





Permanent Aviation Fuel Facility (EP-262/2007/B)

Twenty-Sixth Monthly Environmental Monitoring and Audit Report – December 2008

16 January 2009

Environmental Resources Management

21/F Lincoln House Taikoo Place, 979 King's Road Island East, Hong Kong Telephone 2271 3000 Facsimile 2723 5660

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Permanent Aviation Fuel Facility for Hong Kong International Airport

Environmental Certification Sheet EP-262/2007/B

Reference Document/Plan

Document/Plan-to be Certified/ Verified: 26th Monthly EM&A Report - December 2008

Date of Report: 16 January 2009

Date prepared by ET: 16 January 2009

Date received by IEC: 16 January 2009

Reference EP Condition

Environmental Permit Condition: Condition No.: 5.3

Content: Environmental Monitoring and Audit (EM&A) for the Project

5.3 Four hard copies and one electronic copy of the monthly EM&A Report for the Project shall be submitted to the Director within 2 weeks after the end of the reporting month. The submissions shall be certified by the ET Leader and verified by the IEC before submission to the Director. Additional copies of the submission shall be provided upon request by the Director.

ET Certification

I hereby certify that the above referenced document/plan complies with the above referenced condition of EP-262/2007/B

Craig A Reid, Environmental

Team Leader:

Date:

16 January 2009

IEC Verification

I hereby verify that the above referenced document/plan complies with the above referenced condition of EP-262/2007/B

Dr Guiyi Li, Independent

Environmental Checker: P.F.

Date:

21 Jan 2009

Notes: EP-262/2007/B has replaced the former EP-262/2007/A, EP-262/2007 and EP-139-2002/A for the PAFF project after the resubmission of revised EM&A Manual and revised EIA Report respectively.

REPORT

Permanent Aviation Fuel Facility (EP-262/2007/B)

Twenty-Sixth Monthly Environmental Monitoring and Audit Report – December 2008

16 January 2009

Prepared by: Karen Lui/Clement Pang/Craig A Reid

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For and on behalf of

Environmental Resources Management

Approved by: Craig A Reid

Signed:

Position: Environmental Team Leader

Date: 16 January 2009

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EXECUTIVE SUMMARY

The construction works for the Permanent Aviation Fuel Facility resumed on 9 July 2007. This **twenty-sixth** monthly Environmental Monitoring and Audit (EM&A) report presents the EM&A work carried out during the period from **1 December** to **31 December 2008** in accordance with the EM&A Manual.

Breaches of all Action and Limit Levels

No exceedances of any Action and Limit Levels applicable to the project were observed during the reporting period.

Complaint Log

No environmental complaints were received during the reporting period.

Notifications of any Summons and Successful Prosecutions

No environmental summons or prosecutions were received in this reporting period.

Reporting Changes

There was no reporting changes in the reporting period.

Future Key Issues

- Dust release and suppression;
- · Operation of dredging activities; and
- Water quality monitoring and dolphin monitoring during dredging activities.

1 INTRODUCTION

Leighton Contractors (Asia) Limited (LCAL) has appointed ERM-Hong Kong, Limited (ERM) as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for the Permanent Aviation Fuel Facility (PAFF) (the Project) during construction works.

The construction works for PAFF commenced in November 2005 based upon the previous EIA (*EIAO Register Number AEIAR-062-2002*) conducted and the Environmental Permit *EP-139/2002* granted on the 28th August 2002. Due to minor changes to the detailed layout of the site and the site boundary, application for Variation to the Environmental Permit (VEP) (*VEP-133/2004*) was submitted to the Director of Environmental Protection (DEP) for approval. The variation to the EP (*EP-139/2002/A*) was granted by the EPD in February 2004.

The decision by the EPD to grant the above Environmental Permit was, however, subject to a Judicial Review. The Judicial Review sided in the favour of the DEP, as did the subsequent Judgement from the Court of Appeal from the High Court for Judicial Review in March 2005. However, the DEP's decision to grant the EP was quashed by the Judgement of the Court of Final Appeal of July 2006.

The construction works were stopped following the Judgement of the Court of Final Appeal of July 2006. As such, in order to continue with the construction of the project, the project went through the statutory procedures under the EIAO again with a new design in order to obtain an environmental permit. The revised EIA was submitted in 2007 and the environmental permit (*EP-262/2007*) was granted in May 2007. *EP-262/2007* has been amended to *EP-262/2007/A* and issued by the EPD on 30 November 2007. A further Variation to the Environmental Permit has been approved to allow dredging works to continue until March 2008. As such, *EP-262/2007/A* has been amended to *EP-262/2007/B* and issued by the EPD on 27 February 2008.

The construction works and EM&A requirements were resumed on 9th July 2007 following the latest requirements of the *EP-262/2007/B* and *EM&A Manual*. Details regarding the EM&A requirements and changes should refer to the updated *EM&A Manual*. For the marine works, all piling activities were completed before the previous suspension of construction works in 2006.

1.1 Purpose of the Report

This is the **twenty-sixth** EM&A Report which summarizes the monitoring results and audit findings for the EM&A programme during the reporting period from **1 December** to **31 December** 2008.

2 ENVIRONMENTAL STATUS

2.1 PROJECT AREA

The project area is in Area 38 of Tuen Mun and the pipelines are located in Urmston Road between Tuen Mun Area 38 and Sha Chau. The site is illustrated in *Annex A*.

2.2 ENVIRONMENTAL SENSITIVE RECEIVERS

No air and noise sensitive receivers were identified close to the project area. However, water sensitive receivers and ecological sensitive receivers were identified in the EIA study, and are shown in *Annex B*.

2.3 MAJOR CONSTRUCTION ACTIVITIES

A summary of the major works undertaken in this reporting period is shown in *Table 2.1*. Dredging operation was suspended from 1 April to 31 August 2008 and resumed on 1 September 2008. *Table 2.2* presents the cumulative quantity of excavated materials up to 31 December 2008. Daily and cumulative dredging production rates are illustrated in *Figure 2.1*.

Table 2.1 Summary of Works Undertaken During the Reporting Period

Area	Works undertaken
Tuen Mun Area 38	Tank Farm, Roof Truss and Bund Wall Construction
	Permanent Drainage Construction
	Operational & Fire Services Buildings Construction
	Jetty Works (Non-piling)
Submarine Pipeline Route	Dredging Operations

Table 2.2 Cumulative Quantity of Excavated Marine Sediments up to 31 December 2008

Type of Excavated Materials	Cumulative Bulk Volume (m³)
From 17 December 2007 to 31 March 2008	
Contaminated Mud	105,974
Uncontaminated Mud	97,815
From 1 September to 31 December 2008	
Contaminated Mud	0
Uncontaminated Mud	117,967

2.4 MONITORING SCHEDULE OF THE REPORTING MONTH

Daily water quality monitoring during dredging activities was recommenced on 1 September 2008. The monitoring schedule for December 2008 is presented in *Annex C*.

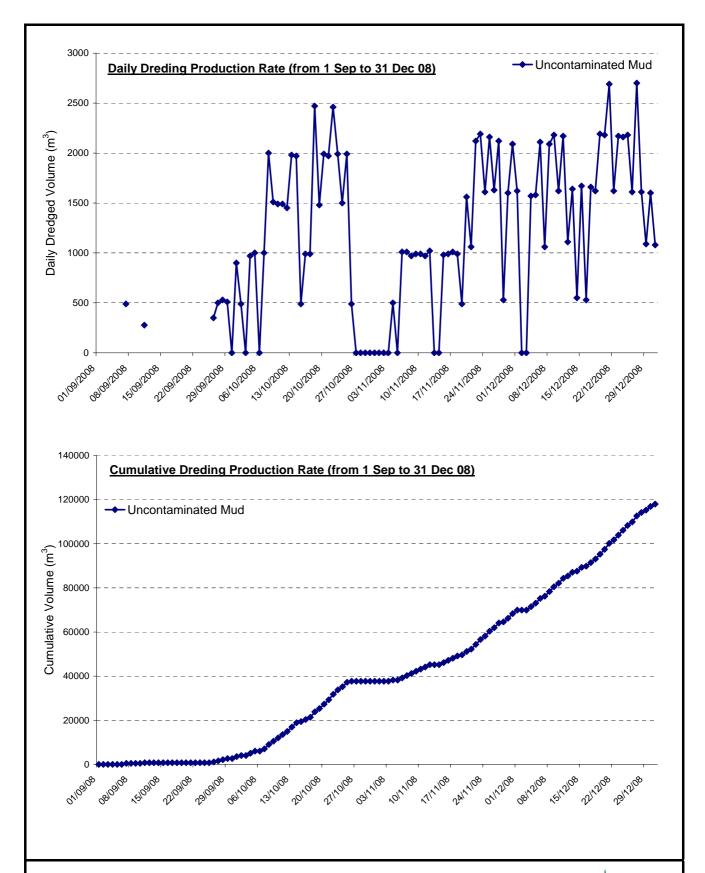


Figure 2.1 Daily and cumulative volumes (m³) of excavated materials from 1 September to 31 December 2008. Excavated materials contained uncontaminated mud only.



Ref: 0018105_Figure 2.1_dredging volume.doc

2.5 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project since July 2007 is presented in *Table* 2.3.

Table 2.3 Summary of Environmental Licensing, Notification and Permit Status

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	EP-262/2007/B	Throughout Project	Issued on 27 February 2008 (EP-262/2007/A on 30 November 2007, EP-262/2007 issued on 31 May 2007, EP-139/2002 originally granted on 28 August 2002 and EP-139/2002/A granted on 24 February 2004 were superseded)
Chemical Waste Producer Registration	WPN 5111-421-L2174- 25	Throughout Project	Issued on 10 November 2005
Notification of Construction Works under Air Pollution Control (Construction Dust) Regulation	H2104/U1D/5542/DG/ DH/PL	Throughout Project	Notification on 6 July 2007
Construction Noise Permit	GW-RW0676-07	21 December 2007 to 19 June 2008	For land-based works including air compressors, breakers, excavators, wheeled loaders, mobile cranes, concrete lorry mixers, hand-held pokers, bar benders/cutters, wood saws, grinders, submarine water pump, lorries with crane, dump trucks, rollers, ventilation fans and generators
	GW-RW0677-07	21 December 2007 to 29 February 2008	For marine dredging operation including grab dredger, tug boat, split hopper barge and motor sampan
	GW-RW0678-07	21 December 2007 to 18 June 2008	For marine jetty works including concrete pump derrick barges, hand-held grinders, generators, air compressors, boring machines, water pumps, tug boat, grout mixers and grout pumps

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Notification	GW-RW0094-08	1 March to 31 March 2008	For marine dredging operation including grab dredger, tug boat, split hopper barge and motor sampan
	GW-RW0312-08	04 July 2008 to 22 December 2008	For marine jetty works including concrete pump derrick barges, hand-held grinders, generators, air compressors, boring machines, water pumps, tug boat, grout mixers and grout pumps
	GW-RW0313-08	04 July 2008 to 19 December 2008	For land-based works including air compressors, breakers, excavators, wheeled loaders, mobile cranes, concrete lorry mixers, hand-held pokers, bar benders/cutters, wood saws, grinders, submarine water pump, lorries with crane, dump trucks, rollers, ventilation fans and generators
	GW-RW0373-08	1 August 2008 to 20 January 2009	For land-based works including air compressors, breakers, excavators, wheeled loaders, mobile cranes, concrete lorry mixers, hand-held pokers, bar benders/cutters, wood saws, grinders, submarine water pump, lorries with crane, dump trucks, rollers, ventilation fans, generators, stirrer, jet chisel, water jet machine and dehumidifier
	GW-RW0368-08	1 September to 30 November 2008	For marine dredging operation including grab dredger, tug boat, split hopper barge and motor sampan
Marine Dumping Permit	EP/MD/08-064	13 December 2007 to 29 February 2008	For Type 1 – Open Sea Disposal
	EP/MD/08-065	13 December 2007 to 12 January 2008	For Type 1d & Type 2 marine disposal
	EP/MD/08-071	13 January 2008 to 12 February 2008	For Type 1d & Type 2 marine disposal
	EP/MD/08-090	3 March to 31 March 2008	For Type 1d & Type 2 marine disposal

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
	EP/MD/08-091	3 March to 31 March 2008	For Type 1 – Open Sea Disposal
	EP/MD/09-018	1 September to 30 September 2008	For Type 1d & Type 2 marine disposal
	EP/MD/09-032	1 October to 31 October 2008	For Type 1d & Type 2 marine disposal
	EP/MD/09-017	1 September to 30 November 2008	For Type 1 – Open Sea Disposal
	EP/MD/09-039	1 December 2008 to 31 January 2009	For Type 1 - Open Sea Disposal
Wastewater Discharge License	EP760/421/011399/l	15 March 2006 to 31 March 2011	Issued on 15 March 2006

2.6 COMMUNITY LIAISON GROUP MEETING

According to the EP requirements, a Community Liaison Group (CLG) shall be established within three months after commencement of construction of the Project. The major duty of the CLG is to advise on and monitor the proper design, construction and operation of the Project. The CLG comprises representatives from Airport Authority, members of Tuen Mun community and academics. During the reporting month, a meeting was organised by the CLG on 3 December 2008.

Details of the CLG (including Membership and its Terms of Reference) can be found on the Project website (http://www.paffhk.com).

2.7 SUMMARY OF NON-COMPLIANCE WITH THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS

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

2.8 SUMMARY OF ENVIRONMENTAL COMPLAINTS

No environmental complaints were received during the reporting period. A summary of environmental complaints since project commencement is presented in *Annex D*.

2.9 SUMMARY OF ENVIRONMENTAL SUMMONS

No summons was received in this reporting period. A summary of legal proceeding since project commencement is presented in *Annex D*.

3.1 PREVIOUS ENVIRONMENTAL DEFICIENCIES AND FOLLOW-UP ACTIONS

As no environmental complaint was received over the last reporting period, no follow-up action was required.

Weekly site inspections were carried out by the ET on 4, 11, 18, 23 and 31 December 2008. Overall, the site was in good orderly manner and no non-compliances were found. Environmental deficiencies and follow-up actions/mitigation measures were identified during the inspections, as follows:

Air Quality

3

- During the site inspection on 4 December 2008, waste trucks left the work site without properly using the wheel-wash facility. The Contractor was reminded to ensure that no soil and grit were carried onto the neighbouring public road by vehicles leaving the construction site.
- On 4 December 2008, excavators in the surcharge area were observed to be operating without dust control measures. The Contractor was reminded to implement dust suppression measures (ie water spraying) regularly when dusty activities are conducted on site.
- On 23 December 2008, loading works near the oil interceptor was observed to be generating lots of dust. The Contractor was recommended to spray excavated materials prior to loading in order to avoid wind erosion.

Water Quality

• During the site inspection on 11 December 2008, the stop plug of a drip tray under a diesel generator near the oil interceptor was observed to be missing. The Contractor was reminded to replace the missing stop plug and to ensure the stop plug is tightly fastened onto the drip tray.

Waste Management

- On 11 December 2008, no chemical waste labels were observed on a few waste oil drums on the dredging barge. The Contractor was recommended to label the waste oil drums with chemical waste labels with reference to the guidelines in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.
- On 23 December 2008, general wastes were piled up behind the tank farms without receptor bins. The Contractor was reminded to replace bins for temporary storage of wastes as soon as possible.

 On 23 and 31 December 2008, the chemical waste store near the operation building was observed to be full. The Contractor was recommended to arrange collection of chemical wastes by a licensed Contractor as soon as possible.

With the exception of the above observations, the site was in a good orderly manner. The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

3.2 IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS

The implementation status of environmental mitigation measures and requirements as stated in the *EIA Report, Environmental Permits* and *EM&A Manual* during the reporting period is summarized in *Annex E*.

4 ENVIRONMENTAL MONITORING

4.1 AIR AND NOISE

Air and Noise monitoring is not required for the project.

4.2 WATER QUALITY

In accordance to the EM&A Manual, water quality monitoring recommenced on 1 September 2008 alongside dredging activities. QA/QC reports for suspended solids testing are presented in *Annex F*. Monitoring data and graphical presentations of the results are included in *Annex G*.

Results of the monitoring demonstrated that all measured turbidity, dissolved oxygen (DO) and suspended solids (SS) levels of all Impact Stations were compliant with the Action and Limit (AL) Levels specified in the *EM&A Manual*.

4.3 POPS MONITORING

Biweekly monitoring of POPs in water samples was conducted on 10 and 24 December for POPs analysis. At the time of this report, results were available for monitoring of total PCBs, total DDTs and total PAHs on 26 November and 10 December. All POPs parameters were below detection limits. Monitoring results and QA/QC reports for POPs testing are presented in *Annex H*.

4.4 WASTE MANAGEMENT

According to EP *Condition 3.3*, the Contractor's revised Waste Management Plan (Revision 5) (WMP), which has been certified by the ET and IEC, was submitted to the EPD on 05 November 2008.

4.5 CULTURAL HERITAGE

The *Watching Brief Report*, verified by the Independent Environmental Checker, was submitted to the EPD and AMO on 9 May 2008.

4.6 LANDSCAPE AND VISUAL

According to the *EIA report* and *EM&A Manual*, mitigation measures and site inspection are required during the landscaping/planting works. The berm/landscaping bund appeared to be habilitated by vegetation which was grown during the project suspension period. The transplanted trees appeared to be in good and healthy condition.

The weekly site inspections included audits on landscape and visual issues to ensure that the site was in orderly acceptable manner.

4.7 LAND CONTAMINATION, HAZARD TO LIFE AND FUEL SPILL RISK

The ET and IEC verified updated design audit plan was submitted to the EPD on 7 November 2007.

Weekly site inspection covered the waste management aspects which included measures to prevent land contamination by chemical wastes.

4.8 ECOLOGY

Dolphin Visual Monitoring

In accordance with *EM&A Manual*, dolphin monitoring has been undertaken during dredging activities since 1 September 2008. During the reporting period, a total of 9 dolphin sightings were recorded. Appropriate action was taken in accordance with the *EM&A Manual*. The sighting locations and field records are presented in *Annex I*.

4.9 EM&A MANUAL

The *EM&A Manual* for the Project has been updated by the ET to include the detailed arrangements of setting up a CLG, carrying out design audit, and monitoring of Persistent Organic Pollutants during construction of the Project. Further comments were received from the EPD and a revised *EM&A Manual* has been verified by the IEC and was submitted to EPD on 2 December 2008.

4.10 BASELINE WATER QUALITY MONITORING

The *Final Baseline Monitoring Report* was submitted to the EPD on 20 February 2008 and placed under the EIAO register.

5 FUTURE KEY ISSUES

5.1 KEY ISSUES FOR THE NEXT MONTH

Key issues to be considered in the next month will be:

- Dust release and suppression;
- Operation of dredging activities; and,
- Water quality monitoring and dolphin monitoring during dredging activities.

5.2 IMPACT PREDICTION FOR THE NEXT MONTH

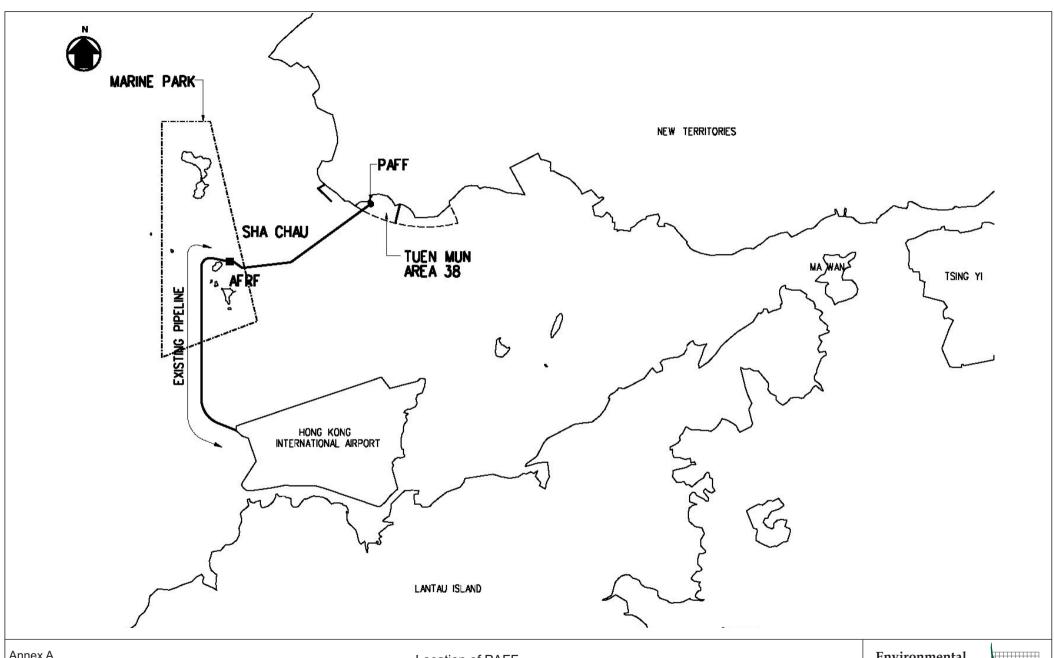
Provided that environmental mitigation measures including good on-site practises are properly implemented, it is not expected that unacceptable adverse impacts will arise.

5.3 WORKS AND MONITORING SCHEDULE FOR THE NEXT MONTH

Work programme for the next month includes jetty platform works (non-piling), site works (construction works for tank farm, operational and fire services buildings, pump platform, drainages, bund wall, security wall etc) and dredging operations. Weekly site inspections will be undertaken. Water quality and dolphin monitoring will be undertaken in accordance with the *EM&A Manual*.

Annex A

Project Location



Annex A

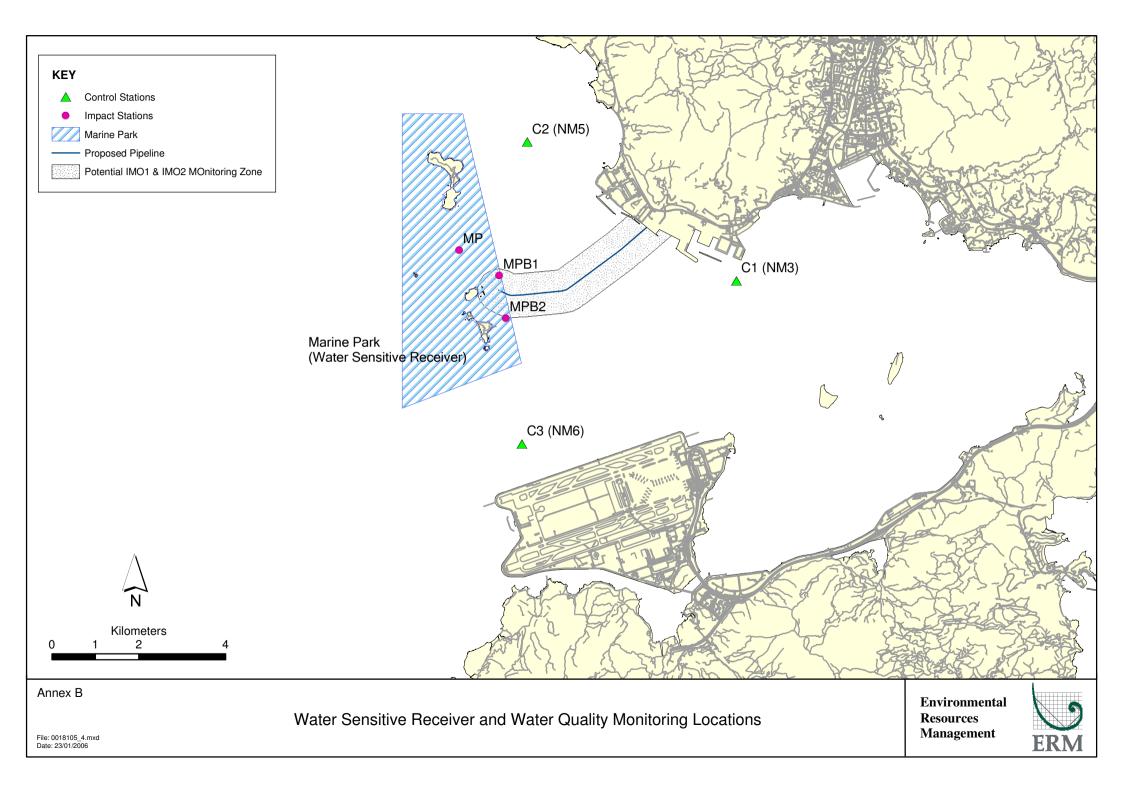
Location of PAFF

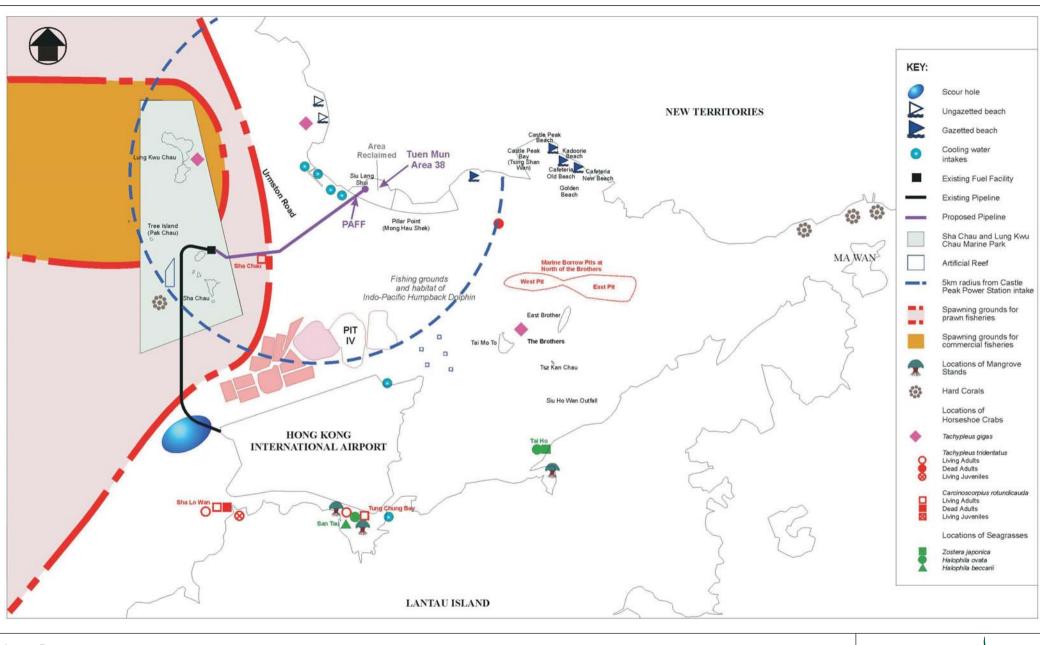
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Annex B

Water Quality Monitoring Stations, Water Quality and Ecological Sensitive Receivers





Annex B

FILE: C2475aa

DATE: 12/11/2007

Water Quality and Ecological Sensitive Receivers

(Soure: PAFF for Hong Kong International Airport EIA, Mouchel 2002)

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Annex C

Monitoring Schedule for the Reporting Period and Next Month

PAFF
Impact Water Quality Monitoring Schedule for December 2008

Sur	nday	Mor	nday	Tues	sday	Wedn	esday	Thur	sday	Fri	day	Satu	ırday
			01-Dec		02-Dec		03-Dec		04-Dec		05-Dec		06-Dec
		Mid-Flood	10:09					Mid-Ebb	04:27	Mid-Flood	05:10	Mid-Ebb	13:56
		Mid-Ebb	14:54	1	No WQ M	lonitoring*		Mid-Flood	16:50	Mid-Ebb	13:21	Mid-Flood	20:09
	07-Dec		08-Dec		09-Dec		10-Dec		11-Dec		12-Dec		13-Dec
						(POP samp	ling)						
Mid-Ebb	14:27	Mid-Ebb	08:21	Mid-Ebb	09:29	Mid-Ebb	10:32	Mid-Ebb	11:31	Mid-Ebb	12:25	Mid-Ebb	13:15
Mid-Flood	21:02	Mid-Flood	14:59	Mid-Flood	15:32	Mid-Flood	16:09	Mid-Flood	16:48	Mid-Flood	17:31	Mid-Flood	18:16
	14-Dec		15-Dec		16-Dec		17-Dec		18-Dec		19-Dec		20-Dec
Mid-Ebb	14:03	Mid-Flood	09:49	Mid-Flood	10:36	Mid-Flood	11:22	Mid-Flood	12:09	Mid-Flood	12:57	Mid-Flood	13:42
Mid-Flood	19:04	Mid-Ebb	14:52	Mid-Ebb	15:41	Mid-Ebb	16:34	Mid-Ebb	17:35	Mid-Ebb	18:54	Mid-Ebb	20:14
	21-Dec		22-Dec		23-Dec		24-Dec		25-Dec		26-Dec		27-Dec
						(POP samp	ling)						
Mid-Flood	14:22	Mid-Ebb	09:02	Mid-Ebb	10:14	Mid-Ebb	11:08	Mid-Ebb	11:49	Mid-Ebb	12:25	Mid-Ebb	13:00
Mid-Ebb	09:26	Mid-Flood	14:56	Mid-Flood	15:28	Mid-Flood	16:00	Mid-Flood	16:36	Mid-Flood	17:13	Mid-Flood	17:50
	28-Dec		29-Dec		30-Dec		31-Dec		01-Jan		02-Jan		03-Jan
Mid-Ebb	13:35	Mid-Ebb	14:09	Mid-Flood	09:41	Mid-Flood	10:09			-	-	-	
Mid-Flood	18:28	Mid-Flood	19:06	Mid-Ebb	14:45	Mid-Ebb	15:21]					

^{*}Water quality monitoring was not conducted since no dredging operation was undertaken.

PAFF
Tentative Impact Water Quality Monitoring Schedule for January 2009

Sund	lay	Mond	ay	Tues	day	Wedn	esday	Thurs	day	Fric	day	Satu	ırday
									01-Jan		02-Jan		03-Jan
								Mid-Flood	10:38	Mid-Flood	11:08	Mid-Flood	11:41
								Mid-Ebb	16:00	Mid-Ebb	16:44	Mid-Ebb	17:37
	04-Jan		05-Jan		06-Jan		07-Jan		08-Jan		09-Jan		10-Jan
												(POP samp	ling)
Mid-Flood	12:15	Mid-Flood	12:52	Mid-Ebb	07:18	Mid-Ebb	08:45	Mid-Ebb	10:14	Mid-Ebb	11:21	Mid-Ebb	12:17
Mid-Ebb	18:47	Mid-Ebb	19:54	Mid-Flood	13:33	Mid-Flood	14:19	Mid-Flood	15:14	Mid-Flood	16:14	Mid-Flood	17:15
	11-Jan		12-Jan		13-Jan		14-Jan		15-Jan		16-Jan		17-Jan
Mid-Ebb	13:08	Mid-Ebb	13:55	Mid-Ebb	14:39	Mid-Flood	10:00	Mid-Flood	10:35	Mid-Flood	11:07	Mid-Flood	11:38
Mid-Flood	18:13	Mid-Flood	19:07	Mid-Flood	19:58	Mid-Ebb	15:22	Mid-Ebb	16:06	Mid-Ebb	16:52	Mid-Ebb	17:49
	18-Jan		19-Jan		20-Jan		21-Jan		22-Jan		23-Jan		24-Jan
												(POP samp	ling)
Mid-Flood	12:06	Mid-Ebb	06:12	Mid-Flood	09:06	Mid-Flood	10:15	Mid-Flood	10:58	Mid-Ebb	11:25	Mid-Ebb	12:11
Mid-Ebb	19:01	Mid-Flood	12:36	Mid-Ebb	21:48	Mid-Ebb	22:34	Mid-Ebb	23:14	Mid-Flood	15:55	Mid-Flood	16:58
	25-Jan		26-Jan		27-Jan		28-Jan		29-Jan		30-Jan		31-Jan
				-									
Mid-Ebb	12:47							Mid-Flood	09:16	Mid-Flood	09:36	Mid-Flood	09:55
Mid-Flood	17:45			No WQ Mo	nitoring*			Mid-Ebb	14:51	Mid-Ebb	15:24	Mid-Ebb	16:01

^{*} Water quality monitoring will not be conducted since no dredging operation will be undertaken

Annex D

Cumulative Complaints Statistics

Summary of Environmental Complaints

Reporting Period	Complaint Statistics						
	Frequency	Cumulative	Complaint Nature				
Before construction	1	1	Dust				
works							
18/11/05 - 15/12/05	1	2	Dust				
15/12/05 - 14/01/06	0	2	Nil				
15/01/06 - 14/02/06	0	2	Nil				
15/02/06 - 14/03/06	0	2	Nil				
15/03/06 - 14/04/06	0	2	Nil				
15/04/06 - 14/05/06	0	2	Nil				
15/05/06 - 14/06/06	0	2	Nil				
15/06/06 - 14/07/06	0	2	Nil				
09/07/07 - 31/07/07	0	2	Nil				
Re-commencement of con							
01/08/07 - 31/08/07	0	2	Nil				
01/09/07 - 30/09/07	0	2	Nil				
01/10/07 - 31/10/07	0	2	Nil				
01/11/07 - 30/11/07	0	2	Nil				
01/12/07 - 31/12/07	0	2	Nil				
01/01/08 - 31/01/08	0	2	Nil				
01/02/08 - 29/02/08	0	2	Nil				
01/03/08 - 31/03/08	0	2	Nil				
01/04/08 - 30/04/08	0	2	Nil				
01/05/08 - 31/05/08	0	2	Nil				
01/06/08 - 30/06/08	0	2	Nil				
01/07/08 - 31/07/08	0	2	Nil				
01/08/08 - 31/08/08	0	2	Nil				
01/09/08 - 30/09/08	0	2	Nil				
01/10/08 - 31/10/08	0	2	Nil				
01/11/08 - 30/11/08	0	2	Nil				
01/12/08 - 31/12/08	0	2	Nil				

Summary of Environmental Summons

Reporting Period	Environmental Summons						
	Frequency	Cumulative	Summon Nature				
18/11/05 - 15/12/05	0	0	Nil				
16/12/05 - 14/01/06	0	0	Nil				
15/01/06 - 14/02/06	0	0	Nil				
15/02/06 - 14/03/06	0	0	Nil				
15/03/06 - 14/04/06	0	0	Nil				
15/04/06 - 14/05/06	0	0	Nil				
15/05/06 - 14/06/06	0	0	Nil				
15/06/06 - 14/07/06	0	0	Nil				
Re-commencement of con 09/07/07 - 31/07/07	0	0	Nil				
01/08/07 - 31/08/07	0	0	Nil				
01/09/07 - 30/09/07	0	0	Nil				
01/10/07 - 31/10/07	0	0	Nil				
01/11/07 - 30/11/07	0	0	Nil				
01/12/07 - 31/12/07	0	0	Nil				
01/01/08 - 31/01/08	0	0	Nil				
01/02/08 - 29/02/08	0	0	Nil				
01/03/08 - 31/03/08	0	0	Nil				
01/04/08 - 30/04/08	0	0	Nil				
01/05/08 - 31/05/08	0	0	Nil				
01/06/08 - 30/06/08	0	0	Nil				
01/07/08 - 31/07/08	0	0	Nil				
01/08/08 - 31/08/08	0	0	Nil				
01/09/08 - 30/09/08	0	0	Nil				
01/10/08 - 31/10/08	0	0	Nil				
01/11/08 - 30/11/08	0	0	Nil				
01/12/08 - 31/12/08	0	0	Nil				

Annex E

Implementation Programme of Mitigation Measures

ANNEX E IMPLEMENTATION SCHEDULE

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D		entat dule	Maintenance Agency	Implementation Status
Water Qua					requirement					
6.7	6.8.1	There should be no access to the shore or working from land within the Marine Park. No marine anchors shall be used within the Marine Park.	Marine Park / Pipeline Dredging	Contractor	TMEIA		Y		N/A	On going
6.7	6.8.1	No hydraulic dredging within Marine Park.	Marine Park / Pipeline Dredging	Contractor	TMEIA		Y		N/A	Completed
6.7	6.8.1	Dredging for pipeline trench should be timed to coincide with maintenance dredging for Sha Chau AFRF marine access channel if relevant.	Sha Chau ARFR Marine access channel	Airport Authority	TMEIA		Y		N/A	On going
6.4		The work rate for dredging should not exceed 4,000 m ³ /hr for the TSHD and 7,000 m ³ /day for the grab dredger.	Marine Park / Pipeline Dredging	Contractor	TMEIA		Y		N/A	On going
6.7	6.8.1	Standard good dredging practice measures shall be written in the dredging contract.	Marine Park / Pipeline Dredging	Franchisee	TMEIA		Y		N/A	On going
6.7	6.8.1	Use of Lean Material Overboard (LMOB) systems shall be prohibited. No mud overflow is to be permitted for dredging using TSHD.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y		N/A	Not applicable
6.7	6.8.1	Mechanical grabs shall be designed and maintained to avoid spillage and should seal tightly while being lifted.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y		N/A	On going
6.7	6.8.1	Barges and hopper dredgers shall have tight fittings seals to their bottom openings to prevent leakage of material.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y		N/A	On going

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D	nplementation Schedule C O	Maintenance Agency	Implementation Status
6.7	6.8.1	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	Not applicable
6.7	6.8.1	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	On going
6.7	6.8.1	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	On going
6.7	6.8.1	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	On going
6.7	6.8.1	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	On going
6.7	6.8.1	The works shall not cause foam, oil, grease, letter or other objectionable matter to be present in the water within and adjacent to the works site.	Dredged areas/ Pipeline Dredging	Contractor	TMEIA Marine Fill Committee Guidelines. DASO permit conditions		Y	N/A	Ongoing

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D	nplementation Schedule C O	Maintenance Agency	Implementation Status
6.7	6.8.1	Placement of pipeline trench backfill should be undertaken in a controlled manner to minimise impacts. Backfilling with rock should be undertaken either down pipe or by a reverse grab operation or other controlled technique to ensure that this material does not mound on the seabed	Pipeline trench/ Pipeline Dredging	Contractor	TMEIA Minimise disturbance	D	Y	N/A	Pending
6.7	6.8.1	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y	N/A	Ongoing
6.7	6.8.1	Sewage effluent and discharges from onsite kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y	N/A	Ongoing
6.7	6.8.1	Storm drainage should be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sandbag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y	N/A	Ongoing
6.7	6.8.1	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y	N/A	Ongoing

EIA	EM&A	Environmental Protection Measures	Location /	Implementation Agent	Relevant	In		ementati	on	Maintenance	Implementation Status
Reference	Manual Reference		Timing		Standard or Requirement	D	S	chedule C	o	Agency	
6.7	6.8.1	Temporary access roads should be surfaced with crushed stone or gravel.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing
6.7	6.8.1	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing
6.7	6.8.1	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing
6.7	6.8.1	Open stockpiles of construction materials (e.g. aggregates and sand) o nsite should be covered with tarpaulin or similar fabric during rainstorms.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing
6.7	6.8.1	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing
6.7	6.8.1	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards			Y		N/A	Ongoing

EIA Reference	EM&A Manual	1	Location / Timing	Implementation Agent	Relevant Standard or	In		lementation	Maintenance Agency	Implementation Status
	Reference		_		Requirement	D C O				
6.7	6.8.1	All vehicles and plant should be cleaned	Land site/	Contractor	TMEIA			Y	N/A	Ongoing
		before they leave the construction site to	Throughout		ProPECC Note					
		ensure that no earth, mud or debris is	construction		1/94. WPCO					
		deposited by them on roads. A wheel	period		TM on Effluent					
		washing bay should be provided at every site exit.			Standards					
6.7	6.8.1	Wheel wash overflow shall be directed to		Contractor	TMEIA			Y	N/A	Ongoing
		silt removal facilities before being	Throughout		ProPECC Note					
		discharged to the storm drain.	construction		1/94. WPCO					
			period		TM on Effluent					
					Standards					
6.7	6.8.1	The section of construction road between	•	Contractor	TMEIA			Y	N/A	Ongoing
		the wheel washing bay and the public	Throughout		ProPECC Note					
		road should be surfaced with crushed	construction		1/94. WPCO					
		stone or coarse gravel.	period		TM on Effluent					
<i>(</i> 7	(01	3.1 Wastawatar gaparated from concreting	Land sito /		Standards			3/	NT / A	O .
6.7	6.8.1	Wastewater generated from concreting,	g Throughout	TMEIA ProPECC Note		Y	N/A	Ongoing		
		plastering, internal decoration, cleaning work and other similar activities, shall be			1/94. WPCO					
		screened to remove large objects.	period		TM on Effluent					
		screened to remove large objects.	periou		Standards					
6.7	6.8.1	Vehicle and plant servicing areas, vehicle	I and site /	Contractor	TMEIA			Y	N/A	Ongoing
0.7	0.0.1	wash bays and lubrication facilities shall	Throughout	Contractor	ProPECC Note			1	14/11	Origonia
		be located under roofed areas. The	construction		1/94. WPCO					
		drainage in these covered areas shall be	period		TM on Effluent					
		connected to foul sewers via a petrol	F		Standards					
		interceptor in accordance with the								
		requirements of the WPCO or collected								
		for off site disposal.								
6.7	6.8.1	The contractors shall prepare	Land site/	Contractor	TMEIA			Y	N/A	Ongoing
		oil/chemical cleanup plan and ensure	Throughout		ProPECC Note					
		that leakages or spillages are contained	construction		1/94. WPCO					
		and cleaned up immediately.	period		TM on Effluent					
					Standards					

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	Im D	pleme Schee C	entation dule O	Maintenance Agency	Implementation Status
6.7	6.8.1	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y		N/A	Ongoing
6.7	6.8.1	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y		N/A	Ongoing
6.7	6.8.1	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	Land site/ Throughout construction period	Contractor	TMEIA ProPECC Note 1/94. WPCO TM on Effluent Standards		Y		N/A	Ongoing
6.7	6.8.1	Wastewater from pipe commissioning dewatering exercises shall be stored on site and for chemical analysis and safe disposal in accordance with the WPCO.	Tank Farm/Tank farm commissioning	Franchisee	TMEIA WPCO TM on Effluent Standards		Y		N/A	Ongoing
6.7	Section 6	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	Land site/ Throughout construction period	Contractor	EM&A Manual		Y		N/A	Ongoing
6.7	Section 6	Submarine section of aviation fuel pipeline shall be covered with rock armour protection which shall not protrude above the level of the adjacent natural seabed.	Submarine pipeline	Franchisee	TMEIA Rock armour to minimum thickness of 1m	Y	Y		Franchisee	On going
6.7	Section 6	Detailed emergency response procedures shall be drawn up. These will include requirements to maintain floating oil booms, absorbent materials and skimmers on site at all times.	All facilities	Franchisee	TMEIA Industry Standards e.g. Oil Companies International Marine Forum			Y	Franchisee	Pending

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D	•	ementa chedul C		Maintenance Agency	Implementation Status
6.7	Section 6	Coupling points on the jetty will be protected with slop collection utilities.	Jetty	Franchisee	TMEIA Rock armour to minimum thickness of 1m			Y		Franchisee	On going
6.7	Section 6	Auxiliary tanks shall be permanently maintained at the tank farm for recovered fuel and slops.	Tank farm	Franchisee	TMEIA				Y	Franchisee	Pending
6.7	Section 6	Oily drainage systems and slop collection systems will connect to an oil/water separator.	Tank farm	Franchisee	TMEIA Industry Standards e.g. Oil Companies International Marine Forum			Y		Franchisee	On going
6.7	Section 6	All tanks shall be bunded to a capacity of at least 150% of the largest individual tank in each compound by 2040. Tank pits shall be protected by an impermeable bed (e.g. geotextile sheeting) to prevent seepage of aviation fuel to ground. A leak detection system shall be installed beneath the containment membrane.	Tank farm	Franchisee	TMEIA Hong Kong Code of Practice for Oil Installations, 1992			Y		Franchisee	On going
6.7	Section 6	There shall be no direct outlet from the bund. A collection pump shall be included in the base. Removal of accumulated rainwater shall be activated manually and discharged to storm drain via an oil/water separator.	Tank farm	Franchisee	TMEIA			Y		Franchisee	On going
6.7	Section 6	Contingency procedures shall be drawn up to ensure containment and safe disposal of any fuel lost from tanks or pipework. Suitable absorbent materials (e.g. sand or earth) shall be kept on site to deal with spillages.	Tank farm	Franchisee	TMEIA Hong Kong Code of Practice for Oil Installations, 1992				Y	Franchisee	Pending
6.7	Section 6	Valves shall be installed within the storm drainage system to facilitate the retention of spillages.	Tank farm	Franchisee	TMEIA			Y		Franchisee	On going

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D	npleme Sched C	ntation lule O	Maintenance Agency	Implementation Status
6.10	Section 6	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen.	Design monitoring stations as defined in EM&A Manual, section 6. Construction period when dredging takes place within 1000m of Marine Park and along entire length of the pipeline	Contractor	EM&A Manual		Y		N/A	Ongoing
6.10	Section 6	Routine water quality monitoring in the vicinity of the PAFF site to check the effectiveness of the proposed precautionary measures implemented for on-site spill control. The details of the monitoring to be undertaken will be prepared by the Franchisee as part of the PAFF Operations Manual and the details will be agreed with the relevant authorities within 3 months of the commencement of operation of the PAFF. Monitoring should include but not be limited to the parameters of TPH and PAH and reference should be made to the existing monitoring programme undertaken for the fuel tank farm on the HKIA platform.		Franchisee	EM&A Manual			Y	N/A	Pending
Ecology 7.8	5.3	Undertake post construction dolphin abundance monitoring.	Construction	Contractor	TMEIA		Y		N/A	Pending

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	Im D	-	entation edule	Maintenance Agency	Implementation Status
7.8	5.3	A 250m dolphin exclusion zone shall be implemented and dredging shall not begin until the observer has confirmed that the area has been clear for 30 minutes.	250m around dredger/throug hout dredging in Marine Park and along the length of pipeline	Contractor	TMEIA	D)		N/A	Ongoing
7.8	5.3	Avoidance of dolphin main calving season between March and August.	Throughout dredging in Marine Park and along the length of the pipeline	Contractor	TMEIA		Υ	(N/A	Ongoing
Landscape	& Visual									
8.10	7.2.1	The construction programme for the PAFF should be reduced to the shortest possible period.	PAFF site / throughout construction period	Contractor	TMEIA	Y	J	(N/A	Ongoing
8.10	7.2.1	The extent and periphery of the works areas should be managed so that they are as small as possible and do not appear cluttered, untidy and unattractive, particularly to road traffic along Lung Mun Road.	PAFF site /	Contractor	TMEIA		λ	Y	N/A	Ongoing
8.10	7.2.1	Temporary hoarding barriers should be of a recessive visual appearance in both colour and form.	PAFF site / throughout construction period	Contractor	TMEIA	Y	Y	(N/A	Ongoing
8.10	7.2.1	Materials should be stored in areas with the least obstruction to residents, pedestrians and traffic.	PAFF site / throughout construction period	Contractor	TMEIA		Υ	Y Y	N/A	Ongoing

EIA Reference	EM&A Manual	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or	Im	plement Schedu		Maintenance Agency	Implementation Status
	Reference		Ö	0	Requirement	D	C	Ο	3	
8.10	7.2.1	All material stockpiles should be covered with an impermeable material and sandbagging diversions should be placed around exposed soil.	PAFF site / throughout construction period	Contractor	TMEIA		Y	Y	N/A	Ongoing
8.10	7.2.1	Conservation of existing and imported soil resources.	PAFF site / throughout construction period of fuel tank expansion	Contractor	TMEIA			Y	N/A	Ongoing
8.10	7.2.1	A landscape perimeter bund comprising containment bund-wall, access road and planting buffer shall be built and maintained around the tank farm.	PAFF site / throughout construction period	Project Proponent	TMEIA	Y	Y	Y	Franchisee	Ongoing
8.10	7.2.1	The design of the PAFF should incorporate materials, details and textures which are visually recessive.	PAFF site / design	Project Proponent	TMEIA	Y	Y		N/A	Ongoing
8.10	7.2.1	Colours should be of low chromatic intensity to reduce the potential contrast between the structure and their background.	PAFF site tanks / design	Project Proponent	TMEIA	Y	Y		N/A	Ongoing
8.10	7.2.1	Visually permeable security fencing should be used around the perimeter.	Site perimeter	Project Proponent	TMEIA	Y	Y	Y	N/A	Ongoing
8.10	7.2.1	Minimum amount of lighting for the tanks shall be used, only applied for safety at the key access points and staircases.	Tanks / Operational phase	Project Proponent	TMEIA	Y	Y	Y	N/A	Ongoing
8.10	7.2.1	Limited lighting intensity on the site.	PAFF site / Operational phase	Project Proponent	TMEIA	Y	Y	Y	N/A	Ongoing
8.10	7.2.1	Directional down lighting is suggested to minimise light spill to the surrounding area.	1	Project Proponent	TMEIA	Y	Y	Y	N/A	Ongoing

Cultural Heritage

EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	Im	plement	ation	Maintenance	Implementation
Reference	Manual		Timing	Agent	Standard or		Schedu	le	Agency	Status
	Reference				Requirement	D	C	О		
9.8.1	9.2.1	Undertake a watching brief during	Within vicinity	Franchisee	TMEIA		Y		N/A	Ongoing
		dredging of the pipeline within 25m	of SS1 and SS2							

• Dredge operators to be made aware of the potential presence of cultural heritage material. The operators would be required to report to the AMO any unusual resistance and/or recovery of timbers, anchors or other wreck related material. Any obstacles encountered during the dredging that are of timber should be reported to the marine archaeologist. The obstacle should be avoided and not removed until it has been assessed by the marine archaeologist as to whether the obstacle is of cultural heritage importance;

either side of anomalies SS1 and SS2.

This should comprise:

 A marine archaeologist shall be on board the dredging barge during dredging within 25m either side of SS1 and SS2 in the event of any unusual resistance occurring or blockages which requires the dredge head to be bought on deck for cleaning and examination; and,

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	Im D		entation edule O	Maintenance Agency	Implementation Status
		Dredging to cease in the nominated area SS1 after 3 meters of sediment removal and after 1 metre for SS2. A dive survey will then be undertaken to examine the trench for possible cultural remains.								
9.8.2	9.2.1	During the course of the watching brief, if the targets are identified as being potentially archaeologically important, then an immediate marine archaeological impact assessment in accordance with EIAO TM Annex 19 will be required to be undertaken by a qualified marine archaeologist.	With vicinity of SS1 and SS2	Franchisee	TMEIA		Y	•	N/A	Ongoing
9.8.4	9.2.1	Any changes, additions or alterations to the dredging method and alignment should be further assessed by marine archaeologist to determine if any further assessment is required.	Pipeline alignment	Franchisee	TMEIA		Y		N/A	Ongoing
Fuel Spill I	Risk	1								
11.4.1	10.2	Tank farms will be constructed in a bunded area surrounding the tanks which will have collection capacity of 150% of the maximum content of the largest tank.	Tank farm / Design Phase	Franchisee	TMEIA	Y			N/A	On going
11.4.1	10.2	Emergency shut down valves shall be installed within the wider site storm drainage system.	Tank farm / Design Phase	Franchisee	TMEIA	Y			N/A	On going
11.4.1	10.2	An impermeable membrane shall be installed in the tank foundation beneath the tank bottom.	Tank farm / Design Phase	Franchisee	TMEIA	Y			N/A	On going
11.4.1	10.2	Pipeline to be covered with a protective rock armour layer.	Pipelines/ Design Phase	Franchisee	TMEIA	Y			Franchisee	On going
11.4.1	10.2	An integrated leak detection system shall be installed to all pipelines to provide early detection of any leak.	Pipelines/ Design Phase	Franchisee	TMEIA	Y			N/A	On going

EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	Im			Maintenance	Implementation
		Timing	Agent					Agency	Status
Reference				Requirement		С	O		
10.2	An automatic shut-off system shall be	Pipelines/	Franchisee	TMEIA	Y			N/A	On going
	implemented for pipelines.	Design Phase							
10.2	A workboat shall be on standby at the	Jetty/ During	Franchisee	TMEIA	Y		Y	N/A	Pending
	jetty during tanker berthing.	Tanker Berth							
10.2	Skimmers shall be available for quick	Jetty/ During	Franchisee	TMEIA	Y		Y	N/A	Pending
	deployment in case of a spill.	Tanker Berth							
10.2	An emergency response plan shall be	Jetty/ During	Franchisee	TMEIA	Y		Y	N/A	Pending
	prepared prior to the operation of the	Tanker Berth							
	PAFF.								
10.2	Operator-training programme shall be	Jetty/ During	Franchisee	TMEIA	Y		Y	N/A	Pending
	implemented.	Tanker Berth							
10.4	During the planning of the later phase of	During	Franchisee	TMEIA			Y	N/A	Pending
	the tank farm development, in order to	planning stage							Ü
	ensure that the required mitigation	for future tank							
	measures are undertaken at that time,	construction							
	review the EIA report only if the latest								
	0;								
	that time.								
	Manual Reference 10.2 10.2 10.2 10.2 10.2 10.2	Manual Reference An automatic shut-off system shall be implemented for pipelines. 10.2 A workboat shall be on standby at the jetty during tanker berthing. 10.2 Skimmers shall be available for quick deployment in case of a spill. 10.2 An emergency response plan shall be prepared prior to the operation of the PAFF. 10.2 Operator-training programme shall be implemented. 10.4 During the planning of the later phase of the tank farm development, in order to ensure that the required mitigation measures are undertaken at that time, review the EIA report only if the latest technology, industrial standards and statutory requirements have changed by	Manual ReferenceTiming10.2An automatic shut-off system shall be implemented for pipelines.Pipelines/ Design Phase10.2A workboat shall be on standby at the jetty / During jetty during tanker berthing.Jetty / During Tanker Berth10.2Skimmers shall be available for quick deployment in case of a spill.Jetty / 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ReferenceTimingAgentStandard or RequirementD10.2An automatic shut-off system shall be implemented for pipelines.Pipelines/ During PhaseFranchiseeTMEIAY10.2A workboat shall be on standby at the jetty during tanker berthing.Jetty/ During PranchiseeTMEIAY10.2Skimmers shall be available for quick deployment in case of a spill.Jetty/ During PranchiseeTMEIAY10.2An emergency response plan shall be prepared prior to the operation of the PAFF.Tanker Berth PAFF.Tanker Berth PAFF.Tanker Berth PAFF.10.4During the planning of the later phase of the tank farm development, in order to ensure that the required mitigation measures are undertaken at that time, review the EIA report only if the latest technology, industrial standards and statutory requirements have changed byDuring Time PanchiseeTanker Berth PanchiseeTMEIAY	Manual ReferenceTimingAgent RequirementStandard or RequirementSchedular RequirementDosidant10.2An automatic shut-off system shall be implemented for pipelines.Pipelines/ Design 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EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant		plement		Maintenance	Implementation
Reference	Manual Reference		Timing	Agent	Standard or Requirement	D	Schedul C	le O	Agency	Status
11.6	10.4	Regular inspections and audits will be undertaken by the Franchisee during the operational phase of the facility:	Operation	Franchisee	TMEIA			Y	N/A	Pending
		• Two inspections every year of the tank farm, jetty and pipelines including one undertaken pursuant to the Joint Inspection Group (JIG) explained above;								
		• Inspection of the whole sub sea pipelines every 5 to 10 years;								
		 Health, Safety and Environmental audit of the facility once every 3 years; and, 								
11.6	10.4	• Inspection of the structural integrity of the tanks once per year. Prepare an Environmental Management	Within 3	Franchisee	TMEIA			Y	N/A	Pending
		Plan to ensure the on-going adequacy of the fuel spill contingency plan and that it is being implemented as required and that the above mitigation measures have been incorporated and are effective.	months of start of operation of the PAFF with audits every 24 months							
Land Conta	mination	•								
13.5.1	10.2	Bunding shall be provided by all fuel storage areas to at least 150% of largest individual tank in each compound.	Tank farm / Design	Franchisee	TMEIA	Y			N/A	On going
13.5.1	10.2	Relevant design standards for storage tanks, pipework, containment and drainage shall be adhered to.	Tank farm / Design	Franchisee	TMEIA	Y			N/A	On going
13.5.1	10.2	Plant inspections and maintenance shall be undertaken once per month.	Tank farm / Design	Franchisee	TMEIA	Y	Y	Y	N/A	On going
13.5.1	10.2	Impermeable lining shall be provided for all tank pits.	Tank farm / Design	Franchisee	TMEIA	Y			N/A	On going

	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	_	_		Maintenance	Implementation
	Manual Reference		Timing	Agent	Standard or Requirement	D	Schedu C	ie O	Agency	Status
13.5.1	10.2	Leak detection systems shall be provided		Franchisee	TMEIA	Y			N/A	On going
		to all valves.	Design							
13.5.1	10.2	Surface drainage shall be contained and	Tank farm /	Franchisee	TMEIA	Y	Y	Y	N/A	On going
		treated prior to discharge.	Design							
13.5.1	10.2	Emergency spill response plans shall be	Tank farm /	Franchisee	TMEIA	Y		Y	N/A	Pending
		prepared.	Design							
13.5.1	10.2	Spill control materials and equipment	Tank farm /	Franchisee	TMEIA	Y		Y	N/A	Pending
		shall be provided on site.	Design							
13.5.1	10.2	Runoff from the rood of site buildings	Tank farm /	Franchisee	TMEIA	Y		Y	N/A	On going
		and landscaped areas shall be conveyed	Design							
		in closed drains to the nearest storm								
		water drain to prevent the generation of								
		excessive quantities of surface water								
10 = =	100	which may be polluted.	T 16 (TT	3.7			NT / A	D 11
13.5.5	10.2	Suitable absorbent materials (e.g. sand or		Franchisee	TMEIA	Y			N/A	Pending
		earth) shall be kept on site to deal with	Design							
		spills. Chemical dispersants shall not								
13.5.5	10.2	be employed. The facility shall be designed,	Tank farm /	Franchisee	TMEIA	Y	Y	Y	N/A	On going
15.5.5	10.2	constructed, operated and maintained in	·	Tranchisee	INILIA	1	1	1	IV/A	On going
		full accordance with the Code of Practice	Design							
		for Oil Installations, 1992.								
13.5.5	10.2	Tank pressure testing shall be carried out	Tank farm /	Franchisee	TMEIA	Y	Y	Y	N/A	On going
13.3.3	10.2	routinely to check for possible tank leaks.		Tranchisee	TWILIA	1	1	1	IV/A	Offgoring
		Product inventory monitoring shall be	Design							
		integrated into site management								
		procedures to check for any abnormal or								
		unexpected product loss.								
13.5.5	10.2	Tank overfill monitoring systems shall	Tank farm /	Franchisee	TMEIA	Y	Y	Y	N/A	On going
		be installed and regularly tested. Inlet	Design			_	_	_	- 1,	0.1.001.10
		valves shall be designed to automatically								
		shutdown on exceedance of "high-high								
		level" to prevent over-filling.								
13.5.5	10.2	Pipe leakages shall be routinely checked	Tank farm /	Franchisee	TMEIA	Y	Y	Y	N/A	On going
		for by means of a pressure sensitive leak								
		detection system and routine inventory	-							
		control.								
		for by means of a pressure sensitive leak detection system and routine inventory				-	-	_		8

EIA Reference	EM&A Manual	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or		olement Schedu		Maintenance Agency	Implementation Status
Reference	Reference		Tilling	Agent	Requirement	D	C	O	Agency	Status
13.5.5	10.2	Drainage from areas of hardstanding shall be treated by means of oil/water separators prior to discharge to storm drain. All surface drainage shall be fitted with closure valves to provided additional containment and facilitate clean up of any leaks.	Tank farm / Design	Franchisee	TMEIA	Y	Y	Y	N/A	On going
13.5.5	10.2	The delivery pipeline from the jetty and the supply line to the airport shall be fitted with pressure sensitive leak detectors.	Tank farm / Design	Franchisee	TMEIA	Y	Y		N/A	On going
Waste Man	nagement									
14.7.2	8.3.1	The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	The waste coordinator shall prepare and implement a Waste Management Plan which specifies procedures such as ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of waste does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposal.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		N/A	Ongoing

EIA Reference	EM&A Manual	Environmental Protection Measures	Location /	Implementation	Relevant Standard or	In		ementatio		Implementation Status
Reference	Reference		Timing	Agent	Requirement	D	30	C O	Agency	Status
14.7.2	8.3.1	The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.			Y	N/A	Ongoing
14.7.2	8.3.1	No waste shall be burnt on site.	PAFF Site throughout construction period	Contractor	TMEIA			Y	N/A	Ongoing
14.7.2	8.3.1	Excavated material shall be used on site for purposes of landscaping or formation of bund walls as far as possible.	All site / throughout construction period	Contractor	TMEIA			Y	N/A	Ongoing
14.7.2	8.3.1	All material shall be reused on site as far as practicable, including formwork plywood, topsoil and excavated material.	All site / throughout construction period	Contractor	TMEIA			Y	N/A	Ongoing
14.7.2	8.3.1	Suitable provisions shall be included in the construction contract to ensure that the Contractor sorts and recycles waste.	Contract preparation stage	HyD	TMEIA	Y			N/A	Ongoing

EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	Im	-	ntation		Implementation
Reference	Manual Reference		Timing	Agent	Standard or Requirement	D	Sched C	lule O	Agency	Status
14.7.2	8.3.1	Re-use and recycling of waste must always be considered first. Waste disposal shall only be undertaken in the last resort. Any surplus material generated shall be sorted on site into construction and demolition (C&D) waste and the public fill fraction. A sorting facility shall be set up on the site.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	The C&D waste shall be disposed of at a licensed landfill or deposited at an authorised waste transfer facility and the material suitable for public fill delivered to a public filling area, public filling barging point or public fill stockpile area after obtaining the appropriate licence.	CEDD pubic fill stockpile in Mui Wo, North	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	Stockpile material shall avoid vegetated areas.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	Stockpiles shall be covered by tarpaulin and/or watered as required.	All areas / throughout construction period, particularly during dry season	Contractor	TMEIA, Public Health and Municipal Services Ordinance (Cap 132) and the Public Cleansing and Prevention of Nuisances (Regional Council) By- laws		Y		N/A	Ongoing

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	In D	-	emen chedu C	tation ile O	Maintenance Agency	Implementation Status
14.7.2	8.3.1	Storage of material on site should be kept to a minimum.	All areas / throughout construction period	Contractor	TMEIA, Public Cleansing and Prevention of Nuisances (Regional Council) By- laws			Y		N/A	Ongoing
14.7.2	8.3.1	Excavated material in trucks shall be covered by tarpaulins.	All areas, particularly at site exits / throughout construction period	Contractor	TMEIA, Reduce the potential for spillage and dust. Public Health and Municipal Services Ordinance (Cap 132) and the Public Cleansing and Prevention of Nuisances (Regional Council) By- laws			Y		N/A	Ongoing
14.7.2	8.3.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent the transfer of mud onto public roads.	Site entrances and exits/ throughout construction period	Contractor	TMEIA, Public Cleansing and Prevention of Nuisances (Regional Council) By- laws			Y		N/A	Ongoing

EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	Im				Maintenance	Implementation
Reference	Manual Reference		Timing	Agent	Standard or Requirement	D		iedule C	0	Agency	Status
14.7.2	8.3.1	Suitable chemical waste storage areas should be formed at the works site for temporary storage pending collection.	Works site/ throughout construction period	Contractor	TMEIA, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. A Guide to the			Y	0	N/A	Ongoing
14.7.2	8.3.1	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical waste treatment facility at Tsing Yi / throughout construction period	Contractor	Chemical Waste Control Scheme TMEIA, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. A Guide to the			Y		N/A	Ongoing
14.7.2	8.3.1	Temporary storage areas for general refuse should be enclosed to avoid environmental impacts.	All areas/ throughout construction period	Contractor	Chemical Waste Control Scheme TMEIA, Public Health and Municipal Services		,	Y		N/A	Ongoing
14.7.2	8.3.1	Sufficient dustbins should be provided for storage of waste.	All areas/ throughout construction period	Contractor	Ordinance TMEIA, Public Cleansing and Prevention of Nuisances Ordinance (Regional Council) By- laws, Public Health and Municipal Services Ordinance			Y		N/A	Ongoing

EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	In	-	entation	Maintenance	Implementation
Reference	Manual		Timing	Agent	Standard or	ъ	Sche		Agency	Status
14.7.2	Reference 8.3.1	General refuse should be cleared daily and should be disposed of to the nearest licensed facility.	All areas, WENT landfill or NWNT refuse transfer stations/	Contractor	Requirement TMEIA, Sanitation and Conservancy (Regional Council) By-	D	C Y		N/A	Ongoing
14.7.2	8.3.1	Waste oils, chemicals or solvents shall	throughout construction period PAFF site/	Contractor	laws TMEIA		Y		N/A	Ongoing
11,	0.0.1	not be disposed of to drain.	throughout construction period	Continue			-			01.501.5
14.7.2	8.3.1	Good site practice shall be implemented to avoid waste generation and promote waste minimisation.	PAFF site/ throughout construction period	Contractor	TMEIA		Y			Ongoing
14.7.2	8.3.1	Waste materials such as paper, metal, timber and waste oil shall be recycled as far as practicable.	PAFF site/ throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	Temporary structures used during construction shall be provided in the form of proprietary Protakabin type units sited on areas of permanent hard paving units as far as practicable.	PAFF site/ throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	Dredged marine mud shall be disposed of in a gazetted marine disposal ground under the requirements of the Dumping at Sea Ordinance.	PAFF site/ throughout construction period				Y		N/A	Ongoing
14.7.2	8.3.1	All waste containers shall be in good condition and fitted with lids or covers to prevent waste from escaping or the ingress of water.	PAFF site/ throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing
14.7.2	8.3.1	All waste containers shall be in a secure area on hardstanding.	PAFF site/ throughout construction period	Contractor	TMEIA		Y		N/A	Ongoing

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location / Timing	Implementation Agent	Relevant Standard or Requirement	Im D	nplemen Sched C	Maintenance Agency	Implementation Status
14.7.2	8.3.1	Emergency equipment to deal with any spillage or fire shall be kept on site.	PAFF site/ throughout construction period		TMEIA		Y	N/A	Ongoing
14.7.2	8.3.1	All containers used for storage of chemical waste shall be maintained in good condition and clearly labelled in both English and Chinese.	PAFF site/ throughout construction period	Contractor	TMEIA		Y	N/A	Ongoing
14.7.2	8.3.1	All storage areas for chemical waste shall be:	•	Contractor	TMEIA		Y	N/A	Ongoing
		• Clearly labelled;	period						
		• Enclosed on at least 3 sides;							
		 Have impermeable floor and bunding sufficient to fully retain any spillage or leakages; 							
		• Ventilated; and,							
		 Covered to prevent rainfall from entering. 							
14.7.2	8.3.1	All types of asbestos including sources (such as clutch linings) shall be treated as chemical waste. Asbestos containing wastes shall be kept separate from other wastes.	PAFF site/ throughout construction period	Contractor	TMEIA		Y	N/A	Ongoing
14.7.2	8.3.1	All leaking containers shall be contained and removed from site an soon as is reasonably practicable.	PAFF site/ throughout construction period	Contractor	TMEIA		Y	N/A	Ongoing
14.7.2	8.3.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.	PAFF site/ throughout construction period	Contractor	TMEIA		Y	N/A	Ongoing

EIA	EM&A	Environmental Protection Measures	Location /	Implementation	Relevant	Im	plement	ation	Maintenance	Implementation
Reference	Manual		Timing	Agent	Standard or	Schedule		le	Agency	Status
	Reference				Requirement	D	C	Ο		
14.7.2	8.3.1	EM&A of waste handling, storage,	All areas/	Contractor	TMEIA		Y		N/A	Ongoing
Section 5		transportation, disposal procedures and	throughout							
		documentation through the site audit	construction							
		programme shall be undertaken.	period							

Annex F

QA/QC Results for Laboratory Testing of Suspended Solids

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

FACILITY



: 01-DEC-2008

Date received

CERTIFICATE OF ANALYSIS

· ERM HONG KONG : ALS Technichem (HK) Pty Ltd Client Laboratory Page : 1 of 5

: MS KAREN LUI : Wong Wai Man, Alice Work Order Contact Contact HK0819960 Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

> TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong : Karen.Lui@erm.com E-mail : Alice.Wong@alsenviro.com

Telephone : +852 2271 3000 : +852 2610 1044 Telephone

Facsimile : +852 2723 5660 Facsimile **+852 2610 2021**

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number

Date of issue : 08-DEC-2008 Order number

C-O-C number No. of samples Received 74

74 Analysed Site

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0819960 supersedes any previous reports with this reference. The completion date of analysis is . 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.

