### **ALS Laboratory Group**

**ANALYICAL CHEMISTRY & TESTING SERVICES** 

2723 5660



: 1 of 5

### **CERTIFICATE OF ANALYSIS**

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

Facsimile

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718174

Address : 21/F, LINCOLN HOUSE. Address : 11/F, Chung Shun Knitting Centre.

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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 17 Dec 2007

FACILITY

Order number : ---- Date of issue : 21 Dec 2007

C-O-C number : ---- No. of samples - Received : 78

+852 2610 2021

Site : --- - Analysed : 78

#### **Report Comments**

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0718174 supersedes any previous reports with this reference. The completion date of analysis is 20 Dec 2007. 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 HK0718174: 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.

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of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718174



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER					Duplicate (DUP) Results					
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)		
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 560693)								
HK0718174-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0		
HK0718174-011	MPB1 B ME	EA025: Suspended Solids (SS)		1	mg/L	11	12	13.4		
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 560694)								
HK0718174-021	IMO1 M ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	13.8		
HK0718174-043	C2 (NM5) S ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0		
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 560695)								
HK0718174-053	MP B MF	EA025: Suspended Solids (SS)		1	mg/L	10	9	0.0		
HK0718174-063	MPB2 M MF	EA025: Suspended Solids (SS)		1	mg/L	11	13	14.7		
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 560696)						·		
HK0718174-073	IMO2 S MF	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0		
HK0718174-095	C1 (NM3) B MF	EA025: Suspended Solids (SS)		1	mg/L	18	17	0.0		

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	ties (QCLot: 560693)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 560694)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 560695)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 560696)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		

### **ALS Laboratory Group**

**ANALYICAL CHEMISTRY & TESTING SERVICES** 



#### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718175

Address : 21/F, LINCOLN HOUSE. Address : 11/F, Chung Shun Knitting Centre.

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Facsimile : 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 18 Dec 2007

FACILITY

Order number : ---- Date of issue : 21 Dec 2007

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 HK0718175 supersedes any previous reports with this reference. The completion date of analysis is 21 Dec 2007. 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 HK0718175: 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.

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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.

Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718175



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 561449)						
HK0718175-001	MPSME	EA025: Suspended Solids (SS)		1	mg/L	6	7	18.4
HK0718175-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 561450)						
HK0718175-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0
HK0718175-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 561451)						
HK0718175-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
HK0718175-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	5	4	0.0
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 561452)						·
HK0718175-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	18	18	0.0
HK0718175-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	8	9	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
•					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561449)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 561450)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561451)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 561452)		,	•							
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.0		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718376
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Telephone : 2271 3000 Telephone : +852 2610 1044
Facsimile : 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 19 Dec 2007

FACILITY

Order number : ---- Date of issue : 24 Dec 2007

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 HK0718376 supersedes any previous reports with this reference. The completion date of analysis is 21 Dec 2007. 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 HK0718376 : 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.

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Signatory Position Authorised results for:-

Fung Lim Chee, Richard General Manager Inorganics

ALS Laboratory Group
Trading Name: ALS Technichem (HK) Pty Ltd

Client : ERM HONG KONG

Work Order HK0718376



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results						
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)		
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 561464)								
HK0718376-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	11	12	15.4		
HK0718376-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	16.4		
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 561465)								
HK0718376-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	7	8	0.0		
HK0718376-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0		
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 561466)								
HK0718376-058	MPB1 M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0		
HK0718376-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0		
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 561467)								
HK0718376-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0		
HK0718376-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	6	0.0		

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561464)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561465)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561466)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 561467)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718409

Address : 21/F, LINCOLN HOUSE. Address : 11/F,. Chung Shun Knitting Centre.

