



Appendix E Laboratory Reports

RTI DL RELEASE - EHP



Certificate of Analysis

Sinclair Knight Merz
369 Anne Street
Brisbane QLD 4000
Australia

Attention: Jeremy Wicks

Project 09ENME0031585
Client Reference QE09537
Cronulla Park
Received Date 18/09/2009 12:10:00 PM

Customer Sample ID			Trip01	Trip02
Sample Matrix			WATER	WATER
Labmark Sample No.			1732403	1732404
Date Sampled			17/09/2009	17/09/2009
VOC				
Test/Reference	PQL	Unit		
1100 BTEX & (C6-C9) in Water by P&T				
4-Bromofluorobenzene - Surrogate	-	%	89	86
Benzene	0.5	µg/L	1.6	6.7
Toluene	1	µg/L	4.6	1.1
Ethylbenzene	1	µg/L	2.4	7.6
Meta- & Para- Xylene	2	µg/L	<2.0	7.3
Ortho-Xylene	1	µg/L	<1.0	4.1
Total Xylenes	3	µg/L	<3.0	11
C6-C9 Fraction	20	µg/L	<20.0	44
SVOC				
Test/Reference	PQL	Unit		
2000 TPH (C10 - C36) in Water by GC				
C10-C14 Fraction	40	µg/L	720	520
C15-C28 Fraction	100	µg/L	1230	1210
C29-C36 Fraction	100	µg/L	<100	<100
Metals				
Test/Reference	PQL	Unit		
3100 Dissolved Metals in Water By ICP/MS				
Arsenic	5	µg/L	20	12
Cadmium	5	µg/L	<5	<5
Chromium	5	µg/L	7.5	14
Copper	5	µg/L	<5	5.2
Lead	5	µg/L	<5	<5
Nickel	5	µg/L	9.0	44
Zinc	5	µg/L	21	12
3400 Dissolved Mercury in Water by FIMS				
Mercury	0.1	µg/L	<0.1	<0.1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

Description	Testing Site	Extracted	Analysed
1100 BTEX & (C6-C9) in Water by P&T	Melbourne 1645	23/09/2009	25/09/2009
2000 TPH (C10 - C36) in Water by GC	Melbourne 1645	23/09/2009	25/09/2009
3100 Dissolved Metals in Water By ICP/MS	Melbourne 1645	22/09/2009	23/09/2009
3400 Dissolved Mercury in Water by FIMS	Melbourne 1645	22/09/2009	23/09/2009

Labmark Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. Matrix spike recoveries are calculated on an 'As Received' basis; the parent sample result is moisture corrected after the % recovery is determined.
3. Proficiency trial results are available on request.
4. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spike or surrogate recoveries.
6. Test samples duplicated or spiked, are for this job only and are identified in the following QC report.
7. SVOC analyses on waters are performed on homogenized, unfiltered sample, unless noted otherwise.
8. When individual results are qualified in the body of a report, refer to the qualifier descriptions that follow.
9. Samples were analysed on an as received basis.
10. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sampling and Preservation Chart for Soils & Waters' for holding times. (LM-FOR-ADM-020)

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgement.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitability qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

****NOTE:** pH duplicates are reported as a range NOT as an RPD

Quality Control Results

Laboratory: **EN_METALS**

Sample, Test, Result Reference	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Codes
1737175 [Method Blank]						
3400 Dissolved Mercury in Water by FIMS						
Mercury	µg/L	<0.1		< 0.1	Pass	
1737185 [Method Blank]						
3100 Dissolved Metals in Water By ICP/MS						
Antimony	µg/L	<5		< 5	Pass	
Arsenic	µg/L	<5		< 5	Pass	
Barium	µg/L	<5		< 5	Pass	
Beryllium	µg/L	<5		< 5	Pass	
Boron	µg/L	<5		< 5	Pass	
Cadmium	µg/L	<5		< 5	Pass	
Chromium	µg/L	<5		< 5	Pass	
Cobalt	µg/L	<5		< 5	Pass	
Copper	µg/L	<5		< 5	Pass	
Lead	µg/L	<5		< 5	Pass	
Manganese	µg/L	<5		< 5	Pass	
Molybdenum	µg/L	<5		< 5	Pass	
Nickel	µg/L	<5		< 5	Pass	
Selenium	µg/L	<5		< 5	Pass	
Tin	µg/L	<5		< 5	Pass	
Vanadium	µg/L	<5		< 5	Pass	
Zinc	µg/L	<5		< 5	Pass	
1737176 [Laboratory Control Sample]						
3400 Dissolved Mercury in Water by FIMS						
Mercury	µg/L	9.6	Expected Value 10.0	Percent Recovery 96	80-120 %	Pass

Laboratory: EN_METALS

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
1737186 [Laboratory Control Sample]							
3100 Dissolved Metals in Water By ICP/MS			Expected Value	Percent Recovery			
Antimony	µg/L	97	100.0	97	80-120 %	Pass	
Arsenic	µg/L	97	100.0	97	80-120 %	Pass	
Barium	µg/L	100	100.0	100	80-120 %	Pass	
Beryllium	µg/L	93	100.0	93	80-120 %	Pass	
Boron	µg/L	110	100.0	107	80-120 %	Pass	
Cadmium	µg/L	100	100.0	105	80-120 %	Pass	
Chromium	µg/L	100	100.0	101	80-120 %	Pass	
Cobalt	µg/L	99	100.0	99	80-120 %	Pass	
Copper	µg/L	100	100.0	100	80-120 %	Pass	
Lead	µg/L	100	100.0	102	80-120 %	Pass	
Manganese	µg/L	98	100.0	98	80-120 %	Pass	
Molybdenum	µg/L	92	100.0	92	80-120 %	Pass	
Nickel	µg/L	98	100.0	98	80-120 %	Pass	
Selenium	µg/L	94	100.0	94	80-120 %	Pass	
Tin	µg/L	100	100.0	100	80-120 %	Pass	
Vanadium	µg/L	99	100.0	99	80-120 %	Pass	
Zinc	µg/L	100	100.0	100	80-120 %	Pass	

Laboratory: EN_SVOC

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
1736842 [Method Blank]							
2000 TPH (C10 - C36) in Water by GC							
C10-C14 Fraction	µg/L	<40			< 40	Pass	
C15-C28 Fraction	µg/L	<100			< 100	Pass	
C29-C36 Fraction	µg/L	<100			< 100	Pass	
1736843 [Laboratory Control Sample]							
2000 TPH (C10 - C36) in Water by GC			Expected Value	Percent Recovery			
C10-C14 Fraction	µg/L	2600	200.0	104	70-130 %	Pass	
C15-C28 Fraction	µg/L	2890	200.0	116	70-130 %	Pass	
C29-C36 Fraction	µg/L	2840	200.0	114	70-130 %	Pass	

Laboratory: EN_VOC

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
1736430 [Method Blank]							
1100 MAH(BTEX & C6-C9) in Water P&T							
Benzene	µg/L	<0.5			< 0.5	Pass	
C6-C9 Fraction	µg/L	<20.0			< 20	Pass	
Ethylbenzene	µg/L	<1.0			< 1	Pass	
Meta- & Para- Xylene	µg/L	<2.0			< 2	Pass	
Ortho-Xylene	µg/L	<1.0			< 1	Pass	
Toluene	µg/L	<1.0			< 1	Pass	
Total Xylenes	µg/L	<3.0			< 3	Pass	
4-Bromofluorobenzene - Surrogate	%	87			70-130 %	Pass	
1736432 [Laboratory Control Sample]							
1100 MAH(BTEX & C6-C9) in Water P&T			Expected Value	Percent Recovery			
Benzene	µg/L	12	10.0	117	70-130 %	Pass	
C6-C9 Fraction	µg/L	170	140.0	124	70-130 %	Pass	
Ethylbenzene	µg/L	11	10.0	114	70-130 %	Pass	
Meta- & Para- Xylene	µg/L	25	20.0	124	70-130 %	Pass	
Ortho-Xylene	µg/L	12	10.0	116	70-130 %	Pass	
Toluene	µg/L	12	10.0	117	70-130 %	Pass	
Total Xylenes	µg/L	36	30.0	122	70-130 %	Pass	
4-Bromofluorobenzene - Surrogate	%	101			70-130 %	Pass	

Sample Integrity

Custody Seals Intact (if used)	Yes
Attempt to Chill was evident	Yes
Samples correctly preserved	Yes
Organic samples had Teflon liners	Yes
Samples received with Zero Headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes

Authorised By

Alex Petridis	Senior Analyst - SVOC	
Ruth Callander	Client Services Officer	
Mark Herbstreit	Senior Analyst - Metals	Accreditation Number: 1645
Khoa Pham	Analyst - VOC	Accreditation Number: 1645
Olga Alieva	Analyst - SVOC	Accreditation Number: 1645
Patricia Hua	Senior Analyst	Accreditation Number: 1645

Laboratory Manager

David Elliott	Laboratory Manager - Melbourne	
		49-Sch4 - Signature

Final Report

- Indicates Not Requested * Indicates NATA accreditation does not cover the performance of this service

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The samples were not collected by Laboratory staff.



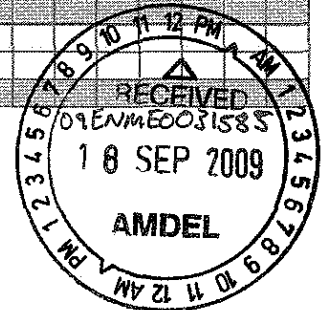
SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537		
Site:	Cronulla Park		
Contact:	Jeremy Wicks	Quote No:	EN/003/07
Office:	32 Cordelia Street, South Brisbane Qld 4101	Results Required:	
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy
Phone:		Turn Around:	5-days
		Comments:	Standard 5-day turnaround Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au

Laboratory Use	
Lab Batch No:	Comments:
Cooler Seal Intact: ☒ Yes ☐ No ☐ N/A	
Sample Temp (chilled): ☒ Yes ☐ No 15°C	

Relinquished By		Received By		Shipping	
Name: Jeremy Wicks	Date: 18/09/2009	Name: N Clayton	Date: 18/09/09	Consignment Note No:	
Company: SKM	Time: 1:30 pm	Company: Labmark	Time: 1210	Transport Company:	

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS									
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Sample Date	Time	Type / Code	Total Bottles	TPH/Ca C30/BTEX/Heads									
1732403	Trip01		Water	17/9/09			2G, 2V, 1N	x									
1732404	Trip02		Water	17/9/09			2G, 2V, 1N	x									
TOTAL SAMPLES			15					7									



RTI DL RELEASE - EHP

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: SKM

ADDRESS / OFFICE: 32 Cordelia St Gth Bne

PROJECT MANAGER (PM): Jeremy Wicks

PROJECT ID: Q209537

SITE: P.O. NO.:

RESULTS REQUIRED (Date): QUOTE NO.:

SAMPLER: Ona Kanas

MOBILE:

PHONE:

EMAIL REPORT TO: okanas@skm.com.au

EMAIL INVOICE TO: (if different to report) jwicks@skm.com.au

ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)

FOR LABORATORY USE ONLY

COOLER SEAL (circle appropriate)

Intact: Yes No N/A

SAMPLE TEMPERATURE

CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

SAMPLE INFORMATION (note: S = Soil, W=Water)

CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	pH	Metals (7+Hg)	Asbestos	TPH/BTEX	Other
1	RINSATE 1	W	11/5	AM	201A IN	4		✓			
2	RINSATE 2	W	12/5	AM	201A IN	4		✓			
3	MW07-0.0-0.1	S	12/5	AM	1G	1	✓	✓	✓		
4	MW08-0.0-0.1	S	13/5	AM	1G	1		✓			
5	MW08-0.2-0.3	S	13/5	AM	1G	1		✓			
6	MW08-0.5-0.6	S	13/5	AM	1G	1		✓			
7	RINSATE 3	W	13/5	AM	201N1G	4	✓	✓	✓		
8	MW09-0.0-0.1	S	13/5	AM	1G	1		✓			
9	MW09-0.2-0.3	S	13/5	AM	1G	1					
10	D 1	S	15/5	AM	1G	1		✓			

Notes: e.g. Highly contaminated samples, Extra volume for QC or trace LORs etc.

Environmental Division Brisbane Work Order EB0907635

Telephone : + 61-7-3243 7222

RELINQUISHED BY:

RECEIVED BY

METHOD OF SHIPMENT

Date: 12/5	Name: L. Angeles	Date: 13/5/09	Con' Note No:
Time: AM	Of: ALS	Time: 1640	
Date:	Name:	Date:	Transport Co:
Time:	Of:	Time:	

atic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

CHAIN OF CUSTODY DOCUMENTATION										 Australian Laboratory Services Pty Ltd	
CLIENT: SKM					SAMPLER: Ona Kanas						
ADDRESS / OFFICE: 32 Cordelia St, Sth Bris					MOBILE:						
PROJECT MANAGER (PM): Jeremy Wicks					PHONE:						
PROJECT ID: QEO9537					EMAIL REPORT TO: okanas@skm.com.au						
SITE:					P.O. NO.:					EMAIL INVOICE TO: (if different to report) jwicks@skm.com.au	
RESULTS REQUIRED (Date):					QUOTE NO.:					ANALYSIS REQUIRED including SUITES (note - suite codes must be listed to attract suite prices)	
FOR LABORATORY USE ONLY			COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:							Notes: e.g. Highly contaminated samples, Extra volume for QC or trace LORs etc.	
COOLER SEAL (circle appropriate)											
Intact: Yes No N/A											
SAMPLE TEMPERATURE											
CHILLED: Yes No											
SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION						
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles					
11	MW03-1.0-1.1	S	11/5	am	250ml Jar	1					
12	MW04-0.0-0.1										
13	MW04-0.2-0.3										
14	MW04-0.5-0.6										
15	MW05-0.2-0.1		12/5	am							
16	MW05-0.2-0.5										
17	MW05-0.5-0.6										
	MW05-0.0-0.1										
18	MW06-0.0-0.1										
19	MW06-0.2-0.3										
20	MW06-0.5-0.6										
	MW06-1.0-1.1										
RELINQUISHED BY:					RECEIVED BY					METHOD OF SHIPMENT	
Name: Ona Kanas			Date: 13/5		Name: L. Angeles			Date: 13/5/09		Con' Note No:	
Of: SKM			Time: 16:00		Of: ALS			Time: 1640			
Name:			Date:		Name:			Date:		Transport Co:	
Of:			Time:		Of:			Time:			
Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved;											
V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulphuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulphuric Preserved Plastic; F = Formaldehyde Preserved Glass;											
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.											



SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537
Site:	Cronulla Park

Contact:	Jeremy Wicks	Quote No:	EN/003/07	Comments: Standard 5-day turnaround Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au
Office:	369 Ann Street, Brisbane Qld 4000	Results Required:		
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy	
Phone:		Turn Around:	5-days	

Laboratory Use		Comments:
Lab Batch No:		
Cooler Seal Intact: Yes No N/A		
Sample Temp (chilled): Yes No		

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 20/5/2009	Name: T. CREAGH	Date: 19/5/09	Consignment Note No:
Company: SKM	Time: 8:30 am	Company: ALS	Time: 1300	Transport Company:

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS									
LAB ID	Sample ID	Sample Depth	Matrix Type S, Soil, W, Water	Date	Time	Type / Code	Total bottles	Ammonia (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)	As (E, Gassy)
1	MW01		Water					x	x								
2	MW02		Water					x	x								
3	MW03		Water					x		x	x						
4	MW04		Water					x		x	x						
5	MW05		Water					x		x	x						
6	MW06		Water					x		x	x						
7	MW07		Water					x		x	x						
8	MW08		Water					x		x	x						
9	MW09		Water					x		x	x						
13 to	DUP04		Water					x									
10	MWA (CR13)		Water					x									
11	MWB (CR14)		Water					x		x	x						
12	MWC (CR15)		Water					x									
14	Rinsate/ Rinsate 4		Water					x									
TOTAL SAMPLES			14					10	6	8	8						

Environmental Division
Brisbane
Work Order

EB0907913



Telephone : + 61-7-3243 7222



Contact:	Jeremy Wicks	Quote No:	EN/003/07	Comments: Standard 5-day turnaround Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au
Office:	369 Ann Street, Brisbane Qld 4000	Results Required:		
Email:	jwicks@skm.com.au ; okanas@skm.com.au	Report Format:	Email, Hard Copy	
Phone:		Turn Around	5-days	

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 20/5/2009	Name:	Date:	Consignment Note No:
Company: SKM	Time: 8:30 am	Company: ALS	Time:	Transport Company:

SAMPLE INFORMATION							CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS																								
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Date	Time	Type / Code	Total Bottles	S-2 Metals	S-19 TPH/BTEX/PAH/P	S-5 TPH/BTEX/Metals	S-4 TPH/BTEX																						
SNR	MW06 0.0-0.1		Soil						X																								
SNR	MW09 0.2-0.3		Soil							X																							
1	TP1 0.0-0.1		Soil																														
2	TP1 0.2-0.3		Soil					X																									
SNR	TP2 0.0-0.1		Soil																														
3	TP2 0.2-0.3		Soil							X																							
4	TP3 0.0-0.1		Soil																														
5	TP3 0.2-0.3		Soil							X																							
6	TP4 0.0-0.1		Soil																														

Environmental Division
Brisbane
Work Order 49-Sch4 - Signature
EB0907967

Telephone : +61-7-3243 7222

Environmental Division
Brisbane
Work Order

EB0907967



Telephone : + 61-7-3243 7222

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS															
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Date	Time	Type / Code	Total Bottles	S-2 Metals	S-19 TPH/BTEX/PAH/P	S-5 TPH/BTEX/PAH/P	S-4 TPH/BTEX												
7	TP4 0.2-0.3		Soil						x														
8	TP5 0.0-0.1		Soil																				
9	TP5 0.2-0.3		Soil						x														
10	TP6 0.0-0.1		Soil																				
11	TP6 0.2-0.3		Soil					x															
12	TP7 0.0-0.1		Soil																				
13	TP7 0.2-0.3		Soil						x														
14	TP8 0.0-0.1		Soil					x															
15	TP8 0.2-0.3		Soil																				
16	TP9 0.0-0.1		Soil																				
17	TP9 0.2-0.3		Soil						x														
18	TP10 0.0-0.1		Soil																				
19	TP10 0.2-0.3		Soil						x														
20	Dup 02		Soil							x													
21	Dup 03		Soil							x													
5NR	Dup 01		Soil								x												
TOTAL SAMPLES			25					3	6	5	1												

EXTRA 22 RINSATS

RTI DL RELEASE - EHP



SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537		
Site:	Cronulla Park		
Contact:	Jeremy Wicks	Quote No:	EN/003/07
Office:	369 Ann Street, Brisbane Qld 4000	Results Required:	
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy
Phone:		Turn Around:	5-days
		Comments:	Standard 5-day turnaround Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au

Laboratory Use	
Lab Batch No:	Comments:
Cooler Seal Intact: Yes No N/A	
Sample Temp (chilled): Yes No	

Relinquished By		Received By		Shipping	
Name: Jeremy Wicks	Date: 20/5/2009	Name: T. Creagh	Date: 19/5/09	Consignment Note No:	
Company: SKM	Time: 8:30 am	Company: ALS	Time: 1300	Transport Company:	

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS									
LAB ID	Sample ID	Sample Depth	Matrix Type S- Soil W- Water	Date	Time	Type / Code	Total Bottles	Soil Metals	Soil	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs	TPH/BTEX/PAHs
EB0907635	MW06 0.0-0.1		Soil						x								
EB0907635	MW09 0.2-0.3		Soil								x						
EB0907967	TP1 0.0-0.1	1	Soil														
EB0907967	TP1 0.2-0.3	2	Soil					x									
EB0907967	TP2 0.2-0.3	3	Soil								x						
EB0907967	TP3 0.0-0.1	4	Soil														
EB0907967	TP3 0.2-0.3	5	Soil								x						
EB0907967	TP4 0.0-0.1	6	Soil														
EB0907967	TP4 0.2-0.3	7	Soil								x						
EB0907967	TP5 0.0-0.1	8	Soil														
EB0907967	TP5 0.2-0.3	9	Soil								x						
EB0907967	TP6 0.0-0.1	10	Soil														
EB0907967	TP6 0.2-0.3	11	Soil					x									
EB0907967	TP7 0.0-0.1	12	Soil														
EB0907967	TP7 0.2-0.3	13	Soil								x						
EB0907967	TP8 0.0-0.1	14	Soil					x									
EB0907967	TP8 0.2-0.3	15	Soil														
EB0907967	TP9 0.0-0.1	16	Soil														
EB0907967	TP9 0.2-0.3	17	Soil								x						
EB0907967	TP10 0.0-0.1	18	Soil														
EB0907967	TP10 0.2-0.3	19	Soil								x						
EB0907967	Dup 02	20	Soil									x					
EB0907967	Dup 03	21	Soil									x					
EB0907635	Dup 01		Soil										x				
TOTAL SAMPLES			21					1	0	0	0	0	0	0	0	0	0

Environmental Division
Brisbane
Work Order
EB0907967



Telephone : + 61-7-3243 7222



Project ID: QE09537			
Site: Cronulla Park			
Contact:	Jeremy Wicks	Quote No:	EN/003/07
Office:	369 Ann Street, Brisbane Qld 4000	Results Required:	Standard 5-day turnaround
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy
Phone:		Turn Around:	5-days
		Comments: Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au	

Laboratory Use	
Lab Batch No:	Comments:
Cooler Seal Intact: Yes No N/A	
Sample Temp (chilled): Yes No	

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 3/6/2009	Name:	Date:	Consignment Note No:
Company: SKM	Time: 1:30 pm	Company: ALS	Time:	Transport Company:

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS													
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Date	Time	Type / Code	Total Bottles	Ammonia (EK03)	M5 TPH (C6-C15) (E-K) Metals	M10 TPH (C6-C15) (E-K) PAH	EPD/GA Phosphorus SIM (2 analyses)	TPH Speciation (Almatic/omadic)	M28 Metals								
1	MW01		Water					x	x												
2	MW02		Water					x	x												
3	MW03		Water					x		x	x		x								
4	MW04		Water					x		x	x	x	x								
5	MW05		Water					x		x	x	x	x								
6	MW06		Water					x		x	x	x	x								
7	MW07		Water					x		x	x	x	x								
8	MW08		Water					x		x	x			x							
9	MW09		Water					x		x	x			x							
10	DUP05		Water					x		x	x			x							
	DUP05a	SNK	Water						x												
11	MWA (CR13)		Water					x		x	x			x							
12	MWB (CR14)		Water						x												
13	MWC (CR15)		Water						x												
14	Drain		Water					x		x	x			x							
TOTAL SAMPLES			15					11	6	0	9	4	9								

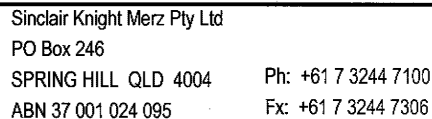
Environmental Division
Brisbane 49-Sch4 - Signature

49-Sch4 - Signature Work Order

EB0908932



Telephone : + 61-7-3243 7222



CHAIN OF CUSTODY & ANALYSIS REQUEST

LAB:

Page 1 of 1

ADDRESS:

PHONE:

FAX:

[illegible]



SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537		
Site:	Cronulla Park		
Contact:	Jeremy Wicks	Quote No:	EN/003/07
Office:	32 Cordelia Street, South Brisbane Qld 4101	Results Required:	
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy
Phone:		Turn Around	5 days
		Comments: Standard 5-day turnaround Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au	

Laboratory Use		Comments:
Lab Batch No:		
Cooler Seal Intact: Yes No N/A		
Sample Temp (chilled): Yes No		

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 18/09/2009	Name: L. Angles	Date: 18.9.09	Consignment Note No:
Company: SKM	Time: 1:30 pm	Company: ALS	Time: 1200	Transport Company:

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS											
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Sample Date	Time	Type / Code	Total Bottles	W-5 TPH/C6	C38/BTEX/Metals	W-10 TPH/C6	C38/OC/PAH	EP078A Phenols/SIN (12 analytes)	TPH Speciation (Aliphatic/Aromatic)	W-2 & Metals					
1	MW01		Water	17/9/09			2G, 2V, 1N	x											
2	MW02		Water	17/9/09			2G, 2V, 1N	x											
3	MW03		Water	17/9/09			1G, 2V, 1N			x	x			x					
4	MW04		Water	17/9/09			2G, 2V, 1N			x	x	x	x	x					
5	MW05		Water	17/9/09			2G, 2V, 1N			x	x	x	x	x					
6	MW06		Water	17/9/09			2G, 2V, 1N			x	x	x	x	x					
7	MW07		Water	17/9/09			2G, 2V, 1N			x	x	x	x	x					
8	MW08		Water	17/9/09			1G, 2V, 1N			x	x		x	x					
9	MW09		Water	17/9/09			1G, 2V, 1N	x											
10	Dup01		Water	17/9/09			2G, 2V, 1N	x											
11	Dup02		Water	17/9/09			2G, 2V, 1N	x											
12	CR13		Water	17/9/09			2G, 2V, 1N			x	x			x					
13	CR14		Water	17/9/09			2G, 2V, 1N	x											
14	CR15		Water	17/9/09			2G, 2V, 1N	x											
15	Drain 1		Water	17/9/09			1G, 2V, 1N			x	x			x					
TOTAL SAMPLES			15					7	8	8	5	8							

16 Trip blank oz 17/9

Environmental Division
Brisbane
49-Sch4 - Signature Work Order

EB0914886



Telephone : +61-7-3243 7222



SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537	Quote No:	EN/003/07	Comments: Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au
Site:	Cronulla Park	Results Required:		
Contact:	Jeremy Wicks	Report Format:	Email, Hard Copy	
Office:	32 Cordelia Street, South Brisbane Qld 4101	Turn Around		
Email:	jwicks@skm.com.au; okanas@skm.com.au			
Phone:	3026 7526; 3026 7286			

Laboratory Use		Comments:
Lab Batch No:		
Cooler Seal Intact: Yes No N/A		
Sample Temp (chilled): Yes * No		

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 8/10/2009	Name:	Date:	Consignment Note No:
Company: SKM	Time: 12:00 pm	Company: ALS	Time:	Transport Company:

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Sample Date	Time	Type / Code	Total Bottles																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

Christina U.
ALS
8.10.09.

PTI DL RELEASE

Environmental Division
Brisbane
49-Sch4 - Signature Work Order

EB0916017



Telephone : + 61-7-3243 7222



SINCLAIR KNIGHT MERZ
CHAIN OF CUSTODY FORM

Project ID:	QE09537		
Site:	Cronulla Park		
Contact:	Jeremy Wicks	Quote No:	EN/003/07
Office:	32 Cordelia Street, South Brisbane Qld 4101	Results Required:	
Email:	jwicks@skm.com.au; okanas@skm.com.au	Report Format:	Email, Hard Copy
Phone:	3026 7526; 3026 7286	Turn Around:	7-day
		Comments:	Please send electronic reports to jwicks@skm.com.au & okanas@skm.com.au

Laboratory Use	
Lab Batch No:	Comments:
Cooler Seal Intact: Yes No N/A	
Sample Temp (chilled): Yes No	

Relinquished By		Received By		Shipping
Name: Jeremy Wicks	Date: 8/10/2009	Name:	Date:	Consignment Note No:
Company: SKM	Time: 12:00 pm	Company: ALS	Time:	Transport Company:

SAMPLE INFORMATION						CONTAINER INFORMATION		ANALYTICAL REQUIREMENTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
LAB ID	Sample ID	Sample Depth	Matrix Type S: Soil W: Water	Sample Date	Time	Type / Code	Total Bottles	S-4 TPH/TEX	TPH (C10-C36) with Silica Gel Cleanup																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Environmental Division
Brisbane
Work Order
EB0916017



Telephone : + 61-7-3243 7222

Sample Receipt Advice

Client Name: Sinclair Knight Merz
Attention: MR Jeremy Wicks
Client Reference number: QE09537
Cronulla Park

Date Received: 18 September 2009
Due Date: 25 September 2009
Turnaround: Standard

Laboratory Reference
Number: 09ENME0031585

Your Laboratory
Contact: Rebecca Kleinschmidt
+61 7 3902 4600

If you have any queries regarding turnaround and sample progress, technical queries or wish to make changes please contact the laboratory immediately.

Job Information

Sample Integrity

Attempt to Chill was evident	Yes
Samples correctly preserved	Yes
Organic samples had Teflon liners	Yes
Samples received with Zero Headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	Yes
Custody Seals Intact (if used)	Yes

Analysis Requested

Analysis Requested	Method Code	Number Of Samples
BTEX & (C6-C9) in Water by P&T	1100	2
Dissolved Mercury in Water by FIMS	3400	2
Dissolved Metals in Water By ICP/MS	3100	2
TPH (C10 - C36) in Water by GC	2000	2

Note

- Turn Around Time starts when samples are received at the Laboratory
 - For samples received after 4pm, Turn Around Time starts the next working day
 - For samples received on the last day of holding time, notification of testing requirements must be given at least 6 hours prior to the sample receipt deadlines; Should the laboratory not receive the information in the required timeframe a suitably qualified results may still be reported.
 - Surcharges may apply for 24, 48 and 72 hour turnaround.
 - Water samples will be discarded after 4 weeks unless notified.
 - Soil samples are chilled for 1 month and will be discarded after 3 months unless notified.
 - Samples submitted for Micro analysis on a Friday may incur a \$150 surcharge and / or be analysed outside holding time (24 Hour Holding Time).
 - The Quoted Due Date does not apply to sub-contracted tests or some in-house tests. Contact your Customer Support Officer for details
- NOTE: Unless advised otherwise - Sample analysis will commence regardless of integrity issues and / or non-conformance and these will be recorded on the final report.



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EB0907635	Page	: 1 of 6
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET SOUTH BRISBANE QLD, AUSTRALIA 4101	Address	: 32 Shand Street Stafford QLD Australia 4053
E-mail	: okanas@skm.com.au	E-mail	: Services.Brisbane@alsenviro.com
Telephone	: 3333	Telephone	: +61-7-3243 7222
Facsimile	: 3333	Facsimile	: +61-7-3243 7218
Project	: QE09537	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: 3333	Date Samples Received	: 13-MAY-2009
C-O-C number	: 3333	Issue Date	: 25-MAY-2009
Sampler	: Ona Kanas	No. of samples received	: 34
Site	: 3333	No. of samples analysed	: 12
Quote number	: EN/003/09		

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.

Signatories	Position	Accreditation Category
Kim McCabe	Senior Inorganic Chemist	Inorganics
Sarah Ashworth	Organic Chemist	Organics

Environmental Division Brisbane

Part of the **ALS Laboratory Group**

32 Shand Street Stafford QLD Australia 4053

Tel. +61-7-3243 7222 Fax. +61-7-3243 7218 www.alsglobal.com

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Page :) of 6
Work Order : EB0907635
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

PROVIDED FOR RELEASE - EHP



Page : 3 of 6
Work Order : EB0907635
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

Analytical Results

Sub-Matrix: SOIL

		Client sample ID		Client sampling date / time		Unit	
Compound	CAS Number	LOR					
EA002 : pH (Solis)							
pH Value	3333	0.1		5.5		3333	
EA055: Moisture Content							
^ Moisture Content (dried @ 103°C)	3333	1.0		11.5		3333	
EG005T: Total Metals by ICP-AES							
Arsenic	7440-38-2	5		<5			
Cadmium	7440-43-9	1		<1			
Chromium	7440-47-3	)		13			
Copper	7440-50-8	5		<5			
Lead	7439-92-1	5		<5			
Nickel	7440-02-0	)		4			
Zinc	7440-66-6	5		31			
EG035T: Total Recoverable Mercury by FIMS							
Mercury	7439-97-6	0.1		<0.1			
EP080/071: Total Petroleum Hydrocarbons							
C6 - C9 Fraction	3333	10		<10			
C10 - C14 Fraction	3333	50		<50			
C15 - C28 Fraction	3333	100		<100			
C29 - C36 Fraction	3333	100		<100			
EP080: BTEX							
Benzene	71-43-2	0.2		<0.2			
Toluene	108-88-3	0.5		<0.5			
Ethylbenzene	100-41-4	0.5		<0.5			
meta- & para-Xylene	108-38-3 106-42-3	0.5		<0.5			
ortho-Xylene	95-47-6	0.5		<0.5			
EP080S: TPH(V)/BTX Surrogates							
1,2-Dichloroethane-D4	17060-07-0	0.1		89.6			
Toluene-D8	2037-26-5	0.1		83.4			
4-Bromofluorobenzene	460-00-4	0.1		80.9			



Page : 0 of 6
Work Order : EB0907635
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

Analytical Results

Sub-Matrix: SOIL

Compound	Client sample ID		Client sampling date / time		Unit	Client sample ID			
	CAS Number	LOR				MW05_0.2-0.3	MW06_0.2-0.3	MW01_0.2-0.3	MW02_0.2-0.3
EA002 : pH (Solis)									
pH Value	3333	0.1			pH Unit	6.4	3333	3333	5.7
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	3333	1.0			I	9.2	10.7	7.5	16.7
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5			mg/kg	<5	<5	<5	<5
Cadmium	7440-43-9	1			mg/kg	<1	<1	<1	<1
Chromium	7440-47-3	)			mg/kg	21	14	9	28
Copper	7440-50-8	5			mg/kg	16	<5	<5	<5
Lead	7439-92-1	5			mg/kg	8	<5	8	18
Nickel	7440-02-0	)			mg/kg	10	3	G)	3
Zinc	7440-66-6	5			mg/kg	21	6	<5	18
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1			mg/kg	<0.1	<0.1	<0.1	<0.1
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	3333	10			mg/kg	<10	3333	3333	<10
C10 - C14 Fraction	3333	50			mg/kg	<50	3333	3333	<50
C15 - C28 Fraction	3333	100			mg/kg	<100	3333	3333	<100
C29 - C36 Fraction	3333	100			mg/kg	<100	3333	3333	<100
EP080: BTEX									
Benzene	71-43-2	0.2			mg/kg	<0.2	3333	3333	<0.2
Toluene	108-88-3	0.5			mg/kg	<0.5	3333	3333	<0.5
Ethylbenzene	100-41-4	0.5			mg/kg	<0.5	3333	3333	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5			mg/kg	<0.5	3333	3333	<0.5
ortho-Xylene	95-47-6	0.5			mg/kg	<0.5	3333	3333	<0.5
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1			I	94.6	3333	3333	89.2
Toluene-D8	2037-26-5	0.1			I	85.1	3333	3333	84.2
4-Bromofluorobenzene	460-00-4	0.1			I	80.6	3333	3333	80.5



Page : 5 of 6
Work Order : EB0907635
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

13-054

Analytical Results

Compound		Client sample ID		Client sampling date / time		Unit	
		CAS Number	LOR	RINSATE 1	RINSATE 2	RINSATE 3	
EA005: pH		3333	0.01	11-MAY-2009 15:00	12-MAY-2009 15:00	13-MAY-2009 15:00	3333
pH Value				EB0907635-001	EB0907635-002	EB0907635-007	3333
EG020T: Total Metals by ICP-MS							----
Arsenic	7440-38-2	0.001		<0.001	<0.001	<0.001	3333
Cadmium	7440-43-9	0.0001		<0.0001	<0.0001	<0.0001	3333
Chromium	7440-47-3	0.001		<0.001	<0.001	<0.001	3333
Copper	7440-50-8	0.001		<0.001	<0.001	<0.001	3333
Lead	7439-92-1	0.001		<0.001	<0.001	<0.001	3333
Nickel	7440-02-0	0.001		<0.001	<0.001	<0.001	3333
Zinc	7440-66-6	0.005		0.005	0.008	<0.005	3333
EG035T: Total Recoverable Mercury by FIMS							----
Mercury	7439-97-6	0.0001		<0.0001	<0.0001	<0.0001	3333
EP080/071: Total Petroleum Hydrocarbons							----
C6 - C9 Fraction	3333	20		<20	<20	<20	3333
C10 - C14 Fraction	3333	50		<50	<50	<50	3333
C15 - C28 Fraction	3333	100		<100	<100	<100	3333
C29 - C36 Fraction	3333	50		<50	<50	<50	3333
EP080: BTEX							----
Benzene	71-43-2	1		<1	<1	<1	3333
Toluene	108-88-3	)		G)	G)	G)	3333
Ethylbenzene	100-41-4	)		G)	G)	G)	3333
meta- & para-Xylene	108-38-3 106-42-3	)		G)	G)	G)	3333
ortho-Xylene	95-47-6	)		G)	G)	G)	3333
EP080S: TPH(V)/BTX Surrogates							----
1,2-Dichloroethane-D4	17060-07-0	0.1		102	97.0	101	3333
Toluene-D8	2037-26-5	0.1		99.7	98.5	101	3333
4-Bromofluorobenzene	460-00-4	0.1		100	96.7	100	3333

DL Documents

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Page : 6 of 6
Work Order : EB0907635
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	121
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121
Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	99	110
4-Bromofluorobenzene	460-00-4	86	115

13-054



Environmental Division

QUALITY CONTROL REPORT

Work Order	: EB0907635	Page	: of 9
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET SOUTH BRISBANE QLD, AUSTRALIA 4101	Address	: 32 Shand Street Stafford QLD Australia 4053
E-mail	: okanas@skm.com.au	E-mail	: Services.Brisbane@alsenviro.com
Telephone	: 1111	Telephone	: +61-7-3243 7222
Facsimile	: 1111	Facsimile	: +61-7-3243 7219
Project	: QE09537	QC Level	: NEP, 1999 Schedule B\$=and ALS QCS3 re>uirement
Site	: 1111	Date Samples Received	: \$1; ~ ?-2009
C-O-C number	: 1111	Issue Date	: %01 ~ ?-2009
Sampler	: Ona Kanas	No. of samples received	: \$,
Order number	: 1111	No. of samples analysed	: %
Quote number	: EN@S @9		

This report supersedes any previous reports= Aith this reference. Results apply to the samples= as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the folloAing information:

- Laboratory Duplicate <DUP=Report; Relative Percentage Difference <RPD=and Acceptance Limits
- ; ethod Blank <; =and Laboratory Control Spike <LCS=Report; Recovery and Acceptance Limits
- ; atrix Spike <; !=Report; Recovery and Acceptance Limits



NATA Accredited Laboratory 9%0

This document is issued in accordance Aith NATA accreditation re>uirements.

Accredited for compliance Aith '1, @C 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated beloA. Electronic signing has been carried out in compliance Aith procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Kim ; cCabe	Senior Inorganic Chemist	Inorganics
Sarah AshAorth	Organic Chemist	Organics

Environmental Division Brisbane

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Work Order : EB0907635
Client : SINCLAIR KNIGHT ; ERZ
Project : QE09537

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 NEP; . In house developed procedures are employed in the absence of documented standards or by client request.

Here moisture determination has been performed, results are reported on a dry weight basis.

Here a reported less than result is higher than the LOR, this may be due to primary sample extract dilution and insufficient sample for analysis.

Here the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample 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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
= Indicates failed QC

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Laboratory Duplicate (DUP) Report

The >uality 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 ; ethod * E' -EN39 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result betAeen 10 and 20 times LOR:- 0K - 50K ; Result L 20 times LOR:- 0K - 20K 4

Sub-; atrix: **SOIL**

Sub-; atriX: SOIL			Laboratory Duplicate (DUP) Report							
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)	
EA055: Moisture Content (QC Lot: 980873)										
EB0907635-010	Dup 01	EA055-103; : oisture Content dried @ 103MC=	1111	4-	K	%4	\$4-	84%	- K - 50K	
EB090769 1--%	Anonymous	EA055-103; : oisture Content dried @ 103MC=	1111	4-	K	047	04-	%4	No Limit	
EG005T: Total Metals by ICP-AES (QC Lot: 985255)										
EB0907635-003	;E 07 0.0-0.1	EG005T: Cadmium	7440-43-9		mg	>	>	-4-	No Limit	
		EG005T: Chromium	8,-1,81\$	%	mg	\$	0	47	No Limit	
		EG005T: Nickel	8,-1-%1-	%	mg	,	\$		-4-	No Limit
		EG005T: Arsenic	8,-1\$ 91%	0	mg	>0	>0		-4-	No Limit
		EG005T: Copper	8,-10-1 9	0	' g	0	0		-4-	No Limit
		EG005T: Lead	7439-92-1	0	mg	8	9	749	No Limit	
		EG005T: Zinc	8,-17717	0	mg	\$	\$%	\$49	No Limit	
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 985256)										
EB0907635-003	;E 07 0.0-0.1	EG035T: ; ercury	7439-97-6	-4	mg	>-4	>-4	-4-	No Limit	
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 978470)										
EB0907635-003	;E 07 0.0-0.1	EP090: C6 - C9 Fraction	1111	-	mg	>-	>-	-4-	No Limit	
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 984863)										
EB09079701--	Anonymous	EP071: C15 - C29 Fraction	1111	-	mg	>-	>-	-4-	No Limit	
		EP071: C29 - C36 Fraction	1111	-	mg	>-	>-	-4-	No Limit	
		EP071: C10 - C14 Fraction	1111	0-	mg	>0-	>0-	-4-	No Limit	
		EP071: C15 - C29 Fraction	1111	-	mg	-	>-	>-	-4-	No Limit
EB09079701- \$	Anonymous	EP071: C29 - C36 Fraction	1111	-	mg	>-	>-	-4-	No Limit	
		EP071: C10 - C14 Fraction	1111	0-	mg	>0-	>0-	-4-	No Limit	
EP080: BTEX (QC Lot: 978470)										
EB0907635-003	;E 07 0.0-0.1	EP090: Benzene	8 1,\$1%	-4%	mg	>-4%	>-4%	-4-	No Limit	
		EP090: Toluene	- 9991\$	-40	mg	>-40	>-40	-4-	No Limit	
		EP090: Ethylbenzene	-1, 1,	-40	mg	>-40	>-40	-4-	No Limit	
		EP090: meta- N para-Oylene	- 91\$-3	-40	mg	>-40	>-40	-4-	No Limit	
			-71,%1\$							
		EP090: ortho-Oylene	95-47-6	-40	mg	>-40	>-40	-4-	No Limit	

Sub-; atrix: **WATER**

Laboratory sample ID		Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA005: pH (QC Lot: 978565)										
EB0907525-002		Anonymous	EA005: pH Palue	1111	-4-	pH Unit	7.99	7.99	-4-	- K - 20K
EB0907621-004		Anonymous	EA005: pH Palue	1111	-4-	pH Unit	84 0	840	9.3	- K - 20K
EG020T: Total Metals by ICP-MS (QC Lot: 981671)										

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Sub-: atrix: WATER		Laboratory Duplicate (DUP) Report									
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)		
EG020T: Total Metals by ICP-MS (QC Lot: 981671) - continued											
EB0907437-001	Anonymous	EG020A-T: Cadmium	7440-43-9	4--	mg@	4---8	4--8	-4	No Limit		
		EG020A-T: Arsenic	8,-1\$ 91%	-4-	mg@	-4--%	4--	-4	No Limit		
		EG020A-T: Chromium	8,-1,81\$	-4-	mg@	-4--\$	4--	-4	No Limit		
		EG020A-T: Copper	8,-10-1 9	-4-	mg@	-4--%	4--%	-4	No Limit		
		EG020A-T: Lead	7439-92-1	4--	mg@	>4--	>4--	-4	No Limit		
		EG020A-T: Nickel	8,-1-%1-	4--	mg@	4-- 9	0.009	-4	No Limit		
		EG020A-T: Zinc	8,-17717	-4-0	mg@	0.059	4-00	84	- K - 50K		
		EG020A-T: Cadmium	7440-43-9	4--	mg@	>4---	>4---	-4	No Limit		
		EG020A-T: Arsenic	8,-1\$ 91%	-4-	mg@	-4--	4--%	-4	No Limit		
EB0907741-003	Anonymous	EG020A-T: Chromium	8,-1,81\$	-4-	mg@	-4--%	4--\$	-4	No Limit		
		EG020A-T: Copper	8,-10-1 9	-4-	mg@	4--	4--	-4	No Limit		
		EG020A-T: Lead	7439-92-1	4--	mg@	4--	4--%	-4	No Limit		
		EG020A-T: Nickel	8,-1-%1-	4--	mg@	-4--%	4--\$	-4	No Limit		
		EG020A-T: Zinc	8,-17717	-4-0	mg@	-4--	4-- 9	%04%	No Limit		
		EG020T: Total Metals by ICP-MS (QC Lot: 983852)									
		EB0907527-002	Anonymous	EG020A-T: Cadmium	7440-43-9	4--	mg@	4---%	>4---	-4	No Limit
				EG020A-T: Arsenic	8,-1\$ 91%	-4-	mg@	-4--	>4--	-4	No Limit
				EG020A-T: Chromium	8,-1,81\$	-4-	mg@	>4--	>4--	-4	No Limit
EG020A-T: Copper	8,-10-1 9			-4-	mg@	-4 8	4-- 8	-4	- K - 50K		
EG020A-T: Lead	7439-92-1			4--	mg@	4--	4--%	-4	No Limit		
EG020A-T: Nickel	8,-1-%1-			4--	mg@	-4--\$	4--\$	-4	No Limit		
EG020A-T: Zinc	8,-17717			-4-0	mg@	-4-08	4-08	-4	- K - 50K		
EG020A-T: Cadmium	7440-43-9			4--	mg@	4---	4---	-4	No Limit		
EG020A-T: Arsenic	8,-1\$ 91%			-4-	mg@	-4--%	4--\$	2.9	- K - 20K		
EB0907713-007	Anonymous	EG020A-T: Chromium	8,-1,81\$	-4-	mg@	0.009	0.009	-4	No Limit		
		EG020A-T: Copper	8,-10-1 9	-4-	mg@	-4--%	4--%	-4	- K - 20K		
		EG020A-T: Lead	7439-92-1	4--	mg@	4-- 9	4-- 8	-4	- K - 20K		
		EG020A-T: Nickel	8,-1-%1-	4--	mg@	-4-8	4-- 9	-4	No Limit		
		EG020A-T: Zinc	8,-17717	-4-0	mg@	-4\$%0	4\$%,	%48	- K - 20K		
		EP080/071: Total Petroleum Hydrocarbons (QC Lot: 978477)									
		EB0907607-001	Anonymous	EP090: C6 - C9 Fraction	1111	%-	Qg@	>%-	>%-	-4	No Limit
		EB0907635-001	RINSATE 1	EP090: C6 - C9 Fraction	1111	%-	Qg@	>%-	>%-	-4	No Limit
		EP080: BTEX (QC Lot: 978477)									
EB0907607-001	Anonymous	EP090: Benzene	8 1,\$1%		Qg@	>	>	-4	No Limit		
		EP090: Toluene	- 9 991\$	%	Qg@	>%	>%	-4	No Limit		
		EP090: Ethylbenzene	-1, 1,	%	Qg@	>%	>%	-4	No Limit		
		EP090: meta- N para-Oylene	- 91\$-3	%	Qg@	>%	>%	-4	No Limit		
			-71,%1\$								
		EP090: ortho-Oylene	95-47-6	%	Qg@	>%	>%	-4	No Limit		

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Sub-; atrix: WATER			Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080: BTEX (QC Lot: 978477) - continued									
EB0907635-001	RINSATE 1	EP090: Benzene	81, \$1%		Qg@	>	>	-4-	No Limit
		EP090: Toluene	- 9991\$	%	Qg@	>%	>%	-4-	No Limit
		EP090: Ethylbenzene	-1, 1,	%	Qg@	>%	>%	-4-	No Limit
		EP090: meta- N para-Oylene	- 91\$-3	%	Qg@	>%	>%	-4-	No Limit
			-71, %1\$						
		EP090: ortho-Oylene	95-47-6	%	Qg@	>%	>%	-4-	No Limit

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Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term ; Method 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.

Substrate: SOIL

Method Blank (MB) Report				Laboratory Control Spike (LCS) Report				
Result		Spike Concentration	Spike Recovery (%)	Low	High			
Method: Compound	CAS Number	LOR	Unit					
EA002 : pH (Soils) (QCLot: 980865)								
EA002: pH Value	1111	-4	pH Unit	1111	5.2 pH Unit	-	90	0
EG005T: Total Metals by ICP-AES (QCLot: 985255)								
EG005T: Arsenic	8,,-1\$ 91%	0	mg/kg	>0	\$49 mg/kg	%	89	%,
EG005T: Cadmium	7440-43-9		mg/kg	>	%82 mg/kg	-,	88	8
EG005T: Chromium	8,,-1,81\$	%	mg/kg	>%	61.6 mg/kg		9\$	119
EG005T: Copper	8,,-10-1 9	0	g/kg	>0	54.7 mg/kg	-8	9%	%%
EG005T: Lead	7439-92-1	0	mg/kg	>0	55.5 mg/kg	99.4	9\$	8
EG005T: Nickel	8,,-1-%1-	%	mg/kg	>%	55.1 mg/kg	-,	9\$	%
EG005T: Zinc	8,,-17717	0	mg/kg	>0	105 mg/kg	-7	9%	%-
EG035T: Total Recoverable Mercury by FIMS (QCLot: 985256)								
EG035T: ; ercury	7439-97-6	-4	mg/kg	>-4	1111	1111	1111	1111
		-4 -	mg/kg	1111	1.34 mg/kg	99.9	89	129
EP080/074: Total Petroleum Hydrocarbons (QCLot: 978470)								
EP090: C6 - C9 Fraction	1111	-	mg/kg	>-	16 mg/kg	91.5	8	\$\$
EP080/074: Total Petroleum Hydrocarbons (QCLot: 984863)								
EP071: C10 - C14 Fraction	1111	0-	mg/kg	>0-	259 mg/kg	9-4,	70	%
EP071: C15 - C29 Fraction	1111	-	mg/kg	>--	524 mg/kg	79.4	874%	%%
EP071: C29 - C36 Fraction	1111	-	mg/kg	>--	1111	1111	1111	1111
EP080: BTEX (QCLot: 978470)								
EP090: Benzene	8 1,\$1%	-4%	mg/kg	>-4%	1 mg/kg	92.9	89	%
EP090: Toluene	- 9 991\$	-40	mg/kg	>-40	1 mg/kg	974	89	%
EP090: Ethylbenzene	--1, 1,	-40	mg/kg	>-40	1 mg/kg	92.7	8%	119
EP090: meta- N para-Oylene	- 9199-3	-40	mg/kg	>-40	2 mg/kg	91.5	77	%
	-71,%1\$							
EP090: ortho-Oylene	95-47-6	-40	mg/kg	>-40	1 mg/kg	90.9	8-	9

Substrate: WATER

Sub-; atrix: WATER									
Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report		Spike Concentration	Laboratory Control Spike (LCS) Report		
				Result			Spike Recovery (%)	LCS	Recovery Limits (%)
EA005: pH (QCLot: 978565)									
EA005: pH Palue	1111	-4-	pH Unit	1111		7.00 pH Unit	--	9%	9
EG020T: Total Metals by ICP-MS (QCLot: 981671)									
EG020A-T: Arsenic	8,,-1\$ 91%	-4--	mg@	>-4---		0.100 mg@	95.6	8,	,
EG020A-T: Cadmilum	7440-43-9	-4---	mg@	>-4---		0.100 mg@	994,	8,	1 9

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Sub-; atrix: WATER				Laboratory Control Spike (LCS) Report			
Method: Compound				Spike		Recovery Limits (%)	
CAS Number				Concentration		Low	
LOR				Result		High	
Unit				Report		Spike Recovery (%)	
Method Blank (MB)				Result		LCS	
EG020T: Total Metals by ICP-MS (QCLot: 981671) - continued							
EG020A-T: Chromium	8,,-1,81\$	-4--	mg@	>-4--	0.100 mg@	99.2	9
EG020A-T: Copper	8,,-10-1 9	-4--	mg@	>-4--	0.200 mg@	97.5	80
EG020A-T: Lead	7439-92-1	-4--	mg@	>-4--	0.100 mg@	99.5	9-
EG020A-T: Nickel	8,,-1-%1-	-4--	mg@	>-4--	0.100 mg@	994%	80
EG020A-T: Zinc	8,,-17717	-4-0	mg@	>-4-0	0.200 mg@	99.0	8\$
EG020T: Total Metals by ICP-MS (QCLot: 983852)							
EG020A-T: Arsenic	8,,-1\$ 91%	-4--	mg@	>-4--	0.100 mg@	94.4	8,
EG020A-T: Cadmium	7440-43-9	-4--	mg@	>-4--	0.100 mg@	- 9	8,
EG020A-T: Chromium	8,,-1,81\$	-4--	mg@	>-4--	0.100 mg@		9
EG020A-T: Copper	8,,-10-1 9	-4--	mg@	>-4--	0.200 mg@	-7	80
EG020A-T: Lead	7439-92-1	-4--	mg@	>-4--	0.100 mg@	-%	9-
EG020A-T: Nickel	8,,-1-%1-	-4--	mg@	>-4--	0.100 mg@	-,	80
EG020A-T: Zinc	8,,-17717	-4-0	mg@	>-4-0	0.200 mg@	109	8\$
EG035T: Total Recoverable Mercury by FIMS (QCLot: 979405)							
EG035T: ; ercury	7439-97-6	-4--	mg@	>-4--	0.0100 mg@	99.7	9%
EP080/071: Total Petroleum Hydrocarbons (QCLot: 978477)							
EP090: C6 - C9 Fraction	1111	%-	Qg@	>%-	160 Qg@	96.5	8\$
EP080/071: Total Petroleum Hydrocarbons (QCLot: 978693)							
EP071: C10 - C14 Fraction	1111	0-	Qg@	>0-	600 Qg@	7.47	49
EP071: C15 - C29 Fraction	1111	--	Qg@	>-	1020 Qg@	8%8	09
EP071: C29 - C36 Fraction	1111	0-	Qg@	>0-	1111	1111	1111
EP080: BTEX (QCLot: 978477)							
EP090: Benzene	8 1,\$1%		Qg@	>	10 Qg@	94.4	8847
EP090: Toluene	- 9 991\$	%	Qg@	>%	10 Qg@	94.7	8,
EP090: Ethylbenzene	--1, 1,	%	Qg@	>%	10 Qg@	96.1	8\$
EP090: meta- N para-Oylene	- 919-3	%	Qg@	>%	20 Qg@	95.1	8-4,
EP090: ortho-Oylene	-71,%1\$	%	Qg@	>%	10 Qg@	94.6	8.4\$

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Matrix Spike (MS) Report

The quality control term ;atrix Spike <;l= 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 achieved in the event of sample matrix interference.