Sample(s) were collected by ALS Technichem (HK) staff on 01 December, 2008. Specific comments for Work Order HK0819960:

Water sample(s) analysed and reported on an as received basis.

This report may not be reproduced except with prior written This document has been electronically signed by those names that appear on this report and are the authorised signatories. approval from ALS Technichem (HK) Pty Ltd.

Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hong Kong. Chapter 553. Section 6.

Position Authorised results for:-Signatory

General Manager Fung Lim Chee, Richard Inorganics

Client : ERM HONG KONG

Work Order HK0819960



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	oratory Duplicate (DUP) F	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 831449)						
HK0819960-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
HK0819960-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 831450)						
HK0819960-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	19.5
HK0819960-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	11	9	20.8
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 831451)						
HK0819960-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0
HK0819960-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	21.8
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 831452)						
HK0819960-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0819960-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (Mi	3) Report		Laboratory Control S	Spike (LCS) and Laborat	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLo	t: 831449)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 831450)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 831451)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 831452)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

· ERM HONG KONG Client : MS KAREN LUI Contact

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

TAIKOO PLACE, ISLAND EAST,

QUARRY BAY, HONG KONG

E-mail : Karen.Lui@erm.com

Telephone : +852 2271 3000

Facsimile : +852 2723 5660

Project : EM&A FOR THE PERMANENT AVIATION FUEL

FACILITY

Order number

Address

C-O-C number Site

: ALS Technichem (HK) Pty Ltd Laboratory

: Wong Wai Man, Alice Contact

: 11/F., Chung Shun Knitting Centre,

1 - 3 Wing Yip Street,

Kwai Chung, N.T., Hong Kong

: Alice.Wong@alsenviro.com

: +852 2610 1044 Telephone

Facsimile +852 2610 2021

Date received

: 04-DEC-2008

: 1 of 5

HK0819964

Date of issue No. of samples

Page

Work Order

: 09-DEC-2008

Received Analysed 74 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0819964 supersedes any previous reports with this reference. The completion date of analysis is . 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 HK0819964:

Sample(s) were collected by ALS Technichem (HK) staff on 04 December, 2008.

Water sample(s) analysed and reported on an as received basis.

Address

E-mail

Quote number

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Signatory

Position

Authorised results for:-

Fung Lim Chee, Richard

General Manager

Inorganics

Client : ERM HONG KONG

Work Order HK0819964



Laboratory Duplicate (DUP) Report

Matrix: WATER					Lab	oratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 835586)						
HK0819964-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0
HK0819964-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 835587)						
HK0819964-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
HK0819964-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 835588)						
HK0819964-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0819964-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 835589)						
HK0819964-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0819964-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (MI	B) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLo	t: 835586)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 835587)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 835588)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Properties (QCLo	t: 835589)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

: +852 2723 5660



74

CERTIFICATE OF ANALYSIS

· ERM HONG KONG : ALS Technichem (HK) Pty Ltd Client Laboratory Page : 1 of 5

: MS KAREN LUI : Wong Wai Man, Alice Work Order Contact Contact HK0819963 Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

> TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong : Karen.Lui@erm.com E-mail : Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 : +852 2610 1044 Telephone

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : 05-DEC-2008 Date received

FACILITY

Date of issue : 10-DEC-2008 Order number

C-O-C number No. of samples Received

74 Analysed Site

+852 2610 2021

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0819963 supersedes any previous reports with this reference. The completion date of analysis is . 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.

Sample(s) were collected by ALS Technichem (HK) staff on 05 December, 2008. Specific comments for Work Order HK0819963:

Water sample(s) analysed and reported on an as received basis.

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of Hong Kong. Chapter 553. Section 6.

Position Authorised results for:-Signatory

General Manager Fung Lim Chee, Richard Inorganics

Client : ERM HONG KONG

Work Order HK0819963



Laboratory Duplicate (DUP) Report

Matrix: WATER					Lab	oratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836275)						
HK0819963-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0819963-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836276)						
HK0819963-024	IMO1 B DUP ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0
HK0819963-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836277)						
HK0819963-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0819963-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836278)						
HK0819963-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0819963-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (MI	B) Report		Laboratory Control S	pike (LCS) and Laborat	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD)s (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLc	ot: 836275)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLc	ot: 836276)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLc	ot: 836277)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLc	ot: 836278)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821670

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 06-DEC-2008

FACILITY

Order number : ---- Date of issue : 12-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821670 supersedes any previous reports with this reference. The completion date of analysis is 08-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0821670: Sample(s) were collected by ALS Technichem (HK) staff on 06 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821670



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) F	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836281)						
HK0821670-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
HK0821670-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836282)						
HK0821670-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
HK0821670-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	9	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836283)						
HK0821670-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
HK0821670-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 836284)						
HK0821670-091	C1 (NM3) S MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0
HK0821670-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1.0	mg/L	6	6.6	11.6

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CA	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	836281)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	836282)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	836283)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	836284)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

: +852 2723 5660



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI : Wong Wai Man, Alice Work Order : LIMO

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821677

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 08-DEC-2008

FACILITY

Order number : ---- Date of issue : 10-DEC-2008

C-O-C number : --- No. of samples - Received : 74

+852 2610 2021

Site : --- - Analysed : 74

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821677 supersedes any previous reports with this reference. The completion date of analysis is . 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 HK0821677: Sample(s) were collected by ALS Technichem (HK) staff on 07 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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of Hona Kona. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821677



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	d Aggregate Properties	(QC Lot: 837069)										
HK0821677-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
HK0821677-014	MPB2 S DUP ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837070)										
HK0821677-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
HK0821677-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837071)										
HK0821677-058	MPB1 M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	20.6				
HK0821677-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837072)										
HK0821677-078	IMO2 B DUP MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0				
HK0821677-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0				

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (Mi	3) Report		Laboratory Control S	Spike (LCS) and Laborat	ory Control S	pike Duplicat	te (DCS) Report	CS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLo	ot: 837069)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLo	ot: 837070)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLo	ot: 837071)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLo	ot: 837072)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115			

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

· ERM HONG KONG : ALS Technichem (HK) Pty Ltd Client Laboratory Page : 1 of 5

: MS KAREN LUI : Wong Wai Man, Alice Work Order Contact Contact HK0821676 Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

> TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong E-mail : Alice.Wong@alsenviro.com

E-mail : Karen.Lui@erm.com Telephone : +852 2271 3000 : +852 2610 1044 Telephone

Facsimile : +852 2723 5660 Facsimile +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : 08-DEC-2008 Date received

FACILITY

Date of issue : 10-DEC-2008 Order number

C-O-C number No. of samples Received 74

74 Analysed Site

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821676 supersedes any previous reports with this reference. The completion date of analysis is . 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.

Sample(s) were collected by ALS Technichem (HK) staff on 08 December, 2008. Specific comments for Work Order HK0821676:

Water sample(s) analysed and reported on an as received basis.

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Position Authorised results for:-Signatory

General Manager Fung Lim Chee, Richard Inorganics

Client : ERM HONG KONG

Work Order HK0821676



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	d Aggregate Properties	(QC Lot: 837591)										
HK0821676-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0				
HK0821676-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837592)										
HK0821676-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0				
HK0821676-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837593)										
HK0821676-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	17.0				
HK0821676-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 837594)										
HK0821676-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0				
HK0821676-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	10	9	16.5				

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Control S	pike (LCS) and Laborat	ory Control S	pike Duplicat	e (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	9s (%)
Method: Compound CA	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 8	337591)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	337592)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	337593)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	337594)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	107		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821675

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

21/F, LINCOLN HOUSE, 979 KING'S ROAD,
Address
: 11/F., Chung Shun Knitting Centre,
TAIKOO PLACE, ISLAND EAST,
1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 09-DEC-2008

FACILITY

Order number : ---- Date of issue : 12-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821675 supersedes any previous reports with this reference. The completion date of analysis is . 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 HK0821675: Sample(s) were collected by ALS Technichem (HK) staff on 09 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821675



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	d Aggregate Properties	(QC Lot: 839051)									
HK0821675-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	8	7	14.9			
HK0821675-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 839052)									
HK0821675-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
HK0821675-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 839053)									
HK0821675-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0			
HK0821675-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 839054)									
HK0821675-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0			
HK0821675-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	8	18.8			

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 (DC							te (DCS) Report	DCS) Report		
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound C	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	839051)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	839052)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	839053)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	839054)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



74

CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821672

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 10-DEC-2008

FACILITY

Order number : ---- Date of issue : 15-DEC-2008

C-O-C number : ---- No. of samples - Received :

Site : --- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821672 supersedes any previous reports with this reference. The completion date of analysis is 12-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0821672: Sample(s) were collected by ALS Technichem (HK) staff on 10 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Page

: 1 of 5

Client : ERM HONG KONG

Work Order HK0821672



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	d Aggregate Properties	(QC Lot: 840467)									
HK0821672-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0			
HK0821672-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 840468)									
HK0821672-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0			
HK0821672-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 840469)									
HK0821672-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0			
HK0821672-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	7	14.4			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 840470)									
HK0821672-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0			
HK0821672-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0			

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	B) Report		Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report					
					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS N	lumber	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 840	0467)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	106		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 840	0468)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 840	0469)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 840	0470)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821671

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 11-DEC-2008

FACILITY

Order number : ---- Date of issue : 16-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821671 supersedes any previous reports with this reference. The completion date of analysis is 13-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0821671: Sample(s) were collected by ALS Technichem (HK) staff on 11 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hona Kona. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821671



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	d Aggregate Properties	s (QC Lot: 842430)									
HK0821671-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0			
HK0821671-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	17.2			
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 842431)									
HK0821671-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
HK0821671-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	9	9	0.0			
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 842432)									
HK0821671-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0			
HK0821671-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0			
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 842433)									
HK0821671-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0			
HK0821671-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
					-						

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 842430)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	42431)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	42432)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	342433)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0822848

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 12-DEC-2008

FACILITY

Order number : ---- Date of issue : 17-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

+852 2610 2021

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822848 supersedes any previous reports with this reference. The completion date of analysis is 16-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822848 : Sample(s) were collected by ALS Technichem (HK) staff on 12 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822848



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	d Aggregate Properties	(QC Lot: 844538)										
HK0822848-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0				
HK0822848-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844539)										
HK0822848-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				
HK0822848-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844540)										
HK0822848-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0				
HK0822848-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844541)										
HK0822848-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
HK0822848-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0				

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	ke Spike Recovery (%)		Recovery	Limits (%)	RPD	RPDs (%)	
Method: Compound CAS I	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 84	4538)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 84	4539)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 84	4540)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	90.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 84	4541)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	92.0		85	115			

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

· ERM HONG KONG Client

: MS KAREN LUI

Laboratory Contact

: ALS Technichem (HK) Pty Ltd : Wong Wai Man, Alice

Kwai Chung, N.T., Hong Kong

Page

: 1 of 5

Contact Address

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

Address

: 11/F., Chung Shun Knitting Centre,

Work Order

HK0822954

TAIKOO PLACE, ISLAND EAST, **QUARRY BAY, HONG KONG**

: Karen.Lui@erm.com

E-mail

: Alice.Wong@alsenviro.com

1 - 3 Wing Yip Street,

· +852 2610 1044

+852 2271 3000 Telephone Facsimile +852 2723 5660

Telephone Facsimile

+852 2610 2021

: EM&A FOR THE PERMANENT AVIATION FUEL

Quote number

Date received

· 13-DEC-2008

Order number

E-mail

Project

Site

C-O-C number

FACILITY

Date of issue

: 17-DEC-2008

No. of samples

Received

74

Analysed

74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822954 supersedes any previous reports with this reference. The completion date of analysis is 16-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822954:

Sample(s) were collected by ALS Technichem (HK) staff on 13 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory

Position

Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822954



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	d Aggregate Properties	(QC Lot: 844546)										
HK0822954-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0				
HK0822954-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844547)										
HK0822954-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0				
HK0822954-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844548)										
HK0822954-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	18.4				
HK0822954-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	18.2				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844549)										
HK0822954-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	13.2				
HK0822954-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)	
Method: Compound CA	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot:	844546)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	844547)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	844548)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	103		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	844549)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115			

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG
Contact : MS KAREN LUI

ONG KONG Laboratory

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

TAIKOO PLACE, ISLAND EAST,

QUARRY BAY, HONG KONG

E-mail : Karen.Lui@erm.com

Telephone : +852 2271 3000

Facsimile : +852 2723 5660

Project : EM&A FOR THE PERMANENT AVIATION FUEL

FACILITY

Order number : ----

C-O-C number : ----

Site

tory : ALS Technichem (HK) Pty Ltd

Contact Wong Wai Man, Alice

Address : 11/F.. Chung Shun Kr

: 11/F., Chung Shun Knitting Centre,

1 - 3 Wing Yip Street,

Kwai Chung, N.T., Hong Kong
: Alice.Wong@alsenviro.com

E-mail : Alice.Wong@alse

Telephone : +852 2610 1044

Facsimile : +852 2610 2021

Quote number : ----

Date received : 14

: 14-DEC-2008

HK0822943

: 1 of 5

Date of issue

Page

Work Order

: 17-DEC-2008

Analysed

No. of samples - Received

•

74

74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822943 supersedes any previous reports with this reference. The completion date of analysis is 16-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822943:

Sample(s) were collected by ALS Technichem (HK) staff on 14 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822943



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	d Aggregate Properties	(QC Lot: 844542)										
HK0822943-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0				
HK0822943-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844543)										
HK0822943-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0				
HK0822943-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844544)										
HK0822943-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	13.6				
HK0822943-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 844545)										
HK0822943-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	9	8	0.0				
HK0822943-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 8	344542)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	92.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	344543)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	844544)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	844545)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

· ERM HONG KONG Client

Laboratory : MS KAREN LUI

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

TAIKOO PLACE, ISLAND EAST,

QUARRY BAY, HONG KONG

E-mail : Karen.Lui@erm.com

+852 2271 3000 Telephone

Facsimile +852 2723 5660

Project : EM&A FOR THE PERMANENT AVIATION FUEL

FACILITY

Order number

Contact

Address

C-O-C number Site

: Wong Wai Man, Alice Contact

: 11/F., Chung Shun Knitting Centre,

1 - 3 Wing Yip Street,

Kwai Chung, N.T., Hong Kong

: Alice.Wong@alsenviro.com

: ALS Technichem (HK) Pty Ltd

· +852 2610 1044 Telephone

Facsimile +852 2610 2021

Quote number

· 15-DEC-2008 Date received

Page

Work Order

: 1 of 5

HK0822944

Date of issue : 18-DEC-2008 No. of samples

74 Received 74

Analysed

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822944 supersedes any previous reports with this reference. The completion date of analysis is 16-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822944:

Sample(s) were collected by ALS Technichem (HK) staff on 15 December, 2008.

Water sample(s) analysed and reported on an as received basis.

Address

E-mail

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Position Authorised results for:-Signatory

Page Number : 5

: 5 of 5

Client : ERM HONG KONG

Work Order HK0822944



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	d Aggregate Properties	(QC Lot: 845244)										
HK0822944-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	11	10	0.0				
HK0822944-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 845245)										
HK0822944-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0				
HK0822944-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	9	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 845246)										
HK0822944-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0				
HK0822944-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 845247)										
HK0822944-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	9	9	0.0				
HK0822944-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CA	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 8	345244)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	345245)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	845246)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	345247)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



74

CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0822945

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 16-DEC-2008

FACILITY

Order number : ---- Date of issue : 19-DEC-2008

C-O-C number : ---- No. of samples - Received :

Site : --- - - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822945 supersedes any previous reports with this reference. The completion date of analysis is 18-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822945 : Sample(s) were collected by ALS Technichem (HK) staff on 16 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822945



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) i	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 847192)						
HK0822945-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0
HK0822945-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 847193)						
HK0822945-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
HK0822945-047	C2 (NM5) B ME	EA025: Suspended Solids (SS)		1	mg/L	8	9	13.8
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 847194)						
HK0822945-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
HK0822945-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
EA/ED: Physical and	d Aggregate Properties	s (QC Lot: 847195)						
HK0822945-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0822945-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
	· ·							

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

, , , , ,		• /				• •					
Matrix: WATER			Method Blank (MI	B) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplica	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot	: 847192)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	92.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	: 847193)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	112		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	: 847194)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	: 847195)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0822946

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD. Address : 11/F, Chung Shun Knitting Centre.

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre, TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

Facsimile

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 17-DEC-2008

FACILITY

Order number : ---- Date of issue : 22-DEC-2008

C-O-C number : --- No. of samples - Received : 74

+852 2610 2021

Site : --- - Analysed : 74

Report Comments

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822946 supersedes any previous reports with this reference. The completion date of analysis is 19-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822946 : Sample(s) were collected by ALS Technichem (HK) staff on 17 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822946



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	d Aggregate Properties	(QC Lot: 848624)										
HK0822946-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	12	11	10.3				
HK0822946-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	7	14.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 848625)										
HK0822946-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0				
HK0822946-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 848626)										
HK0822946-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0				
HK0822946-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	9	8	15.6				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 848627)										
HK0822946-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0				
HK0822946-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 8	48624)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	92.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	48625)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	48626)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	48627)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

· ERM HONG KONG Client Contact

: MS KAREN LUI

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

Address

TAIKOO PLACE, ISLAND EAST,

QUARRY BAY, HONG KONG

: Karen.Lui@erm.com E-mail +852 2271 3000

Telephone

Facsimile +852 2723 5660

Project : EM&A FOR THE PERMANENT AVIATION FUEL **FACILITY**

Order number

C-O-C number Site

Laboratory

E-mail

: ALS Technichem HK Pty Ltd

: Wong Wai Man, Alice Contact

Address : 11/F., Chung Shun Knitting Centre,

1 - 3 Wing Yip Street,

Kwai Chung, N.T., Hong Kong : Alice.Wong@alsenviro.com

· +852 2610 1044 Telephone

Facsimile +852 2610 2021 Quote number

Date received

Page

Work Order

· 18-DEC-2008

HK0822947

: 1 of 5

Date of issue No. of samples : 23-DEC-2008 Received Analysed

74

74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822947 supersedes any previous reports with this reference. The completion date of analysis is 19-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822947:

Sample(s) were collected by ALS Technichem (HK) staff on 18 December, 2008.

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

Client : ERM HONG KONG

Work Order HK0822947



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	d Aggregate Properties	(QC Lot: 849284)										
HK0822947-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				
HK0822947-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 849285)										
HK0822947-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0				
HK0822947-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 849286)										
HK0822947-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0				
HK0822947-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 849287)										
HK0822947-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0				
HK0822947-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 84	49284)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 84	49285)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 84	49286)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 84	49287)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	106		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



74

CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5
Contact : MS KAREN LUI : Wong Wai Man, Alice Work Order : LICON

Contact : MS KAREN LUI : Wong Wai Man, Alice : Work Order : HK0822949

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 19-DEC-2008

FACILITY

Order number : ---- Date of issue : 24-DEC-2008

C-O-C number : ---
No. of samples - Received

Site : ---- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822949 supersedes any previous reports with this reference. The completion date of analysis is 22-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822949 : Sample(s) were collected by ALS Technichem (HK) staff on 19 December, 2008

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822949



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) F	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	Aggregate Properties (Q	C Lot: 850377)						
HK0822949-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0
HK0822949-018	MPB2 B DUP ME	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0
EA/ED: Physical and	Aggregate Properties (Q	C Lot: 850378)						
HK0822949-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
HK0822949-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	17.3
EA/ED: Physical and	Aggregate Properties (Q	C Lot: 850379)						
HK0822949-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0822949-102	C3 (NM6) B DUP MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	23.4
EA/ED: Physical and	Aggregate Properties (Q	C Lot: 850380)						
HK0822949-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0
HK0822949-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0

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 Re	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 85	50377)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 85	60378)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 85	0379)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	92.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 85	60380)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	89.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5
Contact : MS KAREN LUI : Wong Wai Man, Alice Work Order : LICON

Contact : MS KAREN LUI : Wong Wai Man, Alice : Work Order : HK0822948

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Karen.Lui@erm.com

E-mail

Kwai Chung, N.T., Hong Kong

Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 20-DEC-2008

FACILITY

Order number : ---- Date of issue : 24-DEC-2008

C-O-C number : --- No. of samples - Received : 74

+852 2610 2021

Site : --- - Analysed : 74

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822948 supersedes any previous reports with this reference. The completion date of analysis is 23-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822948 : Sample(s) were collected by ALS Technichem (HK) staff on 20 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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approval from ALS Technichem (HK) Pty Ltd.

Flectronic signing has been carried out in compliance with procedures specified in the 'Flectronic Transactions Ordinance'

Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822948



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	oratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851513)						
HK0822948-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0822948-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851514)						
HK0822948-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
HK0822948-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851515)						
HK0822948-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0822948-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851516)						
HK0822948-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0
HK0822948-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS Number	r LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 851513)									
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	91.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 851514										
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 851515										
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	92.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 851516										
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	108		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem HK Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821673

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD. Address : 11/F, Chung Shun Knitting Centre.

: 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre, TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 21-DEC-2008

FACILITY

Order number : ---- Date of issue : 24-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821673 supersedes any previous reports with this reference. The completion date of analysis is 23-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0821673: Sample(s) were collected by ALS Technichem (HK) staff on 21 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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approval from ALS Technichem (HK) Pty Ltd.

Flectronic signing has been carried out in compliance with procedures specified in the 'Flectronic Transactions Ordinance'

Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hona Kona. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821673



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	d Aggregate Properties	(QC Lot: 851509)										
HK0821673-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0				
HK0821673-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851510)										
HK0821673-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0				
HK0821673-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	21.8				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851511)										
HK0821673-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0				
HK0821673-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0				
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 851512)										
HK0821673-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	5	4	22.6				
HK0821673-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0				

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound Ca	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	851509)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	90.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	851510)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	851511)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	108		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	851512)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



74

CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem HK Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821674

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Karen.Lui@erm.com

E-mail

Kwai Chung, N.T., Hong Kong

Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 22-DEC-2008

FACILITY

Order number : ---- Date of issue : 29-DEC-2008

C-O-C number : --- No. of samples - Received :

Site : --- - - Analysed : 74

+852 2610 2021

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0821674 supersedes any previous reports with this reference. The completion date of analysis is 24-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0821674: Sample(s) were collected by ALS Technichem (HK) staff on 22 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0821674



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852473)						
HK0821674-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	2	2	0.0
HK0821674-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852474)						
HK0821674-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	3	2	0.0
HK0821674-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852476)						
HK0821674-058	MPB1 M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0
HK0821674-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852477)						
HK0821674-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	2	3	0.0
HK0821674-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0

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 Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CA	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	852473)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	852474)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	852476)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	852477)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0822953

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Karen.Lui@erm.com

E-mail

Kwai Chung, N.T., Hong Kong

Alice.Wong@alsenviro.com

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.co

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 23-DEC-2008

FACILITY

Order number : ---- Date of issue : 30-DEC-2008

C-O-C number : ---- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822953 supersedes any previous reports with this reference. The completion date of analysis is 29-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822953: Sample(s) were collected by ALS Technichem (HK) staff on 23 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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of Hona Kona. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822953



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852801)						
HK0822953-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	3	2	0.0
HK0822953-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852802)						
HK0822953-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0822953-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852803)						
HK0822953-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0822953-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 852804)						
HK0822953-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0822953-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0

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 Re	ecovery (%)	Recovery	Limits (%)	RPD	s (%)	
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 8	52801)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	52802)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	52803)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	52804)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	106		85	115			

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG : ALS Technichem HK Pty Ltd Page : 1 of 5

TAIKOO PLACE, ISLAND EAST,

1 - 3 Wing Yip Street,

Facsimile

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 24-DEC-2008

FACILITY

Order number : ---- Date of issue : 31-DEC-2008

C-O-C number : --- No. of samples - Received : 74

+852 2610 2021

Site : --- - Analysed : 74

Report Comments

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822952 supersedes any previous reports with this reference. The completion date of analysis is 29-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0822952: Sample(s) were collected by ALS Technichem (HK) staff on 24 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0822952



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	d Aggregate Properties	(QC Lot: 853243)											
HK0822952-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0					
HK0822952-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0					
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853244)											
HK0822952-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	3	3	0.0					
HK0822952-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0					
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853245)											
HK0822952-058	MPB1 M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0					
HK0822952-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0					
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853246)											
HK0822952-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0					
HK0822952-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0					

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

				<u> </u>		• •					
Matrix: WATER			Method Blank (MI	3) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplica	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot	853243)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	853244)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	853245)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	108		85	115		
EA/ED: Physical and Aggregate Properties (QCLot	853246)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem HK Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0820878

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F,, Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 25-DEC-2008

FACILITY

Order number : ---- Date of issue : 31-DEC-2008

C-O-C number : ---- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0820878 supersedes any previous reports with this reference. The completion date of analysis is 29-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0820878 : Sample(s) were collected by ALS Technichem (HK) staff on 25 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0820878



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853679)						
HK0820878-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0820878-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853680)						
HK0820878-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
HK0820878-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	9	8	14.1
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853681)						
HK0820878-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
HK0820878-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853682)						
HK0820878-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
HK0820878-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	B) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CA	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	853679)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	853680)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	853681)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	853682)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0823733

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Karen.Lui@erm.com

E-mail

Kwai Chung, N.T., Hong Kong

Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 26-DEC-2008

FACILITY

Order number : ---- Date of issue : 31-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0823733 supersedes any previous reports with this reference. The completion date of analysis is 29-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0823733: Sample(s) were collected by ALS Technichem (HK) staff on 26 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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approval from ALS Technichem (HK) Pty Ltd.

Flectronic signing has been carried out in compliance with procedures specified in the 'Flectronic Transactions Ordinance'

Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0823733



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	oratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853247)						
HK0823733-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	19.8
HK0823733-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853248)						
HK0823733-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
HK0823733-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	18.4
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853249)						
HK0823733-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0823733-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 853250)						
HK0823733-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0823733-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Control S	Spike (LCS) and Laborate	ory Control S	pike Duplica	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 8	53247)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	53248)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	105		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	53249)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		
EA/ED: Physical and Aggregate Properties (QCLot: 8	53250)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



74

CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem HK Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0823726

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Karen.Lui@erm.com

E-mail

Kwai Chung, N.T., Hong Kong

Alice.Wong@alsenviro.com

Facsimile

 E-mail
 : Karen.Lui@erm.com
 E-mail
 : Alice.Wong@alsenviro.

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 27-DEC-2008

FACILITY

Order number : ---- Date of issue : 31-DEC-2008

C-O-C number : --- No. of samples - Received :

Site : --- - Analysed : 74

+852 2610 2021

Report Comments

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0823726 supersedes any previous reports with this reference. The completion date of analysis is 30-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0823726: Sample(s) were collected by ALS Technichem (HK) staff on 27 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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approval from ALS Technichem (HK) Pty Ltd.

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of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0823726



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	d Aggregate Properties	(QC Lot: 854262)												
HK0823726-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0						
HK0823726-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0						
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854263)												
HK0823726-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0						
HK0823726-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0						
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854264)												
HK0823726-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0						
HK0823726-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0						
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854265)												
HK0823726-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	9	8	16.0						
HK0823726-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0						

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	3) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplicat	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound CA	S Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot:	854262)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	854263)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	854264)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115		
EA/ED: Physical and Aggregate Properties (QCLot:	854265)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	88.0		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client: ERM HONG KONG Laboratory: ALS Technichem HK Pty Ltd Page: 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0823730

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 28-DEC-2008

FACILITY

Order number : ---- Date of issue : 31-DEC-2008

C-O-C number : --- No. of samples - Received : 74

Site : --- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0823730 supersedes any previous reports with this reference. The completion date of analysis is 30-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0823730 : Sample(s) were collected by ALS Technichem (HK) staff on 28 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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of Hona Kona. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Page Number

: 5 of 5 Client : ERM HONG KONG

Work Order HK0823730



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) F	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854268)						
HK0823730-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0
HK0823730-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854269)						
HK0823730-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0823730-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854270)						
HK0823730-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	5	0.0
HK0823730-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	20.1
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854271)						
HK0823730-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0823730-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	B) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplica	te (DCS) Report	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	s (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QC	CLot: 854268)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Properties (QC	CLot: 854269)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		
EA/ED: Physical and Aggregate Properties (QC	CLot: 854270)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Properties (QC	CLot: 854271)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	106		85	115		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

FACILITY



CERTIFICATE OF ANALYSIS

· ERM HONG KONG : ALS Technichem HK Pty Ltd Client Laboratory Page : 1 of 5

: MS KAREN LUI : Wong Wai Man, Alice Work Order Contact Contact HK0823731 Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

: Karen.Lui@erm.com E-mail : Alice.Wong@alsenviro.com E-mail +852 2271 3000 · +852 2610 1044 Telephone Telephone

Facsimile +852 2723 5660 Facsimile +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number · 29-DEC-2008 Date received

Date of issue : 02-JAN-2009 Order number

C-O-C number No. of samples Received

74 74 Analysed Site

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0823731 supersedes any previous reports with this reference. The completion date of analysis is 30-DEC-2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Sample(s) were collected by ALS Technichem (HK) staff on 29 December, 2008. Specific comments for Work Order HK0823731:

Water sample(s) analysed and reported on an as received basis.

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Position Authorised results for:-Signatory

Client : ERM HONG KONG

Work Order HK0823731



Laboratory Duplicate (DUP) Report

Matrix: WATER					Labo	ratory Duplicate (DUP) I	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854272)						
HK0823731-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
HK0823731-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854273)						
HK0823731-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0
HK0823731-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	9	8	20.1
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854274)						
HK0823731-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	9	9	0.0
HK0823731-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 854275)						
HK0823731-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	9	10	11.0
HK0823731-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0

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 (%)		RPD	RPDs (%)	
Method: Compound CAS	Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 8	54272)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	54273)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	54274)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 8	54275)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115			

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



74

CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0823732

Address : 21/F, LINCOLN HOUSE, 979 KING`S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

 Telephone
 : +852 2271 3000
 Telephone
 : +852 2610 1044

 Facsimile
 : +852 2723 5660
 Facsimile
 : +852 2610 2021

Project: EM&A FOR THE PERMANENT AVIATION FUEL Quote number: --- Date received: 30-DEC-2008

FACILITY

Order number : ---- Date of issue : 06-JAN-2009

C-O-C number : ---- No. of samples - Received :

Site : ---- - Analysed : 74

Report Comments

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0823732 supersedes any previous reports with this reference. The completion date of analysis is 03-JAN-2009. 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 HK0823732 : Sample(s) were collected by ALS Technichem (HK) staff on 30 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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Signatory Position Authorised results for:-

Page Number : 5 of 5

Client : ERM HONG KONG

Work Order HK0823732



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	d Aggregate Properties (C	QC Lot: 855584)									
HK0823732-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	9	9	0.0			
HK0823732-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0			
EA/ED: Physical and	d Aggregate Properties (C	QC Lot: 855585)									
HK0823732-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	11	11	0.0			
HK0823732-046	C2 (NM5) M DUP ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0			
EA/ED: Physical and	d Aggregate Properties (C	QC Lot: 855586)									
HK0823732-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	11	10	12.4			
HK0823732-069	IMO1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
EA/ED: Physical and	d Aggregate Properties (C	QC Lot: 855587)									
HK0823732-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	10	9	0.0			
HK0823732-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	9	8	0.0			

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

, ,,	•					• •						
Matrix: WATER			Method Blank (MI	3) Report		Laboratory Control S	pike (LCS) and Laborate	ory Control S	pike Duplica	te (DCS) Report		
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)		
Method: Compound Ca	AS Number	LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 855584)												
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	91.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	855585)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	855586)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot:	855587)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 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.

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

+852 2723 5660



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 5

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0822950

Address : 21/F, LINCOLN HOUSE, 979 KING'S ROAD, Address : 11/F., Chung Shun Knitting Centre,

TAIKOO PLACE, ISLAND EAST, 1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG

Kwai Chung, N.T., Hong Kong

Karen.Lui@erm.com

E-mail

Alice.Wong@alsenviro.com

Facsimile

Telephone : +852 2271 3000 Telephone : +852 2610 1044

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 31-DEC-2008

FACILITY

Order number : ---- Date of issue : 06-JAN-2009

C-O-C number : --- No. of samples - Received : 74

Site : --- - - Analysed : 74

+852 2610 2021

Report Comments

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0822950 supersedes any previous reports with this reference. The completion date of analysis is 03-JAN-2009. 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 HK0822950: Sample(s) were collected by ALS Technichem (HK) staff on 31 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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This document has been electronically signed by those names that appear on this report and are the authorised signatories.

approval from ALS Technichem (HK) Pty Ltd.

Flectronic signing has been carried out in compliance with procedures specified in the 'Flectronic Transactions Ordinance'

Electronic signing has been carried out in compliance with procedures specified in the 'Electronic Transactions Ordinance'

of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Fung Lim Chee, Richard General Manager Inorganics

Page Number : 5 of 5

Client : ERM HONG KONG

Work Order HK0822950



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: 855580)											
HK0822950-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0			
HK0822950-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 855581)									
HK0822950-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	9	8	0.0			
HK0822950-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	9	12.1			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 855582)									
HK0822950-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0			
HK0822950-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0			
EA/ED: Physical and	d Aggregate Properties	(QC Lot: 855583)									
HK0822950-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	19.0			
HK0822950-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	9	8	18.9			

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 Numb	r LOR	Unit	Result	Concentration	LCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 855580)											
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	99.0		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 855581)											
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	98.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 855582)										
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	93.5		85	115			
EA/ED: Physical and Aggregate Properties (QCLot: 855583)											
EA025: Suspended Solids (SS)	- 2	mg/L	<2	20 mg/L	103		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 G

Impact Water Quality Monitoring Results

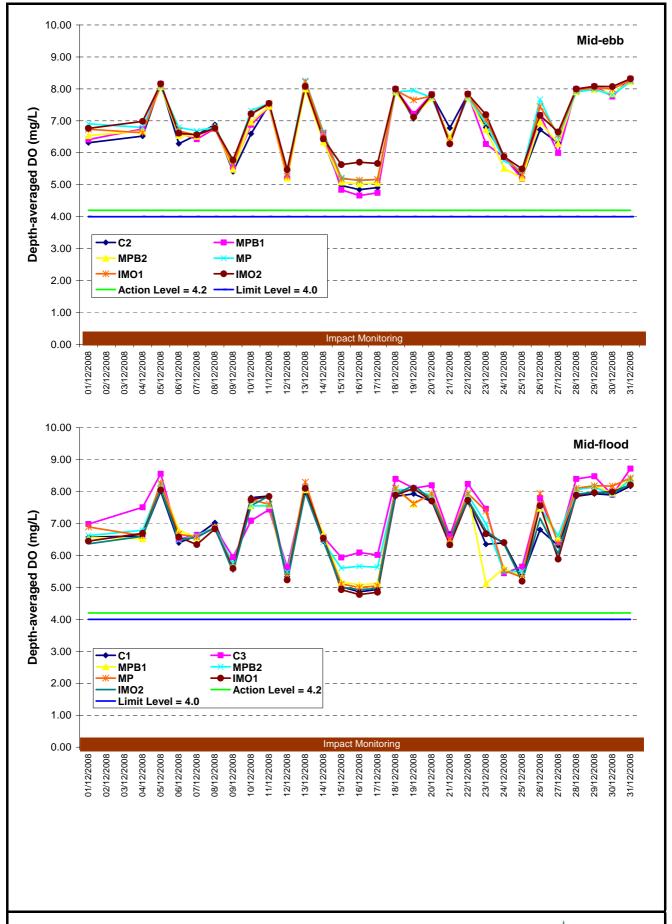


Figure G1 Dissolved oxygen concentration (depth-averaged) (mg/L) of water samples from the eight sampling locations at mid-ebb and mid-flood between 1 Dec to 31 Dec 08. No monitoring was conducted in from 2 Dec to 3 Dec since no dredging operation was undertaken.



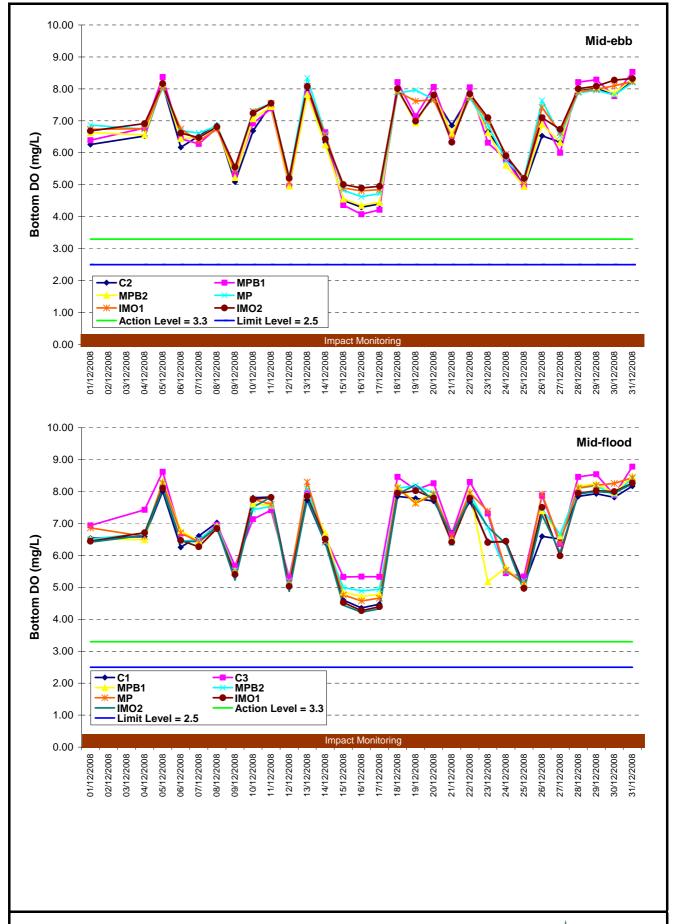


Figure G2 Dissolved oxygen concentration (bottom) (mg/L) of water samples from the eight sampling locations at mid-ebb and mid-flood between 1 Dec to 31 Dec 08. No monitoring was conducted in from 2 Dec to 3 Dec since no dredging operation was undertaken.



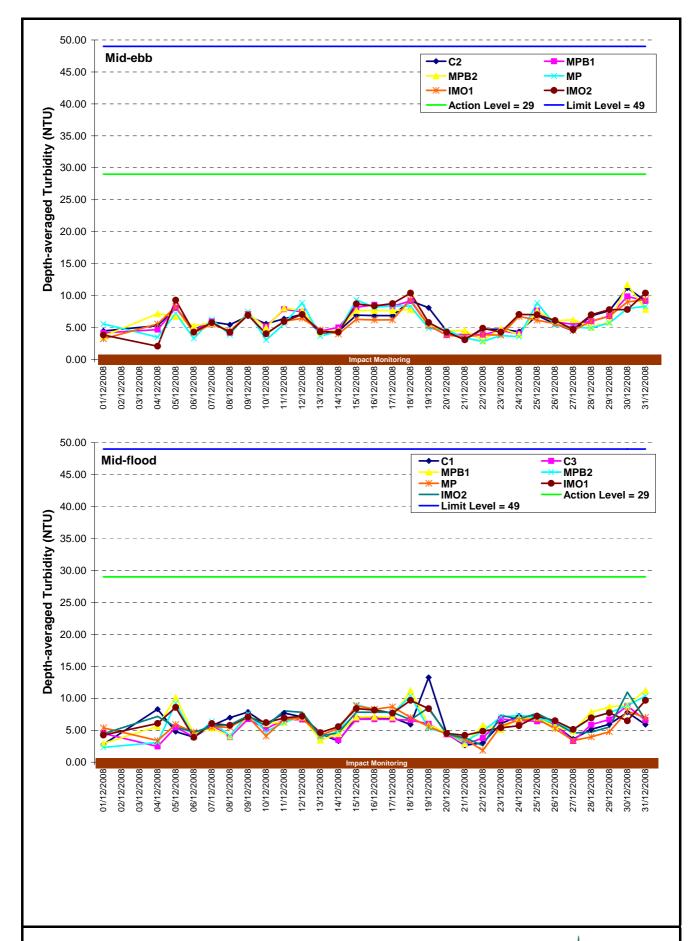


Figure G3 Depth-averaged turbidity (NTU) of water samples from the eight sampling locations at mid-ebb and mid-flood between 1 Dec to 31 Dec 08. No monitoring was conducted in from 2 Dec to 3 Dec since no dredging operation was undertaken.



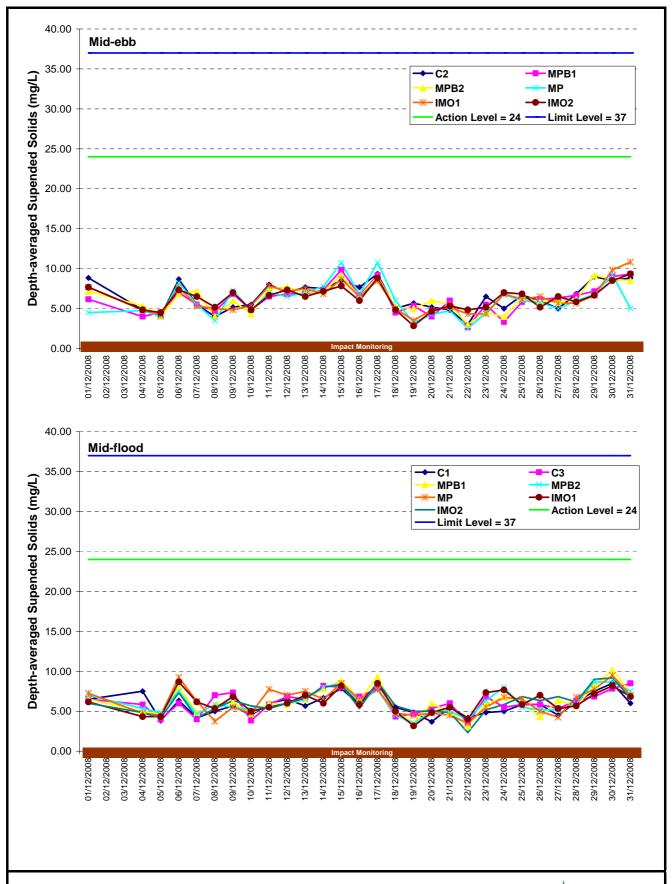


Figure G4 Depth-averaged suspended solids concentration (mg/L) of water samples from the eight sampling locations at mid-ebb and mid-flood between 1 Dec to 31 Dec 08. No monitoring was conducted in from 2 Dec to 3 Dec since no dredging operation was undertaken.



Sampling Date	01/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1	
Time (hh:mm)			14:37	-14:40				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.4	21.3	22.0	22.1	22.0	22.0	21.78	-
Salinity (ppt)	29.7	29.7	32.8	32.9	33.3	33.2	31.93	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.21	
D.O. Saturation (%)	93.5	93.1	88.8	89.7	92.0	91.3	91.40	-
D.O. (mg/L)	6.6	6.6	6.1	6.1	6.3	6.2	6.31	6.26
Turbidity (NTU)	3.4	3.2	4.4	4.2	5.9	5.8	4.48	-
SS (mg/L)	8.0	6.0	10.0	8.83	-			
Remarks			No	dredging wo	orks was obs	erved.	•	

I =												
Station			IM	01			Co-ore	dinates				
Time (hh:mm)			14:51	-14:53			Northing	Easting				
Water Depth (m)				22.22.122	113.55.223							
Monitoring Depth (m)	1	.0	6	.4	11	1.8		-				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom				
							averaged					
Water Temperature (°C)	22.4	22.4	23.0	23.0	22.0	22.0	22.47	-				
Salinity (ppt)	31.3	31.4	32.7	32.6	32.8	32.8	32.25	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.17					
D.O. Saturation (%)	95.5	95.9	93.6	92.6	94.0	93.3	94.15	-				
D.O. (mg/L)	6.6	6.6	6.3	6.3	6.4	6.38	6.41	6.40				
Turbidity (NTU)	3.5	3.4	4.2	4.4	4.8	4.7	4.17	-				
SS (mg/L)	7.0 6.0 6.0 6.0 6.0							-				
Remarks		No dredging works was observed.										

Station			IM	02			Co-ord	dinates
Time (hh:mm)			15:03	-15:05			Northing	Easting
Water Depth (m)				22.21.839	113.55.724			
Monitoring Depth (m)	1	.0	4	4.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	22.6	22.6	22.0	22.0	21.8	21.8	22.11	-
Salinity (ppt)	31.7	31.7	32.6	32.6	32.7	32.7	32.34	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.19	
D.O. Saturation (%)	97.5	96.5	93.2	92.4	96.6	96.5	95.45	-
D.O. (mg/L)	6.7	6.6	6.4	6.3	6.6	6.62	6.54	6.63
Turbidity (NTU)	2.9	3.0	3.5	3.6	4.3	4.5	3.63	-
SS (mg/L)	7.0	7.0	7.17	-				
Remarks			No	dredging wo	orks was obs	erved.	•	

Station			MF	PB1			1	
Time (hh:mm)			14:13	-14:15				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.1	21.1	21.3	21.3	21.4	21.4	21.26	-
Salinity (ppt)	27.4	27.2	30.1	30.2	30.4	30.4	29.30	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.19	
D.O. Saturation (%)	94.8	96.2	93.9	94.1	96.4	95.4	95.13	-
D.O. (mg/L)	6.8	6.9	6.6	6.6	6.8	6.7	6.74	6.74
Turbidity (NTU)	2.9	2.7	3.4	3.2	3.7	3.5	3.23	-
SS (mg/L)	5.0	6.0	9.0	7.67	-			
Remarks			No	dredging wo	orks was obs	served.		

Station			M	PB2							
Time (hh:mm)			14:02	-14:04							
Water Depth (m)			g	1.2							
Monitoring Depth (m)	1	.0	.2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	21.3	21.2	21.3	21.3	21.3	21.3	21.25	-			
Salinity (ppt)	29.1	29.1	29.3	29.3	32.7	32.7	30.37	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.21				
D.O. Saturation (%)	96.6	97.2	95.1	95.3	96.6	96.0	96.13	-			
D.O. (mg/L)	6.9	6.9	6.7	6.8	6.7	6.7	6.76	6.69			
Turbidity (NTU)	3.4	3.2	3.9	3.7	4.3	4.5	3.83	-			
SS (mg/L)	7.0	7.0	10.0	8.0	7.0	7.0	7.67	-			
Remarks		No dredging works was observed.									

Station			N	IP			1	
Time (hh:mm)			14:23	-14:24				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.9	21.0	-	-	21.5	21.5	21.21	-
Salinity (ppt)	28.5	28.6	-	-	31.2	31.2	29.87	-
pH	8.2	8.2	-	-	8.2	8.2	8.17	
D.O. Saturation (%)	97.4	96.7	-	-	99.2	97.9	97.80	-
D.O. (mg/L)	7.0	6.9	-	-	6.9	6.8	6.91	6.87
Turbidity (NTU)	4.7	4.5	-	-	6.6	6.5	5.58	-
SS (mg/L)	4.0	4.0	-	-	4.0	6.0	4.50	-
Remarks		-	No	dredging wo	orks was obs	erved.	•	

Compliance with Action at	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		IMO2		MPB1		B2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.3	6.3	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.3	6.3	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.8	5.8	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	11.5	11.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	01/12/2008
Weather & Ambient Temperature	Sunny, 18C

Station			C1 (
Time (hh:mm)			9:43					
Water Depth (m)			16	5.2				
Monitoring Depth (m)	1	.0	8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.8	21.8	21.6	21.6	22.0	22.0	21.81	-
Salinity (ppt)	32.4	32.5	32.8	32.8	33.3	33.3	32.85	-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.10	
D.O. Saturation (%)	96.4	97.3	95.0	94.6	95.4	96.1	95.80	-
D.O. (mg/L)	6.6	6.7	6.5	6.5	6.5	6.6	6.57	6.54
Turbidity (NTU)	2.1	2.2	2.8	2.6	3.4	3.6	2.78	-
SS (mg/L)	7.0	6.0	6.0	8.0	6.0	6.0	6.50	-
Remarks				was observed	d.			

Station			C3 (
Time (hh:mm)			11:08									
Water Depth (m)			6	.2								
Monitoring Depth (m)	1	.0	3	.1	5	.2						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	21.3	21.3	21.4	21.3	21.4	21.4	21.34	-				
Salinity (ppt)	29.9	29.9	30.3	30.3	31.6	31.7	30.63	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22					
D.O. Saturation (%)	99.5	99.8	99.1	99.6	99.0	99.4	99.40	-				
D.O. (mg/L)	7.0	7.0	7.0	7.0	7.0	6.9	6.98	6.94				
Turbidity (NTU)	3.5	3.6	4.5	4.7	5.5	5.2	4.50	-				
SS (mg/L)	8.0	6.0	7.0	6.0	6.0	6.0	6.50	-				
Remarks		No dredging works was observed.										

Station			IM	01			Co-ordinate	s
Time (hh:mm)			10:08	-10:11		Northing	Easting	
Water Depth (m)			1;		22.21.119	113.55.236		
Monitoring Depth (m)	1	.0	6					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	22.3	22.2	22.5	22.4	22.6	22.6	22.42	-
Salinity (ppt)	31.6	31.7	31.8	31.8	32.2	32.2	31.90	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.21	
D.O. Saturation (%)	94.3	95.0	94.5	94.9	95.1	94.8	94.77	-
D.O. (mg/L)	6.5	6.5	6.5	6.4	6.5	6.4	6.45	6.45
Turbidity (NTU)	3.4	3.3	4.2	4.5	4.9	5.2	4.25	-
SS (mg/L)	6.0	7.0	6.0	6.0	6.0	6.0	6.17	-
Remarks				No dred	dging works	was observe	d.	

Station			IM	02			Co-ordinate	s	
Time (hh:mm)			9:55	-9:58		Northing	Easting		
Water Depth (m)			9		22.21.830	113.55.727			
Monitoring Depth (m)	1	.0	4	.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	22.6	22.6	21.9	21.9	21.7	21.7	22.09	-	
Salinity (ppt)	32.0	31.8	32.8	32.8	33.0	33.1	32.57	-	
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.23		
D.O. Saturation (%)	93.8	93.6	91.8	91.6	93.4	93.2	92.90	-	
D.O. (mg/L)	6.4	6.4	6.3	6.3	6.4	6.4	6.36	6.42	
Turbidity (NTU)	3.5	3.7	4.5	4.3	5.2	5.5	4.45	-	
SS (mg/L)	6.0	6.0	6.0	6.0	6.0	6.0	6.00	-	
Remarks		No dredging works was observed.							

Station			ME							
Time (hh:mm)			10:40							
Water Depth (m)			7	`.4						
Monitoring Depth (m)	1	.0	3	3.7	6	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.0	21.0	21.3	21.3	21.3	21.3	21.21	-		
Salinity (ppt)	28.2	28.3	30.5	30.5	30.8	30.9	29.86	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.23			
D.O. Saturation (%)	93.7	94.6	91.6	91.7	92.4	93.2	92.87	-		
D.O. (mg/L)	6.7	6.8	6.4	6.4	6.5	6.5	6.57	6.52		
Turbidity (NTU)	2.4	2.2	3.1	2.8	3.4	3.6	2.92	-		
SS (mg/L)	6.0	6.0	7.0	6.0	6.0	8.0	6.50	-		
Remarks		No dredging works was observed.								

Station			MF	PB2								
Time (hh:mm)			10:51									
Water Depth (m)			9	.4								
Monitoring Depth (m)	1	.0	4	.7	8	.4						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	21.2	21.2	21.2	21.2	21.2	21.2	21.19	-				
Salinity (ppt)	29.3	29.3	29.6	29.5	32.7	32.6	30.50	-				
pH	8.2	8.2	8.2	8.2	8.3	8.3	8.25					
D.O. Saturation (%)	94.4	94.9	93.7	93.8	94.0	93.7	94.08	-				
D.O. (mg/L)	6.7	6.7	6.6	6.6	6.5	6.5	6.62	6.51				
Turbidity (NTU)	1.9	1.8	2.2	2.3	2.8	2.9	2.32	-				
SS (mg/L)	6.0	8.0	6.0	6.0	7.0	9.0	7.00	-				
Remarks		No dredging works was observed.										

Station												
Time (hh:mm)			10:31									
Water Depth (m)			5	.8								
Monitoring Depth (m)	1	.0		-	4	.8						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.9	20.9	-	-	21.4	21.4	21.14	-				
Salinity (ppt)	28.6	28.5	-	-	31.5	31.5	30.03	-				
pH	8.2	8.2	-	-	8.2	8.2	8.22					
D.O. Saturation (%)	96.4	97.1	-	-	97.7	98.9	97.53	-				
D.O. (mg/L)	6.9	7.0	-	-	6.8	6.9	6.89	6.86				
Turbidity (NTU)	4.7	4.5	-	-	6.3	6.0	5.38	-				
SS (mg/L)	7.0	9.0	-	-	7.0	6.0	7.25	-				
Remarks		No dredging works was observed.										

Compliance with Action an	<u>d Limit Lev</u>	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.7	6.7	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.8	6.8	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	4.7	4.7	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.5	8.5	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	04/12/2008
Weather & Ambient Temperature	Fine, 21C

Station											
Time (hh:mm)			1								
Water Depth (m)			20	0.2							
Monitoring Depth (m)	1	.0	10	0.1	19	9.2					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	21.7	21.7	21.3	21.3	21.3	21.4	21.43	-			
Salinity (ppt)	32.2	32.2	33.5	33.5	34.0	34.1	33.24	-			
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.79				
D.O. Saturation (%)	92.2	93.3	90.4	89.2	92.1	91.7	91.48	-			
D.O. (mg/L)	6.6	6.7	6.5	6.4	6.5	6.5	6.52	6.53			
Turbidity (NTU)	3.8	3.6	5.4	5.1	6.8	7.1	5.30	-			
SS (mg/L)	7.0	4.0	5.0	6.0	3.0	4.0	4.83	-			
Remarks		No dredging works was observed.									

Station			Co-ord	dinates							
Time (hh:mm)				Northing	Easting						
Water Depth (m)			9	.0			22.21.330	113.54.023			
Monitoring Depth (m)	1	.0	4	.5	8	.0		3			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	21.4	21.3	21.16	-							
Salinity (ppt)	30.6	30.5	32.7	32.7	32.9	33.0	32.07	-			
pH	7.9	7.9	8.0	8.0	8.0	8.0	7.95				
D.O. Saturation (%)	93.3	93.6	93.5	92.2	94.6	93.8	93.50	-			
D.O. (mg/L)	6.8	6.8	6.7	6.6	6.8	6.74	6.75	6.78			
Turbidity (NTU)	3.1	2.8	4.4	4.1	6.7	6.9	4.67	-			
SS (mg/L)	5.0	5.0 3.0 4.0 4.0 4.0 4.0 -									
Remarks			No	dredging wo	orks was obs	erved.					

Station			IM	02			Co-ore	dinates
Time (hh:mm)			4:50	-4:53			Northing	Easting
Water Depth (m)			9	.2			22.21.184	113.58.493
Monitoring Depth (m)	1							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.2	21.1	21.0	21.0	21.0	21.0	21.07	-
Salinity (ppt)	30.0	30.2	31.0	30.9	32.5	32.5	31.16	-
pH	8.0	8.0	8.0	8.0	8.0	8.1	8.02	
D.O. Saturation (%)	92.8	93.3	91.5	91.9	90.5	91.3	91.88	-
D.O. (mg/L)	6.8	6.8	6.7	6.7	6.5	6.59	6.69	6.56
Turbidity (NTU)	5.2	5.0	6.0	6.2	10.5	10.2	7.18	-
SS (mg/L)	5.0	4.0	6.0	4.0	9.0	4.0	5.33	-
Remarks		-	No	dredging wo	orks was obs	served.		-

Station			MF	PB1							
Time (hh:mm)			4:59	-5:01							
Water Depth (m)			7	.4							
Monitoring Depth (m)	1	.0	3	.7	6	.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	21.1	21.1	21.0	21.0	21.1	21.0	21.06	-			
Salinity (ppt)	30.0	30.1	31.1	31.1	32.4	32.3	31.18	-			
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.06				
D.O. Saturation (%)	90.3	90.1	89.5	89.8	93.7	93.4	91.13	-			
D.O. (mg/L)	6.6	6.6	6.5	6.5	6.8	6.8	6.63	6.76			
Turbidity (NTU)	2.5	2.4	4.2	4.5	9.9	9.8	5.55	-			
SS (mg/L)	4.0	6.0	5.0	6.0	4.0	4.0	4.83	-			
Remarks		No dredging works was observed.									

Station			MI	PB2							
Time (hh:mm)											
Water Depth (m)			g	.0							
Monitoring Depth (m)	1	.0	4	.5	8	.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	21.3	21.3	21.0	21.0	21.0	20.9	21.08	-			
Salinity (ppt)	29.8	29.8	32.0	32.0	32.3	32.4	31.37	-			
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.12				
D.O. Saturation (%)	96.2	96.6	96.5	96.4	95.5	95.6	96.13	-			
D.O. (mg/L)	7.0	7.1	7.0	7.0	6.9	6.9	6.98	6.92			
Turbidity (NTU)	1.7	1.8	2.1	1.9	2.4	2.6	2.08	-			
SS (mg/L)	4.0	4.0 4.0 6.0 5.0 6.0 4.0 4.83									
Remarks		No dredging works was observed.									

Station			N	/IP				
Time (hh:mm)			5:09	-5:10				
Water Depth (m)								
Monitoring Depth (m)	1	.0	2	1.8	4	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	21.1	21.1	-	-	20.9	20.9	20.99	-
Salinity (ppt)	30.6	30.5	-	-	32.1	32.1	31.32	-
pH	8.1	8.1	-	-	8.2	8.2	8.14	
D.O. Saturation (%)	93.9	93.7	-	-	92.7	93.3	93.40	-
D.O. (mg/L)	6.9	6.8	-	-	6.7	6.8	6.80	6.74
Turbidity (NTU)	2.1	1.9	-	-	4.8	5.2	3.50	-
SS (mg/L)	5.0	4.0	-	-	4.0	6.0	4.75	-
Remarks		•	No	dredging wo	orks was obs	served.	•	

Compliance with Action at	compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IM	IMO1		IMO2		MPB1	MF	PB2 MF		IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.5	6.5	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	6.9	6.9	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	6.3	6.3	N	N	N	N	N	N	N	N	N	N

Sampling Date	04/12/2008
Weather & Ambient Temperature	Sunny, 24C

Station			C1 (NM3)				
Time (hh:mm)			16:54	-16:57				
Water Depth (m)			16	6.4				
Monitoring Depth (m)	1	.0	8	3.2	15	5.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.3	21.3	21.2	21.2	21.3	21.4	21.30	-
Salinity (ppt)	34.0	34.0	34.2	34.2	34.3	34.3	34.18	-
pH	7.4	7.4	7.4	7.4	7.4	7.3	7.37	
D.O. Saturation (%)	93.8	94.3	91.8	92.4	92.5	93.3	93.02	-
D.O. (mg/L)	6.7	6.7	6.5	6.6	6.6	6.6	6.61	6.59
Turbidity (NTU)	5.0	5.2	6.8	6.6	13.2	13.0	8.30	-
SS (mg/L)	7.0	8.0	8.0	6.0	9.0	7.0	7.50	-
Remarks				No dred	dging works	was observed		

Station			C3 (NM6)							
Time (hh:mm)			15:25								
Water Depth (m)			6	.0							
Monitoring Depth (m)	1	.0	3	.0	5	.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	21.4	21.4	21.4	21.4	21.4	21.4	21.40	-			
Salinity (ppt)	33.4	33.4	33.2	33.2	33.2	33.2	33.24	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.21				
D.O. Saturation (%)	106.5	106.1	104.9	105.0	104.1	103.9	105.08	-			
D.O. (mg/L)	7.6	7.6	7.5	7.5	7.4	7.4	7.51	7.43			
Turbidity (NTU)	2.0	2.2	2.4	2.5	2.8	2.9	2.47	-			
SS (mg/L)	7.0	5.0	6.0	6.0	5.83	-					
Remarks		No dredging works was observed.									