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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 20 Dec 2007

FACILITY

Order number : ---- Date of issue : 24 Dec 2007

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 HK0718409 supersedes any previous reports with this reference. The completion date of analysis is 24 Dec 2007. 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 HK0718409: 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718409



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56210	7)						
HK0718409-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
HK0718409-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56210	8)						
HK0718409-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	5	6	0.0
HK0718409-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	4	3	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56210	9)						
HK0718409-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0718409-068	IMO1 S DUP MF	EA025: Suspended Solids (SS)		1	mg/L	4	6	19.8
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56211	0)						·
HK0718409-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0718409-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 562107)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 562108)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	104		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 562109)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 562110)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	101		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES

2723 5660



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718428
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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 21 Dec 2007

FACILITY

Order number : ---- Date of issue : 28 Dec 2007

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 HK0718428 supersedes any previous reports with this reference. The completion date of analysis is 24 Dec 2007. 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 HK0718428 : 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718428



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56219	14)									
HK0718428-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	14	15	10.4			
HK0718428-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	24	22	6.2			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56219	95)									
HK0718428-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	14	13	0.0			
HK0718428-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56219	(6)									
HK0718428-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	6	7	0.0			
HK0718428-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	4	5	0.0			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56219	7)									
HK0718428-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0			
HK0718428-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0			

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	Os (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Propert	ties (QCLot: 562194)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115			
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562195)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115			
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562196)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562197)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115			

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES

2723 5660



### **CERTIFICATE OF ANALYSIS**

Client **ERM HONG KONG** : ALS Technichem (HK) Pty Ltd Laboratory Page : 1 of 4

MS KAREN LUI Work Order Contact Contact : Alice Wong HK0718519 Address : 21/F. LINCOLN HOUSE. Address : 11/F., Chung Shun Knitting Centre.

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Facsimile Facsimile : EM&A FOR THE PERMANENT AVIATION FUEL · 22 Dec 2007 Project Quote number Date received

**FACILITY** 

· 28 Dec 2007 Date of issue Order number

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

74 Site Analysed

+852 2610 2021

### **Report Comments**

E-mail

This report for ALS Technichem (HK) Pty Ltd work order reference HK0718519 supersedes any previous reports with this reference. The completion date of analysis is 27 Dec 2007. 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 HK0718519: 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718519



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56299	5)						
HK0718519-002	MP S DUP ME	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0718519-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56299	6)						
HK0718519-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	5	5	0.0
HK0718519-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56299	7)						
HK0718519-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	4	3	0.0
HK0718519-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56299	8)						
HK0718519-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	4	4	0.0
HK0718519-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	3	4	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	9s (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562995)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.5		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562996)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562997)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 562998)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718587

Address : 21/F, LINCOLN HOUSE. Address : 11/F,. Chung Shun Knitting Centre.

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

ISLAND EAST, HONG KONG Kwai Chung, N.T., Hong Kong

Telephone : 2271 3000 Telephone : +852 2610 1044
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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 23 Dec 2007

FACILITY

Order number · --- Date of issue · 28 Dec 2007

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 HK0718587 supersedes any previous reports with this reference. The completion date of analysis is 27 Dec 2007. 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 HK0718587: 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.

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of Hong Kong. Chapter 553. Section 6.

Signatory Position Authorised results for:-

Fung Lim Chee, Richard General Manager Inorganics

ALS Laboratory Group Trading Name: ALS Technichem (HK) Pty Ltd

Client : ERM HONG KONG

Work Order HK0718587



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56300	14)						
HK0718587-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	12	12	0.0
HK0718587-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	9	16.5
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56300	95)						
HK0718587-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	12	13	0.0
HK0718587-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	10	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56300	16)						
HK0718587-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	9	10	0.0
HK0718587-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56300	(8)						
HK0718587-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	10	9	0.0
HK0718587-100	C3 (NM6) M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	12	13	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 563004)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 563005)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 563006)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 563008)			·							
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718588
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Telephone : 2271 3000 Telephone : +852 2610 1044
Facsimile : 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 24 Dec 2007

FACILITY

Order number : ---- Date of issue : 31 Dec 2007

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 HK0718588 supersedes any previous reports with this reference. The completion date of analysis is 28 Dec 2007. 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 HK0718588: 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718588