Sub-;atrix: **SOIL**

Laboratory sample ID			Client sample ID	Method/Compound	CAS Number	Matrix Spike (MS) Report		
						Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
EG005T: Total Metals by ICP-AES (QCLot: 985255)								
EB0907635-005	;E - 9R4%1-\$	EG005T: Arsenic	8,-1\$ 91%	50 mg@	97.9	8-	\$-	
		EG005T: Cadmium	7440-43-9	25 mg@	-7	8-	\$-	
		EG005T: Chromium	8,-1,81\$	50 mg@	- 9	8-	\$-	
		EG005T: Copper	8,-10-1 9	50 mg@	-,	8-	\$-	
		EG005T: Lead	7439-92-1	50 mg@	99.6	8-	\$-	
		EG005T: Nickel	8,-1-%1-	50 mg@	-7	8-	\$-	
		EG005T: Zinc	8,-17717	50 mg@	-\$	8-	\$-	
EG035T: Total Recoverable Mercury by FIMS (QCLot: 985256)								
EB0907635-005	;E - 9R4%1-\$	EG035T: ; mercury	7439-97-6	5.0 mg@	9\$4-	8-	\$-	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 978470)								
EB0907635-013	;E -, R4%1-4\$	EP090: C6 - C9 Fraction	1111	% mg@	8748	8-	\$-	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 984863)								
EB0907635-013	;E -, R4%1-4\$	EP071: C10 - C14 Fraction	1111	259 mg@	8.4	8-	\$-	
		EP071: C15 - C29 Fraction	1111	524 mg@	8947	8-	\$-	
EP080: BTEX (QCLot: 978470)								
EB0907635-013	;E -, R4%1-4\$	EP090: Benzene	81,\$1%	2 mg@	94.5	8-	\$-	
		EP090: Toluene	- 9991\$	2 mg@	9747	8-	\$-	

Sub-;atrix: **WATER**

Laboratory sample ID		Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike (MS) Report		
						Spike Recovery (%)	MS	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QCLot: 981671)								
EB0907437-002	Anonymous	EG020A-T: Arsenic	8,-1\$ 91%	1.000 mg@	-%	8-	\$-	
		EG020A-T: Cadmium	7440-43-9	0.500 mg@	9940	8-	\$-	
		EG020A-T: Chromium	8,-1,81\$	1.000 mg@	994,	8-	\$-	
		EG020A-T: Copper	8,-10-1 9	1.000 mg@	94.7	8-	\$-	
		EG020A-T: Lead	7439-92-1	1.000 mg@	92.2	8-	\$-	
		EG020A-T: Nickel	8,-1-%1-	1.000 mg@	97.2	8-	\$-	
		EG020A-T: Zinc	8,-17717	1.000 mg@	97.7	8-	\$-	
EG020T: Total Metals by ICP-MS (QCLot: 983852)								
EB0907635-007	RINSATE 3	EG020A-T: Arsenic	8,-1\$ 91%	1.000 mg@	-7	8-	\$-	
		EG020A-T: Cadmium	7440-43-9	0.500 mg@	-8	8-	\$-	
		EG020A-T: Chromium	8,-1,81\$	1.000 mg@	-%	8-	\$-	
		EG020A-T: Copper	8,-10-1 9	1.000 mg@	-%	8-	\$-	



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Sub-; atrix: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike (MS) Report		
					Spike Recovery (%)	Recovery Limits (%)	
					MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 983852) - continued							
EB0907635-007	RINSATE 3	EG020A-T: Lead	7439-92-1	1,000 mg@	-0	8-	\$-
		EG020A-T: Nickel	8,-1-%1-	1,000 mg@	-	8-	\$-
		EG020A-T: Zinc	8,-17717	1,000 mg@	-0	8-	\$-
EP080/071: Total Petroleum Hydrocarbons (QCLot: 978477)							
EB0907623-013	Anonymous	EP090: C6 - C9 Fraction	1111	140 Qg@	8,48	8-	\$-
EP080: BTEX (QCLot: 978477)							
EB0907623-013	Anonymous	EP090: Benzene	8 1,\$1%	10 Qg@	9 4-	8-	\$-
		EP090: Toluene	- 91991\$	10 Qg@	8849	8-	\$-



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EB0907635	Page	: of 9
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET (, TH BRISBANE QLD, A, STRALIA 4101	Address	: 32 S1and Street Stafford QLD Australia 4053
E3mail	: o4anas5 ' 4' 6com6au	E3mail	: Services6Brisbane5 alsenviro6com
Tele71one	: 3333	Tele71one	: 81 333243 7222
Facsimile	: 3333	Facsimile	: 81 333243 7218
Project	: QE09537	QC Level	: NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Site	: 3333	Date Sam7les Received	: * 3% 9 3009
C3 3C number	: 3333	Issue Date	: +03% 9 3009
Sam7ler	: Ona Kanas	Notes of sam7les received	: *
Order number	: 3333	Notes of sam7les analysed	: +
Quote number	: EN/003/09		

T1is re7ort su7ersedes any 7revious re7ort(s) wit1 t1is reference6Results a77ly to t1e sam7le(s) as submitted6All 7ages of t1is re7ort 1ave been c1ec4ed and a77roved for release6

T1is Inter7retive Quality Control Re7ort contains t1e following information:

- Analysis Holding Time Com7liance
- Quality Control Parameter Frequency Com7liance
- Brief Met1od Summaries
- Summary of Outliers



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Analysis Holding Time Compliance

The following report summarises eDrac1on / 7re7aration and analysis times and com7ares w1t1 recommended 1olding times6 Dates re7orted re7resent first date of eDrac1on or analysis and 7recludes subsequent dilutions and reruns6 Information is also 7provided re t1e sam7le container 67reservative) from ; 11c1 t1e analysis al1quot was ta6en6 Ela7sed 7er1od to analysis re7resents number of days from sam7ling ; 1ere no eDrac1on / digestion is involved or 7er1od from eDrac1on / digestion ; 1ere t1is is 7resent6 For com7osite sam7les, sam7ling date is assumed to be t1at of t1e oldest sam7le contributing to t1e com7osite6 Sam7le date for laboratory 7roduced leac1ates is assumed as t1e com7letion date of t1e leac1ing 7rocess6 Outliers for 1olding time are based on , SEPA , E 4.1 , APHA, AS and NEPM (1999)6 A listing of breac1es is 7provided in t1e Summary of Outliers6

Holding times for leac1ate methods (eDcluding elutriates) vary according to t1e analytes being determined on t1e resulting solution6 For non 3volatile analytes, t1e 1olding time com7liance assessment com7ares t1e leac1 date w1t1 t1e 1ortest analyte 1olding time for t1e equivalent soil method6 These soil 1olding times are: Organics (14 days); Mercury (28 days) & other metals (180 days)6 A recorded breac1 therefore does not guarantee a breac1 for all non 3volatile 7arameters6

Matrix SOIL

Evaluation: * H Holding time breac1 ; ✓ HE it 1 in 1olding time6

Method		Sample Date	Extraction / Preparation		Analysis	
Container / Client Sample ID(s)			Date extracted	Due for extraction	Date analysed	Due for analysis
EA002 : pH (Soils)						
Soil Glass Jar - Unpreserved %E />/ 6-3 6-	%E />/ 6-3 6-	11-MAY-2009	18-MAY-2009	4 3% 9 32009	18-MAY-2009	4 3% 9 32009
Soil Glass Jar - Unpreserved %E /0>/ 6-3 6-	%E /0>/ 6-3 6-	12-MAY-2009	18-MAY-2009	193% 9 32009	18-MAY-2009	4 3% 9 32009
EA055: Moisture Content						
Soil Glass Jar - Unpreserved %E />/ 6-3 6-	%E />/ 6-3 6-	11-MAY-2009	----	3333	18-MAY-2009	4 3% 9 32009
Soil Glass Jar - Unpreserved %E /0>/ 6-3 6-	%E /0>/ 6-3 6-	12-MAY-2009	----	3333	18-MAY-2009	193% 9 32009
Soil Glass Jar - Unpreserved %E /4>/ 6-3*-	%E /4>/ 6-3 6-	13-MAY-2009	----	3333	18-MAY-2009	+ / 3% 9 32009
EG005T: Total Metals by ICP-AES						
Soil Glass Jar - Unpreserved %E />/ 6-3 6-	%E />/ 6-3 6-	11-MAY-2009	22-MAY-2009	12 3(?) 32009	22-MAY-2009	12 3(?) 32009
Soil Glass Jar - Unpreserved %E /0>/ 6-3 6-	%E /0>/ 6-3 6-	12-MAY-2009	22-MAY-2009	14 3(?) 32009	22-MAY-2009	14 3(?) 32009
Soil Glass Jar - Unpreserved %E /4>/ 6-3*-	%E /09_06 3 6-	13-MAY-2009	22-MAY-2009	093(?) 32009	22-MAY-2009	093(?) 32009

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MatrixD SOIL Evaluation: * HHolding time breac1 ; ✓ HE it1in 1olding time6

Method		Sample Date	Extraction / Preparation		Evaluation	Analysis	
Container / Client Sample ID(s)			Date extracted	Due for extraction		Date analysed	Due for analysis
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved	%E />/ 6-3 6-	11-MAY-2009	22-MAY-2009	1/2 3(? 32009	✓	22-MAY-2009	1/4 3@ ~ 32009
Soil Glass Jar - Unpreserved	%E /0>/ 6-3 6-	12-MAY-2009	22-MAY-2009	1/4 3(? 32009	✓	22-MAY-2009	093@ ~ 32009
Soil Glass Jar - Unpreserved	%E /1>/ 6-3 6-						
Soil Glass Jar - Unpreserved	%E /4>/ 6-3*-Du7 01	13-MAY-2009	22-MAY-2009	093(? 32009	✓	22-MAY-2009	1 3@ ~ 32009
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved	%E /+>/ 6-3 6-	11-MAY-2009	14-MAY-2009	+03% 9 32009	✓	14-MAY-2009	+03% 9 32009
Soil Glass Jar - Unpreserved	%E /+>/ 6-3 6-	11-MAY-2009	21-MAY-2009	+03% 9 32009	✓	22-MAY-2009	*1 3@ ~ 32009
Soil Glass Jar - Unpreserved	%E /0>/ 6-3 6-	12-MAY-2009	14-MAY-2009	+13% 9 32009	✓	14-MAY-2009	+13% 9 32009
Soil Glass Jar - Unpreserved	%E /0>/ 6-3 6-	12-MAY-2009	21-MAY-2009	+13% 9 32009	✓	22-MAY-2009	*1 3@ ~ 32009
EP080: BTEX							
Soil Glass Jar - Unpreserved	%E /+>/ 6-3 6-	11-MAY-2009	14-MAY-2009	+03% 9 32009	✓	14-MAY-2009	+03% 9 32009
Soil Glass Jar - Unpreserved	%E /0>/ 6-3 6-	12-MAY-2009	14-MAY-2009	+13% 9 32009	✓	14-MAY-2009	+13% 9 32009

MatrixD WATER Evaluation: * HHolding time breac1 ; ✓ HE it1in 1olding time6

Method		Sample Date	Extraction / Preparation		Analysis		
Container / Client Sample ID(s)			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis
EA005: pH							
Amber Glass Bottle - Unpreserved							
RINSATE 3		13-MAY-2009	----	3333	3333	13-MAY-2009	* 3% 9 32009
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified							
RINSATE 1		11-MAY-2009	18-MAY-2009	1/2 3(?) 32009	✓	18-MAY-2009	1/2 3(?) 32009
Clear Plastic Bottle - Unfiltered; Lab-acidified							
RINSATE 2		12-MAY-2009	18-MAY-2009	1/4 3(?) 32009	✓	18-MAY-2009	1/4 3(?) 32009
Clear Plastic Bottle - Unfiltered; Lab-acidified							
RINSATE 3		13-MAY-2009	22-MAY-2009	093(?) 32009	✓	22-MAY-2009	093(?) 32009

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Matrix: **WATER** Evaluation: * H Holding time breac1 ; ✓ HE it in 1olding time6

Method		Sample Date	Extraction / Preparation		Analysis		
Container / Client Sample ID(s)	Date extracted		Due for extraction	Evaluation	Date analysed	Due for analysis	
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified RINSATE 1		11-MAY-2009	----	3333	3333	15-MAY-2009 / 4 30 ~ 32009	✓
Clear Plastic Bottle - Unfiltered; Lab-acidified RINSATE 2		12-MAY-2009	----	3333	3333	15-MAY-2009 0930 ~ 32009	✓
Clear Plastic Bottle - Unfiltered; Lab-acidified RINSATE 3		13-MAY-2009	----	3333	3333	15-MAY-2009 / 30 ~ 32009	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved RINSATE 1		11-MAY-2009	15-MAY-2009	4 3% 9 32009	✓	17-MAY-2009 + 30 ~ 32009	✓
Amber Glass Bottle - Unpreserved RINSATE 2		12-MAY-2009	15-MAY-2009	193% 9 32009	✓	17-MAY-2009 + 30 ~ 32009	✓
Amber Glass Bottle - Unpreserved RINSATE 3		13-MAY-2009	15-MAY-2009	+ 3% 9 32009	✓	17-MAY-2009 + 30 ~ 32009	✓
Amber VOC Vial - HCl or NaHSO4 RINSATE 1		11-MAY-2009	----	333	3333	14-MAY-2009 +03% 9 32009	✓
Amber VOC Vial - HCl or NaHSO4 RINSATE 2		12-MAY-2009	----	333	3333	14-MAY-2009 +13% 9 32009	✓
Amber VOC Vial - HCl or NaHSO4 RINSATE 3		13-MAY-2009	----	333	3333	14-MAY-2009 +23% 9 32009	✓
EP080: BTEX							
Amber VOC Vial - HCl or NaHSO4 RINSATE 1		11-MAY-2009	----	333	3333	14-MAY-2009 +03% 9 32009	✓
Amber VOC Vial - HCl or NaHSO4 RINSATE 2		12-MAY-2009	----	333	3333	14-MAY-2009 +13% 9 32009	✓
Amber VOC Vial - HCl or NaHSO4 RINSATE 3		13-MAY-2009	----	333	3333	14-MAY-2009 +23% 9 32009	✓

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Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was/were processed. Actual rate should be greater than or equal to the detected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL** Evaluation: * H Quality Control frequency not within specification < H Quality Control frequency within specification

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification	
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory DuPonts (D, P)							
Moisture Content	EA0053*	+	9	10.5	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG005T	1	9	11.1	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	9	11.1	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071	+	9	10.5	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	.	.	25.0	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
7H (1:5)	EA002	.	*	7.7	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	9	11.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	9	11.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071	9	9	5.3	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	.	.	25.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Method Blank (MB)							
Total Mercury by FIMS	EG035T	1	9	11.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	9	11.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071	9	9	5.3	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	.	.	25.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Matrix Spike (MS)							
Total Mercury by FIMS	EG035T	1	9	11.1	5.0	✓	ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	9	11.1	5.0	✓	ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071	9	9	5.3	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	.	.	25.0	5.0	✓	ALS QCS3 requirement

Matrix: **WATER** Evaluation: * H Quality Control frequency not within specification < H Quality Control frequency within specification

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification	
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory DuPonts (D, P)							
7S	EA005	+	9	10.5	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES 3Suite A	EG020A3T	.	./	10.0	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	+	.	14.3	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
7S	EA005	+	9	10.5	10.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	.	./	5.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES 3Suite A	EG020A3T	+	./	5.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071	*	*	7.7	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	.	.	7.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement



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Matrix: **WATER** Evaluation: * H Quality Control frequency not within specification < ✓ H Quality Control frequency within specification

Quality Control Sample Type		Count		Rate (%)		Quality Control Specification	
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Met10d Blanks (MB)							
Total Mercury by FIMS	EG035T		+ /	5.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Total Metals by ICP3MS 3Suite A	EG020A3T	+	. /	5.0	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH 3Semi-volatile Fraction	EP071		*	7.7	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080		.	7.1	5.0	✓	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Matrix DS74des (MS)							
Total Metals by ICP3MS 3Suite A	EG020A3T	+	. /	5.0	5.0	✓	ALS QCS3 requirement
TPH Volatiles/BTEX	EP080		.	7.1	5.0	✓	ALS QCS3 requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the EPA, APHA, AS and NEPM. In-house developed procedures are employed in the absence of documented standards or by client request following the brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which the ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Asbestos 3 Count (Solid)	EA002	SOIL	Asbestos Count on solid matrices using PLM conducted by Subcontracting Laboratory (APHA 21st ed 4500H8) 7H is determined on soil samples after a 1:5 soil/water leach. 16T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (Met1od 103)
Moisture Content	EA0553/*	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103±0.5 degrees C. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (Met1od 102)
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed 3120; , SEPA SE 846 36010) (ICPAES) Metals are determined following an a77ro7riate acid digestion of the soil. 6T is ICP-AES technique ionises samples in a plasma, emitting a characteristic spectrum based on metal intensities at selected wavelengths. 6T is com7ared against the use of matrix matched standards. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed 3112 Hg 3B (Flow Injection) (SnCl2)(Cold Vapor generation) AAS) FIMS-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an a77ro7riate acid digestion. Atomic mercury is reduced online to atomic mercury vapor by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3)
TPH 3 Semivolatile Fraction	EP071	SOIL	6 SEPA SE 846 38015A) Samples are analysed by Ca7illary GC/FID and quantified against alkanes standards over the range C10 to C36. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (Met1od 50667)
TPH Volatiles/BTEX	EP080	SOIL	6 SEPA SE 846 38260B) Extracts are analysed by Purge and Trap, Ca7illary GC/MS. Quantification is by com7arison against an established 5 point calibration curve. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (Met1od 501)
7\$	EA005	EATER	APHA 21st ed 64500 H8 B6 7H of water samples is determined by ISE either manually or by automated 7H meter. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (A77) D&2
Total Metals by ICP-MS 3 Suite A	EG020A3T	EATER	(APHA 21st ed 3125; , SEPA SE 846 36020, ALS QOE EN/EG020): The ICP-MS technique utilizes a highly efficient argon plasma to ionize selected elements. Samples are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	EATER	AS 3550, APHA 21st ed 3112 Hg 3B (Flow Injection) (SnCl2)(Cold Vapor generation) AAS) FIMS-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an a77ro7riate acid digestion. Atomic mercury is reduced online to atomic mercury vapor by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (A77) D&2
TPH 3 Semivolatile Fraction	EP071	EATER	, SEPA SE 846 38015A) The sample extract is analysed by Ca7illary GC/FID and quantification is by com7arison against an established 5 point calibration curve of n-alkane standards. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (A77) D&2
TPH Volatiles/BTEX	EP080	EATER	, SEPA SE 846 38260B) Extracts are directly purged prior to analysis by Ca7illary GC/MS and quantification is by com7arison against an established 5 point calibration curve. 6T is method is com7liant wit1 NEPM (1999) Sc1edule B(3) (A77) D&2



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Preparation Methods	Method	Matrix	Method Descriptions
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is milled with 50 mL of distilled water and tumbled end over end for 1 hour. After soluble salts are leached from the soil by the continuous suspension, the samples are settled and the water filtered off for analysis.
Hot Block Digest for metals in soils, sediments and sludges	EN69	SOIL	SEPA 2002 Mod 6 Hot Block Acid Digestion: 10 g of sample is treated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples are treated and cooled again before being filtered and bulked to volume for analysis. Digest is analyzed for determination of selected metals in sludge, sediments, and soils.
Mercuric Ethanol Extraction of Soils for Purge and Treat	(# 1)	SOIL	SEPA SE 846 35030A) 5g of solid is spiked with surrogate and 10mL mercuric ethanol prior to analysis by Purge and Treat GC/MS.
Tumbler Extraction of Solids (Option B 3 Non-concentrating)	(# 2)	SOIL	In 3-bottle, Mercuric Ethanol agitation (tumbler) 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	SEPA SE 4.1 30005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to treat surface and ground water samples for analysis by ICP-AES or ICP-MS. The method is compliant with NEPM (1999) Schedule B(3) (A77) D62.
Sequential Extraction of Liquids	(# .)	WATER	SEPA SE 846 33510B 500 mL to 1L of sample is transferred to a sequential extraction funnel and serially extracted times using 60mL DCM for each extraction. The resultant extracts are combined, dehydrated and concentrated for analysis. The method is compliant with NEPM (1999) Schedule B(3) (A77) D62. ALS default extracts sediment; 1mL may be resident in the container.

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Summary of Outliers

Outliers : Quality Control Samples

The following re7ort 1ig1lig1ts outliers flagged in the Quality Control (QC) Re7ort6 Surrogate recovery limits are static and based on , SEPA , E 846 or ALS3 E I/EN/38 (in the absence of specific , SEPA limits)6 This re7ort displays QC Outliers (breaches) only6

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outliers occur.

Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

This re7ort displays Holding Time breaches only6Only the respective EDraction / Pre7raction and/or Analysis component is/are displayed6

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

The following re7ort 1ig1lig1ts breaches in the Frequency of Quality Control Samples6

- No Quality Control Sample Frequency Outliers exist.

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Environmental Division

SAMPLE RECEIPT NOTIFICATION (SRN)

Comprehensive Report

Work Order : **EB0907635**

Client : **SINCLAIR KNIGHT MERZ**
Contact : **ONA KANAS**
Address : **32 CORDELIA STREET**
BRISBANE QLD, AUSTRALIA 4101

Laboratory : **Environmental Division Brisbane**
Contact : **Tim Kilmister**
Address : **32 Shand Street Stafford QLD Australia**
4053

E-mail : **okanas@skm.com.au**
Telephone : **----**
Facsimile : **----**

E-mail : **Services.Brisbane@alsenviro.com**
Telephone : **+61-7-3243 7222**
Facsimile : **+61-7-3243 7218**

Project : **QE09537**
Order number : **----**
C-O-C number : **----**
Site : **----**
Sampler : **Ona Kanas**

Page : **(of**
Quote number : **ES2009SINKNI0322 (EN/003/09)**
QC Level : **NEPM 1999 Schedule B(3) and ALS**
QCS3 requirement

Dates

Date Samples Received : **(- = ' ? -2009**
Client Requested Due Date : **! , - = ' ? -2009**

Issue Date : **(' - = ' ? -2009 13:23**
Scheduled Reporting Date : **25-MAY-2009**

Delivery Details

Mode of Delivery : **Client Drop off**
No. of coolers/boxes : **2 MEDIUM**
Security Seal : **Intact.**

Temperature : **7.0, 5.6 C - Ice present**
No. of samples received : **'**
No. of samples analysed : **(3**

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliance
 - Summary of Sample(s) and Requested Analysis
 - Requested Deliverables
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Asbestos analysis will be subcontracted to Queensland Laboratory.**
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Please direct any queries related to sample condition / numbering / breakages to Maggie Kahi.
- Analytical Work for this Work order will be conducted at ALS Brisbane.
- Sample Disposal - Aqueous (14 days), Solid (90 days) from date of completion of Work order.



Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exist.

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

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 has not been provided by client.

Matrix: SOIL

Laboratory sample ID	Client sampling date / time	Client sample ID	(On Hold) SOIL No analysis requested	SOIL - ASB-SOL (Subcontracted) Asbestos - Count (Solid)	SOIL - EA002 pH (1:5)	SOIL - S-02 8 Metals (incl. Digestion)	SOIL - S-05 TPH/BTEX/8 Metals
EB0907635-003	(2009 15:00)	MW07 0.0-0.1					
EB0907635-004	(2009 15:00)	MW08 0.0-0.1		✓			✓
EB0907635-005	(2009 15:00)	MW08_0.2-0.3				✓	
EB0907635-006	(2009 15:00)	MW08_0.5-0.6	✓				
EB0907635-008	(2009 15:00)	MW09_0.0-0.1				✓	
EB0907635-009	(2009 15:00)	MW09_0.2-0.3	✓				
EB0907635-010	(2009 15:00)	Dup 01				✓	
EB0907635-011	(2009 15:00)	MW03_1.0-1.1	✓				
EB0907635-012	(2009 15:00)	MW04_0.0-0.1		✓			
EB0907635-013	(2009 15:00)	MW04_0.2-0.3			✓		✓
EB0907635-014	(2009 15:00)	MW04_0.5-0.6	✓				
EB0907635-015	(2009 15:00)	MW05_0.0-0.1		✓			
EB0907635-016	(2009 15:00)	MW05_0.2-0.3			✓		✓
EB0907635-017	(2009 15:00)	MW05_0.5-0.6	✓				
EB0907635-018	(2009 15:00)	MW06_0.0-0.1		✓			
EB0907635-019	(2009 15:00)	MW06_0.2-0.3				✓	
EB0907635-020	(2009 15:00)	MW06_0.5-0.6	✓				
EB0907635-021	(2009 15:00)	MW01_0.0-0.1	✓				
EB0907635-022	(2009 15:00)	MW01_0.2-0.3				✓	
EB0907635-023	(2009 15:00)	MW01_0.5-0.6	✓				
EB0907635-024	(2009 15:00)	MW01_1.0-1.1	✓				
EB0907635-025	(2009 15:00)	MW02_0.0-0.1	✓				
EB0907635-026	(2009 15:00)	MW02_0.2-0.3			✓		✓
EB0907635-027	(2009 15:00)	MW02_0.5-0.6		✓			
EB0907635-028	(2009 15:00)	MW02_1.0-1.1	✓				
EB0907635-029	(2009 15:00)	MW02_1.4-1.5	✓				
EB0907635-030	(2009 15:00)	MW03_0.0-0.1	✓				
EB0907635-031	(2009 15:00)	MW03_0.5-0.6	✓				
EB0907635-032	(2009 15:00)	MW03_0.2-0.3	✓				
EB0907635-033	(2009 15:00)	MW07_0.2-0.3	✓				
EB0907635-034	(2009 15:00)	MW05_1.0-1.1	✓				



Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - EA005: pH 0A	WATER - W-05T TPH/BTEX/8 Metals (Total)
EB0907635-001	((-' ?-2009 15:00	RINSATE 1		✓
EB0907635-002	(l-' ?-2009 15:00	RINSATE 2		✓
EB0907635-007	(-' ?-2009 15:00	RINSATE 3	✓	✓

Requested Deliverables

MR JEREMY WICKS

- *AU Certificate of Analysis - NATA (COA)	Email	Wicks@skm.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	Wicks@skm.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	Wicks@skm.com.au
- A4 - AU Sample Receipt Notification - Environmental (SRN)	Email	Wicks@skm.com.au
- A4 - AU Tax Invoice (INV)	Email	Wicks@skm.com.au
- Default - Chain of Custody (COC)	Email	Wicks@skm.com.au
- EDI Format - ENMRG (ENMRG)	Email	Wicks@skm.com.au
- EDI Format - ESDAT (ESDAT)	Email	Wicks@skm.com.au
- EDI Format - XTab (XTAB)	Email	Wicks@skm.com.au
- Trigger - Subcontract Report (SUBCO)	Email	Wicks@skm.com.au

ONA KANAS

- *AU Certificate of Analysis - NATA (COA)	Email	okanas@skm.com.au
- *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) (QCI)	Email	okanas@skm.com.au
- *AU QC Report - DEFAULT (Anon QC Rep) - NATA (QC)	Email	okanas@skm.com.au
- A4 - AU Sample Receipt Notification - Environmental (SRN)	Email	okanas@skm.com.au
- Default - Chain of Custody (COC)	Email	okanas@skm.com.au
- EDI Format - ENMRG (ENMRG)	Email	okanas@skm.com.au
- EDI Format - ESDAT (ESDAT)	Email	okanas@skm.com.au
- EDI Format - XTab (XTAB)	Email	okanas@skm.com.au
- Trigger - Subcontract Report (SUBCO)	Email	okanas@skm.com.au

Job #: BSQ080884
ID Date: 18/05/09

Date Sampled: 11/13/05/09

Certificate of Analysis

ALS BATCH #: EB0907635

SAMPLED BY: ALS Environmental

SAMPLE IDENTIFICATION: Five samples as submitted.

SCOPE: Microscope examination for the presence of asbestos.

INTRODUCTION: Five samples as submitted by ALS Environmental, were examined for the presence of asbestos.

METHODOLOGY: Samples are examined in accordance with the methodology outlined in the Australian Standards (AS 4964 – 2004) and In-House Method QLA003.

ALS No.	Sample Description	Weight / Dimensions (L/W/T)	Sample ID	Asbestos Detected (Y/N)	Fibre Type Detected
4	MW08-0.0-0.0.1 - Non homogenous soil sample	86.77g	884 - 01	N	No Asbestos Detected*
12	MW04-0.0-0.0.1 - Non homogenous soil sample	63.92g	884 - 2	N	No Asbestos Detected*
15	MW05-0.0-0.0.1 - Non homogenous soil sample	73.82g	884 - 3	N	No Asbestos Detected*
18	MW06-0.0-0.1 - Non homogenous soil sample	59.56g	884 - 4	N	No Asbestos Detected*
27	MW02-0.5-0.6 - Non homogenous soil sample	79.11g	884 - 5	N	No Asbestos Detected*

Table 1 - Results of sample examination using polarised light microscopy (PLM) including Dispersion Staining

*No Asbestos Detected at the Reporting Limit of 0.1g/kg.

49-Sch4 - Signature

NATA Approved Identifier
Michael Creighton

49-Sch4 - Signature

NATA Approved Signatory
Michael Creighton

SCOPE OF ACCREDITATION: Class 7.82.31: Qualitative identification of asbestos types in bulk samples by polarised light microscopy



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1 of 1



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EB0907913	Page	1 of 21
Client	SINCLAIR KNIGHT MERZ	Laboratory	Environmental Division Brisbane
Contact	ONA KANAS	Contact	Tim Kilmister
Address	32 CORDELIA STREET SOUTH BRISBANE, E QLD, AUSTRALIA 4101	Address	32 Shand Street Stafford QLD Australia 40+3
E-mail	okanas@skm.com.au	E-mail	Services.Brisbane@alsenviro.com
Telephone	""	Telephone	+61-7, 3243 7222
Facsimile	""	Facsimile	+61-7, 3243 7219
Project	& E09+37	QC Level	"EP", 1999 Schedule B(3) and ALS QCS3 requirement
Order number	""	Date Samples Received	19,, ?-2009
C-O-C number	""	Issue Date	27,, ?-2009
Sampler	O Kana & ; ; cleod	No. of samples received	14
Site	Cronulla Park	No. of samples analysed	14
Quote number	E'4003409		

This report supersedes any previous reports with this reference. Results apply to the samples 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 925

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with #4#EC 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
Kim ; cCabe	Senior Inorganic Chemist	Inorganics
athew Goodwin	Senior Organic Chemist	Organics
Sarah Ashworth	Organic Chemist	Organics

Environmental Division Brisbane

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A Campbell Brothers Limited Company



Page 2 of 21
Work Order EB0907913
Client SINCLAIR KNIGHT ME"
Project 8 E09+37

13-054

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the U" EPA, APHA, AS and " EP; . 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 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 data is 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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

- PAH/Phenols: Sample MW04 shows poor 2-Fluorobiphenyl surrogate recovery due to suspected matrix interference. Insufficient sample for re-extraction and re-analysis.
- Pesticides: Results for Monocrotophos should be scrutinised as QC data indicates abnormally low recovery.
- Pesticides/PCB: Insufficient sample for MW08 has been provided for standard analysis. Where applicable LOR values have been adjusted accordingly. It appears that sample container was not full upon receipt at ALS.



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Unit		MW01	MW02	MW03	MW04	MW05
Compound	CAS Number	LOR	Unit	EB0907913-001	EB0907913-002	EB0907913-003	EB0907913-004	EB0907913-005				
EG020F: Dissolved Metals by ICP-MS												
Arsenic	7((0.38-2	0/001	mg/L	; 0/001	; 0/001	<0/001	0.003	0.003				
Cadmium	7((0.(3.9	0/0001	mg/L	; 0/0001	0.0006	<0/0001	<0/0001	<0/0001				
Chromium	7((0.(7.3	0/001	mg/L	0.010	0.009	; 0/001	<0/001	0.003				
Copper	7((0.+0.9	0/001	mg/L	0.021	0.018	; 0/001	<0/001	<0/001				
Lead	7(39.92-1	0/001	mg/L	0.026	0.032	; 0/001	<0/001	<0/001				
Nickel	7((0.02-0	0/001	mg/L	0.032	0.100	0.004	0.013	0.013				
Zinc	7((0.22,2	0/00+	mg/L	0.100	0.359	0.033	; 0/00+	; 0/00+				
EG035F: Dissolved Mercury by FIMS												
Mercury	7(39.97,2	0/0001	mg/L	; 0/0001	; 0/0001	<0/0001	<0/0001	<0/0001				
EK055G: Ammonia as N by Discrete Analyser												
Ammonia as N	7664-41-7	0/01	mg/L	0.06	0.12	0.52	228	120				
EP066: Polychlorinated Biphenyls (PCB)												
Total Polychlorinated biphenyls		1	Jg/L			<1	<1	<1				
EP068A: Organochlorine Pesticides (OC)												
alpha-BHC	319.9(,2	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Hexachlorobenzene (HCB)	119.74-1	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
beta-BHC	319.9+,7	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
gamma-BHC	+9.89,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
delta-BHC	319.92,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Heptachlor	72,(, 9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Aldrin	309.00-2	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Heptachlor epoxide	1024-57,3	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
trans-Chlordane	5103.74-2	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
alpha-Endosulfan	9+9.98,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
cis-Chlordane	5103.71-9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Dieldrin	20,+7-1	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
4,4'-DDE	72-55-9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Endrin	72-20,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
beta-Endosulfan	33213,2+,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
4,4'-DDD	72-54-9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Endrin aldehyde	7421-93,(	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Endosulfan sulfate	1031-07,9	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
4,4'-DDT	+0-29,3	2	Jg/L			<2	<2	<2				
Endrin ketone	+3(9(, 70,+	0/+	Jg/L			; 0/+	; 0/+	; 0/+				
Methoxychlor	72-43,+	2	Jg/L			<2	<2	<2				
EP068B: Organophosphorus Pesticides (OP)												
Dichlorvos	62-73,7	0/+	Jg/L			; 0/+	; 0/+	; 0/+				



Analytical Results

Sub-; atrix: WATER

Sub-; atriX: WATER		Client sample ID		Client sampling date / time						
Compound	CAS Number	LOR	Unit	MW01	MW02	MW03	MW04	MW05		
EP068B: Organophosphorus Pesticides (OP) - Continued										
Demeton-S-methyl	919,92,9	0/+	Jg/L	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00		
Monocrotophos	2923-22-4	2	Jg/L	EB0907913-001	EB0907913-002	EB0907913-003	EB0907913-004	EB0907913-005		
Dimethoate	20-51-5	0/+	Jg/L							
Diazinon	333-41-5	0/+	Jg/L							
Chlorpyrifos-methyl	++98-13,0	0/+	Jg/L							
Parathion-methyl	298,00,0	2	Jg/L							
Malathion	121-7+,+	0/+	Jg/L							
Fenthion	++38,9	0/+	Jg/L							
Chlorpyrifos	2921-99-2	0/+	Jg/L							
Parathion	+2,38-2	2	Jg/L							
Pirimphos-ethyl	23+05-41-1	0/+	Jg/L							
Chlorfenvinphos	(70,90,2	0/+	Jg/L							
Bromophos-ethyl	(924-78,2	0/+	Jg/L							
Fenamiphos	22224-92-6	0/+	Jg/L							
Prothiofos	3(2(3,(2,(	0/+	Jg/L							
Ethion	+23-12-2	0/+	Jg/L							
Carbophenothion	786-19,2	0/+	Jg/L							
Azinphos Methyl	92,+0,0	0/+	Jg/L							
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	71-43-2	+	Jg/L				5			
Toluene	108,99,3	+	Jg/L							
Ethylbenzene	100-41-4	+	Jg/L							
meta- & para-Xylene	108,38,3 106-42-3	+	Jg/L							
Styrene	100-42-5	+	Jg/L							
ortho-Xylene	9+,(7,2	+	Jg/L							
Isopropylbenzene	98,92-9	+	Jg/L							
n-Propylbenzene	103-65-1	+	Jg/L				6			
1,3,5-Trimethylbenzene	108,27,9	+	Jg/L							
sec-Butylbenzene	13+,98,9	+	Jg/L							
1,2,4-Trimethylbenzene	9+,23,2	+	Jg/L							
tert-Butylbenzene	98,02,2	+	Jg/L							
p-Isopropyltoluene	99,87,2	+	Jg/L							
n-Butylbenzene	104-51-9	+	Jg/L							
EP074B: Oxygenated Compounds										
Vinyl Acetate	108,0+, (	+0	Jg/L							
2-Butanone (MEK)	78,93,3	+0	Jg/L							
4-Methyl-2-pentanone (MIBK)	108-10-1	+0	Jg/L							
2-Hexanone (MBK)	+91-78,2	+0	Jg/L							



Analytical Results

Sub-; atrix: WATER

Compound		Client sample ID		Client sampling date / time		Unit		MW01	MW02	MW03	MW04	MW05
		CAS Number	LOR					19,, , ?-2009 11:00 EB0907913-001	19,, , ?-2009 11:00 EB0907913-002	19,, , ?-2009 11:00 EB0907913-003	19,, , ?-2009 11:00 EB0907913-004	19,, , ?-2009 11:00 EB0907913-005
EP074C: Sulfonated Compounds												
Carbon disulfide		75-15-0	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
EP074D: Fumigants												
2,2-Dichloropropane		+94-20,7	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,2-Dichloropropane		78,87,+	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
cis-1,3-Dichloropropylene		10061-01-5	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
trans-1,3-Dichloropropylene		10061-02-6	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,2-Dibromoethane (EDB)		102,93,(	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
EP074E: Halogenated Aliphatic Compounds												
Dichlorodifluoromethane		7+ ,71-9	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Chloromethane		7(, 87,3	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Vinyl chloride		7+01-4	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Bromomethane		7(, 83,9	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Chloroethane		7+ ,00,3	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Trichlorofluoromethane		7+29,(	+0			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1-Dichloroethene		7+ ,3+,(	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Iodomethane		7(, 99,(	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
trans-1,2-Dichloroethene		156-60,+	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1-Dichloroethane		7+ ,3(, 3	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
cis-1,2-Dichloroethene		156-59-2	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1,1-Trichloroethane		71-55-6	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1-Dichloropropylene		+23,+9,2	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Carbon Tetrachloride		56-23,+	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,2-Dichloroethane		107,06-2	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Trichloroethene		79,01-6	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Dibromomethane		7(, 9+ ,3	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1,2-Trichloroethane		79,00,+	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,3-Dichloropropane		142-29,9	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Tetrachloroethene		127-19,(	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1,1,2-Tetrachloroethane		230-20,2	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
trans-1,4-Dichloro-2-butene		110,+7,2	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
cis-1,4-Dichloro-2-butene		1476-11-5	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,1,2,2-Tetrachloroethane		79,3(,+	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,2,3-Trichloropropane		96-19,(	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Pentachloroethane		72,01-7	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
1,2-Dibromo-3-chloropropane		96-12-9	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
Hexachlorobutadiene		87,29,3	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00
EP074F: Halogenated Aromatic Compounds												
Chlorobenzene		108,90,7	+			Jg/L		19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00	19,, , ?-2009 11:00



Analytical Results

Sub-; atrix: WATER

Sub- matrix: WATER		Client sample ID		Client sampling date / time		MW01		MW02		MW03		MW04		MW05	
Compound	CAS Number	LOR	Unit			EB0907913-001		EB0907913-002		EB0907913-003		EB0907913-004		EB0907913-005	
EP074F: Halogenated Aromatic Compounds - Continued															
Bromobenzene	108-96-1	+	Jg/L							;+		;+		;+	
2-Chlorotoluene	9+,(9,9	+	Jg/L							;+		;+		;+	
4-Chlorotoluene	102,(3,(	+	Jg/L							;+		;+		;+	
1,3-Dichlorobenzene	541-73-1	+	Jg/L							;+		;+		;+	
1,4-Dichlorobenzene	102,(2, 7	+	Jg/L							;+		6		28	
1,2-Dichlorobenzene	9+,+0-1	+	Jg/L							;+		;+		5	
1,2,4-Trichlorobenzene	120,92-1	+	Jg/L							;+		;+		;+	
1,2,3-Trichlorobenzene	87-61-6	+	Jg/L							;+		;+		;+	
EP074G: Trihalomethanes															
Chloroform	27,22,3	+	Jg/L							;+		;+		;+	
Bromodichloromethane	75-27,(	+	Jg/L							;+		;+		;+	
Dibromochloromethane	124-49-1	+	Jg/L							;+		;+		;+	
Bromoform	75-25-2	+	Jg/L							;+		;+		;+	
EP074H: Naphthalene															
Naphthalene	91-20,3	7	Jg/L							; 7		20		14	
EP075(SIM)A: Phenolic Compounds															
Phenol	108,95-2	1.0	Jg/L							<1.0		<1.0		<1.0	
2-Chlorophenol	9+,+7,9	1.0	Jg/L							<1.0		<1.0		<1.0	
2-Methylphenol	9+,(9,7	1.0	Jg/L							<1.0		<1.0		<1.0	
3- & 4-Methylphenol	1319,77,3	2.0	Jg/L							<2.0		<2.0		<2.0	
2-Nitrophenol	99,7+,+	1.0	Jg/L							<1.0		<1.0		<1.0	
2,4-Dimethylphenol	10+,27,9	1.0	Jg/L							<1.0		<1.0		<1.0	
2,4-Dichlorophenol	120,83-2	1.0	Jg/L							<1.0		<1.0		<1.0	
2,6-Dichlorophenol	87,2+,0	1.0	Jg/L							<1.0		<1.0		<1.0	
4-Chloro-3-Methylphenol	+9+,0,7	1.0	Jg/L							<1.0		<1.0		1.9	
2,4,6-Trichlorophenol	99,06-2	1.0	Jg/L							<1.0		<1.0		<1.0	
2,4,5-Trichlorophenol	9+9+,(	1.0	Jg/L							<1.0		<1.0		<1.0	
Pentachlorophenol	87,92,+	2.0	Jg/L							<2.0		<2.0		<2.0	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons															
Naphthalene	91-20,3	1.0	Jg/L							<1.0		7.1		11.2	
Acenaphthylene	208,92,9	1.0	Jg/L							<1.0		<1.0		<1.0	
Acenaphthene	83,32-9	1.0	Jg/L							<1.0		<1.0		<1.0	
Fluorene	92,73,7	1.0	Jg/L							<1.0		<1.0		<1.0	
Phenanthrene	9+01-9	1.0	Jg/L							<1.0		<1.0		<1.0	
Anthracene	120-12-7	1.0	Jg/L							<1.0		<1.0		<1.0	
Fluoranthene	202,(, 0	1.0	Jg/L							<1.0		<1.0		<1.0	
Pyrene	129,00,0	1.0	Jg/L							<1.0		<1.0		<1.0	
Benz(a)anthracene	+2,+,+3	1.0	Jg/L							<1.0		<1.0		<1.0	



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		MW01	MW02	MW03	MW04	MW05
Compound	CAS Number	LOR	Unit	EB0907913-001	EB0907913-002	EB0907913-003	EB0907913-004	EB0907913-005		
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued										
Chrysene	219,01-9	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b)fluoranthene	20+,99-2	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207,08,9	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	+0,32-9	0/+	Jg/L	***	***	; 0/+	; 0/+	; 0/+	; 0/+	; 0/+
Indeno(1.2.3.cd)pyrene	193,39,+	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a,h)anthracene	+3,70,3	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0	Jg/L	***	***	<1.0	<1.0	<1.0	<1.0	<1.0
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	***	20	Jg/L	<20	<20	<20	<20	<20	40	50
C10 - C14 Fraction	***	+0	Jg/L	+ 0	+ 0	+ 0	+ 0	+ 0	280	350
C15 - C28 Fraction	***	100	Jg/L	<100	<100	<100	<100	<100	800	1200
C29 - C36 Fraction	***	+0	Jg/L	+ 0	+ 0	+ 0	+ 0	+ 0	370	380
EP080: BTEX										
Benzene	71-43-2	1	Jg/L	<1	<1	<1	<1	<1	6	3
Toluene	108,99,3	2	Jg/L	<2	<2	<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	Jg/L	<2	<2	<2	<2	<2	<2	<2
meta- & para-Xylene	108,38,3 106-42-3	2	Jg/L	<2	<2	<2	<2	<2	3	2
ortho-Xylene	9+,7,2	2	Jg/L	<2	<2	<2	<2	<2	<2	<2
EP066S: PCB Surrogate										
Decachlorobiphenyl	2051-24-3	0.1	K	***	***	83.4	35.6	35.6	35.6	77.2
EP068S: Organochlorine Pesticide Surrogate										
Dibromo-DDE	21655-73-2	0.1	K	***	***	97.0	35.6	35.6	35.6	93.2
EP068T: Organophosphorus Pesticide Surrogate										
DEF	78,(9,9	0.1	K	***	***	88.4	32.3	32.3	32.3	83.3
EP074S: VOC Surrogates										
1,2-Dichloroethane-D4	17020,07,0	0.1	K	***	***	102	105	105	105	103
Toluene-D8	2037-26-5	0.1	K	***	***	97.0	96.0	96.0	96.0	94.4
4-Bromofluorobenzene	(2,0,0,(	0.1	K	***	***	93.5	97.7	97.7	97.7	96.4
EP075(SIM)S: Phenolic Compound Surrogates										
Phenol-d6	13127,99,3	0.1	K	***	***	34.3	24.9	24.9	24.9	44.9
2-Chlorophenol-D4	93951-73,2	0.1	K	***	***	76.6	34.3	34.3	34.3	89.3
2,4,6-Tribromophenol	119,79,2	0.1	K	***	***	97.3	51.9	51.9	51.9	81.7
EP075(SIM)T: PAH Surrogates										
2-Fluorobiphenyl	321-60,9	0.1	K	***	***	90.0	33.7	33.7	33.7	82.8
Anthracene-d10	1719,02,9	0.1	K	***	***	111	53.6	53.6	53.6	99.8
4-Terphenyl-d14	1719-51-0	0.1	K	***	***	100	51.7	51.7	51.7	89.9
EP080S: TPH(V)/BTX Surrogates										



Analytical Results

Substrate: WATER

Sub-; atrix: WATER	Client sample ID			
	Client sampling date / time			
	CAS Number	LOR	Unit	
EP080S: TPH(V)/BTX Surrogates - Continued				
1,2-Dichloroethane-D4	17020,07,0	0.1	K	
Toluene-D8	2037-26-5	0.1	K	
4-Bromofluorobenzene	(20,00,(	0.1	K	



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time							
Compound	CAS Number	LOR	Unit	MW06	MW07	MW08	MW09	MWA (CR13)			
EG020F: Dissolved Metals by ICP-MS											
Arsenic	7((0.38-2	0/001	mg/L	0.008	0.006	; 0/001	<0/001	0.019			
Cadmium	7((0.(3.9	0/0001	mg/L	; 0/0001	; 0/0001	<0/0001	<0/0001	<0/0001			
Chromium	7((0.(7.3	0/001	mg/L	0.001	0.006	; 0/001	<0/001	<0/001			
Copper	7((0.+0.9	0/001	mg/L	; 0/001	; 0/001	0.003	0.001	; 0/001			
Lead	7(39.92-1	0/001	mg/L	; 0/001	; 0/001	<0/001	0.001	; 0/001			
Nickel	7((0.02-0	0/001	mg/L	0.016	0.039	0.003	0.003	0.001			
Zinc	7((0.22,2	0/00+	mg/L	0.029	; 0/00+	; 0/00+	0.038	0.025			
EG035F: Dissolved Mercury by FIMS											
Mercury	7(39.97,2	0/0001	mg/L	; 0/0001	; 0/0001	<0/0001	<0/0001	<0/0001			
EK055G: Ammonia as N by Discrete Analyser											
Ammonia as N	7664-41-7	0/01	mg/L	18.8	43.4	27.0	0.58	****			
EP066: Polychlorinated Biphenyls											
Total Polychlorinated biphenyls	****	1	Jg/L	<1	<1	; 2	<1	****			
EP068A: Organochlorine Pesticides (OC)											
alpha-BHC	319,9(,2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Hexachlorobenzene (HCB)	119,74-1	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
beta-BHC	319,9+,7	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
gamma-BHC	+9,89,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
delta-BHC	319,92,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Heptachlor	72((, 9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Aldrin	309,00-2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Heptachlor epoxide	1024-57,3	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
trans-Chlordane	5103,74-2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
alpha-Endosulfan	9+9,98,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
cis-Chlordane	5103,71-9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Dieldrin	20,+7-1	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
4,4'-DDE	72-55-9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Endrin	72-20,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
beta-Endosulfan	33213,2+,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
4,4'-DDD	72-54-9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Endrin aldehyde	7421-93,(	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Endosulfan sulfate	1031-07,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
4,4'-DDT	+0-29,3	2	Jg/L	<2	<2	; 3	<2	****			
Endrin ketone	+3(9(, 70,+	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			
Methoxychlor	72-43,+	2	Jg/L	<2	<2	; 3	<2	****			
EP068B: Organophosphorus Pesticides (OP)											
Dichlorvos	62-73,7	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	****			



Analytical Results

Sub-; atrix: WATER

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	MW06 19,, , ?-2009 11:00 EB0907913-006	MW07 19,, , ?-2009 11:00 EB0907913-007	MW08 19,, , ?-2009 11:00 EB0907913-008	MW09 19,, , ?-2009 11:00 EB0907913-009	MWA (CR13) 19,, , ?-2009 11:00 EB0907913-010
EP068B: Organophosphorus Pesticides (OP) - Continued								
Demeton-S-methyl	919,92,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Monocrotophos	2923-22-4	2	Jg/L	<2	<2	; 3	<2	***
Dimethoate	20-51-5	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Diazinon	333-41-5	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Chlorpyrifos-methyl	++98-13,0	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Parathion-methyl	298,00,0	2	Jg/L	<2	<2	; 3	<2	***
Malathion	121-7+ ,+	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Fenthion	++ 38,9	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Chlorpyrifos	2921-99-2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Parathion	+2,38-2	2	Jg/L	<2	<2	; 3	<2	***
Pirimphos-ethyl	23+05-41-1	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Chlorfenvinphos	(70,90,2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Bromophos-ethyl	(924-78,2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Fenamiphos	22224-92-6	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Prothiofos	3(2(3,(2,(	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Ethion	+23-12-2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Carbophenothion	786-19,2	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
Azinphos Methyl	92,+0,0	0/+	Jg/L	; 0/+	; 0/+	<2.9	; 0/+	***
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	+	Jg/L	+	+	+	+	***
Toluene	108,99,3	+	Jg/L	9	+	+	+	***
Ethylbenzene	100-41-4	+	Jg/L	+	+	10	+	***
meta- & para-Xylene	108,38,3 106-42-3	+	Jg/L	+	+	9	+	***
Styrene	100-42-5	+	Jg/L	+	+	+	+	***
ortho-Xylene	9+,(7,2	+	Jg/L	+	+	+	+	***
Isopropylbenzene	98,92-9	+	Jg/L	+	+	+	+	***
n-Propylbenzene	103-65-1	+	Jg/L	+	+	+	+	***
1,3,5-Trimethylbenzene	108,27,9	+	Jg/L	+	+	+	+	***
sec-Butylbenzene	13+ ,98,9	+	Jg/L	+	+	+	+	***
1,2,4-Trimethylbenzene	9+ ,23,2	+	Jg/L	+	+	24	+	***
tert-Butylbenzene	98,02,2	+	Jg/L	+	+	+	+	***
p-Isopropyltoluene	99,87,2	+	Jg/L	+	+	19	+	***
n-Butylbenzene	104-51-9	+	Jg/L	+	+	+	+	***
EP074B: Oxygenated Compounds								
Vinyl Acetate	108,0+,(	+0	Jg/L	; +0	; +0	; +0	; +0	***
2-Butanone (MEK)	78,93,3	+0	Jg/L	; +0	; +0	; +0	; +0	***
4-Methyl-2-pentanone (MIBK)	108-10-1	+0	Jg/L	; +0	; +0	; +0	; +0	***
2-Hexanone (MBK)	+91-78,2	+0	Jg/L	; +0	; +0	; +0	; +0	***