Station			IM	01			Co-ordinate	S
Time (hh:mm)			15:54	-15:56			Northing	Easting
Water Depth (m)			9	22.21.324	113.54.030			
Monitoring Depth (m)	1	.0	4	.6	8	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.4	21.4	21.1	21.1	21.1	21.1	21.20	-
Salinity (ppt)	30.8	30.7	33.1	33.1	33.4	33.4	32.40	-
pH	7.9	7.9	8.0	8.0	8.0	8.0	7.95	
D.O. Saturation (%)	92.7	93.6	92.2	91.6	93.3	93.6	92.83	-
D.O. (mg/L)	6.7	6.8	6.6	6.6	6.7	6.7	6.70	6.71
Turbidity (NTU)	4.1	4.2	5.9	6.1	8.2	7.9	6.07	-
SS (mg/L)	4.0	3.0	6.0	4.0	4.33	-		
Remarks				No dred	dging works	was observe	d.	

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			16:27	-16:29			Northing	Easting			
Water Depth (m)			9		22.21.189	113.53.492					
Monitoring Depth (m)	1	.0	4	.8	8	.6					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	21.2	21.3	21.0	21.0	21.1	21.1	21.10	-			
Salinity (ppt)	30.2	30.2	31.1	31.0	32.8	32.8	31.35	-			
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.02				
D.O. Saturation (%)	90.4	91.1	89.6	89.6	92.3	91.5	90.75	-			
D.O. (mg/L)	6.6	6.7	6.5	6.5	6.7	6.6	6.60	6.63			
Turbidity (NTU)	5.5	5.3	7.8	7.6	8.5	8.3	7.17	-			
SS (mg/L)	5.0	4.0	6.0	4.0	4.83	-					
Remarks		No dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			16:06							
Water Depth (m)			7	.6						
Monitoring Depth (m)	1	.0	3	.8	6	.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.2	21.2	21.1	21.1	21.1	21.1	21.10	-		
Salinity (ppt)	30.4	30.2	31.34	-						
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.05			
D.O. Saturation (%)	90.1	89.5	89.5	89.1	90.0	90.1	89.72	-		
D.O. (mg/L)	6.6	6.6	6.5	6.5	6.5	6.5	6.52	6.50		
Turbidity (NTU)	3.5	3.4	5.2	5.1	8.3	8.1	5.60	-		
SS (mg/L)	4.0	4.0	4.0	6.0	5.0	7.0	5.00	-		
Remarks		No dredging works was observed.								

Station			MF	PB2						
Time (hh:mm)			15:43							
Water Depth (m)			9	.4						
Monitoring Depth (m)	1	.0	4	.7	8	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.3	21.3	21.0	21.0	21.0	21.0	21.12	-		
Salinity (ppt)	30.0	30.0	32.2	32.1	32.3	32.3	31.48	-		
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.11			
D.O. Saturation (%)	95.0	94.5	93.6	93.1	92.5	92.5	93.53	-		
D.O. (mg/L)	7.0	6.9	6.8	6.7	6.7	6.7	6.79	6.70		
Turbidity (NTU)	2.5	2.7	3.2	3.0	3.5	3.6	3.08	-		
SS (mg/L)	5.0	6.0	4.0	7.0	5.33	-				
Remarks		No dredging works was observed.								

Station			IV	IP							
Time (hh:mm)			16:16	-16:17							
Water Depth (m)			5								
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	21.2	21.2	-	-	21.0	21.0	21.07	-			
Salinity (ppt)	30.5	30.5	-	-	32.2	32.2	31.35	-			
pH	8.1	8.1	-	-	8.1	8.1	8.10				
D.O. Saturation (%)	91.0	90.8	-	-	90.8	91.1	90.93	-			
D.O. (mg/L)	6.6	6.6	-	-	6.6	6.6	6.62	6.60			
Turbidity (NTU)	2.5	2.3	-	-	4.5	4.2	3.38	-			
SS (mg/L)	4.0	7.0	-	4.75	-						
Remarks		No dredging works was observed.									

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.0	7.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.1	7.1	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.0	7.0	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.7	8.7	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	05/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1	
Time (hh:mm)			12:55	-12:57				
Water Depth (m)								
Monitoring Depth (m)	1	.0	10	0.1	19	9.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	25.0	24.4	24.8	24.7	24.6	24.6	24.68	-
Salinity (ppt)	26.9	27.4	27.7	27.7	28.1	28.1	27.67	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.91	
D.O. Saturation (%)	101.5	104.1	104.1	102.5	104.0	101.6	102.97	-
D.O. (mg/L)	8.0	8.3	8.2	8.1	8.2	8.0	8.15	8.13
Turbidity (NTU)	3.3	3.2	9.9	10.4	10.8	10.9	8.08	-
SS (mg/L)	4.0	4.0	4.00	-				
Remarks			No	dredging wo	orks was obs	served.		

Station			IM	01			Co-ordinates		
Time (hh:mm)			13:12	-13:13			Northing	Easting	
Water Depth (m)				22.20.791	113.53.644				
Monitoring Depth (m)	1	.0	5	.5	10	0.0			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	24.6	24.7	24.5	24.6	24.5	24.5	24.56	-	
Salinity (ppt)	28.5	28.3	28.5	28.5	23.9	28.5	27.71	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93		
D.O. Saturation (%)	102.3	102.5	100.2	103.3	105.4	103.6	102.88	-	
D.O. (mg/L)	8.1	8.1	7.9	8.2	8.6	8.18	8.16	8.37	
Turbidity (NTU)	4.9	5.6	9.3	9.6	9.5	9.5	8.07	-	
SS (mg/L)	4.0	5.0	4.50	-					
Remarks			No	dredging wo	orks was obs	erved.			

Station				Co-ordinates						
Time (hh:mm)			13:25	-13:27			Northing	Easting		
Water Depth (m)				22.21.510	113.54.436					
Monitoring Depth (m)	1.	.0	5	.9	10).8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	24.7	24.7	24.6	24.6	24.5	24.5	24.58	-		
Salinity (ppt)	28.3	28.3	28.6	28.5	28.6	28.7	28.51	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93			
D.O. Saturation (%)	101.2	101.4	103.1	101.5	102.8	103.7	102.28	-		
D.O. (mg/L)	8.0	8.0	8.1	8.0	8.1	8.19	8.07	8.15		
Turbidity (NTU)	4.0	4.0 3.7		7.7	8.4	8.7	6.73	-		
SS (mg/L)	4.0 4.0 4.0 4.0 4.0 4.0							-		
Remarks		No dredging works was observed.								

Station			MF	PB1			1		
Time (hh:mm)			12:28	-12:29					
Water Depth (m)									
Monitoring Depth (m)	1	.0	4	.1	7	.2			
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2							
Water Temperature (°C)	24.8	24.9	24.8	24.8	24.8	24.8	24.84	-	
Salinity (ppt)	27.4	27.3	27.8	27.3	27.3	27.3	27.38	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.91		
D.O. Saturation (%)	102.2	102.6	103.0	101.9	101.8	102.4	102.32	-	
D.O. (mg/L)	8.1	8.1	8.3	8.1	8.0	8.1	8.12	8.07	
Turbidity (NTU)	8.2	8.0	8.2	8.1	8.4	8.7	8.27	-	
SS (mg/L)	4.0	4.0	4.17	-					
Remarks			No	dredging wo	orks was obs	erved.			

Station			MI	PB2						
Time (hh:mm)			12:19	-12:20						
Water Depth (m)										
Monitoring Depth (m)	1	.0	4	.3	7	.5				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	24.7	24.7	24.7	24.7	24.7	24.7	24.71	-		
Salinity (ppt)	27.1	27.5	27.4	27.5	27.3	27.5	27.39	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.92			
D.O. Saturation (%)	103.6	102.8	102.8	102.5	103.4	102.9	103.00	-		
D.O. (mg/L)	8.2	8.1	8.2	8.1	8.2	8.1	8.16	8.17		
Turbidity (NTU)	9.2	9.4	8.9	9.5	9.4	9.4	9.30	-		
SS (mg/L)	5.0	4.0	5.0	6.0	3.0	4.0	4.50	-		
Remarks		No dredging works was observed.								

Station			IV	P				
Time (hh:mm)			12:38	-12:38				
Water Depth (m)								
Monitoring Depth (m)	1	.0	2	.8	4	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	24.9	24.9	-	-	24.9	24.9	24.91	-
Salinity (ppt)	26.8	26.8	-	-	26.9	26.9	26.85	
pH	7.9	7.9	-	-	7.9	7.9	7.87	
D.O. Saturation (%)	102.1	102.3	-	-	101.4	101.7	101.88	
D.O. (mg/L)	8.1	8.1	-	•	8.0	8.1	8.06	8.04
Turbidity (NTU)	6.7	6.8	-	-	7.7	7.7	7.23	-
SS (mg/L)	4.0	3.0	4.00	-				
Remarks		-	No	dredging wo	orks was obs	erved.		

Compliance with Action at	compliance with action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IMO1		IM	IMO2		MPB1	MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.1	8.1	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.1	8.1	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	10.5	10.5	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	5.2	5.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	05/12/2008
Weather & Ambient Temperature	Cloudy, 17C

Station			C1 (NM3)							
Time (hh:mm)			5:00	-5:02							
Water Depth (m)			16								
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.0	25.0	24.8	24.8	24.7	24.7	24.85	-			
Salinity (ppt)	26.9	26.9	27.6	27.6	27.9	27.9	27.46	-			
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90				
D.O. Saturation (%)	102.1	101.6	100.9	101.3	101.5	101.4	101.47	-			
D.O. (mg/L)	8.1	8.0	8.0	8.0	8.0	8.0	8.01	8.01			
Turbidity (NTU)	4.0	3.4	5.6	5.6	4.9	5.2	4.78	-			
SS (mg/L)	3.0	3.0	5.0	4.0	3.83	-					
Remarks		No dredging works was observed.									

Station			C3 (NM6)							
Time (hh:mm)			6:22	-6:24							
Water Depth (m)			6								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.7	24.7	24.6	24.6	24.6	24.6	24.63	-			
Salinity (ppt)	27.7	27.6	27.6	27.8	27.6	27.8	27.68	-			
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93				
D.O. Saturation (%)	106.8	107.9	108.8	106.8	106.8	110.5	107.93	-			
D.O. (mg/L)	8.5	8.6	8.6	8.5	8.5	8.8	8.56	8.62			
Turbidity (NTU)	5.1	5.0	5.4	5.4	5.9	6.0	5.47	-			
SS (mg/L)	4.0	5.0	4.0	4.0	4.0	3.0	4.00	-			
Remarks		No dredging works was observed.									

Station			IM	01			Co-ordinates	3		
Time (hh:mm)			5:23	-5:26			Northing	Easting		
Water Depth (m)			12	2.3			22.21.560	113.54.427		
Monitoring Depth (m)	1	.0	6	.2	1	1.3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	24.7	24.7	24.5	24.6	24.5	24.5	24.58	-		
Salinity (ppt)	28.3	28.3	28.5	28.5	28.6	26.7	28.13	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93			
D.O. Saturation (%)	102.0	102.5	102.4	99.9	101.9	102.4	101.85	-		
D.O. (mg/L)	8.0	8.1	8.1	7.9	8.0	8.2	8.05	8.11		
Turbidity (NTU)	5.1	5.1	10.0	10.6	10.1	10.5	8.57	-		
SS (mg/L)	4.0	4.0	6.0	4.0	4.0	4.0	4.33	-		
Remarks		No dredging works was observed.								

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			5:12	-5:14			Northing	Easting		
Water Depth (m)			12	2.4		22.21.320	113.54.822			
Monitoring Depth (m)	1	.0	6	.2	11	1.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	24.7	24.6	24.5	24.5	24.5	24.5	24.57	-		
Salinity (ppt)	28.3	28.3	27.5	28.6	28.6	28.6	28.31	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.94			
D.O. Saturation (%)	103.1	102.2	101.3	101.8	102.5	102.3	102.20	-		
D.O. (mg/L)	8.1	8.1	8.0	8.0	8.1	8.1	8.07	8.08		
Turbidity (NTU)	3.3	3.6	7.3	7.1	5.8	6.0	5.52	-		
SS (mg/L)	4.0	4.0	4.0	4.0	4.0	5.0	4.17	-		
Remarks		No dredging works was observed.								

Station			MF	PB1						
Time (hh:mm)			5:50	-5:52						
Water Depth (m)			8	.3						
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	24.8	24.9	24.8	24.8	24.8	24.8	24.84	-		
Salinity (ppt)	27.3	24.5	27.4	27.3	27.8	27.3	26.93	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90			
D.O. Saturation (%)	104.1	102.6	104.7	103.0	106.8	103.9	104.18	-		
D.O. (mg/L)	8.2	8.3	8.3	8.1	8.4	8.2	8.26	8.33		
Turbidity (NTU)	9.8	9.9	10.6	10.1	9.9	10.5	10.13	-		
SS (mg/L)	5.0	4.0	4.0	5.0	6.0	4.0	4.67	-		
Remarks		No dredging works was observed.								

Station			MF	B2							
Time (hh:mm)			6:00	-6:02							
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4	.4	7	.7					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.7	24.7	24.7	24.7	24.7	24.7	24.71	-			
Salinity (ppt)	27.5	27.5	27.4	27.5	27.5	27.4	27.46	-			
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.92				
D.O. Saturation (%)	103.2	103.7	104.2	103.0	103.6	105.0	103.78	-			
D.O. (mg/L)	8.2	8.2	8.3	8.2	8.2	8.3	8.22	8.26			
Turbidity (NTU)	9.0	8.9	9.3	9.6	9.3	9.4	9.25	-			
SS (mg/L)	6.0	4.0	5.0	4.0	6.0	4.0	4.83	-			
Remarks		No dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			5:41	-5:42							
Water Depth (m)			5								
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.0	24.9	-	-	24.9	25.0	24.95	-			
Salinity (ppt)	26.9	26.8	-	-	26.9	27.2	26.93	-			
pH	7.9	7.9	-	-	7.9	7.8	7.85				
D.O. Saturation (%)	105.3	103.2	-	-	102.3	107.1	104.48	-			
D.O. (mg/L)	8.3	8.2	-	-	8.1	8.5	8.27	8.28			
Turbidity (NTU)	5.4	5.4	-	-	6.5	6.3	5.90	-			
SS (mg/L)	5.0	4.0	-	-	5.0	4.0	4.50	-			
Remarks		No dredging works was observed.									

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IM	101	IMO2			MPB1	MF	PB2	IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.3	8.3	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.3	8.3	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	6.7	6.7	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	5.1	5.1	N	N	N	N	N	N	N	N	N	N

Sampling Date	06/12/2008
Weather & Ambient Temperature	Sunny, 18C

Station	I		C2 (NM5)			1	
Time (hh:mm)			- 1	-14:19				
Water Depth (m)).6			1	
Monitoring Depth (m)	1	.0).3	19	9.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.2	20.5	20.5	20.6	20.6	20.44	-
Salinity (ppt)	25.8	25.8	30.7	30.6	31.4	31.4	29.28	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.99	
D.O. Saturation (%)	93.3	93.2	90.6	89.0	91.6	91.1	91.47	-
D.O. (mg/L)	6.6	6.6	6.2	6.1	6.2	6.2	6.29	6.17
Turbidity (NTU)	2.9	2.7	4.8	4.5	6.5	6.8	4.70	-
SS (mg/L)	8.0	7.0	8.67	-				
Remarks			D	redging worl	ks was obse	rved.		

Station			IM	01			Co-ore	dinates
Time (hh:mm)				Northing	Easting			
Water Depth (m)			12	2.4			22.22.068	113.55.206
Monitoring Depth (m)	1	.0	6	.2	11	1.4		-
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.5	20.5	20.2	20.3	20.5	20.5	20.41	-
Salinity (ppt)	25.8	25.8	29.8	29.7	31.7	31.7	29.05	-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.10	
D.O. Saturation (%)	96.5	96.3	95.2	95.0	94.3	95.3	95.43	-
D.O. (mg/L)	6.8	6.8	6.6	6.6	6.4	6.47	6.61	6.44
Turbidity (NTU)	4.1	3.8	4.5	4.2	5.2	5.3	4.52	-
SS (mg/L)	8.0	7.0	7.0	7.0	7.0	6.0	7.00	-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates		
Time (hh:mm)			13:50		Northing	Easting				
Water Depth (m)			9	.4			22.21.872	113.55.634		
Monitoring Depth (m)	1	.0	4	.7	8	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.3	20.3	20.4	20.4	20.6	20.6	20.43	-		
Salinity (ppt)	27.0	27.1	30.3	30.4	31.8	31.7	29.70	-		
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.06			
D.O. Saturation (%)	94.8	94.5	94.9	95.1	95.2	95.2	94.95	-		
D.O. (mg/L)	6.7	6.7	6.5	6.5	6.5	6.44	6.54	6.45		
Turbidity (NTU)	4.4	4.1	5.4	5.2	6.1	6.3	5.25	-		
SS (mg/L)	7.0	6.0	7.0	6.83	-					
Remarks		Dredging works was observed.								

Station			MF	PB1			1	
Time (hh:mm)								
Water Depth (m)			7	.6				
Monitoring Depth (m)	1	.0	3	.8	6	5.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.5	20.5	20.3	20.2	20.4	20.5	20.39	-
Salinity (ppt)	26.3	26.3	27.1	27.3	29.7	29.7	27.74	-
pH	8.2	8.1	8.1	8.2	8.2	8.2	8.15	
D.O. Saturation (%)	95.6	94.6	93.4	94.6	98.1	97.5	95.63	-
D.O. (mg/L)	6.7	6.7	6.6	6.7	6.8	6.7	6.68	6.75
Turbidity (NTU)	3.9	3.8	4.1	4.3	4.6	4.4	4.18	-
SS (mg/L)	7.0	11.0	7.67	-				
Remarks			D	redging worl	ks was obse	rved.		

Station			M	PB2								
Time (hh:mm)			14:52	-14:54								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom				
							averaged					
Water Temperature (°C)	20.6	20.7	20.3	20.4	20.2	20.2	20.41	-				
Salinity (ppt)	25.4	25.4	26.5	26.6	29.4	29.3	27.10	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.16					
D.O. Saturation (%)	95.1	94.6	92.8	92.4	95.5	95.2	94.27	-				
D.O. (mg/L)	6.7	6.7	6.5	6.5	6.6	6.6	6.61	6.62				
Turbidity (NTU)	3.2	3.1	4.4	4.6	5.2	5.3	4.30	-				
SS (mg/L)	7.0	6.0	7.0	7.33	-							
Remarks		7.0 6.0 8.0 7.0 9.0 7.0 7.33 - Dredging works was observed.										

Station			N	IP			1					
Time (hh:mm)			14:33	-14:35								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	20.5	20.6	-	-	20.2	20.2	20.36	-				
Salinity (ppt)	26.5	26.5	-	-	28.3	28.3	27.38	-				
pH	8.1	8.1	-	-	8.1	8.1	8.13					
D.O. Saturation (%)	96.9	99.2	-	-	95.6	96.2	96.98	-				
D.O. (mg/L)	6.8	7.0	-	-	6.7	6.7	6.80	6.70				
Turbidity (NTU)	3.0	2.9	-	-	3.8	3.5	3.30	-				
SS (mg/L)	7.0	10.0	8.0	8.25	-							
Remarks		Dredging works was observed.										

Compliance with Action an	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		IMO2		MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.2	6.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.3	6.3	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	6.1	6.1	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	11.3	11.3	N	N	N	N	N	N	N	N	N	N

Sampling Date	06/12/2008
Weather & Ambient Temperature	Fine, 17C

Station			C1 (NM3)								
Time (hh:mm)			20:14	-20:17								
Water Depth (m)			16									
Monitoring Depth (m)	1	.0	8									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.8	20.8	20.6	20.6	20.7	20.7	20.70	-				
Salinity (ppt)	31.5	31.5	31.9	31.9	32.3	32.3	31.90	-				
pH	8.0	8.0	7.9	7.9	7.9	7.9	7.94					
D.O. Saturation (%)	97.4	98.1	93.7	93.4	92.5	92.7	94.63	-				
D.O. (mg/L)	6.6	6.6	6.3	6.3	6.3	6.3	6.40	6.26				
Turbidity (NTU)	3.4	3.3	3.8	3.7	4.5	4.7	3.90	-				
SS (mg/L)	7.0	9.0	6.0	6.33	-							
Remarks		Dredging works was observed.										

Station			C3 (NM6)	•					
Time (hh:mm)			18:43	-18:45						
Water Depth (m)			6							
Monitoring Depth (m)	1	.0	3							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.7	20.7	20.4	20.4	20.4	20.3	20.46	-		
Salinity (ppt)	26.3	26.4	29.5	29.4	30.7	30.8	28.83	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22			
D.O. Saturation (%)	92.4	92.7	91.6	92.3	98.1	97.0	94.02	-		
D.O. (mg/L)	6.5	6.5	6.3	6.4	6.7	6.7	6.51	6.69		
Turbidity (NTU)	2.7	2.5	3.9	4.1	5.3	5.2	3.95	-		
SS (mg/L)	6.0	6.0	6.0	6.0	6.0	6.0	6.00	-		
Remarks	Dredging works was observed.									

Station			IM	01			Co-ordinates			
Time (hh:mm)			19:48	-19:51			Northing	Easting		
Water Depth (m)			12	2.8			22.22.076	113.55.198		
Monitoring Depth (m)	1	.0	6							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.5	20.5	20.4	20.4	20.3	20.3	20.40	-		
Salinity (ppt)	25.4	25.4	29.6	29.7	31.3	31.3	28.78	-		
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.05			
D.O. Saturation (%)	95.4	95.5	94.2	93.9	94.6	94.6	94.70	-		
D.O. (mg/L)	6.8	6.8	6.5	6.5	6.5	6.4	6.58	6.47		
Turbidity (NTU)	2.9	2.8	4.1	3.8	4.9	4.8	3.88	-		
SS (mg/L)	8.0	8.0	8.0	9.0	8.67	-				
Remarks				Dredg	ging works w	as observed.				

Station			IM	02			Co-ordinates			
Time (hh:mm)			20:00	-20:03			Northing	Easting		
Water Depth (m)			9	.6			22.21.881	113.55.639		
Monitoring Depth (m)	1	.0	4	.6						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.2	20.2	20.4	20.4	20.6	20.5	20.38	-		
Salinity (ppt)	27.1	27.2	30.8	30.8	31.9	31.8	29.92	-		
pH	8.0	8.0	8.1	8.0	8.0	8.1	8.04			
D.O. Saturation (%)	93.4	93.9	94.5	94.1	95.9	94.6	94.40	-		
D.O. (mg/L)	6.6	6.6	6.5	6.4	6.5	6.4	6.49	6.44		
Turbidity (NTU)	3.8	3.5	4.4	4.5	5.8	5.9	4.65	-		
SS (mg/L)	7.0	8.0	8.0	7.0	7.33	-				
Remarks	Dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			19:11	-19:13						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.4	20.4	20.2	20.2	20.3	20.3	20.28	-		
Salinity (ppt)	26.3	26.4	27.9	28.0	29.4	29.3	27.89	-		
pH	8.1	8.1	8.1	8.1	8.1	8.2	8.13			
D.O. Saturation (%)	97.0	97.5	95.8	97.1	98.4	97.5	97.22	-		
D.O. (mg/L)	6.8	6.9	6.7	6.8	6.8	6.8	6.79	6.78		
Turbidity (NTU)	3.4	3.5	4.4	4.6	5.3	5.5	4.45	-		
SS (mg/L)	11.0	8.0	7.0	7.0	7.0	8.0	8.00	-		
Remarks		Dredging works was observed.								

Station			MF	PB2								
Time (hh:mm)			18:59	-19:01								
Water Depth (m)			9									
Monitoring Depth (m)	1	.0	4	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.7	20.7	20.2	20.3	20.2	20.2	20.36	-				
Salinity (ppt)	25.3	25.2	27.1	27.1	29.2	29.1	27.15	-				
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.13					
D.O. Saturation (%)	93.1	93.7	91.3	90.8	93.0	92.7	92.43	-				
D.O. (mg/L)	6.6	6.6	6.4	6.4	6.4	6.4	6.47	6.44				
Turbidity (NTU)	3.4	3.1	3.8	3.9	4.5	4.7	3.90	-				
SS (mg/L)	8.0	7.0	7.0	7.0	7.50	-						
Remarks		Dredging works was observed.										

Station			IV	IP								
Time (hh:mm)			19:22	-19:23								
Water Depth (m)			5									
Monitoring Depth (m)	1	.0	2									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.4	20.4	-	-	20.1	20.1	20.27	-				
Salinity (ppt)	26.5	26.4	-	-	28.1	28.1	27.29	-				
pH	8.1	8.1	-	-	8.1	8.1	8.09					
D.O. Saturation (%)	93.9	94.2	-	-	95.7	96.4	95.05	-				
D.O. (mg/L)	6.6	6.6	-	-	6.7	6.7	6.67	6.71				
Turbidity (NTU)	3.8	4.1	-	-	5.5	5.4	4.70	-				
SS (mg/L)	7.0	10.0	-	11.0	9.25	-						
Remarks		Dredging works was observed.										

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		01	IMO2		MPB1		MPB2		IV	IP .
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	Z	N	N	N
DO (Depth-averaged)	4.2	4.0	6.5	6.5	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.1	5.1	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.0	8.0	N	N	N	N	N	N	N	N	N	N

Sampling Date	07/12/2008
Weather & Ambient Temperature	Sunny, 17C

Station			C2 (NM5)			1	
Time (hh:mm)			- 1	-15:39				
Water Depth (m)								
Monitoring Depth (m)	1	.0	9	.6	18	3.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
Matar Tamanatura (%C)	20.0	20.0	20.5	20.4	20.5	20.4	averaged	
Water Temperature (°C)	20.6	20.6	20.5	20.4	20.5	20.4	20.49	-
Salinity (ppt)	30.1	30.3	31.2	30.3	32.1	32.3	31.03	-
pH	7.6	7.5	7.6	7.7	7.6	7.7	7.60	
D.O. Saturation (%)	100.5	100.3	98.3	98.2	97.7	99.0	99.00	-
D.O. (mg/L)	6.7	6.6	6.5	6.5	6.5	6.6	6.56	6.53
Turbidity (NTU)	5.7	5.5	5.88	-				
SS (mg/L)	5.0	5.0	5.50	-				
Remarks			No	dredging wo	orks was obs	erved.	-	

Station			IM	01			Co-ord	dinates
Time (hh:mm)			14:36	-14:38			Northing	Easting
Water Depth (m)			22.22.064	113.55.204				
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.2	20.2	20.5	20.5	20.5	20.5	20.38	-
Salinity (ppt)	28.9	28.9	29.7	29.8	31.6	31.6	30.06	-
pH	7.6	7.6	7.6	7.6	7.6	7.7	7.59	
D.O. Saturation (%)	96.8	96.5	94.3	93.3	95.9	93.7	95.08	-
D.O. (mg/L)	6.7	6.7	6.3	6.2	6.4	6.16	6.43	6.28
Turbidity (NTU)	5.7	5.5	5.98	-				
SS (mg/L)	6.0	5.0	5.50	-				
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			14:25	-14:28			Northing	Easting
Water Depth (m)				22.21.870	113.55.634			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.4	20.4	20.5	20.5	20.5	20.5	20.46	-
Salinity (ppt)	29.0	28.2	29.9	29.9	31.3	31.3	29.95	-
pH	7.5	7.5	7.6	7.6	7.7	7.7	7.61	
D.O. Saturation (%)	98.2	100.1	95.2	95.7	96.3	98.5	97.33	-
D.O. (mg/L)	6.7	6.9	6.3	6.3	6.4	6.55	6.51	6.49
Turbidity (NTU)	5.3	5.1	5.75	-				
SS (mg/L)	9.0	6.0	7.17	-				
Remarks		•	No	dredging wo	orks was obs	erved.	-	•

Station			MF	PB1			1	
Time (hh:mm)			15:09	-15:11				
Water Depth (m)								
Monitoring Depth (m)	1	.0	4	.1	7	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.0	20.2	20.2	20.4	20.3	20.17	-
Salinity (ppt)	28.8	28.8	29.4	29.3	30.0	29.9	29.38	-
pH	7.5	7.5	7.5	7.5	7.6	7.5	7.48	
D.O. Saturation (%)	97.1	97.2	94.4	94.7	95.7	94.4	95.58	-
D.O. (mg/L)	6.8	6.8	6.5	6.5	6.4	6.3	6.55	6.37
Turbidity (NTU)	5.1	5.4	5.52	-				
SS (mg/L)	5.0	6.0	5.33	-				
Remarks			No	dredging wo	orks was obs	served.		

Station			MF	PB2				
Time (hh:mm)			14:58	-15:02				
Water Depth (m)								
Monitoring Depth (m)	1	.0	4	.3	7	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.0	20.3	20.2	20.4	20.4	20.23	-
Salinity (ppt)	29.3	28.8	29.9	29.8	29.9	29.9	29.57	-
pH	7.6	7.6	7.7	7.7	7.7	7.7	7.65	
D.O. Saturation (%)	96.3	95.5	96.3	96.1	96.7	96.8	96.28	-
D.O. (mg/L)	6.7	6.7	6.4	6.6	6.5	6.5	6.56	6.48
Turbidity (NTU)	5.2	5.1	5.77	-				
SS (mg/L)	5.0	6.0	6.50	-				
Remarks			No	dredging wo	orks was obs	erved.		

Station			N	IP				
Time (hh:mm)			15:20	-15:21				
Water Depth (m)								
Monitoring Depth (m)	1	.0	2	.8	4	.5		
Trial	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	20.0	20.0	-	-	20.1	20.2	20.05	-
Salinity (ppt)	29.0	28.8	-	-	29.4	29.5	29.16	-
pH	7.6	7.5	-	-	7.5	7.6	7.54	
D.O. Saturation (%)	95.9	96.7	-	-	97.0	96.0	96.40	-
D.O. (mg/L)	6.8	6.8	-	-	6.7	6.6	6.69	6.62
Turbidity (NTU)	6.3	6.1	6.25	-				
SS (mg/L)	6.0	5.0	7.0	5.50	-			
Remarks			No	dredging wo	orks was obs	erved.		

Compliance with Action an	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*130%		IIV	IMO1		IMO2		MPB1	MPB2		MP	
	Action	Limit	Action	Limit	mit Exceedan Exceedan Exceedanc Exceedanc Exceedanc Exceedance of Limit Lev		Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan			
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.6	6.6	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.6	7.6	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	7.2	7.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	07/12/2008
Weather & Ambient Temperature	Sunny, 15C

Station			C1 (NM3)				
Time (hh:mm)			21:16					
Water Depth (m)			16					
Monitoring Depth (m)	1	.0	8	3.2	15	5.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.4	20.5	20.4	20.4	20.4	20.4	20.41	-
Salinity (ppt)	28.2	30.3	31.2	30.61	-			
pH	7.6	7.6	7.7	7.6	7.7	7.7	7.63	
D.O. Saturation (%)	100.5	100.8	98.2	99.3	100.4	98.5	99.62	-
D.O. (mg/L)	6.7	6.7	6.6	6.5	6.7	6.6	6.62	6.61
Turbidity (NTU)	5.5	5.4	5.8	5.8	5.9	5.8	5.70	-
SS (mg/L)	3.0	3.0	3.0	7.0	4.17	-		
Remarks				No dre	dging works	was observe	d.	

Station			C3 (NM6)				
Time (hh:mm)			20:05					
Water Depth (m)			7	.0				
Monitoring Depth (m)	1	.0	3	.5	6	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	19.9	19.9	20.1	20.0	20.3	20.3	20.08	-
Salinity (ppt)	30.1	28.7	31.1	30.23	-			
pH	7.6	7.6	7.7	7.6	7.7	7.7	7.65	
D.O. Saturation (%)	95.8	96.4	97.0	96.0	98.3	95.9	96.57	-
D.O. (mg/L)	6.8	6.9	6.7	6.6	6.6	6.4	6.65	6.47
Turbidity (NTU)	5.4	5.6	5.8	5.7	6.2	6.4	5.85	-
SS (mg/L)	3.0	4.0	3.0	4.0	4.00	-		
Remarks				No dred	dging works	was observed	d.	

Station			IM	01			Co-ordinate	S
Time (hh:mm)			20:29	-20:31			Northing	Easting
Water Depth (m)			11	1.8		22.22.068	113.55.206	
Monitoring Depth (m)	1	.0	5					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.1	20.1	20.4	20.4	20.4	20.4	20.31	-
Salinity (ppt)	28.9	28.8	29.9	30.1	31.9	30.8	30.06	-
pH	7.6	7.5	7.7	7.7	7.7	7.7	7.62	
D.O. Saturation (%)	94.2	96.1	93.4	93.0	93.6	94.2	94.08	-
D.O. (mg/L)	6.5	6.6	6.2	6.1	6.3	6.3	6.34	6.27
Turbidity (NTU)	5.8	5.7	6.1	6.1	6.3	6.3	6.05	-
SS (mg/L)	7.0	9.0	4.0	6.0	6.17	-		
Remarks				No dred	dging works	was observe	d.	

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			20:19	-20:21			Northing	Easting			
Water Depth (m)			8		22.21.868	113.55.630					
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.4	20.4	20.4	20.5	20.4	20.4	20.40	-			
Salinity (ppt)	26.6	28.3	30.1	30.0	31.1	30.8	29.49	-			
pH	7.5	7.5	7.6	7.6	7.6	7.7	7.57				
D.O. Saturation (%)	100.4	100.6	95.8	95.2	96.7	96.7	97.57	-			
D.O. (mg/L)	6.9	6.9	6.4	6.4	6.4	6.4	6.57	6.44			
Turbidity (NTU)	5.3	5.5	5.7	5.5	5.8	5.9	5.62	-			
SS (mg/L)	3.0	5.0	4.0	4.0	4.17	-					
Remarks		No dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			20:51	-20:53						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.0	7	.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.9	19.9	20.2	20.2	20.4	20.4	20.12	-		
Salinity (ppt)	29.7	28.8	28.7	27.9	29.7	28.7	28.90	-		
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.59			
D.O. Saturation (%)	95.7	95.3	96.1	95.9	96.8	96.5	96.05	-		
D.O. (mg/L)	6.8	6.8	6.5	6.5	6.5	6.5	6.57	6.46		
Turbidity (NTU)	5.2	5.1	5.4	5.1	5.6	5.8	5.37	-		
SS (mg/L)	4.0	7.0	4.0	6.0	4.0	4.0	4.83	-		
Remarks		No dredging works was observed.								

Station			MF	PB2							
Time (hh:mm)			21:03	-21:05							
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4	.2	7	.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.9	19.9	20.2	20.1	20.3	20.3	20.13	-			
Salinity (ppt)	28.9	28.6	27.4	28.4	29.4	28.9	28.60	-			
pH	7.6	7.5	7.6	7.6	7.7	7.7	7.61				
D.O. Saturation (%)	95.9	96.2	96.7	96.0	97.0	97.6	96.57	-			
D.O. (mg/L)	6.8	6.9	6.6	6.5	6.5	6.5	6.62	6.51			
Turbidity (NTU)	5.9	6.1	6.3	6.4	6.8	6.9	6.40	-			
SS (mg/L)	4.0	5.0	4.0	4.0	6.0	5.0	4.67	-			
Remarks		No dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			20:41	-20:43							
Water Depth (m)			5								
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.9	19.9	-	-	20.1	20.1	19.99	-			
Salinity (ppt)	29.8	29.8	-	-	30.0	28.7	29.57	-			
pH	7.5	7.6	-	-	7.6	7.5	7.54				
D.O. Saturation (%)	95.9	95.6	-	-	94.7	94.5	95.18	-			
D.O. (mg/L)	6.7	6.7	-	-	6.4	6.5	6.58	6.42			
Turbidity (NTU)	5.3	5.3	-	-	5.5	5.7	5.45	-			
SS (mg/L)	7.0	9.0	-	-	4.0	5.0	6.25	-			
Remarks		No dredging works was observed.									

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.6	6.6	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.5	7.5	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	5.3	5.3	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	08/12/2008
Weather & Ambient Temperature	Sunny, 17C

Station			C2 (NM5)			1	
Time (hh:mm)			- 1	-8:40				
Water Depth (m)			20	0.8				
Monitoring Depth (m)	1	.0	10).4	19	9.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.8	20.8	20.5	20.5	20.4	20.5	20.56	-
Salinity (ppt)	38.2	37.9	38.0	37.8	37.8	38.0	37.94	-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.10	
D.O. Saturation (%)	96.9	96.4	95.5	94.6	93.9	96.3	95.60	-
D.O. (mg/L)	6.9	6.9	6.9	6.8	6.8	6.9	6.88	6.86
Turbidity (NTU)	4.6	4.7	5.6	5.3	6.3	6.2	5.45	-
SS (mg/L)	4.0	6.0	3.0	3.0	3.0	5.0	4.00	-
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	101			Co-ore	dinates
Time (hh:mm)			9:28	-9:29			Northing	Easting
Water Depth (m)			7	`.2			22.21.273	113.55.043
Monitoring Depth (m)	1	.0	3	3.6	6	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.5	20.6	20.57	-
Salinity (ppt)	38.8	38.8	38.8	38.7	38.8	38.7	38.74	-
pH	8.2	8.1	8.1	8.2	8.1	8.1	8.14	
D.O. Saturation (%)	94.0	94.9	94.8	93.7	93.8	95.2	94.40	-
D.O. (mg/L)	6.7	6.8	6.8	6.7	6.7	6.82	6.76	6.78
Turbidity (NTU)	4.0	4.0	4.1	4.4	4.2	4.3	4.17	-
SS (mg/L)	4.0	5.0	4.0	4.0	5.0	6.0	4.67	-
Remarks			No	dredging wo	orks was obs	served.		

Station			IM	02			Co-ore	dinates
Time (hh:mm)			9:35	-9:36			Northing	Easting
Water Depth (m)			7	.6			22.21.529	113.54.280
Monitoring Depth (m)	1	.0	3	.8	6	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.7	20.6	20.6	20.6	20.5	20.5	20.59	-
Salinity (ppt)	38.8	38.8	38.8	38.8	38.8	38.7	38.78	-
pH	8.2	8.2	8.2	8.2	8.1	8.1	8.15	
D.O. Saturation (%)	95.6	95.6	95.4	95.3	94.5	95.7	95.35	-
D.O. (mg/L)	6.8	6.8	6.8	6.8	6.8	6.86	6.83	6.82
Turbidity (NTU)	4.1	4.2	4.0	4.3	5.1	5.0	4.45	-
SS (mg/L)	3.0	5.0	3.0	5.0	3.0	5.0	4.00	-
Remarks		-	No	dredging wo	orks was obs	erved.	•	-

Station			MF	PB1			1	
Time (hh:mm)			9:14	-9:15				
Water Depth (m)			7	.6				
Monitoring Depth (m)	1	.0	3	.8	6	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.7	20.7	20.5	20.6	20.5	20.5	20.58	-
Salinity (ppt)	38.7	38.6	38.6	38.6	38.6	38.6	38.61	
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.12	
D.O. Saturation (%)	94.7	94.3	94.4	93.8	94.5	93.5	94.20	
D.O. (mg/L)	6.8	6.8	6.8	6.7	6.8	6.7	6.75	6.74
Turbidity (NTU)	5.0	4.4	4.3	4.1	4.5	4.4	4.45	-
SS (mg/L)	5.0	4.0	6.0	4.0	7.0	4.0	5.00	-
Remarks			No	dredging wo	orks was obs	served.		

Station			M	PB2						
Time (hh:mm)										
Water Depth (m)			7	.3						
Monitoring Depth (m)	1	.0	3	.7	6	.3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.7	20.6	20.6	20.6	20.5	20.6	20.58	-		
Salinity (ppt)	38.7	38.7	38.7	38.6	38.7	38.6	38.68	-		
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.13			
D.O. Saturation (%)	93.9	94.4	94.5	94.6	94.9	95.1	94.57	-		
D.O. (mg/L)	6.7	6.8	6.8	6.8	6.8	6.8	6.77	6.81		
Turbidity (NTU)	4.0	4.2	4.2	4.4	4.3	4.6	4.28	-		
SS (mg/L)	5.0	6.0	4.0	6.0	4.0	6.0	5.17	-		
Remarks		No dredging works was observed.								

Station			N	IP			1			
Time (hh:mm)			9:04	-9:05						
Water Depth (m)			5	.4						
Monitoring Depth (m)	1	.0	2	.7	4	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	20.6	20.6	-	-	20.6	20.6	13.73	-		
Salinity (ppt)	38.5	38.6	-	-	38.5	38.4	25.66	-		
pH	8.1	8.1	-	-	8.1	8.1	5.42			
D.O. Saturation (%)	94.5	94.2	-	-	94.4	96.2	63.22	-		
D.O. (mg/L)	6.8	6.8	-	-	6.8	6.9	4.53	6.84		
Turbidity (NTU)	3.7	4.0	-	-	3.8	3.9	2.57	-		
SS (mg/L)	3.0	3.0	-	-	5.0	3.0	3.50	-		
Remarks		No dredging works was observed.								

Compliance with Action at	Compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IIV	IMO1		IMO2		MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.9	6.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.9	6.9	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.1	7.1	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	5.2	5.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	08/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C1 (NM3)								
Time (hh:mm)			15:30	-15:31								
Water Depth (m)			20	0.4								
Monitoring Depth (m)	1	.0	10									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.4	20.4	20.3	20.3	20.3	20.3	20.33	-				
Salinity (ppt)	38.7	38.7	38.7	38.7	38.6	38.6	38.68	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18					
D.O. Saturation (%)	98.0	97.9	97.1	97.8	96.8	98.5	97.68	-				
D.O. (mg/L)	7.0	7.0	7.0	7.0	7.0	7.1	7.03	7.03				
Turbidity (NTU)	5.9	5.7	6.8	7.0	8.2	8.2	6.97	-				
SS (mg/L)	4.0	5.0	5.0	5.0	5.00	-						
Remarks		No dredging works was observed.										

Station			C3 (NM6)								
Time (hh:mm)			14:02	-14:03								
Water Depth (m)			8	.4								
Monitoring Depth (m)	1	.0	4	.4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.7 20.6		20.5	20.5	20.4	20.5	20.51	-				
Salinity (ppt)	38.7 38.7		38.7	38.6	38.6	38.5	38.63	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.17					
D.O. Saturation (%)	94.9	95.4	95.4	95.0	95.7	98.0	95.73	-				
D.O. (mg/L)	6.8	6.8	6.8	6.8	6.9	7.0	6.87	6.96				
Turbidity (NTU)	3.5	3.3	4.2	4.0	4.3	4.2	3.92	-				
SS (mg/L)	6.0	4.0	10.0	6.0	7.00	-						
Remarks		No dredging works was observed.										

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			14:50	-14:51			Northing	Easting			
Water Depth (m)			7	.4			22.21.262	113.55.040			
Monitoring Depth (m)	1	.0	3	.4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.5 20.5		20.4	20.4	20.4	20.4	20.42	-			
Salinity (ppt)	38.7 38.7		38.7	38.7	38.6	38.6	38.68	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.19				
D.O. Saturation (%)	95.2	95.0	95.2	94.9	94.9	95.4	95.10	-			
D.O. (mg/L)	6.8	6.8	6.8	6.8	6.8	6.9	6.83	6.84			
Turbidity (NTU)	5.7	5.6	5.4	5.6	6.0	6.3	5.77	-			
SS (mg/L)	4.0	4.0	6.0	5.0	5.33	-					
Remarks		No dredging works was observed.									

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			14:43	-14:45			Northing	Easting		
Water Depth (m)			7	.4			22.21.537	113.54.291		
Monitoring Depth (m)	1	.0	3	.4						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.5 20.5		20.4	20.4	20.4	20.4	20.43	-		
Salinity (ppt)	38.7	38.7 38.7		38.6	38.6	38.6	38.63	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18			
D.O. Saturation (%)	95.6	96.0	95.5	95.5	95.9	95.8	95.72	-		
D.O. (mg/L)	6.9	6.9	6.9	6.9	6.9	6.9	6.88	6.89		
Turbidity (NTU)	6.1	6.2	5.2	5.3	6.2	6.0	5.83	-		
SS (mg/L)	5.0	4.0	7.0	5.0	5.33	-				
Remarks		No dredging works was observed.								

Station			MF	PB1							
Time (hh:mm)			14:34	-14:35							
Water Depth (m)			7	`.5							
Monitoring Depth (m)	1	.0	3	3.8	6	.5					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.6	20.6	20.4	20.5	20.4	20.5	20.50	-			
Salinity (ppt)	38.8	38.8	38.7	38.7	38.7	38.6	38.73	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.16				
D.O. Saturation (%)	95.8	96.0	96.1	95.9	96.4	96.5	96.12	-			
D.O. (mg/L)	6.9	6.9	6.9	6.9	6.9	6.9	6.89	6.93			
Turbidity (NTU)	3.9	3.8	4.2	4.1	4.2	4.3	4.08	-			
SS (mg/L)	4.0	5.0	6.0	7.0	6.0	7.0	5.83	-			
Remarks		No dredging works was observed.									

Station			MF	PB2							
Time (hh:mm)			14:28	-14:29							
Water Depth (m)			7	.4							
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2						Depth-averaged	Bottom			
Water Temperature (°C)	20.7	20.6	20.5	20.5	20.4	20.4	20.52	-			
Salinity (ppt)	38.8	38.8	38.7	38.7	38.7	38.7	38.72	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.16				
D.O. Saturation (%)	96.0	95.7	95.7	95.5	96.5	95.7	95.85	-			
D.O. (mg/L)	6.9	6.9	6.9	6.9	6.9	6.9	6.87	6.91			
Turbidity (NTU)	3.7	3.9	4.1	4.1	4.3	4.3	4.07	-			
SS (mg/L)	5.0	8.0	5.0	6.0	5.83	-					
Remarks		No dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			14:58	-14:59							
Water Depth (m)			5	.2							
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom						
Water Temperature (°C)	20.5	20.5	-	-	20.4	20.4	13.63	-			
Salinity (ppt)	38.7	38.7	-	-	38.7	38.7	25.81	-			
pH	8.2	8.2	-	-	8.2	8.2	5.46				
D.O. Saturation (%)	95.6	95.9	-	-	95.8	95.2	63.75	-			
D.O. (mg/L)	6.9	6.9	-	-	6.9	6.8	4.58	6.87			
Turbidity (NTU)	5.4	5.4	3.65	-							
SS (mg/L)	4.0	5.0	-	3.0	3.75	-					
Remarks		No dredging works was observed.									

Compliance with Action an	ompliance with Action and Limit Level													
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		101	IMO2		MPB1		MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.0	7.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.9	6.9	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.1	7.1	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.8	7.8	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	09/12/2008
Weather & Ambient Temperature	Sunny, 18C

Station			C2 (NM5)			1	
Time (hh:mm)			- 1	-10:59				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	25.2	25.3	24.5	24.5	23.9	23.9	24.57	-
Salinity (ppt)	25.9	25.8	28.6	28.6	30.6	30.5	28.32	-
pH	7.4	7.4	7.4	7.5	7.4	7.4	7.43	
D.O. Saturation (%)	87.9	86.8	79.4	78.0	76.4	75.8	80.72	-
D.O. (mg/L)	5.9	5.8	5.3	5.2	5.1	5.1	5.41	5.09
Turbidity (NTU)	5.6	5.7	6.78	-				
SS (mg/L)	5.0	5.17	-					
Remarks			No	dredging wo	orks was obs	erved.	•	

Station			IM	01			Co-ord	dinates
Time (hh:mm)			10:03	-10:05			Northing	Easting
Water Depth (m)				22.21.757	113.54.505			
Monitoring Depth (m)	1	.0		3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	25.2	25.2	24.6	24.6	24.3	24.3	24.68	-
Salinity (ppt)	23.0	23.0	27.5	27.5	29.0	29.0	26.50	-
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.47	
D.O. Saturation (%)	86.1	87.0	80.4	80.0	79.4	79.9	82.13	-
D.O. (mg/L)	5.9	6.0	5.4	5.4	5.3	5.36	5.56	5.35
Turbidity (NTU)	6.2 6.2 7.1 7.0 8.0 8.2							-
SS (mg/L)	7.0	9.0	7.0	6.83	-			
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			9:52	-9:54			Northing	Easting
Water Depth (m)				22.21.462	113.55.161			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	25.1	25.1	24.6	24.7	24.2	24.3	24.66	-
Salinity (ppt)	24.6	24.1	27.7	27.5	29.6	29.4	27.14	-
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.48	
D.O. Saturation (%)	85.9	61.9	79.3	80.1	78.2	77.8	77.20	-
D.O. (mg/L)	5.9	5.9	5.3	5.4	5.2	5.22	5.49	5.23
Turbidity (NTU)	6.3 6.3 7.1 7.2 8.2 8.1							-
SS (mg/L)	5.0	6.0	8.0	6.00	-			
Remarks			No	dredging wo	orks was obs	erved.	•	

Station			MF	PB1			1	
Time (hh:mm)			10:30	-10:31				
Water Depth (m)			8	.4				
Monitoring Depth (m)	1	.0	4	.2	7	.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	25.4	25.4	24.7	24.7	24.5	24.5	24.87	
Salinity (ppt)	20.2	20.5	25.9	26.0	27.6	27.4	24.60	
pH	7.4	7.4	7.5	7.5	7.5	7.5	7.44	
D.O. Saturation (%)	86.5	86.9	80.0	80.0	81.0	80.9	82.55	
D.O. (mg/L)	6.0	6.0	5.4	5.4	5.5	5.5	5.62	5.47
Turbidity (NTU)	6.2	6.2	7.8	7.03	-			
SS (mg/L)	5.0	7.0	4.0	4.83	-			
Remarks			No	dredging wo	orks was obs	served.		

Station			MF	PB2					
Time (hh:mm)									
Water Depth (m)			9	.3					
Monitoring Depth (m)	1	.0	4	.7	8	.3			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	25.6	25.5	24.9	25.1	24.8	24.8	25.11	-	
Salinity (ppt)	19.9	20.0	25.3	24.7	27.0	26.3	23.86	-	
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.48		
D.O. Saturation (%)	89.5	89.6	82.9	81.7	82.5	82.2	84.73	-	
D.O. (mg/L)	6.2	6.2	5.6	5.6	5.6	5.6	5.78	5.56	
Turbidity (NTU)	6.1	6.1	6.93	-					
SS (mg/L)	8.0	9.0	6.0	6.0	5.0	8.0	7.00	-	
Remarks	No dredging works was observed.								

Station			IV	IP			1				
Time (hh:mm)											
Water Depth (m)			5	.8							
Monitoring Depth (m)	1	.0	2	.9	4	.8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	25.2	25.3	-	-	24.7	24.7	24.97	-			
Salinity (ppt)	21.0	21.1	-	-	26.4	26.3	23.71	-			
pH	7.3	7.3	-	-	7.4	7.3	7.34				
D.O. Saturation (%)	85.1	86.0	-	-	81.8	81.6	83.63	-			
D.O. (mg/L)	5.9	5.9	-	-	5.5	5.5	5.72	5.53			
Turbidity (NTU)	7.0	6.9	7.50	-							
SS (mg/L)	8.0	9.0	7.0	7.25	-						
Remarks		No dredging works was observed.									

Compliance with Action at	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	C2*130% IMO1		IM	02		MPB1	MPB2		MP		
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.1	5.1	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.4	5.4	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.8	8.8	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	6.7	6.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	09/12/2008
Weather & Ambient Temperature	Sunny, 19C

Station			C1 (NM3)							
Time (hh:mm)			14:38								
Water Depth (m)			16								
Monitoring Depth (m)	1	.0	8	3.2	15	5.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.5	25.5	25.2	25.0	24.6	24.6	25.07	-			
Salinity (ppt)	26.6	26.4	28.4	28.8	30.2	30.2	28.43	-			
pH	7.4	7.4	7.4	7.4	7.4	7.4	7.40				
D.O. Saturation (%)	89.3	88.6	81.7	81.4	80.6	80.7	83.72	-			
D.O. (mg/L)	6.0	6.0	5.5	5.5	5.4	5.4	5.62	5.40			
Turbidity (NTU)	6.3	6.2	7.5	7.4	9.9	9.8	7.85	-			
SS (mg/L)	4.0	7.0	6.0	6.0	5.67	-					
Remarks		No dredging works was observed.									

Station			C3 (NM6)							
Time (hh:mm)			13:31								
Water Depth (m)			7								
Monitoring Depth (m)	1	.0	3	.7	6	.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.9	25.9	25.6	25.6	25.3	25.1	25.55	-			
Salinity (ppt)	21.5	21.3	24.2	24.7	27.2	27.8	24.43	-			
pH	7.4	7.3	7.4	7.4	7.4	7.4	7.36				
D.O. Saturation (%)	92.1	91.7	85.8	86.4	85.0	83.8	87.47	-			
D.O. (mg/L)	6.3	6.3	5.8	5.9	5.7	5.6	5.95	5.68			
Turbidity (NTU)	6.0	6.0	6.8	6.73	-						
SS (mg/L)	5.0	8.0	7.0	6.0	7.33	-					
Remarks		No dredging works was observed.									

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			13:56	-13:57			Northing	Easting			
Water Depth (m)			11	1.9		22.21.761	113.54.496				
Monitoring Depth (m)	1	.0	6								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.7	25.8	25.2	25.2	24.8	24.8	25.24	-			
Salinity (ppt)	22.7	23.0	27.3	27.3	28.9	29.1	26.38	-			
pH	7.4	7.5	7.5	7.5	7.4	7.5	7.46				
D.O. Saturation (%)	86.4	86.5	80.9	81.0	80.9	80.0	82.62	-			
D.O. (mg/L)	5.9	5.9	5.5	5.5	5.4	5.4	5.59	5.41			
Turbidity (NTU)	6.4	6.5	6.9	6.7	7.9	7.9	7.05	-			
SS (mg/L)	7.0	6.0	5.0	8.0	8.0	6.83	-				
Remarks		No dredging works was observed.									

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			13:44	-13:47			Northing	Easting		
Water Depth (m)			9	.5		22.21.464	113.55.161			
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	25.6	25.6	25.2	25.2	24.8	24.8	25.18	-		
Salinity (ppt)	23.7	24.1	26.9	27.0	29.1	29.6	26.71	-		
pH	7.5	7.5	7.5	7.5	7.4	7.5	7.45			
D.O. Saturation (%)	86.0	85.6	79.7	79.6	78.2	77.9	81.17	-		
D.O. (mg/L)	5.9	5.8	5.4	5.4	5.3	5.2	5.49	5.23		
Turbidity (NTU)	6.3	6.3	6.9	6.9	8.5	8.6	7.25	-		
SS (mg/L)	6.0	8.0	6.0	6.0	6.33	-				
Remarks		No dredging works was observed.								

Station			ME	PB1					
Time (hh:mm)			14:15	-14:16					
Water Depth (m)			8						
Monitoring Depth (m)	1	.0	4	.2	7	.4			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	25.9	25.9	25.3	25.3	25.0	25.0	25.39	-	
Salinity (ppt)	20.1	20.2	26.0	25.7	27.9	28.1	24.65	-	
pH	7.4	7.4	7.4	7.4	7.4	7.4	7.41		
D.O. Saturation (%)	87.1	86.3	80.7	81.2	82.2	81.9	83.23	-	
D.O. (mg/L)	6.0	6.0	5.5	5.5	5.5	5.5	5.67	5.52	
Turbidity (NTU)	6.8	6.7	7.2	7.2	7.8	7.9	7.27	-	
SS (mg/L)	8.0	5.0	5.0	6.0	8.0	5.0	6.17	-	
Remarks	No dredging works was observed.								

Station			MF	PB2								
Time (hh:mm)			14:24	-14:26								
Water Depth (m)			8									
Monitoring Depth (m)	1	.0	4									
Trial	Trial 1	Trial 2	Depth-averaged	Bottom								
Water Temperature (°C)	26.0	26.0	25.56	-								
Salinity (ppt)	19.8	19.7	24.7	23.95	-							
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.46					
D.O. Saturation (%)	88.2	87.9	83.4	82.9	81.8	82.4	84.43	-				
D.O. (mg/L)	6.1	6.1 6.1 5.7 5.6 5.5 5.6 5.76										
Turbidity (NTU)	6.5	6.5 6.5 7.7 7.8 8.5 8.4 7.57										
SS (mg/L)	6.0	4.0	6.0	5.0	8.0	4.0	5.50	-				
Remarks		No dredging works was observed.										

Station			IV	IP								
Time (hh:mm)			14:06	-14:07								
Water Depth (m)			5									
Monitoring Depth (m)	1	.0	2									
Trial	Trial 1	Trial 2	Depth-averaged	Bottom								
Water Temperature (°C)	25.7	25.7	-	25.42	-							
Salinity (ppt)	21.2	21.1	-	23.86	-							
pH	7.3	7.3	-	-	7.4	7.3	7.32					
D.O. Saturation (%)	84.2	83.9	-	-	81.1	80.5	82.43	-				
D.O. (mg/L)	5.8	5.8 5.8 5.5 5.4 5.63 5.40										
Turbidity (NTU)	6.7	6.7 6.6 7.6 7.5 7.10 -										
SS (mg/L)	6.0	4.0	-	-	7.0	5.0	5.50	-				
Remarks		No dredging works was observed.										

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2	IMO2		MPB1		MPB2		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.5	5.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.8	5.8	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	9.5	9.5	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.5	8.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	10/12/2008
Weather & Ambient Temperature	Sunny, 18C

Station			C2 (NM5)			1			
Time (hh:mm)			9:58-	10:01						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2								
		averaged								
Water Temperature (°C)	20.7	20.6	20.2	20.2	20.2	20.2	20.33	-		
Salinity (ppt)	38.6	38.9	38.68	-						
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18			
D.O. Saturation (%)	90.9	91.4	91.2	91.4	92.4	93.0	91.72	-		
D.O. (mg/L)	6.5	6.5	6.60	6.69						
Turbidity (NTU)	4.3	4.4	5.58	-						
SS (mg/L)	4.0	6.0	6.0	5.0	6.0	6.0	5.50	-		
Remarks		No dredging works was observed.								

1-												
Station			IM	01			Co-ore	dinates				
Time (hh:mm)			11:05	-11:06			Northing	Easting				
Water Depth (m)		16.4 22.21.294										
Monitoring Depth (m)	1	.0		3								
Trial	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2					Depth-	Bottom					
							averaged					
Water Temperature (°C)	20.4	20.3	20.3	20.2	20.2	20.3	20.26	-				
Salinity (ppt)	38.4	38.4 38.5 38.9 38.8 39.0 39.0					38.76	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22					
D.O. Saturation (%)	95.5	94.5	95.48	-								
D.O. (mg/L)	6.9	6.8	6.88	6.92								
Turbidity (NTU)	4.5 4.5 4.9 5.1 5.9 6.1						5.17	-				
SS (mg/L)	5.0	4.83	-									
Remarks	No dredging works was observed.											

Station			IM	02			Co-ord	dinates			
Time (hh:mm)			11:12	-11:13			Northing	Easting			
Water Depth (m)		18.1 22.21.736 113.									
Monitoring Depth (m)	1	.0									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	20.3	20.3 20.4 20.3 20.2 20.3		20.2	20.2	20.26	-				
Salinity (ppt)	38.5	38.4	38.76	-							
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.23				
D.O. Saturation (%)	96.0	95.8	96.6	95.5	97.6	98.6	96.68	-			
D.O. (mg/L)	6.9	6.9 6.9 7.0 6.9 7.0 7.10 6.96									
Turbidity (NTU)	4.5	4.3	5.00	-							
SS (mg/L)	4.0	5.0	4.0	4.0	4.0	5.0	4.33	-			
Remarks		No dredging works was observed.									

Station			MF	PB1			1			
Time (hh:mm)			10:36	-10:37						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 2	Depth-	Bottom					
			averaged							
Water Temperature (°C)	20.4	20.6	20.8	20.8	20.8	20.8	20.70	-		
Salinity (ppt)	37.8	37.5	38.46	-						
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22			
D.O. Saturation (%)	100.0	99.5	100.0	100.0	102.3	102.4	100.70	-		
D.O. (mg/L)	7.2	7.2	7.21	7.29						
Turbidity (NTU)	4.0	4.1	4.00	-						
SS (mg/L)	4.0	5.0	5.0	7.0	5.0	6.0	5.33	-		
Remarks		No dredging works was observed.								

Station			M	PB2				
Time (hh:mm)			10:44	-10:45				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.4	20.8	20.8	20.8	20.9	20.68	-
Salinity (ppt)	37.7	37.7	38.48	-				
pH	8.3	8.2	8.2	8.2	8.2	8.2	8.23	
D.O. Saturation (%)	101.2	100.4	100.0	100.1	101.8	101.7	100.87	-
D.O. (mg/L)	7.3	7.3	7.1	7.1	7.3	7.2	7.22	7.24
Turbidity (NTU)	3.7	3.7	4.2	4.3	4.1	4.2	4.03	-
SS (mg/L)	4.0	4.0	6.0	5.0	6.0	4.0	4.83	-
Remarks	No dredging works was observed.							

Station			N	IP			1				
Time (hh:mm)			10:26	-10:27							
Water Depth (m)											
Monitoring Depth (m)	1	.0									
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2									
Water Temperature (°C)	20.4	20.4	-	-	20.8	20.7	20.60	-			
Salinity (ppt)	37.8	37.8	38.32	-							
pH	8.2	8.2	-	-	8.2	8.2	8.22				
D.O. Saturation (%)	101.3	102.0	-	-	101.8	103.2	102.08	-			
D.O. (mg/L)	7.3	7.3 7.4 7.3 7.4 7.32 7.31									
Turbidity (NTU)	2.6	2.7	-	-	3.5	3.4	3.05	-			
SS (mg/L)	6.0	5.0	-	-	4.0	4.0	4.75	-			
Remarks		No dredging works was observed.									

Compliance with Action an	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	30%	IIV	101	IM	02		MPB1	MF	PB2	IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.7	6.7	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.6	6.6	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.3	7.3	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	7.2	7.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	10/12/2008
Weather & Ambient Temperature	Sunny, 19C

Station			C1 (NM3)				
Time (hh:mm)			16:26	-16:27				
Water Depth (m)			18					
Monitoring Depth (m)	1	.0	9					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.4	20.4	20.1	20.0	19.9	19.9	20.11	-
Salinity (ppt)	38.2	38.1	38.8	38.8	38.9	38.9	38.63	-
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.27	
D.O. Saturation (%)	109.2	112.3	106.5	105.0	108.7	106.8	108.08	-
D.O. (mg/L)	7.9	8.1	7.7	7.6	7.9	7.7	7.81	7.81
Turbidity (NTU)	4.2	4.3	5.9	6.2	7.5	7.6	5.95	-
SS (mg/L)	4.0	5.0	4.0	5.0	4.0	5.0	4.50	-
Remarks				No dred	dging works	was observe	d.	