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 563410)									
HK0718588-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	32	31	3.8			
HK0718588-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	16	16	0.0			
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 563411)									
HK0718588-022	IMO1 M DUP ME	EA025: Suspended Solids (SS)		1	mg/L	17	18	0.0			
HK0718588-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	14	13	0.0			
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 563412)									
HK0718588-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	18	17	0.0			
HK0718588-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	16	15	8.1			
EA/ED: Physical and A	ggregate Properties (QC Lot:	: 563413)									
HK0718588-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	16	16	0.0			
HK0718588-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	11	12	0.0			

Matrix Type: WATER			Method Blank (MB	) Results		Single Co	ntrol Spike (SCS) and D	uplicate Con	trol Spike (DCS	6) Results	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Propert	ies (QCLot: 563410)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 563411)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.0		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 563412)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	101		85	115		
EA/ED: Physical and Aggregate Propert	ies (QCLot: 563413)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718589

Address : 21/F, LINCOLN HOUSE. Address : 11/F,, Chung Shun Knitting Centre.

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Telephone : 2271 3000 Telephone : +852 2610 1044
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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 25 Dec 2007

FACILITY

Order number : ---- Date of issue : 2 Jan 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 HK0718589 supersedes any previous reports with this reference. The completion date of analysis is 31 Dec 2007. 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 HK0718589 : 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718589



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and A	ggregate Properties (QC Lot:	563416)						
HK0718589-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	21	19	7.7
HK0718589-012	MPB1 B DUP ME	EA025: Suspended Solids (SS)		1	mg/L	24	27	12.6
EA/ED: Physical and A	ggregate Properties (QC Lot:	563417)						
HK0718589-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	17	15	11.1
HK0718589-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	12	12.6
EA/ED: Physical and A	ggregate Properties (QC Lot:	563418)						
HK0718589-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	19	18	0.0
HK0718589-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	18	19	0.0
EA/ED: Physical and A	ggregate Properties (QC Lot:	563419)		•				
HK0718589-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	17	16	0.0
HK0718589-100	C3 (NM6) M DUP MF	EA025: Suspended Solids (SS)		1	mg/L	11	11	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
• •					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 563416)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	89.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 563417)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 563418)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	101		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 563419)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718590
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ISLAND EAST, HONG KONG

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Telephone : 2271 3000 Telephone : +852 2610 1044
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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : --- Date received : 26 Dec 2007

FACILITY

Order number : ---- Date of issue : 2 Jan 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 HK0718590 supersedes any previous reports with this reference. The completion date of analysis is 2 Jan 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 HK0718590 : 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.

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approval from ALS Technichem (HK) Pty Ltd.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718590



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56342	1)						
HK0718590-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	24	25	0.0
HK0718590-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	17	16	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56342	2)						
HK0718590-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	9	8	14.0
HK0718590-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	12	12	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56342	3)						
HK0718590-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	22	23	4.8
HK0718590-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56342	4)						
HK0718590-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	15	15	0.0
HK0718590-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	11	11	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	Os (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Propert	ties (QCLot: 563421)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115			
EA/ED: Physical and Aggregate Propert	ties (QCLot: 563422)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115			
EA/ED: Physical and Aggregate Propert	ties (QCLot: 563423)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			
EA/ED: Physical and Aggregate Propert	ties (QCLot: 563424)										·	
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115			

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES

2723 5660



#### **CERTIFICATE OF ANALYSIS**

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

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718679

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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 27 Dec 2007

FACILITY

Order number : ---- Date of issue : 2 Jan 2008

C-O-C number : ---- No. of samples - Received : 76

Site : --- - Analysed : 76

+852 2610 2021

### **Report Comments**

E-mail

Facsimile

This report for ALS Technichem (HK) Pty Ltd work order reference HK0718679 supersedes any previous reports with this reference. The completion date of analysis is 2 Jan 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 HK0718679 : 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.