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Unit		MW06		MW07		MW08		MW09		MWA (CR13)	
Compound		CAS Number	LOR	Unit		EB0907913-006		EB0907913-007		EB0907913-008		EB0907913-009		EB0907913-010		EB0907913-010	
EP074C: Sulfonated Compounds																	
Carbon disulfide		75-15-0	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
EP074D: Fumigants																	
2,2-Dichloropropane		+94-20,7	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,2-Dichloropropane		78,87,+	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
cis-1,3-Dichloropropylene		10061-01-5	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
trans-1,3-Dichloropropylene		10061-02-6	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,2-Dibromoethane (EDB)		102,93,(	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
EP074E: Halogenated Aliphatic Compounds																	
Dichlorodifluoromethane		7+,71-9	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
Chloromethane		7(, 87,3	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
Vinyl chloride		7+,01-4	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
Bromomethane		7(, 83,9	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
Chloroethane		7+,00,3	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
Trichlorofluoromethane		7+,29,(	+0	Jg/L		;+0		;+0		;+0		;+0		;+0		;+; , ?-2009 11:00	
1,1-Dichloroethene		7+,3+,(	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Iodomethane		7(, 99,(	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
trans-1,2-Dichloroethene		156-60,+	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1-Dichloroethane		7+,3(, 3	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
cis-1,2-Dichloroethene		156-59-2	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1,1-Trichloroethane		71-55-6	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1-Dichloropropylene		+23,+9,2	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Carbon Tetrachloride		56-23,+	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,2-Dichloroethane		107,06-2	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Trichloroethene		79,01-6	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Dibromomethane		7(, 9+,3	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1,2-Trichloroethane		79,00,+	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,3-Dichloropropane		142-29,9	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Tetrachloroethene		127-19,(	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1,1,2-Tetrachloroethane		230-20,2	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
trans-1,4-Dichloro-2-butene		110,+7,2	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
cis-1,4-Dichloro-2-butene		1476-11-5	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,1,2,2-Tetrachloroethane		79,3,(+	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,2,3-Trichloropropane		96-19,(	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Pentachloroethane		72,01-7	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
1,2-Dibromo-3-chloropropane		96-12-9	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
Hexachlorobutadiene		87,29,3	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	
EP074F: Halogenated Aromatic Compounds																	
Chlorobenzene		108,90,7	+	Jg/L		;+		;+		;+		;+		;+		;+; , ?-2009 11:00	



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Unit		MW06	MW07	MW08	MW09	MWA (CR13)
Compound		CAS Number	LOR					EB0907913-006	EB0907913-007	EB0907913-008	EB0907913-009	EB0907913-010
EP074F: Halogenated Aromatic Compounds - Continued												
Bromobenzene		108-96-1	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
2-Chlorotoluene		9+,(9,9	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
4-Chlorotoluene		102,(3,(	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
1,3-Dichlorobenzene		541-73-1	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
1,4-Dichlorobenzene		102,(2, 7	+	Jg/L		11		26		; +		19;; , ?-2009 11:00
1,2-Dichlorobenzene		9+,+0-1	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
1,2,4-Trichlorobenzene		120,92-1	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
1,2,3-Trichlorobenzene		87-61-6	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
EP074G: Trihalomethanes												
Chloroform		27,22,3	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
Bromodichloromethane		75-27,(	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
Dibromochloromethane		124-49-1	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
Bromoform		75-25-2	+	Jg/L		; +		; +		; +		19;; , ?-2009 11:00
EP074H: Naphthalene												
Naphthalene		91-20,3	7	Jg/L		12		10		; 7		19;; , ?-2009 11:00
EP075(SIM)A: Phenolic Compounds												
Phenol		108,95-2	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2-Chlorophenol		9+,+7,9	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2-Methylphenol		9+,(9,7	1.0	Jg/L		1.8		<1.0		<1.0		19;; , ?-2009 11:00
3- & 4-Methylphenol		1319,77,3	2.0	Jg/L		<2.0		<2.0		<2.0		19;; , ?-2009 11:00
2-Nitrophenol		99,7+,+	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2,4-Dimethylphenol		10+,27,9	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2,4-Dichlorophenol		120,83-2	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2,6-Dichlorophenol		87,2+,0	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
4-Chloro-3-Methylphenol		+9+,0,7	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2,4,6-Trichlorophenol		99,06-2	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
2,4,5-Trichlorophenol		9+,9+,(	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Pentachlorophenol		87,92,+	2.0	Jg/L		<2.0		<2.0		<2.0		19;; , ?-2009 11:00
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons												
Naphthalene		91-20,3	1.0	Jg/L		7.5		3.4		2.4		19;; , ?-2009 11:00
Acenaphthylene		208,92,9	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Acenaphthene		83,32-9	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Fluorene		92,73,7	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Phenanthrene		9+,01-9	1.0	Jg/L		1.8		<1.0		1.1		19;; , ?-2009 11:00
Anthracene		120-12-7	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Fluoranthene		202,(, 0	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Pyrene		129,00,0	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00
Benz(a)anthracene		+2,+,+3	1.0	Jg/L		<1.0		<1.0		<1.0		19;; , ?-2009 11:00



Analytical Results

Sub-; atrix: WATER

Compound		Client sample ID		Client sampling date / time		MW06		MW07		MW08		MW09		MWA (CR13)	
		CAS Number	LOR	Unit		EB0907913-006	19,, , ?-2009 11:00	EB0907913-007	19,, , ?-2009 11:00	EB0907913-008	19,, , ?-2009 11:00	EB0907913-009	19,, , ?-2009 11:00	EB0907913-010	19,, , ?-2009 11:00
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued															
Chrysene	219,01-9	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
Benzo(b)fluoranthene	20+,99-2	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
Benzo(k)fluoranthene	207,08,9	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
Benzo(a)pyrene	+0,32-9	0/+		Jg/L		0/+		0/+		0/+		0/+			
Indeno(1,2,3.cd)pyrene	193,39,+	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
Dibenzo(a,h)anthracene	+3,70,3	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
Benzo(g,h,i)perylene	191-24-2	1.0		Jg/L		<1.0		<1.0		<1.0		<1.0			
EP080/071: Total Petroleum Hydrocarbons															
C6 - C9 Fraction	***	20		Jg/L		50		50		50		<20		<20	
C10 - C14 Fraction	***	+0		Jg/L		840		590		230		+0		+0	
C15 - C28 Fraction	***	100		Jg/L		2500		1900		700		100		200	
C29 - C36 Fraction	***	+0		Jg/L		710		680		280		+0		+0	
EP080: BTEX															
Benzene	71-43-2	1		Jg/L		2		5		2		<1		<1	
Toluene	108,99,3	2		Jg/L		10		<2		<2		<2		<2	
Ethylbenzene	100-41-4	2		Jg/L		<2		4		11		<2		<2	
meta- & para-Xylene	108,38,3 106-42-3	2		Jg/L		2		4		10		<2		<2	
ortho-Xylene	9+, (7,2	2		Jg/L		<2		<2		4		<2		<2	
EP066S: PCB Surrogate															
Decachlorobiphenyl	2051-24-3	0.1		K		82.4		69.2		67.6		64.2		***	
EP068S: Organochlorine Pesticide Surrogate															
Dibromo-DDE	21655-73-2	0.1		K		91.8		79.1		78.6		71.2		***	
EP068T: Organophosphorus Pesticide Surrogate															
DEF	78,(9,9	0.1		K		87.2		69.3		76.3		72.8		***	
EP074S: VOC Surrogates															
1,2-Dichloroethane-D4	17020,07,0	0.1		K		98.8		97.9		92.6		104		***	
Toluene-D8	2037-26-5	0.1		K		91.7		93.9		88.6		99.8		***	
4-Bromofluorobenzene	(2,0,0,(	0.1		K		94.0		91.7		88.7		97.3		***	
EP075(SIM)S: Phenolic Compound Surrogates															
Phenol-d6	13127,99,3	0.1		K		48.9		38.3		28.2		21.7		***	
2-Chlorophenol-D4	93951-73-2	0.1		K		90.9		74.4		61.8		41.8		***	
2,4,6-Tribromophenol	119,79,2	0.1		K		85.9		72.1		66.2		64.6		***	
EP075(SIM)T: PAH Surrogates															
2-Fluorobiphenyl	321-60,9	0.1		K		66.3		53.2		62.6		51.6		***	
Anthracene-d10	1719,02,9	0.1		K		106		90.5		79.1		78.7		***	
4-Terphenyl-d14	1719-51-0	0.1		K		96.3		80.3		75.0		76.7		***	
EP080S: TPH(V)/BTX Surrogates															



Analytical Results

Sub-atrix: WATER

Sub-; atrix: WATER	Client sample ID				MW06	MW07	MW08	MW09	MWA (CR13)
	Client sampling date / time		Unit						
Compound	CAS Number	LOR	Unit	EB0907913-006	EB0907913-007	EB0907913-008	EB0907913-009	EB0907913-010	
EP080S: TPH(V)/BTEx Surrogates - Continued									
1,2-Dichloroethane-D4	17020,07,0	0.1	K	102	101	95.0	108	106	
Toluene-D8	2037-26-5	0.1	K	100	102	96.4	109	106	
4-Bromofluorobenzene	(2,0,0),(	0.1	K	104	101	98.0	107	105	



Analytical Results

Sub-; atrix: WATER

		Client sample ID		Client sampling date / time		MWB (CR14)	MWC (CR15)	DUP04	Rinsate/ Rinsate 4	
		CAS Number	LOR	Unit		EB0907913-011	EB0907913-012	EB0907913-013	EB0907913-014	
EG020F: Dissolved Metals by ICP-MS										
Arsenic		7((0.38-2	0/001	mg/L		; 0/001		0.009		0.001
Cadmium		7((0.(3.9	0/0001	mg/L		0.0003		; 0/0001		0.0001
Chromium		7((0.(7.3	0/001	mg/L		0.001		; 0/001		0.001
Copper		7((0.+0.9	0/001	mg/L		0.006		; 0/001		0.001
Lead		7(39.92-1	0/001	mg/L		0.006		; 0/001		0.001
Nickel		7((0.02-0	0/001	mg/L		0.006		0.019		0.001
Zinc		7((0.22,2	0/00+	mg/L		0.079		0.028		0.001
EG020T: Total Metals by ICP-MS										
Arsenic		7((0.38-2	0/001	mg/L						0.001
Cadmium		7((0.(3.9	0/0001	mg/L						0.0001
Chromium		7((0.(7.3	0/001	mg/L						0.001
Copper		7((0.+0.9	0/001	mg/L						0.001
Lead		7(39.92-1	0/001	mg/L						0.001
Nickel		7((0.02-0	0/001	mg/L						0.001
Zinc		7((0.22,2	0/00+	mg/L						0.005
EG035F: Dissolved Mercury by FIMS										
Mercury		7(39.97,2	0/0001	mg/L		; 0/0001		<0/0001		0.001
EG035T: Total Recoverable Mercury by FIMS										
Mercury		7(39.97,2	0/0001	mg/L						0.0001
EK055G: Ammonia as N by Discrete Analyser										
Ammonia as N		7664-41-7	0/01	mg/L		0.14				0.001
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls			1	Jg/L		<1				0.001
EP068A: Organochlorine Pesticides (OC)										
alpha-BHC		319.9(,2	0/+	Jg/L		; 0/+				0.001
Hexachlorobenzene (HCB)		119.74-1	0/+	Jg/L		; 0/+				0.001
beta-BHC		319.9+ ,7	0/+	Jg/L		; 0/+				0.001
gamma-BHC		+9.89,9	0/+	Jg/L		; 0/+				0.001
delta-BHC		319.92,9	0/+	Jg/L		; 0/+				0.001
Heptachlor		72(,(, 9	0/+	Jg/L		; 0/+				0.001
Aldrin		309.00-2	0/+	Jg/L		; 0/+				0.001
Heptachlor epoxide		1024-57,3	0/+	Jg/L		; 0/+				0.001
trans-Chlordane		5103.74-2	0/+	Jg/L		; 0/+				0.001
alpha-Endosulfan		9+9.98,9	0/+	Jg/L		; 0/+				0.001
cis-Chlordane		5103.71-9	0/+	Jg/L		; 0/+				0.001
Dieldrin		20,+7-1	0/+	Jg/L		; 0/+				0.001
4,4' -DDE		72-55-9	0/+	Jg/L		; 0/+				0.001



Analytical Results

Sub-; atrix: WATER

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	MWB (CR14) 19, , ?-2009 11:00 EB0907913-011	MWC (CR15) 19, , ?-2009 11:00 EB0907913-012	DUP04 19, , ?-2009 11:00 EB0907913-013	Rinsate/ Rinsate 4 19, , ?-2009 11:00 EB0907913-014	
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20,9	0/+	Jg/L	; 0/+				9999
beta-Endosulfan	33213,2+,9	0/+	Jg/L	; 0/+				9999
4,4'-DDD	72-54-9	0/+	Jg/L	; 0/+				9999
Endrin aldehyde	7421-93,(	0/+	Jg/L	; 0/+				9999
Endosulfan sulfate	1031-07,9	0/+	Jg/L	; 0/+				9999
4,4'-DDT	+0-29,3	2	Jg/L	<2				9999
Endrin ketone	+3(9(, 70,+	0/+	Jg/L	; 0/+				9999
Methoxychlor	72-43,+	2	Jg/L	<2				9999
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73,7	0/+	Jg/L	; 0/+				9999
Demeton-S-methyl	919,92,9	0/+	Jg/L	; 0/+				9999
Monocrotophos	2923-22-4	2	Jg/L	<2				9999
Dimethoate	20-51-5	0/+	Jg/L	; 0/+				9999
Diazinon	333-41-5	0/+	Jg/L	; 0/+				9999
Chlorpyrifos-methyl	+98-13,0	0/+	Jg/L	; 0/+				9999
Parathion-methyl	298,00,0	2	Jg/L	<2				9999
Malathion	121-7+,+	0/+	Jg/L	; 0/+				9999
Fenthion	++38,9	0/+	Jg/L	; 0/+				9999
Chlorpyrifos	2921-99-2	0/+	Jg/L	; 0/+				9999
Parathion	+2,38-2	2	Jg/L	<2				9999
Pirimphos-ethyl	23+05-41-1	0/+	Jg/L	; 0/+				9999
Chlorfenvinphos	(70,90,2	0/+	Jg/L	; 0/+				9999
Bromophos-ethyl	(924-78,2	0/+	Jg/L	; 0/+				9999
Fenamiphos	22224-92-6	0/+	Jg/L	; 0/+				9999
Prothiofos	3(2(, 3,(2,(	0/+	Jg/L	; 0/+				9999
Ethion	+23-12-2	0/+	Jg/L	; 0/+				9999
Carbophenothion	786-19,2	0/+	Jg/L	; 0/+				9999
Azinphos Methyl	92,+0,0	0/+	Jg/L	; 0/+				9999
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	+	Jg/L	+				9999
Toluene	108,99,3	+	Jg/L	+				9999
Ethylbenzene	100-41-4	+	Jg/L	+				9999
meta- & para-Xylene	108,38,3 106-42-3	+	Jg/L	+				9999
Styrene	100-42-5	+	Jg/L	+				9999
ortho-Xylene	9+, (7,2	+	Jg/L	+				9999
Isopropylbenzene	98,92-9	+	Jg/L	+				9999
n-Propylbenzene	103-65-1	+	Jg/L	+				9999
1,3,5-Trimethylbenzene	108,27,9	+	Jg/L	+				9999



Analytical Results

Sub-: atrix: WATER

		Client sample ID		Client sampling date / time		Client sample ID		Client sampling date / time		Client sample ID		Client sampling date / time	
Compound	CAS Number	LOR	Unit	MWB (CR14)	MWC (CR15)	DUP04	Rinsate/ Rinsate 4	EB0907913-011	EB0907913-012	EB0907913-013	EB0907913-014	EB0907913-015	EB0907913-016
EP074A: Monocyclic Aromatic Hydrocarbons - Continued													
sec-Butylbenzene	13+98.9	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,2,4-Trimethylbenzene	9+23.2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
tert-Butylbenzene	98.02.2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
p-Isopropyltoluene	99.87.2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
n-Butylbenzene	104-51-9	+	Jg/L	+	+	+	+	+	+	+	+	+	+
EP074B: Oxygenated Compounds													
Vinyl Acetate	108.0+,(	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
2-Butanone (MEK)	78.93.3	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
4-Methyl-2-pentanone (MIBK)	108-10-1	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
2-Hexanone (MBK)	+91-78.2	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
EP074C: Sulfonated Compounds													
Carbon disulfide	75-15-0	+	Jg/L	+	+	+	+	+	+	+	+	+	+
EP074D: Fumigants													
2,2-Dichloropropane	+94-20.7	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,2-Dichloropropane	78.87,+	+	Jg/L	+	+	+	+	+	+	+	+	+	+
cis-1,3-Dichloropropylene	10061-01-5	+	Jg/L	+	+	+	+	+	+	+	+	+	+
trans-1,3-Dichloropropylene	10061-02-6	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,2-Dibromoethane (EDB)	102.93,(	+	Jg/L	+	+	+	+	+	+	+	+	+	+
EP074E: Halogenated Aliphatic Compounds													
Dichlorodifluoromethane	7+71-9	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
Chloromethane	7(, 87,3	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
Vinyl chloride	7+01-4	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
Bromomethane	7(, 83,9	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
Chloroethane	7+00,3	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
Trichlorofluoromethane	7+29,(	+0	Jg/L	+	+	+	+	+	+	+	+	+	+
1,1-Dichloroethene	7+3+,(	+	Jg/L	+	+	+	+	+	+	+	+	+	+
Iodomethane	7(, 99,(	+	Jg/L	+	+	+	+	+	+	+	+	+	+
trans-1,2-Dichloroethene	156-60,+	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,1-Dichloroethane	7+3(, 3	+	Jg/L	+	+	+	+	+	+	+	+	+	+
cis-1,2-Dichloroethene	156-59-2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,1,1-Trichloroethane	71-55-6	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,1-Dichloropropylene	+23,+9,2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
Carbon Tetrachloride	56-23,+	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,2-Dichloroethane	107.06-2	+	Jg/L	+	+	+	+	+	+	+	+	+	+
Trichloroethene	79.01-6	+	Jg/L	+	+	+	+	+	+	+	+	+	+
Dibromomethane	7(, 9+3	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,1,2-Trichloroethane	79.00,+	+	Jg/L	+	+	+	+	+	+	+	+	+	+
1,3-Dichloropropane	142-29,9	+	Jg/L	+	+	+	+	+	+	+	+	+	+



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time	
Compound	CAS Number	LOR	Unit	MWB (CR14)	MWC (CR15)	DUP04	Rinsate/ Rinsate 4						
EP074E: Halogenated Aliphatic Compounds - Continued													
Tetrachloroethene	127-19,(	+	Jg/L	;									
1.1.1.2-Tetrachloroethane	230-20.2	+	Jg/L	;									
trans-1.4-Dichloro-2-butene	110,+7.2	+	Jg/L	;									
cis-1.4-Dichloro-2-butene	1476-11-5	+	Jg/L	;									
1.1.2.2-Tetrachloroethane	79.3,(+	+	Jg/L	;									
1.2.3-Trichloropropane	96-19,(	+	Jg/L	;									
Pentachloroethane	72.01-7	+	Jg/L	;									
1.2-Dibromo-3-chloropropane	96-12-9	+	Jg/L	;									
Hexachlorobutadiene	87.29.3	+	Jg/L	;									
EP074F: Halogenated Aromatic Compounds													
Chlorobenzene	108.90.7	+	Jg/L	;									
Bromobenzene	108.96-1	+	Jg/L	;									
2-Chlorotoluene	9+(9.9	+	Jg/L	;									
4-Chlorotoluene	102.(3,(	+	Jg/L	;									
1.3-Dichlorobenzene	541-73-1	+	Jg/L	;									
1.4-Dichlorobenzene	102,(2, 7	+	Jg/L	;									
1.2-Dichlorobenzene	9+,+0-1	+	Jg/L	;									
1.2.4-Trichlorobenzene	120.92-1	+	Jg/L	;									
1.2.3-Trichlorobenzene	87-61-6	+	Jg/L	;									
EP074G: Trihalomethanes													
Chloroform	27.22.3	+	Jg/L	;									
Bromodichloromethane	75-27,(	+	Jg/L	;									
Dibromochloromethane	124-49-1	+	Jg/L	;									
Bromoform	75-25-2	+	Jg/L	;									
EP074H: Naphthalene													
Naphthalene	91-20.3	7	Jg/L	;									
EP075(SIM)A: Phenolic Compounds													
Phenol	108.95-2	1.0	Jg/L	<1.0									
2-Chlorophenol	9+,+7.9	1.0	Jg/L	<1.0									
2-Methylphenol	9+(9.7	1.0	Jg/L	<1.0									
3- & 4-Methylphenol	1319.77.3	2.0	Jg/L	<2.0									
2-Nitrophenol	99.7+,+	1.0	Jg/L	<1.0									
2.4-Dimethylphenol	10+,27.9	1.0	Jg/L	<1.0									
2.4-Dichlorophenol	120.83-2	1.0	Jg/L	<1.0									
2.6-Dichlorophenol	87.2+,0	1.0	Jg/L	<1.0									
4-Chloro-3-Methylphenol	+9+,0.7	1.0	Jg/L	<1.0									
2.4.6-Trichlorophenol	99.06-2	1.0	Jg/L	<1.0									
2.4.5-Trichlorophenol	9+,9+,(	1.0	Jg/L	<1.0									



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time	
Compound	CAS Number	LOR	Unit	MWB (CR14)	MWC (CR15)	DUP04	Rinsate/ Rinsate 4						
EP075(SIM)A: Phenolic Compounds - Continued													
Pentachlorophenol	87,92,+	2.0	Jg/L	<2.0									
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons													
Naphthalene	91-20,3	1.0	Jg/L	<1.0									
Acenaphthylene	208,92,9	1.0	Jg/L	<1.0									
Acenaphthene	83,32-9	1.0	Jg/L	<1.0									
Fluorene	92,73,7	1.0	Jg/L	<1.0									
Phenanthrene	9+01-9	1.0	Jg/L	<1.0									
Anthracene	120-12-7	1.0	Jg/L	<1.0									
Fluoranthene	202,(, 0	1.0	Jg/L	<1.0									
Pyrene	129,00,0	1.0	Jg/L	<1.0									
Benz(a)anthracene	+2,++3	1.0	Jg/L	<1.0									
Chrysene	219,01-9	1.0	Jg/L	<1.0									
Benzo(b)fluoranthene	20+,99-2	1.0	Jg/L	<1.0									
Benzo(k)fluoranthene	207,08,9	1.0	Jg/L	<1.0									
Benzo(a)pyrene	+0,32-9	0/+	Jg/L	; 0/+									
Indeno(1,2,3.cd)pyrene	193,39,+	1.0	Jg/L	<1.0									
Dibenz(a,h)anthracene	+3,70,3	1.0	Jg/L	<1.0									
Benzo(g,h,i)perylene	191-24-2	1.0	Jg/L	<1.0									
EP080/071: Total Petroleum Hydrocarbons													
C6 - C9 Fraction		20	Jg/L	<20		40	<20						
C10 - C14 Fraction		+0	Jg/L	;+ 0		500	;+ 0						
C15 - C28 Fraction		100	Jg/L	<100		1200	<100						
C29 - C36 Fraction		+0	Jg/L	;+ 0		210	;+ 0						
EP080: BTEX													
Benzene	71-43-2	1	Jg/L	<1		2	<1						
Toluene	108,99,3	2	Jg/L	<2		8	<2						
Ethylbenzene	100-41-4	2	Jg/L	<2		<2	<2						
meta- & para-Xylene	108,38,3 106-42-3	2	Jg/L	<2		2	<2						
ortho-Xylene	9+,(7,2	2	Jg/L	<2		<2	<2						
EP066S: PCB Surrogate													
Decachlorobiphenyl	2051-24-3	0.1	K	87.8									
EP068S: Organochlorine Pesticide Surrogate													
Dibromo-DDE	21655-73-2	0.1	K	109									
EP068T: Organophosphorus Pesticide Surrogate													
DEF	78,(9,9	0.1	K	107									
EP074S: VOC Surrogates													
1,2-Dichloroethane-D4	17020,07,0	0.1	K	104									



Analytical Results

Sub-; atrix: WATER

Sub-; atrix: WATER		Client sample ID		Client sampling date / time		Client sample ID		Client sampling date / time		Client sample ID	
Compound	CAS Number	LOR	Unit	MWB (CR14)	MWC (CR15)	DUP04	Rinsate/ Rinsate 4				
EP074S: VOC Surrogates - Continued											
Toluene-D8	2037-26-5	0.1	K	99.0							
4-Bromofluorobenzene	(2 0,00,(	0.1	K	96.2							
EP075(SIM)S: Phenolic Compound Surrogates											
Phenol-d6	13127,99,3	0.1	K	39.6							
2-Chlorophenol-D4	93951-73,2	0.1	K	81.6							
2,4,6-Tribromophenol	119,79,2	0.1	K	89.1							
EP075(SIM)T: PAH Surrogates											
2-Fluorobiphenyl	321-60,9	0.1	K	86.0							
Anthracene-d10	1719,02,9	0.1	K	108							
4-Terphenyl-d14	1719-51-0	0.1	K	105							
EP080S: TPH(V)/BTX Surrogates											
1,2-Dichloroethane-D4	17020,07,0	0.1	K	108	105	106	107				
Toluene-D8	2037-26-5	0.1	K	108	104	106	104				
4-Bromofluorobenzene	(2 0,00,(	0.1	K	106	105	107	102				



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Work Order EB0907913
Client SINCLAIR KNIGHT ME";
Project 8 E09+37

13-054

Surrogate Control Limits

Sub-; atriX: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	10	164
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	10	132
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78,(9,9	10	110
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17020,07,0	80	120
Toluene-D8	2037-26-5	99	110
4-Bromofluorobenzene	(2 0,00,(	92	115
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127,99,3	10	9(
2-Chlorophenol-D4	93951-73,2	23	13(
2,4,6-Tribromophenol	119,79,2	10	123
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60,9	(3	116
Anthracene-d10	1719,02,9	27	133
4-Terphenyl-d14	1719-51-0	33	141
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17020,07,0	80	120
Toluene-D8	2037-26-5	99	110
4-Bromofluorobenzene	(2 0,00,(	92	115

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Environmental Division

QUALITY CONTROL REPORT

Work Order	: EB0907913	P>BA	: of 5
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET SOUTH BRISBANE QLD, AUSTRALIA 4101	Address	: 32 Shand Street Stafford QLD Australia 4053
E-mail	: okanas@skm.com.au	E-mail	: Services.Brisbane@alsenviro.com
Telephone	: ----	Telephone	: +61-7-3243 7222
Facsimile	: ----	Facsimile	: +61-7-3243 7218
Project	: QE09537	QC Level	: NEP; 1999 Schedule B2 =and ALS QCS3 re>uirement
Site	: Cronulla Park	Date Samples Received	: (9-; ^ ?-))9
C-O-C number	: ----	Issue Date	: 4-; ^ ?-))9
Sampler	: O Kana & ; ; cLeod	No. of samples received	: (
Order number	: ----	No. of samples analysed	: (
Quote number	: EN/003/09		

This report supersedes any previous reports with this reference. Results apply to the samples 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
- ; ethod Blank <; B=and Laboratory Control Spike <LCS=Report; Recovery and Acceptance Limits
- ; atrID Spike <; " =Report; Recovery and Acceptance Limits



**WORLD RECOGNISED
ACCREDITATION**

NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation re>uirements.

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
Kim ; cCabe	Senior Inorganic Chemist	Inorganics
; atthew Goodwin	Senior Organic Chemist	Organics
Sarah Ashworth	Organic Chemist	Organics

Environmental Division Brisbane

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Work Order : EB0907913
Client : SINCLAIR KNIGHT ; ERZ
Project : QE09537

13-054

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, "75", AS and NEP; . 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 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 or 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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
= Indicates failed QC

PROJ DL RELEASE - EHP



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Work Order : EB0907913
Client : SINCLAIR KNIGHT ; ERZ
Project : QE09537

13-054

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 ; ethod %A" -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%.

Sub-; attrID: WATER		Laboratory Duplicate (DUP) Report											
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)				
EG020F: Dissolved Metals by ICP-MS (QC Lot: 984592)													
EB0907768-001	Anonymous	EG020A-F: Cadmium	4")-9	)0))	mg/L	)0))	)0))	6)0(	No Limit				
		EG020A-F: Arsenic	4")-6-	)0))	mg/L	4.15	'0)	(0	0% - 20%				
		EG020A-F: Chromium	4")-4-~	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Copper	7440-50-8	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Lead	4*9-9 -(	)0))	mg/L	)0))	)0))	)0)	No Limit				
		EG020A-F: Nickel	4")-)-	)0))	mg/L	)0)9	0.051	5.0	0% - 20%				
		EG020A-F: Zinc	4")-33-3	0.005	mg/L	)0)3	)0)4	~04	No Limit				
		EG020A-F: Cadmium	4")-9	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Arsenic	4")-6-	)0))	mg/L	)096)	0.954	04	0% - 20%				
		EG020A-F: Chromium	4")-4-~	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
EB0907768-011	Anonymous	EG020A-F: Copper	7440-50-8	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Lead	4*9-9 -(	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Nickel	4")-)-	)0))	mg/L	)0))	)0))	)0)	No Limit				
		EG020A-F: Zinc	4")-33-3	0.005	mg/L	)0)9	)0)6	)0)	No Limit				
		EG020F: Dissolved Metals by ICP-MS (QC Lot: 984594)											
		EB0907913-003	; A)	EG020A-F: Cadmium	4")-9	)0))	mg/L	C)0))	C)0))	)0)	No Limit		
				EG020A-F: Arsenic	4")-6-	)0))	mg/L	C)0))	C)0))	)0)	No Limit		
				EG020A-F: Chromium	4")-4-~	)0))	mg/L	C)0))	C)0))	)0)	No Limit		
				EG020A-F: Copper	7440-50-8	)0))	mg/L	C)0))	C)0))	)0)	No Limit		
				EG020A-F: Lead	4*9-9 -(	)0))	mg/L	C)0))	C)0))	)0)	No Limit		
EG020A-F: Nickel	4")-)-			)0))	mg/L	)0))	0.005	)0)	No Limit				
EG020A-F: Zinc	4")-33-3			0.005	mg/L	)0)~	)0)~	)0)	No Limit				
EG020A-F: Cadmium	4")-9			)0))	mg/L	C)0))	C)0))	)0)	No Limit				
EG020A-F: Arsenic	4")-6-			)0))	mg/L	C)0))	C)0))	)0)	No Limit				
EG020A-F: Chromium	4")-4-~			)0))	mg/L	C)0))	C)0))	)0)	No Limit				
EB0907913-012	; WC <CR15=	EG020A-F: Copper	7440-50-8	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Lead	4*9-9 -(	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Nickel	4")-)-	)0))	mg/L	)0))	0.005	)0)	No Limit				
		EG020A-F: Zinc	4")-33-3	0.005	mg/L	)0)~	)0)~	)0)	No Limit				
		EG020A-F: Cadmium	4")-9	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Arsenic	4")-6-	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Chromium	4")-4-~	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Copper	7440-50-8	)0))	mg/L	)0))	)0))	)0)	No Limit				
		EG020A-F: Lead	4*9-9 -(	)0))	mg/L	C)0))	C)0))	)0)	No Limit				
		EG020A-F: Nickel	4")-)-	)0))	mg/L	)0))	)0))	)0)	No Limit				
EG020A-F: Zinc													
EG020T: Total Metals by ICP-MS (QC Lot: 985487)													
EB0907252-001	Anonymous	EG020A-T: Cadmium	4")-9	)0))	mg/L	)0))	)0)~	4.5	0% - 20%				
		EG020A-T: Arsenic	4")-6-	)0))	mg/L	)0)3~	0.058	60~	0% - 2)F				
		EG020A-T: Chromium	4")-4-~	)0))	mg/L	3(04	3(09	)0	0% - 2)F				
		EG020A-T: Copper	7440-50-8	)0))	mg/L	)0)3	0.254	~0~	0% - 20%				
		EG020A-T: Lead	4*9-9 -(	)0))	mg/L	)0)6	)0)6	06	0% - 20%				

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Work Order : EB0907913
Client : SINCLAIR KNIGHT ; ERZ
Project : QE09537

13-054

Sub-; atriD: WATER		Laboratory Duplicate (DUP) Report							
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020T: Total Metals by ICP-MS (QC Lot: 985487) - continued									
EB0907252-001	Anonymous	EG020A-T: Nickel	4")-)-	)0)(	mg/L	)0)93	)0)9	'04	0% - 20%
		EG020A-T: Zinc	4")-33-3	0.005	mg/L	(066	(06)	'03	0% - 20%
EB0907936-003	Anonymous	EG020A-T: Cadmium	4")-)-9	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
		EG020A-T: Arsenic	4")-)-6-	)0)(	mg/L	)0))	)0))	)0)	No Limit
		EG020A-T: Chromium	4")-)-4-	)0)(	mg/L	)0))'	)0))'	)0)	No Limit
		EG020A-T: Copper	7440-50-8	)0)(	mg/L	)0))4	)0))6	)0)	No Limit
		EG020A-T: Lead	4"-9-9-(	)0)(	mg/L	)0))6	)0))6	)0)	No Limit
		EG020A-T: Nickel	4")-)-)-	)0)(	mg/L	)0))~	)0))~	)0)	No Limit
		EG020A-T: Zinc	4")-33-3	0.005	mg/L	)0)'	)0)'3	304	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 984591)									
EB0907768-001	Anonymous	EG035F: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EB0907768-012	Anonymous	EG035F: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 984593)									
EB0907913-003	; A)"	EG035F: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EB0907913-013	DUP04	EG035F: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 984931)									
EB0907913-014	Rinsate/ Rinsate 4	EG035T: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EB0907936-009	Anonymous	EG035T: ; ercury	4"-9-94-3	)0))(	mg/L	C)0))(	C)0))(	)0)	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 989022)									
EB0907698-008	Anonymous	EK055G: Ammonia as N	433-'(-4	)0)(	mg/L	)04"	)04'	)0)	0% - 20%
EB0907913-009	; A)9	EK055G: Ammonia as N	433-'(-4	)0)(	mg/L	0.58	)06	17.5	0% - 20%
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 985153)									
EB0907913-003	; A)"	EP074: Benzene	4(-"-	5	µg/L	<5	<5	)0)	No Limit
		EP074: Toluene	()6-66-~	5	µg/L	<5	<5	)0)	No Limit
		EP074: Ethylbenzene	()-'(-'	5	µg/L	<5	<5	)0)	No Limit
		EP074: meta- & para-Oylene	108-38-3	5	µg/L	<5	<5	)0)	No Limit
			()3-'-~						
		EP074: Styrene	100-42-5	5	µg/L	<5	<5	)0)	No Limit
		EP074: ortho-Oylene	95-47-6	5	µg/L	<5	<5	)0)	No Limit
		EP074: Isopropylbenzene	96-6-6	5	µg/L	<5	<5	)0)	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	)0)	No Limit
		EP074: 1,3,5-Trimethylbenzene	()6-34-6	5	µg/L	<5	<5	)0)	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	)0)	No Limit
		EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	)0)	No Limit
EB0907913-003	; A)"	EP074: tert-Butylbenzene	96-)3-3	5	µg/L	<5	<5	)0)	No Limit
		EP074: p-Isopropyltoluene	99-64-3	5	µg/L	<5	<5	)0)	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	)0)	No Limit
EP074B: Oxygenated Compounds (QC Lot: 985153)									
EB0907913-003	; A)"	EP074: Pinyol Acetate	108-05-4	50	µg/L	<50	<50	)0)	No Limit



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Sub-; atriD: WATER		Laboratory Duplicate (DUP) Report							
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074B: Oxygenated Compounds (QC Lot: 985153) - continued									
EB0907913-003	; A ⁷	EP074: 2-Butanone <; EK=	46-9 ⁻ -	50	µg/L	<50	<50	(0)	No Limit
		EP074: 4-; ethyl-2-pentanone <; IBK=	(6-)(-)	50	µg/L	<50	<50	(0)	No Limit
		EP074: 2-HeDenone <; BK=	591-78-6	50	µg/L	<50	<50	(0)	No Limit
EP074C: Sulfonated Compounds (QC Lot: 985153)									
EB0907913-003	; A ⁷	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	(0)	No Limit
EP074D: Fumigants (QC Lot: 985153)									
EB0907913-003	; A ⁷	EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: trans-1,3-Dichloropropylene	(1)3(-)-3	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2-Dibromoethane <EDB=	(3)-9 ⁻ -	5	µg/L	<5	<5	(0)	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 985153)									
EB0907913-003	; A ⁷	EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	(0)	No Limit
		EP074: Iodomethane	4 ⁻ -66 ⁻ -	5	µg/L	<5	<5	(0)	No Limit
		EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	(0)	No Limit
		EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1-Dichloropropylene	563-56-6	5	µg/L	<5	<5	(0)	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2-Dichloroethane	(4)-3-	5	µg/L	<5	<5	(0)	No Limit
		EP074: Trichloroethene	49-)(-3	5	µg/L	<5	<5	(0)	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,3-Dichloropropane	(' - 6-9	5	µg/L	<5	<5	(0)	No Limit
		EP074: Tetrachloroethene	(4-(6 ⁻ -	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1,1,2-Tetrachloroethane	3 ⁻)-3	5	µg/L	<5	<5	(0)	No Limit
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	(0)	No Limit
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2,3-Trichloropropane	93-(6 ⁻ -	5	µg/L	<5	<5	(0)	No Limit
		EP074: Pentachloroethane	43-)(-4	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2-Dibromo-3-chloropropane	93-(-6	5	µg/L	<5	<5	(0)	No Limit
		EP074: HeDachlorobutadiene	64-36 ⁻ -	5	µg/L	<5	<5	(0)	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	(0)	No Limit
		EP074: Chloromethane	4 ⁻ -64 ⁻ -	50	µg/L	<50	<50	(0)	No Limit
		EP074: PinyI chloride	75-01-4	50	µg/L	<50	<50	(0)	No Limit
		EP074: Bromomethane	4 ⁻ -6 ⁻ -9	50	µg/L	<50	<50	(0)	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	(0)	No Limit

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Sub-; atriD WATER		Laboratory Duplicate (DUP) Report							
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074E: Halogenated Aliphatic Compounds (QC Lot: 985153) - continued									
EB0907913-003	; A)	EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	(0)	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 985153)									
EB0907913-003	; A)	EP074: Chlorobenzene	(6-9)-4	5	µg/L	<5	<5	(0)	No Limit
		EP074: Bromobenzene	(6-63)-(	5	µg/L	<5	<5	(0)	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	(0)	No Limit
		EP074: 4-Chlorotoluene	(3)-'-1	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,4-Dichlorobenzene	(3)-'3-4	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2,4-Trichlorobenzene	(-)-6-(	5	µg/L	<5	<5	(0)	No Limit
		EP074: 1,2,3-Trichlorobenzene	64-3(-3	5	µg/L	<5	<5	(0)	No Limit
EP074G: Trihalomethanes (QC Lot: 985153)									
EB0907913-003	; A)	EP074: Chloroform	34-33-~	5	µg/L	<5	<5	(0)	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	(0)	No Limit
		EP074: Dibromochloromethane	(-)-16-(	5	µg/L	<5	<5	(0)	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	(0)	No Limit
EP074H: Naphthalene (QC Lot: 985153)									
EB0907913-003	; A)	EP074: Naphthalene	9(-)-7	4	µg/L	C4	C4	(0)	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 985152)									
EB0907913-001	; A)(	EP080: C6 - C9 Fraction	---		µg/L	C)	C)	(0)	No Limit
EB0907913-011	; WB <CR14=	EP080: C6 - C9 Fraction	---		µg/L	C)	C)	(0)	No Limit
EP080: BTEX (QC Lot: 985152)									
EB0907913-001	; A)(	EP080: Benzene	4(-'-	(	µg/L	C(	C(	(0)	No Limit
		EP080: Toluene	(6-66-~		µg/L	C	C	(0)	No Limit
		EP080: Ethylbenzene	(-)-('1		µg/L	C	C	(0)	No Limit
		EP080: meta- & para-Oylene	108-38-3		µg/L	C	C	(0)	No Limit
			(3)-' -~						
EB0907913-011	; WB <CR14=	EP080: ortho-Oylene	95-47-6		µg/L	C	C	(0)	No Limit
		EP080: Benzene	4(-'-	(	µg/L	C(	C(	(0)	No Limit
		EP080: Toluene	(6-66-~		µg/L	C	C	(0)	No Limit
		EP080: Ethylbenzene	(-)-('1		µg/L	C	C	(0)	No Limit
		EP080: meta- & para-Oylene	108-38-3		µg/L	C	C	(0)	No Limit
			(3)-' -~						
		EP080: ortho-Oylene	95-47-6		µg/L	C	C	(0)	No Limit

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Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term ; ethod / 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-; atrID: **WATER**

Sub-; atriID: WATER		Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
		Spike Concentration		Spike Recovery (%)		Recovery Limits (%)			
Method: Compound		CAS Number	LOR	Unit	Result				
EG020F: Dissolved Metals by ICP-MS (QCLot: 984592)									
EG020A-F: Arsenic		4")-6-	)	mg/L	C)	0.100 mg/L	(3	75	
EG020A-F: Cadmium		4")-9	)	mg/L	C)	0.100 mg/L	(	49	
EG020A-F: Chromium		4")-4~	)	mg/L	C)	0.100 mg/L	(	6	
EG020A-F: Copper		7440-50-8	)	mg/L	C)	0.200 mg/L	115	6(	
EG020A-F: Lead		4"9-9 -(	)	mg/L	C)	0.100 mg/L	(4	6~	
EG020A-F: Nickel		4")-)	)	mg/L	C)	0.100 mg/L	(	46	
EG020A-F: Zinc		4")-33-3	0.005	mg/L	<0.005	0.200 mg/L	(	(	
EG020F: Dissolved Metals by ICP-MS (QCLot: 984594)									
EG020A-F: Arsenic		4")-6-	)	mg/L	C)	0.100 mg/L	(	75	
EG020A-F: Cadmium		4")-9	)	mg/L	C)	0.100 mg/L	(	49	
EG020A-F: Chromium		4")-4~	)	mg/L	C)	0.100 mg/L	(	6	
EG020A-F: Copper		7440-50-8	)	mg/L	C)	0.200 mg/L	(	6(	
EG020A-F: Lead		4"9-9 -(	)	mg/L	C)	0.100 mg/L	(	6~	
EG020A-F: Nickel		4")-)	)	mg/L	C)	0.100 mg/L	(9	46	
EG020A-F: Zinc		4")-33-3	0.005	mg/L	<0.005	0.200 mg/L	(9	(	
EG020F: Dissolved Metals by ICP-MS (QCLot: 987880)									
EG020A-F: Arsenic		4")-6-	)	mg/L	C)	0.100 mg/L	9606	75	
EG020A-F: Cadmium		4")-9	)	mg/L	C)	0.100 mg/L	(	49	
EG020A-F: Chromium		4")-4~	)	mg/L	C)	0.100 mg/L	(6	6	
EG020A-F: Copper		7440-50-8	)	mg/L	C)	0.200 mg/L	(	6(	
EG020A-F: Lead		4"9-9 -(	)	mg/L	C)	0.100 mg/L	(	6~	
EG020A-F: Nickel		4")-)	)	mg/L	C)	0.100 mg/L	(	46	
EG020A-F: Zinc		4")-33-3	0.005	mg/L	<0.005	0.200 mg/L	105	6(	
EG020T: Total Metals by ICP-MS (QCLot: 985487)									
EG020A-T: Arsenic		4")-6-	)	mg/L	C)	0.100 mg/L	95.8	4'	
EG020A-T: Cadmium		4")-9	)	mg/L	C)	0.100 mg/L	(4	4'	
EG020A-T: Chromium		4")-4~	)	mg/L	C)	0.100 mg/L	(	6(	
EG020A-T: Copper		7440-50-8	)	mg/L	C)	0.200 mg/L	(6	75	
EG020A-T: Lead		4"9-9 -(	)	mg/L	C)	0.100 mg/L	(	6	
EG020A-T: Nickel		4")-)	)	mg/L	C)	0.100 mg/L	(3	75	
EG020A-T: Zinc		4")-33-3	0.005	mg/L	<0.005	0.200 mg/L	(	4	
EG035F: Dissolved Mercury by FIMS (QCLot: 984591)									
EG035F: ; ercury		4"9-94-3	)	mg/L	C)	0.010 mg/L	903	6'	
EG035F: Dissolved Mercury by FIMS (QCLot: 984593)									



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Sub-; atriD: WATER				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 984593) - continued									
EG035F: ; mercury	4 ⁹ -94-3	0)))(	mg/L	C)0)))(	0.010 mg/L	9)03		6'	()
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984931)									
EG035T: ; mercury	4 ⁹ -94-3	0)))(	mg/L	C)0)))(	0.0100 mg/L	0()		6	()
EK055G: Ammonia as N by Discrete Analyser (QCLot: 989022)									
EK055G: Ammonia as N	433 ⁹ -(4	0()	mg/L	C)0()	0.5 mg/L	0')		4)	(6
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 985208)									
EP066: Total Polychlorinated biphenyls	----	(	µg/L	C()	10 µg/L	440'		56.7	((6
EP068A: Organochlorine Pesticides (OC) (QCLot: 985207)									
EP068: alpha-BHC	~(9-6'-3	0.5	µg/L	<0.5	5 µg/L	6'06		55	125
EP068: HeDachlorobenzene HCB=	((6-4'-()	0.5	µg/L	<0.5	5 µg/L	84.5		51	((
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	690		54	(3
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	6 0"		53	(~
EP068: delta-BHC	~(9-63-6	0.5	µg/L	<0.5	5 µg/L	3606		52	(~
EP068: Heptachlor	43 ⁹ -"-6	0.5	µg/L	<0.5	5 µg/L	9309		~	(6
EP068: Aldrin	~(9)-)	0.5	µg/L	<0.5	5 µg/L	6'09		57	(3
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	6'0'		57	('
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	630()		53.4	()
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	9(0"		53	(~
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	85.7		52.4	()
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	660"		51	(6
EP068: 4,4'-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	9)0()		54.8	125
EP068: Endrin	4 -)-6	0.5	µg/L	<0.5	5 µg/L	65.7		'90(	135
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	690'		54	(~
EP068: 4,4'-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	6309		54.3	(9
EP068: Endrin aldehyde	4' (9"-'	0.5	µg/L	<0.5	5 µg/L	6903		54.3	(4
EP068: Endosulfan sulfate	() ⁹ -(4-6	0.5	µg/L	<0.5	5 µg/L	# 42.8		'4	(~3
EP068: 4,4'-DDT	50-29-3		µg/L	C	----	----		----	----
		0)	µg/L	----	5 µg/L	4'0'		')	(~)
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	6'03		~	(~4
EP068: ; ethoDychlor	72-43-5		µg/L	C	----	----		----	----
		0)	µg/L	----	5 µg/L	4606		')	(~)
EP068B: Organophosphorus Pesticides (OP) (QCLot: 985207)									
EP068: Dichlorvos	3 ⁹ -4'-4	0.5	µg/L	<0.5	5 µg/L	6)04		53.6	(3
EP068: Demeton-S-methyl	9(9-63-6	0.5	µg/L	<0.5	5 µg/L	85.2		'90	135
EP068: ; onocrotaphos	39 ⁹ - -'		µg/L	C	----	----		----	----
		0)	µg/L	----	5 µg/L	# Not Determined		17.5	()
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	65.4		51.3	125
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	6'04		52	(3

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Sub-; atriD: **WATER**

Sub-; atrID: WATER		Method: Compound		CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
								Spike Concentration	Spike Recovery (%)	LCS	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QCLot: 985207) - continued											
EP068: Chlorpyrifos-methyl		5598-13-0	0.5	µg/L	<0.5	5 µg/L	4406	54.6	(~		
EP068: Parathion-methyl		96-))(-	0)	µg/L	C	---	---	---	---		
				µg/L	---	5 µg/L	3603	50	()		
EP068: ; alathion		121-75-5	0.5	µg/L	<0.5	5 µg/L	606	51	(9		
EP068: Fenthion		55-38-9	0.5	µg/L	<0.5	5 µg/L	60)	54	()		
EP068: Chlorpyrifos		9 (-66-	0.5	µg/L	<0.5	5 µg/L	85.7	57.6	(		
EP068: Parathion		56-38-2	0)	µg/L	C	---	---	---	---		
				µg/L	---	5 µg/L	60~	51.8	(3		
EP068: Pirimphos-ethyl		23505-41-1	0.5	µg/L	<0.5	5 µg/L	# 48.4	54.7	(		
EP068: Chlorfenvinphos		'4)-9)-3	0.5	µg/L	<0.5	5 µg/L	(4	54.7	()		
EP068: Bromophos-ethyl		'6 '-46-3	0.5	µg/L	<0.5	5 µg/L	9(0~	54.8	()		
EP068: Fenamiphos		'-9 -3	0.5	µg/L	<0.5	5 µg/L	85.0	'60~	(3		
EP068: Prothiofos		~3"- '3-	0.5	µg/L	<0.5	5 µg/L	6.09	53.7	((		
EP068: Ethion		563-12-2	0.5	µg/L	<0.5	5 µg/L	606	54.6	()		
EP068: Carbophenothion		463-(9-3	0.5	µg/L	<0.5	5 µg/L	609	53.4	(6		
EP068: Azinphos ; ethyl		86-50-0	0.5	µg/L	<0.5	5 µg/L	"0	"	()		
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 985153)											
EP074: Benzene		4(-"-	5	µg/L	<5	10 µg/L	90	75	(		
EP074: Toluene		(6-66~	5	µg/L	<5	10 µg/L	95.5	40	('		
EP074: Ethylbenzene		())-('	5	µg/L	<5	10 µg/L	960(	43	()		
EP074: meta- & para-Oylene		108-38-3	5	µg/L	<5	20 µg/L	95.3	36	(~		
		(3- ' -									
EP074: Styrene		100-42-5	5	µg/L	<5	10 µg/L	9609	36	(4		
EP074: ortho-Oylene		95-47-6	5	µg/L	<5	10 µg/L	95.9	43	(		
EP074: Isopropylbenzene		96-6 -6	5	µg/L	<5	10 µg/L	90(	4'	(~		
EP074: n-Propylbenzene		103-65-1	5	µg/L	<5	10 µg/L	9409	4)	125		
EP074: 1,3,5-Trimethylbenzene		(6-34-6	5	µg/L	<5	10 µg/L	960(	4'	((		
EP074: sec-Butylbenzene		135-98-8	5	µg/L	<5	10 µg/L	960'	4	('		
EP074: 1,2,4-Trimethylbenzene		95-63-6	5	µg/L	<5	10 µg/L	940)	73.5	('		
EP074: tert-Butylbenzene		96-)3-3	5	µg/L	<5	10 µg/L	940'	4(03	(6		
EP074: p-Isopropyltoluene		99-64-3	5	µg/L	<5	10 µg/L	9606	360~	()		
EP074: n-Butylbenzene		104-51-8	5	µg/L	<5	10 µg/L	97.5	34	(3		
EP074B: Oxygenated Compounds (QCLot: 985153)											
EP074: PinyI Acetate		108-05-4	50	µg/L	<50	100 µg/L	()	65	(4		
EP074: 2-Butanone <; EK=		46-9~-	50	µg/L	<50	100 µg/L	390(	54	()		
EP074: 4-; ethyl-2-pentanone <; IBK=		(6-()-	50	µg/L	<50	100 µg/L	('	3~	(4		
EP074: 2-HeDanone <; BK=		591-78-6	50	µg/L	<50	100 µg/L	((4	3	135		
EP074C: Sulfonated Compounds (QCLot: 985153)											
EP074: Carbon disulfide		75-15-0	5	µg/L	<5	10 µg/L	75.2	36	135		

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Project : QE09537

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Sub-: atrID: WATER

Sub-; atrID: WATER	Method Blank (MB) Report				Laboratory Control Spike (LCS) Report				
	Method: Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)
							LCS	Low	
EP074D: Fumigants (QCLot: 985153)									
EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	930'	304	("	
EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	9603	3904	(6	
EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	20 µg/L	()	36	(('	
EP074: trans-1,3-Dichloropropylene	()3(-)-3	5	µg/L	<5	20 µg/L	()'	34	(')	
EP074: 1,2-Dibromoethane <EDB=	()3-9'-	5	µg/L	<5	10 µg/L	()3	360(	('	
EP074E: Halogenated Aliphatic Compounds (QCLot: 985153)									
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	# 27.9	52	(')	
EP074: Chloromethane	4'-64-~	50	µg/L	<50	100 µg/L	56.8	"0(	(')	
EP074: Pinyll chloride	75-01-4	50	µg/L	<50	100 µg/L	# 166	53	("	
EP074: Bromomethane	4'-6'-9	50	µg/L	<50	100 µg/L	460~	57.5	(')	
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	# 68.5	4)	(4	
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	360	3'	135	
EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	630	3'09	135	
EP074: Iodomethane	4'-66-'	5	µg/L	<5	10 µg/L	4'0'	57.2	(')	
EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	903	4)	(6	
EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	930(	3'	(3	
EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	()	4(	(6	
EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	96.5	360'	135	
EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	9'06	4(0'	(4	
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	930'	3'	("	
EP074: 1,2-Dichloroethane	(4)-3-	5	µg/L	<5	10 µg/L	()	36	("	
EP074: Trichloroethene	49-)(-3	5	µg/L	<5	10 µg/L	95.6	4	(4	
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	()'	3'09	(3	
EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	((	390	("	
EP074: 1,3-Dichloropropane	(' - 6-9	5	µg/L	<5	10 µg/L	()	4'04	(')	
EP074: Tetrachloroethene	(4-(6-'	5	µg/L	<5	10 µg/L	9604	4'06	("	
EP074: 1,1,1,2-Tetrachloroethane	3')-)-3	5	µg/L	<5	10 µg/L	()'	6(	("	
EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	((3	3	(')	
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	6904	51.1	(')	
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	()6	4	("	
EP074: 1,2,3-Trichloropropane	93-(6-'	5	µg/L	<5	10 µg/L	((	59	(6	
EP074: Pentachloroethane	43-)(-4	5	µg/L	<5	10 µg/L	()	36	(6	
EP074: 1,2-Dibromo-3-chloropropane	93-(-6	5	µg/L	<5	10 µg/L	((	52	150	
EP074: HeDachlorobutadiene	64-36-~	5	µg/L	<5	10 µg/L	690	3	('	
EP074F: Halogenated Aromatic Compounds (QCLot: 985153)									
EP074: Chlorobenzene	()6-9)-4	5	µg/L	<5	10 µg/L	9309	44	()	
EP074: Bromobenzene	()6-63-(	5	µg/L	<5	10 µg/L	()	43	(	
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	930	75.3	('	
EP074: 4-Chlorotoluene	()3-~'-	5	µg/L	<5	10 µg/L	()	43	()	

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Method: Compound				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
				Result	Concentration	Spike Recovery (%)	Low	High	
EP074F: Halogenated Aromatic Compounds (QCLot: 985153) - continued									
EP074: 1,3-Dichlorobenzene	CAS Number	LOR	Unit						
	541-73-1	5	µg/L	<5	10 µg/L	()	75.2	()	
EP074: 1,4-Dichlorobenzene	() 3-3-4	5	µg/L	<5	10 µg/L	95.6	430(	() 9	
EP074: 1,2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	990)	4404	() 6	
EP074: 1,2,4-Trichlorobenzene	() 6-3-3	5	µg/L	<5	10 µg/L	90(	360*	() 6	
EP074: 1,2,3-Trichlorobenzene	64-3(3)-3	5	µg/L	<5	10 µg/L	970)	75	125	
EP074G: Trihalomethanes (QCLot: 985153)									
EP074: Chloroform	34-33-2	5	µg/L	<5	10 µg/L	9606	410(	() 4	
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	()	36	()	
EP074: Dibromochloromethane	() 6-3-3	5	µg/L	<5	10 µg/L	115	39	()	
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	()	3	() 4	
EP074H: Naphthalene (QCLot: 985153)									
EP074: Naphthalene	9() -2	4	µg/L	C4	10 µg/L	9103	670(	() 9	
EP075(SIM)A: Phenolic Compounds (QCLot: 985209)									
EP075^m : Phenol	108-95-2	()	µg/L	---	5 µg/L	9.5	'	4)	
EP075^m : 2-Chlorophenol	95-57-8	()	µg/L	C(0)	5 µg/L	60.5	57	105	
EP075^m : 2-; ethylphenol	95-48-7	()	µg/L	C(0)	5 µg/L	57.9	51	93	
EP075^m : 3- & 4-; ethylphenol	() 9-44-2	()	µg/L	C(0)	10 µg/L	55.2	45	9'	
EP075^m : 2-Nitrophenol	88-75-5	()	µg/L	---	5 µg/L	3304	'6	()	
EP075^m : 2,4-Dimethylphenol	105-67-9	()	µg/L	C(0)	5 µg/L	3304	"	((	
EP075^m : 2,4-Dichlorophenol	() 6-3-	()	µg/L	---	5 µg/L	6106	3)	((	
EP075^m : 2,6-Dichlorophenol	87-65-0	()	µg/L	---	5 µg/L	# 58.4	59	115	
EP075^m : 4-Chloro-3-; ethylphenol	59-50-7	()	µg/L	---	5 µg/L	3903	3)	() 4	
EP075^m : 2,4,6-Trichlorophenol	66-73-	()	µg/L	---	5 µg/L	3306	59	()	
EP075^m : 2,4,5-Trichlorophenol	95-95-4	()	µg/L	C(0)	5 µg/L	3709	59	()	
EP075^m : Pentachlorophenol	87-86-5	()	µg/L	---	10 µg/L	()	0(	()	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 985209)									

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Method Blank (MB) Report				Laboratory Control Spike (LCS) Report			
Result		Spike Concentration		Spike Recovery (%)		Recovery Limits (%)	
Method	Compound	CAS Number	LOR	Unit	Result	Concentration	Recovery Limits (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 985209) - continued							
EP075^m	: Naphthalene	9(-)-	(0)	µg/L	C(0)	5 µg/L	330
EP075^m	: Acenaphthylene	6-93-6	(0)	µg/L	C(0)	5 µg/L	3'06
EP075^m	: Acenaphthene	6--9	(0)	µg/L	C(0)	5 µg/L	65.8
EP075^m	: Fluorene	63-4-4	(0)	µg/L	C(0)	5 µg/L	3'0
EP075^m	: Phenanthrene	85-01-8	(0)	µg/L	C(0)	5 µg/L	6'0(
EP075^m	: Anthracene	(-)-4	(0)	µg/L	C(0)	5 µg/L	490'
EP075^m	: Fluoranthene	3--	(0)	µg/L	C(0)	5 µg/L	490(
EP075^m	: Pyrene	(9--)	(0)	µg/L	C(0)	5 µg/L	6'0(
EP075^m	: Benz[a]anthracene	56-55-3	(0)	µg/L	C(0)	5 µg/L	6306
EP075^m	: Chrysene	(6-)-9	(0)	µg/L	C(0)	5 µg/L	4'09
EP075^m	: Benzo[b]fluoranthene	205-99-2	(0)	µg/L	C(0)	5 µg/L	4606
EP075^m	: Benzo[k]fluoranthene	4-76-9	(0)	µg/L	C(0)	5 µg/L	65.2
EP075^m	: Benzo[a]pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	390)
EP075^m	: Indeno[1,2,3-cd]pyrene	193-39-5	(0)	µg/L	C(0)	5 µg/L	4(0
EP075^m	: Dibenzo[a,h]anthracene	53-70-3	(0)	µg/L	C(0)	5 µg/L	4 04
EP075^m	: Benzo[e]pyrene	(9(-)-	(0)	µg/L	C(0)	5 µg/L	3309
EP080/074: Total Petroleum Hydrocarbons (QCLot: 985152)							
EP080: C6 - C9 Fraction			)	µg/L	C)	160 µg/L	9903
EP080/074: Total Petroleum Hydrocarbons (QCLot: 985206)							
EP071: C10 - C14 Fraction			50	µg/L	<50	600 µg/L	3'03
EP071: C15 - C28 Fraction			()	µg/L	C()	1020 µg/L	440)
EP071: C29 - C36 Fraction			50	µg/L	<50		
EP080: BTEX (QCLot: 985152)							
EP080: Benzene		4(-)-	(	µg/L	C(	10 µg/L	930'
							4403
							(

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Sub: atriD WATER

Sub-: atrid WATER			Laboratory Control Spike (LCS) Report					
			Method Blank (MB) Report		Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result				
EP080: BTEX (QCLot: 985152) - continued								
EP080: Toluene	(06-66-2)		µg/L	C	10 µg/L	9903	4'	(
EP080: Ethylbenzene	(01)-(-)		µg/L	C	10 µg/L	990)	4"	(3
EP080: meta- & para-Oylene	108-38-3		µg/L	C	20 µg/L	990)	4)0'	(9
	(03- ' -							
EP080: ortho-Oylene	95-47-6		µg/L	C	10 µg/L	990"	40"	(3



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Matrix Spike (MS) Report

The quality control term ; atriD Spike <;" = refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrixD effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives <QOOs= Ideal recovery ranges stated may be waived in the event of sample matrixD interference.