Station			C3 (NM6)				
Time (hh:mm)			15:03	-15:04				
Water Depth (m)			8					
Monitoring Depth (m)	1	.0	4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.3	20.3	20.1	20.1	20.1	20.1	20.18	-
Salinity (ppt)	38.4	38.5	38.7	38.6	38.8	38.8	38.62	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.24	
D.O. Saturation (%)	98.6	97.2	98.7	97.6	98.5	99.2	98.30	-
D.O. (mg/L)	7.1	7.0	7.1	7.1	7.1	7.2	7.09	7.14
Turbidity (NTU)	4.5	4.8	5.9	5.7	5.4	5.3	5.27	-
SS (mg/L)	4.0	5.0	3.0	3.0	4.0	4.0	3.83	-
Remarks				No dred	dging works	was observe	d.	

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			16:14	-16:15			Northing	Easting		
Water Depth (m)			16	6.8		22.21.298	113.55.359			
Monitoring Depth (m)	1	.0	8	.4	15	5.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.4	20.4	20.1	20.0	19.9	19.9	20.10	-		
Salinity (ppt)	38.1	38.2	38.8	38.8	38.9	38.9	38.62	-		
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.27			
D.O. Saturation (%)	109.0	109.1	106.7	104.2	109.8	104.1	107.15	-		
D.O. (mg/L)	7.9	7.9	7.7	7.5	8.0	7.6	7.75	7.75		
Turbidity (NTU)	4.6	4.6	6.4	6.2	7.6	7.8	6.20	-		
SS (mg/L)	8.0	6.0	4.0	4.0	4.0	4.0	5.00	-		
Remarks		No dredging works was observed.								

Station			IM	02			Co-ordinate:	S			
Time (hh:mm)			16:04	-16:05			Northing	Easting			
Water Depth (m)			18	3.4			22.21.741	113.54.596			
Monitoring Depth (m)	1	1.0			17	7.4		veraged Bottom			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.3	20.3	20.1	20.0	20.0	20.0	20.11	-			
Salinity (ppt)	37.8	37.7	38.6	38.9	39.1	39.0	38.52	-			
pH	8.3	8.3	8.3	8.3	8.2	8.3	8.25				
D.O. Saturation (%)	104.8	107.8	104.6	102.4	102.3	105.6	104.58	-			
D.O. (mg/L)	7.6	7.8	7.6	7.4	7.4	7.6	7.56	7.51			
Turbidity (NTU)	4.6	4.8	5.8	5.6	6.3	6.7	5.63	-			
SS (mg/L)	4.0	6.0	4.0	6.0	7.0	7.0	5.67	-			
Remarks		No dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			15:36	-15:37						
Water Depth (m)			7							
Monitoring Depth (m)	1	.0	3	.7	6	.3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.2	20.3	20.1	20.0	20.0	20.0	20.08	-		
Salinity (ppt)	38.0	37.8	38.7	38.7	39.0	39.0	38.54	-		
pH	8.3	8.3	8.3	8.3	8.2	8.2	8.25			
D.O. Saturation (%)	104.5	105.5	103.3	102.8	104.9	105.7	104.45	-		
D.O. (mg/L)	7.6	7.6	7.5	7.4	7.6	7.6	7.56	7.61		
Turbidity (NTU)	5.1	5.2	6.1	6.1	7.0	6.7	6.03	-		
SS (mg/L)	4.0	5.0	4.0	6.0	5.0	4.0	4.67	-		
Remarks		No dredging works was observed.								

Station			MF	B2							
Time (hh:mm)			15:28	-15:30							
Water Depth (m)			7								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.2	20.3	20.1	20.1	19.9	20.0	20.10	-			
Salinity (ppt)	37.8	37.6	38.5	38.6	38.9	38.9	38.38	-			
pH	8.2	8.2	8.3	8.3	8.2	8.3	8.25				
D.O. Saturation (%)	105.9	106.1	104.1	104.6	103.2	102.6	104.42	-			
D.O. (mg/L)	7.7	7.7	7.5	7.6	7.5	7.4	7.55	7.44			
Turbidity (NTU)	3.7	3.8	4.8	4.9	5.6	5.9	4.78	-			
SS (mg/L)	6.0	5.0	6.0	5.0	5.0	4.0	5.17	-			
Remarks		No dredging works was observed.									

Station			IV	IP							
Time (hh:mm)											
Water Depth (m)			15:45								
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.2	20.2	-	-	20.0	20.1	20.15	-			
Salinity (ppt)	37.9	37.9	-	-	38.8	38.6	38.30	-			
pH	8.3	8.3	-	-	8.3	8.3	8.26				
D.O. Saturation (%)	106.2	107.1	-	-	107.2	107.6	107.03	-			
D.O. (mg/L)	7.7	7.8	-	-	7.8	7.8	7.75	7.77			
Turbidity (NTU)	3.3	3.3	-	-	4.9	4.8	4.08	-			
SS (mg/L)	4.0	5.0	-	-	6.0	4.0	4.75	-			
Remarks		No dredging works was observed.									

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2	IMO2		MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.5	7.5	N	N	N	N	N	Ν	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.5	7.5	N	N	N	N	N	Ν	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.3	7.3	N	N	N	N	N	Ν	N	N	N	N
SS (Depth-averaged)	24.0	37.0	5.4	5.4	N	N	N	N	N	N	N	N	N	N

Sampling Date	11/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1			
Time (hh:mm)			- 1	-11:17			1			
Water Depth (m)				1						
Monitoring Depth (m)	1	.0	10).2	19	9.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.6	20.6	20.5	20.5	20.4	20.3	20.47	-		
Salinity (ppt)	38.0	37.8	37.9	38.0	37.8	38.0	37.91	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.04			
D.O. Saturation (%)	104.8	104.3	103.7	104.2	103.6	104.5	104.18	-		
D.O. (mg/L)	7.5	7.5	7.5	7.5	7.5	7.6	7.51	7.52		
Turbidity (NTU)	5.6	5.7	6.4	6.5	7.1	7.0	6.38	-		
SS (mg/L)	6.0	6.0 6.0 9.0 9.0 9.0 9.0 8.00								
Remarks			No	dredging wo	orks was obs	erved.				

Station			IM	01			Co-ord	dinates
Time (hh:mm)			12:15	-12:17			Northing	Easting
Water Depth (m)				22.20.791	113.53.644			
Monitoring Depth (m)	1	.0	7.1		-			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.3	20.1	20.1	20.2	20.2	20.19	-
Salinity (ppt)	37.2	37.1	37.9	37.8	38.2	38.0	37.70	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.16	
D.O. Saturation (%)	103.3	104.1	102.1	101.3	102.9	101.3	102.50	-
D.O. (mg/L)	7.5	7.6	7.4	7.4	7.4	7.34	7.44	7.39
Turbidity (NTU)	6.8	6.7	8.7	8.2	8.4	8.4	7.87	-
SS (mg/L)	8.0	6.50	-					
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			12:25	-12:27			Northing	Easting
Water Depth (m)				22.21.510	113.54.436			
Monitoring Depth (m)	1	.0	8	.4	15	5.7		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.3	20.1	20.1	20.2	20.2	20.17	-
Salinity (ppt)	37.3	37.3	38.1	38.0	38.3	38.3	37.88	-
pH	8.2	8.2	8.2	8.1	8.2	8.2	8.16	
D.O. Saturation (%)	103.6	103.9	102.5	101.5	102.9	103.0	102.90	-
D.O. (mg/L)	7.5	7.5	7.4	7.4	7.5	7.45	7.46	7.45
Turbidity (NTU)	6.5	6.9	8.9	9.1	8.2	8.6	8.03	-
SS (mg/L)	7.0	8.0	7.50	-				
Remarks			No	dredging wo	orks was obs	erved.		

Station			MF	PB1			1	
Time (hh:mm)			11:50	-11:51				
Water Depth (m)								
Monitoring Depth (m)	1	.0	3	.6	6	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.6	20.6	20.5	20.5	20.5	20.5	20.55	-
Salinity (ppt)	38.2	38.2 38.2 38.2 38.2 38.3 38.2						-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.06	
D.O. Saturation (%)	104.9	104.5	104.6	104.9	105.0	104.8	104.78	-
D.O. (mg/L)	7.5	7.5	7.5	7.5	7.5	7.5	7.53	7.54
Turbidity (NTU)	5.6	5.8	5.8	5.7	6.6	6.4	5.98	-
SS (mg/L)	7.0	8.0	7.83	-				
Remarks			No	dredging wo	rks was obs	erved.		•

Station			M	PB2						
Time (hh:mm)										
Water Depth (m)			7	'.4						
Monitoring Depth (m)	1	.0	3	3.7	6	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.5	20.6	20.56	-		
Salinity (ppt)	38.3	38.2	38.3	38.3	38.3	38.3	38.26	-		
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.08			
D.O. Saturation (%)	105.2	104.9	105.3	105.0	105.0	105.3	105.12	-		
D.O. (mg/L)	7.6	7.5	7.6	7.5	7.5	7.6	7.55	7.55		
Turbidity (NTU)	6.1	5.9	5.9	5.8	6.0	5.9	5.93	-		
SS (mg/L)	6.0	7.0	8.0	6.0	7.0	6.0	6.67	-		
Remarks		No dredging works was observed.								

Station			IV	IP.			1		
Time (hh:mm)			11:43	-11:44					
Water Depth (m)									
Monitoring Depth (m)	1	.0	2	5	4	.0			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	20.6	20.6	0.0	0.0	20.5	20.5	13.71	-	
Salinity (ppt)	38.1	38.1	0.0	0.0	38.1	38.1	25.41	-	
pH	8.1	8.1	0.0	0.0	8.1	8.1	5.37		
D.O. Saturation (%)	105.0	104.8	0.0	0.0	105.0	105.1	69.98	-	
D.O. (mg/L)	7.6	7.5	0.0	0.0	7.6	7.6	5.03	7.56	
Turbidity (NTU)	5.5	5.8	0.0	0.0	5.5	5.4	3.70	-	
SS (mg/L)	7.0	6.0	0.0	0.0	7.0	8.0	4.67	-	
Remarks		No dredging works was observed.							

Compliance with Action ar	<u>id Limit Lev</u>	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	30%	IMO1		IM	02		MPB1	MP	IPB2		(P
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.5	7.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.5	7.5	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.3	8.3	N	N	N	N	N	N	Ν	N	Z	N
SS (Depth-averaged)	24.0	37.0	10.4	10.4	N	N	N	N	N	N	N	N	N	N

Sampling Date	11/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C1 (NM3)				
Time (hh:mm)			16:57	-16:59				
Water Depth (m)			18	3.5				
Monitoring Depth (m)	1	.0	9	.3	17	7.5		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.3	20.3	20.2	20.2	20.1	20.1	20.22	-
Salinity (ppt)	37.3	37.2	37.8	37.7	38.5	38.5	37.84	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22	
D.O. Saturation (%)	108.7	108.9	108.2	108.7	108.1	108.6	108.53	-
D.O. (mg/L)	7.9	7.9	7.8	7.9	7.8	7.9	7.86	7.83
Turbidity (NTU)	5.5	5.6	8.1	7.8	9.6	9.5	7.68	-
SS (mg/L)	4.0	4.0	6.0	6.0	9.0	7.0	6.00	-
Remarks				No dred	dging works	was observed	d.	

Station			C3 (NM6)							
Time (hh:mm)			15:38	-15:39							
Water Depth (m)			8	.5							
Monitoring Depth (m)	1	.0	4	.3	7	.5					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.2	20.2	20.2	20.2	20.2	20.2	20.21	-			
Salinity (ppt)	37.3	37.4	37.7	37.7	38.2	38.1	37.73	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18				
D.O. Saturation (%)	102.2	103.0	101.9	102.9	103.8	101.2	102.50	-			
D.O. (mg/L)	7.4	7.5	7.4	7.5	7.5	7.3	7.44	7.42			
Turbidity (NTU)	6.5	6.5	6.4	6.7	6.6	6.9	6.60	-			
SS (mg/L)	6.0	5.0	6.0	6.0	5.0	7.0	5.83	-			
Remarks		No dredging works was observed.									

Station			IM	01			Co-ordinate:	s		
Time (hh:mm)			16:27	-16:28			Northing	Easting		
Water Depth (m)			18		22.21.560	113.54.427				
Monitoring Depth (m)	1	.0	9							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.2	20.3	20.2	20.2	20.2	20.2	20.20	-		
Salinity (ppt)	37.4	37.5	37.6	38.0	38.0	38.0	37.74	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.21			
D.O. Saturation (%)	109.0	108.2	108.6	107.8	107.4	108.4	108.23	-		
D.O. (mg/L)	7.9	7.9	7.9	7.8	7.8	7.9	7.85	7.82		
Turbidity (NTU)	6.4	6.3	6.7	6.6	7.9	7.6	6.92	-		
SS (mg/L)	6.0	5.0	6.0	5.0	5.50	-				
Remarks		No dredging works was observed.								

Station			IM	02			Co-ordinate:	s		
Time (hh:mm)			16:36	-16:37			Northing	Easting		
Water Depth (m)			16		22.21.320	113.54.822				
Monitoring Depth (m)	1	.0	8							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.3	20.3	20.2	20.2	20.1	20.1	20.20	-		
Salinity (ppt)	37.3	37.3	37.7	8.2	38.5	38.6	37.83	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.20			
D.O. Saturation (%)	108.6	108.7	108.4	108.4	108.3	108.3	108.45	-		
D.O. (mg/L)	7.9	7.9	7.9	7.9	7.8	7.8	7.86	7.83		
Turbidity (NTU)	6.4	6.3	7.8	7.5	10.3	9.9	8.03	-		
SS (mg/L)	6.0	6.0	5.0	5.0	5.33	-				
Remarks		No dredging works was observed.								

Station			MF	PB1					
Time (hh:mm)			16:11						
Water Depth (m)			7						
Monitoring Depth (m)	1	.0	3	.6	6	.1			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.2	20.2	20.2	20.1	20.2	20.2	20.15	-	
Salinity (ppt)	37.4	37.4	37.8	37.7	38.2	38.1	37.78	-	
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18		
D.O. Saturation (%)	104.2	104.4	103.8	104.4	104.2	105.0	104.33	-	
D.O. (mg/L)	7.6	7.6	7.5	7.6	7.5	7.6	7.57	7.58	
Turbidity (NTU)	6.1	6.1	6.4	6.6	6.2	6.3	6.28	-	
SS (mg/L)	6.0	5.0	6.0	7.0	6.0	6.0	6.00	-	
Remarks		No dredging works was observed.							

Station			MF	PB2						
Time (hh:mm)			16:05							
Water Depth (m)			7							
Monitoring Depth (m)	1	.0	3	.6	6	.2				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.1	20.2	20.2	20.2	20.2	20.2	20.17	-		
Salinity (ppt)	37.4	37.5	37.5	37.7	37.8	38.3	37.68	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.18			
D.O. Saturation (%)	104.0	104.7	104.4	102.9	105.0	103.2	104.03	-		
D.O. (mg/L)	7.6	7.6	7.6	7.5	7.6	7.5	7.55	7.54		
Turbidity (NTU)	6.2	6.1	6.2	6.1	6.3	6.4	6.22	-		
SS (mg/L)	6.0	7.0	5.0	5.0	5.0	5.0	5.50	-		
Remarks		No dredging works was observed.								

Station			IV	IP				
Time (hh:mm)			16:19					
Water Depth (m)			5	.3				
Monitoring Depth (m)	1	.0	2	.7	4	.3		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.2	20.2	0.0	0.0	20.2	20.1	13.44	-
Salinity (ppt)	37.4	37.4	25.06	-				
pH	8.2	8.2	0.0	0.0	8.2	8.2	5.45	
D.O. Saturation (%)	104.7	104.6	0.0	0.0	104.2	105.1	69.77	-
D.O. (mg/L)	7.6	7.6	0.0	0.0	7.6	7.6	5.07	7.60
Turbidity (NTU)	6.8	6.6	0.0	0.0	6.6	6.9	4.48	-
SS (mg/L)	8.0	9.0	0.0	0.0	6.0	8.0	5.17	-
Remarks	No dredging works was observed.							

Compliance with Action an	Compliance with Action and Limit Level													
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		101	IMO2			MPB1	MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedan Exceedance of Action Exceed		Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.6	7.6	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.6	7.6	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	9.3	9.3	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.7	7.7	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station	I		C2 /	NM5)			1					
•••••			- 1									
Time (hh:mm)			13:57	-13:59								
Water Depth (m)												
Monitoring Depth (m)	1	.0	9	.6	18	3.2						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom				
							averaged					
Water Temperature (°C)	25.9	25.9	25.2	25.2	24.6	24.6	25.22	-				
Salinity (ppt)	26.4	26.3	28.9	28.9	30.9	30.8	28.68	-				
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.59					
D.O. Saturation (%)	85.0	84.2	77.1	76.1	74.5	73.6	78.42	-				
D.O. (mg/L)	5.7	5.7	5.2	5.1	5.0	4.9	5.25	4.94				
Turbidity (NTU)	5.7	5.7	7.3	7.0	8.2	8.5	7.07	-				
SS (mg/L)	8.0	6.0	7.00	-								
Remarks		No dredging works was observed.										

Station			IM	01			Co-ore	dinates	
Time (hh:mm)			12:56	-12:58			Northing	Easting	
Water Depth (m)				22.21.277	113.53.369				
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	25.7	25.8	25.3	25.3	25.0	24.9	25.31	-	
Salinity (ppt)	22.9	22.7	28.1	28.2	29.3	29.4	26.76	-	
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.59		
D.O. Saturation (%)	81.7	82.7	75.1	74.7	74.2	73.8	77.03	-	
D.O. (mg/L)	5.6	5.7	5.0	5.0	5.0	4.94	5.20	4.95	
Turbidity (NTU)	6.3	6.3	7.7	7.5	8.5	8.5	7.47	-	
SS (mg/L)	8.0	6.0	8.0	6.0	7.0	6.0	6.83	-	
Remarks	No dredging works was observed.								

Station			IM	02			Co-ord	dinates	
Time (hh:mm)			12:45	-12:47			Northing	Easting	
Water Depth (m)				22.21.168	113.53.796				
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	25.7	25.7	25.2	25.3	24.9	24.9	25.27	-	
Salinity (ppt)	24.3	24.2	28.3	28.1	29.9	29.5	27.39	-	
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.61		
D.O. Saturation (%)	81.9	58.5	74.8	75.9	74.5	73.7	73.22	-	
D.O. (mg/L)	5.6	5.7	5.0	5.1	5.0	4.93	5.21	4.96	
Turbidity (NTU)	6.6	6.6	7.5	7.7	8.9	8.8	7.68	-	
SS (mg/L)	10.0	9.0	6.0	7.0	8.0	6.0	7.67	-	
Remarks	No dredging works was observed.								

Station			MF	PB1			1				
Time (hh:mm)			13:29	-13:31							
Water Depth (m)											
Monitoring Depth (m)	1	.0	4	.2	7	.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	25.9	25.9	25.3	25.3	25.2	25.2	25.48	-			
Salinity (ppt)	19.7	19.4	25.1	25.3	27.4	27.0	24.01	-			
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.51				
D.O. Saturation (%)	82.2	81.8	74.3	74.3	75.5	75.0	77.18	-			
D.O. (mg/L)	5.7	5.7	5.1	5.0	5.1	5.1	5.27	5.08			
Turbidity (NTU)	5.9	6.1	6.5	6.5	6.8	6.9	6.45	-			
SS (mg/L)	7.0	8.0	7.17	-							
Remarks		No dredging works was observed.									

Station			MI	PB2					
Time (hh:mm)			13:18	-13:22					
Water Depth (m)									
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	26.1	26.1	25.6	25.6	25.4	25.4	25.68	-	
Salinity (ppt)	17.9	19.4	25.4	23.6	26.5	27.2	23.32	-	
pH	7.6	7.5	7.6	7.6	7.6	7.6	7.57		
D.O. Saturation (%)	85.0	85.2	78.2	77.1	76.9	77.8	80.03	-	
D.O. (mg/L)	5.9	5.9	5.3	5.3	5.2	5.2	5.47	5.21	
Turbidity (NTU)	6.5	6.5	7.0	7.0	7.7	7.6	7.05	-	
SS (mg/L)	7.0	8.0	8.0	7.0	8.0	6.0	7.33	-	
Remarks	No dredging works was observed.								

Station			N	/IP						
Time (hh:mm)			13:39)-13:40						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	25.8	25.8	-	-	25.3	25.3	25.53	-		
Salinity (ppt)	20.0	20.1	-	-	25.5	24.9	22.63	-		
pH	7.5	7.5	-	-	7.5	7.4	7.46			
D.O. Saturation (%)	81.3	80.2	-	-	76.8	76.8	78.78	-		
D.O. (mg/L)	5.6	5.6	-	-	5.2	5.2	5.42	5.23		
Turbidity (NTU)	8.3	8.4	-	-	9.4	9.4	8.88	-		
SS (mg/L)	7.0	7.0	6.50	-						
Remarks	No dredging works was observed.									

Compliance with Action ar	Compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IM	IMO1		IMO2		MPB1	MPB2		MP	
	Action Limit		Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc Exceedance of Limit Level		Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	4.9	4.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.2	5.2	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	9.2	9.2	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	9.1	9.1	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/12/2008
Weather & Ambient Temperature	Sunny, 20C

Station			C1 (NM3)							
Time (hh:mm)			16:56	-16:57							
Water Depth (m)			16	6.4							
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.9	25.9	25.6	25.4	25.0	24.9	25.45	-			
Salinity (ppt)	26.6	26.5	28.2	28.6	30.1	30.3	28.39	-			
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.58				
D.O. Saturation (%)	85.4	84.6	77.6	77.5	75.9	76.5	79.58	-			
D.O. (mg/L)	5.7	5.7	5.2	5.2	5.1	5.1	5.33	5.10			
Turbidity (NTU)	5.6	5.5	7.1	7.1	8.5	8.7	7.08	-			
SS (mg/L)	8.0	6.0	6.0	6.0	7.0	6.0	6.50	-			
Remarks		No dredging works was observed.									

Station			C3 (NM6)								
Time (hh:mm)			15:33	-15:34								
Water Depth (m)			6									
Monitoring Depth (m)	1	.0	3									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	26.2	26.2	25.9	25.9	25.4	25.6	25.86	-				
Salinity (ppt)	18.2	18.3	23.2	23.1	27.6	26.9	22.88	-				
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.53					
D.O. Saturation (%)	86.6	86.5	81.1	80.4	77.9	80.1	82.10	-				
D.O. (mg/L)	6.0	6.0	5.6	5.5	5.2	5.4	5.63	5.31				
Turbidity (NTU)	6.3	6.2	6.6	6.7	7.0	7.2	6.67	-				
SS (mg/L)	7.0	6.0	7.0	7.0	7.0	7.0	6.83	-				
Remarks		No dredging works was observed.										

Station			IM	01			Co-ordinates	3		
Time (hh:mm)			16:01	-16:03			Northing	Easting		
Water Depth (m)			7	.0			22.21.284	113.53.372		
Monitoring Depth (m)	1	.0	3	.5	6	6.0 Trial 1				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	25.9	26.2	25.6	25.6	25.2	25.2	25.61	-		
Salinity (ppt)	23.3	23.7	27.9	27.8	29.0	29.1	26.80	-		
pH	7.5	7.6	7.6	7.6	7.6	7.6	7.57			
D.O. Saturation (%)	82.0	81.9	75.8	76.0	75.4	74.9	77.67	-		
D.O. (mg/L)	5.6	5.6	5.1	5.1	5.1	5.0	5.23	5.03		
Turbidity (NTU)	6.1	6.4	6.9	6.9	8.5	8.4	7.20	-		
SS (mg/L)	6.0	5.0	7.0	6.0	7.0	5.0	6.00	-		
Remarks		No dredging works was observed.								

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			15:49	-15:51			Northing	Easting		
Water Depth (m)			7		22.21.171	113.53.796				
Monitoring Depth (m)	1	.0	3	.5	6	.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	25.9	25.9	25.5	25.5	25.1	25.1	25.48	-		
Salinity (ppt)	23.6	24.0	27.7	27.8	29.8	29.7	27.09	-		
pH	7.5	7.5	7.6	7.6	7.6	7.5	7.55			
D.O. Saturation (%)	82.6	82.2	75.0	74.5	72.7	73.3	76.72	-		
D.O. (mg/L)	5.7	5.6	5.0	5.0	4.9	4.9	5.18	4.88		
Turbidity (NTU)	6.8	6.7	7.7	7.6	9.1	8.9	7.80	-		
SS (mg/L)	7.0	6.0	6.0	5.0	6.0	6.0	6.00	-		
Remarks		No dredging works was observed.								

Station			ME	PB1				
Time (hh:mm)			16:27	-16:28				
Water Depth (m)			8					
Monitoring Depth (m)	1	.0	4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	26.2	26.1	25.6	25.6	25.4	25.4	25.71	-
Salinity (ppt)	18.2	18.8	25.1	24.7	27.9	28.3	23.84	-
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.50	
D.O. Saturation (%)	81.3	81.9	75.5	75.8	76.4	76.1	77.83	-
D.O. (mg/L)	5.7	5.7	5.1	5.2	5.1	5.1	5.32	5.12
Turbidity (NTU)	6.5	6.5	7.1	7.1	7.4	7.6	7.03	-
SS (mg/L)	6.0	6.0	5.0	5.0	6.0	7.0	5.83	-
Remarks	No dredging works was observed.							

Station			MF	PB2						
Time (hh:mm)			16:41	-16:43						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.2	26.3	25.9	25.8	25.5	25.5	25.86	-		
Salinity (ppt)	17.1	17.1	23.7	24.7	27.2	27.3	22.85	-		
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.52			
D.O. Saturation (%)	83.8	83.6	78.7	78.6	77.5	77.5	79.95	-		
D.O. (mg/L)	5.9	5.9	5.4	5.3	5.2	5.2	5.48	5.21		
Turbidity (NTU)	6.6	6.6	7.4	7.5	7.9	7.8	7.30	-		
SS (mg/L)	5.0	6.0	6.0	7.0	6.0	6.0	6.00	-		
Remarks		No dredging works was observed.								

Station			IV	IP						
Time (hh:mm)			16:14	-16:16						
Water Depth (m)			5							
Monitoring Depth (m)	1	.0	2							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	25.9	25.9	-	-	25.4	25.4	25.67	-		
Salinity (ppt)	20.2	20.0	-	-	25.6	25.8	22.93	-		
pH	7.4	7.5	-	-	7.5	7.5	7.46			
D.O. Saturation (%)	79.7	79.3	-	-	76.0	75.3	77.58	-		
D.O. (mg/L)	5.5	5.5	-	-	5.2	5.1	5.33	5.14		
Turbidity (NTU)	6.5	6.5	-	-	7.3	7.2	6.88	-		
SS (mg/L)	6.0	7.0	-	-	7.0	8.0	7.00	-		
Remarks		No dredging works was observed.								

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2	IMO2		MPB1	MF	PB2 MP		IP.
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedance	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.2	5.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.5	5.5	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.7	8.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	13/12/2008
Weather & Ambient Temperature	Sunny, 21C

Station			C2 /	NM5)			1	
Time (hh:mm)				-14:30			1	
Water Depth (m)				.0				
Monitoring Depth (m)	1	.0	1					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.9	20.7	19.9	19.9	19.5	19.5	20.07	-
Salinity (ppt)	36.6	36.6	37.2	37.1	37.8	37.8	37.18	-
pH	8.2	8.0	8.1	8.1	7.8	7.9	8.02	
D.O. Saturation (%)	119.0	120.9	107.2	105.5	107.6	106.6	111.13	-
D.O. (mg/L)	8.6	8.8	7.9	7.8	7.9	7.9	8.13	7.89
Turbidity (NTU)	3.4	3.6	4.2	4.4	4.4	4.6	4.10	-
SS (mg/L)	7.0	8.0	7.0	8.0	8.0	8.0	7.67	-
Remarks			No	dredging wo	orks was obs	erved.		· · · · · · · · · · · · · · · · · · ·

Station			IM	01			Co-ore	dinates
Time (hh:mm)			13:19	-13:22			Northing	Easting
Water Depth (m)			6	.0			22.21.107	113.53.482
Monitoring Depth (m)	1	.0	3	.0	5	.0		•
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	22.5	21.5	20.7	20.8	19.9	20.0	20.88	-
Salinity (ppt)	34.9	34.9	35.8	35.9	37.5	37.4	36.04	-
pH	8.0	8.0	7.9	8.1	8.0	8.1	8.01	
D.O. Saturation (%)	116.1	113.0	109.6	110.7	106.3	107.0	110.45	-
D.O. (mg/L)	8.4	8.2	8.0	8.1	7.8	7.86	8.06	7.84
Turbidity (NTU)	4.1	4.2	4.3	4.5	4.8	4.9	4.47	-
SS (mg/L)	9.0	6.0	7.0	7.0	6.0	6.0	6.83	-
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)				Northing	Easting			
Water Depth (m)			7	.0			22.21.070	113.58.963
Monitoring Depth (m)	1.0 3.5 6.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.8	20.7	20.6	20.6	19.7	19.7	20.32	-
Salinity (ppt)	35.4	35.4	36.0	35.8	37.6	37.6	36.29	-
pH	8.1	7.8	8.0	8.1	8.2	8.2	8.07	
D.O. Saturation (%)	111.5	110.9	109.5	109.7	106.1	106.5	109.03	-
D.O. (mg/L)	8.2	8.1	8.0	8.0	7.8	7.84	8.00	7.83
Turbidity (NTU)	3.9	3.7	4.2	4.1	4.5	4.6	4.17	-
SS (mg/L)	8.0	6.0	8.0	6.0	8.0	6.0	7.00	-
Remarks			No	dredging wo	orks was obs	erved.	•	

Station			MF	PB1				
Time (hh:mm)			13:48	-13:50				
Water Depth (m)			4	.0				
Monitoring Depth (m)	1	.0	2	.0	3	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.4	20.4	20.4	20.3	20.2	20.3	20.31	-
Salinity (ppt)	36.6	35.9	36.8	37.1	37.5	37.1	36.81	-
pH	7.8	8.0	8.0	8.0	8.0	8.0	7.98	
D.O. Saturation (%)	118.7	118.4	108.1	109.0	111.2	109.8	112.53	-
D.O. (mg/L)	8.6	8.6	7.9	8.0	8.1	8.0	8.22	8.09
Turbidity (NTU)	4.1	4.1	4.5	4.7	5.2	5.1	4.62	-
SS (mg/L)	7.0	7.0	9.0	7.0	8.0	7.0	7.50	-
Remarks			No	dredging wo	orks was obs	served.		•

Station			MI	PB2					
Time (hh:mm)									
Water Depth (m)			5	.0					
Monitoring Depth (m)	1	.0	2	.5	4	.0			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	21.4	21.6	20.8	20.6	20.4	20.3	20.86	-	
Salinity (ppt)	35.3	35.2	36.4	36.7	36.8	36.9	36.22	-	
pH	8.0	8.0	8.1	7.8	8.0	7.8	7.96		
D.O. Saturation (%)	113.7	113.8	108.8	107.3	111.7	109.2	110.75	-	
D.O. (mg/L)	8.3	8.3	8.0	7.9	8.2	8.0	8.08	8.08	
Turbidity (NTU)	4.1	4.2	4.3	4.2	4.5	4.8	4.35	-	
SS (mg/L)	6.0	6.0	7.0	6.0	8.0	6.0	6.50	-	
Remarks	No dredging works was observed.								

Station			IV	IP			1		
Time (hh:mm)			14:01	-14;02					
Water Depth (m)									
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom	
Water Temperature (°C)	20.8	21.0	-	-	20.7	20.6	20.77	-	
Salinity (ppt)	35.3	35.0	-	-	36.1	36.3	35.67	-	
pH	7.9	7.7	-	-	7.8	8.0	7.84		
D.O. Saturation (%)	112.6	111.3	-	-	114.9	113.8	113.15	-	
D.O. (mg/L)	8.2	8.1	-	-	8.4	8.3	8.26	8.34	
Turbidity (NTU)	3.5	3.6	-	-	3.7	3.8	3.65	-	
SS (mg/L)	8.0	7.0	-	-	7.0	6.0	7.00	-	
Remarks		No dredging works was observed.							

Compliance with Action at	compliance with action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IM	01	IM	02		MPB1	MF	B2	IV	IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.9	7.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.1	8.1	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.3	5.3	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	10.0	10.0	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/13/08
Weather & Ambient Temperature	Sunny, 19C

Station			C1 (NM3)					
Time (hh:mm)			18:37	-18:41					
Water Depth (m)			15						
Monitoring Depth (m)	1	.0	7						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.7	20.6	19.7	19.8	19.3	19.3	19.87	-	
Salinity (ppt)	36.6	36.6	37.2	37.1	37.9	37.9	37.22	-	
pH	8.3	8.3	8.2	8.2	7.8	7.7	8.08		
D.O. Saturation (%)	118.1	118.3	103.9	103.6	104.9	104.8	108.93	-	
D.O. (mg/L)	8.6	8.6	7.7	7.6	7.7	7.7	7.98	7.74	
Turbidity (NTU)	4.1	4.2	4.4	4.2	4.9	4.8	4.43	-	
SS (mg/L)	6.0	8.0	5.0	5.67	-				
Remarks	No dredging works was observed.								

Station			C3 (NM6)						
Time (hh:mm)			17:17	-17:19						
Water Depth (m)			17							
Monitoring Depth (m)	1	.0	8							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.0	20.8	19.8	19.9	19.8	19.8	20.16	-		
Salinity (ppt)	35.0	35.1	38.3	37.9	38.5	38.5	37.20	-		
pH	7.9	7.9	8.0	8.0	7.8	8.0	7.94			
D.O. Saturation (%)	115.8	115.5	108.8	109.1	108.5	108.7	111.07	-		
D.O. (mg/L)	8.4	8.4	8.0	8.0	7.9	8.0	8.11	7.95		
Turbidity (NTU)	4.1	4.3	4.7	4.8	5.1	4.8	4.63	-		
SS (mg/L)	6.0	7.0	6.0	6.0	6.50	-				
Remarks		No dredging works was observed.								

Station			IM	01			Co-ordinate:	s		
Time (hh:mm)			18:11	-18:15			Northing	Easting		
Water Depth (m)			2	1.0			22.21.109	113.53.480		
Monitoring Depth (m)	1	.0	10							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.6	21.0	20.6	20.7	19.7	19.7	20.38	-		
Salinity (ppt)	35.2	35.1	36.1	36.1	37.4	37.3	36.21	-		
pH	8.0	8.0	7.9	8.1	7.9	8.1	8.00			
D.O. Saturation (%)	116.7	115.8	109.7	108.9	106.6	107.0	110.78	-		
D.O. (mg/L)	8.5	8.4	8.0	8.0	7.8	7.9	8.10	7.86		
Turbidity (NTU)	4.3	4.5	4.7	4.5	4.8	4.9	4.62	-		
SS (mg/L)	7.0	7.0	6.0	7.00	-					
Remarks		No dredging works was observed.								

Station			IM	02			Co-ordinate:	3	
Time (hh:mm)			18:24	-18:28			Northing	Easting	
Water Depth (m)			22	2.0		22.21.072	113.53.965		
Monitoring Depth (m)	1	.0	11						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.5	20.6	20.5	20.5	19.5	19.5	20.17	-	
Salinity (ppt)	35.5	35.3	35.8	35.8	37.6	37.6	36.26	-	
pH	8.0	7.8	8.0	8.0	8.0	7.7	7.90		
D.O. Saturation (%)	113.6	110.3	109.0	109.0	105.2	105.9	108.83	-	
D.O. (mg/L)	8.3	8.1	8.0	8.0	7.8	7.8	7.98	7.78	
Turbidity (NTU)	3.8	3.7	4.1	4.1	4.5	4.3	4.08	-	
SS (mg/L)	5.0	7.0	5.0	8.0	6.67	-			
Remarks		No dredging works was observed.							

Station			MF	PB1						
Time (hh:mm)			17:49	-17:51						
Water Depth (m)			19							
Monitoring Depth (m)	1	.0	9	3.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.4	20.5	20.2	20.1	20.1	20.0	20.22	-		
Salinity (ppt)	35.2	35.2	36.6	36.7	37.2	37.4	36.37	-		
pH	7.8	8.0	8.1	8.1	8.1	7.9	7.98			
D.O. Saturation (%)	115.0	117.3	106.2	106.7	107.9	107.2	110.05	-		
D.O. (mg/L)	8.4	8.6	7.8	7.8	7.9	7.9	8.06	7.88		
Turbidity (NTU)	3.2	3.2	3.4	3.2	3.9	3.8	3.45	-		
SS (mg/L)	6.0	6.0 7.0 7.0 6.0 7.0 6.0 6.50 -								
Remarks	No dredging works was observed.									

Station			MF	B2						
Time (hh:mm)			17:38	-17:40						
Water Depth (m)			20							
Monitoring Depth (m)	1	.0	10	9.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.3	21.0	20.6	20.4	20.3	20.3	20.66	-		
Salinity (ppt)	35.5	35.9	36.5	36.8	37.1	37.1	36.47	-		
pH	8.0	8.1	7.8	8.1	7.9	8.0	7.98			
D.O. Saturation (%)	115.4	114.5	111.5	109.3	110.5	110.9	112.02	-		
D.O. (mg/L)	8.4	8.3	8.1	8.0	8.1	8.1	8.16	8.08		
Turbidity (NTU)	3.4	3.6	3.87	-						
SS (mg/L)	7.0	7.0 6.0 8.0 6.0 6.0 6.0 6.50 -								
Remarks	No dredging works was observed.									

Station			IV	IP						
Time (hh:mm)			17:53	-17:55						
Water Depth (m)			18							
Monitoring Depth (m)	1	.0	9							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.7	20.7	-	-	20.3	20.4	20.56	-		
Salinity (ppt)	35.1	35.1	-	-	36.4	36.3	35.71	-		
pH	7.9	7.9	-	-	7.9	8.0	7.93			
D.O. Saturation (%)	113.4	113.9	-	-	112.1	115.5	113.73	-		
D.O. (mg/L)	8.3	8.3	-	-	8.2	8.4	8.30	8.30		
Turbidity (NTU)	4.1	4.1 4.1 4.2 4.3 4.18								
SS (mg/L)	8.0	8.0 10.0 5.0 7.0 7.50 -								
Remarks	No dredging works was observed.									

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.8	7.8	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.0	8.0	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.9	5.9	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.9	7.9	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/14/08
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1	
Time (hh:mm)			- 1	-13:58				
Water Depth (m)								
Monitoring Depth (m)	1	.0	10	0.0	19	9.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.5	20.6	20.2	20.2	20.2	20.2	20.30	-
Salinity (ppt)	28.8	28.8	31.8	31.9	32.2	32.2	30.95	-
pH	8.1	8.1	8.1	8.1	8.0	8.1	8.09	
D.O. Saturation (%)	96.4	96.8	92.7	93.7	95.0	94.3	94.82	-
D.O. (mg/L)	6.5	6.6	6.2	6.3	6.4	6.3	6.37	6.33
Turbidity (NTU)	3.2	2.9	4.43	-				
SS (mg/L)	8.0	6.0	7.50	-				
Remarks			No	dredging wo	orks was obs	erved.		

Station			IM	01			Co-ore	dinates
Time (hh:mm)			14:32	-14:35			Northing	Easting
Water Depth (m)				22.21.150	113.53.775			
Monitoring Depth (m)	1	.0		-				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.3	20.1	20.1	20.1	20.1	20.19	-
Salinity (ppt)	25.2	25.3	29.6	29.6	30.6	30.7	28.49	-
pH	8.1	8.1	8.1	8.2	8.2	8.2	8.14	
D.O. Saturation (%)	96.5	97.1	95.7	96.5	98.1	98.8	97.12	-
D.O. (mg/L)	6.7	6.7	6.5	6.5	6.6	6.66	6.62	6.64
Turbidity (NTU)	3.6	3.8	4.9	4.7	6.6	6.5	5.02	-
SS (mg/L)	9.0	9.0	7.33	-				
Remarks			No	dredging wo	orks was obs	served.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			14:44	-14:46			Northing	Easting
Water Depth (m)				22.21.185	113.54.296			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.3	20.3	20.3	20.3	20.2	20.2	20.28	-
Salinity (ppt)	27.3	27.4	30.6	30.5	31.1	31.1	29.66	-
pH	8.0	8.0	8.1	8.1	8.0	8.0	8.05	
D.O. Saturation (%)	94.9	94.9	93.2	93.4	93.2	92.8	93.73	-
D.O. (mg/L)	6.5	6.5	6.3	6.3	6.3	6.23	6.34	6.25
Turbidity (NTU)	3.4	3.5	4.6	4.8	5.8	5.6	4.62	-
SS (mg/L)	8.0	6.0	8.0	7.17	-			
Remarks			No	dredging wo	orks was obs	erved.	-	

Station			MF	PB1			1	
Time (hh:mm)			14:23	-14:26				
Water Depth (m)								
Monitoring Depth (m)	1	.0	3	.8	6	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.4	20.3	20.1	20.1	20.0	20.1	20.17	-
Salinity (ppt)	25.2	25.1	29.3	29.3	30.7	30.7	28.37	-
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.07	
D.O. Saturation (%)	96.9	96.6	96.9	97.1	97.1	96.8	96.90	
D.O. (mg/L)	6.7	6.7	6.6	6.6	6.6	6.5	6.60	6.54
Turbidity (NTU)	3.5	3.2	4.00	-				
SS (mg/L)	6.0	8.0	7.0	6.83	-			
Remarks			No	dredging wo	orks was obs	served.		

Station			M	PB2							
Time (hh:mm)			14:58	-15:00							
Water Depth (m)			g	1.2							
Monitoring Depth (m)	1	.0	4	.6	8	.2					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	20.3	20.3	20.2	20.2	20.2	20.2	20.24	-			
Salinity (ppt)	25.5	25.4	30.2	30.3	30.9	30.9	28.87	-			
pH	8.2	8.2	8.3	8.3	8.3	8.3	8.27				
D.O. Saturation (%)	94.4	94.3	94.5	93.8	96.3	95.0	94.72	-			
D.O. (mg/L)	6.5	6.5	6.4	6.3	6.5	6.4	6.44	6.43			
Turbidity (NTU)	3.5	3.3	4.3	4.5	5.0	5.2	4.30	-			
SS (mg/L)	7.0	7.0 7.0 7.0 6.0 9.0 7.0 7.17									
Remarks		No dredging works was observed.									

Station			N	IP						
Time (hh:mm)			14:14	-14:15						
Water Depth (m)										
Monitoring Depth (m)	1	.0	2	.8	4	.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	20.3	20.3	-	-	20.2	20.2	20.24	-		
Salinity (ppt)	24.3	24.4	-	-	29.7	29.7	27.04	-		
pH	8.0	8.0	-	-	8.1	8.1	8.04			
D.O. Saturation (%)	96.6	97.0	-	-	97.6	96.8	97.00	-		
D.O. (mg/L)	6.7	6.8	-	-	6.6	6.6	6.66	6.58		
Turbidity (NTU)	3.8	3.6	-	-	4.9	5.2	4.38	-		
SS (mg/L)	8.0	8.0	8.0	7.75	-					
Remarks		No dredging works was observed.								

Compliance with Action at	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*1	30%	% IMO1		IM	02		MPB1	MF	MPB2		/IP
	Action	Limit	Action	Limit	Exceedan Exceedan Exceeda		Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.3	6.3	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.4	6.4	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.8	5.8	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	9.8	9.8	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/14/08
Weather & Ambient Temperature	Fine, 19C

Station			C1 (NM3)							
Time (hh:mm)			19:10	-19:13							
Water Depth (m)			16								
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.5	20.5	20.3	20.3	20.2	20.2	20.34	-			
Salinity (ppt)	31.8	31.9	32.5	32.4	32.7	32.8	32.33	-			
pH	8.0	8.1	7.9	8.0	7.9	7.9	7.97				
D.O. Saturation (%)	98.9	98.3	95.2	95.4	95.4	96.3	96.58	-			
D.O. (mg/L)	6.6	6.6	6.4	6.4	6.4	6.4	6.45	6.40			
Turbidity (NTU)	2.8	2.6	3.2	3.32	-						
SS (mg/L)	6.0	7.0	6.0	7.0	6.67	-					
Remarks		No dredging works was observed.									

Station			C3 (NM6)							
Time (hh:mm)			17:42	-17:44							
Water Depth (m)			6								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2						Depth-averaged	Bottom			
Water Temperature (°C)	20.3	20.3	20.4	20.4	20.4	20.4	20.36	-			
Salinity (ppt)	28.3	28.3	29.2	30.3	30.6	30.6	29.56	-			
pH	8.0	8.0	8.0	8.0	8.1	8.1	8.02				
D.O. Saturation (%)	96.8	97.1	96.2	97.2	97.6	97.7	97.10	-			
D.O. (mg/L)	6.6	6.7	6.5	6.6	6.6	6.6	6.59	6.58			
Turbidity (NTU)	2.5	2.6	3.5	3.47	-						
SS (mg/L)	7.0	9.0	7.0	8.0	8.17	-					
Remarks		No dredging works was observed.									

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			18:33	-18:35			Northing	Easting			
Water Depth (m)			9	.6			22.21.155	113.53.781			
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2					Depth-averaged	Bottom			
Water Temperature (°C)	20.5	20.5	20.3	20.3	20.2	20.2	20.34	-			
Salinity (ppt)	25.4	25.3	29.8	29.7	31.2	31.2	28.77	-			
pH	8.1	8.1	8.2	8.2	8.2	8.2	8.15				
D.O. Saturation (%)	95.8	96.3	95.2	95.4	97.0	96.5	96.03	-			
D.O. (mg/L)	6.6	6.7	6.5	6.5	6.5	6.5	6.54	6.52			
Turbidity (NTU)	4.5	4.6	5.2	5.55	-						
SS (mg/L)	6.0	5.0	7.0	6.0	6.00	-					
Remarks		No dredging works was observed.									

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			18:46	-18:48			Northing	Easting		
Water Depth (m)			10	0.8			22.21.181	113.54.290		
Monitoring Depth (m)	1	.0	5							
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2					Depth-averaged	Bottom		
Water Temperature (°C)	20.5	20.5	20.4	20.4	20.4	20.4	20.41	-		
Salinity (ppt)	27.0	26.9	29.9	29.9	31.2	31.2	29.33	-		
pH	8.1	8.1	8.1	8.1	8.2	8.2	8.14			
D.O. Saturation (%)	95.9	95.6	93.9	95.0	95.3	95.9	95.27	-		
D.O. (mg/L)	6.6	6.6	6.4	6.4	6.4	6.4	6.46	6.42		
Turbidity (NTU)	3.8	3.5	4.6	4.58	-					
SS (mg/L)	8.0	8.00	-							
Remarks		No dredging works was observed.								

Station			MF	PB1				
Time (hh:mm)			18:09	-18:12				
Water Depth (m)			7					
Monitoring Depth (m)	1	.0	3	1.9	6	.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.5	20.5	20.3	20.2	20.2	20.2	20.31	-
Salinity (ppt)	25.4	25.3	29.7	29.6	31.3	31.3	28.78	-
pH	8.0	8.1	8.1	8.1	8.1	8.2	8.10	
D.O. Saturation (%)	96.9	96.8	97.6	97.4	99.4	99.1	97.87	-
D.O. (mg/L)	6.7	6.7	6.6	6.6	6.7	6.7	6.67	6.70
Turbidity (NTU)	3.9	3.6	4.5	4.4	5.2	5.2	4.47	-
SS (mg/L)	6.0	7.0	8.0	9.0	8.0	9.0	7.83	-
Remarks				No dredgi	ng works wa	s observed.		

Station			MF	PB2								
Time (hh:mm)			17:58	-18:00								
Water Depth (m)			9									
Monitoring Depth (m)	1	.0	4									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.5	20.5	20.3	20.4	20.3	20.3	20.37	-				
Salinity (ppt)	25.7	25.7	30.7	30.7	31.2	31.2	29.19	-				
pH	8.2	8.2	8.3	8.3	8.3	8.3	8.29					
D.O. Saturation (%)	94.9	94.1	94.0	93.8	95.4	94.9	94.52	-				
D.O. (mg/L)	6.6	6.5	6.3	6.3	6.4	6.4	6.42	6.40				
Turbidity (NTU)	3.9	4.1	4.9	4.8	5.5	5.7	4.82	-				
SS (mg/L)	7.0	9.0	7.0	9.0	7.0	9.0	8.00	-				
Remarks		No dredging works was observed.										

Station			IV	IP								
Time (hh:mm)			18:19	-18:21								
Water Depth (m)			5	.8								
Monitoring Depth (m)	1	.0	2	.8								
Trial	Trial 1	Trial 2	Depth-averaged	Bottom								
Water Temperature (°C)	20.5	20.5	-	-	20.4	20.4	20.42	-				
Salinity (ppt)	24.5	24.5	-	-	30.0	30.1	27.25	-				
pH	8.1	8.1	-	-	8.1	8.1	8.09					
D.O. Saturation (%)	94.9	94.6	-	-	95.6	95.0	95.03	-				
D.O. (mg/L)	6.6	6.6	-	-	6.5	6.4	6.52	6.44				
Turbidity (NTU)	4.3	4.2	-	-	6.4	6.2	5.28	-				
SS (mg/L)	7.0	7.0	-	-	6.0	6.0	6.50	-				
Remarks		No dredging works was observed.										

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%)*130% IMO1		IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.5	6.5	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	4.4	4.4	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	9.6	9.6	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/15/2008
Weather & Ambient Temperature	Sunny, 26C

Station			C2 (NM5)			1	
Time (hh:mm)			16:05	-16:08				
Water Depth (m)			18	3.8				
Monitoring Depth (m)	1	.0	9	.4	17	7.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	24.5	24.7	23.5	23.6	22.5	22.5	23.56	-
Salinity (ppt)	26.3	26.0	29.3	29.3	32.0	32.0	29.14	-
pH	7.8	7.9	7.9	7.9	7.8	7.9	7.86	
D.O. Saturation (%)	86.8	86.1	72.4	72.6	68.8	69.3	76.00	-
D.O. (mg/L)	5.7	5.7	4.7	4.7	4.5	4.5	4.98	4.51
Turbidity (NTU)	5.2	5.4	6.0	6.3	9.4	9.3	6.93	-
SS (mg/L)	9.0	8.0	10.0	8.0	7.0	9.0	8.50	-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	01			Co-ore	dinates
Time (hh:mm)			15:03	-15:07			Northing	Easting
Water Depth (m)			22.21.899	113.54.660				
Monitoring Depth (m)	1	.0	8	.7	16	6.3		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	24.6	24.7	23.7	23.7	22.9	22.8	23.71	-
Salinity (ppt)	24.1	23.9	28.5	28.6	30.9	30.9	27.80	-
pH	7.8	7.8	7.8	7.8	7.9	7.9	7.84	
D.O. Saturation (%)	83.2	85.0	69.4	70.3	67.7	66.1	73.62	-
D.O. (mg/L)	5.5	5.7	4.5	4.6	4.4	4.31	4.84	4.37
Turbidity (NTU)	6.5	6.4	8.1	8.3	9.9	9.9	8.18	-
SS (mg/L)	12.0	12.0	9.0	8.0	10.0	8.0	9.83	-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			14:53	-14:56			Northing	Easting
Water Depth (m)				22.21.557	113.55.214			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	24.7	24.8	23.9	24.0	23.0	23.0	23.89	-
Salinity (ppt)	24.5	24.5	28.2	27.9	31.1	30.9	27.84	-
pH	7.9	7.9	7.9	7.9	7.9	7.8	7.87	
D.O. Saturation (%)	76.0	86.8	74.5	75.0	70.0	69.6	75.32	-
D.O. (mg/L)	5.9	5.8	4.9	4.9	4.6	4.54	5.09	4.56
Turbidity (NTU)	6.4	6.3	7.6	7.6	9.2	8.9	7.67	-
SS (mg/L)	10.0	9.0	10.0	8.0	10.0	8.0	9.17	-
Remarks			D	redging wor	ks was obse	rved.	•	

Station			MF	PB1			1					
Time (hh:mm)			15:35	-15:36								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	25.3	25.2	23.9	23.9	23.7	23.8	24.27	-				
Salinity (ppt)	19.0	19.0	26.6	26.3	28.0	27.5	24.41					
pH	7.9	7.8	7.8	7.7	7.8	7.7	7.78					
D.O. Saturation (%)	89.2	86.3	71.6	71.7	74.1	74.8	77.95					
D.O. (mg/L)	6.0	5.8	4.7	4.7	4.9	4.9	5.19	4.90				
Turbidity (NTU)	5.4	5.5	6.5	6.4	6.9	7.0	6.28	-				
SS (mg/L)	8.0	9.0	10.0	8.67	-							
Remarks		Dredging works was observed.										

Station			MI	PB2						
Time (hh:mm)			15:25	-15:27						
Water Depth (m)			8	3.8						
Monitoring Depth (m)	1	.0	.8							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	25.3	25.4	24.7	24.8	24.2	24.0	24.74	-		
Salinity (ppt)	18.2	18.8	23.2	21.8	24.6	27.4	22.33	-		
pH	7.9	7.9	7.9	7.9	7.8	7.8	7.85			
D.O. Saturation (%)	96.7	97.1	80.8	78.2	74.4	77.2	84.07	-		
D.O. (mg/L)	6.6	6.6	5.4	5.2	4.9	5.1	5.63	5.01		
Turbidity (NTU)	6.4	6.4	9.2	9.0	10.7	10.5	8.70	-		
SS (mg/L)	8.0	8.0	8.0	8.0	8.0	7.0	7.83	-		
Remarks	Dredging works was observed.									

Station			N	IP			1					
Time (hh:mm)			15:44	-15:45								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	24.6	24.7	-	-	23.9	23.9	24.27	-				
Salinity (ppt)	21.8	21.4	-	-	26.4	26.7	24.05	-				
pH	7.7	7.7	-	-	7.6	7.7	7.68					
D.O. Saturation (%)	82.7	84.5	-	-	71.0	75.1	78.33	-				
D.O. (mg/L)	5.6	5.7	-	-	4.7	5.0	5.22	4.83				
Turbidity (NTU)	8.0	7.8	-	-	10.8	10.7	9.33	-				
SS (mg/L)	11.0	11.0	-	-	10.0	11.0	10.75	-				
Remarks		Dredging works was observed.										

Compliance with Action at	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*130%		IIV	IMO1		IMO2		MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	4.5	4.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.0	5.0	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	9.0	9.0	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	11.1	11.1	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/15/2008
Weather & Ambient Temperature	Sunny, 26C

Station			C1 (
Time (hh:mm)			11:04	-11:07				
Water Depth (m)			16	5.2				
Monitoring Depth (m)	1	.0	8	.1	1:	5.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	24.7	24.7	23.9	23.5	22.7	22.7	23.69	-
Salinity (ppt)	26.2	26.2	28.7	29.5	31.6	31.7	28.98	-
pH	7.8	7.8	7.8	7.9	7.9	7.7	7.82	
D.O. Saturation (%)	86.9	86.1	73.2	72.3	69.8	70.9	76.53	-
D.O. (mg/L)	5.7	5.7	4.8	4.7	4.6	4.6	5.02	4.60
Turbidity (NTU)	5.3	5.4	6.6	6.6	9.0	9.2	7.02	-
SS (mg/L)	7.0	9.0	7.0	9.0	7.0	8.0	7.83	-
Remarks								

Station			C3 (NM6)				
Time (hh:mm)			9:47					
Water Depth (m)			7	.2				
Monitoring Depth (m)	1	.0	3	.6	6	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	25.4	25.4	24.9	24.8	23.9	24.5	24.82	-
Salinity (ppt)	18.9	19.0	22.4	22.93	-			
pH	7.9	7.9	7.9	7.8	7.7	7.8	7.82	
D.O. Saturation (%)	99.1	99.7	85.7	86.1	79.0	83.0	88.77	-
D.O. (mg/L)	6.7	6.8	5.7	5.8	5.2	5.5	5.94	5.33
Turbidity (NTU)	5.5	5.6	6.4	6.5	8.1	8.1	6.70	-
SS (mg/L)	8.0	9.0	8.0	7.0	9.0	7.0	8.00	-
Remarks								

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			10:40		Northing	Easting					
Water Depth (m)			17	7.0			22.21.880	113.54.656			
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.7	24.8	23.9	24.0	23.0	23.0	23.88	-			
Salinity (ppt)	24.2	24.5	28.5	28.3	30.7	30.8	27.81	-			
pH	7.8	7.8	7.8	7.80							
D.O. Saturation (%)	84.6	84.3	71.1	71.4	70.0	68.5	74.98	-			
D.O. (mg/L)	5.6	5.6	4.6	4.7	4.6	4.5	4.93	4.53			
Turbidity (NTU)	6.3	6.4	7.7	7.8	11.2	11.0	8.40	-			
SS (mg/L)	8.0	8.0	8.0	8.0	8.0	9.0	8.17	-			
Remarks		Dredging works was observed.									

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			10:51		Northing	Easting					
Water Depth (m)			11		22.21.544	113.55.221					
Monitoring Depth (m)	1	.0	5								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.9	24.9	24.0	24.1	23.1	23.1	24.00	-			
Salinity (ppt)	24.3	24.1	28.0	7.8	31.0	30.9	24.38	-			
pH	7.8	7.8	7.9	7.83							
D.O. Saturation (%)	87.2	88.2	72.7	72.9	68.3	67.9	76.20	-			
D.O. (mg/L)	5.8	5.9	4.8	4.8	4.5	4.4	5.01	4.44			
Turbidity (NTU)	6.5	6.5	7.8	7.5	9.4	9.2	7.82	-			
SS (mg/L)	8.0	7.0	8.0	9.0	9.0	9.0	8.33	-			
Remarks		Dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			10:13							
Water Depth (m)			8	.8						
Monitoring Depth (m)	1	.0	4	.4	7	.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	25.2	25.2	24.0	24.0	23.7	23.7	24.30	-		
Salinity (ppt)	18.4	18.9	26.6	26.4	28.5	28.8	24.61	-		
pH	7.8	7.8	7.7	7.7	7.8	7.7	7.77			
D.O. Saturation (%)	86.3	88.0	71.0	72.1	74.6	73.4	77.57	-		
D.O. (mg/L)	5.9	6.0	4.7	4.8	4.9	4.8	5.17	4.86		
Turbidity (NTU)	5.9	5.9	7.1	7.3	8.0	8.2	7.07	-		
SS (mg/L)	10.0	8.0	8.0	8.0	10.0	9.0	8.83	-		
Remarks		Dredging works was observed.								

Station			MF	PB2							
Time (hh:mm)			10:04								
Water Depth (m)			9	.6							
Monitoring Depth (m)	1	.0	4	.8	8	.6					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.4	25.5	25.0	24.8	24.0	24.0	24.77	-			
Salinity (ppt)	17.8	17.7	21.9	23.4	27.4	27.7	22.64	-			
pH	7.9	7.9	7.9	7.8	7.8	7.8	7.82				
D.O. Saturation (%)	92.9	93.6	82.2	81.5	76.2	75.8	83.70	-			
D.O. (mg/L)	6.3	6.4	5.5	5.4	5.0	5.0	5.60	5.00			
Turbidity (NTU)	6.3	6.3	9.3	9.2	11.4	11.3	8.97	-			
SS (mg/L)	10.0	10.0	8.0	8.0	7.0	8.0	8.50	-			
Remarks		Dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			10:22								
Water Depth (m)			5	.8							
Monitoring Depth (m)	1.	.0	2	.9	4	.8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.7	24.8	-	-	23.9	23.9	24.31	-			
Salinity (ppt)	21.9	21.5	24.29	-							
pH	7.7	7.7	-	-	7.7	7.7	7.70				
D.O. Saturation (%)	81.1	81.2	-	-	71.2	73.2	76.68	-			
D.O. (mg/L)	5.5	5.5	-	-	4.7	4.8	5.11	4.77			
Turbidity (NTU)	7.4	7.3	-	-	10.2	10.4	8.83	-			
SS (mg/L)	9.0	10.0	-	-	7.0	8.0	8.50	-			
Remarks		Dredging works was observed.									

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1+C3)*130%		IIV	101	IMO2	IMO2		MPB1		MPB2		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.0	5.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.5	5.5	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	10.3	10.3	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/16/2008
Weather & Ambient Temperature	Sunny, 27C

Station			C2 (NM5)				
Time (hh:mm)			14:57					
Water Depth (m)			18	8.8				
Monitoring Depth (m)	1	.0	9).4	1	7.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	25.8	26.1	24.7	24.7	23.4	23.4	24.68	-
Salinity (ppt)	26.3	25.9	29.5	29.37	-			
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.00	
D.O. Saturation (%)	87.7	87.0	70.6	70.4	66.4	66.7	74.80	-
D.O. (mg/L)	5.7	5.7	4.6	4.5	4.3	4.3	4.85	4.30
Turbidity (NTU)	5.0	5.2	5.5	5.8	9.9	9.8	6.87	-
SS (mg/L)	7.0	7.0	9.0	7.0	8.0	8.0	7.67	-
Remarks				as observed.				

Station			IM	101			Co-ordinate	s			
Time (hh:mm)			13:55	Northing	Easting						
Water Depth (m)			17	7.3			22.21.899	113.54.648			
Monitoring Depth (m)	1	.0	8	3.7	16	5.3					
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom						
Water Temperature (°C)	25.9	26.1	24.9	24.8	23.8	23.8	24.87	-			
Salinity (ppt)	24.7	24.5	28.6	28.8	31.7	31.6	28.32	-			
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.97				
D.O. Saturation (%)	84.0	86.1	66.7	67.9	64.4	62.2	71.88	-			
D.O. (mg/L)	5.5	5.6	4.3	4.4	4.2	4.00	4.66	4.08			
Turbidity (NTU)	6.6	6.5	8.4	8.6	10.6	10.6	8.55	-			
SS (mg/L)	8.0	7.0	6.0	7.0	6.0	6.0	6.67	-			
Remarks		Dredging works was observed.									

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			13:45	-13:48			Northing	Easting			
Water Depth (m)			12		22.21.557	113.55.203					
Monitoring Depth (m)	1	.0	6	.2	1	1.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	26.2	26.3	25.2	25.3	24.0	24.0	25.16	-			
Salinity (ppt)	24.6	24.6	28.2	27.8	31.5	31.6	28.06	-			
pH	8.1	8.0	8.0	8.00							
D.O. Saturation (%)	84.8	89.2	74.4	74.5	67.5	67.7	76.35	-			
D.O. (mg/L)	6.0	5.8	4.8	4.8	4.4	4.36	5.02	4.36			
Turbidity (NTU)	6.3	6.1	7.7	9.4	7.67	-					
SS (mg/L)	7.0	6.0	7.0	6.0	6.50	-					
Remarks		Dredging works was observed.									

Station			MF	PB1							
Time (hh:mm)			14:27								
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4	.1	7	.1					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	26.9	26.8	25.1	25.2	24.9	25.0	25.63	-			
Salinity (ppt)	18.7	18.8	27.2	26.9	28.3	27.7	24.61	-			
pH	8.0	8.0	7.9	7.9	7.9	7.9	7.92				
D.O. Saturation (%)	92.7	88.6	70.2	70.4	73.4	74.7	78.33	-			
D.O. (mg/L)	6.2	5.9	4.6	4.6	4.8	4.9	5.15	4.81			
Turbidity (NTU)	5.1	5.2	6.5	6.4	6.9	7.0	6.18	-			
SS (mg/L)	6.0	6.0	6.0	7.0	6.50	-					
Remarks		Dredging works was observed.									