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Signatory Position Authorised results for:-

Fung Lim Chee, Richard General Manager Inorganics

ALS Laboratory Group
Trading Name: ALS Technichem (HK) Pty Ltd

Client : ERM HONG KONG

Work Order HK0718679



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56458	35)						
HK0718679-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	12	14	19.7
HK0718679-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56458	36)			•			
HK0718679-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	22	21	0.0
HK0718679-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	15	15	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56458	37)						
HK0718679-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	19	18	0.0
HK0718679-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	12	12	0.0
EA/ED: Physical and Ag	gregate Properties (QC Lot: 56458	38)		·				
HK0718679-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	56	52	6.6
HK0718679-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	22	24	6.4

Matrix Type: WATER			Method Blank (MB	ank (MB) Results Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						S) Results	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPD	9s (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properti	ies (QCLot: 564585)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
EA/ED: Physical and Aggregate Properti	ies (QCLot: 564586)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.0		85	115		
EA/ED: Physical and Aggregate Properti	ies (QCLot: 564587)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		
EA/ED: Physical and Aggregate Properti	ies (QCLot: 564588)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



### **CERTIFICATE OF ANALYSIS**

Client: ERM HONG KONG Laboratory: ALS Technichem (HK) Pty Ltd Page: 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718680
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Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 28 Dec 2007

FACILITY

Order number : ---- Date of issue : 3 Jan 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 HK0718680 supersedes any previous reports with this reference. The completion date of analysis is 1 Jan 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 HK0718680 : 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718680



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 564594)									
HK0718680-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	11	10	0.0			
HK0718680-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	10	12	11.6			
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 564595)									
HK0718680-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	14	15	8.2			
HK0718680-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	11	10	0.0			
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 564596)									
HK0718680-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	16	15	0.0			
HK0718680-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	16	16	0.0			
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 564597)									
HK0718680-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	30	32	6.8			
HK0718680-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	22	21	0.0			

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564594)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564595)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564596)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.0		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564597)			-							
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		

### **ALS Laboratory Group**

ANALYICAL 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 : Alice Wong Work Order : HK0718681

Address : 21/F, LINCOLN HOUSE. Address : 11/F, Chung Shun Knitting Centre.

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Kwai Chung, N.T., Hong Kong

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Facsimile : 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 29 Dec 2007

FACILITY

Order number : ---- Date of issue : 3 Jan 2008

C-O-C number : ---- No. of samples - Received : 76

Site : ---- - Analysed : 76

### **Report Comments**

This report for ALS Technichem (HK) Pty Ltd work order reference HK0718681 supersedes any previous reports with this reference. The completion date of analysis is 3 Jan 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 HK0718681 : 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.

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Signatory Position Authorised results for:-

. 5015

Client : ERM HONG KONG

Work Order HK0718681



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and Ago	regate Properties (QC Lot: 56459	8)									
HK0718681-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	15	16	0.0			
HK0718681-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	14	15	9.3			
EA/ED: Physical and Ago	gregate Properties (QC Lot: 56459	9)									
HK0718681-024	IMO1 B DUP ME	EA025: Suspended Solids (SS)		1	mg/L	44	40	8.7			
HK0718681-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	9	8	11.5			
EA/ED: Physical and Ago	regate Properties (QC Lot: 56460	0)									
HK0718681-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	10	11	0.0			
HK0718681-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	9	9	0.0			
EA/ED: Physical and Ago	gregate Properties (QC Lot: 56460	1)									
HK0718681-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0			
HK0718681-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	14	15	10.4			

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564598)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	99.5		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564599)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.5		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564600)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564601)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115		

### **ALS Laboratory Group**

: EM&A FOR THE PERMANENT AVIATION FUEL

ANALYICAL CHEMISTRY & TESTING SERVICES



· 30 Dec 2007

Date received

### **CERTIFICATE OF ANALYSIS**

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

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718776
Address : 21/F, LINCOLN HOUSE. Address : 11/F,. Chung Shun Knitting Centre.

