



CERTIFICATE OF ANALYSIS

<i>Client</i>	: ERM HONG KONG	<i>Laboratory</i>	: ALS Technichem (HK) Pty Ltd	<i>Page</i>	: 1 of 6
<i>Contact</i>	: MS KAREN LUI	<i>Contact</i>	: Alice Wong	<i>Work Order</i>	: HK0802490
<i>Address</i>	: 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	<i>Address</i>	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
<i>E-mail</i>	: Karen.Lui@erm.com	<i>E-mail</i>	: Alice.Wong@alsenviro.com		
<i>Telephone</i>	: 2271 3000	<i>Telephone</i>	: +852 2610 1044		
<i>Facsimile</i>	: 2723 5660	<i>Facsimile</i>	: +852 2610 2021		
<i>Project</i>	: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY	<i>Quote number</i>	: ---	<i>Date received</i>	: 20 Feb 2008
<i>Order number</i>	: ---			<i>Date of issue</i>	: 14 Mar 2008
<i>C-O-C number</i>	: ---			<i>No. of samples</i>	- Received : 18
<i>Site</i>	: ---				- Analysed : 18

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0802490 supersedes any previous reports with this reference. The completion date of analysis is 29 Feb 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 HK0802490 : **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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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 Hona Kona. Chapter 553. Section 6.

<u>Signatory</u>	<u>Position</u>	<u>Authorised results for:-</u>
Anh Ngoc Huynh	Senior Chemist	Organics



Analytical Results

				Client Sample ID :	MPB1 ME	MPB1 ME DUP	MPB2 ME	MPB2 ME DUP	MP ME
				Laboratory Sample ID :	HK0802490-001	HK0802490-002	HK0802490-003	HK0802490-004	HK0802490-005
				Sample Date / Time :	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]
Submatrix: MARINE WATER									
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	104	116	120	114	108	
Tetrachlorometaxylene	877-09-8	0.1	%	122	85.2	111	116	107	
Dibutylchloroendate	1770-80-5	0.1	%	83.2	90.9	86.7	91.1	89.2	



Analytical Results

				Client Sample ID :	MP ME DUP	C2 (NM5) ME	C2 (NM5) ME DUP	MPB1 MF	MPB1 MF DUP
				Laboratory Sample ID :	HK0802490-006	HK0802490-007	HK0802490-008	HK0802490-009	HK0802490-010
				Sample Date / Time :	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]
Submatrix: MARINE WATER									
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	122	116	117	111	101	
Tetrachlorometaxylene	877-09-8	0.1	%	112	89.5	82.6	91.1	61.6	
Dibutylchlorendate	1770-80-5	0.1	%	94.0	81.6	79.8	91.3	67.5	



Analytical Results

				Client Sample ID :	MPB2 MF	MPB2 MF DUP	MP MF	MP MF DUP	C1 (NM3) MF
				Laboratory Sample ID :	HK0802490-011	HK0802490-012	HK0802490-013	HK0802490-014	HK0802490-015
				Sample Date / Time :	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]
Method: Analysis Description	CAS number	LOR	Units						
Submatrix: MARINE WATER									
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	128	129	99.3	106	82.4	
Tetrachlorometaxylene	877-09-8	0.1	%	60.6	63.0	60.7	89.1	99.2	
Dibutylchlorendate	1770-80-5	0.1	%	93.2	93.5	97.1	105	104	



Analytical Results

				Client Sample ID :	C1 (NM3) MF DUP	C3 (NM6) MF	C3 (NM6) MF DUP		
				Laboratory Sample ID :	HK0802490-016	HK0802490-017	HK0802490-018		
				Sample Date / Time :	[20 Feb 2008]	[20 Feb 2008]	[20 Feb 2008]		
				Submatrix: MARINE WATER					
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<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		
PCB 28	7012-37-5	0.01	µg/L	<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		
PCB 44	41464-39-5	0.01	µg/L	<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		
PCB 101	37680-73-2	0.01	µg/L	<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		
PCB 149	38380-04-0	0.01	µg/L	<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		
PCB 153	35065-27-1	0.01	µg/L	<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		
PCB 126	57465-28-8	0.01	µg/L	<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		
PCB 128	38380-07-3	0.01	µg/L	<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		
PCB 180	35065-29-3	0.01	µg/L	<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		
PCB 170	35065-30-6	0.01	µg/L	<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		
EP-065B: Organochlorine Pesticides									
4,4'-DDT	50-29-3	0.01	µg/L	<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		
4,4'-DDD	72-54-8	0.01	µg/L	<0.01	<0.01	<0.01	<0.01		
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	116	100	104			
Tetrachlorometaxylene	877-09-8	0.1	%	77.4	76.9	82.5			
Dibutylchloroendate	1770-80-5	0.1	%	106	104	111			



