.9704	1745.60	13.49
05-Oct-13	8:44:51	Container Boat	Travelling	90	49	40	0	10	0	22.3125	113.9704	1703.80	13.90
05-Oct-13	8:45:05	Transportation Boat	Travelling	91	4	0	325	50	10	22.3087	113.9619	1317.21	339.57
05-Oct-13	8:45:17	Transportation Boat	Travelling	90	58	20	279	9	50	22.3027	113.9534	1446.82	292.89
05-Oct-13	8:45:45	Fishing Boat	Non-operate and travelling	95	52	30	335	27	30	22.2997	113.9660	237.05	349.19
05-Oct-13	8:46:07	Transportation Boat	Travelling	90	57	0	310	37	0	22.3084	113.9580	1481.03	324.35
05-Oct-13	8:46:15	Tug Boat	Travelling	90	48	20	341	53	0	22.3133	113.9651	1751.50	355.61
05-Oct-13	8:46:21	Construction Boat	Travelling	90	51	50	338	24	0	22.3122	113.9642	1631.08	352.13
05-Oct-13	8:47:05	Tug Boat	Travelling	90	43	10	355	19	40	22.3151	113.9694	1965.99	9.06
05-Oct-13	8:47:11	Container Boat	Travelling	90	43	30	355	47	0	22.3149	113.9695	1950.53	9.51
05-Oct-13	8:48:43	Research Vessel	Travelling	90	55	40	359	39	50	22.3109	113.9698	1516.65	13.39
05-Oct-13	8:48:57	Tug Boat	Travelling	90	39	30	350	33	10	22.3169	113.9680	2153.40	4.28
05-Oct-13	8:49:01	Construction Boat	Travelling	90	42	0	349	11	30	22.3158	113.9674	2021.67	2.92

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
05-Oct-13	8:49:41	Speed Boat	Travelling	90	59	30	300	59	50	22.3066	113.9566	1417.48	314.73
05-Oct-13	8:49:55	Fishing Boat	Operate and travelling	93	12	40	285	3	10	22.2995	113.9627	434.78	298.78
05-Oct-13	8:50:09	Speed Boat	Travelling	90	56	0	305	57	20	22.3080	113.9569	1507.28	319.69
05-Oct-13	8:50:26	Transportation Boat	Travelling	91	41	50	282	11	30	22.3009	113.9592	824.47	295.92
05-Oct-13	8:50:34	Speed Boat	Travelling	90	51	20	304	5	20	22.3086	113.9556	1646.58	317.82
05-Oct-13	8:50:46	Research Vessel	Travelling	90	43	10	359	25	10	22.3148	113.9707	1965.29	13.15
05-Oct-13	8:53:00	Transportation Boat	Travelling	94	12	10	348	36	20	22.3006	113.9665	331.76	2.34
05-Oct-13	8:53:11	Transportation Boat	Travelling	91	1	30	293	43	10	22.3051	113.9558	1370.34	307.45
05-Oct-13	8:53:28	Fishing Boat	Operate and travelling	92	40	50	287	13	20	22.3000	113.9621	520.96	300.95
05-Oct-13	8:53:38	Transportation Boat	Travelling	95	16	40	0	49	0	22.2999	113.9670	263.86	14.55
05-Oct-13	8:53:55	Fishing Boat	Operate and stationary	91	28	20	37	21	20	22.3030	113.9736	950.92	51.09
05-Oct-13	8:54:08	Transportation Boat	Travelling	90	56	20	306	25	20	22.3080	113.9571	1497.66	320.15
05-Oct-13	8:54:39	Transportation Boat	Travelling	90	51	10	306	58	30	22.3091	113.9562	1651.39	320.70
05-Oct-13	8:54:54	Research Vessel	Travelling	90	44	40	16	46	10	22.3123	113.9758	1896.95	30.50
05-Oct-13	8:56:51	Speed Boat	Travelling	91	12	20	22	49	20	22.3060	113.9731	1162.69	36.55
05-Oct-13	8:58:37	Speed Boat	Travelling	91	55	10	299	14	50	22.3021	113.9612	728.04	312.98
05-Oct-13	8:58:49	Fishing Boat	Operate and travelling	92	2	20	280	7	30	22.3001	113.9603	685.21	293.85
05-Oct-13	8:59:17	Speed Boat	Travelling	91	17	40	277	10	30	22.3011	113.9566	1081.94	290.90
05-Oct-13	9:00:12	Speed Boat	Travelling	92	52	40	291	11	0	22.3001	113.9625	484.84	304.91
05-Oct-13	9:01:41	Speed Boat	Travelling	95	30	50	348	4	50	22.2999	113.9665	252.30	1.81
05-Oct-13	9:02:01	Fishing Boat	Operate and travelling	91	37	0	28	50	10	22.3034	113.9721	864.82	42.57
05-Oct-13	9:02:19	Fishing Boat	Non-operate and travelling	91	11	50	23	7	20	22.3060	113.9732	1170.24	36.85
05-Oct-13	9:03:25	Research Vessel	Travelling	90	56	10	30	44	30	22.3073	113.9766	1500.83	44.47
05-Oct-13	9:03:35	Fishing Boat	Non-operate and travelling	91	43	20	357	40	30	22.3048	113.9680	811.43	11.40
05-Oct-13	9:04:55	Fishing Boat	Non-operate and travelling	91	41	10	324	36	50	22.3046	113.9634	828.79	338.34
05-Oct-13	9:05:23	Research Vessel	Travelling	90	47	10	37	0	10	22.3078	113.9799	1792.42	50.73
05-Oct-13	9:08:57	Fishing Boat	Operate and travelling	91	41	0	295	58	50	22.3024	113.9602	829.84	309.71
05-Oct-13	9:09:15	Container Boat	Travelling	91	0	10	312	22	0	22.3081	113.9588	1398.94	326.10
05-Oct-13	9:09:37	Transportation Boat	Travelling	90	51	30	340	3	30	22.3123	113.9647	1638.15	353.79
05-Oct-13	9:10:32	Container Boat	Travelling	90	55	30	307	35	30	22.3083	113.9572	1518.09	321.32
05-Oct-13	9:11:09	Fishing Boat	Operate and travelling	91	24	40	286	26	10	22.3021	113.9581	990.74	300.17
05-Oct-13	9:11:25	Fishing Boat	Operate and travelling	91	34	0	27	41	10	22.3036	113.9721	891.77	41.42
05-Oct-13	9:11:53	Transportation Boat	Travelling	91	2	0	321	27	0	22.3087	113.9609	1356.72	335.18
05-Oct-13	9:12:28	Container Boat	Travelling	90	48	40	302	55	10	22.3090	113.9548	1734.88	316.65
05-Oct-13	9:15:26	Transportation Boat	Travelling	91	7	20	283	50	50	22.3028	113.9556	1247.67	297.58
05-Oct-13	9:15:39	HSF High Speed Ferry	Travelling	90	38	30	349	37	30	22.3174	113.9677	2205.39	3.35
05-Oct-13	9:15:55	Tug Boat	Travelling	90	37	20	349	28	20	22.3181	113.9676	2276.56	3.20
05-Oct-13	9:18:09	HSF High Speed Ferry	Travelling	90	56	40	322	37	50	22.3099	113.9606	1485.29	336.36
05-Oct-13	9:18:17	Tug Boat	Travelling	90	50	20	335	41	20	22.3124	113.9634	1675.41	349.42
05-Oct-13	9:20:26	HSF High Speed Ferry	Travelling	90	55	50	282	39	50	22.3036	113.9533	1507.46	296.39
05-Oct-13	9:20:32	Tug Boat	Travelling	90	56	40	311	1	50	22.3085	113.9581	1484.95	324.76
05-Oct-13	9:21:04	Tug Boat	Travelling	90	52	50	307	37	0	22.3088	113.9567	1594.35	321.35
05-Oct-13	9:23:25	Tug Boat	Travelling	90	41	50	349	19	50	22.3158	113.9675	2023.20	3.06
05-Oct-13	9:23:42	Transportation Boat	Travelling	90	54	10	306	35	30	22.3084	113.9567	1554.08	320.32
05-Oct-13	9:25:41	Transportation Boat	Travelling	91	4	50	326	12	10	22.3086	113.9621	1295.03	339.93
05-Oct-13	9:25:56	Tug Boat	Travelling	90	48	10	340	34	40	22.3133	113.9647	1750.97	354.31
05-Oct-13	9:26:28	Tug Boat	Travelling	90	53	30	305	50	30	22.3084	113.9565	1573.34	319.57
05-Oct-13	9:26:42	Construction platform	Travelling	90	51	40	305	13	40	22.3087	113.9560	1630.09	318.96
05-Oct-13	9:27:11	Transportation Boat	Travelling	91	6	50	322	53	50	22.3080	113.9616	1255.69	336.63
05-Oct-13	9:27:25	Transportation Boat	Travelling	91	50	10	290	44	50	22.3015	113.9603	759.14	304.48
05-Oct-13	9:27:44	Transportation Boat	Travelling	91	0	40	312	21	40	22.3080	113.9589	1384.80	326.09
05-Oct-13	9:28:37	Transportation Boat	Travelling	91	8	40	301	35	50	22.3054	113.9580	1221.65	315.33
05-Oct-13	9:28:42	Transportation Boat	Travelling	92	8	40	306	50	50	22.3021	113.9624	649.51	320.58
05-Oct-13	9:28:48	Transportation Boat	Travelling	90	57	50	325	25	30	22.3098	113.9614	1453.42	339.15
05-Oct-13	9:28:55	Tug Boat	Travelling	90	56	50	321	40	30	22.3097	113.9604	1479.34	335.40
05-Oct-13	9:29:24	Fishing Boat	Operate and stationary	91	34	10	27	2	50	22.3037	113.9720	888.65	40.78
05-Oct-13	9:30:12	Tug Boat	Travelling	90	59	50	313	4	20	22.3082	113.9589	1404.00	326.80
05-Oct-13	9:30:18	Construction platform	Travelling	90	58	30	311	13	10	22.3082	113.9584	1436.42	324.95
05-Oct-13	9:30:26	Transportation Boat	Travelling	90	56	10	279	10	20	22.3029	113.9530	1496.94	292.90
05-Oct-13	9:30:34	Transportation Boat	Travelling	92	15	50	337	48	20	22.3031	113.9655	615.01	351.54
05-Oct-13	9:30:40	Transportation Boat	Travelling	90	46	40	341	37	10	22.3138	113.9650	1807.62	355.35
05-Oct-13	9:31:51	Tug Boat	Travelling	90	58	30	314	26	50	22.3086	113.9590	1436.21	328.18
05-Oct-13	9:32:00	Tug Boat	Travelling	91	2	0	312	27	40	22.3077	113.9591	1354.10	326.19
05-Oct-13	9:32:08	Construction platform	Travelling	91	0	10	314	32	50	22.3083	113.9593	1395.86	328.28
05-Oct-13	9:34:10	Transportation Boat	Travelling	91	22	10	13	33	40	22.3058	113.9709	1018.85	27.29
05-Oct-13	9:34:38	Tug Boat	Travelling	90	57	40	317	15	30	22.3091	113.9595	1456.86	330.99
05-Oct-13	9:34:46	Tug Boat	Travelling	91	0	30	314	18	50	22.3082	113.9593	1387.72	328.04
05-Oct-13	9:34:55	Construction platform	Travelling	90	58	30	316	27	30	22.3088	113.9595	1435.78	330.19
05-Oct-13	9:40:05	Transportation Boat	Travelling	91	25	30	19	10	30	22.3050	113.9716	978.30	32.90
05-Oct-13	9:40:16	Tug Boat	Travelling	90	50	30	1	28	10	22.3121	113.9706	1666.25	15.20
05-Oct-13	9:40:25	Container Boat	Travelling	90	49	30	1	35	30	22.3124	113.9708	1700.52	15.32
05-Oct-13	9:40:36	Tug Boat	Travelling	90	55	40	332	12	10	22.3108	113.9628	1509.11	345.93
05-Oct-13	9:40:41	Construction platform	Travelling	90	56	0	330	41	30	22.3106	113.9625	1499.98	344.42
05-Oct-13	9:40:52	Tug Boat	Travelling	90	56	40	328	54	20	22.3103	113.9621	1482.05	342.64
05-Oct-13	9:41:11	Transportation Boat	Travelling	90	59	20	293	40	0	22.3054	113.9555	1414.49	307.40
05-Oct-13	9:43:11	Tug Boat	Travelling	90	53	30	354	7	50	22.3116	113.9685	1570.80	7.86
05-Oct-13	9:43:17	Container Boat	Travelling	90	54	40	355	7	0	22.3113	113.9687	1536.74	8.85
05-Oct-13	9:43:35	Transportation Boat	Stationary	91	27	0	20	50	20	22.3047	113.9717	961.00	34.57
05-Oct-13	9:44:17	Tour Boat	Travelling	90	55	20	322	53	0	22.3102	113.9605	1517.79	336.61
05-Oct-13	9:45:48	Tug Boat	Travelling	90	48	10	342	56	30	22.3133	113.9654	1747.61	356.67
05-Oct-13	9:45:54	Construction platform	Travelling	90	49	10	342	26	30	22.3130	113.9653	1711.36	356.17
05-Oct-13	9:46:02	Tug Boat	Travelling	90	51	0	341	35	30	22.3124	113.9651	1648.70	355.32
05-Oct-13	9:46:58	Transportation Boat	Travelling	93	59	50	333	49	20	22.3007	113.9657	347.10	347.55
05-Oct-13	9:47:33	Transportation Boat	Travelling	90	47	30	339	5	30	22.3134	113.9642	1772.35	352.82
05-Oct-13	9:48:04	Tug Boat	Travelling	90	51	40	352	23	30	22.3122	113.9681	1626.73	6.12
05-Oct-13	9:48:11	Container Boat	Stationary	90	50	20	351	53	10	22.3126	113.9680	1670.59	5.62
05-Oct-13	9:48:42	Tour Boat	Travelling	90	39	10	349	25	0	22.3170	113.9676	2159.74	3.15
05-Oct-13	9:48:58	Transportation Boat	Travelling	91	33	10	314	8	10	22.3045	113.9618	896.56	327.87
05-Oct-13	9:49:05	Transportation Boat	Travelling	90	57	30	320	28	0	22.3094	113.9602	1459.11	334.20
05-Oct-13	9:49:19	Speed Boat	Travelling	90	52	0	331	36	0	22.3117	113.9624	1615.93	345.33
05-Oct-13	9:50:27	Speed Boat	Travelling	90	57	40	308	32	30	22.3080	113.9577	1454.64	322.27
05-Oct-13	9:50:36	Transportation Boat	Travelling	91	1	20	309	2	40	22.3074	113.9584	1366.55	322.77
05-Oct-13	9:50:41	Transportation Boat	Travelling	90	58	50	295	50	50	22.3058	113.9557	1425.37	309.58
05-Oct-13	9:51:24	Tug Boat	Travelling	90	56	20	1	49	50	22.3105	113.9703	1489.43	15.56
05-Oct-13	9:51:31	Tug Boat	Travelling	90	40	30	351	14	20	22.3163	113.9682	2085.99	4.97
05-Oct-13	9:51:38	Construction platform	Travelling	90	41	30	350	59	0	22.3159	113.9680	2034.32	4.71
05-Oct-13	9:51:45	Tug Boat	Travelling	90	42	30	350	18	50	22.3154	113.9678	1985.17	4.04
05-Oct-13	9:52:00	Transportation Boat	Travelling	90	51	30	278	36	20	22.3032	113.9517	1631.47	292.34
05-Oct-13	9:52:10	Transportation Boat	Travelling	90	58	20	285	47	20	22.3040	113.9542	1437.55	299.52
05-Oct-13	9:52:43	Tug Boat	Travelling	91	4	50	14	51	40	22.3078	113.9724	1291.67	28.59
05-Oct-13	9:53:35	Tug Boat	Travelling	91	9	20	7	2	10	22.3078	113.9706	1206.89	20.77
05-Oct-13	9:53:42	Container Boat	Travelling	91	10	40	8	6	50	22.3075	113.9707	1183.89	21.84
05-Oct-13	9:53:55	Transportation Boat	Travelling	90	54	10	306	10	50	22.3083	113.9567	1549.56	319.91
05-Oct-13	9:55:06	Tug Boat	Travelling	91	1	10	15	6	50	22.3084	113.9728	1369.72	28.84
05-Oct-13	9:55:23	Tug Boat	Travelling	91	0	50	4	2	10	22.3094	113.9705	1377.29	17.77
05-Oct-13	9:55:29	Container Boat	Travelling	91	2	20	4	23	20	22.3091	113.9705	1343.73	18.12
05-Oct-13	9:57:53	Transportation Boat	Travelling	91	0	0	311	21	30	22.3079	113.9586	1396.32	325.09
05-Oct-13	9:58:36	Tug Boat	Travelling	90	52	10	8	14	40	22.3110	113.9723	1609.23	21.97
05-Oct-13	9:58:58	Tug Boat	Travelling	90	47	0	358	16	40	22.3134	113.9700	1789.62	12.01
05-Oct-13	9:59:04	Container Boat	Travelling	90	48	0	358	37	40	22.3130	113.9700	1751.55	12.36
05-Oct-13	9:59:40	Transportation Boat	Travelling	90	54	10	330	30	10	22.3110	113.9623	1548.70	344.23
05-Oct-13	9:59:51	Speed Boat	Travelling	91	1	50	334	42	20	22.3096	113.9638	1354.15	348.44
05-Oct-13	10:00:08	Container Boat	Travelling	90	37	10	349	1	40	22.3181	113.9675	2277.31	2.76
05-Oct-13	10:02:21	Transportation Boat	Travelling	90	40	30	348	22	0	22.3164	113.9671	2083.80	2.10
05-Oct-13	10:02:29	Container Boat	Travelling	90	47	0	341	13	30	22.3137	113.9649	1789.01	354.95
05-Oct-13	10:02:57	Fishing Boat	Operate and travelling	92	15	20	24	27	40	22.3020	113.9701	615.37	38.19
05-Oct-13	10:03:15	Transportation Boat	Travelling	90	41	40	343	53	0	22.3158	113.9656	2023.80	357.61

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
05-Oct-13	10:06:02	Transportation Boat	Travelling	90	43	20	342	5	20	22.3151	113.9650	1944.86	355.82
05-Oct-13	10:06:13	Container Boat	Travelling	91	4	20	333	35	40	22.3090	113.9636	1301.20	347.32
05-Oct-13	10:06:33	Fishing Boat	Operate and travelling	92	11	40	16	14	10	22.3026	113.9695	632.93	29.97
05-Oct-13	10:12:42	Container Boat	Travelling	91	4	20	333	45	0	22.3091	113.9637	1302.55	347.48
05-Oct-13	10:12:49	Container Boat	Travelling	90	52	10	340	54	50	22.3121	113.9649	1611.09	354.64
05-Oct-13	10:13:29	Transportation Boat	Stationary	90	44	30	341	37	50	22.3146	113.9649	1894.92	355.36
05-Oct-13	10:13:42	Transportation Boat	Travelling	90	43	0	344	40	50	22.3153	113.9659	1962.73	358.41
05-Oct-13	10:14:06	Fishing Boat	Operate and stationary	92	8	10	17	57	40	22.3026	113.9697	651.06	31.69
05-Oct-13	10:14:45	Construction Boat	Travelling	90	56	40	290	12	30	22.3051	113.9544	1481.67	303.94
05-Oct-13	10:16:35	Container Boat	Travelling	90	34	50	351	41	30	22.3195	113.9686	2440.33	5.42
05-Oct-13	10:16:42	Transportation Boat	Travelling	90	56	20	320	33	10	22.3097	113.9601	1491.03	334.28
05-Oct-13	10:16:53	Construction Boat	Travelling	90	59	50	311	12	30	22.3080	113.9586	1402.68	324.94
05-Oct-13	10:18:08	Transportation Boat	Travelling	90	59	20	304	8	40	22.3071	113.9572	1414.94	317.87
05-Oct-13	10:18:29	Transportation Boat	Travelling	90	49	10	340	42	30	22.3130	113.9648	1712.79	354.44
05-Oct-13	10:19:42	Construction Boat	Travelling	90	51	10	335	53	40	22.3122	113.9635	1644.94	349.62
05-Oct-13	10:20:22	Transportation Boat	Travelling	90	53	20	279	51	10	22.3033	113.9523	1577.17	293.58
05-Oct-13	10:21:48	Transportation Boat	Travelling	90	56	40	325	46	50	22.3101	113.9613	1483.35	339.51
05-Oct-13	10:22:57	Construction Boat	Travelling	90	37	0	350	30	40	22.3182	113.9681	2294.67	4.24
05-Oct-13	10:30:07	Fishing Boat	Non-operate and travelling	94	20	10	331	12	20	22.3004	113.9656	320.75	344.94
05-Oct-13	10:32:15	Fishing Boat	Non-operate and travelling	93	15	20	283	40	0	22.2994	113.9627	427.82	297.40
05-Oct-13	10:32:59	Transportation Boat	Travelling	90	54	30	308	56	20	22.3087	113.9573	1545.98	322.67
05-Oct-13	10:34:38	Transportation Boat	Travelling	91	3	40	324	34	30	22.3087	113.9616	1320.96	338.30
05-Oct-13	10:36:51	Transportation Boat	Travelling	90	58	30	313	58	50	22.3086	113.9589	1439.67	327.71
05-Oct-13	10:37:13	HSF High Speed Ferry	Travelling	90	54	40	286	14	20	22.3046	113.9534	1542.24	299.97
05-Oct-13	10:37:30	Transportation Boat	Travelling	90	54	10	308	51	40	22.3087	113.9572	1556.77	322.59
05-Oct-13	10:39:47	HSF High Speed Ferry	Travelling	90	55	20	326	22	10	22.3105	113.9614	1524.00	340.10
05-Oct-13	10:39:54	Transportation Boat	Travelling	90	50	20	337	32	20	22.3125	113.9639	1678.09	351.27
05-Oct-13	10:41:34	HSF High Speed Ferry	Travelling	90	42	30	345	3	0	22.3156	113.9660	1995.34	358.78
05-Oct-13	10:41:41	Transportation Boat	Travelling	90	45	30	343	15	0	22.3143	113.9654	1860.73	356.98
05-Oct-13	10:42:39	HSF High Speed Ferry	Travelling	90	36	10	350	50	20	22.3188	113.9682	2356.93	4.57
05-Oct-13	10:42:47	Transportation Boat	Travelling	90	43	20	346	26	0	22.3152	113.9665	1956.38	0.16
05-Oct-13	10:50:17	Transportation Boat	Travelling	90	46	40	341	40	10	22.3139	113.9650	1815.68	355.40
05-Oct-13	10:50:29	Tug Boat	Travelling	90	37	20	349	52	30	22.3181	113.9678	2283.59	3.60
05-Oct-13	10:53:43	Transportation Boat	Travelling	90	58	10	324	27	40	22.3098	113.9612	1451.93	338.19
05-Oct-13	10:53:56	Tug Boat	Travelling	90	54	50	325	41	30	22.3106	113.9611	1541.59	339.42
05-Oct-13	10:54:03	Tug Boat	Travelling	90	45	50	355	32	0	22.3141	113.9693	1850.55	9.26
05-Oct-13	10:54:10	Container Boat	Travelling	90	44	30	355	25	20	22.3146	113.9694	1907.33	9.15
05-Oct-13	10:56:07	Transportation Boat	Travelling	91	3	50	307	47	40	22.3069	113.9584	1321.99	321.52
05-Oct-13	10:56:27	Tug Boat	Travelling	90	58	0	295	13	0	22.3059	113.9554	1456.79	308.95
05-Oct-13	10:56:37	Tug Boat	Travelling	91	0	10	358	24	30	22.3100	113.9693	1403.68	12.14
05-Oct-13	10:56:45	Container Boat	Travelling	90	59	10	358	13	40	22.3102	113.9693	1427.75	11.96
05-Oct-13	10:57:55	Tug Boat	Travelling	90	51	50	278	58	50	22.3033	113.9517	1633.36	292.71
05-Oct-13	10:58:03	Transportation Boat	Travelling	91	4	0	293	5	10	22.3047	113.9561	1318.91	306.82
05-Oct-13	10:58:17	Tug Boat	Travelling	91	15	20	3	16	50	22.3072	113.9696	1118.74	17.01
05-Oct-13	10:58:25	Container Boat	Travelling	91	14	0	2	56	50	22.3074	113.9696	1139.09	16.68
05-Oct-13	11:00:29	Tug Boat	Travelling	91	23	0	15	49	20	22.3056	113.9713	1015.00	29.55
05-Oct-13	11:00:35	Container Boat	Travelling	91	25	40	15	36	0	22.3053	113.9711	983.20	29.33
05-Oct-13	11:00:47	Transportation Boat	Travelling	91	8	20	310	13	20	22.3066	113.9593	1234.94	323.95
05-Oct-13	11:03:26	Tug Boat	Travelling	91	20	50	19	1	0	22.3055	113.9719	1042.89	32.75
05-Oct-13	11:03:36	Container Boat	Travelling	91	22	50	19	25	0	22.3053	113.9718	1017.55	33.15
05-Oct-13	11:03:47	Transportation Boat	Travelling	94	11	50	337	19	0	22.3006	113.9659	333.18	351.05
05-Oct-13	11:04:24	Transportation Boat	Travelling	95	37	30	354	3	50	22.2998	113.9667	248.24	7.79
05-Oct-13	11:05:39	Tug Boat	Travelling	90	48	40	5	56	40	22.3124	113.9721	1743.83	19.67
05-Oct-13	11:05:49	Container Boat	Travelling	90	47	30	5	30	0	22.3128	113.9721	1787.59	19.23
05-Oct-13	11:07:01	Transportation Boat	Travelling	94	7	20	325	32	50	22.3005	113.9652	339.44	339.28
05-Oct-13	11:07:22	Tug Boat	Travelling	91	13	30	13	41	0	22.3068	113.9715	1148.53	27.41
05-Oct-13	11:07:31	Container Boat	Travelling	91	12	0	12	41	30	22.3071	113.9715	1172.71	26.42
05-Oct-13	11:07:39	Tug Boat	Travelling	90	53	20	10	4	20	22.3107	113.9726	1589.11	23.80
05-Oct-13	11:07:46	Container Boat	Travelling	90	51	50	9	29	20	22.3111	113.9727	1635.92	23.22
05-Oct-13	11:08:58	Transportation Boat	Travelling	91	50	50	285	35	10	22.3010	113.9600	759.90	299.32
05-Oct-13	11:10:20	Tug Boat	Travelling	91	12	30	12	30	50	22.3070	113.9714	1165.06	26.24
05-Oct-13	11:10:29	Container Boat	Stationary	91	11	0	11	11	10	22.3073	113.9713	1189.94	24.92
05-Oct-13	11:10:39	Tug Boat	Travelling	91	0	10	16	40	20	22.3085	113.9733	1406.81	30.40
05-Oct-13	11:10:46	Container Boat	Travelling	90	58	30	15	53	40	22.3089	113.9734	1447.46	29.62
05-Oct-13	11:11:31	Fishing Boat	Non-operate and travelling	94	6	0	302	31	30	22.2998	113.9641	341.53	316.25
05-Oct-13	11:12:37	Tug Boat	Travelling	91	2	50	10	46	30	22.3086	113.9718	1346.80	24.50
05-Oct-13	11:12:54	Fishing Boat	Non-operate and travelling	94	21	40	332	40	50	22.3004	113.9657	321.07	346.41
05-Oct-13	11:13:42	HSF High Speed Ferry	Travelling	90	28	50	354	3	40	22.3244	113.9704	3003.10	7.79
05-Oct-13	11:13:52	Tug Boat	Travelling	91	6	40	22	11	20	22.3069	113.9736	1268.76	35.92
05-Oct-13	11:13:59	Container Boat	Travelling	91	4	40	22	54	20	22.3071	113.9740	1308.46	36.64
05-Oct-13	11:14:07	Tug Boat	Travelling	90	51	40	16	44	30	22.3104	113.9745	1642.95	30.47
05-Oct-13	11:14:22	Fishing Boat	Non-operate and travelling	93	35	0	359	59	40	22.3010	113.9673	391.16	13.72
05-Oct-13	11:14:39	Transportation Boat	Travelling	90	41	30	349	20	50	22.3161	113.9675	2055.59	3.08
05-Oct-13	11:14:49	HSF High Speed Ferry	Travelling	90	34	30	351	10	50	22.3199	113.9685	2488.12	4.91
05-Oct-13	11:16:31	Fishing Boat	Non-operate and travelling	92	28	0	24	49	40	22.3016	113.9699	569.13	38.56
05-Oct-13	11:16:39	Tug Boat	Travelling	91	3	20	14	19	20	22.3082	113.9725	1336.90	28.05
05-Oct-13	11:16:46	Tug Boat	Travelling	91	8	0	18	58	30	22.3070	113.9729	1244.20	32.70
05-Oct-13	11:16:53	Container Boat	Travelling	91	6	30	20	35	50	22.3071	113.9734	1272.59	34.33
05-Oct-13	11:17:06	HSF High Speed Ferry	Travelling	90	50	30	333	19	20	22.3124	113.9627	1682.40	347.05
05-Oct-13	11:17:13	Transportation Boat	Travelling	90	49	30	337	38	30	22.3129	113.9639	1717.06	351.37
05-Oct-13	11:18:50	HSF High Speed Ferry	Travelling	91	0	30	305	55	30	22.3072	113.9576	1400.78	319.65
05-Oct-13	11:19:07	Tug Boat	Travelling	91	1	10	9	21	50	22.3091	113.9717	1385.38	23.09
05-Oct-13	11:19:17	Transportation Boat	Travelling	90	56	0	324	30	30	22.3103	113.9609	1515.07	338.24
05-Oct-13	11:19:36	Tug Boat	Travelling	90	59	20	8	42	50	22.3095	113.9717	1428.86	22.44
05-Oct-13	11:19:46	Container Boat	Travelling	91	0	50	8	58	0	22.3092	113.9716	1393.21	22.70
05-Oct-13	11:20:32	HSF High Speed Ferry	Travelling	90	53	0	278	0	20	22.3030	113.9519	1602.55	291.74
05-Oct-13	11:20:49	Transportation Boat	Travelling	91	18	30	7	45	30	22.3066	113.9702	1077.08	21.49
05-Oct-13	11:21:03	Tug Boat	Travelling	90	59	50	309	7	50	22.3078	113.9581	1417.08	322.86
05-Oct-13	11:22:06	Transportation Boat	Travelling	90	59	0	303	7	50	22.3071	113.9568	1437.61	316.86
05-Oct-13	11:22:23	Tug Boat	Travelling	90	56	20	324	36	40	22.3102	113.9610	1506.71	338.34
05-Oct-13	11:22:36	Transportation Boat	Travelling	91	31	20	351	42	30	22.3059	113.9673	925.04	5.44
05-Oct-13	11:22:57	Container Boat	Stationary	91	1	50	11	30	30	22.3088	113.9721	1371.09	25.24
05-Oct-13	11:23:08	Tug Boat	Travelling	90	48	50	0	45	20	22.3128	113.9706	1742.60	14.49
05-Oct-13	11:23:17	Container Boat	Travelling	90	49	40	1	12	40	22.3125	113.9707	1712.84	14.94
05-Oct-13	11:23:53	Tug Boat	Travelling	91	9	20	14	43	30	22.3073	113.9721	1221.41	28.45
05-Oct-13	11:24:06	Transportation Boat	Travelling	90	55	40	288	16	20	22.3049	113.9538	1525.44	302.00
05-Oct-13	11:24:16	Transportation Boat	Travelling	91	38	20	333	14	30	22.3052	113.9645	859.06	346.97
05-Oct-13	11:24:31	Tug Boat	Travelling	90	46	20	342	35	20	22.3141	113.9653	1839.04	356.32
05-Oct-13	11:24:58	Tug Boat	Travelling	90	43	40	357	49	50	22.3148	113.9702	1954.20	11.56
05-Oct-13	11:25:05	Container Boat	Travelling	90	44	30	358	11	20	22.3145	113.9703	1916.76	11.92
05-Oct-13	11:28:19	Transportation Boat	Travelling	91	17	50	292	22	20	22.3034	113.9579	1087.67	306.10
05-Oct-13	11:28:46	Tug Boat	Stationary	91	11	10	14	56	40	22.3070	113.9720	1190.56	28.67
05-Oct-13	11:29:36	Fishing Boat	Operate and travelling	91	33	50	32	40	10	22.3032	113.9727	901.25	46.40
05-Oct-13	11:33:09	Fishing Boat	Non-operate and travelling	93	4	40	3	25	20	22.3015	113.9677	456.99	17.15
05-Oct-13	11:35:54	Fishing Boat	Non-operate and travelling	92	52	0	282	29	0	22.2996	113.9621	490.97	296.21
05-Oct-13	11:38:27	Transportation Boat	Travelling	90	58	40	317	10	10	22.3090	113.9595	1449.63	330.90
05-Oct-13	11:41:53	Transportation Boat	Travelling	90	46	0	342	23	10	22.3143	113.9652	1857.78	356.12
05-Oct-13	11:47:47	Transportation Boat	Travelling	91	4	40	317	18	10	22.3080	113.9602	1315.47	331.03
05-Oct-13	11:49:56	Transportation Boat	Travelling	90	49	50	340	35	40	22.3130	113.9648	1714.22	354.32
05-Oct-13	11:50:21	Speed Boat	Travelling	94	17	40	354	3	50	22.3005	113.9668	328.00	7.79
05-Oct-13	11:50:36	Speed Boat	Travelling	94	42	20	354	22	20	22.3003	113.9668	299.23	8.10
05-Oct-13	11:51:13	Transportation Boat	Travelling	90	41	30	348	17	10	22.3162	113.9671	2067.59	2.02
05-Oct-13	11:51:20	Speed Boat	Travelling	94	12	30	10	36	50	22.3004	113.9677	334.79	24.34
05-Oct-13	11:51:56	Speed Boat	Travelling	94	19	20	15	48	30	22.3002	113.9680	325.96	29.54
05-Oct-13	11:52:15	Research Vessel	Travelling	90	58	20	352	29	30	22.3107	113.9679	1461.21	6.22
05-Oct-13	11:54:07	Research Vessel	Travelling	91	18	0	323	49	10	22.3067	113.9624	1089.74	337.55
05-Oct-13	11:55:21	Research Vessel	Travelling	91	10	0	296	28	30	22.3047	113.9574	1215.68	310.20

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
05-Oct-13	11:56:26	Research Vessel	Travelling	90	57	30	278	15	40	22.3026	113.9530	1483.66	291.99
05-Oct-13	12:00:24	Fishing Boat	Operate and travelling	92	50	50	283	58	40	22.2997	113.9621	496.24	297.71
05-Oct-13	12:00:40	Transportation Boat	Travelling	90	47	20	340	5	30	22.3138	113.9645	1809.70	353.82
05-Oct-13	12:02:08	Fishing Boat	Operate and travelling	92	22	10	288	17	30	22.3005	113.9615	596.82	302.02
05-Oct-13	12:03:27	Transportation Boat	Travelling	90	56	20	321	54	10	22.3101	113.9603	1516.52	335.63
05-Oct-13	12:03:38	Fishing Boat	Operate and stationary	92	27	40	280	19	10	22.2997	113.9613	574.65	294.05
05-Oct-13	12:05:12	Transportation Boat	Travelling	91	1	10	307	34	30	22.3074	113.9579	1395.49	321.30
05-Oct-13	12:06:42	Speed Boat	Travelling	90	53	0	33	8	40	22.3075	113.9779	1614.29	46.87
05-Oct-13	12:07:50	Speed Boat	Travelling	91	22	30	23	53	40	22.3050	113.9725	1032.09	37.62
05-Oct-13	12:08:33	Transportation Boat	Travelling	90	55	30	280	15	10	22.3033	113.9527	1540.88	293.98
05-Oct-13	12:09:15	Speed Boat	Travelling	93	3	50	346	45	10	22.3018	113.9664	461.68	0.48
05-Oct-13	12:09:58	Speed Boat	Travelling	93	12	20	295	5	20	22.3001	113.9631	441.25	308.82
05-Oct-13	12:10:12	Speed Boat	Travelling	92	43	0	282	23	20	22.2997	113.9619	520.96	296.12
05-Oct-13	12:18:15	Tour Boat	Travelling	90	42	30	349	26	50	22.3158	113.9675	2026.30	3.18
05-Oct-13	12:21:10	Fishing Boat	Non-operate and travelling	95	48	0	331	28	50	22.2997	113.9658	243.62	345.21
05-Oct-13	12:21:19	Tour Boat	Travelling	90	55	10	331	37	30	22.3111	113.9626	1553.45	345.35
05-Oct-13	12:22:19	Fishing Boat	Non-operate and travelling	94	8	40	18	55	40	22.3002	113.9682	341.63	32.66
05-Oct-13	12:23:30	Speed Boat	Travelling	94	18	30	311	8	0	22.3000	113.9646	328.64	324.86
05-Oct-13	12:23:53	Speed Boat	Travelling	92	25	20	281	19	30	22.2999	113.9612	585.76	295.05
05-Oct-13	12:24:06	Fishing Boat	Non-operate and travelling	91	53	50	39	35	30	22.3016	113.9722	748.57	53.32
05-Oct-13	12:24:18	Speed Boat	Travelling	91	4	20	305	8	50	22.3066	113.9579	1329.97	318.88
05-Oct-13	12:26:51	Fishing Boat	Non-operate and travelling	91	5	20	43	5	30	22.3041	113.9771	1309.91	56.82
05-Oct-13	12:27:01	Tour Boat	Travelling	90	58	20	279	18	20	22.3028	113.9532	1469.22	293.04
05-Oct-13	12:27:12	Tug Boat	Travelling	90	49	40	3	6	50	22.3125	113.9713	1730.23	16.84
05-Oct-13	12:27:22	Container Boat	Travelling	90	48	40	4	0	10	22.3128	113.9716	1766.53	17.73
05-Oct-13	12:33:09	Tug Boat	Travelling	90	49	50	7	57	0	22.3121	113.9726	1725.94	21.68
05-Oct-13	12:33:15	Container Boat	Travelling	90	50	10	9	26	50	22.3118	113.9730	1714.28	23.18
05-Oct-13	12:33:29	Government Boat	Travelling	91	7	50	32	50	10	22.3054	113.9753	1262.43	46.57
05-Oct-13	12:33:50	Transportation Boat	Travelling	91	49	0	285	48	40	22.3011	113.9598	783.10	299.54
05-Oct-13	12:34:23	Government Boat	Travelling	91	51	40	24	7	0	22.3031	113.9710	764.38	37.85
05-Oct-13	12:35:23	Government Boat	Travelling	94	16	10	11	36	40	22.3003	113.9678	332.26	25.34
05-Oct-13	12:35:48	Transportation Boat	Travelling	93	41	40	321	44	10	22.3008	113.9648	384.22	335.47
05-Oct-13	12:36:08	Container Boat	Stationary	90	50	30	7	38	20	22.3119	113.9724	1703.53	21.37
05-Oct-13	12:36:47	Transportation Boat	Travelling	94	14	30	334	54	50	22.3006	113.9658	334.51	348.64
05-Oct-13	12:37:46	Transportation Boat	Travelling	95	37	10	355	28	10	22.2999	113.9668	252.15	9.20
05-Oct-13	12:41:11	Fishing Boat	Non-operate and travelling	91	7	40	35	7	50	22.3051	113.9757	1267.10	48.86
05-Oct-13	12:41:26	Government Boat	Travelling	94	39	0	327	19	10	22.3002	113.9654	305.23	341.05
05-Oct-13	12:41:48	Government Boat	Travelling	92	52	20	290	51	30	22.3001	113.9624	495.09	304.59
05-Oct-13	12:42:08	Government Boat	Travelling	91	58	50	278	25	40	22.3001	113.9599	718.96	292.16
05-Oct-13	12:43:25	Fishing Boat	Operate and stationary	91	25	10	29	24	0	22.3042	113.9731	1005.12	43.13
05-Oct-13	12:43:44	Transportation Boat	Travelling	91	1	20	316	45	0	22.3086	113.9597	1400.08	330.48
05-Oct-13	12:45:15	Transportation Boat	Travelling	90	56	0	334	8	0	22.3111	113.9633	1535.73	347.86
05-Oct-13	12:46:52	Transportation Boat	Travelling	90	45	40	346	20	50	22.3146	113.9664	1890.94	0.08
05-Oct-13	12:47:50	Transportation Boat	Travelling	90	41	10	351	46	10	22.3165	113.9684	2103.54	5.50
05-Oct-13	12:49:25	Transportation Boat	Travelling	90	59	30	314	19	0	22.3087	113.9590	1445.08	328.05
05-Oct-13	12:50:33	Tug Boat	Travelling	90	53	50	16	16	50	22.3101	113.9742	1599.86	30.01
05-Oct-13	12:51:02	Tour Boat	Travelling	91	1	20	309	14	40	22.3077	113.9582	1401.68	322.97
05-Oct-13	12:51:20	Tug Boat	Travelling	90	54	0	15	55	0	22.3101	113.9741	1595.04	29.65
05-Oct-13	12:51:26	Transportation Boat	Travelling	90	53	50	330	31	30	22.3115	113.9622	1600.08	344.25
05-Oct-13	12:53:11	Tug Boat	Travelling	91	7	0	10	21	10	22.3082	113.9715	1282.24	24.08
05-Oct-13	12:53:19	Transportation Boat	Travelling	90	46	50	341	52	50	22.3142	113.9650	1844.67	355.61
05-Oct-13	12:53:27	Tour Boat	Travelling	90	54	10	332	6	30	22.3115	113.9626	1590.58	345.84
05-Oct-13	12:57:33	Tug Boat	Travelling	91	3	0	2	46	30	22.3094	113.9702	1365.53	16.50
05-Oct-13	12:57:41	Container Boat	Travelling	91	4	30	3	12	30	22.3091	113.9702	1333.44	16.94
05-Oct-13	12:58:15	Dumping Guide Boat	Travelling	92	0	30	18	48	20	22.3030	113.9701	710.75	32.54
05-Oct-13	12:59:41	Tour Boat	Travelling	90	30	30	354	31	10	22.3233	113.9704	2878.58	8.25
05-Oct-13	13:00:35	Tug Boat	Travelling	90	48	50	358	34	50	22.3132	113.9701	1769.58	12.31
05-Oct-13	13:00:42	Container Boat	Travelling	90	49	20	359	1	10	22.3130	113.9702	1751.32	12.75
05-Oct-13	13:00:56	Dumping Guide Boat	Travelling	92	2	20	17	24	50	22.3030	113.9699	700.35	31.14
05-Oct-13	13:03:47	Speed Boat	Travelling	92	53	30	7	6	10	22.3018	113.9681	493.43	20.83
05-Oct-13	13:03:56	Dumping Guide Boat	Travelling	94	29	50	338	39	20	22.3004	113.9660	316.75	352.39
05-Oct-13	13:04:07	Speed Boat	Travelling	91	48	20	28	6	0	22.3029	113.9715	791.66	41.83
05-Oct-13	13:04:21	Tug Boat	Travelling	90	38	20	354	37	20	22.3178	113.9696	2269.88	8.35
05-Oct-13	13:04:29	Container Boat	Travelling	90	38	40	354	53	40	22.3176	113.9697	2249.71	8.62
05-Oct-13	13:04:37	Speed Boat	Travelling	91	32	20	34	46	30	22.3032	113.9732	929.69	48.50
05-Oct-13	13:04:56	Dumping Guide Boat	Travelling	94	51	40	332	29	50	22.3002	113.9657	292.97	346.23
05-Oct-13	13:05:41	Speed Boat	Travelling	91	55	20	28	0	0	22.3026	113.9712	743.58	41.73
05-Oct-13	13:06:00	Speed Boat	Travelling	92	23	0	19	58	20	22.3021	113.9696	599.26	33.70
05-Oct-13	13:06:12	Fishing Boat	Non-operate and travelling	91	29	40	30	6	10	22.3038	113.9729	957.74	43.83
05-Oct-13	13:06:37	Dumping Guide Boat	Stationary	94	51	40	332	41	10	22.3002	113.9657	293.05	346.42
05-Oct-13	13:07:21	Speed Boat	Travelling	93	58	0	8	52	10	22.3006	113.9677	359.51	22.60
05-Oct-13	13:07:38	Speed Boat	Travelling	94	40	20	11	20	40	22.3001	113.9677	305.01	25.07
05-Oct-13	13:07:49	Fishing Boat	Non-operate and travelling	91	15	30	41	45	10	22.3034	113.9755	1139.17	55.48
05-Oct-13	13:10:17	Fishing Boat	Non-operate and travelling	92	31	40	17	27	0	22.3020	113.9692	565.28	31.18
05-Oct-13	13:14:28	Fishing Boat	Non-operate and travelling	91	54	50	280	37	50	22.3004	113.9598	747.85	294.36
05-Oct-13	13:15:19	Tug Boat	Travelling	90	57	10	4	25	30	22.3105	113.9710	1511.00	18.15
05-Oct-13	13:15:29	Container Boat	Travelling	90	58	30	3	46	10	22.3103	113.9707	1476.11	17.50
05-Oct-13	13:19:34	Tug Boat	Travelling	91	34	40	6	59	30	22.3053	113.9695	908.75	20.72
05-Oct-13	13:19:43	Container Boat	Travelling	91	30	40	8	46	0	22.3055	113.9699	949.11	22.50
05-Oct-13	13:19:53	Dumping Guide Boat	Stationary	94	0	50	7	7	40	22.3006	113.9676	355.95	20.86
05-Oct-13	13:23:18	Tug Boat	Travelling	91	24	50	15	42	50	22.3056	113.9713	1015.37	29.44
05-Oct-13	13:23:24	Container Boat	Travelling	91	22	40	14	59	20	22.3058	113.9713	1042.19	28.72
05-Oct-13	13:23:38	Dumping Guide Boat	Stationary	93	31	30	11	28	10	22.3009	113.9681	405.75	25.20
05-Oct-13	13:23:50	Transportation Boat	Travelling	90	42	20	346	57	50	22.3161	113.9666	2055.57	0.69
05-Oct-13	13:24:07	Transportation Boat	Travelling	91	8	20	309	36	50	22.3067	113.9591	1263.02	323.34
05-Oct-13	13:25:41	Transportation Boat	Travelling	91	6	20	326	14	40	22.3086	113.9621	1301.83	339.97
05-Oct-13	13:25:48	Transportation Boat	Travelling	90	53	40	331	28	30	22.3117	113.9624	1613.76	345.20
05-Oct-13	13:26:29	Transportation Boat	Travelling	91	6	0	323	21	50	22.3085	113.9614	1308.64	337.09
05-Oct-13	13:26:42	Transportation Boat	Travelling	90	57	20	321	4	0	22.3099	113.9601	1509.21	334.80
05-Oct-13	13:27:40	Tug Boat	Stationary	93	45	20	340	19	20	22.3010	113.9660	380.99	354.05
05-Oct-13	13:27:52	Transportation Boat	Travelling	91	1	30	303	54	10	22.3070	113.9572	1405.87	317.63
05-Oct-13	13:28:00	Transportation Boat	Travelling	90	56	50	308	53	0	22.3085	113.9574	1523.00	322.61
05-Oct-13	13:28:38	Tug Boat	Travelling	91	15	40	12	59	20	22.3068	113.9714	1140.32	26.72
05-Oct-13	13:28:45	Container Boat	Travelling	91	14	20	12	18	20	22.3070	113.9714	1160.97	26.04
05-Oct-13	13:28:59	Transportation Boat	Travelling	90	48	50	304	16	40	22.3095	113.9548	1777.44	318.01
05-Oct-13	13:29:07	Transportation Boat	Travelling	90	58	10	283	45	20	22.3038	113.9536	1487.84	297.49
05-Oct-13	13:30:52	Tug Boat	Stationary	91	15	40	12	24	40	22.3068	113.9713	1140.72	26.14
05-Oct-13	13:30:59	Container Boat	Stationary	91	14	30	11	45	30	22.3070	113.9713	1158.76	25.49
05-Oct-13	13:33:07	Tug Boat	Travelling	91	15	30	10	54	0	22.3070	113.9710	1143.65	24.63
05-Oct-13	13:33:40	Tug Boat	Travelling	91	9	30	10	1	40	22.3079	113.9713	1243.45	23.76
05-Oct-13	13:36:39	Tug Boat	Travelling	90	55	0	15	19	30	22.3100	113.9738	1576.67	29.05
05-Oct-13	13:39:30	Tug Boat	Travelling	90	54	0	353	15	50	22.3120	113.9683	1607.06	6.99
05-Oct-13	13:42:04	Tug Boat	Travelling	90	52	10	348	34	0	22.3126	113.9670	1665.18	2.30
05-Oct-13	13:42:14	Container Boat	Travelling	90	52	30	349	26	10	22.3125	113.9673	1654.47	3.17
05-Oct-13	13:47:46	Tug Boat	Travelling	90	37	0	353	35	30	22.3188	113.9693	2370.64	7.32
05-Oct-13	13:47:52	Container Boat	Travelling	90	39	0	353	35	20	22.3177	113.9692	2245.09	7.32
05-Oct-13	13:52:36	Dumping Guide Boat	Stationary	93	52	10	9	50	20	22.3007	113.9678	371.16	23.57
05-Oct-13	13:52:50	Government Boat	Travelling	90	47	0	350	9	20	22.3143	113.9676	1855.13	3.89
05-Oct-13	13:53:59	Government Boat	Travelling	90	53	50	342	33	50	22.3121	113.9654	1615.74	356.29
05-Oct-13	13:55:46	Government Boat	Travelling	91	2	20	324	23	40	22.3093	113.9614	1392.85	338.12
05-Oct-13	13:57:23	Dumping Guide Boat	Stationary	93	12	20	19	50	0	22.3010	113.9688	448.66	33.56
05-Oct-13	13:58:16	Government Boat	Travelling	91	7	0	292	21	0	22.3045	113.9562	1295.25	306.08
05-Oct-13	13:59:04	Other	Stationary	91	9	30	320	16	30	22.3077	113.9611	1248.34	334.00
05-Oct-13	13:59:15	Other	Stationary	91	7	10	328	45	10	22.3087	113.9626	1292.20	342.48
05-Oct-13	13:59:23	Other	Stationary	90	28	30	347	17	50	22.3257	113.9669	3122.21	1.03
05-Oct-13	13:59:29	Other	Stationary	90	34	20	356	53	40	22.3203	113.9710	2566.93	10.62
05-Oct-13	13:59:36	Other	Stationary	90	36	20	357	27	10	22.3190	113.9710	2420.23	11.18

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
05-Oct-13	13:59:45	Other	Stationary	90	38	10	358	4	40	22.3179	113.9710	2300.01	11.81
05-Oct-13	13:59:52	Other	Stationary	90	40	50	0	14	50	22.3164	113.9714	2145.28	13.98
05-Oct-13	14:00:23	Other	Stationary	90	51	50	352	3	40	22.3127	113.9680	1680.84	5.79
05-Oct-13	14:00:28	Other	Stationary	90	52	30	353	34	30	22.3124	113.9685	1659.15	7.30
05-Oct-13	14:00:50	Other	Stationary	91	10	20	13	20	10	22.3075	113.9719	1233.74	27.07
05-Oct-13	14:00:56	Other	Stationary	91	14	20	15	22	0	22.3068	113.9719	1166.76	29.10
05-Oct-13	14:01:06	Other	Stationary	90	53	50	17	2	10	22.3101	113.9744	1617.52	30.77
05-Oct-13	14:01:10	Other	Stationary	90	53	50	17	43	40	22.3100	113.9746	1617.54	31.46
05-Oct-13	14:01:22	Other	Stationary	91	6	30	326	24	50	22.3087	113.9621	1305.72	340.14
05-Oct-13	14:01:36	Other	Stationary	90	26	20	355	40	20	22.3278	113.9718	3398.70	9.40
05-Oct-13	14:01:52	Other	Stationary	90	28	40	4	59	0	22.3241	113.9761	3104.15	18.71
05-Oct-13	14:01:59	Other	Stationary	91	14	40	11	59	20	22.3070	113.9713	1161.70	25.72
09-Oct-13	8:02:02	Other	Stationary	94	25	35	0	0	0	22.3005	113.9672	335.04	13.73
09-Oct-13	8:03:18	Other	Stationary	90	33	5	292	26	50	22.3123	113.9448	2755.87	306.18
09-Oct-13	8:03:27	Other	Stationary	90	44	15	295	52	40	22.3093	113.9511	2039.42	309.61
09-Oct-13	8:03:32	Other	Stationary	90	53	20	300	49	15	22.3083	113.9547	1685.37	314.55
09-Oct-13	8:03:38	Other	Stationary	90	59	15	303	47	40	22.3077	113.9565	1514.55	317.52
09-Oct-13	8:03:45	Other	Stationary	91	1	5	304	45	0	22.3075	113.9569	1468.48	318.48
09-Oct-13	8:03:52	Other	Stationary	90	53	40	307	37	15	22.3094	113.9562	1674.72	321.35
09-Oct-13	8:04:08	Other	Stationary	91	0	40	304	45	15	22.3076	113.9569	1478.70	318.48
09-Oct-13	8:04:18	Other	Stationary	90	53	20	307	37	30	22.3095	113.9562	1685.37	321.35
09-Oct-13	8:04:28	Other	Stationary	90	57	55	310	44	40	22.3090	113.9576	1549.93	324.47
09-Oct-13	8:04:32	Other	Stationary	90	59	30	314	27	55	22.3092	113.9587	1508.10	328.20
09-Oct-13	8:04:37	Other	Stationary	90	58	30	318	31	5	22.3098	113.9595	1534.25	332.25
09-Oct-13	8:04:44	Other	Stationary	90	56	35	323	5	50	22.3107	113.9603	1587.01	336.83
09-Oct-13	8:04:50	Other	Stationary	90	55	25	326	34	45	22.3114	113.9611	1620.96	340.31
09-Oct-13	8:04:57	Other	Stationary	90	52	30	332	6	35	22.3126	113.9623	1712.60	345.84
09-Oct-13	8:05:03	Other	Stationary	90	49	40	337	1	0	22.3137	113.9636	1812.22	350.75
09-Oct-13	8:05:09	Other	Stationary	90	44	50	339	45	10	22.3156	113.9642	2012.22	353.48
09-Oct-13	8:05:14	Other	Stationary	90	42	25	343	25	20	22.3168	113.9654	2129.98	357.15
09-Oct-13	8:05:21	Other	Stationary	90	36	55	349	3	15	22.3197	113.9676	2458.35	2.78
09-Oct-13	8:05:28	Other	Stationary	90	30	25	352	1	5	22.3246	113.9693	3010.52	5.75
09-Oct-13	8:05:38	Other	Stationary	90	29	50	348	9	5	22.3253	113.9674	3072.81	1.88
09-Oct-13	8:05:45	Other	Stationary	90	29	50	348	9	5	22.3253	113.9674	3072.81	1.88
09-Oct-13	8:05:54	Other	Stationary	90	30	30	352	0	45	22.3245	113.9693	3001.83	5.74
09-Oct-13	8:06:01	Other	Stationary	90	28	55	345	4	30	22.3262	113.9658	3176.26	358.80
09-Oct-13	8:06:08	Other	Stationary	90	28	25	340	34	20	22.3266	113.9633	3235.77	354.30
09-Oct-13	8:06:15	Other	Stationary	90	28	25	336	11	15	22.3263	113.9609	3235.77	349.92
09-Oct-13	8:06:24	Other	Stationary	90	29	20	330	8	55	22.3247	113.9579	3128.36	343.88
09-Oct-13	8:06:31	Other	Stationary	90	27	40	325	46	0	22.3257	113.9551	3329.49	339.50
09-Oct-13	8:06:37	Other	Stationary	90	25	45	322	8	35	22.3272	113.9521	3596.72	335.87
09-Oct-13	8:06:46	Other	Stationary	90	26	25	317	9	50	22.3251	113.9498	3498.85	330.89
09-Oct-13	8:06:52	Other	Stationary	90	26	50	313	47	10	22.3237	113.9484	3440.45	327.52
09-Oct-13	8:07:01	Other	Stationary	90	26	45	310	24	10	22.3228	113.9467	3451.97	324.13
09-Oct-13	8:07:38	Other	Stationary	91	4	45	336	42	25	22.3099	113.9642	1384.30	350.44
09-Oct-13	8:07:53	Other	Stationary	91	3	45	343	5	20	22.3103	113.9656	1406.28	356.82
09-Oct-13	8:08:06	Other	Stationary	90	29	50	344	45	50	22.3253	113.9656	3072.81	358.49
09-Oct-13	8:08:12	Other	Stationary	90	28	55	347	42	5	22.3262	113.9672	3176.26	1.43
09-Oct-13	8:08:21	Other	Stationary	90	39	10	357	32	55	22.3180	113.9708	2312.31	11.28
09-Oct-13	8:08:41	Other	Stationary	90	42	40	359	13	35	22.3162	113.9710	2117.15	12.96
09-Oct-13	8:08:55	Other	Stationary	90	36	0	0	29	20	22.3196	113.9724	2523.38	14.22
09-Oct-13	8:09:03	Other	Stationary	90	30	40	0	43	45	22.3236	113.9736	2984.61	14.46
09-Oct-13	8:09:10	Other	Stationary	90	33	5	0	52	30	22.3216	113.9732	2755.87	14.60
09-Oct-13	8:09:21	Other	Stationary	90	34	45	2	11	40	22.3203	113.9734	2617.93	15.92
09-Oct-13	8:09:37	Other	Stationary	90	30	35	5	52	0	22.3230	113.9762	2993.19	19.60
09-Oct-13	8:09:46	Other	Stationary	90	32	10	21	15	5	22.3185	113.9822	2838.27	34.98
09-Oct-13	8:09:57	Other	Stationary	91	9	25	325	43	15	22.3085	113.9620	1290.24	339.45
09-Oct-13	8:10:03	Other	Stationary	91	9	25	326	57	40	22.3086	113.9623	1290.24	340.69
09-Oct-13	8:10:11	Other	Stationary	90	54	35	354	38	15	22.3123	113.9687	1646.12	8.37
09-Oct-13	8:10:19	Other	Stationary	90	54	45	356	22	35	22.3122	113.9692	1641.02	10.11
09-Oct-13	8:10:28	Other	Stationary	90	34	15	2	11	15	22.3206	113.9735	2657.81	15.92
09-Oct-13	8:10:33	Other	Stationary	90	34	20	3	28	20	22.3204	113.9740	2651.07	17.20
09-Oct-13	8:10:39	Other	Stationary	90	31	45	4	14	35	22.3223	113.9750	2877.42	17.97
09-Oct-13	8:10:45	Other	Stationary	90	31	20	5	36	25	22.3224	113.9758	2917.70	19.34
09-Oct-13	8:10:59	Other	Stationary	90	54	45	17	0	40	22.3103	113.9746	1641.02	30.74
09-Oct-13	8:11:07	Other	Stationary	90	54	45	17	57	10	22.3102	113.9748	1641.02	31.68
09-Oct-13	8:11:22	Other	Stationary	91	3	20	343	32	0	22.3103	113.9657	1415.65	357.26
09-Oct-13	8:11:56	Other	Stationary	90	56	10	6	58	15	22.3111	113.9719	1598.97	20.70
09-Oct-13	8:12:08	Other	Stationary	91	18	35	7	22	40	22.3072	113.9704	1138.42	21.11
09-Oct-13	8:12:19	Other	Stationary	90	30	35	12	19	45	22.3218	113.9792	2993.19	26.06
09-Oct-13	8:12:58	Tug Boat	Travelling	91	6	20	295	15	25	22.3053	113.9562	1350.88	308.99
09-Oct-13	8:13:21	HSF High Speed Ferry	Travelling	90	28	30	354	56	0	22.3263	113.9711	3225.69	8.66
09-Oct-13	8:15:55	HSF High Speed Ferry	Travelling	90	43	35	347	28	0	22.3163	113.9668	2071.43	1.20
09-Oct-13	8:16:06	Tug Boat	Travelling	90	59	45	327	29	10	22.3104	113.9617	1501.70	341.22
09-Oct-13	8:16:17	Tug Boat	Travelling	90	55	50	2	32	50	22.3115	113.9708	1608.67	16.28
09-Oct-13	8:17:52	Tug Boat	Travelling	90	55	45	355	13	30	22.3119	113.9688	1611.11	8.95
09-Oct-13	8:18:17	Transportation Boat	Travelling	91	14	15	314	51	40	22.3069	113.9603	1205.46	328.59
09-Oct-13	8:18:29	HSF High Speed Ferry	Travelling	91	3	30	314	26	5	22.3084	113.9592	1411.88	328.16
09-Oct-13	8:18:48	Tug Boat	Travelling	90	46	35	345	47	25	22.3150	113.9662	1934.84	359.52
09-Oct-13	8:19:00	Tug Boat	Stationary	90	55	0	355	31	5	22.3121	113.9690	1633.44	9.25
09-Oct-13	8:19:42	Transportation Boat	Travelling	91	10	15	326	0	0	22.3084	113.9621	1274.78	339.73
09-Oct-13	8:20:15	HSF High Speed Ferry	Travelling	90	59	20	283	15	50	22.3038	113.9533	1512.39	296.99
09-Oct-13	8:20:39	Tug Boat	Travelling	90	54	35	357	11	5	22.3122	113.9694	1646.12	10.91
09-Oct-13	8:21:00	Tug Boat	Travelling	90	36	20	351	46	30	22.3200	113.9687	2499.33	5.50
09-Oct-13	8:21:23	Transportation Boat	Travelling	91	9	25	309	5	15	22.3069	113.9588	1290.24	322.82
09-Oct-13	8:21:36	Transportation Boat	Stationary	91	15	50	330	1	10	22.3078	113.9632	1180.06	343.75
09-Oct-13	8:22:22	Tug Boat	Travelling	91	6	20	7	13	25	22.3090	113.9711	1350.88	20.95
09-Oct-13	8:22:42	Transportation Boat	Travelling	91	8	35	311	4	25	22.3072	113.9591	1306.08	324.80
09-Oct-13	8:22:55	Transportation Boat	Travelling	91	2	25	328	20	25	22.3099	113.9621	1436.70	342.07
09-Oct-13	8:23:07	Transportation Boat	Travelling	91	13	15	309	12	15	22.3064	113.9592	1222.07	322.93
09-Oct-13	8:24:11	Tug Boat	Travelling	91	18	0	11	0	25	22.3070	113.9711	1147.01	24.74
09-Oct-13	8:24:42	Transportation Boat	Travelling	90	51	10	345	32	5	22.3134	113.9662	1758.06	359.26
09-Oct-13	8:25:00	Transportation Boat	Travelling	91	2	45	327	51	25	22.3098	113.9620	1428.97	341.59
09-Oct-13	8:25:09	Transportation Boat	Travelling	91	43	15	315	34	35	22.3043	113.9621	864.91	329.31
09-Oct-13	8:26:04	Transportation Boat	Travelling	90	44	45	356	15	5	22.3155	113.9698	2016.06	9.98
09-Oct-13	8:27:04	Tug Boat	Travelling	91	3	55	13	15	10	22.3089	113.9726	1402.57	26.98
09-Oct-13	8:27:15	Transportation Boat	Travelling	90	42	50	359	29	25	22.3161	113.9711	2108.69	13.22
09-Oct-13	8:27:23	Transportation Boat	Travelling	90	53	5	340	48	45	22.3128	113.9648	1693.44	354.54
09-Oct-13	8:27:34	Transportation Boat	Travelling	93	25	35	330	4	50	22.3014	113.9652	433.26	343.81
09-Oct-13	8:28:38	Tug Boat	Travelling	90	55	10	17	13	15	22.3102	113.9745	1628.42	30.95
09-Oct-13	8:28:53	Transportation Boat	Travelling	90	47	45	347	32	5	22.3146	113.9668	1886.52	1.26
09-Oct-13	8:29:04	Transportation Boat	Travelling	95	29	0	352	41	0	22.3000	113.9667	270.13	6.41
09-Oct-13	8:30:54	Transportation Boat	Travelling	90	42	10	355	17	45	22.3167	113.9697	2142.96	9.03
09-Oct-13	8:31:03	Tug Boat	Travelling	91	11	40	10	38	40	22.3079	113.9714	1249.33	24.37
09-Oct-13	8:31:26	Transportation Boat	Travelling	90	32	20	353	28	55	22.3228	113.9698	2822.92	7.21
09-Oct-13	8:31:32	Transportation Boat	Travelling	90	32	40	353	49	20	22.3225	113.9700	2792.71	7.55
09-Oct-13	8:33:33	Transportation Boat	Travelling	90	42	40	348	3	30	22.3167	113.9670	2117.15	1.79
09-Oct-13	8:33:41	Transportation Boat	Travelling	90	46	20	347	33	0	22.3151	113.9668	1945.53	1.28
09-Oct-13	8:33:50	Tug Boat	Travelling	91	10	20	6	39	50	22.3084	113.9707	1273.25	20.39
09-Oct-13	8:34:05	HSF High Speed Ferry	Travelling	91	2	0	290	8	15	22.3049	113.9547	1446.48	303.87
09-Oct-13	8:35:23	Tug Boat	Travelling	91	3	55	4	27	45	22.3096	113.9707	1402.57	18.19
09-Oct-13	8:35:30	Container Boat	Travelling	91	5	35	4	33	55	22.3093	113.9706	1366.50	18.30
09-Oct-13	8:36:28	Transportation Boat	Travelling	91	0	25	322	57	40	22.3099	113.9607	1484.90	336.69
09-Oct-13	8:36:42	Transportation Boat	Travelling	91	4	5	340	32	0	22.3101	113.9650	1398.88	354.26
09-Oct-13	8:36:50	HSF High Speed Ferry	Travelling	91	2	50	321	58	30	22.3093	113.9607	1427.05	335.70
09-Oct-13	8:36:59	HSF High Speed Ferry	Travelling	91	4	40	312	23	50	22.3080	113.9589	1386.11	326.13
09-Oct-13	8:37:39	Transportation Boat	Travelling	91	3	40	306	24	15	22.3073	113.9576	1408.14	320.13

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Oct-13	8:37:56	Transportation Boat	Travelling	91	19	40	326	49	10	22.3071	113.9628	1122.82	340.55
09-Oct-13	8:38:39	HSF High Speed Ferry	Travelling	90	54	5	339	39	55	22.3125	113.9645	1661.59	353.40
09-Oct-13	8:38:44	HSF High Speed Ferry	Travelling	90	52	55	337	22	30	22.3127	113.9638	1698.87	351.10
09-Oct-13	8:38:56	Transportation Boat	Travelling	90	57	30	289	52	5	22.3054	113.9537	1561.33	303.60
09-Oct-13	8:39:08	Transportation Boat	Travelling	91	15	25	297	21	50	22.3046	113.9577	1186.64	311.09
09-Oct-13	8:39:21	Tug Boat	Travelling	90	56	20	357	57	55	22.3117	113.9695	1594.17	11.70
09-Oct-13	8:39:33	Tug Boat	Travelling	90	50	30	357	57	45	22.3133	113.9699	1781.72	11.69
09-Oct-13	8:39:42	Container Boat	Travelling	90	51	35	357	58	35	22.3130	113.9698	1743.60	11.71
09-Oct-13	8:40:10	Transportation Boat	Travelling	91	1	25	278	15	0	22.3025	113.9532	1460.40	291.98
09-Oct-13	8:40:20	Transportation Boat	Travelling	91	4	0	297	29	50	22.3059	113.9562	1400.72	311.23
09-Oct-13	8:40:56	HSF High Speed Ferry	Travelling	90	36	15	351	30	5	22.3201	113.9686	2505.30	5.23
09-Oct-13	8:41:08	HSF High Speed Ferry	Travelling	90	39	10	350	5	10	22.3184	113.9679	2312.31	3.82
09-Oct-13	8:41:26	Tug Boat	Travelling	90	55	20	5	34	5	22.3114	113.9716	1623.44	19.30
09-Oct-13	8:44:19	Speed Boat	Travelling	90	49	5	22	36	5	22.3109	113.9770	1834.20	36.33
09-Oct-13	8:44:34	Tug Boat	Travelling	90	54	55	9	20	50	22.3112	113.9726	1635.96	23.08
09-Oct-13	8:46:22	Speed Boat	Travelling	91	14	0	1	17	20	22.3081	113.9694	1209.57	15.02
09-Oct-13	8:46:36	Tug Boat	Travelling	91	4	20	10	53	15	22.3090	113.9720	1393.37	24.62
09-Oct-13	8:49:29	Speed Boat	Travelling	91	27	0	311	31	25	22.3052	113.9607	1027.50	325.25
09-Oct-13	8:49:38	Transportation Boat	Travelling	91	14	25	312	36	25	22.3066	113.9599	1202.73	326.34
09-Oct-13	8:50:39	Container Boat	Travelling	90	48	25	345	40	45	22.3144	113.9662	1859.99	359.41
09-Oct-13	8:50:53	Transportation Boat	Travelling	91	11	35	324	7	15	22.3080	113.9618	1250.80	337.85
09-Oct-13	8:53:40	Container Boat	Travelling	90	35	40	350	51	50	22.3205	113.9684	2547.90	4.59
09-Oct-13	8:53:57	Tug Boat	Travelling	91	18	40	10	32	5	22.3069	113.9709	1137.21	24.26
09-Oct-13	8:57:08	Tug Boat	Travelling	91	18	0	10	36	5	22.3070	113.9710	1147.01	24.33
09-Oct-13	9:11:57	Transportation Boat	Travelling	91	2	40	311	27	0	22.3082	113.9585	1430.90	325.18
09-Oct-13	9:12:09	Transportation Boat	Travelling	90	38	0	350	39	50	22.3190	113.9682	2385.76	4.39
09-Oct-13	9:12:24	Transportation Boat	Travelling	90	39	55	352	52	40	22.3179	113.9689	2267.48	6.61
09-Oct-13	9:12:51	Speed Boat	Travelling	91	2	55	301	16	10	22.3067	113.9566	1425.14	315.00
09-Oct-13	9:13:19	Speed Boat	Travelling	91	0	45	305	37	0	22.3077	113.9570	1476.64	319.35
09-Oct-13	9:13:34	Transportation Boat	Travelling	90	53	5	335	37	40	22.3126	113.9634	1693.44	349.36
09-Oct-13	9:13:41	Transportation Boat	Travelling	90	53	25	344	19	15	22.3128	113.9658	1682.69	358.05
09-Oct-13	9:13:47	Transportation Boat	Travelling	90	44	55	346	57	0	22.3157	113.9666	2008.39	0.68
09-Oct-13	9:14:00	Speed Boat	Travelling	90	55	15	307	9	10	22.3090	113.9564	1625.93	320.88
09-Oct-13	9:14:22	Transportation Boat	Travelling	90	58	55	342	52	10	22.3113	113.9655	1523.24	356.60
09-Oct-13	9:14:41	HSF High Speed Ferry	Travelling	90	38	0	350	3	15	22.3190	113.9679	2385.76	3.78
09-Oct-13	9:15:22	Transportation Boat	Travelling	90	39	30	349	25	30	22.3182	113.9676	2292.17	3.15
09-Oct-13	9:15:31	Transportation Boat	Travelling	90	53	25	337	44	50	22.3126	113.9640	1682.69	351.48
09-Oct-13	9:15:43	Transportation Boat	Travelling	90	59	30	337	55	15	22.3110	113.9643	1508.10	351.65
09-Oct-13	9:16:14	Transportation Boat	Travelling	90	34	25	351	52	0	22.3213	113.9689	2644.38	5.60
09-Oct-13	9:16:23	Transportation Boat	Travelling	91	0	45	330	4	40	22.3104	113.9624	1476.64	343.81
09-Oct-13	9:16:31	Transportation Boat	Travelling	91	0	0	331	23	15	22.3106	113.9627	1495.35	345.12
09-Oct-13	9:16:39	HSF High Speed Ferry	Travelling	90	53	25	333	37	55	22.3124	113.9628	1682.69	347.36
09-Oct-13	9:16:51	Tug Boat	Travelling	90	39	0	352	34	10	22.3184	113.9689	2322.52	6.30
09-Oct-13	9:18:14	Transportation Boat	Travelling	91	4	50	303	5	40	22.3067	113.9572	1382.50	316.82
09-Oct-13	9:18:18	Transportation Boat	Travelling	91	2	5	314	27	45	22.3087	113.9590	1444.51	328.19
09-Oct-13	9:18:25	HSF High Speed Ferry	Travelling	91	2	0	303	55	15	22.3072	113.9569	1446.48	317.65
09-Oct-13	9:18:34	Tug Boat	Travelling	90	47	20	344	44	25	22.3147	113.9659	1903.50	358.47
09-Oct-13	9:19:25	Transportation Boat	Travelling	90	59	15	286	11	30	22.3044	113.9536	1514.55	299.92
09-Oct-13	9:19:29	Transportation Boat	Travelling	90	54	20	306	0	45	22.3090	113.9560	1653.82	319.74
09-Oct-13	9:19:38	HSF High Speed Ferry	Travelling	90	55	20	282	9	5	22.3040	113.9522	1623.44	295.88
09-Oct-13	9:20:09	Transportation Boat	Travelling	90	55	5	307	46	15	22.3091	113.9565	1630.93	321.50
09-Oct-13	9:20:18	Tug Boat	Travelling	90	56	35	331	12	0	22.3114	113.9624	1587.01	344.93
09-Oct-13	9:23:15	Transportation Boat	Travelling	91	8	55	325	58	30	22.3086	113.9620	1299.70	339.70
09-Oct-13	9:23:23	Tug Boat	Travelling	91	4	35	295	31	25	22.3055	113.9559	1387.92	309.25
09-Oct-13	9:25:40	Transportation Boat	Stationary	91	14	30	329	15	35	22.3080	113.9630	1201.37	342.99
09-Oct-13	9:28:17	Speed Boat	Travelling	90	49	50	25	33	10	22.3102	113.9775	1806.03	39.28
09-Oct-13	9:28:31	Transportation Boat	Travelling	91	54	0	284	23	5	22.3009	113.9597	782.98	298.11
09-Oct-13	9:31:19	Speed Boat	Travelling	91	46	10	351	26	30	22.3052	113.9671	841.03	5.17
09-Oct-13	9:31:28	Transportation Boat	Travelling	94	58	45	353	9	20	22.3003	113.9667	297.66	6.89
09-Oct-13	9:33:27	Speed Boat	Travelling	91	38	0	290	22	10	22.3022	113.9591	911.50	304.10
09-Oct-13	9:34:06	Speed Boat	Travelling	91	20	55	278	23	0	22.3014	113.9564	1105.34	292.11
09-Oct-13	9:36:09	Tug Boat	Travelling	90	36	40	353	16	25	22.3197	113.9693	2475.74	7.00
09-Oct-13	9:36:21	Container Boat	Travelling	90	36	5	353	7	25	22.3201	113.9693	2517.32	6.85
09-Oct-13	9:36:34	Transportation Boat	Travelling	90	39	45	352	48	20	22.3180	113.9689	2277.29	6.54
09-Oct-13	9:38:15	Container Boat	Travelling	90	31	40	353	3	20	22.3234	113.9697	2885.39	6.79
09-Oct-13	9:38:30	Tug Boat	Travelling	90	43	45	354	3	20	22.3160	113.9691	2063.33	7.79
09-Oct-13	9:38:36	Container Boat	Travelling	90	43	5	353	50	0	22.3163	113.9691	2096.12	7.56
09-Oct-13	9:38:46	Transportation Boat	Travelling	90	52	25	338	34	10	22.3129	113.9642	1715.37	352.30
09-Oct-13	9:38:55	Transportation Boat	Travelling	93	35	40	336	9	20	22.3013	113.9657	412.93	349.89
09-Oct-13	9:39:35	Transportation Boat	Travelling	91	47	15	289	42	50	22.3017	113.9596	832.49	303.44
09-Oct-13	9:39:49	Tug Boat	Travelling	91	3	15	283	28	40	22.3035	113.9541	1417.53	297.21
09-Oct-13	9:39:59	Construction Boat	Travelling	91	1	45	282	38	35	22.3034	113.9537	1452.41	296.37
09-Oct-13	9:41:19	Transportation Boat	Travelling	91	38	40	316	54	5	22.3047	113.9621	905.31	330.63
09-Oct-13	9:41:27	Transportation Boat	Travelling	91	3	35	305	59	35	22.3073	113.9575	1410.01	319.72
09-Oct-13	9:41:36	Transportation Boat	Travelling	92	16	35	313	57	40	22.3026	113.9630	653.05	327.69
09-Oct-13	9:41:51	Tug Boat	Travelling	90	59	25	357	14	15	22.3110	113.9692	1510.24	10.97
09-Oct-13	9:41:58	Tug Boat	Travelling	90	58	0	357	32	10	22.3113	113.9693	1547.67	11.27
09-Oct-13	9:42:12	Container Boat	Travelling	90	43	40	344	11	0	22.3162	113.9657	2067.37	357.91
09-Oct-13	9:42:27	Tug Boat	Travelling	91	4	25	299	1	40	22.3061	113.9565	1391.55	312.76
09-Oct-13	9:42:35	Construction Boat	Travelling	91	3	50	297	43	5	22.3060	113.9562	1404.42	311.45
09-Oct-13	9:42:51	Tug Boat	Travelling	90	54	15	17	10	25	22.3104	113.9747	1656.40	30.90
09-Oct-13	9:43:55	Transportation Boat	Travelling	91	0	25	309	8	50	22.3083	113.9577	1484.90	322.88
09-Oct-13	9:44:09	Transportation Boat	Travelling	92	9	15	351	26	25	22.3038	113.9670	690.24	5.17
09-Oct-13	9:44:24	Tug Boat	Travelling	91	22	25	356	40	10	22.3072	113.9683	1085.07	10.40
09-Oct-13	9:44:35	Container Boat	Travelling	91	21	25	356	13	40	22.3074	113.9682	1098.50	9.96
09-Oct-13	9:44:46	Tug Boat	Travelling	91	0	55	11	3	40	22.3096	113.9724	1472.55	24.79
09-Oct-13	9:44:55	Tug Boat	Travelling	91	2	55	313	31	55	22.3084	113.9589	1425.14	327.26
09-Oct-13	9:45:03	Construction Boat	Travelling	91	2	15	312	6	35	22.3083	113.9585	1440.60	325.84
09-Oct-13	9:46:05	Transportation Boat	Travelling	91	35	45	10	32	35	22.3053	113.9701	933.04	24.27
09-Oct-13	9:46:13	Transportation Boat	Travelling	91	5	50	310	19	25	22.3075	113.9586	1361.26	324.05
09-Oct-13	9:46:26	Container Boat	Travelling	90	59	25	315	2	45	22.3092	113.9588	1510.24	328.78
09-Oct-13	9:47:11	Tug Boat	Travelling	91	37	25	8	19	15	22.3053	113.9697	916.99	22.05
09-Oct-13	9:47:22	Container Boat	Travelling	91	40	45	8	45	45	22.3050	113.9697	886.49	22.49
09-Oct-13	9:47:36	Transportation Boat	Travelling	91	16	5	11	0	5	22.3072	113.9712	1176.15	24.73
09-Oct-13	9:47:52	delete	Travelling	92	20	25	333	43	50	22.3032	113.9651	635.15	347.46
09-Oct-13	9:48:09	Container Boat	Travelling	90	55	25	304	21	15	22.3085	113.9559	1620.96	318.08
09-Oct-13	9:48:22	Tug Boat	Travelling	91	17	5	2	24	50	22.3077	113.9695	1160.76	16.14
09-Oct-13	9:48:31	Container Boat	Travelling	91	20	5	3	0	25	22.3072	113.9695	1116.93	16.74
09-Oct-13	9:48:44	Tug Boat	Travelling	90	56	45	333	51	45	22.3115	113.9631	1582.28	347.59
09-Oct-13	9:48:51	Construction Boat	Travelling	90	57	15	332	32	0	22.3113	113.9628	1568.25	346.26
09-Oct-13	9:49:03	Transportation Boat	Travelling	95	5	20	358	49	10	22.3002	113.9670	291.21	12.55
09-Oct-13	9:50:04	Transportation Boat	Travelling	91	32	25	1	15	30	22.3060	113.9688	966.90	14.99
09-Oct-13	9:50:22	Tug Boat	Travelling	91	43	55	8	41	30	22.3048	113.9696	859.33	22.42
09-Oct-13	9:50:30	Container Boat	Travelling	91	43	15	11	36	45	22.3047	113.9700	864.91	25.34
09-Oct-13	9:51:13	Transportation Boat	Travelling	91	42	0	347	43	35	22.3055	113.9666	875.57	1.46
09-Oct-13	9:51:21	Transportation Boat	Travelling	93	48	25	333	24	5	22.3010	113.9656	389.80	347.13
09-Oct-13	9:51:33	Tug Boat	Travelling	90	56	15	1	9	35	22.3115	113.9704	1596.56	14.89
09-Oct-13	9:51:42	Container Boat	Travelling	91	1	40	0	33	20	22.3103	113.9699	1454.40	14.29
09-Oct-13	9:52:14	Tug Boat	Travelling	90	46	35	345	32	5	22.3150	113.9662	1934.84	359.26
09-Oct-13	9:52:21	Construction Boat	Travelling	90	46	50	344	26	25	22.3149	113.9658	1924.28	358.17
09-Oct-13	9:52:48	Transportation Boat	Travelling	91	47	50	325	46	5	22.3046	113.9636	827.97	339.50
09-Oct-13	9:52:55	Transportation Boat	Travelling	92	0	45	298	40	45	22.3021	113.9611	739.03	312.41
09-Oct-13	9:53:12	Tug Boat	Travelling	91	40	0	10	34	0	22.3049	113.9700	893.17	24.30
09-Oct-13	9:53:25	Container Boat	Travelling	91	38	15	11	43	20	22.3050	113.9702	909.17	25.45
09-Oct-13	9:54:02	Tug Boat	Travelling	90	49	20	356	44	25	22.3138	113.9696	1824.71	10.47
09-Oct-13	9:54:10	Container Boat	Travelling	90	50	25	356	53	15	22.3134	113.9696	1784.73	10.62
09-Oct-13	9:54:23	Tug Boat	Travelling	90	40	35	350	0	0	22.3176	113.9678	2229.08	3.73