Station			MF	PB2						
Time (hh:mm)			14:17							
Water Depth (m)			8	.8						
Monitoring Depth (m)	1	.0	4	.4	7	.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.9	27.0	26.2	26.4	25.6	25.3	26.22	-		
Salinity (ppt)	18.4	18.4 18.5 22.1 21.0 23.7 27.5						-		
pH	8.1	8.0	8.0	8.0	7.9	7.9	7.98			
D.O. Saturation (%)	102.5	103.0	82.1	78.7	73.1	76.9	86.05	-		
D.O. (mg/L)	6.9	6.9	5.4	5.2	4.8	5.0	5.71	4.90		
Turbidity (NTU)	6.4	6.3	9.3	8.38	-					
SS (mg/L)	5.0	6.0	7.0	5.0	6.00	-				
Remarks		Dredging works was observed.								

Station			IV	IP.						
Time (hh:mm)			14:36	-14:38						
Water Depth (m)			5							
Monitoring Depth (m)	1	.0	2	.7	4	.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.0	26.2	-	-	25.1	25.1	25.60	-		
Salinity (ppt)	22.6	22.0	-	-	27.1	27.3	24.76	-		
pH	7.9	7.9	-	-	7.7	7.8	7.79			
D.O. Saturation (%)	83.9	86.1	-	-	68.1	74.2	78.08	-		
D.O. (mg/L)	5.6	5.7	-	-	4.4	4.8	5.13	4.63		
Turbidity (NTU)	7.8	7.6	-	-	8.9	8.4	8.18	-		
SS (mg/L)	7.0	7.0 7.0 6.0 7.0 6.75								
Remarks	Dredging works was observed.									

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	C2*	130%	IM	101	IMO2			MPB1	MP	B2	M	P
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
					Level						Level		Level	i l
DO (Bottom)	3.3	2.5	4.3	4.3	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	4.8	4.8	N	N	N	N	N	N	N	N	Ν	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	10.0	10.0	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/16/2008
Weather & Ambient Temperature	Sunny, 27C

Station			C1 (NM3)				
Time (hh:mm)			11:57					
Water Depth (m)			16	6.2				
Monitoring Depth (m)	1	.0	8	3.1	15	5.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	26.0	26.0	25.0	24.6	23.5	23.5	24.78	-
Salinity (ppt)	26.1	26.0	28.9	30.0	32.3	32.4	29.27	-
pH	7.9	8.0	8.0	8.0	8.0	7.8	7.95	
D.O. Saturation (%)	87.6	86.9	71.0	69.7	66.7	68.1	75.00	-
D.O. (mg/L)	5.7	5.7	4.6	4.5	4.3	4.4	4.86	4.36
Turbidity (NTU)	5.2	5.3	6.4	6.3	9.2	9.5	6.98	-
SS (mg/L)	6.0	5.0	7.0	6.0	5.0	6.0	5.83	-
Remarks				Dredo	ging works w	as observed.		

Station			C3 (NM6)				
Time (hh:mm)			10:40					
Water Depth (m)			7	.2				
Monitoring Depth (m)	1	.0	3	.6	6	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	26.9	26.9	26.4	26.3	25.1	26.0	26.27	-
Salinity (ppt)	19.2	19.4	22.1	22.3	28.8	26.0	22.96	-
pH	8.0	8.0	8.0	8.0	7.8	7.9	7.96	
D.O. Saturation (%)	105.4	106.3	88.4	88.6	79.5	84.4	92.10	-
D.O. (mg/L)	7.1	7.1	5.8	5.9	5.2	5.5	6.09	5.34
Turbidity (NTU)	5.1	5.3	6.3	6.4	8.7	8.5	6.72	-
SS (mg/L)	8.0	6.0	8.0	6.0	6.83	-		
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			11:33	-11:37			Northing	Easting		
Water Depth (m)			17		22.21.897	113.54.661				
Monitoring Depth (m)	1	.0	8	.5	16	6.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.1	26.1	25.0	25.1	23.8	23.8	24.98	-		
Salinity (ppt)	24.6	24.8	28.8	28.5	31.6	31.6	28.32	-		
pH	7.9	7.9	7.9	7.91						
D.O. Saturation (%)	85.9	85.5	68.8	69.1	65.3	67.3	73.65	-		
D.O. (mg/L)	5.6	5.6	4.4	4.5	4.2	4.3	4.78	4.27		
Turbidity (NTU)	6.4	6.4	8.1	8.2	9.3	10.5	8.15	-		
SS (mg/L)	6.0	6.0	5.0	5.0	5.83	-				
Remarks		Dredging works was observed.								

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			11:44	-11:47			Northing	Easting		
Water Depth (m)			11		22.21.552	113.55.204				
Monitoring Depth (m)	1	.0	5	.7	10	0.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.4	26.4	25.2	25.3	24.0	24.1	25.21	-		
Salinity (ppt)	24.5	24.4	28.2	8.0	31.6	31.6	28.01	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.97			
D.O. Saturation (%)	89.7	91.0	71.6	72.1	66.1	65.2	75.95	-		
D.O. (mg/L)	5.9	6.0	4.6	4.7	4.3	4.2	4.93	4.22		
Turbidity (NTU)	6.4	6.3	7.8	9.3	7.82	-				
SS (mg/L)	6.0	5.0	4.0	6.0	5.33	-				
Remarks		Dredging works was observed.								

Station			MF	PB1					
Time (hh:mm)			11:06						
Water Depth (m)			8	.8					
Monitoring Depth (m)	1	.0	4	.4	7	.8			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	26.7	26.7	25.2	25.1	24.8	24.9	25.56	-	
Salinity (ppt)	19.0	18.6	27.4	27.2	29.0	28.8	24.99	-	
pH	8.0	8.0	7.9	7.9	7.9	7.9	7.91		
D.O. Saturation (%)	91.0	88.8	68.8	70.3	72.0	73.7	77.43	-	
D.O. (mg/L)	6.1	6.0	4.5	4.6	4.7	4.8	5.09	4.72	
Turbidity (NTU)	5.6	5.6	7.1	7.4	8.5	8.3	7.08	-	
SS (mg/L)	6.0	6.0	6.50	-					
Remarks		Dredging works was observed.							

Station			MF	PB2					
Time (hh:mm)			10:57						
Water Depth (m)			9	.6					
Monitoring Depth (m)	1	.0	4	.8	8	.6			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	26.9	27.1	26.5	26.2	25.2	25.2	26.18	-	
Salinity (ppt)	18.1	17.9	20.9	22.7	27.6	27.9	22.53	-	
pH	8.1	8.0	8.0	8.0	7.9	7.9	7.98		
D.O. Saturation (%)	97.5	98.6	83.9	83.0	75.5	75.0	85.58	-	
D.O. (mg/L)	6.6	6.6	5.6	5.5	4.9	4.9	5.66	4.89	
Turbidity (NTU)	6.1	6.2	9.3	9.0	9.1	10.0	8.28	-	
SS (mg/L)	6.0	7.0	6.0	6.0	6.17	-			
Remarks	Dredging works was observed.								

Station										
Time (hh:mm)										
Water Depth (m)										
Monitoring Depth (m)	1.0		2.9		4	.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	26.1	26.0	-	-	25.1	25.1	25.59	-		
Salinity (ppt)	22.2	22.7	-	-	27.6	27.4	24.98	-		
pH	7.9	7.9	-	-	7.8	7.8	7.83			
D.O. Saturation (%)	82.2	81.8	-	-	69.1	71.8	76.23	-		
D.O. (mg/L)	5.4	5.4	-	-	4.5	4.7	5.00	4.58		
Turbidity (NTU)	7.7	7.8	-	-	8.8	8.9	8.30	-		
SS (mg/L)	6.0	7.0	-	-	6.0	7.0	6.50	-		
Remarks	Dredging works was observed.									

Compliance with Action and Limit Level														
Parameter	As in EM&A		Mean(C1+C3)*130%		IMO1		IMO2		MPB1		MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
					Level						Level		Level	
DO (Bottom)	3.3	2.5	4.8	4.8	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.5	5.5	N	N	N	N	N	N	Ν	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	Ν	Ν	Z	N	N
SS (Depth-averaged)	24.0	37.0	8.2	8.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/17/2008
Weather & Ambient Temperature	Sunny, 27C

Station			C2 (NM5)			1	
Time (hh:mm)								
Water Depth (m)								
Monitoring Depth (m)	1	.0	9	.2	17	7.4		
Trial	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	25.2	25.4	24.1	24.1	23.0	23.0	24.12	-
Salinity (ppt)	26.3	26.0	29.4	29.3	32.3	32.3	29.25	-
pH	7.9	8.0	8.0	7.9	7.9	8.0	7.93	
D.O. Saturation (%)	87.2	86.5	71.5	71.5	67.6	68.0	75.38	-
D.O. (mg/L)	5.7	5.7	4.6	4.6	4.4	4.4	4.91	4.40
Turbidity (NTU)	5.1	5.3	6.87	-				
SS (mg/L)	10.0	8.0	8.0	9.33	-			
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	01			Co-ord	dinates
Time (hh:mm)			14:44	-14:47			Northing	Easting
Water Depth (m)				22.21.887	113.54.662			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	25.2	25.4	24.3	24.3	23.3	23.3	24.29	-
Salinity (ppt)	24.4	24.2	28.6	28.7	31.3	31.2	28.06	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90	
D.O. Saturation (%)	83.6	85.5	68.0	69.1	66.0	64.1	72.72	-
D.O. (mg/L)	5.5	5.6	4.4	4.5	4.3	4.15	4.75	4.22
Turbidity (NTU)	6.5	6.4	8.32	-				
SS (mg/L)	10.0	10.0	8.0	9.17	-			
Remarks			D	redging wor	ks was obse	rved.		

Station				Co-ord	dinates			
Time (hh:mm)			14:34	-14:37			Northing	Easting
Water Depth (m)			22.21.550	113.55.219				
Monitoring Depth (m)	1	.0	6	.1	11	1.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	25.5	25.5	24.5	24.7	23.5	23.5	24.52	-
Salinity (ppt)	24.5	24.6	28.2	27.9	31.2	31.4	27.95	-
pH	8.0	8.0	7.9	7.9	7.9	7.9	7.93	
D.O. Saturation (%)	80.4	88.0	74.4	74.7	68.5	68.8	75.80	-
D.O. (mg/L)	5.9	5.8	4.9	4.9	4.4	4.46	5.05	4.45
Turbidity (NTU)	6.3 6.2 7.6 7.6 8.9 9.3							-
SS (mg/L)	9.0	8.0	9.00	-				
Remarks			D	redging wor	ks was obse	rved.	•	

Station			MF	PB1			1	
Time (hh:mm)			15:16	-15:17				
Water Depth (m)								
Monitoring Depth (m)	1	.0	4	.1	7	'.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	26.1	26.0	24.5	24.5	24.3	24.4	24.95	-
Salinity (ppt)	18.8	18.9	26.9	26.6	28.2	27.6	24.50	-
pH	7.9	7.9	7.8	7.8	7.8	7.8	7.85	
D.O. Saturation (%)	90.9	87.4	70.9	71.0	73.7	74.7	78.10	-
D.O. (mg/L)	6.1	5.9	4.6	4.7	4.8	4.9	5.16	4.85
Turbidity (NTU)	5.2	5.3	6.5	6.4	6.9	7.0	6.22	-
SS (mg/L)	8.0	8.0	9.0	8.50	-			
Remarks		-	D	redging worl	ks was obse	rved.		

Station			MF	PB2			1				
Time (hh:mm)			15:06	-15:07							
Water Depth (m)											
Monitoring Depth (m)	1	.0	4	.4	7	.8					
Trial	Trial 1	Trial 2	Depth- averaged	Bottom							
Water Temperature (°C)	26.1	26.2	25.4	25.6	24.9	24.6	25.48	-			
Salinity (ppt)	18.3	18.6	22.7	21.4	24.2	27.4	22.09	-			
pH	8.0	8.0	7.9	8.0	7.9	7.8	7.91				
D.O. Saturation (%)	99.6	100.0	81.4	78.4	73.7	77.0	85.02	-			
D.O. (mg/L)	6.7	6.7	5.4	5.2	4.9	5.0	5.67	4.95			
Turbidity (NTU)	6.4	6.3	9.7	9.5	10.4	10.2	8.75	-			
SS (mg/L)	8.0	8.0 9.0 9.0 8.0 10.0 9.0 8									
Remarks			D	redging wor	ks was obse	rved.					

Station			N	IP			1	
Time (hh:mm)			15:25	-15:26				
Water Depth (m)								
Monitoring Depth (m)	1	.0	2	.8	4	.5		
Trial	Trial 1	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2						
Water Temperature (°C)	25.3	25.5	-	-	24.5	24.5	24.93	-
Salinity (ppt)	22.2	21.7	-	-	26.7	27.0	24.41	-
pH	7.8	7.8	-	-	7.6	7.7	7.73	
D.O. Saturation (%)	83.3	85.3	-	-	69.5	74.6	78.18	-
D.O. (mg/L)	5.6	5.7	-	-	4.6	4.9	5.17	4.72
Turbidity (NTU)	7.9	7.7	-	-	9.1	8.9	8.40	-
SS (mg/L)	12.0	10.0	11.0	10.75	-			
Remarks		•	D	redging wor	ks was obse	rved.	•	

Compliance with Action an	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*130%		IIV	IMO1		IMO2		MPB1	MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	4.4	4.4	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	4.9	4.9	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	12.1	12.1	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/17/2008
Weather & Ambient Temperature	Sunny, 27C

Station			C1 (
Time (hh:mm)			13:06					
Water Depth (m)			10	6.4				
Monitoring Depth (m)	1	.0	8	3.2	15	5.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	25.4	25.4	24.4	24.1	23.1	23.1	24.23	-
Salinity (ppt)	26.1	26.1	28.8	29.7	32.0	32.0	29.12	-
pH	7.9	7.9	7.9	7.9	7.9	7.8	7.88	
D.O. Saturation (%)	87.2	86.5	72.1	71.0	68.2	69.5	75.75	-
D.O. (mg/L)	5.7	5.7	4.7	4.6	4.4	4.5	4.94	4.48
Turbidity (NTU)	5.2	5.3	6.5	6.4	9.1	9.3	6.97	-
SS (mg/L)	8.0	9.0	8.0	8.33	-			
Remarks				Dredg	ing works w	as observed.		

Station			C3 (NM6)				
Time (hh:mm)			11:48	-11:50				
Water Depth (m)			7	.0				
Monitoring Depth (m)	1	.0	3	.5	6	5.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	26.1	26.2	25.7	25.6	24.5	25.3	25.54	-
Salinity (ppt)	19.1	19.2	22.2	22.5	28.6	26.2	22.94	-
pH	7.9	7.9	7.9	7.9	7.8	7.8	7.89	
D.O. Saturation (%)	102.2	103.0	87.0	87.3	79.2	83.7	90.40	-
D.O. (mg/L)	6.9	6.9	5.8	5.8	5.2	5.5	6.02	5.33
Turbidity (NTU)	5.3	5.4	6.3	6.4	8.4	8.3	6.68	-
SS (mg/L)	9.0	9.0	7.0	7.0	7.83	-		
Remarks				Dredo	ging works w	as observed.		•

Station			IM	01			Co-ordinate	s
Time (hh:mm)			12:42	-12:46			Northing	Easting
Water Depth (m)			16	6.6		22.21.871	113.54.648	
Monitoring Depth (m)	1	.0	8	5.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	25.4	25.5	24.4	24.5	23.4	23.4	24.43	-
Salinity (ppt)	24.4	24.6	28.7	28.4	31.1	31.2	28.06	-
pH	7.9	7.9	7.9	7.9	7.8	7.9	7.85	
D.O. Saturation (%)	85.2	84.9	69.9	70.2	68.6	66.9	74.28	-
D.O. (mg/L)	5.6	5.6	4.5	4.6	4.5	4.3	4.85	4.40
Turbidity (NTU)	6.3	6.4	7.9	8.0	8.8	8.6	7.67	-
SS (mg/L)	9.0	8.0	7.0	8.0	10.0	9.0	8.50	-
Remarks				Dredo	ging works w	as observed.		

Station			IM	02			Co-ordinate	s	
Time (hh:mm)			12:53	-12:55			Northing	Easting	
Water Depth (m)			11		22.21.550	113.55.246			
Monitoring Depth (m)	1	.0	5						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	25.6	25.6	24.6	24.7	23.5	23.6	24.60	-	
Salinity (ppt)	24.4	24.3	28.1	27.7	31.3	31.2	27.85	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90		
D.O. Saturation (%)	88.4	89.6	72.1	72.5	67.2	66.5	76.05	-	
D.O. (mg/L)	5.8	5.9	4.7	4.7	4.4	4.3	4.97	4.33	
Turbidity (NTU)	6.4	6.4	7.8	7.5	9.5	9.2	7.80	-	
SS (mg/L)	11.0	10.0	8.0	7.0	8.67	-			
Remarks	Dredging works was observed.								

Station			ME	PB1					
Time (hh:mm)			12:15	-12:17					
Water Depth (m)			8						
Monitoring Depth (m)	1	.0	4						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	26.0	25.9	24.6	24.5	24.3	24.3	24.93	-	
Salinity (ppt)	18.5	18.9	27.0	26.8	28.9	28.7	24.80	-	
pH	7.9	7.9	7.8	7.8	7.8	7.8	7.84		
D.O. Saturation (%)	87.5	89.5	69.9	71.2	72.7	74.1	77.48	-	
D.O. (mg/L)	5.9	6.0	4.6	4.7	4.7	4.8	5.12	4.79	
Turbidity (NTU)	5.7	5.7	7.1	7.3	8.3	8.1	7.03	-	
SS (mg/L)	8.0	9.0	10.0	12.0	8.0	9.0	9.33	-	
Remarks	Dredging works was observed.								

Station			MF	PB2							
Time (hh:mm)			12:05	-12:07							
Water Depth (m)			9								
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	26.2	26.3	25.7	25.5	24.6	24.6	25.47	-			
Salinity (ppt)	17.9	17.8	21.4	23.1	27.5	27.8	22.58	-			
pH	8.0	8.0	8.0	7.9	7.8	7.8	7.90				
D.O. Saturation (%)	95.2	96.1	83.0	82.2	75.8	75.4	84.62	-			
D.O. (mg/L)	6.4	6.5	5.5	5.4	5.0	4.9	5.63	4.94			
Turbidity (NTU)	6.2	6.2	7.8	7.5	9.2	9.1	7.67	-			
SS (mg/L)	7.0	8.0	7.0	8.0	7.0	9.0	7.67	-			
Remarks		Dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			12:24	-12:25							
Water Depth (m)			5								
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	25.3	25.5	-	-	24.5	24.5	24.94	-			
Salinity (ppt)	22.3	21.8	-	-	27.3	27.1	24.63	-			
pH	7.8	7.8	-	-	7.7	7.7	7.76				
D.O. Saturation (%)	81.4	81.7	-	-	70.1	72.5	76.43	-			
D.O. (mg/L)	5.4	5.4	-	-	4.6	4.8	5.05	4.67			
Turbidity (NTU)	7.6	7.5	-	-	9.4	10.1	8.65	-			
SS (mg/L)	8.0	9.0	-	-	7.0	7.0	7.75	-			
Remarks		Dredging works was observed.									

Compliance with Action an	<u>d Limit Lev</u>	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2	IMO2		MPB1	MF	PB2 MP		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	4.9	4.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.5	5.5	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	10.5	10.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/18/08
Weather & Ambient Temperature	Fine, 23C

Station	ı		C0 (NINAE'			7				
***************************************			<u> </u>	NM5) -17:13							
Time (hh:mm)											
Water Depth (m)											
Monitoring Depth (m)	1	.0	10).1	19	9.2					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	22.8	22.1	22.6	22.5	22.4	22.4	22.47	-			
Salinity (ppt)	26.9	27.3	27.7	27.7	28.0	28.0	27.59	-			
pH	7.6	7.6	7.7	7.7	7.7	7.7	7.69				
D.O. Saturation (%)	98.2	100.8	100.8	99.2	100.7	98.3	99.67	-			
D.O. (mg/L)	7.9	8.1	8.1	7.9	8.1	7.9	7.99	7.97			
Turbidity (NTU)	4.4	4.3	11.0	11.5	11.9	12.0	9.18	-			
SS (mg/L)	4.0	4.0 5.0 4.0 5.0 7.0 5.0 5.00 -									
Remarks		Dredging works was observed.									

Station			IM	101			Co-ord	dinates		
Time (hh:mm)				Northing	Easting					
Water Depth (m)			17	7.6			22.21.791	113.54.644		
Monitoring Depth (m)	1	.0	8	3.8	16	6.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	22.4	22.5	22.3	22.3	22.3	22.3	22.35	-		
Salinity (ppt)	28.4	28.2	28.4	28.4	23.8	28.5	27.63	-		
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71			
D.O. Saturation (%)	99.0	99.2	96.9	100.0	102.1	100.3	99.58	-		
D.O. (mg/L)	7.9	7.9	7.8	8.0	8.4	8.02	8.00	8.21		
Turbidity (NTU)	6.0	6.7	10.4	10.7	10.6	10.6	9.17	-		
SS (mg/L)	5.0	4.0	5.0	4.50	-					
Remarks		Dredging works was observed.								

Station			IM	02			Co-ord	dinates		
Time (hh:mm)			17:41	-17:43			Northing	Easting		
Water Depth (m)				22.21.510	113.55.089					
Monitoring Depth (m)	1	.0	9	.2	17	7.3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	22.5	22.5	22.3	22.3	22.3	22.3	22.37	-		
Salinity (ppt)	28.2	28.2	28.5	28.5	28.7	28.5	28.43	-		
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71			
D.O. Saturation (%)	97.9	98.1	99.8	98.2	100.4	99.5	98.98	-		
D.O. (mg/L)	7.8	7.8	8.0	7.9	8.0	7.95	7.91	7.99		
Turbidity (NTU)	5.1	4.8	9.0	8.8	9.8	9.5	7.83	-		
SS (mg/L)	6.0	6.0	5.0	5.17	-					
Remarks		Dredging works was observed.								

Station			MF	PB1						
Time (hh:mm)			16:44	-16:45						
Water Depth (m)			8	.2						
Monitoring Depth (m)	1	.0	4	.1	7	'.2				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	22.6	22.6	22.6	22.6	22.6	22.6	22.63	-		
Salinity (ppt)	27.3	27.2	27.8	27.2	27.2	27.2	27.30	-		
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.69			
D.O. Saturation (%)	98.9	99.3	99.7	98.6	98.5	99.1	99.02	-		
D.O. (mg/L)	7.9	8.0	8.2	7.9	7.9	7.9	7.96	7.91		
Turbidity (NTU)	9.3	9.1	9.3	9.2	9.5	9.8	9.37	-		
SS (mg/L)	5.0	5.0	5.0	7.0	4.0	4.0	5.00	-		
Remarks		Dredging works was observed.								

Station			MI	PB2						
Time (hh:mm)										
Water Depth (m)										
Monitoring Depth (m)	1	.0	4	.3	7	.5				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	22.5	22.5	22.5	22.5	22.5	22.5	22.50	-		
Salinity (ppt)	27.0	27.4	27.4	27.5	27.2	27.4	27.31	-		
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.70			
D.O. Saturation (%)	100.3	99.5	99.5	99.2	100.1	99.6	99.70	-		
D.O. (mg/L)	8.1	8.0	8.0	8.0	8.0	8.0	8.00	8.01		
Turbidity (NTU)	10.3	10.5	10.0	10.6	10.5	10.5	10.40	-		
SS (mg/L)	5.0	4.0	6.0	5.0	5.0	4.0	4.83	-		
Remarks		Dredging works was observed.								

Station			N	/IP				
Time (hh:mm)								
Water Depth (m)			5	5.6				
Monitoring Depth (m)	1	.0	2	2.8	4	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	22.7	22.7	-	-	22.7	22.7	22.70	-
Salinity (ppt)	26.7	26.8	-	-	26.8	26.8	26.77	-
pH	7.7	7.7	-	-	7.7	7.7	7.65	
D.O. Saturation (%)	98.8	99.0	-	-	98.1	98.4	98.58	-
D.O. (mg/L)	7.9	7.9	-	-	7.9	7.9	7.90	7.88
Turbidity (NTU)	7.8	7.9	-	-	8.8	8.8	8.33	-
SS (mg/L)	6.0	6.0	7.0	6.00	-			
Remarks	Dredging works was observed.							

Compliance with Action an	Compilance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		IMO2		MPB1	MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.0	8.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.0	8.0	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	11.9	11.9	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	6.5	6.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/18/08
Weather & Ambient Temperature	Sunny, 23C

Station			C1 (NM3)							
Time (hh:mm)			11:48	-11:51							
Water Depth (m)			10								
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	22.8	22.8	22.6	22.6	22.5	22.5	22.64	-			
Salinity (ppt)	26.8	26.8	27.5	27.6	27.8	27.8	27.38	-			
pH	7.7	7.6	7.7	7.7	7.7	7.7	7.68				
D.O. Saturation (%)	98.8	98.3	97.6	98.0	98.2	98.1	98.17	-			
D.O. (mg/L)	7.9	7.9	7.8	7.8	7.9	7.9	7.85	7.85			
Turbidity (NTU)	5.1	4.5	6.7	6.7	6.0	6.3	5.88	-			
SS (mg/L)	6.0	5.0	7.0	5.0	6.0	4.0	5.50	-			
Remarks		Dredging works was observed.									

Station			C3 (NM6)		•					
Time (hh:mm)			13:10	-13:12							
Water Depth (m)			6	6.9							
Monitoring Depth (m)	1	.0	3	.9							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	22.5	22.4	22.4	22.4	22.4	22.4	22.42	-			
Salinity (ppt)	27.7 27.5		27.5	27.7	27.5	27.7	27.60	-			
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71				
D.O. Saturation (%)	103.5	104.6	105.5	103.5	103.5	107.2	104.63	-			
D.O. (mg/L)	8.3	8.4	8.5	8.3	8.3	8.6	8.40	8.46			
Turbidity (NTU)	6.2	6.1	6.5	6.5	7.0	7.1	6.57	-			
SS (mg/L)	4.0	4.0	4.0	4.0	6.0	4.0	4.33	-			
Remarks		Dredging works was observed.									

Station			IM	01			Co-ordinates	3			
Time (hh:mm)			12:11	-12:14			Northing	Easting			
Water Depth (m)			17	7.1			22.21.892	113.54.683			
Monitoring Depth (m)	1	.0	8	.6	16	6.1					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	22.5	22.5	22.3	22.3	22.3	22.3	22.37	-			
Salinity (ppt)	28.2 28.2		28.4	28.4	28.5	26.6	28.05	-			
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71				
D.O. Saturation (%)	98.7	99.2	99.1	96.6	98.6	99.1	98.55	-			
D.O. (mg/L)	7.9	7.9	7.9	7.7	7.9	8.0	7.89	7.95			
Turbidity (NTU)	6.2	6.2	11.1	11.7	11.2	11.6	9.67	-			
SS (mg/L)	4.0	4.0	5.0	5.0	7.0	5.0	5.00	-			
Remarks		Dredging works was observed.									

Station			IM	02			Co-ordinate	S		
Time (hh:mm)			12:00	-12:03			Northing	Easting		
Water Depth (m)			18	3.2			22.21.557	113.55.221		
Monitoring Depth (m)	1	.0	9							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	22.5	22.4	22.3	22.3	22.3	22.3	22.36	-		
Salinity (ppt)	28.2 28.3		27.4	28.5	28.5	28.5	28.23	-		
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.72			
D.O. Saturation (%)	99.8	98.9	98.0	98.5	99.0	99.2	98.90	-		
D.O. (mg/L)	8.0	7.9	7.9	7.9	7.9	7.9	7.91	7.92		
Turbidity (NTU)	4.4	4.7	8.4	8.2	7.1	6.9	6.62	-		
SS (mg/L)	8.0	7.0	5.0	5.0	5.67	-				
Remarks	Dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			12:39	-12:41						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.3						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	22.6	22.6	22.6	22.6	22.6	22.6	22.63	-		
Salinity (ppt)	27.2	24.4	27.3	27.2	27.7	27.2	26.85	-		
pH	7.7	7.7	7.7	7.7	7.6	7.7	7.68			
D.O. Saturation (%)	100.8	99.3	101.4	99.7	103.5	100.6	100.88	-		
D.O. (mg/L)	8.1	8.1	8.1	8.0	8.3	8.1	8.10	8.17		
Turbidity (NTU)	10.9	11.0	11.7	11.2	11.0	11.6	11.23	-		
SS (mg/L)	6.0	4.0	5.0	4.0	5.0	6.0	5.00	-		
Remarks	Dredging works was observed.									

Station			MF	B2							
Time (hh:mm)			12:49	-12:51							
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	22.5	22.5	22.5	22.5	22.5	22.5	22.50	-			
Salinity (ppt)	27.4 27.4		27.3	27.4	27.4	27.4	27.38	-			
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.70				
D.O. Saturation (%)	99.9	100.4	100.9	99.7	100.3	101.7	100.48	-			
D.O. (mg/L)	8.0	8.1	8.1	8.0	8.0	8.2	8.06	8.10			
Turbidity (NTU)	10.1	10.0	10.4	10.7	10.4	10.5	10.35	-			
SS (mg/L)	4.0	5.0	4.0	6.0	4.50	-					
Remarks		Dredging works was observed.									

Station			N	IP								
Time (hh:mm)			12:29	-12:31								
Water Depth (m)			5									
Monitoring Depth (m)	1.	.0	2									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	22.8	22.7	-	-	22.7	22.7	22.74	-				
Salinity (ppt)	26.8	26.7	-	-	26.8	27.1	26.85	-				
pH	7.6	7.7	-	-	7.6	7.6	7.63					
D.O. Saturation (%)	102.0	99.9	-	-	99.0	103.8	101.18	-				
D.O. (mg/L)	8.2	8.0	-	-	7.9	8.3	8.11	8.12				
Turbidity (NTU)	6.5	6.5	-	-	7.6	7.4	7.00	-				
SS (mg/L)	4.0	4.0	-	5.0	4.75	-						
Remarks		Dredging works was observed.										

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1+C3)*130%		IMO1		IMO2		MPB1		MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.2	8.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.1	8.1	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.1	8.1	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	6.4	6.4	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/19/08	
Weather & Ambient Tempera	ture Cloudy, 24C	

Station	C2 (NM5)						1	
Time (hh:mm)	18:36-18:38							
Water Depth (m)	20.0							
Monitoring Depth (m)	1.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	19.9	20.0	19.9	20.0	20.0	20.0	19.93	-
Salinity (ppt)	36.2	36.0	37.5	37.5	38.7	38.0	37.32	-
pH	8.1	8.0	8.1	8.1	8.1	8.1	8.08	
D.O. Saturation (%)	98.1	96.8	96.2	96.2	98.4	94.8	96.75	-
D.O. (mg/L)	7.2	7.1	7.0	7.0	7.1	6.9	7.07	7.01
Turbidity (NTU)	6.2	6.3	8.7	8.8	9.1	9.5	8.10	-
SS (mg/L)	6.0	5.0	7.0	8.0	4.0	4.0	5.67	-
Remarks	Dredging			•		•	•	•

I =								
Station	IMO1						Co-ordinates	5
Time (hh:mm)	19:08-19:09						Northing	Easting
Water Depth (m)	13.9						22 21 596	113 55 340
Monitoring Depth (m)	1.0		7.0		12.9			3
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.0	19.9	19.9	19.9	19.8	19.90	-
Salinity (ppt)	35.4	35.4	36.4	36.5	37.8	37.2	36.46	-
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.05	
D.O. Saturation (%)	97.1	99.1	99.7	97.8	95.9	99.6	98.20	-
D.O. (mg/L)	7.2	7.3	7.3	7.2	7.0	7.29	7.22	7.15
Turbidity (NTU)	5.0	4.9	5.3	5.5	5.6	5.7	5.33	-
SS (mg/L)	5.0	6.0	4.0	5.0	6.0	6.0	5.33	-
Remarks	Dredging							

Station	IMO2						Co-ordinates	;
Time (hh:mm)	18:58-18:59						Northing	Easting
Water Depth (m)	14.2						22 21 991	113 54 772
Monitoring Depth (m)	1.0		7.1		13.2			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.0	19.9	19.8	19.9	19.9	19.91	-
Salinity (ppt)	35.9	35.5	36.6	37.1	38.4	37.5	36.82	-
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.05	
D.O. Saturation (%)	99.1	97.9	97.8	98.4	94.2	96.3	97.28	-
D.O. (mg/L)	7.3	7.2	7.2	7.2	6.8	7.03	7.13	6.94
Turbidity (NTU)	5.3	5.1	5.4	5.6	5.8	6.1	5.55	-
SS (mg/L)	5.0	4.0	6.0	5.0	6.0	4.0	5.00	-
Remarks	Dredging					•		

Station	MPB1						1	
Time (hh:mm)	17:59-18:00							
Water Depth (m)	7.2							
Monitoring Depth (m)	1.0		3.6		6.2			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.1	20.1	19.8	19.8	19.8	19.8	19.89	-
Salinity (ppt)	36.3	36.2	36.9	36.9	37.6	37.8	36.96	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.01	
D.O. Saturation (%)	106.8	103.4	104.2	104.1	106.0	102.6	104.52	
D.O. (mg/L)	7.8	7.6	7.7	7.6	7.8	7.5	7.66	7.62
Turbidity (NTU)	4.0	3.9	5.7	5.6	6.4	6.3	5.32	-
SS (mg/L)	4.0	3.0	4.0	3.0	4.0	3.0	3.50	-
Remarks	Dredging		•	-	•			

Station	MPB2							
Time (hh:mm)	17:51-17:52							
Water Depth (m)	6.8							
Monitoring Depth (m)	1.0		3.4		5.8			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.0	19.8	19.8	19.8	19.8	19.84	-
Salinity (ppt)	36.8	39.5	37.3	36.8	37.4	37.8	37.60	-
pH	8.0	8.0	8.0	8.0	8.0	8.0	8.02	
D.O. Saturation (%)	97.3	102.7	101.0	92.8	93.8	97.2	97.47	-
D.O. (mg/L)	7.1	7.4	7.4	6.8	6.9	7.1	7.12	6.99
Turbidity (NTU)	5.0	4.9	6.1	6.0	6.3	6.4	5.78	-
SS (mg/L)	4.0	3.0	2.0	2.0	3.0	3.0	2.83	-
Remarks	Dredging					•		

Station	MP						1	
Time (hh:mm)	18:06-18:07							
Water Depth (m)	5.2							
Monitoring Depth (m)	1.0		2.6		4.2			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.1	20.1	-	-	19.8	19.9	19.95	-
Salinity (ppt)	36.5	36.4	-	-	37.0	37.0	36.73	-
pH	8.0	8.0	-	-	8.0	8.0	8.02	
D.O. Saturation (%)	107.6	109.3	-	-	105.7	111.4	108.50	-
D.O. (mg/L)	7.9	8.0	-	-	7.8	8.2	7.95	7.96
Turbidity (NTU)	4.6	4.3	-	-	5.2	5.4	4.88	-
SS (mg/L)	3.0	2.0	-	-	4.0	4.0	3.25	-
Remarks	Dredging			•		•		

Compliance with Action

Compliance with Action														
Parameter	As in		C2*130%		IMO1		IMO2		MPB1		MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.0	7.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.1	7.1	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	10.5	10.5	N	N	N	Ν	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	7.4	7.4	N	N	N	Ν	N	N	N	N	N	N

Sampling Date	12/19/08
Weather & Ambient Temperature	Sunny, 25C

Station			C1 (NM3)				
Time (hh:mm)			12:46					
Water Depth (m)			17	7.8				
Monitoring Depth (m)	1	.0	8	3.9	16	6.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	19.9	20.0	20.0	20.0	19.9	20.0	19.95	-
Salinity (ppt)	38.0	37.6	38.1	38.2	38.4	38.3	38.10	-
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.47	
D.O. Saturation (%)	106.8	114.8	111.9	106.2	109.6	104.9	109.03	-
D.O. (mg/L)	7.8	8.4	8.1	7.7	8.0	7.6	7.93	7.79
Turbidity (NTU)	7.8	7.3	14.8	14.6	17.6	17.5	13.27	-
SS (mg/L)	5.0	5.0	5.0	5.0	4.0	5.0	4.83	-
Remarks				Dredo	jing works w	as observed.		

Station			C3 (NM6)				
Time (hh:mm)			14:03					
Water Depth (m)			8	.0				
Monitoring Depth (m)	1	.0	4	.0	7	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.2	20.1	19.9	19.9	20.0	20.0	20.01	-
Salinity (ppt)	37.2	37.3	37.5	37.9	41.1	38.6	38.28	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93	
D.O. Saturation (%)	110.0	111.9	111.0	113.3	113.7	110.3	111.70	-
D.O. (mg/L)	8.0	8.2	8.1	8.3	8.1	8.0	8.10	8.06
Turbidity (NTU)	5.5	5.3	5.9	6.0	6.8	6.5	6.00	-
SS (mg/L)	3.0	4.0	5.0	6.0	4.67	-		
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			13:02	-13:03			Northing	Easting			
Water Depth (m)			14	4.3		22 21 592	113 55 346				
Monitoring Depth (m)	1	.0	7	3.3							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.9	19.9	20.0	19.9	20.0	20.0	19.95	-			
Salinity (ppt)	37.8	38.2	38.4	38.1	38.4	38.7	38.25	-			
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.53				
D.O. Saturation (%)	113.3	108.1	113.9	112.2	110.1	111.2	111.47	-			
D.O. (mg/L)	8.3	7.9	8.3	8.2	8.0	8.1	8.10	8.03			
Turbidity (NTU)	7.2	6.9	8.6	8.5	9.5	9.6	8.38	-			
SS (mg/L)	3.0	4.0	3.0	3.0	3.0	3.17	-				
Remarks		Dredging works was observed.									

Station			IIV	102			Co-ordinate	s		
Time (hh:mm)			13:10	-13:11			Northing	Easting		
Water Depth (m)			1-		22 21 994	113 54 771				
Monitoring Depth (m)	1	.0	7	' .3	1;	3.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.9	19.9	19.9	19.9	20.0	19.9	19.94	-		
Salinity (ppt)	38.2	38.7	38.4	38.5	39.0	38.6	38.56	-		
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.62			
D.O. Saturation (%)	113.1	113.1	112.2	113.3	114.1	112.5	113.05	-		
D.O. (mg/L)	8.2	8.2	8.1	8.2	8.3	8.2	8.20	8.21		
Turbidity (NTU)	6.7	6.9	8.6	8.6	10.2	10.1	8.52	-		
SS (mg/L)	3.0	4.0	4.0	5.0	8.0	5.00	-			
Remarks		Dredging works was observed.								

Station			MF	PB1					
Time (hh:mm)			13:34	-13:35					
Water Depth (m)			6						
Monitoring Depth (m)	1	.0	3	.8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.0	20.1	19.9	19.9	20.0	19.9	19.96	-	
Salinity (ppt)	40.3	37.3	37.6	40.7	38.1	41.3	39.20	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90		
D.O. Saturation (%)	101.7	107.5	104.8	105.7	108.7	104.0	105.40	-	
D.O. (mg/L)	7.3	7.8	7.7	7.6	7.9	7.4	7.61	7.66	
Turbidity (NTU)	5.3	5.2	5.8	5.9	6.3	6.5	5.83	-	
SS (mg/L)	4.0	3.0	4.0	3.0	3.0	4.0	3.50	-	
Remarks	Dredging works was observed.								

Station			MF	B2							
Time (hh:mm)			13:40	-13:41							
Water Depth (m)			6								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.1	20.1	19.9	19.9	20.0	19.9	19.98	-			
Salinity (ppt)	37.1	37.3	38.77	-							
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.90				
D.O. Saturation (%)	110.8	111.3	109.5	108.4	110.8	116.7	111.25	-			
D.O. (mg/L)	8.1	8.1 8.1 7.9 7.9 8.0 8.3 8.05									
Turbidity (NTU)	5.2	5.2 4.8 5.3 5.2 5.6 5.7 5.30									
SS (mg/L)	3.0	4.0	4.0	4.0	3.0	3.0	3.50	-			
Remarks		Dredging works was observed.									

Station			IV	IP						
Time (hh:mm)			13:26	-13:26						
Water Depth (m)			5							
Monitoring Depth (m)	1.	.0	2							
Trial	Trial 1	Trial 2	Depth-averaged	Bottom						
Water Temperature (°C)	20.0	20.1	19.99	-						
Salinity (ppt)	40.1	37.0	-	38.17	-					
pH	7.9	7.9	-	-	7.9	7.9	7.91			
D.O. Saturation (%)	101.4	108.8	-	-	107.1	102.4	104.93	-		
D.O. (mg/L)	7.3	8.0	-	7.62	7.63					
Turbidity (NTU)	5.3	5.0	-	5.58	-					
SS (mg/L)	5.0	6.0	-	-	3.0	4.0	4.50	-		
Remarks		Dredging works was observed.								

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2		MPB1		MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.9	7.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.0	8.0	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	12.5	12.5	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	6.2	6.2	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/20/2008
Weather & Ambient Temperature	Fine, 21C

Station			C2 (NM5)			1			
Time (hh:mm)			19:21	-19:24						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	19.9	20.1	19.1	19.3	18.4	18.5	19.22	-		
Salinity (ppt)	33.6	32.8	38.4	38.5	40.9	41.1	37.53	-		
pH	8.0	8.0	8.1	8.1	8.1	8.1	8.07			
D.O. Saturation (%)	97.5	94.9	97.5	95.7	97.2	95.0	96.30	-		
D.O. (mg/L)	8.0	7.7	7.80	7.77						
Turbidity (NTU)	4.1	4.1 4.2 4.5 4.3 4.8 4.9								
SS (mg/L)	7.0	5.0	6.0	5.0	4.0	4.0	5.17	1		
Remarks	Dredging works was observed.									

Station			IM	01			Co-or	dinates
Time (hh:mm)			19:47	-19:49			Northing	Easting
Water Depth (m)			20	0.6			22.21.990	113.54.833
Monitoring Depth (m)	1	.0		•				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.0	20.1	19.6	19.6	19.3	19.1	19.65	-
Salinity (ppt)	33.2	33.5	34.6	34.5	37.4	37.4	35.11	-
pH	7.9	8.0	8.0	8.0	8.0	8.0	7.98	
D.O. Saturation (%)	95.5	95.9	96.7	93.6	98.8	97.0	96.25	-
D.O. (mg/L)	7.7	7.8	7.83	8.06				
Turbidity (NTU)	3.5	3.3	3.8	3.7	4.2	4.4	3.82	-
SS (mg/L)	4.0	5.0	4.0	3.0	4.0	4.0	4.00	-
Remarks	Dredging works was observed.							

Station			IM	O2			Co-ord	dinates
Time (hh:mm)			20:22	-20:23			Northing	Easting
Water Depth (m)			19	9.4			22.21.652	113.55.308
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.6	20.5	19.7	19.7	18.9	18.9	19.70	-
Salinity (ppt)	30.0	30.1	35.0	34.9	38.6	38.6 38.6		-
pH	7.9	7.9	8.0	8.0	8.0	8.1	7.96	
D.O. Saturation (%)	94.6	94.8	96.3	94.7	96.2	97.1	95.62	-
D.O. (mg/L)	7.7	7.7	7.7	7.88	7.73	7.84		
Turbidity (NTU)	4.1	4.2	4.5 4.4		4.8	4.8 4.9		-
SS (mg/L)	7.0	5.0	6.00	-				
Remarks	Dredging works was observed.							

Station			MF	PB1			1		
Time (hh:mm)			19:56	-19:59					
Water Depth (m)									
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom	
Water Temperature (°C)	20.1	20.2	19.4	19.6	19.3	19.2	19.61	-	
Salinity (ppt)	32.9	32.7	36.7	36.7 36.6		37.7	35.70	-	
pH	7.9	7.9	8.0	8.0	8.0	8.0	7.96		
D.O. Saturation (%)	96.0	95.6	96.4	95.3	95.6	95.0	95.65	-	
D.O. (mg/L)	7.8	7.8 7.8 8.0 7.8 7.7 7.6							
Turbidity (NTU)	3.3	3.1	3.80	-					
SS (mg/L)	4.0	6.0	4.0	6.0	4.0	5.0	4.83	ı	
Remarks		Dredging works was observed.							

Station			M	PB2				
Time (hh:mm)			20:05	-20:07				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.2	20.2	19.8	19.9	19.0	19.2	19.72	-
Salinity (ppt)	31.0	31.2	33.5	34.2	38.0	38.0	34.32	-
pH	7.8	7.9	7.9	8.0	8.0	8.0	7.91	
D.O. Saturation (%)	96.2	97.0	96.2	95.7	96.6	96.3	96.33	-
D.O. (mg/L)	7.8	7.9	7.8	7.7	7.8	7.8	7.82	7.81
Turbidity (NTU)	3.8	3.5	4.3	4.4	4.8	4.9	4.28	-
SS (mg/L)	4.0	4.0	6.0	4.0	6.0	4.0	4.67	-
Remarks	Dredging works was observed.							

Station			N	/IP						
Time (hh:mm)			19:38	3-19:40						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	20.0	20.0	-	-	19.4	19.3	19.66	-		
Salinity (ppt)	32.3 32.6 36.4 36.5						34.44	-		
pH	8.0	8.0	-	-	8.1	8.1	8.05			
D.O. Saturation (%)	95.7	95.5	-	-	94.8	94.9	95.23	-		
D.O. (mg/L)	7.8	7.8 7.8 7.7 7.6 7.77								
Turbidity (NTU)	4.3	4.4	-	-	4.8	4.9	4.60	-		
SS (mg/L)	6.0	4.0	-	-	4.0	3.0	4.25	-		
Remarks	Dredging works was observed.									

Compliance with Action at	Compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IIV	101	IM	02		MPB1	MF	PB2	IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.8	7.8	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.8	7.8	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.8	5.8	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	6.7	6.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/20/2008
Weather & Ambient Temperature	Fine, 21C

Station			C1 (NM3)						
Time (hh:mm)			13:28	-13:31						
Water Depth (m)			15							
Monitoring Depth (m)	1	.0	7							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.5	19.8	18.3	18.1	17.6	17.6	18.47	-		
Salinity (ppt)	36.8	36.2	40.6	41.1	43.3	43.0	40.17	-		
pH	8.1	8.0	8.1	8.1	8.2	8.1	8.10			
D.O. Saturation (%)	95.0	95.3	94.3	94.7	94.9	94.8	94.83	-		
D.O. (mg/L)	7.7	7.7	7.7	7.7	7.7	7.7	7.69	7.70		
Turbidity (NTU)	4.3	4.1	4.3	4.5	4.7	4.9	4.47	-		
SS (mg/L)	3.0	3.0	4.0	3.0	5.0	4.0	3.67	-		
Remarks		Dredging works was observed.								

Station			C3 (NM6)							
Time (hh:mm)			13:54	-13:56							
Water Depth (m)			6								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.2	20.0	19.6	19.5	18.8	19.0	19.52	-			
Salinity (ppt)	31.7	32.0	34.6	34.9	39.3	39.2	35.29	-			
pH	7.9	7.9	7.9	7.9	7.8	7.9	7.87				
D.O. Saturation (%)	101.3	100.0	102.0	100.2	103.7	100.2	101.23	-			
D.O. (mg/L)	8.3	8.1	8.2	8.2	8.4	8.2	8.20	8.26			
Turbidity (NTU)	4.2	4.1	4.3	4.2	4.5	4.8	4.35	-			
SS (mg/L)	6.0	5.0	6.0	6.0	5.0	4.0	5.33	-			
Remarks		Dredging works was observed.									

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			14:36	-14:38			Northing	Easting		
Water Depth (m)			2	1.0			22.21.992	113.54.836		
Monitoring Depth (m)	1.0		10	0.5	20	0.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.1	19.8	19.5	19.5	19.1	19.1	19.53	-		
Salinity (ppt)	33.2	33.7	35.1	35.2	37.6	37.6	35.41	-		
pH	8.0	8.0	8.1	8.0	8.0	8.0	8.02			
D.O. Saturation (%)	95.9	95.2	95.6	93.3	95.8	95.3	95.18	-		
D.O. (mg/L)	7.8	7.6	7.7	7.6	7.9	7.7	7.71	7.80		
Turbidity (NTU)	4.3	4.2	4.5	4.4	4.8	4.8	4.50	-		
SS (mg/L)	4.0	4.0	5.0	5.0	6.0	5.0	4.83	-		
Remarks		Dredging works was observed.								

Station			IM	IO2			Co-ordinate	es	
Time (hh:mm)			14:08	-14:11			Northing	Easting	
Water Depth (m)			19	9.8			22.21.650	113.55.310	
Monitoring Depth (m)	1	1.0 9.9 18.8							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.4	20.1	19.7	19.4	18.8	19.4	19.61	-	
Salinity (ppt)	29.9	29.8	35.0	36.6	38.8	37.6	34.62	-	
pH	7.9	7.9	8.0	8.0	8.0	8.0	7.96		
D.O. Saturation (%)	96.5	95.6	95.2	94.7	95.7	95.7	95.57	-	
D.O. (mg/L)	7.8	7.8	7.7	7.7	7.8	7.7	7.75	7.72	
Turbidity (NTU)	4.1	4.2	4.3	4.3	4.5	4.8	4.37	-	
SS (mg/L)	7.0	6.0	6.0	5.0	3.0	3.0	5.00	-	
Remarks		Dredging works was observed.							

Station			MF	PB1						
Time (hh:mm)			14:26	-14:29						
Water Depth (m)			8	.8						
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.5	20.3	19.4	19.6	19.1	19.1	19.65	-		
Salinity (ppt)	31.1	32.5	36.7	36.8	37.8	37.8	35.44	-		
pH	7.9	7.9	8.0	8.0	8.0	8.0	7.97			
D.O. Saturation (%)	97.5	96.0	96.4	98.1	100.2	97.1	97.55	-		
D.O. (mg/L)	7.9	7.9	7.8	8.0	8.1	7.8	7.93	7.97		
Turbidity (NTU)	4.4	4.2	4.7	4.8	4.9	4.7	4.62	-		
SS (mg/L)	6.0	6.0	6.0	7.0	5.0	6.0	6.00	-		
Remarks		Dredging works was observed.								

Station			MF	B2							
Time (hh:mm)			14:19	-14:22							
Water Depth (m)			8	.6							
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.2	20.2	19.9	19.7	19.0	18.9	19.65	-			
Salinity (ppt)	31.1	31.0	34.1	34.1	38.2	38.5	34.51	-			
pH	7.9	7.8	8.0	8.0	8.0	8.0	7.92				
D.O. Saturation (%)	97.1	96.4	97.4	96.4	97.0	98.4	97.12	-			
D.O. (mg/L)	7.9	7.8	7.9	7.9	7.9	8.0	7.88	7.95			
Turbidity (NTU)	4.2	4.1	4.6	4.5	4.9	4.8	4.52	-			
SS (mg/L)	5.0	5.0	4.0	5.0	5.0	6.0	5.00	-			
Remarks		Dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			14:45	-14:46							
Water Depth (m)			5	.7							
Monitoring Depth (m)	1.	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.1	20.0	-	-	19.4	19.6	19.77	-			
Salinity (ppt)	32.6	32.3	-	-	36.5	36.4	34.44	-			
pH	8.0	8.0	-	-	8.1	8.1	8.04				
D.O. Saturation (%)	98.7	96.6	-	-	100.3	95.7	97.83	-			
D.O. (mg/L)	8.0	7.9	-	-	8.1	7.8	7.93	7.92			
Turbidity (NTU)	4.1	4.3	-	-	4.5	4.6	4.38	-			
SS (mg/L)	4.0	4.0	-	-	6.0	5.0	4.75	-			
Remarks		Dredging works was observed.									

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2	IMO2		MPB1	MF	PB2 MI		IP.
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.0	8.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.9	7.9	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.7	5.7	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	5.9	5.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/21/08
Weather & Ambient Temperature	Fine, 22C

Station	ı		00.7	NIMEN			1				
				NM5)							
Time (hh:mm)			8:11	-8:13							
Water Depth (m)											
Monitoring Depth (m)	1	.0	10).2	19	9.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	20.7	20.7	20.5	20.5	20.5	20.5	20.55	-			
Salinity (ppt)	32.8	32.7	33.9	33.9	34.6	34.7	33.76	-			
pH	7.3	7.3	7.4	7.4	7.4	7.4	7.37				
D.O. Saturation (%)	101.3	101.9	99.6	99.8	101.8	103.3	101.28	-			
D.O. (mg/L)	6.8	6.8	6.7	6.7	6.8	6.9	6.78	6.86			
Turbidity (NTU)	2.2	2.4	3.4	3.2	4.0	3.8	3.17	-			
SS (mg/L)	6.0	5.0	5.0	4.0	5.0	4.0	4.83	-			
Remarks		Dredging works was observed.									

Station			IM	01			Co-ord	dinates			
Time (hh:mm)			7:54	-7:57			Northing	Easting			
Water Depth (m)				22.21.912	113.54.907						
Monitoring Depth (m)	1	.0									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	20.8	20.9	20.6	20.6	20.6	20.6	20.68	-			
Salinity (ppt)	27.3	27.4	29.8	29.8	31.7	31.7	29.61	-			
pH	7.3	7.3	7.3	7.3	7.4	7.4	7.32				
D.O. Saturation (%)	90.6	90.3	93.4	93.2	96.1	96.8	93.40	-			
D.O. (mg/L)	6.2	6.2	6.4	6.3	6.5	6.55	6.37	6.53			
Turbidity (NTU)	3.2	3.1	3.8	3.9	4.9	4.8	3.95	-			
SS (mg/L)	5.0	6.0	6.0	6.0	7.0	6.0	6.00	-			
Remarks			Dredging works was observed.								

Station			IM	02			Co-ord	dinates
Time (hh:mm)			7:41	-7:44			Northing	Easting
Water Depth (m)				22.21.610	113.55.415			
Monitoring Depth (m)	1	.0	.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.4	21.3	20.5	20.5	20.4	20.4	20.74	-
Salinity (ppt)	28.8	28.8	31.4	31.4	34.0	34.1	31.39	-
pH	7.4	7.3	7.4	7.5	7.5	7.5	7.42	
D.O. Saturation (%)	94.4	93.1	95.2	95.3	97.6	98.8	95.73	-
D.O. (mg/L)	6.4	6.3	6.5	6.5	6.6	6.64	6.47	6.60
Turbidity (NTU)	3.4	3.6	4.5	4.2	5.9	5.6	4.53	-
SS (mg/L)	5.0	6.0	4.0	5.50	-			
Remarks			D	redging wor	ks was obse	rved.	•	

Station			MF	PB1			1	
Time (hh:mm)								
Water Depth (m)			8	.2				
Monitoring Depth (m)	1	.0	4	.1	7	.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.9	20.9	20.6	20.6	20.6	20.6	20.68	-
Salinity (ppt)	26.8	26.8	29.6	29.5	30.4	30.5	28.92	
pH	7.3	7.3	7.3	7.3	7.3	7.4	7.32	
D.O. Saturation (%)	92.8	92.8	92.4	91.7	94.4	94.8	93.15	
D.O. (mg/L)	6.4	6.4	6.3	6.3	6.4	6.5	6.37	6.44
Turbidity (NTU)	2.6	2.8	3.5	3.8	4.4	4.1	3.53	-
SS (mg/L)	6.0	4.0	6.0	6.0	5.0	4.0	5.17	-
Remarks			D	redging worl	ks was obse	rved.		

Station			M	PB2				
Time (hh:mm)								
Water Depth (m)			g	0.0				
Monitoring Depth (m)	1	.0	4	.5	8	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.9	20.9	20.6	20.6	20.6	20.6	20.68	-
Salinity (ppt)	27.1	27.2	30.0	30.0	30.4	30.4	29.19	-
pH	7.2	7.2	7.3	7.3	7.2	7.3	7.26	
D.O. Saturation (%)	90.9	92.6	91.5	90.5	94.2	91.9	91.93	-
D.O. (mg/L)	6.3	6.4	6.2	6.2	6.4	6.3	6.28	6.33
Turbidity (NTU)	2.6	2.6	3.0	2.9	3.8	3.6	3.08	-
SS (mg/L)	6.0	6.0	5.0	6.0	4.0	5.0	5.33	-
Remarks				redging wor	ks was obse	rved.		

Station			N	IP			1			
Time (hh:mm)										
Water Depth (m)			5	.6						
Monitoring Depth (m)	1	.0	2	.8	4	.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	20.9	20.9	-	-	20.6	20.6	20.76	-		
Salinity (ppt)	26.7	26.7	-	-	29.6	29.6	28.14	-		
pH	7.2	7.2	-	-	7.2	7.2	7.21			
D.O. Saturation (%)	91.9	91.4	-	-	94.3	94.2	92.95	-		
D.O. (mg/L)	6.3	6.3	-	-	6.4	6.4	6.38	6.44		
Turbidity (NTU)	3.3	3.1	-	-	3.7	3.5	3.40	-		
SS (mg/L)	4.0	4.0 6.0 5.0 4.0								
Remarks		•	D	redging wor	ks was obse	rved.	•			

Compliance with Action at	ia Limit Lev	<u>/ei</u>													
Parameter	As in	EM&A	C2*1	30%	IM	IMO1		IMO2		MPB1	MF	B2	IV	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan	
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit	
					Action	Level	Level	Level	Level		Action	Level	Action	Level	
DO (Bottom)	3.3	2.5	6.9	6.9	N	N	N	N	N	N	N	N	N	N	
DO (Depth-averaged)	4.2	4.0	6.8	6.8	N	N	N	N	N	N	N	N	N	N	
Turbidity (Depth-averaged)	29.0	49.0	4.1	4.1	N	N	N	N	N	N	N	N	N	N	
SS (Depth-averaged)	24.0	37.0	6.3	6.3	N	N	N	N	N	N	N	N	N	N	

Sampling Date	12/21/08
Weather & Ambient Temperature	Sunny, 22C

Station			C1 (NM3)				
Time (hh:mm)			14:27					
Water Depth (m)			16	6.4				
Monitoring Depth (m)	1	.0	8	.2	15	5.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.5	20.5	20.4	20.4	20.4	20.4	20.45	-
Salinity (ppt)	33.7	33.8	34.3	34.2	34.6	34.6	34.18	-
pH	7.5	7.5	7.4	7.5	7.3	7.4	7.42	
D.O. Saturation (%)	99.6	100.2	98.2	99.2	101.6	99.0	99.63	-
D.O. (mg/L)	6.7	6.7	6.6	6.6	6.8	6.6	6.67	6.70
Turbidity (NTU)	2.3	2.1	2.5	2.6	3.1	3.2	2.63	-
SS (mg/L)	6.0	4.0	7.0	5.0	6.0	5.0	5.50	-
Remarks				Dredg	jing works w	as observed.		

Station			C3 (NM6)	•			
Time (hh:mm)			13:01	-13:04				
Water Depth (m)			6	6.4				
Monitoring Depth (m)	1	.0	3	3.2	5	.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.1	21.1	20.8	20.8	20.4	20.3	20.73	-
Salinity (ppt)	28.0	28.0	29.9	29.9	32.9	32.8	30.27	-
pH	7.2	7.2	7.2	7.3	7.3	7.3	7.26	
D.O. Saturation (%)	95.8	95.8	97.7	97.4	99.1	98.6	97.40	-
D.O. (mg/L)	6.5	6.6	6.6	6.6	6.7	6.7	6.62	6.68
Turbidity (NTU)	2.2	2.3	2.7	2.6	3.6	3.4	2.80	-
SS (mg/L)	6.0	5.0	6.0	7.0	5.0	7.0	6.00	-
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinate	S
Time (hh:mm)			14:01	-14:03			Northing	Easting
Water Depth (m)			9		22.21.911	113.54.918		
Monitoring Depth (m)	1	.0	4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.0	21.0	20.7	20.7	20.6	20.7	20.77	-
Salinity (ppt)	27.8	27.8	31.8	31.6	32.8	32.6	30.73	-
pH	7.3	7.3	7.4	7.4	7.4	7.4	7.38	
D.O. Saturation (%)	90.9	91.2	93.1	93.3	95.1	94.9	93.08	-
D.O. (mg/L)	6.2	6.3	6.3	6.3	6.4	6.4	6.33	6.42
Turbidity (NTU)	2.9	3.1	4.5	4.3	5.3	5.2	4.22	-
SS (mg/L)	6.0	6.0	5.0	5.0	5.50	-		
Remarks				Dredg	ging works w	as observed.		

Station			IM	02			Co-ordinate	s		
Time (hh:mm)			14:13	-14:16			Northing	Easting		
Water Depth (m)			10		22.21.606	113.55.411				
Monitoring Depth (m)	1	.0	5							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.2	21.3	20.8	20.8	20.5	20.5	20.82	-		
Salinity (ppt)	29.2	29.2	32.5	7.3	34.4	34.4	32.00	-		
pH	7.3	7.3	7.3	7.3	7.4	7.4	7.34			
D.O. Saturation (%)	95.2	94.2	96.4	95.2	98.9	99.1	96.50	-		
D.O. (mg/L)	6.5	6.4	6.6	6.4	6.6	6.6	6.51	6.63		
Turbidity (NTU)	3.3	3.1	3.8	3.6	4.5	4.7	3.83	-		
SS (mg/L)	4.0	5.0	5.0	6.0	5.0	4.0	4.83	-		
Remarks		Dredging works was observed.								

Station			MF	PB1					
Time (hh:mm)			13:28						
Water Depth (m)			8	.4					
Monitoring Depth (m)	1	.0	4	.2	7	.4			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	21.0	21.0	20.7	20.7	20.7	20.7	20.77	-	
Salinity (ppt)	27.2	27.2	29.6	29.5	31.2	31.3	29.34	-	
pH	7.2	7.3	7.3	7.3	7.3	7.3	7.30		
D.O. Saturation (%)	94.1	93.3	94.5	93.3	95.1	96.4	94.45	-	
D.O. (mg/L)	6.5	6.4	6.5	6.4	6.5	6.6	6.47	6.51	
Turbidity (NTU)	2.5	2.3	2.8	2.6	3.7	3.5	2.90	-	
SS (mg/L)	5.0	5.0	6.0	4.0	5.0	4.0	4.83	-	
Remarks		Dredging works was observed.							

Station			MF	PB2				
Time (hh:mm)			13:18					
Water Depth (m)			9	0.0				
Monitoring Depth (m)	1	.0	4	.5	8	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.0	21.0	20.7	20.7	20.7	20.7	20.79	-
Salinity (ppt)	27.4	27.6	30.4	30.5	31.0	31.0	29.66	-
pH	7.1	7.2	7.2	7.2	7.2	7.2	7.18	
D.O. Saturation (%)	92.0	92.0	92.1	91.9	93.9	93.6	92.58	-
D.O. (mg/L)	6.3	6.3	6.3	6.3	6.4	6.4	6.33	6.38
Turbidity (NTU)	2.7	2.5	3.1	3.2	3.9	3.7	3.18	-
SS (mg/L)	5.0	6.0	6.0	4.0	4.0	5.0	5.00	-
Remarks				Dredging	g works was	observed.		