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

Matrix Type: WATER

Method: Analysis Description		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
		CAS number	LOR	Units	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
							SCS	DCS	Low	High	Value	Control Limit
EP-065A: PCB Single Congeners (QCLot: 601113)												
PCB 8	34883-43-7	0.01	µg/L	<0.01	100 µg/L	72.8	----	50	130	----	----	
PCB 18	37680-65-2	0.01	µg/L	<0.01	100 µg/L	75.7	----	50	130	----	----	
PCB 28	7012-37-5	0.01	µg/L	<0.01	100 µg/L	76.6	----	50	130	----	----	
PCB 52	35693-99-3	0.01	µg/L	<0.01	100 µg/L	71.2	----	50	130	----	----	
PCB 44	41464-39-5	0.01	µg/L	<0.01	100 µg/L	72.1	----	50	130	----	----	
PCB 66	32598-10-0	0.01	µg/L	<0.01	100 µg/L	72.4	----	50	130	----	----	
PCB 101	37680-73-2	0.01	µg/L	<0.01	100 µg/L	69.8	----	50	130	----	----	
PCB 77	32598-13-3	0.01	µg/L	<0.01	100 µg/L	71.1	----	50	130	----	----	
PCB 149	38380-04-0	0.01	µg/L	<0.01	100 µg/L	68.4	----	50	130	----	----	
PCB 118	31508-00-6	0.01	µg/L	<0.01	100 µg/L	69.9	----	50	130	----	----	
PCB 153	35065-27-1	0.01	µg/L	<0.01	100 µg/L	104	----	50	130	----	----	
PCB 105	32598-14-4	0.01	µg/L	<0.01	100 µg/L	74.3	----	50	130	----	----	
PCB 126	57465-28-8	0.01	µg/L	<0.01	100 µg/L	70.8	----	50	130	----	----	
PCB 187	52663-68-0	0.01	µg/L	<0.01	100 µg/L	64.3	----	50	130	----	----	
PCB 128	38380-07-3	0.01	µg/L	<0.01	100 µg/L	72.9	----	50	130	----	----	
PCB 156	38380-08-4	0.01	µg/L	<0.01	100 µg/L	74.4	----	50	130	----	----	
PCB 180	35065-29-3	0.01	µg/L	<0.01	100 µg/L	72.0	----	50	130	----	----	
PCB 169	60044-26-0	0.01	µg/L	<0.01	100 µg/L	72.7	----	50	130	----	----	
PCB 170	35065-30-6	0.01	µg/L	<0.01	100 µg/L	71.6	----	50	130	----	----	
PCB 195	52663-78-2	0.01	µg/L	<0.01	100 µg/L	74.0	----	50	130	----	----	
EP-065B: Organochlorine Pesticides (QCLot: 601113)												
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	----	----	

Surrogate Control Limits

Submatrix Type: MARINE WATER

Method: Analysis Description	Units	Lower Limit	Upper Limit
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate			
Decachlorobiphenyl	%	50	130
Tetrachlorometaxylene	%	50	130
Dibutylchloredate	%	50	130



CERTIFICATE OF ANALYSIS

<i>Client</i>	: ERM HONG KONG	<i>Laboratory</i>	: ALS Technichem (HK) Pty Ltd	<i>Page</i>	: 1 of 6
<i>Contact</i>	: MS KAREN LUI	<i>Contact</i>	: Alice Wong	<i>Work Order</i>	: HK0803702
<i>Address</i>	: 21/F, LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, QUARRY BAY HONG KONG	<i>Address</i>	: 11/F., Chung Shun Knitting Centre, 1 - 3 Wing Yip Street, Kwai Chung, N.T., Hong Kong		
<i>E-mail</i>	: Karen.Lui@erm.com	<i>E-mail</i>	: Alice.Wong@alsenviro.com		
<i>Telephone</i>	: 2271 3000	<i>Telephone</i>	: +852 2610 1044		
<i>Facsimile</i>	: 2723 5660	<i>Facsimile</i>	: +852 2610 2021		
<i>Project</i>	: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY	<i>Quote number</i>	: ---	<i>Date received</i>	: 10 Mar 2008
<i>Order number</i>	: ---			<i>Date of issue</i>	: 2 Apr 2008
<i>C-O-C number</i>	: ---			<i>No. of samples</i>	- Received : 18
<i>Site</i>	: ---				- Analysed : 18

Report Comments

This report for ALS Technichem (HK) Pty Ltd work order reference HK0803702 supersedes any previous reports with this reference. The completion date of analysis is 17 Mar 2008. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number. LOR = Limit of reporting.

Specific comments for Work Order HK0803702 : **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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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 Hona Kona. Chapter 553. Section 6.

<u>Signatory</u>	<u>Position</u>	<u>Authorised results for:-</u>
Anh Ngoc Huynh	Senior Chemist	Organics



Analytical Results

				Client Sample ID :	MPB1 ME	MPB1 ME DUP	MPB2 ME	MPB2 ME DUP	MP ME
				Laboratory Sample ID :	HK0803702-001	HK0803702-002	HK0803702-003	HK0803702-004	HK0803702-005
				Sample Date / Time :	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]
Submatrix: MARINE WATER									
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	100	101	106	100	100	
Tetrachlorometaxylene	877-09-8	0.1	%	110	108	97.0	116	106	
Dibutylchloroendate	1770-80-5	0.1	%	115	112	94.9	112	94.7	



Analytical Results

				Client Sample ID :	MP ME DUP	C2 (NM5) ME	C2 (NM5) ME DUP	MPB1 MF	MPB1 MF DUP
				Laboratory Sample ID :	HK0803702-006	HK0803702-007	HK0803702-008	HK0803702-009	HK0803702-010
				Sample Date / Time :	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]
Submatrix: MARINE WATER									
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	80.3	89.7	90.3	115	89.0	
Tetrachlorometaxylene	877-09-8	0.1	%	83.7	89.6	82.8	87.6	98.6	
Dibutylchloroendate	1770-80-5	0.1	%	84.9	80.5	89.3	108	96.6	