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Oct-13	9:54:31	Construction Boat	Travelling	90	41	5	349	14	50	22.3174	113.9675	2201.13	2.98
09-Oct-13	9:54:47	Transportation Boat	Travelling	91	38	40	299	27	0	22.3032	113.9600	905.31	313.18
09-Oct-13	9:54:55	Transportation Boat	Travelling	91	10	30	281	47	25	22.3025	113.9553	1270.21	295.52
09-Oct-13	9:56:47	Tug Boat	Travelling	91	18	20	8	11	0	22.3072	113.9705	1142.09	21.91
09-Oct-13	9:56:57	Container Boat	Stationary	91	16	15	7	35	0	22.3075	113.9705	1173.56	21.31
09-Oct-13	9:57:10	Tug Boat	Travelling	90	37	10	353	20	10	22.3194	113.9693	2441.20	7.07
09-Oct-13	9:57:22	Container Boat	Travelling	90	40	45	353	12	10	22.3174	113.9690	2219.68	6.93
09-Oct-13	9:57:45	Transportation Boat	Travelling	91	9	45	279	13	35	22.3021	113.9549	1284.01	292.96
09-Oct-13	9:59:47	Transportation Boat	Travelling	90	40	30	348	57	30	22.3177	113.9674	2233.80	2.69
09-Oct-13	10:04:09	Transportation Boat	Travelling	91	2	15	309	7	15	22.3080	113.9579	1440.60	322.85
09-Oct-13	10:04:25	Tug Boat	Travelling	91	16	15	10	8	40	22.3073	113.9710	1173.56	23.87
09-Oct-13	10:04:51	Transportation boat	Travelling	90	30	50	352	37	40	22.3242	113.9696	2967.59	6.36
09-Oct-13	10:05:58	Transportation Boat	Travelling	90	56	35	282	20	35	22.3039	113.9525	1587.01	296.07
09-Oct-13	10:13:32	Transportation Boat	Travelling	90	45	45	339	22	15	22.3152	113.9641	1970.92	353.10
09-Oct-13	10:17:17	Transportation Boat	Travelling	90	33	5	354	26	35	22.3212	113.9701	2649.49	8.17
09-Oct-13	10:17:56	Transportation Boat	Travelling	91	22	0	333	29	40	22.3068	113.9641	1049.27	347.22
09-Oct-13	10:18:29	Tug Boat	Travelling	90	33	35	352	2	0	22.3210	113.9689	2608.10	5.76
09-Oct-13	10:20:03	Transportation Boat	Travelling	91	43	0	326	12	20	22.3047	113.9636	834.07	339.94
09-Oct-13	10:20:17	Tug Boat	Travelling	90	42	35	346	30	50	22.3160	113.9665	2039.87	0.24
09-Oct-13	10:21:54	Transportation Boat	Travelling	92	5	15	329	9	25	22.3035	113.9644	685.24	342.89
09-Oct-13	10:22:07	Transportation Boat	Travelling	90	40	30	347	16	15	22.3169	113.9668	2147.58	1.00
09-Oct-13	10:22:57	Construction Boat	Travelling	90	53	30	306	17	45	22.3088	113.9563	1615.50	320.03
09-Oct-13	10:24:04	Transportation Boat	Travelling	94	20	50	3	44	55	22.3004	113.9674	328.14	17.48
09-Oct-13	10:24:13	Transportation Boat	Travelling	90	54	20	330	49	10	22.3114	113.9623	1590.18	344.55
09-Oct-13	10:26:06	Transportation Boat	Travelling	91	2	5	305	14	20	22.3070	113.9575	1388.87	318.97
09-Oct-13	10:26:17	Construction Boat	Travelling	90	59	35	322	25	15	22.3095	113.9607	1447.90	336.15
09-Oct-13	10:26:35	Transportation Boat	Travelling	91	52	35	299	44	10	22.3023	113.9610	762.44	313.47
09-Oct-13	10:27:58	Transportation Boat	Travelling	90	57	35	278	25	50	22.3027	113.9529	1498.74	292.16
09-Oct-13	10:28:07	Transportation Boat	Travelling	92	4	30	318	13	45	22.3031	113.9632	689.11	331.96
09-Oct-13	10:28:18	Construction Boat	Travelling	90	57	20	333	55	45	22.3109	113.9633	1505.34	347.66
09-Oct-13	10:28:43	Transportation Boat	Travelling	94	2	40	355	47	25	22.3007	113.9670	352.71	9.52
09-Oct-13	10:31:19	Transportation Boat	Travelling	91	49	45	312	10	35	22.3034	113.9621	781.98	325.91
09-Oct-13	10:31:32	Transportation Boat	Travelling	91	38	50	357	26	10	22.3053	113.9680	868.79	11.17
09-Oct-13	10:31:40	Construction Boat	Travelling	90	49	20	349	27	30	22.3134	113.9673	1753.54	3.19
09-Oct-13	10:34:50	Transportation Boat	Travelling	90	55	20	297	50	55	22.3069	113.9550	1559.93	311.58
09-Oct-13	10:35:02	Transportation Boat	Travelling	91	17	20	7	45	35	22.3069	113.9704	1111.88	21.49
09-Oct-13	10:35:35	Tug Boat	Travelling	90	34	50	357	32	45	22.3198	113.9712	2507.85	11.28
09-Oct-13	10:36:11	Transportation Boat	Travelling	91	12	55	2	15	45	22.3078	113.9696	1179.74	15.99
09-Oct-13	10:38:09	Transportation Boat	Travelling	91	39	10	331	19	0	22.3051	113.9642	865.49	345.05
09-Oct-13	10:39:08	Fuel Boat	Travelling	90	57	25	332	9	45	22.3107	113.9628	1502.08	345.89
09-Oct-13	10:39:25	HSF High Speed Ferry	Travelling	90	59	40	292	50	50	22.3054	113.9551	1444.64	306.58
09-Oct-13	10:41:26	Transportation Boat	Travelling	91	10	15	277	43	55	22.3017	113.9553	1224.54	291.46
09-Oct-13	10:41:37	HSF High Speed Ferry	Travelling	90	57	5	331	6	15	22.3107	113.9626	1510.74	344.83
09-Oct-13	10:41:55	Fuel Boat	Travelling	90	56	45	308	30	50	22.3084	113.9573	1519.71	322.24
09-Oct-13	10:42:16	Transportation Boat	Travelling	91	2	35	309	22	35	22.3075	113.9584	1376.21	323.11
09-Oct-13	10:42:54	HSF High Speed Ferry	Travelling	90	46	50	346	39	35	22.3142	113.9665	1847.81	0.39
09-Oct-13	10:43:07	Tug Boat	Travelling	90	36	5	353	27	55	22.3192	113.9693	2416.47	7.20
09-Oct-13	10:43:18	Container Boat	Travelling	90	35	40	353	20	0	22.3195	113.9693	2445.75	7.06
09-Oct-13	10:43:59	Transportation Boat	Travelling	90	59	45	336	51	45	22.3104	113.9641	1442.17	350.59
09-Oct-13	10:44:08	HSF High Speed Ferry	Travelling	90	36	20	351	31	25	22.3191	113.9685	2399.06	5.25
09-Oct-13	10:45:13	Transportation Boat	Travelling	91	6	15	339	32	15	22.3092	113.9649	1298.94	353.27
09-Oct-13	10:45:27	Tug Boat	Travelling	90	43	10	356	59	20	22.3154	113.9700	2008.33	10.72
09-Oct-13	10:45:36	Container Boat	Travelling	90	42	50	356	47	45	22.3155	113.9700	2024.35	10.53
09-Oct-13	10:47:15	Transportation Boat	Travelling	91	8	55	295	19	5	22.3047	113.9570	1248.00	309.05
09-Oct-13	10:48:13	Transportation Boat	Travelling	90	58	35	278	47	10	22.3027	113.9532	1470.89	292.52
09-Oct-13	10:48:26	Tug Boat	Travelling	90	53	20	3	26	5	22.3115	113.9710	1617.98	17.16
09-Oct-13	10:48:32	Container Boat	Travelling	90	52	15	2	43	25	22.3119	113.9710	1652.10	16.45
09-Oct-13	10:49:36	Tug Boat	Travelling	90	36	55	350	7	50	22.3188	113.9679	2358.95	3.86
09-Oct-13	10:51:47	Tug Boat	Travelling	91	0	10	14	29	40	22.3090	113.9730	1431.34	28.22
09-Oct-13	10:51:54	Container Boat	Travelling	90	59	25	13	15	10	22.3092	113.9728	1449.64	26.98
09-Oct-13	10:52:06	Tug Boat	Travelling	90	49	20	345	31	0	22.3134	113.9662	1751.24	359.25
09-Oct-13	10:54:04	Tug Boat	Travelling	91	14	40	13	43	55	22.3068	113.9716	1150.53	27.46
09-Oct-13	10:54:44	Tug Boat	Travelling	91	8	5	15	31	30	22.3075	113.9724	1262.83	29.25
09-Oct-13	10:54:52	Container Boat	Travelling	91	7	15	17	9	25	22.3075	113.9728	1278.63	30.89
09-Oct-13	10:55:08	Tug Boat	Travelling	91	2	55	344	25	50	22.3099	113.9660	1367.71	358.16
09-Oct-13	10:55:27	Tug Boat	Travelling	90	57	40	328	23	10	22.3104	113.9619	1493.91	342.12
09-Oct-13	10:56:09	Container Boat	Travelling	91	2	50	318	23	10	22.3085	113.9602	1369.45	332.12
09-Oct-13	10:56:29	Tug Boat	Travelling	90	53	10	17	13	30	22.3101	113.9745	1622.30	30.95
09-Oct-13	10:56:40	Transportation Boat	Travelling	94	39	10	320	52	10	22.3001	113.9651	305.86	334.60
09-Oct-13	10:56:59	Tug Boat	Travelling	91	0	0	339	5	40	22.3104	113.9647	1434.89	352.82
09-Oct-13	10:57:07	Construction Boat	Travelling	90	58	55	339	57	25	22.3107	113.9648	1461.62	353.69
09-Oct-13	10:57:55	Tug Boat	Travelling	90	59	40	316	6	30	22.3088	113.9593	1442.92	329.84
09-Oct-13	10:58:02	Transportation Boat	Travelling	91	46	40	277	34	55	22.3002	113.9591	803.32	291.31
09-Oct-13	10:58:11	Transportation Boat	Travelling	91	34	35	315	7	0	22.3046	113.9618	906.50	328.85
09-Oct-13	10:58:32	Tug Boat	Travelling	91	2	20	12	49	10	22.3087	113.9724	1380.36	26.55
09-Oct-13	10:59:08	Container Boat	Travelling	90	51	5	339	48	35	22.3127	113.9646	1689.36	353.54
09-Oct-13	10:59:45	Transportation Boat	Travelling	91	27	35	339	44	5	22.3064	113.9653	979.31	353.46
09-Oct-13	11:00:13	Tug Boat	Travelling	90	54	10	338	9	20	22.3118	113.9642	1591.48	351.89
09-Oct-13	11:00:22	Construction Boat	Travelling	90	55	40	337	44	35	22.3114	113.9642	1547.91	351.47
09-Oct-13	11:00:33	Tug Boat	Travelling	91	17	20	11	39	15	22.3066	113.9710	1110.06	25.38
09-Oct-13	11:00:44	Container Boat	Travelling	91	14	5	10	20	50	22.3071	113.9710	1159.17	24.08
09-Oct-13	11:01:08	Transportation Boat	Travelling	91	13	15	356	12	15	22.3080	113.9684	1172.45	9.93
09-Oct-13	11:01:17	Container Boat	Travelling	90	40	45	348	39	5	22.3168	113.9673	2128.62	2.38
09-Oct-13	11:01:29	Tug Boat	Travelling	90	59	30	297	30	30	22.3062	113.9558	1446.69	311.24
09-Oct-13	11:02:21	Transportation Boat	Travelling	91	1	40	6	44	10	22.3094	113.9711	1395.13	20.47
09-Oct-13	11:02:28	Transportation Boat	Travelling	90	41	35	351	9	20	22.3163	113.9681	2084.60	4.89
09-Oct-13	11:05:43	Tug Boat	Travelling	91	0	10	2	13	0	22.3100	113.9702	1430.06	15.95
09-Oct-13	11:06:07	Container Boat	Stationary	91	15	35	6	4	5	22.3072	113.9701	1135.58	19.80
09-Oct-13	11:06:16	Tug Boat	Travelling	90	51	0	359	16	45	22.3125	113.9701	1691.40	13.01
09-Oct-13	11:06:26	Tug Boat	Travelling	90	46	55	343	47	45	22.3142	113.9656	1841.66	357.53
09-Oct-13	11:06:34	Construction Boat	Travelling	90	47	30	343	24	5	22.3140	113.9655	1818.55	357.13
09-Oct-13	11:07:17	Tug Boat	Travelling	90	48	10	357	57	35	22.3134	113.9699	1792.77	11.69
09-Oct-13	11:07:22	Tug Boat	Travelling	90	52	10	356	1	40	22.3123	113.9691	1652.78	9.76
09-Oct-13	11:10:17	Transportation Boat	Travelling	91	32	0	333	28	35	22.3058	113.9644	931.39	347.21
09-Oct-13	11:10:29	Tug Boat	Travelling	90	41	15	347	36	5	22.3165	113.9669	2100.83	1.33
09-Oct-13	11:10:34	Construction Boat	Travelling	90	41	55	347	16	10	22.3162	113.9668	2066.49	1.00
09-Oct-13	11:10:51	Tug Boat	Stationary	90	52	20	356	10	50	22.3122	113.9692	1647.06	9.91
09-Oct-13	11:11:17	Transportation Boat	Travelling	91	41	25	295	33	20	22.3024	113.9600	844.40	309.29
09-Oct-13	11:12:50	Tug Boat	Travelling	90	33	40	354	18	5	22.3207	113.9699	2592.18	8.03
09-Oct-13	11:13:15	Transportation Boat	Travelling	94	16	50	347	35	55	22.3006	113.9665	332.23	1.33
09-Oct-13	11:13:21	Transportation Boat	Travelling	92	53	20	324	32	40	22.3017	113.9646	492.98	338.27
09-Oct-13	11:13:30	Transportation Boat	Travelling	90	42	45	344	24	35	22.3158	113.9658	2024.75	358.14
09-Oct-13	11:13:43	Transportation Boat	Travelling	95	42	45	356	2	55	22.2998	113.9668	248.54	9.78
09-Oct-13	11:13:57	Tug Boat	Travelling	90	37	25	349	57	20	22.3185	113.9679	2322.66	3.69
09-Oct-13	11:14:03	Construction Boat	Travelling	90	37	50	349	36	40	22.3182	113.9677	2296.19	3.34
09-Oct-13	11:14:14	HSF High Speed Ferry	Travelling	90	32	20	352	45	0	22.3218	113.9694	2703.78	6.48
09-Oct-13	11:14:54	Transportation Boat	Travelling	94	57	35	359	19	5	22.3001	113.9670	286.50	13.05
09-Oct-13	11:15:01	Transportation Boat	Travelling	90	53	35	330	9	35	22.3115	113.9621	1607.56	343.89
09-Oct-13	11:15:24	Transportation Boat	Travelling	91	3	0	314	27	55	22.3081	113.9594	1364.10	328.20
09-Oct-13	11:15:39	HSF High Speed Ferry	Travelling	90	41	5	347	30	55	22.3166	113.9668	2108.90	1.25
09-Oct-13	11:15:48	Transportation Boat	Travelling	93	55	25	340	32	20	22.3009	113.9660	362.53	354.27
09-Oct-13	11:16:07	Transportation Boat	Travelling	90	59	40	314	59	35	22.3087	113.9591	1441.24	328.72
09-Oct-13	11:16:13	Transportation Boat	Travelling	91	0	55	321	18	20	22.3091	113.9606	1411.27	335.04
09-Oct-13	11:17:23	Transportation Boat	Travelling	92	14	45	319	13	25	22.3027	113.9636	634.51	332.95
09-Oct-13	11:17:33	Transportation Boat	Travelling	91	1	55	291	56	50	22.3049	113.9554	1388.07	305.68
09-Oct-13	11:17:42	Transportation Boat	Travelling	90	54	45	331	35	20	22.3113	113.9625	1572.48	345.32
09-Oct-13	11:17:48	HSF High Speed Ferry	Travelling	90	57	25	322	29	45	22.3100	113.9605	1498.36	336.23

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Oct-13	11:18:27	Transportation Boat	Travelling	90	59	45	278	1	40	22.3024	113.9534	1438.99	291.76
09-Oct-13	11:18:42	Transportation Boat	Travelling	90	50	35	337	40	35	22.3128	113.9639	1704.23	351.41
09-Oct-13	11:19:25	Transportation Boat	Travelling	91	23	45	310	26	30	22.3051	113.9606	1023.16	324.17
09-Oct-13	11:19:31	HSF High Speed Ferry	Travelling	91	1	30	292	19	25	22.3050	113.9554	1397.42	306.05
09-Oct-13	11:20:23	Transportation Boat	Travelling	90	44	15	345	50	30	22.3152	113.9663	1953.53	359.57
09-Oct-13	11:20:38	HSF High Speed Ferry	Travelling	90	52	15	276	4	35	22.3026	113.9513	1648.70	289.81
09-Oct-13	11:20:55	Transportation Boat	Travelling	91	3	15	307	50	35	22.3072	113.9582	1358.17	321.57
09-Oct-13	11:21:15	Transportation Boat	Travelling	90	41	20	349	13	55	22.3164	113.9675	2095.02	2.96
09-Oct-13	11:24:16	Transportation Boat	Travelling	91	14	40	307	57	45	22.3057	113.9595	1148.30	321.69
09-Oct-13	11:28:14	Transportation Boat	Travelling	90	58	15	359	14	55	22.3106	113.9696	1475.63	12.98
09-Oct-13	11:28:24	Transportation Boat	Travelling	90	38	50	348	55	0	22.3177	113.9674	2233.05	2.65
09-Oct-13	11:30:34	Transportation Boat	Travelling	90	43	25	14	26	25	22.3134	113.9755	1990.66	28.17
09-Oct-13	11:30:45	Transportation Boat	Travelling	90	54	45	338	17	25	22.3116	113.9643	1571.16	352.02
09-Oct-13	11:30:54	Transportation Boat	Travelling	90	35	10	353	14	10	22.3197	113.9693	2474.22	6.97
09-Oct-13	11:31:08	Tug Boat	Travelling	90	58	40	291	41	55	22.3053	113.9548	1464.73	305.43
09-Oct-13	11:31:17	Construction Boat	Travelling	90	58	5	290	15	0	22.3051	113.9545	1479.63	303.98
09-Oct-13	11:32:24	Transportation Boat	Travelling	90	47	50	343	41	35	22.3138	113.9656	1802.60	357.42
09-Oct-13	11:32:34	Tug Boat	Travelling	90	42	40	346	33	30	22.3159	113.9665	2026.31	0.29
09-Oct-13	11:32:42	Construction Boat	Travelling	90	41	50	346	47	55	22.3162	113.9666	2067.75	0.53
09-Oct-13	11:33:07	Transportation Boat	Travelling	90	58	20	329	37	55	22.3103	113.9623	1473.03	343.36
09-Oct-13	11:33:16	Transportation Boat	Travelling	91	0	55	318	37	55	22.3089	113.9600	1409.73	332.36
09-Oct-13	11:34:36	Transportation Boat	Travelling	91	3	15	312	7	55	22.3077	113.9590	1356.97	325.86
09-Oct-13	11:34:43	Transportation Boat	Travelling	91	7	0	307	53	0	22.3066	113.9587	1280.18	321.61
09-Oct-13	11:34:51	Transportation Boat	Travelling	90	49	50	338	10	40	22.3130	113.9640	1728.56	351.91
09-Oct-13	11:35:10	Transportation Boat	Travelling	90	39	25	348	41	20	22.3174	113.9673	2198.00	2.42
09-Oct-13	11:35:54	Transportation Boat	Travelling	91	1	25	296	10	0	22.3057	113.9560	1397.87	309.90
09-Oct-13	11:36:01	Transportation Boat	Travelling	91	0	45	279	35	25	22.3027	113.9538	1413.39	293.32
09-Oct-13	11:36:10	Transportation Boat	Travelling	90	41	10	349	50	50	22.3165	113.9677	2101.71	3.58
09-Oct-13	11:36:18	Transportation Boat	Travelling	90	42	55	344	44	20	22.3157	113.9659	2013.71	358.47
09-Oct-13	11:36:27	Tug Boat	Travelling	90	54	15	332	39	0	22.3115	113.9628	1585.30	346.38
09-Oct-13	11:36:34	Construction Boat	Travelling	90	53	40	333	34	0	22.3117	113.9630	1602.80	347.30
09-Oct-13	11:36:46	Tug Boat	Travelling	90	56	40	334	33	50	22.3110	113.9634	1516.63	348.29
09-Oct-13	11:36:55	Construction Boat	Travelling	90	57	30	333	3	5	22.3107	113.9631	1494.32	346.78
09-Oct-13	11:37:10	Transportation Boat	Travelling	90	56	35	282	9	0	22.3036	113.9531	1518.86	295.88
09-Oct-13	11:37:24	Transportation Boat	Travelling	90	35	5	357	9	50	22.3195	113.9710	2479.29	10.89
09-Oct-13	11:38:08	Transportation Boat	Travelling	90	50	25	336	25	45	22.3128	113.9636	1707.83	350.16
09-Oct-13	11:41:15	Transportation Boat	Travelling	90	58	25	312	32	35	22.3086	113.9585	1470.13	326.27
09-Oct-13	11:41:25	Tug Boat	Travelling	91	1	55	302	38	15	22.3066	113.9571	1385.95	316.37
09-Oct-13	11:41:33	Construction Boat	Travelling	91	1	20	303	38	20	22.3069	113.9572	1399.28	317.37
09-Oct-13	11:41:43	Tug Boat	Travelling	90	41	45	359	15	30	22.3158	113.9709	2070.79	12.99
09-Oct-13	11:41:51	Construction Boat	Travelling	90	42	0	358	3	40	22.3158	113.9705	2058.10	11.79
09-Oct-13	11:42:21	Research Vessel	Travelling	90	40	25	5	38	0	22.3158	113.9733	2140.99	19.36
09-Oct-13	11:44:12	Transportation Boat	Travelling	90	38	55	349	32	45	22.3176	113.9676	2225.83	3.28
09-Oct-13	11:44:26	Research Vessel	Travelling	90	40	50	4	43	30	22.3157	113.9729	2118.23	18.45
09-Oct-13	11:44:42	Tug Boat	Travelling	90	35	55	11	36	50	22.3173	113.9765	2418.41	25.34
09-Oct-13	11:44:49	Construction Boat	Travelling	90	36	30	10	38	30	22.3171	113.9759	2378.32	24.37
09-Oct-13	11:45:09	Tug Boat	Travelling	90	55	50	280	35	25	22.3033	113.9528	1538.78	294.32
09-Oct-13	11:45:16	Construction Boat	Travelling	90	56	25	281	22	50	22.3034	113.9530	1522.62	295.11
09-Oct-13	11:45:35	Transportation Boat	Travelling	90	49	55	337	49	45	22.3130	113.9639	1724.43	351.56
09-Oct-13	11:45:57	Research Vessel	Acoustic Recording	90	40	35	3	57	0	22.3159	113.9727	2131.45	17.68
09-Oct-13	11:46:05	Research Vessel	Other	90	41	10	3	54	15	22.3156	113.9726	2100.36	17.63
09-Oct-13	11:48:32	Research Vessel	Travelling	90	41	10	359	35	0	22.3160	113.9711	2100.03	13.31
09-Oct-13	11:48:44	Transportation Boat	Travelling	91	7	15	15	19	35	22.3076	113.9724	1274.22	29.06
09-Oct-13	11:48:53	Transportation Boat	Travelling	90	57	55	284	21	50	22.3039	113.9537	1482.27	298.09
09-Oct-13	11:51:11	Research Vessel	Travelling	90	51	15	343	42	20	22.3127	113.9657	1678.14	357.44
09-Oct-13	11:51:20	Transportation Boat	Travelling	91	50	0	339	12	5	22.3046	113.9655	776.21	352.93
09-Oct-13	11:51:31	Tug Boat	Travelling	90	36	20	350	3	30	22.3191	113.9679	2388.58	3.79
09-Oct-13	11:51:38	Construction Boat	Travelling	90	35	0	350	12	10	22.3199	113.9681	2483.12	3.93
09-Oct-13	11:52:22	Tug Boat	Travelling	90	28	55	354	58	5	22.3246	113.9709	3033.74	8.70
09-Oct-13	11:52:32	Container Boat	Travelling	90	28	40	354	15	0	22.3249	113.9705	3061.78	7.98
09-Oct-13	11:53:17	Transportation Boat	Travelling	90	42	10	3	37	15	22.3152	113.9723	2048.23	17.35
09-Oct-13	11:54:07	Transportation Boat	Travelling	91	27	30	283	29	35	22.3016	113.9580	976.85	297.22
09-Oct-13	11:54:18	Transportation Boat	Travelling	90	50	0	0	23	40	22.3126	113.9705	1720.53	14.12
09-Oct-13	11:54:29	Research Vessel	Travelling	91	0	40	314	39	15	22.3085	113.9592	1413.68	328.38
09-Oct-13	11:54:52	Tug Boat	Travelling	90	48	5	340	6	10	22.3136	113.9645	1790.44	353.83
09-Oct-13	11:54:59	Construction Boat	Travelling	90	47	0	340	36	50	22.3140	113.9646	1832.57	354.34
09-Oct-13	11:55:35	Transportation Boat	Travelling	91	7	55	6	21	30	22.3083	113.9706	1261.03	20.09
09-Oct-13	11:56:37	Tug Boat	Travelling	90	34	45	2	1	40	22.3193	113.9730	2500.89	15.76
09-Oct-13	11:56:44	Container Boat	Travelling	90	33	50	1	10	10	22.3200	113.9728	2571.49	14.90
09-Oct-13	11:56:53	Transportation Boat	Travelling	91	18	40	7	47	15	22.3067	113.9703	1087.17	21.52
09-Oct-13	11:57:11	Research Vessel	Travelling	90	57	55	288	42	25	22.3048	113.9542	1481.48	302.44
09-Oct-13	11:58:15	Research Vessel	Travelling	90	54	0	279	46	55	22.3033	113.9522	1590.52	293.51
09-Oct-13	11:59:15	Transportation Boat	Travelling	91	17	25	6	3	30	22.3070	113.9700	1104.70	19.79
09-Oct-13	12:00:51	Tug Boat	Travelling	90	40	50	8	15	25	22.3161	113.9745	2214.90	21.99
09-Oct-13	12:01:00	Container Boat	Travelling	90	38	30	8	50	40	22.3172	113.9752	2353.57	22.57
09-Oct-13	12:01:26	Tug Boat	Travelling	91	6	5	294	24	35	22.3052	113.9560	1355.93	308.14
09-Oct-13	12:01:34	Construction Boat	Travelling	91	6	10	295	39	30	22.3054	113.9562	1354.19	309.39
09-Oct-13	12:03:06	Tug Boat	Travelling	90	51	35	17	6	10	22.3111	113.9751	1743.26	30.83
09-Oct-13	12:03:14	Container Boat	Stationary	90	38	20	10	42	0	22.3170	113.9759	2363.82	24.43
09-Oct-13	12:04:04	Transportation Boat	Travelling	91	21	15	0	10	55	22.3072	113.9690	1100.49	13.91
09-Oct-13	12:06:34	Tug Boat	Travelling	90	37	30	11	13	45	22.3173	113.9763	2417.73	24.96
09-Oct-13	12:07:23	Transportation Boat	Travelling	91	14	40	296	58	55	22.3047	113.9576	1198.13	310.71
09-Oct-13	12:08:05	Tug Boat	Travelling	90	35	45	353	10	25	22.3203	113.9694	2540.45	6.90
09-Oct-13	12:08:14	Container Boat	Travelling	90	34	50	353	0	40	22.3209	113.9694	2610.06	6.74
09-Oct-13	12:09:08	Transportation Boat	Travelling	90	55	5	277	43	15	22.3030	113.9516	1630.01	291.45
09-Oct-13	12:09:25	Tug Boat	Travelling	90	37	50	6	7	35	22.3179	113.9743	2395.24	19.86
09-Oct-13	12:10:02	Transportation Boat	Travelling	91	17	30	296	31	15	22.3043	113.9578	1153.76	310.25
09-Oct-13	12:10:23	Tug Boat	Travelling	90	38	15	4	53	40	22.3178	113.9738	2368.10	18.62
09-Oct-13	12:10:34	Container Boat	Travelling	90	38	0	5	22	25	22.3179	113.9740	2384.19	19.10
09-Oct-13	12:10:43	Tug Boat	Travelling	90	44	0	351	20	55	22.3160	113.9682	2049.94	5.08
09-Oct-13	12:10:52	Container Boat	Travelling	90	42	45	351	25	40	22.3165	113.9682	2111.49	5.16
09-Oct-13	12:14:55	Transportation Boat	Travelling	90	59	45	356	37	30	22.3109	113.9690	1500.32	10.35
09-Oct-13	12:15:02	Tug Boat	Travelling	91	3	5	353	38	30	22.3103	113.9682	1420.01	7.37
09-Oct-13	12:15:12	Container Boat	Travelling	91	3	40	352	3	5	22.3102	113.9678	1406.83	5.78
09-Oct-13	12:15:43	Tug Boat	Travelling	90	31	30	355	5	50	22.3234	113.9707	2898.59	8.83
09-Oct-13	12:15:49	Container Boat	Travelling	90	35	45	355	20	15	22.3202	113.9703	2539.22	9.07
09-Oct-13	12:16:15	Transportation Boat	Travelling	90	49	20	3	56	0	22.3133	113.9718	1822.88	17.66
09-Oct-13	12:16:23	Tug Boat	Travelling	90	55	50	355	13	45	22.3119	113.9688	1607.04	8.96
09-Oct-13	12:16:31	Container Boat	Stationary	91	6	15	352	43	40	22.3097	113.9679	1351.22	6.46
09-Oct-13	12:19:36	Research Vessel	Travelling	92	8	10	306	42	45	22.3024	113.9621	695.26	320.44
09-Oct-13	12:19:58	Tug Boat	Travelling	90	27	45	352	0	50	22.3273	113.9696	3314.61	5.74
09-Oct-13	12:20:04	Container Boat	Travelling	90	27	50	352	17	10	22.3272	113.9698	3303.98	6.02
09-Oct-13	12:20:23	Tug Boat	Stationary	90	51	30	355	24	40	22.3131	113.9691	1744.27	9.14
09-Oct-13	12:25:30	Research Vessel	Travelling	91	11	45	32	57	50	22.3053	113.9752	1245.91	46.69
09-Oct-13	12:29:09	Research Vessel	Travelling	90	42	10	39	10	30	22.3092	113.9830	2139.09	52.90
09-Oct-13	12:29:27	Transportation Boat	Travelling	91	2	20	310	48	10	22.3081	113.9583	1436.04	324.53
09-Oct-13	12:33:21	Transportation Boat	Travelling	90	48	30	342	43	40	22.3143	113.9653	1852.90	356.46
09-Oct-13	12:33:39	Transportation Boat	Travelling	91	1	30	348	16	45	22.3107	113.9669	1455.37	2.01
09-Oct-13	12:34:34	Transportation Boat	Travelling	90	42	45	348	17	5	22.3166	113.9671	2108.38	2.01
09-Oct-13	12:34:39	Transportation Boat	Travelling	91	7	15	336	1	5	22.3094	113.9641	1329.42	349.75
09-Oct-13	12:34:55	Tug Boat	Travelling	90	33	30	352	31	25	22.3219	113.9693	2714.07	6.25
09-Oct-13	12:36:16	Transportation Boat	Travelling	90	36	0	352	3	10	22.3202	113.9689	2517.67	5.78
09-Oct-13	12:36:23	Transportation Boat	Travelling	91	9	45	311	43	45	22.3071	113.9593	1281.14	325.46
09-Oct-13	12:36:34	Tug Boat	Travelling	90	38	50	356	52	10	22.3182	113.9706	2327.52	10.60
09-Oct-13	12:40:09	Tug Boat	Travelling	90	38	25	358	17	30	22.3183	113.9712	2353.10	12.02
09-Oct-13	12:47:43	Tug Boat	Travelling	91	0	55	13	31	25	22.3094	113.9729	1468.22	27.25
09-Oct-13	12:49:01	Tug Boat	Travelling	90	53	15	16	58	45	22.3106	113.9748	1682.95	30.71

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
09-Oct-13	12:53:49	Tug Boat	Travelling	91	12	30	1	56	55	22.3083	113.9696	1230.75	15.68
09-Oct-13	12:53:57	Container Boat	Travelling	91	14	55	2	27	0	22.3079	113.9696	1190.67	16.18
09-Oct-13	12:54:09	Tug Boat	Travelling	91	4	20	353	23	50	22.3100	113.9681	1388.73	7.13
09-Oct-13	12:57:41	Tug Boat	Travelling	90	51	10	358	29	20	22.3130	113.9700	1751.80	12.22
09-Oct-13	12:57:49	Container Boat	Travelling	90	52	40	358	52	25	22.3126	113.9700	1700.99	12.60
09-Oct-13	12:57:59	Tug Boat	Travelling	91	7	50	350	39	55	22.3094	113.9674	1315.97	4.40
09-Oct-13	12:58:41	Container Boat	Travelling	91	12	25	349	10	50	22.3087	113.9670	1231.81	2.91
09-Oct-13	13:00:58	Tug Boat	Travelling	90	33	45	26	40	30	22.3152	113.9826	2567.29	40.40
09-Oct-13	13:01:09	Container Boat	Travelling	90	33	20	27	23	55	22.3152	113.9830	2600.76	41.13
09-Oct-13	13:01:52	Fishing Boat	Operate and stationary	91	12	0	29	41	50	22.3054	113.9743	1183.77	43.43
09-Oct-13	13:02:00	Fishing Boat	Operate and stationary	90	48	50	32	31	25	22.3085	113.9787	1754.74	46.25
09-Oct-13	13:02:08	Fishing Boat	Operate and stationary	90	44	20	34	46	15	22.3092	113.9805	1936.96	48.50
09-Oct-13	13:02:30	Tug Boat	Travelling	90	36	20	353	27	50	22.3188	113.9693	2377.55	7.19
09-Oct-13	13:02:46	Container Boat	Travelling	90	38	40	353	15	50	22.3175	113.9690	2229.26	6.99
09-Oct-13	13:03:17	Tug Boat	Travelling	91	22	30	6	10	55	22.3064	113.9698	1031.87	19.91
09-Oct-13	13:03:24	Container Boat	Travelling	91	21	55	7	1	5	22.3064	113.9700	1039.26	20.75
09-Oct-13	13:05:20	Tug Boat	Travelling	90	40	0	21	52	35	22.3134	113.9786	2152.32	35.61
09-Oct-13	13:05:31	Container Boat	Stationary	90	38	0	24	36	5	22.3136	113.9801	2269.26	38.33
09-Oct-13	13:05:55	Tug Boat	Travelling	91	16	40	6	18	0	22.3070	113.9701	1110.82	20.03
09-Oct-13	13:06:03	Container Boat	Stationary	91	15	45	5	45	40	22.3072	113.9700	1124.36	19.49
09-Oct-13	13:11:54	Tug Boat	Travelling	90	38	15	24	32	35	22.3135	113.9800	2252.99	38.27
09-Oct-13	13:12:10	Fishing Boat	Operate and stationary	91	16	40	22	38	30	22.3057	113.9728	1110.37	36.37
09-Oct-13	13:12:25	Fishing Boat	Non-operate and travelling	90	49	10	32	34	45	22.3084	113.9786	1741.44	46.31
09-Oct-13	13:12:34	Fishing Boat	Operate and stationary	90	53	55	40	18	25	22.3060	113.9789	1585.38	54.04
09-Oct-13	13:13:29	Fishing Boat	Non-operate and travelling	90	57	40	36	30	10	22.3061	113.9775	1480.68	50.23
09-Oct-13	13:15:02	Fishing Boat	Operate and stationary	91	1	20	37	34	10	22.3054	113.9770	1390.87	51.30
09-Oct-13	13:15:15	Tug Boat	Travelling	90	38	25	26	52	30	22.3129	113.9806	2242.41	40.60
09-Oct-13	13:20:19	Construction Boat	Travelling	90	58	55	342	4	30	22.3106	113.9654	1448.19	355.80
09-Oct-13	13:21:06	Tug Boat	Travelling	90	41	0	17	59	35	22.3137	113.9771	2096.15	31.72
09-Oct-13	13:21:12	Container Boat	Travelling	90	41	15	16	54	0	22.3137	113.9767	2083.08	30.63
09-Oct-13	13:21:22	Transportation Boat	Travelling	90	47	25	347	46	40	22.3139	113.9669	1805.99	1.51
09-Oct-13	13:23:18	Transportation Boat	Travelling	90	57	10	328	11	40	22.3104	113.9619	1492.87	341.92
09-Oct-13	13:23:30	Construction Boat	Travelling	90	52	10	345	40	40	22.3124	113.9662	1638.32	359.41
09-Oct-13	13:25:00	Fishing Boat	Non-operate and travelling	92	27	30	19	11	15	22.3020	113.9694	574.76	32.92
09-Oct-13	13:26:01	Transportation Boat	Travelling	91	0	20	292	9	45	22.3051	113.9553	1413.22	305.89
09-Oct-13	13:26:13	Tug Boat	Travelling	90	49	45	11	15	0	22.3116	113.9735	1719.08	24.98
09-Oct-13	13:26:21	Container Boat	Travelling	90	47	50	11	49	40	22.3121	113.9739	1789.35	25.56
09-Oct-13	13:26:35	Fishing Boat	Operate and travelling	93	17	20	1	9	55	22.3014	113.9675	429.16	14.90
09-Oct-13	13:27:17	Fishing Boat	Operate and travelling	93	56	25	339	39	40	22.3008	113.9660	357.96	353.39
09-Oct-13	13:31:17	Tug Boat	Travelling	90	38	25	19	42	15	22.3144	113.9784	2240.06	33.43
09-Oct-13	13:31:24	Container Boat	Travelling	90	38	5	20	37	40	22.3144	113.9788	2260.30	34.36
09-Oct-13	13:31:35	Fishing Boat	Operate and travelling	93	23	0	318	50	15	22.3010	113.9645	417.01	332.57
09-Oct-13	13:32:55	Transportation Boat	Travelling	91	20	0	311	45	35	22.3055	113.9605	1062.32	325.49
09-Oct-13	13:34:16	Fishing Boat	Operate and stationary	93	42	20	325	25	15	22.3008	113.9651	380.56	339.15
09-Oct-13	13:34:26	Transportation Boat	Travelling	92	13	0	321	58	0	22.3028	113.9638	637.26	335.70
09-Oct-13	13:35:18	Government Boat	Travelling	91	23	20	320	35	50	22.3059	113.9621	1019.37	334.33
09-Oct-13	13:36:07	Government Boat	Travelling	90	59	30	356	59	50	22.3103	113.9690	1432.34	10.73
09-Oct-13	13:36:17	Transportation Boat	Travelling	95	39	10	355	41	50	22.2998	113.9668	248.90	9.43
09-Oct-13	13:36:49	Government Boat	Travelling	90	41	55	9	49	0	22.3145	113.9744	2046.95	23.55
09-Oct-13	13:39:17	Tug Boat	Travelling	90	48	40	345	31	0	22.3134	113.9662	1756.62	359.25
09-Oct-13	13:39:28	Transportation Boat	Travelling	94	35	55	344	54	35	22.3004	113.9663	306.27	358.64
09-Oct-13	13:41:20	Fishing Boat	Non-operate and travelling	94	30	0	324	39	35	22.3002	113.9653	313.04	338.39
09-Oct-13	13:41:35	Transportation Boat	Travelling	91	41	15	325	31	40	22.3047	113.9635	837.87	339.26
09-Oct-13	13:41:47	Tug Boat	Travelling	90	56	45	332	16	45	22.3107	113.9629	1502.60	346.01
09-Oct-13	13:43:56	Transportation Boat	Travelling	91	7	30	326	13	10	22.3083	113.9622	1260.82	339.95
09-Oct-13	13:44:05	Tug Boat	Travelling	91	0	5	316	18	15	22.3087	113.9595	1418.41	330.03
09-Oct-13	13:44:20	Fishing Boat	Operate and travelling	94	18	50	314	24	35	22.3001	113.9647	326.69	328.14
09-Oct-13	13:45:25	Transportation Boat	Travelling	91	4	0	324	45	0	22.3088	113.9617	1330.72	338.48
09-Oct-13	13:45:39	Fishing Boat	Operate and travelling	93	59	55	309	46	45	22.3002	113.9644	352.61	323.51
09-Oct-13	13:45:47	Tug Boat	Travelling	90	52	55	307	36	55	22.3090	113.9566	1613.81	321.35
09-Oct-13	13:48:42	Fishing Boat	Operate and stationary	93	33	40	314	30	40	22.3007	113.9644	396.21	328.24
09-Oct-13	13:48:53	Transportation Boat	Travelling	91	21	30	313	48	45	22.3055	113.9610	1042.97	327.54
09-Oct-13	13:51:00	Tug Boat	Travelling	90	44	45	359	3	10	22.3144	113.9705	1915.66	12.78
09-Oct-13	13:51:07	Container Boat	Travelling	90	44	40	358	39	35	22.3145	113.9704	1919.34	12.39
09-Oct-13	13:52:15	Transportation Boat	Travelling	92	52	15	331	35	55	22.3019	113.9652	491.98	345.33
09-Oct-13	13:53:21	Tug Boat	Travelling	90	55	0	7	51	5	22.3106	113.9720	1552.75	21.58
09-Oct-13	13:53:28	Container Boat	Travelling	90	54	5	7	25	25	22.3109	113.9719	1579.51	21.15
09-Oct-13	13:53:47	Transportation Boat	Travelling	95	20	10	352	39	20	22.3000	113.9667	264.03	6.39
09-Oct-13	13:54:52	Tug Boat	Travelling	91	4	20	10	17	0	22.3085	113.9716	1324.87	24.01
09-Oct-13	13:55:00	Fishing Boat	Non-operate and travelling	94	3	55	348	36	5	22.3007	113.9665	347.09	2.33
09-Oct-13	13:55:23	Tug Boat	Travelling	90	59	15	12	56	20	22.3092	113.9727	1440.07	26.67
09-Oct-13	13:55:29	Tug Boat	Travelling	90	59	15	6	24	0	22.3098	113.9712	1440.09	20.13
09-Oct-13	13:55:38	Container Boat	Stationary	90	59	25	10	3	10	22.3094	113.9720	1436.01	23.78
09-Oct-13	13:55:57	Transportation Boat	Travelling	94	29	30	9	9	50	22.3002	113.9676	314.03	22.89
09-Oct-13	13:56:09	Fishing Boat	Operate and stationary	93	39	35	5	4	20	22.3009	113.9676	385.75	18.80
09-Oct-13	13:58:23	Fishing Boat	Operate and stationary	93	45	15	355	33	30	22.3010	113.9670	376.08	9.29
09-Oct-13	13:58:33	Fishing Boat	Operate and stationary	91	8	20	34	28	35	22.3051	113.9754	1246.91	48.21
09-Oct-13	13:58:39	Fishing Boat	Operate and stationary	91	0	55	38	27	10	22.3053	113.9772	1400.57	52.18
09-Oct-13	13:58:52	Tug Boat	Stationary	91	6	0	9	43	15	22.3083	113.9714	1291.50	23.45
09-Oct-13	13:59:00	Container Boat	Stationary	91	2	45	9	17	40	22.3089	113.9716	1359.19	23.02
09-Oct-13	13:59:08	Tug Boat	Travelling	90	55	45	16	2	40	22.3096	113.9738	1532.33	29.77
09-Oct-13	13:59:55	Other	Stationary	90	28	30	347	46	10	22.3252	113.9672	3064.53	1.50
09-Oct-13	14:00:07	Other	Stationary	90	34	30	357	6	15	22.3198	113.9710	2507.31	10.83
09-Oct-13	14:00:17	Other	Stationary	90	37	40	357	31	50	22.3178	113.9707	2289.03	11.26
09-Oct-13	14:00:31	Other	Stationary	90	40	40	358	56	40	22.3162	113.9709	2115.12	12.67
09-Oct-13	14:00:40	Other	Stationary	90	32	10	359	26	45	22.3213	113.9724	2697.63	13.18
09-Oct-13	14:00:49	Other	Stationary	90	27	25	359	29	40	22.3256	113.9735	3193.83	13.22
09-Oct-13	14:00:58	Other	Stationary	90	32	20	0	32	35	22.3210	113.9728	2683.14	14.27
09-Oct-13	14:01:08	Other	Stationary	90	33	35	2	13	30	22.3199	113.9733	2578.90	15.95
09-Oct-13	14:01:16	Other	Stationary	90	30	0	4	33	40	22.3224	113.9753	2902.96	18.29
09-Oct-13	14:01:25	Other	Stationary	90	31	10	19	2	15	22.3187	113.9811	2788.70	32.77
09-Oct-13	14:01:38	Other	Stationary	91	7	20	325	43	20	22.3083	113.9621	1265.97	339.45
09-Oct-13	14:01:43	Other	Stationary	91	7	20	326	58	45	22.3084	113.9623	1265.97	340.71
09-Oct-13	14:01:53	Other	Stationary	90	53	10	354	38	0	22.3119	113.9687	1608.40	8.36
09-Oct-13	14:01:59	Other	Stationary	90	53	20	356	10	50	22.3118	113.9691	1603.30	9.91
09-Oct-13	14:02:17	Other	Stationary	91	17	40	7	12	40	22.3068	113.9702	1096.15	20.94
09-Oct-13	14:02:23	Other	Stationary	91	16	50	9	21	25	22.3068	113.9706	1108.15	23.09
09-Oct-13	14:02:31	Other	Stationary	90	52	10	17	11	20	22.3103	113.9746	1639.86	30.92
09-Oct-13	14:02:37	Other	Stationary	90	53	0	17	57	55	22.3100	113.9746	1613.65	31.70
09-Oct-13	14:02:49	Other	Stationary	90	26	40	350	8	55	22.3272	113.9686	3290.57	3.88
09-Oct-13	14:03:01	Other	Stationary	90	26	25	354	4	40	22.3273	113.9708	3324.03	7.81
09-Oct-13	14:03:07	Other	Stationary	90	25	10	355	16	25	22.3287	113.9717	3502.21	9.00
09-Oct-13	14:03:16	Other	Stationary	90	26	0	356	38	0	22.3276	113.9723	3381.37	10.36
09-Oct-13	14:03:26	Other	Stationary	90	28	10	8	24	25	22.3235	113.9778	3104.07	22.14
09-Oct-13	14:03:33	Other	Stationary	91	17	5	5	39	5	22.3070	113.9700	1104.64	19.38
09-Oct-13	14:03:40	Other	Stationary	91	13	25	10	9	25	22.3072	113.9710	1160.31	23.89
10-Oct-13	8:01:15	Other	Stationary	94	43	55	0	0	0	22.3004	113.9671	312.36	13.73
10-Oct-13	8:02:12	Other	Stationary	90	32	45	290	38	35	22.3117	113.9441	2776.44	304.37
10-Oct-13	8:02:18	Other	Stationary	90	39	15	294	17	30	22.3104	113.9488	2299.97	308.02
10-Oct-13	8:02:24	Other	Stationary	90	47	5	296	28	15	22.3087	113.9522	1907.81	310.20
10-Oct-13	8:02:31	Other	Stationary	90	54	20	300	39	5	22.3080	113.9549	1648.61	314.38
10-Oct-13	8:02:53	Other	Stationary	90	57	50	302	57	20	22.3078	113.9561	1547.25	316.69
10-Oct-13	8:03:01	Other	Stationary	91	1	5	304	47	55	22.3075	113.9570	1463.78	318.53
10-Oct-13	8:03:11	Other	Stationary	90	54	5	307	35	15	22.3093	113.9563	1656.25	321.32
10-Oct-13	8:03:20	Other	Stationary	91	1	10	304	48	10	22.3075	113.9570	1461.72	318.53
10-Oct-13	8:03:29	Other	Stationary	90	53	45	307	35	0	22.3093	113.9563	1666.64	321.31
10-Oct-13	8:03:37	Other	Stationary	90	57	25	309	3	55	22.3088	113.9572	1558.53	322.80

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Oct-13	8:03:42	Other	Stationary	90	59	50	312	36	35	22.3088	113.9583	1494.68	326.34
10-Oct-13	8:03:47	Other	Stationary	90	59	30	315	57	10	22.3093	113.9590	1503.16	329.68
10-Oct-13	8:03:55	Other	Stationary	90	57	35	321	55	10	22.3104	113.9602	1553.91	335.65
10-Oct-13	8:04:00	Other	Stationary	90	56	25	325	36	15	22.3110	113.9610	1586.52	339.33
10-Oct-13	8:04:10	Other	Stationary	90	55	35	327	59	10	22.3114	113.9615	1610.66	341.72
10-Oct-13	8:04:14	Other	Stationary	90	54	0	330	25	30	22.3120	113.9620	1658.67	344.15
10-Oct-13	8:04:19	Other	Stationary	90	53	35	332	24	45	22.3122	113.9625	1671.77	346.14
10-Oct-13	8:04:24	Other	Stationary	90	51	25	335	33	40	22.3130	113.9632	1743.50	349.29
10-Oct-13	8:04:29	Other	Stationary	90	48	0	338	13	15	22.3143	113.9639	1870.18	351.95
10-Oct-13	8:04:34	Other	Stationary	90	44	20	341	16	25	22.3158	113.9647	2028.62	355.00
10-Oct-13	8:04:40	Other	Stationary	90	42	45	344	20	0	22.3166	113.9657	2105.76	358.06
10-Oct-13	8:04:49	Other	Stationary	90	37	50	349	4	15	22.3191	113.9675	2388.46	2.80
10-Oct-13	8:05:01	Other	Stationary	90	31	15	352	15	40	22.3237	113.9694	2915.76	5.99
10-Oct-13	8:05:11	Other	Stationary	90	30	40	348	16	45	22.3244	113.9674	2974.20	2.01
10-Oct-13	8:05:18	Other	Stationary	90	30	40	348	16	45	22.3244	113.9674	2974.16	2.01
10-Oct-13	8:05:28	Other	Stationary	90	31	5	352	15	5	22.3239	113.9694	2932.09	5.98
10-Oct-13	8:05:41	Other	Stationary	90	30	5	346	27	5	22.3249	113.9665	3035.00	0.18
10-Oct-13	8:05:47	Other	Stationary	90	29	40	342	3	50	22.3253	113.9642	3080.10	355.79
10-Oct-13	8:05:57	Other	Stationary	90	29	0	336	10	55	22.3256	113.9610	3155.23	349.91
10-Oct-13	8:06:01	Other	Stationary	90	29	40	332	59	35	22.3246	113.9595	3080.03	346.72
10-Oct-13	8:06:14	Other	Stationary	90	29	10	328	22	0	22.3245	113.9570	3135.99	342.10
10-Oct-13	8:06:27	Other	Stationary	90	26	25	321	25	20	22.3261	113.9521	3486.06	335.15
10-Oct-13	8:06:34	Other	Stationary	90	26	25	317	31	10	22.3251	113.9501	3486.02	331.25
10-Oct-13	8:06:40	Other	Stationary	90	27	15	314	29	5	22.3234	113.9491	3371.60	328.21
10-Oct-13	8:06:51	Other	Stationary	90	27	50	312	9	15	22.3222	113.9484	3296.00	325.88
10-Oct-13	8:07:02	Other	Stationary	90	30	0	302	51	45	22.3175	113.9461	3043.49	316.59
10-Oct-13	8:07:06	Other	Stationary	90	30	0	301	35	25	22.3171	113.9456	3043.47	315.32
10-Oct-13	8:07:26	Other	Stationary	90	29	40	347	4	0	22.3253	113.9668	3079.57	0.80
10-Oct-13	8:07:41	Other	Stationary	90	26	45	357	16	15	22.3280	113.9728	3438.91	11.00
10-Oct-13	8:07:47	Other	Stationary	90	37	0	357	23	50	22.3192	113.9710	2443.47	11.13
10-Oct-13	8:07:54	Other	Stationary	90	40	5	357	34	45	22.3175	113.9707	2249.34	11.31
10-Oct-13	8:08:03	Other	Stationary	90	38	10	359	11	20	22.3184	113.9715	2366.08	12.92
10-Oct-13	8:08:16	Other	Stationary	90	33	25	359	32	0	22.3214	113.9725	2716.76	13.26
10-Oct-13	8:08:24	Other	Stationary	90	28	45	359	35	20	22.3255	113.9735	3183.58	13.32
10-Oct-13	8:08:36	Other	Stationary	90	42	40	0	24	15	22.3160	113.9714	2109.13	14.13
10-Oct-13	8:08:42	Other	Stationary	90	33	25	0	45	25	22.3213	113.9730	2716.64	14.49
10-Oct-13	8:08:50	Other	Stationary	90	29	35	0	12	10	22.3246	113.9736	3088.32	13.93
10-Oct-13	8:09:04	Other	Stationary	90	33	10	2	3	55	22.3213	113.9737	2737.97	15.80
10-Oct-13	8:09:13	Other	Stationary	90	35	0	3	29	20	22.3199	113.9739	2588.36	17.22
10-Oct-13	8:09:28	Other	Stationary	90	31	15	5	56	5	22.3223	113.9759	2914.40	19.66
10-Oct-13	8:09:38	Other	Stationary	90	32	40	19	31	35	22.3186	113.9812	2781.72	33.26
10-Oct-13	8:09:56	Other	Stationary	91	10	5	325	43	40	22.3083	113.9621	1272.86	339.46
10-Oct-13	8:10:03	Other	Stationary	91	10	15	326	59	0	22.3084	113.9623	1269.80	340.71
10-Oct-13	8:10:33	Other	Stationary	90	54	30	17	11	40	22.3103	113.9746	1642.13	30.92
10-Oct-13	8:10:40	Other	Stationary	90	55	35	17	58	0	22.3099	113.9746	1609.59	31.70
10-Oct-13	8:10:58	Other	Stationary	90	55	25	354	37	50	22.3120	113.9687	1614.46	8.36
10-Oct-13	8:11:05	Other	Stationary	90	55	35	356	10	10	22.3119	113.9691	1609.52	9.90
10-Oct-13	8:11:25	Other	Stationary	91	19	55	8	45	25	22.3069	113.9705	1114.76	22.49
10-Oct-13	8:11:32	Other	Stationary	91	22	55	11	26	55	22.3064	113.9708	1074.11	25.18
10-Oct-13	8:11:58	Other	Stationary	90	26	50	358	7	25	22.3278	113.9732	3425.89	11.85
10-Oct-13	8:12:14	Other	Stationary	91	23	40	7	40	50	22.3065	113.9702	1064.33	21.41
10-Oct-13	8:12:26	Other	Stationary	91	5	55	11	59	25	22.3086	113.9721	1353.87	25.72
10-Oct-13	8:13:40	Transportation Boat	Travelling	92	21	35	328	31	55	22.3030	113.9645	627.22	342.26
10-Oct-13	8:13:56	Tug Boat	Travelling	90	44	55	6	7	20	22.3145	113.9730	1999.69	19.85
10-Oct-13	8:14:06	Tug Boat	Travelling	91	20	0	11	43	35	22.3067	113.9711	1113.28	25.46
10-Oct-13	8:14:21	HSF High Speed Ferry	Travelling	90	34	15	353	27	10	22.3212	113.9696	2646.07	7.18
10-Oct-13	8:14:45	Research Vessel	Travelling	90	41	0	18	5	50	22.3144	113.9777	2195.98	31.83
10-Oct-13	8:15:29	Fishing Boat	Operate and stationary	91	19	55	293	53	15	22.3037	113.9578	1114.29	307.62
10-Oct-13	8:15:52	Tug Boat	Travelling	90	37	45	5	12	20	22.3180	113.9739	2391.18	18.94
10-Oct-13	8:16:13	Tug Boat	Travelling	91	0	0	15	28	45	22.3093	113.9735	1488.56	29.21
10-Oct-13	8:16:29	Tug Boat	Stationary	91	6	55	11	47	10	22.3084	113.9720	1332.86	25.52
10-Oct-13	8:16:47	Transportation Boat	Travelling	91	12	40	312	16	40	22.3068	113.9597	1226.32	326.01
10-Oct-13	8:16:56	HSF High Speed Ferry	Travelling	90	53	45	337	2	30	22.3124	113.9638	1664.35	350.77
10-Oct-13	8:17:33	Tug Boat	Travelling	91	4	25	285	15	0	22.3037	113.9546	1385.05	298.98
10-Oct-13	8:17:53	Transportation Boat	Travelling	91	1	15	308	18	55	22.3080	113.9577	1457.53	322.05
10-Oct-13	8:18:00	Transportation Boat	Travelling	91	11	55	309	40	25	22.3066	113.9592	1239.07	323.40
10-Oct-13	8:18:29	Transportation Boat	Travelling	94	32	40	337	2	25	22.3005	113.9659	324.74	350.77
10-Oct-13	8:18:37	Tug Boat	Travelling	91	0	20	14	21	20	22.3094	113.9732	1479.86	28.09
10-Oct-13	8:19:02	Research Vessel	Travelling	90	57	0	4	54	15	22.3110	113.9713	1567.62	18.63
10-Oct-13	8:19:12	HSF High Speed Ferry	Travelling	91	3	55	299	58	20	22.3063	113.9566	1395.78	313.70
10-Oct-13	8:19:18	Tug Boat	Travelling	91	7	0	304	27	55	22.3065	113.9578	1330.80	318.20
10-Oct-13	8:19:32	Transportation Boat	Travelling	91	3	10	292	12	55	22.3051	113.9553	1412.51	305.95
10-Oct-13	8:19:39	Transportation Boat	Travelling	90	59	50	291	40	35	22.3054	113.9546	1492.24	305.41
10-Oct-13	8:19:55	Transportation Boat	Travelling	91	11	10	325	18	45	22.3081	113.9620	1252.02	339.04
10-Oct-13	8:20:23	HSF High Speed Ferry	Travelling	90	58	0	280	34	5	22.3033	113.9527	1539.98	294.30
10-Oct-13	8:20:50	Transportation Boat	Travelling	91	2	0	303	29	0	22.3071	113.9569	1439.23	317.21
10-Oct-13	8:20:55	Transportation Boat	Travelling	91	1	35	305	49	25	22.3075	113.9573	1449.09	319.55
10-Oct-13	8:21:21	Transportation Boat	Travelling	90	57	0	306	2	20	22.3084	113.9566	1567.25	319.77
10-Oct-13	8:21:29	Transportation Boat	Travelling	90	58	5	306	23	55	22.3082	113.9568	1537.56	320.13
10-Oct-13	8:21:43	Transportation Boat	Travelling	91	14	30	307	32	20	22.3060	113.9591	1195.26	321.27
10-Oct-13	8:22:09	Tug Boat	Travelling	90	57	25	333	28	10	22.3113	113.9630	1555.58	347.20
10-Oct-13	8:22:42	Transportation Boat	Stationary	91	16	5	329	35	10	22.3077	113.9631	1170.05	343.32
10-Oct-13	8:22:53	Research Vessel	Travelling	91	24	30	345	1	10	22.3071	113.9662	1052.61	358.75
10-Oct-13	8:23:34	Fishing Boat	Non-operate and travelling	93	0	15	23	13	10	22.3012	113.9693	491.78	36.95
10-Oct-13	8:23:57	Tug Boat	Travelling	91	8	25	7	10	55	22.3086	113.9709	1302.33	20.91
10-Oct-13	8:24:34	Tug Boat	Travelling	90	44	15	348	34	25	22.3159	113.9672	2028.35	2.30
10-Oct-13	8:24:50	Tug Boat	Travelling	91	5	45	4	32	50	22.3092	113.9705	1355.62	18.28
10-Oct-13	8:24:58	Container Boat	Travelling	91	7	5	5	9	15	22.3089	113.9706	1328.36	18.88
10-Oct-13	8:25:57	Fishing Boat	Non-operate and travelling	93	53	15	3	10	25	22.3009	113.9675	379.59	16.90
10-Oct-13	8:26:31	Tug Boat	Travelling	90	35	30	353	0	20	22.3204	113.9693	2545.84	6.74
10-Oct-13	8:26:53	Research Vessel	Travelling	91	33	10	329	13	35	22.3058	113.9637	953.69	342.96
10-Oct-13	8:27:58	Transportation Boat	Travelling	90	38	5	351	5	25	22.3188	113.9683	2366.55	4.82
10-Oct-13	8:28:08	Speed Boat	Travelling	91	18	5	315	48	25	22.3065	113.9608	1139.20	329.54
10-Oct-13	8:28:34	HSF High Speed Ferry	Travelling	91	0	50	285	47	25	22.3041	113.9540	1466.04	299.52
10-Oct-13	8:28:44	Speed Boat	Travelling	91	2	15	331	8	5	22.3101	113.9628	1432.22	344.86
10-Oct-13	8:28:56	Tug Boat	Travelling	90	52	0	358	33	55	22.3127	113.9700	1719.25	12.30
10-Oct-13	8:29:02	Container Boat	Travelling	90	53	30	358	39	0	22.3123	113.9699	1670.18	12.38
10-Oct-13	8:29:50	Speed Boat	Travelling	90	43	30	347	38	5	22.3162	113.9669	2063.12	1.36
10-Oct-13	8:30:05	Transportation Boat	Travelling	90	49	35	340	22	50	22.3138	113.9646	1804.48	354.11
10-Oct-13	8:31:05	Tug Boat	Travelling	90	46	0	355	56	40	22.3149	113.9696	1948.03	9.67
10-Oct-13	8:31:12	Container Boat	Travelling	90	47	15	356	15	10	22.3144	113.9696	1895.31	9.98
10-Oct-13	8:31:22	HSf High Speed Ferry	Travelling	91	5	30	309	9	40	22.3074	113.9584	1359.95	322.89
10-Oct-13	8:32:04	Container Boat	Travelling	91	18	40	12	12	30	22.3068	113.9712	1130.23	25.94
10-Oct-13	8:32:33	Transportation Boat	Travelling	91	2	0	315	30	35	22.3087	113.9592	1437.51	329.24
10-Oct-13	8:32:47	Transportation Boat	Travelling	91	13	5	296	22	25	22.3047	113.9573	1217.27	310.10
10-Oct-13	8:33:50	Transportation Boat	Travelling	91	0	40	299	8	15	22.3066	113.9559	1469.33	312.87
10-Oct-13	8:33:55	Transportation Boat	Travelling	91	10	0	311	7	20	22.3070	113.9593	1271.27	324.85
10-Oct-13	8:34:05	HSF High Speed Ferry	Travelling	90	59	20	331	6	35	22.3107	113.9626	1502.77	344.84
10-Oct-13	8:34:23	Research Vessel	Travelling	91	37	5	319	32	25	22.3050	113.9624	914.30	333.27
10-Oct-13	8:34:37	Tug Boat	Travelling	90	39	0	354	49	20	22.3182	113.9697	2307.48	8.55
10-Oct-13	8:34:44	Container Boat	Travelling	90	40	5	354	41	20	22.3176	113.9696	2243.11	8.42
10-Oct-13	8:35:00	Container Boat	Travelling	91	16	25	8	13	15	22.3073	113.9706	1163.44	21.95
10-Oct-13	8:36:48	HSF High Speed Ferry	Travelling	91	4	10	310	46	30	22.3078	113.9586	1387.77	324.50
10-Oct-13	8:37:22	Tug Boat	Travelling	90	59	5	2	5	55	22.3107	113.9704	1508.71	15.83
10-Oct-13	8:37:32	HSF High Speed Ferry	Travelling	90	44	45	348	30	40	22.3156	113.9672	2002.44	2.24
10-Oct-13	8:37:43	Transportation Boat	Travelling	90	50	0	350	20	10	22.3137	113.9676	1787.74	4.07
10-Oct-13	8:38:41	HSF High Speed Ferry	Travelling	90	39	55	351	4	5	22.3178	113.9682	2251.85	4.80

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Oct-13	8:38:49	HSF High Speed Ferry	Travelling	90	52	0	340	12	30	22.3130	113.9646	1717.50	353.94
10-Oct-13	8:39:01	Tug Boat	Travelling	90	55	20	355	53	35	22.3119	113.9690	1612.28	9.62
10-Oct-13	8:40:50	HSF High Speed Ferry	Travelling	90	36	45	351	58	45	22.3196	113.9688	2452.30	5.71
10-Oct-13	8:41:05	Transportation Boat	Travelling	90	45	50	348	52	10	22.3152	113.9673	1953.26	2.60
10-Oct-13	8:41:22	Research Vessel	Travelling	91	35	10	302	19	0	22.3037	113.9601	932.15	316.05
10-Oct-13	8:43:49	Transportation Boat	Travelling	91	2	30	318	35	35	22.3090	113.9600	1424.21	332.32
10-Oct-13	8:44:01	Tug Boat	Stationary	90	55	10	356	6	0	22.3120	113.9691	1616.40	9.83
10-Oct-13	8:44:11	Research Vessel	Travelling	91	16	55	282	37	30	22.3022	113.9563	1154.72	296.35
10-Oct-13	8:46:29	Transportation Boat	Travelling	90	53	35	280	32	50	22.3038	113.9516	1664.55	294.28
10-Oct-13	8:53:34	Fishing Boat	Operate and stationary	91	49	35	28	46	0	22.3030	113.9717	807.91	42.50
10-Oct-13	9:00:13	Tug Boat	Travelling	90	55	30	357	21	55	22.3118	113.9694	1603.86	11.10
10-Oct-13	9:03:10	Tug Boat	Travelling	91	26	5	7	41	15	22.3062	113.9701	1028.87	21.42
10-Oct-13	9:03:54	Transportation Boat	Travelling	92	20	50	288	13	45	22.3006	113.9612	627.35	301.96
10-Oct-13	9:04:17	Tug Boat	Travelling	91	26	0	8	49	55	22.3062	113.9702	1029.75	22.56
10-Oct-13	9:04:59	Transportation Boat	Travelling	93	53	45	314	24	30	22.3005	113.9645	377.27	328.14
10-Oct-13	9:05:08	Transportation Boat	Travelling	91	4	35	313	22	15	22.3080	113.9591	1374.70	327.10
10-Oct-13	9:05:49	Transportation Boat	Travelling	91	7	25	308	34	10	22.3070	113.9586	1316.19	322.30
10-Oct-13	9:06:02	Transportation Boat	Travelling	96	9	0	346	38	45	22.2998	113.9664	238.35	0.38
10-Oct-13	9:06:10	Transportation Boat	Travelling	90	56	45	332	17	45	22.3113	113.9627	1567.02	346.03
10-Oct-13	9:06:34	Tug Boat	Travelling	91	22	35	4	20	40	22.3068	113.9696	1072.42	18.07
10-Oct-13	9:06:43	Container Boat	Travelling	91	22	30	6	23	35	22.3067	113.9700	1073.49	20.12
10-Oct-13	9:07:47	Transportation Boat	Travelling	90	41	10	349	51	10	22.3172	113.9677	2174.86	3.58
10-Oct-13	9:07:53	Transportation Boat	Travelling	90	54	0	338	36	25	22.3123	113.9643	1647.85	352.34
10-Oct-13	9:08:02	Transportation Boat	Travelling	94	27	40	330	31	30	22.3005	113.9655	329.17	344.25
10-Oct-13	9:08:17	Transportation Boat	Travelling	90	45	10	18	24	50	22.3127	113.9766	1977.23	32.14
10-Oct-13	9:10:00	Transportation Boat	Travelling	90	38	25	354	26	35	22.3184	113.9696	2335.11	8.17
10-Oct-13	9:10:10	Transportation Boat	Travelling	90	58	35	4	27	35	22.3106	113.9710	1516.65	18.19
10-Oct-13	9:10:20	Transportation Boat	Travelling	91	29	40	308	16	5	22.3046	113.9605	986.76	322.00
10-Oct-13	9:10:31	Tug Boat	Travelling	91	7	25	358	42	10	22.3092	113.9692	1315.56	12.43
10-Oct-13	9:10:40	Container Boat	Travelling	91	11	40	358	7	20	22.3085	113.9689	1236.75	11.85
10-Oct-13	9:11:29	Tug Boat	Travelling	91	4	0	3	15	15	22.3096	113.9703	1386.48	16.98
10-Oct-13	9:11:39	Container Boat	Stationary	91	9	10	356	59	55	22.3090	113.9687	1281.77	10.73
10-Oct-13	9:12:26	Transportation Boat	Travelling	90	55	0	306	30	5	22.3088	113.9563	1616.64	320.23
10-Oct-13	9:12:33	Transportation Boat	Travelling	91	25	55	338	14	10	22.3068	113.9650	1029.89	351.97
10-Oct-13	9:13:37	Tug Boat	Travelling	90	55	35	16	54	0	22.3100	113.9743	1599.21	30.63
10-Oct-13	9:13:51	Transportation Boat	Travelling	91	30	40	329	25	35	22.3060	113.9637	975.45	343.16
10-Oct-13	9:14:02	HSF High Speed Ferry	Travelling	90	34	15	352	48	30	22.3211	113.9693	2629.67	6.54
10-Oct-13	9:16:23	Construction Boat	Travelling	91	0	50	309	56	10	22.3082	113.9580	1458.85	323.67
10-Oct-13	9:16:32	HSF High Speed Ferry	Travelling	90	54	5	337	55	15	22.3123	113.9641	1643.80	351.65
10-Oct-13	9:16:52	Tug Boat	Travelling	90	59	30	354	14	25	22.3109	113.9684	1491.92	7.97
10-Oct-13	9:17:17	Transportation Boat	Stationary	91	31	10	324	31	0	22.3057	113.9629	969.73	338.25
10-Oct-13	9:18:41	Tug Boat	Travelling	90	58	0	351	10	45	22.3113	113.9677	1530.78	4.91
10-Oct-13	9:18:49	Container Boat	Travelling	90	59	40	351	14	55	22.3110	113.9677	1487.40	4.98
10-Oct-13	9:19:11	HSF High Speed Ferry	Travelling	91	1	50	292	35	35	22.3053	113.9552	1434.54	306.32
10-Oct-13	9:19:53	Transportation Boat	Travelling	91	41	25	329	28	20	22.3051	113.9640	870.96	343.20
10-Oct-13	9:20:04	Transportation Boat	Travelling	91	25	45	310	55	15	22.3052	113.9606	1031.10	324.65
10-Oct-13	9:23:28	Transportation Boat	Travelling	95	39	25	349	34	35	22.2999	113.9665	258.83	3.31
10-Oct-13	9:23:37	Transportation Boat	Travelling	92	41	10	334	32	5	22.3024	113.9653	546.84	348.26
10-Oct-13	9:23:53	Transportation Boat	Travelling	91	32	55	317	35	45	22.3051	113.9620	950.71	331.33
10-Oct-13	9:24:08	Construction Boat	Travelling	91	3	45	350	8	20	22.3101	113.9673	1390.17	3.87
10-Oct-13	9:24:15	Tug Boat	Travelling	90	42	10	352	45	20	22.3166	113.9687	2118.19	6.49
10-Oct-13	9:24:22	Container Boat	Travelling	90	43	15	352	31	5	22.3161	113.9686	2063.68	6.25
10-Oct-13	9:24:38	Fishing Boat	Operate and stationary	92	30	40	17	28	50	22.3021	113.9693	585.02	31.21
10-Oct-13	9:27:55	Transportation Boat	Travelling	95	9	20	354	44	0	22.3001	113.9668	284.04	8.46
10-Oct-13	9:28:02	Tug Boat	Travelling	90	35	0	354	36	50	22.3205	113.9700	2567.19	8.34
10-Oct-13	9:28:08	Container Boat	Travelling	90	35	15	354	28	10	22.3203	113.9699	2548.22	8.20
10-Oct-13	9:28:20	Construction Boat	Travelling	90	51	10	4	56	50	22.3124	113.9718	1737.10	18.68
10-Oct-13	9:28:40	Fishing Boat	Non-operate and travelling	94	14	20	305	52	35	22.3000	113.9642	345.78	319.61
10-Oct-13	9:29:13	Transportation Boat	Travelling	91	34	45	311	37	5	22.3045	113.9612	931.69	325.35
10-Oct-13	9:31:55	Transportation Boat	Travelling	91	32	5	18	10	55	22.3049	113.9713	958.57	31.91
10-Oct-13	9:32:08	Fishing Boat	Non-operate and travelling	93	20	30	31	19	50	22.3004	113.9694	438.86	45.06
10-Oct-13	9:32:19	Fishing Boat	Operate and stationary	91	18	35	36	4	35	22.3041	113.9748	1124.46	49.81
10-Oct-13	9:32:33	Tug Boat	Travelling	90	37	20	353	6	25	22.3191	113.9692	2399.63	6.84
10-Oct-13	9:32:41	Container Boat	Travelling	90	36	35	352	58	55	22.3195	113.9692	2450.62	6.71
10-Oct-13	9:32:55	Construction Boat	Travelling	90	40	10	15	12	45	22.3151	113.9769	2224.83	28.94
10-Oct-13	9:34:55	Transportation Boat	Travelling	93	17	55	334	18	55	22.3015	113.9655	444.48	348.05
10-Oct-13	9:35:07	Transportation Boat	Travelling	91	4	20	313	33	50	22.3080	113.9592	1375.85	327.29
10-Oct-13	9:35:36	Transportation Boat	Travelling	93	33	40	329	12	55	22.3012	113.9652	411.58	342.95
10-Oct-13	9:36:20	Transportation Boat	Travelling	91	22	25	33	44	35	22.3041	113.9741	1071.32	47.47
10-Oct-13	9:36:42	Construction Boat	Travelling	90	33	55	20	39	15	22.3173	113.9810	2650.34	34.38
10-Oct-13	9:36:53	Transportation Boat	Travelling	91	55	20	313	14	45	22.3034	113.9623	764.06	326.98
10-Oct-13	9:37:00	Transportation Boat	Travelling	90	56	5	337	2	5	22.3117	113.9639	1580.91	350.76
10-Oct-13	9:37:12	Tug Boat	Travelling	90	51	55	357	40	25	22.3127	113.9697	1709.98	11.40
10-Oct-13	9:37:20	Container Boat	Travelling	90	51	20	357	18	40	22.3129	113.9696	1729.75	11.04
10-Oct-13	9:37:37	Transportation Boat	Travelling	91	36	40	324	11	45	22.3052	113.9631	912.33	337.93
10-Oct-13	9:38:15	Transportation Boat	Travelling	91	14	45	307	37	10	22.3059	113.9592	1181.91	321.35
10-Oct-13	9:38:20	Transportation Boat	Travelling	90	58	30	306	41	20	22.3081	113.9570	1514.43	320.42
10-Oct-13	9:38:43	Transportation Boat	Stationary	91	31	25	29	3	45	22.3040	113.9728	964.93	42.79
10-Oct-13	9:39:08	Transportation Boat	Travelling	91	1	45	306	22	20	22.3075	113.9575	1433.55	320.10
10-Oct-13	9:39:31	Transportation Boat	Travelling	91	11	15	325	43	50	22.3081	113.9622	1240.36	339.46
10-Oct-13	9:39:39	Tug Boat	Travelling	91	7	15	357	51	25	22.3092	113.9690	1314.90	11.59
10-Oct-13	9:39:47	Container Boat	Travelling	91	6	25	357	35	25	22.3094	113.9689	1331.57	11.32
10-Oct-13	9:41:43	Transportation Boat	Travelling	91	0	10	318	9	40	22.3093	113.9597	1471.39	331.89
10-Oct-13	9:41:53	Transportation Boat	Travelling	91	13	15	287	45	0	22.3033	113.9564	1205.88	301.48
10-Oct-13	9:42:07	Transportation Boat	Stationary	91	9	45	326	7	0	22.3083	113.9622	1266.96	339.85
10-Oct-13	9:42:59	Tug Boat	Travelling	91	36	20	0	21	10	22.3056	113.9686	915.00	14.08
10-Oct-13	9:43:05	Container Boat	Travelling	91	36	45	359	12	10	22.3056	113.9684	911.02	12.93
10-Oct-13	9:43:24	Transportation Boat	Travelling	90	54	20	334	46	25	22.3120	113.9632	1631.58	348.50
10-Oct-13	9:44:58	Transportation Boat	Travelling	91	10	35	323	58	25	22.3080	113.9618	1251.49	337.70
10-Oct-13	9:45:18	Transportation Boat	Travelling	90	59	5	285	12	10	22.3041	113.9536	1498.19	298.93
10-Oct-13	9:45:46	Fishing Boat	Operate and stationary	91	44	0	41	7	5	22.3020	113.9731	846.96	54.85
10-Oct-13	9:45:55	Fishing Boat	Operate and stationary	91	12	15	36	42	0	22.3046	113.9756	1222.22	50.43
10-Oct-13	9:46:19	Transportation Boat	Travelling	90	39	55	352	6	5	22.3176	113.9686	2236.08	5.83
10-Oct-13	9:46:39	Tug Boat	Travelling	91	34	20	354	57	30	22.3059	113.9678	934.16	8.69
10-Oct-13	9:46:45	Container Boat	Travelling	91	33	20	357	48	50	22.3059	113.9682	944.22	11.54
10-Oct-13	9:47:00	Transportation Boat	Travelling	91	2	20	303	14	30	22.3070	113.9570	1418.81	316.97
10-Oct-13	9:48:15	Transportation Boat	Travelling	90	53	55	305	50	20	22.3089	113.9560	1643.57	319.57
10-Oct-13	9:52:28	Tug Boat	Travelling	91	22	50	7	34	55	22.3065	113.9702	1064.12	21.31
10-Oct-13	9:52:36	Container Boat	Stationary	91	19	5	7	1	20	22.3070	113.9702	1114.96	20.75
10-Oct-13	9:52:45	Transportation Boat	Travelling	90	49	15	343	39	15	22.3138	113.9656	1801.49	357.38
10-Oct-13	9:52:59	Transportation Boat	Travelling	90	34	5	353	11	50	22.3211	113.9695	2632.32	6.93
10-Oct-13	9:53:26	Transportation Boat	Travelling	90	41	5	14	58	30	22.3147	113.9765	2169.07	28.70
10-Oct-13	9:55:30	Transportation Boat	Travelling	91	0	35	319	55	50	22.3094	113.9601	1459.05	333.66
10-Oct-13	9:55:36	Transportation Boat	Travelling	90	52	20	338	51	30	22.3127	113.9643	1692.89	352.59
10-Oct-13	9:55:57	Transportation Boat	Travelling	91	3	40	352	49	10	22.3100	113.9679	1387.45	6.55
10-Oct-13	9:56:13	Fishing Boat	Non-operate and travelling	92	50	20	4	30	50	22.3020	113.9680	515.59	18.24
10-Oct-13	9:56:30	Tug Boat	Travelling	91	23	0	9	46	20	22.3064	113.9705	1061.53	23.50
10-Oct-13	9:56:50	Transportation Boat	Travelling	90	56	10	307	32	15	22.3087	113.9568	1575.29	321.27
10-Oct-13	9:56:55	Transportation Boat	Travelling	91	1	50	319	49	5	22.3091	113.9602	1428.96	333.55
10-Oct-13	9:57:00	Transportation Boat	Travelling	91	11	55	335	49	45	22.3085	113.9642	1226.54	349.56
10-Oct-13	9:57:10	Fishing Boat	Non-operate and travelling	92	36	5	346	39	25	22.3027	113.9664	562.77	0.39
10-Oct-13	9:57:26	Tug Boat	Travelling	90	35	40	12	15	5	22.3179	113.9771	2509.55	25.98
10-Oct-13	9:57:48	Transportation Boat	Travelling	91	4	0	304	18	5	22.3069	113.9574	1379.87	318.03
10-Oct-13	9:57:55	Transportation Boat	Travelling	91	12	55	317	32	50	22.3072	113.9607	1209.44	331.28
10-Oct-13	9:58:06	Transportation Boat	Travelling	91	24	25	327	7	45	22.3065	113.9631	1043.41	340.86
10-Oct-13	9:59:59	Transportation Boat	Travelling	90	57	55	283	28	5	22.3039	113.9532	1526.48	297.20
10-Oct-13	10:00:08	Fishing Boat	Non-operate and travelling	92	2	25	302	0	45	22.3022	113.9615	717.95	315.74