Sub-; atriD: **WATER**

Sub-; atriID: WATER

			Matrix Spike (MS) Report				
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	Spike	Spike Recovery (%)	Recovery Limits (%)	
				Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 984592)							
EB0907768-002	Anonymous	EG020A-F: Arsenic	4")-6-	.1 mg/L	# Not Determined	4)	(")
		EG020A-F: Cadmium	4")-9	0.100 mg/L	(4	4)	(")
		EG020A-F: Chromium	4")-4~	0.100 mg/L	(3	4)	(")
		EG020A-F: Copper	7440-50-8	.15 mg/L	(	4)	(")
		EG020A-F: Lead	4"9-9 -(	0.100 mg/L	(	4)	(")
		EG020A-F: Nickel	4")-)	0.100 mg/L	(3	4)	(")
		EG020A-F: Zinc	4")33-3	.2 mg/L	115	4)	(")
EG020F: Dissolved Metals by ICP-MS (QCLot: 984594)							
EB0907954-004	Anonymous	EG020A-F: Arsenic	4")-6-	0.100 mg/L	(	4)	(")
		EG020A-F: Cadmium	4")-9	0.100 mg/L	(4	4)	(")
		EG020A-F: Chromium	4")-4~	0.100 mg/L	9604	4)	(")
		EG020A-F: Copper	7440-50-8	.15 mg/L	9904	4)	(")
		EG020A-F: Lead	4"9-9 -(	0.100 mg/L	(	4)	(")
		EG020A-F: Nickel	4")-)	0.100 mg/L	990(	4)	(")
		EG020A-F: Zinc	4")33-3	.2 mg/L	(	4)	(")
EG020T: Total Metals by ICP-MS (QCLot: 985487)							
EB0907698-008	Anonymous	EG020A-T: Arsenic	4")-6-	1.000 mg/L	()	4)	(")
		EG020A-T: Cadmium	4")-9	0.500 mg/L	960	4)	(")
		EG020A-T: Chromium	4")-4~	1.000 mg/L	9406	4)	(")
		EG020A-T: Copper	7440-50-8	1.000 mg/L	930(	4)	(")
		EG020A-T: Lead	4"9-9 -(	1.000 mg/L	9(0	4)	(")
		EG020A-T: Nickel	4")-)	1.000 mg/L	9303	4)	(")
		EG020A-T: Zinc	4")33-3	1.000 mg/L	9(0	4)	(")
EG035F: Dissolved Mercury by FIMS (QCLot: 984591)							
EB0907768-002	Anonymous	EG035F: ; ercury	4"9-94-3	0.010 mg/L	4606	4)	(")
EG035F: Dissolved Mercury by FIMS (QCLot: 984593)							
EB0907913-004	; A)	EG035F: ; ercury	4"9-94-3	0.010 mg/L	4*06	4)	(")
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984931)							
EB0907936-001	Anonymous	EG035T: ; ercury	4"9-94-3	0.010 mg/L	9(0	4)	(")
EK055G: Ammonia as N by Discrete Analyser (QCLot: 989022)							
EB0907910-003	Anonymous	EK055G: Ammonia as N	433'-(-4	0.4 mg/L	# Not Determined	4)	(")
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 985153)							
EB0907913-004	; A)	EP074: Benzene	4(-~	10 µg/L	(	4)	(")
		EP074: Toluene	(6-66~	10 µg/L	9604	4)	(")



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Sub-; attrID: **WATER**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike Concentration	Matrix Spike (MS) Report		
					Spike Recovery (%)	Recovery Limits (%)	
					MS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 985153)							
EB0907913-004	: A)	EP074: 1,1-Dichloroethene	75-35-4	10 µg/L	(3	4)	()
		EP074: Trichloroethene	49-)(-3	10 µg/L	9906	4)	()
EP074F: Halogenated Aromatic Compounds (QCLot: 985153)							
EB0907913-004	: A)	EP074: Chlorobenzene	(6-9)-4	10 µg/L	(X	4)	()
EP080/071: Total Petroleum Hydrocarbons (QCLot: 985152)							
EB0907913-002	: A)	EP080: C6 - C9 Fraction	----	140 µg/L	970)	4)	()
EP080: BTEX (QCLot: 985152)							
EB0907913-002	: A)	EP080: Benzene	4(-"-	10 µg/L	(('	4)	()
		EP080: Toluene	(6-66-~	10 µg/L	(03	4)	()



Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EB0907913	Page	: (of (2
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET SOUTH BRISBANE QLD, AUSTRALIA 4101	Address	: 32 Shand Street Stafford QLD Australia 4053
E-mail	: okanas@skm.com.au	E-mail	: Services.Brisbane@alsenviro.com
Telephone	: 0000	Telephone	: +61-7-3243 7222
Facsimile	: 0000	Facsimile	: +61-7-3243 7218
Project	: QE09537	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: Cronulla Park	Date Samples Received	: 19-MAY-2009
C-O-C number	: 0000	Issue Date	: 27-MAY-2009
Sampler	: O Kana & M McLeod	No. of samples received	: *
Order number	: 0000	No. of samples analysed	: *
Quote number	: EN/003/09		

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

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Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 913, AS and NEPM =*<<<). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **WATER**

Evaluation: * H Holding time breach ; ✓ H Within holding time.

Method		Sample Date		Extraction / Preparation		Analysis	
Container / Client Sample ID(s)		Date extracted	Due for extraction	Due for analysis	Evaluation		
EG020F: Dissolved Metals by ICP-MS							
Amber Glass Bottle - Unpreserved							
F+9		19-MAY-2009	---	000	0000	20-MAY-2009	15-NOV-2009
Clear Plastic Bottle - Filtered; Lab-acidified							
F+9(F+9(F+6(F+7(DUP04	MW02, F+9(F+6(F+7(DUP04	18-MAY-2009	---	000	0000	20-MAY-2009	14-NOV-2009
Clear Plastic Bottle - Filtered; Lab-acidified							
F+9(MWA (CR13), MWC (CR15)	F+9(MWB (CR14), MWB (CR15)	19-MAY-2009	---	000	0000	20-MAY-2009	15-NOV-2009
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Unfiltered; Lab-acidified							
Rinsate/ Rinsate 4		18-MAY-2009	21-MAY-2009	14-NOV-2009	✓	21-MAY-2009	14-NOV-2009
EG035F: Dissolved Mercury by FIMS							
Amber Glass Bottle - Unpreserved							
F+9		19-MAY-2009	---	000	0000	20-MAY-2009	02-JUN-2009
Clear Plastic Bottle - Filtered; Lab-acidified							
F+9(F+9(F+6(F+7(DUP04	MW02, F+9(F+6(F+7(DUP04	18-MAY-2009	---	000	0000	20-MAY-2009	15-JUN-2009
Clear Plastic Bottle - Filtered; Lab-acidified							
F+9(MWA (CR13), MWC (CR15)	F+9(MWB (CR14), MWB (CR15)	19-MAY-2009	---	000	0000	20-MAY-2009	16-JUN-2009
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Unfiltered; Lab-acidified							
Rinsate/ Rinsate 4		18-MAY-2009	---	0000	0000	21-MAY-2009	15-JUN-2009

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Matrix: **WATER** Evaluation: * H Holding time breach ; ✓ H Within holding time.

Method		Sample Date	Extraction / Preparation		Evaluation	Analysis	
Container / Client Sample ID(s)	Date extracted		Due for extraction	Date analysed		Due for analysis	Evaluation
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulphuric Acid							
MW02, F+)(F+%(F+6(F+9(F+/(MWB (CR14)	---	000	0000	26-MAY-2009	15-JUN-2009	✓	
Clear Plastic Bottle - Sulphuric Acid							
F+9(F+/(MWB (CR14)	---	000	0000	26-MAY-2009	16-JUN-2009	✓	
EP066: Polychlorinated Biphenyls (PCB)							
Amber Glass Bottle - Unpreserved							
F+)(F+6(F+<(MWB (CR14)	21-MAY-2009	25-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+)(F+6(MWB (CR14)	21-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+9	22-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved							
F+)(F+6(F+<(MWB (CR14)	21-MAY-2009	25-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+)(F+6(MWB (CR14)	21-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+9	22-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved							
F+)(F+6(F+<(MWB (CR14)	21-MAY-2009	25-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+)(F+6(MWB (CR14)	21-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
Amber Glass Bottle - Unpreserved							
F+9	22-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓	
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - HCl or NaHSO4							
F+)(F+6(F+9(F+/(MWB (CR14)	---	000	0000	21-MAY-2009	01-JUN-2009	✓	
Amber VOC Vial - HCl or NaHSO4							
F+)(F+6(MWB (CR14)	---	000	0000	21-MAY-2009	02-JUN-2009	✓	

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Matrix: **WATER** Evaluation: * H Holding time breach ; ✓ H Within holding time.

Method		Sample Date	Extraction / Preparation		Analysis	
Container / Client Sample ID(s)			Date extracted	Due for extraction	Evaluation	Due for analysis
EP074B: Oxygenated Compounds						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074C: Sulfonated Compounds						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074D: Fumigants						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074E: Halogenated Aliphatic Compounds						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074F: Halogenated Aromatic Compounds						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074G: Trihalomethanes						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009
EP074H: Organophosphorus Compounds						
Amber VOC Vial - HCl or NaHSO4	F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009
Amber VOC Vial - HCl or NaHSO4	F+)(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009

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Method		Sample Date	Extraction / Preparation		Evaluation	Analysis		Evaluation	
Container / Client Sample ID(s)			Date extracted	Due for extraction		Date analysed	Due for analysis		
EP074H: Naphthalene									
Amber VOC Vial - HCl or NaHSO4		F+)(F+7	18-MAY-2009	---	000	0000	21-MAY-2009	01-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4		F+/(F+<(MWB (CR14)	19-MAY-2009	---	000	0000	21-MAY-2009	02-JUN-2009	✓
EP075(SIM)A: Phenolic Compounds									
Amber Glass Bottle - Unpreserved		F+)(F+7	18-MAY-2009	21-MAY-2009	25-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓
Amber Glass Bottle - Unpreserved		F+/(F+<(MWB (CR14)	19-MAY-2009	21-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓
Amber Glass Bottle - Unpreserved		F+9	19-MAY-2009	22-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Amber Glass Bottle - Unpreserved		F+)(F+7	18-MAY-2009	21-MAY-2009	25-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓
Amber Glass Bottle - Unpreserved		F+/(F+<(MWB (CR14)	19-MAY-2009	21-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓
Amber Glass Bottle - Unpreserved		F+9	19-MAY-2009	22-MAY-2009	26-MAY-2009	✓	23-MAY-2009	01-JUL-2009	✓



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Matrix: **WATER** Evaluation: * H Holding time breach ; ✓ H Within holding time.

Method		Sample Date	Extraction / Preparation		Evaluation	Analysis		
Container / Client Sample ID(s)	Date extracted		Due for extraction	Date analysed		Due for analysis	Evaluation	
EP080/071: Total Petroleum Hydrocarbons								
Amber Glass Bottle - Unpreserved		MW02, F+)(F+7(DUP04	18-MAY-2009	21-MAY-2009	25-MAY-2009	✓	22-MAY-2009 01-JUL-2009	✓
Amber Glass Bottle - Unpreserved			18-MAY-2009	22-MAY-2009	25-MAY-2009	✓	22-MAY-2009 01-JUL-2009	✓
Amber Glass Bottle - Unpreserved			19-MAY-2009	21-MAY-2009	26-MAY-2009	✓	22-MAY-2009 01-JUL-2009	✓
Amber Glass Bottle - Unpreserved			19-MAY-2009	22-MAY-2009	26-MAY-2009	✓	22-MAY-2009 01-JUL-2009	✓
Amber VOC Vial - HCl or NaHSO4		MW02, F+)(F+7(Rinsate/ Rinsate 4 DUP04,	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009	✓
EP080: BTEX								
Amber VOC Vial - HCl or NaHSO4		MW02, F+)(F+7(Rinsate/ Rinsate 4 DUP04,	18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			18-MAY-2009	---	000	0000	21-MAY-2009 01-JUN-2009	✓
Amber VOC Vial - HCl or NaHSO4			19-MAY-2009	---	000	0000	21-MAY-2009 02-JUN-2009	✓

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Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: **★** H Qualit Control fre?uenc not within s4efication **✓** H Qualit Control fre?uenc within s4efication.

Quality Control Sample Type		Method		Count		Rate (%)		Evaluation		Quality Control Specification	
Analytical Methods				QC	Regular	Actual	Expected				
Laboratory Duplicates (DUP)											
Ammonia as N by Discrete analyser	EK055G	2	12			16.7	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Mercury by FIMS	EG035F	)	%			10.5	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Metals by ICP-MS - Suite A	EG020A-F	)	%			10.8	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	2+			10.0	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	2	1<			10.5	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	2	2+			10.0	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	*	9			12.5	10.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)											
Ammonia as N by Discrete analyser	EK055G	*	* 2			8.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Mercury by FIMS	EG035F	2	39			5.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Metals by ICP-MS - Suite A	EG020A-F	%	%			7.9	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	*	*)			7.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Pesticides	EP068	*	**			9.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	*	**			9.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	*	* <			5.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	*	9			12.5	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)											
Ammonia as N by Discrete analyser	EK055G	*	* 2			8.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Mercury by FIMS	EG035F	2	39			5.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Dissolved Metals by ICP-MS - Suite A	EG020A-F	%	%			7.9	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	*	*)			7.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Pesticides	EP068	*	**			9.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	*	**			9.1	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	*	* <			5.3	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
TPH - Semivolatile Fraction	EP071	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	2+			5.0	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	*	9			12.5	5.0	✓		NEPM 1999	Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)											
Ammonia as N by Discrete analyser	EK055G	*	* 2			8.3	5.0	✓		ALS QCS3	requirement
Dissolved Mercury by FIMS	EG035F	2	39			5.3	5.0	✓		ALS QCS3	requirement
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	37			5.4	5.0	✓		ALS QCS3	requirement

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Matrix: **WATER** Evaluation: * H Qualit Control fre?uenc not within s4ecification G✓ H Qualit Control fre?uenc within s4ecification.

Quality Control Sample Type		Count		Rate (%)		Evaluation		Quality Control Specification
Analytical Methods		QC	Regular	Actual	Expected			
Matrix Spikes (MS) - Continued								
Total Mercury by FIMS	EG035T	1	2+	5.0	5.0	✓		ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	*	* <	5.3	5.0	✓		ALS QCS3 requirement
TPH Volatiles/BTEX	EP080	1	2+	5.0	5.0	✓		ALS QCS3 requirement
Volatile Organic Compounds	EP074	*	9	12.5	5.0	✓		ALS QCS3 requirement



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Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Total Mercury by FIMS	EG035T	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Ammonia as N by Discrete analyser	EK055G	WATER	APHA 21st ed., 4500-NH ₃ G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Polychlorinated Biphenyls (PCB)	EP066	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Pesticides	EP068	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
TPH - Semivolatile Fraction	EP071	WATER	USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Volatile Organic Compounds	EP074	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
PAH/Phenols (GC/MS - SIM)	EP075-SIM>	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)

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Analytical Methods		Method	Matrix	Method Descriptions
TPH Volatiles/BTEX		EP080	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Preparation Methods		Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals		EN25	WATER	USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)
Separatory Funnel Extraction of Liquids		# , *)	WATER	USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.



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Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP068A: Organochlorine Pesticides (OC)	1128581-008	0000	Endosulfan sulfate	*+%-0+709	42.8 %	)70-%6L	Recovery less than lower control limit
EP068B: Organophosphorus Pesticides (OP)	1128581-008	0000	Monocrotophos	6923-22-4	Not Determined	0000	Standard recovery not determined, result less than LOR
EP068B: Organophosphorus Pesticides (OP)	1128581-008	0000	Pirimphos-ethyl	23505-41-1	48.4 %	54.7-122%	Recovery less than lower control limit
EP074E: Halogenated Aliphatic Compounds	1128525-008	0000	Dichlorodifluoromethane	7107*09	27.9 %	52-130%	Recovery less than lower control limit
EP074E: Halogenated Aliphatic Compounds	1128525-008	0000	Vinyl chloride	710+*0)	166 %	/%0*)L	Recovery greater than upper control limit
EP074E: Halogenated Aliphatic Compounds	1128525-008	0000	Chloroethane	710+*+0%	68.5 %	7+0-%7L	Recovery less than lower control limit
EP075(SIM)A: Phenolic Compounds	1128581-015	0000	2,6-Dichlorophenol	9706/0+	58.4 %	/<0**/L	Recovery less than lower control limit
Matrix Spike (MS) Recoveries							
EG020F: Dissolved Metals by ICP-MS	EB0907768-002	Anonymous	Arsenic	7440-38-2	Not Determined	0000	MS recovery not determined, background level greater than or equal to 4x spike level.
EK055G: Ammonia as N by Discrete Analyser	EB0907910-003	Anonymous	Ammonia as N	766/0)*07	Not Determined	0000	MS recovery not determined, background level greater than or equal to 4x spike level.

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.

Regular Sample Surrogates

Sub-Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075(SIM)T: PAH Surrogates	EB0907913-004	F+)	2-Fluorobiphenyl	321-60-8	33.7 %	43-116 %	Recovery less than lower data quality objective

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.



Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

RTI DL RELEASE - EHP



Environmental Division

SAMPLE RECEIPT NOTIFICATION (SRN)

Comprehensive Report

Work Order : **EB0907913**

Client : **SINCLAIR KNIGHT MERZ**
Contact : **ONA KANAS**
Address : **32 CORDELIA STREET**
S^W UTH BRISBANE QLD, AUSTRALIA
4101

Laboratory : **Environmental Division Brisbane**
Contact : **Tim Kilmister**
Address : **32 Shand Street Stafford QLD Australia**
4053

E-mail : **\$ okanas@skm.com.au**
Telephone : **\$ %%%%**
Facsimile : **\$ %%%%**

E-mail : **\$ Services.Brisbane@alsenviro.com**
Telephone : **\$ +61-7-3243 7222**
Facsimile : **\$ +61-7-3243 7218**

3rd 4th : **\$ QE09537**
Order number : **\$ %%%%**
C-O-C number : **\$ %%%%**
Site : **\$ Cronulla Park**
Sampler : **\$ O Kana & M McLeod**

Page : **\$ 1 of 3**
Quote number : **\$ ES2009SINKNI0322 (EN/003/09=**
QC Level : **\$ NEPM 1999 Schedule B(3= and ALS**
QCS3 requirement

Dates

Date Samples Received : **\$ 19-MAY-2009**
Client Requested Due Date : **\$ 26-MAY-2009**

Issue Date : **\$ 20-MAY-2009 16:46**
Scheduled Reporting Date : **\$ 27-MAY-2009**

Delivery Details

Mode of Delivery : **\$ Client Drop off**
No. of coolers/boxes : **\$ 3 MEDIUM**
Security Seal : **\$ Intact.**

Temperature : **\$ 20.0, 18.0, 19.4°C**
No. of samples received : **\$ 14**
No. of samples analysed : **\$ 14**

General Comments

- This report contains the following information:
 - % Sample Container(s)=Preservation Non-Compliances
 - % Summary of Sample(s)=and Requested Analysis
 - % Requested Deliverables
- Sample containers do not comply to pretreatment / preservation standards (AS, APHA, USEPA= Please refer to the Sample Container(s)=Preservation Non-Compliance Log at the end of this report for details.
- Samples submitted for dissolved metals analysis should be acidified with nitric acid, following field filtration. Additional charges of up to \$5.00 will apply to each sample requiring filtration and preservation upon receipt by the laboratory.
- **Sample containers do not comply to pretreatment / preservation standards (AS, APHA, USEPA). Please refer to the Sample Container(s)/Preservation Non-Compliance Log at the end of this report for details.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Please direct any queries related to sample condition / numbering / breakages to Maggie Kahi.
- Analytical work for this work order will be conducted at ALS Brisbane.
- Sample Disposal - Aqueous (14 days= Solid (90 days=from date of completion of work order.

Environmental Division Brisbane

Part of the **ALS Laboratory Group**

32 Shand Street Stafford QLD Australia 4053

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Sample Container(s)/Preservation Non-Compliances

Il comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

Method	Sample Container Received	Preferred Sample Container for Analysis
Client sample ID		
EG020A-F : Dissolved Metals by ICP-MS - Suite A		
MW08	- Amber Glass Bottle - Unpreserved	- Clear Plastic Bottle - Nitric Acid; Filtered
EG035F : Dissolved Mercury by FIMS		
MW08	- Amber Glass Bottle - Unpreserved	- Clear Plastic Bottle - Nitric Acid; Filtered

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for 06:00. If the sampling time is played as 0:00 the information was not provided by client.

Matrix: **WATER**

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER - EK055G Ammonia as N By Discrete Analyser	WATER - EP074 (water) Volatile Organic Compounds	WATER - W-05 TPH/BTEX/8 Metals	WATER - W-05T TPH/BTEX/8 Metals (Total)	WATER - W-19 TPH/BTX/P/Ph/OC/OP/PCB/8 metals
EB0907913-001	18-MAY-2009 11:00	MW01	✓		✓		
EB0907913-002	18-MAY-2009 11:00	MW02	✓		✓		
EB0907913-003	18-MAY-2009 11:00	MW03	✓	✓			✓
EB0907913-004	18-MAY-2009 11:00	MW04	✓	✓			✓
EB0907913-005	19-MAY-2009 11:00	MW05	✓	✓			✓
EB0907913-006	18-MAY-2009 11:00	MW06	✓	✓			✓
EB0907913-007	18-MAY-2009 11:00	MW07	✓	✓			✓
EB0907913-008	19-MAY-2009 11:00	MW08	✓	✓			✓
EB0907913-009	19-MAY-2009 11:00	MW09	✓	✓			✓
EB0907913-010	19-MAY-2009 11:00	MWA (CR13=			✓		
EB0907913-011	19-MAY-2009 11:00	MWB (CR14=	✓	✓			✓
EB0907913-012	19-MAY-2009 11:00	MWC (CR15=			✓		
EB0907913-013	18-MAY-2009 11:00	DUP04			✓		
EB0907913-014	18-MAY-2009 11:00	Rinsate/ Rinsate 4				✓	

MR JEREMY WICKS

%*AU Certificate of Analysis - NATA (COA =	Email	jwicks@skm.com.au
%*AU Interpretive QC Report - DEFAULT (Anon QCI Rep=(QCI =	Email	jwicks@skm.com.au
%*AU QC Report - DEFAULT (Anon QC Rep=- NATA (QC =	Email	jwicks@skm.com.au
%A4 - AU Sample Receipt Notification - Environmental (SRN =	Email	jwicks@skm.com.au
%A4 - AU Tax Invoice (INV =	Email	jwicks@skm.com.au
%Default - Chain of Custody (COC =	Email	jwicks@skm.com.au
%EDI Format - ENMRG (ENMRG =	Email	jwicks@skm.com.au
%EDI Format - ESDAT (ESDAT =	Email	jwicks@skm.com.au
%EDI Format - XTab (XTAB =	Email	jwicks@skm.com.au

ONA KANAS

%*AU Certificate of Analysis - NATA (COA =	Email	okanas@skm.com.au
%*AU Interpretive QC Report - DEFAULT (Anon QCI Rep=(QCI =	Email	okanas@skm.com.au
%*AU QC Report - DEFAULT (Anon QC Rep=- NATA (QC =	Email	okanas@skm.com.au
%A4 - AU Sample Receipt Notification - Environmental (SRN =	Email	okanas@skm.com.au
%Default - Chain of Custody (COC =	Email	okanas@skm.com.au
%EDI Format - ENMRG (ENMRG =	Email	okanas@skm.com.au
%EDI Format - ESDAT (ESDAT =	Email	okanas@skm.com.au
%EDI Format - XTab (XTAB =	Email	okanas@skm.com.au



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: EB0907967	Page	: of 12
Client	: SINCLAIR KNIGHT MERZ	Laboratory	: Environmental Division Brisbane
Contact	: ONA KANAS	Contact	: Tim Kilmister
Address	: 32 CORDELIA STREET SOUTH BRISBANE, E QLD, AUSTRALIA 410	Address	: 32 Shand Street Stafford QLD Australia 40,"
E-mail	: o4anas5 s4" bomdau	E-mail	: Services.Brisbane5 alsenvirodcom
Telephone	: 3333	Telephone	: +6 -7-3243 7222
Facsimile	: 3333	Facsimile	: +6 -7-3243 7219
Project	: ' E09," 7	QC Level	: " EP; 1999 Schedule B("=and ALS QCS3 re>uirement
Order number	: 3333	Date Samples Received	: 9-M, ?32009
C3 C number	: 3333	Issue Date	: 27-M, ?32009
Sample	: O KANAS	Number Samples received	: 21
Site	: Cronulla Par4	Number samples analysed	: 12
Quote number	: E" /00" /09		

This report su7ersedes any 7revious re7orts= Aith this reference6 Results a77ly to the sam7les= as submitted6 All 7ages of this re7ort have been chec4ed and a77roved for release6

This Certificate of Analysis contains the folloAing information:

- General Comments
- Analytical Results
- Surrogate Control Limits

<p>NATA WORLD RECOGNISED ACCREDITATION</p>	NATA Accredited Laboratory 925	Signatories	This document has been electronically signed by the authoriCed signatories indicated beloA6 Electronic signing has been carried out in com7liance Aith 7rocedures s7ecified in 21 CFR Part 116	
	This document is issued in accordance Aith NATA accreditation re>uirements6	Signatories	Position	Accreditation Category
	Accredited for com7liance Aith \$" C 170256	Kim ; cCabe ; attheA BoodAin Sarah AshAorth	Senior Inorganic Chemist Senior Organic Chemist Organic Chemist	Inorganics Organics Organics

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Page : 2 of 12
E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME# F
Proect : ' E09," 7

13-054

General Comments

The analytical Procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the EPA, APHA, AS and "EP:6 In house developed procedures are employed in the absence of documented standards or by client request

Here moisture determination has been performed, results are reported on a dry weight basis

Here a reported less than <G result is higher than the LOR, this may be due to primary sample eDract@gestate dilution and @ insufficient sample for analysis

Here the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample reduced weight or matrix interference

When date and @ time are shown bracketed, these have been assumed by the laboratory for processing. If the sampling time is displayed as 0:00 the information was not provided by client

Key : CAS Number HICAS registry number from database maintained by Chemical Abstracts Services
The Chemical Abstracts Service is a division of the American Chemical Society
LOR HL Limit of reporting

^ H This result is computed from individual analyte detections at or above the level of reporting

- EG005T (Total Metals): Sample EB0907724-015 shows poor duplicate results due to sample heterogeneity. Confirmed by visual inspection.
- EG005T (Total Metals): Sample EB0907724-016 shows poor matrix spike recovery due to matrix interference. Confirmed by visual inspection.
- EG005T (Total Metals): Sample EB0907953-002 shows poor duplicate results due to sample heterogeneity. Confirmed by visual inspection.
- Pesticides: Poor matrix spike recovery for sample TP5 0.2-0.3 due to matrix interference. Confirmed by re-analysis.

DL Documents

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Page : " of 12
E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Proect : ' E09," 7

13-054

Analytical Results

Sub3: atrID: SOIL

Compound	Client sample ID		Client sampling date / time		Unit		TP1 0.2-0.3	TP2 0.2-0.3	TP3 0.2-0.3	TP4 0.2-0.3	TP5 0.2-0.3
	CAS Number	LOR	3333	.0	mg @#	mg @#	EB0907967-002	EB0907967-003	EB0907967-005	EB0907967-007	EB0907967-009
EA055: Moisture Content											
Moisture Content (dried @ 103°C)			3333	.0			15.6	17.8	15.7	19.1	10.5
EG005T: Total Metals by ICP-AES											
Arsenic	71) 0-" 9Z				mg @#	G		G	G	G	G
Cadmium	71) 0-" -9				mg @#	G		G	G	G	G
Chromium	71) 0-" 7-"	2			mg @#	13		5	8	6	6
Copper	71) 0-" 0-8				mg @#	G		G	G	G	G
Lead	71) 9-923				mg @#	21		G	G	G	G
Nickel	71) 0-02-0	2			mg @#	Q		Q	Q	Q	Q
Zinc	71) 0-66-6				mg @#	17		G	G	G	G
EG035T: Total Recoverable Mercury by FIMS											
Mercury	71) 9-97-6	0.			mg @#	<0.		<0.	<0.	<0.	<0.
EP066: Polychlorinated Biphenyls (PCB)											
Total Polychlorinated biphenyls		3333	0.	0	mg @#		3333		<0.	<0.	<0.
EP068A: Organochlorine Pesticides (OC)											
alpha-BHC	" 9-8) -6	0.0,			mg @#	3333		3333		<0.	<0.
Hexachlorobenzene (HCB)	8-7) 3	0.0,			mg @#	3333		3333		<0.	<0.
beta-BHC	" 9-8, -7	0.0,			mg @#	3333		3333		<0.	<0.
gamma-BHC	, 8-89-9	0.0,			mg @#	3333		3333		<0.	<0.
delta-BHC	" 9-86-8	0.0,			mg @#	3333		3333		<0.	<0.
Heptachlor	76-) 39	0.0,			mg @#	3333		3333		<0.	<0.
Aldrin	"09-00-2	0.0,			mg @#	3333		3333		<0.	<0.
Heptachlor epoxide	0243 7-"	0.0,			mg @#	3333		3333		<0.	<0.
trans-Chlordane	, 0"-7) 3	0.0,			mg @#	3333		3333		<0.	<0.
alpha-Endosulfan	9, 9-98-8	0.0,			mg @#	3333		3333		<0.	<0.
cis-Chlordane	, 0"-7 -9	0.0,			mg @#	3333		3333		<0.	<0.
Dieldrin	60-, 7-	0.0,			mg @#	3333		3333		<0.	<0.
4,4'-DDE	723, -9	0.0,			mg @#	3333		3333		<0.	<0.
Endrin	7230-8	0.0,			mg @#	3333		3333		<0.	<0.
beta-Endosulfan	33213-6, -9	0.0,			mg @#	3333		3333		<0.	<0.
4,4'-DDD	723) 39	0.0,			mg @#	3333		3333		<0.	<0.
Endrin aldehyde	7421-9" 3	0.0,			mg @#	3333		3333		<0.	<0.
Endosulfan sulfate	0" -07-8	0.0,			mg @#	3333		3333		<0.	<0.
4,4'-DDT	, 0-29-"	0.2			mg @#	3333		3333		<0.2	<0.2
Endrin ketone	,") 9)-70-,	0.0,			mg @#	3333		3333		<0.	<0.
Methoxychlor	723" 3	0.2			mg @#	3333		3333		<0.2	<0.2
EP068B: Organophosphorus Pesticides (OP)											
Dichlorvos	62-7"-7	0.0,			mg @#	3333		3333		<0.	<0.

DL Documents

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Analytical Results

Sub3: atrID: SOIL

Sub3; atrID: SOIL		Client sample ID		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time	
Compound	CAS Number	LOR	Unit	TP1 0.2-0.3	TP2 0.2-0.3	TP3 0.2-0.3	TP4 0.2-0.3	TP5 0.2-0.3	TP6 0.2-0.3	TP7 0.2-0.3	TP8 0.2-0.3	TP9 0.2-0.3	TP10 0.2-0.3	TP11 0.2-0.3	TP12 0.2-0.3
EP068B: Organophosphorus Pesticides (OP) - Continued															
Demeton-S-methyl	9 9-86-8	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Monocrotophos	69233223	0.2	mg @#	3333	3333	3333	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-, 3	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Diazinon	"" 3 3	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Chlorpyrifos-methyl	.. 98- " -0	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Parathion-methyl	298-00-0	0.2	mg @#	3333	3333	3333	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-7, 3	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Fenthion	.. 38-9	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Chlorpyrifos	29213992	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Parathion	, 6- " 92	0.2	mg @#	3333	3333	3333	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	2350, 3 3	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Chlorfenvinphos	) 70-90-6	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Bromophos-ethyl	) 924-78-6	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Fenamiphos	22224-92-6	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Prothiofos	") 6" 3 6-	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Ethion	, 6" 3122	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Carbophenothion	786- 9-6	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Azinphos Methyl	86-, 0-0	0.0,	mg @#	3333	3333	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
EP075(SIM)A: Phenolic Compounds															
Phenol	08-9, 2	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2-Chlorophenol	9, 3 7-8	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2-Methylphenol	9, 3 8-7	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
3- & 4-Methylphenol	" 9-77-"	.0	mg @#	3333	3333	3333	G .0	G .0	G .0	G .0	G .0	G .0	G .0	G .0	G .0
2-Nitrophenol	88-7, 3	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2,4-Dimethylphenol	0, -67-9	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2,4-Dichlorophenol	120-8" 2	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2,6-Dichlorophenol	87-6, -0	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
4-Chloro-3-Methylphenol	, 9-, 0-7	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2,4,6-Trichlorophenol	88-06-2	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
2,4,5-Trichlorophenol	9, -9, 3	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Pentachlorophenol	87-86-,	2.0	mg @#	3333	3333	3333	G2.0	G2.0	G2.0	G2.0	G2.0	G2.0	G2.0	G2.0	G2.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons															
Naphthalene	9 30-"	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Acenaphthylene	208-96-8	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Acenaphthene	9" 32-9	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Fluorene	86-7" -7	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Phenanthrene	9, -0 39	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,
Anthracene	120-12-7	0.,	mg @#	3333	3333	3333	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,	<0.,



Page : , of 12
E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Proect : ' E09," 7

Analytical Results

Sub3: atriD: SOIL

Client sample ID

Client sampling date / time

CAS Number LOR Unit

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued

Fluoranthene	206-)) -0	0.,	mg @#	3333	TP1 0.2-0.3 3, , ?32009 11:00 EB0907967-002	TP2 0.2-0.3 3, , ?32009 11:00 EB0907967-003	TP3 0.2-0.3 3, , ?32009 11:00 EB0907967-005	TP4 0.2-0.3 3, , ?32009 11:00 EB0907967-007	TP5 0.2-0.3 3, , ?32009 11:00 EB0907967-009
Pyrene	129-00-0	0.,	mg @#	3333					
Benz(a)anthracene	, 6-, 3'	0.,	mg @#	3333					
Chrysene	218-0 -9	0.,	mg @#	3333					
Benzo(b)fluoranthene	20-, -99-2	0.,	mg @#	3333					
Benzo(k)fluoranthene	207-08-9	0.,	mg @#	3333					
Benzo(a)pyrene	, 0-3239	0.,	mg @#	3333					
Indeno(1,2,3-cd)pyrene	9' 3' 9-,	0.,	mg @#	3333					
Dibenz(a,h)anthracene	, " -70-"	0.,	mg @#	3333					
Benzo(g,h,i)perylene	9 3242	0.,	mg @#	3333					

EP080/071: Total Petroleum Hydrocarbons

C6 - C9 Fraction	3333 0		mg @#	3333	G 0				
C10 - C14 Fraction	3333 , 0		mg @#	3333	G 0				
C15 - C28 Fraction	3333 00		mg @#	3333	G 00				
C29 - C36 Fraction	3333 00		mg @#	3333	G 00				

EP080: BTEX

Benzene	7 3' 32	0.2	mg @#	3333	<0.2				
Toluene	08-88-"	0.,	mg @#	3333	<0.,				
Ethylbenzene	00-) 3	0.,	mg @#	3333	<0.,				
meta- & para-Xylene	08-" 933 106-423'	0.,	mg @#	3333	<0.,				
ortho-Xylene	9, 3' 7-6	0.,	mg @#	3333	<0.,				

EP066S: PCB Surrogate

Decachlorobiphenyl	20, 3243'	0.	I	3333	3333				
--------------------	-----------	----	---	------	------	--	--	--	--

EP068S: Organochlorine Pesticide Surrogate

Dibromo-DDE	216., -7" 32	0.	I	3333	3333				
-------------	--------------	----	---	------	------	--	--	--	--

EP068T: Organophosphorus Pesticide Surrogate

DEF	78-) 939	0.	I	3333	3333				
-----	----------	----	---	------	------	--	--	--	--

EP075(SIM)S: Phenolic Compound Surrogates

Phenol-d6	13127-88-"	0.	I	3333	3333				
2-Chlorophenol-D4	9" 9, -7" -6	0.	I	3333	3333				
2,4,6-Tribromophenol	8-79-6	0.	I	3333	3333				

EP075(SIM)T: PAH Surrogates

2-Fluorobiphenyl	321-60-8	0.	I	3333	3333				
Anthracene-d10	7 9-06-8	0.	I	3333	3333				
4-Terphenyl-d14	7 93, -0	0.	I	3333	3333				

EP080S: TPH(V)/BTEX Surrogates

1,2-Dichloroethane-D4	7060-07-0	0.	I	3333	94.4				
-----------------------	-----------	----	---	------	------	--	--	--	--

91.6

94.9

Analytical Results

Client sample ID

Client sampling date / time

Client sampling date / time

Compound	CAS Number	LOR	Unit	EB0907967-002	EB0907967-003	EB0907967-005	EB0907967-007	EB0907967-009
EP080S: TPH(V)/BTX Surrogates - Continued								
Toluene-D8	20 ⁿ 7-26-,	0.	1	3333	90.2	86.8	86.9	88.6
4-Bromofluorobenzene	(60-00-)	0.	1	3333	74.9	75.4	74.6	75.8



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E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Proect : ' E09," 7

13-054

Analytical Results

Sub3: atrID: SOIL

Compound	Client sample ID		Client sampling date / time		Client sample ID		Client sample ID		Client sample ID		Client sample ID	
	CAS Number	LOR	Unit	Unit	TP6 0.2-0.3	TP7 0.2-0.3	TP8 0.0-0.1	TP9 0.2-0.3	TP10 0.2-0.3	TP11 0.2-0.3	TP12 0.2-0.3	TP13 0.2-0.3
EA055: Moisture Content												
^ Moisture Content (dried @ 103°C)	3333	.0			15.2	33.5	15.4	6.8	6.1			
EG005T: Total Metals by ICP-AES												
Arsenic	71) 0-" 92		mg @		G	G	G	G	G	G	G	G
Cadmium	71) 0-" -9		mg @		G	G	G	G	G	G	G	G
Chromium	71) 0-" 7"	2	mg @		8	4	3	2	3	3	3	3
Copper	71) 0-" 0-8		mg @		G	G	G	G	G	G	G	G
Lead	71) 9-923		mg @		G	6	G	G	G	G	G	6
Nickel	71) 0-02-0	2	mg @		2	2	2	2	2	2	2	2
Zinc	71) 0-66-6		mg @		G	G	G	G	G	G	G	5
EG035T: Total Recoverable Mercury by FIMS												
Mercury	71) 9-97-6	0.	mg @		<0.	<0.	<0.	<0.	<0.	<0.	<0.	<0.
EP066: Polychlorinated Biphenyls (PCB)												
Total Polychlorinated biphenyls	3333	0.0	mg @		3333	<0.0	3333	<0.0	<0.0	<0.0	<0.0	<0.0
EP068A: Organochlorine Pesticides (OC)												
alpha-BHC	" 9-8) -6	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Hexachlorobenzene (HCB)	8-7) 3	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
beta-BHC	" 9-8, -7	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
gamma-BHC	, 8-89-9	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
delta-BHC	" 9-86-8	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Heptachlor	76-) 39	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Aldrin	"09-00-2	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Heptachlor epoxide	0243 7"	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
trans-Chlordane	, 0"-7) 2	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
alpha-Endosulfan	9, 9-98-8	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
cis-Chlordane	, 0"-7 -9	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Dieldrin	60-, 7-	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
4,4'-DDE	723, -9	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Endrin	7220-8	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
beta-Endosulfan	33213-6, -9	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
4,4'-DDD	723) 39	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Endrin aldehyde	7421-9) 3	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Endosulfan sulfate	0" -07-8	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
4,4'-DDT	, 0-29"	0.2	mg @		3333	<0.2	3333	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	,") 9)-70-,	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,
Methoxychlor	723) 3	0.2	mg @		3333	<0.2	3333	<0.2	<0.2	<0.2	<0.2	<0.2
EP068B: Organophosphorus Pesticides (OP)												
Dichlorvos	62-7"-7	0.0,	mg @		3333	<0.0,	3333	<0.0,	<0.0,	<0.0,	<0.0,	<0.0,

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Analytical Results

Sub3: atrID: SOIL

Sub3; atrID: SOIL		Client sample ID		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time	
Compound	CAS Number	LOR	Unit	TP6 0.2-0.3	TP7 0.2-0.3	TP8 0.0-0.1	TP9 0.2-0.3	TP10 0.2-0.3	EB0907967-011	EB0907967-013	EB0907967-014	EB0907967-017	EB0907967-019
EP068B: Organophosphorus Pesticides (OP) - Continued													
Demeton-S-methyl	9 9-86-8	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Monocrotophos	69233223	0.2	mg @#	3333	<0.2	3333	<0.2	<0.2	3333	<0.2	3333	<0.2	<0.2
Dimethoate	60-, 3	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Diazinon	"" 3 3	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Chlorpyrifos-methyl	.. 98- " -0	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Parathion-methyl	298-00-0	0.2	mg @#	3333	<0.2	3333	<0.2	<0.2	3333	<0.2	3333	<0.2	<0.2
Malathion	121-7, 3	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Fenthion	.. 3 8-9	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Chlorpyrifos	29213992	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Parathion	, 6-" 92	0.2	mg @#	3333	<0.2	3333	<0.2	<0.2	3333	<0.2	3333	<0.2	<0.2
Pirimphos-ethyl	2350, 3 3	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Chlorfenvinphos	) 70-90-6	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Bromophos-ethyl	) 924-78-6	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Fenamiphos	22224-92-6	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Prothiofos	") 6" 3 6-	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Ethion	, 6" 3 122	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Carbophenothion	786- 9-6	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
Azinphos Methyl	86-, 0-0	0.0,	mg @#	3333	<0.0,	3333	<0.0,	<0.0,	3333	<0.0,	3333	<0.0,	<0.0,
EP075(SIM)A: Phenolic Compounds													
Phenol	08-9, 2	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2-Chlorophenol	9, 3 7-8	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2-Methylphenol	9, 3 8-7	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
3- & 4-Methylphenol	" 9-77-"	.0	mg @#	3333	G .0	3333	G .0	G .0	3333	G .0	3333	G .0	G .0
2-Nitrophenol	88-7, 3	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2,4-Dimethylphenol	0, -67-9	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2,4-Dichlorophenol	120-8" 2	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2,6-Dichlorophenol	87-6, -0	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
4-Chloro-3-Methylphenol	, 9-, 0-7	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2,4,6-Trichlorophenol	88-06-2	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
2,4,5-Trichlorophenol	9, -9, 3	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Pentachlorophenol	87-86-,	2.0	mg @#	3333	G2.0	3333	G2.0	G2.0	3333	G2.0	3333	G2.0	G2.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons													
Napthalene	9 30-"	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Acenaphthylene	208-96-8	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Acenaphthene	9" 32-9	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Fluorene	86-7"-7	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Phenanthrene	9, -0 39	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,
Anthracene	120-12-7	0,	mg @#	3333	<0,	3333	<0,	<0,	3333	<0,	3333	<0,	<0,



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E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Proect : ' E09," 7

Analytical Results

Sub3: atriD: SOIL

Sub3; atrID: SOIL		Client sample ID		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time		Client sampling date / time	
Compound	CAS Number	LOR	Unit	TP6 0.2-0.3	TP7 0.2-0.3	TP8 0.0-0.1	TP9 0.2-0.3	TP10 0.2-0.3	EB0907967-011	EB0907967-013	EB0907967-014	EB0907967-017	EB0907967-019
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued													
Fluoranthene	206-)	0,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Pyrene	129-00-0	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Benz(a)anthracene	, 6,, 3'	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Chrysene	218-0 -9	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Benzo(b)fluoranthene	20,-99-2	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Benzo(k)fluoranthene	207-08-9	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Benzo(a)pyrene	, 0-3239	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Indeno(1.2.3.cd)pyrene	9" 3' 9,,	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Dibenz(a,h)anthracene	, " -70-"	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Benzo(g,h,i)perylene	9 3242	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
EP080/071: Total Petroleum Hydrocarbons													
C6 - C9 Fraction	3333	0	mg@#	3333	G 0	3333	G 0	< 0	3333	G 0	3333	G 0	< 0
C10 - C14 Fraction	3333	, 0	mg@#	3333	G 0	3333	G 0	< 0	3333	G 0	3333	G 0	< 0
C15 - C28 Fraction	3333	00	mg@#	3333	G 00	3333	G 00	G 00	3333	G 00	3333	G 00	G 00
C29 - C36 Fraction	3333	00	mg@#	3333	G 00	3333	G 00	G 00	3333	G 00	3333	G 00	G 00
EP080: BTEX													
Benzene	7 3" 2	0.2	mg@#	3333	<0.2	3333	<0.2	<0.2	3333	<0.2	3333	<0.2	<0.2
Toluene	08-88-"	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
Ethylbenzene	00-) 3	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
meta- & para-Xylene	08-" 933 106-423'	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
ortho-Xylene	9, 3' 7-6	0,,	mg@#	3333	<0,,	3333	<0,,	<0,,	3333	<0,,	3333	<0,,	<0,,
EP066S: PCB Surrogate													
Decachlorobiphenyl	20, 3243'	0,	I	3333	93.4	3333	94.7	79.4	3333	93.4	3333	94.7	79.4
EP068S: Organochlorine Pesticide Surrogate													
Dibromo-DDE	216,, -7" 3'	0,	I	3333	92.6	3333	90.2	79.1	3333	92.6	3333	90.2	79.1
EP068T: Organophosphorus Pesticide Surrogate													
DEF	78-) 939	0,	I	3333	89.6	3333	97.0	81.5	3333	89.6	3333	97.0	81.5
EP075(SIM)S: Phenolic Compound Surrogates													
Phenol-d6	13127-88-"	0,	I	3333	75.2	3333	75.1	78.2	3333	75.2	3333	75.1	78.2
2-Chlorophenol-D4	9" 9, -7" -6	0,	I	3333	82.6	3333	81.9	86.2	3333	82.6	3333	81.9	86.2
2,4,6-Tribromophenol	8-79-6	0,	I	3333	72.1	3333	75.9	74.3	3333	72.1	3333	75.9	74.3
EP075(SIM)T: PAH Surrogates													
2-Fluorobiphenyl	321-60-8	0,	I	3333	82.1	3333	79.3	85.0	3333	82.1	3333	79.3	85.0
Anthracene-d10	7 9-06-8	0,	I	3333	107	3333	104	113	3333	107	3333	104	113
4-Terphenyl-d14	7 93, -0	0,	I	3333	88.5	3333	92.1	99.1	3333	88.5	3333	92.1	99.1
EP080S: TPH(V)/BTEX Surrogates													
1,2-Dichloroethane-D4	7060-07-0	0,	I	3333	86.0	3333	99.6	96.9	3333	86.0	3333	99.6	96.9



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E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Project : ' E09," 7

13-054

Analytical Results

Sub3: atriD: SOIL

Sub3; atriDx SOIL	Client sample ID			
	Client sampling date / time			
	CAS Number	LOR	Unit	
EP080S: TPH(V)/BTX Surrogates - Continued				
Toluene-D8	20" 7-26-,) 60-00-)	0.	1	
4-Bromofluorobenzene		0.	1	



Page : of 12
E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME#F
Proect : ' E09," 7

13-054

Analytical Results

Sub3: atrID: SOIL

		Client sample ID		Client sampling date / time		Unit	
Compound	CAS Number	LOR	Dup 02	Dup 03	Dup 02	Dup 03	
EA055: Moisture Content							
Moisture Content (dried @ 103°C)	3333	.0	11.4	9.6	3333	3333	3333
EG005T: Total Metals by ICP-AES							
Arsenic	7) 0-" 92	,	mg @	G	3333	3333	3333
Cadmium	7) 0-" -9		mg @	G	3333	3333	3333
Chromium	7) 0-" 7-"	2	mg @	3	3333	3333	3333
Copper	7) 0-, 0-8	,	mg @	G	3333	3333	3333
Lead	7) 9-923	,	mg @	G	3333	3333	3333
Nickel	7) 0-02-0	2	mg @	G	3333	3333	3333
Zinc	7) 0-66-6	,	mg @	G	3333	3333	3333
EG035T: Total Recoverable Mercury by FIMS							
Mercury	7) 9-97-6	0.	mg @	<0.	3333	3333	3333
EP080/071: Total Petroleum Hydrocarbons							
C6 - C9 Fraction	3333	0	mg @	G 0	3333	3333	3333
C10 - C14 Fraction	3333	, 0	mg @	G 0	3333	3333	3333
C15 - C28 Fraction	3333	00	mg @	G 00	3333	3333	3333
C29 - C36 Fraction	3333	00	mg @	G 00	3333	3333	3333
EP080: BTEX							
Benzene	7 3" 2	0.2	mg @	<0.2	3333	3333	3333
Toluene	08-88-"	0.,	mg @	<0.,	3333	3333	3333
Ethylbenzene	00-) 3	0.,	mg @	<0.,	3333	3333	3333
meta- & para-Xylene	08-" 93 106-423"	0.,	mg @	<0.,	3333	3333	3333
ortho-Xylene	9, 3 7-6	0.,	mg @	<0.,	3333	3333	3333
EP080S: TPH(V)/BTX Surrogates							
1,2-Dichloroethane-D4	7060-07-0	0.	I	94.6	3333	3333	3333
Toluene-D8	20" 7-26-,	0.	I	109	3333	3333	3333
4-Bromofluorobenzene	) 60-00-)	0.	I	81.4	3333	3333	3333

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Page : 12 of 12
E or4 Order : EB0907967
Client : SINCLAIR KNIBHT ME# F
Proect : ' E09," 7

13-054

Surrogate Control Limits

Sub3; atriD SOIL	Recovery Limits (%)		
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	20, 3243	0	6)
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	216,, -7" 32	10	" 6
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-) 939	0	0
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-"	24	"
2-Chlorophenol-D4	9" 9, -7" -6	23	"")
2,4,6-Tribromophenol	8-79-6	9	,
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	" 0	,
Anthracene-d10	7 9-06-8	27	""
4-Terphenyl-d14	7 93, -0	9	" 7
EP080S: TPH(V)/BTX Surrogates			
1,2-Dichloroethane-D4	7060-07-0	80	121
Toluene-D8	20" 7-26-,	9	7
4-Bromofluorobenzene	) 60-00-)	7)	121

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RT/DL RELEASE - EHP	<p>Reference RPD=and Acceptance Limits</p> <p>Report: Recovery and Acceptance Limits</p> <p>atories</p>
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This Quality Control Report contains the following information:

- Laboratory Duplicate Δ DUP=Report; Relative Percentage Difference Δ RPD=and Acceptance Limits
- ; ethod Blank Δ ; B=and Laboratory Control Spike Δ CS=Report; Recovery and Acceptance Limits
- ; atrix Spike Δ ; S=Report; Recovery and Acceptance Limits



NATA Accredited Laboratory 825

This document is issued in accordance with the Aith NATA accreditation requirements.