Analytical Results

				Client Sample ID :	MPB2 MF	MPB2 MF DUP	MP MF	MP MF DUP	C1 (NM3) MF
				Laboratory Sample ID :	HK0803702-011	HK0803702-012	HK0803702-013	HK0803702-014	HK0803702-015
				Sample Date / Time :	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]
Submatrix: MARINE WATER									
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<0.01	<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	<0.01
PCB 28	7012-37-5	0.01	µg/L	<0.01	<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	<0.01
PCB 44	41464-39-5	0.01	µg/L	<0.01	<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	<0.01
PCB 101	37680-73-2	0.01	µg/L	<0.01	<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	<0.01
PCB 149	38380-04-0	0.01	µg/L	<0.01	<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	<0.01
PCB 153	35065-27-1	0.01	µg/L	<0.01	<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	<0.01
PCB 126	57465-28-8	0.01	µg/L	<0.01	<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	<0.01
PCB 128	38380-07-3	0.01	µg/L	<0.01	<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	<0.01
PCB 180	35065-29-3	0.01	µg/L	<0.01	<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	<0.01
PCB 170	35065-30-6	0.01	µg/L	<0.01	<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	<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	<0.01
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	<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	<0.01
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate								Surrogate control limits listed at end of this report.	
Decachlorobiphenyl	2051-24-3	0.1	%	88.4	102	89.8	87.0	119	
Tetrachlorometaxylene	877-09-8	0.1	%	83.1	112	92.5	94.0	93.4	
Dibutylchloroendate	1770-80-5	0.1	%	114	96.3	112	109	100	



Analytical Results

				Client Sample ID :	C1 (NM3) MF DUP	C3 (NM6) MF	C3 (NM6) MF DUP		
				Laboratory Sample ID :	HK0803702-016	HK0803702-017	HK0803702-018		
				Sample Date / Time :	[10 Mar 2008]	[10 Mar 2008]	[10 Mar 2008]		
				Submatrix: MARINE WATER					
Method: Analysis Description	CAS number	LOR	Units						
EP-065A: PCB Single Congeners									
PCB 8	34883-43-7	0.01	µg/L	<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		
PCB 28	7012-37-5	0.01	µg/L	<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		
PCB 44	41464-39-5	0.01	µg/L	<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		
PCB 101	37680-73-2	0.01	µg/L	<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		
PCB 149	38380-04-0	0.01	µg/L	<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		
PCB 153	35065-27-1	0.01	µg/L	<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		
PCB 126	57465-28-8	0.01	µg/L	<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		
PCB 128	38380-07-3	0.01	µg/L	<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		
PCB 180	35065-29-3	0.01	µg/L	<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		
PCB 170	35065-30-6	0.01	µg/L	<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		
EP-065B: Organochlorine Pesticides									
4,4'-DDT	50-29-3	0.01	µg/L	<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		
4,4'-DDD	72-54-8	0.01	µg/L	<0.01	<0.01	<0.01	<0.01		
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate									
Surrogate control limits listed at end of this report.									
Decachlorobiphenyl	2051-24-3	0.1	%	112	87.9	106			
Tetrachlorometaxylene	877-09-8	0.1	%	105	85.8	109			
Dibutylchlorendate	1770-80-5	0.1	%	112	90.7	100			



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

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
Method: Analysis Description	CAS number	LOR	Units	Result	Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
					Concentration	SCS	DCS	Low	High	Value	Control Limit
EP-065A: PCB Single Congeners (QCLot: 613974)											
PCB 8	34883-43-7	0.01	µg/L	<0.01	100 µg/L	82.6	----	50	130	----	----
PCB 18	37680-65-2	0.01	µg/L	<0.01	100 µg/L	99.4	----	50	130	----	----
PCB 28	7012-37-5	0.01	µg/L	<0.01	100 µg/L	93.6	----	50	130	----	----
PCB 52	35693-99-3	0.01	µg/L	<0.01	100 µg/L	90.1	----	50	130	----	----
PCB 44	41464-39-5	0.01	µg/L	<0.01	100 µg/L	96.1	----	50	130	----	----
PCB 66	32598-10-0	0.01	µg/L	<0.01	100 µg/L	84.0	----	50	130	----	----
PCB 101	37680-73-2	0.01	µg/L	<0.01	100 µg/L	96.8	----	50	130	----	----
PCB 77	32598-13-3	0.01	µg/L	<0.01	100 µg/L	87.2	----	50	130	----	----
PCB 149	38380-04-0	0.01	µg/L	<0.01	100 µg/L	87.1	----	50	130	----	----
PCB 118	31508-00-6	0.01	µg/L	<0.01	100 µg/L	87.2	----	50	130	----	----
PCB 153	35065-27-1	0.01	µg/L	<0.01	100 µg/L	87.6	----	50	130	----	----
PCB 105	32598-14-4	0.01	µg/L	<0.01	100 µg/L	86.5	----	50	130	----	----
PCB 126	57465-28-8	0.01	µg/L	<0.01	100 µg/L	88.9	----	50	130	----	----
PCB 187	52663-68-0	0.01	µg/L	<0.01	100 µg/L	87.7	----	50	130	----	----
PCB 128	38380-07-3	0.01	µg/L	<0.01	100 µg/L	93.7	----	50	130	----	----
PCB 156	38380-08-4	0.01	µg/L	<0.01	100 µg/L	86.6	----	50	130	----	----
PCB 180	35065-29-3	0.01	µg/L	<0.01	100 µg/L	97.5	----	50	130	----	----
PCB 169	60044-26-0	0.01	µg/L	<0.01	100 µg/L	100	----	50	130	----	----
PCB 170	35065-30-6	0.01	µg/L	<0.01	100 µg/L	81.7	----	50	130	----	----
PCB 195	52663-78-2	0.01	µg/L	<0.01	100 µg/L	81.9	----	50	130	----	----
EP-065B: Organochlorine Pesticides (QCLot: 613974)											
4.4'-DDT	50-29-3	0.01	µg/L	<0.01	100 µg/L	Not Determined	----	50	130	----	----
4.4'-DDE	72-55-9	0.01	µg/L	<0.01	100 µg/L	Not Determined	----	50	130	----	----
4.4'-DDD	72-54-8	0.01	µg/L	<0.01	100 µg/L	Not Determined	----	50	130	----	----