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Oct-13	10:00:21	Tug Boat	Travelling	91	12	40	20	29	40	22.3066	113.9730	1213.34	34.22
10-Oct-13	10:00:30	Tug Boat	Travelling	90	48	55	351	57	25	22.3139	113.9681	1812.56	5.69
10-Oct-13	10:00:43	Transportation Boat	Travelling	92	24	0	330	56	15	22.3029	113.9648	609.94	344.67
10-Oct-13	10:03:09	Transportation Boat	Travelling	95	53	40	352	39	30	22.2998	113.9667	247.31	6.39
10-Oct-13	10:03:20	Tug Boat	Travelling	91	0	15	322	6	35	22.3097	113.9606	1466.05	335.84
10-Oct-13	10:03:27	Tug Boat	Travelling	90	46	55	25	7	30	22.3109	113.9779	1890.94	38.85
10-Oct-13	10:05:57	Transportation Boat	Travelling	93	4	30	327	1	5	22.3017	113.9649	475.40	340.75
10-Oct-13	10:06:07	Tug Boat	Travelling	90	56	25	286	33	40	22.3047	113.9532	1566.69	300.29
10-Oct-13	10:06:26	Tug Boat	Travelling	90	49	35	350	13	25	22.3137	113.9676	1786.59	3.95
10-Oct-13	10:10:02	Tug Boat	Travelling	91	1	40	310	25	5	22.3081	113.9582	1430.93	324.15
10-Oct-13	10:10:10	Transportation Boat	Travelling	91	10	25	309	1	45	22.3066	113.9590	1251.22	322.76
10-Oct-13	10:11:57	Tug Boat	Travelling	90	57	35	286	35	25	22.3046	113.9535	1533.55	300.32
10-Oct-13	10:12:31	Transportation Boat	Travelling	90	52	0	306	50	50	22.3094	113.9559	1700.95	320.58
10-Oct-13	10:12:43	Dumping Guide Boat	Travelling	91	35	55	16	42	20	22.3047	113.9709	916.18	30.44
10-Oct-13	10:14:37	Dumping Guide Boat	Travelling	91	23	0	5	21	35	22.3066	113.9698	1059.55	19.09
10-Oct-13	10:17:51	Dumping Guide Boat	Travelling	91	32	25	355	40	10	22.3061	113.9679	950.59	9.40
10-Oct-13	10:17:59	Transportation Boat	Travelling	91	5	20	20	21	35	22.3077	113.9738	1348.56	34.09
10-Oct-13	10:18:09	Tug Boat	Travelling	90	35	25	353	55	15	22.3201	113.9697	2522.49	7.65
10-Oct-13	10:18:16	Container Boat	Travelling	90	34	50	354	0	0	22.3205	113.9698	2566.43	7.73
10-Oct-13	10:18:28	Tug Boat	Travelling	90	37	40	351	0	0	22.3188	113.9683	2366.25	4.73
10-Oct-13	10:21:50	Tug Boat	Travelling	90	54	15	331	20	45	22.3118	113.9623	1627.63	345.08
10-Oct-13	10:21:58	Tug Boat	Travelling	90	47	45	1	9	15	22.3137	113.9710	1853.64	14.88
10-Oct-13	10:22:08	Container Boat	Travelling	90	47	25	0	48	35	22.3139	113.9710	1866.92	14.54
10-Oct-13	10:22:18	Transportation Boat	Travelling	91	6	50	13	58	20	22.3081	113.9724	1317.37	27.70
10-Oct-13	10:22:33	Dumping Guide Boat	Stationary	91	30	45	358	34	5	22.3061	113.9684	967.68	12.30
10-Oct-13	10:27:32	Tug Boat	Travelling	91	19	0	10	45	20	22.3067	113.9709	1112.13	24.49
10-Oct-13	10:27:49	Container Boat	Stationary	91	1	25	9	25	5	22.3095	113.9719	1434.19	23.15
10-Oct-13	10:28:05	Fishing Boat	Non-operate and travelling	93	0	5	294	30	55	22.3003	113.9627	485.99	308.25
10-Oct-13	10:28:28	Fishing Boat	Non-operate and travelling	92	29	30	279	44	25	22.2997	113.9612	585.74	293.47
10-Oct-13	10:28:49	Tug Boat	Travelling	90	48	35	343	39	50	22.3140	113.9656	1819.88	357.39
10-Oct-13	10:29:00	Container Boat	Travelling	90	47	55	344	3	5	22.3142	113.9657	1845.70	357.78
10-Oct-13	10:30:52	Dumping Guide Boat	Travelling	91	43	35	336	48	15	22.3051	113.9650	846.43	350.53
10-Oct-13	10:31:01	Tug Boat	Travelling	90	55	40	15	36	0	22.3100	113.9739	1584.03	29.33
10-Oct-13	10:31:14	Container Boat	Stationary	90	59	45	6	43	35	22.3100	113.9714	1474.21	20.46
10-Oct-13	10:31:23	Transportation Boat	Stationary	91	30	50	29	3	40	22.3040	113.9728	965.91	42.79
10-Oct-13	10:31:38	Construction Boat	Travelling	90	59	45	312	8	5	22.3086	113.9584	1474.15	325.86
10-Oct-13	10:32:15	Dumping Guide Boat	Travelling	91	52	35	325	58	35	22.3042	113.9638	778.35	339.71
10-Oct-13	10:32:29	Tug Boat	Travelling	90	56	45	15	52	40	22.3098	113.9739	1553.09	29.61
10-Oct-13	10:35:02	Construction Boat	Travelling	90	54	30	332	58	50	22.3118	113.9628	1617.81	346.71
10-Oct-13	10:35:14	Dumping Guide Boat	Stationary	91	47	20	326	21	50	22.3045	113.9637	816.35	340.09
10-Oct-13	10:35:28	Tug Boat	Travelling	91	2	55	310	34	40	22.3078	113.9585	1398.45	324.31
10-Oct-13	10:35:37	Container Boat	Travelling	91	2	20	311	37	50	22.3081	113.9586	1411.68	325.36
10-Oct-13	10:35:57	Tug Boat	Travelling	91	12	40	6	26	5	22.3078	113.9705	1208.88	20.16
10-Oct-13	10:36:14	Container Boat	Travelling	90	36	45	352	55	40	22.3193	113.9691	2422.91	6.66
10-Oct-13	10:36:28	Tug Boat	Travelling	91	5	35	291	47	20	22.3046	113.9558	1340.79	305.52
10-Oct-13	10:36:38	Construction Boat	Travelling	91	4	20	290	54	15	22.3046	113.9555	1367.13	304.63
10-Oct-13	10:36:50	Transportation Boat	Travelling	91	0	55	319	41	30	22.3092	113.9601	1444.76	333.42
10-Oct-13	10:37:10	HSF High Speed Ferry	Travelling	90	58	15	288	21	5	22.3048	113.9539	1511.78	302.08
10-Oct-13	10:38:44	Tug Boat	Travelling	91	0	5	2	53	10	22.3103	113.9705	1464.78	16.62
10-Oct-13	10:39:23	Container Boat	Travelling	91	1	15	288	21	15	22.3045	113.9546	1436.41	302.08
10-Oct-13	10:39:45	Transportation Boat	Travelling	90	36	30	353	0	0	22.3194	113.9692	2439.22	6.73
10-Oct-13	10:40:08	Construction Boat	Travelling	90	39	55	352	8	55	22.3175	113.9686	2223.54	5.88
10-Oct-13	10:40:16	HSF High Speed Ferry	Travelling	90	51	20	336	30	50	22.3129	113.9636	1718.48	350.24
10-Oct-13	10:40:24	Container Boat	Travelling	90	51	15	344	24	55	22.3131	113.9659	1721.30	358.15
10-Oct-13	10:40:33	Tug Boat	Travelling	91	3	10	315	45	35	22.3084	113.9595	1392.12	329.49
10-Oct-13	10:40:38	Construction Boat	Travelling	91	3	10	314	5	45	22.3082	113.9592	1392.10	327.83
10-Oct-13	10:42:32	Tug Boat	Travelling	90	46	35	356	4	20	22.3144	113.9695	1897.03	9.80
10-Oct-13	10:42:42	Transportation Boat	Travelling	92	3	45	302	10	30	22.3022	113.9616	707.07	315.90
10-Oct-13	10:42:50	Speed Boat	Travelling	91	20	35	308	34	50	22.3054	113.9599	1088.38	322.31
10-Oct-13	10:42:58	Dumping Guide Boat	Travelling	91	32	50	297	53	40	22.3033	113.9595	943.84	311.62
10-Oct-13	10:43:14	Container Boat	Travelling	90	58	55	342	30	20	22.3110	113.9654	1493.49	356.24
10-Oct-13	10:43:36	HSF High Speed Ferry	Travelling	90	30	10	354	31	50	22.3241	113.9706	2976.22	8.26
10-Oct-13	10:43:48	Tug Boat	Travelling	90	38	35	355	1	30	22.3181	113.9698	2302.01	8.75
10-Oct-13	10:44:09	Dumping Guide Boat	Travelling	91	35	15	291	41	20	22.3024	113.9591	919.64	305.42
10-Oct-13	10:44:18	Transportation Boat	Travelling	92	6	20	5	51	20	22.3035	113.9687	692.44	19.59
10-Oct-13	10:44:30	Fishing Boat	Non-operate and travelling	92	18	25	6	3	20	22.3030	113.9685	631.77	19.79
10-Oct-13	10:44:39	Speed Boat	Travelling	92	33	10	332	26	35	22.3026	113.9651	570.72	346.17
10-Oct-13	10:46:11	Transportation Boat	Travelling	91	6	55	25	26	50	22.3068	113.9745	1312.46	39.18
10-Oct-13	10:46:29	Speed Boat	Travelling	92	47	55	1	31	0	22.3021	113.9677	520.33	15.25
10-Oct-13	10:46:40	Fishing Boat	Non-operate and travelling	93	52	20	3	3	5	22.3009	113.9675	375.63	16.78
10-Oct-13	10:46:52	Fishing Boat	Non-operate and travelling	92	46	0	321	55	5	22.3019	113.9643	526.34	335.65
10-Oct-13	10:47:00	Container Boat	Travelling	90	58	30	342	33	35	22.3111	113.9655	1503.69	356.29
10-Oct-13	10:47:09	Tug Boat	Travelling	90	46	15	344	38	35	22.3148	113.9659	1910.09	358.37
10-Oct-13	10:47:15	Construction Boat	Travelling	90	46	35	343	29	40	22.3147	113.9655	1896.10	357.22
10-Oct-13	10:47:42	Transportation Boat	Travelling	90	42	20	19	26	35	22.3134	113.9775	2091.34	33.17
10-Oct-13	10:48:49	Fishing Boat	Non-operate and travelling	92	29	15	291	19	5	22.3006	113.9617	585.50	305.05
10-Oct-13	10:49:07	Speed Boat	Travelling	91	58	45	32	29	35	22.3022	113.9716	736.48	46.22
10-Oct-13	10:49:18	Fishing Boat	Non-operate and travelling	92	14	30	37	17	40	22.3013	113.9713	649.91	51.02
10-Oct-13	10:53:26	Tug Boat	Travelling	90	32	10	354	45	20	22.3224	113.9704	2778.87	8.49
10-Oct-13	10:53:34	Construction Boat	Travelling	90	32	25	354	11	50	22.3222	113.9701	2756.36	7.93
10-Oct-13	11:00:46	Transportation Boat	Travelling	91	16	35	308	21	50	22.3057	113.9596	1143.57	322.09
10-Oct-13	11:03:32	Transportation Boat	Travelling	94	33	35	330	58	45	22.3004	113.9656	318.21	344.71
10-Oct-13	11:04:09	Transportation Boat	Travelling	96	4	45	351	6	40	22.2998	113.9666	238.24	4.84
10-Oct-13	11:06:51	Transportation Boat	Travelling	92	51	0	319	1	10	22.3017	113.9641	509.84	332.75
10-Oct-13	11:07:04	Transportation Boat	Travelling	91	24	55	317	55	30	22.3058	113.9616	1029.85	331.65
10-Oct-13	11:07:12	Transportation Boat	Travelling	91	19	10	13	38	55	22.3065	113.9713	1105.21	27.38
10-Oct-13	11:07:27	Speed Boat	Travelling	90	44	55	11	33	5	22.3136	113.9746	1963.98	25.28
10-Oct-13	11:07:46	Transportation Boat	Travelling	90	36	50	350	58	40	22.3192	113.9683	2409.22	4.71
10-Oct-13	11:08:31	Speed Boat	Travelling	90	58	50	359	47	25	22.3107	113.9698	1491.70	13.52
10-Oct-13	11:08:53	Transportation Boat	Travelling	91	59	50	327	54	0	22.3038	113.9642	728.30	341.63
10-Oct-13	11:09:04	Transportation Boat	Travelling	91	13	50	12	35	0	22.3072	113.9715	1185.52	26.31
10-Oct-13	11:09:12	Transportation Boat	Travelling	91	12	30	307	42	20	22.3061	113.9591	1207.51	321.44
10-Oct-13	11:09:20	Transportation Boat	Travelling	90	45	10	343	37	10	22.3152	113.9655	1952.46	357.35
10-Oct-13	11:09:56	Speed Boat	Travelling	91	19	25	329	38	50	22.3071	113.9633	1101.39	343.38
10-Oct-13	11:10:15	Transportation Boat	Travelling	90	57	0	305	21	0	22.3081	113.9566	1540.11	319.08
10-Oct-13	11:10:42	Transportation Boat	Travelling	90	54	50	333	56	10	22.3117	113.9631	1601.86	347.67
10-Oct-13	11:11:05	Speed Boat	Travelling	91	15	15	297	56	15	22.3046	113.9580	1162.76	311.67
10-Oct-13	11:11:24	Transportation Boat	Travelling	94	42	55	347	58	15	22.3004	113.9665	307.41	1.70
10-Oct-13	11:11:36	Transportation Boat	Travelling	90	58	5	15	50	10	22.3094	113.9737	1510.75	29.57
10-Oct-13	11:12:39	Transportation Boat	Travelling	91	3	30	309	37	55	22.3076	113.9584	1380.10	323.36
10-Oct-13	11:13:01	Transportation Boat	Travelling	90	54	10	16	41	50	22.3102	113.9744	1621.50	30.43
10-Oct-13	11:13:23	Dumping Guide Boat	Travelling	90	41	0	33	30	45	22.3108	113.9818	2155.50	47.24
10-Oct-13	11:14:33	Tug Boat	Travelling	91	0	20	297	37	0	22.3063	113.9558	1453.20	311.35
10-Oct-13	11:14:38	Tug Boat	Travelling	91	0	20	296	18	15	22.3060	113.9556	1453.18	310.03
10-Oct-13	11:14:48	Construction Boat	Travelling	90	59	30	291	49	25	22.3053	113.9547	1473.79	305.55
10-Oct-13	11:15:28	Transportation Boat	Travelling	92	12	35	329	48	10	22.3033	113.9646	657.55	343.53
10-Oct-13	11:15:38	Transportation Boat	Travelling	91	9	50	13	15	0	22.3077	113.9719	1253.23	26.98
10-Oct-13	11:19:18	Transportation Boat	Travelling	91	8	45	326	14	0	22.3084	113.9622	1272.70	339.96
10-Oct-13	11:19:29	Dumping Guide Boat	Travelling	91	49	55	25	59	35	22.3031	113.9713	793.43	39.72
10-Oct-13	11:19:43	Tug Boat	Travelling	90	54	15	336	53	15	22.3120	113.9638	1617.84	350.62
10-Oct-13	11:19:48	Tug Boat	Travelling	90	55	0	335	43	25	22.3117	113.9636	1595.41	349.45
10-Oct-13	11:19:56	Construction Boat	Travelling	90	57	5	331	27	5	22.3110	113.9626	1536.28	345.18
10-Oct-13	11:22:49	Dumping Guide Boat	Travelling	94	30	10	351	39	10	22.3005	113.9667	321.61	5.38
10-Oct-13	11:25:11	Dumping Guide Boat	Stationary	95	4	20	338	56	25	22.3002	113.9660	285.26	352.67
10-Oct-13	11:25:28	Dumping Guide Boat	Travelling	91	3	25	305	14	15	22.3070	113.9576	1380.09	318.97
10-Oct-13	11:25:46	Tug Boat	Travelling	90	39	50	8	10	15	22.3161	113.9744	2217.67	21.90
10-Oct-13	11:25:51	Tug Boat	Travelling	90	39	50	7	21	40	22.3162	113.9742	2217.65	21.09

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Oct-13	11:25:59	Construction Boat	Travelling	90	42	15	4	39	30	22.3154	113.9728	2087.18	18.39
10-Oct-13	11:26:54	Transportation Boat	Travelling	91	9	10	321	26	10	22.3079	113.9612	1263.95	335.17
10-Oct-13	11:29:30	Dumping Guide Boat	Travelling	91	53	30	344	4	10	22.3045	113.9661	767.47	357.80
10-Oct-13	11:29:40	Transportation Boat	Travelling	90	56	10	307	49	5	22.3086	113.9570	1560.14	321.55
10-Oct-13	11:29:50	Transportation Boat	Travelling	90	40	55	349	5	35	22.3170	113.9674	2156.28	2.82
10-Oct-13	11:30:02	Tug Boat	Travelling	90	32	20	22	53	50	22.3175	113.9824	2753.14	36.63
10-Oct-13	11:30:06	Tug Boat	Travelling	90	32	20	22	15	20	22.3177	113.9821	2753.12	35.99
10-Oct-13	11:30:13	Construction Boat	Travelling	90	34	10	20	25	55	22.3170	113.9806	2598.83	34.16
10-Oct-13	11:30:29	Dumping Guide Boat	Travelling	92	34	20	354	3	15	22.3026	113.9671	563.71	7.78
10-Oct-13	11:31:58	Dumping Guide Boat	Travelling	93	46	10	9	16	30	22.3008	113.9679	384.11	23.00
10-Oct-13	11:32:06	Transportation Boat	Travelling	90	55	25	330	41	15	22.3113	113.9623	1581.19	344.42
10-Oct-13	11:32:21	Government Boat	Travelling	90	41	35	351	25	50	22.3166	113.9683	2120.16	5.16
10-Oct-13	11:32:37	Tug Boat	Travelling	90	33	35	353	30	25	22.3212	113.9696	2645.29	7.24
10-Oct-13	11:32:46	Container Boat	Travelling	90	32	50	353	22	30	22.3218	113.9697	2708.45	7.10
10-Oct-13	11:33:24	Government Boat	Travelling	91	0	15	324	31	35	22.3098	113.9612	1452.37	338.26
10-Oct-13	11:33:33	Dumping Guide Boat	Travelling	94	6	45	343	20	5	22.3008	113.9662	351.89	357.06
10-Oct-13	11:34:19	Government Boat	Travelling	90	57	35	288	31	20	22.3049	113.9539	1520.45	302.25
10-Oct-13	11:34:26	Transportation Boat	Travelling	91	2	30	298	12	55	22.3060	113.9563	1399.27	311.95
10-Oct-13	11:37:02	Dumping Guide Boat	Travelling	92	52	0	352	36	55	22.3021	113.9669	505.28	6.35
10-Oct-13	11:37:10	Dumping Guide Boat	Travelling	91	16	15	19	8	50	22.3063	113.9724	1144.27	32.88
10-Oct-13	11:37:25	Tug Boat	Travelling	90	48	10	3	11	50	22.3133	113.9716	1822.83	16.93
10-Oct-13	11:37:33	Container Boat	Travelling	90	47	40	2	42	10	22.3135	113.9715	1842.34	16.43
10-Oct-13	11:41:59	Tug Boat	Travelling	91	1	45	6	46	0	22.3096	113.9712	1415.37	20.50
10-Oct-13	11:42:14	Container Boat	Travelling	91	1	55	7	36	45	22.3095	113.9714	1411.47	21.34
10-Oct-13	11:42:29	Dumping Guide Boat	Travelling	91	9	15	16	4	30	22.3075	113.9725	1260.36	29.80
10-Oct-13	11:46:49	Transportation Boat	Travelling	91	24	40	10	29	15	22.3061	113.9705	1028.65	24.22
10-Oct-13	11:46:59	Tug Boat	Travelling	91	11	10	12	28	55	22.3075	113.9717	1225.51	26.21
10-Oct-13	11:47:06	Container Boat	Travelling	91	14	30	12	30	25	22.3071	113.9714	1170.17	26.24
10-Oct-13	11:49:23	Dumping Guide Boat	Travelling	91	33	45	342	11	35	22.3060	113.9658	928.13	355.92
10-Oct-13	11:49:33	Transportation Boat	Travelling	92	2	0	342	56	40	22.3040	113.9660	712.30	356.67
10-Oct-13	11:50:02	Tug Boat	Travelling	91	21	35	10	6	10	22.3064	113.9706	1067.45	23.83
10-Oct-13	11:50:12	Container Boat	Stationary	91	19	40	10	0	0	22.3066	113.9707	1093.31	23.73
10-Oct-13	11:50:41	Transportation Boat	Travelling	90	45	25	2	16	30	22.3143	113.9716	1933.04	16.00
10-Oct-13	11:52:51	Transportation Boat	Travelling	91	27	40	332	53	35	22.3063	113.9642	992.59	346.62
10-Oct-13	11:53:02	Dumping Guide Boat	Travelling	90	51	45	344	47	10	22.3128	113.9660	1691.47	358.52
10-Oct-13	11:53:11	Tug Boat	Travelling	91	16	35	10	23	0	22.3070	113.9709	1137.34	24.11
10-Oct-13	11:53:31	Transportation Boat	Travelling	90	36	20	351	42	25	22.3194	113.9686	2431.82	5.44
10-Oct-13	11:55:02	Transportation Boat	Travelling	90	54	30	276	14	45	22.3026	113.9517	1604.36	289.98
10-Oct-13	11:55:19	Tug Boat	Travelling	90	43	50	346	35	55	22.3157	113.9665	2003.63	0.33
10-Oct-13	11:55:33	Transportation Boat	Travelling	90	55	25	334	39	0	22.3115	113.9633	1577.31	348.38
10-Oct-13	11:55:43	Tug Boat	Travelling	90	59	20	12	56	25	22.3095	113.9728	1471.68	26.67
10-Oct-13	11:58:54	Tug Boat	Travelling	90	58	45	322	58	15	22.3099	113.9607	1486.00	336.70
10-Oct-13	11:59:07	Dumping Guide Boat	Travelling	90	30	0	353	22	45	22.3241	113.9700	2969.68	7.11
10-Oct-13	11:59:29	Dumping Guide Boat	Travelling	91	21	15	23	57	0	22.3052	113.9728	1070.81	37.68
10-Oct-13	11:59:41	Tug Boat	Travelling	91	12	40	4	31	10	22.3079	113.9701	1198.39	18.25
10-Oct-13	12:02:40	Tug Boat	Travelling	90	55	35	281	46	25	22.3037	113.9526	1571.33	295.50
10-Oct-13	12:02:54	Dumping Guide Boat	Travelling	92	51	45	7	8	20	22.3019	113.9681	504.66	20.87
10-Oct-13	12:03:01	Tug Boat	Travelling	91	14	0	358	51	0	22.3080	113.9689	1176.19	12.58
10-Oct-13	12:03:11	Container Boat	Travelling	91	16	0	359	41	20	22.3076	113.9690	1144.95	13.42
10-Oct-13	12:03:25	Government Boat	Travelling	91	12	45	293	9	20	22.3041	113.9571	1196.53	306.89
10-Oct-13	12:06:00	Government Boat	Travelling	90	59	55	1	27	50	22.3103	113.9701	1455.59	15.19
10-Oct-13	12:06:08	Tug Boat	Travelling	91	0	0	351	16	25	22.3107	113.9676	1453.52	5.00
10-Oct-13	12:06:15	Container Boat	Travelling	91	2	5	351	30	55	22.3102	113.9676	1404.10	5.25
10-Oct-13	12:06:59	Dumping Guide Boat	Travelling	94	3	20	6	34	20	22.3006	113.9676	355.61	20.30
10-Oct-13	12:07:08	Government Boat	Travelling	90	42	30	11	4	45	22.3145	113.9748	2065.59	24.81
10-Oct-13	12:09:34	Dumping Guide Boat	Travelling	92	59	30	358	17	10	22.3019	113.9674	482.47	12.02
10-Oct-13	12:09:43	Tug Boat	Travelling	90	46	50	350	6	45	22.3144	113.9676	1869.51	3.84
10-Oct-13	12:09:51	Container Boat	Travelling	90	48	10	350	2	15	22.3139	113.9676	1816.63	3.77
10-Oct-13	12:16:55	Dumping Guide Boat	Travelling	90	40	40	352	41	30	22.3169	113.9687	2159.18	6.42
10-Oct-13	12:17:05	Tug Boat	Travelling	90	31	35	353	12	30	22.3227	113.9697	2807.67	6.94
10-Oct-13	12:17:12	Container Boat	Travelling	90	32	20	353	5	55	22.3221	113.9696	2739.34	6.83
10-Oct-13	12:21:16	Tug Boat	Travelling	91	0	55	297	14	0	22.3061	113.9559	1429.09	310.96
10-Oct-13	12:27:22	Tug Boat	Travelling	90	43	30	345	57	20	22.3157	113.9663	2012.56	359.69
10-Oct-13	12:29:25	Container Boat	Travelling	91	3	40	314	15	20	22.3080	113.9594	1365.44	327.99
10-Oct-13	12:30:27	Tug Boat	Travelling	90	32	10	352	20	10	22.3222	113.9692	2750.33	6.07
10-Oct-13	12:31:54	Container Boat	Travelling	90	55	15	332	33	0	22.3114	113.9628	1576.11	346.28
10-Oct-13	12:37:17	Container Boat	Travelling	90	33	10	353	37	0	22.3214	113.9697	2661.63	7.35
10-Oct-13	12:38:00	Tug Boat	Travelling	90	31	25	353	24	20	22.3228	113.9698	2817.00	7.14
10-Oct-13	12:38:11	Construction Boat	Travelling	90	30	40	353	17	50	22.3234	113.9698	2889.49	7.03
10-Oct-13	12:40:17	Fishing Boat	Non-operate and travelling	93	23	30	0	14	35	22.3013	113.9674	424.03	13.97
10-Oct-13	12:42:57	Fishing Boat	Non-operate and travelling	91	45	45	306	4	35	22.3032	113.9613	817.69	319.81
10-Oct-13	12:43:15	Tug Boat	Travelling	90	41	5	349	38	5	22.3168	113.9676	2130.68	3.36
10-Oct-13	12:43:21	Construction Boat	Travelling	90	40	10	349	56	15	22.3172	113.9678	2180.74	3.67
10-Oct-13	12:45:40	Fishing Boat	Non-Operate and travelling	91	5	0	286	27	25	22.3037	113.9552	1334.82	300.19
10-Oct-13	12:49:21	Tug Boat	Travelling	90	56	10	331	25	0	22.3111	113.9625	1547.15	345.15
10-Oct-13	12:49:27	Construction Boat	Travelling	90	55	40	332	45	40	22.3113	113.9629	1561.24	346.49
10-Oct-13	13:05:57	Tug Boat	Travelling	90	49	0	0	4	30	22.3131	113.9705	1774.57	13.80
10-Oct-13	13:06:08	Container Boat	Travelling	90	48	30	359	56	55	22.3133	113.9705	1793.20	13.68
10-Oct-13	13:09:29	Tug Boat	Travelling	91	0	25	8	16	45	22.3096	113.9716	1433.78	22.01
10-Oct-13	13:09:39	Container Boat	Travelling	90	59	55	7	28	45	22.3097	113.9715	1445.88	21.21
10-Oct-13	13:15:20	Tug Boat	Travelling	91	10	40	1	48	30	22.3082	113.9696	1222.88	15.54
10-Oct-13	13:15:26	Container Boat	Travelling	91	8	15	0	37	0	22.3087	113.9695	1266.61	14.35
10-Oct-13	13:15:55	Container Boat	Travelling	90	45	0	346	48	15	22.3150	113.9666	1933.87	0.53
10-Oct-13	13:17:25	Container Boat	Travelling	90	37	40	352	44	5	22.3184	113.9689	2321.89	6.46
10-Oct-13	13:17:38	Tug Boat	Travelling	91	19	55	359	51	0	22.3071	113.9689	1079.92	13.58
10-Oct-13	13:17:47	Container Boat	Travelling	91	23	10	359	50	55	22.3067	113.9688	1037.40	13.58
10-Oct-13	13:18:16	Speed Boat	Travelling	90	57	25	33	14	25	22.3069	113.9771	1508.36	46.97
10-Oct-13	13:19:28	Speed Boat	Travelling	91	20	55	34	36	20	22.3040	113.9741	1066.27	48.34
10-Oct-13	13:19:47	Container Boat	Travelling	90	29	25	353	18	55	22.3245	113.9700	3005.81	7.05
10-Oct-13	13:20:01	Tug Boat	Travelling	91	34	45	5	27	55	22.3054	113.9693	909.60	19.20
10-Oct-13	13:20:09	Tug Boat	Travelling	91	34	5	6	44	5	22.3053	113.9695	916.07	20.46
10-Oct-13	13:21:04	Speed Boat	Travelling	92	22	15	25	59	25	22.3018	113.9702	604.73	39.72
10-Oct-13	13:24:05	Speed Boat	Travelling	94	26	35	302	13	45	22.2997	113.9642	321.86	315.96
10-Oct-13	13:26:18	Research Vessel	Follow Dolphin	90	22	15	342	48	35	22.3341	113.9640	4061.86	356.54
10-Oct-13	13:29:14	Research Vessel	Follow Dolphin	90	20	55	341	45	30	22.3367	113.9631	4350.89	355.49
10-Oct-13	13:32:24	Research Vessel	Follow Dolphin	90	20	25	339	4	45	22.3375	113.9610	4469.93	352.81
10-Oct-13	13:35:09	Dolphin	Surface	90	20	10	340	14	10	22.3382	113.9618	4531.52	353.97
10-Oct-13	13:35:19	Dolphin	Surface	90	20	5	340	8	30	22.3384	113.9617	4552.85	353.87
10-Oct-13	13:35:23	Dolphin	Surface	90	20	10	340	5	55	22.3382	113.9617	4531.40	353.83
10-Oct-13	13:35:31	Dolphin	Surface	90	20	10	340	0	55	22.3382	113.9616	4531.34	353.75
10-Oct-13	13:36:11	Research Vessel	Follow Dolphin	90	20	10	338	35	40	22.3380	113.9605	4531.00	352.32
10-Oct-13	13:41:18	Research Vessel	Follow Dolphin	90	20	5	338	39	10	22.3382	113.9605	4549.79	352.38
10-Oct-13	13:44:40	Research Vessel	Follow Dolphin	90	19	45	333	57	40	22.3384	113.9568	4635.84	347.69
10-Oct-13	13:48:13	Research Vessel	Follow Dolphin	90	19	50	330	38	20	22.3376	113.9543	4611.72	344.37
10-Oct-13	13:49:15	Dolphin	surface	90	19	50	329	59	35	22.3375	113.9538	4611.18	343.72
10-Oct-13	13:50:33	Research Vessel	Follow Dolphin	90	19	35	330	36	40	22.3382	113.9541	4677.99	344.34
10-Oct-13	13:53:42	Research Vessel	Follow Dolphin	90	19	25	330	39	20	22.3385	113.9540	4722.50	344.39
10-Oct-13	13:57:50	Research Vessel	Travelling	90	20	30	333	2	55	22.3365	113.9565	4436.66	346.78
10-Oct-13	13:58:37	Other	Stationary	90	28	20	347	2	0	22.3256	113.9668	3114.72	0.76
10-Oct-13	13:58:50	Other	Stationary	90	33	40	355	55	10	22.3207	113.9706	2597.54	9.65
10-Oct-13	13:59:02	Other	Stationary	90	38	5	358	26	55	22.3177	113.9711	2285.43	12.18
10-Oct-13	13:59:10	Other	Stationary	90	36	40	358	59	15	22.3185	113.9715	2376.84	12.72
10-Oct-13	13:59:30	Other	Stationary	90	34	40	0	56	55	22.3196	113.9726	2519.32	14.68
10-Oct-13	13:59:36	Other	Stationary	90	31	40	1	44	35	22.3216	113.9736	2769.23	15.47
10-Oct-13	13:59:46	Other	Stationary	90	30	30	2	44	15	22.3225	113.9743	2880.69	16.47
10-Oct-13	13:59:52	Other	Stationary	90	33	55	2	57	45	22.3198	113.9736	2577.28	16.69
10-Oct-13	14:00:00	Other	Stationary	90	33	30	3	22	50	22.3201	113.9739	2610.70	17.11

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
10-Oct-13	14:00:11	Other	Stationary	90	29	45	5	46	30	22.3227	113.9760	2957.25	19.50
10-Oct-13	14:00:29	Other	Stationary	91	7	30	325	38	15	22.3084	113.9620	1274.74	339.37
10-Oct-13	14:00:34	Other	Stationary	91	7	25	326	53	15	22.3085	113.9623	1276.33	340.62
10-Oct-13	14:00:44	Other	Stationary	90	52	0	17	6	50	22.3105	113.9747	1660.64	30.84
10-Oct-13	14:00:49	Other	Stationary	90	53	20	17	52	55	22.3100	113.9747	1618.40	31.61
10-Oct-13	14:01:11	Other	Stationary	90	53	0	354	33	30	22.3121	113.9687	1628.69	8.29
10-Oct-13	14:01:25	Other	Stationary	90	53	30	356	5	40	22.3119	113.9691	1613.17	9.82
10-Oct-13	14:01:49	Other	Stationary	91	18	50	6	32	15	22.3068	113.9701	1089.79	20.27
10-Oct-13	14:01:57	Other	Stationary	91	18	15	8	54	5	22.3067	113.9705	1097.96	22.63
10-Oct-13	14:02:12	Other	Stationary	90	59	35	335	8	25	22.3104	113.9637	1446.01	348.87
10-Oct-13	14:02:32	Other	Stationary	90	57	45	6	22	15	22.3102	113.9714	1492.51	20.10
10-Oct-13	14:02:42	Other	Stationary	91	18	30	5	16	40	22.3069	113.9699	1094.35	19.01
10-Oct-13	14:02:50	Other	Stationary	90	41	10	16	20	45	22.3140	113.9767	2108.30	30.08
12-Oct-13	8:18:33	Other	Stationary	98	9	30	0	0	0	22.2992	113.9668	177.10	13.73
12-Oct-13	8:20:09	Other	Stationary	90	31	30	288	50	10	22.3114	113.9431	2840.08	302.57
12-Oct-13	8:20:16	Other	Stationary	90	33	50	292	46	0	22.3117	113.9458	2635.29	306.50
12-Oct-13	8:20:22	Other	Stationary	90	45	50	296	38	50	22.3088	113.9521	1926.26	310.38
12-Oct-13	8:20:26	Other	Stationary	90	53	0	300	42	20	22.3081	113.9549	1660.92	314.44
12-Oct-13	8:20:34	Other	Stationary	90	59	40	304	53	20	22.3076	113.9569	1472.67	318.62
12-Oct-13	8:20:43	Other	Stationary	90	52	20	308	3	30	22.3095	113.9563	1682.51	321.79
12-Oct-13	8:20:57	Other	Stationary	90	59	50	304	54	0	22.3075	113.9570	1468.57	318.63
12-Oct-13	8:21:07	Other	Stationary	90	52	10	308	4	30	22.3096	113.9562	1688.05	321.80
12-Oct-13	8:21:17	Other	Stationary	90	55	0	310	20	20	22.3093	113.9573	1599.68	324.07
12-Oct-13	8:21:22	Other	Stationary	90	58	40	315	24	0	22.3092	113.9589	1498.25	329.13
12-Oct-13	8:21:26	Other	Stationary	90	58	30	318	48	20	22.3096	113.9597	1502.59	332.54
12-Oct-13	8:21:31	Other	Stationary	90	56	30	322	17	20	22.3104	113.9602	1556.59	336.02
12-Oct-13	8:21:36	Other	Stationary	90	54	40	327	2	40	22.3113	113.9612	1609.65	340.77
12-Oct-13	8:21:41	Other	Stationary	90	51	50	334	2	0	22.3126	113.9629	1699.21	347.76
12-Oct-13	8:21:47	Other	Stationary	90	44	10	340	28	10	22.3155	113.9644	2001.06	354.20
12-Oct-13	8:21:52	Other	Stationary	90	40	50	345	45	30	22.3171	113.9662	2169.07	359.49
12-Oct-13	8:22:01	Other	Stationary	90	32	50	351	6	40	22.3220	113.9686	2719.78	4.84
12-Oct-13	8:22:08	Other	Stationary	90	30	40	352	12	50	22.3238	113.9693	2922.03	5.94
12-Oct-13	8:22:19	Other	Stationary	90	29	40	348	19	50	22.3248	113.9675	3026.23	2.06
12-Oct-13	8:22:28	Other	Stationary	90	29	40	348	19	50	22.3248	113.9675	3026.28	2.06
12-Oct-13	8:22:38	Other	Stationary	90	30	20	352	12	10	22.3241	113.9694	2956.08	5.93
12-Oct-13	8:22:47	Other	Stationary	90	29	20	347	49	0	22.3252	113.9672	3062.82	1.55
12-Oct-13	8:22:53	Other	Stationary	90	28	50	345	16	30	22.3257	113.9659	3119.23	359.00
12-Oct-13	8:23:01	Other	Stationary	90	28	20	341	0	50	22.3261	113.9636	3177.84	354.74
12-Oct-13	8:23:07	Other	Stationary	90	28	20	337	53	20	22.3259	113.9619	3177.88	351.62
12-Oct-13	8:23:15	Other	Stationary	90	28	20	333	22	30	22.3255	113.9595	3177.92	347.10
12-Oct-13	8:23:24	Other	Stationary	90	28	20	328	17	10	22.3248	113.9569	3177.98	342.02
12-Oct-13	8:23:34	Other	Stationary	90	27	20	324	10	20	22.3252	113.9543	3302.26	337.90
12-Oct-13	8:23:40	Other	Stationary	90	25	40	322	0	40	22.3266	113.9523	3533.34	335.74
12-Oct-13	8:23:49	Other	Stationary	90	26	10	317	4	10	22.3248	113.9500	3460.63	330.80
12-Oct-13	8:23:56	Other	Stationary	90	26	50	312	34	0	22.3228	113.9482	3368.36	326.30
12-Oct-13	8:24:20	Other	Stationary	90	27	20	311	37	10	22.3221	113.9481	3302.54	325.35
12-Oct-13	8:24:42	other	stationary	91	16	50	310	54	40	22.3060	113.9600	1141.03	324.64
12-Oct-13	8:24:57	Other	Stationary	90	59	30	339	11	0	22.3108	113.9646	1477.56	352.91
12-Oct-13	8:25:12	Other	Stationary	90	28	50	347	41	30	22.3257	113.9672	3120.05	1.42
12-Oct-13	8:25:22	Other	Stationary	90	38	40	358	14	10	22.3178	113.9710	2295.42	11.97
12-Oct-13	8:25:32	Other	Stationary	90	38	10	359	31	10	22.3180	113.9716	2326.56	13.25
12-Oct-13	8:25:43	Other	Stationary	90	36	0	1	4	50	22.3191	113.9725	2471.86	14.81
12-Oct-13	8:25:51	Other	Stationary	90	34	30	3	3	10	22.3199	113.9737	2583.81	16.78
12-Oct-13	8:25:58	Other	Stationary	90	34	10	3	30	30	22.3201	113.9739	2610.13	17.24
12-Oct-13	8:26:21	Other	Stationary	91	8	50	325	44	0	22.3084	113.9620	1275.18	339.46
12-Oct-13	8:26:25	Other	Stationary	91	8	50	326	58	10	22.3085	113.9623	1275.19	340.70
12-Oct-13	8:26:44	Other	Stationary	90	54	10	17	1	50	22.3102	113.9745	1625.68	30.76
12-Oct-13	8:26:51	Other	Stationary	90	54	40	17	57	30	22.3100	113.9746	1610.58	31.69
12-Oct-13	8:27:08	Other	Stationary	90	52	0	352	20	40	22.3128	113.9681	1694.69	6.07
12-Oct-13	8:27:18	Other	Stationary	90	51	50	354	33	0	22.3128	113.9688	1700.27	8.28
12-Oct-13	8:27:29	Other	Stationary	91	15	50	7	13	10	22.3073	113.9704	1156.56	20.95
12-Oct-13	8:27:34	Other	Stationary	91	15	50	9	30	0	22.3072	113.9708	1156.57	23.23
12-Oct-13	8:27:54	Other	Stationary	90	51	40	352	20	10	22.3129	113.9682	1705.96	6.07
12-Oct-13	8:28:02	Other	Stationary	90	40	40	0	35	50	22.3166	113.9716	2179.72	14.33
12-Oct-13	8:28:17	Other	Stationary	90	49	10	5	36	30	22.3129	113.9722	1794.49	19.34
12-Oct-13	8:28:42	Other	Stationary	90	58	30	13	29	10	22.3097	113.9731	1503.79	27.22
12-Oct-13	8:29:04	Tug Boat	Stationary	91	15	40	311	27	30	22.3062	113.9600	1159.33	325.19
12-Oct-13	8:29:24	Tug Boat	Stationary	90	49	20	6	19	30	22.3127	113.9724	1788.53	20.05
12-Oct-13	8:29:33	Tug Boat	Stationary	90	48	50	6	9	30	22.3129	113.9724	1807.24	19.89
12-Oct-13	8:29:41	Tug Boat	Travelling	90	50	10	344	5	0	22.3134	113.9657	1758.29	357.81
12-Oct-13	8:30:19	Container Boat	Travelling	90	56	0	333	49	30	22.3114	113.9631	1572.23	347.55
12-Oct-13	8:31:02	Transportation Boat	Stationary	91	15	20	331	4	40	22.3077	113.9634	1164.75	344.81
12-Oct-13	8:31:31	Transportation Boat	Travelling	91	6	40	317	21	0	22.3080	113.9602	1317.82	331.08
12-Oct-13	8:31:42	Tug Boat	Travelling	90	57	0	7	22	50	22.3106	113.9718	1544.47	21.11
12-Oct-13	8:31:49	Tug Boat	Travelling	90	54	20	8	14	30	22.3112	113.9723	1621.52	21.97
12-Oct-13	8:32:02	Tug Boat	Travelling	90	37	20	353	44	30	22.3189	113.9694	2382.04	7.47
12-Oct-13	8:32:24	Transportation Boat	Travelling	91	7	20	3	59	30	22.3088	113.9703	1304.76	17.72
12-Oct-13	8:33:19	Transportation Boat	Travelling	90	53	40	338	4	0	22.3122	113.9641	1642.27	351.80
12-Oct-13	8:33:31	Tug Boat	Travelling	91	11	10	10	42	40	22.3077	113.9714	1233.93	24.44
12-Oct-13	8:33:36	Tug Boat	Travelling	91	10	30	8	7	50	22.3080	113.9709	1245.73	21.86
12-Oct-13	8:33:51	Transportation Boat	Travelling	91	10	30	11	21	30	22.3078	113.9715	1245.76	25.09
12-Oct-13	8:34:15	Fishing Boat	Operate and stationary	91	20	20	37	54	20	22.3037	113.9747	1092.07	51.64
12-Oct-13	8:34:43	Fishing Boat	Operate and travelling	90	57	20	31	38	30	22.3073	113.9770	1535.86	45.37
12-Oct-13	8:35:20	Transportation Boat	Travelling	90	43	10	355	47	10	22.3158	113.9697	2051.70	9.52
12-Oct-13	8:35:46	HSF High Speed Ferry	Travelling	91	2	40	293	8	0	22.3052	113.9555	1403.61	306.86
12-Oct-13	8:36:26	Tug Boat	Stationary	91	15	40	9	35	20	22.3072	113.9709	1160.27	23.32
12-Oct-13	8:36:37	Tug Boat	Travelling	91	8	0	9	50	10	22.3083	113.9714	1292.43	23.57
12-Oct-13	8:38:05	Transportation Boat	Travelling	91	12	0	9	59	10	22.3077	113.9712	1220.12	23.72
12-Oct-13	8:38:13	Tug Boat	Travelling	90	58	30	12	40	30	22.3098	113.9729	1505.37	26.40
12-Oct-13	8:38:27	HSF High Speed Ferry	Travelling	90	52	50	338	5	20	22.3125	113.9641	1669.56	351.82
12-Oct-13	8:38:39	Fishing Boat	Operate and travelling	91	11	30	28	50	20	22.3058	113.9745	1228.81	42.57
12-Oct-13	8:40:26	Transportation Boat	Travelling	90	57	40	359	9	30	22.3110	113.9697	1527.81	12.89
12-Oct-13	8:40:35	HSF High Speed Ferry	Travelling	90	36	0	352	12	30	22.3198	113.9689	2475.96	5.94
12-Oct-13	8:40:53	Tug Boat	Stationary	90	58	20	12	53	50	22.3098	113.9730	1510.18	26.63
12-Oct-13	8:42:13	Transportation Boat	Travelling	93	14	20	338	25	50	22.3016	113.9658	450.06	352.16
12-Oct-13	8:43:44	Transportation Boat	Travelling	90	46	0	346	53	40	22.3149	113.9666	1924.08	0.62
12-Oct-13	8:45:49	Delete	Travelling	91	15	40	321	56	0	22.3071	113.9617	1161.46	335.66
12-Oct-13	8:45:57	Transportation Boat	Travelling	90	59	0	329	25	10	22.3105	113.9622	1493.70	343.15
12-Oct-13	8:46:07	Transportation Boat	Travelling	90	53	50	359	56	40	22.3120	113.9702	1639.40	13.67
12-Oct-13	8:46:26	Fishing Boat	Non-operate and travelling	91	53	40	2	13	0	22.3043	113.9685	771.28	15.95
12-Oct-13	8:46:47	Fishing Boat	Operate and stationary	92	38	50	24	22	30	22.3015	113.9697	551.29	38.10
12-Oct-13	8:47:20	Tour Boat	Travelling	90	47	50	23	28	0	22.3109	113.9773	1849.45	37.20
12-Oct-13	8:48:07	Delete	Travelling	90	57	30	307	44	30	22.3084	113.9571	1533.60	321.47
12-Oct-13	8:48:16	Transportation Boat	Travelling	91	4	40	302	51	20	22.3065	113.9573	1361.55	316.59
12-Oct-13	8:48:24	Transportation Boat	Travelling	90	49	20	342	24	10	22.3137	113.9652	1792.28	356.13
12-Oct-13	8:48:34	Transportation Boat	Travelling	90	36	30	352	45	30	22.3195	113.9691	2442.93	6.49
12-Oct-13	8:48:54	Speed Boat	Travelling	92	0	30	2	24	20	22.3039	113.9684	727.55	16.14
12-Oct-13	8:49:29	Transportation Boat	Travelling	90	55	10	16	38	30	22.3100	113.9743	1599.73	30.37
12-Oct-13	8:49:44	Transportation Boat	Travelling	90	58	50	286	29	50	22.3044	113.9538	1498.62	300.23
12-Oct-13	8:49:51	Transportation Boat	Travelling	90	59	40	325	23	0	22.3100	113.9613	1477.42	339.11
12-Oct-13	8:49:59	Transportation Boat	Travelling	90	42	20	348	17	20	22.3165	113.9671	2096.58	2.02
12-Oct-13	8:50:11	Speed Boat	Travelling	91	55	20	290	0	0	22.3014	113.9602	760.39	303.73
12-Oct-13	8:50:29	Transportation Boat	Travelling	90	54	30	279	20	40	22.3033	113.9519	1619.80	293.07
12-Oct-13	8:50:38	Speed Boat	Travelling	91	24	20	277	40	50	22.3010	113.9570	1041.76	291.41
12-Oct-13	8:50:51	Tour Boat	Travelling	91	28	50	5	12	0	22.3060	113.9695	988.66	18.93
12-Oct-13	8:53:10	Transportation Boat	Travelling	90	52	30	277	43	40	22.3032	113.9512	1683.08	291.46
12-Oct-13	8:53:17	Transportation Boat	Travelling	90	58	0	328	8	30	22.3106	113.9618	1521.05	341.87

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Oct-13	8:53:32	Transportation Boat	Travelling	91	10	0	4	40	50	22.3084	113.9703	1257.46	18.41
12-Oct-13	8:53:51	Fishing Boat	Operate and travelling	91	31	40	21	37	30	22.3047	113.9718	958.23	35.35
12-Oct-13	8:54:04	Tour Boat	Travelling	91	52	30	307	55	30	22.3031	113.9617	779.96	321.65
12-Oct-13	8:55:29	Construction Boat	Travelling	90	57	40	284	31	0	22.3041	113.9533	1530.34	298.25
12-Oct-13	8:57:17	Transportation Boat	Travelling	91	3	20	287	56	30	22.3042	113.9549	1391.94	301.67
12-Oct-13	8:57:32	Transportation Boat	Travelling	91	30	50	326	48	20	22.3058	113.9633	967.46	340.54
12-Oct-13	8:57:46	Construction Boat	Travelling	91	2	20	305	28	0	22.3073	113.9574	1414.63	319.20
12-Oct-13	8:58:06	Fishing Boat	Operate and travelling	91	27	10	39	47	30	22.3030	113.9743	1008.49	53.52
12-Oct-13	8:58:18	Tour Boat	Travelling	90	43	50	17	53	20	22.3131	113.9767	2024.81	31.62
12-Oct-13	8:59:40	Tour Boat	Travelling	90	47	0	343	54	30	22.3146	113.9656	1885.53	357.64
12-Oct-13	8:59:50	Transportation Boat	Travelling	90	41	0	349	4	0	22.3171	113.9674	2169.10	2.80
12-Oct-13	9:00:49	Transportation Boat	Travelling	91	20	20	291	36	0	22.3033	113.9577	1095.25	305.33
12-Oct-13	9:01:31	Fishing Boat	Non-operate and travelling	91	53	50	40	20	20	22.3017	113.9725	771.41	54.07
12-Oct-13	9:02:43	Construction Boat	Travelling	90	47	30	344	11	10	22.3144	113.9657	1865.87	357.92
12-Oct-13	9:02:54	Tour Boat	Travelling	91	12	20	349	1	10	22.3086	113.9670	1217.75	2.75
12-Oct-13	9:03:01	Tour Boat	Travelling	91	0	30	319	3	10	22.3093	113.9599	1458.90	332.78
12-Oct-13	9:03:16	Transportation Boat	Travelling	90	59	0	340	25	50	22.3110	113.9649	1496.55	354.16
12-Oct-13	9:03:54	Fishing Boat	Operate and travelling	91	39	10	42	10	20	22.3021	113.9735	886.33	55.90
12-Oct-13	9:04:25	Transportation Boat	Travelling	90	53	20	343	45	50	22.3125	113.9657	1658.37	357.49
12-Oct-13	9:05:24	Construction Boat	Travelling	90	36	10	352	15	40	22.3197	113.9689	2470.92	5.99
12-Oct-13	9:05:39	Tour Boat	Travelling	91	22	10	316	19	0	22.3060	113.9612	1071.19	330.05
12-Oct-13	9:05:46	Tour Boat	Travelling	91	1	10	292	19	10	22.3053	113.9550	1443.22	306.05
12-Oct-13	9:07:19	Tour Boat	Travelling	90	56	10	278	32	0	22.3030	113.9522	1573.88	292.26
12-Oct-13	9:07:44	Transportation Boat	Stationary	90	52	20	343	14	10	22.3128	113.9655	1691.24	356.97
12-Oct-13	9:09:30	Tour Boat	Travelling	90	58	20	278	6	10	22.3027	113.9527	1514.93	291.83
12-Oct-13	9:11:47	Transportation Boat	Travelling	90	48	0	345	11	30	22.3142	113.9661	1847.86	358.92
12-Oct-13	9:12:26	Fishing Boat	Operate and stationary	91	31	0	28	39	20	22.3040	113.9727	967.25	42.39
12-Oct-13	9:12:33	Fishing Boat	Non-operate and travelling	91	30	50	43	29	0	22.3023	113.9743	969.05	57.21
12-Oct-13	9:13:18	Transportation Boat	Travelling	90	39	30	351	28	40	22.3179	113.9684	2257.40	5.21
12-Oct-13	9:15:30	HSF High Speed Ferry	Travelling	90	43	10	347	46	10	22.3162	113.9669	2060.81	1.50
12-Oct-13	9:16:33	Tour Boat	Travelling	91	2	20	292	9	0	22.3051	113.9552	1417.54	305.88
12-Oct-13	9:16:58	Government Boat	Travelling	90	47	20	12	47	10	22.3127	113.9745	1875.53	26.52
12-Oct-13	9:17:37	Transportation Boat	Travelling	92	4	30	316	39	10	22.3031	113.9630	706.30	330.38
12-Oct-13	9:17:49	Government Boat	Travelling	91	16	10	349	58	30	22.3080	113.9671	1157.81	3.70
12-Oct-13	9:18:11	HSF High Speed Ferry	Travelling	91	2	10	312	48	0	22.3083	113.9588	1421.64	326.53
12-Oct-13	9:19:02	Government Boat	Travelling	91	13	10	284	56	40	22.3028	113.9561	1205.88	298.67
12-Oct-13	9:19:13	Transportation Boat	Travelling	91	24	0	331	42	10	22.3068	113.9638	1049.19	345.43
12-Oct-13	9:19:22	Transportation Boat	Travelling	93	15	20	328	46	30	22.3015	113.9651	449.56	342.50
12-Oct-13	9:20:17	Tour Boat	Travelling	90	57	30	330	47	0	22.3110	113.9624	1539.02	344.51
12-Oct-13	9:21:50	Transportation Boat	Travelling	95	8	40	1	58	50	22.3001	113.9671	284.01	15.71
12-Oct-13	9:21:58	Transportation Boat	Travelling	92	12	40	336	24	50	22.3035	113.9653	662.97	350.14
12-Oct-13	9:22:26	Tour Boat	Travelling	90	46	10	344	18	40	22.3149	113.9658	1925.16	358.04
12-Oct-13	9:23:11	Fishing Boat	Operate and travelling	91	50	0	29	26	10	22.3029	113.9717	800.30	43.17
12-Oct-13	9:23:24	Fishing Boat	Operate and travelling	91	0	0	42	22	50	22.3050	113.9783	1474.51	56.11
12-Oct-13	9:23:44	HSF High Speed Ferry	Travelling	90	31	50	355	40	50	22.3227	113.9709	2828.88	9.41
12-Oct-13	9:24:33	Tour Boat	Travelling	90	37	10	352	18	10	22.3192	113.9689	2407.09	6.03
12-Oct-13	9:24:47	Speed Boat	Travelling	90	43	20	347	5	50	22.3161	113.9667	2054.78	0.83
12-Oct-13	9:25:08	Transportation Boat	Travelling	95	11	40	357	58	10	22.3001	113.9670	281.36	11.70
12-Oct-13	9:25:16	Transportation Boat	Travelling	95	5	0	348	1	50	22.3002	113.9665	287.55	1.76
12-Oct-13	9:26:50	Speed Boat	Travelling	91	1	50	314	32	30	22.3086	113.9591	1430.76	328.27
12-Oct-13	9:27:02	HSF High Speed Ferry	Travelling	90	55	10	330	51	30	22.3116	113.9622	1606.33	344.59
12-Oct-13	9:28:49	HSF High Speed Ferry	Travelling	91	3	30	300	39	30	22.3064	113.9567	1393.04	314.39
12-Oct-13	9:29:19	Transportation Boat	Travelling	91	35	10	314	34	30	22.3047	113.9617	926.36	328.30
12-Oct-13	9:31:25	Fishing Boat	Non-operate and travelling	91	53	40	38	56	20	22.3018	113.9724	775.07	52.67
12-Oct-13	9:32:25	Fishing Boat	Operate and stationary	91	50	20	39	6	40	22.3020	113.9726	798.68	52.84
12-Oct-13	9:36:21	Tour Boat	Travelling	91	4	20	296	51	0	22.3057	113.9562	1375.91	310.58
12-Oct-13	9:36:33	Transportation Boat	Travelling	90	41	50	350	48	50	22.3168	113.9680	2133.27	4.54
12-Oct-13	9:38:58	Transportation Boat	Travelling	90	54	10	332	38	10	22.3120	113.9626	1638.62	346.37
12-Oct-13	9:39:11	Tour Boat	Travelling	91	0	30	323	21	10	22.3098	113.9609	1464.68	337.08
12-Oct-13	9:39:25	Tour Boat	Travelling	91	4	0	296	5	0	22.3056	113.9561	1383.63	309.81
12-Oct-13	9:39:44	Transportation Boat	Travelling	92	13	0	305	22	30	22.3021	113.9622	662.58	319.10
12-Oct-13	9:42:01	Transportation Boat	Travelling	91	0	40	296	14	40	22.3061	113.9555	1461.06	309.97
12-Oct-13	9:42:11	Transportation Boat	Travelling	92	7	50	345	22	40	22.3038	113.9663	689.65	359.11
12-Oct-13	9:42:20	Transportation Boat	Travelling	93	49	10	344	11	30	22.3011	113.9663	383.92	357.92
12-Oct-13	9:42:42	Tour Boat	Travelling	90	59	40	328	4	10	22.3103	113.9619	1485.99	341.80
12-Oct-13	9:42:48	Tour Boat	Travelling	90	45	30	346	15	10	22.3152	113.9664	1958.41	359.98
12-Oct-13	9:43:24	Transportation Boat	Travelling	90	55	10	279	25	20	22.3033	113.9520	1609.21	293.15
12-Oct-13	9:45:20	Tour Boat	Travelling	90	36	0	353	18	50	22.3199	113.9694	2493.80	7.04
12-Oct-13	9:46:06	Transportation Boat	Travelling	91	22	30	325	24	10	22.3066	113.9627	1071.54	339.13
12-Oct-13	9:46:19	Transportation Boat	Travelling	91	8	50	15	50	30	22.3077	113.9726	1286.39	29.57
12-Oct-13	9:47:54	Tour Boat	Travelling	90	35	40	352	21	20	22.3202	113.9690	2518.74	6.09
12-Oct-13	9:48:10	Transportation Boat	Travelling	91	9	10	326	6	40	22.3084	113.9621	1280.38	339.84
12-Oct-13	9:48:20	Transportation Boat	Travelling	90	55	10	17	7	40	22.3101	113.9744	1610.08	30.86
12-Oct-13	9:55:32	Transportation Boat	Travelling	91	44	50	312	9	10	22.3039	113.9618	842.90	325.88
12-Oct-13	9:55:57	Fishing Boat	Operate and stationary	91	49	30	39	40	50	22.3019	113.9727	806.84	53.41
12-Oct-13	9:57:20	Container Boat	Travelling	90	45	0	345	31	10	22.3155	113.9661	1983.86	359.25
12-Oct-13	9:57:41	Transportation Boat	Travelling	93	2	20	325	22	20	22.3017	113.9647	483.73	339.10
12-Oct-13	9:59:28	Transportation Boat	Travelling	95	48	10	355	18	20	22.2999	113.9668	252.62	9.04
12-Oct-13	9:59:39	Container Boat	Travelling	90	55	40	329	12	40	22.3114	113.9618	1597.36	342.94
12-Oct-13	10:00:01	Construction Boat	Travelling	91	0	10	301	35	10	22.3071	113.9563	1476.26	315.32
12-Oct-13	10:00:14	Transportation Boat	Travelling	91	0	40	311	14	0	22.3084	113.9582	1463.96	324.96
12-Oct-13	10:01:08	Transportation Boat	Travelling	90	55	0	307	18	40	22.3089	113.9565	1617.29	321.04
12-Oct-13	10:02:34	Container Boat	Travelling	90	57	0	307	48	50	22.3086	113.9570	1559.92	321.54
12-Oct-13	10:02:46	Construction Boat	Travelling	90	57	50	330	4	40	22.3109	113.9622	1537.14	343.81
12-Oct-13	10:07:23	Construction Boat	Travelling	90	41	0	3	14	30	22.3164	113.9726	2185.29	16.97
12-Oct-13	10:07:40	Government Boat	Travelling	90	47	0	346	54	30	22.3147	113.9666	1899.65	0.64
12-Oct-13	10:09:00	Government Boat	Travelling	91	0	30	322	50	20	22.3098	113.9607	1469.45	336.57
12-Oct-13	10:10:20	Government Boat	Travelling	90	59	20	289	29	50	22.3050	113.9542	1498.96	303.23
12-Oct-13	10:13:48	Transportation Boat	Travelling	94	20	10	340	4	40	22.3007	113.9660	339.04	353.81
12-Oct-13	10:16:00	Tug Boat	Travelling	90	43	30	354	44	30	22.3159	113.9693	2056.69	8.47
12-Oct-13	10:16:13	Construction Boat	Travelling	90	43	30	353	7	20	22.3160	113.9688	2056.65	6.85
12-Oct-13	10:17:12	Transportation Boat	Travelling	91	45	10	307	5	30	22.3035	113.9612	841.37	320.82
12-Oct-13	10:19:21	Tug Boat	Travelling	90	51	30	340	54	10	22.3131	113.9648	1730.24	354.63
12-Oct-13	10:19:30	Construction Boat	Travelling	90	49	50	339	12	10	22.3136	113.9643	1789.22	352.93
12-Oct-13	10:21:20	Tug Boat	Travelling	90	43	20	349	12	50	22.3162	113.9674	2063.94	2.94
12-Oct-13	10:21:35	Transportation Boat	Travelling	90	54	30	306	18	10	22.3089	113.9562	1633.09	320.03
12-Oct-13	10:22:22	Transportation Boat	Travelling	90	59	40	312	31	30	22.3088	113.9584	1489.53	326.25
12-Oct-13	10:23:13	Tug Boat	Travelling	91	0	20	319	15	0	22.3094	113.9599	1472.75	332.98
12-Oct-13	10:23:21	Construction Boat	Travelling	91	0	0	317	31	40	22.3093	113.9595	1481.03	331.26
12-Oct-13	10:26:12	Tug Boat	Travelling	91	1	10	309	30	40	22.3081	113.9579	1452.08	323.24
12-Oct-13	10:26:19	Construction Boat	Travelling	90	54	20	305	29	50	22.3088	113.9560	1637.57	319.23
12-Oct-13	10:26:30	Tug Boat	Travelling	90	59	20	325	3	10	22.3102	113.9611	1497.53	338.78
12-Oct-13	10:29:22	Fishing Boat	Non-operate and travelling	94	34	20	313	3	10	22.3000	113.9647	321.06	326.78
12-Oct-13	10:29:33	Tug Boat	Travelling	90	56	50	307	17	20	22.3086	113.9568	1564.01	321.02
12-Oct-13	10:29:39	Tug Boat	Travelling	90	50	20	338	42	0	22.3134	113.9641	1769.69	352.43
12-Oct-13	10:31:45	Fishing Boat	Operate and travelling	93	11	10	34	1	0	22.3004	113.9697	461.31	47.75
12-Oct-13	10:32:00	Tug Boat	Travelling	90	40	20	353	0	30	22.3175	113.9689	2220.13	6.74
12-Oct-13	10:32:40	Transportation Boat	Travelling	91	10	10	318	9	30	22.3076	113.9606	1263.18	331.89
12-Oct-13	10:33:01	Fishing Boat	Operate and travelling	92	20	0	20	52	20	22.3023	113.9699	630.51	34.60
12-Oct-13	10:33:33	Transportation Boat	Travelling	91	1	40	305	4	0	22.3074	113.9572	1439.32	318.80
12-Oct-13	10:34:00	Tug Boat	Travelling	90	47	0	349	1	10	22.3147	113.9673	1897.26	2.75
12-Oct-13	10:34:09	Construction Boat	Travelling	90	46	0	349	12	50	22.3150	113.9674	1939.44	2.94
12-Oct-13	10:34:30	Transportation Boat	Travelling	91	10	50	335	31	50	22.3087	113.9641	1250.99	349.26
12-Oct-13	10:34:39	Transportation Boat	Travelling	91	5	10	292	38	10	22.3049	113.9557	1360.98	306.37
12-Oct-13	10:35:06	Fishing Boat	Operate and travelling	93	8	0	3	57	10	22.3016	113.9678	468.99	17.68
12-Oct-13	10:36:30	Transportation Boat	Travelling	91	0	50	277	47	10	22.3024	113.9532	1458.96	291.52
12-Oct-13	10:36:39	Transportation Boat	Travelling	91	3	0	353	30	0	22.3102	113.9681	1408.14	7.23

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Oct-13	10:36:53	Fishing Boat	Non-operate and travelling	93	7	50	302	55	20	22.3007	113.9633	469.34	316.65
12-Oct-13	10:37:38	Fishing Boat	Non-operate and travelling	92	51	30	282	20	30	22.2997	113.9619	514.16	296.07
12-Oct-13	10:39:30	Tug Boat	Travelling	90	59	10	341	45	50	22.3111	113.9653	1500.28	355.49
12-Oct-13	10:39:38	Construction Boat	Travelling	90	59	10	343	11	30	22.3111	113.9656	1500.26	356.92
12-Oct-13	10:40:19	Transportation Boat	Travelling	91	1	10	338	26	40	22.3106	113.9645	1450.47	352.17
12-Oct-13	10:41:44	HSF High Speed Ferry	Travelling	91	2	0	290	18	0	22.3048	113.9549	1430.57	304.03
12-Oct-13	10:41:53	Transportation Boat	Travelling	91	1	20	300	20	0	22.3067	113.9563	1446.30	314.06
12-Oct-13	10:42:05	Transportation Boat	Travelling	91	0	10	336	8	30	22.3107	113.9639	1474.70	349.87
12-Oct-13	10:43:33	Tug Boat	Travelling	90	58	50	340	31	0	22.3111	113.9649	1508.42	354.25
12-Oct-13	10:43:41	Construction Boat	Stationary	90	59	40	340	12	20	22.3109	113.9649	1487.04	353.94
12-Oct-13	10:44:07	Transportation Boat	Travelling	90	48	10	342	30	30	22.3142	113.9652	1848.84	356.24
12-Oct-13	10:44:16	HSF High Speed Ferry	Travelling	90	52	50	336	14	10	22.3125	113.9635	1682.50	349.97
12-Oct-13	10:44:54	Transportation Boat	Travelling	90	54	0	279	10	0	22.3034	113.9517	1645.44	292.90
12-Oct-13	10:45:41	Tug Boat	Travelling	90	52	30	343	18	20	22.3128	113.9655	1693.18	357.04
12-Oct-13	10:45:50	HSF High Speed Ferry	Travelling	90	39	0	352	2	10	22.3182	113.9686	2295.97	5.77
12-Oct-13	10:55:58	Fishing Boat	Operate and travelling	96	8	20	325	42	10	22.2996	113.9656	238.19	339.43
12-Oct-13	10:56:18	Transportation Boat	Travelling	91	28	10	310	31	40	22.3049	113.9607	1001.56	324.26
12-Oct-13	10:58:37	Transportation Boat	Travelling	91	1	50	13	29	50	22.3091	113.9728	1432.57	27.23
12-Oct-13	10:58:46	Transportation Boat	Travelling	92	23	50	323	10	30	22.3027	113.9641	612.41	336.90
12-Oct-13	10:59:43	Fishing Boat	Operate and travelling	95	42	30	304	50	0	22.2993	113.9648	256.22	318.56
12-Oct-13	11:00:16	Transportation Boat	Travelling	91	11	10	0	34	30	22.3085	113.9694	1242.56	14.30
12-Oct-13	11:01:28	Transportation Boat	Travelling	95	18	50	2	3	30	22.3000	113.9671	275.33	15.79
12-Oct-13	11:02:13	Tug Boat	Travelling	91	0	10	313	11	30	22.3087	113.9586	1472.37	326.92
12-Oct-13	11:02:27	Transportation Boat	Travelling	91	21	50	338	45	30	22.3072	113.9650	1079.12	352.49
12-Oct-13	11:02:40	Transportation Boat	Travelling	91	4	40	302	34	20	22.3065	113.9572	1368.61	316.30
12-Oct-13	11:03:02	Tug Boat	Travelling	90	57	30	333	0	20	22.3111	113.9630	1541.55	346.74
12-Oct-13	11:03:51	Transportation Boat	Travelling	94	27	40	348	28	20	22.3006	113.9665	328.21	2.20
12-Oct-13	11:04:04	Transportation Boat	Travelling	91	27	40	320	29	40	22.3058	113.9621	1006.69	334.22
12-Oct-13	11:04:12	Transportation Boat	Travelling	91	3	20	283	40	30	22.3034	113.9543	1397.61	297.40
12-Oct-13	11:04:23	Tug Boat	Travelling	90	54	10	334	29	50	22.3120	113.9631	1637.78	348.23
12-Oct-13	11:04:32	Tug Boat	Travelling	91	1	10	318	59	40	22.3092	113.9599	1447.71	332.72
12-Oct-13	11:04:52	Transportation Boat	Travelling	91	1	50	313	8	50	22.3084	113.9588	1431.87	326.88
12-Oct-13	11:05:18	Fishing Boat	Operate and travelling	95	36	50	302	25	30	22.2993	113.9646	260.45	316.15
12-Oct-13	11:06:06	Tug Boat	Travelling	90	46	20	346	50	40	22.3149	113.9666	1920.31	0.57
12-Oct-13	11:06:15	Tug Boat	Travelling	91	5	10	318	36	0	22.3084	113.9603	1357.61	332.33
12-Oct-13	11:06:30	Transportation Boat	Travelling	93	0	0	328	17	40	22.3018	113.9649	488.70	342.02
12-Oct-13	11:06:39	Transportation Boat	Travelling	91	15	0	293	8	0	22.3040	113.9572	1177.89	306.86
12-Oct-13	11:06:46	Transportation Boat	Travelling	90	56	20	332	43	20	22.3114	113.9628	1573.50	346.45
12-Oct-13	11:06:56	Container Boat	Travelling	90	55	50	307	22	50	22.3087	113.9567	1587.79	321.11
12-Oct-13	11:08:08	Tug Boat	Travelling	90	38	50	356	31	30	22.3180	113.9704	2302.07	10.25
12-Oct-13	11:08:14	Tug Boat	Travelling	91	0	10	338	10	20	22.3107	113.9644	1471.67	351.90
12-Oct-13	11:08:24	Transportation Boat	Travelling	92	6	0	322	19	20	22.3034	113.9636	698.90	336.05
12-Oct-13	11:08:34	Transportation Boat	Travelling	91	2	50	278	44	10	22.3025	113.9537	1408.38	292.47
12-Oct-13	11:08:55	Transportation Boat	Travelling	90	51	10	340	48	20	22.3132	113.9648	1734.94	354.54
12-Oct-13	11:09:26	Container Boat	Travelling	90	57	50	328	20	30	22.3107	113.9618	1531.76	342.07
12-Oct-13	11:09:37	Tug Boat	Travelling	91	0	10	334	54	20	22.3106	113.9636	1471.51	348.64
12-Oct-13	11:11:40	Transportation Boat	Travelling	91	14	40	311	50	40	22.3064	113.9599	1182.73	325.57
12-Oct-13	11:11:45	Transportation Boat	Travelling	90	59	10	330	23	20	22.3106	113.9624	1496.48	344.12
12-Oct-13	11:11:56	Container Boat	Travelling	90	45	0	345	52	50	22.3154	113.9663	1977.67	359.61
12-Oct-13	11:12:07	Transportation Boat	Travelling	91	3	50	306	43	0	22.3072	113.9578	1385.66	320.45
12-Oct-13	11:14:04	Transportation Boat	Travelling	90	55	50	307	27	20	22.3087	113.9567	1586.90	321.19
12-Oct-13	11:14:13	Tug Boat	Travelling	90	58	40	282	27	0	22.3036	113.9532	1509.12	296.18
12-Oct-13	11:14:25	Container Boat	Travelling	90	34	0	352	53	20	22.3212	113.9694	2641.39	6.62
12-Oct-13	11:16:03	HSF High Speed Ferry	Travelling	90	35	20	351	39	40	22.3204	113.9687	2537.27	5.39
12-Oct-13	11:16:26	Transportation Boat	Travelling	91	7	0	297	43	40	22.3055	113.9568	1318.99	311.46
12-Oct-13	11:18:39	HSF High Speed Ferry	Travelling	90	54	40	332	34	30	22.3118	113.9627	1620.73	346.30
12-Oct-13	11:19:17	Transportation Boat	Travelling	91	23	40	276	52	0	22.3010	113.9568	1053.90	290.60
12-Oct-13	11:19:30	Transportation Boat	Travelling	91	4	10	299	9	20	22.3061	113.9566	1377.58	312.89
12-Oct-13	11:19:57	Speed Boat	Travelling	91	3	10	300	33	0	22.3064	113.9567	1399.60	314.28
12-Oct-13	11:20:22	Fishing Boat	Operate and travelling	93	18	40	283	14	40	22.2994	113.9626	442.16	296.97
12-Oct-13	11:20:42	HSF High Speed Ferry	Travelling	91	2	0	298	57	40	22.3063	113.9562	1426.19	312.69
12-Oct-13	11:20:56	Speed Boat	Travelling	91	3	0	277	54	30	22.3023	113.9537	1403.25	291.64
12-Oct-13	11:21:05	Transportation Boat	Travelling	91	0	20	279	22	0	22.3028	113.9533	1466.07	293.10
12-Oct-13	11:22:02	HSF High Speed Ferry	Travelling	90	55	0	278	24	0	22.3031	113.9519	1610.32	292.13
12-Oct-13	11:22:29	Transportation Boat	Travelling	90	56	20	308	16	20	22.3088	113.9570	1571.55	322.00
12-Oct-13	11:26:09	Transportation Boat	Travelling	91	38	20	322	38	50	22.3050	113.9629	895.32	336.38
12-Oct-13	11:28:46	Transportation Boat	Travelling	93	56	10	342	24	10	22.3010	113.9662	371.47	356.13
12-Oct-13	11:29:02	Transportation Boat	Travelling	90	58	30	290	23	30	22.3053	113.9542	1511.72	304.12
12-Oct-13	11:30:45	Transportation Boat	Travelling	90	58	40	306	34	10	22.3081	113.9570	1507.16	320.30
12-Oct-13	11:30:54	Transportation Boat	Travelling	91	49	20	290	19	0	22.3017	113.9599	804.51	304.05
12-Oct-13	11:31:19	Transportation Boat	Travelling	90	53	20	306	49	10	22.3092	113.9561	1660.28	320.55
12-Oct-13	11:32:22	Transportation Boat	Travelling	91	6	10	305	13	10	22.3067	113.9579	1334.11	318.95
12-Oct-13	11:32:41	Transportation Boat	Travelling	92	18	40	313	10	40	22.3024	113.9630	633.63	326.91
12-Oct-13	11:34:28	Transportation Boat	Travelling	92	9	20	341	40	30	22.3037	113.9659	679.43	355.40
12-Oct-13	11:34:40	Transportation Boat	Travelling	92	10	40	318	20	10	22.3030	113.9633	672.46	332.07
12-Oct-13	11:34:46	Transportation Boat	Travelling	91	6	30	298	40	40	22.3057	113.9569	1327.10	312.41
12-Oct-13	11:36:24	Transportation Boat	Travelling	91	38	40	1	56	20	22.3053	113.9687	891.56	15.67
12-Oct-13	11:36:30	Transportation Boat	Travelling	95	16	0	0	53	20	22.3000	113.9671	277.06	14.62
12-Oct-13	11:36:39	Transportation Boat	Travelling	90	59	40	282	8	0	22.3034	113.9534	1480.86	295.86
12-Oct-13	11:38:23	Transportation Boat	Travelling	91	16	40	8	26	50	22.3072	113.9706	1149.19	22.18
12-Oct-13	11:38:41	Transportation Boat	Travelling	91	1	0	304	31	20	22.3073	113.9570	1447.82	318.25
12-Oct-13	11:39:03	Tug Boat	Travelling	90	54	10	306	24	0	22.3089	113.9562	1633.31	320.13
12-Oct-13	11:39:49	Transportation Boat	Travelling	94	51	30	324	22	50	22.3001	113.9653	300.40	338.11
12-Oct-13	11:40:08	Tug Boat	Travelling	91	6	30	308	18	10	22.3070	113.9585	1326.54	322.03
12-Oct-13	11:40:14	Tug Boat	Travelling	91	1	20	286	12	40	22.3041	113.9543	1439.68	299.94
12-Oct-13	11:40:22	Transportation Boat	Travelling	90	55	30	277	37	20	22.3028	113.9520	1593.27	291.35
12-Oct-13	11:41:16	Transportation Boat	Travelling	92	21	10	286	33	0	22.3004	113.9612	621.95	300.28
12-Oct-13	11:41:28	Tug Boat	Travelling	91	3	0	300	44	0	22.3065	113.9567	1400.98	314.46
12-Oct-13	11:41:44	Transportation Boat	Travelling	91	1	30	304	14	10	22.3072	113.9571	1435.56	317.97
12-Oct-13	11:42:05	Transportation Boat	Travelling	91	43	20	278	48	10	22.3006	113.9588	850.71	292.53
12-Oct-13	11:43:05	Transportation Boat	Travelling	90	54	40	279	48	20	22.3034	113.9520	1617.61	293.54
12-Oct-13	11:43:15	Tug Boat	Travelling	91	1	0	321	37	50	22.3095	113.9605	1447.30	335.36
12-Oct-13	11:50:00	Tug Boat	Travelling	90	52	10	341	27	0	22.3128	113.9650	1695.57	355.18
12-Oct-13	11:51:01	Tug Boat	Travelling	90	49	30	343	31	40	22.3137	113.9656	1788.55	357.26
12-Oct-13	11:51:17	construction boat	Travelling	90	50	40	343	8	0	22.3133	113.9655	1746.53	356.86
12-Oct-13	11:57:37	Tug Boat	Travelling	90	37	50	356	30	30	22.3185	113.9705	2355.71	10.24
12-Oct-13	11:57:46	Construction Boat	Travelling	90	38	40	355	50	30	22.3181	113.9701	2303.21	9.57
12-Oct-13	11:59:01	Tug Boat	Travelling	90	50	20	9	27	10	22.3122	113.9731	1757.24	23.18
12-Oct-13	11:59:14	Container Boat	Travelling	90	50	50	10	41	50	22.3119	113.9734	1739.60	24.43
12-Oct-13	12:04:07	Tug Boat	Travelling	90	36	20	11	38	0	22.3176	113.9766	2455.30	25.36
12-Oct-13	12:04:13	Container Boat	Travelling	90	37	0	11	32	30	22.3172	113.9764	2409.41	25.27
12-Oct-13	12:04:34	Transportation Boat	Travelling	91	3	10	291	48	50	22.3049	113.9554	1394.69	305.54
12-Oct-13	12:05:37	Transportation Boat	Travelling	90	59	10	306	50	10	22.3080	113.9572	1490.13	320.57
12-Oct-13	12:06:03	Transportation Boat	Travelling	90	53	30	306	14	30	22.3090	113.9561	1650.48	319.97
12-Oct-13	12:16:18	Tug Boat	Travelling	90	43	30	18	58	40	22.3130	113.9771	2037.18	32.71
12-Oct-13	12:16:32	Container Boat	Stationary	90	41	0	16	48	20	22.3144	113.9771	2164.91	30.54
12-Oct-13	12:25:02	Research Vessel	Travelling	90	29	10	353	33	10	22.3252	113.9702	3086.04	7.28
12-Oct-13	12:26:12	Transportation Boat	Travelling	94	2	50	333	55	30	22.3008	113.9657	359.60	347.65
12-Oct-13	12:29:40	Construction Boat	Travelling	90	46	50	345	3	40	22.3146	113.9660	1886.81	358.79
12-Oct-13	12:29:52	Research Vessel	Travelling	90	44	50	343	11	0	22.3153	113.9654	1972.96	356.91
12-Oct-13	12:30:07	Transportation Boat	Travelling	91	13	20	312	56	50	22.3066	113.9600	1197.01	326.68
12-Oct-13	12:30:50	Tug Boat	Travelling	90	34	30	20	31	20	22.3169	113.9806	2585.60	34.25
12-Oct-13	12:31:00	Container Boat	Travelling	90	35	0	20	22	30	22.3166	113.9803	2547.11	34.10
12-Oct-13	12:32:44	Transportation Boat	Travelling	90	50	50	308	37	0	22.3100	113.9561	1734.98	322.35
12-Oct-13	12:32:58	Research Vessel	Travelling	90	58	0	322	47	20	22.3101	113.9605	1517.25	336.52
12-Oct-13	12:33:13	Construction Boat	Travelling	90	55	50	327	29	40	22.3111	113.9615	1577.00	341.22
12-Oct-13	12:35:01	Tour Boat	Travelling	90	28	0	350	39	50	22.3265	113.9688	3220.35	4.39

Appendix II. (cont'd)

Date	Time	Fix Type	Fix Type Behaviour	Fix Vert Degrees	Fix Vert Minutes	Fix Vert Seconds	Fix Horz Degrees	Fix Horz Minutes	Fix Horz Seconds	Fix Latitude	Fix Longitude	Distance	Bearing
12-Oct-13	12:36:05	Tour Boat	Travelling	90	30	10	353	13	20	22.3242	113.9699	2975.22	6.95
12-Oct-13	12:36:21	Research Vessel	Travelling	90	59	0	290	27	20	22.3052	113.9544	1490.77	304.19
12-Oct-13	12:37:51	Research Vessel	Travelling	90	54	10	277	54	20	22.3030	113.9517	1625.72	291.64
12-Oct-13	12:38:09	Tour Boat	Travelling	90	43	0	349	20	50	22.3161	113.9675	2057.91	3.08
12-Oct-13	12:41:47	Tug Boat	Travelling	91	5	30	301	8	10	22.3061	113.9572	1340.48	314.87
12-Oct-13	12:42:02	Tour Boat	Travelling	90	54	10	332	48	30	22.3118	113.9627	1625.18	346.54
12-Oct-13	12:42:12	Tour Boat	Travelling	90	59	50	320	15	10	22.3095	113.9601	1469.04	333.98
12-Oct-13	12:44:25	Tug Boat	Travelling	91	4	50	275	35	20	22.3017	113.9540	1354.14	289.32
12-Oct-13	12:44:40	Tour Boat	Travelling	91	1	10	294	25	10	22.3056	113.9554	1436.32	308.15
12-Oct-13	12:46:10	Tour Boat	Travelling	91	0	0	291	3	50	22.3051	113.9547	1464.44	304.79
12-Oct-13	12:46:20	Tour Boat	Travelling	90	56	10	279	7	0	22.3031	113.9524	1565.87	292.85
12-Oct-13	12:46:57	Government Boat	Travelling	90	41	20	348	6	40	22.3169	113.9671	2141.73	1.84
12-Oct-13	12:47:44	Tour Boat	Travelling	90	54	40	277	6	10	22.3028	113.9518	1609.35	290.83
12-Oct-13	12:48:13	Transportation Boat	Travelling	90	59	40	288	52	10	22.3048	113.9543	1472.50	302.60
12-Oct-13	12:48:27	Government Boat	Travelling	90	57	40	322	22	20	22.3102	113.9604	1524.28	336.10
12-Oct-13	12:49:08	Transportation Boat	Travelling	91	13	50	329	12	30	22.3078	113.9630	1187.04	342.94
12-Oct-13	12:49:52	Transportation Boat	Travelling	91	0	20	305	32	30	22.3075	113.9572	1455.82	319.27
12-Oct-13	12:50:02	Government Boat	Travelling	90	56	0	282	50	0	22.3039	113.9527	1570.14	296.56
12-Oct-13	12:50:15	Transportation Boat	Travelling	91	12	20	328	29	30	22.3080	113.9628	1211.78	342.22
12-Oct-13	12:50:27	Transportation Boat	Travelling	90	56	40	304	14	0	22.3080	113.9563	1551.33	317.96
12-Oct-13	12:50:37	Transportation Boat	Travelling	90	56	40	306	1	30	22.3083	113.9567	1551.31	319.75
12-Oct-13	12:51:36	Transportation Boat	Travelling	91	1	40	297	35	10	22.3061	113.9560	1423.74	311.32
12-Oct-13	12:51:54	Transportation Boat	Travelling	91	8	30	326	10	50	22.3084	113.9621	1280.12	339.91
12-Oct-13	12:53:14	Transportation Boat	Travelling	90	56	0	279	16	10	22.3031	113.9523	1569.74	293.00
12-Oct-13	12:57:05	Research Vessel	Travelling	91	33	0	298	35	0	22.3033	113.9596	940.21	312.31
12-Oct-13	12:57:32	Tug Boat	Travelling	90	59	20	282	6	20	22.3034	113.9534	1479.79	295.84
12-Oct-13	13:00:26	Tug Boat	Travelling	91	10	40	308	4	30	22.3064	113.9589	1239.64	321.80
12-Oct-13	13:00:36	Research Vessel	Travelling	91	47	20	350	41	20	22.3049	113.9670	813.80	4.42
12-Oct-13	13:03:08	Tug Boat	Travelling	90	47	20	347	43	40	22.3144	113.9669	1861.47	1.46
12-Oct-13	13:03:56	Research Vessel	Travelling	91	6	20	21	31	30	22.3073	113.9738	1321.13	35.25
12-Oct-13	13:05:40	Tour Boat	Travelling	91	0	30	291	58	20	22.3052	113.9549	1449.93	305.70
12-Oct-13	13:05:54	Transportation Boat	Travelling	90	56	20	287	19	30	22.3049	113.9534	1558.74	301.05
12-Oct-13	13:06:05	Tug Boat	Travelling	91	0	40	320	13	50	22.3093	113.9602	1445.85	333.96
12-Oct-13	13:06:20	Research Vessel	Travelling	90	48	30	30	17	10	22.3094	113.9787	1815.29	44.02
12-Oct-13	13:07:51	Transportation Boat	Travelling	91	1	10	306	11	30	22.3075	113.9574	1433.68	319.92
12-Oct-13	13:08:27	Transportation Boat	Travelling	90	54	40	304	48	0	22.3085	113.9561	1606.70	318.53
12-Oct-13	13:08:47	Tour Boat	Travelling	91	0	40	321	7	10	22.3094	113.9604	1445.54	334.85
12-Oct-13	13:09:00	Research Vessel	Travelling	90	37	10	34	54	0	22.3118	113.9838	2385.80	48.63
12-Oct-13	13:09:11	Tug Boat	Travelling	90	57	30	284	36	0	22.3041	113.9533	1526.24	298.33
12-Oct-13	13:12:41	Tour Boat	Travelling	90	43	10	345	52	40	22.3160	113.9663	2044.11	359.61
12-Oct-13	13:12:48	Tour Boat	Travelling	91	4	10	303	16	20	22.3066	113.9573	1365.30	317.00
12-Oct-13	13:19:02	Government Boat	Travelling	91	30	10	319	12	50	22.3054	113.9621	968.25	332.94
12-Oct-13	13:19:16	Tour Boat	Travelling	90	40	50	349	0	20	22.3171	113.9674	2163.13	2.74
12-Oct-13	13:19:23	Tour Boat	Travelling	90	31	20	355	3	40	22.3230	113.9706	2848.58	8.79
12-Oct-13	13:19:40	Government Boat	Travelling	91	9	20	351	14	10	22.3089	113.9675	1261.79	4.97
12-Oct-13	13:20:31	Government Boat	Travelling	90	44	0	10	52	50	22.3140	113.9745	2003.15	24.61
12-Oct-13	13:21:01	Government Boat	Travelling	90	35	40	16	48	50	22.3169	113.9787	2487.58	30.54
12-Oct-13	13:31:38	Transportation Boat	Travelling	91	9	10	312	30	10	22.3071	113.9596	1263.66	326.23
12-Oct-13	13:34:53	Transportation Boat	Travelling	91	1	0	281	33	50	22.3031	113.9538	1434.56	295.29
12-Oct-13	13:42:02	Transportation Boat	Travelling	91	0	30	304	58	0	22.3074	113.9571	1445.75	318.70
12-Oct-13	13:43:10	Transportation Boat	Travelling	90	58	40	286	2	50	22.3043	113.9538	1491.42	299.78
12-Oct-13	13:43:50	Transportation Boat	Travelling	90	53	50	276	38	20	22.3027	113.9516	1627.39	290.37
12-Oct-13	13:47:52	Transportation Boat	Travelling	90	59	30	313	39	10	22.3088	113.9587	1469.69	327.38
12-Oct-13	13:50:02	Transportation Boat	Travelling	90	49	20	338	56	10	22.3135	113.9642	1777.80	352.67
12-Oct-13	13:50:11	Transportation Boat	Travelling	90	56	10	283	23	40	22.3040	113.9529	1557.93	297.12
12-Oct-13	13:50:24	Transportation Boat	Travelling	90	38	40	349	45	20	22.3181	113.9677	2282.51	3.49
12-Oct-13	13:52:09	Transportation Boat	Travelling	90	36	20	350	47	30	22.3195	113.9683	2434.09	4.52
12-Oct-13	13:52:17	Transportation Boat	Travelling	91	1	30	304	42	30	22.3072	113.9572	1420.78	318.44
12-Oct-13	13:52:27	Transportation Boat	Travelling	90	50	40	338	11	20	22.3130	113.9640	1729.78	351.92
12-Oct-13	13:53:08	Transportation Boat	Travelling	90	53	50	306	10	0	22.3088	113.9562	1626.19	319.90
12-Oct-13	13:56:30	Transportation Boat	Travelling	91	0	30	288	39	10	22.3046	113.9545	1444.08	302.38
12-Oct-13	13:56:48	Tug Boat	Travelling	90	38	40	349	13	50	22.3181	113.9675	2281.34	2.96
12-Oct-13	13:57:25	Transportation Boat	Travelling	90	55	20	278	12	40	22.3029	113.9521	1580.85	291.94
12-Oct-13	14:02:18	Tug Boat	Travelling	91	0	50	308	4	0	22.3078	113.9578	1435.40	321.80
12-Oct-13	14:02:38	Transportation Boat	Travelling	91	3	40	291	50	0	22.3048	113.9556	1370.70	305.56
12-Oct-13	14:03:54	Transportation Boat	Travelling	90	56	0	306	0	10	22.3083	113.9566	1560.93	319.73
12-Oct-13	14:04:31	Transportation Boat	Travelling	90	50	40	307	7	40	22.3097	113.9558	1728.11	320.86
12-Oct-13	14:04:39	Tug Boat	Travelling	90	55	40	282	45	30	22.3039	113.9527	1570.33	296.49
12-Oct-13	14:14:47	Other	Stationary	91	13	40	310	47	50	22.3063	113.9597	1181.69	324.53
12-Oct-13	14:14:59	Other	Stationary	91	0	20	340	33	20	22.3106	113.9650	1445.99	354.29
12-Oct-13	14:15:10	Other	Stationary	90	28	30	347	37	50	22.3258	113.9671	3134.52	1.36
12-Oct-13	14:15:20	Other	Stationary	90	38	40	357	53	20	22.3177	113.9709	2277.94	11.62
12-Oct-13	14:15:31	Other	Stationary	90	37	40	359	10	10	22.3182	113.9715	2340.45	12.90
12-Oct-13	14:15:36	Other	Stationary	90	37	30	359	24	30	22.3182	113.9716	2351.20	13.14
12-Oct-13	14:15:44	Other	Stationary	90	35	30	1	4	30	22.3193	113.9726	2488.71	14.80
12-Oct-13	14:15:54	Other	Stationary	90	34	0	3	28	40	22.3200	113.9739	2603.10	17.21
12-Oct-13	14:16:03	Other	Stationary	90	32	20	3	56	10	22.3211	113.9745	2743.52	17.67
12-Oct-13	14:16:15	Other	Stationary	90	33	10	7	17	20	22.3201	113.9757	2671.37	21.02
12-Oct-13	14:16:24	Other	Stationary	90	33	0	7	39	40	22.3201	113.9759	2685.44	21.39
12-Oct-13	14:16:46	Other	Stationary	91	8	0	325	43	40	22.3084	113.9620	1280.96	339.46
12-Oct-13	14:16:52	Other	Stationary	91	8	0	326	58	20	22.3085	113.9623	1280.95	340.70
12-Oct-13	14:17:14	Other	Stationary	90	53	0	17	11	30	22.3103	113.9746	1649.01	30.92
12-Oct-13	14:17:24	Other	Stationary	90	53	50	17	57	40	22.3100	113.9747	1623.03	31.69
12-Oct-13	14:17:43	Other	Stationary	90	50	30	353	3	50	22.3131	113.9684	1732.09	6.79
12-Oct-13	14:17:51	Other	Stationary	90	51	20	354	32	10	22.3128	113.9688	1703.43	8.27
12-Oct-13	14:18:00	Other	Stationary	91	14	20	7	9	30	22.3075	113.9705	1170.70	20.89
12-Oct-13	14:18:09	Other	Stationary	91	14	0	9	29	30	22.3073	113.9709	1176.00	23.22
12-Oct-13	14:18:31	Other	Stationary	90	51	20	352	20	20	22.3129	113.9682	1703.35	6.07
12-Oct-13	14:18:38	Other	Stationary	90	48	0	2	14	20	22.3134	113.9713	1824.02	15.97
12-Oct-13	14:19:09	Other	Stationary	91	9	20	315	55	30	22.3074	113.9602	1255.84	329.65

Annex H

Baseline Monitoring Report for Underwater Noise and Dolphin Acoustic Behavioural Monitoring

CONTRACT NO. HY/2012/07
Hong Kong-Zhuhai-Macao Bridge
Tuen Mun – Chek Lap Kok Link (Southern Connection Viaduct Section)
Baseline Monitoring Report for Underwater Noise and Dolphin Acoustic Behavioural Monitoring

Prepared by Hong Kong Cetacean Research Project (Professor Bernd Würsig, Dr. Katherine Kim, Dr. Marc Lammers, Dr. Lisa Munger and Dr. Samuel Hung)

December 30, 2013

1. INTRODUCTION

The Tuen Mun-Chek Lap Kok Link (TM-CLKL) comprises a 1.6 km long dual 2-lane viaduct section between the Hong Kong Boundary Crossing Facilities (HKBCF) and the North Lantau Highway and associated roads at Tai Ho. Gammon Construction Limited (hereinafter called the "Contractor") was awarded as the main contractor of Contract No. HY/2012/07 – Hong Kong-Zhuhai-Macao Bridge (HZMB) Tuen Mun-Chek Lap Kok Link (TM-CLKL) – Southern Connection Viaduct Section.