Accredited for compliance Aith
ISO 17025.

Signatories

Kim ; +7~
; attheA GoodA#~
Sarah AshAorth

Position

Senior Inorganic Chemist
Senior Organic Chemist
Organic Chemist

Accreditation Category

Inorganics	
Organics	
Organics	

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4": %2~° 12
Work Order %EB0907967
7"#": %SINCLAIR KNIGHT ; ERZ
4"-5, +: %QE09537

13-054

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 NEP; . In house developed procedures are employed in the absence of documented standards or by client re> , i**

Where moisture determination has been performed, results are reported on a dry Aeight basis.

Where a reported less than A=result is higher than the LOR, this may be due to primary sample extract@gestate dilution and@ 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 A=duced Aeight employed=or matrix interference.

Key :

Anonymous = Refers to samples Awhich are not specifically part of this Awork order but formed part of the QC process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

= Indicates failed QC

PROHIBITED RELEASE - EHP



4": %3 ~° 12
Work Order %EB0907967
7"#: %SINCLAIR KNIGHT ; ERZ
4"-5, +: %QE09537

13-054

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 ; ethod QWI-EN38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result betAeen 10 and 20 times LOR:- 0K - 50K ; Result L 20 times LOR:- 0K - 20K *

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7"#: %EB0907967
%SINCLAIR KNIGHT ; ERZ
4"-5, +: %QE09537

13-054

Sub-: "##< SOIL			Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 984847) - continued									
EB0907724-015	Anonymous	EG035T: ; " + "g	7439-97-6	0.1	;	<0.1	<0.1	0.0	No Limit
EB0907953-002	Anonymous	EG035T: ; " + "g	7439-97-6	0.1	;	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 984850)									
EB0907967-017	TP9 0.2-0.3	EG035T: ; " + "g	7439-97-6	0.1	;	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 986346)									
EB0907967-007	TP4 0.2-0.3	EP066: Total Polychlorinated Biphenyls	&&&&	0.10	;	<0.10	<0.10	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 986345)									
EB0907967-007	TP4 0.2-0.3	EP068: alpha-BHC	319-84-6	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene 4-HCB	118-74-1	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	\$3&36&6	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	656&63&3	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-74-9	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDE	72-55-9	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDD	72-54-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: 4,4'-DDT	50-29-3	0.2	;	<0.2	<0.2	0.0	No Limit
		EP068: ; ethoxychlor	72-43-5	0.2	;	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 986345)									
EB0907967-007	TP4 0.2-0.3	EP068: Dichlorvos	62-73-7	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: ; alathon	121-75-5	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	;	<0.05	<0.05	0.0	No Limit



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Laboratory sample ID		Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 986345) - continued										
EB0907967-007	TP4 0.2-0.3	EP068: Bromophos-ethyl		4824-78-6	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos		22224-92-6	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos		34643-46-4	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Ethion		563-12-2	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion		786-19-6	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos ; ethyl		86-50-0	0.05	;	<0.05	<0.05	0.0	No Limit
		EP068: ; onocrotophos		6923-22-4	0.2	;	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl		298-00-0	0.2	;	<0.2	<0.2	0.0	No Limit
		EP068: Parathion		56-38-2	0.2	;	<0.2	<0.2	0.0	No Limit
		EP075(SIM)A: Phenolic Compounds (QC Lot: 986337)								
EB0907967-009	TP5 0.2-0.3	EP075-SI: ; Phenol		108-95-2	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2-Chlorophenol		68-95-1	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2-ethylphenol		95-48-7	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2-Nitrophenol		3381-38-5	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2,4-Dimethylphenol		105-67-9	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2,4-Dichlorophenol		120-83-2	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2,6-Dichlorophenol		87-65-0	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 4-Chloro-3-ethylphenol		59-50-7	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2,4,6-Trichlorophenol		88-06-2	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 2,4,5-Trichlorophenol		95-95-4	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; 3- & 4-ethylphenol		1319-77-3	1.0	;	<1.0	<1.0	0.0	No Limit
		EP075-SI: ; Pentachlorophenol		318308-5	2.0	;	<2.0	<2.0	0.0	No Limit
		EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 986337)								
EB0907967-009	TP5 0.2-0.3	EP075-SI: ; Naphthalene		91-20-3	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Acenaphthylene		208-96-8	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Acenaphthene		83-32-9	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Fluorene		86-73-7	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Phenanthrene		85-01-8	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Anthracene		120-12-7	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Fluoranthene		206-44-0	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Pyrene		129-00-0	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Benz[a]anthracene		56-55-3	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Chrysene		218-01-9	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Benzo[a]fluoranthene		205-99-2	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Benzo[b]fluoranthene		207-08-9	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Benzo[k]fluoranthene		50-32-8	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Indeno[1,2,3-cd]pyrene		193-39-5	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Dibenzo[a,h]anthracene		53-70-3	0.5	;	<0.5	<0.5	0.0	No Limit
		EP075-SI: ; Benzo[g,h,i]perylene		191-24-2	0.5	;	<0.5	<0.5	0.0	No Limit



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Sub-; ~""#< SOIL			Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 984803)									
EB0907838-062	Anonymous	EP080: C6 - C9 Fraction	8888	10	': @	\$1	63	6*6	No Limit
EB0907953-003	Anonymous	EP080: C6 - C9 Fraction	8888	10	': @	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 986336)									
EB0907934-001	Anonymous	EP071: C15 - C28 Fraction	8888	100	': @	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	8888	100	': @	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	8888	50	': @	<50	<50	0.0	No Limit
		EP071: C15 - C28 Fraction	8888	100	': @	<100	<100	0.0	No Limit
EB0907967-009	TP5 0.2-0.3	EP071: C29 - C36 Fraction	8888	100	': @	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	8888	50	': @	<50	<50	0.0	No Limit
EP080: BTEX (QC Lot: 984803)									
EB0907838-062	Anonymous	EP080: Benzene	71-43-2	0.2	': @	1.0	1.0	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	': @	12.1	13.0	0*6	0K - 20K
		EP080: Ethylbenzene	100-41-4	0.5	': @	1.9	2.1	1*6	No Limit
		EP080: meta- & para-Xylene	108-38-3	0.5	': @	3*3	10.0	12.5	0K - 20K
			106-42-3						
		EP080: ortho-Xylene	95-47-6	0.5	': @	3.0	3.4	11.7	No Limit
		EP080: Benzene	71-43-2	0.2	': @	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	': @	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	': @	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3	0.5	': @	<0.5	<0.5	0.0	No Limit
			106-42-3						
EB0907953-003	Anonymous	EP080: ortho-Xylene	95-47-6	0.5	': @	<0.5	<0.5	0.0	No Limit



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13-054

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term ; ethod @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 >uality control term Laboratory Control Sample LCS= refers to a certified reference material, or a (" An interference free matrix spiked Alth 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.

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Method: Compound				CAS Number	LOR	Unit	Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
							Result	Spike Concentration	Spike Recovery (%)	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 984846)												
EG005T: Arsenic	7440-38-2	\$	: @	A\$	13.8 mg@	95.1	13	124				
EG005T: Cadmium	7440-43-9	1	: @	<1	2.82 mg@	91.9	11	117				
EG005T: Chromium	7440-47-3	2	: @	<2	61.6 mg@	99.2	83	119				
EG005T: Copper	7440-50-8	\$	: @	A\$	54.7 mg@	100	82	122				
EG005T: Lead	7439-92-1	\$	: @	A\$	55.5 mg@	90.4	83	117				
EG005T: Nickel	7440-02-0	2	: @	<2	55.1 mg@	94.7	83	121				
EG005T: Zinc	7440-66-6	\$	: @	A\$	105 mg@	94.0	82	120				
EG005T: Total Metals by ICP-AES (QCLot: 984849)												
EG005T: Arsenic	7440-38-2	\$	: @	A\$	13.8 mg@	94.4	13	124				
EG005T: Cadmium	7440-43-9	1	: @	<1	2.82 mg@	93.2	11	117				
EG005T: Chromium	7440-47-3	2	: @	<2	61.6 mg@	63*1	83	119				
EG005T: Copper	7440-50-8	\$	: @	A\$	54.7 mg@	61*6	82	122				
EG005T: Lead	7439-92-1	\$	: @	A\$	55.5 mg@	91.6	83	117				
EG005T: Nickel	7440-02-0	2	: @	<2	55.1 mg@	93.9	83	121				
EG005T: Zinc	7440-66-6	\$	: @	A\$	105 mg@	97.2	82	120				
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984847)												
EG035T: ; ,+ °	7439-97-6	0.1	: @	<0.1	8888	8888	8888	8888	8888	129		
		0.10	: @	8888	1.34 mg@	98.3	13					
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984850)												
EG035T: ; ,+ °	7439-97-6	0.1	: @	<0.1	8888	8888	8888	8888	8888	129		
		0.10	: @	8888	1.34 mg@	63*\$	13					
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 986346)												
EP066: Total Polychlorinated biphenyls	8888	0.1	: @	8888	0.5 mg@	81.7	53.8	105				
		0.10	: @	<0.10	8888	8888	8888	8888	8888			
EP068A: Organochlorine Pesticides (OC) (QCLot: 986345)												
EP068: alpha-BHC	319-84-6	0.05	: @	<0.05	0.25 mg@	72.6	58.4	116				
EP068: Hexachlorobenzene 4HCB=	118-74-1	0.05	: @	<0.05	0.25 mg@	72.5	\$1*1	107				
EP068: beta-BHC	319-85-7	0.05	: @	<0.05	0.25 mg@	73.6	59.3	116				
EP068: gamma-BHC	\$383686	0.05	: @	<0.05	0.25 mg@	71.4	59.1	118				
EP068: delta-BHC	319-86-8	0.05	: @	<0.05	0.25 mg@	75.2	\$0	117				
EP068: Heptachlor	76-44-8	0.05	: @	<0.05	0.25 mg@	86.4	57.3	119				
EP068: Aldrin	309-00-2	0.05	: @	<0.05	0.25 mg@	75.0	58.2	113				
EP068: Heptachlor epoxide	1024-57-3	0.05	: @	<0.05	0.25 mg@	71.4	60.4	113				
EP068: trans-Chlordane	5103-74-2	0.05	: @	<0.05	0.25 mg@	74.7	60.3	114				



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Method: Compound			CAS Number	LOR	Unit	Method Blank (MB) Report	Spike Concentration	Laboratory Control Spike (LCS) Report		
								Spike Recovery (%)	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 986345) - continued										
EP068: alpha-Endosulfan	686&63&83	0.05	': @	<0.05	0.25 mg@	77.4	\$0	120		
EP068: cis-Chlordane	5103-71-9	0.05	': @	<0.05	0.25 mg@	74.5	60.8	113		
EP068: Dieldrin	60-57-1	0.05	': @	<0.05	0.25 mg@	74.9	\$3*3	115		
EP068: 4,4'-DDE	72-56-9	0.05	': @	<0.05	0.25 mg@	77.1	61.2	116		
EP068: Endrin	72-20-8	0.05	': @	<0.05	0.25 mg@	06*6	47	133		
EP068: beta-Endosulfan	33213-65-9	0.05	': @	<0.05	0.25 mg@	75.3	\$3*\$	117		
EP068: 4,4'-DDD	72-54-8	0.05	': @	<0.05	0.25 mg@	74.9	58.4	118		
EP068: Endrin aldehyde	7421-93-4	0.05	': @	<0.05	0.25 mg@	77.1	46.3	115		
EP068: Endosulfan sulfate	1031-07-8	0.05	': @	<0.05	0.25 mg@	78.0	53.6	120		
EP068: 4,4'-DDT	50-29-3	0.05	': @	&&&&	0.25 mg@	1\$*0	52.6	129		
		0.2	': @	<0.2	&&&&	&&&&	&&&&	&&&&		
EP068: Endrin ketone	53494-70-5	0.05	': @	<0.05	0.25 mg@	73.0	51.6	124		
EP068: ; ethoxychlor	72-43-5	0.05	': @	&&&&	0.25 mg@	71.4	52.4	129		
		0.2	': @	<0.2	&&&&	&&&&	&&&&	&&&&		
EP068B: Organophosphorus Pesticides (OP) (QCLot: 986345)										
EP068: Dichlorvos	62-73-7	0.05	': @	<0.05	0.25 mg@	71.3	43.9	113		
EP068: Demeton-S-methyl	919-86-8	0.05	': @	<0.05	0.25 mg@	# 27.5	31.8	112		
EP068: ; onocrotophos	6923-22-4	0.05	': @	&&&&	0.25 mg@	13*6	33	130		
		0.2	': @	<0.2	&&&&	&&&&	&&&&	&&&&		
EP068: Dimethoate	60-51-5	0.05	': @	<0.05	0.25 mg@	10*0	46.4	129		
EP068: Diazinon	333-41-5	0.05	': @	<0.05	0.25 mg@	74.5	57.1	114		
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	': @	<0.05	0.25 mg@	75.4	\$3*6	113		
EP068: Parathion-methyl	298-00-0	0.05	': @	&&&&	0.25 mg@	75.4	54.8	112		
		0.2	': @	<0.2	&&&&	&&&&	&&&&	&&&&		
EP068: ; alathion	121-75-5	0.05	': @	<0.05	0.25 mg@	77.2	\$1*3	119		
EP068: Fenthion	55-38-9	0.05	': @	<0.05	0.25 mg@	69.1	03	109		
EP068: Chlorpyrifos	2921-88-2	0.05	': @	<0.05	0.25 mg@	74.9	62.2	115		
EP068: Parathion	56-38-2	0.05	': @	&&&&	0.25 mg@	1\$*0	54.7	113		
		0.2	': @	<0.2	&&&&	&&&&	&&&&	&&&&		
EP068: Pirimphos-ethyl	23505-41-1	0.05	': @	<0.05	0.25 mg@	76.0	51.9	121		
EP068: Chlorfenvinphos	470-90-6	0.05	': @	<0.05	0.25 mg@	94.1	\$3	118		
EP068: Bromophos-ethyl	4824-78-6	0.05	': @	<0.05	0.25 mg@	81.3	\$6*3	115		
EP068: Fenamiphos	22224-92-6	0.05	': @	<0.05	0.25 mg@	68.1	32.5	101		
EP068: Prothiofos	34643-46-4	0.05	': @	<0.05	0.25 mg@	74.7	\$6*0	116		
EP068: Ethion	563-12-2	0.05	': @	<0.05	0.25 mg@	77.4	58.4	118		
EP068: Carbophenothion	786-19-6	0.05	': @	<0.05	0.25 mg@	1\$*3	\$0*6	117		
EP068: Azinphos ; ethyl	86-50-0	0.05	': @	<0.05	0.25 mg@	73.8	42	130		
EP075(SIM)A: Phenolic Compounds (QCLot: 986337)										
EP075-SI:= ; Phenol	108-95-2	0.5	': @	<0.5	5.0 mg@	33*0	61	119		



Sub-; ...#< SOIL

Subj: "##< SOIL	Method: Compound				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report				
	CAS Number	LOR	Unit	Result		Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
							LCS	Low	High	
EP075(SIM)A: Phenolic Compounds (QCLot: 986337) - continued										
EP075-SI=: 2-Chlorophenol	65&\$1&3	0.5	': @	<0.5	5.0 mg@	81.9	63	117		
EP075-SI=: 2; ethylphenol	95-48-7	0.5	': @	<0.5	5.0 mg@	36*6	62	119		
EP075-SI=: : 3- & 4-; ethylphenol	1319-77-3	1.0	': @	<1.0	10 mg@	90.1	\$1	120		
EP075-SI=: : 2-Nitrophenol	33&15&\$	0.5	': @	<0.5	5.0 mg@	82.0	49	125		
EP075-SI=: 2,4-Dimethylphenol	105-67-9	0.5	': @	<0.5	5.0 mg@	86.1	\$3	116		
EP075-SI=: 2,4-Dichlorophenol	120-83-2	0.5	': @	<0.5	5.0 mg@	105	\$3	116		
EP075-SI=: 2,6-Dichlorophenol	87-65-0	0.5	': @	<0.5	5.0 mg@	72.7	\$6	119		
EP075-SI=: : 4-Chloro-3-; ethylphenol	59-50-7	0.5	': @	<0.5	5.0 mg@	84.2	61	121		
EP075-SI=: : 2,4,6-Trichlorophenol	88-06-2	0.5	': @	<0.5	5.0 mg@	81.0	\$	116		
EP075-SI=: : 2,4,5-Trichlorophenol	95-95-4	0.5	': @	<0.5	5.0 mg@	73.3	53	116		
EP075-SI=: : Pentachlorophenol	31&30&\$	2.0	': @	<2.0	10 mg@	100	41	137		
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 986337)										
EP075-SI=: : Naphthalene	91-20-3	0.5	': @	<0.5	5.0 mg@	84.6	00	114		
EP075-SI=: : Acenaphthylene	208-96-8	0.5	': @	<0.5	5.0 mg@	80.2	63	113		
EP075-SI=: : Acenaphthene	83-32-9	0.5	': @	<0.5	5.0 mg@	85.2	0\$	114		
EP075-SI=: : Fluorene	86-73-7	0.5	': @	<0.5	5.0 mg@	81.8	0\$	111		
EP075-SI=: : Phenanthrene	85-01-8	0.5	': @	<0.5	5.0 mg@	110	60	112		
EP075-SI=: : Anthracene	120-12-7	0.5	': @	<0.5	5.0 mg@	# 114	0\$	110		
EP075-SI=: : Fluoranthene	206-44-0	0.5	': @	<0.5	5.0 mg@	109	64	111		
EP075-SI=: : Pyrene	129-00-0	0.5	': @	<0.5	5.0 mg@	111	64	111		
EP075-SI=: : Benz< anthracene	56-55-3	0.5	': @	<0.5	5.0 mg@	# 123	61	115		
EP075-SI=: : Chrysene	218-01-9	0.5	': @	<0.5	5.0 mg@	100	\$1	114		
EP075-SI=: : Benzo< fluoranthene	205-99-2	0.5	': @	<0.5	5.0 mg@	107	46	124		
EP075-SI=: : Benzo< fluoranthene	207-08-9	0.5	': @	<0.5	5.0 mg@	72.9	48	124		
EP075-SI=: : Benzo< =9"	50-32-8	0.5	': @	<0.5	5.0 mg@	84.6	\$	116		
EP075-SI=: : Indeno<1,2,3.cd=9"	193-39-5	0.5	': @	<0.5	5.0 mg@	01*1	52	130		
EP075-SI=: : Dibenz<anthracene	53-70-3	0.5	': @	<0.5	5.0 mg@	82.4	54	129		
EP075-SI=: : Benzo<g,h,i= "9"	191-24-2	0.5	': @	<0.5	5.0 mg@	74.9	52	128		
EP080/071: Total Petroleum Hydrocarbons (QCLot: 984803)										
EP080: C6 - C9 Fraction	&&&&	10	': @	<10	16 mg@	3\$*6	71	123		
EP080/071: Total Petroleum Hydrocarbons (QCLot: 986336)										
EP071: C10 - C14 Fraction	&&&&	50	': @	<50	259 mg@	61*3	0\$	112		
EP071: C15 - C28 Fraction	&&&&	100	': @	<100	524 mg@	90.1	76.2	122		
EP071: C29 - C36 Fraction	&&&&	100	': @	<100	&&&&	&&&&	&&&&	&&&&		
EP080: BTEX (QCLot: 984803)										
EP080: Benzene	71-43-2	0.2	': @	<0.2	1 mg@	101	13	121		
EP080: Toluene	106-88-3	0.5	': @	<0.5	1 mg@	63*6	13	121		
EP080: Ethylbenzene	100-41-4	0.5	': @	<0.5	1 mg@	92.3	72	119		



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Sub: "SOIL				Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound	CAS Number	LOR	Unit	Result		Spike Concentration	Spike Recovery (%)		Recovery Limits (%)
							LCS	Low	High
EP080: BTEX (QCLot: 984803) - continued									
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	': @	<0.5		2 mg@	33.0	00	121
EP080: ortho-Xylene	95-47-6	0.5	': @	<0.5		1 mg@	89.4	70	118

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Matrix Spike (MS) Report

The quality control term ; arix Spike <; S= refers to an intralaboratory split sample spiked Alth 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 <QOOS= Ideal recovery ranges stated may be Aalved in the event of sample matrix interference.

Sub-; ~"~#< SOIL

Sub: "##" SOIL			Matrix Spike (MS) Report				
Laboratory sample ID	Client sample ID	Method/Compound	CAS Number	Spike Concentration	Spike Recovery (%)	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 984846)							
EB0907724-016	Anonymous	EG005T: Arsenic	7440-38-2	50 mg@	3\$*\$	70	130
		EG005T: Cadmium	7440-43-9	25 mg@	61*\$	70	130
		EG005T: Chromium	7440-47-3	50 mg@	# 24.6	70	130
		EG005T: Copper	7440-50-8	50 mg@	109	70	130
		EG005T: Lead	7439-92-1	50 mg@	108	70	130
		EG005T: Nickel	7440-02-0	50 mg@	115	70	130
		EG005T: Zinc	7440-66-6	50 mg@	116	70	130
EG005T: Total Metals by ICP-AES (QCLot: 984849)							
EB0907967-019	TP10 0.2-0.3	EG005T: Arsenic	7440-38-2	50 mg@	100	70	130
		EG005T: Cadmium	7440-43-9	25 mg@	102	70	130
		EG005T: Chromium	7440-47-3	50 mg@	103	70	130
		EG005T: Copper	7440-50-8	50 mg@	66*\$	70	130
		EG005T: Lead	7439-92-1	50 mg@	100	70	130
		EG005T: Nickel	7440-02-0	50 mg@	102	70	130
		EG005T: Zinc	7440-66-6	50 mg@	102	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984847)							
EB0907724-016	Anonymous	EG035T: ; ; "+" 9	7439-97-6	5.0 mg@	95.2	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 984850)							
EB0907967-019	TP10 0.2-0.3	EG035T: ; ; "+" 9	7439-97-6	5.0 mg@	91.3	70	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 986346)							
EB0907967-009	TP5 0.2-0.3	EP066: Total Polychlorinated biphenyls	&&&&	0.5 mg@	83.5	70	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 986345)							
EB0907967-009	TP5 0.2-0.3	EP068: gamma-BHC	\$3&36&6	0.25 mg@	13*\$	70	130
		EP068: Heptachlor	76-44-8	0.25 mg@	87.0	70	130
		EP068: Aldrin	309-00-2	0.25 mg@	74.2	70	130
		EP068: Dieldrin	60-57-1	0.25 mg@	16*3	70	130
		EP068: Endrin	72-20-8	1.0 mg@	13*3	70	130
		EP068: 4,4'-DDT	50-29-3	1.0 mg@	# 49.7	70	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 986345)							
EB0907967-009	TP5 0.2-0.3	EP068: Diazinon	333-41-5	0.25 mg@	31*0	70	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.25 mg@	84.8	70	130
		EP068: Pirimphos-ethyl	23505-41-1	0.25 mg@	80.8	70	130
		EP068: Bromophos-ethyl	4824-78-6	0.25 mg@	30*\$	70	130
		EP068: Prothiofos	34643-46-4	0.25 mg@	81.6	70	130



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Sub-; ~"~#~ SOIL

Laboratory sample ID			Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report		
						Spike Concentration	Spike Recovery (%)	Recovery Limits (%)
EP075(SIM)A: Phenolic Compounds (QCLot: 986337)								
EB0907967-009	TP5 0.2-0.3	EP075-SI:= : Phenol	108-95-2	2.5 mg@	6\$*6	70	130	
		EP075-SI:= : 2-Chlorophenol	6\$&\$1&3	2.5 mg@	89.4	70	130	
		EP075-SI:= : 2-Nitrophenol	33&1\$&\$	2.5 mg@	81.1	70	130	
		EP075-SI:= : 4-Chloro-3-; ethylphenol	59-50-7	2.5 mg@	87.2	70	130	
		EP075-SI:= : Pentachlorophenol	31&30&\$	2.5 mg@	118	70	130	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 986337)								
EB0907967-009	TP5 0.2-0.3	EP075-SI:= : Acenaphthene	83-32-9	2.5 mg@	31*\$	70	130	
		EP075-SI:= : Pyrene	129-00-0	2.5 mg@	121	70	130	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 984803)								
EB0907938-004	Anonymous	EP080: C6 - C9 Fraction	&&&&	28 mg@	74.3	70	130	
EP080/071: Total Petroleum Hydrocarbons (QCLot: 986336)								
EB0907934-002	Anonymous	EP071: C10 - C14 Fraction	&&&&	259 mg@	92.8	70	130	
		EP071: C15 - C28 Fraction	&&&&	524 mg@	94.0	70	130	
EP080: BTEX (QCLot: 984803)								
EB0907938-004	Anonymous	EP080: Benzene	71-43-2	2 mg@	66*3	70	130	
		EP080: Toluene	108-88-3	2 mg@	103	70	130	

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Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: EB0907967	%1 ^{no} 7
Client	: SINCLAIR KNIGHT MERZ	: Environmental Division Brisbane
Contact	: ONA KANAS	: Tim Kilmister
Address	: 32 CORDELIA STREET SO, TH BRISBANE QLD, A, STRALIA 4101	: 32 S1and Street Stafford QLD Australia 4053
E3mail	: o4anas5 s4m6com6au	: Services6Brisbane5 alsenviro6com
Tele71one	: 3333	: 8/* 373243 7222
Facsimile	: 3333	: 8/* 373243 7218
Project	: QE09537	: NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement
Site	: Cronulla Par4	
C# 3C number	: 3333	: *4 3`8 38++4
Sam7ler	: O KANAS	: 273`8 38++4
Order number	: 3333	
Quote number	: EN/003/09	: &* : *8

* 1is re7ort su7ersedes any 7revious re7ort(s) wit1 t1is reference6Results a77ly to t1e sam7le(s) as submitted6All 7ages of t1is report 1ave been c1ec4ed and a77roved for release6

* 1is Inter7retive Quality Control Re7ort contains t1e following information:

- Analysis Holding Time Com7liance
- Quality Control Parameter Frequency Com7liance
- Brief Met1od Summaries
- Summary of Outliers

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Client : SINCLAIR KNIGHT MERZ
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Analysis Holding Time Compliance

The following report summarises the duration of the analysis times and the recommended holding times for the analysis of the samples. The analysis times are based on the results of the analysis of the samples. The recommended holding times are based on the results of the analysis of the samples. The analysis times are based on the results of the analysis of the samples. The recommended holding times are based on the results of the analysis of the samples.

Holding times for the analysis of the samples are determined on the basis of the results of the analysis of the samples. The recommended holding times are based on the results of the analysis of the samples. The analysis times are based on the results of the analysis of the samples. The recommended holding times are based on the results of the analysis of the samples.

Matrix: SOIL Evaluation: * H Holding time breach: 1; * HE it in 1 holding time 6

Method		Sample Date	Extraction / Preparation		Analysis		
Container / Client Sample ID(s)			Date extracted	Due for extraction	Date analysed	Due for analysis	
EA055: Moisture Content							
Soil Glass Jar - Unpreserved		15-MAY-2009	----	3333	21-MAY-2009	8.83`8 38+++4	
TP1 083+0%(							3333
TP3 4 083+0%(							
TP5 083+0%(							
TP7 083+0%(							
TP9 083+0%(							
Du7 02,							
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved		15-MAY-2009	21-MAY-2009	** 3#> 38+++4	21-MAY-2009	** 3#> 38+++4	
TP2 083+0%(							
TP4 083+0%(							
TP6 083+0%(							
TP8 08+3+6(							
TP10 083+0%(							
Du7 02,							
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved		15-MAY-2009	21-MAY-2009	** 3#> 38+++4	21-MAY-2009	*837, ` 38+++4	
TP1 083+0%(							
TP3 4 083+0%(							
TP5 083+0%(							
TP7 083+0%(							
TP9 083+0%(							
Du7 02,							
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved		15-MAY-2009	22-MAY-2009	8.43`8 38+++4	26-MAY-2009	+* 37, L38+++4	
TP4 083+0%(							
TP7 083+0%(							
TP10 083+0%							

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Evaluation: * H Holding time breac1 ; ✓ HE it1 in 1olding time6

MatriD SOIL		Sample Date		Extraction / Preparation		Analysis	
Method	Container / Client Sample ID(s)	Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved							
TP4 083+0%(	TP5 083+0%(	22-MAY-2009	843`8 38+++4	✓	26-MAY-2009	+*3, L38+++4	✓
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%							
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved							
TP4 083+0%(	TP5 083+0%(	22-MAY-2009	843`8 38+++4	✓	26-MAY-2009	+*3, L38+++4	✓
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%							
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved							
TP4 083+0%(	TP5 083+0%(	22-MAY-2009	843`8 38+++4	✓	25-MAY-2009	+*3, L38+++4	✓
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%							
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
TP4 083+0%(	TP5 083+0%(	22-MAY-2009	843`8 38+++4	✓	25-MAY-2009	+*3, L38+++4	✓
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%							
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved							
TP2 083+0%(	TP3 083+0%(	21-MAY-2009	843`8 38+++4	✓	21-MAY-2009	843`8 38+++4	✓
TP4 083+0%(	TP5 083+0%(						
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%(	Du7 02,						
Du7 03							
Soil Glass Jar - Unpreserved							
TP2 083+0%(	TP3 083+0%(	22-MAY-2009	843`8 38+++4	✓	25-MAY-2009	+*3, L38+++4	✓
TP4 083+0%(	TP5 083+0%(						
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%(	Du7 02,						
Du7 03							
EP080: BTEX							
Soil Glass Jar - Unpreserved							
TP2 083+0%(	TP3 083+0%(	21-MAY-2009	843`8 38+++4	✓	21-MAY-2009	843`8 38+++4	✓
TP4 083+0%(	TP5 083+0%(						
TP7 083+0%(	TP9 083+0%(						
TP10 083+0%(	Du7 02,						
Du7 03							

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Quality Control Parameter Frequency Compliance

Following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was/were processed. Actual rate should be greater than or equal to the detected rate. A listing of breaches is provided in the Summary of Outliers.

MatrixD SOIL									
Evaluation: ✖ HQualit Control fre7uenc not wit1in s7ecification < ✓ HQualit Control fre7uenc wit1in s7ecification									
Quality Control Sam7le Ty7e			Count			Quality Control Specification			
Analytical Methods			QC	Regular	Actual	Expected	Evaluation		
Laboratory Du7licates (D, 26									
Moisture Content			EA0553+%	%	10.3	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
2°92 1enols (SIM)			EP075(SIM)	*	20.0	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Pesticides by GCMS			EP068	.	20.0	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Polyc1lorinated B171enyls (PCB)			EP066	.	20.0	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Mercury by FIMS			EG035T	%	10.0	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Metals by ICPAES			EG005T	%)	11.8	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH 3Semi-volatile Fraction			EP071	& */	12.5	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH Volatiles/BTEX			EP080	& &+	10.0	10.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Laboratory Control Sam7les (LCS)									
2°92 1enols (SIM)			EP075(SIM)	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Pesticides by GCMS			EP068	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Polyc1lorinated B171enyls (PCB)			EP066	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Mercury by FIMS			EG035T	&	6.7	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Metals by ICPAES			EG005T	&	5.9	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH 3Semi-volatile Fraction			EP071	*	6.3	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH Volatiles/BTEX			EP080	*	5.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Met1od Blank4s (MB)									
2°92 1enols (SIM)			EP075(SIM)	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Pesticides by GCMS			EP068	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Polyc1lorinated B171enyls (PCB)			EP066	*	20.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Mercury by FIMS			EG035T	&	6.7	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
Total Metals by ICPAES			EG005T	&	5.9	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH 3Semi-volatile Fraction			EP071	*	6.3	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
TPH Volatiles/BTEX			EP080	*	5.0	5.0	NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement		
MatrixDS7 4es (MS)									
2°92 1enols (SIM)			EP075(SIM)	*	20.0	5.0	ALS QCS3 requirement		
Pesticides by GCMS			EP068	*	20.0	5.0	ALS QCS3 requirement		
Polyc1lorinated B171enyls (PCB)			EP066	*	20.0	5.0	ALS QCS3 requirement		
Total Mercury by FIMS			EG035T	&	6.7	5.0	ALS QCS3 requirement		
Total Metals by ICPAES			EG005T	&	5.9	5.0	ALS QCS3 requirement		
TPH 3Semi-volatile Fraction			EP071	*	6.3	5.0	ALS QCS3 requirement		
TPH Volatiles/BTEX			EP080	*	5.0	5.0	ALS QCS3 requirement		

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Client : SINCLAIR KNIGHT MERZ
Project : QE09537

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Brief Method Summaries

"1e analytical Procedures used by the Environmental Division have been developed from established procedures used by the EPA, APHA, AS and NEPM. The following procedures are employed in the absence of documented standards or by client request following the brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which the ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA0553+%	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103.3 ± 0.5 degrees Celsius. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed 3120; SEPA SE 846 36010) (ICPAES) Metals are determined following an acid digestion of the soil. The ICP-AES technique ionises samples in a plasma, emitting a characteristic spectrum based on metal transitions. Intensities at selected wavelengths are compared against a standardised method (1999) Schedule B(3).
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed 3112 Hg 3B (Flow Injection) (SnCl ₂) (Cold Vapor generation) AAS) FIMS-AAS is an automated flameless atomic absorption technique. Mercury in solids is determined following an acid digestion. Mercury is reduced online to atomic mercury vapor by SnCl ₂ . The signal is then measured into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. The method is compliant with NEPM (1999) Schedule B(3).
Polychlorinated Biphenyls (PCB)	EP066	SOIL	SEPA SE 846 38270B) EDs are analysed by GC/MS and quantification is by comparison against an established 5 point calibration curve. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
Pesticides by GC/MS	EP068	SOIL	SEPA SE 846 38270B) EDs are analysed by GC/MS and quantification is by comparison against an established 5 point calibration curve. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
TPH 3Semi-volatile Fraction	EP071	SOIL	SEPA SE 846 38015A) Samples are analysed by GC/FID and quantified against a standardised 5 point calibration curve. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
2,4,6-Trinitrophenols (SIM)	EP075SIM6	SOIL	SEPA SE 846 38270B) EDs are analysed by GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
TPH Volatiles/BTEX	EP080	SOIL	SEPA SE 846 38260B) EDs are analysed by Purge and Trap, GC/MS. Quantification is by comparison against an established 5 point calibration curve. The method is compliant with NEPM (1999) Schedule B(3) (Method 102).
Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils, sediments and sludges	EN69	SOIL	SEPA 2002 Method 6 Hot Block Acid Digestion. 10g of sample is treated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and sample is treated and cooled again before being filtered and bulked to volume for analysis. Digest is analysed for determination of selected metals in sludge, sediments, and soils. The method is compliant with NEPM (1999) Schedule B(3) (Method 202).
Metallurgical Extraction of Soils for Purge and Trap	#*/	SOIL	SEPA SE 846 35030A) 5g of solid is placed in surrogate and 10mL methanol prior to analysis by Purge and Trap GC/MS.
Tumbler Extraction of Solids (O7) A 3 Concentrating)	ORG17A	SOIL	In 3 phase, Mechanical agitation (tumbler) 20g of sample, Na ₂ SO ₄ and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumbling. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

DL Documents

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Page : / of 7
E or4 Order : EB0907967
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

13-054

Preparation Methods		Method	Matrix	Method Descriptions
Tumbler EDraction of Solids (O7tion B 3 Non3-oncentrating)		ORG17B	SOIL	In31buse, Mec1anical agitation (tumbler)610g of sam7le, Na2SO4 and surrogate are eDracted wit1 20mL 1:1 DCM/Acetone by end over end tumble6 T1e solvent is transferred directly to a GC vial for analysis6

RTI DL RELEASE - EHP



Page : 7 of 7
E or4 Order : EB0907967
Client : SINCLAIR KNIGHT MERZ
Project : QE09537

13-054

Summary of Outliers

Outliers : Quality Control Samples

1e following re7ort 1 ; 1lig1ts outliers flagged in t1e Quality Control (QC) Re7ort6 Surrogate recovery limits are static and based on , SEPA SE 846 or ALS3 E I/EN/38 (in t1e absence of s7ecific , SEPA limits)6 T1is re7ort dis7lays QC Outliers (breac1es) only6

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: SOIL

Com7ound Grou7 Name	Laboratory Sam7le ID	Client Sam7le ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005T: Total Metals by ICPAES	EB09077243*	Anonymous	Nickel	74403-83-	276 %	+3%+B	RPD exceeds LOR based limits
Laboratory Control Spike (LCS) Recoveries							
EP068B: Organo71os71orus Pesticides (OP)	**&44.% 3+*&	3333	Demeton-S-methyl	4*4 3/ 3/	276 %	%13 3*+&B	Recovery less than lower control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	11299473+*/	3333	Anthracene	*&+3*&3/	114 %	/ . 3*+&B	Recovery greater than upper control limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons	11299473+*/	3333	Benz(a)anthracene	/ 3. 3/	123 %	/ * 3*+B	Recovery greater than upper control limit
Matrix Spike (MS) Recoveries							
EG005T: Total Metals by ICPAES	EB09077243+*/	Anonymous	Chromium	74403-73/	8\6 %	703%+B	Recovery less than lower data quality objective
EP068A: Organoc1orine Pesticides (OC)	EB09079673+*+4	TP5 063+0%	4,4'-DDT	+ 3&43/	14 8 %	703%+B	Recovery less than lower data quality objective

- For all matrices, no Method Blank value outliers occur.
- For all regular sample matrices, no surrogate recovery outliers occur.

Regular Sample Surrogates

Outliers : Analysis Holding Time Compliance

1is re7ort dis7lays Holding Time breac1es only6Only t1e res7ective EDraction / Pre7aration and/or Analysis com7onent is/are dis7layed6

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

1e following re7ort 1 ; 1lig1ts breac1es in t1e Frequency of Quality Control Sam7les6

- No Quality Control Sample Frequency Outliers exist.



Environmental Division

SAMPLE RECEIPT NOTIFICATION (SRN)

Comprehensive Report

Work Order : **EB0907967**

8!""	\$ SINCLAIR KNIGHT MERZ	La,° a°°@	\$ Environmental Division Brisba~
8°~^ a^~	\$ ONA KANAS	8°~^ a^~	\$ Tim Kilmister
~^~	\$ 32 CORDELIA STREET	~^~	\$ 32 Shand Street S'afford QLD AC~ al'a
	SOUTH BRISBANE QLD, AUSTRALIA		4053
	4101		
E-ma"! "	\$ °' a~ a ('&)*°&) au	E-ma"! "	\$ Services.Brisba~(al ~+""°)*°&
TeleDhone	\$ %%%%	TeleDhone	\$. E1-F-3243 F222
Fa* "&!"	\$ %%%%	Fa* "&!"	\$. E1-F-3243 F21H
I ° J^~	\$ QE0353F	Pa4"	\$ 1 ° 3
Order nC&,"	\$ %%%%		
C-O-C nC&,"	\$ %%%%	Cote nC&,"	\$ E\$2003SINKNI0322 ENH03H03=
S^~	\$ 8 °~ Qla Pa'		
Sa& D^~	\$ O KANAS	QC Level	\$ NE11 1333 SchedQe BG= and ALS
			8 S3 reJC^~&^~

Dates

Date Sa& Des Received	\$ 13% K-2003	IssCe Da~	\$ 20-I K-2003 1E:22
Client ReJCsted DCe Da~	\$ 2E% K-2003	SchedQed ReD^~^~ 4 Da~	\$ 27-MAY-2009

Delivery Details

I ode of Delivery	\$ Client DroDoff	TemD^~ a^C~	\$ 4.4IC - Ice D^~ ^~
No. of coolers,f 5~	\$ 1 I EDIUI	No. of sa& Des received	\$ 21
S^~* Qity S~ al	\$ Inta^~)	No. of sa& Des a~ al@ ~	\$ 12

General Comments

- This reDort contains the follo: ~ 4 informa^~\$
% Sa& De Conta^~ G=H ~ ~+ ation Non-ComD'a^~
% Su&& ary of Sa& D^~ G=and ReJCsted Ana!@ "
% ReJCsted Delivera,!"
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- I !~ ase direct any tQn a ° Qnd Hechnical JCeries to the la,° atory contact desi4~ ated a,°+~)
- I !~ ase direct any JCeries related to sa& De condition HnC&," ~ 4 Hbrea' a4es to I a44ie Kahi.
- ~ al@~ : ork for this : ork order : ill be condCted at ALS Brisba~)
- Sa& De DisD^ al - AJC^ Cs G4 da@~ Solid G0 da@~ from date of comDetion of : ork order.



Sample Container(s)/Preservation Non-Compliances

Il comparisons are made a4ainst D~~~~ a^&~~~ Hb~ ~~~ + ation AS, Al HA, USEI A sta~~ a~~)

- No sample container / preservation non-compliance exist.