Surrogate Control Limits

Submatrix Type: MARINE WATER

Method: Analysis Description	Units	Lower Limit	Upper Limit
EP-065S: PCB Congeners and Organochlorine Pesticides Surrogate			
Decachlorobiphenyl	%	50	130
Tetrachlorometaxylene	%	50	130
Dibutylchloredate	%	50	130



CERTIFICATE OF ANALYSIS

CONTACT: MS KAREN LUI
CLIENT: ERM HONG KONG
ADDRESS: 21/F., LINCOLN HOUSE,
979 KING'S ROAD, TAIKOO PLACE,
ISLAND EAST, HONG KONG
PROJECT: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY

Batch: HK0802490
LABORATORY: HONG KONG
DATE RECEIVED: 20/02/2008
DATE OF ISSUE: 14/03/2008
SAMPLE TYPE: WATER
No. of SAMPLES: 18

COMMENTS

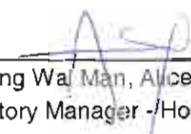
Sample(s) were picked up from client by ALS Technichem (HK) staff in a chilled condition.
PAHs was subcontracted and tested by ALS Sydney.
ALS Sydney details report was attached. The attached report contains a total of 14 pages.

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: 852-2610 1044
Fax: 852-2610 2021
Email: hongkong@alsenviro.com


Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

Other ALS Environmental Laboratories

AUSTRALIA

Brisbane Hong Kong
Melbourne Singapore
Sydney Kuala Lumpur
Newcastle Bogor

AMERICAS

Vancouver
Santiago
Amtofagasta
Lima

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Abbreviations: % SPK REC denotes percentage spike recovery
CHK denotes duplicate check sample
LOR denotes limit of reporting
LCS % REC denotes Laboratory Control Sample percentage recovery



CERTIFICATE OF ANALYSIS

Batch: HK0802490
Date of Issue: 14/03/2008
Client: ERM HONG KONG
Client Reference: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY

ALS Sydney report is attached for the analysis of PAHs in water.
This attached report contains a total of 14 pages.

Sample Details

<i>ALS Lab ID</i>	<i>ALS Sydney Lab ID</i>	<i>Client's Sample ID</i>	<i>Sampling Date</i>
HK0802490-1	ES0802671-1	MPB1 ME	20/02/2008
HK0802490-2	ES0802671-2	MPB1 ME DUP	20/02/2008
HK0802490-3	ES0802671-3	MPB2 ME	20/02/2008
HK0802490-4	ES0802671-4	MPB2 ME DUP	20/02/2008
HK0802490-5	ES0802671-5	MP ME	20/02/2008
HK0802490-6	ES0802671-6	MP ME DUP	20/02/2008
HK0802490-7	ES0802671-7	C2(NM5) ME	20/02/2008
HK0802490-8	ES0802671-8	C2(NM5) ME DUP	20/02/2008
HK0802490-9	ES0802671-9	MPB1 MF	20/02/2008
HK0802490-10	ES0802671-10	MPB1 MF DUP	20/02/2008
HK0802490-11	ES0802671-11	MPB2 MF	20/02/2008
HK0802490-12	ES0802671-12	MPB2 MF DUP	20/02/2008
HK0802490-13	ES0802671-13	MP MF	20/02/2008
HK0802490-14	ES0802671-14	MP MF DUP	20/02/2008
HK0802490-15	ES0802671-15	C1(NM3) MF	20/02/2008
HK0802490-16	ES0802671-16	C1(NM3) MF DUP	20/02/2008
HK0802490-17	ES0802671-17	C3(NM6) MF	20/02/2008
HK0802490-18	ES0802671-18	C3(NM6) MF DUP	20/02/2008



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0802671	Page	: 1 of 8
Client	: ALS TECHNICHEM (HK)	Laboratory	: Environmental Division Sydney
Contact	: MS KERRY YUEN	Contact	: Ashwini Sharma
Address	: 11/F CHUNG SHUN KNITTING CNTR 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: kerry.yuen@alsenviro.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: +852 001585226101044	Telephone	: +61-2-8784 8555
Facsimile	: +852 26102021	Facsimile	: +61-2-8784 8500
Project	: SY 241 07 2007 Blanket Quote - discount by a further 20%	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ---	Date Samples Received	: 28-FEB-2008
C-O-C number	: ---	Issue Date	: 10-MAR-2008
Sampler	: ---	No. of samples received	: 18
Site	: ---	No. of samples analysed	: 18
Quote number	: SY/241/07		

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.