According to Section 6.4.5. of the TM-CLKL EM&A Manual, a bored piling monitoring programme in relation to Chinese white dolphins (a.k.a Indo-Pacific humpback dolphins, *Sousa chinensis*) shall be conducted during baseline and construction phases. These include underwater noise levels measurements to evaluate the details of frequency and intensity spectra of the bored piling noise in relation to dolphin acoustic behaviours, and dolphin acoustic behavioural monitoring to record and note any changes in response of dolphins to the bored piling noise. Such monitoring shall be undertaken by qualified dolphin specialists who have sufficient relevant post-graduate experience and publication in the respective aspects. Approval of the specialists responsible for these bored piling monitoring studies shall be sought from AFCD and EPD, and Drs. Bernd Würsig, Marc Lammers, Lisa Munger and Katherine Kim were selected and approved.

This monitoring assessment of underwater noise and dolphin acoustic behaviour for the initial baseline phase details the methodology and results in the baseline phase (September 26 to October 25, 2013) to meet the requirement in the particular specification and EM&A Manual. The present

data will need to be compared to construction and post-construction phases in due time.

2. METHODS AND MATERIALS

2.1. Overall Objective and Scheme

For the underwater noise study, the primary objectives were to measure and characterize: (1) baseline ambient noise levels during the pre-construction phase of development; and (2) industrial noise levels associated with bored piling activities during the construction phase. The results obtained from this study, in conjunction with the concurrent dolphin acoustic behavioural and shore-based theodolite tracking studies, would provide guidance with respect to mitigation for the resident dolphin population.

On the other hand, the primary objective of the dolphin acoustic behavioural study was to investigate their acoustic behaviour and movement in response to bored piling sites during both baseline and construction phases. Overall, a set of parameters such as the presence of dolphin acoustic signaling, durations of periods of acoustic activity, relative occurrence of different kinds of signals per unit time and shifts in the time of day of acoustic activity were quantified. Other factors would also need to be measured concurrently during baseline and construction phases in order to understand whether any observed differences in acoustic behaviour of dolphins may represent a reaction to the bored piling works, or are an artifact of other factors. To achieve this goal, the primary approach was to conduct dedicated acoustic surveys of focal follows of Chinese white dolphins in North Lantau with sound recordings taken from a dipping hydrophone deployed from the research vessel, and their movements near the bored piling site were also monitored during focal follow sessions for both baseline and construction phases. These recordings were used to establish baseline acoustic behaviour of the dolphins (e.g. rate of sound production, types of sounds), and its relation to visually determined dolphin group size, behaviour (e.g. foraging, socializing, traveling, milling) and covariates such as the time of day, Beaufort sea state, and occurrence of nearby vessels. Types, distances, and behaviours of vessels will be determined from the recording vessel using laser rangefinder.

A complementary approach for the acoustic data collection was to deploy two sets of ecological acoustic recorders (EARs) near the bored piling site and at a control site for passive acoustic monitoring during both baseline and construction phases. The EARs are bottom-moored, autonomous acoustic recording systems that are used to monitor ambient sounds on a programmable duty cycle (see detailed specifications of EAR in Lammers et al. 2008). They have a

programmable bandwidth up to 40 kHz and can be deployed from days to months at a time. Based on past experience in other areas, the effective detection range of EARs on dolphin signals in Hong Kong waters is estimated to be between 500-1,000 metres.

2.2. Monitoring Location

To characterize the local soundscape, underwater sound data collection were conducted mostly in the northeastern waters of Lantau Island during baseline phases where bored piling activities in association with TM-CLKL construction will occur. Sound measurements were made at various distances from six bored piling sites along the TM-CLKL alignment (Figure 1), to allow estimation of a simple acoustic propagation model for the region where bored piling activities will occur during the construction phase. The numberings and locations of these six bored piling sites to be monitored during baseline phase were listed as follow (some of the bored piling works from different pier sites will be conducted concurrently), and three of these six sites will be chosen for impact phase monitoring from the start of the bored piling activities when the initial phase of the construction schedule is confirmed:

Pier No.	Northing	Easting	Number of Bored Piles	Tentative Starting and Ending Months since Commencement of Marine Bored Pile Construction**
B1	818342	814940	3	Month 9-14
B2	818306	814987	2	Month 9-14
B3	818261	815028	2	Month 9-14
B5	818152	815081	2	Month 9-14
B6	818094	815091	3	Month 9-14
B7	818035	815093	2	Month 9-11

** As the commencement date of the works under the contract was 22 June 2013, which is month 0, Month 9-14 would represent March-August 2014, while Month 9-11 would represent March-May 2014.

Moreover, the dolphin acoustic behavioural study were conducted concurrently with the underwater noise study mostly in the northeastern waters of Lantau Island where the bored piling activities will occur. For this study, the research vessel would follow a predefined route for systematic search effort in Northeast Lantau region to cover the area overlapped with the TM-CLKL alignment (Figure 2), where dolphins will be potentially disturbed by the bored piling works during the construction phase. The acoustic surveys would also cover some part of Northwest Lantau waters as control sites, where dolphins were likely encountered for acoustic data collection

but would not be disturbed by the bored piling activities (e.g. Sha Chau, Lung Kwu Chau, Black Point).

The EARs were deployed at two locations: 1) within 500 m of the bridge alignment (Site C1: N 818198, E 814807), and 2) a control site between Sha Chau and Lung Kwu Chau (Site C2: N 825101, E 806072), a less disturbed site relatively far away from the bridge alignment (Figure 2). The scientific permit obtained from AFCD to deploy the EAR within the Sha Chau and Lung Kwu Chau Marine Park (i.e. Site C2) was attached with this report.

2.3. Monitoring Methodology

2.3.1. Underwater noise study using dipping hydrophone

The underwater sound recording system consists of a high-sensitivity, high-bandwidth hydrophone (International Transducer Corporation ITC-6050c) and two-channel audio recorder (Sound Devices 702T). The hydrophone was deployed from the stern of the research vessel, a deployment scheme sometimes referred to as a "dipping hydrophone", approximately mid-water column at a depth of 5 m beneath a 2 m spar buoy. The hydrophone cable was faired to streamline water flow around the cable, reducing pseudonoise and eliminating cable vibration. The vessel would "go quiet" (its engine, generator, bilge pump, and depth sounder turned off) and drift for the duration of each recording. The recording system and deployment method generally followed that of another well-established study of underwater sounds in Hong Kong waters (Würsig and Greene 2002).

The ITC-6050c is a wide-band hydrophone with a built-in, low-noise preamplifier for optimum noise performance. Its nominal operating band is 30 Hz to 70 kHz, and its self-noise level is well below Knudsen Sea State 0 up to 20 kHz. The hydrophone signal would be amplified as needed via a postamplifier with user-selectable gains from 0 to 60 dB in 10 dB increments. The audio recorder was configured to sample 16-bit data received on each of its two channels at a rate of 192 kHz, thus allowing analysis of the acoustic data up to 96 kHz. According to Section 6.4.5 of the EM&A Manual, "the acoustic results of the monitoring should be analyzed in terms of both the broadband range (100 Hz to 25.6 kHz) and, also, the dolphin sensitive range (400 Hz to 12.6 kHz)." In compliance with the EM&A Manual requirement, the acoustic data collected from the present underwater noise study was analyzed between 30 Hz and 40 kHz, avoiding a hydrophone resonance frequency at 50 kHz.

Observers would log document the recording date, start and end times, hydrophone and water

depths, Beaufort sea state, survey area, and postamplifier gain in each recording. Wind speed, often directly correlated with underwater levels, were measured and documented in the survey team's logs. The wind speed measurements were performed with a handheld Kestrel 1000 anemometer, containing an impeller with precision axle and low-friction bearings, providing 0.1 m/s resolution between 0.6–40.0 m/s and an accuracy (calculated using two standard deviations) of the larger of 3% of the reading, least significant digit, or 0.1 m/s.

2.3.2. Dolphin acoustic behavioural study using dipping hydrophone

During dedicated acoustic surveys, the survey team of 2-3 HKCRP researchers conducted systematic search for dolphins within the study area. The survey protocol to search for dolphins was similar to the line-transect survey methodology adopted in the vessel survey under the AFCD long-term marine mammal monitoring programme (Hung 2012, 2013) as well as various HZMB EM&A dolphin monitoring programmes. For each survey, a 15-m inboard vessel with an open upper deck was used to make observations from the flying bridge area, at a visual height of 4-5 m above water surface. The two observers searched with unaided eyes and 7 x 50 marine binoculars ahead of the vessel (between 270° and 90° in relation to the bow, which is defined as 0°). The survey team recorded effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance travelled in each series (a continuous period of search effort) with the assistance of a handheld GPS.

When dolphins were sighted, the survey team ended the search effort, and the research vessel was diverted from its course to slowly approach the animals for group size estimation, assessment of group composition, and behavioural observations in the initial 5-10 minutes. The dipping hydrophone was then deployed 3 to 7 metres below the sea surface by 2-metre long spar buoy from the stern of the research vessel, with vessel engine noise off and the vessel drifting. Broadband dolphin recordings was made with the same set of underwater sound recording system as mentioned in Section 2.3.1 (see previous paragraph for detailed description). According to Section 6.4.5 of the EM&A Manual, "the acoustic results of the monitoring should be analyzed in terms of both the broadband range (100 Hz to 25.6 kHz) and, also, the dolphin sensitive range (400 Hz to 12.6 kHz)." Dolphin acoustic data collected from the recording system was analyzed from 100 Hz and up to 40 kHz, which avoided a hydrophone resonance frequency at 50 kHz. This range would be sufficient to detect the presence of dolphin acoustic signals and their temporal parameters (e.g. click intervals), while it was also in compliance with the EM&A Manual requirement.

During the dipping hydrophone deployment, the date, start and end times, hydrophone and

water depths, Beaufort sea state, survey area, locations, gain, event, and notes were taken for each recording in five-minute intervals. Within each corresponding five-minute interval, observers also noted variables including the group size, group composition and general behaviour during the 5-minute period (i.e. feeding, socializing, travelling, resting, milling and any aerial activity). The number of vessels that passed within 500 m of the dolphin group was also recorded during the same 5-minute interval, with special notes on close approaches by vessels within 100 m of dolphins, including the time of closest approach and any behavioural reaction being noted. Distances of vessels were gathered by hand-held laser rangefinder (*Bushnell* Yardage Pro 800; maximum range of detection for most objects: 720 metres; ranging accuracy ± 2 metres under most circumstances). Also, notes were made on the approximate distance (i.e. 0-250m, 250-500m, >500 m) of the dolphin groups to the hydrophone during the 5-minute interval. Notably, positions of dolphin group was recorded continuously during the entire focal follow session to examine their movements in detail, especially when they occur in the vicinity of the TM-CLKL alignment.

2.3.3. Passive acoustic monitoring using EARs

Two sets of EARs were deployed at two sites in North Lantau, one near the bored piling site and another at a control site between Sha Chau and Lung Kwu Chau. The EARs were deployed and recovered by a professional dive team from Oceanway Corporation Limited. During each deployment, the EAR serial number, as well as the time and date of deployment were recorded. Moreover, the GPS position, water depth and type of substrate at the deployment location were also recorded.

The EARs were programmed to record on a 20% duty cycle (1 minute “on” for every 5 minutes). Recordings was from approximately 20 Hz at the low end to 32 kHz at the high end, which effectively covered a major part of the acoustic channel of the Chinese White Dolphins (Sims et al. 2011). Data from the EARs were downloaded onto a computer hard disk at the end of the baseline monitoring period, and will then be re-deployed at the same location before the start of bored piling works until the study is completed at the end of the 30 days of construction phase monitoring.

2.4 Data Analysis

2.4.1. Dipping hydrophone data for underwater noise measurement

The acoustic data were analysed for narrowband spectra, one-third-octave band levels, and broadband levels. The levels were tabulated and summarized with respect to various noise contributors including but not limited to vessels, wind, industrial activity, and biological sounds.

Due to the transient nature of vessel noise and the highly variable ambient noise levels encountered throughout the study, the estimation of a single baseline noise level representative of the study area is not be feasible. However, ambient noise levels were quantitatively characterized and their potential masking effect on dolphin vocalization was discussed.

2.4.2. Dipping hydrophone data for dolphin acoustic behaviour

To evaluate if dolphin acoustic behaviour varies between baseline and construction phases, a number of parameters will be examined during both phases for comparison, and this data analysis has begun for the baseline phase. For the calibrated hydrophone data, parameters include the duration of acoustic encounters of dolphins and the rates of their whistling and click production (echolocation and burst pulses) per 5 min recording time bin. The rates of sound production as a function of dolphin group size, behavioural state, location and time of day were also examined.

For the comparison of response variables between baseline and construction phases, each 5 min recording time bin was treated as a sample point, providing a measure of the rate of whistling (whistles/min) and click production (clicks/min). The rate of whistling is quantified for each time period by visually and aurally examining individual recordings and logging the presence of signals using the program Raven Pro 1.5™. Click production (echolocation and burst pulses) was quantified using a custom-written click detector program in MATLAB™ R2011b. Recording periods when the dolphins were more than 500 m away or when they were on the bow of the research vessel were excluded from consideration.

To investigate signal production as a function of dolphin group size, the whistling and clicking rates were binned by group size as follows: 1 individual dolphin, 2-5 dolphins, 6-9 dolphins, and 10+ dolphins. The whistling and clicking rates were also similarly grouped by the behavioural categories of milling, traveling, socializing, feeding and resting. Signal production by time of day was investigated by grouping the number of sightings and rates of whistling and clicking occurring in five two-hour periods of data collection (08:00-09:59, 10:00-11:59, 12:00-13:59, 14:00-15:59 and 16:00-17:59). Finally, to examine sound production by location, the GPS coordinates of the first recording for each sighting were plotted using Google Earth™, and these were divided into two zones based on proximity to the construction area. The recordings were then grouped by zone.

2.4.3. EARs data for passive acoustic monitoring

The data from EARs were analyzed by visually and aurally examining individual recordings. The presence of clicks and/or whistles was used to establish the presence of dolphins near the EAR.

Analysts scanned spectrograms of each file in either a 60-second display window (browsing mode) or a 10-second display window (verification mode). Dolphin sounds were confirmed visually and aurally by playing back at reduced speed (usually to ½ original speed, and in some cases ¼ speed).

The occurrence of dolphin signals was used to examine temporal trends in dolphin presence and activity level, and to provide a baseline for future comparison with the construction phase. The number and duration of dolphin encounters was established for each day. Here an encounter is defined as a period of recordings containing dolphin signals in which the interval between detected signals is less than 30 minutes. For example, two recordings with detections separated by 25 minutes would be treated as part of the same encounter, while two recordings with detections separated 40 minutes would be treated as two separate encounters. In addition, the overall acoustic behaviour (not per individual dolphin) was also established and any changes in temporal patterns (e.g. from mostly calling at night, to mostly during the day, or vice versa), or any increase/reduction and change in the mean duration of acoustic presence at the location of EAR deployment will be compared between pre-construction and construction phases.

3. RESULTS AND ANALYSES

3.1. Summary of acoustic monitoring effort

Thirty days of acoustic monitoring surveys were conducted between 26 September and 25 October 2013 for the baseline period (see Appendix I for detailed monitoring schedule). During this period, 1,894.7 km of survey effort were conducted to search for dolphins in the North Lantau region. From these 30-days of monitoring surveys, 469 underwater sound samples were collected, with 26 hours and 46 minutes of recordings of ambient sound levels and dolphin vocalizations under various environmental conditions and during different times of the day (Appendix II). Moreover, 70 dolphin groups, numbering 301 animals, were encountered during these surveys (Appendix III), and 122 sound samples were taken from some of these dolphin groups (Appendix IV).

3.2. Underwater noise study (dipping hydrophone)

A total of 472 underwater acoustic recordings were available for the underwater noise study. These sound files were quality-checked to assess their suitability for noise analyses. Thirty-two recordings included mid-recording, user-selectable, gain changes which introduced high-frequency artifacts most noticeable above 10–20 kHz. These recordings were discarded so as not to bias the

acoustic results with electronic noise. After data quality checking, 440 recordings remained for subsequent noise analyses.

In compliance with Section 6.4.5 of the EM&A Manual, the acoustic data were analyzed in terms of both a "wideband" frequency range of 30 Hz to 40 kHz and a "dolphin-sensitive" frequency range of 400 Hz to 12.5 kHz. Figure 3 depicts the mean bandlevel for each of the 440 recordings for the "wideband" frequency range (shown in red) and the "dolphin band" (shown in blue). Bandlevels were averaged over the duration of each recording, where recording durations ranged from 1 minute, 58 seconds up to 6 minutes, with most recordings around 3 minutes in duration. As seen in Figure 3, wideband levels were always greater than dolphin-band levels, as expected. Mean bandlevel across all recordings (n = 440) was 116.71 ± 6.29 dB re 1 µPa for the wideband case and 112.27 ± 6.36 dB re 1 µPa for the dolphin band case, where "± x.xx" refers to one standard deviation from the mean and indicates the degree of variability in the measurements. In addition, as anticipated, bandlevels varied greatly as a function of time, as illustrated in Figure 3, but also within individual recordings. This variability was due to the numerous transient noise sources, primarily transiting ships, present in the waters off Hong Kong. According to observer logs and confirmed in the acoustic records, vessel traffic is the greatest contributor to the local soundscape.

Wind and the subsequent sea surface waves it generates are a common and well-known source of ambient noise in the world's oceans. Wind speed was measured directly at the time of each recording, and the related Beaufort sea state was also logged by field personnel. Wind speed measurements (which ranged from 0 to 7.7 m/s) and Beaufort sea states (0 to 5) generally agreed. However, wind speeds were usually quite low, averaging only 1.00 ± 0.05 m/s, and no correlation was found between wind speed and mean bandlevels, with a Pearson's correlation coefficient of 0.05 (see Figure 4). The lack of correlation can be attributed to a number of factors: low wind speeds, deviation from wind-generated ambient noise models due to the shallow waters, and masking by other noise sources. The latter is especially relevant given the high shipping density in the region and the fact that wind and shipping noise compete in similar frequency bands (i.e. order tens to hundreds of Hz).

The potential effect of tides on ambient sound levels was also investigated. Tidal height, and by proxy, tidal current, can contribute to background noise levels in the form of, e.g., rolling gravel or similar on the seafloor, but often takes the form of "pseudo-noise", i.e., flow noise, which contaminates underwater measurements. Figure 5 shows predicted tidal heights and measured

bandlevels throughout the study. No significant correlation was found between tidal height and mean bandlevels (Pearson's correlation coefficient of 0.10). The recording system, by design, employed a spar buoy and faired hydrophone cable to mitigate cable tension and flow noise, so no tidal effects were expected.

Of the 440 recordings utilized in the ambient noise study, 122 recordings contained dolphin vocalizations. The mean bandlevels for these recordings containing dolphin vocalizations are shown in Figure 6. Average bandlevel across these recordings was 118.44 ± 5.88 dB re 1 µPa and 114.94 ± 5.26 dB re 1 µPa for the wideband frequency range (red) and dolphin band (blue), respectively. By comparison, recordings without dolphin vocalizations (n = 318) had average bandlevels of 116.04 ± 6.33 dB re 1 µPa and 111.24 ± 6.46 dB re 1 µPa for wide and dolphin frequency bands, respectively. Mean bandlevel was calculated across the entire recording and the bandwidth as indicated, regardless of the duration and frequency extent of detected dolphin vocalizations. Consequently, bandlevels for the recordings containing dolphin vocalizations may not be representative of received levels of individual dolphin vocalizations, and likely contain other sound sources such as vessels, and, therefore, should be interpreted with caution. However, the large sample sizes and over 3 dB difference in average bandlevels with and without dolphin vocalizations, notably manifest in the dolphin band, suggest that dolphin vocalizations can contribute significantly to the soundscape.

Field personnel documented actively operating industrial activity that might contribute sound energy received by the recording system. Figure 7 shows mean bandlevels for recordings annotated with such industrial sound sources (n = 97), specifically, fishing activity (depicted as triangles), dredging (depicted as squares), and other general industrial activity (depicted as stars). As in previous figures, red represents analyses over the wideband frequency range and blue the dolphin-sensitive band. Figure 7 shows broadband received levels and provides only a very rough indication of broadband source levels of various industrial activities. Received levels are a function of source-to-receiver range, and distances to sound sources shown in Figure 7 ranged from a gillnet fishing vessel operating 99 m from the hydrophone to dredging operations 1153 m away. Furthermore, the mean bandlevel was calculated across the entire recording, and thus, measured sound levels represent other concurrent sound sources, such as the many vessels documented during these recordings and/or potential dolphin vocalizations. Vessels were present in all of Figure 7's recordings of industrial activity, and, out of those 97 recordings, dolphin vocalizations were detected in ten of them, notably nine of which involved fishing activity. Estimating source levels of aforementioned industrial activity or of specific vessels is beyond the scope of this study. However,

Figure 7 does show received sound levels containing concurrent industrial activity and unequivocally illustrates the high rate of occurrence of such activity.

The soundscape's time variability is demonstrated in Figure 8 in which mean bandlevels for all 440 recordings are shown as a function of time of day, represented by 12 two-hour periods. Red and blue represent the wideband frequency range and "dolphin-sensitive" band, respectively, and, as expected, wideband bandlevels are always higher than dolphin-band bandlevels. During the study's October timeframe, sunrise occurred at ~0600 HKT and sunset at ~1800 HKT. Figure 8 shows increased sound levels between sunrise and sunset. Sample sizes are indicated by the numbers above each bar in the histogram. A bias might be present due to the relatively small sample sizes outside daytime hours (n = 82, as compared to the sample size in daytime hours (n = 358)), but increased sound levels during daytime hours may also be attributed to increased vessel traffic, fishing, construction, and other anthropogenic activity more likely to occur during the day.

During the impact phase of this study, sounds associated with bored piling activity will be measured and subsequently modeled and compared to baseline phase ambient noise measurements. For the baseline phase, sound levels were measured at different distances from proposed bored piling pier locations on 3 October , 8 October, 11 October, 15 October, and 21 October 2013. The resultant mean bandlevels are given in Table 1 for bandlevel calculations over the wideband frequency range and over the dolphin-sensitive band (approximately 114 dB re 1 µPa and 108 dB re 1 µPa, respectively). As one might expect, devoid of any nearby sound sources different from those encountered elsewhere in the study area during the baseline phase in the absence of any bored piling activity, mean bandlevels and their variability were similar to other measurements in the environment (refer to Figure 3) and were the same value (within a standard deviation) regardless of source-to-receiver range. If construction-related sounds exceed ambient noise levels during the impact phase of the study, one will expect to see a monotonic decrease in sound levels on the order of 10logR to 20logR, where R is the range between the sound source and recording hydrophone.

3.3. Dolphin acoustic behavioural study (dipping hydrophone)

During the baseline acoustic monitoring period, a total of 629 recording minutes were made. Figure 9 shows the number of recording minutes summed for each day, as well as the number of sightings per day. Recordings were obtained on all but 8 days of the 30-day period. The daily number of 5-minute recordings ranged between 0 and 15 (mean = 4.4, stdv = 4.1) and the daily number of minutes recorded was between 0 and 73.4 (mean = 21.0, stdv = 20.1).

Whistling and clicking rates were determined for all recordings (n =122). Figure 10 shows the daily rate of click and whistle production recorded. The mean daily whistling rate was 2.8 whistles/min (stdv = 3.9) and the mean click production rate was 165.9 clicks/min (stdv = 100.0).

The variability of whistling and clicking rates was examined as a function of group size, behavioural state, time of day, Beaufort sea state and location within the study area. Figure 11 shows the rate of both click and whistle production as a function of group size. The rate of whistling generally increased with group size while the rate of click production did not vary much. In Figure 12 the rate of signaling is represented in relation to the dolphins' observed behavioural state during the recording period. Milling was the most common behavioural state noted. Whistling rates did not vary greatly across behavioural states. However, the rate of click production was greatest when the animals were observed socializing.

The greatest number of recordings were made during the 12:00-13:59 time period (n = 52), followed by the 10:00-11:59 period (n = 35), the 14:00-15:59 period (n = 27), the 16:00-17:59 period (n = 11), the 08:00-09:59 period (n = 5) and lastly the 18:00-19:59 period (n = 1) (Figure 13). Not counting the 18:00-19:59 time period, which had only one recording, the lowest and highest rates of and click production occurred in the morning period from 08:00 to 09:59 and the afternoon period from 14:00 to 15:59, respectively. Whistling rates, on the other hand, were lowest during the middle of the day from 12:00 to 13:59 and highest in the afternoon from 14:00 to 15:59. Notably, the daily monitoring effort has been held consistent throughout the entire monitoring period. However, the recording effort was largely depended upon the time of dolphin occurrence and whether they were available for recording. Therefore, no bias was introduced in the monitoring and recording effort throughout the day, which may be related to the observed asymmetry in peak rates of whistling and clicking during the day.

A total of 117 recordings were made with vessels transiting nearby. Of these, 17 were with vessels between 0 and 99 m at the closest approach, 26 were between 100 and 199 m, 14 were between 200 and 299 m, 13 between 300 and 399 m, 11 between 400 and 499 m, and 36 were 500 m or further away. There was a wide variation in both clicking and whistling rates for vessels at all six range categories (Figure 14). No specific conclusions can be drawn about the effects of vessel distance on signaling rate from these data.

Recordings were collected in Beaufort sea states (BSS) ranging from 1 to 5. There were 8 recordings made in BSS 1, 77 recordings in BSS 2, 41 recordings in BSS 3, 4 recordings in BSS 4,

and 1 recordings in BSS 5. Whistling rates decreased with increasing BSS. Clicking rates were equivalent between BSS 2 and 4, and were highest in BSS 5 (Figure 15). However, only one recording was made in BSS 5, so it must be considered an outlier and not necessarily representative of a change in the dolphins' acoustic behavior.

The location of each recording and the division of the study area into two zones are shown in Figure 16. Zone 1b includes the construction area, while Zone 1a is to the west of the construction area. An approximately equal number of recordings were made in Zones 1a (n = 65) and 1b (n = 66). The rates of clicking were equivalent between two zones (Figure 17). However, considerably more whistles were recorded in Zone 1b. This difference was highly significant (Mann-Whitney U Test, $U = 849.5$, $p < 0.001$).

3.4. Passive acoustic monitoring (EARs)

The EAR at Bridge Alignment Area (Site C1) was deployed between 27 September and 5 November, 2013 for a total of 40 days. It yielded 11,446 one min recordings totaling 190 hours of data. The EAR near Lung Kwu Chau (site C2) was also deployed between 27 September and 5 November 2013 for 40 days and recorded 11,464 one min files. However, as agreed in the methodology proposal, only the first 30 days of collected EAR data, between 27 September and 26 October 2013, were considered for analysis.

3.4.1. Site C1 – Bridge Alignment Area

Dolphin signals were detected on 26 out of 30 days of EAR recordings at this site. Figure 18 shows the percentage of files for each day (288 recordings per day) that contained dolphin signals. Daily dolphin acoustic activity was low, with between 0% and 4.5% of recordings containing dolphin signals any given day. Figure 19 shows the number of dolphin encounters (as defined in section 2.4.3) and the mean duration of encounters for each day of the deployment period. There were a mean of 4.6 encounters per day (S.D. = 3.3) at site C1, which lasted a mean of 1.9 min (S.D. = 3.6).

Figure 20 shows the occurrence of dolphin acoustic signals in EAR recordings at site C1 as a function of the hour of the day. All detections were of dolphin click trains. No detections were made of dolphin whistles. Two possible explanation for this are that: 1) dolphins engage in little or no socializing activities (which are typically characterized by whistling) in this area, or 2) ambient and/or anthropogenic noise in the frequency bands associated with whistles (4-12 kHz) masked any whistles that were present. However, a comparison of the ambient noise levels at sites C1 and C2

revealed that the average root-mean-square (RMS) sound pressure levels (SPLs) in the 4-8 kHz and 8-16 kHz bands were 95.4 dB (S.D. = 1.7) and 95.4 dB (S.D. = 2.2), respectively at site C1, and 96.8 dB (S.D. = 1.8) and 96.3 dB (S.D. = 1.7), respectively at site C2. Although ambient noise levels were slightly higher at site C2, dolphin whistles were regularly detected there (see section 3.4.2 below), so it is unlikely that masking by noise at site C1 was the principal reason why whistle detections were absent at this location. Consequently, it can be assumed that dolphins likely do not produce many whistles at or near site C1 and that the amount of any noise masking is not greater than at site C2.

Approximately 54% of detections occurred during the nighttime period between 19:00 and 6:59 and 46% occurred during the day between 7:00 and 18:59. There were no distinct peaks in acoustic activity throughout the 24-period (Figure 20). Rather, there was a low level of acoustic activity during all hourly periods.

Figure 21 shows the root-mean-square (RMS) sound pressure level (SPL) in 1-octave bands and full bandwidth averaged hourly at site C1. The ambient noise level was highest in the 0-2 kHz frequency band, which was driven by vessel traffic, and lowest between 2-4 kHz. There was a sudden and unexpected decrease in the ambient noise levels between 2-32 kHz beginning on 5 October. It is presently unclear what caused this sudden change, but it may have resulted from either a perturbation of the nearby benthic fauna or a shift in sea surface conditions (see discussion below).

3.4.2. Site C2 – Between Lung Kwu Chau and Sha Chau

Dolphin signals were detected on all 30 days of EAR data that were recorded at site C2. Figure 22 shows the percentage of files for each day (288 recordings per day) that contained dolphin signals. Daily dolphin acoustic activity was variable, with between ~1% and 28% or recordings containing dolphin signals any given day. Figure 23 shows the number of dolphin encounters (as defined in section 2.4.3) and the mean duration of encounters for each day of the deployment period. There were a mean of 8.6 encounters per day (S.D. = 2.0) at site C2, which lasted a mean of 25.0 min (S.D. = 14.3).

Figure 24 shows the occurrence of dolphin acoustic signals in EAR recordings as a function of the hour of the day. Although the majority of detections at site C2 were of click trains, whistles were also regularly detected at this site. In addition, there was only a weak diel trend in the occurrence of detections, with approximately 53% of click train detections and 60% of whistle

detections occurring during the nighttime period between 19:00 and 6:59. The peak number of detections occurred between 07:00 and 08:59.

Figure 25 shows the root-mean-square (RMS) sound pressure level (SPL) in 1-octave bands and full bandwidth averaged hourly at site C2. Average noise levels were within 3 dB re 1 µPa across all frequency bands between 0-32 kHz. However, SPLs in the 0-2 kHz band exhibited daily variations of up to 14 dB due to noise contributions from vessels and a biological evening chorus produced by one or more unknown species of fish and/or invertebrates. Overall, broadband noise levels above 2 kHz were higher at site C2 than at C1, but levels below 2 kHz were higher at C1 due to a greater daytime noise contribution from vessel traffic.

4. DISCUSSION

4.1. Underwater noise study (dipping hydrophone)

During this baseline phase of the study and throughout the study area, mean bandlevels of underwater noise were 116.71 ± 6.29 dB re 1 µPa for the "wideband" frequency range of 30 Hz to 40 kHz and 112.27 ± 6.36 dB re 1 µPa for the "dolphin-sensitive" frequency range of 400 Hz to 12.5 kHz. At greater than 100 dB, these bandlevels exceed levels of typical background ambient noise, whose source is primarily wind/waves and other environmental factors. Indeed, unlike other "ambient" noise measurements, no correlation was found between wind speed and sound levels since noise due to vessels and other anthropogenic sources masked that of wind-generated noise. With respect to studying local dolphins by passive acoustic means, these same high noise levels can also mask dolphin vocalizations and limit their detection range.

In addition to high baseline noise levels, temporal and spectral characteristics of sound in the study area varied greatly due to the high density of vessel traffic, fishing-related noise, and other anthropogenic activity that introduced transient noise throughout the day, especially during daylight hours.

4.2. Dolphin acoustic behavioural study (hydrophone)

The information obtained by focal follow hydrophone data collection yielded some anticipated and also some novel information about the acoustic activity of Chinese White Dolphins (CWD) in Hong Kong off North Lantau. CWD occur nearly daily in the study area, with approximately equal occurrence in both zones. As expected, acoustic activity tended to increase with group size and was

highest during socializing periods. Larger groups have more animals that can contribute signals to recordings and it is common for delphinids to be more vocally active during periods of socializing (for example, Würsig et al. 1994; Brownlee and Norris 1994). Interestingly, there was a gradual rise in the click production rate throughout the day, peaking in the afternoon period between 14:00 and 15:59. This suggests that the afternoon could be a time of increased foraging or socializing for dolphins in this area. It is also very interesting to note that there was a large difference in the occurrence of whistling between Zones 1a (including the construction area) and 1b (to the west of the construction area). This suggests that, at least during daytime hours when the data were obtained, Zone 1a may be used differently than Zone 1b by the dolphins. A proportionately greater whistling rate in Zone 1b suggests more emphasis on social behaviors (Herzing 1996). On the other hand, clicking rates were equivalent between zones, suggesting that dolphin vigilance and foraging effort may be similar in the two zones.

The higher rates of whistling and clicking observed in the focal follow hydrophone data during the afternoon period between 14:00 and 16:59 are approximately consistent with the temporal patterns of acoustic activity observed on the EAR at C2 (near Lung Kwu Chau). This four-hour period corresponds to the higher number of afternoon sonar click detections, relative to the previous three hours. Although the peak of acoustic activity on EAR C2 was between 07:00 and 9:59, this was a time period with few sample points in the focal follow hydrophone database, so a direct comparison is not warranted.

4.3. Passive acoustic monitoring (EARs)

The EAR data indicate that dolphin acoustic activity is considerably greater at site C2 (near Lung Kwu Chau) than at site C1 (bridge alignment area). On average, 12.8% of files at site C2 per day contained dolphin detections, compared to only 1.6% of files per day at site C1. In addition, the mean number of daily encounters and the duration of encounters were greater at site C2 than at site C1. The day with the greatest number of detections at site C2 was 8 October 2013, with 28.1% of files containing dolphin detections. At site C1, the day with the most detections was 7 October 2013, with 4.5% files containing dolphin signals. Interestingly, there was an increase in dolphin detections at site C1 coincident with the sudden decrease in recorded noise levels in the 2-32 kHz band on 5 October. A likely explanation is that the lower noise levels resulted in an improvement in signal to noise ratio for dolphin signals, reducing the effects of masking and increasing the detection range. It is also interesting to note that more dolphin activity was recorded at site C2 despite higher ambient noise levels present there in the frequency band associated with dolphin signals (4-32 kHz) compared to site C1.

Dolphin detections at site C1 did not exhibit any temporal pattern of dolphin occurrence. At site C2, the main temporal features were the peak in detections occurring in the morning hours between 08:00 and 9:59, followed by a comparative lull in the mid-day hours between 11:00 and 13:59. The difference in both detection rates and temporal occurrence suggest that dolphins use sites C1 and C2 very differently. The lack of whistles recorded and the sparse detections at Site C1 is an indicator that the area is likely not used very much for socializing or regular foraging.

The drop in noise level in the 2-32 kHz band at site C1 on 5 October is somewhat puzzling. While we cannot completely rule out a hardware explanation without some testing of the EAR unit itself, there are telling factors that point to an alternative explanation. First, a manual spectral analysis of the data recorded before and after 5 October did not show any evidence of a sudden drop in instrument sensitivity, which would also be unprecedented in the more than seven years that EARs have been operational (M. Lammers, per. exp.). Second, while ambient RMS SPLs were lower, dolphin detections concurrently increased. This is inconsistent with a drop in instrument sensitivity, which would have resulted in fewer dolphin detections, not more. Consequently, a more plausible explanation is that the sources of mid- (2-16 kHz) and high frequency (16-32 kHz) noise in the area were in some way removed or suppressed. The greatest contributors to shallow water noise in the 2-32 kHz band are sounds generated from invertebrates (specifically, snapping shrimp), surface-breaking waves and rain.

Therefore, one or both of the following alternative explanations are plausible: 1) a local disturbance (e.g. a bottom trawler, large runoff event) substantially altered/affected the nearby benthic faunal composition, or 2) the days prior to 5 October were characterized by rain and/or surface breaking waves, which were not present during the remainder of the deployment period. Either or both events could result in the observed reduction in mid- and high frequency noise. However, in order to rule out the unlikely possibility of an instrument malfunction, the performance of the two EARs used for this work will be compared to one another in a mock deployment prior to the impact phase of the monitoring project. The two instruments will be co-located for a short, 24-hour recording period and the RMS SPLs of the resulting recordings will be calculated. If little (< 2 dB) or no difference is observed between the two instruments, it will be assumed that the EAR from C1 is functioning properly.

5. EVENT AND ACTION PLAN

According to Section 6.5 of the EM&A Manual, the Action and Limit Levels and event-action plan for ecology shall be proposed upon the baseline monitoring data, and agreed by AFCD and EPD. More specifically, as described in Table 6.9 of the EM&A Manual, the event-action plan should be triggered when dolphin numbers and behaviour patterns recorded in the construction and post-construction monitoring are significantly lower or different than those recorded in the pre-construction monitoring. Therefore, the Event and Action Plan should be developed to examine changes in the dolphin acoustic behaviour between baseline and impact phases of monitoring. Notably, such plan would not be needed for the underwater noise study, as it is not required by the EM&A Manual, and the mitigation measures including the 250-m dolphin exclusion zone during bored piling works as well as avoidance of the peak calving season of May and June for installation of metal caisson are already in place to keep the dolphins at a distance from the noise source of bored piling sites.

To develop the Event and Action Plan (EAP) on dolphin acoustic behaviour, we propose to take into account of the values of two response variables (clicking and whistling rates) as a function of the size of dolphin group, their behavioural state and time of day deduced from the calibrated hydrophone data as presented in Table 2. Departures of any of these variables between baseline and construction phases with a 20% difference will be of concern and should trigger the Action Level under the EAP. If a 40% difference in any of these variables between baseline and construction phases is detected, then the Limit Level under the EAP should be triggered and immediate actions will be required (see Table 3). The numerical values of these variables with the 20% and 40% differences are presented in Table 4.

Moreover, the response variable for the EAR data would be the diel occurrence at the two sites as shown in Figure 20 for Site C1 and Figure 24 for Site C2. However, there was no distinct diel pattern in acoustic activity of dolphins at Site C1, with 54% of detections occurred during the nighttime period between 19:00 and 6:59, and 46% occurred during the day between 7:00 and 18:59. Similarly, there was only a weak diel pattern in acoustic signal detection of dolphins at Site C2, with 53% of click train detections occurring during the nighttime period between 19:00 and 6:59. As there was no distinct peak occurrence of dolphins at Site C1, the shift of peak occurrence in acoustic signal detection cannot be used as triggering mechanism for the Event and Action Plan as in the HKLR09 bored piling monitoring programme.

Alternatively, we proposed that if there is a 20% difference in detections occurred during the

nighttime period between 19:00 and 6:59 at Site C1 (baseline percentage of detection as 54%) in the impact phase monitoring period (i.e. ≥74% or ≤34% of all detections occurred at nighttime), then the Action Level should be triggered. On the other hand, if there is a 40% difference in detections occurred during the nighttime period between 19:00 and 6:59 at Site C1 in the impact phase monitoring period (i.e. ≥94% or ≤14% of all detections occurred at nighttime), then the Limit Level should be triggered. However, if such 20% or 40% difference occurs at both Sites C1 and C2 (baseline percentages of detections as 54% and 53% respectively), the action or limit level should not be triggered, as the change in diel pattern of dolphin occurrence does not only occur at the site of impact (C1) but also at the control site (C2), and the changes in dolphin occurrence at both sites may not be directly to the TM-CLKL construction works. Such review of data from Site C2 (control site between Lung Kwu Chau and Sha Chau) should be part of the review as listed in Action #2 by the ET Leader when the AL or LL is triggered as detailed in the Action and Event Plan (Table 3).

6. REFERENCE

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Table 1. Mean bandlevels as a function of distance from proposed bored piling pier locations for the baseline study phase.

Range (m)	Mean Bandlevel ± s.d. (dB re 1 µPa)	
	Wideband: 30 Hz – 40 kHz	**Dolphin Band: 400 Hz – 12.5 kHz**
0	113.98 ± 3.98	107.43 ± 4.95
10	112.59 ± 2.78	107.70 ± 2.76
20	113.93 ± 3.54	107.19 ± 4.09
50	113.78 ± 4.17	108.75 ± 5.98
100	115.28 ± 4.57	107.40 ± 4.16
200	115.75 ± 3.67	109.82 ± 5.10
300	115.22 ± 4.19	108.33 ± 4.98
500	113.37 ± 3.58	106.20 ± 2.84

Table 2. Values of the two response variables of dolphin acoustic behaviour collected by calibrated hydrophone (mean clicks and whistles per minutes) by size of group, behavioural state and time of day during baseline period

	Mean number of clicks per minute (± s.d.)	Mean number of whistles per minute (± s.d.)
Group Size		
1 dolphins	169.74 ± 194.88 (n=10)	2.89 ± 5.21 (n=10)
2-5 dolphins	161.46 ± 160.61 (n=86)	3.14 ± 6.54 (n=86)
6-9 dolphins	207.25 ± 157.17 (n=35)	5.64 ± 9.91 (n=35)
Behavioural State		
Feeding	165.09 ± 118.49 (n=18)	2.71 ± 6.67 (n=18)
Milling	183.73 ± 182.09 (n=123)	3.83 ± 7.63 (n=123)
Socializing	294.63 ± 159.98 (n=4)	3.05 ± 3.33 (n=4)
Traveling	119.98 ± 81.82 (n=22)	4.98 ± 8.77 (n=22)
Time of day		
08:00-09:59	100.83 ± 77.23 (n=5)	2.30 ± 4.35 (n=5)
10:00-11:59	155.65 ± 120.40 (n=35)	4.77 ± 9.59 (n=35)
12:00-13:59	171.08 ± 149.02 (n=52)	2.08 ± 5.08 (n=52)
14:00-15:59	218.49 ± 241.38 (n=27)	3.88 ± 5.77 (n=27)
16:00-17:59	186.40 ± 122.57 (n=11)	7.82 ± 11.83 (n=11)

Table 3. Event and Action Plan on Dolphin Acoustic Behaviour

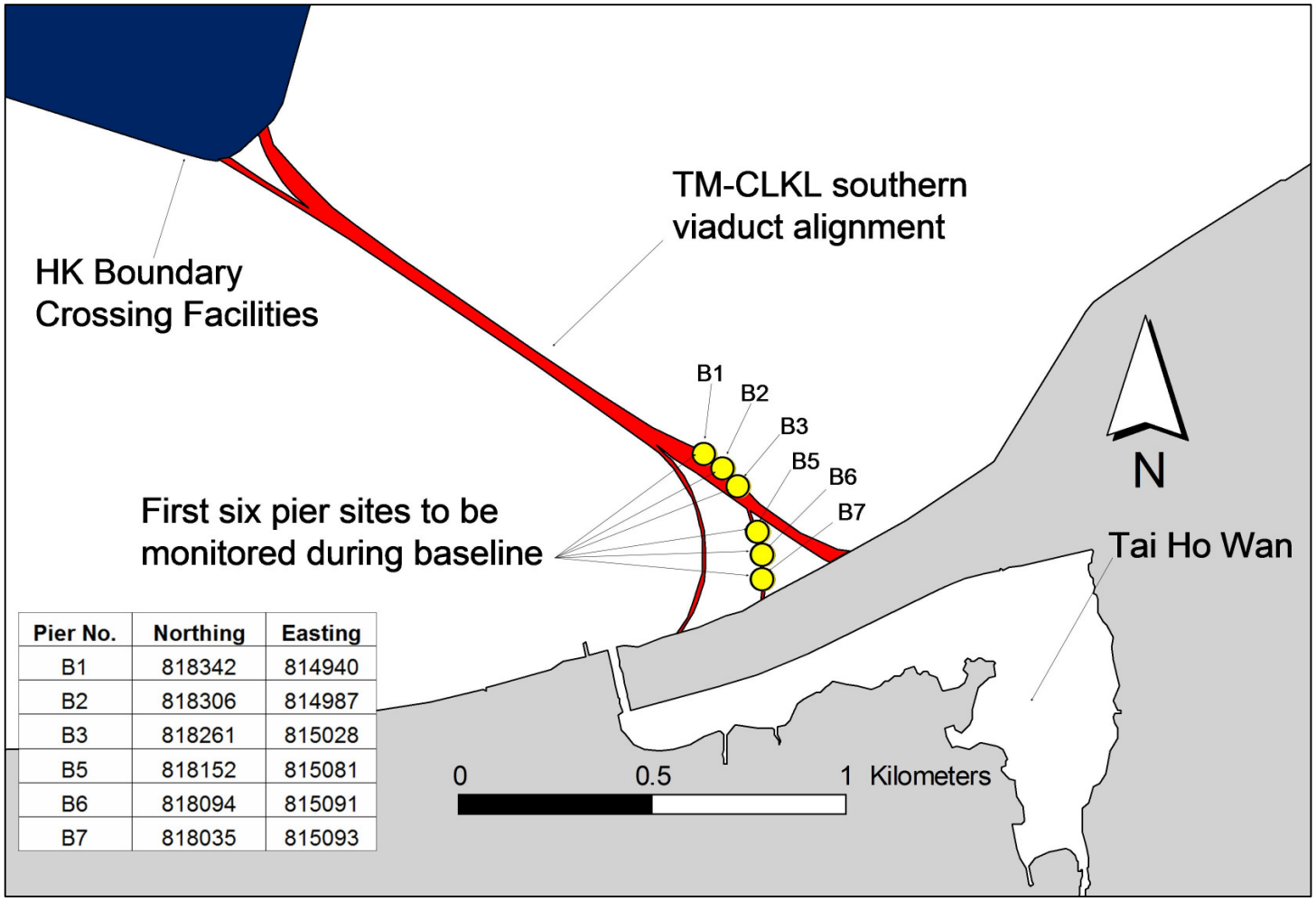
EVENT	ACTION			
	ET Leader	**IEC**	**SO**	**Contractor**
Action Level With the numerical values presented in Table 2, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 20% lower or higher than that recorded in the baseline monitoring (see Table 4), or when there is a difference of 20% in dolphin acoustic signal detection at nighttime period at Site C1, the action level should be triggered	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor;	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.
Limit Level With the numerical values presented in Table 2, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 40% lower or higher than that recorded in the baseline monitoring (see Table 4), or when there is a difference of 40% in dolphin acoustic signal detection at nighttime at Site C1, the limit level should be triggered	1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 7. Discuss additional dolphin monitoring and any other potential mitigation measures (e.g. consider to temporarily stop relevant portion of construction activity) with the IEC and Contractor.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; 3. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly.	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, SO – Supervising Office

Table 4. Values of action level (AL) and limit level (LL) for all response variables by size of group, behavioural state and time of day

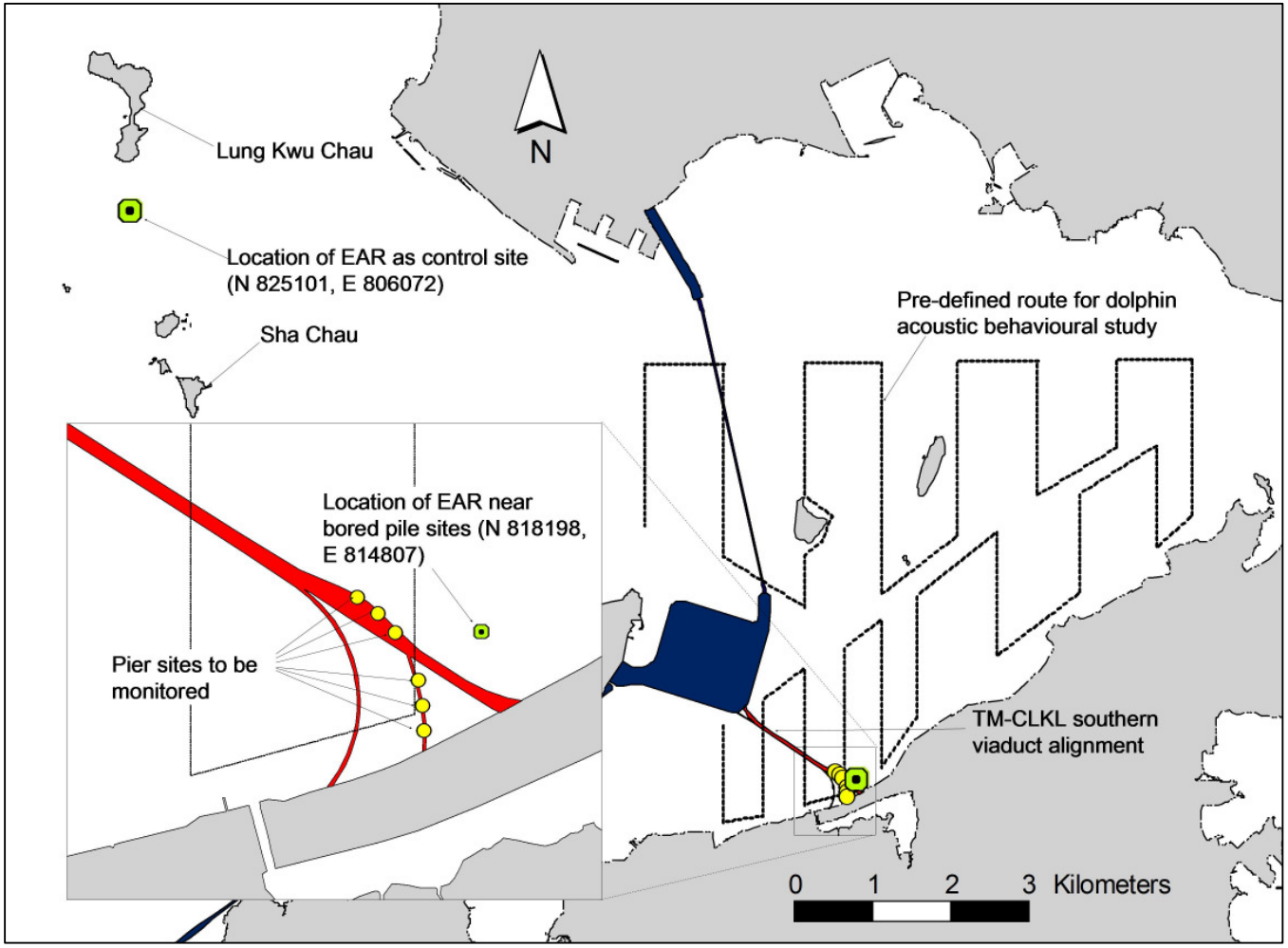
	Mean no. of clicks per minute	Mean no. of whistles per minute
Group Size	AL / LL	AL / LL
1 dolphins (20%/40% ***lower***)	135.79 / 101.84	2.31 / 1.73
1 dolphins (20%/40% ***higher***)	203.69 / 237.64	3.47 / 4.05
2-5 dolphins (20%/40% ***lower***)	129.17 / 96.88	2.51 / 1.88
2-5 dolphins (20%/40% ***higher***)	193.75 / 226.04	3.77 / 4.40
6-9 dolphins (20%/40% ***lower***)	165.80 / 124.35	4.51 / 3.38
6-9 dolphins (20%/40% ***higher***)	248.70 / 290.15	6.77 / 7.90
Behavioural State	AL / LL	AL / LL
Feeding (20%/40% ***lower***)	132.07 / 99.05	2.17 / 1.63
Feeding (20%/40% ***higher***)	198.11 / 231.13	3.25 / 3.79
Milling (20%/40% ***lower***)	146.98 / 110.24	3.06 / 2.30
Milling (20%/40% ***higher***)	220.48 / 257.22	4.60 / 5.36
Socializing (20%/40% ***lower***)	235.70 / 176.78	2.44 / 1.83
Socializing (20%/40% ***higher***)	353.56 / 412.48	3.66 / 4.27
Traveling (20%/40% ***lower***)	95.98 / 71.99	3.98 / 2.99
Traveling (20%/40% ***higher***)	143.98 / 167.97	5.98 / 6.97
Time of day	AL / LL	AL / LL
08:00-09:59 (20%/40% ***lower***)	80.66 / 60.50	1.84 / 1.38
08:00-09:59 (20%/40% ***higher***)	121.00 / 141.16	2.76 / 3.22
10:00-11:59 (20%/40% ***lower***)	124.52 / 93.39	3.82 / 2.86
10:00-11:59 (20%/40% ***higher***)	186.78 / 217.91	5.72 / 6.68
12:00-13:59 (20%/40% ***lower***)	136.86 / 102.65	1.66 / 1.25
12:00-13:59 (20%/40% ***higher***)	205.30 / 239.51	2.50 / 2.91
14:00-15:59 (20%/40% ***lower***)	174.79 / 131.09	3.10 / 2.33
14:00-15:59 (20%/40% ***higher***)	262.19 / 305.89	4.66 / 5.43
16:00-17:59 (20%/40% ***lower***)	149.12 / 111.84	6.26 / 4.69
16:00-17:59 (20%/40% ***higher***)	223.68 / 260.96	9.38 / 10.95

Figure 1. Location of the bored pile pier sites to be monitored for the underwater noise measurement study of TM-CLKL construction



Pier No.	Northing	Easting
B1	818342	814940
B2	818306	814987
B3	818261	815028
B5	818152	815081
B6	818094	815091
B7	818035	815093

Figure 2. Map showing the locations of two EAR deployments, pier sites to be monitored as well as pre-defined route for dolphin acoustic behavioural study



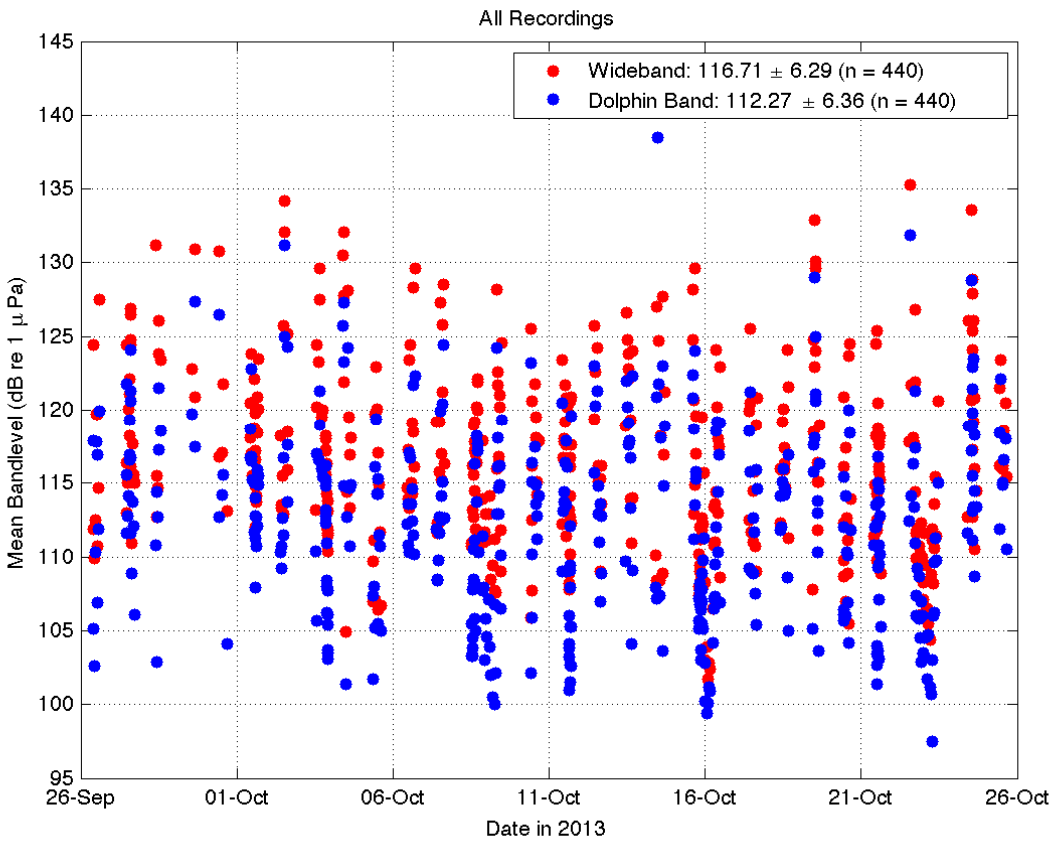


Figure 3. Mean bandlevels for all 440 recordings. Bandlevels were analyzed in terms of both the 30–40,000 Hz "wideband" frequency range (red) and 400–12,500 Hz "dolphin-sensitive" band (blue) and then averaged over the duration of each recording.

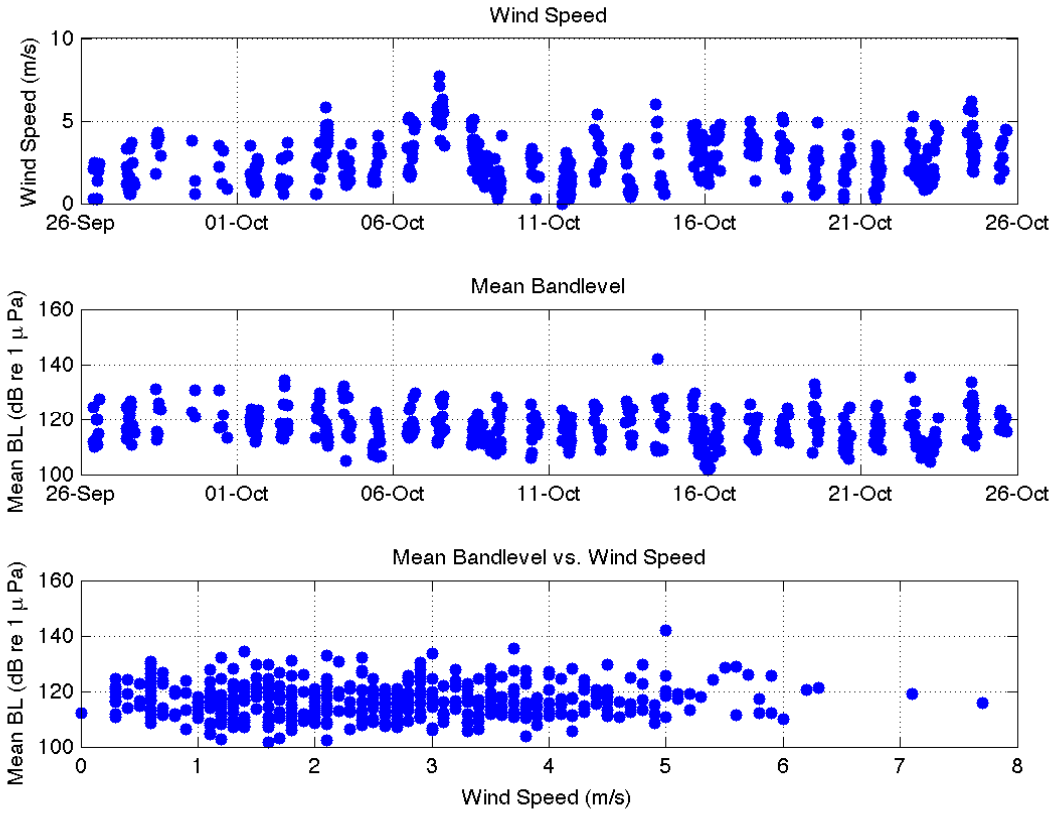


Figure 4. Received sound levels in relation to wind speed: wind speeds measured during each recording (top plot), mean bandlevels for each recording (middle plot), and mean bandlevels as a function of wind speed (bottom plot).

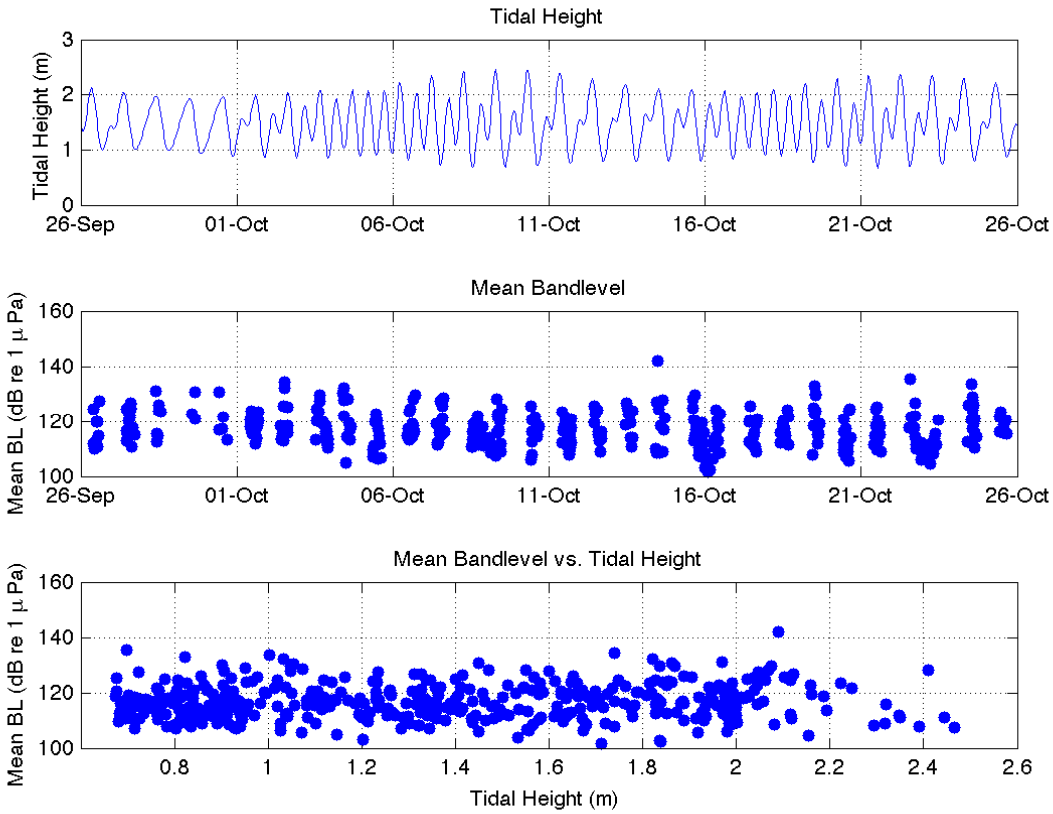


Figure 5. Received sound levels in relation to tidal height: tidal height throughout the study (top plot), mean bandlevels for each recording (middle plot), and mean bandlevels as a function of tidal height (bottom plot).

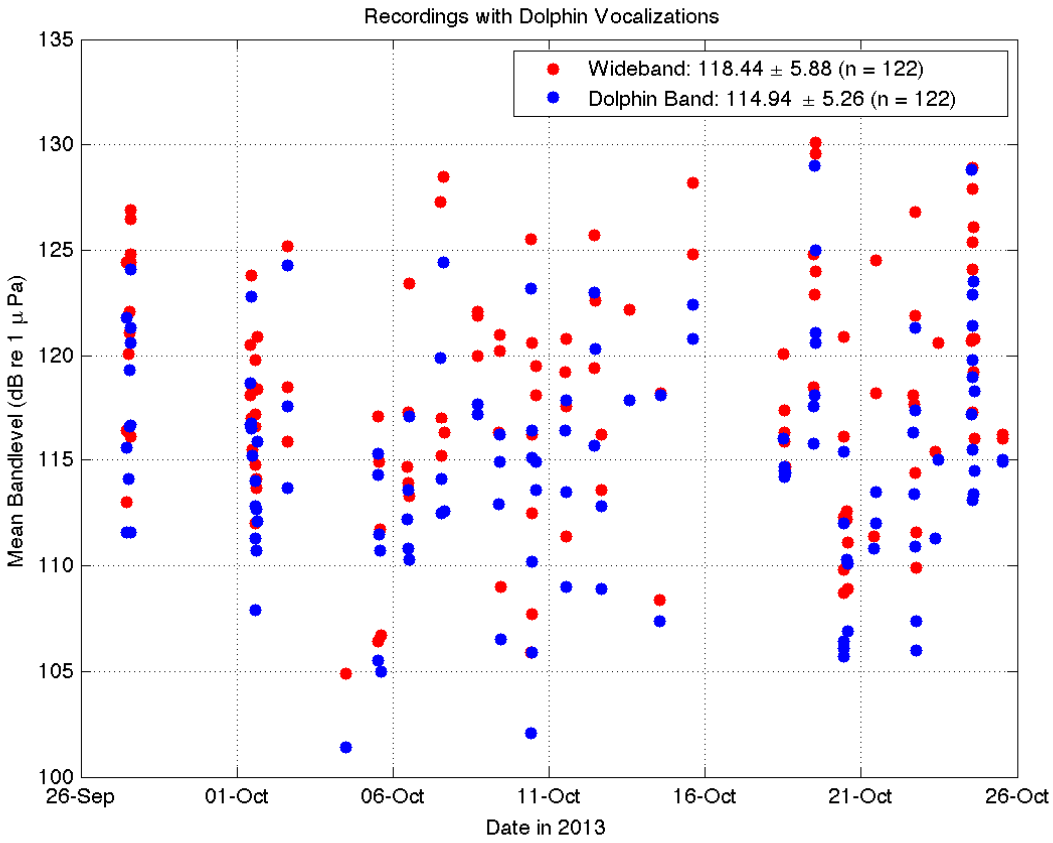


Figure 6. Mean bandlevels for the 122 recordings containing dolphin vocalizations. Bandlevels were analyzed in terms of both the 30–40,000 Hz "wideband" frequency range (red) and 400–12,500 Hz "dolphin-sensitive" band (blue). Note that the mean bandlevel was calculated across the entire recording, regardless of the duration of detected dolphin vocalizations.

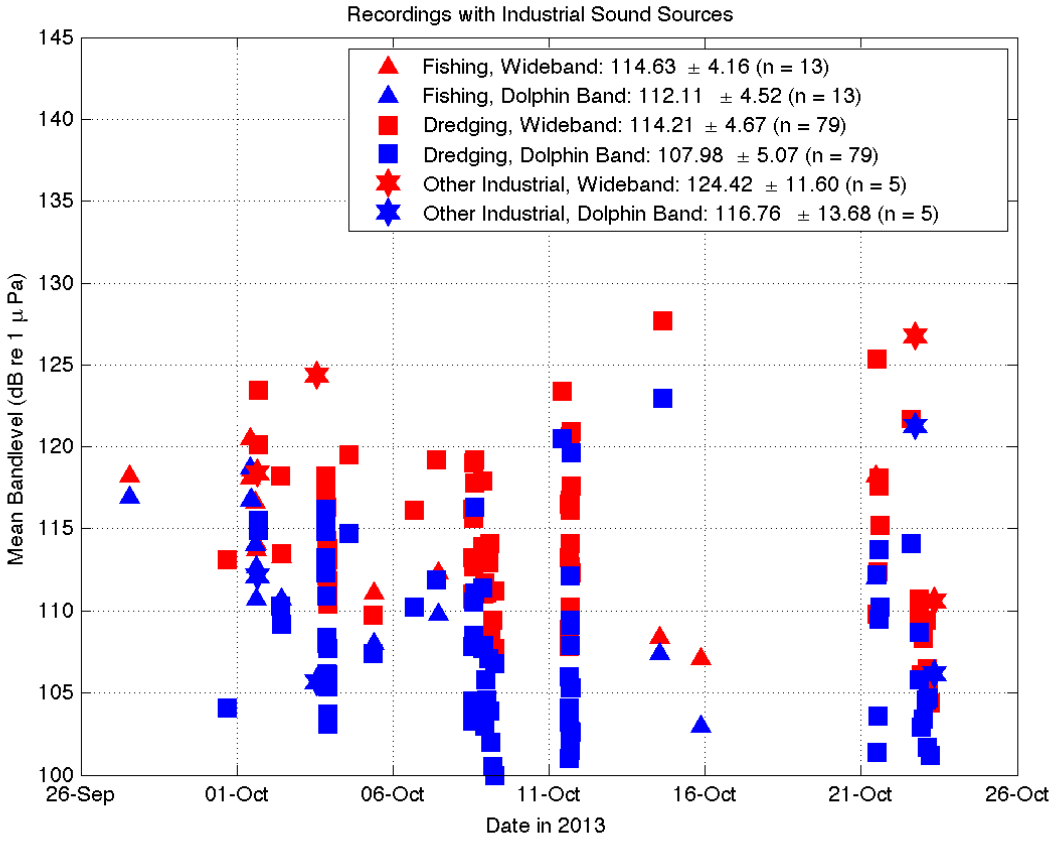


Figure 7. Mean bandlevels for recordings with documented, actively operating, industrial sound sources: fishing activity (triangles), dredging (squares), and other general industrial activity (stars) Red and blue represent the 30–40,000 Hz "wideband" frequency range and 400–12,500 Hz "dolphin-sensitive" band, respectively. Note that the mean bandlevel was calculated across the entire recording, and, thus, bandlevels may represent other concurrent sound sources.

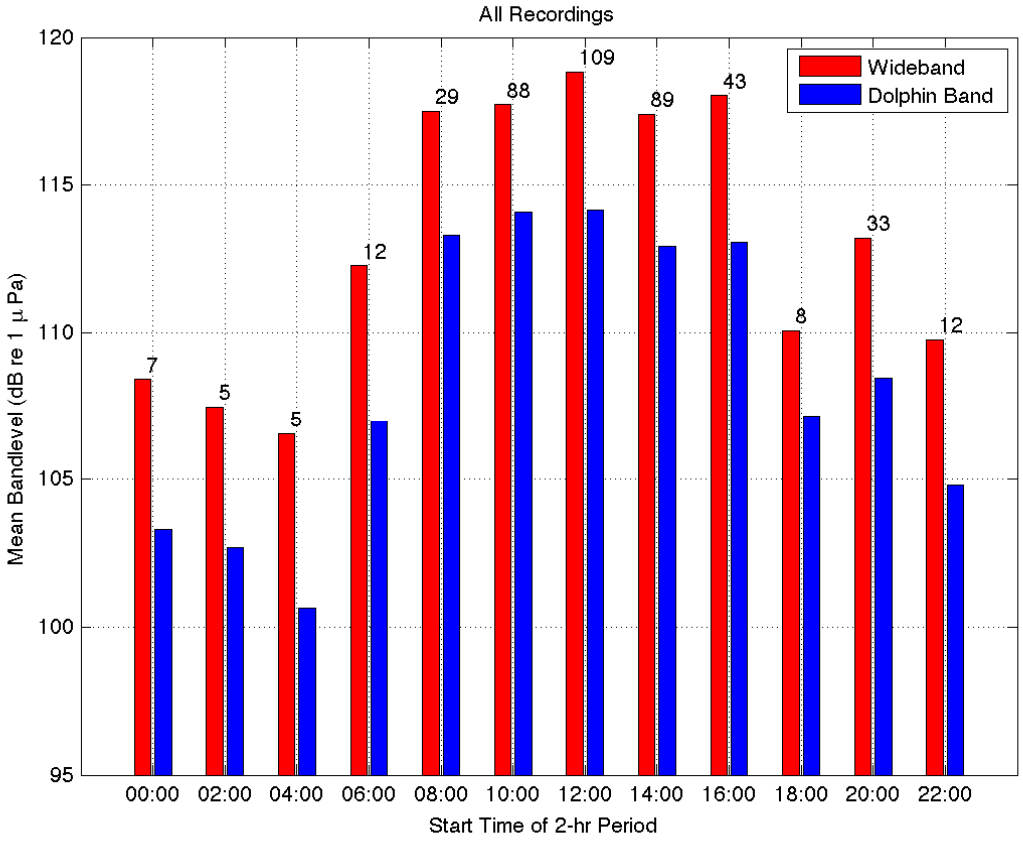


Figure 8. Mean bandlevels for all 440 recordings as a function of time of day. Red and blue represent the 30–40,000 Hz "wideband" frequency range and 400–12,500 Hz "dolphin-sensitive" band, respectively.