Station			IV	IP					
Time (hh:mm)			13:39						
Water Depth (m)			5	.7					
Monitoring Depth (m)	1	.0	2	.9	4	.7			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	21.0	21.0	-	-	20.7	20.7	20.85	-	
Salinity (ppt)	26.9	26.9	-	-	29.6	29.8	28.33	-	
pH	7.3	7.2	-	-	7.3	7.3	7.26		
D.O. Saturation (%)	93.9	92.6	-	-	97.4	96.1	95.00	-	
D.O. (mg/L)	6.5	6.4	-	-	6.7	6.6	6.52	6.61	
Turbidity (NTU)	3.2	3.5	-	-	3.8	3.9	3.60	-	
SS (mg/L)	5.0	4.0	-	-	5.0	4.0	4.50	-	
Remarks		Dredging works was observed.							

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		101	IMO2		MPB1		MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action Exceedan		Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.7	6.7	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.6	6.6	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	3.5	3.5	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.5	7.5	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/22/08
Weather & Ambient Temperature	Sunny, 21C

Station			C2 (NM5)]			
Time (hh:mm)			- 1	-9:27						
Water Depth (m)										
Monitoring Depth (m)	1	.0	3.2							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
						[
Water Temperature (°C)	20.9	20.2	20.6	20.6	20.5	20.5	20.54	-		
Salinity (ppt)	27.2	27.6	28.0	28.0	28.3	28.3	27.89	-		
pH	7.9	7.9	7.9	8.0	8.0	8.0	7.93			
D.O. Saturation (%)	94.9	97.5	97.5	95.9	97.4	95.0	96.37	-		
D.O. (mg/L)	7.7	8.0	7.9	7.8	7.9	7.7	7.83	7.81		
Turbidity (NTU)	1.9	1.9	5.5	6.0	6.6	6.5	4.73	-		
SS (mg/L)	2.0	3.0	4.0	3.00	1					
Remarks	Dredging works was observed.									

1-									
Station			IM	01			Co-ord	dinates	
Time (hh:mm)			9:42	-9:43			Northing	Easting	
Water Depth (m)				22.21.859	113.54.907				
Monitoring Depth (m)	1	.0		3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	20.4	20.5	20.4	20.4	20.4	20.4	20.42	-	
Salinity (ppt)	28.7	28.5	28.7	28.7	24.1	28.8	27.93	-	
pH	8.0	8.0	8.0	8.0	7.9	8.0	7.95		
D.O. Saturation (%)	95.7	95.9	93.6	96.7	98.8	97.0	96.28	-	
D.O. (mg/L)	7.7	7.8	7.6	7.8	8.2	7.86	7.84	8.05	
Turbidity (NTU)	1.5	1.5	4.9	5.2	5.1	5.1	3.88	-	
SS (mg/L)	2.0	3.0	2.0	3.0	3.0	3.0	2.67	-	
Remarks	Dredging works was observed.								

Station			IM	02			Co-ord	dinates		
Time (hh:mm)			9:55	-9:57			Northing	Easting		
Water Depth (m)				22.21.577	113.55.244					
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.5	20.6	20.4	20.4	20.4	20.4	20.44	-		
Salinity (ppt)	28.5	28.5	28.8	28.8	28.8	29.0	28.73	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.95			
D.O. Saturation (%)	94.6	94.8	94.9	96.5	96.2	97.1	95.68	-		
D.O. (mg/L)	7.7	7.7	7.7	7.8	7.8	7.87	7.75	7.83		
Turbidity (NTU)	1.3	1.3	3.3	3.5	4.0	4.3	2.95	-		
SS (mg/L)	2.0	3.0	3.00	-						
Remarks		Dredging works was observed.								

Station			MF	PB1			1				
Time (hh:mm)			8:58	-8:59							
Water Depth (m)											
Monitoring Depth (m)	1	.0	4	.1	7	.2					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	20.7	20.7	20.7	20.7	20.7	20.7	20.70	-			
Salinity (ppt)	27.6	27.5	28.1	27.5	27.5	27.5	27.60	-			
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93				
D.O. Saturation (%)	95.6	96.0	96.4	95.3	95.2	95.8	95.72	-			
D.O. (mg/L)	7.8	7.8	8.0	7.7	7.7	7.8	7.80	7.75			
Turbidity (NTU)	3.8	3.6	3.8	3.7	4.0	4.3	3.87	-			
SS (mg/L)	4.0	3.0	4.33	-							
Remarks		Dredging works was observed.									

Station			MI	PB2					
Time (hh:mm)			8:49	-8:50					
Water Depth (m)									
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.6	20.6	20.57	-	
Salinity (ppt)	27.3	27.7	27.7	27.8	27.5	27.7	27.61	-	
pH	7.9	8.0	7.9	7.9	7.9	8.0	7.94		
D.O. Saturation (%)	97.0	96.2	96.2	95.9	96.8	96.3	96.40	-	
D.O. (mg/L)	7.9	7.8	7.8	7.8	7.9	7.8	7.84	7.85	
Turbidity (NTU)	4.8	5.0	4.5	5.1	5.0	5.0	4.90	-	
SS (mg/L)	6.0	6.0	5.0	4.0	4.0	4.0	4.83	-	
Remarks	Dredging works was observed.								

Station			IV	IP			1		
Time (hh:mm)			9:07	-9:08					
Water Depth (m)									
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom	
Water Temperature (°C)	20.8	20.8	-	-	20.8	20.7	20.77	-	
Salinity (ppt)	27.0	27.1	-	-	27.1	27.1	27.07	=	
pH	7.9	7.9	-	-	7.9	7.9	7.89		
D.O. Saturation (%)	95.5	95.7	-	-	94.8	95.1	95.28	-	
D.O. (mg/L)	7.8	7.8	-	-	7.7	7.7	7.74	7.72	
Turbidity (NTU)	2.3	2.4	-	-	3.3	3.3	2.83	-	
SS (mg/L)	2.0	2.0	3.0	2.50	-				
Remarks	Dredging works was observed.								

Compliance with Action at	Compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IIV	IMO1 IMO2		02	MPB1			MPB2		/IP
	Action Limit		Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedance of Limit Level		Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.8	7.8	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.8	7.8	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	6.2	6.2	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	3.9	3.9	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/22/08
Weather & Ambient Temperature	Fine, 21C

Station			C1 (NM3)								
Time (hh:mm)			13:55	-13:57								
Water Depth (m)			10	6.2								
Monitoring Depth (m)	1	.0	8									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.9	20.9	20.7	20.7	20.6	20.6	20.71	-				
Salinity (ppt)	27.1	27.1	27.8	27.9	28.1	28.1	27.68	-				
pH	7.9	7.9	7.9	7.9	8.0	7.9	7.92					
D.O. Saturation (%)	95.5	95.0	94.3	94.7	94.9	94.8	94.87	-				
D.O. (mg/L)	7.8	7.7	7.7	7.7	7.7	7.7	7.69	7.69				
Turbidity (NTU)	2.9	2.9	3.2	2.9	3.2	3.1	3.03	-				
SS (mg/L)	5.0	4.0	4.0	3.0	5.0	4.0	4.17	-				
Remarks		Dredging works was observed.										

Station			C3 (NM6)								
Time (hh:mm)			15:17	-15:18								
Water Depth (m)			6	.9								
Monitoring Depth (m)	1	.0	3									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.5	20.5	20.5	20.5	20.5	20.5	20.49	-				
Salinity (ppt)	28.0	27.8	27.8	28.0	27.8	28.0	27.90	-				
pH	8.0	8.0	8.0	8.0	8.0	7.9	7.95					
D.O. Saturation (%)	100.2	101.3	102.2	100.2	100.2	103.9	101.33	-				
D.O. (mg/L)	8.1	8.2	8.3	8.1	8.2	8.5	8.24	8.30				
Turbidity (NTU)	3.4	3.3	3.7	3.7	4.2	4.3	3.77	-				
SS (mg/L)	4.0	4.0	4.0	4.0	2.0	3.0	3.50	-				
Remarks		Dredging works was observed.										

Station			IM	01			Co-ordinate:	s		
Time (hh:mm)			14:18	-14:20			Northing	Easting		
Water Depth (m)			18	3.8		22.21.901	113.54.844			
Monitoring Depth (m)	1	1.0 9.4 17.8				7.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.6	20.5	20.4	20.4	20.4	20.4	20.44	-		
Salinity (ppt)	28.5	28.5	28.7	28.7	26.9	28.8	28.35	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.95			
D.O. Saturation (%)	95.9	95.4	93.3	95.8	95.8	95.3	95.25	-		
D.O. (mg/L)	7.8	7.7	7.6	7.8	7.9	7.7	7.73	7.79		
Turbidity (NTU)	2.7	2.7	6.2	5.6	6.1	5.7	4.83	-		
SS (mg/L)	3.0	3.0	5.0	4.0	5.0	4.0	4.00	-		
Remarks		Dredging works was observed.								

Station			IM	02			Co-ordinate:	S	
Time (hh:mm)			14:07	-14:09			Northing	Easting	
Water Depth (m)			19	9.3		22.21.537	113.55.265		
Monitoring Depth (m)	1	1.0 9.7 18.3							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.5	20.5	20.4	20.4	20.4	20.4	20.43	-	
Salinity (ppt)	28.5	28.6	27.7	8.0	28.8	28.8	28.53	-	
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.96		
D.O. Saturation (%)	96.5	95.6	94.7	95.2	95.9	95.7	95.60	-	
D.O. (mg/L)	7.8	7.7	7.7	7.7	7.8	7.8	7.75	7.76	
Turbidity (NTU)	2.7	2.5	2.4	2.7	2.7	2.6	2.60	-	
SS (mg/L)	3.0 2.0 2.0 2.0 3.0						2.33	-	
Remarks		Dredging works was observed.							

Station			MF	PB1					
Time (hh:mm)			14:45	-14:47					
Water Depth (m)			8						
Monitoring Depth (m)	1	.0	4						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	20.7	20.7	20.7	20.7	20.7	20.7	20.70	-	
Salinity (ppt)	27.5	24.7	27.6	27.5	28.0	27.5	27.15	-	
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.92		
D.O. Saturation (%)	97.5	96.0	98.1	96.4	100.2	97.3	97.58	-	
D.O. (mg/L)	7.9	7.9	8.0	7.8	8.1	7.9	7.94	8.01	
Turbidity (NTU)	5.4	5.5	6.2	5.7	5.5	6.1	5.73	-	
SS (mg/L)	2.0	3.0	3.0	3.0	4.0	4.0	3.17	-	
Remarks		Dredging works was observed.							

Station			MF	PB2						
Time (hh:mm)			14:55	-14:57						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.6	20.6	20.57	-		
Salinity (ppt)	27.7	27.7	27.6	27.7	27.7	27.7	27.68	-		
pH	7.9	7.9	7.9	7.9	8.0	7.9	7.94			
D.O. Saturation (%)	96.6	97.1	97.6	96.4	97.0	98.4	97.18	-		
D.O. (mg/L)	7.9	7.9	7.9	7.8	7.9	8.0	7.90	7.94		
Turbidity (NTU)	4.6	4.5	4.9	5.2	4.9	5.0	4.85	-		
SS (mg/L)	4.0	4.0	3.0	4.0	4.0	5.0	4.00	-		
Remarks		Dredging works was observed.								

Station			IV	IP						
Time (hh:mm)			14:36	-14:37						
Water Depth (m)			5							
Monitoring Depth (m)	1.	.0	2							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.8	20.8	-	-	20.8	20.8	20.81	-		
Salinity (ppt)	27.1	27.0	-	-	27.1	27.4	27.15	-		
pH	7.9	7.9	-	-	7.9	7.8	7.87			
D.O. Saturation (%)	98.7	96.6	-	-	95.7	100.5	97.88	-		
D.O. (mg/L)	8.0	7.9	-	-	7.8	8.1	7.95	7.96		
Turbidity (NTU)	1.7	1.7	-	-	2.1	1.9	1.85	-		
SS (mg/L)	5.0	4.0	-	-	2.0	3.0	3.50	-		
Remarks		Dredging works was observed.								

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MF	MPB2 MP		IP .
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.0	8.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.0	8.0	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	4.4	4.4	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	5.0	5.0	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/23/08
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1	
Time (hh:mm)								
Water Depth (m)			20	0.6				
Monitoring Depth (m)	1	.0	10	0.3	19	9.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	19.6	19.6	19.8	19.8	19.9	19.8	19.77	-
Salinity (ppt)	36.6	36.7	39.7	39.5	37.3	37.2	37.84	-
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.19	
D.O. Saturation (%)	98.4	95.8	98.9	95.0	95.4	92.5	96.00	-
D.O. (mg/L)	7.1	6.9	6.9	6.6	6.8	6.6	6.79	6.66
Turbidity (NTU)	4.2	3.9	4.9	5.1	5.2	5.1	4.73	-
SS (mg/L)	6.0	7.0	6.0	7.0	7.0	6.0	6.50	-
Remarks			D	redging wor	ks was obse	rved.	•	

Station			IM	01			Co-ore	dinates			
Time (hh:mm)				Northing	Easting						
Water Depth (m)			16	6.8			22 21 515	113 55 512			
Monitoring Depth (m)	1	.0	8	.4	15	5.8		3			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	19.7	19.7	19.9	19.9	19.8	19.8	19.79	-			
Salinity (ppt)	36.5	38.5	39.5	39.4	39.3	36.9	38.35	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.17				
D.O. Saturation (%)	88.7	89.7	91.0	86.9	88.5	89.0	88.97	-			
D.O. (mg/L)	6.3	6.3	6.3	6.1	6.3	6.31	6.28	6.32			
Turbidity (NTU)	3.9	3.8	4.0	3.8	5.8	5.8	4.52	-			
SS (mg/L)	5.0	5.0	4.0	6.0	6.0	7.0	5.50	-			
Remarks		Dredging works was observed.									

Station			IM		Co-ord	dinates			
Time (hh:mm)				Northing	Easting				
Water Depth (m)			22 21 899	113 54 934					
Monitoring Depth (m)	1	.0	8	.6	16	6.2			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	19.6	19.6	19.9	19.9	19.8	19.8	19.78	-	
Salinity (ppt)	36.4	36.7	39.8	37.2	37.1	37.0	37.39	-	
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.19		
D.O. Saturation (%)	96.3	93.3	94.5	98.1	93.2	93.4	94.80	-	
D.O. (mg/L)	6.9	6.7	6.6	7.0	6.6	6.63	6.73	6.63	
Turbidity (NTU)	3.7	3.6	4.7	4.6	6.2	6.4	4.87	-	
SS (mg/L)	4.0	6.0	4.0	4.50	-				
Remarks		Dredging works was observed.							

Station			MF	PB1			1			
Time (hh:mm)										
Water Depth (m)			7	.8						
Monitoring Depth (m)	1	.0	3	.9	6	.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	19.5	19.4	19.5	19.5	19.5	19.5	19.47	-		
Salinity (ppt)	37.1	37.5	37.4	37.2	37.3	37.8	37.38	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.24			
D.O. Saturation (%)	90.4	89.5	91.0	88.3	89.2	89.8	89.70	-		
D.O. (mg/L)	7.1	7.0	7.1	6.9	7.0	7.0	7.03	7.01		
Turbidity (NTU)	3.4	3.5	3.9	4.0	4.1	4.0	3.82	-		
SS (mg/L)	4.0	3.0	5.0	4.0	6.0	4.0	4.33	ı		
Remarks		Dredging works was observed.								

Station			MI	PB2					
Time (hh:mm)									
Water Depth (m)			7	.4					
Monitoring Depth (m)	1	.0	3	.7	6	.4			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom	
							averaged		
Water Temperature (°C)	19.4	19.5	19.5	19.5	19.5	19.5	19.46	-	
Salinity (ppt)	36.5	37.0	37.5	37.2	37.4	37.2	37.14	-	
pH	8.2	8.3	8.2	8.3	8.2	8.2	8.24		
D.O. Saturation (%)	93.7	92.3	92.3	91.5	90.9	90.3	91.83	-	
D.O. (mg/L)	7.4	7.2	7.2	7.2	7.1	7.1	7.20	7.10	
Turbidity (NTU)	4.1	4.1	4.2	4.4	4.5	4.4	4.28	-	
SS (mg/L)	6.0	5.0	4.0	6.0	5.0	5.0	5.17	-	
Remarks	Dredging works was observed.								

Station			N	IP			1					
Time (hh:mm)			10:56	-10:57								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	19.5	19.4	-	-	19.5	19.5	19.46	-				
Salinity (ppt)	37.1	36.9	-	-	38.8	37.3	37.54	-				
pH	8.2	8.2	-	-	8.2	8.2	8.23					
D.O. Saturation (%)	88.6	89.1	-	-	89.9	85.3	88.23	-				
D.O. (mg/L)	7.0	7.0	-	-	7.0	6.7	6.92	6.86				
Turbidity (NTU)	3.4	3.4	-	-	4.2	4.0	3.75	-				
SS (mg/L)	3.0	3.0 4.0 6.0 5.0 4.50 -										
Remarks		Dredging works was observed.										

Compliance with Action at	compliance with Action and Limit Level													
Parameter	As in	EM&A	C2*1	30%	IIV	101	IM	02		MPB1	MF	PB2	IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.7	6.7	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.8	6.8	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	6.2	6.2	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	8.5	8.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/23/08
Weather & Ambient Temperature	Sunny, 20C

Station			C1 (NM3)					
Time (hh:mm)			15:57	-15:58					
Water Depth (m)			19						
Monitoring Depth (m)	1	.0	9						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	19.6	19.5	19.9	20.1	19.9	19.8	19.81	-	
Salinity (ppt)	38.9	37.7	38.8	38.8	38.5	39.7	38.75	-	
pH	8.3	8.3	8.2	8.2	8.2	8.2	8.24		
D.O. Saturation (%)	87.4	86.5	86.9	86.1	87.3	90.4	87.43	-	
D.O. (mg/L)	6.4	6.4	6.3	6.2	6.4	6.5	6.35	6.44	
Turbidity (NTU)	5.9	5.6	5.9	5.9	6.5	6.4	6.03	-	
SS (mg/L)	5.0	6.0	5.0	5.0	4.0	4.0	4.83	-	
Remarks	Dredging works was observed.								

Station			C3 (NM6)							
Time (hh:mm)			14:26	-14:27							
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.8	19.7	19.8	19.9	19.7	19.8	19.79	-			
Salinity (ppt)	37.4	37.2	37.4	37.2	36.7	36.5	37.05	-			
pH	8.2	8.2	8.2	8.19							
D.O. Saturation (%)	100.5	97.8	99.1	95.9	93.1	97.0	97.23	-			
D.O. (mg/L)	7.7	7.5	7.6	7.4	7.2	7.5	7.46	7.32			
Turbidity (NTU)	6.6	6.7	6.7	6.9	6.8	6.7	6.73	-			
SS (mg/L)	5.0	5.0	8.0	8.0	6.83	-					
Remarks		Dredging works was observed.									

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			15:41	-15:43			Northing	Easting		
Water Depth (m)			17	7.0			22 21 519	113 55 513		
Monitoring Depth (m)	1	.0	8							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.5	19.5	20.5	20.1	19.8	19.8	19.84	-		
Salinity (ppt)	37.3	37.6	38.6	39.0	38.5	38.4	38.25	-		
pH	8.3	8.3	8.2	8.2	8.2	8.2	8.24			
D.O. Saturation (%)	94.3	93.2	94.0	93.4	87.3	88.5	91.78	-		
D.O. (mg/L)	6.9	6.9	6.8	6.7	6.4	6.5	6.68	6.41		
Turbidity (NTU)	5.4	5.6	5.4	5.2	5.4	5.3	5.38	-		
SS (mg/L)	8.0	8.0	6.0	8.0	7.33	-				
Remarks		Dredging works was observed.								

Station			IM	02			Co-ordinate	s
Time (hh:mm)			15:32	-15:34			Northing	Easting
Water Depth (m)			17	7.6			22 21 894	113 54 931
Monitoring Depth (m)	1	.0	8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	19.5	19.5	20.5	20.5	19.9	19.9	19.94	-
Salinity (ppt)	37.4	37.3	38.4	8.2	38.5	38.6	38.06	-
pH	8.3	8.3	8.2	8.2	8.2	8.2	8.24	
D.O. Saturation (%)	86.9	88.0	104.0	87.4	101.3	85.4	92.17	-
D.O. (mg/L)	6.4	6.5	7.7	6.3	7.6	6.2	6.78	6.89
Turbidity (NTU)	5.9	5.7	6.5	6.8	9.8	9.4	7.35	-
SS (mg/L)	5.0	5.0	4.0	6.0	5.17	-		
Remarks	Dredging works was observed.							

Station			MF	PB1					
Time (hh:mm)			15:47	-15:48					
Water Depth (m)			7						
Monitoring Depth (m)	1	.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	19.6	19.8	19.9	20.2	19.8	19.8	19.84	-	
Salinity (ppt)	37.8	37.9	38.9	39.2	38.3	38.6	38.43	-	
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.22		
D.O. Saturation (%)	69.9	70.2	70.5	69.2	71.9	70.4	70.35	-	
D.O. (mg/L)	5.1	5.2	5.1	5.0	5.2	5.1	5.12	5.18	
Turbidity (NTU)	5.2	5.4	4.9	4.7	5.3	5.1	5.10	-	
SS (mg/L)	7.0	5.0	5.83	-					
Remarks		Dredging works was observed.							

Station			MF	PB2						
Time (hh:mm)			14:48	-14:50						
Water Depth (m)			7							
Monitoring Depth (m)	1	.0	3	.5						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.8	19.6	19.8	19.5	19.5	19.7	19.63	-		
Salinity (ppt)	37.4	37.3	37.7	37.4	38.6	37.1	37.58	-		
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.23			
D.O. Saturation (%)	90.3	97.0	89.1	96.3	93.6	88.3	92.43	-		
D.O. (mg/L)	6.8	7.4	6.7	7.3	7.1	6.7	6.99	6.88		
Turbidity (NTU)	6.7	6.5	6.8	7.07	-					
SS (mg/L)	6.0	6.0	6.33	-						
Remarks		Dredging works was observed.								

Station			IV	IP							
Time (hh:mm)			15:03	-15:04							
Water Depth (m)			5								
Monitoring Depth (m)	1	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.5	19.5	-	-	19.5	19.5	19.47	-			
Salinity (ppt)	37.3	37.6	-	-	36.9	37.5	37.35	-			
pH	8.3	8.3	-	-	8.3	8.3	8.25				
D.O. Saturation (%)	98.0	97.4	-	-	97.8	97.1	97.58	-			
D.O. (mg/L)	7.4	7.4	-	-	7.4	7.4	7.40	7.39			
Turbidity (NTU)	5.6	5.7	-	5.6	5.65	-					
SS (mg/L)	7.0	7.0 6.0 - - 5.0 4.0 5.50 -									
Remarks		Dredging works was observed.									

Compliance with Action an	<u>id Limit Lev</u>	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	-C3)*130%	IIV	101	IMO2		MPB1		MPB2		N	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedance	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.9	6.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.9	6.9	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.3	8.3	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	7.6	7.6	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/24/08
Weather & Ambient Temperature	Sunny, 20C

Station			C2 (NM5)			1				
Time (hh:mm)			11:18	-11:19							
Water Depth (m)											
Monitoring Depth (m)	1	.0	10	0.5	20	0.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	19.8	19.7	19.7	19.7	19.7	19.7	19.70	-			
Salinity (ppt)	37.9	38.1	38.0	38.1	38.1	38.1	38.03	-			
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.14				
D.O. Saturation (%)	78.6	78.1	80.2	80.4	79.4	78.4	79.18	-			
D.O. (mg/L)	5.9	5.8	6.0	6.0	5.9	5.8	5.90	5.88			
Turbidity (NTU)	3.9	3.7	5.3	4.37	-						
SS (mg/L)	5.0	5.0	6.0	5.00	-						
Remarks		Dredging works was observed.									

Station			IM	01			Co-ore	dinates
Time (hh:mm)			10:37	-10:38			Northing	Easting
Water Depth (m)			22 21 689	113 55 498				
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	19.8	19.8	19.7	19.7	19.7	19.7	19.71	-
Salinity (ppt)	38.1	38.0	38.1	38.0	37.9	38.2	38.06	-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.12	
D.O. Saturation (%)	78.9	80.4	80.0	83.9	79.4	78.4	80.17	-
D.O. (mg/L)	5.8	5.9	5.8	6.1	5.9	5.73	5.86	5.80
Turbidity (NTU)	3.3	3.2	4.4	4.5	4.3	4.4	4.02	-
SS (mg/L)	4.0	3.0	3.33	-				
Remarks			С	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			10:47	-10:48			Northing	Easting
Water Depth (m)				22 22 015	113 55 008			
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	19.8	19.7	19.7	19.7	19.7	19.7	19.70	-
Salinity (ppt)	38.0	38.0	38.1	38.1	38.2	38.2	38.10	-
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.12	
D.O. Saturation (%)	70.5	75.4	76.4	74.1	78.8	74.5	74.95	-
D.O. (mg/L)	5.2	5.6	5.7	5.4	5.8	5.44	5.51	5.61
Turbidity (NTU)	3.6	3.6	3.6	3.8	4.1	4.8	3.92	-
SS (mg/L)	5.0	4.0	4.00	-				
Remarks		•	D	redging wor	ks was obse	rved.	-	-

Station			MF	PB1			1					
Time (hh:mm)			11:56	-11:57								
Water Depth (m)												
Monitoring Depth (m)	1	.0	3	.8	6	.6						
Trial	Trial 1	Trial 2	Trial 2	Depth- averaged	Bottom							
Water Temperature (°C)	19.7	19.7	19.7	19.7	19.7	19.7	19.73	-				
Salinity (ppt)	36.7	36.7	36.6	37.8	36.1	36.8	36.79	-				
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.12					
D.O. Saturation (%)	78.1	78.4	78.1	79.1	78.6	80.1	78.73	-				
D.O. (mg/L)	5.9	5.9	5.9	5.9	5.9	6.0	5.90	5.95				
Turbidity (NTU)	6.0	5.7	6.75	-								
SS (mg/L)	7.0	7.0	7.0	6.83	-							
Remarks		Dredging works was observed.										

Station			M	PB2						
Time (hh:mm)			12:03	-12:04						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	19.7	19.7	19.7	19.7	19.7	19.7	19.73	-		
Salinity (ppt)	37.0	37.2	37.9	37.1	36.7	37.3	37.17	-		
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.13			
D.O. Saturation (%)	78.5	77.8	79.0	78.7	79.6	78.4	78.67	-		
D.O. (mg/L)	5.9	5.8	5.9	5.9	6.0	5.9	5.88	5.91		
Turbidity (NTU)	6.0	6.2	7.3	7.1	7.8	7.9	7.05	-		
SS (mg/L)	7.0	6.0	7.0	7.0	8.0	7.0	7.00	-		
Remarks	Dredging works was observed.									

Station			I	/IP						
Time (hh:mm)			11:49)-11:49						
Water Depth (m)										
Monitoring Depth (m)	1.0 2.5 4.0				.0					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1 T	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	19.7	19.7	-	-	19.7	19.7	19.74	-		
Salinity (ppt)	37.9	37.8	-	-	37.9	37.9	37.89	-		
pH	8.1	8.1	-	-	8.1	8.1	8.14			
D.O. Saturation (%)	77.3	77.3	-	-	76.4	78.1	77.28	-		
D.O. (mg/L)	5.8	5.8	-	-	5.7	5.8	5.76	5.76		
Turbidity (NTU)	3.5	3.4	-	-	3.7	3.6	3.55	-		
SS (mg/L)	7.0	7.0	-	-	7.0	6.0	6.75	-		
Remarks	Dredging works was observed.									

Compliance with Action at	iu Liiiii Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*130%		IM	IMO1 IMO2		02	MPB1			PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan Exceedan		Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.9	5.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.9	5.9	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.7	5.7	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	6.5	6.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/24/08
Weather & Ambient Temperature	Sunny, 21C

Station			C1 (NM3)							
Time (hh:mm)			16:10	-16:11							
Water Depth (m)											
Monitoring Depth (m)	1	.0	9								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.3	19.3	19.3	19.3	19.7	19.6	19.40	-			
Salinity (ppt)	38.2	38.1	38.2	38.1	38.6	38.1	38.21	-			
pH	8.2	8.2	8.2	8.2	8.1	8.1	8.15				
D.O. Saturation (%)	86.7	86.2	87.1	87.1	87.9	87.9	87.15	-			
D.O. (mg/L)	6.4	6.3	6.4	6.4	6.4	6.4	6.40	6.42			
Turbidity (NTU)	5.8	5.9	7.1	7.2	8.7	8.6	7.22	-			
SS (mg/L)	5.0	4.0	5.0	5.0	5.00	-					
Remarks		Dredging works was observed.									

Station			C3 (NM6)							
Time (hh:mm)			14:48								
Water Depth (m)			8								
Monitoring Depth (m)	1	.0	4	.2	7	.3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.5	20.5	20.2	20.1	20.0	20.0	20.22	-			
Salinity (ppt)	38.6	38.5	38.3	38.6	38.5	37.9	38.39	-			
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.13				
D.O. Saturation (%)	76.2	75.9	75.1	74.9	75.6	74.4	75.35	-			
D.O. (mg/L)	5.5	5.5	5.4	5.4	5.5	5.4	5.44	5.45			
Turbidity (NTU)	6.6	6.3	6.4	6.4	6.6	6.9	6.53	-			
SS (mg/L)	7.0	5.0	5.0	5.0	5.50	-					
Remarks		Dredging works was observed.									

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			15:55	-15:56			Northing	Easting			
Water Depth (m)			15	5.0			22 21 683	113 55 490			
Monitoring Depth (m)	1	.0	7	4.0							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.3	19.3	19.3	19.3	19.4	19.4	19.33	-			
Salinity (ppt)	38.2	38.2	38.3	38.3	38.3	38.4	38.26	-			
pH	8.1	8.2	8.1	8.1	8.1	8.1	8.14				
D.O. Saturation (%)	86.6	86.4	87.4	86.9	87.9	87.8	87.17	-			
D.O. (mg/L)	6.4	6.4	6.4	6.4	6.5	6.4	6.40	6.45			
Turbidity (NTU)	4.1	4.0	5.2	5.3	7.8	7.8	5.70	-			
SS (mg/L)	7.0	7.0	9.0	7.0	7.67	-					
Remarks		Dredging works was observed.									

Station			IM	02			Co-ordinate	s	
Time (hh:mm)			15:47	-15:49			Northing	Easting	
Water Depth (m)			17	7.1			22 22 017	113 55 011	
Monitoring Depth (m)	1	.0	8	5.1					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	19.3	19.3	19.3	19.3	19.8	19.5	19.40	-	
Salinity (ppt)	38.0	38.2	38.3	38.1	38.2	38.5	38.22	-	
pH	8.2	8.1	8.1	8.1	8.1	8.1	8.14		
D.O. Saturation (%)	85.5	86.8	87.1	85.9	86.8	87.8	86.65	-	
D.O. (mg/L)	6.3	6.4	6.4	6.3	6.3	6.4	6.36	6.37	
Turbidity (NTU)	5.9	6.0	6.3	6.6	7.6	8.0	6.73	-	
SS (mg/L)	7.0	7.0	7.0	4.0	5.83	-			
Remarks	Dredging works was observed.								

Station			MF	PB1							
Time (hh:mm)			15:15	-15:16							
Water Depth (m)			7								
Monitoring Depth (m)	1	.0	3	.2							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.5	20.6	20.3	20.4	20.3	20.2	20.38	-			
Salinity (ppt)	38.8	38.7	38.8	38.8	38.6	38.5	38.71	-			
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.16				
D.O. Saturation (%)	77.4	78.2	77.5	78.6	77.4	78.4	77.92	-			
D.O. (mg/L)	5.6	5.6	5.6	5.7	5.6	5.7	5.60	5.62			
Turbidity (NTU)	6.6	6.6	6.7	6.8	7.3	7.2	6.87	-			
SS (mg/L)	6.0	7.0	6.0	6.0	8.0	8.0	6.83	-			
Remarks		Dredging works was observed.									

Station			MF	PB2								
Time (hh:mm)			15:05	-15:06								
Water Depth (m)			7									
Monitoring Depth (m)	1	.0	3	.3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.6	20.6	20.3	20.3	20.1	20.2	20.34	-				
Salinity (ppt)	38.8	38.8	38.8	38.8	38.6	38.6	38.73	-				
pH	8.2	8.2	8.2	8.2	8.2	8.2	8.15					
D.O. Saturation (%)	77.1	76.1	75.4	76.9	75.4	76.8	76.28	-				
D.O. (mg/L)	5.5	5.5	5.4	5.5	5.5	5.5	5.49	5.50				
Turbidity (NTU)	6.9	6.7	6.7	6.7	8.6	8.3	7.32	-				
SS (mg/L)	8.0	8.0	8.0	7.0	8.0	9.0	8.00	-				
Remarks		Dredging works was observed.										

Station			IV	IP				
Time (hh:mm)			15:22	-15:23				
Water Depth (m)			5					
Monitoring Depth (m)	1.	.0	2	.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.5	20.4	-	-	20.2	20.3	20.34	-
Salinity (ppt)	38.7	38.8	-	-	38.7	38.7	38.73	-
pH	8.2	8.2	-	-	8.2	8.2	8.16	
D.O. Saturation (%)	77.2	76.9	-	-	75.9	77.7	76.93	-
D.O. (mg/L)	5.5	5.5	-	-	5.5	5.6	5.53	5.54
Turbidity (NTU)	6.7	6.4	-	-	6.7	6.6	6.60	-
SS (mg/L)	6.0	7.0	-	-	7.0	7.0	6.75	-
Remarks				Dredging	g works was	observed.		

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IMO1		IMO2		MPB1		MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.9	5.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.9	5.9	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	6.8	6.8	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/25/2008
Weather & Ambient Temperature	Sunny, 25C

Station	I		C2 (NM5)			1	
••••			<u> </u>					
Time (hh:mm)			13:07	-13:09				
Water Depth (m)								
Monitoring Depth (m)	1	.0	3.3					
Trial	Trial 1	Trial 2	Depth-	Bottom				
							averaged	
Water Temperature (°C)	24.1	24.2	23.6	23.6	23.0	23.0	23.57	-
Salinity (ppt)	27.5	27.4	29.7	29.6	31.4	31.5	29.51	-
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.61	
D.O. Saturation (%)	85.2	84.5	77.6	76.8	74.1	75.3	78.92	-
D.O. (mg/L)	5.7	5.6	5.1	5.1	4.9	5.0	5.24	4.94
Turbidity (NTU)	5.2	5.3	6.9	6.6	8.7	8.6	6.88	-
SS (mg/L)	6.0	5.0	6.67	1				
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	01			Co-ore	dinates
Time (hh:mm)			12:05	-12:08			Northing	Easting
Water Depth (m)				22.21.936	113.55.030			
Monitoring Depth (m)	1	.0	7	.4	13	3.8		-
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	23.9	24.0	23.6	23.6	23.2	23.3	23.60	-
Salinity (ppt)	23.6	23.5	29.0	29.0	30.2	30.2	27.56	-
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.60	
D.O. Saturation (%)	81.9	82.8	75.3	75.1	74.1	74.4	77.27	-
D.O. (mg/L)	5.6	5.7	5.0	5.0	4.9	4.94	5.19	4.93
Turbidity (NTU)	6.1	6.1	7.9	7.7	9.1	9.0	7.65	-
SS (mg/L)	7.0	6.0	5.0	6.0	5.0	6.0	5.83	-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM		Co-ore	dinates		
Time (hh:mm)			11:55	-11:57			Northing	Easting
Water Depth (m)				22.21.635	113.55.481			
Monitoring Depth (m)	1	.0	5	.6	10).1		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	24.0	24.0	23.7	23.6	23.2	23.2	23.62	-
Salinity (ppt)	25.0	25.0	28.9	29.2	30.8	30.6	28.25	-
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.63	
D.O. Saturation (%)	82.6	75.4	76.6	75.6	75.0	73.9	76.52	-
D.O. (mg/L)	5.6	5.7	5.1	5.0	5.0	4.91	5.21	4.94
Turbidity (NTU)	6.3	6.3	7.5	7.3	9.2	9.1	7.62	-
SS (mg/L)	6.0	6.33	-					
Remarks			D	redging wor	ks was obse	rved.	•	•

Station			MF	PB1			1					
Time (hh:mm)			12:38	-12:40								
Water Depth (m)												
Monitoring Depth (m)	1	.0										
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	24.2	24.2	23.6	23.6	23.6	23.6	23.79	-				
Salinity (ppt)	20.2	20.1	26.2	25.9	28.2	27.6	24.70	-				
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.52					
D.O. Saturation (%)	83.3	82.6	75.2	75.1	76.4	76.1	78.12	-				
D.O. (mg/L)	5.8	5.7	5.1	5.1	5.1	5.1	5.31	5.12				
Turbidity (NTU)	5.5	5.6	6.3	6.2	6.6	6.7	6.15	-				
SS (mg/L)	6.0	5.0	6.0	6.17	-							
Remarks		Dredging works was observed.										

Station			M	PB2							
Time (hh:mm)			12:27	-12:31							
Water Depth (m)											
Monitoring Depth (m)	1	.0	4	.7	8	.3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	24.3	24.3	24.0	24.0	23.8	23.7	24.01	-			
Salinity (ppt)	18.6	20.2	24.1	26.1	27.2	28.1	24.04	-			
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.60				
D.O. Saturation (%)	85.8	86.2	78.1	79.3	77.3	78.4	80.85	-			
D.O. (mg/L)	6.0	6.0	5.3	5.3	5.2	5.2	5.50	5.20			
Turbidity (NTU)	6.1	6.2	7.1	7.2	7.8	7.7	7.02	-			
SS (mg/L)	8.0	10.0	6.0	6.0	5.0	6.0	6.83	-			
Remarks		Dredging works was observed.									

Station			N	IP			1					
Time (hh:mm)			12:49	-12:50								
Water Depth (m)												
Monitoring Depth (m)	1	.0	2	.9	4	.8						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	24.0	24.0	-	-	23.6	23.6	23.79	-				
Salinity (ppt)	20.6	20.8	-	-	26.3	25.6	23.34	-				
pH	7.5	7.5	-	-	7.5	7.4	7.47					
D.O. Saturation (%)	81.9	80.7	-	-	77.4	77.0	79.25	-				
D.O. (mg/L)	5.7	5.6	-	-	5.2	5.2	5.43	5.22				
Turbidity (NTU)	8.5	8.6	-	-	9.1	9.2	8.85	-				
SS (mg/L)	6.0	6.0	-	-	6.0	6.0	6.00	-				
Remarks		Dredging works was observed.										

Compliance with Action at	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		MO2		MPB1		PB2	IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	4.9	4.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.2	5.2	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	8.7	8.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/25/2008
Weather & Ambient Temperature	Sunny, 25C

Station			C1 (
Time (hh:mm)			17:59					
Water Depth (m)			16	6.4				
Monitoring Depth (m)	1	.0	8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	24.2	24.2	23.8	23.7	23.2	23.2	23.72	-
Salinity (ppt)	27.6	27.6	29.3	29.7	31.1	31.2	29.43	-
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.60	
D.O. Saturation (%)	85.7	84.9	77.7	77.8	76.1	76.9	79.85	-
D.O. (mg/L)	5.7	5.7	5.2	5.2	5.1	5.1	5.31	5.08
Turbidity (NTU)	5.3	5.2	7.1	7.1	8.9	9.3	7.15	-
SS (mg/L)	5.0	7.0	5.0	6.0	6.0	6.0	5.83	-
Remarks				as observed.				

Station			C3 (NM6)				
Time (hh:mm)			16:36					
Water Depth (m)			7	.4				
Monitoring Depth (m)	1	.0	3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	24.4	24.3	24.1	24.1	23.8	24.0	24.11	-
Salinity (ppt)	19.1	19.3	24.1	24.3	28.3	27.6	23.81	-
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.57	
D.O. Saturation (%)	87.4	87.3	81.2	81.8	78.8	81.1	82.93	-
D.O. (mg/L)	6.1	6.1	5.5	5.6	5.3	5.4	5.65	5.34
Turbidity (NTU)	5.9	5.8	6.2	6.2	7.1	7.2	6.40	-
SS (mg/L)	7.0	5.0	6.0	5.0	6.0	6.0	5.83	-
Remarks								

Station			IM	01			Co-ordinate	S
Time (hh:mm)			17:05	-17:06		Northing	Easting	
Water Depth (m)			14	22.21.926	113.55.032			
Monitoring Depth (m)	1	.0	7					
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom			
Water Temperature (°C)	24.1	24.5	23.8	23.8	23.4	23.4	23.85	-
Salinity (ppt)	24.2	24.7	28.8	28.9	30.0	30.2	27.78	-
pH	7.6	7.6 7.6 7.6 7.6 7.6 7.6					7.61	
D.O. Saturation (%)	82.4	82.4	75.7	75.6	75.1	74.6	77.63	-
D.O. (mg/L)	5.6	5.6	5.0	5.0	5.0	5.0	5.20	4.97
Turbidity (NTU)	5.8	6.2	7.1	7.1	8.6	8.4	7.20	-
SS (mg/L)	8.0	9.0	5.0	5.0	5.83	-		
Remarks				Dredo	jing works w	as observed.	•	

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			16:53		Northing	Easting					
Water Depth (m)			10	22.21.620	113.55.487						
Monitoring Depth (m)	1	.0	5								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.1	24.2	23.8	23.8	23.4	23.4	23.76	-			
Salinity (ppt)	24.4	24.8	28.9	7.6	30.8	30.6	28.05	-			
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.59				
D.O. Saturation (%)	83.9	83.4	75.3	75.4	73.6	74.0	77.60	-			
D.O. (mg/L)	5.7	5.7	5.0	5.0	4.9	4.9	5.20	4.89			
Turbidity (NTU)	6.4	6.3	7.5	7.6	9.1	8.9	7.63	-			
SS (mg/L)	7.0	8.0	5.0	6.0	8.0	7.0	6.83	-			
Remarks		Dredging works was observed.									

Station			MF								
Time (hh:mm)			17:31								
Water Depth (m)			8	.4							
Monitoring Depth (m)	1	.0	4	.2	7	.4					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.3	24.3	23.8	23.8	23.7	23.7	23.93	-			
Salinity (ppt)	19.6	19.0	26.2	25.8	29.3	28.9	24.78	-			
pH	7.5	7.5	7.5	7.5	7.6	7.6	7.55				
D.O. Saturation (%)	82.7	81.9	75.7	76.1	76.8	77.1	78.38	-			
D.O. (mg/L)	5.7	5.7	5.1	5.2	5.1	5.1	5.33	5.13			
Turbidity (NTU)	6.2	6.1	7.1	7.1	7.8	7.5	6.97	-			
SS (mg/L)	6.0	6.0	6.0	6.0	6.0	6.0	6.00	-			
Remarks		Dredging works was observed.									

Station			MF	PB2							
Time (hh:mm)			17:45								
Water Depth (m)			8	.8							
Monitoring Depth (m)	1	.0	4	.4	7	.8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.4	24.4	24.1	24.1	23.8	23.8	24.12	-			
Salinity (ppt)	18.0	17.9	24.4	25.6	28.1	28.3	23.75	-			
pH	7.6	7.6	7.6	7.6	7.6	7.6	7.59				
D.O. Saturation (%)	84.7	84.7	79.7	79.5	78.1	78.0	80.78	-			
D.O. (mg/L)	5.9	5.9	5.4	5.4	5.2	5.2	5.50	5.21			
Turbidity (NTU)	6.3	6.3	7.0	7.0	7.6	7.6	6.97	-			
SS (mg/L)	5.0	4.0	5.0	5.0	8.0	6.0	5.50	-			
Remarks		Dredging works was observed.									

Station												
Time (hh:mm)			17:18									
Water Depth (m)			5	.6								
Monitoring Depth (m)	1.	.0	2	.8	4	.6						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	24.1	24.1	-	-	23.7	23.7	23.90	-				
Salinity (ppt)	21.2	20.9	-	-	26.4	26.7	23.78	-				
pH	7.5	7.5	-	-	7.5	7.5	7.48					
D.O. Saturation (%)	80.0	79.8	-	-	76.2	75.5	77.88	-				
D.O. (mg/L)	5.5	5.5	-	-	5.1	5.1	5.32	5.12				
Turbidity (NTU)	6.4	6.4	-	-	7.3	7.0	6.78	-				
SS (mg/L)	6.0	8.0	-	-	6.0	6.0	6.50	-				
Remarks		Dredging works was observed.										

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	5.2	5.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	5.5	5.5	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.8	8.8	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.6	7.6	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/26/08
Weather & Ambient Temperature	Sunny, 24C

Station			C2 (NM5)			1	
Time (hh:mm)				1				
Water Depth (m)			19	9.4			1	
Monitoring Depth (m)	1	.0	9	.7	18	3.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	23.4	23.3	23.9	23.9	23.9	23.9	23.70	-
Salinity (ppt)	34.4	34.5	36.9	37.0	37.2	37.2	36.21	-
pH	8.3	8.3	8.2	8.2	8.2	8.2	8.24	
D.O. Saturation (%)	105.9	105.5	94.3	95.3	97.2	97.0	99.20	-
D.O. (mg/L)	7.3	7.3	6.3	6.4	6.5	6.5	6.73	6.53
Turbidity (NTU)	4.6	4.4	5.9	5.6	6.5	6.5	5.58	-
SS (mg/L)	6.0	6.0	6.0	6.0	6.0	6.0	6.00	-
Remarks			D	redging wor	ks was obse	rved.		

Station				Co-ord	dinates			
Time (hh:mm)			Northing	Easting				
Water Depth (m)			18	3.2			22.21.934	113.55.032
Monitoring Depth (m)	1	.0	9	.1	17	7.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	24.0	23.9	23.6	23.6	23.6	23.6	23.70	-
Salinity (ppt)	35.5	35.5	36.2	36.2	36.7	36.7	36.11	-
pH	8.4	8.3	8.3	8.3	8.3	8.4	8.34	
D.O. Saturation (%)	109.1	108.0	104.6	104.1	105.5	103.5	105.80	-
D.O. (mg/L)	7.4	7.4	7.1	7.1	7.2	7.03	7.18	7.10
Turbidity (NTU)	4.9	5.1	5.7	5.7	6.8	7.1	5.88	-
SS (mg/L)	7.0	6.17	-					
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			12:25	-12:27			Northing	Easting
Water Depth (m)			17	7.8			22.21.631	113.55.478
Monitoring Depth (m)	1	.0	8	.9	16	6.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	23.8	23.8	23.9	23.9	24.0	24.0	23.93	-
Salinity (ppt)	35.6	35.6	36.1	36.1	36.4	36.4	36.05	-
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.32	
D.O. Saturation (%)	104.8	105.5	101.8	102.7	102.3	103.1	103.37	-
D.O. (mg/L)	7.1	7.2	6.8	6.9	6.9	6.94	6.96	6.90
Turbidity (NTU)	5.5	5.7	6.1	6.0	6.5	6.5	6.05	-
SS (mg/L)	7.0	6.0	5.83	-				
Remarks			D	redging wor	ks was obse	rved.	•	•

Station			MF	PB1			1	
Time (hh:mm)			12:46	-12:47				
Water Depth (m)								
Monitoring Depth (m)	1	.0	4	.5	8	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	23.2	23.2	23.3	23.3	23.3	23.3	23.24	-
Salinity (ppt)	33.5	33.5	35.2	34.49	-			
pH	8.3	8.3	8.3	8.4	8.3	8.3	8.34	
D.O. Saturation (%)	110.0	108.2	107.2	106.4	108.8	107.4	108.00	-
D.O. (mg/L)	7.6	7.5	7.4	7.3	7.5	7.4	7.45	7.42
Turbidity (NTU)	4.8	4.9	5.9	5.8	6.3	6.0	5.62	-
SS (mg/L)	5.0	5.0	6.0	6.50	-			
Remarks			D	redging worl	ks was obse	rved.		

Station			M	PB2				
Time (hh:mm)								
Water Depth (m)			8	3.6				
Monitoring Depth (m)	1	.0	4	.3	7	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	23.2	23.3	23.2	23.2	23.3	23.3	23.27	-
Salinity (ppt)	34.3	34.3	34.6	34.6	36.6	36.6	35.19	-
pH	8.3	8.4	8.3	8.3	8.4	8.4	8.34	
D.O. Saturation (%)	104.9	104.6	103.5	104.1	104.1	104.8	104.33	-
D.O. (mg/L)	7.3	7.2	7.1	7.2	7.1	7.1	7.17	7.10
Turbidity (NTU)	6.1	6.0	6.2	6.1	6.0	6.2	6.10	-
SS (mg/L)	5.0	5.0	5.0	5.0	5.0	6.0	5.17	-
Remarks				redging wor	ks was obse	rved.		

Station			IV	IP							
Time (hh:mm)			12:56	-12:57							
Water Depth (m)											
Monitoring Depth (m)	1	.0	2	.9	4	.7					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	23.1	23.1	-	-	23.3	23.3	23.20	-			
Salinity (ppt)	33.7	33.7	-	-	35.3	35.4	34.53	-			
pH	8.3	8.4	-	-	8.3	8.4	8.34				
D.O. Saturation (%)	110.4	110.8	-	-	110.8	112.1	111.03	-			
D.O. (mg/L)	7.7	7.7	-	-	7.6	7.7	7.67	7.64			
Turbidity (NTU)	5.2	5.1	-	-	5.6	5.7	5.40	-			
SS (mg/L)	5.0	6.0	6.0	5.75	-						
Remarks		Dredging works was observed.									

Compliance with Action an	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*1	30%	IMO1		IM	IMO2		MPB1	MF	IPB2		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.5	6.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.7	6.7	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.3	7.3	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	7.8	7.8	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/26/08
Weather & Ambient Temperature	Sunny, 24C

Station			C1 (NM3)				
Time (hh:mm)			17:31					
Water Depth (m)			16	5.2				
Monitoring Depth (m)	1	.0	8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	23.6	23.6	23.6	23.7	23.9	23.9	23.70	-
Salinity (ppt)	36.1	36.0	36.9	37.0	37.3	37.3	36.74	-
pH	8.3	8.3	8.2	8.2	8.2	8.2	8.21	
D.O. Saturation (%)	106.8	105.9	97.5	97.4	98.6	98.9	100.85	-
D.O. (mg/L)	7.3	7.2	6.6	6.6	6.6	6.6	6.81	6.60
Turbidity (NTU)	4.8	4.8	5.7	6.0	6.7	6.7	5.78	-
SS (mg/L)	7.0	6.0	5.0	5.0	5.0	7.0	5.83	-
Remarks				Dredg	ging works w	as observed.		

Station			C3 (NM6)				
Time (hh:mm)			16:19					
Water Depth (m)			7	.0				
Monitoring Depth (m)	1	.0	3	.5	6	.0		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	23.4	23.4	23.4	23.3	23.3	23.4	23.35	-
Salinity (ppt)	34.7	34.7	34.9	34.9	35.7	35.7	35.07	-
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.34	
D.O. Saturation (%)	113.3	113.6	113.7	111.3	115.5	113.8	113.53	-
D.O. (mg/L)	7.8	7.8	7.8	7.7	7.9	7.8	7.80	7.87
Turbidity (NTU)	5.5	5.5	5.7	5.7	6.5	6.7	5.93	-
SS (mg/L)	5.0	6.0	6.0	5.0	5.83	-		
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinate:	s
Time (hh:mm)			17:04	-17:06			Northing	Easting
Water Depth (m)			18		22.21.932	113.55.027		
Monitoring Depth (m)	1	.0	9					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	23.8	23.8	24.1	24.2	23.7	23.7	23.90	-
Salinity (ppt)	35.1	35.2	36.0	36.0	36.6	36.5	35.91	-
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.31	
D.O. Saturation (%)	113.7	115.1	108.0	110.1	111.5	110.8	111.53	-
D.O. (mg/L)	7.8	7.9	7.3	7.4	7.6	7.5	7.56	7.51
Turbidity (NTU)	5.3	5.2	6.7	6.4	7.6	7.8	6.50	-
SS (mg/L)	7.0	7.0	5.0	6.0	9.0	7.00	-	
Remarks				Dredg	ging works w	as observed.		

Station			IM	02			Co-ordinate	S			
Time (hh:mm)			17:15	-17:17			Northing	Easting			
Water Depth (m)			18		22.21.633	113.55.480					
Monitoring Depth (m)	1	.0	9								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	24.0	24.0	23.7	23.7	23.7	23.7	23.78	-			
Salinity (ppt)	35.6	35.5	36.6	36.6	36.7	36.7	36.28	-			
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.31				
D.O. Saturation (%)	107.5	107.8	101.9	104.0	108.3	106.3	105.97	-			
D.O. (mg/L)	7.3	7.3	6.9	7.0	7.3	7.2	7.17	7.27			
Turbidity (NTU)	6.0	6.0	6.1	6.1	6.4	6.6	6.20	-			
SS (mg/L)	7.0	7.0	7.0	5.0	6.33	-					
Remarks		Dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			16:44							
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.4						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	23.2	23.2	23.3	23.3	23.3	23.4	23.28	-		
Salinity (ppt)	33.0	32.9	34.6	34.6	34.9	35.0	34.18	-		
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.32			
D.O. Saturation (%)	110.5	109.9	105.8	107.9	108.8	107.0	108.32	-		
D.O. (mg/L)	7.7	7.7	7.3	7.4	7.4	7.4	7.48	7.40		
Turbidity (NTU)	4.9	5.1	5.6	5.4	6.2	6.2	5.57	-		
SS (mg/L)	4.0	4.0	5.0	4.0	5.0	4.0	4.33	-		
Remarks		Dredging works was observed.								

Station			MF	B2						
Time (hh:mm)			16:33							
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.0	7	.0				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	23.3	23.3	23.3	23.3	23.3	23.3	23.30	-		
Salinity (ppt)	34.2	34.2	35.02	-						
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.32			
D.O. Saturation (%)	110.3	111.0	107.4	107.7	109.9	108.8	109.18	-		
D.O. (mg/L)	7.6	7.6	7.4	7.4	7.5	7.4	7.50	7.45		
Turbidity (NTU)	5.5	5.7	6.3	6.2	6.4	6.4	6.08	-		
SS (mg/L)	5.0	6.0	4.0	5.0	5.0	6.0	5.17	-		
Remarks		Dredging works was observed.								

Station			IV	IP					
Time (hh:mm)			16:54	-16:55					
Water Depth (m)			5						
Monitoring Depth (m)	1	.0	2						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	23.1	23.1	-	-	23.4	23.3	23.23	-	
Salinity (ppt)	33.7	33.7	-	-	35.1	35.2	34.42	-	
pH	8.3	8.3	-	-	8.3	8.3	8.32		
D.O. Saturation (%)	115.0	114.6	-	-	115.2	115.3	115.03	-	
D.O. (mg/L)	8.0	8.0	-	-	7.9	7.9	7.94	7.92	
Turbidity (NTU)	5.0	5.2	-	-	5.4	5.4	5.25	-	
SS (mg/L)	7.0	5.0	-	-	4.0	4.0	5.00	-	
Remarks	Dredging works was observed.								

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IIV	101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.2	7.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.3	7.3	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.6	7.6	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	7.6	7.6	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/27/08
Weather & Ambient Temperature	Cloudy, 21C

Station			C2 (NM5)			1				
Time (hh:mm)			13:20	-13:23			1				
Water Depth (m)											
Monitoring Depth (m)	1	.0	10	0.3	19	9.6					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom			
Water Temperature (°C)	20.4	20.4	19.9	19.8	19.6	19.6	19.95	-			
Salinity (ppt)	24.9	24.9	30.2	30.3	31.4	31.4	28.86	-			
pH	8.2	8.3	8.4	8.3	8.4	8.3	8.31				
D.O. Saturation (%)	94.7	93.6	91.0	89.9	94.2	94.1	92.92	-			
D.O. (mg/L)	6.5	6.4	6.2	6.1	6.3	6.3	6.30	6.33			
Turbidity (NTU)	3.6	3.5	4.4	4.2	5.8	5.5	4.50	-			
SS (mg/L)	5.0	6.0	5.00	-							
Remarks		Dredging works was observed.									

Station			IM	01			Co-ord	dinates
Time (hh:mm)			13:06	-13:08			Northing	Easting
Water Depth (m)			22.22.047	113.55.102				
Monitoring Depth (m)	1	.0	5	.7	10	0.4		-
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.7	20.7	19.4	19.4	19.2	19.2	19.76	-
Salinity (ppt)	31.3	31.2	32.4	32.4	32.9	32.9	32.20	-
pH	8.3	8.3	8.4	8.4	8.5	8.4	8.38	
D.O. Saturation (%)	94.0	93.2	87.5	85.9	88.9	89.5	89.83	-
D.O. (mg/L)	6.2	6.2	5.7	5.8	6.0	6.01	6.00	6.00
Turbidity (NTU)	4.7	4.5	5.4	5.3	6.5	6.6	5.50	-
SS (mg/L)	5.0 7.0 5.0 7.0 7.0 7.0							-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	O2			Co-ord	dinates		
Time (hh:mm)			12:53	-12:55			Northing	Easting		
Water Depth (m)				22.21.663	113.55.628					
Monitoring Depth (m)	1	.0	5	.1	9	.2				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.1	20.1	19.3	19.3	19.1	19.1	19.52	-		
Salinity (ppt)	31.9	31.9	32.8	32.9	33.1	33.1	32.62	-		
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.32			
D.O. Saturation (%)	94.5	95.3	91.9	93.0	94.2	92.4	93.55	-		
D.O. (mg/L)	6.3	6.4	6.2	6.3	6.3	6.31	6.29	6.33		
Turbidity (NTU)	5.4	5.5	6.2	6.4	7.0	6.9	6.23	-		
SS (mg/L)	6.0	7.0	6.0	6.0	5.0	6.0	6.00	-		
Remarks		Dredging works was observed.								

Station			MF	PB1			1	
Time (hh:mm)			13:47	-13:49				
Water Depth (m)								
Monitoring Depth (m)	1	.0	3	.9	6	.8		
Trial	Trial 1 Trial 2 Trial 1 Trial 2 Trial 1 Trial 2							Bottom
Water Temperature (°C)	20.7	20.6	20.3	20.3	20.0	20.1	20.33	-
Salinity (ppt)	24.8	24.7	27.2	27.2	29.0	29.0	26.95	
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.29	
D.O. Saturation (%)	96.5	95.1	94.6	95.3	97.9	97.7	96.18	
D.O. (mg/L)	6.6	6.6	6.5	6.5	6.6	6.6	6.56	6.63
Turbidity (NTU)	3.8	3.9	4.6	4.5	5.3	5.2	4.55	-
SS (mg/L)	6.0	6.0	5.67	-				
Remarks			D	redging worl	ks was obse	rved.		

Station			MI	PB2					
Time (hh:mm)			14:36	-14:38					
Water Depth (m)									
Monitoring Depth (m)	1	.0	4	.6	8	.2			
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom	
Water Temperature (°C)	20.6	20.6	20.3	20.3	20.2	20.2	20.40	-	
Salinity (ppt)	25.1	25.1	27.4	27.5	27.7	27.9	26.77	-	
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.31		
D.O. Saturation (%)	96.5	96.3	97.2	97.6	98.4	99.6	97.60	-	
D.O. (mg/L)	6.6	6.6	6.6	6.6	6.7	6.8	6.65	6.74	
Turbidity (NTU)	3.7	3.8	4.6	4.7	5.9	5.6	4.72	-	
SS (mg/L)	7.0	8.0	5.0	6.0	6.0	7.0	6.50	-	
Remarks	Dredging works was observed.								

Station			- N	/IP	-	-			
Time (hh:mm)			13:38	-13:39					
Water Depth (m)			1						
Monitoring Depth (m)	1	.0	2	2.8	4	.5	1		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom	
Water Temperature (°C)	20.6	20.6	-	-	20.3	20.2	20.42	-	
Salinity (ppt)	26.4	26.2	-	-	27.4	27.4	26.85	-	
pH	8.3	8.3	-	-	8.3	8.3	8.31		
D.O. Saturation (%)	93.4	94.4	-	-	95.9	96.3	95.00	-	
D.O. (mg/L)	6.4	6.4	-	-	6.5	6.6	6.48	6.53	
Turbidity (NTU)	4.7	4.4	-	-	5.5	5.6	5.05	-	
SS (mg/L)	4.0	5.00	-						
Remarks	Dredging works was observed.								

Compliance with Action at	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*1	30%	IMO1		IM	02		MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.3	6.3	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	6.3	6.3	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	5.9	5.9	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	6.5	6.5	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/27/08
Weather & Ambient Temperature	Cloudy, 21C

Station			C1 (NM3)							
Time (hh:mm)			18:28	-18:30							
Water Depth (m)			16	6.6							
Monitoring Depth (m)	1	.0	8								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.8	19.8	19.0	19.1	19.0	19.0	19.27	-			
Salinity (ppt)	32.4	32.4	33.4	33.4	33.6	33.6	33.12	-			
pH	8.1	8.2	8.1	8.2	8.1	8.2	8.15				
D.O. Saturation (%)	95.5	95.1	91.1	89.3	97.1	96.2	94.05	-			
D.O. (mg/L)	6.4	6.3	6.1	6.0	6.5	6.5	6.31	6.51			
Turbidity (NTU)	2.9	2.7	3.7	3.5	4.5	4.4	3.62	-			
SS (mg/L)	4.0	4.0	5.0	5.0	4.50	-					
Remarks		Dredging works was observed.									

Station			C3 (NM6)								
Time (hh:mm)			16:26	-16:28								
Water Depth (m)			6									
Monitoring Depth (m)	1	.0	3									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	19.8	19.8	20.4	19.7	19.8	20.3	19.98	-				
Salinity (ppt)	30.2	29.8	28.2	30.1	29.8	28.2	29.37	-				
pH	8.4	8.4	8.3	8.4	8.4	8.3	8.34					
D.O. Saturation (%)	96.6	93.6	95.1	96.0	93.5	94.1	94.82	-				
D.O. (mg/L)	6.5	6.3	6.4	6.5	6.3	6.4	6.42	6.36				
Turbidity (NTU)	3.8	3.3	2.7	3.9	3.2	2.9	3.30	-				
SS (mg/L)	5.0	5.0	5.0	4.0	7.0	6.0	5.33	-				
Remarks		Dredging works was observed.										

Station			IM	01			Co-ordinates	3		
Time (hh:mm)			18:02	-18:04			Northing	Easting		
Water Depth (m)			11	1.8		22.22.052	113.55.099			
Monitoring Depth (m)	1	1.0 5.9 10.8				0.8				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.1	20.1	19.7	19.7	19.2	19.1	19.63	-		
Salinity (ppt)	31.0	30.9	32.4	32.4	32.9	33.0	32.10	-		
pH	8.4	8.4	8.4	8.4	8.4	8.4	8.37			
D.O. Saturation (%)	92.0	90.3	84.5	83.9	88.9	89.5	88.18	-		
D.O. (mg/L)	6.2	6.1	5.5	5.6	6.0	6.0	5.89	5.99		
Turbidity (NTU)	4.2	4.2	4.7	4.7	6.6	6.4	5.13	-		
SS (mg/L)	6.0 5.0 6.0 6.0 4.0 5.0						5.33	-		
Remarks		Dredging works was observed.								

Station			IM	IO2			Co-ordinate	s		
Time (hh:mm)			18:14	-18:16			Northing	Easting		
Water Depth (m)			10	0.6			22.21.656	113.55.633		
Monitoring Depth (m)	1	1.0 5.3 9.6				1.6				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.9	19.9	19.2	19.2	19.0	19.0	19.38	-		
Salinity (ppt)	30.6	30.5	32.3	8.3	32.9	33.0	31.95	-		
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.32			
D.O. Saturation (%)	91.7	90.5	88.9	88.8	90.1	91.0	90.17	-		
D.O. (mg/L)	6.1	6.1	6.0	6.0	6.1	6.1	6.06	6.09		
Turbidity (NTU)	3.8	3.6	4.6	4.4	5.5	5.4	4.55	-		
SS (mg/L)	5.0 6.0 5.0 7.0 9.0 9.0						6.83	-		
Remarks		Dredging works was observed.								