WORLD RECOGNISED ACCREDITATION

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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
PHALAK INTHAKESONE	Organics Co-ordinator	Organics

Page : 3 of 8
Work Order : ES0802671
Client : ALS TECHNICHEM (HK)
Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



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 process purposes. If the sampling time is 0:00 the information was not supplied 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



Analytical Results

Substrate	Client sample ID			HK0802490-1	HK0802490-2	HK0802490-3	HK0802490-4	HK0802490-5
MARINE WATER	Client sampling date / time			20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00
Compound	CAS Number	LOR	Unit	ES0802671-001	ES0802671-002	ES0802671-003	ES0802671-004	ES0802671-005
EP132B: Polynuclear Aromatic Hydrocarbons								
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	207-98-9	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	<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	0.1	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	85-01-3	0.1	µg/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
EP132T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	79.9	80.5	94.4	88.3	88.6
Anthracene-d10	1719-06-8	0.1	%	90.1	80.8	97.2	91.1	91.4
4-Terphenyl-d14	1718-51-0	0.1	%	89.5	81.7	96.4	90.4	91.0

Page : 5 of 8
 Work Order : ES0802671
 Client : ALS TECHNICHEM (HK)
 Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



Analytical Results

Sub-Matrix: MARINE WATER

Compound	CAS Number	LOR	Unit	Client sample ID	Client sample ID	Client sample ID	Client sample ID	Client sample ID
				Client sampling date / time	Client sampling date / time	Client sampling date / time	Client sampling date / time	Client sampling date / time
				HK0802490-6	HK0802490-7	HK0802490-8	HK0802490-9	HK0802490-10
				20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00
				ES0802671-005	ES0802671-007	ES0802671-008	ES0802671-009	ES0802671-010
EP132B: Polynuclear Aromatic Hydrocarbons								
3-Methylcholanthrene	56-49-6	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	<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	0.1	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	µg/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
EP132T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	92.2	77.4	87.1	95.2	88.4
Anthracene-d10	1719-06-8	0.1	%	94.2	81.0	90.0	99.2	90.1
4-Terphenyl-d14	1718-51-0	0.1	%	93.1	81.4	90.3	99.4	95.5

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 Work Order : ES0802671
 Client : ALS TECHNICHEM (HK)
 Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



Analytical Results

Sub-Matrix: MARINE WATER

Compound	CAS Number	LOR	Unit	Client sample ID	Client sample ID	Client sample ID	Client sample ID	Client sample ID
				HK0802490-11	HK0802490-12	HK0802490-13	HK0802490-14	HK0802490-15
				20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00
				ES0802671-011	ES0802671-012	ES0802671-013	ES0802671-014	ES0802671-015
EP132B: Polynuclear Aromatic Hydrocarbons								
3-Methylchoanthrene	56-48-5	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
Benzo(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	<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	0.1	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	µg/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
EP132T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	82.7	84.3	85.2	86.1	81.3
Anthracene-d10	1719-06-8	0.1	%	84.6	86.9	86.1	87.2	81.6
4-Terphenyl-d14	1718-51-0	0.1	%	86.7	88.6	86.4	88.7	83.6

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 Work Order : ES0802671
 Client : ALS TECHNICHEM (HK)
 Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



Analytical Results

Sub-Matrix	MARINE WATER	Client sample ID			HK0802490-16	HK0802490-17	HK0802490-18	---	---
		Client sampling date / time			20-FEB-2008 15:00	20-FEB-2008 15:00	20-FEB-2008 15:00	---	---
Compound	CAS Number	LOD	Unit	ES0802671-016	ES0802671-017	ES0802671-018	---	---	
EP132B: Polynuclear Aromatic Hydrocarbons									
3-Methylcholanthrene	56-48-5	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	---	---	
Benzo(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,i)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	---	---	
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	µg/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	µg/L	<0.1	<0.1	<0.1	---	---	
Naphthalene	91-20-3	0.1	µg/L	<0.1	<0.1	<0.1	---	---	
Perylene	198-55-0	0.1	µg/L	<0.1	<0.1	<0.1	---	---	
Phenanthrene	85-01-8	0.1	µg/L	<0.1	<0.1	<0.1	---	---	
Pyrene	129-00-0	0.1	µg/L	<0.1	<0.1	<0.1	---	---	
EP132T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%	82.8	89.2	80.8	---	---	
Anthracene-d10	1719-06-8	0.1	%	84.4	93.4	81.6	---	---	
4-Terphenyl-d14	1718-51-0	0.1	%	85.8	88.9	84.8	---	---	

Page : 8 of 8
Work Order : ES0802671
Client : ALS TECHNICHEM (HK)
Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



Surrogate Control Limits

Sub-Matrix: MARINE WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP132T: Base/Neutral Extractable Surrogates			
2-Fluorobiphenyl	321-60-8	43	116
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	33	141



Environmental Division

QUALITY CONTROL REPORT

Work Order	: ES0802671	Page	: 1 of 6
Client	: ALS TECHNICHEM (HK)	Laboratory	: Environmental Division Sydney
Contact	: MS KERRY YUEN	Contact	: Ashwini Sharma
Address	: 11/F CHUNG SHUN KNITTING CNTR 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: kerry.yuen@alsenviro.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: +852 001585226101044	Telephone	: +61-2-8784 8555
Facsimile	: +852 26102021	Facsimile	: +61-2-8784 8500
Project	: SY 241 07 2007 Blanket Quote - disount by a further 20%	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: ---	Date Samples Received	: 28-FEB-2008
C-O-C number	: ---	Issue Date	: 10-MAR-2008
Sampler	: ---	No. of samples received	: 18
Order number	: ---	No. of samples analysed	: 18
Quote number	: SY/241/07		

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



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
PHALAK INTHAKESONE	Organics Co-ordinator	Organics

Page : 2 of 6
Work Order : ES0802671
Client : ALS TECHNICHEM (HK)
Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



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.