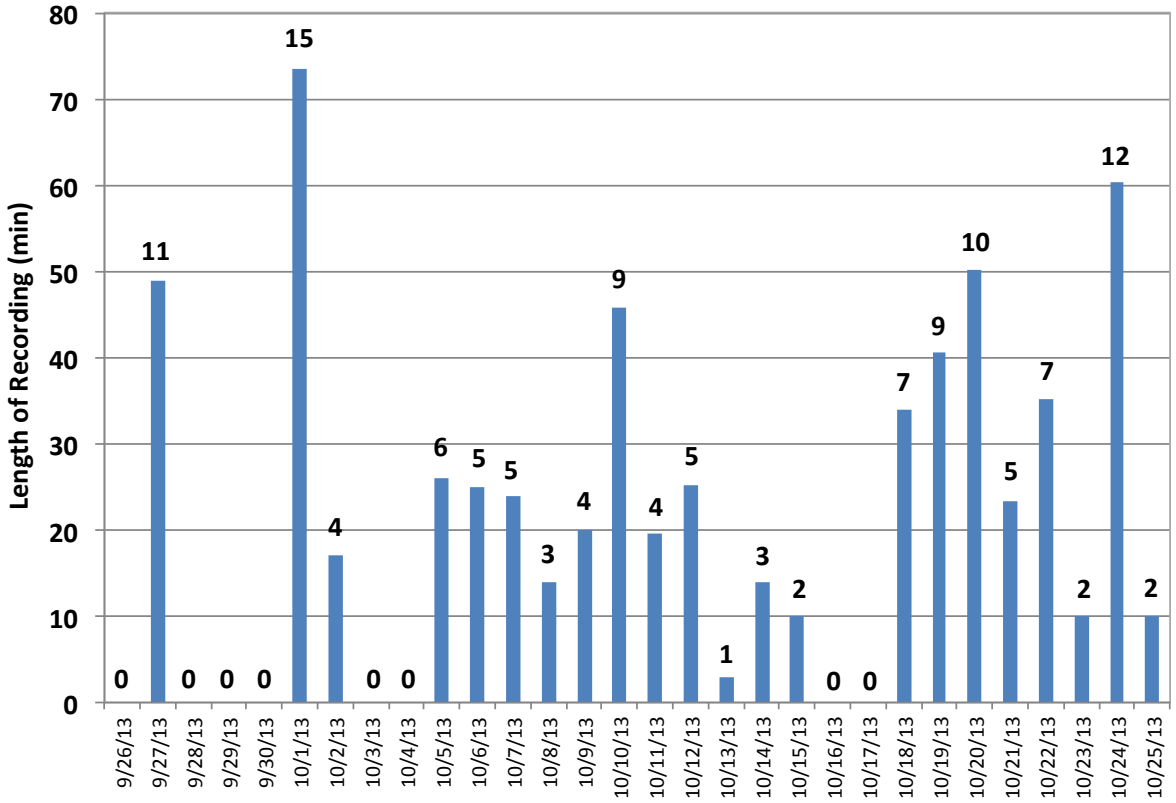


Figure 9. The summed length of recordings in minutes made for each day of observational effort during the baseline acoustic monitoring in September-October 2013. The values above each column represent the number of 5-minute recordings per day.

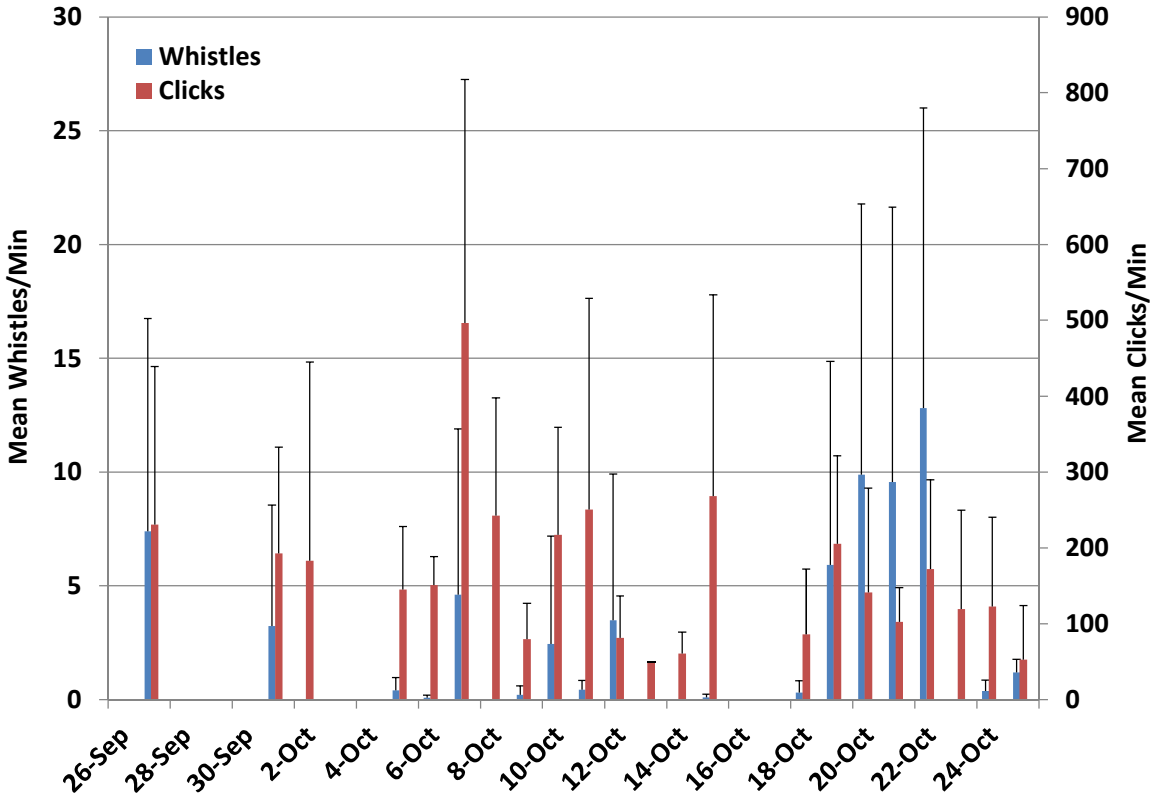


Figure 10. The mean number of clicks and whistles per minute of recording detected for each day of observational effort. Errors bars represent one standard deviation.

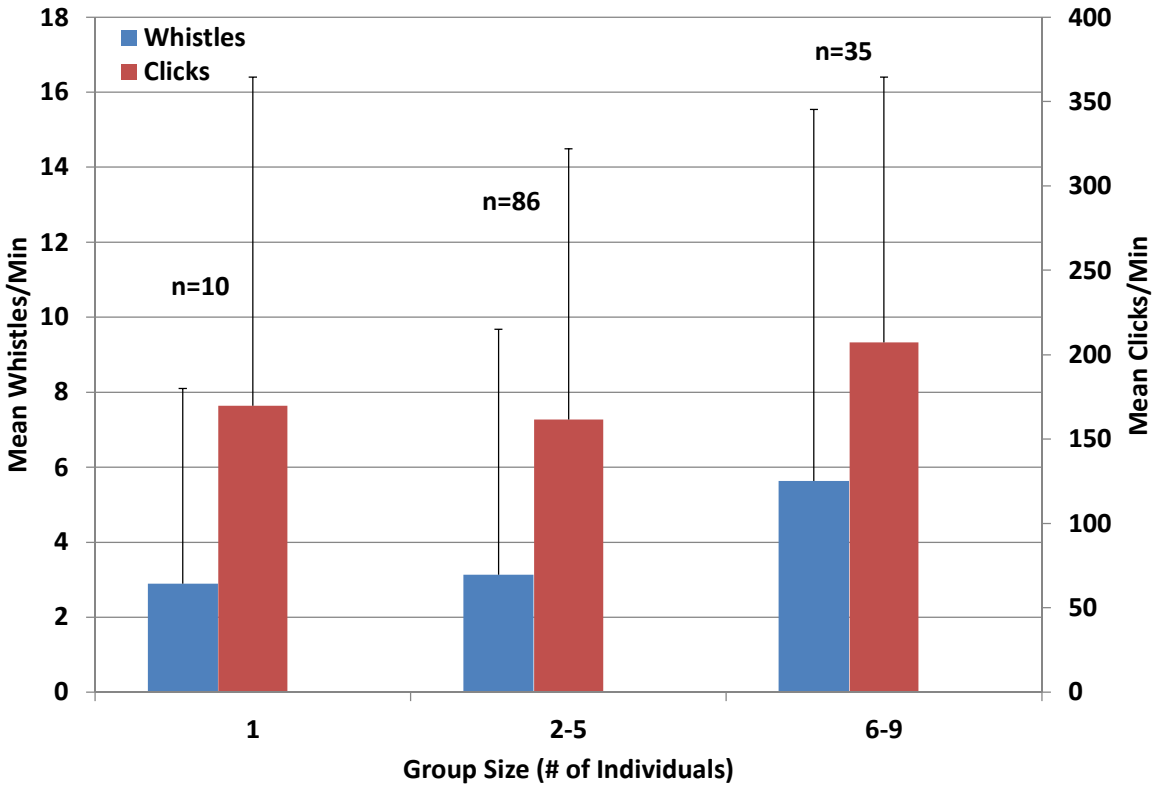


Figure 11. Mean number of whistles per minute and clicks per minute recorded as a function of dolphin group size. Error bars represent one standard deviation.

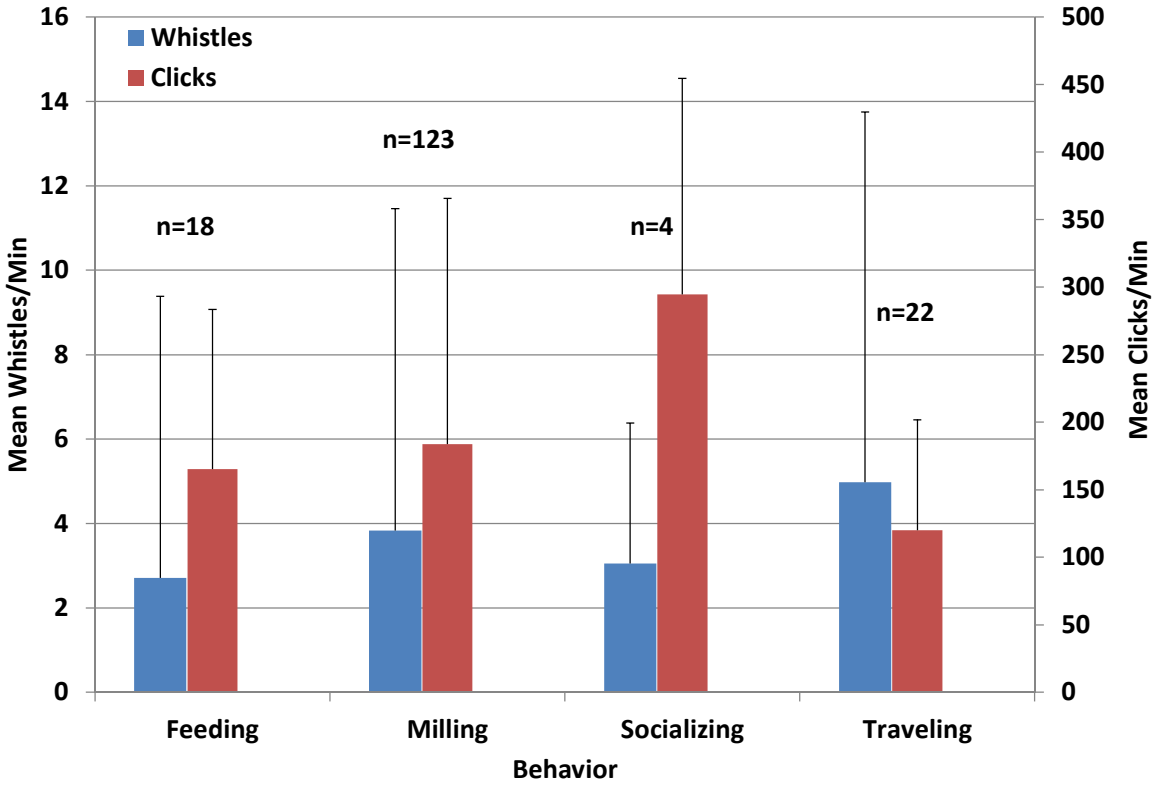


Figure 12. Mean number of whistles per minute and clicks per minute recorded as a function of dolphin behavioural state. Error bars represent one standard deviation.

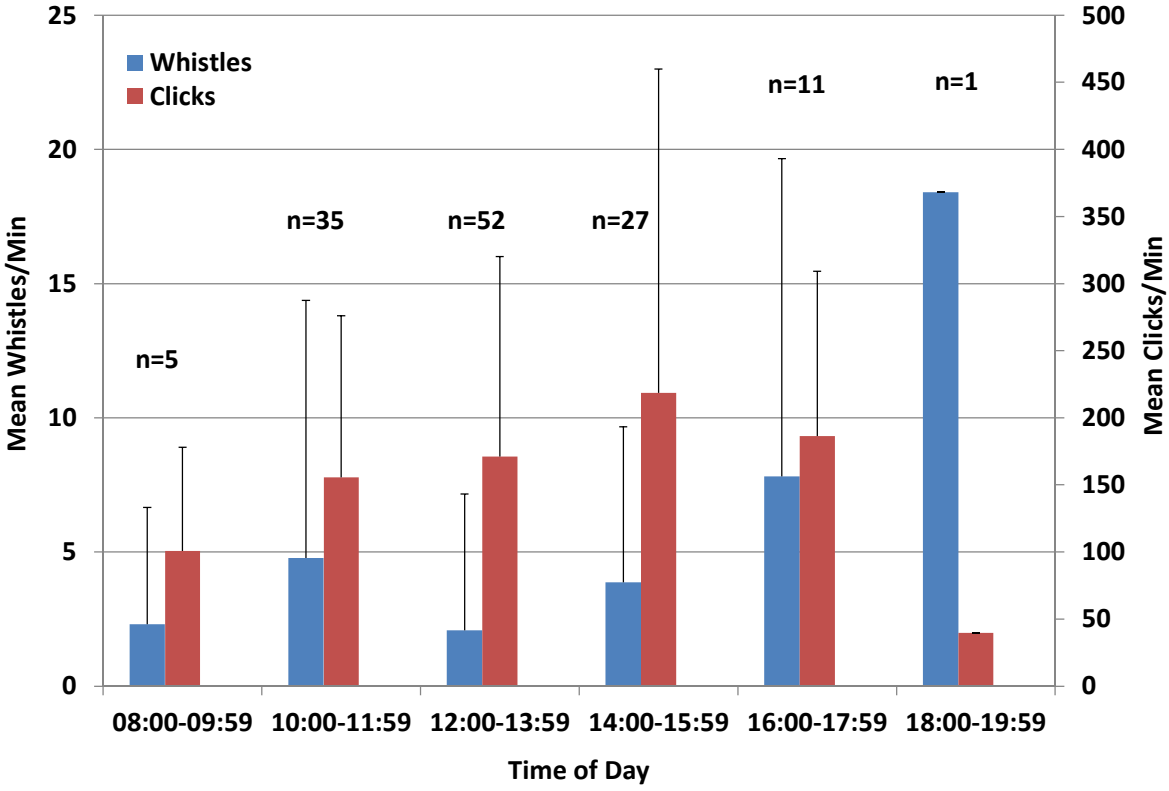


Figure 13. Mean number of whistles per minute and clicks per minute recorded as a function of the time of day. Error bars represent one standard deviation.

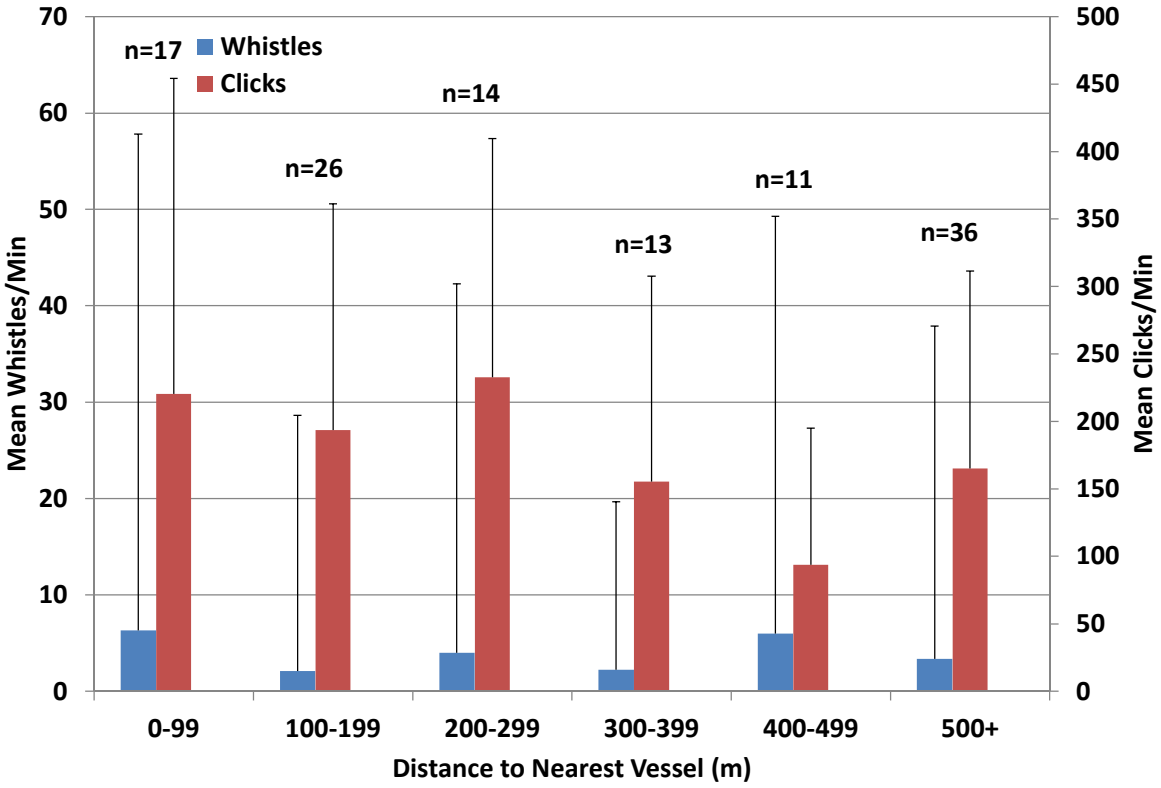


Figure 14. Mean number of whistles per minute and clicks per minute recorded as a function of the distance to the nearest vessel. Error bars represent one standard deviation.

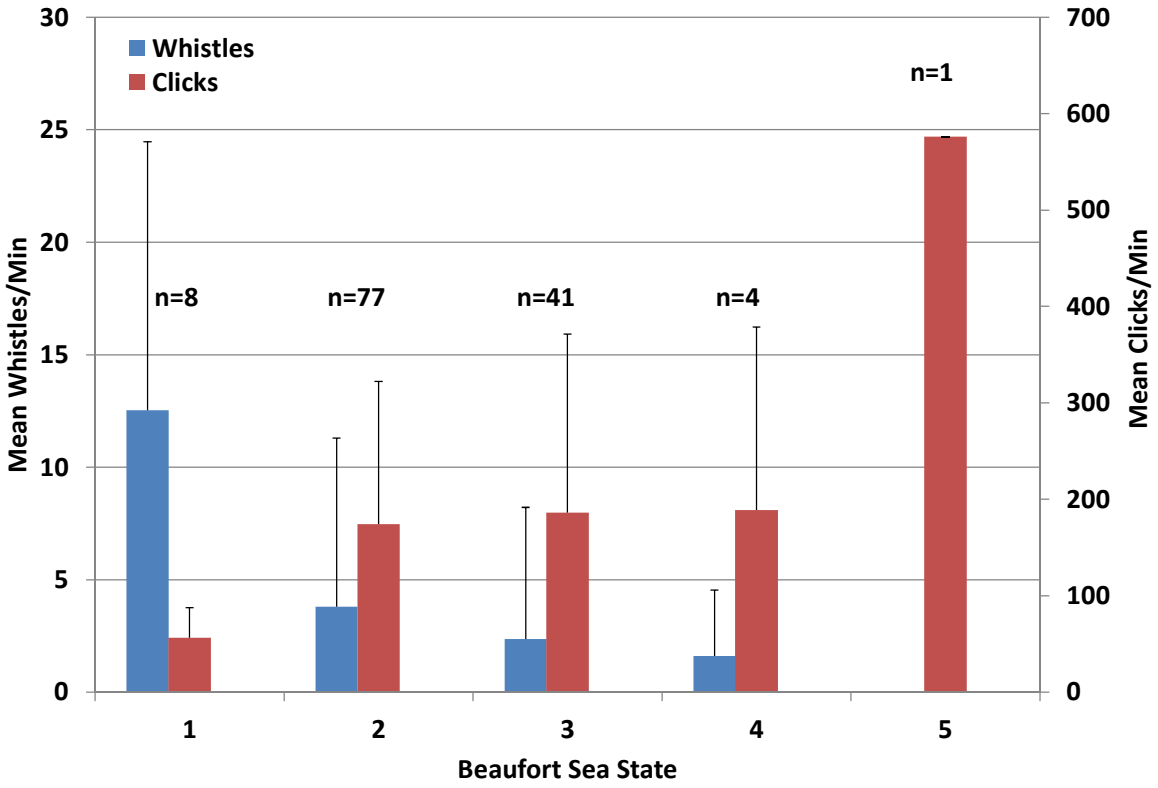


Figure 15. Mean number of clicks per minute and whistles per minute recorded as a function of the Beaufort Sea State. Error bars represent one standard deviation.

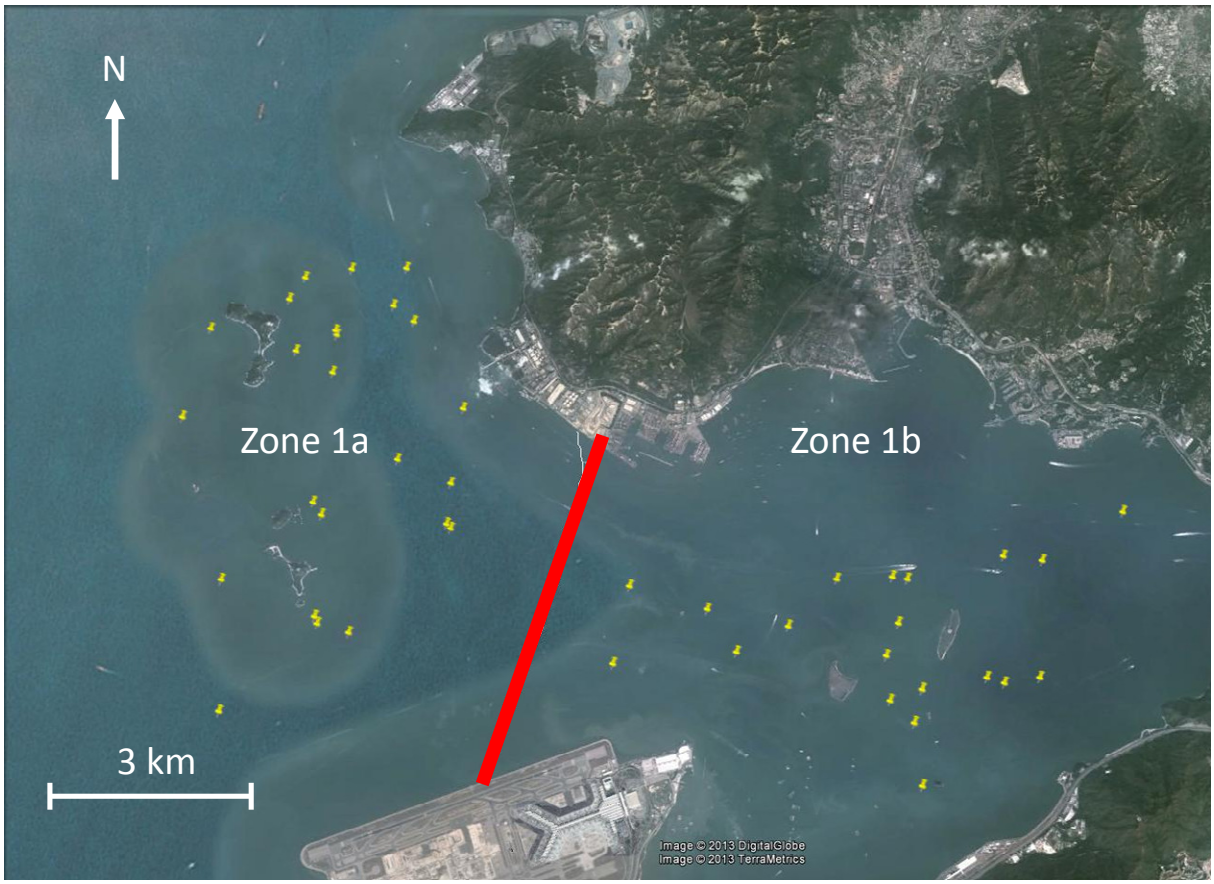


Figure 16. The location of the first recordings made for each sighting for each day of observational effort. Place marks represent GPS coordinates. The red solid line designates the boundary of two study zones. Map generated in Google Earth 7.0.3.8542.

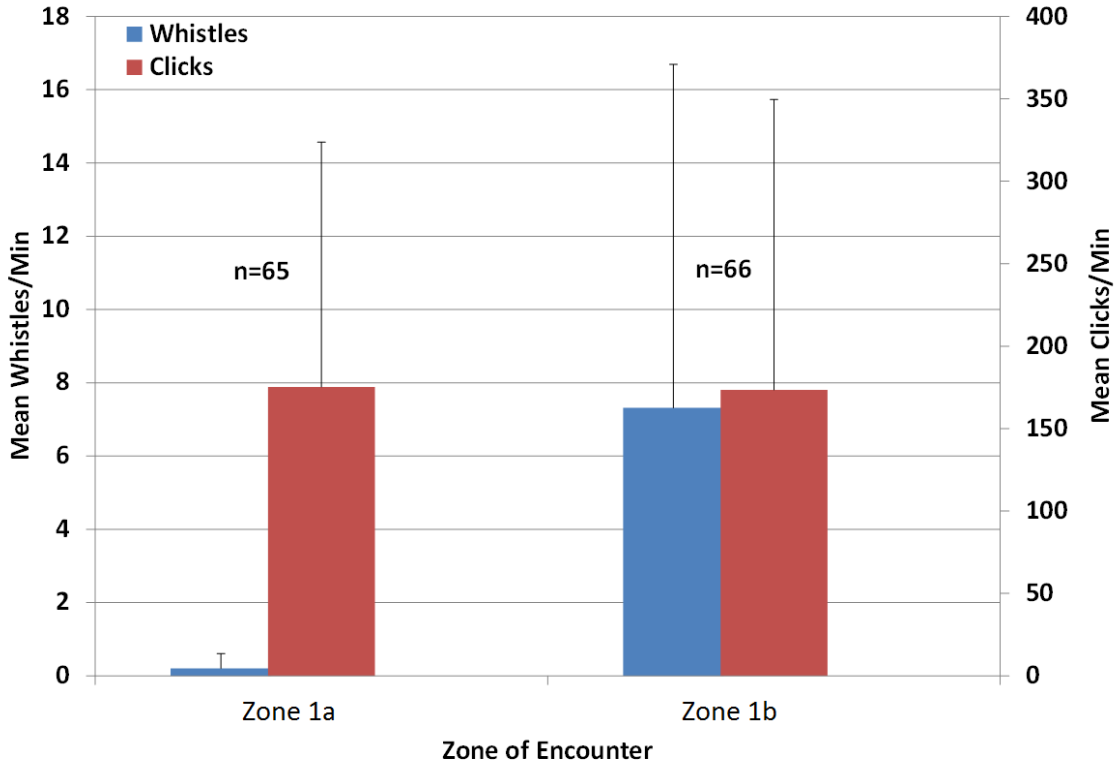


Figure 17. Mean number of whistles per minute and clicks per minute recorded in each zone of the study area. Error bars represent one standard deviation.

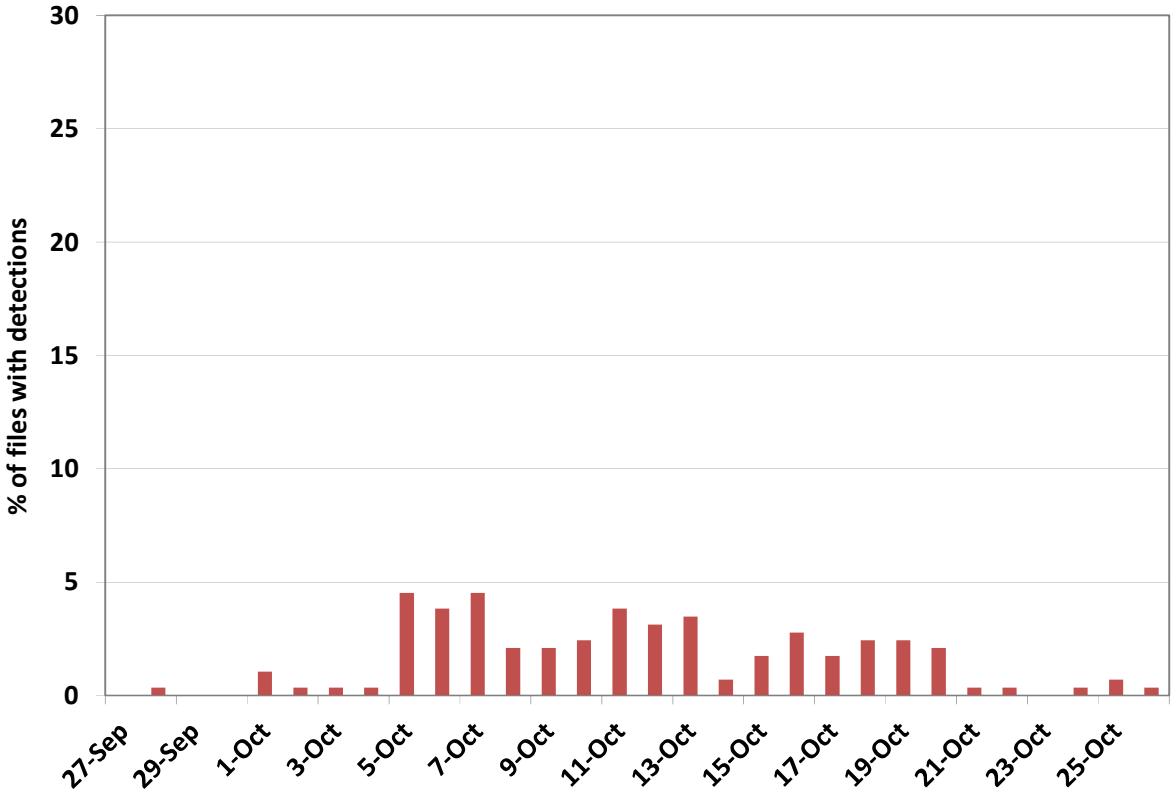


Figure 18. Histogram of the percentage of EAR recordings with dolphin detections made at site C1 (Bridge Alignment Area) during 30 days of the deployment period.

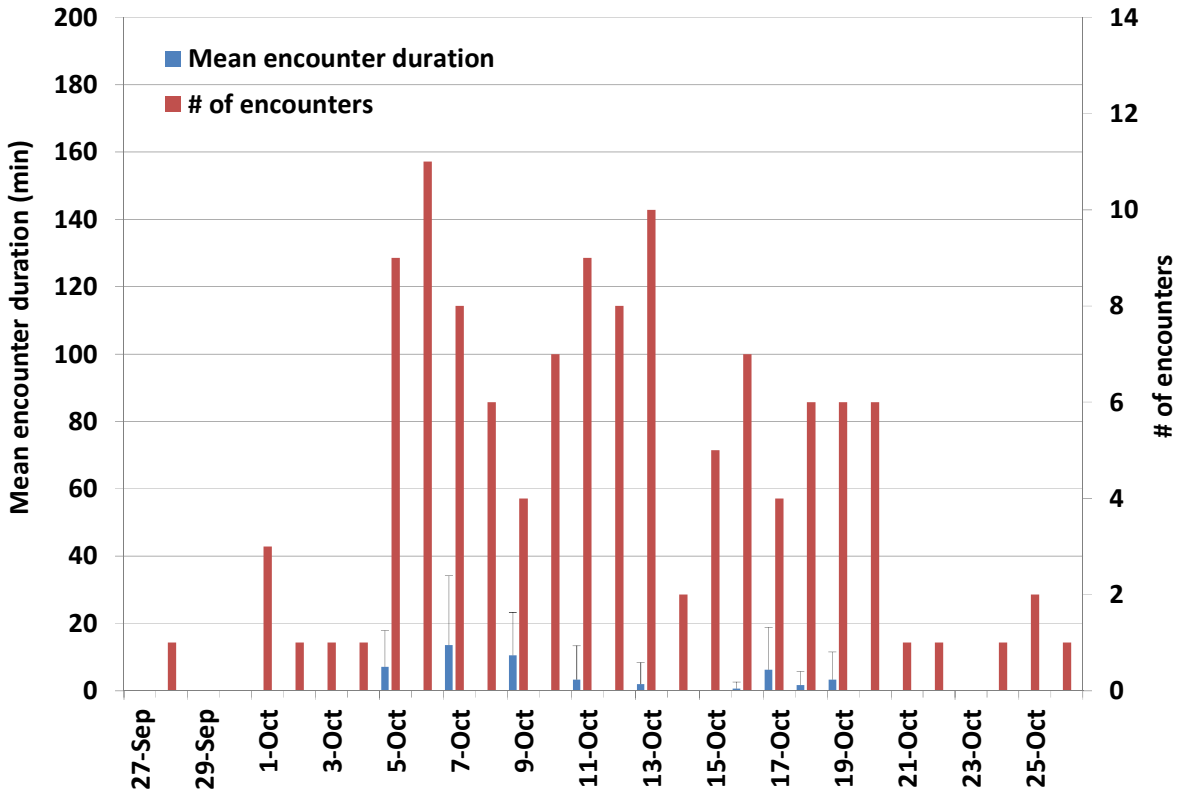


Figure 19. The number of dolphin encounters and the mean encounter duration for each day recorded on the EAR at site C1 (Bridge Alignment Area). Error bars represent one standard deviation.

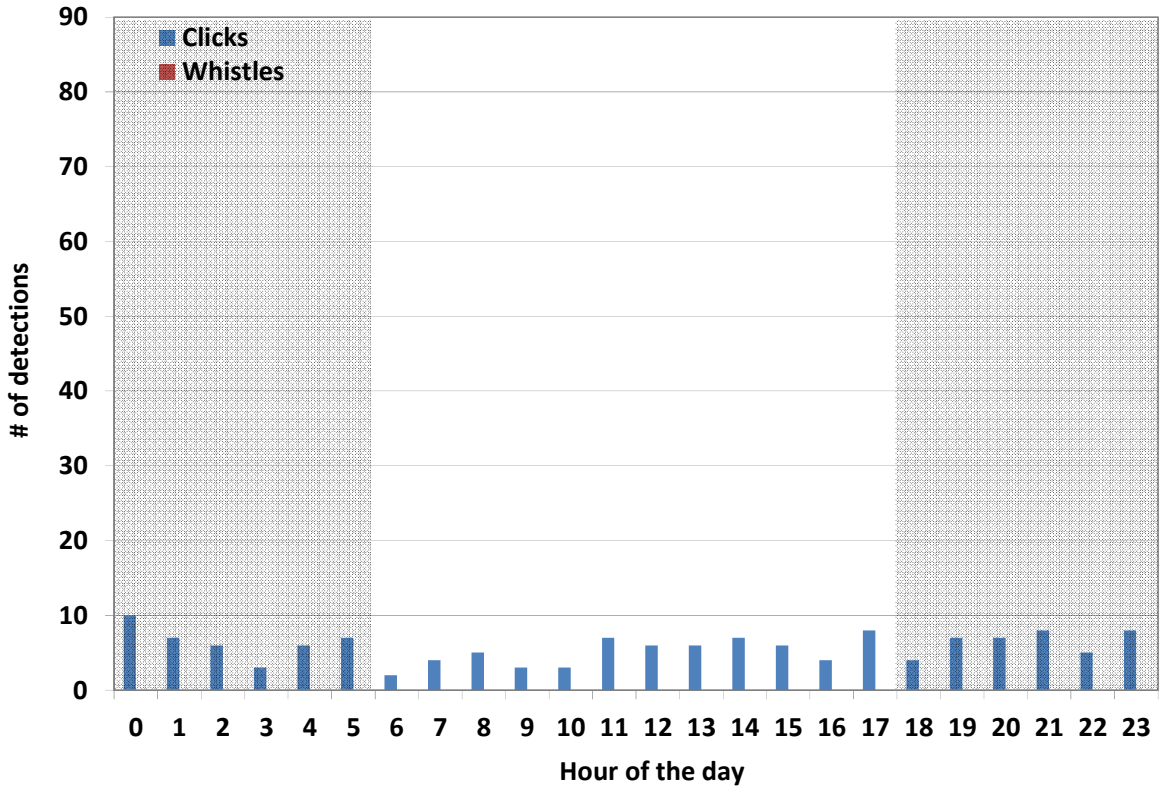


Figure 20. Detections of dolphin signals at site C1 (Bridge Alignment Area) as a function of the hour of the day. Values are the total number of detections in each hour across the entire monitoring period.

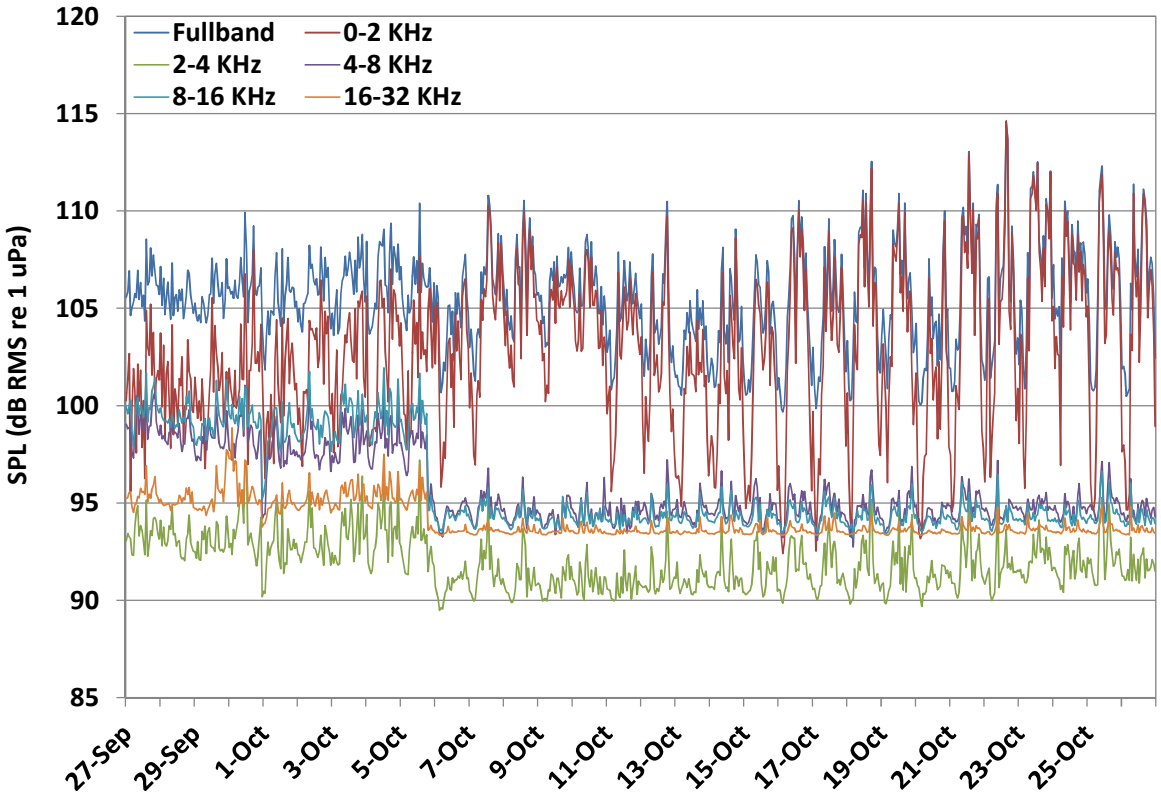


Figure 21. Root-mean-square (RMS) sound pressure level (SPL) in 1-octave bands and full bandwidth averaged hourly over the deployment period at site C1 (Bridge Alignment Area).

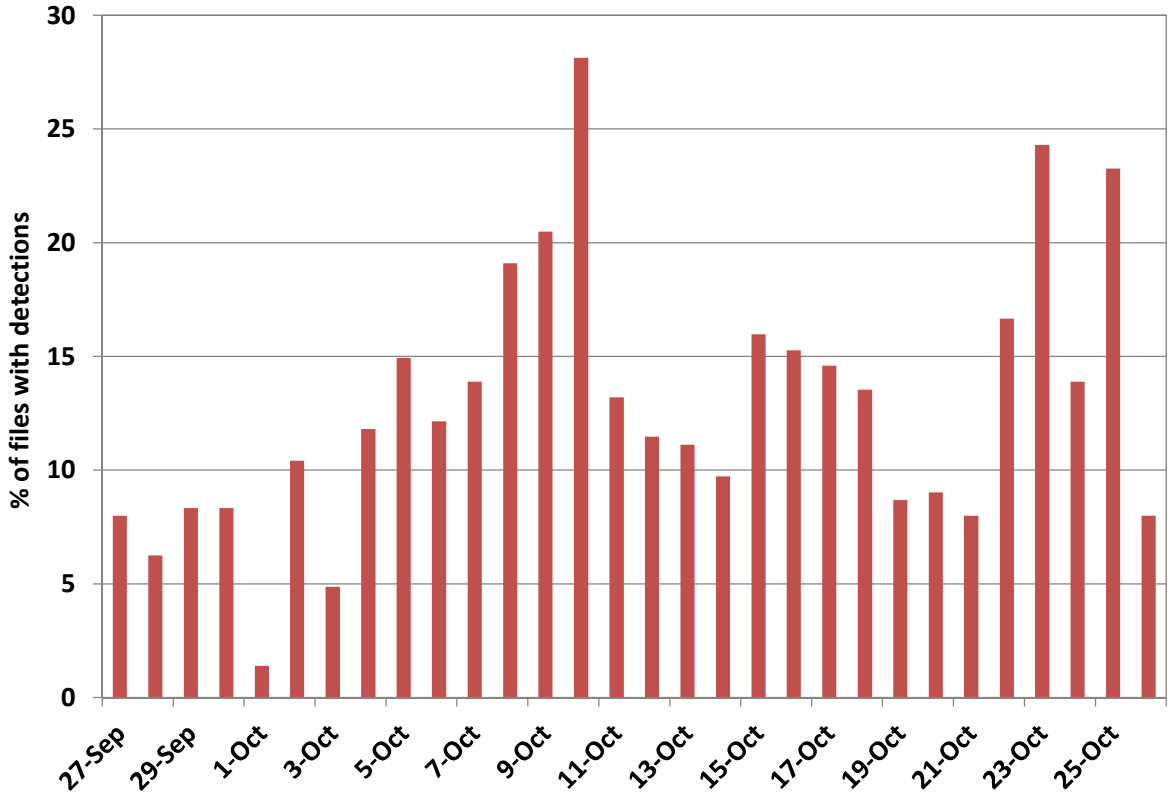


Figure 22. Histogram of the percentage of EAR recordings at site C2 (near Lung Kwu Chau), with dolphin detections made during 30 days of the deployment period.

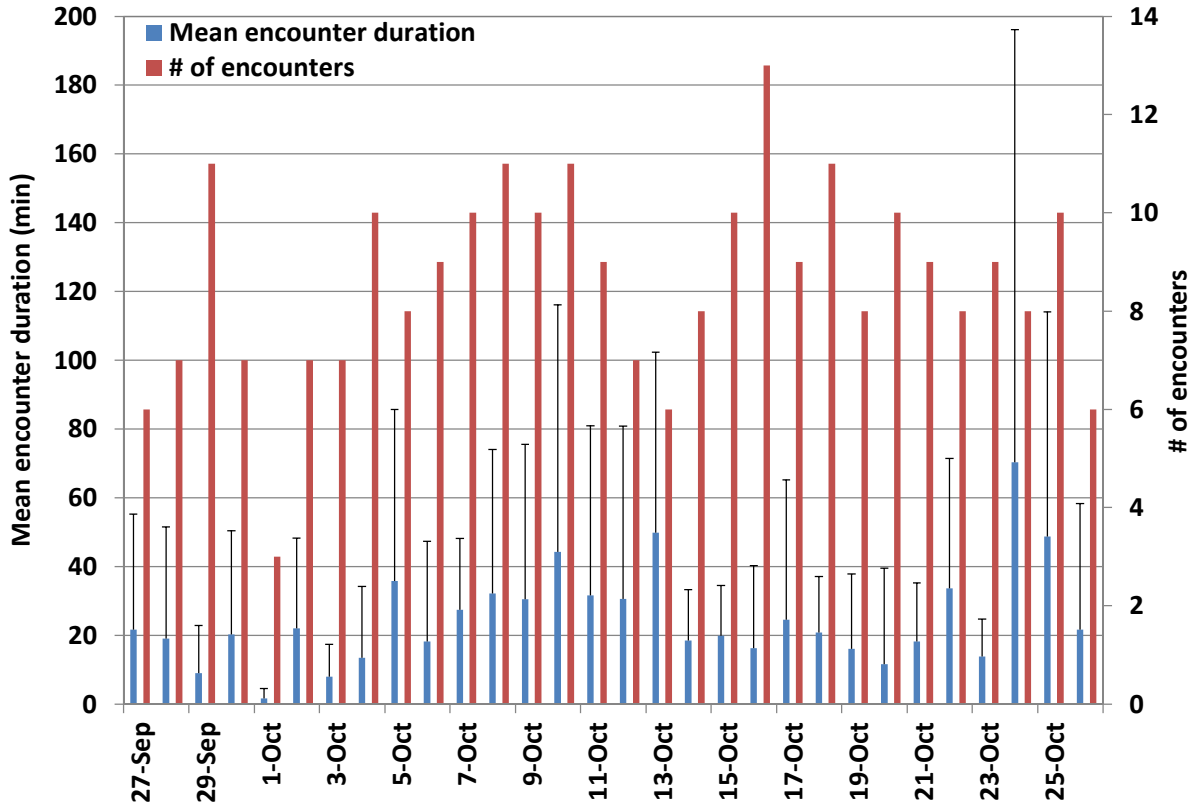


Figure 23. The number of dolphin encounters and the mean encounter duration for each day recorded on the EAR at site C2 (near Lung Kwu Chau). Error bars represent one standard deviation.

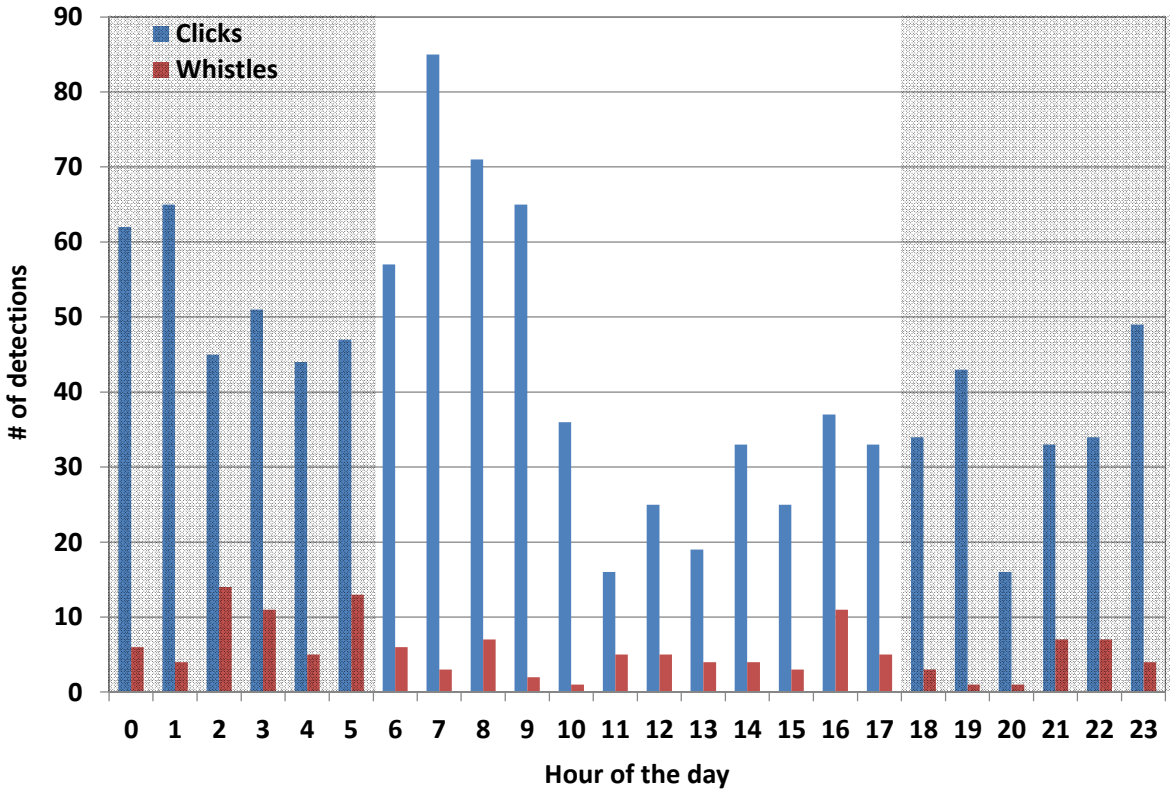


Figure 24. Detections of dolphin signals at site C2 (near Lung Kwu Chau) as a function of the hour of the day. Values are the total number of detections in each hour across the entire monitoring period.

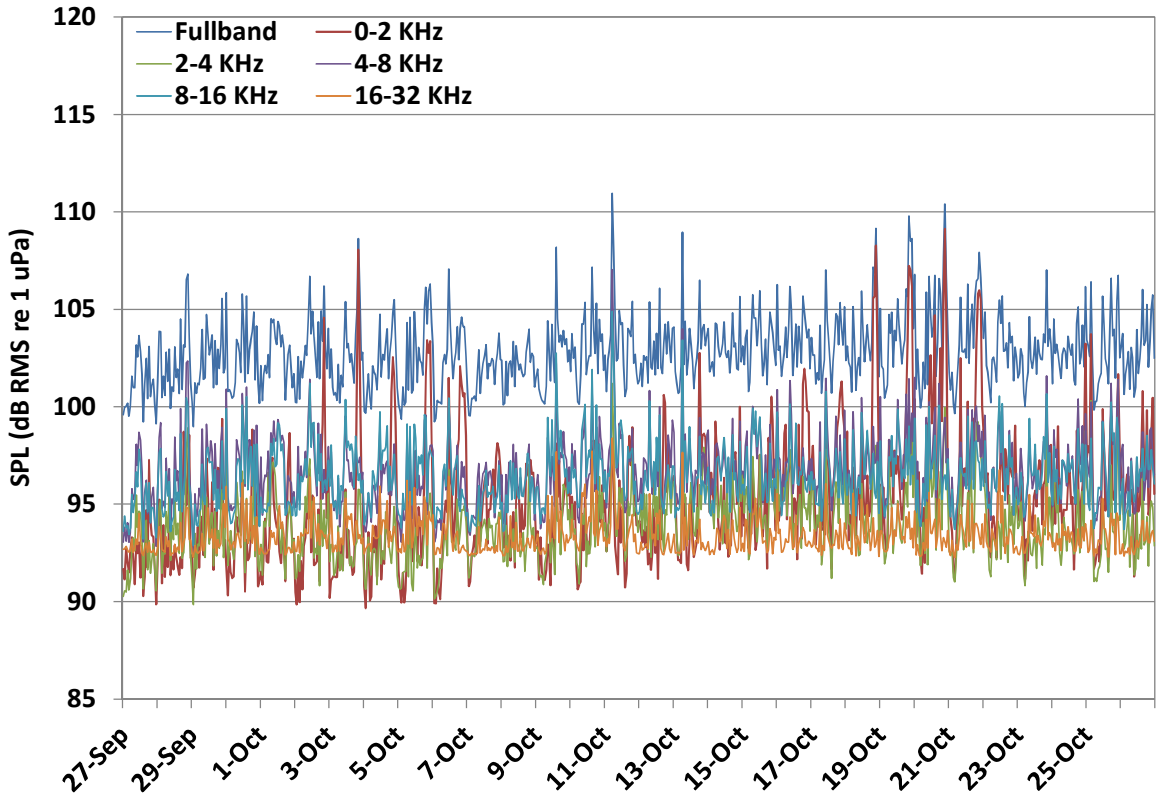


Figure 25. Root-mean-square (RMS) sound pressure level (SPL) in 1-octave bands and full bandwidth averaged hourly over the deployment period at site C2 (near Lung Kwu Chau).

Appendix I. Baseline Monitoring on Acoustic Monitoring in relation to TM-CLKL bored-piling works

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep
8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep
15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep
22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep
				Acoustic Monitoring Survey (Day 1)	Acoustic Monitoring Survey (Day 2)	Acoustic Monitoring Survey (Day 3)
29-Sep	30-Sep					
Acoustic Monitoring Survey (Day 4)	Acoustic Monitoring Survey (Day 5)					

Appendix I. (cont'd)

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

Appendix II. Database of underwater sound recordings (including dolphin sound recordings) during baseline period of TM-CLKL acoustic monitoring

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
26-Sep-13	20	9	9:20:10	9:23:13	0:03:03	22.3048	113.9539	22.3048	113.9533	NE LANTAU	x10	N	6.4	5	2	2.1	0	N	near HKBCF
26-Sep-13	22	6	10:00:33	10:03:33	0:03:00	22.3077	113.9662	22.3065	113.9645	NE LANTAU	x10	N	3.9	3	2	0.3	0	N	near CMP and HKBCF; 2 minutes recordingy by Fostex recorder at same location
26-Sep-13	23	5	10:34:23	10:37:23	0:03:00	22.3035	113.9737	22.3030	113.9735	NE LANTAU	x20	N	3.9	3	2	2.5	0	N	weird sound @ 2:30
26-Sep-13	25	5	10:54:25	10:57:26	0:03:01	22.3138	113.9844	22.3133	113.9840	NE LANTAU	x20	N	9.9	5	2	2.1	0	N	
26-Sep-13	26	1	11:22:38	11:27:40	0:05:02	22.3262	113.9993	22.3253	113.9978	NE LANTAU	x10/x20	Y	14.7	5	3	2.5	0	N	gain change from 20dB to 10dB @ 1:26; snapping shrimp sound
26-Sep-13	27	4	11:52:00	11:55:00	0:03:00	22.3407	114.0115	22.3404	114.0102	NE LANTAU	x10	N	22.1	5	2	0.3	0	N	
26-Sep-13	28	6	12:24:10	12:27:12	0:03:02	22.3454	113.9940	22.3452	113.9929	NE LANTAU	x10	N	25.0	5	2	1.4	0	N	
26-Sep-13	29	5	12:51:40	12:54:50	0:03:10	22.3300	113.9762	22.3300	113.9756	NE LANTAU	x10	N	8.0	5	2	0.3	0	N	
26-Sep-13	30	10	13:23:20	13:26:40	0:03:20	22.3293	113.9710	22.3288	113.9705	NE LANTAU	x10	N	5.9	3	2	2.0	0	N	
26-Sep-13	32	15	13:55:30	14:00:45	0:05:15	22.3470	113.9600	22.3465	113.9588	NE LANTAU	x10	N	19.4	5	2	2.4	0	N	
26-Sep-13	33	1	16:26:35	16:30:20	0:03:45	22.2919	113.8784	22.2905	113.8780	NW LANTAU	x10/x20	Y	6.7	5	2	1.7	0	N	gain change from 20dB to 10dB @ 1:05; faint croaking sound
27-Sep-13	35	4	11:08:29	11:13:29	0:05:00	22.3772	113.8932	22.3744	113.8933	NW LANTAU	x10	N	10.3	5	3	2.2	0	Y	snapping shrimp sound
27-Sep-13	36	8	11:23:16	11:28:16	0:05:00	22.3849	113.8918	22.3831	113.8920	NW LANTAU	x10	N	21.5	5	2	3.3	0	Y	
27-Sep-13	37	7	11:28:18	11:33:20	0:05:02	22.3831	113.8920	22.3812	113.8925	NW LANTAU	x10	N	21.7	5	2	1.2	0	Y	
27-Sep-13	38	8	12:19:15	12:22:25	0:03:10	22.3326	113.9434	22.3328	113.9430	NW LANTAU	x10	N	11.2	5	2	1.8	0	N	
27-Sep-13	39	9	12:56:18	13:01:18	0:05:00	22.3342	113.9518	22.3343	113.9516	NE LANTAU	x10	N	7.4	5	3	0.8	0	Y	
27-Sep-13	40	5	13:10:05	13:13:05	0:03:00	22.3327	113.9441	22.3325	113.9437	NW LANTAU	x10	N	8.9	5	3	3.3	0	Y	
27-Sep-13	41	8	13:25:43	13:28:48	0:03:05	22.3327	113.9345	22.3332	113.9338	NW LANTAU	x10	N	7.8	5	3	0.6	0	N	
27-Sep-13	42	4	13:50:18	13:55:18	0:05:00	22.3362	113.9449	22.3364	113.9446	NW LANTAU	x10	N	16.9	5	2	1.6	0	Y	
27-Sep-13	43	8	13:55:25	14:00:25	0:05:00	22.3364	113.9446	22.3367	113.9445	NW LANTAU	x10	N	16.9	5	2	0.6	0	Y	
27-Sep-13	44	0	14:00:33	14:02:33	0:02:00	22.3367	113.9445	22.3367	113.9443	NW LANTAU	x10	N	27.8	5	2	0.6	0	Y	
27-Sep-13	45	0	14:04:01	14:09:00	0:04:59	22.3367	113.9442	22.3368	113.9440	NW LANTAU	x10	N	27.8	5	2	1.2	0	Y	
27-Sep-13	46	7	14:19:37	14:25:37	0:06:00	22.3375	113.9463	22.3375	113.9459	NW LANTAU	x10	N	8.3	5	2	1.2	0	Y	
27-Sep-13	47	6	14:26:51	14:29:51	0:03:00	22.3375	113.9459	22.3376	113.9456	NW LANTAU	x10	N	17.2	5	2	0.7	0	Y	
27-Sep-13	48	0	15:12:55	15:15:55	0:03:00	22.3321	113.9966	22.3319	113.9958	NE LANTAU	x10	N	9.2	5	2	3.7	0	N	
27-Sep-13	49	4	15:42:06	15:45:36	0:03:30	22.3363	114.0060	22.3366	114.0052	NE LANTAU	x10	N	14.1	5	2	2.5	0	N	
27-Sep-13	50	4	16:16:30	16:19:30	0:03:00	22.3286	113.9866	22.3286	113.9862	NE LANTAU	x10	N	10.4	5	2	1.3	0	N	near CMP
27-Sep-13	51	5	16:42:34	16:45:44	0:03:10	22.3119	113.9752	22.3124	113.9747	NE LANTAU	x10	N	5.9	3	2	2.6	0	N	
27-Sep-13	52	9	17:11:50	17:14:52	0:03:02	22.2998	113.9588	22.3002	113.9588	NE LANTAU	x10	N	3.8	3	2	1.1	0	N	
28-Sep-13	53	7	9:42:09	9:47:09	0:05:00	22.3111	113.9650	22.3107	113.9653	NE LANTAU	x10	N	4.3	3	2	1.8	0	N	near HKBCF
28-Sep-13	54	5	10:08:10	10:11:10	0:03:00	22.3045	113.9750	22.3038	113.9750	NE LANTAU	x10	N	4.0	3	2	3.6	0	N	snapping shrimp sound
28-Sep-13	56	3	10:40:49	10:43:48	0:02:59	22.3190	113.9906	22.3188	113.9906	NE LANTAU	x10	N	11.1	5	3	4.1	0	N	engine sound @ 1:04; weird sound @ 2:17 & 2:41
28-Sep-13	57	6	11:08:25	11:11:35	0:03:10	22.3331	114.0132	22.3323	114.0128	NE LANTAU	x10	N	17.3	5	3	4.3	0	N	
28-Sep-13	59	8	11:40:37	11:45:37	0:05:00	22.3528	114.0155	22.3522	114.0152	NE LANTAU	x10	N	15.8	5	3	4.0	0	N	
28-Sep-13	61	9	12:07:00	12:10:00	0:03:00	22.3541	114.0018	22.3542	114.0008	NE LANTAU	x10	N	10.6	5	2		0	N	
28-Sep-13	65	7	13:26:00	13:29:00	0:03:00	22.3511	113.9633	22.3510	113.9630	NE LANTAU	x20	N	12.2	5	3	2.9	0	N	
29-Sep-13	69	7	13:34:55	13:37:55	0:03:00	22.3280	113.9647	22.3279	113.9636	NE LANTAU	x0	N	11.1	5	3	3.8	0	N	near HKBCF
29-Sep-13	70	6	15:25:52	15:28:52	0:03:00	22.3482	114.0044	22.3477	114.0025	NE LANTAU	x10	N	17.7	5	2	1.4	0	N	starting recording at 2:20
29-Sep-13	72	7	16:01:43	16:04:43	0:03:00	22.3320	114.0018	22.3311	114.0000	NE LANTAU	x10	N	12.0	5	2	0.6	0.1-0.5	N	
30-Sep-13	73	5	9:39:47	9:42:49	0:03:02	22.3052	113.9709	22.3053	113.9708	NE LANTAU	x0/x10	Y	4.6	3	2	2.7	0	N	gain change from 0dB to 10dB @ 0:45; start recording at 1:10
30-Sep-13	74	8	10:11:45	10:14:43	0:02:58	22.3182	113.9789	22.3180	113.9791	NE LANTAU	x10	N	7.9	5	3	2.2	0	N	start recording at 2:45
30-Sep-13	75	8	10:39:00	10:43:03	0:04:03	22.3329	113.9988	22.3330	113.9989	NE LANTAU	x10	N	9.8	5	3	3.5	0	N	
30-Sep-13	77	2	11:28:13	11:32:23	0:04:10	22.3427	114.0001	22.3428	114.0003	NE LANTAU	x0/x10	Y	33.0	5	3	1.2	5.1	N	gain change from 0dB to 10dB @ 1:50; start recording at 1:50
30-Sep-13	80	1	12:39:17	12:42:18	0:03:01	22.3352	113.9680	22.3349	113.9683	NE LANTAU	x0	N	6.7	5	3	1.2	7	N	near Tai Mo To; start recording at 0:10
30-Sep-13	81	6	13:09:26	13:12:56	0:03:30	22.3498	113.9529	22.3492	113.9526	NE LANTAU	x0	N	14.4	5	2	3.2	0.1-0.5	N	start recording at 2:00
30-Sep-13	82	2	16:08:20	16:10:20	0:02:00	22.3047	113.9714	22.3047	113.9714	NE LANTAU	x0/x10/x20	Y	4.3	3	1	0.9	0	N	gain change from 0dB to 10dB @ 0:22; from 10dB to 20dB @ 0:44
30-Sep-13	84	6	16:13:09	16:16:11	0:03:02	22.3047	113.9713	22.3047	113.9708	NE LANTAU	x20	N	4.3	3	1	0.9	0	N	
30-Sep-13	85	6	16:22:37	16:26:36	0:03:59	22.3017	113.9665	22.3015	113.9658	NE LANTAU	x0/x10	Y	4.1	3	1	0.5	0	N	gain change from 0dB to 10dB @ 0:19
1-Oct-13	86	7	10:32:14	10:37:13	0:04:59	22.3766	113.8934	22.3749	113.8938	NW LANTAU	x10	N	31.0	5	3	1.8	0	Y	lots of cargo ships in shipping channel; snapping shrimp sound
1-Oct-13	87	5	10:37:26	10:42:31	0:05:05	22.3748	113.8938	22.3727	113.8941	NW LANTAU	x10	N	29.0	5	3	3.5	0	Y	lots of cargo ships in shipping channel; snapping shrimp sound
1-Oct-13	88	4	10:42:51	10:47:57	0:05:06	22.3726	113.8941	22.3702	113.8946	NW LANTAU	x10	N	29.0	5	3	1.6	0	Y	lots of cargo ships in shipping channel; snapping shrimp sound
1-Oct-13	89	3	10:49:18	10:54:18	0:05:00	22.3696	113.8946	22.3672	113.8946	NW LANTAU	x10	N	12.2	5	3	1.7	0	Y	snapping shrimp sound; 11:00 am - purse seine finish hauling net
1-Oct-13	90	3	11:24:43	11:29:42	0:04:59	22.3751	113.8908	22.3720	113.8909	NW LANTAU	x10	N	29.0	5	2	1.3	0	Y	snapping shrimp sound
1-Oct-13	92	1	11:44:50	11:49:50	0:05:00	22.3817	113.8879	22.3796	113.8882	NW LANTAU	x10	N	18.2	5	2	1.2	0	Y	snapping shrimp sound
1-Oct-13	93	6	13:09:40	13:12:40	0:03:00	22.3408	113.9535	22.3405	113.9544	NE LANTAU	x10	N	11.3	5	2	1.7	0	N	
1-Oct-13	94	3	13:39:39	13:42:39	0:03:00	22.3492	113.9664	22.3495	113.9673	NE LANTAU	x10	N	30.0	5	2	1.2	0	N	
1-Oct-13	95	3	14:01:22	14:05:21	0:03:59	22.3252	113.9765	22.3249	113.9773	NE LANTAU	x10	N	9.1	5	1	2.2	0	Y	
1-Oct-13	96	10	14:11:11	14:16:11	0:05:00	22.3274	113.9762	22.3275	113.9772	NE LANTAU	x10	N	10.2	5	2	1.2	0	Y	engine sound @ 2:45
1-Oct-13	97	7	14:16:15	14:20:16	0:04:01	22.3275	113.9772	22.3275	113.9777	NE LANTAU	x10	N	14.0	5	2	1.2	0	Y	

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
1-Oct-13	98	11	14:25:41	14:31:41	0:06:00	22.3275	113.9777	22.3270	113.9765	NE LANTAU	x10	N	13.7	5	2	0.7	0	Y	
1-Oct-13	99	8	14:32:40	14:37:40	0:05:00	22.3270	113.9766	22.3267	113.9774	NE LANTAU	x10	N	14.9	5	2	1.4	0	Y	
1-Oct-13	100	9	14:47:24	14:52:24	0:05:00	22.3279	113.9767	22.3277	113.9772	NE LANTAU	x10	N	13.0	5	2	1.5	0	Y	
1-Oct-13	101	9	15:04:28	15:09:38	0:05:10	22.3244	113.9843	22.3240	113.9849	NE LANTAU	x10	N	10.5	5	2	2.1	0	Y	
1-Oct-13	102	5	15:20:48	15:24:48	0:04:00	22.3204	113.9925	22.3202	113.9927	NE LANTAU	x10	N	11.4	5	2	2.7	0	Y	
1-Oct-13	103	6	15:34:07	15:39:07	0:05:00	22.3176	113.9942	22.3168	113.9945	NE LANTAU	x10	N	7.0	5	2	2.5	0	Y	near Shum Shui Kok
1-Oct-13	104	8	16:12:50	16:15:50	0:03:00	22.3130	113.9658	22.3128	113.9657	NE LANTAU	x10	N	30.0	5	2	1.1	0	N	near HKBCF
1-Oct-13	105	8	16:21:28	16:24:28	0:03:00	22.3133	113.9653	22.3137	113.9649	NE LANTAU	x10	N	5.4	3	2	2.5	0	N	near HKBCF
2-Oct-13	106	7	9:28:08	9:31:08	0:03:00	22.3035	113.9656	22.3033	113.9658	NE LANTAU	x10	N	4.6	3	2	1.1	0	N	near HKBCF
2-Oct-13	108	3	10:01:20	10:04:20	0:03:00	22.3133	113.9813	22.3132	113.9816	NE LANTAU	x10	N	6.6	5	2	1.5	0	N	
2-Oct-13	109	5	10:27:11	10:30:11	0:03:00	22.3282	113.9989	22.3281	113.9995	NE LANTAU	x10	N	14.1	5	3	2.7	0	N	
2-Oct-13	110	2	10:59:56	11:02:56	0:03:00	22.3478	114.0016	22.3471	114.0031	NE LANTAU	x10	N	32.0	5	3	2.7	0	N	start recording at 1:00
2-Oct-13	111	9	11:30:50	11:33:50	0:03:00	22.3471	113.9872	22.3471	113.9882	NE LANTAU	x10	N	28.4	5	3	2.8	0	N	
2-Oct-13	112	3	11:57:58	12:00:58	0:03:00	22.3362	113.9768	22.3355	113.9776	NE LANTAU	x10	N	4.5	3	2	0.6	0	N	snapping shrimp sound
2-Oct-13	113	8	12:29:37	12:32:37	0:03:00	22.3269	113.9648	22.3268	113.9660	NE LANTAU	x10	N	11.8	5	2	1.4	0	N	
2-Oct-13	114	6	12:58:10	13:01:10	0:03:00	22.3409	113.9511	22.3398	113.9521	NW LANTAU	x10	N	11.2	5	2	1.2	0	N	
2-Oct-13	115	4	14:36:03	14:41:03	0:05:00	22.3848	113.8883	22.3825	113.8892	NW LANTAU	x10	N	18.8	5	2	1.4	0	Y	
2-Oct-13	116	5	14:51:32	14:56:32	0:05:00	22.3869	113.8925	22.3830	113.8935	NW LANTAU	x10	N	18.7	5	2	2.9	0	Y	
2-Oct-13	117	2	15:09:03	15:12:03	0:03:00	22.3808	113.9015	22.3791	113.9025	NW LANTAU	x10	N	20.0	5	3	3.7	0	Y	
2-Oct-13	118	7	15:40:11	15:44:11	0:04:00	22.3736	113.9135	22.3727	113.9143	NW LANTAU	x10/x0	Y	17.4	5	3	2.4	0	Y	near Power Plant and Lung Kwu Tan; gain change from 10dB to 0dB @ 2:00
3-Oct-13	119	2	12:33:10	12:36:15	0:03:05	22.3236	113.9906	22.3241	113.9921	NE LANTAU	x10	N	13.3	5	2	0.6	0	N	croaking sound heard
3-Oct-13	120	7	13:02:09	13:05:09	0:03:00	22.3107	113.9754	22.3108	113.9758	NE LANTAU	x10	N	4.9	3	1	0.6	0	N	
3-Oct-13	121	9	13:27:00	13:30:10	0:03:10	22.3097	113.9627	22.3097	113.9634	NE LANTAU	x20	N	4.1	3	2	2.5	0	N	
3-Oct-13	123	8	14:47:30	14:50:30	0:03:00	22.3396	113.9532	22.3396	113.9546	NE LANTAU	x10	N	9.6	5	3	2.8	0	N	
3-Oct-13	124	12	15:17:15	15:20:24	0:03:09	22.3498	113.9662	22.3503	113.9680	NE LANTAU	x10	N	13.3	5	2	3.7	0	N	
3-Oct-13	125	7	15:47:00	15:50:01	0:03:01	22.3402	113.9862	22.3407	113.9864	NE LANTAU	x20	N	8.8	5	2	1.5	0	N	
3-Oct-13	126	4	17:16:24	17:20:14	0:03:50	22.3341	113.9988	22.3343	113.9972	NE LANTAU	x20	N	9.2	5	2	2.8	0	N	croaking sound heard
3-Oct-13	127	4	17:51:09	17:54:09	0:03:00	22.3420	114.0003	22.3422	113.9993	NE LANTAU	x20	N	32.1	5	2	2.2	0	N	
3-Oct-13	128	13	18:16:40	18:20:10	0:03:30	22.3149	113.9674	22.3156	113.9664	NE LANTAU	x10/x20	Y	11.4	5	2	1.2	0	N	gain change from 20dB to 10dB @ 2:50
3-Oct-13	129	9	18:48:20	18:51:20	0:03:00	22.3044	113.9668	22.3044	113.9668	NE LANTAU	x10/x20	Y	4.1	3	2	2.1	0	N	gain change from 20dB to 10dB @ 2:12
3-Oct-13	130	6	19:45:30	19:48:30	0:03:00	22.3045	113.9668	22.3044	113.9668	NE LANTAU	x10/x20	Y	4.3	3	2	3.5	0	N	gain change from 10dB to 20dB @ 0:15; croaking sound heard
3-Oct-13	131	4	20:06:05	20:08:05	0:02:00	22.3039	113.9700	22.3040	113.9698	NE LANTAU	x20	N	4.3	3	2	3.0	0	N	at Pier B1 (0m); croaking sound heard
3-Oct-13	132	4	20:08:27	20:10:27	0:02:00	22.3040	113.9698	22.3042	113.9697	NE LANTAU	x20	N	4.8	3	2	3.1	0	N	at Pier B1 (10m); croaking sound heard
3-Oct-13	133	4	20:11:46	20:13:45	0:01:59	22.3044	113.9697	22.3047	113.9695	NE LANTAU	x20	N	4.8	3	2	3.9	0	N	at Pier B1 (20m); croaking sound heard
3-Oct-13	134	4	20:20:46	20:22:45	0:01:59	22.3039	113.9624	22.3041	113.9690	NE LANTAU	x20	N	4.8	3	2	4.2	0	N	at Pier B1 (50m); croaking sound heard
3-Oct-13	135	4	20:23:55	20:25:55	0:02:00	22.3042	113.9690	22.3046	113.9689	NE LANTAU	x20	N	4.8	3	2	4.4	0	N	at Pier B1 (100m); croaking sound heard
3-Oct-13	136	4	20:33:05	20:35:05	0:02:00	22.3040	113.9681	22.3045	113.9680	NE LANTAU	x20	N	4.9	3	2	5.8	0	N	at Pier B1 (200m); croaking sound heard
3-Oct-13	137	4	20:40:25	20:42:25	0:02:00	22.3038	113.9669	22.3042	113.9668	NE LANTAU	x20	N	4.8	3	2	4.7	0	N	at Pier B1 (300m); croaking sound heard
3-Oct-13	138	4	20:45:35	20:47:35	0:02:00	22.3039	113.9651	22.3042	113.9652	NE LANTAU	x20	N	4.8	3	2	3.6	0	N	at Pier B1 (500m); croaking sound heard
3-Oct-13	139	4	21:01:45	21:03:45	0:02:00	22.3037	113.9703	22.3040	113.9700	NE LANTAU	x20	N	4.8	3	2	4.6	0	N	at Pier B2 (0m); croaking sound heard
3-Oct-13	140	4	21:10:35	21:12:35	0:02:00	22.3032	113.9707	22.3035	113.9706	NE LANTAU	x20	N	4.7	3	2	4.5	0	N	at Pier B3 (0m)
3-Oct-13	141	4	21:18:30	21:20:30	0:02:00	22.3031	113.9707	22.3036	113.9708	NE LANTAU	x20	N	4.8	3	2	4.7	0	N	at Pier B3 (10m)
3-Oct-13	142	5	21:34:00	21:36:00	0:02:00	22.3033	113.9706	22.3040	113.9709	NE LANTAU	x20	N	4.9	3	2	4.3	0	N	at Pier B3 (20m); faint croaking sound
3-Oct-13	143	3	21:42:30	21:44:30	0:02:00	22.3031	113.9702	22.3035	113.9702	NE LANTAU	x20	N	4.8	3	2	4.5	0	N	at Pier B3 (50m); faint croaking sound
3-Oct-13	144	4	21:47:25	21:49:25	0:02:00	22.3031	113.9697	22.3034	113.9696	NE LANTAU	x20	N	4.8	3	2	4.1	0	N	at Pier B3 (100m); faint croaking sound
3-Oct-13	145	4	21:53:50	21:55:50	0:02:00	22.3031	113.9689	22.3034	113.9688	NE LANTAU	X20	N	4.8	3	2	4.8	0	N	at Pier B3 (200m)
3-Oct-13	146	4	22:00:22	22:02:20	0:01:58	22.3031	113.9678	22.3034	113.9676	NE LANTAU	x20	N	4.8	3	2	3.6	0	N	at Pier B3 (300m)
3-Oct-13	147	4	22:06:45	22:08:45	0:02:00	22.3032	113.9658	22.3034	113.9659	NE LANTAU	x20	N	5.2	3	2	3.8	0	N	at Pier B3 (500m)
4-Oct-13	148	19	9:50:05	9:55:05	0:05:00	22.2835	113.8826	22.2835	113.8820	NW LANTAU	x10	N	7.0	5	2	2.9	0	N	near HKLR09 bored pile sites; with 25-30 vessels within 500m
4-Oct-13	149	14	9:55:09	10:01:09	0:06:00	22.2835	113.8820	22.2832	113.8815	NW LANTAU	x10	N	7.0	5	2	2.9	0	N	near HKLR09 bored pile sites; with 25-30 vessels within 500m
4-Oct-13	150	6	10:05:14	10:10:44	0:05:30	22.2831	113.8813	22.2831	113.8811	NW LANTAU	x10	N	7.0	5	2	1.7	0	N	near HKLR09 bored pile sites; with 25-30 vessels within 500m
4-Oct-13	151	4	10:10:59	10:13:59	0:03:00	22.2831	113.8811	22.2830	113.8810	NW LANTAU	x10	N	7.0	5	2	2.4	0	N	near HKLR09 bored pile sites; with 25-30 vessels within 500m
4-Oct-13	152	3	11:43:09	11:47:09	0:04:00	22.3626	113.8728	22.3617	113.8725	NW LANTAU	x20	N	6.7	5	2	1.1	0	Y	faint croaking sound
4-Oct-13	153	7	12:41:42	12:44:42	0:03:00	22.3326	113.9433	22.3323	113.9440	NW LANTAU	x10	N	9.4	5	2	1.1	0	N	near HKBCF
4-Oct-13	154	23	13:12:57	13:17:58	0:05:01	22.3198	113.9691	22.3198	113.9691	NE LANTAU	x10	N	11.3	5	1	1.3	0	N	
4-Oct-13	155	8	14:13:42	14:17:27	0:03:45	22.3048	113.9703	22.3048	113.9703	NE LANTAU	x10	N	3.9	3	2	2.6	0	N	
4-Oct-13	156	5	14:42:46	14:45:46	0:03:00	22.3135	113.9795	22.3136	113.9799	NE LANTAU	x10	N	5.8	3	2	2.0	0	N	
4-Oct-13	157	0	15:13:10	15:16:10	0:03:00	22.3374	114.0001	22.3377	114.0006	NE LANTAU	x10	N	11.8	5	2	1.4	0	N	
4-Oct-13	158	2	15:41:30	15:44:30	0:03:00	22.3326	114.0134	22.3333	114.0133	NE LANTAU	x10	N	16.3	5	2	3.6	0	N	