Summary of Sample(s) and Requested Analysis

Some items described ,!° : may be part of a la,° a^°@
Drocess ~~~~ ary for the "5"* Qion of client ~~~JC~ ~~~
^a ' . Pa* a4es &ay *o~~ ain a~~~~ al a~alyses, Cch a
the ~~~~&~~ ation of &on ^ Ore content and D~~pa~a~~
^asks, that are inclCded in the pa* a4")

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have been a Qmed by the la,° atory for D°~~ ~~~ 4
DCD° ~ . If the a&D~~4 time is ~~~ Dayed as 0:00 the
~~~& ation was not Drovied by client.

I a~~5: SOIL

| Laboratory sample ID | Client sampling date / time | Client sample ID | On Hold=SOIL<br>No a~alysis reJC~ ~~~ | SOIL - S-02<br>H1 ~~~ als Dicl D4~ ~~~ = | SOIL - S-05<br>TI H#TE6H#I ~~~ al | SOIL - S-13<br>TI H#TE6H#H#H8 H7 I H CBH#metal |
|----------------------|-----------------------------|------------------|---------------------------------------|------------------------------------------|-----------------------------------|------------------------------------------------|
| EB030F3EF-001        | 15-I K-2003 11:00           | TI 1 0.0-0.1     | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-002        | 15-I K-2003 11:00           | TI 1 0.2-0.3     |                                       | ✓                                        |                                   |                                                |
| EB030F3EF-003        | 15-I K-2003 11:00           | TI 2 0.2-0.3     |                                       |                                          | ✓                                 |                                                |
| EB030F3EF-004        | 15-I K-2003 11:00           | TI 3 0.0-0.1     | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-005        | 15-I K-2003 11:00           | TI 3 0.2-0.3     |                                       |                                          | ✓                                 |                                                |
| EB030F3EF-00E        | 15-I K-2003 11:00           | TI 4 0.0-0.1     | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-00F        | 15-I K-2003 11:00           | TI 4 0.2-0.3     |                                       |                                          |                                   | ✓                                              |
| EB030F3EF-00H        | 15-I K-2003 11:00           | TI 5 0.0-0.1     | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-003        | 15-I K-2003 11:00           | TI 5 0.2-0.3     |                                       |                                          |                                   | ✓                                              |
| EB030F3EF-010        | 15-I K-2003 11:00           | TIE 0.0-0.1      | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-011        | 15-I K-2003 11:00           | TIE 0.2-0.3      |                                       | ✓                                        |                                   |                                                |
| EB030F3EF-012        | 15-I K-2003 11:00           | TIF 0.0-0.1      | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-013        | 15-I K-2003 11:00           | TIF 0.2-0.3      |                                       |                                          |                                   | ✓                                              |
| EB030F3EF-014        | 15-I K-2003 11:00           | TIH 0.0-0.1      |                                       | ✓                                        |                                   |                                                |
| EB030F3EF-015        | 15-I K-2003 11:00           | TIH 0.2-0.3      | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-01E        | 15-I K-2003 11:00           | TI 3 0.0-0.1     | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-01F        | 15-I K-2003 11:00           | TI 3 0.2-0.3     |                                       |                                          |                                   | ✓                                              |
| EB030F3EF-01H        | 15-I K-2003 11:00           | TI 10 0.0-0.1    | ✓                                     |                                          |                                   |                                                |
| EB030F3EF-013        | 15-I K-2003 11:00           | TI 10 0.2-0.3    |                                       |                                          |                                   | ✓                                              |
| EB030F3EF-020        | 15-I K-2003 11:00           | DCD02            |                                       |                                          | ✓                                 |                                                |
| EB030F3EF-021        | 15-I K-2003 11:00           | DCD03            |                                       |                                          | ✓                                 |                                                |



## Requested Deliverables

### MR JEREMY WICKS

|                                                             |                                |
|-------------------------------------------------------------|--------------------------------|
| %MAU Certificate of Analysis - NATA GCOA =                  | Ema"! J: " *! ( ' & ) * ° & au |
| %MAU InterDretive QC ReDort - DEGAULT QAnon QCI ReD=GQCI =  | Ema"! J: " *! ( ' & ) * ° & au |
| %MAU QC ReDort - DEGAULT QAnon QC ReD=- NATA GQC =          | Ema"! J: " *! ( ' & ) * ° & au |
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| %EDI G° & at - 6Tab G6TAB =                                 | Ema"! J: " *! ( ' & ) * ° & au |

### ONA KANAS

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| %MAU QC ReDort - DEGAULT QAnon QC ReD=- NATA GQC =          | Ema"! °' a ~ a ( ' & ) * ° & au |
| %A4 - AU Sa& De ReceiDt Notification - Environmental GSRN = | Ema"! °' a ~ a ( ' & ) * ° & au |
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RTI DL RELEASE - ENP

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“\$” e “f” i a e o “a” s “he follow” g “fo” a “o” :

- Geographical Orientation
- Analytical Results
- Summary of Overall Findings

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## Signatories

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## Signatories

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## Accreditation Category

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Environmental Division Brisbane

Part of the **ALS Laboratory Group**

32 Sha, d S<sup>ee</sup> S<sup>affo</sup> d QLD Aus<sup>al</sup>a 4053

A Campbell Brothers Limited Company



## General Comments

The analytical procedures used by the Environmental Protection Agency (EPA) have been developed for the USEPA, APHA, AS and NEPM. The house developed procedures are plotted, the absolute error of the data is by the "equation"

When the "equation" is used, the results are reported, and the "weight" is based.

When the "equation" is used, the results are reported, and the "weight" is based.

When the LOR of a "reported" difference for the data is LOR, the "weight" is based on the "weight" of the data.

When the LOR of a "reported" difference for the data is LOR, the "weight" is based on the "weight" of the data.

Key : The "AS Number" is the "AS Number" of the data, and the "AS Number" is the "AS Number" of the data.

LOR = Limit of "reported" data

AS = The "AS Number" is the "AS Number" of the data, and the "AS Number" is the "AS Number" of the data.

- EP070- for all samples EB0908932, fractionation process was not complete- fractional surrogate recovery could not be accurately determined.
- PAH/Phenols: Sample MW05 required dilution due to the presence of high level contaminants.



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                |            | Client sample ID |       | Client sampling date / time |               | MW01              |               | MW02              |               | MW03              |               | MW04              |               | MW05 |  |
|--------------------------------------------------|------------|------------------|-------|-----------------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|------|--|
| Compound                                         | CAS Number | LOR              | Unit  | 02-JUN-2009 15:00           | EB0908932-001 | 02-JUN-2009 15:00 | EB0908932-002 | 02-JUN-2009 15:00 | EB0908932-003 | 02-JUN-2009 15:00 | EB0908932-004 | 02-JUN-2009 15:00 | EB0908932-005 |      |  |
| EG020F: Dissolved Metals by ICP-MS               |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Arsenic                                          | 7440-38-2  | 0.00             | ~ g/L | 0.002                       | 0.001         | 80.00             | 0.005         | 0.005             | 0.0001        | 80.00             | 0.001         | 0.005             | 0.005         |      |  |
| Cadmium                                          | 7440-43-9  | 0.000            | ~ g/L | 0.0003                      | 0.0006        | 0.0001            | 0.0001        | 0.0003            | 0.0001        | 0.0001            | 0.0001        | 0.0003            | 0.0003        |      |  |
| Chromium                                         | 7440-47-3  | 0.00             | g/L   | 0.018                       | 0.004         | 80.00             | 0.004         | 8.000             | 80.00         | 8.000             | 8.000         | 0.006             | 0.006         |      |  |
| Copper                                           | 7440-80-8  | 0.00             | ~ g/L | 0.028                       | 0.017         | 80.00             | 0.017         | 8.000             | 80.00         | 8.000             | 8.000         | 0.001             | 0.001         |      |  |
| Lead                                             | 7439-92-1  | 0.00             | ~ g/L | 0.064                       | 0.043         | 80.00             | 0.043         | 8.000             | 80.00         | 8.000             | 8.000         | 0.002             | 0.002         |      |  |
| Nickel                                           | 7440-02-0  | 0.00             | ~ g/L | 0.038                       | 0.098         | 0.004             | 0.098         | 0.003             | 0.004         | 0.003             | 0.003         | 0.122             | 0.122         |      |  |
| Zinc                                             | 7440-00-7  | 0.00&            | ~ g/L | 0.154                       | 0.349         | 0.035             | 0.349         | 0.009             | 0.035         | 0.009             | 0.009         | 0.043             | 0.043         |      |  |
| EG035F: Dissolved Mercury by FIMS                |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Mercury                                          | 7439-97-6  | 0.000            | ~ g/L | 80.000                      | 80.000        | 80.000            | 80.000        | 8.000             | 8.000         | 8.000             | 8.000         | 8.000             | 8.000         |      |  |
| EK055G: Ammonia as N by Discrete Analyser        |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Ammonia as N                                     | 7664-41-7  | 0.0              | ~ g/L | 0.08                        | 0.02          | 80.0              | 0.02          | 80.0              | 80.0          | 37.9              | 37.9          | 87.2              | 87.2          |      |  |
| EP070: Total Petroleum Hydrocarbons - Speciation |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Aliphatic C10-C14                                | ""         | 80               | Jg/L  | ""                          | ""            | ""                | ""            | 880               | 880           | 880               | 880           | 880               | 880           |      |  |
| Aliphatic C15-C28                                | ""         | 00               | Jg/L  | ""                          | ""            | ""                | ""            | 8.00              | 8.00          | 8.00              | 8.00          | 400               | 400           |      |  |
| Aliphatic C29-C36                                | ""         | 80               | Jg/L  | ""                          | ""            | ""                | ""            | 880               | 880           | 880               | 880           | 150               | 150           |      |  |
| Aromatic C10-C14                                 | ""         | 80               | Jg/L  | ""                          | ""            | ""                | ""            | 70                | 70            | 70                | 70            | 180               | 180           |      |  |
| Aromatic C15-C28                                 | ""         | 00               | Jg/L  | ""                          | ""            | ""                | ""            | 8.00              | 8.00          | 8.00              | 8.00          | 8.00              | 8.00          |      |  |
| Aromatic C29-C36                                 | ""         | 80               | Jg/L  | ""                          | ""            | ""                | ""            | 880               | 880           | 880               | 880           | 880               | 880           |      |  |
| EP074A: Monocyclic Aromatic Hydrocarbons         |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Benzene                                          | 71-43-2    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| Toluene                                          | 08-88-3    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 10                | 10            |      |  |
| Ethylbenzene                                     | 00-00-0    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| meta- & para-Xylene                              | 08-38-3    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 9                 | 9             |      |  |
| Styrene                                          | 00-42-5    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| ortho-Xylene                                     | 95-47-6    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| Isopropylbenzene                                 | 98-82-8    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 5                 | 5             |      |  |
| n-Propylbenzene                                  | 03-65-1    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 8                 | 8             |      |  |
| 1,3,5-Trimethylbenzene                           | 08-67-8    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| sec-Butylbenzene                                 | 135-98-8   | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| 1,2,4-Trimethylbenzene                           | 95-63-6    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 14                | 14            |      |  |
| tert-Butylbenzene                                | 98-00-0    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| p-Isopropyltoluene                               | 99-87-6    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 18                | 18            |      |  |
| n-Butylbenzene                                   | 04-51-8    | &                | Jg/L  | ""                          | ""            | 88                | ""            | 88                | 88            | 88                | 88            | 88                | 88            |      |  |
| EP074B: Oxygenated Compounds                     |            |                  |       |                             |               |                   |               |                   |               |                   |               |                   |               |      |  |
| Vinyl Acetate                                    | 08-08-1    | 80               | Jg/L  | ""                          | ""            | 880               | ""            | 880               | 880           | 880               | 880           | 880               | 880           |      |  |
| 2-Butanone (MEK)                                 | 78-93-3    | 80               | Jg/L  | ""                          | ""            | 880               | ""            | 880               | 880           | 880               | 880           | 880               | 880           |      |  |
| 4-Methyl-2-pentanone (MIBK)                      | 08-10-1    | 80               | Jg/L  | ""                          | ""            | 880               | ""            | 880               | 880           | 880               | 880           | 880               | 880           |      |  |





Analytical Results

Sub-Matrix: WATER

| Sub-Ma <sup>™</sup> 5: WATER             |            | Client sample ID |      | Client sampling date / time |      |      |      |      |     |  |
|------------------------------------------|------------|------------------|------|-----------------------------|------|------|------|------|-----|--|
| Compound                                 | CAS Number | LOR              | Unit | MW01                        | MW02 | MW03 | MW04 | MW05 |     |  |
| EP074B: Oxygenated Compounds - Continued |            |                  |      |                             |      |      |      |      |     |  |
| 2-Hexanone (MBK)                         | 891-78-6   | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| EP074C: Sulfonated Compounds             |            |                  |      |                             |      |      |      |      |     |  |
| Carbon disulfide                         | 75-15-0    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| EP074D: Fumigants                        |            |                  |      |                             |      |      |      |      |     |  |
| 2,2-Dichloropropane                      | 894-20-7   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,2-Dichloropropane                      | 78-87-5    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| cis-1,3-Dichloropropylene                | 00'' 0' 8  | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| trans-1,3-Dichloropropylene              | 00'' 02-6  | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,2-Dibromoethane (EDB)                  | 0'' 93-4   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| EP074E: Halogenated Aliphatic Compounds  |            |                  |      |                             |      |      |      |      |     |  |
| Dichlorodifluoromethane                  | 75-71-8    | 80               | Jg/L | ""                          | ""   | 8&0  | 60   | 8&0  | 8&0 |  |
| Chloromethane                            | 74-87-3    | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| Vinyl chloride                           | 75-0''     | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| Bromomethane                             | 74-83-9    | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| Chloroethane                             | 75-00-3    | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| Trichlorofluoromethane                   | 75-69''    | 80               | Jg/L | ""                          | ""   | 8&0  | 8&0  | 8&0  | 8&0 |  |
| 1,1-Dichloroethene                       | 75-35-4    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Iodomethane                              | 74-88-4    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| trans-1,2-Dichloroethene                 | &'''' 0'8  | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1-Dichloroethane                       | 75-34-3    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| cis-1,2-Dichloroethene                   | &''& 9-2   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1,1-Trichloroethane                    | 71-55-6    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1-Dichloropropylene                    | 563-58-6   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Carbon Tetrachloride                     | 56-23-5    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,2-Dichloroethane                       | 07-06-2    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Trichloroethene                          | 79'0''     | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Dibromomethane                           | 74-95-3    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1,2-Trichloroethane                    | 79'00'8    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,3-Dichloropropane                      | 142-28-9   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Tetrachloroethene                        | 127-18-4   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1,1,2-Tetrachloroethane                | 630-20''   | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| trans-1,4-Dichloro-2-butene              | 0-57-6     | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| cis-1,4-Dichloro-2-butene                | 1476-11-5  | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,1,2,2-Tetrachloroethane                | 79-34-5    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,2,3-Trichloropropane                   | 96-18-4    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Pentachloroethane                        | 76-01-7    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| 1,2-Dibromo-3-chloropropane              | 96-12-8    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |
| Hexachlorobutadiene                      | 87-68-3    | &                | Jg/L | ""                          | ""   | 8&   | 8&   | 8&   | 8&  |  |



## Analytical Results

Sub-Matrix: WATER

| Compound                                       |  | Client sample ID |     | Client sampling date / time |  | MW01          |  | MW02          |  | MW03          |  | MW04          |  | MW05          |  |
|------------------------------------------------|--|------------------|-----|-----------------------------|--|---------------|--|---------------|--|---------------|--|---------------|--|---------------|--|
|                                                |  | CAS Number       | LOR | Unit                        |  | EB0908932-001 |  | EB0908932-002 |  | EB0908932-003 |  | EB0908932-004 |  | EB0908932-005 |  |
| EP074F: Halogenated Aromatic Compounds         |  |                  |     |                             |  |               |  |               |  |               |  |               |  |               |  |
| Chlorobenzene                                  |  | 08-90-7          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 6             |  | 14            |  |
| Bromobenzene                                   |  | 08-86-1          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| 2-Chlorotoluene                                |  | 98-09-8          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| 4-Chlorotoluene                                |  | 06-43-4          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| 1,3-Dichlorobenzene                            |  | 541-73-1         | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| 1,4-Dichlorobenzene                            |  | 06-46-7          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 47            |  |
| 1,2-Dichlorobenzene                            |  | 98-09-8          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8             |  |
| 1,2,4-Trichlorobenzene                         |  | 120-82-1         | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| 1,2,3-Trichlorobenzene                         |  | 87-61-6          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| EP074G: Trihalomethanes                        |  |                  |     |                             |  |               |  |               |  |               |  |               |  |               |  |
| Chloroform                                     |  | 67-66-3          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| Bromodichloromethane                           |  | 75-27-4          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| Dibromochloromethane                           |  | 124-48-1         | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| Bromoform                                      |  | 75-25-2          | &   | Jg/L                        |  | ""            |  | ""            |  | 8&            |  | 8&            |  | 8&            |  |
| EP074H: Naphthalene                            |  |                  |     |                             |  |               |  |               |  |               |  |               |  |               |  |
| Naphthalene                                    |  | 91-20-3          | 7   | Jg/L                        |  | ""            |  | ""            |  | <7            |  | 17            |  | 20            |  |
| EP075(SIM)A: Phenolic Compounds                |  |                  |     |                             |  |               |  |               |  |               |  |               |  |               |  |
| Phenol                                         |  | 08-95-2          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| 2-Chlorophenol                                 |  | 95-57-8          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| 2-Methylphenol                                 |  | 95-48-7          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 225           |  |
| 3- & 4-Methylphenol                            |  | 1319-77-3        | 2.0 | Jg/L                        |  | ""            |  | ""            |  | <2.0          |  | <2.0          |  | 49.0          |  |
| 2-Nitrophenol                                  |  | 88-75-5          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| 2,4-Dimethylphenol                             |  | 05-67-9          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 4.6           |  |
| 2,4-Dichlorophenol                             |  | 120-83-2         | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 1.3           |  |
| 2,6-Dichlorophenol                             |  | 87-65-0          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| 4-Chloro-3-Methylphenol                        |  | 89-00-7          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 36.4          |  |
| 2,4,6-Trichlorophenol                          |  | 88-06-2          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| 2,4,5-Trichlorophenol                          |  | 98-09-8          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 1.0           |  |
| Pentachlorophenol                              |  | 87-86-5          | 2.0 | Jg/L                        |  | ""            |  | ""            |  | <2.0          |  | <2.0          |  | <2.0          |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons |  |                  |     |                             |  |               |  |               |  |               |  |               |  |               |  |
| Naphthalene                                    |  | 91-20-3          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 19.5          |  | 24.0          |  |
| Acenaphthylene                                 |  | 208-96-8         | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Acenaphthene                                   |  | 83-32-9          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Fluorene                                       |  | 86-73-7          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Phenanthrene                                   |  | 85-01-8          | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Anthracene                                     |  | 120-12-7         | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Fluoranthene                                   |  | 200-00-0         | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |
| Pyrene                                         |  | 129-00-0         | *0  | Jg/L                        |  | ""            |  | ""            |  | 8*0           |  | 8*0           |  | 8*0           |  |



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                          |                  | Client sample ID |      | Client sampling date / time |      | MW01          |      | MW02          |      | MW03          |      | MW04          |      | MW05 |  |
|------------------------------------------------------------|------------------|------------------|------|-----------------------------|------|---------------|------|---------------|------|---------------|------|---------------|------|------|--|
| Compound                                                   | CAS Number       | LOR              | Unit | EB0908932-001               |      | EB0908932-002 |      | EB0908932-003 |      | EB0908932-004 |      | EB0908932-005 |      |      |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| Benz(a)anthracene                                          | 56-55-3          | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Chrysene                                                   | 218-01-9         | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Benzo(b)fluoranthene                                       | 208-99-2         | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Benzo(k)fluoranthene                                       | 207-08-9         | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Benzo(a)pyrene                                             | 80-32-8          | 0*&              | Jg/L | ***                         | ***  | ***           | ***  | 80*&          | 80*& | 80*&          | 80*& | 80*&          | 80*& |      |  |
| Indeno(1,2,3-cd)pyrene                                     | 93-39&           | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Dibenz(a,h)anthracene                                      | 53-70-3          | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| Benzo(g,h,i)perylene                                       | 91-24-2          | *0               | Jg/L | ***                         | ***  | ***           | ***  | 8*0           | 8*0  | 8*0           | 8*0  | 8*0           | 8*0  |      |  |
| EP080/071: Total Petroleum Hydrocarbons                    |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| C6 - C9 Fraction                                           | ***              | 20               | Jg/L | <20                         | <20  | <20           | <20  | <20           | <20  | <20           | 30   | 30            | 60   |      |  |
| C10 - C14 Fraction                                         | ***              | 80               | Jg/L | ***                         | ***  | ***           | ***  | ***           | ***  | ***           | 90   | 90            | 450  |      |  |
| C10 - C14 Fraction                                         | ***              | 80               | Jg/L | 8&0                         | 8&0  | 8&0           | 8&0  | 8&0           | 8&0  | 8&0           | ***  | ***           | ***  |      |  |
| C15 - C28 Fraction                                         | ***              | 00               | Jg/L | ***                         | ***  | ***           | ***  | ***           | ***  | ***           | 8 00 | 8 00          | 500  |      |  |
| C15 - C28 Fraction                                         | ***              | 00               | Jg/L | 8 00                        | 8 00 | 8 00          | 8 00 | 8 00          | 8 00 | 8 00          | ***  | ***           | ***  |      |  |
| C29 - C36 Fraction                                         | ***              | 80               | Jg/L | ***                         | ***  | ***           | ***  | ***           | ***  | ***           | 8&0  | 8&0           | 150  |      |  |
| C29 - C36 Fraction                                         | ***              | 80               | Jg/L | 8&0                         | 8&0  | 8&0           | 8&0  | 8&0           | 8&0  | 8&0           | ***  | ***           | ***  |      |  |
| EP080: BTEX                                                |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| Benzene                                                    | 71-43-2          |                  | Jg/L | 8                           | 8    | 8             | 8    | ***           | ***  | ***           | ***  | ***           | ***  |      |  |
| Toluene                                                    | 08-88-3          | 2                | Jg/L | <2                          | <2   | <2            | <2   | ***           | ***  | ***           | ***  | ***           | ***  |      |  |
| Ethylbenzene                                               | 001-41-4         | 2                | Jg/L | <2                          | <2   | <2            | <2   | ***           | ***  | ***           | ***  | ***           | ***  |      |  |
| meta- & para-Xylene                                        | 08-38-3 106-42-3 | 2                | Jg/L | <2                          | <2   | <2            | <2   | ***           | ***  | ***           | ***  | ***           | ***  |      |  |
| ortho-Xylene                                               | 95-47-6          | 2                | Jg/L | <2                          | <2   | <2            | <2   | ***           | ***  | ***           | ***  | ***           | ***  |      |  |
| EP070S:TPH Surrogates - Speciation                         |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| 2-Fluorobiphenyl                                           | 321-60-8         | 0*               | K    | ***                         | ***  | ***           | ***  | ***           | ***  | ***           | 80.1 | 80.1          | 81.2 |      |  |
| 2-Bromonaphthalene                                         | 580-13-2         | 0*               | K    | ***                         | ***  | ***           | ***  | ***           | ***  | ***           | 64.4 | 64.4          | 56.9 |      |  |
| EP074S: VOC Surrogates                                     |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| 1,2-Dichloroethane-D4                                      | 1701-07-0        | 0*               | K    | ***                         | ***  | ***           | ***  | 95.7          | 95.7 | 95.7          | 99.7 | 99.7          | 89.8 |      |  |
| Toluene-D8                                                 | 2037-26-5        | 0*               | K    | ***                         | ***  | ***           | ***  | 92.5          | 92.5 | 92.5          | 102  | 102           | 95.4 |      |  |
| 4-Bromofluorobenzene                                       | 100-001          | 0*               | K    | ***                         | ***  | ***           | ***  | 93.3          | 93.3 | 93.3          | 93.6 | 93.6          | 91.6 |      |  |
| EP075(SIM)S: Phenolic Compound Surrogates                  |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| Phenol-d6                                                  | 13127-88-3       | 0*               | K    | ***                         | ***  | ***           | ***  | 32.7          | 32.7 | 32.7          | 43.2 | 43.2          | 35.0 |      |  |
| 2-Chlorophenol-D4                                          | 93951-73-6       | 0*               | K    | ***                         | ***  | ***           | ***  | 86.3          | 86.3 | 86.3          | 98.8 | 98.8          | 75.4 |      |  |
| 2,4,6-Tribromophenol                                       | 118-791          | 0*               | K    | ***                         | ***  | ***           | ***  | 93.5          | 93.5 | 93.5          | 108  | 108           | 104  |      |  |
| EP075(SIM)T: PAH Surrogates                                |                  |                  |      |                             |      |               |      |               |      |               |      |               |      |      |  |
| 2-Fluorobiphenyl                                           | 321-60-8         | 0*               | K    | ***                         | ***  | ***           | ***  | 95.3          | 95.3 | 95.3          | 99.9 | 99.9          | 78.0 |      |  |
| Anthracene-d10                                             | 17191-06-8       | 0*               | K    | ***                         | ***  | ***           | ***  | 83.0          | 83.0 | 83.0          | 108  | 108           | 93.3 |      |  |
| 1-Terphenyl-d14                                            | 1718-51-0        | 0*               | K    | ***                         | ***  | ***           | ***  | 92.0          | 92.0 | 92.0          | 110  | 110           | 87.7 |      |  |



## Analytical Results

Sub-Matrix: WATER

| Sub-Ma <sup>xxxx</sup> 5: WATER | Client sample ID            |     |      |                   |                   |                   |                   |                   |  |  |
|---------------------------------|-----------------------------|-----|------|-------------------|-------------------|-------------------|-------------------|-------------------|--|--|
|                                 | Client sampling date / time |     |      |                   |                   |                   |                   |                   |  |  |
|                                 | CAS Number                  | LOR | Unit | MW01              | MW02              | MW03              | MW04              | MW05              |  |  |
|                                 |                             |     |      | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 |  |  |
|                                 |                             |     |      | EB0908932-001     | EB0908932-002     | EB0908932-003     | EB0908932-004     | EB0908932-005     |  |  |
| EP080S: TPH(V)/BTX Surrogates   |                             |     |      |                   |                   |                   |                   |                   |  |  |
| 1,2-Dichloroethane-D4           | 170° 0' 07-0                | 0*  | K    | 96.8              | 99.6              | 99.5              | 104               | 93.6              |  |  |
| Toluene-D8                      | 2037-26-5                   | 0*  | K    | 96.8              | 99.7              | 95.3              | 105               | 98.3              |  |  |
| 4-Bromofluorobenzene            | xxx 0' 00"                  | 0*  | K    | 94.2              | 96.8              | 93.3              | 102               | 99.5              |  |  |



## Analytical Results

Sub-Matrix: WATER

| Sub-Ma <sup>***5</sup> : WATER                   |            | Client sample ID |       | Client sampling date / time |               | Unit          |               | MW06          | MW07 | MW08 | MW09 | DUP05 |
|--------------------------------------------------|------------|------------------|-------|-----------------------------|---------------|---------------|---------------|---------------|------|------|------|-------|
| Compound                                         | CAS Number | LOR              | Unit  | EB0908932-006               | EB0908932-007 | EB0908932-008 | EB0908932-009 | EB0908932-010 |      |      |      |       |
| EG020F: Dissolved Metals by ICP-MS               |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Arsenic                                          | 7440-38-2  | 0*00             | ~ g/L | 0.025                       | 0.002         | 0.018         | 0.001         | 0.026         |      |      |      |       |
| Cadmium                                          | 7440-43-9  | 0*000            | ~ g/L | 80*000                      | 80*000        | 8 0*000       | 0.0001        | 80*000        |      |      |      |       |
| Chromium                                         | 7440-47-3  | 0*00             | g/L   | 80*00                       | 80*00         | 0.004         | 80*00         | 8 0*00        |      |      |      |       |
| Copper                                           | 7440*80-8  | 0*00             | ~ g/L | 80*00                       | 80*00         | 8 0*00        | 0.001         | 80*00         |      |      |      |       |
| Lead                                             | 7439*92-1  | 0*00             | ~ g/L | 80*00                       | 80*00         | 8 0*00        | 0.001         | 80*00         |      |      |      |       |
| Nickel                                           | 7440*02-0  | 0*00             | ~ g/L | 0.013                       | 0.019         | 0.017         | 0.002         | 0.014         |      |      |      |       |
| Zinc                                             | 7440****   | 0*00&            | ~ g/L | 0.038                       | 0.010         | 0.012         | 0.042         | 0.039         |      |      |      |       |
| EG035F: Dissolved Mercury by FIMS                |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Mercury                                          | 7439*97-6  | 0*000            | ~ g/L | 80*000                      | 80*000        | 8 0*000       | 8 0*000       | 8 0*000       |      |      |      |       |
| EK055G: Ammonia as N by Discrete Analyser        |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Ammonia as N                                     | 7664-41-7  | 0*0              | ~ g/L | 50.4                        | 119           | 92.6          | 0.50          | ***           |      |      |      |       |
| EP070: Total Petroleum Hydrocarbons - Speciation |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Aliphatic C10-C14                                | ***        | 80               | Jg/L  | ***                         | 8&0           | ***           | ***           | ***           |      |      |      |       |
| Aliphatic C15-C28                                | ***        | 00               | Jg/L  | ***                         | 8 00          | ***           | ***           | ***           |      |      |      |       |
| Aliphatic C29-C36                                | ***        | 80               | Jg/L  | ***                         | 8&0           | ***           | ***           | ***           |      |      |      |       |
| Aromatic C10-C14                                 | ***        | 80               | Jg/L  | ***                         | 70            | ***           | ***           | ***           |      |      |      |       |
| Aromatic C15-C28                                 | ***        | 00               | Jg/L  | ***                         | 8 00          | ***           | ***           | ***           |      |      |      |       |
| Aromatic C29-C36                                 | ***        | 80               | Jg/L  | ***                         | 8&0           | ***           | ***           | ***           |      |      |      |       |
| EP074A: Monocyclic Aromatic Hydrocarbons         |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Benzene                                          | 71-43-2    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| Toluene                                          | 08-88-3    | &                | Jg/L  | 7                           | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| Ethylbenzene                                     | 00* **     | &                | Jg/L  | 8&                          | 8&            | 8             | 8&            | ***           |      |      |      |       |
| meta- & para-Xylene                              | 08-38-3    | &                | Jg/L  | 8&                          | 8&            | 9             | 8&            | ***           |      |      |      |       |
| Styrene                                          | 00-42-5    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| ortho-Xylene                                     | 95-47-6    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| Isopropylbenzene                                 | 98-82-8    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| n-Propylbenzene                                  | 03-65-1    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| 1,3,5-Trimethylbenzene                           | 08-67-8    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| sec-Butylbenzene                                 | 135-98-8   | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| 1,2,4-Trimethylbenzene                           | 95-63-6    | &                | Jg/L  | 8&                          | 8&            | 17            | 8&            | ***           |      |      |      |       |
| tert-Butylbenzene                                | 98-0****   | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| p-Isopropyltoluene                               | 99-87-6    | &                | Jg/L  | 8&                          | 8&            | 29            | 8&            | ***           |      |      |      |       |
| n-Butylbenzene                                   | 04-51-8    | &                | Jg/L  | 8&                          | 8&            | 8&            | 8&            | ***           |      |      |      |       |
| EP074B: Oxygenated Compounds                     |            |                  |       |                             |               |               |               |               |      |      |      |       |
| Vinyl Acetate                                    | 08-08**    | 80               | Jg/L  | 8&0                         | 8&0           | 8&0           | 8&0           | ***           |      |      |      |       |
| 2-Butanone (MEK)                                 | 78-93-3    | 80               | Jg/L  | 8&0                         | 8&0           | 8&0           | 8&0           | ***           |      |      |      |       |
| 4-Methyl-2-pentanone (MIBK)                      | 08-10'     | 80               | Jg/L  | 8&0                         | 8&0           | 8&0           | 8&0           | ***           |      |      |      |       |



## Analytical Results

Sub-Matrix: WATER

|                                          |            | Client sample ID |  | Client sampling date / time |  | Unit |  | MW06          | MW07          | MW08          | MW09          | DUP05         |
|------------------------------------------|------------|------------------|--|-----------------------------|--|------|--|---------------|---------------|---------------|---------------|---------------|
| Compound                                 | CAS Number | LOR              |  |                             |  |      |  | EB0908932-006 | EB0908932-007 | EB0908932-008 | EB0908932-009 | EB0908932-010 |
| EP074B: Oxygenated Compounds - Continued |            |                  |  |                             |  |      |  |               |               |               |               |               |
| 2-Hexanone (MBK)                         | 891-78-6   | &                |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| EP074C: Sulfonated Compounds             |            |                  |  |                             |  |      |  |               |               |               |               |               |
| Carbon disulfide                         | 75-15-0    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| EP074D: Fumigants                        |            |                  |  |                             |  |      |  |               |               |               |               |               |
| 2,2-Dichloropropane                      | 894-20-7   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,2-Dichloropropane                      | 78-87-5    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| cis-1,3-Dichloropropylene                | 00'' 0' 8  | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| trans-1,3-Dichloropropylene              | 00'' 02-6  | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,2-Dibromoethane (EDB)                  | 0'' 93-4   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| EP074E: Halogenated Aliphatic Compounds  |            |                  |  |                             |  |      |  |               |               |               |               |               |
| Dichlorodifluoromethane                  | 75-71-8    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| Chloromethane                            | 74-87-3    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| Vinyl chloride                           | 75-01-2    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| Bromomethane                             | 74-83-9    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| Chloroethane                             | 75-00-3    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| Trichlorofluoromethane                   | 75-69-1    | &0               |  |                             |  | Jg/L |  | 8&0           | 8&0           | 8&0           | 8&0           | ""            |
| 1,1-Dichloroethene                       | 75-35-4    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Iodomethane                              | 74-88-4    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| trans-1,2-Dichloroethene                 | &'''' 0' 8 | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1-Dichloroethane                       | 75-34-3    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| cis-1,2-Dichloroethene                   | &''& 9-2   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1,1-Trichloroethane                    | 71-55-6    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1-Dichloropropylene                    | 563-58-6   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Carbon Tetrachloride                     | 56-23-5    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,2-Dichloroethane                       | 07-06-2    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Trichloroethene                          | 7910-''    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Dibromomethane                           | 74-95-3    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1,2-Trichloroethane                    | 7910' 8    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,3-Dichloropropane                      | 142-28-9   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Tetrachloroethene                        | 127-18-4   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1,1,2-Tetrachloroethane                | 630-20''   | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| trans-1,4-Dichloro-2-butene              | 0-57-6     | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| cis-1,4-Dichloro-2-butene                | 1476-11-5  | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,1,2,2-Tetrachloroethane                | 79-34-5    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,2,3-Trichloropropane                   | 96-18-4    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Pentachloroethane                        | 76-01-7    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| 1,2-Dibromo-3-chloropropane              | 96-12-8    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |
| Hexachlorobutadiene                      | 87-68-3    | &                |  |                             |  | Jg/L |  | 8&            | 8&            | 8&            | 8&            | ""            |



## Analytical Results

Substrate: WATER

| Sub-Ma <sup>TM</sup> 5: WATER                  |            | Client sample ID |      | Client sampling date / time |      |      |      |       |  |  |
|------------------------------------------------|------------|------------------|------|-----------------------------|------|------|------|-------|--|--|
| Compound                                       | CAS Number | LOR              | Unit | MW06                        | MW07 | MW08 | MW09 | DUP05 |  |  |
| EP074F: Halogenated Aromatic Compounds         |            |                  |      |                             |      |      |      |       |  |  |
| Chlorobenzene                                  | 08-90-7    | &                | Jg/L | 8&                          | 7    | 8&   | 8&   | ***   |  |  |
| Bromobenzene                                   | 08-86-1    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 2-Chlorotoluene                                | 9&'' 9-8   | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 4-Chlorotoluene                                | 06-43-4    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 1,3-Dichlorobenzene                            | 541-73-1   | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 1,4-Dichlorobenzene                            | 06-46-7    | &                | Jg/L | 9                           | 15   | 8&   | 8&   | ***   |  |  |
| 1,2-Dichlorobenzene                            | 9&80'      | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 1,2,4-Trichlorobenzene                         | 120-82-1   | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| 1,2,3-Trichlorobenzene                         | 87-61-6    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| EP074G: Trihalomethanes                        |            |                  |      |                             |      |      |      |       |  |  |
| Chloroform                                     | 67-66-3    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| Bromodichloromethane                           | 75-27-4    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| Dibromochloromethane                           | 124-48-1   | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| Bromoform                                      | 75-25-2    | &                | Jg/L | 8&                          | 8&   | 8&   | 8&   | ***   |  |  |
| EP074H: Naphthalene                            |            |                  |      |                             |      |      |      |       |  |  |
| Naphthalene                                    | 91-20-3    | 7                | Jg/L | 20                          | 11   | <7   | <7   | ***   |  |  |
| EP075(SIM)A: Phenolic Compounds                |            |                  |      |                             |      |      |      |       |  |  |
| Phenol                                         | 08-95-2    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2-Chlorophenol                                 | 95-57-8    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2-Methylphenol                                 | 95-48-7    | *0               | Jg/L | 2.0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 3- & 4-Methylphenol                            | 1319-77-3  | 2.0              | Jg/L | <2.0                        | <2.0 | <2.0 | <2.0 | ***   |  |  |
| 2-Nitrophenol                                  | 88-75-5    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2,4-Dimethylphenol                             | 05-67-9    | *0               | Jg/L | 1.2                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2,4-Dichlorophenol                             | 120-83-2   | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2,6-Dichlorophenol                             | 87-65-0    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 4-Chloro-3-Methylphenol                        | 89&0-7     | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2,4,6-Trichlorophenol                          | 88-06-2    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| 2,4,5-Trichlorophenol                          | 9&9&''     | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Pentachlorophenol                              | 87-86-5    | 2.0              | Jg/L | <2.0                        | <2.0 | <2.0 | <2.0 | ***   |  |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons |            |                  |      |                             |      |      |      |       |  |  |
| Naphthalene                                    | 91-20-3    | *0               | Jg/L | 8.1                         | 5.8  | 1.8  | 8*0  | ***   |  |  |
| Acenaphthylene                                 | 208-96-8   | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Acenaphthene                                   | 83-32-9    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Fluorene                                       | 86-73-7    | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Phenanthrene                                   | 85-01-8    | *0               | Jg/L | 1.3                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Anthracene                                     | 120-12-7   | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Fluoranthene                                   | 20'''''' 0 | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |
| Pyrene                                         | 129'00'0   | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | ***   |  |  |



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                          |                  | Client sample ID |      | Client sampling date / time |      |      |      |                   |                   |                   |                   |               |  |
|------------------------------------------------------------|------------------|------------------|------|-----------------------------|------|------|------|-------------------|-------------------|-------------------|-------------------|---------------|--|
| Compound                                                   | CAS Number       | LOR              | Unit | MW06                        | MW07 | MW08 | MW09 | DUP05             |                   |                   |                   |               |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| Benz(a)anthracene                                          | 56-55-3          | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | EB0908932-010 |  |
| Chrysene                                                   | 218-01-9         | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| Benzo(b)fluoranthene                                       | 208-99-2         | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| Benzo(k)fluoranthene                                       | 207-08-9         | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| Benzo(a)pyrene                                             | 80-32-8          | 0*&              | Jg/L | 80*&                        | 80*& | 80*& | 80*& |                   |                   |                   |                   |               |  |
| Indeno(1,2,3-cd)pyrene                                     | 93-39&           | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| Dibenz(a,h)anthracene                                      | 53-70-3          | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| Benzo(g,h,i)perylene                                       | 91-24-2          | *0               | Jg/L | 8*0                         | 8*0  | 8*0  | 8*0  |                   |                   |                   |                   |               |  |
| EP080/071: Total Petroleum Hydrocarbons                    |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| C6 - C9 Fraction                                           | ""               | 20               | Jg/L | 40                          | 30   | 40   | <20  |                   |                   |                   |                   | 40            |  |
| C10 - C14 Fraction                                         | ""               | 80               | Jg/L | ""                          | 140  | ""   | ""   |                   |                   |                   |                   | ""            |  |
| C10 - C14 Fraction                                         | ""               | 80               | Jg/L | ""                          | ""   | 310  | 8&0  |                   |                   |                   |                   | 590           |  |
| C15 - C28 Fraction                                         | ""               | 00               | Jg/L | ""                          | 300  | ""   | ""   |                   |                   |                   |                   | ""            |  |
| C15 - C28 Fraction                                         | ""               | 00               | Jg/L | ""                          | ""   | 700  | 8 00 |                   |                   |                   |                   | 1100          |  |
| C29 - C36 Fraction                                         | ""               | 80               | Jg/L | ""                          | 8&0  | ""   | ""   |                   |                   |                   |                   | ""            |  |
| C29 - C36 Fraction                                         | ""               | 80               | Jg/L | ""                          | ""   | 240  | 8&0  |                   |                   |                   |                   | 120           |  |
| EP080: BTEX                                                |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| Benzene                                                    | 71-43-2          |                  | Jg/L | ""                          | ""   | ""   | ""   |                   |                   |                   |                   | 2             |  |
| Toluene                                                    | 08-88-3          | 2                | Jg/L | ""                          | ""   | ""   | ""   |                   |                   |                   |                   | 7             |  |
| Ethylbenzene                                               | 001-81-5         | 2                | Jg/L | ""                          | ""   | ""   | ""   |                   |                   |                   |                   | 2             |  |
| meta- & para-Xylene                                        | 08-38-3 106-42-3 | 2                | Jg/L | ""                          | ""   | ""   | ""   |                   |                   |                   |                   | 2             |  |
| ortho-Xylene                                               | 95-47-6          | 2                | Jg/L | ""                          | ""   | ""   | ""   |                   |                   |                   |                   | <2            |  |
| EP070S:TPH Surrogates - Speciation                         |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| 2-Fluorobiphenyl                                           | 321-60-8         | 0*               | K    | ""                          | 80.5 | ""   | ""   |                   |                   |                   |                   | ""            |  |
| 2-Bromonaphthalene                                         | 580-13-2         | 0*               | K    | ""                          | 62.1 | ""   | ""   |                   |                   |                   |                   | ""            |  |
| EP074S: VOC Surrogates                                     |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| 1,2-Dichloroethane-D4                                      | 1701-07-0        | 0*               | K    | 95.2                        | 89.5 | 93.0 | 98.9 |                   |                   |                   |                   | ""            |  |
| Toluene-D8                                                 | 2037-26-5        | 0*               | K    | 104                         | 97.2 | 99.9 | 100  |                   |                   |                   |                   | ""            |  |
| 4-Bromofluorobenzene                                       | "" 01001         | 0*               | K    | 97.1                        | 88.5 | 95.1 | 90.3 |                   |                   |                   |                   | ""            |  |
| EP075(SIM)S: Phenolic Compound Surrogates                  |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| Phenol-d6                                                  | 13127-88-3       | 0*               | K    | 42.5                        | 29.7 | 20.1 | 31.6 |                   |                   |                   |                   | ""            |  |
| 2-Chlorophenol-D4                                          | 93951-73-6       | 0*               | K    | 97.7                        | 87.0 | 49.9 | 87.0 |                   |                   |                   |                   | ""            |  |
| 2,4,6-Tribromophenol                                       | 118-791          | 0*               | K    | 118                         | 119  | 53.8 | 93.2 |                   |                   |                   |                   | ""            |  |
| EP075(SIM)T: PAH Surrogates                                |                  |                  |      |                             |      |      |      |                   |                   |                   |                   |               |  |
| 2-Fluorobiphenyl                                           | 321-60-8         | 0*               | K    | 90.8                        | 94.8 | 52.4 | 96.5 |                   |                   |                   |                   | ""            |  |
| Anthracene-d10                                             | 17191-06-8       | 0*               | K    | 104                         | 103  | 51.8 | 88.8 |                   |                   |                   |                   | ""            |  |
| 4-Terphenyl-d14                                            | 1718-51-0        | 0*               | K    | 103                         | 107  | 53.5 | 95.6 |                   |                   |                   |                   | ""            |  |





## Analytical Results

Sub-Matrix: WATER

| Compound                       | Client sample ID |     | Client sampling date / time |  | Unit |  | MW06              | MW07              | MW08              | MW09              | DUP05             |
|--------------------------------|------------------|-----|-----------------------------|--|------|--|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                | CAS Number       | LOR |                             |  |      |  | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 | 02-JUN-2009 15:00 |
| EP080S: TPH(V)/BTEX Surrogates |                  |     |                             |  |      |  |                   |                   |                   |                   |                   |
| 1,2-Dichloroethane-D4          | 170-0107-0       | 0*  |                             |  | K    |  | 99.7              | 93.0              | 96.2              | 103               | 95.6              |
| Toluene-D8                     | 2037-26-5        | 0*  |                             |  | K    |  | 108               | 100               | 103               | 103               | 100               |
| 4-Bromofluorobenzene           | ... 0100"        | 0*  |                             |  | K    |  | 106               | 96.1              | 103               | 98.1              | 98.7              |



## Analytical Results

Sub-Matrix: WATER

| Sub-Ma <sup>5</sup> : WATER               |                  | Client sample ID |       | Client sampling date / time |            |            |         |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------------|------------------|------------------|-------|-----------------------------|------------|------------|---------|--|--|--|--|--|--|--|--|--|--|
| Compound                                  | CAS Number       | LOR              | Unit  | MWA (CR13)                  | MWB (CR14) | MWC (CR15) | Drain   |  |  |  |  |  |  |  |  |  |  |
| EG020F: Dissolved Metals by ICP-MS        |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Arsenic                                   | 7440-38-2        | 0*00             | ~ g/L | 0.022                       | 0.002      | 0.002      | 0.001   |  |  |  |  |  |  |  |  |  |  |
| Cadmium                                   | 7440-43-9        | 0*000            | ~ g/L | 80*000                      | 80*000     | 0.0003     | 80*000  |  |  |  |  |  |  |  |  |  |  |
| Chromium                                  | 7440-47-3        | 0*00             | g/L   | 80*00                       | 80*00      | 8 0*00     | 8 0*00  |  |  |  |  |  |  |  |  |  |  |
| Copper                                    | 7440*80-8        | 0*00             | ~ g/L | 80*00                       | 0.002      | 0.001      | 0.003   |  |  |  |  |  |  |  |  |  |  |
| Lead                                      | 7439*92-1        | 0*00             | ~ g/L | 80*00                       | 80*00      | 0.002      | 80*00   |  |  |  |  |  |  |  |  |  |  |
| Nickel                                    | 7440*02-0        | 0*00             | ~ g/L | 0.001                       | 0.002      | 0.003      | 0.001   |  |  |  |  |  |  |  |  |  |  |
| Zinc                                      | 7440*0000        | 0*00&            | ~ g/L | 0.016                       | 0.015      | 0.070      | 0.173   |  |  |  |  |  |  |  |  |  |  |
| EG035F: Dissolved Mercury by FIMS         |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Mercury                                   | 7439*97-6        | 0*000            | ~ g/L | 80*000                      | 80*000     | 8 0*000    | 8 0*000 |  |  |  |  |  |  |  |  |  |  |
| EK055G: Ammonia as N by Discrete Analyser |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Ammonia as N                              | 7664-41-7        | 0*0              | ~ g/L | 9.79                        | ***        | ***        | 4.21    |  |  |  |  |  |  |  |  |  |  |
| EP074A: Monocyclic Aromatic Hydrocarbons  |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Benzene                                   | 71-43-2          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| Toluene                                   | 08-88-3          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| Ethylbenzene                              | 00* 1*           | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| meta- & para-Xylene                       | 08-38-3 106-42-3 | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| Styrene                                   | 00-42-5          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| ortho-Xylene                              | 95-47-6          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| Isopropylbenzene                          | 98-82-8          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| n-Propylbenzene                           | 03-65-1          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| 1,3,5-Trimethylbenzene                    | 08-67-8          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| sec-Butylbenzene                          | 135-98-8         | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| 1,2,4-Trimethylbenzene                    | 95-63-6          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| tert-Butylbenzene                         | 98-0****         | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| p-Isopropyltoluene                        | 99-87-6          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| n-Butylbenzene                            | 04-51-8          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| EP074B: Oxygenated Compounds              |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Vinyl Acetate                             | 08-08* *         | 80               | Jg/L  | 8&0                         | ***        | ***        | 8&0     |  |  |  |  |  |  |  |  |  |  |
| 2-Butanone (MEK)                          | 78-93-3          | 80               | Jg/L  | 8&0                         | ***        | ***        | 8&0     |  |  |  |  |  |  |  |  |  |  |
| 4-Methyl-2-pentanone (MIBK)               | 08-10*           | 80               | Jg/L  | 8&0                         | ***        | ***        | 8&0     |  |  |  |  |  |  |  |  |  |  |
| 2-Hexanone (MBK)                          | 891-78-6         | 80               | Jg/L  | 8&0                         | ***        | ***        | 8&0     |  |  |  |  |  |  |  |  |  |  |
| EP074C: Sulfonated Compounds              |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| Carbon disulfide                          | 75-15-0          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| EP074D: Fumigants                         |                  |                  |       |                             |            |            |         |  |  |  |  |  |  |  |  |  |  |
| 2,2-Dichloropropane                       | 894-20-7         | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| 1,2-Dichloropropane                       | 78-87-5          | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |
| cis-1,3-Dichloropropylene                 | 00* * 0 &        | &                | Jg/L  | 8&                          | ***        | ***        | 8&      |  |  |  |  |  |  |  |  |  |  |



## Analytical Results

Substrate: WATER

| Sub-Ma <sup>5</sup> : WATER             |            |     | Client sample ID |            | Client sampling date / time |            |       |  |
|-----------------------------------------|------------|-----|------------------|------------|-----------------------------|------------|-------|--|
| Compound                                | CAS Number | LOR | Unit             | MWA (CR13) | MWB (CR14)                  | MWC (CR15) | Drain |  |
| EP074D: Fumigants - Continued           |            |     |                  |            |                             |            |       |  |
| trans-1,3-Dichloropropylene             | 00'' 02-6  | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,2-Dibromoethane (EDB)                 | 0'' 93-4   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| EP074E: Halogenated Aliphatic Compounds |            |     |                  |            |                             |            |       |  |
| Dichlorodifluoromethane                 | 75-71-8    | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| Chloromethane                           | 74-87-3    | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| Vinyl chloride                          | 75-0''     | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| Bromomethane                            | 74-83-9    | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| Chloroethane                            | 75-00-3    | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| Trichlorofluoromethane                  | 75-69''    | 80  | Jg/L             | 8&0        | ''''                        | ''''       | 8&0   |  |
| 1,1-Dichloroethene                      | 75-35-4    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Iodomethane                             | 74-88-4    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| trans-1,2-Dichloroethene                | &'''' 0&   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1-Dichloroethane                      | 75-34-3    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| cis-1,2-Dichloroethene                  | &''& 9-2   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1,1-Trichloroethane                   | 71-55-6    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1-Dichloropropylene                   | 563-58-6   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Carbon Tetrachloride                    | 56-23-5    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,2-Dichloroethane                      | 07-06-2    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Trichloroethene                         | 79'0''     | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Dibromomethane                          | 74-95-3    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1,2-Trichloroethane                   | 79'00&     | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,3-Dichloropropane                     | 142-28-9   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Tetrachloroethene                       | 127-18-4   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1,1,2-Tetrachloroethane               | 630-20''   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| trans-1,4-Dichloro-2-butene             | 0-57-6     | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| cis-1,4-Dichloro-2-butene               | 1476-11-5  | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,1,2,2-Tetrachloroethane               | 79-34-5    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,2,3-Trichloropropane                  | 96-18-4    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Pentachloroethane                       | 76-01-7    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,2-Dibromo-3-chloropropane             | 96-12-8    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Hexachlorobutadiene                     | 87-68-3    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| EP074F: Halogenated Aromatic Compounds  |            |     |                  |            |                             |            |       |  |
| Chlorobenzene                           | 08-90-7    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| Bromobenzene                            | 08-86-1    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 2-Chlorotoluene                         | 9&'' 9-8   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 4-Chlorotoluene                         | 06-43-4    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,3-Dichlorobenzene                     | 541-73-1   | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |
| 1,4-Dichlorobenzene                     | 06-46-7    | &   | Jg/L             | 8&         | ''''                        | ''''       | 8&    |  |



## Analytical Results

Sub-Matrix: WATER

|                                                    |            | Client sample ID |  | Client sampling date / time |  | Unit |      | MWA (CR13)    | MWB (CR14)    | MWC (CR15)    | Drain         |      |
|----------------------------------------------------|------------|------------------|--|-----------------------------|--|------|------|---------------|---------------|---------------|---------------|------|
| Compound                                           | CAS Number | LOR              |  |                             |  |      |      | EB0908932-011 | EB0908932-012 | EB0908932-013 | EB0908932-014 | ---- |
| EP074F: Halogenated Aromatic Compounds - Continued |            |                  |  |                             |  |      |      |               |               |               |               |      |
| 1,2-Dichlorobenzene                                | 98'80'     | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| 1,2,4-Trichlorobenzene                             | 120-82-1   | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| 1,2,3-Trichlorobenzene                             | 87-61-6    | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| EP074G: Trihalomethanes                            |            |                  |  |                             |  |      |      |               |               |               |               |      |
| Chloroform                                         | 67-66-3    | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| Bromodichloromethane                               | 75-27-4    | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| Dibromochloromethane                               | 124-48-1   | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| Bromoform                                          | 75-25-2    | &                |  | Jg/L                        |  |      | 8&   |               |               |               | 8&            | ---  |
| EP074H: Naphthalene                                |            |                  |  |                             |  |      |      |               |               |               |               |      |
| Naphthalene                                        | 91-20-3    | 7                |  | Jg/L                        |  |      | <7   |               |               |               | <7            | ---  |
| EP075(SIM)A: Phenolic Compounds                    |            |                  |  |                             |  |      |      |               |               |               |               |      |
| Phenol                                             | 08-95-2    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2-Chlorophenol                                     | 95-57-8    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2-Methylphenol                                     | 95-48-7    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 3- & 4-Methylphenol                                | 1319-77-3  | 2.0              |  | Jg/L                        |  |      | <2.0 |               |               |               | <2.0          | ---  |
| 2-Nitrophenol                                      | 88-75-5    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2,4-Dimethylphenol                                 | 05-67-9    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2,4-Dichlorophenol                                 | 120-83-2   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2,6-Dichlorophenol                                 | 87-65-0    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 4-Chloro-3-Methylphenol                            | 89'80-7    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2,4,6-Trichlorophenol                              | 88-06-2    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| 2,4,5-Trichlorophenol                              | 98'98'     | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Pentachlorophenol                                  | 87-86-5    | 2.0              |  | Jg/L                        |  |      | <2.0 |               |               |               | <2.0          | ---  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons     |            |                  |  |                             |  |      |      |               |               |               |               |      |
| Naphthalene                                        | 91-20-3    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Acenaphthylene                                     | 208-96-8   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Acenaphthene                                       | 83-32-9    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Fluorene                                           | 86-73-7    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Phenanthrene                                       | 85-01-8    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Anthracene                                         | 120-12-7   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Fluoranthene                                       | 20'00' 0   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Pyrene                                             | 129'00'0   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Benzo(a)anthracene                                 | 56-55-3    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Chrysene                                           | 218-0' 9   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Benzo(b)fluoranthene                               | 208'99-2   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Benzo(k)fluoranthene                               | 207-08-9   | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |
| Benzo(a)pyrene                                     | 80-32-8    | 0'&              |  | Jg/L                        |  |      | 80*& |               |               |               | 80*&          | ---  |
| Indeno(1,2,3-cd)pyrene                             | 93-39'&    | *0               |  | Jg/L                        |  |      | 8*0  |               |               |               | 8*0           | ---  |



## Analytical Results

Sub-Ma 5: WATER

| Sub-Ma <sup>***5</sup> : WATER                             |  | Client sample ID |  | Client sampling date / time |  | Unit |  | MWA (CR13)    |  | MWB (CR14)    |  | MWC (CR15)    |  | Drain         |  | ***  |  |
|------------------------------------------------------------|--|------------------|--|-----------------------------|--|------|--|---------------|--|---------------|--|---------------|--|---------------|--|------|--|
| Compound                                                   |  | CAS Number       |  | LOR                         |  | Unit |  | EB0908932-011 |  | EB0908932-012 |  | EB0908932-013 |  | EB0908932-014 |  | **** |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| Dibenz(a,h)anthracene                                      |  | 53-70-3          |  | *0                          |  | Jg/L |  | 8 * 0         |  | ***           |  | ***           |  | 8 * 0         |  | ***  |  |
| Benzo(g,h,i)perylene                                       |  | 91-24-2          |  | *0                          |  | Jg/L |  | 8 * 0         |  | ***           |  | ***           |  | 8 * 0         |  | ***  |  |