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

Page : 3 of 6
Work Order : ES0802671
Client : ALS TECHNICHEM (HK)
Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



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.**



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

Method/Compound	CAS Number	LOR	Unit	Method Blank (MB)	Spike Concentration	Laboratory Control Spike (LCS) Report		
				Result		Spike Recovery (%)	Recovery Limits (%)	
						LCS	Low	High
EP132B: Polynuclear Aromatic Hydrocarbons (QCLat: 804431)								
EP132: 3-Methylcholanthrene	56-10-5	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	92.4	65.8	121
EP132: 2-Methylnaphthalene	91-57-6	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	86.5	67.7	112
EP132: 7,12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	85.4	11.6	146
EP132: Acenaphthene	83-32-9	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	88.8	73.2	111
EP132: Acenaphthylene	208-96-8	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	91.1	72.4	112
EP132: Anthracene	120-12-7	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	92.6	73.4	113
EP132: Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	90.2	73.6	114
EP132: Benzo(a)pyrene	50-32-8	0.05	µg/L	<0.05	2 µg/L	87.5	75.2	117
EP132: Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	90.5	71.4	119
EP132: Benzo(e)pyrene	192-97-2	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	91.0	75.3	118
EP132: Benzo(g,h,i)perylene	191-24-2	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	85.6	66.6	121
EP132: Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	91.7	74.8	118
EP132: Chrysene	218-01-9	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	91.4	69.6	120
EP132: Coronene	191-07-1	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	68.4	47.4	131
EP132: Dibenz(a,h)anthracene	53-70-3	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	86.8	71.5	117
EP132: Fluoranthene	206-44-0	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	91.8	74.8	117
EP132: Fluorene	86-73-7	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	93.6	72.9	114
EP132: Indeno(1,2,3-cd)pyrene	193-39-5	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	85.4	67.8	119
EP132: N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	96.1	53.6	131
EP132: Naphthalene	91-20-3	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	86.6	68.3	116

Page : 5 of 6
 Work Order : ES0802671
 Client : ALS TECHNICHEM (HK)
 Project : SY 241 07 2007 Blanket Quote - discount by a further 20%



Sub-Matrix: WATER

Method/Compound	CAS Number	LOD	Unit	Method Blank (MB)	Spike Concentration	Laboratory Control Spike (LCS) Report		
				Report		Spike Recovery (%)	Recovery Limits (%)	
				Result		LCS	Low	High
EP132B: Polynuclear Aromatic Hydrocarbons (QCLat: 654431) - continued								
EP132: Perylene	198-55-0	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	90.2	68	122
EP132: Phenanthrene	85-01-8	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	90.8	74.8	112
EP132: Pyrene	129-00-0	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	93.3	75.1	117



CERTIFICATE OF ANALYSIS

CONTACT:	MS KAREN LUI	Batch:	HK0803702
CLIENT:	ERM HONG KONG	LABORATORY:	HONG KONG
ADDRESS:	21/F., LINCOLN HOUSE, 979 KING'S ROAD, TAIKOO PLACE, ISLAND EAST, HONG KONG	DATE RECEIVED:	10/03/2008
PROJECT:	EM&A FOR THE PERMANENT AVIATION FUEL FACILITY	DATE OF ISSUE:	01/04/2008
		SAMPLE TYPE:	WATER
		No. of SAMPLES:	18

COMMENTS

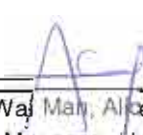
Sample(s) were picked up from client by ALS Technichem (HK) staff in a chilled condition.
PAHs was subcontracted and tested by ALS Sydney.
ALS Sydney details report was attached. The attached report contains a total of 14 pages.

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: 852-2610 1044
Fax: 852-2610 2021
Email: hongkong@alsenviro.com


Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

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Melbourne
Sydney
Newcastle

Hong Kong

Singapore

Kuala Lumpur

Bogor

AMERICAS

Vancouver
Santiago
Amtofagasta
Lima

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Abbreviations: % SPK REC denotes percentage spike recovery

CHK denotes duplicate check sample

LOR denotes limit of reporting

LCS % REC denotes Laboratory Control Sample percentage recovery



CERTIFICATE OF ANALYSIS

Batch: HK0803702
Date of Issue: 01/04/2008
Client: ERM HONG KONG
Client Reference: EM&A FOR THE PERMANENT AVIATION FUEL FACILITY

ALS Sydney report is attached for the analysis of PAHs in water.
This attached report contains a total of 14 pages.