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
5-Oct-13	159	8	8:27:20	8:30:20	0:03:00	22.3010	113.9612	22.3008	113.9609	NE LANTAU	x20	N	4.3	3	2	1.6	0	N	
5-Oct-13	160	6	8:57:03	9:00:03	0:03:00	22.3104	113.9761	22.3104	113.9760	NE LANTAU	x20	N	5.7	3	2	1.3	0	N	
5-Oct-13	161	2	9:30:10	9:33:10	0:03:00	22.3313	113.9992	22.3310	113.9992	NE LANTAU	x20	N	11.8	5	2	1.7	0	N	
5-Oct-13	162	3	9:58:11	10:01:11	0:03:00	22.3462	114.0013	22.3460	114.0006	NE LANTAU	x10	N	31.5	5	2	1.9	0	N	
5-Oct-13	163	4	10:28:22	10:31:22	0:03:00	22.3294	113.9837	22.3282	113.9842	NE LANTAU	x20	N	11.7	5	2	1.3	0	N	
5-Oct-13	164	9	10:57:55	11:00:56	0:03:01	22.3446	113.9697	22.3435	113.9698	NE LANTAU	x10	N	26.9	5	2	1.3	0	N	
5-Oct-13	165	5	11:27:18	11:30:19	0:03:01	22.3503	113.9550	22.3500	113.9553	NE LANTAU	x10	N	14.7	5	2	2.4	0	N	
5-Oct-13	166	1	12:20:20	12:24:19	0:03:59	22.3521	113.8926	22.3503	113.8933	NW LANTAU	x10	N	9.8	5	2	3.4	0	Y	
5-Oct-13	167	2	12:38:01	12:42:01	0:04:00	22.3538	113.9002	22.3524	113.9014	NW LANTAU	x10	N	9.8	5	2	4.1	0	Y	
5-Oct-13	168	0	12:54:45	12:59:45	0:05:00	22.3595	113.9031	22.3577	113.9049	NW LANTAU	x10	N	12.0	5	3	3.0	0	Y	snapping shrimp sound
5-Oct-13	169	0	13:17:33	13:22:33	0:05:00	22.3667	113.8940	22.3645	113.8953	NW LANTAU	x10	N	11.7	5	2	3.4	0	Y	
5-Oct-13	170	1	13:41:53	13:45:49	0:03:56	22.3770	113.8907	22.3753	113.8919	NW LANTAU	x10	N	16.9	5	2	3.1	0	Y	
5-Oct-13	171	4	14:29:03	14:34:03	0:05:00	22.3653	113.8717	22.3631	113.8724	NW LANTAU	x10	N	6.2	5	2	3.0	0	Y	
6-Oct-13	172	2	11:09:28	11:14:28	0:05:00	22.3538	113.8913	22.3528	113.8916	NW LANTAU	x0	N	10.1	5	3	3.4	0	Y	
6-Oct-13	173	2	11:30:44	11:35:44	0:05:00	22.3548	113.8832	22.3544	113.8844	NW LANTAU	x0	N	8.0	5	4	5.1	0	Y	
6-Oct-13	174	5	12:06:29	12:11:29	0:05:00	22.3367	113.8973	22.3360	113.8990	NW LANTAU	x0	N	9.4	5	3	1.8	0	Y	
6-Oct-13	175	6	12:19:32	12:24:32	0:05:00	22.3379	113.8928	22.3366	113.8935	NW LANTAU	x0	N	9.7	5	3	2.1	0	Y	
6-Oct-13	177	1	12:35:06	12:40:06	0:05:00	22.3394	113.8879	22.3378	113.8895	NW LANTAU	x0	N	5.5	3	4	5.2	0	Y	
6-Oct-13	178	8	13:29:52	13:32:52	0:03:00	22.3341	113.9548	22.3338	113.9563	NE LANTAU	x10	N	7.0	5	3	1.6	0	N	
6-Oct-13	179	5	13:57:32	14:00:32	0:03:00	22.3419	113.9753	22.3416	113.9765	NE LANTAU	x10	N	14.7	5	2	1.8	0	N	
6-Oct-13	180	7	14:27:05	14:30:05	0:03:00	22.3467	113.9922	22.3463	113.9938	NE LANTAU	x10	N	31.0	5	3	2.7	0	N	
6-Oct-13	181	2	14:59:25	15:02:25	0:03:00	22.3398	114.0112	22.3395	114.0136	NE LANTAU	x10	N	20.1	5	3	3.0	0	N	
6-Oct-13	182	5	15:28:20	15:31:20	0:03:00	22.3229	113.9982	22.3232	113.9999	NE LANTAU	x10	N	7.9	5	4	3.5	0	N	
6-Oct-13	183	7	15:57:57	16:00:57	0:03:00	22.3102	113.9803	22.3101	113.9812	NE LANTAU	x10	N	5.5	3	4	5.0	0	N	
6-Oct-13	184	7	16:16:26	16:19:26	0:03:00	22.3086	113.9716	22.3084	113.9724	NE LANTAU	x10	N	4.3	3	4	4.5	0	N	
6-Oct-13	185	10	16:46:02	16:49:02	0:03:00	22.3048	113.9528	22.3041	113.9531	NE LANTAU	x10	N	5.6	3	3	4.8	0	N	
7-Oct-13	186	7	9:32:10	9:35:10	0:03:00	22.3081	113.9688	22.3076	113.9690	NE LANTAU	x20	N	4.8	3	3	5.0	0	N	
7-Oct-13	187	3	10:02:03	10:05:03	0:03:00	22.3238	113.9828	22.3232	113.9828	NE LANTAU	x20	N	11.3	5	3	5.8	0	N	
7-Oct-13	188	1	10:31:35	10:34:35	0:03:00	22.3318	114.0061	22.3311	114.0062	NE LANTAU	x20	N	16.0	5	4	5.6	0	N	
7-Oct-13	189	2	11:02:35	11:05:35	0:03:00	22.3353	113.9952	22.3344	113.9952	NE LANTAU	x20	N	9.1	5	4	5.9	0	N	
7-Oct-13	190	4	11:33:30	11:36:30	0:03:00	22.3249	113.9792	22.3244	113.9800	NE LANTAU	x20	N	12.8	5	4	7.1	0	N	
7-Oct-13	191	3	11:45:22	11:48:28	0:03:06	22.3318	113.9764	22.3312	113.9772	NE LANTAU	x10	N	8.6	5	5	7.7	0	N	
7-Oct-13	192	6	12:23:30	12:28:30	0:05:00	22.3436	113.9789	22.3434	113.9805	NE LANTAU	x10	N	30.1	5	3	3.8	0	Y	
7-Oct-13	193	6	13:01:30	13:06:30	0:05:00	22.3454	113.9765	22.3449	113.9887	NE LANTAU	x10	N	33.6	5	5	4.8	0	Y	
7-Oct-13	194	4	13:07:40	13:12:40	0:05:00	22.3449	113.9787	22.3451	113.9813	NE LANTAU	x10	N	31.8	5	4	4.9	0	Y	
7-Oct-13	195	0	13:51:48	13:54:48	0:03:00	22.3429	113.9598	22.3425	113.9623	NE LANTAU	x10	N	16.1	5	5	6.3	0	N	
7-Oct-13	196	5	14:22:15	14:25:15	0:03:00	22.3499	113.9543	22.3494	113.9572	NE LANTAU	x10	N	14.8	5	5	5.9	0	N	
7-Oct-13	197	8	14:46:10	14:51:10	0:05:00	22.3397	113.9477	22.3385	113.9508	NE LANTAU	x10	N	9.8	5	3	5.5	0	Y	
7-Oct-13	198	4	15:15:55	15:19:55	0:04:00	22.3427	113.9367	22.3406	113.9392	NE LANTAU	x10	N	9.8	5	4	3.5	0	Y	
8-Oct-13	199	2	12:24:51	12:27:51	0:03:00	22.3021	113.9713	22.3021	113.9714	NE LANTAU	x0/x10	Y	4.8	3	3	4.6	0	N	at Pier B5 (0m); gain change from 0dB to 10dB @ 0:10
8-Oct-13	200	4	12:34:25	12:37:25	0:03:00	22.3023	113.9712	22.3022	113.9712	NE LANTAU	x10	N	4.8	3	3	4.6	0	N	at Pier B5 (10m)
8-Oct-13	201	3	12:43:39	12:46:39	0:03:00	22.3022	113.9710	22.3020	113.9710	NE LANTAU	x10	N	4.8	3	3	5.0	0	N	at Pier B5 (20m)
8-Oct-13	202	4	12:54:20	12:57:20	0:03:00	22.3020	113.9703	22.3020	113.9703	NE LANTAU	x10	N	4.7	3	3	2.0	0	N	at Pier B5 (100m)
8-Oct-13	203	6	13:10:05	13:13:05	0:03:00	22.3022	113.9708	22.3022	113.9707	NE LANTAU	x10	N	4.8	3	4	3.4	0	N	at Pier B5 (50m)
8-Oct-13	204	6	13:19:15	13:22:15	0:03:00	22.3021	113.9694	22.3020	113.9694	NE LANTAU	x10	N	4.8	3	3	3.5	0	N	at Pier B5 (200m)
8-Oct-13	205	4	13:28:49	13:31:48	0:02:59	22.3021	113.9684	22.3020	113.9685	NE LANTAU	x10	N	4.6	3	3	3.9	0	N	at Pier B5 (300m)
8-Oct-13	206	4	13:42:28	13:45:28	0:03:00	22.3022	113.9664	22.3021	113.9664	NE LANTAU	x10	N	4.6	3	3	5.1	0	N	at Pier B5 (500m)
8-Oct-13	207	4	13:59:50	14:02:50	0:03:00	22.3012	113.9712	22.3012	113.9713	NE LANTAU	x10	N	5.0	3	3	3.0	0	N	at Pier B7 (20m)
8-Oct-13	208	5	14:03:18	14:06:18	0:03:00	22.3011	113.9713	22.3011	113.9713	NE LANTAU	x10	N	4.8	3	3	3.8	0	N	at Pier B7 (10m)
8-Oct-13	209	4	14:27:40	14:30:40	0:03:00	22.3010	113.9713	22.3009	113.9713	NE LANTAU	x10	N	4.5	3	3	3.9	0	N	at Pier B7 (0m); very close to shore
8-Oct-13	210	5	14:39:50	14:42:55	0:03:05	22.3010	113.9709	22.3009	113.9709	NE LANTAU	x10	N	4.8	3	2	3.7	0	N	at Pier B7 (50m)
8-Oct-13	211	8	14:48:40	14:51:40	0:03:00	22.3010	113.9703	22.3009	113.9702	NE LANTAU	x10	N	5.0	3	2	2.7	0	N	at Pier B7 (100m)
8-Oct-13	213	4	15:03:10	15:06:11	0:03:01	22.3010	113.9695	22.3009	113.9694	NE LANTAU	x10	N	4.8	3	3	2.7	0	N	at Pier B7 (200m)
8-Oct-13	214	4	15:15:10	15:18:10	0:03:00	22.3009	113.9685	22.3009	113.9685	NE LANTAU	x20	N	5.0	3	3	3.4	0	N	at Pier B7 (300m)
8-Oct-13	215	6	15:23:35	15:26:35	0:03:00	22.3010	113.9666	22.3010	113.9666	NE LANTAU	x20	N	4.9	3	3	3.3	0	N	at Pier B7 (500m)
8-Oct-13	216	4	16:02:40	16:05:40	0:03:00	22.3241	113.9892	22.3234	113.9907	NE LANTAU	x10	N	12.4	5	2	3.2	0	N	
8-Oct-13	217	1	16:33:34	16:36:34	0:03:00	22.3329	114.0133	22.3333	114.0139	NE LANTAU	x10	N	16.5	5	3	2.4	0	N	
8-Oct-13	218	6	16:59:26	17:04:26	0:05:00	22.3524	114.0070	22.3519	114.0080	NE LANTAU	x0	N	10.5	5	2	2.1	0	Y	
8-Oct-13	219	13	17:09:36	17:14:36	0:05:00	22.3511	114.0024	22.3504	114.0041	NE LANTAU	x0	N	11.1	5	2	3.1	0	Y	

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
8-Oct-13	220	7	17:21:10	17:25:10	0:04:00	22.3482	113.9975	22.3477	113.9984	NE LANTAU	x0	N	32.0	5	2	1.5	0	Y	
8-Oct-13	221	0	18:01:25	18:04:25	0:03:00	22.3369	113.9863	22.3366	113.9853	NE LANTAU	x10	N	4.6	3	2	3.6	0	N	
8-Oct-13	222	5	20:08:45	20:11:45	0:03:00	22.3017	113.9694	22.3018	113.9695	NE LANTAU	x0/x10	Y	4.8	3	2	1.8	0	N	gain change from 0 dB to 10dB @ 0:15
8-Oct-13	223	3	20:48:10	20:51:10	0:03:00	22.3018	113.9694	22.3018	113.9694	NE LANTAU	x20	N	5.0	3	2	1.3	0	N	croaking sound heard
8-Oct-13	224	5	21:16:31	21:19:31	0:03:00	22.3017	113.9694	22.3017	113.9694	NE LANTAU	x10	N	5.2	3	2	1.8	0	N	croaking sound heard
8-Oct-13	225	2	21:44:08	21:47:08	0:03:00	22.3017	113.9695	22.3017	113.9694	NE LANTAU	x10	N	5.3	3	2	1.8	0	N	croaking sound heard
8-Oct-13	226	2	22:18:00	22:21:00	0:03:00	22.3017	113.9695	22.3017	113.9695	NE LANTAU	x20	N	5.4	3	2	1.0	0	N	
8-Oct-13	227	2	22:49:37	22:52:37	0:03:00	22.3017	113.9695	22.3018	113.9694	NE LANTAU	x20/x10	Y	5.5	3	2	0.4	0	N	gain change from 20dB to 10dB @ 0:22
8-Oct-13	228	2	23:17:05	23:20:04	0:02:59	22.3017	113.9696	22.3017	113.9695	NE LANTAU	x10	N	5.5	3	2	2.4	0	N	
9-Oct-13	229	2	0:16:35	0:19:35	0:03:00	22.3017	113.9698	22.3017	113.9698	NE LANTAU	x10	N	5.5	3	1	2.9	0	N	
9-Oct-13	231	2	1:19:55	1:21:55	0:02:00	22.3018	113.9693	22.3018	113.9693	NE LANTAU	x10	N	5.3	3	2	2.6	0	N	
9-Oct-13	232	2	2:15:55	2:18:55	0:03:00	22.3023	113.9698	22.3023	113.9698	NE LANTAU	x10	N	4.8	3	1	1.1	0	N	
9-Oct-13	233	2	3:17:33	3:20:33	0:03:00	22.3022	113.9700	22.3021	113.9701	NE LANTAU	x10	N	4.3	3	2	1.1	0	N	
9-Oct-13	234	2	4:18:50	4:21:50	0:03:00	22.3021	113.9701	22.3022	113.9701	NE LANTAU	x10	N	4.5	3	1	1.9	0	N	
9-Oct-13	235	2	5:52:43	5:55:44	0:03:01	22.3022	113.9700	22.3021	113.9701	NE LANTAU	x10	N	3.5	3	2	2.7	0	N	
9-Oct-13	236	3	6:18:23	6:21:23	0:03:00	22.3021	113.9701	22.3020	113.9701	NE LANTAU	x10	N	3.3	3	2	0.8	0	N	
9-Oct-13	237	5	6:48:23	6:51:23	0:03:00	22.3022	113.9700	22.3022	113.9700	NE LANTAU	x10	N	3.4	3	2	1.4	0	N	
9-Oct-13	238	9	7:32:30	7:35:30	0:03:00	22.3234	113.9692	22.3234	113.9693	NE LANTAU	x0	N	10.3	5	1	0.6	0	N	
9-Oct-13	239	3	8:03:20	8:06:20	0:03:00	22.3395	113.9553	22.3391	113.9552	NE LANTAU	x0	N	10.3	5	1	1.0	0	N	
9-Oct-13	240	8	8:21:50	8:24:50	0:03:00	22.3282	113.9694	22.3281	113.9682	NE LANTAU	x0	N	7.7	5	1	0.3	0	N	
9-Oct-13	241	4	8:41:59	8:44:59	0:03:00	22.3495	113.9634	22.3496	113.9626	NE LANTAU	x0	N	14.4	5	2	0.7	0	N	
9-Oct-13	242	8	9:02:18	9:05:18	0:03:00	22.3346	113.9755	22.3352	113.9751	NE LANTAU	x0	N	5.5	3	2	1.7	0	N	
9-Oct-13	243	4	9:33:10	9:38:10	0:05:00	22.3466	113.9897	22.3464	113.9886	NE LANTAU	x0	N	31.1	5	2	2.0	0	Y	
9-Oct-13	244	3	9:49:35	9:54:35	0:05:00	22.3477	113.9967	22.3474	113.9955	NE LANTAU	x0	N	33.7	5	2	1.1	0	Y	
9-Oct-13	245	2	10:09:50	10:14:50	0:05:00	22.3430	114.0015	22.3428	114.0023	NE LANTAU	x0	N	30.3	5	2	1.3	0	Y	
9-Oct-13	246	0	10:47:20	10:50:21	0:03:01	22.3330	114.0059	22.3327	114.0054	NE LANTAU	x0	N	15.1	5	2	0.8	0	N	
9-Oct-13	247	0	11:11:10	11:16:10	0:05:00	22.3332	113.9973	22.3328	113.9965	NE LANTAU	x0	N	9.1	5	2	1.4	0	Y	
9-Oct-13	248	9	11:43:44	11:46:44	0:03:00	22.3152	113.9721	22.3152	113.9712	NE LANTAU	x10	N	13.1	5	3	4.1	0	N	
10-Oct-13	249	1	10:01:49	10:06:49	0:05:00	22.3267	113.8798	22.3272	113.8781	NW LANTAU	x10	N	6.6	5	3	3.0	0	Y	
10-Oct-13	250	11	10:16:15	10:21:15	0:05:00	22.3282	113.8838	22.3286	113.8824	NW LANTAU	x10	N	6.5	5	2	2.8	0	Y	
10-Oct-13	251	1	10:28:50	10:33:50	0:05:00	22.3370	113.8818	22.3380	113.8802	NW LANTAU	x10	N	4.8	3	2	3.3	0	Y	
10-Oct-13	253	0	10:46:10	10:51:10	0:05:00	22.3421	113.8799	22.3432	113.8791	NW LANTAU	x10	N	5.8	5	2	1.8	0	Y	
10-Oct-13	254	2	10:53:32	10:58:37	0:05:05	22.3435	113.8787	22.3441	113.8781	NW LANTAU	x10	N	6.8	5	2	2.4	0	Y	
10-Oct-13	255	3	11:04:04	11:09:04	0:05:00	22.3452	113.8787	22.3458	113.8781	NW LANTAU	x10	N	7.0	5	2	2.9	0	Y	
10-Oct-13	256	2	12:23:40	12:27:40	0:04:00	22.3563	113.9109	22.3571	113.9035	NW LANTAU	x10/x0	Y	13.3	5	3	3.0	0	Y	gain change from 10dB to 0dB @ 2:05
10-Oct-13	257	6	13:02:28	13:07:28	0:05:00	22.3489	113.9530	22.3492	113.9522	NE LANTAU	x0	N	5.0	3	2	1.7	0	N	
10-Oct-13	258	4	13:35:34	13:40:34	0:05:00	22.3375	113.9591	22.3381	113.9591	NE LANTAU	x0	N	9.5	5	2	1.6	0	Y	
10-Oct-13	259	7	13:48:10	13:53:10	0:05:00	22.3370	113.9529	22.3380	113.9527	NE LANTAU	x0	N	8.4	5	2	0.3	0	Y	near HKBCF; sound of mud pit dredger
10-Oct-13	262	1	14:31:59	14:34:59	0:03:00	22.3351	113.9763	22.3347	113.9766	NE LANTAU	x0	N	5.9	5	1	1.6	0	N	
10-Oct-13	263	2	15:03:35	15:06:35	0:03:00	22.3388	113.9919	22.3389	113.9926	NE LANTAU	x0	N	10.4	5	2	2.8	0	N	
10-Oct-13	264	5	15:32:29	15:35:29	0:03:00	22.3467	114.0096	22.3462	114.0106	NE LANTAU	x10/x0	Y	24.7	5	2	3.0	0	N	gain change from 10dB to 0dB @ 1:45
10-Oct-13	265	6	16:16:35	16:19:35	0:03:00	22.3340	113.9986	22.3339	113.9994	NE LANTAU	x10	N	9.5	5	2	1.6	0	N	croaking sound heard
11-Oct-13	266	6	9:47:53	9:50:53	0:03:00	22.3057	113.9730	22.3052	113.9728	NE LANTAU	x10	N	3.3	3	1	0.6	0	N	
11-Oct-13	267	7	10:17:13	10:20:23	0:03:10	22.3212	113.9810	22.3212	113.9811	NE LANTAU	x20	N	11.1	5	1	0.0	0	N	
11-Oct-13	269	5	10:48:59	10:51:59	0:03:00	22.3367	114.0060	22.3363	114.0051	NE LANTAU	x10	N	13.4	5	1	1.1	0	N	
11-Oct-13	270	8	11:20:44	11:23:45	0:03:01	22.3444	114.0012	22.3441	114.0009	NE LANTAU	x10	N	33.0	5	2	2.1	0	N	
11-Oct-13	271	6	11:47:23	11:50:23	0:03:00	22.3446	113.9862	22.3441	113.9855	NE LANTAU	x10	N	29.3	5	2	1.5	0	N	
11-Oct-13	272	6	12:18:04	12:20:04	0:02:00	22.3508	113.9762	22.3508	113.9755	NE LANTAU	x10	N	13.2	5	2	2.1	0	N	
11-Oct-13	273	9	12:45:25	12:50:55	0:05:30	22.3437	113.9765	22.3436	113.9760	NE LANTAU	x10	N	30.4	5	2	0.4	0	Y	
11-Oct-13	274	9	13:00:00	13:05:00	0:05:00	22.3443	113.9725	22.3442	113.9715	NE LANTAU	x10	N	28.8	5	2	1.3	0	Y	
11-Oct-13	275	7	13:15:37	13:20:37	0:05:00	22.3449	113.9757	22.3452	113.9755	NE LANTAU	x10	N	32.0	5	2	2.3	0	Y	
11-Oct-13	276	1	13:26:32	13:30:32	0:04:00	22.3450	113.9786	22.3456	113.9787	NE LANTAU	x10	N	31.5	5	2	3.1	0	Y	
11-Oct-13	277	7	14:18:22	14:21:22	0:03:00	22.3354	113.9438	22.3355	113.9440	NE LANTAU	x10	N	8.7	5	2	2.7	0	N	
11-Oct-13	278	2	15:00:32	15:02:32	0:02:00	22.3039	113.9699	22.3039	113.9701	NE LANTAU	x10/x20	Y	4.3	3	2	0.8	0	N	gain change from 10dB to 20dB @ 0:25; at Pier B1 (0m)
11-Oct-13	279	4	15:12:48	15:14:48	0:02:00	22.3039	113.9697	22.3038	113.9699	NE LANTAU	x20	N	4.3	3	2	2.5	0	N	at Pier B1 (20m)
11-Oct-13	280	2	15:29:02	15:31:02	0:02:00	22.3038	113.9697	22.3037	113.9698	NE LANTAU	x20	N	4.4	3	2	1.2	0	N	at Pier B1 (10m)
11-Oct-13	281	3	15:38:24	15:40:24	0:02:00	22.3039	113.9694	22.3040	113.9696	NE LANTAU	x20	N	4.3	3	2	2.4	0	N	at Pier B1 (50m)
11-Oct-13	282	5	15:43:42	15:45:42	0:02:00	22.3039	113.9689	22.3039	113.9690	NE LANTAU	x20	N	4.3	3	2	0.3	0	N	at Pier B1 (100m)
11-Oct-13	283	4	15:49:58	15:51:58	0:02:00	22.3039	113.9680	22.3039	113.9682	NE LANTAU	x20	N	4.4	3	2	2.3	0	N	at Pier B1 (200m)

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
11-Oct-13	284	5	15:55:28	15:57:28	0:02:00	22.3039	113.9670	22.3039	113.9672	NE LANTAU	x20	N	4.3	3	2	2.5	0	N	at Pier B1 (300m)
11-Oct-13	285	3	16:01:34	16:03:34	0:02:00	22.3039	113.9650	22.3039	113.9651	NE LANTAU	x20	N	4.3	3	2	1.0	0	N	at Pier B1 (500m)
11-Oct-13	286	3	16:12:54	16:14:54	0:02:00	22.3032	113.9707	22.3031	113.9708	NE LANTAU	x20	N	4.3	3	2	1.2	0	N	at Pier B3 (0m)
11-Oct-13	287	5	16:18:02	16:20:03	0:02:01	22.3031	113.9705	22.3031	113.9705	NE LANTAU	x20	N	4.3	3	2	0.5	0	N	at Pier B3 (20m)
11-Oct-13	288	6	16:20:50	16:22:50	0:02:00	22.3031	113.9706	22.3031	113.9707	NE LANTAU	x20	N	4.3	3	2	0.6	0	N	at Pier B3 (10m)
11-Oct-13	289	3	16:26:29	16:28:29	0:02:00	22.3033	113.9702	22.3033	113.9702	NE LANTAU	x20	N	4.4	3	2	1.7	0	N	at Pier B3 (50m)
11-Oct-13	290	3	16:32:43	16:34:43	0:02:00	22.3032	113.9696	22.3032	113.9697	NE LANTAU	x20	N	4.3	3	2	1.0	0	N	at Pier B3 (100m)
11-Oct-13	291	4	16:39:08	16:41:08	0:02:00	22.3032	113.9688	22.3032	113.9690	NE LANTAU	x20	N	4.3	3	2	1.6	0	N	at Pier B3 (200m)
11-Oct-13	292	3	16:44:51	16:46:51	0:02:00	22.3032	113.9677	22.3031	113.9678	NE LANTAU	x20	N	4.3	3	2	1.2	0	N	at Pier B3 (300m)
11-Oct-13	293	5	16:50:30	16:52:30	0:02:00	22.3032	113.9658	22.3033	113.9659	NE LANTAU	x20	N	4.3	3	2	1.7	0	N	at Pier B3 (500m)
12-Oct-13	294	10	10:45:23	10:50:24	0:05:01	22.3785	113.9046	22.3770	113.9047	NW LANTAU	x0	N	19.8	5	2	4.5	0	Y	
12-Oct-13	295	6	11:04:50	11:10:05	0:05:15	22.3724	113.9125	22.3721	113.9132	NW LANTAU	x0	N	20.7	5	2	1.8	0	Y	
12-Oct-13	296	9	11:22:16	11:27:17	0:05:01	22.3739	113.9131	22.3734	113.9137	NW LANTAU	x0	N	17.6	5	2	1.3	0	Y	Near Power Plant ; a fuel tanker (~160m away) stopped next to power plant
12-Oct-13	297	4	12:34:44	12:37:59	0:03:15	22.3332	113.9432	22.3333	113.9427	NW LANTAU	x0/x10	Y	7.7	5	2	2.9	0	N	
12-Oct-13	298	9	13:07:02	13:11:04	0:04:02	22.3501	113.9514	22.3509	113.9500	NE LANTAU	x10	N	14.3	5	3	5.4	0	N	
12-Oct-13	299	2	13:37:00	13:40:00	0:03:00	22.3374	113.9678	22.3379	113.9669	NE LANTAU	x20	N	10.7	5	3	4.1	0	N	
12-Oct-13	300	6	14:07:05	14:10:05	0:03:00	22.3230	113.9793	22.3235	113.9785	NE LANTAU	x20	N	11.0	5	2	3.5	0	N	
12-Oct-13	301	0	14:36:55	14:39:55	0:03:00	22.3395	113.9913	22.3399	113.9901	NE LANTAU	x20	N	11.9	5	2	2.3	0	N	
12-Oct-13	302	3	15:06:33	15:09:33	0:03:00	22.3326	114.0135	22.3330	114.0129	NE LANTAU	x20	N	16.7	5	2	2.5	0	N	
12-Oct-13	303	2	15:27:06	15:30:06	0:03:00	22.3258	113.9996	22.3262	113.9986	NE LANTAU	x20	N	13.8	5	2	2.1	0	N	
12-Oct-13	304	4	15:59:45	16:04:45	0:05:00	22.3294	113.9777	22.3301	113.9762	NE LANTAU	x10	N	9.6	5	3	2.4	0	Y	
12-Oct-13	305	1	16:05:19	16:10:18	0:04:59	22.3302	113.9760	22.3310	113.9746	NE LANTAU	x10	N	6.8	5	3	3.2	0	Y	
13-Oct-13	306	6	10:25:25	10:28:30	0:03:05	22.3103	113.9754	22.3098	113.9751	NE LANTAU	x10	N	4.5	3	2	2.9	0	N	
13-Oct-13	307	8	11:49:23	11:52:23	0:03:00	22.3360	113.9471	22.3357	113.9470	NE LANTAU	x10	N	7.5	5	3	2.4	0	N	
13-Oct-13	308	6	12:17:05	12:20:05	0:03:00	22.3293	113.9604	22.3293	113.9598	NE LANTAU	x10	N	7.7	5	2	1.5	0	N	
13-Oct-13	309	4	12:48:55	12:51:55	0:03:00	22.3394	113.9759	22.3394	113.9753	NE LANTAU	x10	N	7.3	5	3	3.3	0	N	
13-Oct-13	310	7	13:17:40	13:20:40	0:03:00	22.3492	113.9914	22.3491	113.9905	NE LANTAU	x10	N	20.3	5	2	0.7	0	N	
13-Oct-13	311	7	13:43:40	13:46:40	0:03:00	22.3460	113.9952	22.3428	113.9946	NE LANTAU	x10	N	32.9	5	2	1.4	0	Y	
13-Oct-13	312	5	14:16:57	14:19:57	0:03:00	22.3306	114.0114	22.3297	114.0109	NE LANTAU	x10	N	15.4	5	1	0.9	0	N	
13-Oct-13	313	4	14:47:14	14:50:14	0:03:00	22.3264	113.9838	22.3260	113.9823	NE LANTAU	x10	N	10.3	5	2	0.4	0	N	
13-Oct-13	314	4	15:18:50	15:21:50	0:03:00	22.3029	113.9651	22.3026	113.9646	NE LANTAU	x20	N	4.0	3	1	0.6	0	N	
13-Oct-13	315	5	15:49:40	15:52:40	0:03:00	22.3247	113.9698	22.3245	113.9692	NE LANTAU	x10	N	11.7	5	1	0.9	0	N	
13-Oct-13	316	4	16:20:05	16:23:07	0:03:02	22.3333	113.9768	22.3332	113.9762	NE LANTAU	x10	N	8.0	5	2	0.7	0	N	
14-Oct-13	318	2	9:53:53	9:56:53	0:03:00	22.3395	113.9948	22.3393	113.9947	NE LANTAU	x20	N	13.0	5	3	6.0	0	N	
14-Oct-13	319	1	10:22:55	10:25:55	0:03:00	22.3308	113.9854	22.3308	113.9861	NE LANTAU	x20	N	9.8	5	3	4.9	0	N	
14-Oct-13	320	5	10:59:53	11:02:53	0:03:00	22.3521	113.9753	22.3524	113.9761	NE LANTAU	x20	N	11.3	5	2	4.0	0	N	
14-Oct-13	321	6	11:27:15	11:30:15	0:03:00	22.3277	113.9618	22.3271	113.9620	NE LANTAU	x0	N	9.9	5	3	5.0	0	N	
14-Oct-13	322	6	11:58:37	12:01:37	0:03:00	22.3404	113.9466	22.3401	113.9468	NE LANTAU	x10	N	18.3	5	2	3.0	0	N	
14-Oct-13	323	1	13:14:28	13:19:28	0:05:00	22.3775	113.8749	22.3763	113.8742	NW LANTAU	x10	N	10.0	5	2	1.1	0	Y	
14-Oct-13	324	0	13:21:07	13:25:07	0:04:00	22.3759	113.8740	22.3748	113.8737	NW LANTAU	x10/x20	Y	10.0	5	1	0.9	0	Y	
14-Oct-13	325	3	13:46:14	13:51:16	0:05:02	22.3744	113.8876	22.3726	113.8869	NW LANTAU	x10	N	10.1	5	2	1.7	0	Y	
14-Oct-13	326	7	15:09:55	15:12:55	0:03:00	22.3021	113.9606	22.3027	113.9604	NE LANTAU	x20	N	3.5	3	2	1.2	0	N	
14-Oct-13	327	7	15:38:00	15:41:00	0:03:00	22.3158	113.9705	22.3163	113.9700	NE LANTAU	x10	N	14.4	5	1	1.1	0.5-2.0	N	
14-Oct-13	328	4	16:09:05	16:12:05	0:03:00	22.3235	113.9902	22.3226	113.9897	NE LANTAU	x10	N	13.1	5	0	0.6	0.5-2.0	N	
14-Oct-13	329	6	16:39:31	16:42:31	0:03:00	22.3309	114.0136	22.3308	114.0127	NE LANTAU	x10	N	9.6	5	1	0.6	0.5-2.0	N	
15-Oct-13	330	8	14:22:59	14:27:59	0:05:00	22.3664	113.9123	22.3655	113.9120	NW LANTAU	x10	N	20.5	5	3	4.2	0	Y	
15-Oct-13	331	10	14:46:55	14:51:55	0:05:00	22.3735	113.9137	22.3739	113.9133	NW LANTAU	x0	N	17.3	5	3	4.7	0	Y	Near Plant Power
15-Oct-13	332	5	15:06:20	15:09:20	0:03:00	22.3552	113.9213	22.3560	113.9211	NW LANTAU	x10	N	17.7	5	3	4.0	0	N	
15-Oct-13	333	5	15:21:50	15:24:50	0:03:00	22.3410	113.9307	22.3413	113.9301	NW LANTAU	x10	N	8.4	5	3	2.2	0	N	
15-Oct-13	334	7	15:47:00	15:50:00	0:03:00	22.3505	113.9532	22.3514	113.9523	NE LANTAU	x0	N	14.3	5	3	4.5	0	N	
15-Oct-13	335	5	16:16:42	16:19:47	0:03:05	22.3380	113.9667	22.3391	113.9649	NE LANTAU	x10	N	10.5	5	2	3.2	0	N	
15-Oct-13	336	11	16:47:15	16:50:15	0:03:00	22.3255	113.9800	22.3258	113.9790	NE LANTAU	x10	N	12.1	5	3	3.5	0	N	
15-Oct-13	337	2	17:17:50	17:20:50	0:03:00	22.3370	113.9985	22.3375	113.9976	NE LANTAU	x10	N	11.2	5	2	4.8	0	N	
15-Oct-13	338	1	19:17:20	19:19:35	0:02:15	22.3022	113.9711	22.3023	113.9712	NE LANTAU	x20	N	4.8	3	2	3.1	0	N	croaking sound heard
15-Oct-13	339	1	19:20:05	19:22:05	0:02:00	22.3022	113.9711	22.3023	113.9712	NE LANTAU	x20	N	4.8	3	2	1.6	0	N	at Pier B5 (20m)
15-Oct-13	340	1	19:22:52	19:24:52	0:02:00	22.3023	113.9711	22.3022	113.9711	NE LANTAU	x20	N	4.8	3	2	2.6	0	N	
15-Oct-13	341	1	19:50:01	19:52:01	0:02:00	22.3023	113.9712	22.3022	113.9711	NE LANTAU	x20	N	4.8	3	2	3.1	0	N	at Pier B5 (10m); croaking sound
15-Oct-13	342	1	19:55:08	19:57:08	0:02:00	22.3022	113.9713	22.3022	113.9713	NE LANTAU	x20	N	5.0	3	3	2.7	0	N	at Pier B5 (0m)
15-Oct-13	343	3	20:07:52	20:09:52	0:02:00	22.3022	113.9707	22.3022	113.9707	NE LANTAU	x20	N	4.8	3	2	3.5	0	N	at Pier B5 (50m); croaking sound

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
15-Oct-13	344	3	20:19:17	20:21:28	0:02:11	22.3021	113.9702	22.3022	113.9702	NE LANTAU	x20	N	4.9	3	2	3.4	0	N	at Pier B5 (100m)
15-Oct-13	345	3	20:30:13	20:32:13	0:02:00	22.3022	113.9695	22.3023	113.9693	NE LANTAU	x20	N	4.7	3	2	3.3	0	N	at Pier B5 (200m)
15-Oct-13	346	3	20:39:15	20:41:15	0:02:00	22.3021	113.9684	22.3022	113.9684	NE LANTAU	x20	N	4.8	3	2	2.6	0	N	at Pier B5 (300m)
15-Oct-13	347	4	20:50:40	20:52:40	0:02:00	22.3021	113.9664	22.3021	113.9964	NE LANTAU	x20	N	4.7	3	2	1.4	0	N	at Pier B5 (500m)
15-Oct-13	348	1	21:08:10	21:10:10	0:02:00	22.3012	113.9715	22.3012	113.9715	NE LANTAU	x10	N	4.9	3	2	2.7	0	N	at Pier B7 (0m)
15-Oct-13	349	1	21:17:05	21:19:05	0:02:00	22.3012	113.9713	22.3012	113.9713	NE LANTAU	x10	N	5.1	3	2	3.1	0	N	at Pier B7 (10m)
15-Oct-13	350	2	21:25:03	21:28:03	0:03:00	22.3012	113.9711	22.3011	113.9711	NE LANTAU	x10	N	5.1	3	2	3.5	0	N	at Pier B7 (20m)
15-Oct-13	352	3	21:34:03	21:36:03	0:02:00	22.3012	113.9709	22.3011	113.9709	NE LANTAU	x10	N	5.0	3	2	4.2	0	N	at Pier B7 (50m)
15-Oct-13	353	3	21:43:29	21:45:29	0:02:00	22.3011	113.9704	22.3011	113.9703	NE LANTAU	x10	N	5.1	3	2	4.1	0	N	at Pier B7 (100m)
15-Oct-13	354	3	21:54:20	21:56:20	0:02:00	22.3010	113.9694	22.3010	113.9694	NE LANTAU	x10	N	5.1	3	2	2.6	0	N	at Pier B7 (200m)
15-Oct-13	355	5	22:05:45	22:07:45	0:02:00	22.3011	113.9685	22.3010	113.9684	NE LANTAU	x10	N	5.2	3	2	3.8	0	N	at Pier B7 (300m)
15-Oct-13	356	4	22:17:03	22:19:03	0:02:00	22.3011	113.9665	22.3010	113.9664	NE LANTAU	x10	N	5.2	3	2	3.9	0	N	at Pier B7 (500m)
15-Oct-13	357	3	23:09:35	23:12:35	0:03:00	22.3022	113.9687	22.3022	113.9687	NE LANTAU	x10	N	4.3	3	2	2.9	0	N	
15-Oct-13	358	3	23:35:58	23:38:58	0:03:00	22.3024	113.9689	22.3024	113.9689	NE LANTAU	x20	N	4.1	3	2	1.7	0	N	
16-Oct-13	359	4	0:07:25	0:10:25	0:03:00	22.3023	113.9688	22.3023	113.9688	NE LANTAU	x20	N	4.2	3	2	2.6	0	N	
16-Oct-13	360	3	1:05:10	1:08:10	0:03:00	22.3022	113.9687	22.3023	113.9688	NE LANTAU	x20	N	3.9	3	2	3.8	0	N	
16-Oct-13	361	3	1:59:27	2:02:27	0:03:00	22.3019	113.9687	22.3018	113.9687	NE LANTAU	x20	N	4.0	3	2	1.6	0	N	
16-Oct-13	362	3	3:03:40	3:06:40	0:03:00	22.3018	113.9687	22.3019	113.9687	NE LANTAU	x20	N	4.4	3	2	1.2	0	N	
16-Oct-13	363	3	4:03:50	4:05:50	0:02:00	22.3018	113.9687	22.3018	113.9687	NE LANTAU	x20	N	4.4	3	2	2.1	0	N	
16-Oct-13	364	3	6:03:55	6:06:56	0:03:01	22.3015	113.9689	22.3017	113.9687	NE LANTAU	x20	N	5.5	3	2	2.3	0	N	
16-Oct-13	365	3	6:28:30	6:30:30	0:02:00	22.3016	113.9688	22.3017	113.9687	NE LANTAU	x20	N	5.2	3	2	2.9	0	N	
16-Oct-13	366	3	6:52:44	6:55:44	0:03:00	22.3016	113.9687	22.3016	113.9688	NE LANTAU	x20	N	5.2	3	3	2.8	0	N	
16-Oct-13	367	5	7:22:46	7:25:46	0:03:00	22.3061	113.9616	22.3059	113.9611	NE LANTAU	x10	N	5.0	3	3	3.8	0	N	
16-Oct-13	368	5	7:43:01	7:46:01	0:03:00	22.3080	113.9710	22.3075	113.9708	NE LANTAU	x20	N	5.3	3	3	4.5	0	N	
16-Oct-13	369	5	8:02:35	8:05:35	0:03:00	22.3066	113.9778	22.3065	113.9778	NE LANTAU	x20	N	5.8	3	3	3.9	0	N	
16-Oct-13	370	1	8:22:59	8:26:01	0:03:02	22.3237	113.9886	22.3234	113.9883	NE LANTAU	x10/x0	Y	13.2	5	3	4.7	0	N	snapping shrimp sound
16-Oct-13	371	5	8:43:50	8:46:50	0:03:00	22.3351	113.9981	22.3345	113.9980	NE LANTAU	x10	N	9.8	5	4	4.3	0	N	
16-Oct-13	372	0	9:03:00	9:06:00	0:03:00	22.3352	114.0137	22.3351	114.0139	NE LANTAU	x10	N	11.6	5	3	2.9	0	N	
16-Oct-13	373	0	9:32:35	9:35:35	0:03:00	22.3401	113.9961	22.3397	113.9967	NE LANTAU	x10	N	15.3	5	4	4.0	0	N	
16-Oct-13	374	7	10:02:00	10:05:00	0:03:00	22.3252	113.9798	22.3249	113.9799	NE LANTAU	x10	N	13.0	5	4	4.5	0	N	
16-Oct-13	375	2	10:32:33	10:35:33	0:03:00	22.3387	113.9668	22.3389	113.9670	NE LANTAU	x10	N	11.6	5	4	4.2	0	N	
16-Oct-13	376	5	11:09:30	11:13:00	0:03:30	22.3302	113.9255	22.3295	113.9255	NW LANTAU	x10	N	8.5	5	3	4.8	0	N	
16-Oct-13	377	4	11:25:25	11:28:25	0:03:00	22.3215	113.9044	22.3211	113.9037	NW LANTAU	x10	N	6.6	5	3	2.0	0	N	
17-Oct-13	378	4	9:32:16	9:35:16	0:03:00	22.3361	113.9981	22.3366	113.9975	NE LANTAU	x20	N	11.0	5	3	3.7	0	N	
17-Oct-13	379	5	10:02:26	10:05:26	0:03:00	22.3259	113.9802	22.3264	113.9799	NE LANTAU	x10	N	12.3	5	3	3.0	0	N	
17-Oct-13	380	7	10:32:02	10:35:02	0:03:00	22.3426	113.9675	22.3427	113.9679	NE LANTAU	x10	N	15.6	5	4	4.3	0	N	
17-Oct-13	381	10	11:02:38	11:05:41	0:03:03	22.3480	113.9599	22.3476	113.9604	NE LANTAU	x10	N	16.5	5	3	5.0	0	N	
17-Oct-13	382	5	11:31:55	11:34:55	0:03:00	22.3356	113.9315	22.3354	113.9316	NW LANTAU	x10	N	8.2	5	3	3.8	0	N	
17-Oct-13	383	0	12:58:52	13:01:52	0:03:00	22.3305	113.9039	22.3287	113.9026	NW LANTAU	x10	N	6.6	3	4	4.0	0	N	snapping shrimp sound
17-Oct-13	384	6	13:20:04	13:23:04	0:03:00	22.3314	113.9323	22.3309	113.9323	NW LANTAU	x20	N	8.2	5	4	3.8	0	N	
17-Oct-13	385	7	14:04:14	14:07:15	0:03:01	22.3064	113.9618	22.3060	113.9612	NE LANTAU	x20	N	3.9	3	3	2.9	0	N	
17-Oct-13	386	7	14:32:20	14:35:22	0:03:02	22.3133	113.9747	22.3135	113.9742	NE LANTAU	x20	N	13.4	5	2	1.4	0	N	
17-Oct-13	387	2	15:01:54	15:04:54	0:03:00	22.3170	113.9926	22.3172	113.9921	NE LANTAU	x20	N	7.0	5	2	3.3	0	N	snapping shrimp sound
17-Oct-13	388	2	15:32:16	15:35:46	0:03:30	22.3310	114.0134	22.3313	114.0126	NE LANTAU	x10	N	10.5	5	2	2.9	0	N	
17-Oct-13	389	8	16:03:23	16:06:23	0:03:00	22.3449	113.9761	22.3453	113.9750	NE LANTAU	x10	N	32.4	5	2	3.7	0	N	
18-Oct-13	390	4	9:33:43	9:36:43	0:03:00	22.3395	114.0014	22.3394	114.0008	NE LANTAU	x10	N	18.4	5	3	2.7	0	N	
18-Oct-13	391	3	10:02:35	10:05:35	0:03:00	22.3345	113.9854	22.3342	113.9852	NE LANTAU	x20	N	6.4	5	3	4.1	0	N	
18-Oct-13	392	6	10:33:18	10:36:18	0:03:00	22.3459	113.9696	22.3455	113.9694	NE LANTAU	x10	N	27.8	5	3	3.2	0	N	
18-Oct-13	393	6	11:03:08	11:06:08	0:03:00	22.3458	113.9600	22.3459	113.9602	NE LANTAU	x10	N	21.8	5	3	5.2	0	N	
18-Oct-13	394	6	12:24:18	12:30:18	0:06:00	22.3714	113.8931	22.3676	113.8940	NW LANTAU	x20/x10	Y	14.2	5	3	5.9	0	Y	
18-Oct-13	395	2	12:30:50	12:35:50	0:05:00	22.3676	113.8940	22.3641	113.8949	NW LANTAU	x10	N	14.2	5	3	5.0	0	Y	
18-Oct-13	396	3	12:51:35	12:56:35	0:05:00	22.3751	113.8931	22.3724	113.8936	NW LANTAU	x10	N	18.1	5	3	3.6	0	Y	snapping shrimp sound
18-Oct-13	397	1	13:05:36	13:10:36	0:05:00	22.3811	113.8923	22.3782	113.8932	NW LANTAU	x10	N	21.7	5	2	2.6	0	Y	
18-Oct-13	398	1	13:20:08	13:25:08	0:05:00	22.3856	113.8887	22.3825	113.8888	NW LANTAU	x10	N	20.5	5	2	2.6	0	Y	
18-Oct-13	399	0	13:25:19	13:30:19	0:05:00	22.3824	113.8888	22.3793	113.8894	NW LANTAU	x10	N	20.5	5	2	2.1	0	Y	snapping shrimp sound
18-Oct-13	400	5	14:10:12	14:13:14	0:03:02	22.3242	113.9019	22.3226	113.9014	NW LANTAU	x10/x20	Y	6.9	5	2	2.7	0	N	
18-Oct-13	401	4	14:21:00	14:24:00	0:03:00	22.3241	113.9119	22.3232	113.9119	NW LANTAU	x10/x20	Y	5.5	3	3	2.7	0	N	
18-Oct-13	402	3	14:32:09	14:35:09	0:03:00	22.3286	113.9217	22.3283	113.9219	NW LANTAU	x20/x10	Y	5.5	3	2	0.4	0	Y	
18-Oct-13	403	5	15:24:58	15:27:26	0:02:28	22.3091	113.9642	22.3094	113.9643	NE LANTAU	x20	N	3.9	3	0	0.4	0	N	

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
18-Oct-13	404	4	15:56:35	15:59:34	0:02:59	22.3127	113.9809	22.3131	113.9803	NE LANTAU	x20	N	5.1	3	1	3.4	0	N	
18-Oct-13	405	4	16:22:22	16:25:22	0:03:00	22.3305	113.9993	22.3305	113.9993	NE LANTAU	x10	N	11.8	5	2	3.3	0	N	
19-Oct-13	406	3	10:22:25	10:25:25	0:03:00	22.3318	113.9848	22.3313	113.9847	NE LANTAU	x20	N	10.6	5	2	1.1	0	N	
19-Oct-13	407	10	10:48:40	10:54:00	0:05:20	22.3337	113.9728	22.3320	113.9732	NE LANTAU	x20/x10	Y	8.2	5	3	3.6	0	Y	
19-Oct-13	409	7	11:04:01	11:09:01	0:05:00	22.3350	113.9680	22.3339	113.9688	NE LANTAU	x0	N	7.8	5	3	2.8	0	Y	
19-Oct-13	410	7	11:22:47	11:27:47	0:05:00	22.3397	113.9627	22.3391	113.9649	NE LANTAU	x0/x10	Y	12.0	5	3	2.1	0	Y	
19-Oct-13	411	5	11:36:10	11:39:10	0:03:00	22.3393	113.9582	22.3393	113.9587	NE LANTAU	x10	N	11.0	5	2	2.8	0	Y	
19-Oct-13	412	9	12:03:03	12:08:03	0:05:00	22.3429	113.9456	22.3426	113.9469	NW LANTAU	x0	N	14.2	5	2	2.1	0	Y	
19-Oct-13	413	5	12:20:50	12:24:52	0:04:02	22.3491	113.9434	22.3488	113.9448	NW LANTAU	x0	N	22.9	5	2	0.5	0	Y	
19-Oct-13	414	8	12:34:09	12:37:18	0:03:09	22.3523	113.9412	22.3517	113.9424	NW LANTAU	x0	N	22.3	5	2	0.6	0	Y	
19-Oct-13	415	9	12:50:10	12:55:10	0:05:00	22.3537	113.9362	22.3523	113.9382	NW LANTAU	x0	N	24.3	5	2	3.2	0	Y	
19-Oct-13	416	6	13:15:10	13:20:10	0:05:00	22.3578	113.9283	22.3560	113.9296	NW LANTAU	x0	N	21.6	5	2	1.6	0	Y	
19-Oct-13	417	4	14:07:30	14:10:30	0:03:00	22.3357	113.9088	22.3342	113.9097	NW LANTAU	x10	N	4.6	3	3	4.9	0	N	
19-Oct-13	418	4	14:25:50	14:28:50	0:03:00	22.3304	113.9253	22.3294	113.9264	NW LANTAU	x10	N	7.9	5	2	3.2	0	N	
19-Oct-13	419	4	14:36:50	14:39:50	0:03:00	22.3322	113.9393	22.3316	113.9410	NW LANTAU	x10	N	9.6	5	3	2.7	0	N	
19-Oct-13	420	6	15:26:10	15:29:10	0:03:00	22.3086	113.9713	22.3090	113.9715	NE LANTAU	x10	N	4.2	3	2	2.6	0	N	
19-Oct-13	421	4	16:20:00	16:23:00	0:03:00	22.3315	114.0145	22.3319	114.0146	NE LANTAU	x10	N	10.5	5	2	0.8	0	N	
20-Oct-13	422	2	9:40:40	9:45:40	0:05:00	22.3302	113.9892	22.3301	113.9886	NE LANTAU	x20/x10	Y	10.0	5	2	0.9	0	Y	
20-Oct-13	423	2	10:17:55	10:23:10	0:05:15	22.3173	113.9774	22.3172	113.9775	NE LANTAU	x10	N	9.8	5	1	1.8	0	Y	
20-Oct-13	424	0	10:23:20	10:28:20	0:05:00	22.3172	113.9775	22.3173	113.9778	NE LANTAU	x10	N	9.7	5	1	0.6	0	Y	
20-Oct-13	425	1	10:28:30	10:33:30	0:05:00	22.3173	113.9778	22.3174	113.9781	NE LANTAU	x10	N	9.9	5	1	1.4	0	Y	
20-Oct-13	426	6	10:41:47	10:46:47	0:05:00	22.3192	113.9794	22.3195	113.9798	NE LANTAU	x10	N	11.4	5	1	0.3	0	Y	
20-Oct-13	427	7	10:55:11	11:00:11	0:05:00	22.3157	113.9848	22.3162	113.9855	NE LANTAU	x10	N	10.4	5	1	0.3	0	Y	
20-Oct-13	428	8	11:59:44	12:02:44	0:03:00	22.3295	113.9600	22.3297	113.9607	NE LANTAU	x10	N	8.3	5	2	1.3	0	N	
20-Oct-13	429	3	12:23:15	12:26:15	0:03:00	22.3361	113.9273	22.3356	113.9282	NW LANTAU	x10	N	8.5	5	2	2.7	0	N	
20-Oct-13	430	2	12:57:57	13:02:57	0:05:00	22.3388	113.8924	22.3377	113.8926	NW LANTAU	x10	N	9.7	5	2	2.4	0	Y	
20-Oct-13	431	5	13:14:08	13:19:08	0:05:00	22.3449	113.8949	22.3433	113.8958	NW LANTAU	x10	N	11.1	5	2	2.3	0	Y	
20-Oct-13	432	2	13:34:55	13:39:55	0:05:00	22.3511	113.8932	22.3493	113.8943	NW LANTAU	x10	N	9.1	5	2	2.7	0	Y	
20-Oct-13	433	0	13:49:15	13:54:15	0:05:00	22.3548	113.8930	22.3526	113.8944	NW LANTAU	x10	N	9.0	5	3	4.2	0	Y	
20-Oct-13	434	0	14:21:40	14:24:40	0:03:00	22.3284	113.9145	22.3273	113.9156	NW LANTAU	x10	N	6.7	5	3	4.2	0	N	
20-Oct-13	435	3	14:37:00	14:40:00	0:03:00	22.3303	113.9358	22.3295	113.9382	NW LANTAU	x0	N	7.1	5	3	2.8	0	N	
20-Oct-13	436	9	15:22:44	15:25:44	0:03:00	22.3495	113.9758	22.3493	113.9776	NE LANTAU	x10	N	15.6	5	2	3.4	0	N	
20-Oct-13	437	0	16:09:05	16:12:05	0:03:00	22.3379	114.0048	22.3375	114.0057	NE LANTAU	x10	N	14.8	5	2	2.5	0	N	
21-Oct-13	438	4	9:37:24	9:41:24	0:04:00	22.3309	113.9868	22.3303	113.9861	NE LANTAU	x10	N	9.8	5	1	0.7	0	Y	
21-Oct-13	439	1	10:17:23	10:20:23	0:03:00	22.3358	113.9773	22.3359	113.9775	NE LANTAU	x20	N	5.8	3	2	0.5	0	N	
21-Oct-13	440	5	10:57:41	11:03:01	0:05:20	22.3436	113.9660	22.3428	113.9651	NE LANTAU	X10	N	23.7	5	2	2.2	0	Y	
21-Oct-13	441	5	11:11:19	11:16:19	0:05:00	22.3397	113.9549	22.3395	113.9540	NE LANTAU	x10/x0	Y	11.0	5	2	1.0	0	Y	
21-Oct-13	442	6	11:25:33	11:30:33	0:05:00	22.3398	113.9432	22.3403	113.9428	NE LANTAU	x20	N	28.7	5	2	0.3	0	Y	
21-Oct-13	443	3	12:03:53	12:06:23	0:02:30	22.3037	113.9703	22.3037	113.9705	NE LANTAU	x20	N	4.8	3	2	1.3	0	N	at Pier B2 (0m)
21-Oct-13	444	4	12:11:01	12:13:01	0:02:00	22.3036	113.9702	22.3036	113.9701	NE LANTAU	x20	N	4.9	3	2	1.9	0	N	at Pier B2 (10m)
21-Oct-13	445	4	12:14:51	12:16:51	0:02:00	22.3036	113.9701	22.3036	113.9701	NE LANTAU	x20	N	4.9	3	2	1.0	0	N	at Pier B2 (20m)
21-Oct-13	446	4	12:22:12	12:24:12	0:02:00	22.3036	113.9698	22.3037	113.9698	NE LANTAU	x20	N	4.9	3	2	2.4	0	N	at Pier B2 (50m)
21-Oct-13	447	6	12:28:28	12:30:28	0:02:00	22.3034	113.9693	22.3034	113.9693	NE LANTAU	x20	N	5.0	3	2	3.5	0	N	at Pier B2 (100m)
21-Oct-13	448	4	12:37:00	12:39:00	0:02:00	22.3035	113.9683	22.3035	113.9683	NE LANTAU	x20	N	4.7	3	2	2.6	0	N	at Pier B2 (200m)
21-Oct-13	449	5	12:45:00	12:47:00	0:02:00	22.3037	113.9673	22.3037	113.9673	NE LANTAU	x20	N	4.6	3	2	3.3	0	N	at Pier B2 (300m)
21-Oct-13	450	4	12:54:30	12:56:30	0:02:00	22.3037	113.9654	22.3037	113.9654	NE LANTAU	x20	N	4.7	3	2	2.9	0	N	at Pier B2 (500m)
21-Oct-13	451	4	13:13:33	13:15:33	0:02:00	22.3017	113.9713	22.3018	113.9715	NE LANTAU	x20	N	5.2	3	2	3.2	0	N	at Pier B6 (10m)
21-Oct-13	452	4	13:20:32	13:22:33	0:02:01	22.3017	113.9712	22.3017	113.9712	NE LANTAU	x20	N	5.1	3	2	3.3	0	N	at Pier B6 (20m)
21-Oct-13	453	2	13:27:18	13:29:18	0:02:00	22.3017	113.9714	22.3017	113.9714	NE LANTAU	x20	N	5.1	3	2	1.1	0	N	at Pier B6 (0m)
21-Oct-13	454	5	13:33:35	13:35:35	0:02:00	22.3017	113.9709	22.3018	113.9709	NE LANTAU	x20	N	5.1	3	2	2.6	0	N	at Pier B6 (50m)
21-Oct-13	455	3	13:41:18	13:43:22	0:02:04	22.3017	113.9704	22.3016	113.9703	NE LANTAU	x20	N	4.9	3	2	2.8	0	N	at Pier B6 (100m)
21-Oct-13	456	4	13:45:37	13:47:37	0:02:00	22.3017	113.9703	22.3016	113.9703	NE LANTAU	x20	N	4.9	3	2	2.6	0	N	at Pier B6 (100m)
21-Oct-13	457	8	13:54:33	13:56:33	0:02:00	22.3018	113.9695	22.3018	113.9695	NE LANTAU	x20	N	4.8	3	2	1.0	0	N	at Pier B6 (200m)
21-Oct-13	458	6	14:03:12	14:05:12	0:02:00	22.3017	113.9685	22.3017	113.9685	NE LANTAU	x20	N	4.5	3	2	2.1	0	N	at Pier B6 (300m)
21-Oct-13	459	5	14:11:46	14:13:46	0:02:00	22.3017	113.9665	22.3017	113.9665	NE LANTAU	x20	N	4.4	3	2	1.8	0	N	at Pier B6 (500m)
21-Oct-13	460	0	15:22:30	15:25:30	0:03:00	22.3253	113.9998	22.3255	114.0019	NE LANTAU	x20	N	13.4	5	2	2.1	0	N	snapping shrimp and croaker sound
21-Oct-13	461	3	16:27:25	16:31:25	0:04:00	22.3419	113.9781	22.3420	113.9799	NE LANTAU	x10/x0	Y	13.3	5	2	2.9	0	Y	noise generated by boat propeller from 02:00-04:00

Appendix II. (cont'd)

Date	File #	No. Cues	Begin Time	End Time	Duration	Begin LAT	Begin LONG	End LAT	End LONG	Area	Gain	Gain Change?	Water Depth	Hp Depth	BSS	Wind Speed	Prec.	Dolphin Record?	Note(s)
22-Oct-13	462	5	12:59:20	13:02:20	0:03:00	22.3260	113.9771	22.3258	113.9771	NE LANTAU	x10	N	8.1	5	2	2.0	0	N	
22-Oct-13	463	6	13:37:36	13:40:36	0:03:00	22.3292	113.9615	22.3292	113.9624	NE LANTAU	x0	N	8.4	5	2	3.7	0	N	
22-Oct-13	464	7	14:24:25	14:27:25	0:03:00	22.3153	113.9669	22.3152	113.9675	NE LANTAU	x10	N	7.3	5	2	4.3	0	N	
22-Oct-13	465	0	16:17:12	16:22:12	0:05:00	22.3379	113.9746	22.3377	113.9760	NE LANTAU	x0	N	5.5	3	2	5.3	0	Y	
22-Oct-13	466	4	16:47:55	16:52:55	0:05:00	22.3389	113.9742	22.3394	113.9750	NE LANTAU	x0	N	6.5	3	2	3.3	0	Y	
22-Oct-13	467	9	17:09:49	17:14:49	0:05:00	22.3280	113.9732	22.3284	113.9736	NE LANTAU	x10	N	8.4	5	2	1.7	0	Y	
22-Oct-13	468	2	17:22:22	17:27:22	0:05:00	22.3235	113.9789	22.3231	113.9790	NE LANTAU	x10	N	11.5	5	2	2.3	0	Y	croaking sound heard
22-Oct-13	469	3	17:37:03	17:42:18	0:05:15	22.3172	113.9844	22.3169	113.9840	NE LANTAU	x10	N	7.5	5	2	3.5	0	Y	
22-Oct-13	470	1	17:54:00	17:59:00	0:05:00	22.3190	113.9897	22.3186	113.9892	NE LANTAU	x10	N	10.8	5	2	2.7	0	Y	croaking sound heard
22-Oct-13	473	1	18:02:40	18:07:40	0:05:00	22.3183	113.9888	22.3179	113.9881	NE LANTAU	x10	N	10.3	5	2	2.6	0	Y	croaking sound heard
22-Oct-13	474	3	19:05:13	19:08:13	0:03:00	22.3017	113.9684	22.3017	113.9684	NE LANTAU	x20	N	4.5	3	2	2.0	0	N	croaking sound heard
22-Oct-13	475	3	20:14:10	20:17:10	0:03:00	22.3016	113.9684	22.3016	113.9684	NE LANTAU	x20	N	5.1	3	2	1.4	0	N	croaking sound heard
22-Oct-13	477	3	20:48:15	20:51:15	0:03:00	22.3017	113.9684	22.3017	113.9684	NE LANTAU	x20	N	4.9	3	2	1.8	0	N	croaking sound heard
22-Oct-13	478	6	21:16:50	21:19:50	0:03:00	22.3017	113.9684	22.3018	113.9684	NE LANTAU	x20	N	5.0	3	2	1.7	0	N	croaking sound heard
22-Oct-13	479	3	21:50:28	21:53:28	0:03:00	22.3018	113.9684	22.3019	113.9685	NE LANTAU	x20	N	5.0	3	2	2.6	0	N	
22-Oct-13	480	3	22:15:41	22:18:41	0:03:00	22.3019	113.9685	22.3019	113.9686	NE LANTAU	x20	N	5.1	3	2	1.8	0	N	
22-Oct-13	481	3	22:47:53	22:49:53	0:02:00	22.3019	113.9686	22.3019	113.9687	NE LANTAU	x20	N	5.3	3	2	1.2	0	N	
22-Oct-13	482	4	23:20:40	23:23:40	0:03:00	22.3019	113.9685	22.3019	113.9686	NE LANTAU	x20	N	5.3	3	2	2.1	0	N	
22-Oct-13	483	3	23:52:55	23:55:55	0:03:00	22.3019	113.9686	22.3019	113.9686	NE LANTAU	x20	N	5.2	3	3	1.6	0	N	
23-Oct-13	484	3	0:48:10	0:51:10	0:03:00	22.3013	113.9686	22.3013	113.9686	NE LANTAU	x20	N	5.6	3	2	0.8	0	N	
23-Oct-13	485	3	1:46:05	1:49:05	0:03:00	22.3019	113.9687	22.3019	113.9687	NE LANTAU	x20	N	5.0	3	2	2.8	0	N	
23-Oct-13	486	3	2:49:15	2:52:15	0:03:00	22.3018	113.9689	22.3019	113.9689	NE LANTAU	x20	N	4.7	3	2	0.9	0	N	
23-Oct-13	487	3	3:45:58	3:48:58	0:03:00	22.3013	113.9690	22.3013	113.9687	NE LANTAU	x20	N	4.6	3	3	3.3	0	N	
23-Oct-13	488	3	4:46:07	4:49:07	0:03:00	22.3019	113.9689	22.3019	113.9689	NE LANTAU	x30	N	3.8	3	2	1.1	0	N	
23-Oct-13	489	3	5:48:00	5:51:00	0:03:00	22.3019	113.9686	22.3019	113.9686	NE LANTAU	x20	N	3.6	3	2	1.6	0	N	
23-Oct-13	490	4	6:17:53	6:20:53	0:03:00	22.3018	113.9685	22.3018	113.9685	NE LANTAU	x20	N	3.4	3	1	1.2	0	N	
23-Oct-13	491	5	6:45:48	6:48:48	0:03:00	22.3012	113.9685	22.3012	113.9685	NE LANTAU	x20	N	4.1	3	2	1.2	0	N	
23-Oct-13	492	4	7:21:47	7:24:47	0:03:00	22.3099	113.9623	22.3094	113.9619	NE LANTAU	x20	N	4.9	3	2	2.1	0	N	
23-Oct-13	493	5	7:57:30	8:00:30	0:03:00	22.3123	113.9806	22.3121	113.9799	NE LANTAU	x20	N	4.9	3	2	3.2	0	N	
23-Oct-13	494	2	8:18:22	8:21:22	0:03:00	22.3182	113.9911	22.3173	113.9908	NE LANTAU	x20	N	10.3	5	2	1.6	0	N	
23-Oct-13	495	3	8:49:12	8:54:12	0:05:00	22.3309	113.9942	22.3298	113.9923	NE LANTAU	x20	N	8.8	5	3	4.7	0	Y	
23-Oct-13	496	0	9:32:28	9:35:28	0:03:00	22.3316	114.0135	22.3309	114.0129	NE LANTAU	x20	N	12.8	5	3	3.8	0	N	
23-Oct-13	497	4	10:19:36	10:22:36	0:03:00	22.3444	113.9850	22.3441	113.9839	NE LANTAU	x20/x10	Y	29.3	5	3	2.5	0	N	
23-Oct-13	498	5	11:01:40	11:06:40	0:05:00	22.3439	113.9739	22.3431	113.9730	NE LANTAU	x10	N	29.7	5	3	4.4	0	Y	
24-Oct-13	499	3	9:48:33	9:51:33	0:03:00	22.3347	113.9854	22.3338	113.9842	NE LANTAU	x20	N	5.2	3	3	4.3	0	N	
24-Oct-13	500	5	10:32:50	10:35:50	0:03:00	22.3294	113.9605	22.3294	113.9593	NE LANTAU	x10	N	8.4	5	4	5.7	0	N	
24-Oct-13	501	4	12:35:19	12:40:19	0:05:00	22.3860	113.8951	22.3858	113.8958	NW LANTAU	x20	N	21.7	5	3	6.2	0	Y	
24-Oct-13	502	5	13:04:04	13:09:04	0:05:00	22.3861	113.9032	22.3867	113.9039	NW LANTAU	x0	N	17.3	5	3	3.0	0	Y	
24-Oct-13	503	8	13:15:37	13:20:39	0:05:02	22.3856	113.9045	22.3860	113.9047	NW LANTAU	x10	N	15.3	5	3	3.8	0	Y	
24-Oct-13	504	5	13:20:51	13:26:05	0:05:14	22.3860	113.9047	22.3866	113.9054	NW LANTAU	x10	N	14.3	5	3	5.6	0	Y	
24-Oct-13	505	2	13:26:23	13:31:23	0:05:00	22.3866	113.9054	22.3871	113.9061	NW LANTAU	x10	N	12.3	5	3	3.6	0	Y	
24-Oct-13	506	7	13:31:35	13:36:35	0:05:00	22.3872	113.9061	22.3875	113.9067	NW LANTAU	x10	N	11.6	5	3	3.6	0	Y	
24-Oct-13	507	7	13:36:55	13:41:55	0:05:00	22.3875	113.9067	22.3878	113.9071	NW LANTAU	x10	N	10.5	5	3	3.2	0	Y	
24-Oct-13	508	5	13:52:45	13:57:47	0:05:02	22.3881	113.9089	22.3875	113.9096	NW LANTAU	x10	N	6.8	5	2	2.0	0	Y	
24-Oct-13	509	6	13:58:54	14:03:54	0:05:00	22.3875	113.9099	22.3869	113.9107	NW LANTAU	x10	N	6.8	5	2	1.9	0	Y	
24-Oct-13	510	6	14:10:30	14:15:30	0:05:00	22.3862	113.9114	22.3851	113.9122	NW LANTAU	x10	N	4.9	3	2	2.5	0	Y	
24-Oct-13	511	4	14:45:12	14:50:12	0:05:00	22.3509	113.9105	22.3503	113.9117	NW LANTAU	x10	N	9.8	5	2	2.6	0	Y	
24-Oct-13	512	3	15:07:15	15:12:15	0:05:00	22.3503	113.9111	22.3494	113.9122	NW LANTAU	x10	N	9.9	5	3	4.0	0	Y	
24-Oct-13	514	3	15:28:23	15:31:23	0:03:00	22.3386	113.9171	22.3379	113.9182	NW LANTAU	x10	N	7.3	5	3	2.9	0	N	
24-Oct-13	515	3	13:36:00	13:39:05	0:03:05	22.3377	113.9229	22.3371	113.9238	NW LANTAU	x10	N	8.0	5	3	4.7	0	N	
24-Oct-13	516	1	16:32:49	16:35:49	0:03:00	22.3374	114.0140	22.3373	114.0147	NE LANTAU	x10	N	21.0	5	3	3.6	0	N	
25-Oct-13	517	5	10:10:50	10:13:50	0:03:00	22.3251	113.9800	22.3224	113.9774	NE LANTAU	x20	N	~13	5	3	2.3	0	N	
25-Oct-13	518	6	10:50:00	10:53:00	0:03:00	22.3274	113.9646	22.3275	113.9635	NE LANTAU	x10	N	~11	5	2	1.5	0	N	
25-Oct-13	519	6	11:29:00	11:32:00	0:03:00	22.3366	113.9209	22.3364	113.9205	NW LANTAU	x10	N	~8	5	3	3.5	0	N	
25-Oct-13	520	4	12:30:30	12:35:30	0:05:00	22.3817	113.8862	22.3812	113.8857	NW LANTAU	x10	N	~18	5	3	2.8	0	Y	
25-Oct-13	521	2	12:35:45	12:40:45	0:05:00	22.3812	113.8857	22.3806	113.8853	NW LANTAU	x10	N	~18	5	3	3.8	0	Y	
25-Oct-13	522	5	13:40:12	13:43:12	0:03:00	22.3362	113.9151	22.3357	113.9148	NW LANTAU	x10	N	~7	5	4	2.0	0	N	
25-Oct-13	523	4	14:47:30	14:50:30	0:03:00	22.3051	113.9722	22.3044	113.9720	NE LANTAU	x10	N	~4.5	3	3	4.5	0	N	
25-Oct-13	524	2	15:33:40	15:36:40	0:03:00	22.3238	113.9992	22.3235	113.9989	NE LANTAU	x10	N	~8	5	4	4.4	0	N	

Appendix III. Sighting records of Chinese White Dolphins during baseline period of TM-CLKL acoustic monitoring

DATE	STG #	TIME	HRD SZ	AREA	BEAU	TYPE	LATITUDE	LONGITUDE	SEASON	BOAT ASSOC.	RECORDING
26-Sep-13	1	1447	2	NW LANTAU	3	TMCLKL	22.3802	113.8879	AUTUMN	NONE	N
26-Sep-13	2	1615	2	NW LANTAU	3	TMCLKL	22.2967	113.8773	AUTUMN	NONE	N
27-Sep-13	1	1050	6	NW LANTAU	3	TMCLKL	22.3720	113.8878	AUTUMN	NONE	Y
27-Sep-13	2	1245	5	NE LANTAU	2	TMCLKL	22.3294	113.9585	AUTUMN	NONE	Y
27-Sep-13	3	1339	11	NW LANTAU	3	TMCLKL	22.3347	113.9394	AUTUMN	NONE	Y
28-Sep-13	1	1508	4	NW LANTAU	2	TMCLKL	22.3830	113.8822	AUTUMN	NONE	Y
28-Sep-13	2	1615	1	NW LANTAU	2	TMCLKL	22.2955	113.8800	AUTUMN	NONE	N
29-Sep-13	1	1014	1	NW LANTAU	3	TMCLKL	22.3751	113.8759	AUTUMN	NONE	N
1-Oct-13	1	1022	9	NW LANTAU	2	TMCLKL	22.3789	113.8894	AUTUMN	PURSE SEINE	Y
1-Oct-13	2	1227	1	NW LANTAU	2	TMCLKL	22.3321	113.9057	AUTUMN	NONE	N
1-Oct-13	3	1356	5	NE LANTAU	1	TMCLKL	22.3311	113.9755	AUTUMN	NONE	Y
2-Oct-13	1	1412	5	NW LANTAU	2	TMCLKL	22.3811	113.8871	AUTUMN	NONE	Y
2-Oct-13	2	1530	1	NW LANTAU	3	TMCLKL	22.3753	113.9133	AUTUMN	NONE	Y
4-Oct-13	1	1123	8	NW LANTAU	2	TMCLKL	22.3629	113.8759	AUTUMN	NONE	Y
4-Oct-13	2	1523	1	NE LANTAU	3	TMCLKL	22.3320	114.0080	AUTUMN	NONE	N
5-Oct-13	1	1211	4	NW LANTAU	2	TMCLKL	22.3493	113.8949	AUTUMN	NONE	Y
5-Oct-13	2	1249	8	NW LANTAU	2	TMCLKL	22.3569	113.9053	AUTUMN	NONE	Y
5-Oct-13	3	1413	5	NW LANTAU	2	TMCLKL	22.3662	113.8769	AUTUMN	NONE	Y
5-Oct-13	4	1526	1	NE LANTAU	2	TMCLKL	22.3336	113.9747	AUTUMN	NONE	N
6-Oct-13	1	954	1	NW LANTAU	3	TMCLKL	22.3303	113.8858	AUTUMN	NONE	N
6-Oct-13	2	1056	10	NW LANTAU	2	TMCLKL	22.3528	113.8942	AUTUMN	NONE	Y
6-Oct-13	3	1152	6	NW LANTAU	3	TMCLKL	22.3374	113.9011	AUTUMN	NONE	Y
6-Oct-13	4	1217	7	NW LANTAU	3	TMCLKL	22.3386	113.8940	AUTUMN	NONE	Y
6-Oct-13	5	1308	1	NW LANTAU	3	TMCLKL	22.3390	113.9426	AUTUMN	NONE	N
6-Oct-13	6	1445	1	NE LANTAU	3	TMCLKL	22.3418	114.0095	AUTUMN	NONE	N
7-Oct-13	1	1156	10	NE LANTAU	3	TMCLKL	22.3444	113.9775	AUTUMN	NONE	Y
7-Oct-13	2	1438	9	NW LANTAU	4	TMCLKL	22.3386	113.9483	AUTUMN	NONE	Y
7-Oct-13	3	1506	6	NW LANTAU	4	TMCLKL	22.3408	113.9405	AUTUMN	NONE	Y
7-Oct-13	4	1553	1	NW LANTAU	5	TMCLKL	22.3451	113.8954	AUTUMN	NONE	N
8-Oct-13	1	1644	6	NE LANTAU	3	TMCLKL	22.3459	114.0119	AUTUMN	NONE	Y
9-Oct-13	1	925	10	NE LANTAU	1	TMCLKL	22.3479	113.9882	AUTUMN	NONE	Y
9-Oct-13	2	1101	8	NE LANTAU	2	TMCLKL	22.3266	113.9974	AUTUMN	NONE	Y

Appendix III. (cont'd)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	TYPE	LATITUDE	LONGITUDE	SEASON	BOAT ASSOC.	RECORDING
10-Oct-13	1	948	10	NW LANTAU	2	TMCLKL	22.3187	113.8790	AUTUMN	NONE	Y
10-Oct-13	2	1151	4	NW LANTAU	2	TMCLKL	22.3558	113.9073	AUTUMN	NONE	Y
10-Oct-13	3	1235	4	NW LANTAU	2	TMCLKL	22.3501	113.9172	AUTUMN	NONE	Y
10-Oct-13	4	1321	2	NE LANTAU	2	TMCLKL	22.3288	113.9616	AUTUMN	NONE	Y
10-Oct-13	5	1542	1	NE LANTAU	2	TMCLKL	22.3354	114.0135	AUTUMN	NONE	N
11-Oct-13	1	1231	2	NE LANTAU	2	TMCLKL	22.3375	113.9653	AUTUMN	NONE	Y
12-Oct-13	1	1029	3	NW LANTAU	2	TMCLKL	22.3807	113.9014	AUTUMN	NONE	Y
12-Oct-13	2	1238	1	NW LANTAU	2	TMCLKL	22.3416	113.9407	AUTUMN	NONE	N
12-Oct-13	3	1545	2	NE LANTAU	2	TMCLKL	22.3280	113.9847	AUTUMN	NONE	Y
13-Oct-13	1	1325	1	NE LANTAU	2	TMCLKL	22.3441	113.9927	AUTUMN	NONE	Y
14-Oct-13	1	1045	1	NE LANTAU	3	TMCLKL	22.3456	113.9757	AUTUMN	NONE	N
14-Oct-13	2	1252	4	NW LANTAU	2	TMCLKL	22.3768	113.8753	AUTUMN	NONE	Y
14-Oct-13	3	1337	4	NW LANTAU	2	TMCLKL	22.3796	113.8871	AUTUMN	NONE	Y
15-Oct-13	1	1341	8	NW LANTAU	3	TMCLKL	22.3829	113.9028	AUTUMN	NONE	Y
18-Oct-13	1	1216	13	NW LANTAU	4	TMCLKL	22.3699	113.8893	AUTUMN	PURSE SEINE	Y
18-Oct-13	2	1426	2	NW LANTAU	2	TMCLKL	22.3242	113.9149	AUTUMN	NONE	N
19-Oct-13	1	1030	9	NE LANTAU	2	TMCLKL	22.3251	113.9783	AUTUMN	NONE	Y
19-Oct-13	2	1329	2	NW LANTAU	3	TMCLKL	22.3517	113.9194	AUTUMN	NONE	N
19-Oct-13	3	1417	2	NW LANTAU	2	TMCLKL	22.3291	113.9195	AUTUMN	NONE	N
20-Oct-13	1	929	1	NE LANTAU	2	TMCLKL	22.3354	113.9998	AUTUMN	NONE	Y
20-Oct-13	2	1010	6	NE LANTAU	1	TMCLKL	22.3167	113.9778	AUTUMN	NONE	Y
20-Oct-13	3	1243	11	NW LANTAU	3	TMCLKL	22.3300	113.8991	AUTUMN	NONE	Y
21-Oct-13	1	924	1	NE LANTAU	2	TMCLKL	22.3358	113.9971	AUTUMN	NONE	Y
21-Oct-13	2	1042	3	NE LANTAU	2	TMCLKL	22.3434	113.9707	AUTUMN	NONE	Y
21-Oct-13	3	1618	1	NE LANTAU	2	TMCLKL	22.3410	113.9775	AUTUMN	NONE	Y
22-Oct-13	1	1603	5	NE LANTAU	3	TMCLKL	22.3370	113.9713	AUTUMN	NONE	Y
22-Oct-13	2	1709	5	NE LANTAU	2	TMCLKL	22.3280	113.9732	AUTUMN	NONE	Y
23-Oct-13	1	835	1	NE LANTAU	2	TMCLKL	22.3215	113.9982	AUTUMN	NONE	Y
23-Oct-13	2	1043	1	NE LANTAU	3	TMCLKL	22.3424	113.9763	AUTUMN	NONE	Y
23-Oct-13	3	1121	2	NE LANTAU	3	TMCLKL	22.3414	113.9649	AUTUMN	NONE	N

Appendix III. (cont'd)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	TYPE	LATITUDE	LONGITUDE	SEASON	BOAT ASSOC.	RECORDING
24-Oct-13	1	1147	4	NW LANTAU	3	TMCLKL	22.3387	113.8652	AUTUMN	NONE	Y
24-Oct-13	2	1226	8	NW LANTAU	3	TMCLKL	22.3834	113.8876	AUTUMN	NONE	Y
24-Oct-13	3	1440	5	NW LANTAU	3	TMCLKL	22.3534	113.9081	AUTUMN	NONE	Y
24-Oct-13	4	1507	3	NW LANTAU	3	TMCLKL	22.3503	113.9111	AUTUMN	NONE	Y
25-Oct-13	1	1214	4	NW LANTAU	3	TMCLKL	22.3846	113.8867	AUTUMN	NONE	Y
25-Oct-13	2	1255	2	NW LANTAU	3	TMCLKL	22.3781	113.8889	AUTUMN	NONE	N

Appendix IV. Database for acoustic focal follow during TM-CLKL baseline period

Date	Area	Stg#	File#	Hp Depth	Water Depth	ICP Gain	Time	Latitude	Longitude	Beau	Dolphin Grp Sz
27-Sep-13	NW LANTAU	1	35	5	10.3	x10	11:08:29	22.3772	113.8932	3	6
27-Sep-13	NW LANTAU	1	36	5	21.5	x10	11:23:16	22.3849	113.8918	2	4
27-Sep-13	NW LANTAU	1	37	5	21.7	x10	11:28:18	22.3831	113.8920	2	4
27-Sep-13	NE LANTAU	2	39	5	7.4	x10	12:56:18	22.3342	113.9518	3	4
27-Sep-13	NW LANTAU	2	40	5	8.9	x10	13:10:05	22.3327	113.9441	3	5
27-Sep-13	NW LANTAU	2	41	5	7.8	x10	13:25:43	22.3327	113.9345	3	5
27-Sep-13	NW LANTAU	3	43	5	16.9	x10	13:55:25	22.3364	113.9446	2	8
27-Sep-13	NW LANTAU	3	44	5	27.8	x10	14:00:33	22.3367	113.9445	2	8
27-Sep-13	NW LANTAU	3	45	5	27.8	x10	14:04:01	22.3367	113.9442	2	8
27-Sep-13	NW LANTAU	3	46	5	8.3	x10	14:19:37	22.3375	113.9463	2	8
27-Sep-13	NW LANTAU	3	47	5	17.2	x10	14:26:51	22.3375	113.9459	2	8
28-Sep-13	NW LANTAU	1	003	5	9.8	x11	15:22:19	22.3833	113.8775	2	3
1-Oct-13	NW LANTAU	1	86	5	31.0	x10	10:32:14	22.3766	113.8934	3	9
1-Oct-13	NW LANTAU	1	87	5	29.0	x10	10:37:26	22.3748	113.8938	3	9
1-Oct-13	NW LANTAU	1	88	5	29.0	x10	10:42:51	22.3726	113.8941	3	9
1-Oct-13	NW LANTAU	1	89	5	12.2	x10	10:49:18	22.3696	113.8946	3	9
1-Oct-13	NW LANTAU	1	90	5	29.0	x10	11:24:43	22.3751	113.8908	2	4
1-Oct-13	NW LANTAU	1	92	5	18.2	x10	11:44:50	22.3817	113.8879	2	2
1-Oct-13	NE LANTAU	3	95	5	9.1	x10	14:01:22	22.3252	113.9765	1	5
1-Oct-13	NE LANTAU	3	96	5	10.2	x10	14:11:11	22.3274	113.9762	2	5
1-Oct-13	NE LANTAU	3	97	5	14.0	x10	14:16:15	22.3275	113.9772	2	5
1-Oct-13	NE LANTAU	3	98	5	10.2	x10	14:25:41	22.3275	113.9777	2	5
1-Oct-13	NE LANTAU	3	99	5	14.9	x10	14:32:40	22.3270	113.9766	2	5
1-Oct-13	NE LANTAU	3	100	5	13.0	x10	14:47:24	22.3279	113.9767	2	5
1-Oct-13	NE LANTAU	3	101	5	10.5	x10	15:04:28	22.3244	113.9843	2	5
1-Oct-13	NE LANTAU	3	102	5	11.4	x10	15:20:48	22.3204	113.9925	2	5
1-Oct-13	NE LANTAU	3	103	5	7.0	x10	15:34:07	22.3176	113.9942	2	5
2-Oct-13	NW LANTAU	1	115	5	18.8	x10	14:36:03	22.3848	113.8883	2	3
2-Oct-13	NW LANTAU	1	116	5	18.7	x10	14:51:32	22.3869	113.8925	2	5
2-Oct-13	NW LANTAU	2	117	5	20.0	x10	15:09:03	22.3808	113.9015	3	3
2-Oct-13	NW LANTAU	2	118	5	17.4	x10	15:40:11	22.3736	113.9135	3	1
5-Oct-13	NW LANTAU	1	166	5	9.8	x10	12:20:20	22.3521	113.8926	2	2
5-Oct-13	NW LANTAU	1	167	5	9.8	x10	12:38:01	22.3508	113.9002	2	3
5-Oct-13	NW LANTAU	2	168	5	12.0	x10	12:54:45	22.3595	113.9031	3	4
5-Oct-13	NW LANTAU	2	169	5	11.7	x10	13:17:33	22.3667	113.8940	2	4
5-Oct-13	NW LANTAU	2	170	5	16.9	x10	13:41:53	22.3770	113.8907	2	4
5-Oct-13	NW LANTAU	3	171	5	6.2	x10	14:29:03	22.3653	113.8717	2	4
6-Oct-13	NW LANTAU	2	172	5	10.1	x0	11:09:28	22.3538	113.8913	3	6
6-Oct-13	NW LANTAU	2	173	5	8.0	x0	11:30:44	22.3548	113.8832	4	4
6-Oct-13	NW LANTAU	3	174	5	9.4	x0	12:06:29	22.3367	113.8973	3	4
6-Oct-13	NW LANTAU	4	175	5	9.7	x0	12:19:32	22.3379	113.8928	3	6
6-Oct-13	NW LANTAU	4	177	3	5.5	x0	12:35:06	22.3394	113.8879	4	5
7-Oct-13	NE LANTAU	1	192	5	30.1	x10	12:23:30	22.3436	113.9789	3	4
7-Oct-13	NE LANTAU	1	193	5	33.6	x10	13:01:30	22.3454	113.9765	5	3
7-Oct-13	NE LANTAU	1	194	5	31.8	x10	13:07:40	22.3449	113.9787	4	3
7-Oct-13	NW LANTAU	2	197	5	9.8	x10	14:46:10	22.3397	113.9477	3	3
7-Oct-13	NW LANTAU	3	198	5	9.8	x10	15:15:55	22.3427	113.9367	4	3
8-Oct-13	NE LANTAU	1	218	5	10.5	x0	16:59:26	22.3524	114.0070	2	6
8-Oct-13	NE LANTAU	1	219	5	11.1	x0	17:09:36	22.3511	114.0024	2	3
8-Oct-13	NE LANTAU	1	220	5	32.0	x0	17:21:10	22.3482	113.9975	2	2
9-Oct-13	NE LANTAU	1	243	5	31.1	x0	9:33:10	22.3466	113.9897	2	3
9-Oct-13	NE LANTAU	1	244	5	33.7	x0	9:49:35	22.3477	113.9967	2	6
9-Oct-13	NE LANTAU	1	245	5	30.3	x0	10:09:50	22.3430	114.0015	2	6
9-Oct-13	NE LANTAU	2	247	5	9.1	x0	11:11:10	22.3332	113.9973	2	6

Appendix IV. (cont'd)

Date	Area	Stg#	File#	Hp Depth	Water Depth	ICP Gain	Time	Latitude	Longitude	Beau	Dolphin Grp Sz
10-Oct-13	NW LANTAU	1	249	5	6.6	x10	10:01:48	22.3267	113.8798	3	2
10-Oct-13	NW LANTAU	1	250	5	6.5	x10	10:16:15	22.3282	113.8838	2	3
10-Oct-13	NW LANTAU	1	251	3	4.8	x10	10:28:50	22.3370	113.8818	2	4
10-Oct-13	NW LANTAU	1	253	5	5.8	x10	10:46:10	22.3421	113.8799	2	8
10-Oct-13	NW LANTAU	1	254	5	6.8	x10	10:53:32	22.3435	113.8787	2	6
10-Oct-13	NW LANTAU	1	255	5	7.0	x10	11:04:04	22.3452	113.8787	2	3
10-Oct-13	NW LANTAU	2	256	5	13.3	x10	12:23:40	22.3563	113.9109	3	3
10-Oct-13	NE LANTAU	3	258	5	9.5	x0	13:35:34	22.3375	113.9591	2	2
10-Oct-13	NE LANTAU	4	259	5	8.4	x0	13:48:10	22.3370	113.9529	2	2
11-Oct-13	NE LANTAU	1	273	5	30.4	x10	12:45:25	22.3437	113.9765	2	2
11-Oct-13	NE LANTAU	1	274	5	28.8	x10	13:00:00	22.3443	113.9725	2	2
11-Oct-13	NE LANTAU	1	275	5	32.0	x10	13:15:37	22.3449	113.9757	2	2
11-Oct-13	NE LANTAU	1	276	5	31.5	x10	13:26:32	22.3450	113.9786	2	2
12-Oct-13	NW LANTAU	1	294	5	19.8	x0	10:45:23	22.3785	113.9046	2	3
12-Oct-13	NW LANTAU	1	295	5	20.7	x0	11:04:50	22.3724	113.9125	2	2
12-Oct-13	NW LANTAU	1	296	5	17.6	x0	11:22:16	22.3739	113.9131	2	2
12-Oct-13	NE LANTAU	3	304	5	9.6	x10	15:59:45	22.3294	113.9777	3	1
12-Oct-13	NE LANTAU	3	305	5	6.8	x10	16:05:19	22.3302	113.9760	3	1
13-Oct-13	NE LANTAU	1	311	5	32.9	x10	13:43:40	22.3460	113.9952	2	1
14-Oct-13	NW LANTAU	2	323	5	10.0	x10	13:14:28	22.3775	113.8749	2	3
14-Oct-13	NW LANTAU	2	324	5	10.0	x10/x20	13:21:07	22.3759	113.8740	1	2
14-Oct-13	NW LANTAU	3	325	5	10.1	x10	13:46:14	22.3744	113.8876	2	3
15-Oct-13	NW LANTAU	1	330	5	20.5	x10	14:22:59	22.3664	113.9123	3	1
15-Oct-13	NW LANTAU	1	331	5	17.3	x0	14:46:55	22.3735	113.9137	3	2
18-Oct-13	NW LANTAU	1	394	5	14.2	x20/x10	12:24:18	22.3714	113.8931	3	7
18-Oct-13	NW LANTAU	1	395	5	14.2	x10	12:30:50	22.3676	113.8940	3	5
18-Oct-13	NW LANTAU	1	396	5	18.1	x10	12:51:35	22.3751	113.8931	3	4
18-Oct-13	NW LANTAU	1	397	5	21.7	x10	13:05:36	22.3811	113.8923	2	8
18-Oct-13	NW LANTAU	1	398	5	20.5	x10	13:20:08	22.3856	113.8887	2	8
18-Oct-13	NW LANTAU	1	399	5	20.5	x10	13:25:19	22.3824	113.8888	2	3
18-Oct-13	NE LANTAU	2	402	3	5.5	x20/x10	14:32:09	22.3286	113.9217	2	2
19-Oct-13	NE LANTAU	1	407	5	8.2	x20/x10	10:48:40	22.3337	113.9728	3	6
19-Oct-13	NE LANTAU	1	409	5	7.8	x0	11:04:01	22.3350	113.9680	3	6
19-Oct-13	NE LANTAU	1	410	5	12.0	x0/x10	11:22:47	22.3397	113.9627	3	6
19-Oct-13	NE LANTAU	1	411	5	11.0	x10	11:36:10	22.3393	113.9582	2	6
19-Oct-13	NW LANTAU	1	412	5	14.2	x0	12:03:03	22.3429	113.9456	2	6
19-Oct-13	NW LANTAU	1	413	5	22.9	x0	12:20:50	22.3491	113.9434	2	6
19-Oct-13	NW LANTAU	1	414	5	22.3	x0	12:34:09	22.3523	113.9412	2	6
19-Oct-13	NW LANTAU	1	415	5	24.3	x0	12:50:10	22.3537	113.9362	2	6
19-Oct-13	NW LANTAU	1	416	5	21.6	x0	13:15:10	22.3578	113.9283	2	6
20-Oct-13	NE LANTAU	1	422	5	10.0	x20/x10	9:40:40	22.3302	113.9892	2	1
20-Oct-13	NE LANTAU	2	423	5	9.8	x10	10:17:55	22.3173	113.9774	1	6
20-Oct-13	NE LANTAU	2	424	5	9.7	x10	10:23:20	22.3172	113.9775	1	6
20-Oct-13	NE LANTAU	2	425	5	9.9	x10	10:28:30	22.3173	113.9778	1	6
20-Oct-13	NE LANTAU	2	426	5	11.4	x10	10:41:47	22.3192	113.9794	1	3
20-Oct-13	NE LANTAU	2	427	5	10.4	x10	10:55:11	22.3157	113.9848	1	3
20-Oct-13	NW LANTAU	3	430	5	9.7	x10	12:57:57	22.3388	113.8924	2	6
20-Oct-13	NW LANTAU	3	431	5	11.1	x10	13:14:08	22.3449	113.8949	2	5
20-Oct-13	NW LANTAU	3	432	5	9.1	x10	13:34:55	22.3511	113.8932	2	5
20-Oct-13	NW LANTAU	3	433	5	9.0	x10	13:49:15	22.3548	113.8930	3	5
21-Oct-13	NE LANTAU	1	438	5	9.8	x10	9:37:24	22.3309	113.9868	1	1
21-Oct-13	NE LANTAU	2	440	5	23.7	X10	10:57:41	22.3436	113.9660	2	3
21-Oct-13	NE LANTAU	2	441	5	11.0	x10/x0	11:11:19	22.3397	113.9549	2	3
21-Oct-13	NW LANTAU	2	442	5	28.7	x10	11:25:33	22.3398	113.9432	2	3
21-Oct-13	NE LANTAU	3	461	5	13.3	x10/x0	16:27:25	22.3419	113.9781	2	1

Appendix IV. (cont'd)

Date	Area	Stg#	File#	Hp Depth	Water Depth	ICP Gain	Time	Latitude	Longitude	Beau	Dolphin Grp Sz
22-Oct-13	NE LANTAU	1	465	3	5.5	x0	16:17:12	22.3379	113.9746	2	5
22-Oct-13	NE LANTAU	1	466	3	6.5	x0	16:47:55	22.3389	113.9742	2	3
22-Oct-13	NE LANTAU	2	467	5	8.4	x10	17:09:49	22.3280	113.9732	2	5
22-Oct-13	NE LANTAU	2	468	5	11.5	x10	17:22:22	22.3235	113.9789	2	5
22-Oct-13	NE LANTAU	2	469	5	7.5	x10	17:37:03	22.3172	113.9844	2	5
22-Oct-13	NE LANTAU	2	470	5	10.8	x10	17:54:00	22.3190	113.9897	2	4
22-Oct-13	NE LANTAU	2	473	5	10.3	x10	18:02:40	22.3183	113.9888	2	3
23-Oct-13	NE LANTAU	1	495	5	8.8	x20	8:49:12	22.3309	113.9942	3	1
23-Oct-13	NE LANTAU	2	498	5	29.7	x10	11:01:40	22.3439	113.9739	3	1
24-Oct-13	NW LANTAU	2	501	5	21.7	x20	12:35:19	22.3860	113.8951	3	3
24-Oct-13	NW LANTAU	2	502	5	17.3	x0	13:04:04	22.3861	113.9032	3	4
24-Oct-13	NW LANTAU	2	503	5	15.3	x10	13:15:37	22.3856	113.9045	3	4
24-Oct-13	NW LANTAU	2	504	5	14.3	x10	13:20:51	22.3860	113.9047	3	4
24-Oct-13	NW LANTAU	2	505	5	12.3	x10	13:26:23	22.3866	113.9054	3	4
24-Oct-13	NW LANTAU	2	506	5	11.6	x10	13:31:35	22.3872	113.9061	3	4
24-Oct-13	NW LANTAU	2	507	5	10.5	x10	13:36:55	22.3875	113.9067	3	5
24-Oct-13	NW LANTAU	2	508	5	6.8	x10	13:52:45	22.3881	113.9089	2	5
24-Oct-13	NW LANTAU	2	509	5	6.8	x10	13:58:54	22.3875	113.9099	2	5
24-Oct-13	NW LANTAU	2	510	3	4.9	x10	14:10:30	22.3862	113.9114	2	5
24-Oct-13	NW LANTAU	3	511	5	9.8	x10	14:45:12	22.3509	113.9105	2	4
24-Oct-13	NW LANTAU	4	512	5	9.9	x10	15:07:15	22.3503	113.9111	3	3
25-Oct-13	NW LANTAU	1	520	5	~18	x10	12:30:30	22.3817	113.8862	3	2
25-Oct-13	NW LANTAU	1	521	5	~18	x10	12:35:45	22.3812	113.8857	3	2

APPENDIX V. Raw data for plots.