Station			MF	PB1						
Time (hh:mm)			17:32	-17:34						
Water Depth (m)			8	.0						
Monitoring Depth (m)	1	.0	4							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.5	20.5	20.2	20.1	20.0	20.0	20.20	-		
Salinity (ppt)	24.9	25.0	27.2	27.3	28.7	28.8	26.95	-		
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.30			
D.O. Saturation (%)	95.7	95.3	94.5	94.9	96.7	97.9	95.83	-		
D.O. (mg/L)	6.6	6.5	6.4	6.5	6.6	6.6	6.54	6.61		
Turbidity (NTU)	4.3	4.1	4.9	4.8	5.6	5.4	4.85	-		
SS (mg/L)	5.0	5.0	8.0	8.0	7.0	5.0	6.33	-		
Remarks		Dredging works was observed.								

Station			MF	PB2							
Time (hh:mm)			16:40	-16:42							
Water Depth (m)			9								
Monitoring Depth (m)	1	.0	4								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.4	20.4	20.3	20.3	20.3	20.3	20.36	-			
Salinity (ppt)	25.4	25.3	25.9	26.0	26.5	26.6	25.93	-			
pH	8.3	8.3	8.3	8.3	8.3	8.3	8.30				
D.O. Saturation (%)	96.4	95.9	97.2	97.1	97.4	97.7	96.95	-			
D.O. (mg/L)	6.6	6.6	6.6	6.6	6.7	6.7	6.62	6.66			
Turbidity (NTU)	4.5	4.4	4.9	5.1	5.5	5.7	5.02	-			
SS (mg/L)	6.0	5.0	6.0	4.0	5.0	5.0	5.17	-			
Remarks		Dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			17:41	-17:42							
Water Depth (m)			5								
Monitoring Depth (m)	1	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	20.4	20.4	-	-	20.0	20.1	20.22	-			
Salinity (ppt)	26.6	26.7	-	-	28.2	28.1	27.42	-			
pH	8.3	8.3	-	-	8.4	8.3	8.32				
D.O. Saturation (%)	93.1	94.1	-	-	94.3	94.6	94.03	-			
D.O. (mg/L)	6.3	6.4	-	-	6.4	6.4	6.39	6.41			
Turbidity (NTU)	3.2	2.9	-	-	3.6	3.8	3.38	-			
SS (mg/L)	4.0	5.0	-	4.0	4.25	-					
Remarks		Dredging works was observed.									

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	IM	01	IMO2			MPB1	MPB2		IV	IP .
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	6.4	6.4	N	N	N	N	N	N	Z	N	N	N
DO (Depth-averaged)	4.2	4.0	6.4	6.4	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	4.5	4.5	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	6.4	6.4	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/28/08
Weather & Ambient Temperature	Sunny, 21C

Station			C2 (NM5)			1						
Time (hh:mm)			- 1	-13:23			1						
Water Depth (m)													
Monitoring Depth (m)	1	.0	10).3	19	9.6							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom					
							averaged						
Water Temperature (°C)	20.9	20.2	20.6	20.6	20.5	20.5	20.54	-					
Salinity (ppt)	27.2	27.6	28.0	28.0	28.3	28.3	27.89	-					
pH	7.9	7.9	8.0	7.9	8.0	8.0	7.93						
D.O. Saturation (%)	98.2	100.8	99.2	100.8	100.7	98.3	99.67	-					
D.O. (mg/L)	7.9	8.1	7.9	8.1	8.1	7.9	7.99	7.97					
Turbidity (NTU)	4.0	4.0	8.1	7.6	8.7	8.6	6.83	-					
SS (mg/L)	8.0	6.83	-										
Remarks			D	Dredging works was observed.									

Station			IM	01			Co-ord	dinates
Time (hh:mm)			13:06	-13:08			Northing	Easting
Water Depth (m)				22.22.007	113.55.131			
Monitoring Depth (m)	1	.0	7	.0	12	2.9		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.4	20.5	20.4	20.4	20.4	20.4	20.42	-
Salinity (ppt)	28.7	28.5	28.7	28.7	28.8	24.1	27.93	-
pH	8.0	8.0	8.0	8.0	8.0	7.9	7.95	
D.O. Saturation (%)	99.0	99.2	96.9	100.0	100.3	102.1	99.58	-
D.O. (mg/L)	7.9	7.9	7.8	8.0	8.0	8.40	8.00	8.21
Turbidity (NTU)	3.6	3.6	7.0	7.3	7.2	7.2	5.98	-
SS (mg/L)	5.0	7.0	6.0	6.67	-			
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	O2			Co-ord	dinates		
Time (hh:mm)			12:53	-12:55			Northing	Easting		
Water Depth (m)			13	3.4			22.21.651	113.55.611		
Monitoring Depth (m)	1	.0	6	.7	12	2.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom		
							averaged			
Water Temperature (°C)	20.5	20.6	20.4	20.4	20.4	20.4	20.44	-		
Salinity (ppt)	28.5	28.5	28.8	28.8	28.8	29.0	28.73	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.95			
D.O. Saturation (%)	97.9	98.1	98.2	99.8	99.5	100.4	98.98	-		
D.O. (mg/L)	7.8	7.8	7.9	8.0	8.0	8.03	7.91	7.99		
Turbidity (NTU)	3.4	3.4	5.4	5.6	6.1	6.4	5.05	-		
SS (mg/L)	8.0	7.0	5.0	6.17	-					
Remarks		Dredging works was observed.								

Station			MF	PB1			1	
Time (hh:mm)			13:48	-13:50				
Water Depth (m)			7	.8				
Monitoring Depth (m)	1	.0	3	.9	6	.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.7	20.7	20.7	20.7	20.7	20.7	20.70	-
Salinity (ppt)	27.6	27.5	28.1	27.5	27.5	27.5	27.60	-
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.93	
D.O. Saturation (%)	98.9	99.3	99.7	98.6	98.5	99.1	99.02	-
D.O. (mg/L)	7.9	8.0	8.2	7.9	7.9	7.9	7.96	7.91
Turbidity (NTU)	5.9	5.7	5.9	5.8	6.1	6.4	5.97	-
SS (mg/L)	5.0	6.0	5.67	-				
Remarks			D	redging wor	ks was obse	rved.	•	•

Station			MI	PB2								
Time (hh:mm)			14:56	-14:59								
Water Depth (m)												
Monitoring Depth (m)	1	.0	4	.5	7	. .9						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.6	20.6	20.57	-				
Salinity (ppt)	27.3	27.7	27.7	27.8	27.5	27.7	27.61	-				
pH	7.9	8.0	7.9	7.9	7.9	8.0	7.94					
D.O. Saturation (%)	100.3	99.5	99.5	99.2	100.1	99.6	99.70	_				
D.O. (mg/L)	8.1	8.0	8.0	8.0	8.0	8.0	8.00	8.01				
Turbidity (NTU)	6.9	7.1	6.6	7.2	7.1	7.1	7.00	-				
SS (mg/L)	6.0	6.0	5.0	6.0	5.0	7.0	5.83	-				
Remarks		Dredging works was observed.										

Station			N	/IP				
Time (hh:mm)			13:38	-13:39				
Water Depth (m)								
Monitoring Depth (m)	1							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.8	20.8	-	-	20.8	20.7	20.77	-
Salinity (ppt)	27.0	27.1	-	-	27.1	27.1	27.07	-
pH	7.9	7.9	-	-	7.9	7.9	7.89	
D.O. Saturation (%)	98.8	99.0	-	-	98.1	98.4	98.58	-
D.O. (mg/L)	7.9	7.9	-	-	7.9	7.9	7.90	7.88
Turbidity (NTU)	4.4	4.5	-	-	5.4	5.4	4.93	-
SS (mg/L)	6.0	6.0	-	-	5.0	7.0	6.00	-
Remarks		-		redging wor	ks was obse	rved.		

Compliance with Action at	ia Limit Lev	<u>/ei</u>												
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		02		MPB1	MF	PB2	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.0	8.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.0	8.0	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.9	8.9	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	8.9	8.9	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/28/08
Weather & Ambient Temperature	Fine, 21C

Station			C1 (NM3)				
Time (hh:mm)			19:03	-19:05				
Water Depth (m)			16					
Monitoring Depth (m)	1	.0	8					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.9	20.9	20.7	20.7	20.6	20.6	20.71	-
Salinity (ppt)	27.1	27.1	27.9	27.8	28.1	28.1	27.68	-
pH	7.9	7.9	7.9	7.9	7.9	8.0	7.92	
D.O. Saturation (%)	98.8	98.3	98.0	97.6	98.1	98.2	98.17	-
D.O. (mg/L)	7.9	7.9	7.8	7.8	7.9	7.9	7.85	7.85
Turbidity (NTU)	5.0	5.0	5.0	5.3	5.2	5.3	5.13	-
SS (mg/L)	5.0	5.0	6.0	6.0	6.17	-		
Remarks				as observed.	•			

Station			C3 (NM6)				
Time (hh:mm)			16:41	-16:44				
Water Depth (m)			6					
Monitoring Depth (m)	1	.0	3	.4				
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom			
Water Temperature (°C)	20.5	20.5	20.5	20.5	20.5	20.5	20.49	-
Salinity (ppt)	28.0	27.8	27.8	28.0	28.0	27.8	27.90	-
pH	8.0	8.0	8.0	8.0	7.9	8.0	7.95	
D.O. Saturation (%)	103.5	104.6	105.5	103.5	107.2	103.5	104.63	-
D.O. (mg/L)	8.3	8.4	8.5	8.3	8.6	8.3	8.40	8.46
Turbidity (NTU)	5.5	5.4	5.8	5.8	6.4	6.3	5.87	-
SS (mg/L)	6.0	8.0	6.0	5.0	6.33	-		
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinates			
Time (hh:mm)			18:38	-18:40			Northing	Easting		
Water Depth (m)			14		22.22.051	113.55.079				
Monitoring Depth (m)	1	.0	7							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	al 2 Trial 1 Tria		Depth-averaged	Bottom		
Water Temperature (°C)	20.5	20.6	20.4	20.4	20.4	20.4	20.44	-		
Salinity (ppt)	28.5	28.5	28.7	28.7	28.8	26.9	28.35	-		
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.95			
D.O. Saturation (%)	98.7	99.2	99.1	96.6	98.6	99.1	98.55	-		
D.O. (mg/L)	7.9	7.9	7.9	7.7	7.9	8.0	7.89	7.95		
Turbidity (NTU)	4.8	4.8	7.7	8.3	7.8	8.2	6.93	-		
SS (mg/L)	6.0	5.0	5.0	6.0	5.67	-				
Remarks				Dredg	ging works w	as observed.				

Station			IM	02			Co-ordinates				
Time (hh:mm)			18:50	-18:52			Northing	Easting			
Water Depth (m)			14		22.21.646	113.55.639					
Monitoring Depth (m)	1	.0	7								
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom						
Water Temperature (°C)	20.5	20.5	20.4	20.4	20.4	20.4	20.43	-			
Salinity (ppt)	28.5	28.6	28.8	8.0	28.8	28.8	28.53	-			
pH	8.0	8.0	8.0	8.0	8.0	8.0	7.96				
D.O. Saturation (%)	99.8	98.9	98.5	98.0	99.2	99.0	98.90	-			
D.O. (mg/L)	8.0	7.9	7.9	7.9	7.9	7.9	7.91	7.92			
Turbidity (NTU)	4.8	4.6	4.8	4.5	4.8	4.7	4.70	-			
SS (mg/L)	6.0	6.0	5.0	7.0	6.17	-					
Remarks		Dredging works was observed.									

Station			MF	PB1						
Time (hh:mm)			18:05	-18:07						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.0						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.7	20.7	20.7	20.7	20.7	20.7	20.70	-		
Salinity (ppt)	24.7	27.5	27.5	27.6	28.0	27.5	27.15	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.92			
D.O. Saturation (%)	99.3	100.8	99.7	101.4	103.5	100.6	100.88	-		
D.O. (mg/L)	8.1	8.1	8.0	8.1	8.3	8.1	8.10	8.17		
Turbidity (NTU)	7.6	7.5	7.8	8.3	7.6	8.2	7.83	-		
SS (mg/L)	5.0	6.0	6.0	6.0	6.0	5.0	5.67	-		
Remarks	Dredging works was observed.									

Station			MF	B2								
Time (hh:mm)			16:55	-16:57								
Water Depth (m)			9									
Monitoring Depth (m)	1	.0	4	.4								
Trial	Trial 1	Trial 2	Depth-averaged	Bottom								
Water Temperature (°C)	20.6	20.6	20.6	20.6	20.6	20.6	20.57	-				
Salinity (ppt)	27.7	27.7	27.6	27.7	27.7	27.7	27.68	-				
pH	7.9	7.9	7.9	7.9	8.0	7.9	7.94					
D.O. Saturation (%)	99.9	100.4	100.9	99.7	100.3	101.7	100.48	-				
D.O. (mg/L)	8.0	8.1	8.1	8.0	8.0	8.2	8.06	8.10				
Turbidity (NTU)	6.7	6.6	7.0	7.3	7.0	7.1	6.95	-				
SS (mg/L)	5.0	5.0	6.0	7.0	6.00	-						
Remarks		Dredging works was observed.										

Station			N	IP								
Time (hh:mm)			18:15	-18:17								
Water Depth (m)			5									
Monitoring Depth (m)	1	.0	2									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	20.8	20.8	-	20.8	20.81	-						
Salinity (ppt)	27.0	27.1	-	-	27.1	27.4	27.15	-				
pH	7.9	7.9	-	-	7.9	7.8	7.87					
D.O. Saturation (%)	99.9	102.0	-	-	99.0	103.8	101.18	-				
D.O. (mg/L)	8.0	8.2	-	-	7.9	8.3	8.11	8.12				
Turbidity (NTU)	3.8	3.8	4.0	3.95	-							
SS (mg/L)	7.0	8.0	-	6.0	6.75	-						
Remarks		Dredging works was observed.										

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1-	Mean(C1+C3)*130%		101	IMO2			MPB1	MPB2		IV	/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.2	8.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.1	8.1	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	7.2	7.2	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	8.1	8.1	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/29/08
Weather & Ambient Temperature	Sunny, 22C

Station			C2 (NM5)			1	
Time (hh:mm)								
Water Depth (m)								
Monitoring Depth (m)	1	.0	9	.8	18	3.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.6	21.3	21.0	21.1	20.9	20.9	20.95	-
Salinity (ppt)	27.4	26.9	27.7	27.7	28.1	28.1	27.67	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.70	
D.O. Saturation (%)	102.4	99.8	100.8	102.4	102.3	99.9	101.27	-
D.O. (mg/L)	8.2	7.9	8.0	8.1	8.1	8.0	8.07	8.05
Turbidity (NTU)	4.8	4.8	7.63	-				
SS (mg/L)	11.0	10.0	9.00	-				
Remarks			D	redging wor	ks was obse	rved.	•	

Station			IM	01			Co-ord	dinates
Time (hh:mm)				Northing	Easting			
Water Depth (m)			22.22.012	113.55.121				
Monitoring Depth (m)	1	.0	7	.1	13	3.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	20.8	20.9	20.8	20.8	20.8	20.8	20.83	-
Salinity (ppt)	28.5	28.3	28.5	28.5	28.5	23.9	27.71	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.72	
D.O. Saturation (%)	100.6	100.8	98.5	101.6	101.9	103.7	101.18	-
D.O. (mg/L)	8.0	8.0	7.8	8.1	8.1	8.48	8.08	8.29
Turbidity (NTU)	4.4	4.4	6.78	-				
SS (mg/L)	8.0	8.0	7.0	7.17	-			
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates
Time (hh:mm)			13:31	-13:33			Northing	Easting
Water Depth (m)				22.21.650	113.55.608			
Monitoring Depth (m)	1	.0	7	.2	13	3.4		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.0	20.9	20.8	20.8	20.8	20.8	20.85	-
Salinity (ppt)	28.3	28.3	28.5	28.6	28.6	28.7	28.51	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.72	
D.O. Saturation (%)	99.7	99.5	99.8	101.4	101.1	102.0	100.58	-
D.O. (mg/L)	7.9	7.9	7.9	8.1	8.0	8.11	7.99	8.07
Turbidity (NTU)	4.2	4.2	5.85	-				
SS (mg/L)	8.0	8.0	10.0	9.17	-			
Remarks			D	redging worl	ks was obse	rved.	•	

Station			MF	PB1			1	
Time (hh:mm)			14:25	-14:27				
Water Depth (m)								
Monitoring Depth (m)	1	.0	3	.8	6	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	21.1	21.1	21.1	21.1	21.1	21.1	21.11	-
Salinity (ppt)	27.4	27.3	27.8	27.3	27.3	27.3	27.38	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.70	
D.O. Saturation (%)	100.5	100.9	101.3	100.2	100.1	100.7	100.62	-
D.O. (mg/L)	8.0	8.0	8.2	8.0	8.0	8.0	8.04	7.99
Turbidity (NTU)	6.7	6.5	6.7	6.6	6.9	7.2	6.77	-
SS (mg/L)	7.0	6.0	7.0	6.67	-			
Remarks			D	redging worl	ks was obse	rved.		•

Station			MI	PB2			1	
Time (hh:mm)			15:34	-15:36				
Water Depth (m)								
Monitoring Depth (m)	1	.0	4	1.3	7	.5		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom
							averaged	
Water Temperature (°C)	21.0	21.0	21.0	21.0	21.0	21.0	20.98	-
Salinity (ppt)	27.1	27.5	27.4	27.5	27.3	27.5	27.39	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71	
D.O. Saturation (%)	101.9	101.1	101.1	100.8	101.7	101.2	101.30	-
D.O. (mg/L)	8.1	8.1	8.1	8.0	8.1	8.1	8.08	8.09
Turbidity (NTU)	7.7	7.9	7.4	8.0	7.9	7.9	7.80	-
SS (mg/L)	6.0	7.0	6.0	6.67	-			
Remarks		•		redging wor	ks was obse	rved.		

Station			N	IP			1	
Time (hh:mm)			14:15	-14:17				
Water Depth (m)								
Monitoring Depth (m)	1	.0	2	.8	4	.6		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	21.2	21.2	-	-	21.1	21.2	21.18	-
Salinity (ppt)	26.8	26.8	-	-	26.9	26.9	26.85	-
pH	7.7	7.7	-	-	7.7	7.7	7.66	
D.O. Saturation (%)	100.4	100.6	-	-	100.0	99.7	100.18	-
D.O. (mg/L)	8.0	8.0	-	-	8.0	7.9	7.98	7.96
Turbidity (NTU)	5.2	5.3	-	-	6.2	6.2	5.73	-
SS (mg/L)	7.0	8.0	6.0	6.75	-			
Remarks		•	D	redging wor	ks was obse	rved.	•	

Compliance with Action at	ia Limit Lev	<u>'eı</u>												
Parameter	As in	EM&A	C2*1	C2*130%		IMO1		IMO2		MPB1	MF	MPB2		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level	Level	Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.0	8.0	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.1	8.1	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	9.9	9.9	N	N	N	N	N	N	Ν	N	N	N
SS (Depth-averaged)	24.0	37.0	11.7	11.7	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/29/08
Weather & Ambient Temperature	Fine, 22C

Station			C1 (NM3)				
Time (hh:mm)			19:40					
Water Depth (m)			16					
Monitoring Depth (m)	1	.0	8	.1	1:	5.2		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.3	21.3	21.1	21.1	21.0	21.0	21.12	-
Salinity (ppt)	26.9	26.9	27.6	27.6	27.9	27.9	27.46	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.69	
D.O. Saturation (%)	100.4	99.9	99.6	99.2	99.7	99.8	99.77	-
D.O. (mg/L)	8.0	7.9	7.9	7.9	7.9	7.9	7.93	7.93
Turbidity (NTU)	5.8	5.8	5.8	6.1	6.0	6.1	5.93	-
SS (mg/L)	7.0	9.0	6.0	7.50	-			
Remarks				Dredg	jing works w	as observed.		

Station			C3 (NM6)				
Time (hh:mm)			17:19					
Water Depth (m)			6	.3				
Monitoring Depth (m)	1	.0	3	.2	5	.3		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.9	20.9	20.9	20.9	20.9	20.9	20.90	-
Salinity (ppt)	27.6	27.7	27.6	27.8	27.8	27.6	27.68	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.72	
D.O. Saturation (%)	106.2	105.1	107.1	105.1	108.8	105.1	106.23	-
D.O. (mg/L)	8.5	8.4	8.6	8.4	8.7	8.4	8.48	8.54
Turbidity (NTU)	6.2	6.3	6.6	6.6	7.2	7.1	6.67	-
SS (mg/L)	6.0	8.0	7.0	7.0	6.83	-		
Remarks				Dredo	jing works w	as observed.		

Station			IM	01			Co-ordinate	s
Time (hh:mm)			19:15	-19:17			Northing	Easting
Water Depth (m)			1;	3.9		22.22.050	113.55.077	
Monitoring Depth (m)	1	.0	7	2.9				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.0	21.0	20.8	20.8	20.8	20.8	20.85	-
Salinity (ppt)	28.3	28.3	28.5	28.5	28.6	26.7	28.13	-
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.72	
D.O. Saturation (%)	100.3	100.8	100.7	98.2	100.2	100.7	100.15	-
D.O. (mg/L)	8.0	8.0	8.0	7.8	8.0	8.1	7.97	8.03
Turbidity (NTU)	5.6	5.6	8.5	9.1	8.6	9.0	7.73	-
SS (mg/L)	7.0	7.0	8.0	8.0	6.0	7.17	-	
Remarks				Dredg	ging works w	as observed.		

Station			IM	02			Co-ordinate:	3		
Time (hh:mm)			19:27	-19:29			Northing	Easting		
Water Depth (m)			13		22.21.644	113.55.638				
Monitoring Depth (m)	1	.0	6							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.0	20.9	20.8	20.8	20.8	20.8	20.84	-		
Salinity (ppt)	28.3 28.3 27.5 28.6 28.6 28.6						28.31	-		
pH	7.7	7.7	7.7	7.73						
D.O. Saturation (%)	101.4	100.5	99.6	100.1	100.8	100.6	100.50	-		
D.O. (mg/L)	8.1	8.0	8.0	8.0	8.0	8.0	7.99	8.00		
Turbidity (NTU)	5.6	5.4	5.3	5.6	5.6	5.5	5.50	-		
SS (mg/L)	9.0	10.0	8.0	9.0	9.00	-				
Remarks		Dredging works was observed.								

Station			MF	PB1						
Time (hh:mm)			18:42	-18:44						
Water Depth (m)			7							
Monitoring Depth (m)	1	.0	3							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.1	21.1	21.1	21.1	21.1	21.1	21.11	-		
Salinity (ppt)	24.5	27.3	27.3	27.4	27.3	27.8	26.93	-		
pH	7.7	7.7	7.7	7.7	7.7	7.6	7.69			
D.O. Saturation (%)	100.9	102.4	101.3	103.0	102.2	105.1	102.48	-		
D.O. (mg/L)	8.2	8.2	8.1	8.2	8.1	8.4	8.18	8.25		
Turbidity (NTU)	8.4	8.3	8.6	9.1	9.0	8.4	8.63	-		
SS (mg/L)	6.0	6.0	9.0	10.0	10.0	8.0	8.17	-		
Remarks	Dredging works was observed.									

Station			MF	B2							
Time (hh:mm)			17:33								
Water Depth (m)			9								
Monitoring Depth (m)	1	.0	4	.6	8	.1					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	21.0	21.0	21.0	21.0	21.0	21.0	20.98	-			
Salinity (ppt)	27.5	27.5	27.46	-							
pH	7.7	7.7	7.7	7.7	7.7	7.7	7.71				
D.O. Saturation (%)	101.5	102.0	101.3	102.5	101.9	103.3	102.08	-			
D.O. (mg/L)	8.1	8.1	8.1	8.2	8.1	8.2	8.14	8.18			
Turbidity (NTU)	7.5	7.4	8.1	7.8	7.8	7.9	7.75	-			
SS (mg/L)	10.0	8.0	9.0	7.0	8.0	10.0	8.67	-			
Remarks		Dredging works was observed.									

Station			IV	IP						
Time (hh:mm)			18:53	-18:54						
Water Depth (m)			5							
Monitoring Depth (m)	1.	.0	2							
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.2	21.2	-	-	21.2	21.2	21.22	-		
Salinity (ppt)	26.8	26.9	-	26.93	-					
pH	7.7	7.6	-	-	7.6	7.7	7.64			
D.O. Saturation (%)	101.5	103.6	-	-	105.4	100.6	102.78	-		
D.O. (mg/L)	8.1	8.3	-	-	8.4	8.0	8.19	8.20		
Turbidity (NTU)	4.6	4.6	-	-	4.8	5.0	4.75	-		
SS (mg/L)	7.0	7.0	-	-	9.0	8.0	7.75	-		
Remarks		Dredging works was observed.								

Compliance with Action an	d Limit Lev	<u>el</u>												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	6 IMO1		IMO2	IMO2		MPB1		MPB2		/IP
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.2	8.2	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.2	8.2	N	N	N	N	N	N	Z	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.2	8.2	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	9.3	9.3	N	Ν	N	N	N	N	N	N	N	N

Sampling Date	12/30/08
Weather & Ambient Temperature	Fine, 20C

Station			C2 (NM5)								
Time (hh:mm)			14:32	-14:33								
Water Depth (m)			2	1.0								
Monitoring Depth (m)	1	.0	10									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.3	19.3	19.37	-				
Salinity (ppt)	31.8	31.8	31.8	31.89	-							
pH	8.3	8.2	8.4	8.4	8.4	8.4	8.31					
D.O. Saturation (%)	102.0	102.2	102.2	102.5	102.3	102.0	102.20	-				
D.O. (mg/L)	7.8	7.8	7.8	7.8	7.8	7.8	7.79	7.79				
Turbidity (NTU)	8.7	8.9	12.2	12.3	12.6	12.5	11.20	-				
SS (mg/L)	6.0	6.0	11.0	9.0	8.50	-						
Remarks		Dredging works was observed.										

Station			IM	01			Co-ordinate	s			
Time (hh:mm)			15:08	-15:09			Northing	Easting			
Water Depth (m)			1;	3.0		22 21 824	113 55 749				
Monitoring Depth (m)	1	.0	6								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.4	19.3	19.38	-			
Salinity (ppt)	31.8 31.8 31.9 31.9 32.0 32.0						31.89	-			
pH	8.2	8.2	8.4	8.28							
D.O. Saturation (%)	101.6	101.7	101.9	101.8	102.3	101.9	101.87	-			
D.O. (mg/L)	7.7	7.8	7.8	7.8	7.8	7.76	7.76	7.78			
Turbidity (NTU)	8.3	8.6	10.4	10.6	10.6	10.7	9.87	-			
SS (mg/L)	6.0	8.0	8.0	12.0	9.00	-					
Remarks		Dredging works was observed.									

Station			IM	02			Co-ordinate	s			
Time (hh:mm)			14:59	-15:00			Northing	Easting			
Water Depth (m)			19	9.0		22 22 087	113 55 220				
Monitoring Depth (m)	1	.0	9								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.3	19.3	19.36	-			
Salinity (ppt)	31.8	31.8	31.9	31.8	32.0	32.1	31.89	-			
pH	8.2 8.2 8.3 8.4 8.2 8.4						8.29				
D.O. Saturation (%)	102.3	102.9	103.3	102.4	104.0	102.3	102.87	-			
D.O. (mg/L)	7.8	7.9	7.9	7.8	7.9	7.80	7.85	7.87			
Turbidity (NTU)	9.1	9.0	11.4	11.8	14.4	14.5	11.70	-			
SS (mg/L)	8.0	9.0	10.0	8.0	8.67	-					
Remarks		Dredging works was observed.									

Station			MF	PB1							
Time (hh:mm)			13:51	-13:52							
Water Depth (m)			7								
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.4	19.4	19.37	-			
Salinity (ppt)	31.8	31.8	31.81	-							
pH	8.2	8.2	8.3	8.3	8.3	8.3	8.28				
D.O. Saturation (%)	104.8	102.9	103.1	106.0	108.9	103.6	104.88	-			
D.O. (mg/L)	8.0	7.9	7.9	8.1	8.3	7.9	8.00	8.10			
Turbidity (NTU)	8.1	8.0	9.0	9.1	10.0	9.8	9.00	-			
SS (mg/L)	8.0	9.0	10.0	10.0	9.83	-					
Remarks		Dredging works was observed.									

Station			MF	PB2							
Time (hh:mm)			13:20	-13:21							
Water Depth (m)			7	.2							
Monitoring Depth (m)	1	.0	3	.6	6	.2					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.4	19.4	19.36	-			
Salinity (ppt)	31.7	31.7 31.8 31.8 31.8 31.8						-			
pH	8.1	8.1	8.1	8.2	8.1	8.2	8.13				
D.O. Saturation (%)	104.8	103.1	106.5	103.5	113.0	103.9	105.80	-			
D.O. (mg/L)	8.0	7.9	8.1	7.9	8.6	7.9	8.07	8.28			
Turbidity (NTU)	7.5	7.4	7.9	8.0	8.1	8.0	7.82	-			
SS (mg/L)	10.0	9.0	7.0	8.0	8.0	9.0	8.50	-			
Remarks		Dredging works was observed.									

Station			IV	IP.					
Time (hh:mm)			14:02	-14:03					
Water Depth (m)			4						
Monitoring Depth (m)	1	.0	2						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom	
Water Temperature (°C)	19.4	19.4	-	-	19.4	19.4	19.38	-	
Salinity (ppt)	31.8	31.8	-	-	31.8	31.8	31.79	-	
pH	8.1	8.1	-	-	8.2	8.1	8.12		
D.O. Saturation (%)	102.2	102.3	-	-	102.3	102.6	102.35	-	
D.O. (mg/L)	7.8	7.8	-	-	7.8	7.8	7.81	7.81	
Turbidity (NTU)	7.6	7.7	-	-	8.2	8.4	7.98	-	
SS (mg/L)	9.0	8.0	-	-	10.0	10.0	9.25	-	
Remarks	Dredging works was observed.								

Parameter	As in	EM&A	C2*1	30%	IM	01	IMO2			MPB1	MPB2		MP	
	Action Level	Limit Level	Action Level	Limit Level	Exceedan ce of Action Level	Exceedan ce of Limit Level			Exceedanc e of Action Level	Exceedance of Limit Level		Exceedan ce of Limit Level		Exceedan ce of Limit Level
DO (Bottom)	3.3	2.5	7.8	7.8	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.8	7.8	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	14.6	14.6	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	11.1	11.1	N	N	N	N	N	N	N	N	Z	N

Sampling Date	12/30/08
Weather & Ambient Temperature	Fine, 20C

Station			C1 (NM3)								
Time (hh:mm)			9:29	-9:30								
Water Depth (m)			20	0.2								
Monitoring Depth (m)	1	.0	10									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	19.5	19.5	19.5	19.5	19.5	19.5	19.53	-				
Salinity (ppt)	32.6 32.7		32.7	32.7	32.7	32.8	32.71	-				
pH	7.8	7.9	7.9	7.9	7.9	7.9	7.86					
D.O. Saturation (%)	104.8	105.4	105.4	103.8	101.4	105.4	104.37	-				
D.O. (mg/L)	7.9	8.0	8.0	7.8	7.7	8.0	7.89	7.82				
Turbidity (NTU)	7.1	7.1	7.4	7.5	8.7	9.0	7.80	-				
SS (mg/L)	8.0	6.0	8.0	8.0	11.0	10.0	8.50	-				
Remarks		Dredging works was observed.										

Station			C3 (NM6)								
Time (hh:mm)			11:19	-11:20								
Water Depth (m)			8	.2								
Monitoring Depth (m)	1	.0	4									
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	19.4 19.4		19.4	19.4	19.3	19.3	19.35	-				
Salinity (ppt)	31.9 31.9		31.9	31.9	32.0	32.0	31.92	-				
pH	8.1	8.1	8.2	8.2	8.2	8.3	8.21					
D.O. Saturation (%)	103.6	103.6	103.6	103.6	103.4	103.5	103.55	-				
D.O. (mg/L)	7.9	7.9	7.9	7.9	7.9	7.9	7.90	7.89				
Turbidity (NTU)	8.2	8.1	8.5	8.6	9.9	9.5	8.80	-				
SS (mg/L)	9.0	7.0	9.0	7.0	7.83	-						
Remarks		Dredging works was observed.										

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			9:46	-9:47			Northing	Easting		
Water Depth (m)			12	2.8			22 21 822	113 55 741		
Monitoring Depth (m)	1	.0	6	1.8						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	19.5	19.5	19.5	19.5	19.5	19.5	19.54	-		
Salinity (ppt)	32.7	32.7 32.6		32.8	32.8	32.8	32.71	-		
pH	7.9	7.9	7.9	7.9	7.9	7.9	7.88			
D.O. Saturation (%)	105.7	105.7	105.7	105.7	105.9	105.8	105.75	-		
D.O. (mg/L)	8.0	8.0	8.0	8.0	8.0	8.0	8.00	8.00		
Turbidity (NTU)	6.2			6.5	6.7	6.6	6.48	-		
SS (mg/L)	7.0 8.0 6.0 8.0 11.0 9.0						8.17	-		
Remarks		Dredging works was observed.								

Station			IM	IO2			Co-ordinate	s			
Time (hh:mm)			9:56	i-9:58			Northing	Easting			
Water Depth (m)			18	8.8			22 22 086	113 55 220			
Monitoring Depth (m)	1	.0	9).4	17	7.8					
Trial	Trial 1	Trial 2	al 2 Trial 1 Trial 2 Trial 1 Trial 2		Trial 2	Depth-averaged	Bottom				
Water Temperature (°C)	19.5	19.5	19.5	19.5	19.5	19.5	19.54	-			
Salinity (ppt)	32.7			8.1	32.8	32.8	32.76	-			
pH	8.1	8.1	8.1	8.1	8.1	8.1	8.08				
D.O. Saturation (%)	104.7	105.1	104.6	105.2	104.9	105.7	105.03	-			
D.O. (mg/L)	7.9	8.0	7.9	8.0	7.9	8.0	7.94	7.96			
Turbidity (NTU)	7.4	7.4 7.3		10.7	14.8	15.0	10.95	-			
SS (mg/L)	10.0 9.0 10.0 8.0 10.0 8.0					8.0	9.17	-			
Remarks		Dredging works was observed.									

Station			MF								
Time (hh:mm)			10:26	-10:28							
Water Depth (m)			7	.4							
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.4	19.4	19.39	-			
Salinity (ppt)	31.8	31.8	31.8	31.8	31.8	31.8	31.81	-			
pH	7.9	8.0	7.9	8.0	7.9	7.9	7.93				
D.O. Saturation (%)	104.2	104.2	104.3	104.1	104.3	104.6	104.28	-			
D.O. (mg/L)	7.9	8.0	8.0	7.9	8.0	8.0	7.95	7.96			
Turbidity (NTU)	7.9	7.8	9.1	9.2	9.7	9.8	8.92	-			
SS (mg/L)	11.0	9.0	11.0	11.0	9.0	10.0	10.17	-			
Remarks		Dredging works was observed.									

Station			MF	B2							
Time (hh:mm)			10:57	-10:58							
Water Depth (m)			7	.3							
Monitoring Depth (m)	1	.0	3								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	19.4	19.4	19.4	19.4	19.4	19.3	19.36	-			
Salinity (ppt)	31.9 31.9		31.9	31.9	31.9	31.9	31.89	-			
pH	8.1	8.1	8.2	8.2	8.2	8.2	8.17				
D.O. Saturation (%)	103.4	103.6	103.7	103.5	103.4	103.8	103.57	-			
D.O. (mg/L)	7.9	7.9	7.9	7.9	7.9	7.9	7.90	7.90			
Turbidity (NTU)	8.5	8.6	8.87	-							
SS (mg/L)	8.0	10.0	8.0	8.0	8.67	-					
Remarks		Dredging works was observed.									

Station			IV	IP							
Time (hh:mm)			10:15	-10:15							
Water Depth (m)			5	.0							
Monitoring Depth (m)	1	.0	2								
Trial	Trial 1	Trial 2	Trial 1	Depth-averaged	Bottom						
Water Temperature (°C)	19.4	19.4	-	-	19.4	19.4	19.39	-			
Salinity (ppt)	31.8	31.8	-	-	31.8	31.8	31.79	-			
pH	7.9	7.8	-	-	7.8	7.9	7.85				
D.O. Saturation (%)	105.2	107.2	-	-	110.6	105.9	107.23	-			
D.O. (mg/L)	8.0	8.2	-	-	8.4	8.1	8.18	8.26			
Turbidity (NTU)	7.5	7.7	-	8.1	7.95	-					
SS (mg/L)	8.0	9.0	-	10.0	9.50	-					
Remarks		Dredging works was observed.									

Compliance with Action an	<u>d Limit Lev</u>	el												
Parameter	As in	EM&A	Mean(C1-	+C3)*130%	30% IMO1		IMO2			MPB1	MPB2		MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	7.9	7.9	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	7.9	7.9	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	10.8	10.8	N	N	N	N	N	N	Z	N	N	N
SS (Depth-averaged)	24.0	37.0	10.6	10.6	N	N	N	N	N	N	N	N	N	N

Sampling Date	12/31/08
Weather & Ambient Temperature	Cloudy, 22C

Station			C2 (NM5)			1					
Time (hh:mm)				-15:12			1					
Water Depth (m)			1									
Monitoring Depth (m)	1	.0	1									
Trial	Trial 1	Trial 2	Depth- averaged	Bottom								
Water Temperature (°C)	21.1	20.5	20.9	20.9	20.7	20.7	20.80	-				
Salinity (ppt)	28.2	28.7	29.0	29.0	29.4	29.4	28.94	-				
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80					
D.O. Saturation (%)	104.8	107.4	107.4	105.8	107.3	104.9	106.27	-				
D.O. (mg/L)	8.2	8.5	8.4	8.3	8.4	8.2	8.31	8.29				
Turbidity (NTU)	4.4	4.3	9.18	-								
SS (mg/L)	10.0	8.0	8.83	-								
Remarks		Dredging works was observed.										

Station			IM	01			Co-ore	dinates
Time (hh:mm)			15:27	-15:28			Northing	Easting
Water Depth (m)			22.22.061	113.55.331				
Monitoring Depth (m)	1	.0	6	.5	12	2.0		•
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom
Water Temperature (°C)	20.7	20.8	20.7	20.7	20.6	20.6	20.68	-
Salinity (ppt)	29.8	29.6	29.8	29.8	25.2	29.8	28.98	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	105.6	105.8	103.5	106.6	108.7	106.9	106.18	-
D.O. (mg/L)	8.2	8.2	8.1	8.3	8.7	8.34	8.32	8.53
Turbidity (NTU)	6.0	6.7	10.4	10.7	10.6	10.6	9.17	-
SS (mg/L)	10.0	8.0	10.0	9.0	9.0	10.0	9.33	-
Remarks			D	redging wor	ks was obse	rved.		

Station			IM	02			Co-ord	dinates			
Time (hh:mm)			15:40	-15:42			Northing	Easting			
Water Depth (m)			22.21.820	113.55.736							
Monitoring Depth (m)	1.	.0									
Trial	Trial 1 Trial 2		Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	20.8	20.8	20.7	20.7	20.7	20.6	20.70	-			
Salinity (ppt)	29.6	29.6	29.8	29.8	29.9	30.0	29.78	-			
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82				
D.O. Saturation (%)	104.5	104.7	106.4	104.8	106.1	107.0	105.58	-			
D.O. (mg/L)	8.1	8.2	8.3	8.2	8.3	8.35	8.23	8.31			
Turbidity (NTU)	5.1	4.8	9.0	8.8	9.5	9.8	7.83	-			
SS (mg/L)	10.0	9.0	8.50	-							
Remarks		Dredging works was observed.									

Station			MF	PB1			1	
Time (hh:mm)			14:43	-14:44				
Water Depth (m)								
Monitoring Depth (m)	1	.0						
Trial	Trial 1	Trial 2	Depth- averaged	Bottom				
Water Temperature (°C)	21.0	21.0	21.0	21.0	21.0	21.0	20.96	-
Salinity (ppt)	28.6	28.5	29.1	28.6	28.5	28.5	28.65	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.80	
D.O. Saturation (%)	105.5	105.9	106.3	105.2	105.1	105.7	105.62	-
D.O. (mg/L)	8.2	8.3	8.5	8.2	8.2	8.3	8.28	8.23
Turbidity (NTU)	9.3	9.1	9.3	9.2	9.5	9.8	9.37	-
SS (mg/L)	10.0	12.0	11.0	10.83	-			
Remarks			D	redging worl	ks was obse	rved.		

Station			MI	PB2							
Time (hh:mm)			14:34	-14:35							
Water Depth (m)											
Monitoring Depth (m)	1	.0	4	1.3	7	.5					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-	Bottom			
							averaged				
Water Temperature (°C)	20.8	20.8	20.8	20.8	20.8	20.8	20.83	-			
Salinity (ppt)	28.4	28.7	28.7	28.8	28.6	28.8	28.66	-			
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.81				
D.O. Saturation (%)	106.9	106.1	106.1	105.8	106.7	106.2	106.30	-			
D.O. (mg/L)	8.4	8.3	8.3	8.3	8.4	8.3	8.32	8.33			
Turbidity (NTU)	10.3	10.5	10.0	10.6	10.5	10.5	10.40	-			
SS (mg/L)	10.0	9.0	10.0	8.0	10.0	9.0	9.33	-			
Remarks		Dredging works was observed.									

Station			IV	IP			1			
Time (hh:mm)			14:53	-14:53						
Water Depth (m)										
Monitoring Depth (m)	1	.0								
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth- averaged	Bottom		
Water Temperature (°C)	21.0	21.0	-	-	21.1	21.0	21.03	-		
Salinity (ppt)	28.1	28.1	-	-	28.1	28.2	28.12	-		
pH	7.8	7.8	-	-	7.8	7.8	7.76			
D.O. Saturation (%)	105.4	105.6	-	-	104.7	105.0	105.18	-		
D.O. (mg/L)	8.2	8.3	-	-	8.2	8.2	8.22	8.20		
Turbidity (NTU)	7.8	7.9	-	-	8.8	8.8	8.33	-		
SS (mg/L)	6.0	5.0	-	-	5.0	4.0	5.00	-		
Remarks		Dredging works was observed.								

Compliance with Action at	ia Limit Lev	<u>/ei</u>													
Parameter	As in	EM&A	C2*1	30%	IMO1		IM	02		MPB1	MF	PB2	IV	MP	
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedanc	Exceedanc	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan	
	Level	Level	Level	Level	ce of	ce of Limit	e of Action	e of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit	
					Action	Level	Level	Level	Level		Action	Level	Action	Level	
DO (Bottom)	3.3	2.5	8.3	8.3	N	N	N	N	N	N	N	N	N	N	
DO (Depth-averaged)	4.2	4.0	8.3	8.3	N	N	N	N	N	N	N	N	N	N	
Turbidity (Depth-averaged)	29.0	49.0	11.9	11.9	N	N	N	N	N	N	Ν	N	N	N	
SS (Depth-averaged)	24.0	37.0	11.5	11.5	N	N	N	N	N	N	N	N	N	N	

Sampling Date	12/31/08
Weather & Ambient Temperature	Cloudy, 22C

Station			C1 (NM3)							
Time (hh:mm)			9:30	-9:33							
Water Depth (m)											
Monitoring Depth (m)	1	.0	8	.2	15	5.3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom			
Water Temperature (°C)	21.1	21.2	20.9	20.9	20.9	20.8	20.97	-			
Salinity (ppt)	28.2	28.1	28.9	28.9	29.2	29.2	28.73	-			
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.79				
D.O. Saturation (%)	105.4	104.9	104.2	104.6	104.8	104.7	104.77	-			
D.O. (mg/L)	8.2	8.2	8.1	8.2	8.2	8.2	8.17	8.17			
Turbidity (NTU)	5.1	4.5	6.7	6.7	6.0	6.3	5.88	-			
SS (mg/L)	5.0	5.0	7.0	6.0	7.0	6.0	6.00	-			
Remarks		Dredging works was observed.									

Station			C3 (NM6)				
Time (hh:mm)			10:52	-10:54				
Water Depth (m)			6					
Monitoring Depth (m)	1	.0	3					
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.8	20.8	20.8	20.8	20.8	20.7	20.75	-
Salinity (ppt)	29.0	28.9	28.9	29.0	28.9	29.0	28.95	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82	
D.O. Saturation (%)	110.1	111.2	112.1	110.1	110.1	113.8	111.23	-
D.O. (mg/L)	8.6	8.7	8.8	8.6	8.6	8.9	8.72	8.78
Turbidity (NTU)	6.2	6.1	6.5	6.5	7.0	7.1	6.57	-
SS (mg/L)	9.0	8.0	9.0	8.0	9.0	8.0	8.50	-
Remarks				Dredo	ging works w	as observed.		

Station			IM	01			Co-ordinate	s		
Time (hh:mm)			9:53	-9:56			Northing	Easting		
Water Depth (m)			14	4.3			22.21.822	113.55.744		
Monitoring Depth (m)	1	.0	7	.2	13	3.3				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.8	20.8	20.7	20.7	20.7	20.6	20.70	-		
Salinity (ppt)	29.5	29.5	29.8	29.8	29.8	28.0	29.40	-		
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.82			
D.O. Saturation (%)	105.3	105.8	105.7	103.2	105.2	105.7	105.15	-		
D.O. (mg/L)	8.2	8.2	8.2	8.0	8.2	8.3	8.21	8.27		
Turbidity (NTU)	6.2	6.2	11.1	11.7	11.2	11.6	9.67	-		
SS (mg/L)	8.0	8.0	6.0	8.0	5.0	6.0	6.83	-		
Remarks		Dredging works was observed.								

Station			IM	102			Co-ordinate	s		
Time (hh:mm)			9:42	:-9:45			Northing	Easting		
Water Depth (m)			14		22.22.068	113.55.311				
Monitoring Depth (m)	1	.0	7	'.2	13	3.4				
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	20.8	20.8	20.7	20.6	20.7	20.7	20.69	-		
Salinity (ppt)	29.6	29.6	28.8	7.8	29.9	29.9	29.58	-		
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.83			
D.O. Saturation (%)	106.4	105.5	104.6	105.1	105.6	105.8	105.50	-		
D.O. (mg/L)	8.3	8.2	8.2	8.2	8.2	8.3	8.23	8.24		
Turbidity (NTU)	4.4	4.7	8.4	8.2	7.1	6.9	6.62	-		
SS (mg/L)	6.0	7.0	6.0	7.0	7.0	7.0	6.67	-		
Remarks		Dredging works was observed.								

Station			MF	PB1						
Time (hh:mm)			10:21	-10:23						
Water Depth (m)			8							
Monitoring Depth (m)	1	.0	4	.3						
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom		
Water Temperature (°C)	21.0	21.0	21.0	21.0	21.0	21.0	20.96	-		
Salinity (ppt)	28.6	25.8	28.20	-						
pH	7.8	7.8	7.8	7.8	7.7	7.8	7.79			
D.O. Saturation (%)	107.4	105.9	108.0	106.3	110.1	107.2	107.48	-		
D.O. (mg/L)	8.4	8.4	8.4	8.3	8.6	8.4	8.42	8.49		
Turbidity (NTU)	10.9	11.0	11.7	11.2	11.0	11.6	11.23	-		
SS (mg/L)	6.0	7.0	7.0	9.0	7.0	8.0	7.33	-		
Remarks		Dredging works was observed.								

Station								
Time (hh:mm)								
Water Depth (m)			8	.7				
Monitoring Depth (m)	1	.0	4	.4	7	.7		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	20.8	20.8	20.8	20.8	20.8	20.8	20.83	-
Salinity (ppt)	28.7	28.8	28.7	28.7	28.8	28.7	28.73	-
pH	7.8	7.8	7.8	7.8	7.8	7.8	7.81	
D.O. Saturation (%)	106.5	107.0	107.5	106.3	106.9	108.3	107.08	-
D.O. (mg/L)	8.3	8.4	8.4	8.3	8.4	8.5	8.38	8.42
Turbidity (NTU)	10.1	10.0	10.4	10.7	10.4	10.5	10.35	-
SS (mg/L)	7.0	9.0	7.50	-				
Remarks				Dredging	g works was	observed.		

Station								
Time (hh:mm)								
Water Depth (m)			5	.8				
Monitoring Depth (m)	1	.0	2	.9	4	.8		
Trial	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2	Depth-averaged	Bottom
Water Temperature (°C)	21.1	21.1	-	-	21.1	21.1	21.07	-
Salinity (ppt)	28.1	28.1	-	-	28.1	28.5	28.20	-
pH	7.7	7.8	-	-	7.8	7.7	7.74	
D.O. Saturation (%)	108.6	106.5	-	-	105.6	110.4	107.78	-
D.O. (mg/L)	8.5	8.3	-	-	8.3	8.6	8.43	8.44
Turbidity (NTU)	6.5	6.5	-	-	7.6	7.4	7.00	-
SS (mg/L)	7.0	8.0	7.00	-				
Remarks				Dredging	g works was	observed.		

Compliance with Action an	d Limit Lev	el												
Parameter	As in	EM&A	Mean(C1+C3)*130%		+C3)*130% IMO1		IMO2		MPB1		MPB2		IV	IP.
	Action	Limit	Action	Limit	Exceedan	Exceedan	Exceedance of Action	Exceedance	Exceedanc	Exceedance of Limit Level	Exceedan	Exceedan	Exceedan	Exceedan
	Level	Level	Level	Level	ce of	ce of Limit	Level	of Limit	e of Action		ce of	ce of Limit	ce of	ce of Limit
					Action	Level		Level	Level		Action	Level	Action	Level
DO (Bottom)	3.3	2.5	8.5	8.5	N	N	N	N	N	N	N	N	N	N
DO (Depth-averaged)	4.2	4.0	8.4	8.4	N	N	N	N	N	N	N	N	N	N
Turbidity (Depth-averaged)	29.0	49.0	8.1	8.1	N	N	N	N	N	N	N	N	N	N
SS (Depth-averaged)	24.0	37.0	9.4	9.4	N	N	N	N	N	N	Ν	Ζ	N	N

Annex H

Monitoring Results and QA/QC Reports of Laboratory Testing for POPs

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 6

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0819955

: 21/F, LINCOLN HOUSE, 979 KING`S ROAD,

TAIKOO PLACE, ISLAND EAST,

Address

1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

Telephone : +852 2271 3000 Telephone : +852 2610 1044
Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date Samples Received : 26-NOV-2008

FACILITY

: ---- Issue Date : 16-DEC-2008

C-O-C number : --- No. of samples received : 18
Site : --- No. of samples analysed : 18

General Comments

Address

E-mail

Order number

This report supersedes any previous report(s) with this reference. Results apply to the 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 processing purposes. If the sampling time is displayed as 0:00 the information was not provided by client. The completion date of analysis is:

05-DEC-2008

Key: LOR = Limit of reporting; CAS Number = Chemistry Abstract Services number

Specific comments for Work Order: HK0819955

Sample(s) were picked up from client by ALS Technichem (HK) staff in a chilled condition.

Water sample(s) analysed and reported on an as received basis.

This report may not be reproduced except with prior written approval from the testing laboratory.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the Electronic Transactions Ordinance of Hong Kong, Chapter 553, Section 6.

 Signatories
 Position
 Authorised results for

 Anh Ngoc Huynh
 Senior Chemist
 Organics

Page Number : 2 of 6

Client : ERM HONG KONG

Work Order HK0819955



Analytical Results

Sub-Matrix: MARINE WATER		Clie	nt sample ID	MPB1 ME [26-NOV-2008]	MPB1 ME DUP	MPB2 ME	MPB2 ME DUP [26-NOV-2008]	MP ME [26-NOV-2008]
	Cli	ent samplin	g date / time		[26-NOV-2008]	[26-NOV-2008]		
Compound	CAS Number	LOR	Unit	HK0819955-001	HK0819955-002	HK0819955-003	HK0819955-004	HK0819955-005
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
P-065B: Organochlorine Pesticides								
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065S: PCB Congeners and Organ	ochlorine Pesticides Surrog	ate					Surrogate control lim	its listed at end of this re
Decachlorobiphenyl	2051-24-3	0.1	%	61.6	67.2	65.7	60.4	63.0

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Client : ERM HONG KONG

Work Order HK0819955



Sub-Matrix: MARINE WATER		Client sample ID			C2 (NM5) ME	C2 (NM5) ME DUP	MPB1 MF	MPB1 MF DUP
	Clie	ent samplin	ng date / time	[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]
Compound	CAS Number	LOR	Unit	HK0819955-006	HK0819955-007	HK0819955-008	HK0819955-009	HK0819955-010
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065B: Organochlorine Pesticides	·	'						
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065S: PCB Congeners and Organo	chlorine Pesticides Surrog	ate					Surrogate control lir	nits listed at end of this report
Decachlorobiphenyl	2051-24-3	0.1	%	79.6	72.5	66.0	54.2	84.0

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Client : ERM HONG KONG

Work Order HK0819955



Sub-Matrix: MARINE WATER		Clie	nt sample ID	MPB2 MF	MPB2 MF DUP	MP MF	MP MF DUP	C1 (NM3) MF
	Clie	Client sampling date / time			[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]
Compound	CAS Number	LOR	Unit	HK0819955-011	HK0819955-012	HK0819955-013	HK0819955-014	HK0819955-015
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065B: Organochlorine Pesticides								
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065S: PCB Congeners and Organo	ochlorine Pesticides Surrog	ate					Surrogate control lin	nits listed at end of this report.
Decachlorobiphenyl	2051-24-3	0.1	%	65.8	61.9	56.1	55.8	55.0

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Client : ERM HONG KONG

Work Order HK0819955



Sub-Matrix: MARINE WATER		Clie	ent sample ID	C1 (NM3) MF DUP	C3 (NM6) MF	C3 (NM6) MF DUP		
	CI			[26-NOV-2008]	[26-NOV-2008]	[26-NOV-2008]		
Compound	CAS Number	LOR	Unit	HK0819955-016	HK0819955-017	HK0819955-018		
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01		
EP-065B: Organochlorine Pesticides	'							
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01		
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01		
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01		
EP-065S: PCB Congeners and Organochlorin	ne Pesticides Surrog	jate				•	Surrogate control li	mits listed at end of this report.
Decachlorobiphenyl	2051-24-3	0.1	%	60.6	56.5	54.9		

Page Number :

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Client : ERM HONG KONG

Work Order HK0819955



Laboratory Duplicate (DUP) Report

• No Laboratory Duplicate (DUP) Results are required to be reported.

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 Re	covery (%)	Recovery	Limits (%)	RI	PD (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentratio	LCS	DCS	Low	High	Value	Control Limit
EP-065A: PCB Single Congeners	s (QC Lot: 827467)				n						
PCB 8	34883-43-7	0.01	μg/L	<0.01	100 μg/L	62.1		50	130		
PCB 18	37680-65-2	0.01	μg/L	<0.01	100 μg/L	65.6		50	130		
PCB 28	7012-37-5	0.01	μg/L	<0.01	100 μg/L	97.5		50	130		
PCB 52	35693-99-3	0.01	μg/L	<0.01	100 μg/L	67.9		50	130		
PCB 44	41464-39-5	0.01	μg/L	<0.01	100 μg/L	66.9		50	130		
PCB 66	32598-10-0	0.01	μg/L	<0.01	100 μg/L	89.5		50	130		
PCB 101	37680-73-2	0.01	μg/L	<0.01	100 μg/L	65.4		50	130		
PCB 77	32598-13-3	0.01	μg/L	<0.01	100 μg/L	84.2		50	130		
PCB 149	38380-04-0	0.01	μg/L	<0.01	100 μg/L	82.9		50	130		
PCB 118	31508-00-6	0.01	μg/L	<0.01	100 μg/L	72.6		50	130		
PCB 153	35065-27-1	0.01	μg/L	<0.01	100 μg/L	96.3		50	130		
PCB 105	32598-14-4	0.01	μg/L	<0.01	100 μg/L	70.6		50	130		
PCB 126	57465-28-8	0.01	μg/L	<0.01	100 μg/L	118		50	130		
PCB 187	52663-68-0	0.01	μg/L	<0.01	100 μg/L	61.0		50	130		
PCB 128	38380-07-3	0.01	μg/L	<0.01	100 μg/L	69.7		50	130		
PCB 156	38380-08-4	0.01	μg/L	<0.01	100 μg/L	72.8		50	130		
PCB 180	35065-29-3	0.01	μg/L	<0.01	100 μg/L	84.2		50	130		
PCB 169	60044-26-0	0.01	μg/L	<0.01	100 μg/L	96.0		50	130		
PCB 170	35065-30-6	0.01	μg/L	<0.01	100 μg/L	84.6		50	130		
PCB 195	52663-78-2	0.01	μg/L	<0.01	100 μg/L	94.5		50	130		
EP-065B: Organochlorine Pestic	cides (QC Lot: 827467)										
4.4`-DDT	50-29-3	0.01	μg/L	<0.01							
4.4`-DDE	72-55-9	0.01	μg/L	<0.01							
4.4`-DDD	72-54-8	0.01	μg/L	<0.01							

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

• No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

Surrogate Control Limits

Sub-Matrix: MARINE WATER		Recovery Limits (%)			
Compound	CAS Number Low				
EP-065S: PCB Congeners and Organochlori	ine Pesticides Surrogate				
Decachlorobiphenyl	2051-24-3	50	130		

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

ALS TECHNICHEM (HK) Pty Ltd

Environmental Division

CERTIFICATE OF ANALYSIS



CONTACT: MS KAREN LUI CLIENT: **ERM HONG KONG**

ADDRESS: 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST,

QUARRY BAY, HONG KONG.

PROJECT: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY

Batch: HK0819955 LABORATORY: DATE RECEIVED:

DATE OF ISSUE:

HONG KONG 26/11/2008 16/12/2008

SAMPLE TYPE: WATER No. of SAMPLES: 18

COMMENTS

Sample(s) were collected by ALS Technichem (HK) staff on 26 November, 2008.

Water sample(s) analysed and reported on an as received basis.

PAHs were subcontracted and tested by ALS Sydney.

ALS Sydney details report was attached. The attached report contains a total of 14 pages.

Sample Details

ALS Lab ID	Sample ID	Date of Sampling
HK0819955 - 1	MPB1_ME	26/11/2008
HK0819955 - 2	MPB1_ME DUP	26/11/2008
HK0819955 - 3	MPB2_ME	26/11/2008
HK0819955 - 4	MPB2_ME DUP	26/11/2008
HK0819955 - 5	MP_ME	26/11/2008
HK0819955 - 6	MP_ME DUP	26/11/2008
HK0819955 - 7	C2 (NM5)_ME	26/11/2008
HK0819955 - 8	C2 (NM5)_ME DUP	26/11/2008
HK0819955 - 9	MPB1_MF	26/11/2008
HK0819955 - 10	MPB1_MF DUP	26/11/2008
HK0819955 - 11	MPB2_MF	26/11/2008
HK0819955 - 12	MPB2_MF DUP	26/11/2008
HK0819955 - 13	MP_MF	26/11/2008
HK0819955 - 14	MP_MF DUP	26/11/2008
HK0819955 - 15	C1 (NM3)_MF	26/11/2008
HK0819955 - 16	C1 (NM3)_MF DUP	26/11/2008
HK0819955 - 17	C3 (NM6)_MF	26/11/2008
HK0819955 - 18	C3 (NM6)_MF DUP	26/11/2008

ISSUING LABORATORY: HONG KONG

Address

ALS Technichem (HK) Pty Ltd 11/F Chung Shun Knitting Centre

1-3 Wing Yip Street Kwai Chung HONG KONG

Phone: Fax:

852-2610 1044 852-2610 2021

Email:

hongkong@alsenviro.com

Ms Wong Wai Man, Alice Laboratory Manager - Hong Kong

Other ALS Environmental Laboratories

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AUSTRALIA

Brisbane Melbourne

Sydney

Newcastle

Hong Kong

Singapore Kuala Lumpur Bogor

AMERICAS Vancouver Santiago Amtofagasta Lima

Abbreviations: % SPK REC denotes percentage spike recovery

CHK denotes duplicate check sample

LOR denotes limit of reporting ALS Technichem (HK) Pty Ltd

Part of the ALS Laboratory Group





Environmental Division

CERTIFICATE OF ANALYSIS

: ES0817549 Work Order Page : 1 of 8 Client : ALS TECHNICHEM (HK) Laboratory : Environmental Division Sydney : Charlie Pierce Contact : MS ALICE WONG Contact Address Address : 11/F CHUNG SHUN KNITTING CNTR : 277-289 Woodpark Road Smithfield NSW Australia 2164 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG E-mail E-mail : alice.wong@alsenviro.com : charlie.pierce@alsenviro.com Telephone : +61-2-8784 8555 Telephone : +852 001185226101044 Facsimile : +61-2-8784 8500 Facsimile : +852 26102021 QC Level : NEPM 1999 Schedule B(3) and ALS QCS3 requirement Project Order number Date Samples Received C-O-C number : 01-DEC-2008 Issue Date : 15-DEC-2008 Sampler Site No. of samples received : 18 No. of samples analysed Quote number SY/241/07 : 18

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Accreditation Category

Signatories Position

Alex Rossi Organic Chemist Organics
Victor Kedicioqlu Business Manager - NSW Organics

Page

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Work Order - ES0817549

Client : ALS TECHNICHEM (HK)

Project : -

ALS

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for processing purposes. If the sampling time is displayed as 0:00 the information was not provided by client.