Sample Details

<i>ALS Lab ID</i>	<i>ALS Sydney Lab ID</i>	<i>Client's Sample ID</i>	<i>Sampling Date</i>
HK0803702-1	ES0803795-1	MPB1 ME	10/03/2008
HK0803702-2	ES0803795-2	MPB1 ME DUP	10/03/2008
HK0803702-3	ES0803795-3	MPB2 ME	10/03/2008
HK0803702-4	ES0803795-4	MPB2 ME DUP	10/03/2008
HK0803702-5	ES0803795-5	MP ME	10/03/2008
HK0803702-6	ES0803795-6	MP ME DUP	10/03/2008
HK0803702-7	ES0803795-7	C2(NM5) ME	10/03/2008
HK0803702-8	ES0803795-8	C2(NM5) ME DUP	10/03/2008
HK0803702-9	ES0803795-9	MPB1 MF	10/03/2008
HK0803702-10	ES0803795-10	MPB1 MF DUP	10/03/2008
HK0803702-11	ES0803795-11	MPB2 MF	10/03/2008
HK0803702-12	ES0803795-12	MPB2 MF DUP	10/03/2008
HK0803702-13	ES0803795-13	MP MF	10/03/2008
HK0803702-14	ES0803795-14	MP MF DUP	10/03/2008
HK0803702-15	ES0803795-15	C1(NM3) MF	10/03/2008
HK0803702-16	ES0803795-16	C1(NM3) MF DUP	10/03/2008
HK0803702-17	ES0803795-17	C3(NM6) MF	10/03/2008
HK0803702-18	ES0803795-18	C3(NM6) MF DUP	10/03/2008



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0803975	Page	: 1 of 8
Client	: ALS TECHNICHEM (HK)	Laboratory	: Environmental Division Sydney
Contact	: MS KERRY YUEN	Contact	: Ashwini Sharma
Address	: 11/F CHUNG SHUN KNITTING CNTR 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: kerry.yuen@alsenviro.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: +852 001585226101044	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
Order number	: ---	Date Samples Received	: 25-MAR-2008
C-O-C number	: ---	Issue Date	: 31-MAR-2008
Sampler	: ---	No. of samples received	: 18
Site	: ---	No. of samples analysed	: 18
Quote number	: SY/241/07		

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



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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
PHALAK INTHAKESONE	Organics Co-ordinator	Organics

Page : 3 of 8
Work Order : ES0803975
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 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



Analytical Results

Sub-Matrix: WATER

Compound	CAS Number	LOR	Unit	Client sample ID	Client sampling date / time	ES0803975-001	ES0803975-002	ES0803975-003	ES0803975-004	ES0803975-005
				HK0803702-1	HK0803702-2	HK0803702-3	HK0803702-4	HK0803702-5		
EP132B: Polynuclear Aromatic Hydrocarbons										
3-Methylcholanthrene	56-49-5	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
2-Methylnaphthalene	91-57-6	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
7,12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	83-32-9	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	208-96-8	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	120-12-7	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	56-55-3	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	50-32-8	0.05	µg/L		10-MAR-2008 15:00	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	205-99-2	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(e)pyrene	192-97-2	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	191-24-2	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	207-08-9	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	218-01-9	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Coronene	191-07-1	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenz(a,h)anthracene	53-70-3	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	206-44-0	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	86-73-7	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	193-39-5	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	91-20-3	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Perylene	198-55-0	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	85-01-8	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	129-00-0	0.1	µg/L		10-MAR-2008 15:00	<0.1	<0.1	<0.1	<0.1	<0.1
EP132T: Base/Neutral Extractable Surrogates										
2-Fluorobiphenyl	321-60-8	0.1	%		10-MAR-2008 15:00	94.8	84.6	98.0	99.9	95.4
Anthracene-d10	1719-06-8	0.1	%		10-MAR-2008 15:00	96.4	88.1	99.7	103	100
4-Terphenyl-d14	1718-51-0	0.1	%		10-MAR-2008 15:00	97.0	89.5	102	104	101



Analytical Results

Sub-Matrix: WATER

Compound	CAS Number	LDR	Unit	Client sample ID	HK0803702-6	HK0803702-7	HK0803702-8	HK0803702-9	HK0803702-10
				Civil sampling date / time	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00
					ES0803975-006	ES0803975-007	ES0803975-008	ES0803975-009	ES0803975-010
EP132B: Polynuclear Aromatic Hydrocarbons									
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	<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	0.1	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	µg/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
EP132T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		97.1	93.9	104	101	107
Anthracene-d10	1719-06-8	0.1	%		101	94.5	107	103	108
4-Terphenyl-d14	1718-51-0	0.1	%		102	93.3	104	101	106



Analytical Results

Sub-Matrix: WATER		Client sample ID	HK0803702-11	HK0803702-12	HK0803702-13	HK0803702-14	HK0803702-15	
		Client sampling date / time	10-MAR-2005 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	
Compound	CAS Number	LOR	Unit	ES0803975-011	ES0803975-012	ES0803975-013	ES0803975-014	ES0803975-015
EP132B: Polynuclear Aromatic Hydrocarbons								
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	53-32-9	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
Benzo(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	<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	0.1	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	µg/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
EP132T: Base/Neutral Extractable Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	105	90.7	94.3	103	95.2
Anthracene-d10	1719-06-8	0.1	%	107	91.6	99.2	103	95.1
4-Terphenyl-d14	1718-51-0	0.1	%	105	90.0	97.4	101	93.2