| EP080/071: Total Petroleum Hydrocarbons                    |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| C6 - C9 Fraction                                           |  | ***              |  | 20                          |  | Jg/L |  | <20           |  | <20           |  | <20           |  | <20           |  | ***  |  |
| C10 - C14 Fraction                                         |  | ***              |  | 80                          |  | Jg/L |  | 880           |  | 880           |  | 880           |  | 880           |  | ***  |  |
| C15 - C28 Fraction                                         |  | ***              |  | 00                          |  | Jg/L |  | 400           |  | 8 00          |  | 8 00          |  | 8 00          |  | ***  |  |
| C29 - C36 Fraction                                         |  | ***              |  | 80                          |  | Jg/L |  | 110           |  | 880           |  | 90            |  | 880           |  | ***  |  |
| EP080: BTEX                                                |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| Benzene                                                    |  | 71-43-2          |  |                             |  | Jg/L |  | ***           |  | 8             |  | 8             |  | ***           |  | ***  |  |
| Toluene                                                    |  | 08-88-3          |  | 2                           |  | Jg/L |  | ***           |  | <2            |  | <2            |  | ***           |  | ***  |  |
| Ethylbenzene                                               |  | 00' ''           |  | 2                           |  | Jg/L |  | ***           |  | <2            |  | <2            |  | ***           |  | ***  |  |
| meta- & para-Xylene                                        |  | 08-38-3 106-42-3 |  | 2                           |  | Jg/L |  | ***           |  | <2            |  | <2            |  | ***           |  | ***  |  |
| ortho-Xylene                                               |  | 95-47-6          |  | 2                           |  | Jg/L |  | ***           |  | <2            |  | <2            |  | ***           |  | ***  |  |
| EP074S: VOC Surrogates                                     |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| 1,2-Dichloroethane-D4                                      |  | 170' 0' 07-0     |  | 0*                          |  | K    |  | 99.4          |  | ***           |  | ***           |  | 106           |  | ***  |  |
| Toluene-D8                                                 |  | 2037-26-5        |  | 0*                          |  | K    |  | 95.5          |  | ***           |  | ***           |  | 101           |  | ***  |  |
| 4-Bromofluorobenzene                                       |  | '' 0' 00''       |  | 0*                          |  | K    |  | 89.1          |  | ***           |  | ***           |  | 91.8          |  | ***  |  |
| EP075(SIM)S: Phenolic Compound Surrogates                  |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| Phenol-d6                                                  |  | 13127-88-3       |  | 0*                          |  | K    |  | 34.8          |  | ***           |  | ***           |  | 33.8          |  | ***  |  |
| 2-Chlorophenol-D4                                          |  | 93951-73-6       |  | 0*                          |  | K    |  | 89.8          |  | ***           |  | ***           |  | 85.9          |  | ***  |  |
| 2,4,6-Tribromophenol                                       |  | 118-79'''        |  | 0*                          |  | K    |  | 101           |  | ***           |  | ***           |  | 90.0          |  | ***  |  |
| EP075(SIM)T: PAH Surrogates                                |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| 2-Fluorobiphenyl                                           |  | 321-60-8         |  | 0*                          |  | K    |  | 96.4          |  | ***           |  | ***           |  | 92.8          |  | ***  |  |
| Anthracene-d10                                             |  | 1719' 06-8       |  | 0*                          |  | K    |  | 89.4          |  | ***           |  | ***           |  | 88.3          |  | ***  |  |
| 4-Terphenyl-d14                                            |  | 1718-51-0        |  | 0*                          |  | K    |  | 96.5          |  | ***           |  | ***           |  | 95.5          |  | ***  |  |
| EP080S: TPH(V)/BTEX Surrogates                             |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |      |  |
| 1,2-Dichloroethane-D4                                      |  | 170' 0' 07-0     |  | 0*                          |  | K    |  | 103           |  | 110           |  | 99.5          |  | 110           |  | ***  |  |
| Toluene-D8                                                 |  | 2037-26-5        |  | 0*                          |  | K    |  | 98.1          |  | 104           |  | 96.2          |  | 104           |  | ***  |  |
| 4-Bromofluorobenzene                                       |  | ''' 0' 00''      |  | 0*                          |  | K    |  | 96.7          |  | 103           |  | 93.3          |  | 99.8          |  | ***  |  |



### Surrogate Control Limits

| Sub-Matrix: WATER                                |            | Recovery Limits (%) |      |
|--------------------------------------------------|------------|---------------------|------|
| Compound                                         | CAS Number | Low                 | High |
| <b>EP070S:TPH Surrogates - Speciation</b>        |            |                     |      |
| 2-Fluorobiphenyl                                 | 321-60-8   | ~0                  | ~0   |
| 2-Bromonaphthalene                               | 580-13-2   | ~0                  | ~0   |
| <b>EP074S: VOC Surrogates</b>                    |            |                     |      |
| 1,2-Dichloroethane-D4                            | 1700-07-0  | 80                  | 120  |
| Toluene-D8                                       | 2037-26-5  | 88                  | 0    |
| 4-Bromofluorobenzene                             | "" 000     | 86                  | &    |
| <b>EP075(SIM)S: Phenolic Compound Surrogates</b> |            |                     |      |
| Phenol-d6                                        | 13127-88-3 | 0                   | 9    |
| 2-Chlorophenol-D4                                | 93951-73-6 | 23                  | 134  |
| 2,4,6-Tribromophenol                             | 118-79     | 0                   | 123  |
| <b>EP075(SIM)T: PAH Surrogates</b>               |            |                     |      |
| 2-Fluorobiphenyl                                 | 321-60-8   | 43                  | ~    |
| Anthracene-d10                                   | 1719-06-8  | 27                  | 133  |
| 4-Terphenyl-d14                                  | 1718-51-0  | 33                  | .    |
| <b>EP080S: TPH(V)/BTX Surrogates</b>             |            |                     |      |
| 1,2-Dichloroethane-D4                            | 1700-07-0  | 80                  | 120  |
| Toluene-D8                                       | 2037-26-5  | 88                  | 0    |
| 4-Bromofluorobenzene                             | "" 000     | 86                  | &    |



Environmental Division

**QUALITY CONTROL REPORT**

|              |                                 |                                                    |
|--------------|---------------------------------|----------------------------------------------------|
| Work Order   | : <b>EB0908932</b>              | : * of * 5                                         |
| 7 < >        | : <b>SINCLAIR KNIGHT MERZ</b>   | : ?>@>A, > ; < B @>io> C' =b> ,                    |
| 7 o> ;D'     | : EF GHI KIHIF                  | : Tim Kilmister                                    |
| Address      | : P O BOX 246                   | : 32 Shand Street Stafford QLD Australia 4053      |
|              | SPRING HILL QLD, AUSTRALIA 4004 |                                                    |
| E-mail       | : okanas@skm.com.au             | : Services.Brisbane@alsenviro.com                  |
| Telephone    | : +61 07 3244 7100              | : +61-7-3243 7222                                  |
| Facsimile    | : +61 07 3244 7306              | : +61-7-3243 7218                                  |
| Project      | : +++++                         | : NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Site         | : Cronulla Park                 |                                                    |
| C-O-C number | : +++++                         | : 03-JUN-2009                                      |
| Sampler      | : +++++                         | : 12-JUN-2009                                      |
| Order number | : +++++                         |                                                    |
| Quote number | : **@!!"@!;                     | : 14                                               |
|              |                                 | : 14                                               |

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 & released.

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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**ACCREDITATION**

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| Signatories     | Position                 | Accreditation Category |
|-----------------|--------------------------|------------------------|
| Matthew Goodwin | Senior Organic Chemist   | Organics               |
| Stephen Hislop  | Senior Inorganic Chemist | Inorganics             |
| Xingbin Lin     | Instrument Chemist       | Organics               |

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Work Order : EB0908932  
Client : SINCLAIR KNIGHT MERZ  
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13-054

### 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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.  
LOR = Limit of reporting  
RPD = Relative Percentage Difference  
# = Indicates failed QC

PROJ DL RELEASE - EHP





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Work Order : EB0908932  
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13-054

### 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 'G' -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%.

| Sub-Matrix: <b>WATER</b>                             |                  |                                                      | Laboratory Duplicate (DUP) Report |                    |           |                 |                  |          |                     |      |          |
|------------------------------------------------------|------------------|------------------------------------------------------|-----------------------------------|--------------------|-----------|-----------------|------------------|----------|---------------------|------|----------|
| Laboratory sample ID                                 | Client sample ID | Method: Compound                                     | CAS Number                        | LOR                | Unit      | Original Result | Duplicate Result | RPD (%)  | Recovery Limits (%) |      |          |
| EG020F: Dissolved Metals by ICP-MS (QC Lot: 1002635) |                  |                                                      |                                   |                    |           |                 |                  |          |                     |      |          |
| EB0908954-001                                        | Anonymous        | EG020A-F: Cadmium                                    | 7440-43-9                         | I.II.I4            | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Arsenic                                    | 7440-38-2                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Chromium                                   | 7440-47-3                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Copper                                     | 7440-50-8                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Lead                                       | 7439-92-1                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Nickel                                     | 7440-02-0                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Zinc                                       | 7440-66-6                         | I.I.I              | mg/L      | II.I.I          | II.I.I           | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Cadmium                                    | 7440-43-9                         | I.I.I4             | mg/L      | I.I.I4          | I.I.I4           | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Arsenic                                    | 7440-38-2                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Chromium                                   | 7440-47-3                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EB0908954-010                                        | Anonymous        | EG020A-F: Copper                                     | 7440-50-8                         | I.I.I4             | mg/L      | 0.025           | I.I.I            | # 113    | 0% - 20%            |      |          |
|                                                      |                  | EG020A-F: Lead                                       | 7439-92-1                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Nickel                                     | 7440-02-0                         | I.I.I4             | mg/L      | 0.006           | 0.006            | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Zinc                                       | 7440-66-6                         | I.I.I              | mg/L      | 0.028           | 0.036            | 25.1     | No Limit            |      |          |
|                                                      |                  |                                                      |                                   |                    |           |                 |                  |          |                     |      |          |
|                                                      |                  | EG020F: Dissolved Metals by ICP-MS (QC Lot: 1003848) |                                   |                    |           |                 |                  |          |                     |      |          |
|                                                      |                  | EB0908929-014                                        | Anonymous                         | EG020A-F: Cadmium  | 7440-43-9 | I.I.I4          | mg/L             | II.II.I4 | II.II.I4            | I.I. | No Limit |
|                                                      |                  |                                                      |                                   | EG020A-F: Arsenic  | 7440-38-2 | I.I.I4          | mg/L             | II.II.I4 | II.II.I4            | I.I. | No Limit |
|                                                      |                  |                                                      |                                   | EG020A-F: Chromium | 7440-47-3 | I.I.I4          | mg/L             | II.II.I4 | II.II.I4            | I.I. | No Limit |
|                                                      |                  |                                                      |                                   | EG020A-F: Copper   | 7440-50-8 | I.I.I4          | mg/L             | 0.002    | I.I.I4              | I.I. | No Limit |
| EG020A-F: Lead                                       | 7439-92-1        |                                                      |                                   | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EG020A-F: Nickel                                     | 7440-02-0        |                                                      |                                   | I.I.I4             | mg/L      | II.II.I4        | 0.002            | I.I.     | No Limit            |      |          |
| EG020A-F: Zinc                                       | 7440-66-6        |                                                      |                                   | I.I.I              | mg/L      | II.I.I          | II.I.I           | I.I.     | No Limit            |      |          |
| EG020A-F: Cadmium                                    | 7440-43-9        |                                                      |                                   | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EG020A-F: Arsenic                                    | 7440-38-2        |                                                      |                                   | I.I.I4             | mg/L      | I.I47           | I.I45            | 6.2      | 0% - 50%            |      |          |
| EG020A-F: Chromium                                   | 7440-47-3        |                                                      |                                   | I.I.I4             | mg/L      | 0.004           | 0.004            | I.I.     | No Limit            |      |          |
| EB0908932-008                                        | :G17             | EG020A-F: Copper                                     | 7440-50-8                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Lead                                       | 7439-92-1                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Nickel                                     | 7440-02-0                         | I.I.I4             | mg/L      | II.II.I4        | 0.002            | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Zinc                                       | 7440-66-6                         | I.I.I              | mg/L      | II.I.I          | II.I.I           | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Cadmium                                    | 7440-43-9                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Arsenic                                    | 7440-38-2                         | I.I.I4             | mg/L      | I.I47           | I.I45            | 6.2      | 0% - 50%            |      |          |
|                                                      |                  | EG020A-F: Chromium                                   | 7440-47-3                         | I.I.I4             | mg/L      | 0.004           | 0.004            | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Copper                                     | 7440-50-8                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Lead                                       | 7439-92-1                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
|                                                      |                  | EG020A-F: Nickel                                     | 7440-02-0                         | I.I.I4             | mg/L      | I.I45           | I.I47            | I.I.     | 0% - 50%            |      |          |
| EG020A-F: Zinc                                       |                  |                                                      |                                   |                    |           |                 |                  |          |                     |      |          |
| EG035F: Dissolved Mercury by FIMS (QC Lot: 1002634)  |                  |                                                      |                                   |                    |           |                 |                  |          |                     |      |          |
| EB0908954-001                                        | Anonymous        | EG035F: Mercury                                      | 7439-97-6                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EB0908954-010                                        | Anonymous        | EG035F: Mercury                                      | 7439-97-6                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EG035F: Dissolved Mercury by FIMS (QC Lot: 1003846)  |                  |                                                      |                                   |                    |           |                 |                  |          |                     |      |          |
| EB0908926-001                                        | Anonymous        | EG035F: Mercury                                      | 7439-97-6                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |
| EB0908928-014                                        | Anonymous        | EG035F: Mercury                                      | 7439-97-6                         | I.I.I4             | mg/L      | II.II.I4        | II.II.I4         | I.I.     | No Limit            |      |          |

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Project : ++++

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| Sub-Matrix: WATER                                           |                  |                               | Laboratory Duplicate (DUP) Report |         |      |                 |                  |         |                     |
|-------------------------------------------------------------|------------------|-------------------------------|-----------------------------------|---------|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                        | Client sample ID | Method: Compound              | CAS Number                        | LOR     | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EG035F: Dissolved Mercury by FIMS (QC Lot: 1003849)         |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-002                                               | MW02             | EG035F: Mercury               | 7439-97-6                         | I.II.I4 | mg/L | II.II.I4        | II.II.I4         | I.I     | No Limit            |
| EB0908932-013                                               | MWC (CR15)       | EG035F: Mercury               | 7439-97-6                         | I.II.I4 | mg/L | II.II.I4        | II.II.I4         | I.I     | No Limit            |
| EK055G: Ammonia as N by Discrete Analyser (QC Lot: 1002596) |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908818-001                                               | Anonymous        | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | 15.6            | 47.7             | 18.6    | 0% - 20%            |
| EB0908818-011                                               | Anonymous        | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | 0.43            | 0.43             | I.I     | 0% - 20%            |
| EK055G: Ammonia as N by Discrete Analyser (QC Lot: 1003437) |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908859-001                                               | Anonymous        | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | 1.21            | 1.16             | 4.2     | 0% - 20%            |
| EB0908901-002                                               | Anonymous        | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | 1.7"            | 1.5)             | 10.6    | 0% - 20%            |
| EK055G: Ammonia as N by Discrete Analyser (QC Lot: 1003439) |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                               | :Gi"             | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | II.I4           | 1.17             | 4))     | No Limit            |
| EB0909039-003                                               | Anonymous        | EK055G: Ammonia as N          | 7664-41-7                         | I.I4    | mg/L | II.I4           | II.I4            | I.I     | No Limit            |
| EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 1002578)  |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                               | :Gi"             | EP074: Benzene                | 71-43-2                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Toluene                | 417+77+"                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Ethylbenzene           | 100-41-4                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: meta- & para-Xylene    | 108-38-3                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  |                               | 106-42-3                          |         |      |                 |                  |         |                     |
|                                                             |                  | EP074: Styrene                | 100-42-5                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: ortho-Xylene           | 95-47-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Isopropylbenzene       | 98-82-8                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: n-Propylbenzene        | 103-65-1                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: 1,3,5-Trimethylbenzene | 108-67-8                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: sec-Butylbenzene       | 417+77+                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: 1,2,4-Trimethylbenzene | 95-63-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: tert-Butylbenzene      | 98-06-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: p-Isopropyltoluene     | 99-87-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: n-Butylbenzene         | 104-51-8                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Benzene                | 71-43-2                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Toluene                | 417+77+"                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Ethylbenzene           | 100-41-4                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: meta- & para-Xylene    | 108-38-3                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  |                               | 106-42-3                          |         |      |                 |                  |         |                     |
| EB0908953-004                                               | Anonymous        | EP074: Styrene                | 100-42-5                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: ortho-Xylene           | 95-47-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: Isopropylbenzene       | 98-82-8                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: n-Propylbenzene        | 103-65-1                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: 1,3,5-Trimethylbenzene | 108-67-8                          | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: sec-Butylbenzene       | 417+77+                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |
|                                                             |                  | EP074: 1,2,4-Trimethylbenzene | 95-63-6                           | )       | NC@" | I)              | I)               | I.I     | No Limit            |

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| Sub-Matrix: WATER                                                      |                  |                                    | Laboratory Duplicate (DUP) Report |     |      |                 |                  |         |                     |
|------------------------------------------------------------------------|------------------|------------------------------------|-----------------------------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                   | Client sample ID | Method: Compound                   | CAS Number                        | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 1002578) - continued |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EB0908953-004                                                          | Anonymous        | EP074: tert-Butylbenzene           | 98-06-6                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: p-Isopropyltoluene          | 99-87-6                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: n-Butylbenzene              | 104-51-8                          | )   | NC@" | )               | )                | !:      | No Limit            |
| EP074B: Oxygenated Compounds (QC Lot: 1002578)                         |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EB0908932-003                                                          | :Cl"             | EP074: Pinyl Acetate               | 108-05-4                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: 2-Butanone (MEK)            | 57+,"+"                           | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: 4-Methyl-2-pentanone (MIBK) | 417+41+4                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: 2-Hexanone (MBK)            | 591-78-6                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: Pinyl Acetate               | 108-05-4                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: 2-Butanone (MEK)            | 57+,"+"                           | )!  | NC@" | )!              | )!               | !:      | No Limit            |
| EB0908953-004                                                          | Anonymous        | EP074: 4-Methyl-2-pentanone (MIBK) | 417+41+4                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  | EP074: 2-Hexanone (MBK)            | 591-78-6                          | )!  | NC@" | )!              | )!               | !:      | No Limit            |
|                                                                        |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EP074C: Sulfonated Compounds (QC Lot: 1002578)                         |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EB0908932-003                                                          | :Cl"             | EP074: Carbon disulfide            | 5)+4)+!                           | )   | NC@" | )               | )                | !:      | No Limit            |
| EB0908953-004                                                          | Anonymous        | EP074: Carbon disulfide            | 5)+4)+!                           | )   | NC@" | )               | )                | !:      | No Limit            |
| EP074D: Fumigants (QC Lot: 1002578)                                    |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EB0908932-003                                                          | :Cl"             | EP074: 2,2-Dichloropropane         | 594-20-7                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,2-Dichloropropane         | 57+75+)                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: cis-1,3-Dichloropropylene   | 10061-01-5                        | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: trans-1,3-Dichloropropylene | 10061-02-6                        | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,2-Dibromoethane (EDB)     | 106-93-4                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 2,2-Dichloropropane         | 594-20-7                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,2-Dichloropropane         | 57+75+)                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: cis-1,3-Dichloropropylene   | 10061-01-5                        | )   | NC@" | )               | )                | !:      | No Limit            |
| EB0908953-004                                                          | Anonymous        | EP074: trans-1,3-Dichloropropylene | 10061-02-6                        | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,2-Dibromoethane (EDB)     | 106-93-4                          | )   | NC@" | )               | )                | !:      | No Limit            |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1002578)              |                  |                                    |                                   |     |      |                 |                  |         |                     |
| EB0908932-003                                                          | :Cl"             | EP074: 1,1-Dichloroethene          | 75-35-4                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: Iodomethane                 | 74-88-4                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: trans-1,2-Dichloroethene    | 156-60-5                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,1-Dichloroethane          | 75-34-3                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: cis-1,2-Dichloroethene      | 156-59-2                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,1,1-Trichloroethane       | 71-55-6                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,1-Dichloropropylene       | 563-58-6                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: Carbon Tetrachloride        | 56-23-5                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,2-Dichloroethane          | 107-06-2                          | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: Trichloroethene             | 79-01-6                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: Dibromomethane              | 74-95-3                           | )   | NC@" | )               | )                | !:      | No Limit            |
|                                                                        |                  | EP074: 1,1,2-Trichloroethane       | 5:+!)+)                           | )   | NC@" | )               | )                | !:      | No Limit            |

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Sub-Matrix: WATER

| Sub-Matrix: WATER                                                     |                  | Laboratory Duplicate (DUP) Report  |            |     |      |                 |                  |         |                     |
|-----------------------------------------------------------------------|------------------|------------------------------------|------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                  | Client sample ID | Method: Compound                   | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1002578) - continued |                  |                                    |            |     |      |                 |                  |         |                     |
| EB0908932-003                                                         | :GI"             | EP074: 1.3-Dichloropropane         | 142-28-9   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Tetrachloroethene           | 127-18-4   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.1.2-Tetrachloroethane   | 630-20-6   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: trans-1.4-Dichloro-2-butene | 110-57-6   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: cis-1.4-Dichloro-2-butene   | 1476-11-5  | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.2.2-Tetrachloroethane   | 79-34-5    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.2.3-Trichloropropane      | 96-18-4    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Pentachloroethane           | 76-01-7    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.2-Dibromo-3-chloropropane | 96-12-8    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Hexachlorobutadiene         | 87-68-3    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Dichlorodifluoromethane     | 5)+54+7    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Chloromethane               | 74-87-3    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Vinyl chloride              | 75-01-4    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Bromomethane                | 74-83-9    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Chloroethane                | 5)+!!+"    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Trichlorofluoromethane      | 75-69-4    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1-Dichloroethene          | 75-35-4    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Iodomethane                 | 74-88-4    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: trans-1.2-Dichloroethene    | 156-60-5   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1-Dichloroethane          | 75-34-3    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: cis-1.2-Dichloroethene      | 156-59-2   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.1-Trichloroethane       | 71-55-6    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1-Dichloropropylene       | 563-58-6   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Carbon Tetrachloride        | 56-23-5    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.2-Dichloroethane          | 107-06-2   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Trichloroethene             | 79-01-6    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Dibromomethane              | 74-95-3    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.2-Trichloroethane       | 5,)+!!+)   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.3-Dichloropropane         | 142-28-9   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Tetrachloroethene           | 127-18-4   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.1.2-Tetrachloroethane   | 630-20-6   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: trans-1.4-Dichloro-2-butene | 110-57-6   | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: cis-1.4-Dichloro-2-butene   | 1476-11-5  | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.1.2.2-Tetrachloroethane   | 79-34-5    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.2.3-Trichloropropane      | 96-18-4    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Pentachloroethane           | 76-01-7    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: 1.2-Dibromo-3-chloropropane | 96-12-8    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Hexachlorobutadiene         | 87-68-3    | )   | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Dichlorodifluoromethane     | 5)+54+7    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
|                                                                       |                  | EP074: Chloromethane               | 74-87-3    | )!  | NC@" | I)              | I)               | !)      | No Limit            |
| EB0908953-004                                                         | Anonymous        |                                    |            |     |      |                 |                  |         |                     |

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| Sub-Matrix: WATER                                                     |                  |                               | Laboratory Duplicate (DUP) Report |         |      |                 |                  |         |                     |
|-----------------------------------------------------------------------|------------------|-------------------------------|-----------------------------------|---------|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                  | Client sample ID | Method: Compound              | CAS Number                        | LOR     | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1002578) - continued |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908953-004                                                         | Anonymous        | EP074: Pinyll chloride        | 75-01-4                           | )!      | NC@" | )!              | )!               | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromomethane           | 74-83-9                           | )!      | NC@" | )!              | )!               | !;!     | No Limit            |
|                                                                       |                  | EP074: Chloroethane           | 5)!+!"                            | )!      | NC@" | )!              | )!               | !;!     | No Limit            |
|                                                                       |                  | EP074: Trichlorofluoromethane | 75-69-4                           | )!      | NC@" | )!              | )!               | !;!     | No Limit            |
| EP074F: Halogenated Aromatic Compounds (QC Lot: 1002578)              |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                                         | :G!"             | EP074: Chlorobenzene          | 417+;!+5                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromobenzene           | 108-86-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 2-Chlorotoluene        | 95-49-8                           | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 4-Chlorotoluene        | 106-43-4                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,3-Dichlorobenzene    | 541-73-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,4-Dichlorobenzene    | 106-46-7                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,2-Dichlorobenzene    | :+)!+4                            | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,2,4-Trichlorobenzene | 120-82-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,2,3-Trichlorobenzene | 87-61-6                           | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Chlorobenzene          | 417+;!+5                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromobenzene           | 108-86-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 2-Chlorotoluene        | 95-49-8                           | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 4-Chlorotoluene        | 106-43-4                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,3-Dichlorobenzene    | 541-73-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,4-Dichlorobenzene    | 106-46-7                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: 1,2-Dichlorobenzene    | :+)!+4                            | )       | NC@" | )               | )                | !;!     | No Limit            |
| EP074: 1,2,4-Trichlorobenzene                                         | 120-82-1         | )                             | NC@"                              | )       | )    | !;!             | No Limit         |         |                     |
| EP074: 1,2,3-Trichlorobenzene                                         | 87-61-6          | )                             | NC@"                              | )       | )    | !;!             | No Limit         |         |                     |
| EP074G: Trihalomethanes (QC Lot: 1002578)                             |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                                         | :G!"             | EP074: Chloroform             | 67-66-3                           | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromodichloromethane   | 75-27-4                           | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Dibromochloromethane   | 124-48-1                          | )       | NC@" | )               | )                | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromoform              | 75-25-2                           | )       | NC@" | )               | )                | !;!     | No Limit            |
| EB0908953-004                                                         | Anonymous        | EP074: Chloroform             | 67-66-3                           | )       | NC@" | "!              | "4               | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromodichloromethane   | 75-27-4                           | )       | NC@" | 45              | 45               | !;!     | No Limit            |
|                                                                       |                  | EP074: Dibromochloromethane   | 124-48-1                          | )       | NC@" | 5               | 5                | !;!     | No Limit            |
|                                                                       |                  | EP074: Bromoform              | 75-25-2                           | )       | NC@" | )               | )                | !;!     | No Limit            |
| EP074H: Naphthalene (QC Lot: 1002578)                                 |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                                         | :G!"             | EP074: Naphthalene            | 91-20-3                           | 5       | NC@" | 15              | 15               | !;!     | No Limit            |
|                                                                       |                  | EB0908953-004                 | Anonymous                         | 91-20-3 | 5    | NC@"            | 15               | 15      | !;!                 |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1002577)             |                  |                               |                                   |         |      |                 |                  |         |                     |
| EB0908932-003                                                         | :G!"             | EP080: C6 - C9 Fraction       | +++ +                             | 20      | NC@" | <20             | <20              | !;!     | No Limit            |
| EB0908953-004                                                         | Anonymous        | EP080: C6 - C9 Fraction       | +++ +                             | 20      | NC@" | "!              | "!               | !;!     | No Limit            |
| EP080: BTEX (QC Lot: 1002577)                                         |                  |                               |                                   |         |      |                 |                  |         |                     |

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| Sub-Matrix: <b>WATER</b>                  |                  |                            | Laboratory Duplicate (DUP) Report |     |      |                 |                  |         |                     |
|-------------------------------------------|------------------|----------------------------|-----------------------------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                      | Client sample ID | Method: Compound           | CAS Number                        | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP080: BTEX (QC Lot: 1002577) - continued |                  |                            |                                   |     |      |                 |                  |         |                     |
| EB0908932-003                             | :Cl"             | EP080: Benzene             | 71-43-2                           | 4   | NC@" | 14              | 14               | !:      | No Limit            |
|                                           |                  | EP080: Toluene             | 417+77+"                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  | EP080: Ethylbenzene        | 100-41-4                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  | EP080: meta- & para-Xylene | 108-38-3                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  |                            | 106-42-3                          |     |      |                 |                  |         |                     |
| EB0908953-004                             | Anonymous        | EP080: ortho-Xylene        | 95-47-6                           | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  | EP080: Benzene             | 71-43-2                           | 4   | NC@" | 14              | 14               | !:      | No Limit            |
|                                           |                  | EP080: Toluene             | 417+77+"                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  | EP080: Ethylbenzene        | 100-41-4                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  | EP080: meta- & para-Xylene | 108-38-3                          | 2   | NC@" | <2              | <2               | !:      | No Limit            |
|                                           |                  |                            | 106-42-3                          |     |      |                 |                  |         |                     |
|                                           |                  | EP080: ortho-Xylene        | 95-47-6                           | 2   | NC@" | <2              | <2               | !:      | No Limit            |

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### Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                                 |            | Method Blank (MB) Report |      |                    |               | Laboratory Control Spike (LCS) Report |      |      |  |
|-------------------------------------------------------------------|------------|--------------------------|------|--------------------|---------------|---------------------------------------|------|------|--|
|                                                                   |            | Spike Concentration      |      | Spike Recovery (%) |               | Recovery Limits (%)                   |      |      |  |
| Method: Compound                                                  | CAS Number | LOR                      | Unit | Result             | Concentration | Recovery (%)                          | Low  | High |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1002635)               |            |                          |      |                    |               |                                       |      |      |  |
| EG020A-F: Arsenic                                                 | 7440-38-2  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 94.8                                  | 7I   | 124  |  |
| EG020A-F: Cadmium                                                 | 7440-43-9  | I.III4                   | mg/L | II.III4            | 0.100 mg/L    | 102                                   | 7;   | 445  |  |
| EG020A-F: Chromium                                                | 7440-47-3  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 415                                   | 7)   | 127  |  |
| EG020A-F: Copper                                                  | 7440-50-8  | I.II4                    | mg/L | II.II4             | 0.200 mg/L    | 102                                   | 7)   | 44;  |  |
| EG020A-F: Lead                                                    | 7439-92-1  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 102                                   | 77   | 116  |  |
| EG020A-F: Nickel                                                  | 7440-02-0  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 104                                   | 7)   | 44;  |  |
| EG020A-F: Zinc                                                    | 7440-66-6  | I.II)                    | mg/L | II.II)             | 0.200 mg/L    | 417                                   | 86   | 4"i  |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1003848)               |            |                          |      |                    |               |                                       |      |      |  |
| EG020A-F: Arsenic                                                 | 7440-38-2  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 97.2                                  | 7I   | 124  |  |
| EG020A-F: Cadmium                                                 | 7440-43-9  | I.III4                   | mg/L | II.III4            | 0.100 mg/L    | 98.6                                  | 7;   | 445  |  |
| EG020A-F: Chromium                                                | 7440-47-3  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 415                                   | 7)   | 127  |  |
| EG020A-F: Copper                                                  | 7440-50-8  | I.II4                    | mg/L | II.II4             | 0.200 mg/L    | 102                                   | 7)   | 44;  |  |
| EG020A-F: Lead                                                    | 7439-92-1  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 96.9                                  | 77   | 116  |  |
| EG020A-F: Nickel                                                  | 7440-02-0  | I.II4                    | mg/L | II.II4             | 0.100 mg/L    | 104                                   | 7)   | 44;  |  |
| EG020A-F: Zinc                                                    | 7440-66-6  | I.II)                    | mg/L | II.II)             | 0.200 mg/L    | 417                                   | 86   | 4"i  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1002634)                |            |                          |      |                    |               |                                       |      |      |  |
| EG035F: Mercury                                                   | 7439-97-6  | I.III4                   | mg/L | II.III4            | 0.010 mg/L    | 41;                                   | 74   | 44)  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1003846)                |            |                          |      |                    |               |                                       |      |      |  |
| EG035F: Mercury                                                   | 7439-97-6  | I.III4                   | mg/L | II.III4            | 0.010 mg/L    | 100                                   | 74   | 44)  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1003849)                |            |                          |      |                    |               |                                       |      |      |  |
| EG035F: Mercury                                                   | 7439-97-6  | I.III4                   | mg/L | II.III4            | 0.010 mg/L    | 98.6                                  | 74   | 44)  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1002596)        |            |                          |      |                    |               |                                       |      |      |  |
| EK055G: Ammonia as N                                              | 7664-41-7  | I.I4                     | mg/L | II.I4              | 0.5 mg/L      | 81.4                                  | 5I   | 128  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1003437)        |            |                          |      |                    |               |                                       |      |      |  |
| EK055G: Ammonia as N                                              | 7664-41-7  | I.I4                     | mg/L | II.I4              | 0.5 mg/L      | 71.1                                  | 5I   | 128  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1003439)        |            |                          |      |                    |               |                                       |      |      |  |
| EK055G: Ammonia as N                                              | 7664-41-7  | I.I4                     | mg/L | II.I4              | 0.5 mg/L      | 75.7                                  | 5I   | 128  |  |
| EP070: Total Petroleum Hydrocarbons - Speciation (QCLot: 1006014) |            |                          |      |                    |               |                                       |      |      |  |
| EP070: Aliphatic C10-C14                                          | ++++       | J)                       | NC@" | I)I                | 8370 µg/L     | 70.6                                  | 5I   | 4"i  |  |
| EP070: Aliphatic C15-C28                                          | ++++       | 4I)                      | NC@" | I4I)               | 17280 µg/L    | 7.1;                                  | 5I   | 4"i  |  |
| EP070: Aliphatic C29-C36                                          | ++++       | J)                       | NC@" | I)I                | ++++          | ++++                                  | ++++ | ++++ |  |
| EP070: Aromatic C10-C14                                           | ++++       | J)                       | NC@" | I)I                | 1392 µg/L     | 125                                   | 5I   | 4"i  |  |
| EP070: Aromatic C15-C28                                           | ++++       | 4I)                      | NC@" | I4I)               | 2352 µg/L     | 122                                   | 5I   | 4"i  |  |

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Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                                             |  |            |     | Method Blank (MB) Report |        |                     |                    | Laboratory Control Spike (LCS) Report |       |                     |  |
|-------------------------------------------------------------------------------|--|------------|-----|--------------------------|--------|---------------------|--------------------|---------------------------------------|-------|---------------------|--|
| Method: Compound                                                              |  | CAS Number | LOR | Unit                     | Result | Spike Concentration | Spike Recovery (%) | LCS                                   | Low   | Recovery Limits (%) |  |
| EP070: Total Petroleum Hydrocarbons - Speciation (QCLot: 1006014) - continued |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP070: Aromatic C29-C36                                                       |  | ++++       | )!  | NC@"                     | I)!    | ++++                | ++++               | ++++                                  | ++++  | ++++                |  |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1002578)                     |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: Benzene                                                                |  | 71-43-2    | )   | NC@"                     | I)     | 10 µg/L             | 94.9               |                                       | 5)    | 122                 |  |
| EP074: Toluene                                                                |  | 417-77-1   | )   | NC@"                     | I)     | 10 µg/L             | ;).4               |                                       | 71.2  | 124                 |  |
| EP074: Ethylbenzene                                                           |  | 100-41-4   | )   | NC@"                     | I)     | 10 µg/L             | 96.5               |                                       | 76    | 120                 |  |
| EP074: meta- & para-Xylene                                                    |  | 108-38-3   | )   | NC@"                     | I)     | 20 µg/L             | 87.6               |                                       | 68    | 132                 |  |
|                                                                               |  | 106-42-3   |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: Styrene                                                                |  | 100-42-5   | )   | NC@"                     | I)     | 10 µg/L             | 96.6               |                                       | 68    | 127                 |  |
| EP074: ortho-Xylene                                                           |  | 95-47-6    | )   | NC@"                     | I)     | 10 µg/L             | 96.2               |                                       | 76    | 122                 |  |
| EP074: Isopropylbenzene                                                       |  | 98-82-8    | )   | NC@"                     | I)     | 10 µg/L             | 95.2               |                                       | 74    | 123                 |  |
| EP074: n-Propylbenzene                                                        |  | 103-65-1   | )   | NC@"                     | I)     | 10 µg/L             | 94.2               |                                       | 51    | 125                 |  |
| EP074: 1,3,5-Trimethylbenzene                                                 |  | 108-67-8   | )   | NC@"                     | I)     | 10 µg/L             | 94.9               |                                       | 74    | 121                 |  |
| EP074: sec-Butylbenzene                                                       |  | 47-77-7    | )   | NC@"                     | I)     | 10 µg/L             | 4!!                |                                       | 72    | 124                 |  |
| EP074: 1,2,4-Trimethylbenzene                                                 |  | 95-63-6    | )   | NC@"                     | I)     | 10 µg/L             | 93.6               |                                       | 5")   | 124                 |  |
| EP074: tert-Butylbenzene                                                      |  | 98-06-6    | )   | NC@"                     | I)     | 10 µg/L             | ;.7.!              |                                       | 71.6  | 128                 |  |
| EP074: p-Isopropyltoluene                                                     |  | 99-87-6    | )   | NC@"                     | I)     | 10 µg/L             | ;).4               |                                       | 68.3  | 4")                 |  |
| EP074: n-Butylbenzene                                                         |  | 104-51-8   | )   | NC@"                     | I)     | 10 µg/L             | ;.5.!              |                                       | 67    | 126                 |  |
| EP074B: Oxygenated Compounds (QCLot: 1002578)                                 |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: Pinyl Acetate                                                          |  | 108-05-4   | )!  | NC@"                     | I)     | 100 µg/L            | ;".!               |                                       | 65    | 147                 |  |
| EP074: 2-Butanone (MEK)                                                       |  | 57-72-1    | )!  | NC@"                     | I)!    | 100 µg/L            | 83.6               |                                       | 54    | 4")                 |  |
| EP074: 4-Methyl-2-pentanone (MIBK)                                            |  | 417-41-4   | )!  | NC@"                     | I)!    | 100 µg/L            | 91.2               |                                       | 63    | 4*5                 |  |
| EP074: 2-Hexanone (MBK)                                                       |  | 591-78-6   | )!  | NC@"                     | I)!    | 100 µg/L            | 7).5               |                                       | 62    | 4")                 |  |
| EP074C: Sulfonated Compounds (QCLot: 1002578)                                 |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: Carbon disulfide                                                       |  | 5)+4)+1    | )   | NC@"                     | I)     | 10 µg/L             | ;.5.!              |                                       | 68    | 4")                 |  |
| EP074D: Fumigants (QCLot: 1002578)                                            |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: 2,2-Dichloropropane                                                    |  | 594-20-7   | )   | NC@"                     | I)     | 10 µg/L             | 4!!                |                                       | 60.7  | 143                 |  |
| EP074: 1,2-Dichloropropane                                                    |  | 57+75+)    | )   | NC@"                     | I)     | 10 µg/L             | 102                |                                       | 69.7  | 128                 |  |
| EP074: cis-1,3-Dichloropropylene                                              |  | 10061-01-5 | )   | NC@"                     | I)     | 20 µg/L             | 96.4               |                                       | 68    | 4*4                 |  |
| EP074: trans-1,3-Dichloropropylene                                            |  | 10061-02-6 | )   | NC@"                     | I)     | 20 µg/L             | ;).!               |                                       | 67    | 140                 |  |
| EP074: 1,2-Dibromoethane (EDB)                                                |  | 106-93-4   | )   | NC@"                     | I)     | 10 µg/L             | 4!!                |                                       | 68.1  | 132                 |  |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1002578)                      |  |            |     |                          |        |                     |                    |                                       |       |                     |  |
| EP074: Dichlorodifluoromethane                                                |  | 5)+54+7    | )!  | NC@"                     | I)!    | 100 µg/L            | 91.4               |                                       | 52    | 4")                 |  |
| EP074: Chloromethane                                                          |  | 74-87-3    | )!  | NC@"                     | I)!    | 100 µg/L            | 86.1               |                                       | 43.1  | 4")                 |  |
| EP074: Pinyl chloride                                                         |  | 75-01-4    | )!  | NC@"                     | I)!    | 100 µg/L            | 4!7                |                                       | )     | 144                 |  |
| EP074: Bromomethane                                                           |  | 74-83-9    | )!  | NC@"                     | I)!    | 100 µg/L            | 106                |                                       | ;)5.) | 4")                 |  |
| EP074: Chloroethane                                                           |  | 5)+!)+"    | )!  | NC@"                     | I)!    | 100 µg/L            | 86.9               |                                       | 51    | 4*5                 |  |
| EP074: Trichlorofluoromethane                                                 |  | 75-69-4    | )!  | NC@"                     | I)!    | 100 µg/L            | 82.4               |                                       | 64    | 4")                 |  |
| EP074: 1,1-Dichloroethene                                                     |  | 75-35-4    | )   | NC@"                     | I)     | 10 µg/L             | ;.5.4              |                                       | 63.9  | 4")                 |  |

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Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                                    |  |            |     | Method Blank (MB) Report |        | Laboratory Control Spike (LCS) Report |                    |      |      |      |
|----------------------------------------------------------------------|--|------------|-----|--------------------------|--------|---------------------------------------|--------------------|------|------|------|
| Method: Compound                                                     |  | CAS Number | LOR | Unit                     | Result | Spike Concentration                   | Spike Recovery (%) | LCS  | Low  | High |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1002578) - continued |  |            |     |                          |        |                                       |                    |      |      |      |
| EP074: Iodomethane                                                   |  | 74-88-4    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 90.6 | 57.2 | 4"   |
| EP074: trans-1,2-Dichloroethene                                      |  | 156-60-5   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 51   | 128  |
| EP074: 1,1-Dichloroethane                                            |  | 75-34-3    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 64   | 136  |
| EP074: cis-1,2-Dichloroethene                                        |  | 156-59-2   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 54   | 128  |
| EP074: 1,1,1-Trichloroethane                                         |  | 71-55-6    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 5    | 68.4 | 4"   |
| EP074: 1,1-Dichloropropylene                                         |  | 563-58-6   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 71.4 | 127  |
| EP074: Carbon Tetrachloride                                          |  | 56-23-5    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 95.2 | 64   | 134  |
| EP074: 1,2-Dichloroethane                                            |  | 107-06-2   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 5    | 68   | 134  |
| EP074: Trichloroethene                                               |  | 79-01-6    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 72   | 127  |
| EP074: Dibromomethane                                                |  | 74-95-3    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 96.6 | 63.9 | 136  |
| EP074: 1,1,2-Trichloroethane                                         |  | 5, +I +)   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 92.7 | 69.2 | 4"   |
| EP074: 1,3-Dichloropropane                                           |  | 142-28-9   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 5" 5 | 4"   |
| EP074: Tetrachloroethene                                             |  | 127-18-4   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 5" 7 | 132  |
| EP074: 1,1,1,2-Tetrachloroethane                                     |  | 630-20-6   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 92.6 | 74   | 123  |
| EP074: trans-1,4-Dichloro-2-butene                                   |  | 110-57-6   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 14   | 26   | 4"   |
| EP074: cis-1,4-Dichloro-2-butene                                     |  | 1476-11-5  | )   | NC@"                     | I)     | 10 µg/L                               |                    | 77   | 44   | 4"   |
| EP074: 1,1,2,2-Tetrachloroethane                                     |  | 79-34-5    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 102  | 72   | 4"   |
| EP074: 1,2,3-Trichloropropane                                        |  | 96-18-4    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 44   | 148  |      |
| EP074: Pentachloroethane                                             |  | 76-01-7    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 68   | 4"   |
| EP074: 1,2-Dibromo-3-chloropropane                                   |  | 96-12-8    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 74.7 | 52   | 4)   |
| EP074: Hexachlorobutadiene                                           |  | 87-68-3    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 106  | 62   | 142  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 1002578)              |  |            |     |                          |        |                                       |                    |      |      |      |
| EP074: Chlorobenzene                                                 |  | 417-1, +5  | )   | NC@"                     | I)     | 10 µg/L                               |                    | 5    | 55   | 120  |
| EP074: Bromobenzene                                                  |  | 108-86-1   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 41   | 76   | 122  |
| EP074: 2-Chlorotoluene                                               |  | 95-49-8    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 99.2 | 5)   | 124  |
| EP074: 4-Chlorotoluene                                               |  | 106-43-4   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 76   | 120  |
| EP074: 1,3-Dichlorobenzene                                           |  | 541-73-1   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 5    | 75.2 | 120  |
| EP074: 1,4-Dichlorobenzene                                           |  | 106-46-7   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 76.1 | 44   |
| EP074: 1,2-Dichlorobenzene                                           |  | 9, +I +4   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 92.6 | 55.5 | 447  |
| EP074: 1,2,4-Trichlorobenzene                                        |  | 120-82-1   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 4    | 68.3 | 128  |
| EP074: 1,2,3-Trichlorobenzene                                        |  | 87-61-6    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 88.2 | 5)   | 125  |
| EP074G: Trihalomethanes (QCLot: 1002578)                             |  |            |     |                          |        |                                       |                    |      |      |      |
| EP074: Chloroform                                                    |  | 67-66-3    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 5    | 54.4 | 127  |
| EP074: Bromodichloromethane                                          |  | 75-27-4    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 96.9 | 68   | 132  |
| EP074: Dibromochloromethane                                          |  | 124-48-1   | )   | NC@"                     | I)     | 10 µg/L                               |                    | 7    | 69   | 4"   |
| EP074: Bromoform                                                     |  | 75-25-2    | )   | NC@"                     | I)     | 10 µg/L                               |                    | 94.7 | 62   | 4"5  |
| EP074H: Naphthalene (QCLot: 1002578)                                 |  |            |     |                          |        |                                       |                    |      |      |      |
| EP074: Naphthalene                                                   |  | 91-20-3    | 5   | NC@"                     | I5     | 10 µg/L                               |                    | 4.5  | 7" 4 | 44   |
| EP075(SIM)A: Phenolic Compounds (QCLot: 1003086)                     |  |            |     |                          |        |                                       |                    |      |      |      |

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Sub-Matrix: **WATER**

| Method: Compound                                                |             |     | Method Blank (MB) Report |                     | Laboratory Control Spike (LCS) Report |      |      |  |
|-----------------------------------------------------------------|-------------|-----|--------------------------|---------------------|---------------------------------------|------|------|--|
|                                                                 |             |     | Result                   | Spike Concentration | Spike Recovery (%)                    | Low  | High |  |
| EP075(SIM)A: Phenolic Compounds (QCLot: 1003086) - continued    |             |     |                          |                     |                                       |      |      |  |
| EP075(SIM): Phenol                                              | 108-95-2    | 4   | NC@"                     | 5 µg/L              | 31.6                                  | 24   | 5!   |  |
| EP075(SIM): 2-Chlorophenol                                      | ;)+5+7      | 4   | NC@"                     | 5 µg/L              | 66.2                                  | )5   | 4!)  |  |
| EP075(SIM): 2-Methylphenol                                      | 95-48-7     | 4   | NC@"                     | 5 µg/L              | )!;                                   | )4   | 96   |  |
| EP075(SIM): 3- & 4-Methylphenol                                 | 4"-4;+55+1" | 2   | NC@"                     | 10 µg/L             | 60.5                                  | 45   | 94   |  |
| EP075(SIM): 2-Nitrophenol                                       | 77+5)+4     | 4   | NC@"                     | 5 µg/L              | 76.6                                  | 48   | 132  |  |
| EP075(SIM): 2,4-Dimethylphenol                                  | 105-67-9    | 4   | NC@"                     | 5 µg/L              | 62.2                                  | 44   | 112  |  |
| EP075(SIM): 2,4-Dichlorophenol                                  | 120-83-2    | 4   | NC@"                     | 5 µg/L              | 5"7                                   | 60   | 114  |  |
| EP075(SIM): 2,6-Dichlorophenol                                  | 87-65-0     | 4   | NC@"                     | 5 µg/L              | 72.3                                  | )    | 44)  |  |
| EP075(SIM): 4-Chloro-3-Methylphenol                             | ;)+1)+5     | 4   | NC@"                     | 5 µg/L              | 72.2                                  | 60   | 445  |  |
| EP075(SIM): 2,4,6-Trichlorophenol                               | 88-06-2     | 4   | NC@"                     | 5 µg/L              | 74.5                                  | )    | 123  |  |
| EP075(SIM): 2,4,5-Trichlorophenol                               | 95-95-4     | 4   | NC@"                     | 5 µg/L              | 65.4                                  | )    | 123  |  |
| EP075(SIM): Pentachlorophenol                                   | 87-86-5     | 2   | NC@"                     | 10 µg/L             | 76.4                                  | 22.1 | 4"!) |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1003086) |             |     |                          |                     |                                       |      |      |  |
| EP075(SIM): Naphthalene                                         | 91-20-3     | 4   | NC@"                     | 5 µg/L              | 60.1                                  | 46   | 444  |  |
| EP075(SIM): Acenaphthylene                                      | 208-96-8    | 4   | NC@"                     | 5 µg/L              | 67.3                                  | )4   | 114  |  |
| EP075(SIM): Acenaphthene                                        | 83-32-9     | 4   | NC@"                     | 5 µg/L              | 60.6                                  | )!   | 114  |  |
| EP075(SIM): Fluorene                                            | 86-73-7     | 4   | NC@"                     | 5 µg/L              | 64.1                                  | )    | 447  |  |
| EP075(SIM): Phenanthrene                                        | 7)+14+7     | 4   | NC@"                     | 5 µg/L              | 72.4                                  | 54   | 44!  |  |
| EP075(SIM): Anthracene                                          | 120-12-7    | 4   | NC@"                     | 5 µg/L              | 51.7                                  | 49   | 445  |  |
| EP075(SIM): Fluoranthene                                        | 206-44-0    | 4   | NC@"                     | 5 µg/L              | 54.7                                  | )4   | 445  |  |
| EP075(SIM): Pyrene                                              | 129-00-0    | 4   | NC@"                     | 5 µg/L              | 51.7                                  | )4   | 445  |  |
| EP075(SIM): Benz(a)anthracene                                   | 56-55-3     | 4   | NC@"                     | 5 µg/L              | 75.4                                  | )"   | 120  |  |
| EP075(SIM): Chrysene                                            | 218-01-9    | 4   | NC@"                     | 5 µg/L              | 69.0                                  | 48   | 114  |  |
| EP075(SIM): Benzo(b)fluoranthene                                | 205-99-2    | 4   | NC@"                     | 5 µg/L              | 55.4                                  | 48   | 4"!) |  |
| EP075(SIM): Benzo(k)fluoranthene                                | 207-08-9    | 4   | NC@"                     | 5 µg/L              | 65.8                                  | 43   | 126  |  |
| EP075(SIM): Benzo(a)pyrene                                      | 50-32-8     | !)  | NC@"                     | 5 µg/L              | 60.7                                  | 44   | 120  |  |
| EP075(SIM): Indeno(1,2,3-cd)pyrene                              | 4"-+";+)    | 4   | NC@"                     | 5 µg/L              | 65.8                                  | 45   | 129  |  |
| EP075(SIM): Dibenz(a,h)anthracene                               | )" +5!)+"   | 4   | NC@"                     | 5 µg/L              | 63.0                                  | 47   | 4"4  |  |
| EP075(SIM): Benzo(g,h,i)perylene                                | 191-24-2    | 4   | NC@"                     | 5 µg/L              | 62.8                                  | 42   | 126  |  |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1002577)        |             |     |                          |                     |                                       |      |      |  |
| EP080: C6 - C9 Fraction                                         | ++++        | 20  | NC@"                     | 160 µg/L            | " ;                                   | 5"   | 4")  |  |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1003085)        |             |     |                          |                     |                                       |      |      |  |
| EP071: C10 - C14 Fraction                                       | ++++        | )!  | NC@"                     | 600 µg/L            | )7.5                                  | 49   | 44!  |  |
| EP071: C15 - C28 Fraction                                       | ++++        | 4!! | NC@"                     | 1020 µg/L           | 68.2                                  | )7   | 4"!) |  |
| EP071: C29 - C36 Fraction                                       | ++++        | )!  | NC@"                     | ++++                | ++++                                  | ++++ | ++++ |  |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1006015)        |             |     |                          |                     |                                       |      |      |  |
| EP071-HX: C10 - C14 Fraction                                    | ++++        | )!  | NC@"                     | 798 µg/L            | 68.9                                  | 64   | 124  |  |
| EP071-HX: C15 - C28 Fraction                                    | ++++        | 4!! | NC@"                     | 804 µg/L            | 73.4                                  | 5!   | 4"!) |  |
| EP071-HX: C29 - C36 Fraction                                    | ++++        | )!  | NC@"                     | 800 µg/L            | 72.5                                  | 68   | 128  |  |



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Project : ++++

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Sub-Matrix: **WATER**

| Sub-Matrix: WATER            |  |            |     | Method Blank (MB) Report |        |  |                     | Laboratory Control Spike (LCS) Report |                    |  |                     |  |
|------------------------------|--|------------|-----|--------------------------|--------|--|---------------------|---------------------------------------|--------------------|--|---------------------|--|
| Method: Compound             |  | CAS Number | LOR | Unit                     | Result |  | Spike Concentration |                                       | Spike Recovery (%) |  | Recovery Limits (%) |  |
| EP080: BTEX (QCLot: 1002577) |  |            |     |                          |        |  |                     |                                       |                    |  |                     |  |
| EP080: Benzene               |  | 71-43-2    | 4   | NC@"                     | 14     |  | 10 µg/L             |                                       | 91.1               |  | 77.6 122            |  |
| EP080: Toluene               |  | 417+77+"   | 2   | NC@"                     | <2     |  | 10 µg/L             |                                       | 92.0               |  | 74 122              |  |
| EP080: Ethylbenzene          |  | 100-41-4   | 2   | NC@"                     | <2     |  | 10 µg/L             |                                       | 90.4               |  | 5" 126              |  |
| EP080: meta- & para-Xylene   |  | 108-38-3   | 2   | NC@"                     | <2     |  | 20 µg/L             |                                       | 90.6               |  | 70.4 129            |  |
|                              |  | 106-42-3   |     |                          |        |  |                     |                                       |                    |  |                     |  |
| EP080: ortho-Xylene          |  | 95-47-6    | 2   | NC@"                     | <2     |  | 10 µg/L             |                                       | 91.4               |  | 74.3 126            |  |



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Project : ++++

### Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                          |                  |                           |            | Matrix Spike (MS) Report |                    |                     |  |
|------------------------------------------------------------|------------------|---------------------------|------------|--------------------------|--------------------|---------------------|--|
| Laboratory sample ID                                       | Client sample ID | Method/Compound           | CAS Number | Spike Concentration      | Spike Recovery (%) | Recovery Limits (%) |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1002635)        |                  |                           |            |                          |                    |                     |  |