Key: CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

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Work Order Client

: ALS TECHNICHEM (HK)

Project

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Sub-Matrix: MARINE WATER		Cité	ant sample ID	HK0819955_1 MPB1 ME	HK0819955_2 MPB1 ME DUP	HK0819955_3 MPB2_ME	HK0819955_4 MPB2 ME DUP	HK0819955_5 MP_ME	
	Chi	int sampli	ig date / fime	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00	
Compound	GAS Number	LOB	Unit	ES0817549-001	ES0817549-002	ES0817549-003	ES0817549-004	ES0817549-005	
EP132B: Polynuclear Aromatic Hydro	ocarbons								
3-Methylcholanthrene	56-49-5	0.1	h@/L	<0.1	<0.1	<0.1	<0.1	<0.1	
2-Methylnaphthalene	91-57-6	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Acenaphthene	83-32-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Acenaphthylene	208-96-8	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Anthracene	120-12-7	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Benzo(a)pyrene	50-32-8	0.05	μg/L	< 0.05	< 0.05	<0.05	<0.05	<0.05	
Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Benzo(e)pyrene	192-97-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Benzo(g.h.i)perylene	191-24-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Chrysene	218-01-9	0.1	µg/L	<0.1	<().1	<0.1	<0.1	<0.1	
Coronene	191-07-1	0.1	µg/L	<i></i> ₹0.1	<0.1	<0.1	<0.1	<0.1	
Dibenz(a.h)anthracene	53-70 3	0.1	μg/L	50.1	<0.1	<0.1	<0.1	<0.1	
Fluoranthene	206-44-0	0.1	ид/_	<0.1	<0.1	<0.1	<0.1	<0.1	
Fluorene	86-73-7	0.1	µgA.	<0.1	<0.1	<0.1	<0.1	<0.1	
ndeno(1.2.3.cd)pyrene	193-39-5	0.1	ug/L	<0.1	< 0.1	<0.1	<0.1	<0.1	
N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Naphthalene	91-20-3	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Perylene	198-55-0	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	
Phenanthrene	85-01-8	0.1	ug/L	<0.1	<0.1	<0.1	s0.1	<0.1	
Pyrene	129-00-0	0.1	ид/	<0.1	<0.1	<0.1	<0.1	<0.1	
Sum of PAHs		0.1	µg/L	< 0.1	<0.1	<0.1	<0.1	<0,1	
EP132T: Base/Neutral Extractable Sc	rrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	102	102	114	117	111	
Anthracene-d10	1719-06-8	0.1	%	106	108	119	123	118	
4-Terphenyl-d14	1718-51-0	0.1	%	110	114	128	97.9	128	

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Client : ALS TECHNICHEM (HK)

Project : ---

ALS

Sub-Matrix: MARINE WATER		Client sample ID			HK0819955_7 C2 (NM5)_ME	HK0819955_8 C2 (NM5)_ME DUP	HK0819955_9 MPB1_MF	HK0819955_10 MPB1_MF DUP
	10%	ent sampli	ng date / lime	26 NOV-2008 14 00	26-NOV-2008 14:00	26-NOV-2008 14:00	28-NOV-2008 14:00	26-NOV-2008 14:00
Compaund:	CAS Number	LOR	Unit	ES0817549-006	ES0817549-007	E\$0817549-008	ES0817549-009	ES0817549-010
EP132B: Polynuclear Aromatic Hydr	ocarbons							
3-Methylcholanthrene	56-49-5	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	91-57-6	0.1	µg/L	<0.1	. <0.1	<0.1	<0.1	<0.1
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	83-32-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	208-96-8	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	120-12-7	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	50-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(e)pyrene	192-97-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g.h.i)perylene	191-24-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	207-08-9	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	218-01-9	0.1	μg/L	<0.1	<0,1	<0.1	<0.1	<0.1
Coronene	191-07-1	0.1	μg/L	<0,1	<0.1	<0.1	<0.1	<0.1
Dibenz(a.h)anthracene	53-70-3	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	< 0.1
Fluoranthene	206-44-0	0.1	μg/L	×0.1	<0.1	÷0.1	<0.1	50.1
Fluorene	86-73-7	0.1	Mg/L	<d.1< td=""><td><0,1</td><td><0.V</td><td><0.1</td><td><0.1</td></d.1<>	<0,1	<0.V	<0.1	<0.1
Indeno(1.2.3.cd)pyrene	193-39-5	0.1	1/gi4	<0.1	<0.1	<0,1	<0.1	<0.1
N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	<0.1	< 0.1	<0.1	< 0.1
Naphthalene	91-20-3	0.1	µg/L	≪0.1	<0.1	<0.1	<0.1	<0.1
Perylene	198-55-0	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	×0.1
Phenanthrene	85-01-8	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	129-00-0	0.1	110/1-	±0.1	×0.1	<0.1	<0.1	<0.1
Sum of PAHs	_	0.1	µg/L	<0.1	50.1	<0.1	<0.1	<0.1
EP132T: Base/Neutral Extractable S	urrogates							
2-Fluorobiphenyl	321-60-8	0.1	%	100	106	95.7	110	104
Anthracene-d10	1719-06-8	0.1	%	104	112	99.6	114	108
4-Terphenyl-d14	1718-51-0	0.1	%	115	119	107	124	117

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Client

ALS TECHNICHEM (HK)

Project



Sub-Matrix: MARINE WATER		16h	ent sample II)	HK0819955_11 MPB2_MF	HK0819955_12 MPB2_MF DUP	HK0819955_13 MP_ME	HK0819955_14 MP_MF DUP	HK0819955_15 C1 (NM3)_MF
	SQR	ent samiph	ng clate / time	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00
Compound	CAS Number	LOR	Unit	ES0817549-011	ES0817549-012	ES0817549-013	ES0817549-014	ES0817549-015
EP132B: Polynuciear Aromatic Hydro	ocarbons							
3-Methylcholanthrene	56-49-5	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	91-57-6	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	μg/L	40.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	83-32-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	208-96-8	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	120-12-7	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	56-55-3	0.1	µg/L -	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	50-32-B	0.05	µg/i∟	<0.05	<0.05	<0.05	<0.05	< 0.05
Benzo(b)fluoranthene	205-99-2	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(e)pyrene	192-97-2	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g.h.i)perylene	191-24-2	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	218-01-9	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	191-07-1	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	j.0>
Dibenz(a.h)anthracene	53-70-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	206-44-0	0.1	µg/L	<0.1	50.1	<0.1	<0.1	<0.1
Fluorene	86-73-7	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1.2.3.cd)pyrene	193-39-5	0.7	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	91-20-3	0.1	µg/L	<0.1	×0.1	<0.1	<0.1	<0.1
Perylene	198-55-0	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	85-01-8	0.1	pg/L	<0.1	<0.1	< 0.1	<0.1	<0.1
Pyrene	129-00-0	0.1	μg/L	>0.1	<0.1	<0.1	<0.1	<0.1
Sum of PAHs		0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
EP132T: Base/Neutral Extractable Su	urrogates							tonia tonia
2-Fluorobiphenyl	321-60-8	Ū.1	%	112	106	113	97.7	104
Anthracene-d10	1719-06-8	0.1	%	118	111	115	104	123
4-Terphenyl-d14	1718-51-0	0.1	%	115	118	124	112	124

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Work Order Client

ALS TECHNICHEM (HK)

Project

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ALS

Sub-Matrix: MARINE WATER			Client sample ID	HK0819955_16 C1 (NM3)_MF DUP	HK0819955_17 C3 (NM6)_MF	HK0819955_18 C3 (NM6)_MF DUF	,	-
	Ch	ent sam	oling date / time	26-NOV-2008 14:00	26-NOV-2008 14:00	26-NOV-2008 14:00		
Compound	CAS Number	LOR	Unit	ES0817549-016	ES0817549-017	ES0817549-018		
EP132B: Polynuclear Aromatic Hydrod	carbons							
3-Methylcholanthrene	56-49-5	0.1	µg/L	<0.1	<0.1	<0.1		
2-Methylnaphthalene	91-57-€	0.1	143/A.	<0.1	<0.1	<0.1		
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	ug/L	<0.1	<0.1	<0.1		
Acenaphthene	83-32-9	0.1	μg/L	<0.1	<0.1	<0.1		
Acenaphthylene	208-96-8	0.1	μg/L	<0.1	<0.1	<0.1		
Anthracene	120-12-7	0.1	µg/L	<0.1	<0.1	<0.1		
Benz(a)anthracene	56-55-3	0.1	μg/L	<0.1	<0.1	<0.1		
Benzo(a)pyrene	50-32-8	0.05	μg/L	<0.05	<0.05	<0.05		
Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	<0.1	<0.1		
Benzo(e)pyrene	192-97-2	0.1	µg/L	<0.1	<0.1	<0.1		
Benzo(g.h.l)perylene	191-24-2	0.1	µg/L	<0.1	<0.1	<0.1		
Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	<0.1	<0.1		
Chrysene	218-01-9	0.1	µg/L	<0.1	<0.1	<0.1	Acres	
Coronene	191-07-1	0.1	µg/L	<0.1	<0.1	<0.1		
Dibenz(a.h)anthracene	53-70-3	0.1	µg/L	<0.1	<0.1	<0.1		
Fluoranthene	206-44-0	0.1	11g/L	<0.1	<0.1	<0.1		
Fluorene	86-73-7	0.1	ug/L	<0.1	<0.1	<0.1		
Indeno(1.2.3.cd)pyrene	193-39-5	0.1	μg/L	<0.1	<0.1	<0.1	****	****
N-2-Fluorenyl Acetamide	53-96-3	0.1	ug/L	<0.1	<0.1	<0.1		
Naphthalene	91-20-3	0.1	µg/L	<0.1	<0.1	<0.1		A SUPPLIES ASSESSMENT
Perylene	198-55-0	0.1	μg/L	<0.1	<0.1	<0.1	****	
Phenanthrene	85-01-8	0,1	H9/4-	<0.1	<0,1	<0.1		1 A da sa
Pyrene	129-00-0	0.1	ug/L	<0.1	<0.1	<0.1		
Sum of PAHs		0.1	µg/L	₹0.1	×0.1	<0.1		- '
EP132T: Base/Neutral Extractable Sur	rogates							
2-Fluorobiphenyl	321-60-8	0.1	%	124	109	112		
Anthracene-d10	1719-06-8	0.1	%	127	114	116		- 8 5
4-Terphenyl-d14	1718-51-0	0.1	%	126	120	125		:

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Client

: ALS TECHNICHEM (HK)

Project

Surrogate Control Limits

MARINE WATER		Recovery	Limits (%)
Compound	CAS Number	Low	High
EP132T: Base/Neutral Extractable S	vrogates		
2-Fluorobiphenyl	321-50-8	43	116
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	33	141

ALS Laboratory Group ANALYTICAL CHEMISTRY & TESTING SERVICES



Environmental Division

QUALITY CONTROL REPORT

: ES0817549 Page Work Order : 1 of 6 Laboratory : Environmental Division Sydney Client : ALS TECHNICHEM (HK) : MS ALICE WONG Contact : Charlie Pierce Contact Address : 277-289 Woodpark Road Smithfield NSW Australia 2164 Address : 11/F CHUNG SHUN KNITTING CNTR 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG E-mail : charlie.pierce@alsenviro.com E-mail : alice.wong@alsenviro.com : +61-2-8784 8555 : +852 001185226101044 Telephone Telephone : +61-2-8784 8500 Facsimile Facsimile : +852 26102021 Project QC Level : NEPM 1999 Schedule B(3) and ALS QCS3 requirement Site Date Samples Received : 01-DEC-2008 C-O-C number Issue Date : 15-DEC-2008 Sampler Order number No. of samples received : 18 No. of samples analysed Quote number : SY/241/07 : 18

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



WORLD RECOGNISED ACCREDITATION NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Accreditation Category

Organics

Organics

Position Signatories

Organic Chemist Alex Rossi Business Manager - NSW Victor Kedicioglu

A Campbell Brothers Limited Company

Page : 2 of 6

Work Order : ES0817549

Client : ALS TECHNICHEM (HK)

Project

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis,

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficial sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key:

Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

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: ES0817549 Client : ALS TECHNICHEM (HK)

Project



Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:-No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

No Limit

• No Laboratory Duplicate (DUP) Results are required to be reported.

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Work Order

ES0817549

Client

: ALS TECHNICHEM (HK)

Project :

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: WATER				Mothod Blank (MB)		Laboratory Control Spike (LC	S) Report	
				Report	Spike	Spike Pectivery (%)	Recovery	Limits (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
P132B: Polynuclear Aromatic Hydrocarbons (Q	(CLot: 831339)							
P132: 3-Methylcholanthrene	56-49-5	0.1	µg/L	<0.1	****			
		0.10	µg/L		2 µg/L	109	Co.5	121
EP132: 2-Methylnaphthalene	91-57-6	0.1	μg/L	<0.1			****	
	i	0.10	μg/L		2 μg/L	71.2	67.7	112
EP132: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	μg/L	<0.1				,
TOD: T. TO OMNOWING CONTROL OF		0.10	μg/L		2 µg/L	101	11.6	146
P132: Acenaphthene	83-32-9	0.1	μg/L	<0.1				
, Total Monaphismon		0.10	µg/L		2 µg/L	88.2	73.2	111
EP132: Acenaphthylene	208-96-8	0.1	μg/L	<0.1		40° 201		
1 132. Acertaphiniyene		0.10	μg/L		2 µg/L	88.6	72.4	112
EP132: Anthracene	120-12-7	0.1	μg/L	<0.1				
LF 102. Alltinacene		0.10	μg/L		2 μg/L	51.4	73.4	113
P132: Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	-,	_ <u>!</u>		
EF 132. Benz(a)antinacene	55.55	0.10	µg/L		2 μg/L	99.6	73.6	114
P132: Benzo(a)pyrene	50-32-8	0.05	µg/L	<0.05	2 μg/L	93.0	75.2	117
The state of the s	205-99-2	0.1	µg/L	<0.1				
EP132: Benzo(b)fluoranthene	200-03-2	0.10	μg/L		2 μg/L	87.2	71.4	119
	192-97-2	0.1	µg/L	<0.1	~ P9'-			
EP132: Benzo(e)pyrene	192-91-2	0.10	µg/L		2 μg/L	· # 57.2	75.3	118
THE COLUMN TO LEE	191-24-2	0.10	µg/L	<0.1				
EP132: Benzo(g.h.i)perylene	191-24-2	0.10	μg/L		2 μg/L	104	66.6	121
	207.08.0			<0.1	2 pg/L			
EP132: Benzo(k)fluoranthene	207-08-9	0.1 0.10	μg/L		2 μg/L	94.3	74.8	118
11 07 007 00	240.04.0		µg/L			- '		
EP132: Chrysene	218-01-9	0.1	µg/L	<0.1	2		60.6	120
	104.00	0.10	µg/L	10.4	2 µg/L	93.2	69.6	120
EP132: Coronene	191-07-1	0.1	μg/L	<0.1	0 1		47.4	404
	LGG-9	0.10	μg/L		2 µg/L	92.5	47.4	131
EP132: Dibenz(a.h)anthracene	53-70-3	0.1	μg/L	<0.1	0	400	74.5	447
%	•	0.10	μg/L		2 µg/L	103	71.5	. 117
EP132: Fluoranthene	206-44-0	0.1	μg/L	<0.1				
		0.10	μg/L		2 μg/L	93.3	74.8	117
EP132: Fluorene	86-73-7	0.1	μg/L	<0.1				
		0.10	μg/L		2 μg/L	89.0	72.9	114
EP132: Indeno(1.2.3.cd)pyrene	193-39-5	0.1	μg/L	<0.1	=	•		
		0.10	μg/L		2 jg/L.	102	67.8	119

Page

Work Order

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Client

: ALS TECHNICHEM (HK)

Project



Sub-Maria: WATER				Method Blank (MB)	Laboratory Control Spike (LCS) Report				
THE STATE OF THE PARTY OF THE P				Report	Spoke	Spike Recovery (%)	Recovery	Limits (%)	
Method: Compound	CAS Number	LOR	1/01/	Result	Concentration	LCS	Low	High	
EP132B: Polynuclear Aromatic Hydrocarbons (Q	CLot: 831339) - continued								
EP132: N-2-Fluorenyl Acetamide	53-96-3	0.1	μg/L	<0.1					
,		0.10	μg/L		2 μg/L	79.2	53.6	. 131	
EP132: Naphthalene	91-20-3	0.1	μg/L	<0.1		****			
·		0.10	μg/L		2 μg/L	82.7	68.3	116	
EP132: Pervlene	198-55-0	0.1	μg/L	<0.1					
•		0.10	μg/L		2 μg/L	107	68	122	
EP132: Phenanthrene	85-01-8	0.1	μg/L	<0.1					
		0.10	μg/L		2 μg/L	91.3	74.8	112	
EP132: Pyrene	129-00-0	0.1	μg/L	<0.1					
		0.10	μg/L	****	2 μg/L	93.8	75.1	117	

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Client : ALS TECHNICHEM (HK)

Project . -



Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs), Ideal recovery ranges stated may be waived in the event of sample matrix interference.

• No Matrix Spike (MS) Results are required to be reported.

ALS Technichem (HK) Pty Ltd

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES



CERTIFICATE OF ANALYSIS

Client : ERM HONG KONG Laboratory : ALS Technichem HK Pty Ltd Page : 1 of 7

Contact : MS KAREN LUI Contact : Wong Wai Man, Alice Work Order : HK0821679

: 21/F, LINCOLN HOUSE, 979 KING`S ROAD,

Address

: 11/F., Chung Shun Knitting Centre,
1 - 3 Wing Yip Street,

QUARRY BAY, HONG KONG Kwai Chung, N.T., Hong Kong

Telephone : +852 2271 3000 Telephone : +852 2610 1044
Facsimile : +852 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date Samples Received : 10-DEC-2008

FACILITY

: ---- Issue Date : 30-DEC-2008

C-O-C number : --- No. of samples received : 18
Site : --- No. of samples analysed : 18

General Comments

Address

E-mail

Order number

This report supersedes any previous report(s) with this reference. Results apply to the 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 processing purposes. If the sampling time is displayed as 0:00 the information was not provided by client. The completion date of analysis is:

18-DEC-2008

Key: LOR = Limit of reporting; CAS Number = Chemistry Abstract Services number

Specific comments for Work Order: HK0821679

Sample(s) were collected by ALS Technichem (HK) staff on 10 December, 2008.

Water sample(s) analysed and reported on an as received basis.

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This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in the Electronic Transactions Ordinance of Hong Kong, Chapter 553, Section 6.

 Signatories
 Position
 Authorised results for

 Anh Ngoc Huynh
 Senior Chemist
 Organics

Page Number : 2 of 7

Client : ERM HONG KONG

Work Order HK0821679



Sub-Matrix: MARINE WATER		Clie	nt sample ID	MPB1 ME	MPB1 ME DUP	MPB2 ME	MPB2 ME DUP	MP ME
	Cli	ent samplin	g date / time	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]
Compound	CAS Number	LOR	Unit	HK0821679-001	HK0821679-002	HK0821679-003	HK0821679-004	HK0821679-005
P-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
P-065B: Organochlorine Pesticides								
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
P-065S: PCB Congeners and Organochic	orine Pesticides Surrog	ate					Surrogate control lim	its listed at end of this r
Decachlorobiphenyl	2051-24-3	0.1	%	68.4	71.7	64.0	67.4	66.8

Page Number : 3 of 7

Client : ERM HONG KONG

Work Order HK0821679



Sub-Matrix: MARINE WATER		Clier	nt sample ID	MP ME DUP	C2 (NM5) ME	C2 (NM5) ME DUP	MPB1 MF	MPB1 MF DUP
	Clie	ent samplin	g date / time	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]
Compound	CAS Number	LOR	Unit	HK0821679-006	HK0821679-007	HK0821679-008	HK0821679-009	HK0821679-010
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065B: Organochlorine Pesticides	,				'	'		'
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065S: PCB Congeners and Organo	ochlorine Pesticides Surrog	ate				•	Surrogate control lir	nits listed at end of this report
Decachlorobiphenyl	2051-24-3	0.1	%	61.3	65.7	59.8	68.0	68.6

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Client : ERM HONG KONG

Work Order HK0821679



Sub-Matrix: MARINE WATER		Clie	ent sample ID	MPB2 MF	MPB2 MF DUP	MP MF	MP MF DUP	C1 (NM3) MF
	Clie	ent sampliı	ng date / time	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]
Compound	CAS Number	LOR	Unit	HK0821679-011	HK0821679-012	HK0821679-013	HK0821679-014	HK0821679-015
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065B: Organochlorine Pesticides								
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01	<0.01	<0.01
EP-065S: PCB Congeners and Organo	chlorine Pesticides Surrog	ate					Surrogate control lin	nits listed at end of this report
Decachlorobiphenyl	2051-24-3	0.1	%	67.8	61.0	62.5	61.6	68.8

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Client : ERM HONG KONG

Work Order HK0821679



Sub-Matrix: MARINE WATER		Clie	ent sample ID	C1 (NM3) MF DUP	C3 (NM6) MF	C3 (NM6) MF DUP		
	Cli	ient samplii	ng date / time	[10-DEC-2008]	[10-DEC-2008]	[10-DEC-2008]		
Compound	CAS Number	LOR	Unit	HK0821679-016	HK0821679-017	HK0821679-018		
EP-065A: PCB Single Congeners								
PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	<0.01		
PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	<0.01		
EP-065B: Organochlorine Pesticides								
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	<0.01		
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	<0.01		
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	<0.01		
EP-065S: PCB Congeners and Organo	chlorine Pesticides Surrog	jate			•	-	Surrogate control l	imits listed at end of this report.
Decachlorobiphenyl	2051-24-3	0.1	%	61.5	64.3	56.4		
						· · · · · · · · · · · · · · · · · · ·		

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Client : ERM HONG KONG

Work Order HK0821679



Laboratory Duplicate (DUP) Report

Matrix: WATER					La	aboratory Duplicate (DUP) i	Report	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)
P-065A: PCB Sing	le Congeners (QC Lot:	843113)				·		
HK0821679-001	MPB1 ME	PCB 8	34883-43-7	0.01	μg/L	<0.01	<0.01	0.0
		PCB 18	37680-65-2	0.01	μg/L	<0.01	<0.01	0.0
		PCB 28	7012-37-5	0.01	μg/L	<0.01	<0.01	0.0
		PCB 52	35693-99-3	0.01	μg/L	<0.01	<0.01	0.0
		PCB 44	41464-39-5	0.01	μg/L	<0.01	<0.01	0.0
		PCB 66	32598-10-0	0.01	μg/L	<0.01	<0.01	0.0
		PCB 101	37680-73-2	0.01	μg/L	<0.01	<0.01	0.0
		PCB 77	32598-13-3	0.01	μg/L	<0.01	<0.01	0.0
		PCB 149	38380-04-0	0.01	μg/L	<0.01	<0.01	0.0
		PCB 118	31508-00-6	0.01	μg/L	<0.01	<0.01	0.0
		PCB 153	35065-27-1	0.01	μg/L	<0.01	<0.01	0.0
		PCB 105	32598-14-4	0.01	μg/L	<0.01	<0.01	0.0
		PCB 126	57465-28-8	0.01	μg/L	<0.01	<0.01	0.0
		PCB 187	52663-68-0	0.01	μg/L	<0.01	<0.01	0.0
		PCB 128	38380-07-3	0.01	μg/L	<0.01	<0.01	0.0
		PCB 156	38380-08-4	0.01	μg/L	<0.01	<0.01	0.0
		PCB 180	35065-29-3	0.01	μg/L	<0.01	<0.01	0.0
		PCB 169	60044-26-0	0.01	μg/L	<0.01	<0.01	0.0
		PCB 170	35065-30-6	0.01	μg/L	<0.01	<0.01	0.0
		PCB 195	52663-78-2	0.01	μg/L	<0.01	<0.01	0.0
P-065B: Organoch	lorine Pesticides (QC	Lot: 843113)						
HK0821679-001	MPB1 ME	4.4`-DDT	50-29-3	0.01	μg/L	<0.01	<0.01	0.0
		4.4`-DDE	72-55-9	0.01	μg/L	<0.01	<0.01	0.0
		4.4`-DDD	72-54-8	0.01	μg/L	<0.01	<0.01	0.0

Method Blank (MB), Laboratory Control Spike (LCS) and Laboratory Control Spike Duplicate (DCS) Report

Matrix: WATER			Method Blank (ME	B) Report		Laboratory Control	Spike (LCS) and Labo	oratory Control	Spike Duplicat	e (DCS) Report	
					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RF	PD (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentratio	LCS	DCS	Low	High	Value	Control Limit
EP-065A: PCB Single Congeners (QC Lo	ot: 843113)				n						
PCB 8	34883-43-7	0.01	μg/L	<0.01	100 μg/L	95.6		50	130		
PCB 18	37680-65-2	0.01	μg/L	<0.01	100 μg/L	88.5		50	130		
PCB 28	7012-37-5	0.01	μg/L	<0.01	100 μg/L	67.1		50	130		
PCB 52	35693-99-3	0.01	μg/L	<0.01	100 μg/L	61.2		50	130		
PCB 44	41464-39-5	0.01	μg/L	<0.01	100 μg/L	62.1		50	130		
PCB 66	32598-10-0	0.01	μg/L	<0.01	100 μg/L	59.4		50	130		
PCB 101	37680-73-2	0.01	μg/L	<0.01	100 μg/L	118		50	130		
PCB 77	32598-13-3	0.01	μg/L	<0.01	100 μg/L	115		50	130		
PCB 149	38380-04-0	0.01	μg/L	<0.01	100 μg/L	115		50	130		

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Client : ERM HONG KONG

Work Order HK0821679



Matrix: WATER			Method Blank (MB) Report		Laboratory Control Sp	oike (LCS) and Labor	atory Control	Spike Duplicat	e (DCS) Report	
					Spike	Spike Reco	very (%)	Recovery	Limits (%)	RF	D (%)
Method: Compound	CAS Number	LOR	Unit	Result	Concentratio	LCS	DCS	Low	High	Value	Control Limit
EP-065A: PCB Single Congeners (QC Lot: 843	113) - Continue	ed			n						
PCB 118	31508-00-6	0.01	μg/L	<0.01	100 μg/L	116		50	130		
PCB 153	35065-27-1	0.01	μg/L	<0.01	100 μg/L	116		50	130		
PCB 105	32598-14-4	0.01	μg/L	<0.01	100 μg/L	119		50	130		
PCB 126	57465-28-8	0.01	μg/L	<0.01	100 μg/L	120		50	130		
PCB 187	52663-68-0	0.01	μg/L	<0.01	100 μg/L	120		50	130		
PCB 128	38380-07-3	0.01	μg/L	<0.01	100 μg/L	117		50	130		
PCB 156	38380-08-4	0.01	μg/L	<0.01	100 μg/L	116		50	130		
PCB 180	35065-29-3	0.01	μg/L	<0.01	100 μg/L	123		50	130		
PCB 169	60044-26-0	0.01	μg/L	<0.01	100 μg/L	123		50	130		
PCB 170	35065-30-6	0.01	μg/L	<0.01	100 μg/L	125		50	130		
PCB 195	52663-78-2	0.01	μg/L	<0.01	100 μg/L	115		50	130		
EP-065B: Organochlorine Pesticides (QC Lot:	843113)										
4.4`-DDT	50-29-3	0.01	μg/L	<0.01	25 μg/L	# Not Determined		50	130		
4.4`-DDE	72-55-9	0.01	μg/L	<0.01	25 μg/L	# Not Determined		50	130		
4.4`-DDD	72-54-8	0.01	μg/L	<0.01	25 μg/L	# Not Determined		50	130		

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

• No Matrix Spike (MS) or Matrix Spike Duplicate (MSD) Results are required to be reported.

Surrogate Control Limits

Sub-Matrix: MARINE WATER		Recovery	Limits (%)
Compound	CAS Number	Low	High
EP-065S: PCB Congeners and Organochlo	rine Pesticides Surrogate		
Decachlorobiphenyl	2051-24-3	50	130

ALS Laboratory Group

ANALYTICAL CHEMISTRY & TESTING SERVICES

ALS TECHNICHEM (HK) Pty Ltd

Environmental Division

CERTIFICATE OF ANALYSIS



CONTACT: MS KAREN LUI CLIENT: **ERM HONG KONG**

ADDRESS: 21/F, LINCOLN HOUSE, 979 KING'S ROAD,

TAIKOO PLACE, ISLAND EAST, QUARRY BAY, HONG KONG.

PROJECT: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY

Batch: HK0821679 LABORATORY: DATE RECEIVED:

DATE OF ISSUE:

HONG KONG 10/12/2008 24/12/2008

SAMPLE TYPE: No. of SAMPLES: 18

WATER

COMMENTS

Sample(s) were collected by ALS Technichem (HK) staff on 10 December, 2008.

Water sample(s) analysed and reported on an as received basis.

PAHs were subcontracted and tested by ALS Sydney.

ALS Sydney details report was attached. The attached report contains a total of 14 pages.

Sample Details

ALS Lab ID	Sample ID	Date of Sampling
HK0821679 - 1	MPB1_ME	10/12/2008
HK0821679 - 2	MPB1_ME DUP	10/12/2008
HK0821679 - 3	MPB2_ME	10/12/2008
HK0821679 - 4	MPB2_ME DUP	10/12/2008
HK0821679 - 5	MP_ME	10/12/2008
HK0821679 - 6	MP_ME DUP	10/12/2008
HK0821679 - 7	C2 (NM5)_ME	10/12/2008
HK0821679 - 8	C2 (NM5)_ME DUP	10/12/2008
HK0821679 - 9	MPB1_MF	10/12/2008
HK0821679 - 10	MPB1_MF DUP_	10/12/2008
HK0821679 - 11	MPB2_MF	10/12/2008
HK0821679 - 12	MPB2_MF DUP	10/12/2008
HK0821679 - 13	MP_MF	10/12/2008
HK0821679 - 14	MP_MF DUP	10/12/2008
HK0821679 - 15	C1_(NM3)_MF	10/12/2008
HK0821679 - 16	C1 (NM3)_MF DUP	10/12/2008
HK0821679 - 17	C3 (NM6)_MF	10/12/2008
HK0821679 - 18	C3 (NM6)_MF DUP	10/12/2008

ISSUING LABORATORY: HONG KONG

Address

Brisbane Melbourne

Sydney

Newcastle

ALS Technichem (HK) Pty Ltd 11/F Chung Shun Knitting Centre

1-3 Wing Yip Street Kwai Chung HONG KONG

Phone: Fax:

852-2610 1044 852-2610 2021

Email:

hongkong@alsenviro.com

Ms Wong Wai Man

Laboratory Manager - Hong Kong

Other ALS Environmental Laboratories

Bogor

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AUSTRALIA

AMERICAS

Hong Kong Singapore Kuala Lumpur Vancouver Santiago Amtofagasta Lima

Abbreviations: % SPK REC denotes percentage spike recovery

CHK denotes duplicate check sample LOR denotes limit of reporting

ALS Technichem (HK) Pty Ltd

Part of the ALS Laboratory Group 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., H.K. Phone: 852-2610 1044 Fax: 852-2610 2021 www.alsenviro.com

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ALS Laboratory Group ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

CERTIFICATE OF ANALYSIS

: ES0818462 Work Order Page : 1 of 8

Client Laboratory : ALS TECHNICHEM (HK) : Environmental Division Sydney

: MS ALICE WONG Contact : Charlie Pierce Contact

Address Address : 277-289 Woodpark Road Smithfield NSW Australia 2164 : 11/F CHUNG SHUN KNITTING CNTR

1-3 WING YIP STREET

KWAI CHUNG, N.T HONG KONG HONG KONG

E-maii : alice.wong@alsenviro.com E-mail : charlie.pierce@alsenviro.com

Telephone : +852 001185226101044 Telephone : +61-2-8784 8555 Facsimile : +852 26102021 Facsimile : +61-2-8784 8500

QC Level Project : NEPM 1999 Schedule B(3) and ALS QCS3 requirement

Order number : ----C-O-C number Date Samples Received

: 15-DEC-2008 Sampler Issue Date : 24-DEC-2008

Site

No. of samples received : 18 Quote number : SY/241/07 No. of samples analysed : 18

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



ACCREDITATION

This document is issued in accordance with NATA accreditation requirements.

ISO/IEC 17025.

Accredited for compliance with

NATA Accredited Laboratory 825

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Alex Rossi Organic Chemist Organics Page 3 of 8

Work Order : ES0818462

Client : ALS TECHNICHEM (HK)

Project : ----



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficit sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture containt, insufficient sample (reduced weight employed) or matrix interference.

When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for processing purposes. If the sampling time is displayed as 0:00 the information was not provided by client.

Key: CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

Page

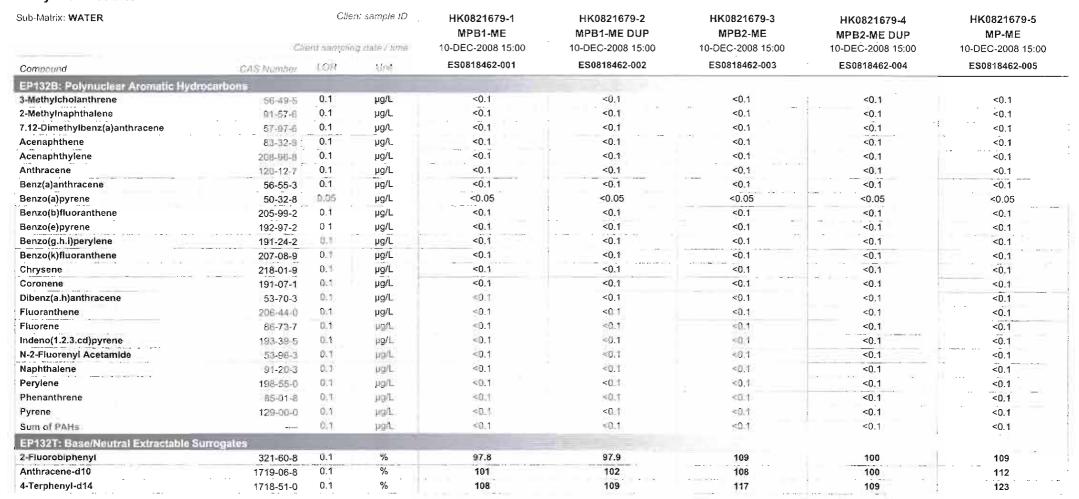
4 of 8

Work Order

ES0818462

Client Project ALS TECHNICHEM (HK)

roject : -





5 of 8 ES0818462

Client

: ALS TECHNICHEM (HK)

Project

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ALS

Sub-Matrix: WATER			ent sample (D)	HK0821679-6 MP-ME DUP	HK0821679-7 C2 (NM5)-ME	HK0821679-8 C2 (NM5)-ME DUP	HK0821679-9 MPB1-MF	HK0821679-10 MPB1-MF DUP
	CH	erit samplli	ig date / lime	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00
Compound	CAS Number	LOR	5,020	ES0818462-006	ES0818462-007	ES0818462-008	ES0818462-009	ES0818462-010
EP132B: Polynuclear Aromatic Hydro	carbons							
3-Methylcholanthrene	96-49-5	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	91-57-6	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	83-32-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	< 0.1
Acenaphthylene	208-96-8	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	120-12-7	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	50-32-8	0.05	µg/L	< 0.05	< 0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(e)pyrene	192-97-2	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	< 0.1
Benzo(g.h.i)perylene	191-24-2	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	207-08-9	0.1	Hg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	218-01-9	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	< 0.1
Coronene	191-07-1	0.1	µg/L	< 0.1	<0.1	<0.1	<0.1	<0.1
Dibenz(a.h)anthracene	63-70-3	0.1	hB/F	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	206-44-0	0.1	µg/L	<0.1	< 0.1	<0.1	<0.1	<0.1
Fluorene	86-73-7	0.1	ug/t_	< 0.1	<0.1	<0.1	<0.1	<0.1
indeno(1.2.3.cd)pyrene	193-39-5	0.1	ug/L	< 0.1	<0.1	<0.1	<0.1	<0.1
N-2-Fluorenyl Acetamide	53-96-3	0.1)/gi/L	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	91-20-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perylene	198-55-0	0.1	ug/L	< 0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	85-01-8	0.1	ug/L	< 0.1	<0.1	<0.1	< 0.1	<0.1
Pyrene	129-00-0	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Sum of PAHs		0.1	ug/L	≪0.1	<0.1	⊀0.1	<0.1	<0.1
EP132T: Base/Neutral Extractable Sur	rrogates							
2-Fluorobiphenyl	321-60-8	0.1	%	118	114	109	114	104
Anthracene-d10	1719-06-8	Ū.1	%	112	110	109	134	110
4-Terphenyl-d14	1718-51-0	0.1	%	122	121	118	130	119

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Client ALS TECHNICHEM (HK)

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Sub-Matrix: WATER		1C//2	int sample ID:	HK0821679-11 MPB2-MF	HK0821679-12 MPB2-MF DUP	HK0821679-13 MP-MF	HK0821679-14 MP-MF DUP	HK0821679-15 C1 (NM3)-MF
	(2)	got sample	ig (fale/ lime	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00	10-DEC-2008 15:00
Compound	CAS Number	LOR	-127307	ES0818462-011	ES0818462-012	ES0818462-013	ES0818462-014	ES0818462-015
EP132B: Polynuclear Aromatic Hydro	carbons							
3-Methylcholanthrene	56-49-5	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	91-57-6	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	83-32-9	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	208-96-8	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	120-12-7	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benz(a)anthracene	56-55-3	0.1	μg/L	<0.1	<0.1	<0.1	< 0.1	<0.1
Benzo(a)pyrene	50-32-8	0.05	μg/L	<0.05	<0.05	<0.05	< 0.05	<0.05
Benzo(b)fluoranthene	205-99-2	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(e)pyrene	192-97-2 .	0.1	μg/L	< 0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g.h.i)perylene	191-24-2	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	207-08-9	0.1	μg/L :	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	218-01-9	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	191-07-1	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenz(a.h)anthracene	53-76-3	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	206-44-0	0.1	µg/L	<0.1	<0.1	: <0.1	<0.1	<0.1
Fluorene	86-73-7	0.1	H9/L	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1.2.3.cd)pyrene	193-39-5	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	91-20-3	0.1	μg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perylene	198-55-0	0.1	µg/L	< 0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	85-01-8	0.1	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	129-00-0	0.1	µg/L	<0.1	<0.1	<0.1	· <0.1:	<0.1
Sum of PAHs		0.1	HB/L	<0.1	≤0.1	<0,1	<0.1	50.1
EP132T: Base/Neutral Extractable Su	rrogates							
2-Fluorobiphenyl	321-60-8	0.1	%	79.6	91.3	81.8	91.9	92.6
Anthracene-d10	1719-06-8	0.1	%	92.7	104	96.4	105	111
4-Terphenyl-d14	1718-51-0	0.1	%	101		104	115	. 121

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Sub-Matrix: WATER	Cli		ent sample ID ng date / time	HK0821679-16 C1 (NM3)-MF DUP 10-DEC-2008 15:00	HK0821679-17 C3 (NM6)-MF 10-DEC-2008 15:00	HK0821679-18 C3 (NM6)-MF DUP 10-DEC-2008 15:00	,	
Compound	CAS Number	LOR	Unit .	ES0818462-016	ES0818462-017	ES0818462-018		
EP132B: Polynuclear Aromatic Hydro	ocarbons							
3-Methylcholanthrene	56-49-5	0.1	μg/L	<0.1	<0.1	<0.1		
2-Methylnaphthalene	91-57-6	0.1	μg/L	<0.1	<0.1	<0.1		
7.12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L	<0.1	<0.1	<0.1		
Acenaphthene	83-32-9	0.1	µg/L	<0.1	<0.1	<0.1		
Acenaphthylene	208-96-8	0.1	µg/L	<0.1	<0.1	<0.1		
Anthracene	120-12-7	0.1	µg/L	<0.1	<0.1	<0.1		
Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	<0.1	<0.1		
Benzo(a)pyrene	50-32-8	0.05	µg/L	<0.05	<0.05	<0.05		· ·
Benzo(b)fluoranthene	205-99-2	0.1	µg/L	< 0.1	<0.1	<0.1	<u></u>	
Benzo(e)pyrene	192-97-2	0.1	Hg/L	<0.1	<0.1	<0.1		
Benzo(g.h.i)perylene	191-24-2	0.1	ug/L	<0.1	<0.1	<0.1		
Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	<0.1	<0.1		
Chrysene	218-01-9	0.1	ug/L	<0.1	<0.1	<0.1		
Coronene	191-07-1	0.1	µg/L	<0.1	<0.1	<0.1		
Dibenz(a.h)anthracene	53-70-3	0.1	µg/L	<0.1	<0.1	<0.1		
Fluoranthene	206-44-0	0.1	µg/L	<0.1	<0.1	<0.1		
Fluorene	86-73-7	0.1	Hg/L	<0.1	<0.1	<0.1		
Indeno(1.2.3.cd)pyrene	193-39-5	0.1	sig/L	<0.1	<0.1	<0.1		
N-2-Fluorenyl Acetamide	63-96-3	0.1	vig/t.	< 0.1	<0.1	<0.1		Ann Anna and Anna Anna and Ann
Naphthalene	91-20-3	0.1	µg/L	<0.1	< D.1	<0.1		
Perylene	198-55-0	0.1	µg/L	50.1	<0:1	<0.1		
Phenanthrene	85-01-8	0.1	pg/L	< 0.1	<0.1	<0.1		
Pyrene	129-00-0	0.1	uga.	<0.1	<0.1	<0.1	,	
Sum of PAHs		0.1	ug/a.	50.1	<0.1	<0.1		
EP132T: Base/Neutral Extractable Sc	ırrogates							
2-Fluorobiphenyl	321-60-8	0.1	76	94.6	96.0	105		
Anthracene-d10	1719-06-8	0.1	%	110	104	103		
4-Terphenyl-d14	1718-51-0	0.1	%	119	114	111		-

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Client : ALS TECHNICHEM (HK)

Project : ---



Surrogate Control Limits

Sub-Matrix: WATER		Recovery	Limits (%)
Compound	CAS Number	Low	High
EP132T: Base/Neutral Extractable Surroge			
2-Fluorobiphenyl	321-60-8	43	116
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	33	141

ALS

Environmental Division

QUALITY CONTROL REPORT

Work Order : **ES0818462** Page : 1 of 6

Client : ALS TECHNICHEM (HK) Laboratory : Environmental Division Sydney

Contact : MS ALICE WONG Contact : Charlie Pierce

Address : 11/F CHUNG SHUN KNITTING CNTR Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

1-3 WING YIP STREET

KWAI CHUNG, N.T HONG KONG HONG KONG

 Telephone
 : +852 001185226101044
 Telephone
 : +61-2-8784 8555

 Facsimile
 : +852 26102021
 Facsimile
 : +61-2-8784 8500

Project : --- QC Level : NEPM 1999 Schedule B(3) and ALS QCS3 requirement

Site : ----

 C-O-C number
 : -- Date Samples Received
 : 15-DEC-2008

 Sampler
 : -- Issue Date
 : 24-DEC-2008

No. of samples received : 18

Quote number : SY/241/07 No. of samples analysed : 18

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report: Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



ACCREDITATION

Order number

NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11,

Signatories Position Accreditation Category

Alex Rossi Organic Chemist Organics

Page : 2 of 6

Work Order : ES0818462

Client : ALS TECHNICHEM (HK)

Project . ---



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA. AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficit sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key: Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot

CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

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Work Order : ES0818462
Client : ALS TECHN

Project

: ALS TECHNICHEM (HK)

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Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:-No Limit: Result between 10 and 20 times LOR:-0% - 50%; Result > 20 times LOR:-0% - 20%.

• No Laboratory Duplicate (DUP) Results are required to be reported.

No Limit

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Client

ALS TECHNICHEM (HK)

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Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

			Method Blank (MB)		Laboratory Control Spike (LC)) Kepon	
			Repart	Spies	Spike Recovery (%)	Recovery	Limits (%)
CAS Number	LOR	unit	Result	Concentration	LCS	Low	High
Lot: 844604)							
56-49-5	Ū.1	µg/L	<0.1	-			
	0.10	μg/L		2 µg/L	77.9	65.8	121
91-57-6	0.1	μg/L	<0.1				
	0.10	μg/L		2 µg/L	82.2	67.7	112
57-97-6	0.1	μg/L	<0.1	****			
	0.10	μg/L		2 μg/L	95.2	11.6	146
83-32-9	0.1	μg/L	<0.1				
	0.10	μg/L	****	2 µg/L	92.8	73.2	111
208-96-8	0.1	μg/L	<0.1				
	0.10	μg/L		2 μg/L	92.9	72.4	112
120-12-7	0.1		<0.1		· ·		
	0.10	µg/L	***	2 μg/L	96.1	73.4	. 113
56-55-3	0.1	μg/L	<0.1				
	0.10	μg/L		2 μg/L	93.3	73.6	114
50-32-8	0.05	µg/L	<0.05	2 μg/L	88.8	75.2	117
205-99-2	0.1	μg/L	<0.1				
	0.10			2 μg/L	84.5	71.4	119
192-97-2	0.1		<0.1				
:	0.10			2 μg/L	88.4	75.3	118
191-24-2	0.1		<0.1	1- 11-	···	-112	
	0.10			2 μg/L	79.7	66.6	121
207-08-9	0.1		<0.1			in the same of the	
	0.10			2 µg/L	99.8	74.8	118
218-01-9	0.1		<0.1				
	0.10		;	2 µg/L	95.0	69.6	120
191-07-1	0.1	,	<0.1				
				2 µg/L			131
53-70-3							
							117
206-44-0	0.1	_	<0.1				
· · ·	0.10	-					117
86-73-7							
55.07							114
193-39-A					J7.4		1 122
	0.10	μg/L	-0.1	2 μg/L	81.4	67.8	139
	91-57-6 57-97-6 83-32-9 208-96-8 120-12-7 56-55-3 50-32-8 205-99-2 192-97-2 191-24-2	Decit S44804 Decit Decit S44804 Decit S44804 Decit S44804 Decit Decit	Dec Section Dec Dec	Decision Decision	CAS Number LDR	CAS Munchair LDR	CAS Number LDR

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Work Order

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Client

: ALS TECHNICHEM (HK)

Project

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Sulp-Matrix: WATER				Method Blank (MB)		Laboratory Control Spike (LC)	Report	
				Report	Sp/ke	Spike Recovery (%)	Reservery	LIMME (%)
Method: Campaand	CAS Number	LUR	Unit	Result	Canamittatini	LCS	Low	High
EP132B: Polynuclear Aromatic Hydrocarbons (QCLot: 84	4804) - continued							
EP132: N-2-Fluorenyl Acetamide	53-96-3	0.1	μg/L	<0.1				
		0.10	μg/L		2 μg/L	106	53.6	131
EP132: Naphthalene	91-20-3	0.1	μg/L	<0.1				
		0.10	μg/L		2 μg/L	94.1	68.3	116
EP132: Perylene	198-55-0	0.1	μg/L	<0.1				`
		0.10	μg/L		2 μg/L	89.1	68	122
EP132: Phenanthrene	85-01-8	0.1	μg/L	<0.1				
		0.10	μg/L		2 μg/L	96.4	74.8	112
EP132: Pyrene	129-00-0	0.1	μg/L	<0.1			****	
		0.10	. μg/L		2 μg/L	99.2	75.1	117

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Client : ALS TECHNICHEM (HK)

Project



Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analyles. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

No Matrix Spike (MS) Results are required to be reported.

Annex I

Dolphin Sighting Records

Project name: EM&A for Permanent Aviation Fuel Facility (PAFF)
Activity: Dolphin Impact Monitoring - Field Log Sheet
*Remark: Record the number of dolphin occurrence within the 500m exclusion (A) prior to dredging and (B) during decorded when there is no dredging

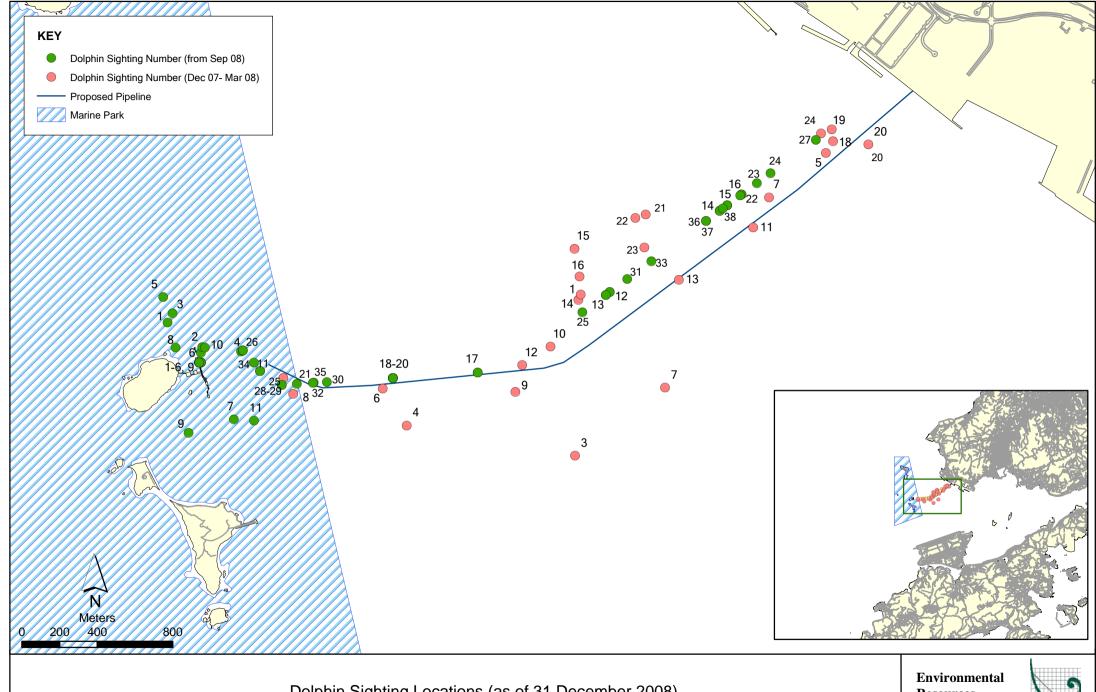
Week	D	ate	Dredger 1 No. of Dolphin Occurrence*	Sighting No.	Observers' Names			
1	Mon	01-Sep	No Dredging	-	Richard Huang			
	Tue	02-Sep	15	1-7	Anton Tsang			
	Wed	03-Sep	2	8	Anton Tsang			
	Thu	04-Sep	2	9	Richard Huang			
	Fri	05-Sep	1	10	Anton Tsang			
	Sat	06-Sep	·	No Dredging	g			
	Sun	07-Sep		No Dredging				
2	Mon	08-Sep	No Dredging		Richard Huang			
	Tue	09-Sep	0	-	Anton Tsang			
	Wed	10-Sep	0	-	Anton Tsang			
	Thu	11-Sep	0	-	Richard Huang			
	Fri	12-Sep	0	-	Anton Tsang			
	Sat	13-Sep		No Dredging				
	Sun	14-Sep		No Dredging				
3	Mon	15-Sep		No Dredging				
	Tue	16-Sep	0	-	Richard Huang			
	Wed	17-Sep	0	-	Anton Tsang			
	Thu	18-Sep	0	-	Richard Huang			
	Fri	19-Sep	0	-	Anton Tsang			
	Sat	20-Sep		No Dredging				
	Sun	21-Sep		No Dredging				
4	Mon	22-Sep	No Dredging	-	Ivy So			
	Tue	23-Sep	No Dredging	-	Anton Tsang			
	Wed	24-Sep	Typhoon		No Monitoring			
	Thu	25-Sep	0	-	Richard Huang			
	Fri	26-Sep	0	-	Ivy So			
	Sat	27-Sep		No Dredging				
	Sun	28-Sep		No Dredging				

5	Mon	29-Sep	0	-	Ivy So
	Tue	30-Sep	4	11	Ivy So
	Wed	01-Oct	0	-	Richard Huang
	Thu	02-Oct	0	-	Ivy So
	Fri	03-Oct	0	-	Ivy So
	Sat	04-Oct	0	-	Ivy So
	Sun	05-Oct	0	-	Richard Huang
6	Mon	06-Oct	0	-	Ivy So
	Tue	07-Oct	0	-	Richard Huang
	Wed	08-Oct	0	-	Ivy So
	Thu	09-Oct	4	12-13	Ivy So
	Fri	10-Oct	0	-	Ivy So
	Sat	11-Oct	3	14	Ivy So
	Sun	12-Oct	1	15	Richard Huang
7	Mon	13-Oct	3	16	Ivy So
	Tue	14-Oct	0	-	Ivy So
	Wed	15-Oct	No Dredging	-	Ivy So
	Thu	16-Oct	0	-	Chung
	Fri	17-Oct	0	-	Ivy So
	Sat	18-Oct	0	-	Ivy So
	Sun	19-Oct	2	17	Richard Huang
8	Mon	20-Oct	0	-	Ivy So
	Tue	21-Oct	0	-	Ivy So
	Wed	22-Oct	5	18-20	Ivy So
	Thu	23-Oct	0	-	Richard Huang
	Fri	24-Oct	0	-	Ivy So
	Sat	25-Oct	0	-	Ivy So
	Sun	26-Oct	0	-	Richard Huang

9	Mon	27-Oct	No Dredging	-	No Monitoring
	Tue	28-Oct	No Dredging	-	Ivy So
	Wed	29-Oct	No Dredging	-	No Monitoring
	Thu	30-Oct	No Dredging	-	No Monitoring
	Fri	31-Oct	No Dredging	-	lvy So
	Sat	01-Nov	No Dredging	-	No Monitoring
	Sun	02-Nov	No Dredging	-	No Monitoring
10	Mon	03-Nov	No Dredging	-	No Monitoring
	Tue	04-Nov	No Dredging	-	No Monitoring
	Wed	05-Nov	No Dredging	-	Anton Tsang
	Thu	06-Nov	0	-	Richard Huang
	Fri	07-Nov	1	21-22	Anton Tsang
	Sat	08-Nov	No Dredging	-	Ivy So
	Sun	09-Nov	0	-	Richard Huang
11	Mon	10-Nov	1	23	Anton Tsang
	Tue	11-Nov	1	24	Anton Tsang
	Wed	12-Nov	0	-	Anton Tsang
	Thu	13-Nov	No Dredging	-	No Monitoring
	Fri	14-Nov	No Dredging	-	No Monitoring
	Sat	15-Nov	0	-	Ivy So
	Sun	16-Nov	1	25	Richard Huang
12	Mon	17-Nov	0	-	Anton Tsang
	Tue	18-Nov	0	-	Anton Tsang
	Wed	19-Nov	0	-	Anton Tsang
	Thu	20-Nov	0	-	Richard Huang
	Fri	21-Nov	11	26	Anton Tsang
	Sat	22-Nov	1	27	Ivy So
	Sun	23-Nov	0	-	Richard Huang

13	Mon	24-Nov	4	28-29	Anton Tsang
	Tue	25-Nov	0	-	Anton Tsang
	Wed	26-Nov	0	-	Anton Tsang
	Thu	27-Nov	0	-	Richard Huang
	Fri	28-Nov	0	-	Anton Tsang
	Sat	29-Nov	0	-	Ivy So
	Sun	30-Nov	0	-	Richard Huang
14	Mon	01-Dec	0	-	Anton Tsang
	Tue	02-Dec	No Dredging	-	No Monitoring
	Wed	03-Dec	No Dredging	-	No Monitoring
	Thu	04-Dec	3	30	Ivy So
	Fri	05-Dec	2	31	Ivy So
	Sat	06-Dec	0	-	Ivy So
	Sun	07-Dec	3	32	Ivy So
15	Mon	08-Dec	2	33	Anton Tsang
	Tue	09-Dec	0	-	Anton Tsang
	Wed	10-Dec	0	-	Richard Huang
	Thu	11-Dec	0	-	Ivy So
	Fri	12-Dec	1	34	Anton Tsang
	Sat	13-Dec	1	35	Ivy So
	Sun	14-Dec	0	-	Ivy So
16	Mon	15-Dec	2	36-37	Ivy So
	Tue	16-Dec	0	-	Anton Tsang
	Wed	17-Dec	1	38	Richard Huang
	Thu	18-Dec	0	-	Ivy So
	Fri	19-Dec	0	-	Anton Tsang
	Sat	20-Dec	0	-	Ivy So
	Sun	21-Dec	0	-	Richard Huang

17	Mon	22-Dec	0	-	Anton Tsang
	Tue	23-Dec	0	-	Anton Tsang
	Wed	24-Dec	0	-	Richard Huang
	Thu	25-Dec	0	-	Ivy So
	Fri	26-Dec	0	-	Ivy So
	Sat	27-Dec	0	-	Ivy So
	Sun	28-Dec	0	-	Richard Huang
18	Mon	29-Dec	0	-	Anton Tsang
	Tue	30-Dec	0	-	Anton Tsang
	Wed	31-Dec	0	-	Richard Huang



Dolphin Sighting Locations (as of 31 December 2008)

Environmental Resources Management



Sighting					Dredger	Sighting							1
NI.				Coordinates	Coordinates (E-	Distance	#Sighting Angle from				Boat		
No.	Date	Time		(N-Lat)	Long)	(m)	Dredging Machine (o)		Group Composition*	Beaufort	Association	Behaviour	Other comments
1	2/9/2008	1000	4315	823838.545	806678.150	275	320	4	2UA, 1 SA, 1 SJ	1	None	Feeding, Traveling	Before Dredging
_	0/0/0000	4004	4321	823840.556	806672.460	00		-	OLIA	4	Nicos	Booth's a Octoberation	Defense Description
2	2/9/2008	1024	4315	823838.545	806678.150	80	5	2	2UA	1	None	Breaching, Spy-hopping	Before Dredging
3	2/9/2008	1035	4321 4315	823840.556 823838.545	806672.460	300	330	2	1UA, 1SA	1	None	Travalina	Potoro Drodaina
3	2/9/2008	1035	4315	823840.556	806678.150 806672.460	300	330	2	10A, 15A	1	None	Traveling	Before Dredging
4	2/9/2008	1045	4315	823838.545	806678.150	220	75	3	1UA, 1SA, 1UJ	1	None	Traveling	Before Dredging
-	2/3/2000	1040	4321	823840.556	806672.460	220	75		107, 107, 100	'	None	Travelling	Defore Dreaging
5	2/9/2008	1108	4315	823838.546	806678.151	400	330	1	1SA	1	None	Traveling	Before Dredging
	2/0/2000	1100	4321	823840.557	806672.461	.00					110110	Tratog	Doiole Drouging
6	2/9/2008	1411	4315	823838.547	806678.152	50	0	1	1UA	2	None	Traveling	During Dredging
			4321	823840.558	806672.462								0 00
7	2/9/2008	1530	4315	823838.548	806678.153	350	150	2	2UA	2	None	Traveling	During Dredging
			4321	823840.559	806672.463							· · · · · · · · · · · · · · · · · · ·	
8	3/9/2008	1535	4306	823841.180	806687.338	155	300	2	2UA	1	None	Traveling	During Dredging
			4300	823842.903	806693.345								
9	4/9/2008	1336	4306	823841.181	806687.339	380	190	2	2UA	2	None	Traveling	During Dredging
			4300	823842.904	806693.346								
10	5/9/2008	1711	4315	823838.546	806678.151	80	15	1	1UA	2	None	Traveling	Dredging Stopped
			4321	823840.557	806672.461								
11	30/9/2008	1050	3925	823794.421	807000.841	250	350	4	4UA	2	None	Traveling	Before Dredging
			4015	823867.660	806948.534								
12	9/10/2008	1001	1900	824212.899	808853.818	200	10	3	3UA	2	None	Traveling	During Dredging
			1925	824198.037	808833.716								
13	9/10/2008	1427	1925	824198.037	808833.716	100	35	1	1UA	3	None	Traveling	Before Dredging
	4.4.4.0.100.00	2000	1970	824171.284	808797.532	000			0.114			-	5 (5) :
14	11/10/2008	0839	1175	824643.917	809436.783	220	15	3	3 UA	2	None	Traveling	Before Dredging
45	40/40/0000	0000	1160	824652.835	809448.845	0.40	400		4114	0	Maria	T P	Dorden Decided on
15	12/10/2008	0839	1125	824673.643	809476.988	240	160	1	1UA	2	None	Traveling	During Dredging
16	13/10/2008	0818	1170 1030	824646.890 824730.121	809440.804 809553.376	170	160	3	1SS, 1 SA, 1 UA	2	None	Breaching, Feeding	Before Dredging
10	13/10/2006	0010	1030	824733.094	809557.397	170	160	3	133, 13A, 10A		None	Breaching, reeding	before Dreaging
17	19/10/2008	11:04	2730	823785.196	808154.203	270	270	2	2UA	2	None	Traveling	Dredger was moving
17	19/10/2000	11.04	2680	823792.332	808203.670	210	210		20/1		None	Travelling	Dreager was moving
18	22/10/2008	1420	3180	823757.391	807705.065	550	30	3	3 UA	2	None	Traveling	During Dredging
10	22/10/2000	1420	3220	823754.942	807665.140	330	30		3 0/4		None	Travelling	During Dreaging
19	22/10/2008	1528	3180	823757.392	807705.066	180	55	2	2 UA	2	None	Traveling	During Dredging
	227 . 07 2 0 0 0	.020	3220	823754.943	807665.141	.00		_	2 0/1	_	110.10		Duning Drougning
20	22/10/2008	1625	3180	823757.393	807705.067	200	45	3	3UA	2	Hang	Feeding	Dredging Stopped
			3220	823754.944	807665.142					_			
21	7/11/2008	1210	3690	82376.168	807196.022	700	345	5	3UA, 2SA	2	Hang	Traveling, Feeding	Dredging Stopped
			3760	823721.882	807126.153				, -		- J	, , , , , , , , , , , , , , , , , , ,	3 3 11
22	7/11/2008	1618	1040	824724.176	809545.335	200	45	1	1UA	1	None	Traveling	During Dredging
			1015	824739.039	809565.468							· · · · · · · · · · · · · · · · · · ·	
23	10/11/2008	1249	930	824789.572	809633.785	20	275	1	1UA	3	None	Traveling	Dredging Stopped
			905	824804.435	809653.888								
24	11/11/2008	1605	840	824843.078	809706.153	30	97	1	1UA	3	None	Traveling	During Dredging
			820	824854.968	809722.235								
25	16/11/2008	0843	2080	824105.888	808709.082	290	270	1	1UA	2	None	Traveling	During Dredging
26a	21/11/2008	1430	4074	823904.923	806909.628	50	70	5	2UA, 2SS, 1UJ	2	None	Traveling, Breaching, Porpoising, Feeding	During Dredging
			4059	823904.280	806922.380								
26b	21/11/2008	1430	4074	823904.923	806909.628	300	335	6	2UA, 2SA, 1SJ, 1UC	2	None	Traveling, Breaching, Feeding	During Dredging
			4059	823904.280	806922.380								
							t 3350, so they are regarded a	s one sighting					
27	22/11/2008	1558	545	825018.457	809946.360	100	325	1	1UA	3	None	Traveling	During Dredging
			490	825051.155	809987.585			1					
28	24/11/2008	1220	3770	823721.270	807116.172	400	345	1	1UA	4	None	Traveling	Dredging Stopped
00	04/44/2005	4000	4030	823879.867	806939.816	050	007		0114 100		NI.	Toronto (411A form)	Double Co.
29	24/11/2008	1233	3770	823721.270	807116.172	250	305	3	2UA, 1SS	4	None	Traveling (1UA traveled past the side of	Dredging Stopped

				Dredger	Dredger	Sighting							
Sighting					Coordinates (E-		#Sighting Angle from				Boat		
No.	Date	Time	4000	(N-Lat)	Long)	(m)	Dredging Machine (o)	Group size	Group Composition*	Beaufort	Association	Behaviour	Other comments
	4/40/0000	1100	4030	823879.867	806939.816	400	110		0114	_		dredging machine and the nearest distance is	
30	4/12/2008	1130	3530	823735.963	807355.722	480	110	3	3UA	3	None	Traveling	During Dredging
	-//		3470	823739.636	807415.609			_					
31	5/12/2008	0851	1785	824281.268	808946.289	200	100	2	2UA	4	None	Traveling	Dredger was moving
	-//		1770	824290.185	808958.350			_					
32	7/12/2008	1056	3600	823731.678	807285.853	200	350	3	2UA, 1SA	3	None	Traveling	Before Dredging
			3550	823734.739	807335.759								
33	8/12/2008	1619	1625	824376.389	809074.943	500	115	2	2UA	4	None	Traveling, Breaching	During Dredging
			1590	824397.197	809103.086								
34	12/12/2008	1204	3980	823839.178	806968.875	200	66	1	1UA	2	None	Traveling	Dredging Stopped
			3970	823831.041	806974.687								
35	13/12/2008	1440	3600	827373.678	807285.853	450	340	1	1UA	3	None	Traveling	Dredger was moving
			3605	823731.372	807280.863								
36	15/12/2008	0845	1265	824590.412	809364.415	170	270	1	1SA	2	None	Traveling	Dredger was moving
												stayed at about 100m at 270 degree for the	Dredger was moving
37	15/12/2008	0855	1265	824590.412	809364.415	100-300	from 330 to 270	2	1UA, 1SS	2	None	whole morning	and before dredging
38	17/12/2008	1105	1155	824655.808	809452.865	120	170	3	1UA, 2SJ	2	None	Traveling	During Dredging
			1145	824661.753	809460.906								
*Key	:												
				# Compa	ss bearing is used	(North = 0 dec	gree)						
	Unspotted Cal												
UJ = Unspotted Juvenile													
SJ = Spotted Juvenile													
SS = Spotted Sub-adult													
	Spotted Adult												
UA =	 Unspotted Adu 	ılt											

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21/F Lincoln House Taikoo Place, 979 King's Road Island East, Hong Kong

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