Analytical Results

Sub-Matrix: WATER

Compound	CAS Number	LOP	Unit	Client sample ID	HK0803702-16	HK0803702-17	HK0803702-18	---	---
				Client sampling date / time	10-MAR-2008 15:00	10-MAR-2008 15:00	10-MAR-2008 15:00	---	---
					ES0803975-016	ES0803975-017	ES0803975-018	---	---
EP132B: Polynuclear Aromatic Hydrocarbons									
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	---	---
Benzo(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,i)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	---	---
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	µg/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	µg/L		<0.1	<0.1	<0.1	---	---
Naphthalene	91-20-3	0.1	µg/L		<0.1	<0.1	<0.1	---	---
Perylene	198-55-0	0.1	µg/L		<0.1	<0.1	<0.1	---	---
Phenanthrene	85-01-8	0.1	µg/L		<0.1	<0.1	<0.1	---	---
Pyrene	129-00-0	0.1	µg/L		<0.1	<0.1	<0.1	---	---
EP132T: Base/Neutral Extractable Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		93.5	108	104	---	---
Anthracene-d10	1719-06-8	0.1	%		93.8	102	106	---	---
4-Terphenyl-d14	1718-51-0	0.1	%		92.3	99.8	103	---	---

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Surrogate Control Limits

Sub-Matrix: WATER

Recovery Limits (%)

Compound	CAS Number	Low	High
EP1021: Base/Neutral Extractable Surrogates			
2-Fluorobiphenyl	321-80-8	43	116
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	33	141



Environmental Division

QUALITY CONTROL REPORT

Work Order	: ES0803975	Page	: 1 of 6
Client	: ALS TECHNICHEM (HK)	Laboratory	: Environmental Division Sydney
Contact	: MS KERRY YUEN	Contact	: Ashwini Sharma
Address	: 11/F CHUNG SHUN KNITTING CNTR 1-3 WING YIP STREET KWAI CHUNG, N.T HONG KONG HONG KONG	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: kerry.yuen@alsenviro.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: +852 001585226101044	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	: ---	Date Samples Received	: 25-MAR-2008
C-O-C number	: ---	Issue Date	: 31-MAR-2008
Sampler	: ---	No. of samples received	: 18
Order number	: ---	No. of samples analysed	: 18
Quote number	: SY/241/07		

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



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Accredited for compliance with ISO/IEC 17025.

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ACCREDITATION

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.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
PHALAK INTHAKESONE	Organics Co-ordinator	Organics

Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

Tel. +61-2-8784 8555 Fax. +61-2-8784 8500 www.als.com.au

A Campbell Brothers Limited Co

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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.

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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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 QM-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.



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

Method/Compound	CAS Number	LOF	Unit	Method Blank (MB)	Spike Concentration	Laboratory Control Spike (LCS) Report	
				Report Result		Spike Recovery (%)	Recovery Limits (%)
						Low	High
EP132B: Polynuclear Aromatic Hydrocarbons (QCLot: 620114)							
EP132: 3-Methylcholanthrene	56-49-5	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	104	65.8 121
EP132: 2-Methylnaphthalene	91-57-6	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	83.3	67.7 112
EP132: 7,12-Dimethylbenz(a)anthracene	57-97-6	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	101	11.6 146
EP132: Acenaphthene	83-32-9	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	96.1	73.2 111
EP132: Acenaphthylene	208-96-8	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	97.2	72.4 112
EP132: Anthracene	120-12-7	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	90.5	73.4 113
EP132: Benz(a)anthracene	56-55-3	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	107	73.6 114
EP132: Benzo(a)pyrene	50-32-8	0.05	µg/L	<0.05	2 µg/L	106	75.2 117
EP132: Benzo(b)fluoranthene	205-99-2	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	103	71.4 119
EP132: Benzo(e)pyrene	192-97-2	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	106	75.3 118
EP132: Benzo(g,h,i)perylene	191-24-2	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	106	66.6 121
EP132: Benzo(k)fluoranthene	207-08-9	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	110	74.8 118
EP132: Chrysene	218-01-9	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	106	69.6 120
EP132: Coronene	191-07-1	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	108	47.4 131
EP132: Dibenz(a,h)anthracene	53-70-3	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	106	71.5 117
EP132: Fluoranthene	206-44-0	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	92.4	74.8 117
EP132: Fluorene	86-73-7	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	97.8	72.9 114
EP132: Indeno(1,2,3-cd)pyrene	193-39-5	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	106	67.8 119
EP132: N-2-Fluorenyl Acetamide	53-96-3	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	20 µg/L	95.2	53.6 131
EP132: Naphthalene	91-20-3	0.1	µg/L	<0.1	---	---	---
		0.10	µg/L	---	2 µg/L	89.2	68.3 116

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Sub-Matrix: WATER

Method Component	CAS Number	Low	Unit	Method Blank (MB)	Spike Concentration	Laboratory Control Spike (LCS) Report		
				Report		Spike Recovery (%)	Recovery Limits (%)	
				Result		LCS	Low	High
EP132B: Polynuclear Aromatic Hydrocarbons (QCLot: 520114) - continued								
EP132: Perylene	198-55-0	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	104	68	122
EP132: Phenanthrene	85-01-6	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	92.4	74.8	112
EP132: Pyrene	129-00-0	0.1	µg/L	<0.1	---	---	---	---
		0.10	µg/L	---	2 µg/L	92.8	75.1	117

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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.**