Data for Table 1. Mean bandlevels as a function of distance from proposed bored piling pier locations for the baseline study phase.

Wideband:

	Set 1: SPL_mean [dB re 1 uPa]					
Range (m)	Pier B1	Pier B2	Pier B3	Pier B5	Pier B6	Pier B7
0	118.0	116.3	113.2	107.2	NaN	117.8
10	116.1	NaN	114.3	110.7	NaN	112.7
20	117.2	NaN	113.8	110.9	NaN	115.6
50	117.3	NaN	111.5	110.7	NaN	119.2
100	118.2	NaN	111.8	116.2	NaN	114.5
200	117.3	NaN	113.1	113.2	NaN	117.2
300	115.6	NaN	111.6	111.0	NaN	117.0
500	112.1	NaN	110.4	119.0	NaN	111.9
	Set 2: SPL_mean [dB re 1 uPa]					
Range (m)	Pier B1	Pier B2	Pier B3	Pier B5	Pier B6	Pier B7
0	107.9	112.5	114.1	111.2	117.8	117.8
10	108.2	111.8	116.7	109.0	113.7	112.7
20	108.9	114.3	116.7	108.0	118.3	115.6
50	107.8	109.8	112.7	112.0	117.6	119.2
100	116.5	125.4	110.2	109.4	116.1	114.5
200	113.2	118.8	120.9	108.5	118.1	117.2
300	120.6	120.5	112.3	108.4	118.2	117.0
500	116.1	112.4	117.6	107.1	115.2	111.9

APPENDIX V (cont'd)

Data for Table 1. (cont'd)

Dolphin Band:

	Set 1: SPL_mean [dB re uPa]					
Range (m)	Pier B1	Pier B2	Pier B3	Pier B5	Pier B6	Pier B7
0	112.8	110.9	106.2	102.8	NaN	111.1
10	113.2	NaN	108.0	105.5	NaN	108.5
20	114.8	NaN	107.7	103.3	NaN	108.2
50	115.1	NaN	103.5	104.5	NaN	116.3
100	116.2	NaN	106.1	107.8	NaN	105.8
200	115.2	NaN	105.4	103.8	NaN	108.3
300	112.3	NaN	103.7	103.3	NaN	108.0
500	108.4	NaN	103.1	110.5	NaN	105.0
	Set 2: SPL_mean [dB re uPa]					
Range (m)	Pier B1	Pier B2	Pier B3	Pier B5	Pier B6	Pier B7
0	99.8	102.7	102.7	107.0	114.6	111.1
10	104.1	104.0	109.1	106.8	109.3	108.5
20	101.0	103.4	109.4	105.1	110.8	108.2
50	103.2	101.4	105.3	108.2	113.7	116.3
100	103.8	112.2	101.5	107.7	107.1	105.8
200	106.0	115.0	119.6	107.1	109.5	108.3
300	112.1	116.8	102.6	103.7	112.8	108.0
500	107.9	103.6	105.3	103.0	110.2	105.0

APPENDIX V (cont'd)

Data for Figure 3. Mean bandlevels for all 440 recordings. Bandlevels were analyzed in terms of both the 30–40,000 Hz "wideband" frequency range (red) and 400–12,500 Hz "dolphin-sensitive" band (blue) and then averaged over the duration of each recording.

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
26-Sep-13	9:20 AM	124.4	117.9
26-Sep-13	10:00 AM	111.9	105.1
26-Sep-13	10:34 AM	109.9	102.6
26-Sep-13	10:54 AM	112.5	110.3
26-Sep-13	11:52 AM	119.7	117.8
26-Sep-13	12:24 PM	119.7	116.9
26-Sep-13	12:51 PM	110.7	106.9
26-Sep-13	1:23 PM	114.7	111.9
26-Sep-13	1:55 PM	127.5	119.9
27-Sep-13	11:08 AM	113.0	111.6
27-Sep-13	11:23 AM	116.4	115.6
27-Sep-13	11:28 AM	124.4	121.8
27-Sep-13	12:19 PM	115.0	112.8
27-Sep-13	12:56 PM	120.1	114.1
27-Sep-13	1:10 PM	122.1	119.3
27-Sep-13	1:25 PM	118.2	116.9
27-Sep-13	1:50 PM	121.1	116.6
27-Sep-13	1:55 PM	126.5	121.3
27-Sep-13	2:00 PM	124.8	116.7
27-Sep-13	2:04 PM	116.1	111.6
27-Sep-13	2:19 PM	124.4	120.6
27-Sep-13	2:26 PM	126.9	124.1
27-Sep-13	3:12 PM	110.9	108.9
27-Sep-13	3:42 PM	117.7	113.7
27-Sep-13	4:16 PM	115.6	112.1
27-Sep-13	5:11 PM	115.0	106.1
28-Sep-13	9:42 AM	131.2	110.8
28-Sep-13	10:08 AM	112.7	102.9
28-Sep-13	10:40 AM	115.5	114.4
28-Sep-13	11:08 AM	114.7	112.7
28-Sep-13	11:40 AM	126.1	121.5
28-Sep-13	12:07 PM	123.8	117.3
28-Sep-13	1:26 PM	123.4	118.6
29-Sep-13	1:34 PM	122.8	119.7
29-Sep-13	3:25 PM	120.9	117.5

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
29-Sep-13	4:01 PM	130.9	127.4
30-Sep-13	10:11 AM	130.8	126.5
30-Sep-13	10:39 AM	116.8	112.7
30-Sep-13	12:39 PM	117.1	114.2
30-Sep-13	1:09 PM	121.8	115.6
30-Sep-13	4:13 PM	113.1	104.1
1-Oct-13	10:32 AM	120.5	118.7
1-Oct-13	10:37 AM	118.1	116.7
1-Oct-13	10:42 AM	123.8	122.8
1-Oct-13	10:49 AM	118.6	116.8
1-Oct-13	11:24 AM	117.0	116.5
1-Oct-13	11:44 AM	115.5	115.2
1-Oct-13	1:09 PM	122.1	115.0
1-Oct-13	1:39 PM	118.8	111.7
1-Oct-13	2:01 PM	119.8	114.0
1-Oct-13	2:11 PM	117.2	112.8
1-Oct-13	2:16 PM	114.8	111.3
1-Oct-13	2:25 PM	112.0	107.9
1-Oct-13	2:32 PM	116.6	114.0
1-Oct-13	2:47 PM	113.7	110.7
1-Oct-13	3:04 PM	114.1	112.7
1-Oct-13	3:20 PM	120.9	115.9
1-Oct-13	3:34 PM	118.4	112.1
1-Oct-13	4:12 PM	123.5	114.9
1-Oct-13	4:21 PM	120.1	115.5
2-Oct-13	9:28 AM	118.2	110.3
2-Oct-13	10:01 AM	113.5	109.2
2-Oct-13	10:27 AM	113.3	110.7
2-Oct-13	10:59 AM	115.5	112.6
2-Oct-13	11:30 AM	125.7	116.7
2-Oct-13	11:57 AM	112.9	111.5
2-Oct-13	12:29 PM	134.2	131.2
2-Oct-13	12:58 PM	132.1	125.0
2-Oct-13	2:36 PM	118.5	117.6
2-Oct-13	2:51 PM	125.2	124.3
2-Oct-13	3:09 PM	115.9	113.7
3-Oct-13	12:33 PM	113.2	110.4

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
3-Oct-13	1:02 PM	120.2	117.0
3-Oct-13	1:27 PM	124.4	105.7
3-Oct-13	2:47 PM	123.3	116.6
3-Oct-13	3:17 PM	127.5	121.3
3-Oct-13	3:47 PM	129.6	119.0
3-Oct-13	5:16 PM	119.5	116.0
3-Oct-13	5:51 PM	120.0	115.4
3-Oct-13	8:06 PM	118.0	112.8
3-Oct-13	8:08 PM	116.1	113.2
3-Oct-13	8:11 PM	117.2	114.8
3-Oct-13	8:20 PM	117.3	115.1
3-Oct-13	8:23 PM	118.2	116.2
3-Oct-13	8:33 PM	117.3	115.2
3-Oct-13	8:40 PM	115.6	112.3
3-Oct-13	8:45 PM	112.1	108.4
3-Oct-13	9:01 PM	116.3	110.9
3-Oct-13	9:10 PM	113.2	106.2
3-Oct-13	9:18 PM	114.3	108.0
3-Oct-13	9:34 PM	113.8	107.7
3-Oct-13	9:42 PM	111.5	103.5
3-Oct-13	9:47 PM	111.8	106.1
3-Oct-13	9:53 PM	113.1	105.4
3-Oct-13	10:00 PM	111.6	103.7
3-Oct-13	10:06 PM	110.4	103.1
4-Oct-13	9:50 AM	130.5	125.7
4-Oct-13	9:55 AM	127.8	123.3
4-Oct-13	10:05 AM	121.9	114.8
4-Oct-13	10:10 AM	132.1	127.3
4-Oct-13	11:43 AM	104.9	101.4
4-Oct-13	12:41 PM	114.4	112.7
4-Oct-13	1:12 PM	128.1	124.2
4-Oct-13	2:13 PM	119.5	114.7
4-Oct-13	2:42 PM	113.3	110.7
4-Oct-13	3:13 PM	116.9	114.7
4-Oct-13	3:41 PM	118.1	114.9
5-Oct-13	8:27 AM	107.0	101.7
5-Oct-13	8:57 AM	109.7	107.4

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
5-Oct-13	9:30 AM	111.1	108.0
5-Oct-13	9:58 AM	119.7	116.1
5-Oct-13	10:28 AM	107.1	105.2
5-Oct-13	10:57 AM	122.9	119.4
5-Oct-13	11:27 AM	120.1	114.3
5-Oct-13	12:20 PM	106.4	105.5
5-Oct-13	12:38 PM	117.1	114.3
5-Oct-13	12:54 PM	117.1	115.3
5-Oct-13	1:17 PM	114.9	111.5
5-Oct-13	1:41 PM	111.7	110.7
5-Oct-13	2:29 PM	106.7	105.0
6-Oct-13	11:09 AM	114.7	112.2
6-Oct-13	11:30 AM	117.3	113.6
6-Oct-13	12:06 PM	113.9	110.8
6-Oct-13	12:19 PM	123.4	117.1
6-Oct-13	12:35 PM	113.3	110.3
6-Oct-13	1:29 PM	124.4	116.7
6-Oct-13	1:57 PM	115.0	113.6
6-Oct-13	2:27 PM	119.1	114.6
6-Oct-13	2:59 PM	114.3	112.4
6-Oct-13	3:28 PM	128.3	121.7
6-Oct-13	3:57 PM	118.5	111.5
6-Oct-13	4:16 PM	116.1	110.2
6-Oct-13	4:46 PM	129.6	122.3
7-Oct-13	9:32 AM	119.2	111.9
7-Oct-13	10:02 AM	112.3	108.5
7-Oct-13	10:31 AM	111.6	108.4
7-Oct-13	11:02 AM	112.3	109.8
7-Oct-13	11:33 AM	119.2	112.7
7-Oct-13	11:45 AM	115.8	111.6
7-Oct-13	12:23 PM	127.3	119.9
7-Oct-13	1:01 PM	117.0	114.1
7-Oct-13	1:07 PM	115.2	112.5
7-Oct-13	1:51 PM	121.2	115.1
7-Oct-13	2:22 PM	125.8	120.4
7-Oct-13	2:46 PM	128.5	124.4
7-Oct-13	3:15 PM	116.3	112.6

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
8-Oct-13	12:34 PM	110.7	105.5
8-Oct-13	12:43 PM	110.9	103.3
8-Oct-13	12:54 PM	110.7	104.5
8-Oct-13	1:10 PM	116.2	107.8
8-Oct-13	1:19 PM	113.2	103.8
8-Oct-13	1:28 PM	111.0	103.3
8-Oct-13	1:42 PM	119.0	110.5
8-Oct-13	1:59 PM	115.6	108.2
8-Oct-13	2:03 PM	112.7	108.5
8-Oct-13	2:27 PM	117.8	111.1
8-Oct-13	2:39 PM	119.2	116.3
8-Oct-13	2:48 PM	114.5	105.8
8-Oct-13	3:03 PM	117.2	108.3
8-Oct-13	3:15 PM	117.0	108.0
8-Oct-13	3:23 PM	111.9	105.0
8-Oct-13	4:02 PM	116.4	113.7
8-Oct-13	4:33 PM	120.2	118.2
8-Oct-13	4:59 PM	121.9	117.2
8-Oct-13	5:09 PM	122.1	117.7
8-Oct-13	5:21 PM	120.0	117.2
8-Oct-13	6:01 PM	111.3	110.3
8-Oct-13	8:48 PM	113.9	107.7
8-Oct-13	9:16 PM	117.9	111.4
8-Oct-13	9:44 PM	111.0	107.9
8-Oct-13	10:18 PM	111.7	103.0
8-Oct-13	11:17 PM	112.9	105.8
9-Oct-13	12:16 AM	111.1	104.6
9-Oct-13	1:19 AM	112.9	107.1
9-Oct-13	2:15 AM	114.1	103.9
9-Oct-13	3:17 AM	108.5	102.0
9-Oct-13	4:18 AM	109.4	100.5
9-Oct-13	5:52 AM	107.7	100.0
9-Oct-13	6:18 AM	111.2	106.8
9-Oct-13	6:48 AM	107.6	102.1
9-Oct-13	7:32 AM	128.2	124.2
9-Oct-13	8:03 AM	116.0	112.9
9-Oct-13	8:21 AM	121.7	118.1

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
9-Oct-13	8:41 AM	122.6	116.1
9-Oct-13	9:02 AM	116.8	114.7
9-Oct-13	9:33 AM	116.3	112.9
9-Oct-13	9:49 AM	120.2	116.2
9-Oct-13	10:09 AM	121.0	114.9
9-Oct-13	10:47 AM	111.8	110.1
9-Oct-13	11:11 AM	109.0	106.5
9-Oct-13	11:43 AM	124.6	119.3
10-Oct-13	10:01 AM	105.9	102.1
10-Oct-13	10:16 AM	125.5	123.2
10-Oct-13	10:28 AM	116.2	115.1
10-Oct-13	10:46 AM	107.7	105.9
10-Oct-13	10:53 AM	120.6	116.4
10-Oct-13	11:04 AM	112.5	110.2
10-Oct-13	1:02 PM	121.8	117.5
10-Oct-13	1:35 PM	119.5	114.9
10-Oct-13	1:48 PM	118.1	113.6
10-Oct-13	2:31 PM	114.2	111.2
10-Oct-13	3:03 PM	115.1	112.8
10-Oct-13	4:16 PM	117.9	114.1
11-Oct-13	9:47 AM	123.4	120.5
11-Oct-13	10:17 AM	112.2	109.0
11-Oct-13	10:48 AM	116.7	113.1
11-Oct-13	11:20 AM	117.8	114.4
11-Oct-13	11:47 AM	118.0	113.7
11-Oct-13	12:18 PM	121.7	113.6
11-Oct-13	12:45 PM	119.2	116.4
11-Oct-13	1:00 PM	117.6	113.5
11-Oct-13	1:15 PM	120.8	117.9
11-Oct-13	1:26 PM	111.4	109.0
11-Oct-13	2:18 PM	120.2	116.1
11-Oct-13	3:12 PM	108.9	101.0
11-Oct-13	3:29 PM	108.2	104.1
11-Oct-13	3:38 PM	107.8	103.2
11-Oct-13	3:43 PM	116.5	103.8
11-Oct-13	3:49 PM	113.2	106.0
11-Oct-13	3:55 PM	120.6	112.1

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
11-Oct-13	4:01 PM	116.1	107.9
11-Oct-13	4:12 PM	114.1	102.7
11-Oct-13	4:18 PM	116.7	109.4
11-Oct-13	4:20 PM	116.7	109.1
11-Oct-13	4:26 PM	112.7	105.3
11-Oct-13	4:32 PM	110.2	101.5
11-Oct-13	4:39 PM	120.9	119.6
11-Oct-13	4:44 PM	112.3	102.6
11-Oct-13	4:50 PM	117.6	105.3
12-Oct-13	10:45 AM	119.4	115.7
12-Oct-13	11:04 AM	125.7	123.0
12-Oct-13	11:22 AM	122.6	120.3
12-Oct-13	1:07 PM	124.2	121.3
12-Oct-13	1:37 PM	115.1	112.9
12-Oct-13	2:07 PM	116.2	114.8
12-Oct-13	2:36 PM	113.0	111.0
12-Oct-13	3:06 PM	115.3	113.6
12-Oct-13	3:27 PM	109.0	107.0
12-Oct-13	3:59 PM	116.2	112.8
12-Oct-13	4:05 PM	113.6	108.9
13-Oct-13	10:25 AM	118.9	109.7
13-Oct-13	11:49 AM	126.6	122.0
13-Oct-13	12:17 PM	124.8	120.2
13-Oct-13	12:48 PM	122.8	119.1
13-Oct-13	1:17 PM	123.8	117.6
13-Oct-13	1:43 PM	122.2	117.9
13-Oct-13	2:16 PM	119.3	116.7
13-Oct-13	2:47 PM	113.9	113.3
13-Oct-13	3:18 PM	110.9	104.1
13-Oct-13	3:49 PM	124.0	122.3
13-Oct-13	4:20 PM	114.0	109.1
14-Oct-13	9:53 AM	110.1	107.9
14-Oct-13	10:22 AM	108.4	107.2
14-Oct-13	10:59 AM	127.0	120.9
14-Oct-13	11:27 AM	141.9	138.5
14-Oct-13	11:58 AM	124.7	121.8
14-Oct-13	1:14 PM	108.4	107.4

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
14-Oct-13	1:46 PM	118.2	118.1
14-Oct-13	3:09 PM	108.9	103.6
14-Oct-13	3:38 PM	127.7	123.0
14-Oct-13	4:09 PM	116.9	114.8
14-Oct-13	4:39 PM	121.2	118.9
15-Oct-13	2:22 PM	128.2	122.4
15-Oct-13	2:46 PM	124.8	120.8
15-Oct-13	3:06 PM	120.7	118.7
15-Oct-13	3:21 PM	112.9	111.2
15-Oct-13	3:47 PM	129.6	124.0
15-Oct-13	4:16 PM	114.9	113.5
15-Oct-13	4:47 PM	119.6	115.3
15-Oct-13	5:17 PM	117.0	115.8
15-Oct-13	7:17 PM	110.2	107.2
15-Oct-13	7:20 PM	108.0	105.1
15-Oct-13	7:22 PM	107.4	105.7
15-Oct-13	7:50 PM	109.0	106.8
15-Oct-13	7:55 PM	111.2	107.0
15-Oct-13	8:07 PM	112.0	108.2
15-Oct-13	8:19 PM	109.4	107.7
15-Oct-13	8:30 PM	108.5	107.1
15-Oct-13	8:39 PM	108.4	103.7
15-Oct-13	8:50 PM	107.1	103.0
15-Oct-13	9:08 PM	111.2	106.4
15-Oct-13	9:17 PM	112.3	105.2
15-Oct-13	9:25 PM	119.5	107.8
15-Oct-13	9:34 PM	111.4	107.0
15-Oct-13	9:43 PM	111.8	105.5
15-Oct-13	9:54 PM	112.6	108.9
15-Oct-13	10:05 PM	112.2	109.8
15-Oct-13	10:17 PM	108.0	105.1
15-Oct-13	11:09 PM	115.7	111.3
15-Oct-13	11:35 PM	103.0	100.2
16-Oct-13	12:07 AM	108.3	102.8
16-Oct-13	1:04 AM	103.9	99.4
16-Oct-13	1:59 AM	101.7	100.1
16-Oct-13	3:03 AM	102.8	101.2

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
16-Oct-13	4:03 AM	102.4	100.9
16-Oct-13	6:03 AM	106.5	104.2
16-Oct-13	6:28 AM	110.8	106.5
16-Oct-13	6:52 AM	113.4	107.2
16-Oct-13	7:22 AM	113.6	109.5
16-Oct-13	7:43 AM	111.0	107.3
16-Oct-13	8:02 AM	114.4	112.0
16-Oct-13	8:43 AM	124.1	118.6
16-Oct-13	9:03 AM	120.2	119.2
16-Oct-13	9:32 AM	113.0	110.3
16-Oct-13	10:02 AM	118.0	114.4
16-Oct-13	10:32 AM	117.5	116.9
16-Oct-13	11:09 AM	122.9	119.1
16-Oct-13	11:25 AM	108.6	106.9
17-Oct-13	9:32 AM	112.5	109.2
17-Oct-13	10:02 AM	119.9	118.6
17-Oct-13	10:32 AM	120.5	115.8
17-Oct-13	11:02 AM	125.5	121.2
17-Oct-13	11:31 AM	111.7	109.0
17-Oct-13	12:58 PM	111.0	108.9
17-Oct-13	1:20 PM	114.5	112.6
17-Oct-13	2:04 PM	115.8	111.7
17-Oct-13	2:32 PM	110.7	107.5
17-Oct-13	3:01 PM	109.0	105.4
17-Oct-13	3:32 PM	119.0	115.9
17-Oct-13	4:03 PM	120.8	114.6
18-Oct-13	9:33 AM	116.0	114.1
18-Oct-13	10:02 AM	112.3	111.8
18-Oct-13	10:33 AM	115.9	112.0
18-Oct-13	11:03 AM	119.2	115.1
18-Oct-13	12:30 PM	120.1	116.0
18-Oct-13	12:51 PM	117.4	114.2
18-Oct-13	1:05 PM	116.3	114.5
18-Oct-13	1:20 PM	115.9	114.7
18-Oct-13	1:25 PM	114.7	114.4
18-Oct-13	3:24 PM	124.1	108.6
18-Oct-13	3:56 PM	111.3	105.0

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
18-Oct-13	4:22 PM	121.6	116.9
19-Oct-13	10:22 AM	107.8	105.1
19-Oct-13	11:04 AM	118.5	115.8
19-Oct-13	11:36 AM	124.8	117.6
19-Oct-13	12:03 PM	132.9	129.0
19-Oct-13	12:20 PM	122.9	118.1
19-Oct-13	12:34 PM	130.1	121.1
19-Oct-13	12:50 PM	124.0	120.6
19-Oct-13	1:15 PM	129.6	125.0
19-Oct-13	2:07 PM	111.8	110.3
19-Oct-13	2:25 PM	116.4	113.0
19-Oct-13	2:36 PM	115.1	113.8
19-Oct-13	3:26 PM	115.1	103.6
19-Oct-13	4:20 PM	119.0	116.3
20-Oct-13	10:17 AM	112.3	106.4
20-Oct-13	10:23 AM	108.7	105.7
20-Oct-13	10:28 AM	109.8	106.1
20-Oct-13	10:41 AM	120.9	115.4
20-Oct-13	10:55 AM	116.1	112.0
20-Oct-13	11:59 AM	117.4	114.1
20-Oct-13	12:23 PM	107.0	106.0
20-Oct-13	12:57 PM	112.2	110.3
20-Oct-13	1:14 PM	112.6	110.3
20-Oct-13	1:34 PM	108.9	106.9
20-Oct-13	1:49 PM	111.1	110.1
20-Oct-13	2:21 PM	105.5	104.2
20-Oct-13	2:37 PM	123.7	120.0
20-Oct-13	3:22 PM	124.5	118.4
20-Oct-13	4:09 PM	113.9	111.8
21-Oct-13	9:37 AM	111.4	110.8
21-Oct-13	10:17 AM	114.9	112.0
21-Oct-13	10:57 AM	118.2	112.0
21-Oct-13	11:25 AM	124.5	113.5
21-Oct-13	12:03 PM	112.5	102.7
21-Oct-13	12:11 PM	111.8	104.0
21-Oct-13	12:14 PM	114.3	103.4
21-Oct-13	12:22 PM	109.8	101.4

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
21-Oct-13	12:28 PM	125.4	112.2
21-Oct-13	12:37 PM	118.8	115.0
21-Oct-13	12:45 PM	120.5	116.8
21-Oct-13	12:54 PM	112.4	103.6
21-Oct-13	1:13 PM	113.7	109.3
21-Oct-13	1:20 PM	118.3	110.8
21-Oct-13	1:27 PM	117.8	114.6
21-Oct-13	1:33 PM	117.6	113.7
21-Oct-13	1:41 PM	115.8	103.1
21-Oct-13	1:45 PM	116.1	107.1
21-Oct-13	1:54 PM	118.1	109.5
21-Oct-13	2:03 PM	118.2	112.8
21-Oct-13	2:11 PM	115.2	110.2
21-Oct-13	3:22 PM	108.9	105.3
22-Oct-13	12:59 PM	117.8	112.4
22-Oct-13	1:37 PM	135.3	131.9
22-Oct-13	2:24 PM	121.7	114.1
22-Oct-13	4:17 PM	118.1	116.3
22-Oct-13	4:47 PM	117.7	113.4
22-Oct-13	5:09 PM	126.8	121.3
22-Oct-13	5:22 PM	121.9	117.4
22-Oct-13	5:37 PM	114.4	110.9
22-Oct-13	5:54 PM	109.9	107.4
22-Oct-13	6:02 PM	111.6	106.0
22-Oct-13	7:05 PM	111.9	109.2
22-Oct-13	8:14 PM	110.7	108.7
22-Oct-13	8:48 PM	109.8	105.8
22-Oct-13	9:16 PM	110.2	104.5
22-Oct-13	9:50 PM	112.3	107.0
22-Oct-13	10:15 PM	106.1	102.9
22-Oct-13	10:47 PM	110.0	106.0
22-Oct-13	11:20 PM	108.3	103.4
22-Oct-13	11:52 PM	107.1	103.5
23-Oct-13	12:48 AM	111.6	104.5
23-Oct-13	1:46 AM	109.4	104.6
23-Oct-13	2:49 AM	106.5	101.7
23-Oct-13	3:45 AM	105.5	104.7

APPENDIX V (cont'd)

Data for Figure 3. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
23-Oct-13	4:46 AM	104.4	101.2
23-Oct-13	5:48 AM	108.8	100.7
23-Oct-13	6:17 AM	111.1	97.5
23-Oct-13	6:45 AM	111.9	103.0
23-Oct-13	7:21 AM	108.2	106.0
23-Oct-13	7:57 AM	113.6	109.6
23-Oct-13	8:18 AM	110.6	106.2
23-Oct-13	8:49 AM	115.4	111.3
23-Oct-13	9:32 AM	111.4	109.8
23-Oct-13	11:01 AM	120.6	115.0
24-Oct-13	9:48 AM	112.7	111.6
24-Oct-13	10:32 AM	126.1	118.9
24-Oct-13	12:35 PM	120.7	117.2
24-Oct-13	1:04 PM	133.6	128.8
24-Oct-13	1:15 PM	124.1	119.0
24-Oct-13	1:20 PM	128.9	122.9
24-Oct-13	1:26 PM	117.3	113.1
24-Oct-13	1:31 PM	125.4	121.4
24-Oct-13	1:36 PM	127.9	119.8
24-Oct-13	1:52 PM	120.8	115.5
24-Oct-13	1:58 PM	126.1	123.5
24-Oct-13	2:10 PM	119.2	113.4
24-Oct-13	2:45 PM	120.8	118.3
24-Oct-13	3:07 PM	116.0	114.5
24-Oct-13	3:28 PM	110.5	108.7
24-Oct-13	1:36 PM	112.7	111.1
24-Oct-13	4:32 PM	114.5	113.4
25-Oct-13	10:10 AM	116.2	111.9
25-Oct-13	10:50 AM	121.5	118.4
25-Oct-13	11:29 AM	123.4	122.1
25-Oct-13	12:30 PM	116.2	114.9
25-Oct-13	12:35 PM	116.0	115.0
25-Oct-13	1:40 PM	118.6	116.6
25-Oct-13	2:47 PM	120.5	118.0
25-Oct-13	3:33 PM	115.4	110.5

APPENDIX V (cont'd)

Data for Figure 4. Received sound levels in relation to wind speed: wind speeds measured during each recording (top plot), mean bandlevels for each recording (middle plot), and mean bandlevels as a function of wind speed (bottom plot).

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
26-Sep-13	9:20 AM	2.1	124.4
26-Sep-13	10:00 AM	0.3	111.9
26-Sep-13	10:34 AM	2.5	109.9
26-Sep-13	10:54 AM	2.1	112.5
26-Sep-13	11:52 AM	0.3	119.7
26-Sep-13	12:24 PM	1.4	119.7
26-Sep-13	12:51 PM	0.3	110.7
26-Sep-13	1:23 PM	2.0	114.7
26-Sep-13	1:55 PM	2.4	127.5
27-Sep-13	11:08 AM	2.2	113.0
27-Sep-13	11:23 AM	3.3	116.4
27-Sep-13	11:28 AM	1.2	124.4
27-Sep-13	12:19 PM	1.8	115.0
27-Sep-13	12:56 PM	0.8	120.1
27-Sep-13	1:10 PM	3.3	122.1
27-Sep-13	1:25 PM	0.6	118.2
27-Sep-13	1:50 PM	1.6	121.1
27-Sep-13	1:55 PM	0.6	126.5
27-Sep-13	2:00 PM	0.6	124.8
27-Sep-13	2:04 PM	1.2	116.1
27-Sep-13	2:19 PM	1.2	124.4
27-Sep-13	2:26 PM	0.7	126.9
27-Sep-13	3:12 PM	3.7	110.9
27-Sep-13	3:42 PM	2.5	117.7
27-Sep-13	4:16 PM	1.3	115.6
27-Sep-13	5:11 PM	1.1	115.0
28-Sep-13	9:42 AM	1.8	131.2
28-Sep-13	10:08 AM	3.6	112.7
28-Sep-13	10:40 AM	4.1	115.5
28-Sep-13	11:08 AM	4.3	114.7
28-Sep-13	11:40 AM	4.0	126.1
28-Sep-13	12:07 PM	NaN	123.8
28-Sep-13	1:26 PM	2.9	123.4
29-Sep-13	1:34 PM	3.8	122.8
29-Sep-13	3:25 PM	1.4	120.9

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
29-Sep-13	4:01 PM	0.6	130.9
30-Sep-13	10:11 AM	2.2	130.8
30-Sep-13	10:39 AM	3.5	116.8
30-Sep-13	12:39 PM	1.2	117.1
30-Sep-13	1:09 PM	3.2	121.8
30-Sep-13	4:13 PM	0.9	113.1
1-Oct-13	10:32 AM	1.8	120.5
1-Oct-13	10:37 AM	3.5	118.1
1-Oct-13	10:42 AM	1.6	123.8
1-Oct-13	10:49 AM	1.7	118.6
1-Oct-13	11:24 AM	1.3	117.0
1-Oct-13	11:44 AM	1.2	115.5
1-Oct-13	1:09 PM	1.7	122.1
1-Oct-13	1:39 PM	1.2	118.8
1-Oct-13	2:01 PM	2.2	119.8
1-Oct-13	2:11 PM	1.2	117.2
1-Oct-13	2:16 PM	1.2	114.8
1-Oct-13	2:25 PM	0.7	112.0
1-Oct-13	2:32 PM	1.4	116.6
1-Oct-13	2:47 PM	1.5	113.7
1-Oct-13	3:04 PM	2.1	114.1
1-Oct-13	3:20 PM	2.7	120.9
1-Oct-13	3:34 PM	2.5	118.4
1-Oct-13	4:12 PM	1.1	123.5
1-Oct-13	4:21 PM	2.5	120.1
2-Oct-13	9:28 AM	1.1	118.2
2-Oct-13	10:01 AM	1.5	113.5
2-Oct-13	10:27 AM	2.7	113.3
2-Oct-13	10:59 AM	2.7	115.5
2-Oct-13	11:30 AM	2.8	125.7
2-Oct-13	11:57 AM	0.6	112.9
2-Oct-13	12:29 PM	1.4	134.2
2-Oct-13	12:58 PM	1.2	132.1
2-Oct-13	2:36 PM	1.4	118.5
2-Oct-13	2:51 PM	2.9	125.2
2-Oct-13	3:09 PM	3.7	115.9
3-Oct-13	12:33 PM	0.6	113.2

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
3-Oct-13	1:02 PM	0.6	120.2
3-Oct-13	1:27 PM	2.5	124.4
3-Oct-13	2:47 PM	2.8	123.3
3-Oct-13	3:17 PM	3.7	127.5
3-Oct-13	3:47 PM	1.5	129.6
3-Oct-13	5:16 PM	2.8	119.5
3-Oct-13	5:51 PM	2.2	120.0
3-Oct-13	8:06 PM	3.0	118.0
3-Oct-13	8:08 PM	3.1	116.1
3-Oct-13	8:11 PM	3.9	117.2
3-Oct-13	8:20 PM	4.2	117.3
3-Oct-13	8:23 PM	4.4	118.2
3-Oct-13	8:33 PM	5.8	117.3
3-Oct-13	8:40 PM	4.7	115.6
3-Oct-13	8:45 PM	3.6	112.1
3-Oct-13	9:01 PM	4.6	116.3
3-Oct-13	9:10 PM	4.5	113.2
3-Oct-13	9:18 PM	4.7	114.3
3-Oct-13	9:34 PM	4.3	113.8
3-Oct-13	9:42 PM	4.5	111.5
3-Oct-13	9:47 PM	4.1	111.8
3-Oct-13	9:53 PM	4.8	113.1
3-Oct-13	10:00 PM	3.6	111.6
3-Oct-13	10:06 PM	3.8	110.4
4-Oct-13	9:50 AM	2.9	130.5
4-Oct-13	9:55 AM	2.9	127.8
4-Oct-13	10:05 AM	1.7	121.9
4-Oct-13	10:10 AM	2.4	132.1
4-Oct-13	11:43 AM	1.1	104.9
4-Oct-13	12:41 PM	1.1	114.4
4-Oct-13	1:12 PM	1.3	128.1
4-Oct-13	2:13 PM	2.6	119.5
4-Oct-13	2:42 PM	2.0	113.3
4-Oct-13	3:13 PM	1.4	116.9
4-Oct-13	3:41 PM	3.6	118.1
5-Oct-13	8:27 AM	1.6	107.0
5-Oct-13	8:57 AM	1.3	109.7

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
5-Oct-13	9:30 AM	1.7	111.1
5-Oct-13	9:58 AM	1.9	119.7
5-Oct-13	10:28 AM	1.3	107.1
5-Oct-13	10:57 AM	1.3	122.9
5-Oct-13	11:27 AM	2.4	120.1
5-Oct-13	12:20 PM	3.4	106.4
5-Oct-13	12:38 PM	4.1	117.1
5-Oct-13	12:54 PM	3.0	117.1
5-Oct-13	1:17 PM	3.4	114.9
5-Oct-13	1:41 PM	3.1	111.7
5-Oct-13	2:29 PM	3.0	106.7
6-Oct-13	11:09 AM	3.4	114.7
6-Oct-13	11:30 AM	5.1	117.3
6-Oct-13	12:06 PM	1.8	113.9
6-Oct-13	12:19 PM	2.1	123.4
6-Oct-13	12:35 PM	5.2	113.3
6-Oct-13	1:29 PM	1.6	124.4
6-Oct-13	1:57 PM	1.8	115.0
6-Oct-13	2:27 PM	2.7	119.1
6-Oct-13	2:59 PM	3.0	114.3
6-Oct-13	3:28 PM	3.5	128.3
6-Oct-13	3:57 PM	5.0	118.5
6-Oct-13	4:16 PM	4.5	116.1
6-Oct-13	4:46 PM	4.8	129.6
7-Oct-13	9:32 AM	5.0	119.2
7-Oct-13	10:02 AM	5.8	112.3
7-Oct-13	10:31 AM	5.6	111.6
7-Oct-13	11:02 AM	5.9	112.3
7-Oct-13	11:33 AM	7.1	119.2
7-Oct-13	11:45 AM	7.7	115.8
7-Oct-13	12:23 PM	3.8	127.3
7-Oct-13	1:01 PM	4.8	117.0
7-Oct-13	1:07 PM	4.9	115.2
7-Oct-13	1:51 PM	6.3	121.2
7-Oct-13	2:22 PM	5.9	125.8
7-Oct-13	2:46 PM	5.5	128.5
7-Oct-13	3:15 PM	3.5	116.3

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
8-Oct-13	12:34 PM	4.6	110.7
8-Oct-13	12:43 PM	5.0	110.9
8-Oct-13	12:54 PM	2.0	110.7
8-Oct-13	1:10 PM	3.4	116.2
8-Oct-13	1:19 PM	3.5	113.2
8-Oct-13	1:28 PM	3.9	111.0
8-Oct-13	1:42 PM	5.1	119.0
8-Oct-13	1:59 PM	3.0	115.6
8-Oct-13	2:03 PM	3.8	112.7
8-Oct-13	2:27 PM	3.9	117.8
8-Oct-13	2:39 PM	3.7	119.2
8-Oct-13	2:48 PM	2.7	114.5
8-Oct-13	3:03 PM	2.7	117.2
8-Oct-13	3:15 PM	3.4	117.0
8-Oct-13	3:23 PM	3.3	111.9
8-Oct-13	4:02 PM	3.2	116.4
8-Oct-13	4:33 PM	2.4	120.2
8-Oct-13	4:59 PM	2.1	121.9
8-Oct-13	5:09 PM	3.1	122.1
8-Oct-13	5:21 PM	1.5	120.0
8-Oct-13	6:01 PM	3.6	111.3
8-Oct-13	8:48 PM	1.3	113.9
8-Oct-13	9:16 PM	1.8	117.9
8-Oct-13	9:44 PM	1.8	111.0
8-Oct-13	10:18 PM	1.0	111.7
8-Oct-13	11:17 PM	2.4	112.9
9-Oct-13	12:16 AM	2.9	111.1
9-Oct-13	1:19 AM	2.6	112.9
9-Oct-13	2:15 AM	1.1	114.1
9-Oct-13	3:17 AM	1.1	108.5
9-Oct-13	4:18 AM	1.9	109.4
9-Oct-13	5:52 AM	2.7	107.7
9-Oct-13	6:18 AM	0.8	111.2
9-Oct-13	6:48 AM	1.4	107.6
9-Oct-13	7:32 AM	0.6	128.2
9-Oct-13	8:03 AM	1.0	116.0
9-Oct-13	8:21 AM	0.3	121.7

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
9-Oct-13	8:41 AM	0.7	122.6
9-Oct-13	9:02 AM	1.7	116.8
9-Oct-13	9:33 AM	2.0	116.3
9-Oct-13	9:49 AM	1.1	120.2
9-Oct-13	10:09 AM	1.3	121.0
9-Oct-13	10:47 AM	0.8	111.8
9-Oct-13	11:11 AM	1.4	109.0
9-Oct-13	11:43 AM	4.1	124.6
10-Oct-13	10:01 AM	3.0	105.9
10-Oct-13	10:16 AM	2.8	125.5
10-Oct-13	10:28 AM	3.3	116.2
10-Oct-13	10:46 AM	1.8	107.7
10-Oct-13	10:53 AM	2.4	120.6
10-Oct-13	11:04 AM	2.9	112.5
10-Oct-13	1:02 PM	1.7	121.8
10-Oct-13	1:35 PM	1.6	119.5
10-Oct-13	1:48 PM	0.3	118.1
10-Oct-13	2:31 PM	1.6	114.2
10-Oct-13	3:03 PM	2.8	115.1
10-Oct-13	4:16 PM	1.6	117.9
11-Oct-13	9:47 AM	0.6	123.4
11-Oct-13	10:17 AM	0.0	112.2
11-Oct-13	10:48 AM	1.1	116.7
11-Oct-13	11:20 AM	2.1	117.8
11-Oct-13	11:47 AM	1.5	118.0
11-Oct-13	12:18 PM	2.1	121.7
11-Oct-13	12:45 PM	0.4	119.2
11-Oct-13	1:00 PM	1.3	117.6
11-Oct-13	1:15 PM	2.3	120.8
11-Oct-13	1:26 PM	3.1	111.4
11-Oct-13	2:18 PM	2.7	120.2
11-Oct-13	3:12 PM	2.5	108.9
11-Oct-13	3:29 PM	1.2	108.2
11-Oct-13	3:38 PM	2.4	107.8
11-Oct-13	3:43 PM	0.3	116.5
11-Oct-13	3:49 PM	2.3	113.2
11-Oct-13	3:55 PM	2.5	120.6

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
11-Oct-13	4:01 PM	1.0	116.1
11-Oct-13	4:12 PM	1.2	114.1
11-Oct-13	4:18 PM	0.5	116.7
11-Oct-13	4:20 PM	0.6	116.7
11-Oct-13	4:26 PM	1.7	112.7
11-Oct-13	4:32 PM	1.0	110.2
11-Oct-13	4:39 PM	1.6	120.9
11-Oct-13	4:44 PM	1.2	112.3
11-Oct-13	4:50 PM	1.7	117.6
12-Oct-13	10:45 AM	4.5	119.4
12-Oct-13	11:04 AM	1.8	125.7
12-Oct-13	11:22 AM	1.3	122.6
12-Oct-13	1:07 PM	5.4	124.2
12-Oct-13	1:37 PM	4.1	115.1
12-Oct-13	2:07 PM	3.5	116.2
12-Oct-13	2:36 PM	2.3	113.0
12-Oct-13	3:06 PM	2.5	115.3
12-Oct-13	3:27 PM	2.1	109.0
12-Oct-13	3:59 PM	2.4	116.2
12-Oct-13	4:05 PM	3.2	113.6
13-Oct-13	10:25 AM	2.9	118.9
13-Oct-13	11:49 AM	2.4	126.6
13-Oct-13	12:17 PM	1.5	124.8
13-Oct-13	12:48 PM	3.3	122.8
13-Oct-13	1:17 PM	0.7	123.8
13-Oct-13	1:43 PM	1.4	122.2
13-Oct-13	2:16 PM	0.9	119.3
13-Oct-13	2:47 PM	0.4	113.9
13-Oct-13	3:18 PM	0.6	110.9
13-Oct-13	3:49 PM	0.9	124.0
13-Oct-13	4:20 PM	0.7	114.0
14-Oct-13	9:53 AM	6.0	110.1
14-Oct-13	10:22 AM	4.9	108.4
14-Oct-13	10:59 AM	4.0	127.0
14-Oct-13	11:27 AM	5.0	141.9
14-Oct-13	11:58 AM	3.0	124.7
14-Oct-13	1:14 PM	1.1	108.4

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
14-Oct-13	1:46 PM	1.7	118.2
14-Oct-13	3:09 PM	1.2	108.9
14-Oct-13	3:38 PM	1.1	127.7
14-Oct-13	4:09 PM	0.6	116.9
14-Oct-13	4:39 PM	0.6	121.2
15-Oct-13	2:22 PM	4.2	128.2
15-Oct-13	2:46 PM	4.7	124.8
15-Oct-13	3:06 PM	4.0	120.7
15-Oct-13	3:21 PM	2.2	112.9
15-Oct-13	3:47 PM	4.5	129.6
15-Oct-13	4:16 PM	3.2	114.9
15-Oct-13	4:47 PM	3.5	119.6
15-Oct-13	5:17 PM	4.8	117.0
15-Oct-13	7:17 PM	3.1	110.2
15-Oct-13	7:20 PM	1.6	108.0
15-Oct-13	7:22 PM	2.6	107.4
15-Oct-13	7:50 PM	3.1	109.0
15-Oct-13	7:55 PM	2.7	111.2
15-Oct-13	8:07 PM	3.5	112.0
15-Oct-13	8:19 PM	3.4	109.4
15-Oct-13	8:30 PM	3.3	108.5
15-Oct-13	8:39 PM	2.6	108.4
15-Oct-13	8:50 PM	1.4	107.1
15-Oct-13	9:08 PM	2.7	111.2
15-Oct-13	9:17 PM	3.1	112.3
15-Oct-13	9:25 PM	3.5	119.5
15-Oct-13	9:34 PM	4.2	111.4
15-Oct-13	9:43 PM	4.1	111.8
15-Oct-13	9:54 PM	2.6	112.6
15-Oct-13	10:05 PM	3.8	112.2
15-Oct-13	10:17 PM	3.9	108.0
15-Oct-13	11:09 PM	2.9	115.7
15-Oct-13	11:35 PM	1.7	103.0
16-Oct-13	12:07 AM	2.6	108.3
16-Oct-13	1:04 AM	3.8	103.9
16-Oct-13	1:59 AM	1.6	101.7
16-Oct-13	3:03 AM	1.2	102.8

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
16-Oct-13	4:03 AM	2.1	102.4
16-Oct-13	6:03 AM	2.3	106.5
16-Oct-13	6:28 AM	2.9	110.8
16-Oct-13	6:52 AM	2.8	113.4
16-Oct-13	7:22 AM	3.8	113.6
16-Oct-13	7:43 AM	4.5	111.0
16-Oct-13	8:02 AM	3.9	114.4
16-Oct-13	8:43 AM	4.3	124.1
16-Oct-13	9:03 AM	2.9	120.2
16-Oct-13	9:32 AM	4.0	113.0
16-Oct-13	10:02 AM	4.5	118.0
16-Oct-13	10:32 AM	4.2	117.5
16-Oct-13	11:09 AM	4.8	122.9
16-Oct-13	11:25 AM	2.0	108.6
17-Oct-13	9:32 AM	3.7	112.5
17-Oct-13	10:02 AM	3.0	119.9
17-Oct-13	10:32 AM	4.3	120.5
17-Oct-13	11:02 AM	5.0	125.5
17-Oct-13	11:31 AM	3.8	111.7
17-Oct-13	12:58 PM	4.0	111.0
17-Oct-13	1:20 PM	3.8	114.5
17-Oct-13	2:04 PM	2.9	115.8
17-Oct-13	2:32 PM	1.4	110.7
17-Oct-13	3:01 PM	3.3	109.0
17-Oct-13	3:32 PM	2.9	119.0
17-Oct-13	4:03 PM	3.7	120.8
18-Oct-13	9:33 AM	2.7	116.0
18-Oct-13	10:02 AM	4.1	112.3
18-Oct-13	10:33 AM	3.2	115.9
18-Oct-13	11:03 AM	5.2	119.2
18-Oct-13	12:30 PM	5.0	120.1
18-Oct-13	12:51 PM	3.6	117.4
18-Oct-13	1:05 PM	2.6	116.3
18-Oct-13	1:20 PM	2.6	115.9
18-Oct-13	1:25 PM	2.1	114.7
18-Oct-13	3:24 PM	0.4	124.1
18-Oct-13	3:56 PM	3.4	111.3

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
18-Oct-13	4:22 PM	3.3	121.6
19-Oct-13	10:22 AM	1.1	107.8
19-Oct-13	11:04 AM	2.8	118.5
19-Oct-13	11:36 AM	2.8	124.8
19-Oct-13	12:03 PM	2.1	132.9
19-Oct-13	12:20 PM	0.5	122.9
19-Oct-13	12:34 PM	0.6	130.1
19-Oct-13	12:50 PM	3.2	124.0
19-Oct-13	1:15 PM	1.6	129.6
19-Oct-13	2:07 PM	4.9	111.8
19-Oct-13	2:25 PM	3.2	116.4
19-Oct-13	2:36 PM	2.7	115.1
19-Oct-13	3:26 PM	2.6	115.1
19-Oct-13	4:20 PM	0.8	119.0
20-Oct-13	10:17 AM	1.8	112.3
20-Oct-13	10:23 AM	0.6	108.7
20-Oct-13	10:28 AM	1.4	109.8
20-Oct-13	10:41 AM	0.3	120.9
20-Oct-13	10:55 AM	0.3	116.1
20-Oct-13	11:59 AM	1.3	117.4
20-Oct-13	12:23 PM	2.7	107.0
20-Oct-13	12:57 PM	2.4	112.2
20-Oct-13	1:14 PM	2.3	112.6
20-Oct-13	1:34 PM	2.7	108.9
20-Oct-13	1:49 PM	4.2	111.1
20-Oct-13	2:21 PM	4.2	105.5
20-Oct-13	2:37 PM	2.8	123.7
20-Oct-13	3:22 PM	3.4	124.5
20-Oct-13	4:09 PM	2.5	113.9
21-Oct-13	9:37 AM	0.7	111.4
21-Oct-13	10:17 AM	0.5	114.9
21-Oct-13	10:57 AM	2.2	118.2
21-Oct-13	11:25 AM	0.3	124.5
21-Oct-13	12:03 PM	1.3	112.5
21-Oct-13	12:11 PM	1.9	111.8
21-Oct-13	12:14 PM	1.0	114.3
21-Oct-13	12:22 PM	2.4	109.8

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
21-Oct-13	12:28 PM	3.5	125.4
21-Oct-13	12:37 PM	2.6	118.8
21-Oct-13	12:45 PM	3.3	120.5
21-Oct-13	12:54 PM	2.9	112.4
21-Oct-13	1:13 PM	3.2	113.7
21-Oct-13	1:20 PM	3.3	118.3
21-Oct-13	1:27 PM	1.1	117.8
21-Oct-13	1:33 PM	2.6	117.6
21-Oct-13	1:41 PM	2.8	115.8
21-Oct-13	1:45 PM	2.6	116.1
21-Oct-13	1:54 PM	1.0	118.1
21-Oct-13	2:03 PM	2.1	118.2
21-Oct-13	2:11 PM	1.8	115.2
21-Oct-13	3:22 PM	2.1	108.9
22-Oct-13	12:59 PM	2.0	117.8
22-Oct-13	1:37 PM	3.7	135.3
22-Oct-13	2:24 PM	4.3	121.7
22-Oct-13	4:17 PM	5.3	118.1
22-Oct-13	4:47 PM	3.3	117.7
22-Oct-13	5:09 PM	1.7	126.8
22-Oct-13	5:22 PM	2.3	121.9
22-Oct-13	5:37 PM	3.5	114.4
22-Oct-13	5:54 PM	2.7	109.9
22-Oct-13	6:02 PM	2.6	111.6
22-Oct-13	7:05 PM	2.0	111.9
22-Oct-13	8:14 PM	1.4	110.7
22-Oct-13	8:48 PM	1.8	109.8
22-Oct-13	9:16 PM	1.7	110.2
22-Oct-13	9:50 PM	2.6	112.3
22-Oct-13	10:15 PM	1.8	106.1
22-Oct-13	10:47 PM	1.2	110.0
22-Oct-13	11:20 PM	2.1	108.3
22-Oct-13	11:52 PM	1.6	107.1
23-Oct-13	12:48 AM	0.8	111.6
23-Oct-13	1:46 AM	2.8	109.4
23-Oct-13	2:49 AM	0.9	106.5
23-Oct-13	3:45 AM	3.3	105.5

APPENDIX V (cont'd)

Data for Figure 4. (cont'd)

Date	Time	Wind Speed [m/s]	Bandlevel (Wideband) [dB re uPa]
23-Oct-13	4:46 AM	1.1	104.4
23-Oct-13	5:48 AM	1.6	108.8
23-Oct-13	6:17 AM	1.2	111.1
23-Oct-13	6:45 AM	1.2	111.9
23-Oct-13	7:21 AM	2.1	108.2
23-Oct-13	7:57 AM	3.2	113.6
23-Oct-13	8:18 AM	1.6	110.6
23-Oct-13	8:49 AM	4.7	115.4
23-Oct-13	9:32 AM	3.8	111.4
23-Oct-13	11:01 AM	4.4	120.6
24-Oct-13	9:48 AM	4.3	112.7
24-Oct-13	10:32 AM	5.7	126.1
24-Oct-13	12:35 PM	6.2	120.7
24-Oct-13	1:04 PM	3.0	133.6
24-Oct-13	1:15 PM	3.8	124.1
24-Oct-13	1:20 PM	5.6	128.9
24-Oct-13	1:26 PM	3.6	117.3
24-Oct-13	1:31 PM	3.6	125.4
24-Oct-13	1:36 PM	3.2	127.9
24-Oct-13	1:52 PM	2.0	120.8
24-Oct-13	1:58 PM	1.9	126.1
24-Oct-13	2:10 PM	2.5	119.2
24-Oct-13	2:45 PM	2.6	120.8
24-Oct-13	3:07 PM	4.0	116.0
24-Oct-13	3:28 PM	2.9	110.5
24-Oct-13	1:36 PM	4.7	112.7
24-Oct-13	4:32 PM	3.6	114.5
25-Oct-13	10:10 AM	2.3	116.2
25-Oct-13	10:50 AM	1.5	121.5
25-Oct-13	11:29 AM	3.5	123.4
25-Oct-13	12:30 PM	2.8	116.2
25-Oct-13	12:35 PM	3.8	116.0
25-Oct-13	1:40 PM	2.0	118.6
25-Oct-13	2:47 PM	4.5	120.5
25-Oct-13	3:33 PM	4.4	115.4

APPENDIX V (cont'd)

Data for Figure 5. Received sound levels in relation to tidal height: tidal heights measured throughout the study (top plot), mean bandlevels for each recording (middle plot), and mean bandlevels as a function of tidal height (bottom plot).

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
26-Sep-13	9:20 AM	2.1	124.4
26-Sep-13	10:00 AM	2.0	111.9
26-Sep-13	10:34 AM	1.9	109.9
26-Sep-13	10:54 AM	1.8	112.5
26-Sep-13	11:52 AM	1.6	119.7
26-Sep-13	12:24 PM	1.5	119.7
26-Sep-13	12:51 PM	1.4	110.7
26-Sep-13	1:23 PM	1.3	114.7
26-Sep-13	1:55 PM	1.2	127.5
27-Sep-13	11:08 AM	1.9	113.0
27-Sep-13	11:23 AM	1.8	116.4
27-Sep-13	11:28 AM	1.8	124.4
27-Sep-13	12:19 PM	1.7	115.0
27-Sep-13	12:56 PM	1.6	120.1
27-Sep-13	1:10 PM	1.5	122.1
27-Sep-13	1:25 PM	1.5	118.2
27-Sep-13	1:50 PM	1.4	121.1
27-Sep-13	1:55 PM	1.4	126.5
27-Sep-13	2:00 PM	1.4	124.8
27-Sep-13	2:04 PM	1.4	116.1
27-Sep-13	2:19 PM	1.3	124.4
27-Sep-13	2:26 PM	1.3	126.9
27-Sep-13	3:12 PM	1.2	110.9
27-Sep-13	3:42 PM	1.1	117.7
27-Sep-13	4:16 PM	1.1	115.6
27-Sep-13	5:11 PM	1.0	115.0
28-Sep-13	9:42 AM	2.0	131.2
28-Sep-13	10:08 AM	2.0	112.7
28-Sep-13	10:40 AM	2.0	115.5
28-Sep-13	11:08 AM	1.9	114.7
28-Sep-13	11:40 AM	1.9	126.1
28-Sep-13	12:07 PM	1.8	123.8
28-Sep-13	1:26 PM	1.7	123.4
29-Sep-13	1:34 PM	1.9	122.8
29-Sep-13	3:25 PM	1.6	120.9

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
29-Sep-13	4:01 PM	1.5	130.9
30-Sep-13	10:11 AM	1.9	130.8
30-Sep-13	10:39 AM	1.9	116.8
30-Sep-13	12:39 PM	2.0	117.1
30-Sep-13	1:09 PM	2.0	121.8
30-Sep-13	4:13 PM	1.6	113.1
1-Oct-13	10:32 AM	1.6	120.5
1-Oct-13	10:37 AM	1.6	118.1
1-Oct-13	10:42 AM	1.6	123.8
1-Oct-13	10:49 AM	1.7	118.6
1-Oct-13	11:24 AM	1.7	117.0
1-Oct-13	11:44 AM	1.8	115.5
1-Oct-13	1:09 PM	1.9	122.1
1-Oct-13	1:39 PM	2.0	118.8
1-Oct-13	2:01 PM	2.0	119.8
1-Oct-13	2:11 PM	2.0	117.2
1-Oct-13	2:16 PM	2.0	114.8
1-Oct-13	2:25 PM	2.0	112.0
1-Oct-13	2:32 PM	2.0	116.6
1-Oct-13	2:47 PM	2.0	113.7
1-Oct-13	3:04 PM	2.0	114.1
1-Oct-13	3:20 PM	1.9	120.9
1-Oct-13	3:34 PM	1.9	118.4
1-Oct-13	4:12 PM	1.8	123.5
1-Oct-13	4:21 PM	1.8	120.1
2-Oct-13	9:28 AM	1.3	118.2
2-Oct-13	10:01 AM	1.4	113.5
2-Oct-13	10:27 AM	1.4	113.3
2-Oct-13	10:59 AM	1.5	115.5
2-Oct-13	11:30 AM	1.6	125.7
2-Oct-13	11:57 AM	1.6	112.9
2-Oct-13	12:29 PM	1.7	134.2
2-Oct-13	12:58 PM	1.8	132.1
2-Oct-13	2:36 PM	2.0	118.5
2-Oct-13	2:51 PM	2.0	125.2
2-Oct-13	3:09 PM	2.0	115.9
3-Oct-13	12:33 PM	1.6	113.2

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
3-Oct-13	1:02 PM	1.7	120.2
3-Oct-13	1:27 PM	1.7	124.4
3-Oct-13	2:47 PM	2.0	123.3
3-Oct-13	3:17 PM	2.0	127.5
3-Oct-13	3:47 PM	2.1	129.6
3-Oct-13	5:16 PM	1.9	119.5
3-Oct-13	5:51 PM	1.8	120.0
3-Oct-13	8:06 PM	1.2	118.0
3-Oct-13	8:08 PM	1.2	116.1
3-Oct-13	8:11 PM	1.2	117.2
3-Oct-13	8:20 PM	1.1	117.3
3-Oct-13	8:23 PM	1.1	118.2
3-Oct-13	8:33 PM	1.1	117.3
3-Oct-13	8:40 PM	1.1	115.6
3-Oct-13	8:45 PM	1.0	112.1
3-Oct-13	9:01 PM	1.0	116.3
3-Oct-13	9:10 PM	1.0	113.2
3-Oct-13	9:18 PM	0.9	114.3
3-Oct-13	9:34 PM	0.9	113.8
3-Oct-13	9:42 PM	0.9	111.5
3-Oct-13	9:47 PM	0.9	111.8
3-Oct-13	9:53 PM	0.9	113.1
3-Oct-13	10:00 PM	0.9	111.6
3-Oct-13	10:06 PM	0.9	110.4
4-Oct-13	9:50 AM	1.1	130.5
4-Oct-13	9:55 AM	1.0	127.8
4-Oct-13	10:05 AM	1.0	121.9
4-Oct-13	10:10 AM	1.0	132.1
4-Oct-13	11:43 AM	1.1	104.9
4-Oct-13	12:41 PM	1.3	114.4
4-Oct-13	1:12 PM	1.5	128.1
4-Oct-13	2:13 PM	1.7	119.5
4-Oct-13	2:42 PM	1.8	113.3
4-Oct-13	3:13 PM	1.9	116.9
4-Oct-13	3:41 PM	2.0	118.1
5-Oct-13	8:27 AM	1.3	107.0
5-Oct-13	8:57 AM	1.2	109.7

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
5-Oct-13	9:30 AM	1.1	111.1
5-Oct-13	9:58 AM	1.0	119.7
5-Oct-13	10:28 AM	0.9	107.1
5-Oct-13	10:57 AM	0.9	122.9
5-Oct-13	11:27 AM	0.9	120.1
5-Oct-13	12:20 PM	1.0	106.4
5-Oct-13	12:38 PM	1.1	117.1
5-Oct-13	12:54 PM	1.1	117.1
5-Oct-13	1:17 PM	1.2	114.9
5-Oct-13	1:41 PM	1.3	111.7
5-Oct-13	2:29 PM	1.6	106.7
6-Oct-13	11:09 AM	0.8	114.7
6-Oct-13	11:30 AM	0.8	117.3
6-Oct-13	12:06 PM	0.8	113.9
6-Oct-13	12:19 PM	0.8	123.4
6-Oct-13	12:35 PM	0.9	113.3
6-Oct-13	1:29 PM	1.0	124.4
6-Oct-13	1:57 PM	1.1	115.0
6-Oct-13	2:27 PM	1.3	119.1
6-Oct-13	2:59 PM	1.4	114.3
6-Oct-13	3:28 PM	1.6	128.3
6-Oct-13	3:57 PM	1.7	118.5
6-Oct-13	4:16 PM	1.8	116.1
6-Oct-13	4:46 PM	1.9	129.6
7-Oct-13	9:32 AM	1.4	119.2
7-Oct-13	10:02 AM	1.2	112.3
7-Oct-13	10:31 AM	1.0	111.6
7-Oct-13	11:02 AM	0.9	112.3
7-Oct-13	11:33 AM	0.8	119.2
7-Oct-13	11:45 AM	0.8	115.8
7-Oct-13	12:23 PM	0.7	127.3
7-Oct-13	1:01 PM	0.8	117.0
7-Oct-13	1:07 PM	0.8	115.2
7-Oct-13	1:51 PM	0.9	121.2
7-Oct-13	2:22 PM	1.0	125.8
7-Oct-13	2:46 PM	1.1	128.5
7-Oct-13	3:15 PM	1.2	116.3

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
8-Oct-13	12:34 PM	0.7	110.7
8-Oct-13	12:43 PM	0.7	110.9
8-Oct-13	12:54 PM	0.7	110.7
8-Oct-13	1:10 PM	0.7	116.2
8-Oct-13	1:19 PM	0.7	113.2
8-Oct-13	1:28 PM	0.7	111.0
8-Oct-13	1:42 PM	0.7	119.0
8-Oct-13	1:59 PM	0.7	115.6
8-Oct-13	2:03 PM	0.7	112.7
8-Oct-13	2:27 PM	0.8	117.8
8-Oct-13	2:39 PM	0.8	119.2
8-Oct-13	2:48 PM	0.8	114.5
8-Oct-13	3:03 PM	0.9	117.2
8-Oct-13	3:15 PM	0.9	117.0
8-Oct-13	3:23 PM	1.0	111.9
8-Oct-13	4:02 PM	1.1	116.4
8-Oct-13	4:33 PM	1.3	120.2
8-Oct-13	4:59 PM	1.4	121.9
8-Oct-13	5:09 PM	1.4	122.1
8-Oct-13	5:21 PM	1.5	120.0
8-Oct-13	6:01 PM	1.6	111.3
8-Oct-13	8:48 PM	1.8	113.9
8-Oct-13	9:16 PM	1.7	117.9
8-Oct-13	9:44 PM	1.6	111.0
8-Oct-13	10:18 PM	1.5	111.7
8-Oct-13	11:17 PM	1.3	112.9
9-Oct-13	12:16 AM	1.2	111.1
9-Oct-13	1:19 AM	1.2	112.9
9-Oct-13	2:15 AM	1.4	114.1
9-Oct-13	3:17 AM	1.7	108.5
9-Oct-13	4:18 AM	2.0	109.4
9-Oct-13	5:52 AM	2.4	107.7
9-Oct-13	6:18 AM	2.4	111.2
9-Oct-13	6:48 AM	2.5	107.6
9-Oct-13	7:32 AM	2.4	128.2
9-Oct-13	8:03 AM	2.3	116.0
9-Oct-13	8:21 AM	2.2	121.7

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
9-Oct-13	8:41 AM	2.2	122.6
9-Oct-13	9:02 AM	2.1	116.8
9-Oct-13	9:33 AM	1.9	116.3
9-Oct-13	9:49 AM	1.8	120.2
9-Oct-13	10:09 AM	1.7	121.0
9-Oct-13	10:47 AM	1.4	111.8
9-Oct-13	11:11 AM	1.3	109.0
9-Oct-13	11:43 AM	1.1	124.6
10-Oct-13	10:01 AM	2.0	105.9
10-Oct-13	10:16 AM	1.9	125.5
10-Oct-13	10:28 AM	1.8	116.2
10-Oct-13	10:46 AM	1.7	107.7
10-Oct-13	10:53 AM	1.7	120.6
10-Oct-13	11:04 AM	1.6	112.5
10-Oct-13	1:02 PM	1.0	121.8
10-Oct-13	1:35 PM	0.9	119.5
10-Oct-13	1:48 PM	0.8	118.1
10-Oct-13	2:31 PM	0.7	114.2
10-Oct-13	3:03 PM	0.7	115.1
10-Oct-13	4:16 PM	0.8	117.9
11-Oct-13	9:47 AM	2.2	123.4
11-Oct-13	10:17 AM	2.1	112.2
11-Oct-13	10:48 AM	2.0	116.7
11-Oct-13	11:20 AM	1.8	117.8
11-Oct-13	11:47 AM	1.7	118.0
11-Oct-13	12:18 PM	1.5	121.7
11-Oct-13	12:45 PM	1.4	119.2
11-Oct-13	1:00 PM	1.3	117.6
11-Oct-13	1:15 PM	1.3	120.8
11-Oct-13	1:26 PM	1.2	111.4
11-Oct-13	2:18 PM	1.0	120.2
11-Oct-13	3:12 PM	0.8	108.9
11-Oct-13	3:29 PM	0.8	108.2
11-Oct-13	3:38 PM	0.8	107.8
11-Oct-13	3:43 PM	0.8	116.5
11-Oct-13	3:49 PM	0.8	113.2
11-Oct-13	3:55 PM	0.8	120.6

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
11-Oct-13	4:01 PM	0.8	116.1
11-Oct-13	4:12 PM	0.8	114.1
11-Oct-13	4:18 PM	0.8	116.7
11-Oct-13	4:20 PM	0.8	116.7
11-Oct-13	4:26 PM	0.8	112.7
11-Oct-13	4:32 PM	0.8	110.2
11-Oct-13	4:39 PM	0.8	120.9
11-Oct-13	4:44 PM	0.8	112.3
11-Oct-13	4:50 PM	0.8	117.6
12-Oct-13	10:45 AM	2.2	119.4
12-Oct-13	11:04 AM	2.1	125.7
12-Oct-13	11:22 AM	2.0	122.6
12-Oct-13	1:07 PM	1.6	124.2
12-Oct-13	1:37 PM	1.5	115.1
12-Oct-13	2:07 PM	1.3	116.2
12-Oct-13	2:36 PM	1.2	113.0
12-Oct-13	3:06 PM	1.1	115.3
12-Oct-13	3:27 PM	1.0	109.0
12-Oct-13	3:59 PM	0.9	116.2
12-Oct-13	4:05 PM	0.9	113.6
13-Oct-13	10:25 AM	2.2	118.9
13-Oct-13	11:49 AM	2.1	126.6
13-Oct-13	12:17 PM	2.1	124.8
13-Oct-13	12:48 PM	2.0	122.8
13-Oct-13	1:17 PM	1.9	123.8
13-Oct-13	1:43 PM	1.8	122.2
13-Oct-13	2:16 PM	1.6	119.3
13-Oct-13	2:47 PM	1.5	113.9
13-Oct-13	3:18 PM	1.4	110.9
13-Oct-13	3:49 PM	1.2	124.0
13-Oct-13	4:20 PM	1.1	114.0
14-Oct-13	9:53 AM	1.9	110.1
14-Oct-13	10:22 AM	2.0	108.4
14-Oct-13	10:59 AM	2.1	127.0
14-Oct-13	11:27 AM	2.1	141.9
14-Oct-13	11:58 AM	2.1	124.7
14-Oct-13	1:14 PM	2.1	108.4

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
14-Oct-13	1:46 PM	2.0	118.2
14-Oct-13	3:09 PM	1.7	108.9
14-Oct-13	3:38 PM	1.6	127.7
14-Oct-13	4:09 PM	1.5	116.9
14-Oct-13	4:39 PM	1.3	121.2
15-Oct-13	2:22 PM	2.1	128.2
15-Oct-13	2:46 PM	2.0	124.8
15-Oct-13	3:06 PM	2.0	120.7
15-Oct-13	3:21 PM	1.9	112.9
15-Oct-13	3:47 PM	1.8	129.6
15-Oct-13	4:16 PM	1.7	114.9
15-Oct-13	4:47 PM	1.6	119.6
15-Oct-13	5:17 PM	1.4	117.0
15-Oct-13	7:17 PM	0.9	110.2
15-Oct-13	7:20 PM	0.9	108.0
15-Oct-13	7:22 PM	0.9	107.4
15-Oct-13	7:50 PM	0.9	109.0
15-Oct-13	7:55 PM	0.8	111.2
15-Oct-13	8:07 PM	0.8	112.0
15-Oct-13	8:19 PM	0.8	109.4
15-Oct-13	8:30 PM	0.8	108.5
15-Oct-13	8:39 PM	0.8	108.4
15-Oct-13	8:50 PM	0.8	107.1
15-Oct-13	9:08 PM	0.8	111.2
15-Oct-13	9:17 PM	0.8	112.3
15-Oct-13	9:25 PM	0.8	119.5
15-Oct-13	9:34 PM	0.8	111.4
15-Oct-13	9:43 PM	0.9	111.8
15-Oct-13	9:54 PM	0.9	112.6
15-Oct-13	10:05 PM	0.9	112.2
15-Oct-13	10:17 PM	0.9	108.0
15-Oct-13	11:09 PM	1.1	115.7
15-Oct-13	11:35 PM	1.2	103.0
16-Oct-13	12:07 AM	1.3	108.3
16-Oct-13	1:04 AM	1.5	103.9
16-Oct-13	1:59 AM	1.7	101.7
16-Oct-13	3:03 AM	1.8	102.8

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
16-Oct-13	4:03 AM	1.8	102.4
16-Oct-13	6:03 AM	1.6	106.5
16-Oct-13	6:28 AM	1.5	110.8
16-Oct-13	6:52 AM	1.4	113.4
16-Oct-13	7:22 AM	1.3	113.6
16-Oct-13	7:43 AM	1.3	111.0
16-Oct-13	8:02 AM	1.3	114.4
16-Oct-13	8:43 AM	1.2	124.1
16-Oct-13	9:03 AM	1.2	120.2
16-Oct-13	9:32 AM	1.3	113.0
16-Oct-13	10:02 AM	1.3	118.0
16-Oct-13	10:32 AM	1.4	117.5
16-Oct-13	11:09 AM	1.5	122.9
16-Oct-13	11:25 AM	1.6	108.6
17-Oct-13	9:32 AM	1.0	112.5
17-Oct-13	10:02 AM	1.1	119.9
17-Oct-13	10:32 AM	1.1	120.5
17-Oct-13	11:02 AM	1.2	125.5
17-Oct-13	11:31 AM	1.3	111.7
17-Oct-13	12:58 PM	1.6	111.0
17-Oct-13	1:20 PM	1.7	114.5
17-Oct-13	2:04 PM	1.8	115.8
17-Oct-13	2:32 PM	1.9	110.7
17-Oct-13	3:01 PM	2.0	109.0
17-Oct-13	3:32 PM	2.0	119.0
17-Oct-13	4:03 PM	2.0	120.8
18-Oct-13	9:33 AM	1.0	116.0
18-Oct-13	10:02 AM	0.9	112.3
18-Oct-13	10:33 AM	0.9	115.9
18-Oct-13	11:03 AM	0.9	119.2
18-Oct-13	12:30 PM	1.2	120.1
18-Oct-13	12:51 PM	1.2	117.4
18-Oct-13	1:05 PM	1.3	116.3
18-Oct-13	1:20 PM	1.4	115.9
18-Oct-13	1:25 PM	1.4	114.7
18-Oct-13	3:24 PM	1.9	124.1
18-Oct-13	3:56 PM	1.9	111.3

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
18-Oct-13	4:22 PM	2.0	121.6
19-Oct-13	10:22 AM	0.8	107.8
19-Oct-13	11:04 AM	0.8	118.5
19-Oct-13	11:36 AM	0.8	124.8
19-Oct-13	12:03 PM	0.8	132.9
19-Oct-13	12:20 PM	0.9	122.9
19-Oct-13	12:34 PM	0.9	130.1
19-Oct-13	12:50 PM	1.0	124.0
19-Oct-13	1:15 PM	1.0	129.6
19-Oct-13	2:07 PM	1.3	111.8
19-Oct-13	2:25 PM	1.4	116.4
19-Oct-13	2:36 PM	1.4	115.1
19-Oct-13	3:26 PM	1.6	115.1
19-Oct-13	4:20 PM	1.8	119.0
20-Oct-13	10:17 AM	0.9	112.3
20-Oct-13	10:23 AM	0.9	108.7
20-Oct-13	10:28 AM	0.9	109.8
20-Oct-13	10:41 AM	0.8	120.9
20-Oct-13	10:55 AM	0.8	116.1
20-Oct-13	11:59 AM	0.7	117.4
20-Oct-13	12:23 PM	0.7	107.0
20-Oct-13	12:57 PM	0.8	112.2
20-Oct-13	1:14 PM	0.8	112.6
20-Oct-13	1:34 PM	0.9	108.9
20-Oct-13	1:49 PM	0.9	111.1
20-Oct-13	2:21 PM	1.1	105.5
20-Oct-13	2:37 PM	1.1	123.7
20-Oct-13	3:22 PM	1.3	124.5
20-Oct-13	4:09 PM	1.5	113.9
21-Oct-13	9:37 AM	1.4	111.4
21-Oct-13	10:17 AM	1.1	114.9
21-Oct-13	10:57 AM	0.9	118.2
21-Oct-13	11:25 AM	0.8	124.5
21-Oct-13	12:03 PM	0.7	112.5
21-Oct-13	12:11 PM	0.7	111.8
21-Oct-13	12:14 PM	0.7	114.3
21-Oct-13	12:22 PM	0.7	109.8

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
21-Oct-13	12:28 PM	0.7	125.4
21-Oct-13	12:37 PM	0.7	118.8
21-Oct-13	12:45 PM	0.7	120.5
21-Oct-13	12:54 PM	0.7	112.4
21-Oct-13	1:13 PM	0.7	113.7
21-Oct-13	1:20 PM	0.7	118.3
21-Oct-13	1:27 PM	0.7	117.8
21-Oct-13	1:33 PM	0.7	117.6
21-Oct-13	1:41 PM	0.8	115.8
21-Oct-13	1:45 PM	0.8	116.1
21-Oct-13	1:54 PM	0.8	118.1
21-Oct-13	2:03 PM	0.8	118.2
21-Oct-13	2:11 PM	0.8	115.2
21-Oct-13	3:22 PM	1.1	108.9
22-Oct-13	12:59 PM	0.7	117.8
22-Oct-13	1:37 PM	0.7	135.3
22-Oct-13	2:24 PM	0.8	121.7
22-Oct-13	4:17 PM	1.1	118.1
22-Oct-13	4:47 PM	1.2	117.7
22-Oct-13	5:09 PM	1.3	126.8
22-Oct-13	5:22 PM	1.4	121.9
22-Oct-13	5:37 PM	1.4	114.4
22-Oct-13	5:54 PM	1.5	109.9
22-Oct-13	6:02 PM	1.5	111.6
22-Oct-13	7:05 PM	1.6	111.9
22-Oct-13	8:14 PM	1.7	110.7
22-Oct-13	8:48 PM	1.6	109.8
22-Oct-13	9:16 PM	1.6	110.2
22-Oct-13	9:50 PM	1.5	112.3
22-Oct-13	10:15 PM	1.4	106.1
22-Oct-13	10:47 PM	1.4	110.0
22-Oct-13	11:20 PM	1.3	108.3
22-Oct-13	11:52 PM	1.3	107.1
23-Oct-13	12:48 AM	1.3	111.6
23-Oct-13	1:46 AM	1.4	109.4
23-Oct-13	2:49 AM	1.7	106.5
23-Oct-13	3:45 AM	1.9	105.5

APPENDIX V (cont'd)

Data for Figure 5. (cont'd)

Date	Time	Tidal Height [m]	Bandlevel (Wideband) [dB re uPa]
23-Oct-13	4:46 AM	2.2	104.4
23-Oct-13	5:48 AM	2.3	108.8
23-Oct-13	6:17 AM	2.4	111.1
23-Oct-13	6:45 AM	2.3	111.9
23-Oct-13	7:21 AM	2.3	108.2
23-Oct-13	7:57 AM	2.2	113.6
23-Oct-13	8:18 AM	2.1	110.6
23-Oct-13	8:49 AM	2.0	115.4
23-Oct-13	9:32 AM	1.8	111.4
23-Oct-13	11:01 AM	1.3	120.6
24-Oct-13	9:48 AM	1.9	112.7
24-Oct-13	10:32 AM	1.7	126.1
24-Oct-13	12:35 PM	1.1	120.7
24-Oct-13	1:04 PM	1.0	133.6
24-Oct-13	1:15 PM	1.0	124.1
24-Oct-13	1:20 PM	1.0	128.9
24-Oct-13	1:26 PM	0.9	117.3
24-Oct-13	1:31 PM	0.9	125.4
24-Oct-13	1:36 PM	0.9	127.9
24-Oct-13	1:52 PM	0.9	120.8
24-Oct-13	1:58 PM	0.9	126.1
24-Oct-13	2:10 PM	0.8	119.2
24-Oct-13	2:45 PM	0.8	120.8
24-Oct-13	3:07 PM	0.8	116.0
24-Oct-13	3:28 PM	0.8	110.5
24-Oct-13	1:36 PM	0.9	112.7
24-Oct-13	4:32 PM	0.9	114.5
25-Oct-13	10:10 AM	1.9	116.2
25-Oct-13	10:50 AM	1.7	121.5
25-Oct-13	11:29 AM	1.6	123.4
25-Oct-13	12:30 PM	1.3	116.2
25-Oct-13	12:35 PM	1.3	116.0
25-Oct-13	1:40 PM	1.1	118.6
25-Oct-13	2:47 PM	0.9	120.5
25-Oct-13	3:33 PM	0.9	115.4

APPENDIX V (cont'd)

Data for Figure 6. Mean bandlevels for the 122 recordings containing dolphin vocalizations. Bandlevels were analyzed in terms of both the 30–40,000 Hz "wideband" frequency range (red) and 400–12,500 Hz "dolphin-sensitive" band (blue). Note that the mean bandlevel was calculated across the entire recording, regardless of the duration of detected dolphin vocalizations.