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Telephone : 2271 3000 Telephone : +852 2610 1044

Facsimile : 2723 5660 Facsimile : +852 2610 2021

Quote number

FACILITY

Order number : ---- Date of issue : 7 Jan 2008

C-O-C number : ---- No. of samples - Received : **76** 

Site : ---- - Analysed : 76

### **Report Comments**

Project

This report for ALS Technichem (HK) Pty Ltd work order reference HK0718776 supersedes any previous reports with this reference. The completion date of analysis is 3 Jan 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 HK0718776 : 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.

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Signatory Position Authorised results for:-

Fung Lim Chee, Richard General Manager Inorganics

ALS Laboratory Group
Trading Name: ALS Technichem (HK) Pty Ltd

Client : ERM HONG KONG

Work Order HK0718776



### **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 5646	02)									
HK0718776-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	34	34	0.0			
HK0718776-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	10	18.5			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 5646	03)									
HK0718776-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	23	23	0.0			
HK0718776-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	9	10	11.2			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 5646	04)									
HK0718776-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	13	13	0.0			
HK0718776-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	19	19	0.0			
EA/ED: Physical and Ag	gregate Properties (QC Lot: 5646	05)						·			
HK0718776-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	25	26	4.0			
HK0718776-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	16	14	6.8			

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564602)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	94.0		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564603)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115		
EA/ED: Physical and Aggregate Proper	rties (QCLot: 564604)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.5		85	115		
EA/ED: Physical and Aggregate Proper	ties (QCLot: 564605)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	93.0		85	115		

### **ALS Laboratory Group**

ANALYICAL CHEMISTRY & TESTING SERVICES



#### **CERTIFICATE OF ANALYSIS**

Client : ERM HONG KONG Laboratory : ALS Technichem (HK) Pty Ltd Page : 1 of 4

Contact : MS KAREN LUI Contact : Alice Wong Work Order : HK0718949
Address : 21/F, LINCOLN HOUSE. Address : 11/F,. Chung Shun Knitting Centre.

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Facsimile : 2723 5660 Facsimile : +852 2610 2021

Project : EM&A FOR THE PERMANENT AVIATION FUEL Quote number : ---- Date received : 31 Dec 2007

FACILITY

Order number ---- Date of issue --- 4 Jan 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 HK0718949 supersedes any previous reports with this reference. The completion date of analysis is 4 Jan 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 HK0718949 : 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.

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Signatory Position Authorised results for:-

Client : ERM HONG KONG

Work Order HK0718949



## **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Agg	regate Properties (QC Lot: 565639	9)						
HK0718949-001	MP S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
HK0718949-013	MPB2 S ME	EA025: Suspended Solids (SS)		1	mg/L	8	8	0.0
EA/ED: Physical and Agg	regate Properties (QC Lot: 565640	0)						
HK0718949-023	IMO1 B ME	EA025: Suspended Solids (SS)		1	mg/L	6	6	0.0
HK0718949-045	C2 (NM5) M ME	EA025: Suspended Solids (SS)		1	mg/L	10	8	20.0
EA/ED: Physical and Agg	regate Properties (QC Lot: 56564	1)						
HK0718949-057	MPB1 M MF	EA025: Suspended Solids (SS)		1	mg/L	5	6	20.0
HK0718949-067	IMO1 S MF	EA025: Suspended Solids (SS)		1	mg/L	7	7	0.0
EA/ED: Physical and Agg	regate Properties (QC Lot: 565642	2)						
HK0718949-077	IMO2 B MF	EA025: Suspended Solids (SS)		1	mg/L	12	11	0.0
HK0718949-099	C3 (NM6) M MF	EA025: Suspended Solids (SS)		1	mg/L	8	7	0.0

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Os (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Proper	ties (QCLot: 565639)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	90.5		85	115			
EA/ED: Physical and Aggregate Proper	ties (QCLot: 565640)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115			
EA/ED: Physical and Aggregate Proper	ties (QCLot: 565641)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	107		85	115			
EA/ED: Physical and Aggregate Proper	ties (QCLot: 565642)											
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	100		85	115			