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
27-Sep-13	11:08 AM	113.0	111.6
27-Sep-13	11:23 AM	116.4	115.6
27-Sep-13	11:28 AM	124.4	121.8
27-Sep-13	12:56 PM	120.1	114.1
27-Sep-13	1:10 PM	122.1	119.3
27-Sep-13	1:50 PM	121.1	116.6
27-Sep-13	1:55 PM	126.5	121.3
27-Sep-13	2:00 PM	124.8	116.7
27-Sep-13	2:04 PM	116.1	111.6
27-Sep-13	2:19 PM	124.4	120.6
27-Sep-13	2:26 PM	126.9	124.1
1-Oct-13	10:32 AM	120.5	118.7
1-Oct-13	10:37 AM	118.1	116.7
1-Oct-13	10:42 AM	123.8	122.8
1-Oct-13	10:49 AM	118.6	116.8
1-Oct-13	11:24 AM	117.0	116.5
1-Oct-13	11:44 AM	115.5	115.2
1-Oct-13	2:01 PM	119.8	114.0
1-Oct-13	2:11 PM	117.2	112.8
1-Oct-13	2:16 PM	114.8	111.3
1-Oct-13	2:25 PM	112.0	107.9
1-Oct-13	2:32 PM	116.6	114.0
1-Oct-13	2:47 PM	113.7	110.7
1-Oct-13	3:04 PM	114.1	112.7
1-Oct-13	3:20 PM	120.9	115.9
1-Oct-13	3:34 PM	118.4	112.1
2-Oct-13	2:36 PM	118.5	117.6
2-Oct-13	2:51 PM	125.2	124.3
2-Oct-13	3:09 PM	115.9	113.7
4-Oct-13	11:43 AM	104.9	101.4
5-Oct-13	12:20 PM	106.4	105.5
5-Oct-13	12:38 PM	117.1	114.3
5-Oct-13	12:54 PM	117.1	115.3

APPENDIX V (cont'd)

Data for Figure 6. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
5-Oct-13	1:17 PM	114.9	111.5
5-Oct-13	1:41 PM	111.7	110.7
5-Oct-13	2:29 PM	106.7	105.0
6-Oct-13	11:09 AM	114.7	112.2
6-Oct-13	11:30 AM	117.3	113.6
6-Oct-13	12:06 PM	113.9	110.8
6-Oct-13	12:19 PM	123.4	117.1
6-Oct-13	12:35 PM	113.3	110.3
7-Oct-13	12:23 PM	127.3	119.9
7-Oct-13	1:01 PM	117.0	114.1
7-Oct-13	1:07 PM	115.2	112.5
7-Oct-13	2:46 PM	128.5	124.4
7-Oct-13	3:15 PM	116.3	112.6
8-Oct-13	4:59 PM	121.9	117.2
8-Oct-13	5:09 PM	122.1	117.7
8-Oct-13	5:21 PM	120.0	117.2
9-Oct-13	9:33 AM	116.3	112.9
9-Oct-13	9:49 AM	120.2	116.2
9-Oct-13	10:09 AM	121.0	114.9
9-Oct-13	11:11 AM	109.0	106.5
10-Oct-13	10:01 AM	105.9	102.1
10-Oct-13	10:16 AM	125.5	123.2
10-Oct-13	10:28 AM	116.2	115.1
10-Oct-13	10:46 AM	107.7	105.9
10-Oct-13	10:53 AM	120.6	116.4
10-Oct-13	11:04 AM	112.5	110.2
10-Oct-13	1:35 PM	119.5	114.9
10-Oct-13	1:48 PM	118.1	113.6
11-Oct-13	12:45 PM	119.2	116.4
11-Oct-13	1:00 PM	117.6	113.5
11-Oct-13	1:15 PM	120.8	117.9
11-Oct-13	1:26 PM	111.4	109.0
12-Oct-13	10:45 AM	119.4	115.7
12-Oct-13	11:04 AM	125.7	123.0
12-Oct-13	11:22 AM	122.6	120.3
12-Oct-13	3:59 PM	116.2	112.8
12-Oct-13	4:05 PM	113.6	108.9

APPENDIX V (cont'd)

Data for Figure 6. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
14-Oct-13	1:14 PM	108.4	107.4
14-Oct-13	1:46 PM	118.2	118.1
15-Oct-13	2:22 PM	128.2	122.4
15-Oct-13	2:46 PM	124.8	120.8
18-Oct-13	12:30 PM	120.1	116.0
18-Oct-13	12:51 PM	117.4	114.2
18-Oct-13	1:05 PM	116.3	114.5
18-Oct-13	1:20 PM	115.9	114.7
18-Oct-13	1:25 PM	114.7	114.4
19-Oct-13	11:04 AM	118.5	115.8
19-Oct-13	11:36 AM	124.8	117.6
19-Oct-13	12:03 PM	132.9	129.0
19-Oct-13	12:20 PM	122.9	118.1
19-Oct-13	12:34 PM	130.1	121.1
19-Oct-13	12:50 PM	124.0	120.6
19-Oct-13	1:15 PM	129.6	125.0
20-Oct-13	10:17 AM	112.3	106.4
20-Oct-13	10:23 AM	108.7	105.7
20-Oct-13	10:28 AM	109.8	106.1
20-Oct-13	10:41 AM	120.9	115.4
20-Oct-13	10:55 AM	116.1	112.0
20-Oct-13	12:57 PM	112.2	110.3
20-Oct-13	1:14 PM	112.6	110.3
20-Oct-13	1:34 PM	108.9	106.9
20-Oct-13	1:49 PM	111.1	110.1
21-Oct-13	9:37 AM	111.4	110.8
21-Oct-13	10:57 AM	118.2	112.0
21-Oct-13	11:25 AM	124.5	113.5
22-Oct-13	4:17 PM	118.1	116.3
22-Oct-13	4:47 PM	117.7	113.4
22-Oct-13	5:09 PM	126.8	121.3
22-Oct-13	5:22 PM	121.9	117.4
22-Oct-13	5:37 PM	114.4	110.9
22-Oct-13	5:54 PM	109.9	107.4
22-Oct-13	6:02 PM	111.6	106.0
23-Oct-13	8:49 AM	115.4	111.3
23-Oct-13	11:01 AM	120.6	115.0

APPENDIX V (cont'd)

Data for Figure 6. (cont'd)

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
24-Oct-13	1:15 PM	124.1	119.0
24-Oct-13	1:20 PM	128.9	122.9
24-Oct-13	1:26 PM	117.3	113.1
24-Oct-13	1:31 PM	125.4	121.4
24-Oct-13	1:36 PM	127.9	119.8
24-Oct-13	1:52 PM	120.8	115.5
24-Oct-13	1:58 PM	126.1	123.5
24-Oct-13	2:10 PM	119.2	113.4
24-Oct-13	2:45 PM	120.8	118.3
24-Oct-13	3:07 PM	116.0	114.5
25-Oct-13	12:30 PM	116.2	114.9
25-Oct-13	12:35 PM	116.0	115.0

APPENDIX V (cont'd)

Data for Figure 7. Mean bandlevels for recordings with documented, actively operating, industrial sound sources: fishing activity (triangles), dredging (squares), and other general industrial activity (stars) Red and blue represent the 30–40,000 Hz "wideband" frequency range and 400–12,500 Hz "dolphin-sensitive" band, respectively. Note that the mean bandlevel was calculated across the entire recording, and, thus, bandlevels may represent other concurrent sound sources.

Fish:

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
27-Sep-13	1:25 PM	118.2	116.9
1-Oct-13	10:32 AM	120.5	118.7
1-Oct-13	10:37 AM	118.1	116.7
1-Oct-13	10:49 AM	118.6	116.8
1-Oct-13	2:32 PM	116.6	114.0
1-Oct-13	2:47 PM	113.7	110.7
1-Oct-13	3:04 PM	114.1	112.7
2-Oct-13	10:27 AM	113.3	110.7
5-Oct-13	9:30 AM	111.1	108.0
7-Oct-13	11:02 AM	112.3	109.8
14-Oct-13	1:14 PM	108.4	107.4
15-Oct-13	8:50 PM	107.1	103.0
21-Oct-13	10:57 AM	118.2	112.0

Dredging:

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
30-Sep-13	4:13 PM	113.1	104.1
1-Oct-13	4:12 PM	123.5	114.9
1-Oct-13	4:21 PM	120.1	115.5
2-Oct-13	9:28 AM	118.2	110.3
2-Oct-13	10:01 AM	113.5	109.2
3-Oct-13	8:06 PM	118.0	112.8
3-Oct-13	8:08 PM	116.1	113.2
3-Oct-13	8:11 PM	117.2	114.8
3-Oct-13	8:20 PM	117.3	115.1
3-Oct-13	8:23 PM	118.2	116.2
3-Oct-13	8:33 PM	117.3	115.2
3-Oct-13	8:40 PM	115.6	112.3
3-Oct-13	8:45 PM	112.1	108.4

APPENDIX V (cont'd)

Data for Figure 7. (cont'd)

Dredging (cont'd):

3-Oct-13	9:01 PM	116.3	110.9
3-Oct-13	9:10 PM	113.2	106.2
3-Oct-13	9:18 PM	114.3	108.0
3-Oct-13	9:34 PM	113.8	107.7
3-Oct-13	9:42 PM	111.5	103.5
3-Oct-13	9:47 PM	111.8	106.1
3-Oct-13	9:53 PM	113.1	105.4
3-Oct-13	10:00 PM	111.6	103.7
3-Oct-13	10:06 PM	110.4	103.1
4-Oct-13	2:13 PM	119.5	114.7
5-Oct-13	8:57 AM	109.7	107.4
6-Oct-13	4:16 PM	116.1	110.2
7-Oct-13	9:32 AM	119.2	111.9
8-Oct-13	12:54 PM	110.7	104.5
8-Oct-13	1:10 PM	116.2	107.8
8-Oct-13	1:19 PM	113.2	103.8
8-Oct-13	1:28 PM	111.0	103.3
8-Oct-13	1:42 PM	119.0	110.5
8-Oct-13	1:59 PM	115.6	108.2
8-Oct-13	2:03 PM	112.7	108.5
8-Oct-13	2:27 PM	117.8	111.1
8-Oct-13	2:39 PM	119.2	116.3
8-Oct-13	8:48 PM	113.9	107.7
8-Oct-13	9:16 PM	117.9	111.4
8-Oct-13	9:44 PM	111.0	107.9
8-Oct-13	10:18 PM	111.7	103.0
8-Oct-13	11:17 PM	112.9	105.8
9-Oct-13	12:16 AM	111.1	104.6
9-Oct-13	1:19 AM	112.9	107.1
9-Oct-13	2:15 AM	114.1	103.9
9-Oct-13	3:17 AM	108.5	102.0
9-Oct-13	4:18 AM	109.4	100.5
9-Oct-13	5:52 AM	107.7	100.0
9-Oct-13	6:18 AM	111.2	106.8
11-Oct-13	9:47 AM	123.4	120.5
11-Oct-13	3:12 PM	108.9	101.0
11-Oct-13	3:29 PM	108.2	104.1
11-Oct-13	3:38 PM	107.8	103.2
11-Oct-13	3:43 PM	116.5	103.8
11-Oct-13	3:49 PM	113.2	106.0

APPENDIX V (cont'd)

Data for Figure 7. (cont'd)

Dredging (cont'd):

11-Oct-13	3:55 PM	120.6	112.1
11-Oct-13	4:01 PM	116.1	107.9
11-Oct-13	4:12 PM	114.1	102.7
11-Oct-13	4:18 PM	116.7	109.4
11-Oct-13	4:20 PM	116.7	109.1
11-Oct-13	4:26 PM	112.7	105.3
11-Oct-13	4:32 PM	110.2	101.5
11-Oct-13	4:39 PM	120.9	119.6
11-Oct-13	4:44 PM	112.3	102.6
11-Oct-13	4:50 PM	117.6	105.3
14-Oct-13	3:38 PM	127.7	123.0
21-Oct-13	12:22 PM	109.8	101.4
21-Oct-13	12:28 PM	125.4	112.2
21-Oct-13	12:54 PM	112.4	103.6
21-Oct-13	1:33 PM	117.6	113.7
21-Oct-13	1:54 PM	118.1	109.5
21-Oct-13	2:11 PM	115.2	110.2
22-Oct-13	2:24 PM	121.7	114.1
22-Oct-13	8:14 PM	110.7	108.7
22-Oct-13	8:48 PM	109.8	105.8
22-Oct-13	10:15 PM	106.1	102.9
22-Oct-13	11:20 PM	108.3	103.4
23-Oct-13	1:46 AM	109.4	104.6
23-Oct-13	2:49 AM	106.5	101.7
23-Oct-13	3:45 AM	105.5	104.7
23-Oct-13	4:46 AM	104.4	101.2

Other Industrial:

Date	Time	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]
1-Oct-13	3:34 PM	118.4	112.1
3-Oct-13	1:27 PM	124.4	105.7
14-Oct-13	11:27 AM	141.9	138.5
22-Oct-13	5:09 PM	126.8	121.3
23-Oct-13	8:18 AM	110.6	106.2

APPENDIX V (cont'd)

Data for Figure 8. Mean bandlevels for all 440 recordings as a function of time of day. Red and blue represent the 30–40,000 Hz "wideband" frequency range and 400 –12,500 Hz"dolphin-sensitive" band, respectively.

2-hr Period	Mean Bandlevel (Wideband) [dB re uPa]	Mean Bandlevel (Dolphin Band) [dB re uPa]	Number of Recordings
00:00–01:59	108.41	103.30	7
02:00–03:59	107.48	102.70	5
04:00–05:59	106.54	100.66	5
06:00–07:59	112.26	106.99	12
08:00–09:59	117.50	113.29	29
10:00–11:59	117.72	114.07	88
12:00–13:59	118.83	114.16	109
14:00–15:59	117.40	112.93	89
16:00–17:59	118.02	113.06	43
18:00–19:59	110.08	107.16	8
20:00–21:59	113.21	108.46	33
22:00–23:59	109.75	104.82	12

APPENDIX V (cont'd)

Data for Figure 9. The summed length of recordings in minutes made for each day of observational effort during the baseline acoustic monitoring in September-October 2013. The values above each column represent the number of recordings per day.

Date	Length of recording (min)	# of recordings
26-Sep	0.00	0
27-Sep	49.00	11
28-Sep	0.00	0
29-Sep	0.00	0
30-Sep	0.00	0
1-Oct	73.38	15
2-Oct	17.00	4
3-Oct	0.00	0
4-Oct	0.00	0
5-Oct	26.00	6
6-Oct	25.00	5
7-Oct	24.00	5
8-Oct	14.00	3
9-Oct	20.00	4
10-Oct	45.68	9
11-Oct	19.50	4
12-Oct	25.25	5
13-Oct	3.00	1
14-Oct	14.00	3
15-Oct	10.00	2
16-Oct	0.00	0
17-Oct	0.00	0
18-Oct	34.00	7
19-Oct	40.48	9
20-Oct	50.25	10
21-Oct	23.33	5
22-Oct	35.25	7
23-Oct	10.00	2
24-Oct	60.25	12
25-Oct	10.00	2

APPENDIX V (cont'd)

Data for Figure 10. The mean number of clicks and whistles per minute of recording detected for each day of observational effort. SD = standard deviation, W = whistles, C = clicks

Date	Whistles	SD W	Clicks	SD C
26-Sep	0.00	0.00	0.00	0.00
27-Sep	7.38	9.36	230.68	208.44
28-Sep	0.00	0.00	0.00	0.00
29-Sep	0.00	0.00	0.00	0.00
30-Sep	0.00	0.00	0.00	0.00
1-Oct	3.23	5.31	192.69	140.00
2-Oct	0.00	0.00	182.82	262.12
3-Oct	0.00	0.00	0.00	0.00
4-Oct	0.00	0.00	0.00	0.00
5-Oct	0.41	0.57	144.92	83.24
6-Oct	0.08	0.11	151.08	37.30
7-Oct	4.60	7.29	496.50	321.04
8-Oct	0.00	0.00	242.61	155.13
9-Oct	0.20	0.40	79.70	47.19
10-Oct	2.44	4.74	217.02	141.85
11-Oct	0.43	0.40	250.72	278.14
12-Oct	3.48	6.43	81.23	55.37
13-Oct	0.00	0.00	49.61	0.00
14-Oct	0.00	0.00	60.66	28.41
15-Oct	0.10	0.14	268.20	265.31
16-Oct	0.00	0.00	0.00	0.00
17-Oct	0.00	0.00	0.00	0.00
18-Oct	0.30	0.51	85.89	86.20
19-Oct	5.92	8.93	205.29	115.77
20-Oct	9.88	11.90	141.29	137.39
21-Oct	9.56	12.08	102.50	45.19
22-Oct	12.80	13.20	172.04	117.45
23-Oct	0.00	0.00	119.40	130.39
24-Oct	0.37	0.48	122.59	117.70
25-Oct	1.20	0.57	52.60	71.28

Data for figure 11. Mean number of whistles per minute and clicks per minute as a function of dolphin group size. SD = standard deviation, W = whistles, C = clicks

Group Size	Whistles	SD W	Clicks	SD C
1	2.89	5.21	169.74	194.88
2-5	3.14	6.54	161.46	160.61
6-9	5.64	9.91	207.25	157.17

APPENDIX V (cont'd)

Data for Figure 12. Mean number of whistles per minute and clicks per minute as a function of dolphin behavioural state. SD = standard deviation, W = whistles, C = clicks

Behavioral State	Whistles	SD W	Clicks	SD C
Feeding	2.71	6.67	165.09	118.49
Milling	3.83	7.63	183.73	182.09
Socializing	3.05	3.33	294.63	159.98
Traveling	4.98	8.77	119.98	81.82

Data for Figure 13. Mean number of whistles per minute and clicks per minute as a function of the time of day.

Time of observation	Whistles	SD W	Clicks	SD C
08:00-09:59	2.30	4.35	100.83	77.23
10:00-11:59	4.77	9.59	155.65	120.40
12:00-13:59	2.08	5.08	171.07	149.02
14:00-15:59	3.88	5.79	218.49	241.38
16:00-17:59	7.82	11.83	186.40	122.57
18:00-19:59	18.40	0.00	39.74	0.00

Data for Figure 14. Mean number of clicks/min and whistles/min recorded as a function of the distance to the nearest vessel.

Distance to nearest boat	Average whistles/min	SD W	Average clicks/min	SD C
0-99m	6.34	51.47	220.23	233.94
100-199m	2.10	26.52	193.56	167.60
200-299m	4.01	38.28	232.71	176.87
300-399m	2.23	17.44	155.41	152.16
400-499m	6.00	43.28	93.62	101.39
500+	3.36	34.54	165.17	146.28

Data for Figure 15. Mean number of clicks/min and whistles/min recorded as a function of the Beaufort Sea State.

Beaufort Scale	Average whistles/min	SD W	Average clicks/min	SD C
1	12.54	11.92	56.58	30.91
2	3.80	7.49	174.26	147.99
3	2.36	5.85	186.20	184.95
4	1.60	2.93	188.97	189.78
5	0.00	0.00	576.00	0.00

APPENDIX V (cont'd)

Data for Figure 17. Mean number of whistles per minute and clicks per minute recorded in each zone of the study area.

Zone	Whistles	SD W	Clicks	SDC
1	0.21	0.40	175.19	148.50
2	7.31	9.38	173.48	176.07

Data for Figure 18. Histogram of the percentage of EAR recordings with dolphin detections made at site C1 (Bridge Alignment Area) during 30 days of the deployment period.

Date	# of files	% files per day
27-Sep	0	0.00
28-Sep	1	0.35
29-Sep	0	0.00
30-Sep	0	0.00
1-Oct	3	1.04
2-Oct	1	0.35
3-Oct	1	0.35
4-Oct	1	0.35
5-Oct	13	4.51
6-Oct	11	3.82
7-Oct	13	4.51
8-Oct	6	2.08
9-Oct	6	2.08
10-Oct	7	2.43
11-Oct	11	3.82
12-Oct	9	3.13
13-Oct	10	3.47
14-Oct	2	0.69
15-Oct	5	1.74
16-Oct	8	2.78
17-Oct	5	1.74
18-Oct	7	2.43
19-Oct	7	2.43
20-Oct	6	2.08
21-Oct	1	0.35
22-Oct	1	0.35
23-Oct	0	0.00
24-Oct	1	0.35
25-Oct	2	0.69
26-Oct	1	0.35

APPENDIX V (cont'd)

Data for Figure 19. The number of dolphin encounters and the mean encounter duration recorded on the EAR at site C1 (Bridge Alignment Area).

Date	# of encounters	Average encounter duration	Std Dev
27-Sep	0	0	0
28-Sep	1	0	0
29-Sep	0	0	0
30-Sep	0	0	0
1-Oct	3	0	0
2-Oct	1	0	0
3-Oct	1	0	0
4-Oct	1	0	0
5-Oct	9	7.11	10.79
6-Oct	11	0	0
7-Oct	8	13.63	20.55
8-Oct	6	0	0
9-Oct	4	10.50	12.79
10-Oct	7	0	0
11-Oct	9	3.33	10.00
12-Oct	8	0	0
13-Oct	10	2.00	6.32
14-Oct	2	0	0
15-Oct	5	0	0
16-Oct	7	0.71	1.89
17-Oct	4	6.25	12.50
18-Oct	6	1.67	4.08
19-Oct	6	3.33	8.16
20-Oct	6	0	0
21-Oct	1	0	0
22-Oct	1	0	0
23-Oct	0	0	0
24-Oct	1	0	0
25-Oct	2	0	0
26-Oct	1	0	0

APPENDIX V (cont'd)

Data for Figure 20. Detections of dolphin signals at site C1 (Bridge Alignment Area) as a function of the hour of the day. Values are the total number of detections in each hour across the entire monitoring period (shaded cells represent nigttime period).

Hour of day	Click Detections	Whistle Detections
0	10	0
1	7	0
2	6	0
3	3	0
4	6	0
5	7	0
6	2	0
7	4	0
8	5	0
9	3	0
10	3	0
11	7	0
12	6	0
13	6	0
14	7	0
15	6	0
16	4	0
17	8	0
18	4	0
19	7	0
20	7	0
21	8	0
22	5	0
23	8	0

APPENDIX V (cont'd)

Data for Figure 22. Histogram of the percentage of EAR recordings at site C2 (Lung (Kwu Chau) with dolphin detections made during 30 days of the deployment period

Date	# Files	% files/day
27-Sep	23	7.99
28-Sep	18	6.25
29-Sep	24	8.33
30-Sep	24	8.33
1-Oct	4	1.39
2-Oct	30	10.42
3-Oct	14	4.86
4-Oct	34	11.81
5-Oct	43	14.93
6-Oct	35	12.15
7-Oct	40	13.89
8-Oct	55	19.10
9-Oct	59	20.49
10-Oct	81	28.13
11-Oct	38	13.19
12-Oct	33	11.46
13-Oct	32	11.11
14-Oct	28	9.72
15-Oct	46	15.97
16-Oct	44	15.28
17-Oct	42	14.58
18-Oct	39	13.54
19-Oct	25	8.68
20-Oct	26	9.03
21-Oct	23	7.99
22-Oct	48	16.67
23-Oct	70	24.31
24-Oct	40	13.89
25-Oct	67	23.26
26-Oct	23	7.99

APPENDIX V (cont'd)

Data for Figure 23. The number of dolphin encounters and the mean encounter duration recorded on the EAR at site C2 (near Lung Kwu Chau).

Date	# of encounters	Avg. encounter duration	Std Dev
27-Sep	6	21.67	33.57
28-Sep	7	19.00	32.58
29-Sep	11	9.00	13.83
30-Sep	7	20.29	30.10
1-Oct	3	1.67	2.89
2-Oct	7	22.00	26.23
3-Oct	7	8.00	9.38
4-Oct	10	13.50	20.69
5-Oct	8	35.75	49.87
6-Oct	9	18.22	29.11
7-Oct	10	27.40	20.76
8-Oct	11	32.18	41.80
9-Oct	10	30.50	45.07
10-Oct	11	44.27	71.78
11-Oct	9	31.67	49.25
12-Oct	7	30.57	50.26
13-Oct	6	49.83	52.50
14-Oct	8	18.50	14.80
15-Oct	10	19.90	14.61
16-Oct	13	16.23	24.00
17-Oct	9	24.56	40.68
18-Oct	11	20.82	16.32
19-Oct	8	16.13	21.72
20-Oct	10	11.60	27.97
21-Oct	9	18.22	17.06
22-Oct	8	33.63	37.79
23-Oct	9	13.78	10.91
24-Oct	8	70.25	125.90
25-Oct	10	48.70	65.32
26-Oct	6	21.67	36.62

APPENDIX V (cont'd)

Data for Figure 24. Detections of dolphin signals at site C2 (near Lung Kwu Chau) as a function of the hour of the day. Values are the total number of detections in each hour across the entire monitoring period (shaded cells represent nigttime period).

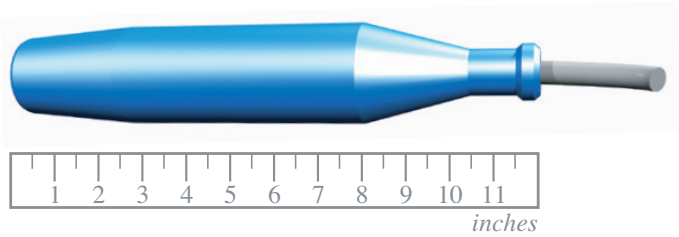
Hour of day	Click Detections	Whistle Detections
0	62	6
1	65	4
2	45	14
3	51	11
4	44	5
5	47	13
6	57	6
7	85	3
8	71	7
9	65	2
10	36	1
11	16	5
12	25	5
13	19	4
14	33	4
15	25	3
16	37	11
17	33	5
18	34	3
19	43	1
20	16	1
21	33	7
22	34	7
23	49	4

Attachment I. Specifications of dipping hydrophone (Model ITC6050C) and associated calibration record

Model ITC-6050C

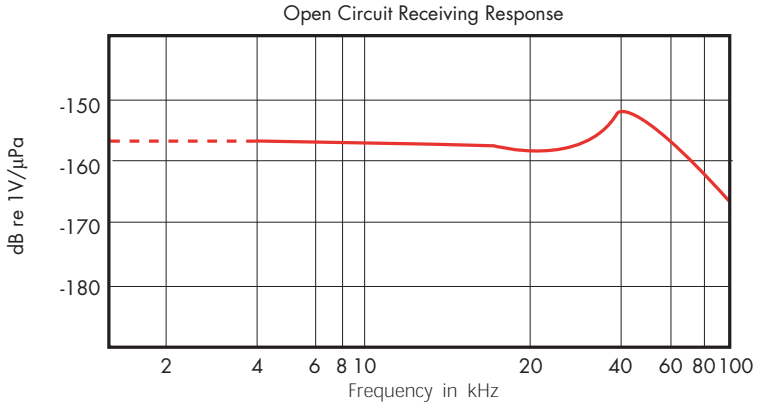
Preamplified Hydrophone

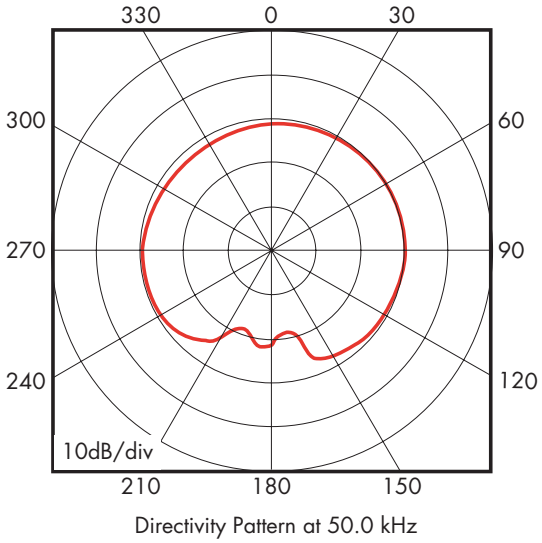
The Model ITC-6050C is a popular broadband hydrophone. The unit has a built-in, low noise preamplifier making it excellent for many field applications. Fully encapsulated in high quality polyurethane, it is well suited for rigorous conditions.



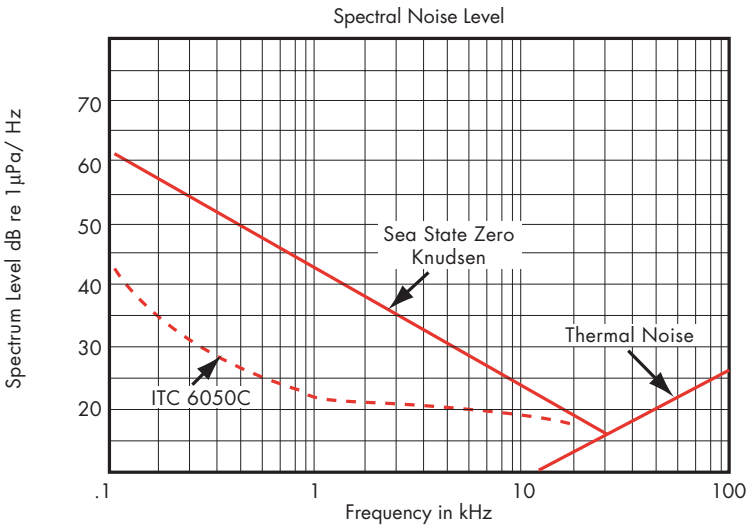
Specifications (Nominal)

Type	Hydrophone w/ Preamplifier
Resonance f_r	50 kHz
Depth	900 meters
Envelope Dimensions (in.)	2D x 12L
Midband OCV	-157 dB//1V/µPa
Suggested Band	.03 - 70 kHz
Beam Type	Spherical





Directivity Pattern at 50.0 kHz



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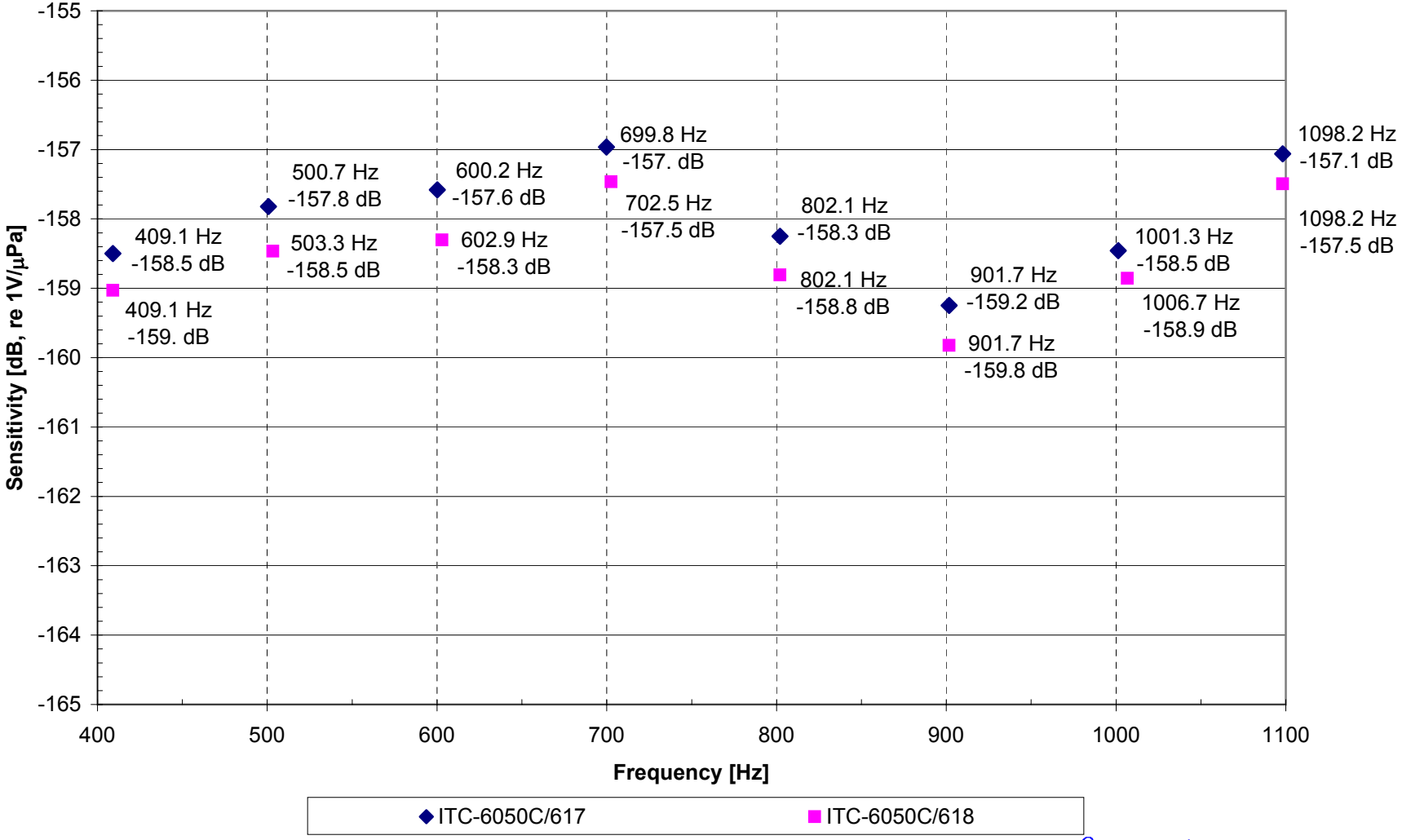
ITC-6050C/617 Mean Sensitivity = -158.0dB
ITC-6050C/618 Mean Sensitivity = -158.5dB



Method: USRD C100 Hydrophone Calibrator + ST191DSA
Water Temperature: 80F

Measurement Date: 26 August 2013

Attachment II. Calibration Record of Ecological Acoustic Recorders (EARs) by Oceanway Corporation Limited

Oceanway Corporation Limited
Unit. 3, G/F., N0. 34, Tai Chung Hau Village, Sai Kung, Hong Kong(S.A.R.), P.R.C.
Tel: (852) 2791 5331 Fax: (852) 2792 5331

REPORT ON ACOUSTICAL MEASUREMENTS CONDUCTED FOR

Hong Kong Cetacean Research Project

EQUIPMENT TESTED
Hydrophone on an Environmental Acoustic Recorder (EAR)
EAR S/N : 9300708B088
(B1)

REPORT NUMBER : EARS-001

PREPARED BY: Gus ZHANG Cheng

PREPARED ON: 13th September 2013

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TEST OBJECTIVE

The test objective for this report was designed to reproduce the frequency testing carried for the hydrophone model SQ26-01, fitted to an Environmental Acoustic Recorder (EAR).

The SQ26-01 is manufactured by Sensor Technology Limited, a Canadian Company with an address given as P.O. Box 97, Collingwood, Ontario, Canada L9Y 3Z4. The hydrophone SQ26-01 is described as a general purpose, low-cost electrically shielded hydrophone.

The Environmental Acoustic Recorder (EAR) is supplied by Oceanwide Science Institute with an address given as 3620 Baldwin Ave. Ste 204, Makawao, HI 96768, U.S.A.

MEASUREMENT INSTRUMENTATION

The measurement Instrumentation was comprised of a calibrated hydrophone probe, an Agilent Technologies DSO-X-3024A Digital Oscilloscope, and an 8116A Hewlett Packard Pulse/Function Generator. All results were recorded in a Dell Laptop running Excel.

Two calibrated by-laminar membrane hydrophones were used. One used for the frequency range from 0.1KHz to 20KHz, the other from 15KHz to 50KHz. The overlap of frequency was used to check the calibration of both of the equipment used.

MEASUREMENT SETUP
The 0.1KHz to 20KHz by-laminar membrane hydrophone was connected to the Hewlett Packard Signal Generator. The unit was set to give a single frequency sine wave at a voltage level of 30Vp-p.

The hydrophone on the EAR's unit (model SQ26-01) was electrically disconnected from the electronic circuit and directly connected to the Agilent Digital oscilloscope. The latter was configured to display the signal being received by the hydrophone as well as the Fast Fourier Transformation (FFT) of that signal.

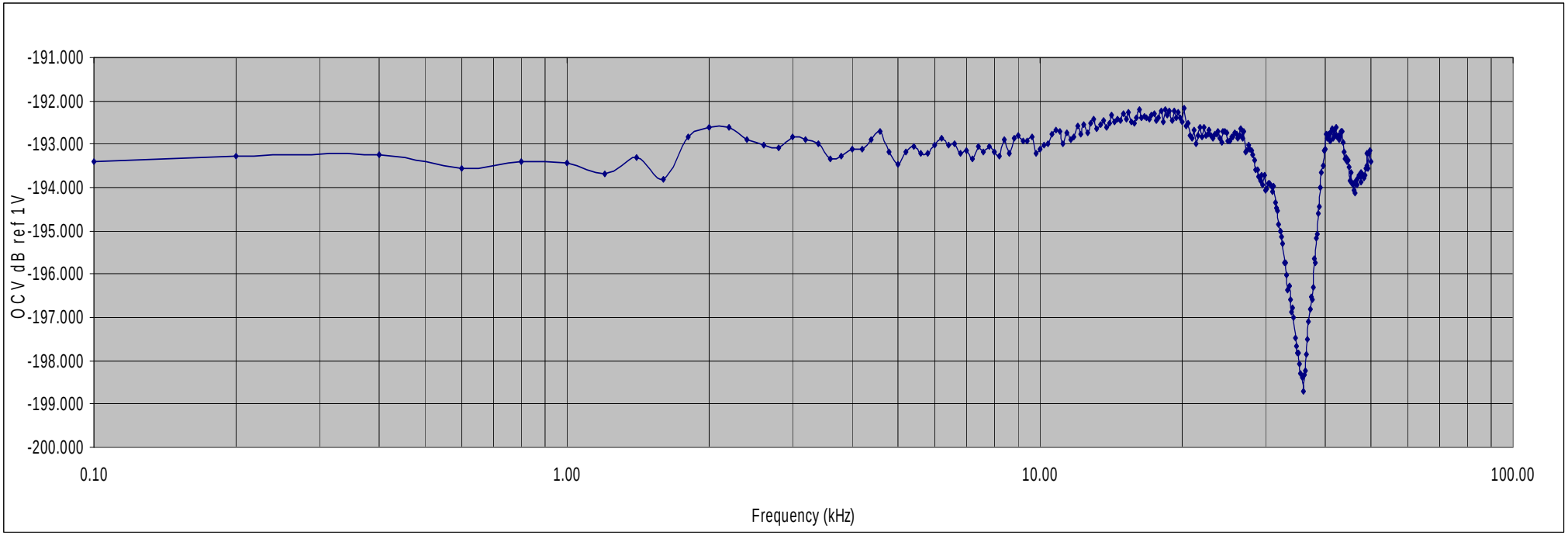
The by-laminar membrane hydrophone was mechanically connected to the top of the SQ26-01 hydrophone.

The frequency of the signal Generator was varied in 200Hz graduations through the range of 0.1KHz to 50KHz and the corresponding height of the FFT displayed result was measured using the calibrated internal cursor on the oscilloscope screen. In all a total of 250 readings were taken.

Agilent Technologies DSO-X-3024A serial number : MY52161670
Hewlett Packard Function Generator serial number : 178667-03

RESULTS

The results of the testing for frequencies from 0.1KHz to 50KHz are shown in the Received Voltage Response graph below:



Temperature during the test = 20ºC.
Pressure was 1.001mB
Location of test : HKU Laboratory
Date of test = 7th September 2013.

PERFORMANCE STATEMENT

The results of these tests shows that the maximum received frequency attenuation deviation of the SQ26-01 hydrophone fitted to the EAR unit with serial number 9300708B088, as compared to the manufacturers quoted specification (see Appendix A for details) is less than 0.5dBA. This gives a worst case deviation of <±1dBA. This is an acceptable result for such a sensor given the specification quotes a deviation of ±1dBA is acceptable (see Appendix A).

Signed : 

Date : _13th September 2013.

APPENDIX A - SQ23-01 Data Sheet

The SQ23-01 data sheet showing the frequency attenuation response.

SENSOR

Sensor Technology Limited

Hydrophone SQ26-01



Features

- Low cost
- Rugged
- Good depth capability

Applications

- General purpose research
- Towed arrays

Overview

The SQ26-01 is a general-purpose low-cost electrically shielded hydrophone. It has good sensitivity, wide bandwidth, and good stability. Custom configurations of these hydrophones are also available. For additional data on frequency response or outline drawings, please call our technical support. All parameters are measured after hydrophones have been subjected to pressures of 70 bar. The polyurethane-encapsulated hydrophone will withstand continuous immersion in isoparaffinic hydrocarbon fluids and sea water.

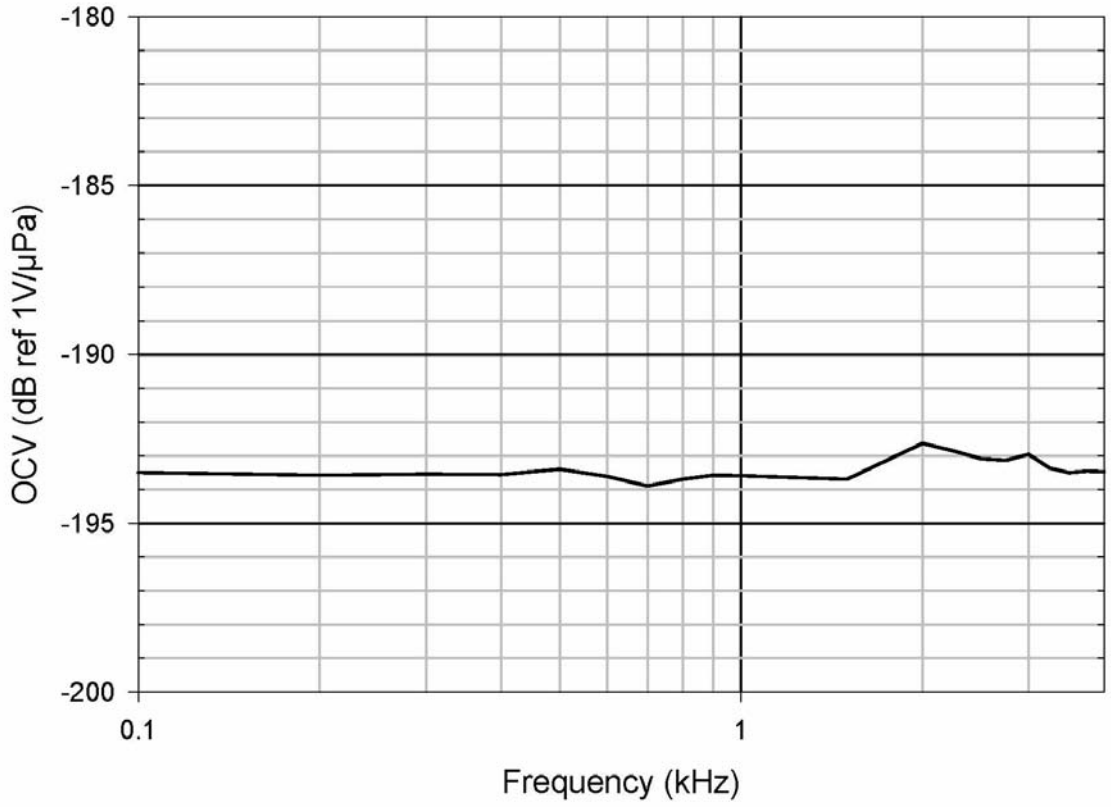
Specifications

Voltage sensitivity	-193.5 ± 1.0 dBV re 1 µPa @ 20 °C, 20 V/bar
Charge sensitivity	24 nC/bar
Capacitance	1.4 nF ± 10 % @ 20 °C
Sensitivity variation with temperature	less than 1 dB loss from 0 to 35 °C
Capacitance variation with temperature	0.33% increase per °C
Capacitance variation with depth	7% loss per 1,000 m
Operating depth	down to 1,000 m
Frequency response	flat from 1 Hz to 28,000 Hz
Acceleration sensitivity	< 0.2 mbar/g when properly mounted
Storage and operating temperature	-30 to +60 °C
Diameter	25.4 mm (1.0")
Length	25.4 mm (1.0") max
Mass	16 grams
Electrical leads	two-wire shielded, 28AWG, 30cm (12") long
Shielding	integral Faraday cage type
Electrical insulation	> 500 M Ohms
Water blocked leads	No

Sensor Technology Limited, PO Box 97, Collingwood Ontario, Canada L9Y 3Z4
Tel (705) 444-1440 Fax (705) 444-6787 www.Sensortech.ca Email: techsupport@Sensortech.ca

Rev. 09/03

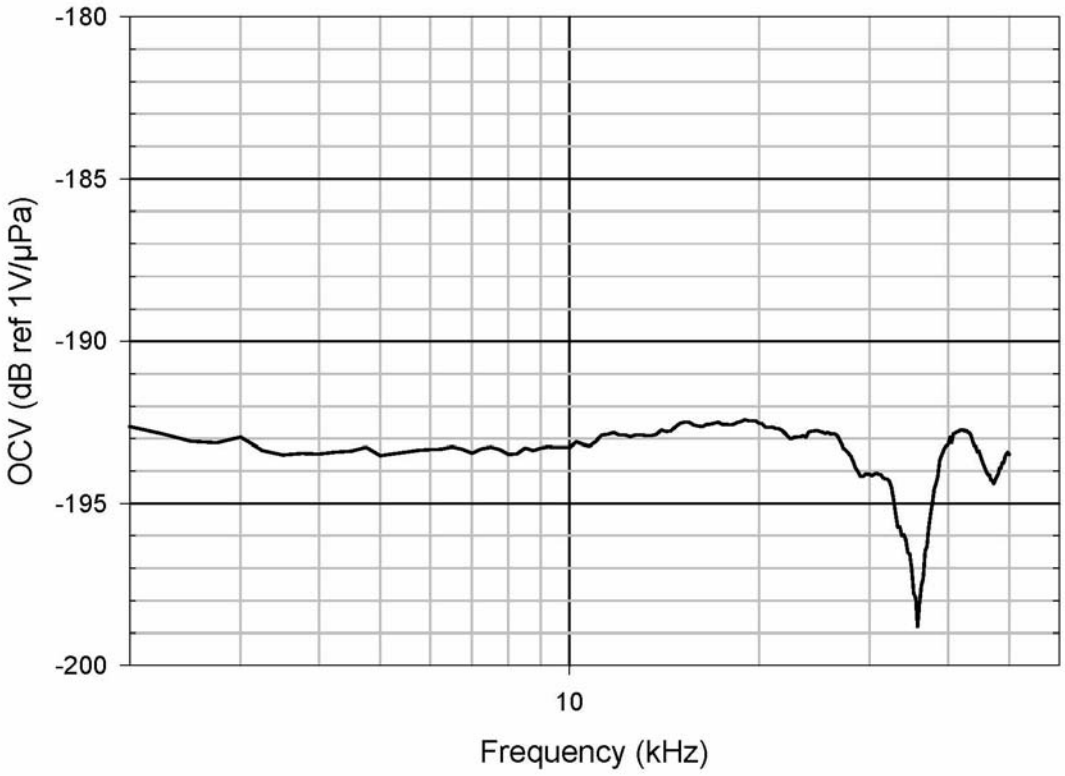
Receive Voltage Response
SQ26 (typical)



Date: October 4, 2004
Acoustic Test Facility: Newport Rhode Island
Transducer Model: SQ26
Test Frequency: 100 - 3000Hz
Spacing: 2.32 meters
Depth: 12 meters
Plane: XZ

SENSOR
Sensor Technology Limited

Receive Voltage Response
SQ26 (typical)



Date: Sept 16, 2004
Acoustic Test Facility: Seneca Lake Sonar Test Facility
Transducer Model: SQ26
Test Frequency: 2 - 50kHz
Spacing: 2.32 meters
Depth: 12 meters
Plane: XZ

SENSOR
Sensor Technology Limited

APPENDIX B - Raw Data

The raw data collected during the testing:

Frequency KHz	Log10 (v) dB
0.10	-193.403
0.20	-193.271
0.40	-193.241
0.60	-193.557
0.80	-193.394
1.00	-193.422
1.20	-193.678
1.40	-193.321
1.60	-193.797
1.80	-192.845
2.00	-192.598
2.20	-192.621
2.40	-192.901
2.60	-193.011
2.80	-193.073
3.00	-192.842
3.20	-192.897
3.40	-192.979
3.60	-193.346
3.80	-193.282
4.00	-193.112
4.20	-193.106
4.40	-192.895
4.60	-192.703
4.80	-193.175
5.00	-193.448
5.20	-193.184
5.40	-193.052
5.60	-193.224
5.80	-193.212
6.00	-193.028
6.20	-192.861
6.40	-193.035
6.60	-192.981
6.80	-193.201
7.00	-193.153
7.20	-193.338
7.40	-193.046
7.60	-193.184
7.80	-193.055
8.00	-193.178
8.20	-193.274
8.40	-192.902
8.60	-193.225
8.80	-192.873
9.00	-192.813
9.20	-192.918
9.40	-192.931
9.60	-192.845
9.80	-193.214
10.00	-193.104
10.20	-193.008
10.40	-192.999
10.60	-192.766
10.80	-192.689
11.00	-192.708
11.20	-192.984
11.40	-192.728
11.60	-192.888
11.80	-192.827
12.00	-192.582
12.20	-192.783
12.40	-192.554
12.60	-192.744
12.80	-192.509
13.00	-192.429
13.20	-192.641
13.40	-192.535
13.60	-192.445
13.80	-192.610

Frequency KHz	Log10 (v) dB
14.00	-192.520
14.20	-192.336
14.40	-192.477
14.60	-192.417
14.80	-192.454
15.00	-192.287
15.20	-192.435
15.40	-192.279
15.60	-192.474
15.80	-192.505
16.00	-192.384
16.20	-192.190
16.40	-192.380
16.60	-192.349
16.80	-192.402
17.00	-192.411
17.20	-192.328
17.40	-192.303
17.60	-192.440
17.80	-192.380
18.00	-192.217
18.20	-192.487
18.40	-192.194
18.60	-192.341
18.80	-192.233
19.00	-192.439
19.20	-192.226
19.40	-192.387
19.60	-192.251
19.80	-192.403
20.00	-192.485
20.20	-192.169
20.40	-192.570
20.60	-192.515
20.80	-192.810
21.00	-192.874
21.20	-192.660
21.40	-192.975
21.60	-192.804
21.80	-192.602
22.00	-192.837
22.20	-192.615
22.40	-192.797
22.60	-192.769
22.80	-192.671
23.00	-192.790
23.20	-192.872
23.40	-192.781
23.60	-192.760
23.80	-192.708
24.00	-192.856
24.20	-192.949
24.40	-192.695
24.60	-192.714
24.80	-192.748
25.00	-192.939
25.20	-192.916
25.40	-192.843
25.60	-192.824
25.80	-192.735
26.00	-192.766
26.20	-192.865
26.40	-192.809
26.60	-192.656
26.80	-192.854
27.00	-192.709
27.20	-193.172
27.40	-193.148
27.60	-193.035
27.80	-193.119

Frequency KHz	Log10 (v) dB
28.00	-193.161
28.20	-193.244
28.40	-193.373
28.60	-193.578
28.80	-193.589
29.00	-193.736
29.20	-193.831
29.40	-193.713
29.60	-193.925
29.80	-193.702
30.00	-194.070
30.20	-194.016
30.40	-193.893
30.60	-193.896
30.80	-193.976
31.00	-194.104
31.20	-193.959
31.40	-194.362
31.60	-194.479
31.80	-194.547
32.00	-194.844
32.20	-195.025
32.40	-195.137
32.60	-195.290
32.80	-195.729
33.00	-195.733
33.20	-196.015
33.40	-196.356
33.60	-196.283
33.80	-196.582
34.00	-196.882
34.20	-196.784
34.40	-196.985
34.60	-197.486
34.80	-197.665
35.00	-197.824
35.20	-197.827
35.40	-198.077
35.60	-198.298
35.80	-198.398
36.00	-198.697
36.20	-198.311
36.40	-198.217
36.60	-197.842
36.80	-197.493
37.00	-197.080
37.20	-196.823
37.40	-196.529
37.60	-196.597
37.80	-196.315
38.00	-195.656
38.20	-195.731
38.40	-195.181
38.60	-195.073
38.80	-194.599
39.00	-194.453
39.20	-194.009
39.40	-193.661
39.60	-193.499
39.80	-193.158
40.00	-193.125
40.20	-192.755
40.40	-192.864
40.60	-192.753
40.80	-192.807
41.00	-192.930
41.20	-192.695
41.40	-192.646
41.60	-192.876
41.80	-192.662

Frequency KHz	Log10 (v) dB
42.00	-192.790
42.20	-192.597
42.40	-192.832
42.60	-192.787
42.80	-192.909
43.00	-192.809
43.20	-192.817
43.40	-192.710
43.60	-192.702
43.80	-192.962
44.00	-193.165
44.20	-193.335
44.40	-193.299
44.60	-193.386
44.80	-193.380
45.00	-193.517
45.20	-193.826
45.40	-193.651
45.60	-193.903
45.80	-193.950
46.00	-193.905
46.20	-194.049
46.40	-194.121
46.60	-193.841
46.80	-193.944
47.00	-193.775
47.20	-193.707
47.40	-193.704
47.60	-193.658
47.80	-193.874
48.00	-193.679
48.20	-193.726
48.40	-193.764
48.60	-193.712
48.80	-193.561
49.00	-193.498
49.20	-193.222
49.40	-193.552
49.60	-193.225
49.80	-193.157
50.00	-193.390

Oceanway Corporation Limited
Unit. 3, G/F., N0. 34, Tai Chung Hau Village, Sai Kung, Hong Kong(S.A.R.), P.R.C.
Tel: (852) 2791 5331 Fax: (852) 2792 5331

REPORT ON ACOUSTICAL MEASUREMENTS CONDUCTED FOR

Hong Kong Cetacean Research Project

EQUIPMENT TESTED
Hydrophone on an Environmental Acoustic Recorder (EAR)
EAR S/N : 9300479B100
(B2)

REPORT NUMBER : EARS-002

PREPARED BY: Gus ZHANG Cheng

PREPARED ON: 13th September 2013

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TEST OBJECTIVE

The test objective for this report was designed to reproduce the frequency testing carried for the hydrophone model SQ26-01, fitted to an Environmental Acoustic Recorder (EAR).

The SQ26-01 is manufactured by Sensor Technology Limited, a Canadian Company with an address given as P.O. Box 97, Collingwood, Ontario, Canada L9Y 3Z4. The hydrophone SQ26-01 is described as a general purpose, low-cost electrically shielded hydrophone.

The Environmental Acoustic Recorder (EAR) is supplied by Oceanwide Science Institute with an address given as 3620 Baldwin Ave. Ste 204, Makawao, HI 96768, U.S.A.

MEASUREMENT INSTRUMENTATION

The measurement Instrumentation was comprised of a calibrated hydrophone probe, an Agilent Technologies DSO-X-3024A Digital Oscilloscope, and an 8116A Hewlett Packard Pulse/Function Generator. All results were recorded in a Dell Laptop running Excel.

Two calibrated by-laminar membrane hydrophones were used. One used for the frequency range from 0.1KHz to 20KHz, the other from 15KHz to 50KHz. The overlap of frequency was used to check the calibration of both of the equipment used.

MEASUREMENT SETUP
The 0.1KHz to 20KHz by-laminar membrane hydrophone was connected to the Hewlett Packard Signal Generator. The unit was set to give a single frequency sine wave at a voltage level of 30Vp-p.

The hydrophone on the EAR's unit (model SQ26-01) was electrically disconnected from the electronic circuit and directly connected to the Agilent Digital oscilloscope. The latter was configured to display the signal being received by the hydrophone as well as the Fast Fourier Transformation (FFT) of that signal.

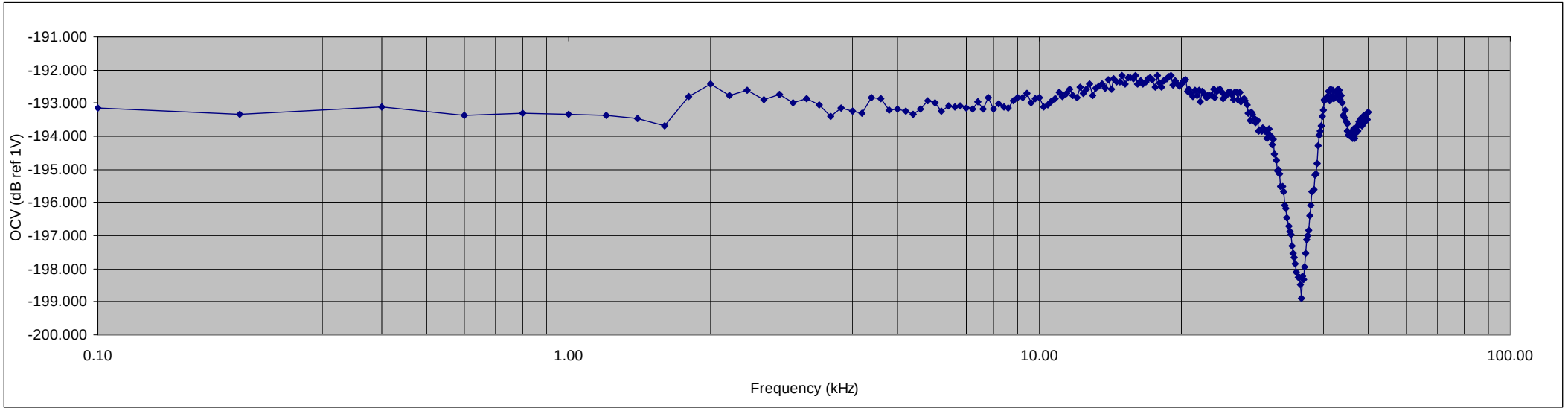
The by-laminar membrane hydrophone was mechanically connected to the top of the SQ26-01 hydrophone.

The frequency of the signal Generator was varied in 200Hz graduations through the range of 0.1KHz to 50KHz and the corresponding height of the FFT displayed result was measured using the calibrated internal cursor on the oscilloscope screen. In all a total of 251 readings were taken.

Agilent Technologies DSO-X-3024A serial number : MY52161670
Hewlett Packard Function Generator serial number : 178667-03

RESULTS

The results of the testing for frequencies from 0.1KHz to 50KHz are shown in the Received Voltage Response graph below:



Temperature during the test = 20ºC.
Pressure was 1.003mB
Location of test : HKU Laboratory
Date of test = 10th September 2013.

PERFORMANCE STATEMENT

The results of these tests shows that the maximum received frequency attenuation deviation of the SQ26-01 hydrophone fitted to the EAR unit with serial number 9300479B100, as compared to the manufacturers quoted specification (see Appendix A for details) is less than 0.4dBA. This gives a worst case deviation of <±1dBA. This is an acceptable result for such a sensor given the specification quotes a deviation of ±1dBA is acceptable (see Appendix A).

Signed : 

Date : 13th September 2013

APPENDIX A - SQ23-01 Data Sheet

The SQ23-01 data sheet showing the frequency attenuation response.

SENSOR

Sensor Technology Limited

Hydrophone SQ26-01



Features

- Low cost
- Rugged
- Good depth capability

Applications

- General purpose research
- Towed arrays

Overview

The SQ26-01 is a general-purpose low-cost electrically shielded hydrophone. It has good sensitivity, wide bandwidth, and good stability. Custom configurations of these hydrophones are also available. For additional data on frequency response or outline drawings, please call our technical support. All parameters are measured after hydrophones have been subjected to pressures of 70 bar. The polyurethane-encapsulated hydrophone will withstand continuous immersion in isoparaffinic hydrocarbon fluids and sea water.

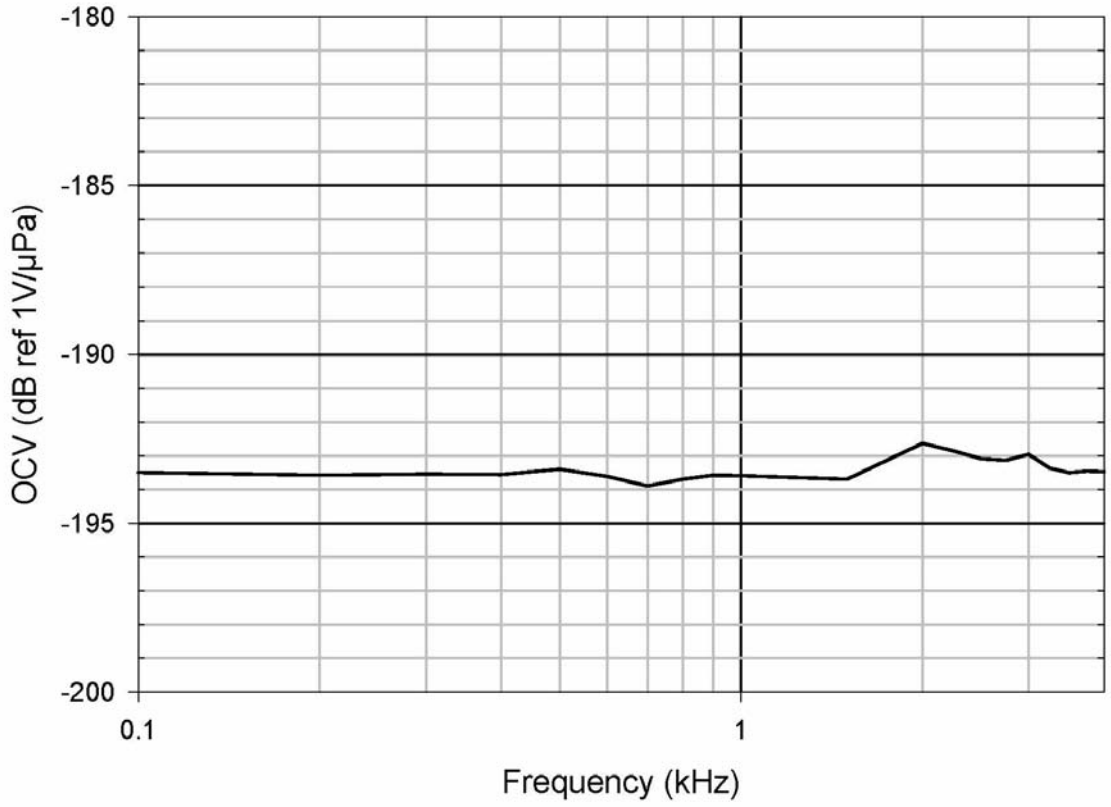
Specifications

Voltage sensitivity	-193.5 ± 1.0 dBV re 1 µPa @ 20 °C, 20 V/bar
Charge sensitivity	24 nC/bar
Capacitance	1.4 nF ± 10 % @ 20 °C
Sensitivity variation with temperature	less than 1 dB loss from 0 to 35 °C
Capacitance variation with temperature	0.33% increase per °C
Capacitance variation with depth	7% loss per 1,000 m
Operating depth	down to 1,000 m
Frequency response	flat from 1 Hz to 28,000 Hz
Acceleration sensitivity	< 0.2 mbar/g when properly mounted
Storage and operating temperature	-30 to +60 °C
Diameter	25.4 mm (1.0")
Length	25.4 mm (1.0") max
Mass	16 grams
Electrical leads	two-wire shielded, 28AWG, 30cm (12") long
Shielding	integral Faraday cage type
Electrical insulation	> 500 M Ohms
Water blocked leads	No

Sensor Technology Limited, PO Box 97, Collingwood Ontario, Canada L9Y 3Z4
Tel (705) 444-1440 Fax (705) 444-6787 www.Sensortech.ca Email: techsupport@Sensortech.ca

Rev. 09/03

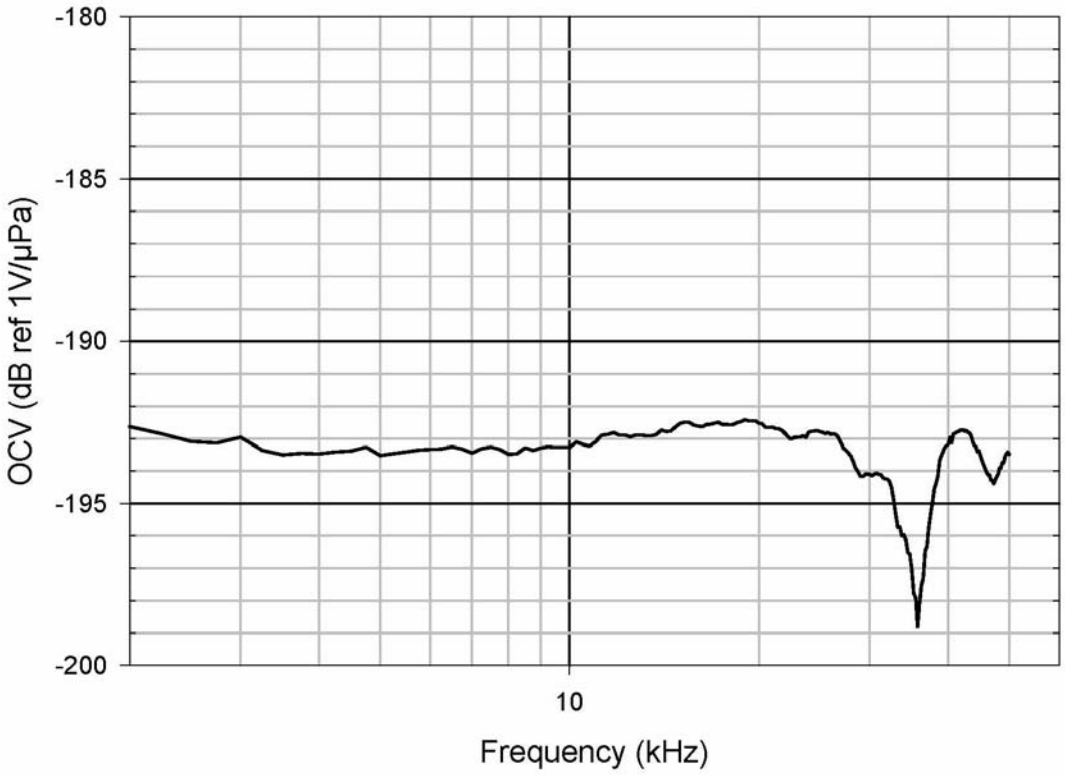
Receive Voltage Response
SQ26 (typical)



Date: October 4, 2004
Acoustic Test Facility: Newport Rhode Island
Transducer Model: SQ26
Test Frequency: 100 - 3000Hz
Spacing: 2.32 meters
Depth: 12 meters
Plane: XZ

SENSOR
Sensor Technology Limited

Receive Voltage Response
SQ26 (typical)



Date: Sept 16, 2004
Acoustic Test Facility: Seneca Lake Sonar Test Facility
Transducer Model: SQ26
Test Frequency: 2 - 50kHz
Spacing: 2.32 meters
Depth: 12 meters
Plane: XZ

SENSOR
Sensor Technology Limited

APPENDIX B - Raw Data

The raw data collected during the testing:

Frequency KHz	Log10 (v) dB
0.100	-193.134
0.200	-193.349
0.400	-193.114
0.600	-193.356
0.800	-193.320
1.000	-193.341
1.200	-193.370
1.400	-193.478
1.600	-193.684
1.800	-192.800
2.000	-192.409
2.200	-192.780
2.400	-192.603
2.600	-192.908
2.800	-192.737
3.000	-192.988
3.200	-192.851
3.400	-193.045
3.600	-193.408
3.800	-193.151
4.000	-193.238
4.200	-193.300
4.400	-192.845
4.600	-192.856
4.800	-193.219
5.000	-193.164
5.200	-193.234
5.400	-193.322
5.600	-193.177
5.800	-192.918
6.000	-192.993
6.200	-193.230
6.400	-193.080
6.600	-193.103
6.800	-193.082
7.000	-193.154
7.200	-193.174
7.400	-192.946
7.600	-193.178
7.800	-192.828
8.000	-193.170
8.200	-193.027
8.400	-193.112
8.600	-193.149
8.800	-192.921
9.000	-192.833
9.200	-192.818
9.400	-192.690
9.600	-192.982
9.800	-192.859
10.000	-192.825
10.200	-193.130
10.400	-193.040
10.600	-192.961
10.800	-192.869
11.000	-192.685
11.200	-192.790
11.400	-192.712
11.600	-192.575
11.800	-192.771
12.000	-192.824
12.200	-192.525
12.400	-192.701
12.600	-192.570
12.800	-192.424
13.000	-192.782
13.200	-192.536
13.400	-192.495
13.600	-192.416
13.800	-192.563

Frequency KHz	Log10 (v) dB
14.000	-192.293
14.200	-192.567
14.400	-192.274
14.600	-192.353
14.800	-192.372
15.000	-192.159
15.200	-192.416
15.400	-192.242
15.600	-192.235
15.800	-192.269
16.000	-192.154
16.200	-192.411
16.400	-192.334
16.600	-192.410
16.800	-192.351
17.000	-192.271
17.200	-192.240
17.400	-192.290
17.600	-192.512
17.800	-192.155
18.000	-192.391
18.200	-192.500
18.400	-192.337
18.600	-192.251
18.800	-192.186
19.000	-192.167
19.200	-192.445
19.400	-192.342
19.600	-192.429
19.800	-192.489
20.000	-192.428
20.200	-192.331
20.400	-192.303
20.600	-192.648
20.800	-192.575
21.000	-192.692
21.200	-192.789
21.400	-192.610
21.600	-192.753
21.800	-192.619
22.000	-192.946
22.200	-192.652
22.400	-192.739
22.600	-192.830
22.800	-192.779
23.000	-192.766
23.200	-192.777
23.400	-192.577
23.600	-192.847
23.800	-192.648
24.000	-192.619
24.200	-192.563
24.400	-192.676
24.600	-192.848
24.800	-192.756
25.000	-192.780
25.200	-192.683
25.400	-192.669
25.600	-192.744
25.800	-192.904
26.000	-192.679
26.200	-192.674
26.400	-192.897
26.600	-192.679
26.800	-192.946
27.000	-192.906
27.200	-192.863
27.400	-192.936
27.600	-193.068
27.800	-193.319

Frequency KHz	Log10 (v) dB
28.000	-193.526
28.200	-193.260
28.400	-193.341
28.600	-193.449
28.800	-193.576
29.000	-193.522
29.200	-193.833
29.400	-193.798
29.600	-193.852
29.800	-193.749
30.000	-193.779
30.200	-193.830
30.400	-194.057
30.600	-193.921
30.800	-193.789
31.000	-194.000
31.200	-194.263
31.400	-194.096
31.600	-194.534
31.800	-194.718
32.000	-195.050
32.200	-195.012
32.400	-195.149
32.600	-195.528
32.800	-195.516
33.000	-195.678
33.200	-196.071
33.400	-196.176
33.600	-196.466
33.800	-196.717
34.000	-196.858
34.200	-196.959
34.400	-197.301
34.600	-197.523
34.800	-197.652
35.000	-197.850
35.200	-198.104
35.400	-198.270
35.600	-198.277
35.800	-198.473
36.000	-198.884
36.200	-198.246
36.400	-198.323
36.600	-197.958
36.800	-197.543
37.000	-197.135
37.200	-196.988
37.400	-196.846
37.600	-196.396
37.800	-196.097
38.000	-195.666
38.200	-195.605
38.400	-195.172
38.600	-195.144
38.800	-194.835
39.000	-194.277
39.200	-193.983
39.400	-193.829
39.600	-193.696
39.800	-193.386
40.000	-193.195
40.200	-192.936
40.400	-192.886
40.600	-192.876
40.800	-192.838
41.000	-192.795
41.200	-192.650
41.400	-192.922
41.600	-192.572
41.800	-192.827

Frequency KHz	Log10 (v) dB
42.000	-192.597
42.200	-192.870
42.400	-192.817
42.600	-192.816
42.800	-192.680
43.000	-192.574
43.200	-192.597
43.400	-192.925
43.600	-192.892
43.800	-192.773
44.000	-192.977
44.200	-193.356
44.400	-193.446
44.600	-193.209
44.800	-193.559
45.000	-193.629
45.200	-193.845
45.400	-193.956
45.600	-193.981
45.800	-193.919
46.000	-193.975
46.200	-194.059
46.400	-193.863
46.600	-193.780
46.800	-194.056
47.000	-193.917
47.200	-193.722
47.400	-193.827
47.600	-193.635
47.800	-193.564
48.000	-193.548
48.200	-193.477
48.400	-193.681
48.600	-193.571
48.800	-193.623
49.000	-193.375
49.200	-193.553
49.400	-193.324
49.600	-193.312
49.800	-193.489
50.000	-193.265

GUS, ZHANG CHENG

Post Doctoral Student Engineer

Mr. Gus Zhang Cheng is a young aspiring student engineer who has experience across a wide platform of engineering disciplines. He is currently developing practical systems to facilitate wireless power transfer for consumer electronics. He has represented the City University in the International MATE Underwater Robot Competition held in the U.S.A. He has also taught several short courses to undergraduate university students. Gus Zhang was involved in the DataBuoy Project that streams marine data onto the internet for secondary school and university student use.

Education

- 2012 – Present The University of Hong Kong, HK. Ph.D candidate.
  Areas of Concentration: Wireless Energy Transfer, Power Electronics

- 2008 - 2012 City University of Hong Kong, HK. B.Eng. (Hons.) in Electronic and Communication Engineering – *First Class Honours*
  Minor: Computer Sciences
  Minor: Business Intelligence

Extracurricular Activities

Chief Designer and Technician, ROV Operator 2010 - 2011. Designed underwater robots, programmed control software, operated ROV for the Underwater Robot Team of City University of Hong Kong for the U. S. A. MATE Underwater Robot Challenge, Hong Kong.

Mentor 2013. Helped the underwater Robot team for City University of Hong Kong in Underwater robotic design and development

Judge 2010 - 2013. Was part of the Underwater Robot Security Check for the MATE Underwater Robot Challenge, Hong Kong.

Key Posts & Projects

Teaching Assistant 2013. Taught Advanced Power Electronics at The University of Hong Kong, HK.

Part-Time Lecturer 2008. Taught Algorithms and Data Structure at Wuxi No.1 Middle School, Wuxi, PRC.

Summer Intern 2010 - 2012. Designed and developed underwater data collection systems for Oceanway Corporation Limited, HK.

Research Assistant 2010. Fixed and re-developed laser software of excitation source and monochrome scope for the laser excitement laboratory in City University of Hong Kong, HK.

Awards

Hong Kong PhD Fellowship, 2012 – Present
Hong Kong Government Scholarship, 2009 – 2012
City University of Hong Kong Entry Scholarship (2nd Class), 2008 – 2009

Publication and Papers

(2013)A Time-Efficient Methodology For Visualizing Time-Varying Magnetic Flux Patterns of Mid-Range Wireless Power Transfer Systems
Paper presented at ECCE 2013,Denver, CO

Languages

Chinese Wu – Native Language
Chinese Mandarin – Native Language
Chinese Cantonese – Speak fluently
English – Speak fluently and read/write with high proficiency

Memberships

IEEE Student Member

Contact Details

301 Haking Wong Building, The University of Hong Kong, Hong Kong SAR

(852) 9202 9536 | galloplus.c@gmail.com

Attachment III. **AFCD Permit to deploy EARs in Sha Chau and Lung Kwu Chau Marine Park**

漁農自然護理署
郊野公園及海岸公園管理局
九龍長沙灣道 303 號
長沙灣政府合署六樓

Agriculture, Fisheries & Conservation Department
Country & Marine Parks Authority
Cheung Sha Wan Government Offices
303 Cheung Sha Wan Road 6th floor
Kowloon, Hong Kong

本署檔號 OUR REF: (64) AF GR MPA 01/5/2 Pt.14
來函檔號 YOUR REF:
電　　話 TEL NO.: (852) 2150 6870
圖文傳真 Faxline No: (852) 2152 0060

Room 2004, 20/F,
Tamson Plaza, 161 Wai Yip Street,
Kwun Tong, Kowloon
Hong Kong

Attn: Dr. Hung Ka Yiu Samuel

18 September 2013

Dear Dr. Hung,

Application for Permission to Undertake Scientific Study in Sha Chau and Lung Kwu Chau Marine Park

I refer to your application, seeking permission to undertake a research project entitled "Application of Passive Acoustic Monitoring using Ecological Acoustic Recorder (EAR) within Sha Chau and Lung Kwu Chau Marine Park".

The permission is hereby given under Section 17 (5)(a) of the Marine Parks and Marine Reserves Regulation (Cap. 476A) to you for carrying out experimental devices installation activities in relation to the above research in the captioned Marine Park during the period from 18 September 2013 to 30 June 2014 subject to the conditions attached.

If you have any enquiry, please contact Ms. Hiu-yan LI at 2150 7150.

Yours sincerely,

(Alan Chan)
for Director of Agriculture, Fisheries and Conservation

Encl.

cc.
Internal
MP/W