| EB0908954-001                                              | Anonymous        | EG020A-F: Arsenic         | 7440-38-2  | 0.100 mg/L               | 417                | 51                  |  |
|                                                            |                  | EG020A-F: Cadmium         | 7440-43-9  | 0.100 mg/L               | 41                 | 51                  |  |
|                                                            |                  | EG020A-F: Chromium        | 7440-47-3  | 0.100 mg/L               | 106                | 51                  |  |
|                                                            |                  | EG020A-F: Copper          | 7440-50-8  | 0.2 mg/L                 | 106                | 51                  |  |
|                                                            |                  | EG020A-F: Lead            | 7439-92-1  | 0.100 mg/L               | 415                | 51                  |  |
|                                                            |                  | EG020A-F: Nickel          | 7440-02-0  | 0.100 mg/L               | 417                | 51                  |  |
|                                                            |                  | EG020A-F: Zinc            | 7440-66-6  | 0.2 mg/L                 | 123                | 51                  |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1003848)        |                  |                           |            |                          |                    |                     |  |
| EB0908929-015                                              | Anonymous        | EG020A-F: Arsenic         | 7440-38-2  | 0.100 mg/L               | 102                | 51                  |  |
|                                                            |                  | EG020A-F: Cadmium         | 7440-43-9  | 0.100 mg/L               | 71                 | 51                  |  |
|                                                            |                  | EG020A-F: Chromium        | 7440-47-3  | 0.100 mg/L               | 98.6               | 51                  |  |
|                                                            |                  | EG020A-F: Copper          | 7440-50-8  | 0.2 mg/L                 | 94.0               | 51                  |  |
|                                                            |                  | EG020A-F: Lead            | 7439-92-1  | 0.100 mg/L               | 96.5               | 51                  |  |
|                                                            |                  | EG020A-F: Nickel          | 7440-02-0  | 0.100 mg/L               | 5                  | 51                  |  |
|                                                            |                  | EG020A-F: Zinc            | 7440-66-6  | 0.2 mg/L                 | 106                | 51                  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1002634)         |                  |                           |            |                          |                    |                     |  |
| EB0908954-001                                              | Anonymous        | EG035F: Mercury           | 7439-97-6  | 0.010 mg/L               | 98.6               | 51                  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1003846)         |                  |                           |            |                          |                    |                     |  |
| EB0908926-002                                              | Anonymous        | EG035F: Mercury           | 7439-97-6  | 0.010 mg/L               | 5                  | 51                  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1003849)         |                  |                           |            |                          |                    |                     |  |
| EB0908932-003                                              | GI"              | EG035F: Mercury           | 7439-97-6  | 0.010 mg/L               | # 65.6             | 51                  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1002596) |                  |                           |            |                          |                    |                     |  |
| EB0908818-002                                              | Anonymous        | EK055G: Ammonia as N      | 7664-41-7  | 0.4 mg/L                 | # Not Determined   | 51                  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1003437) |                  |                           |            |                          |                    |                     |  |
| EB0908859-002                                              | Anonymous        | EK055G: Ammonia as N      | 7664-41-7  | 0.8 mg/L                 | 41"                | 51                  |  |
| EK055G: Ammonia as N by Discrete Analyser (QCLot: 1003439) |                  |                           |            |                          |                    |                     |  |
| EB0908932-004                                              | MW04             | EK055G: Ammonia as N      | 7664-41-7  | 0.4 mg/L                 | # Not Determined   | 51                  |  |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1002578)  |                  |                           |            |                          |                    |                     |  |
| EB0908932-004                                              | MW04             | EP074: Benzene            | 71-43-2    | 10 µg/L                  | 417                | 51                  |  |
|                                                            |                  | EP074: Toluene            | 417+77+"   | 10 µg/L                  | 414                | 51                  |  |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1002578)   |                  |                           |            |                          |                    |                     |  |
| EB0908932-004                                              | MW04             | EP074: 1,1-Dichloroethene | 75-35-4    | 10 µg/L                  | 128                | 51                  |  |
|                                                            |                  | EP074: Trichloroethene    | 79-01-6    | 10 µg/L                  | 41"                | 51                  |  |

|                        |         |     |
|------------------------|---------|-----|
| P080: C6 - C9 Fraction | +++     | 140 |
| P080: Benzene          | 71-43-2 | 10  |
| P080: Toluene          | 417+77+ | 10  |



Environmental Division

**INTERPRETIVE QUALITY CONTROL REPORT**

|                      |                                                           |                                |                                                            |
|----------------------|-----------------------------------------------------------|--------------------------------|------------------------------------------------------------|
| <b>Work Order</b>    | <b>: EB0908932</b>                                        | <b>PaC</b>                     | <b>: 4 '8 40</b>                                           |
| <b>Client</b>        | <b>: SINCLAIR KNIGHT MERZ</b>                             | <b>Laboratory</b>              | <b>: Environmental Division Brisbane</b>                   |
| <b>Contact</b>       | <b>: MS ONA KANAS</b>                                     | <b>Contact</b>                 | <b>: Tim Kilmister</b>                                     |
| <b>Address</b>       | <b>: P O BOX 246<br/>SPRING HILL . LD/ AUSTRALIA 4004</b> | <b>Address</b>                 | <b>: 32 Shand Street Stafford . LD Australia 4053</b>      |
| <b>E-mail</b>        | <b>: okanas@skm.com.au</b>                                | <b>E-mail</b>                  | <b>: Services.Brisbane@alsenviro.com</b>                   |
| <b>Telephone</b>     | <b>: +61 07 3244 7100</b>                                 | <b>Telephone</b>               | <b>: +61-7-3243 7222</b>                                   |
| <b>Facsimile</b>     | <b>: +61 07 3244 7306</b>                                 | <b>Facsimile</b>               | <b>: +61-7-3243 7218</b>                                   |
| <b>Project</b>       | <b>: 0000</b>                                             | <b>. C Level</b>               | <b>: NEPM 1999 Schedule B(3) and ALS . CS3 requirement</b> |
| <b>Site</b>          | <b>: Cronulla Park</b>                                    | <b>Date Samples Received</b>   | <b>: 03-JUN-2009</b>                                       |
| <b>C-O-C number</b>  | <b>: 0000</b>                                             | <b>Issue Date</b>              | <b>: 12-JUN-2009</b>                                       |
| <b>Sampler</b>       | <b>: 0000</b>                                             | <b>No. of samples received</b> | <b>: 6(</b>                                                |
| <b>Order number</b>  | <b>: 0000</b>                                             | <b>No. of samples analysed</b> | <b>: 6(</b>                                                |
| <b>. note number</b> | <b>: EN/003/09</b>                                        |                                |                                                            |

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 Interpretive . uality Control Report contains the following information:

- Analysis Holding Time Compliance
- . uality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

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Part of the **ALS Laboratory Group**

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## Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples/ sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 9() / %<sup>o</sup> / AS and NEPM <6;; ). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes/ the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

| Method                                         | Sample Date                                                             | Extraction / Preparation                                                |                    | Analysis      |                  |             |             |   |
|------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------|---------------|------------------|-------------|-------------|---|
| Container / Client Sample ID(s)                |                                                                         | Date extracted                                                          | Due for extraction | Date analysed | Due for analysis | Evaluation  |             |   |
| EG020F: Dissolved Metals by ICP-MS             |                                                                         |                                                                         |                    |               |                  |             |             |   |
| Clear Plastic Bottle - Filtered; Lab-acidified | MW02/<br>MW04/<br>MW06/<br>MW09/<br>MWA (CR13)/<br>MWC (CR15)/<br>Drain | 02-JUN-2009                                                             | ---                | 000           | 10-JUN-2009      | 29-NOV-2009 | ✔           |   |
|                                                | Clear Plastic Bottle - Sulphuric Acid                                   | 02-JUN-2009                                                             | ---                | 000           | 09-JUN-2009      | 03-JUN-2009 | ✘           |   |
|                                                | EG035F: Dissolved Mercury by FIMS                                       |                                                                         |                    |               |                  |             |             |   |
|                                                | Clear Plastic Bottle - Filtered; Lab-acidified                          | MW02/<br>MW04/<br>MW06/<br>MW09/<br>MWA (CR13)/<br>MWC (CR15)/<br>Drain | 02-JUN-2009        | ---           | 000              | 10-JUN-2009 | 30-JUN-2009 | ✔ |
|                                                |                                                                         | Clear Plastic Bottle - Sulphuric Acid                                   | 02-JUN-2009        | ---           | 000              | 09-JUN-2009 | 16-JUN-2009 | ✔ |
|                                                |                                                                         | EK055G: Ammonia as N by Discrete Analyser                               |                    |               |                  |             |             |   |
| Amber Glass Bottle - Unpreserved               |                                                                         | 02-JUN-2009                                                             | ---                | 000           | 09-JUN-2009      | 03-JUN-2009 | ✘           |   |
| Clear Plastic Bottle - Sulphuric Acid          |                                                                         | MW02/<br>MW04/<br>MW06/<br>MW09/<br>MWA (CR13)/<br>Drain                | 02-JUN-2009        | ---           | 000              | 09-JUN-2009 | 30-JUN-2009 | ✔ |

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Matrix: **WATER**  
Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

| Method                                                                                                                             |                                  | Sample Date    |                    | Extraction / Preparation |               | Analysis         |            |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------|--------------------|--------------------------|---------------|------------------|------------|
| Container / Client Sample ID(s)                                                                                                    |                                  | Date extracted | Due for extraction | Evaluation               | Date analysed | Due for analysis | Evaluation |
| <b>EP070: Total Petroleum Hydrocarbons - Speciation</b>                                                                            |                                  |                |                    |                          |               |                  |            |
| Amber Glass Bottle - Unpreserved<br>MW04/<br>MW06<br>Amber VOC Vial - HCl or NaHSO4<br>MW07                                        | MW05                             | 02-JUN-2009    | 09-JUN-2009        | 09-JUN-2009              | 12-JUN-2009   | 21-JUL-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | 11-JUN-2009        | 09-JUN-2009              | 12-JUN-2009   | 21-JUL-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | 09-JUN-2009        | 09-JUN-2009              | 12-JUN-2009   | 21-JUL-2009      | ✔          |
| <b>EP074A: Monocyclic Aromatic Hydrocarbons</b>                                                                                    |                                  |                |                    |                          |               |                  |            |
| Amber VOC Vial - HCl or NaHSO4<br>MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/<br>Clear Plastic Bottle - Filtered; Lab-acidified<br>MW07 | MW04/<br>MW06/<br>MW09/<br>Drain | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
| <b>EP074B: Oxygenated Compounds</b>                                                                                                |                                  |                |                    |                          |               |                  |            |
| Amber VOC Vial - HCl or NaHSO4<br>MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/<br>Clear Plastic Bottle - Filtered; Lab-acidified<br>MW07 | MW04/<br>MW06/<br>MW09/<br>Drain | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
| <b>EP074C: Sulfonated Compounds</b>                                                                                                |                                  |                |                    |                          |               |                  |            |
| Amber VOC Vial - HCl or NaHSO4<br>MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/<br>Clear Plastic Bottle - Filtered; Lab-acidified<br>MW07 | MW04/<br>MW06/<br>MW09/<br>Drain | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
| <b>EP074D: Fumigants</b>                                                                                                           |                                  |                |                    |                          |               |                  |            |
| Amber VOC Vial - HCl or NaHSO4<br>MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/<br>Clear Plastic Bottle - Filtered; Lab-acidified<br>MW07 | MW04/<br>MW06/<br>MW09/<br>Drain | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |
|                                                                                                                                    |                                  | 02-JUN-2009    | ---                | 000                      | 09-JUN-2009   | 16-JUN-2009      | ✔          |

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Matrix: **WATER** Evaluation: \* = Holding time breach ; ✓ = Within holding time.

| Method                                         |                                           | Sample Date | Extraction / Preparation |                    | Analysis      |                  |
|------------------------------------------------|-------------------------------------------|-------------|--------------------------|--------------------|---------------|------------------|
| Container / Client Sample ID(s)                |                                           |             | Date extracted           | Due for extraction | Date analysed | Due for analysis |
| EP074E: Halogenated Aliphatic Compounds        |                                           |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4                 |                                           |             |                          |                    |               |                  |
| MW04/<br>MW06/<br>MW09/<br>Drain               | MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/    | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| Clear Plastic Bottle - Filtered; Lab-acidified |                                           |             |                          |                    |               |                  |
| MW07                                           |                                           | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| EP074F: Halogenated Aromatic Compounds         |                                           |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4                 |                                           |             |                          |                    |               |                  |
| MW04/<br>MW06/<br>MW09/<br>Drain               | MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/    | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| Clear Plastic Bottle - Filtered; Lab-acidified |                                           |             |                          |                    |               |                  |
| MW07                                           |                                           | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| EP074G: Trihalomethanes                        |                                           |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4                 |                                           |             |                          |                    |               |                  |
| MW04/<br>MW06/<br>MW09/<br>Drain               | MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/    | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| Clear Plastic Bottle - Filtered; Lab-acidified |                                           |             |                          |                    |               |                  |
| MW07                                           |                                           | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| EP074H: Naphthalene                            |                                           |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4                 |                                           |             |                          |                    |               |                  |
| MW04/<br>MW06/<br>MW09/<br>Drain               | MW03/<br>MW05/<br>MW08/<br>MWA (CR13)/    | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| Clear Plastic Bottle - Filtered; Lab-acidified |                                           |             |                          |                    |               |                  |
| MW07                                           |                                           | 02-JUN-2009 | ---                      | 000                | 0000          | 09-JUN-2009      |
| 16-JUN-2009                                    |                                           |             |                          |                    |               | ✓                |
| EP075(SIM)A: Phenolic Compounds                |                                           |             |                          |                    |               |                  |
| Amber Glass Bottle - Unpreserved               |                                           |             |                          |                    |               |                  |
| MW04/<br>MW06/<br>MW08/<br>MWA (CR13)/         | MW03/<br>MW05/<br>MW07/<br>MW09/<br>Drain | 02-JUN-2009 | 09-JUN-2009              | 09-JUN-2009        | ✓             | 19-JUL-2009      |
| 19-JUL-2009                                    |                                           |             |                          |                    |               | ✓                |

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| Matrix: <b>WATER</b>                                               |             | Evaluation: * = Holding time breach ; ✓ = Within holding time. |                    |            |               |                  |            |
|--------------------------------------------------------------------|-------------|----------------------------------------------------------------|--------------------|------------|---------------|------------------|------------|
| Method                                                             | Sample Date | Extraction / Preparation                                       |                    | Analysis   |               |                  |            |
| Container / Client Sample ID(s)                                    |             | Date extracted                                                 | Due for extraction | Evaluation | Date analysed | Due for analysis | Evaluation |
| <b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b>              |             |                                                                |                    |            |               |                  |            |
| <b>Amber Glass Bottle - Unpreserved</b>                            |             |                                                                |                    |            |               |                  |            |
| MW03/<br>MW05/<br>MW07/<br>MW09/<br>Drain                          | 02-JUN-2009 | 09-JUN-2009                                                    | 09-JUN-2009        | ✓          | 10-JUN-2009   | 19-JUL-2009      | ✓          |
| <b>EP080/071: Total Petroleum Hydrocarbons</b>                     |             |                                                                |                    |            |               |                  |            |
| <b>Amber Glass Bottle - Unpreserved</b>                            |             |                                                                |                    |            |               |                  |            |
| MW02/<br>MW08/<br>DUP05/<br>MWB (CR14)/<br>Drain                   | 02-JUN-2009 | 09-JUN-2009                                                    | 09-JUN-2009        | ✓          | 10-JUN-2009   | 19-JUL-2009      | ✓          |
| MW05                                                               | 02-JUN-2009 | 09-JUN-2009                                                    | 09-JUN-2009        | ✓          | 12-JUN-2009   | 21-JUL-2009      | ✓          |
| <b>Amber Glass Bottle - Unpreserved</b>                            |             |                                                                |                    |            |               |                  |            |
| MW06                                                               | 02-JUN-2009 | 11-JUN-2009                                                    | 09-JUN-2009        | ✗          | 12-JUN-2009   | 21-JUL-2009      | ✓          |
| <b>Amber VOC Vial - HCl or NaHSO4</b>                              |             |                                                                |                    |            |               |                  |            |
| MW01/<br>MW03/<br>MW05/<br>MW08/<br>DUP05/<br>MWB (CR14)/<br>Drain | 02-JUN-2009 | ---                                                            | 000                | 0000       | 09-JUN-2009   | 16-JUN-2009      | ✓          |
| <b>Amber VOC Vial - HCl or NaHSO4</b>                              |             |                                                                |                    |            |               |                  |            |
| MW07                                                               | 02-JUN-2009 | 09-JUN-2009                                                    | 09-JUN-2009        | ✓          | 12-JUN-2009   | 21-JUL-2009      | ✓          |
| <b>Clear Plastic Bottle - Filtered; Lab-acidified</b>              |             |                                                                |                    |            |               |                  |            |
| MW07                                                               | 02-JUN-2009 | ---                                                            | 000                | 0000       | 09-JUN-2009   | 16-JUN-2009      | ✓          |
| <b>EP080: BTEX</b>                                                 |             |                                                                |                    |            |               |                  |            |
| <b>Amber VOC Vial - HCl or NaHSO4</b>                              |             |                                                                |                    |            |               |                  |            |
| MW01/<br>DUP05/<br>MWB (CR15)                                      | 02-JUN-2009 | ---                                                            | 000                | 0000       | 09-JUN-2009   | 16-JUN-2009      | ✓          |

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## Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory . C samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: \* = . ualit Control fre>uenc not within s4ecification E✓ = . ualit Control fre>uenc within s4ecification.

| Quality Control Sample Type          |            | Count |         | Rate (%) |          | Quality Control Specification |                                                   |
|--------------------------------------|------------|-------|---------|----------|----------|-------------------------------|---------------------------------------------------|
| Analytical Methods                   |            | QC    | Regular | Actual   | Expected | Evaluation                    |                                                   |
| Laboratory Duplicates (DUP)          |            |       |         |          |          |                               |                                                   |
| Ammonia as N by Discrete analyser    | EK055G     | )     | / 6     | 11.8     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Mercury by FIMS            | EG035F     | )     | / '     | 11.5     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | (     | +(      | 11.8     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | '     | 6/      | 13.3     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Volatile Organic Compounds           | EP074      | '     | 6/      | 13.3     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Laboratory Control Samples (LCS)     |            |       |         |          |          |                               |                                                   |
| Ammonia as N by Discrete analyser    | EK055G     | +     | / 6     | 5.9      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Mercury by FIMS            | EG035F     | +     | / '     | 5.8      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | '     | +(      | 5.9      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| PAH/Phenols (GC/MS - SIM)            | EP075(SIM) | 6     | 66      | 9.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Semivolatile Fraction          | EP071      | 6     | 6(      | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Semivolatile Fraction          | EP071-HX   | 6     | +       | 33.3     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Speciation                     | EP070      | 6     | +       | 33.3     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | 6     | 6/      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Volatile Organic Compounds           | EP074      | 6     | 6/      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Method Blanks (MB)                   |            |       |         |          |          |                               |                                                   |
| Ammonia as N by Discrete analyser    | EK055G     | +     | / 6     | 5.9      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Mercury by FIMS            | EG035F     | +     | / '     | 5.8      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | '     | +(      | 5.9      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| PAH/Phenols (GC/MS - SIM)            | EP075(SIM) | 6     | 66      | 9.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Semivolatile Fraction          | EP071      | 6     | 6(      | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Semivolatile Fraction          | EP071-HX   | 6     | +       | 33.3     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH - Speciation                     | EP070      | 6     | +       | 33.3     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | 6     | 6/      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Volatile Organic Compounds           | EP074      | 6     | 6/      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS . CS3 requirement |
| Matrix Spikes (MS)                   |            |       |         |          |          |                               |                                                   |
| Ammonia as N by Discrete analyser    | EK055G     | +     | / 6     | 5.9      | 5.0      | ✓                             | ALS . CS3 requirement                             |
| Dissolved Mercury by FIMS            | EG035F     | +     | / '     | 5.8      | 5.0      | ✓                             | ALS . CS3 requirement                             |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | '     | +(      | 5.9      | 5.0      | ✓                             | ALS . CS3 requirement                             |
| TPH Volatiles/BTEX                   | EP080      | 6     | 6/      | 6.7      | 5.0      | ✓                             | ALS . CS3 requirement                             |
| Volatile Organic Compounds           | EP074      | 6     | 6/      | 6.7      | 5.0      | ✓                             | ALS . CS3 requirement                             |



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## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA/ APHA/ AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods                      | Method     | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------|------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dissolved Metals by ICP-MS - Suite A    | EG020A-F   | WATER  | (APHA 21st ed./ 3125; USEPA SW846 - 6020/ ALS . WI-EN/EG020); The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer/ which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.                                                                                                                                                                                          |
| Dissolved Mercury by FIMS               | EG035F     | WATER  | AS 3550/ APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl <sub>2</sub> )(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl <sub>2</sub> which is then purged into a heated quartz cell. . quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2) |
| Ammonia as N by Discrete analyser       | EK055G     | WATER  | APHA 21st ed./ 4500-NH <sub>3</sub> G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                                                           |
| TPH - Speciation                        | EP070      | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                               |
| TPH - Semivolatile Fraction             | EP071      | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                               |
| TPH - Semivolatile Fraction             | EP071-HX   | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                               |
| Volatile Organic Compounds              | EP074      | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                 |
| PAH/Phenols (GC/MS - SIM)               | EP075-SIM= | WATER  | USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                            |
| TPH Volatiles/BTEX                      | EP080      | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                 |
| Preparation Methods                     | Method     | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Separatory Funnel Extraction of Liquids | #.6(       | WATER  | USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined/ dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.                                                                                                                                                                       |

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| Preparation Methods                     |  | Method  | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|--|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Separatory Funnel Extraction of Liquids |  | # 6(0°& | WATER  | Variation of USEPA SW 846 - 3510B: 500 mL to 0.5L of sample is transferred to a separatory funnel and serially extracted three times using 30mL DCM for each extract. The resultant extracts are combined/ dehydrated/ and exchanged into 5 mL of hexane for analysis. ALS default excludes sediment which may be resident in the container. |

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## Summary of Outliers

### Outliers : Quality Control Samples

The following report highlights outliers flagged in the . uality Control < C) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALSQ WI/EN/38 (in the absence of specific USEPA limits). This report displays . C Outliers (breaches) only.

### Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

| Compound Group Name                       | Laboratory Sample ID | Client Sample ID | Analyte      | CAS Number | Data           | Limits  | Comment                                                                               |
|-------------------------------------------|----------------------|------------------|--------------|------------|----------------|---------|---------------------------------------------------------------------------------------|
| <b>Duplicate (DUP) RPDs</b>               |                      |                  |              |            |                |         |                                                                                       |
| EG020F: Dissolved Metals by ICP-MS        | EB0908954-010        | Anonymous        | Copper       | 7440-50-8  | 113 %          | 0-20%   | RPD exceeds LOR based limits                                                          |
| <b>Matrix Spike (MS) Recoveries</b>       |                      |                  |              |            |                |         |                                                                                       |
| EG035F: Dissolved Mercury by FIMS         | EB0908932-003        | MW03             | Mercury      | 7(+;0;70)  | 65.6 %         | 70-130% | Recovery less than lower data quality objective                                       |
| EK055G: Ammonia as N by Discrete Analyser | EB0908932-004        | MW04             | Ammonia as N | 7)(0(607   | Not Determined | 0000    | MS recovery not determined, background level greater than or equal to 4x spike level. |
| EK055G: Ammonia as N by Discrete Analyser | EB0908818-002        | Anonymous        | Ammonia as N | 7)(0(607   | Not Determined | 0000    | MS recovery not determined, background level greater than or equal to 4x spike level. |

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Laboratory Control outliers occur.

### Regular Sample Surrogates

Sub-Matrix: **WATER**

| Compound Group Name                | Laboratory Sample ID | Client Sample ID | Analyte            | CAS Number | Data   | Limits   | Comment                                         |
|------------------------------------|----------------------|------------------|--------------------|------------|--------|----------|-------------------------------------------------|
| <b>Samples Submitted</b>           |                      |                  |                    |            |        |          |                                                 |
| EP070S:TPH Surrogates - Speciation | EB0908932-005        | MW05             | 2-Bromonaphthalene | 560-13-2   | 56.9 % | 60-140 % | Recovery less than lower data quality objective |

### Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

Matrix: **WATER**

| Method<br>Container / Client Sample ID(s)        | Extraction / Preparation |                    | Analysis      |                  |
|--------------------------------------------------|--------------------------|--------------------|---------------|------------------|
|                                                  | Date extracted           | Due for extraction | Date analysed | Due for analysis |
| <b>EG020F: Dissolved Metals by ICP-MS</b>        |                          |                    |               |                  |
| Clear Plastic Bottle - Sulphuric Acid<br>MW07    | 0000                     | 0000               | 09-JUN-2009   | 03-JUN-2009      |
| <b>EK055G: Ammonia as N by Discrete Analyser</b> |                          |                    |               |                  |
| Amber Glass Bottle - Unpreserved<br>MW07         | 0000                     | 0000               | 09-JUN-2009   | 03-JUN-2009      |



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Matrix: **WATER**

| Method                                                  | Extraction / Preparation |                    |              | Analysis      |              |
|---------------------------------------------------------|--------------------------|--------------------|--------------|---------------|--------------|
|                                                         | Date extracted           | Due for extraction | Days overdue | Date analysed | Days overdue |
| <b>EP070: Total Petroleum Hydrocarbons - Speciation</b> |                          |                    |              |               |              |
| Amber Glass Bottle - Unpreserved<br>MW06                | 11-JUN-2009              | 09-JUN-2009        | 2            | 0000          | 0000         |
| <b>EP080/071: Total Petroleum Hydrocarbons</b>          |                          |                    |              |               |              |
| Amber Glass Bottle - Unpreserved<br>MW06                | 11-JUN-2009              | 09-JUN-2009        | 2            | 0000          | 0000         |

### Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of . uality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

RTI DL RELEASE - EHP



Environmental Division

**SAMPLE RECEIPT NOTIFICATION (SRN)**  
**Comprehensive Report**

Work Order : **EB0908932**

|                |                                  |              |                                                    |
|----------------|----------------------------------|--------------|----------------------------------------------------|
| Client Name    | \$ <b>SINCLAIR KNIGHT MERZ</b>   | ALS Office   | \$ Environmental Division Brisbane                 |
| Client Address | \$ <b>MS ONA KANAS</b>           | ALS Analyst  | \$ <b>Tim Kilmister</b>                            |
| Address        | : P O BOX 246                    | Address      | : 32 Shand Street Stafford QLD Australia 4053      |
|                | SPRING HILL QLD, A, STRALIA 4004 |              |                                                    |
| E-mail         | : okanas@skm.com.au              | E-mail       | : Services.Brisbane@alsenviro.com                  |
| Telephone      | : +61 07 3244 7100               | Telephone    | : +61-7-3243 7222                                  |
| Facsimile      | : +61 07 3244 7306               | Facsimile    | : +61-7-3243 7218                                  |
| Project        | : +++++                          | Page         | : 4 '8 "                                           |
| Order number   | : +++++                          | Quote number | : ES2009SINKNI0322 (EN/003/09)                     |
| C-O-C number   | : +++++                          | QC Level     | : NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Site           | : Cronulla Park                  |              |                                                    |
| Sampler        | : +++++                          |              |                                                    |

**Dates**

|                           |               |                          |                      |
|---------------------------|---------------|--------------------------|----------------------|
| Date Samples Received     | : 12-JUN-2009 | Issue Date               | : 12-JUN-2009 15:59  |
| Client Requested Due Date | : 12-JUN-2009 | Scheduled Reporting Date | : <b>12-JUN-2009</b> |

**Delivery Details**

|                      |             |                         |                              |
|----------------------|-------------|-------------------------|------------------------------|
| Mode of Delivery     | : Carrier   | Temperature             | : 1.2 C, 7.8 C - Ice present |
| No. of coolers/boxes | : 2 MEDI, M | No. of samples received | : 14                         |
| Security Seal        | : Intact.   | No. of samples analysed | : 14                         |

**General Comments**

- This report contains the following information:
  - + Sample Container(s)/Preservation Non-Compliance
  - + Summary of Sample(s) and Requested Analysis
  - + Requested Deliverables
- **Sample containers do not comply to pretreatment / preservation standards (AS, APHA, USEPA). Please refer to the Sample Container(s)/Preservation Non-Compliance Log at the end of this report for details.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **Sample DUP05a was not received.**
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Please direct any queries related to sample condition / numbering / breakages to Maggie Kahi.
- Analytical work for this work order will be conducted at ALS Brisbane.
- Sample Disposal - Aqueous (14 days), Solid (90 days) from date of completion of work order.





## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, , SEPA standards.

| Method                                                 | Sample Container Received                        | Preferred Sample Container for Analysis        |
|--------------------------------------------------------|--------------------------------------------------|------------------------------------------------|
| <b>Client sample ID</b>                                |                                                  |                                                |
| <b>EG020A-F : Dissolved Metals by ICP-MS - Suite A</b> |                                                  |                                                |
| <b>MW07</b>                                            | - Clear Plastic Bottle - Sulphuric Acid          | - Clear Plastic Bottle - Nitric Acid; Filtered |
| <b>EG035F : Dissolved Mercury by FIMS</b>              |                                                  |                                                |
| <b>MW07</b>                                            | - Clear Plastic Bottle - Sulphuric Acid          | - Clear Plastic Bottle - Nitric Acid; Filtered |
| <b>EK055G : Ammonia as N by Discrete analyser</b>      |                                                  |                                                |
| <b>MW07</b>                                            | - Amber Glass Bottle - , npreserved              | - Clear Plastic Bottle - Sulphuric Acid        |
| <b>EP070 : TPH - Speciation</b>                        |                                                  |                                                |
| <b>MW07</b>                                            | - Amber VOC Vial - HCl or NaHSO4                 | - Amber Glass Bottle - , npreserved            |
| <b>EP071-HX : TPH - Semivolatile Fraction</b>          |                                                  |                                                |
| <b>MW07</b>                                            | - Amber VOC Vial - HCl or NaHSO4                 | - Amber Glass Bottle - , npreserved            |
| <b>EP074 : Volatile Organic Compounds</b>              |                                                  |                                                |
| <b>MW07</b>                                            | - Clear Plastic Bottle - Filtered; Lab-acidified | - Amber VOC Vial - HCl or NaHSO4               |
| <b>EP080 : TPH Volatiles/BTEX</b>                      |                                                  |                                                |
| <b>MW07</b>                                            | - Clear Plastic Bottle - Filtered; Lab-acidified | - Amber VOC Vial - HCl or NaHSO4               |

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package. 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.

Matrix: **WATER**

| Laboratory sample ID | Client sampling date / time | Client sample ID | EATER - EK055G Ammonia as N By Discrete Analyser | EATER - EP070 (Eater) TPH Speciation - Aliphatic & Aromatic Hydrocarbons C10-C35 | EATER - EP071(V - TPH-E) TPH Volatiles | EATER - EP071-HX Total Petroleum Hydrocarbons (TPH) | EATER - EP074 (water) Volatile Organic Compounds | EATER - EP075 SIM Phenols only SIM - Phenols only | EATER - E-02 8 Metals | EATER - E+1) TPH/BTEX/8 Metals |
|----------------------|-----------------------------|------------------|--------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------------|--------------------------------------------------|---------------------------------------------------|-----------------------|--------------------------------|
| EB0908932-001        | 02-J, N-2009 15:00          | ME 14            | ✓                                                |                                                                                  |                                        |                                                     |                                                  |                                                   |                       | ✓                              |
| EB0908932-002        | 02-J, N-2009 15:00          | ME 02            | ✓                                                |                                                                                  |                                        |                                                     |                                                  |                                                   |                       | ✓                              |
| EB0908932-003        | 02-J, N-2009 15:00          | ME 1"            | ✓                                                |                                                                                  |                                        |                                                     |                                                  | ✓                                                 | ✓                     |                                |
| EB0908932-004        | 02-J, N-2009 15:00          | ME 04            | ✓                                                | ✓                                                                                | ✓                                      | ✓                                                   | ✓                                                |                                                   | ✓                     |                                |
| EB0908932-005        | 02-J, N-2009 15:00          | ME 1)            | ✓                                                | ✓                                                                                | ✓                                      | ✓                                                   | ✓                                                |                                                   | ✓                     |                                |
| EB0908932-006        | 02-J, N-2009 15:00          | ME 1"            | ✓                                                | ✓                                                                                | ✓                                      | ✓                                                   | ✓                                                |                                                   | ✓                     |                                |
| EB0908932-007        | 02-J, N-2009 15:00          | ME 15            | ✓                                                | ✓                                                                                | ✓                                      | ✓                                                   | ✓                                                |                                                   | ✓                     |                                |
| EB0908932-008        | 02-J, N-2009 15:00          | ME 17            | ✓                                                |                                                                                  |                                        |                                                     |                                                  | ✓                                                 | ✓                     |                                |
| EB0908932-009        | 02-J, N-2009 15:00          | ME 1;            | ✓                                                |                                                                                  |                                        |                                                     |                                                  | ✓                                                 | ✓                     |                                |
| EB0908932-010        | 02-J, N-2009 15:00          | ~, P05           |                                                  |                                                                                  |                                        |                                                     |                                                  |                                                   |                       | ✓                              |
| EB0908932-011        | 02-J, N-2009 15:00          | ME A (CR13)      | ✓                                                |                                                                                  |                                        |                                                     |                                                  | ✓                                                 | ✓                     |                                |
| EB0908932-012        | 02-J, N-2009 15:00          | ME B (CR14)      |                                                  |                                                                                  |                                        |                                                     |                                                  |                                                   |                       | ✓                              |
| EB0908932-013        | 02-J, N-2009 15:00          | ME C (CR15)      |                                                  |                                                                                  |                                        |                                                     |                                                  |                                                   |                       | ✓                              |
| EB0908932-014        | 02-J, N-2009 15:00          | Drain            | ✓                                                |                                                                                  |                                        |                                                     |                                                  | ✓                                                 | ✓                     |                                |



Matrix: WATER

| Laboratory sample ID | Client sampling date / time | Client sample ID | EATER - E +41<br>TPH/VOC/PAH | EATER - E -14A<br>PAH/Phenols (SIM) |
|----------------------|-----------------------------|------------------|------------------------------|-------------------------------------|
| EB0908932-003        | 02-J, N-2009 15:00          | ME 1"            | ✓                            |                                     |
| EB0908932-004        | 02-J, N-2009 15:00          | ME 04            |                              | ✓                                   |
| EB0908932-005        | 02-J, N-2009 15:00          | ME 1)            |                              | ✓                                   |
| EB0908932-006        | 02-J, N-2009 15:00          | ME 1"            |                              | ✓                                   |
| EB0908932-007        | 02-J, N-2009 15:00          | ME 15            |                              | ✓                                   |
| EB0908932-008        | 02-J, N-2009 15:00          | ME 17            | ✓                            |                                     |
| EB0908932-009        | 02-J, N-2009 15:00          | ME 1;            | ✓                            |                                     |
| EB0908932-011        | 02-J, N-2009 15:00          | ME A (CR13)      | ✓                            |                                     |
| EB0908932-014        | 02-J, N-2009 15:00          | Drain            | ✓                            |                                     |

### Requested Deliverables

#### ACCOUNTS PAYABLE

+ A4 - A, Tax Invoice ( INV )

Email

E AAccounts@skm.com.au

#### MR JEREMY WICKS

+ \*A, Certificate of Analysis - NATA ( COA )

Email

jwicks@skm.com.au

+ \*A, Interpretive QC Report - DEFA, LT (Anon QCI Rep) ( QCI )

Email

jwicks@skm.com.au

+ \*A, QC Report - DEFA, LT (Anon QC Rep) - NATA ( QC )

Email

jwicks@skm.com.au

+ A4 - A, Sample Receipt Notification - Environmental ( SRN )

Email

jwicks@skm.com.au

+ Default - Chain of Custody ( COC )

Email

jwicks@skm.com.au

+ EDI Format - ENMRG ( ENMRG )

Email

jwicks@skm.com.au

+ EDI Format - ESDAT ( ESDAT )

Email

jwicks@skm.com.au

+ EDI Format - XTab ( XTab )

Email

jwicks@skm.com.au

#### MS ONA KANAS

+ \*A, Certificate of Analysis - NATA ( COA )

Email

okanas@skm.com.au

+ \*A, Interpretive QC Report - DEFA, LT (Anon QCI Rep) ( QCI )

Email

okanas@skm.com.au

+ \*A, QC Report - DEFA, LT (Anon QC Rep) - NATA ( QC )

Email

okanas@skm.com.au

+ A4 - A, Sample Receipt Notification - Environmental ( SRN )

Email

okanas@skm.com.au

+ Default - Chain of Custody ( COC )

Email

okanas@skm.com.au

+ EDI Format - ENMRG ( ENMRG )

Email

okanas@skm.com.au

+ EDI Format - ESDAT ( ESDAT )

Email

okanas@skm.com.au

+ EDI Format - XTab ( XTab )

Email

okanas@skm.com.au



Environmental Division

**CERTIFICATE OF ANALYSIS**

Work Order : **EB0909112** Page : 1 of 6

Client : **SINCLAIR KNIGHT MERZ** Laboratory : Environmental Division Brisbane

Contact : MS "## %\$#\$, Contact : Tim %lmister

\$ address : P " BOX 246 \$ address : 32 Shand Street Stafford . LD \$ustralia 40'\$

SP\*+G -+LL . LD/\$# , \*\$ L+\$400!

E-mail : okanas@skm.com.au E-mail : Services.Brisbane@alsenviro.com

Telephone : +61 07 3244 7100 Telephone : +61-7-3243 7222

Facsimile : +61 07 3244 7306 Facsimile : +61-7-3243 7218

Project : QE09537 Greyhound . Id Ltd . C Level : NEPM 1999 Schedule B(3) and \$LS . CS3 requirement

"rder number : ((( Date Samples \* eceived : 09(4##-2009

C-" -C number : ((( Issue Date : 16-JU#-2009

Sampler : " -#%\$#\$ , # o. of samples received : 1

Site : ((( # o. of samples analysed : 1

. uote number : EN\$0\$0\$09

This report supersedes any previous report(s) with this reference. \* results apply to the sample(s) as submitted. \$ll pages of this report have been checked and approved for release.

This Certificate of \$nalysis contains the following information:

- General Comments
- \$nalytical \* results
- Surrogate Control Limits



WORLD RECOGNISED  
**ACCREDITATION**

#\$ ° \$ \$ccredited Laboratory 825

This document is issued in accordance with #\$ ° \$ accreditation requirements.

\$ccredited for compliance with + " \$EC 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 CF\* Part 11.

| Signatories     | Position               | Accreditation Category |
|-----------------|------------------------|------------------------|
| Sarah \$shworth | "rganic Chemist        | "rganics               |
| Stephen - islop | Senior *rganic Chemist | *rganics               |

**Environmental Division Brisbane**

Part of the **ALS Laboratory Group**

32 Shand Street Stafford . LD \$ustralia 40'\$

Tel. +61-7-3243 7222 Fax. +61-7-3243 7218 www.alsglobal.com

A Campbell Brothers Limited Company



Page : 2 of 6  
Work " rder : EB0909112  
Client : , + #CL\$+\* % # # - T MER:  
Project : QE09537 Greyhound . Id Ltd

13-054

### General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the U, EP\$/ \$P-\$ / \$\$ and NEPM. n 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 L""/ this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the L"" of a reported result differs from standard L""/ 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. # the sampling time is displayed as 0:00 the information was not provided by client.

%ey : C\$S # umber = C\$S registry number from database maintained by Chemical \$bstracts Services. The Chemical \$bstracts Service is a division of the \$merican Chemical Society.

L"" = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

- Volatile TPH/BTEX: Poor matrix spike recovery due to matrix interference. Confirmed by re-analysis.



Page : \$ of 6  
Work " rder : EB0909112  
Client : , +#CL\$+\* %\*#\* - T MER:  
Project : QE09537 Greyhound . Id Ltd

## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                         |                   | Client sample ID |      | Client sampling date / time |  | Drain 1           |  |  |  |  |  |
|-------------------------------------------|-------------------|------------------|------|-----------------------------|--|-------------------|--|--|--|--|--|
|                                           |                   |                  |      |                             |  | 09(4##-2009 15:00 |  |  |  |  |  |
| Compound                                  | CAS Number        | LOR              | Unit | EB0909112-001               |  |                   |  |  |  |  |  |
| EG020T: Total Metals by ICP-MS            |                   |                  |      |                             |  |                   |  |  |  |  |  |
| Arsenic                                   | .!! 0-38-2        | 0-001            | mg/L | 0.001                       |  |                   |  |  |  |  |  |
| Cadmium                                   | .!! 0!(S( 9       | 0-0001           | mg/L | 0.0003                      |  |                   |  |  |  |  |  |
| Chromium                                  | .!! 0!(.(\$       | 0-001            | mg/L | 0.007                       |  |                   |  |  |  |  |  |
| Copper                                    | .!! 0' 0/         | 0-001            | mg/L | 0.002                       |  |                   |  |  |  |  |  |
| Lead                                      | !\$ 9(92-1        | 0-001            | mg/L | 0.001                       |  |                   |  |  |  |  |  |
| Nickel                                    | .!! 0(02-0        | 0-001            | mg/L | 0.005                       |  |                   |  |  |  |  |  |
| Zinc                                      | .!! 0-66-6        | 0-001            | mg/L | 0.097                       |  |                   |  |  |  |  |  |
| EG035T: Total Recoverable Mercury by FIMS |                   |                  |      |                             |  |                   |  |  |  |  |  |
| Mercury                                   | !\$ 9(97-6        | 0-0001           | mg/L | ; 0-0001                    |  |                   |  |  |  |  |  |
| EP074A: Monocyclic Aromatic Hydrocarbons  |                   |                  |      |                             |  |                   |  |  |  |  |  |
| Benzene                                   | 71-43-2           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| Toluene                                   | 10(/(/(\$         | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| Ethylbenzene                              | 100-41-4          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| meta- & para-Xylene                       | 108-38-3 106-42-3 | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| Styrene                                   | 100-42-5          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| ortho-Xylene                              | 95-47-6           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| Isopropylbenzene                          | 98-82-8           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| n-Propylbenzene                           | 103-65-1          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| 1,3,5-Trimethylbenzene                    | 108-67-8          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| sec-Butylbenzene                          | 135-9(/           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| 1,2,4-Trimethylbenzene                    | 95-63-6           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| tert-Butylbenzene                         | 9(/ 06-6          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| p-Isopropyltoluene                        | 99-87-6           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| n-Butylbenzene                            | 104-51-8          | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| EP074B: Oxygenated Compounds              |                   |                  |      |                             |  |                   |  |  |  |  |  |
| Vinyl Acetate                             | 10(/ 0'(!         | ' 0              | Jg/L | ' 0                         |  |                   |  |  |  |  |  |
| 2-Butanone (MEK)                          | ./(! 9\$(\$       | ' 0              | Jg/L | ' 0                         |  |                   |  |  |  |  |  |
| 4-Methyl-2-pentanone (MIBK)               | 108-10-1          | ' 0              | Jg/L | ' 0                         |  |                   |  |  |  |  |  |
| 2-Hexanone (MBK)                          | ' 91-78-6         | ' 0              | Jg/L | ' 0                         |  |                   |  |  |  |  |  |
| EP074C: Sulfonated Compounds              |                   |                  |      |                             |  |                   |  |  |  |  |  |
| Carbon disulfide                          | 75-15-0           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| EP074D: Fumigants                         |                   |                  |      |                             |  |                   |  |  |  |  |  |
| 2,2-Dichloropropane                       | ' 94-20(.         | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| 1,2-Dichloropropane                       | ./!(/.'           | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| cis-1,3-Dichloropropylene                 | 10061-01-5        | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| trans-1,3-Dichloropropylene               | 10061-02-6        | '                | Jg/L | '                           |  |                   |  |  |  |  |  |
| 1,2-Dibromoethane (EDB)                   | 106-9\$(!         | '                | Jg/L | '                           |  |                   |  |  |  |  |  |



Page : 1 of 6  
Work " rder : EB0909112  
Client : , +#CL\$+\* %#+ - T MER:  
Project : QE09537 Greyhound . Id Ltd

## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                       |            | Client sample ID |      | Client sampling date / time |  | Drain 1          |     |  |  |  |  |  |  |
|-----------------------------------------|------------|------------------|------|-----------------------------|--|------------------|-----|--|--|--|--|--|--|
|                                         |            |                  |      |                             |  | 09(4#-2009 15:00 |     |  |  |  |  |  |  |
|                                         |            |                  |      |                             |  | EB0909112-001    |     |  |  |  |  |  |  |
| Compound                                | CAS Number | LOR              | Unit |                             |  |                  |     |  |  |  |  |  |  |
| EP074E: Halogenated Aliphatic Compounds |            |                  |      |                             |  |                  |     |  |  |  |  |  |  |
| Dichlorodifluoromethane                 | 75-71-8    | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| Chloromethane                           | .1/((\$    | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| Vinyl chloride                          | .'( 01-4   | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| Bromomethane                            | .1/(\$ 9   | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| Chloroethane                            | .'( 00(\$  | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| Trichlorofluoromethane                  | 75-69(l    | ' 0              | Jg/L |                             |  |                  | ' 0 |  |  |  |  |  |  |
| 1.1-Dichloroethene                      | .'(\$(!    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Iodomethane                             | .1/(/(!    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| trans-1.2-Dichloroethene                | 156-60('   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1-Dichloroethane                      | .'(\$(\$   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| cis-1.2-Dichloroethene                  | 156-59-2   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1.1-Trichloroethane                   | 71-55-6    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1-Dichloropropylene                   | 563-58-6   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Carbon Tetrachloride                    | 56-23-5    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2-Dichloroethane                      | 10.( 06-2  | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Trichloroethene                         | . 9(01-6   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Dibromomethane                          | .1( 9('\$  | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1.2-Trichloroethane                   | . 9(00('   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.3-Dichloropropane                     | 142-28-9   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Tetrachloroethene                       | 127-18-4   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1.1.2-Tetrachloroethane               | 630-20-6   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| trans-1.4-Dichloro-2-butene             | 110-57-6   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| cis-1.4-Dichloro-2-butene               | 1476-11-5  | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.1.2.2-Tetrachloroethane               | . 9(\$(!'  | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2.3-Trichloropropane                  | 96-18-4    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Pentachloroethane                       | 76-01-7    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2-Dibromo-3-chloropropane             | 96-12-8    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Hexachlorobutadiene                     | 87-68-3    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| EP074F: Halogenated Aromatic Compounds  |            |                  |      |                             |  |                  |     |  |  |  |  |  |  |
| Chlorobenzene                           | 10(/ 90(.  | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| Bromobenzene                            | 108-86-1   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 2-Chlorotoluene                         | 9(! 9(/    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 4-Chlorotoluene                         | 106-43-4   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.3-Dichlorobenzene                     | 541-73-1   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.4-Dichlorobenzene                     | 106-46-7   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2-Dichlorobenzene                     | 9(' 0-1    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2.4-Trichlorobenzene                  | 120-82-1   | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |
| 1.2.3-Trichlorobenzene                  | 87-61-6    | '                | Jg/L |                             |  |                  | '   |  |  |  |  |  |  |

## Analytical Results

**Sub-Matrix: WATER**

| Sub-Matrix: WATER                       |                   | Client sample ID |      | Client sampling date / time |   |
|-----------------------------------------|-------------------|------------------|------|-----------------------------|---|
| Compound                                | CAS Number        | LOR              | Unit | Drain 1                     |   |
| 09/4##-2009 15:00                       |                   |                  |      |                             |   |
| EB0909112-001                           |                   |                  |      |                             |   |
| EP074G: Trihalomethanes                 |                   |                  |      |                             |   |
| Chloroform                              | 67-66-3           | '                | Jg/L | '                           | ( |
| Bromodichloromethane                    | 75-27-4           | '                | Jg/L | '                           | ( |
| Dibromochloromethane                    | 124-48-1          | '                | Jg/L | '                           | ( |
| Bromoform                               | 75-25-2           | '                | Jg/L | '                           | ( |
| EP074H: Naphthalene                     |                   |                  |      |                             |   |
| Naphthalene                             | 91-20(\$          | .                | Jg/L | ;                           | ( |
| EP080/071: Total Petroleum Hydrocarbons |                   |                  |      |                             |   |
| C6 - C9 Fraction                        | (                 | 20               | Jg/L | <20                         | ( |
| C10 - C14 Fraction                      | (                 | ' 0              | Jg/L | ' 0                         | ( |
| C15 - C28 Fraction                      | (                 | 100              | Jg/L | 200                         | ( |
| C29 - C36 Fraction                      | (                 | ' 0              | Jg/L | 100                         | ( |
| EP080: BTEX                             |                   |                  |      |                             |   |
| Benzene                                 | 71-43-2           | 1                | Jg/L | <1                          | ( |
| Toluene                                 | 10(/(/(\$         | 2                | Jg/L | <2                          | ( |
| Ethylbenzene                            | 100-41-4          | 2                | Jg/L | <2                          | ( |
| meta- & para-Xylene                     | 108-38-3 106-42-3 | 2                | Jg/L | <2                          | ( |
| ortho-Xylene                            | 95-47-6           | 2                | Jg/L | <2                          | ( |
| EP074S: VOC Surrogates                  |                   |                  |      |                             |   |
| 1,2-Dichloroethane-D4                   | 17060(0,(0        | 0.1              | K    | 102                         | ( |
| Toluene-D8                              | 2037-26-5         | 0.1              | K    | 104                         | ( |
| 4-Bromofluorobenzene                    | 460(00(i          | 0.1              | K    | 96.7                        | ( |
| EP080S: TPH(V)/BTEX Surrogates          |                   |                  |      |                             |   |
| 1,2-Dichloroethane-D4                   | 17060(0,(0        | 0.1              | K    | 94.0                        | ( |
| Toluene-D8                              | 2037-26-5         | 0.1              | K    | 99.5                        | ( |
| 4-Bromofluorobenzene                    | 460(00(i          | 0.1              | K    | 96.1                        | ( |



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Project : QE09537 Greyhound . Id Ltd

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### Surrogate Control Limits

| Sub-Matrix: WATER              |             | Recovery Limits (%) |      |
|--------------------------------|-------------|---------------------|------|
| Compound                       | CAS Number  | Low                 | High |
| EP074S: VOC Surrogates         |             |                     |      |
| 1,2-Dichloroethane-D4          | 17060(0.( 0 | / 0                 | 120  |
| Toluene-D8                     | 2037-26-5   | //                  | 110  |
| 4-Bromofluorobenzene           | 460(00(l    | 86                  | 115  |
| EP080S: TPH(V)/BTEX Surrogates |             |                     |      |
| 1,2-Dichloroethane-D4          | 17060(0.( 0 | / 0                 | 120  |
| Toluene-D8                     | 2037-26-5   | //                  | 110  |
| 4-Bromofluorobenzene           | 460(00(l    | 86                  | 115  |





Environmental Division

**QUALITY CONTROL REPORT**

|               |                                                  |                         |                                                    |
|---------------|--------------------------------------------------|-------------------------|----------------------------------------------------|
| Work Order    | : EB0909112                                      | P>B                     | : 6 of 66                                          |
| Client        | : SINCLAIR KNIGHT MERZ                           | Laboratory              | : Environmental Division Brisbane                  |
| Contact       | : MS ONA KANAS                                   | Contact                 | : Tim Kilmister                                    |
| Address       | : P O BOX 246<br>SPRING HILL QLD, AUSTRALIA 4004 | Address                 | : 32 S1and Street Stafford QLD A2stralia 4053      |
| E-mail        | : okanas@skm.com.au                              | E-mail                  | : Services.Brisbane@alsenviro.com                  |
| Telephone     | : +61 07 3244 7100                               | Telep1one               | : +61-7-3243 7222                                  |
| Facsimile     | : +61 07 3244 7306                               | Facsimile               | : +61-7-3243 7218                                  |
| Project       | : QE09537 Grey1o2nd Qld Ltd                      | QC Level                | : NEPM 1999 Sc1ed2le B(3) and ALS QCS3 req2irement |
| Site          | : ///                                            | Date Samples Received   | : +/~/>*/!++:                                      |
| C-O-C n2mber  | : ///                                            | Issue Date              | : 5#/~/>*/!++:                                     |
| Sampler       | : 2~~~~                                          | No. of samples received | : 5                                                |
| Order n2mber  | : ///                                            | No. of samples analysed | : 5                                                |
| ( Zote n2mber | : EN/003/09                                      |                         |                                                    |

1is report s2persedes any previo2s report(s) wit1 t1is reference. Res2lts apply to t1e sample(s) as s2mitted. All pages of t1is report 1ave been c1ecked and approved for release.

1is Q2ality Control Report contains t1e following information:

- Laboratory D2plicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Met1od Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



WORLD RECOGNISED  
**ACCREDITATION**

|                                                                            |                    |                                                                                                                                                                                               |
|----------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NATA Accredited Laboratory 825                                             | <b>Signatories</b> | 1is doc2ment 1as been electronically signed by t1e a2t1orized signatories indicated below. Electronic signing 1as been carried o2t in compliance wit1 proced2res specified in 21 CFR Part 11. |
| 1is doc2ment is iss2ed in accordance wit1 NATA accreditation req2irements. | <i>Signatories</i> | <i>Position</i>                                                                                                                                                                               |
| Accredited for compliance wit1 ISO/IEC 17025.                              | Sara1 As1wort1     | Organic C1emist                                                                                                                                                                               |
|                                                                            | Step1en Hislop     | Senior Inorganic C1emist                                                                                                                                                                      |
|                                                                            |                    | Organics                                                                                                                                                                                      |
|                                                                            |                    | Inorganics                                                                                                                                                                                    |

**Environmental Division Brisbane**

Part of the **ALS Laboratory Group**

32 S1and Street Stafford QLD A2stralia 4053

Tel. +61-7-3243 7222 Fax. +61-7-3243 7218 [www.alsglobal.com](http://www.alsglobal.com)

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### General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures as those specified by the USEPA, AS and NEPM. In those developed procedures are employed in the absence of documented standards or by client request.

The moisture determination has been performed, results are reported on a dry weight basis.

The reported loss (LOI) is 11.1% LOI, this may be due to primary sample extraction/digestion and/or insufficient sample for analysis.

The LOI of a reported result differs from standard LOI, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :  
Anonymo2s = Refers to samples which are not specifically part of this work order but formed part of the QC process lot  
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.  
LOI = Limit of reporting  
RPD = Relative Percentage Difference  
# = Indicates failed QC

PROJ DL RELEASE - EHP



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### Laboratory Duplicate (DUP) Report

1e =2ality control term Laboratory D2plicate refers to a randomly selected intralaboratory split. Laboratory °2plicates provide information regarding met1od precision and sample 1eterogeneity. ,1e permitted ranges for 11e Relative Percent Deviation (RPD) of Laboratory D2plicates are specified in ALS Met1od (E%-EN/38 and are dependent on 11e magnit2de of res2lts in comparison to 11e level of reporting: Res2lt < 10 times LOR:- No Limit; Res2lt between 10 and 20 times LOR:- 0% - 50%; Res2lt > 20 times LOR:- 0% - 20%.

2b-Matrix: **WATER**

| Laboratory sample ID                             |                               | Client sample ID                                            | Method: Compound   | CAS Number      | LOR            | Unit    | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |          |          |
|--------------------------------------------------|-------------------------------|-------------------------------------------------------------|--------------------|-----------------|----------------|---------|-----------------|------------------|---------|---------------------|----------|----------|
| EG020T: Total Metals by ICP-MS (QC Lot: 1006390) |                               |                                                             |                    |                 |                |         |                 |                  |         |                     |          |          |
| EB0908843-002                                    | Anonymo2s                     |                                                             | EG020A-T: Cadmi2m  | 6""+""/1:.      | +2+++5         | mg/L    | G+2+++5         | +2+++1           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Arsenic  | 6""+/,8/!       | +2++5          | mg/L    | G+2++5          | G+2++5           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: C1romi2m | 6""+/"6/!       | +2++5          | mg/L    | G+2++5          | G+2++5           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Copper   | 6""+/,+8        | +2++5          | mg/L    | G+2++5          | G+2++5           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Lead     | 6"/:!/5         | +2++5          | mg/L    | G+2++5          | G+2++5           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Nickel   | 6""+/,+!/+      | +2++5          | mg/L    | G+2++5          | G+2++5           | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Zinc     | 6""+###/##      | +2+.           | mg/L    | G+2+.           | G+2+.            | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             | EG020A-T: Cadmi2m  | 6""+""/1:.      | +2+++5         | mg/L    | +2++6!          | +2++65           | !2"     | 0% - 20%            |          |          |
|                                                  |                               |                                                             | EG020A-T: Arsenic  | 6""+/,8/!       | +2++5          | mg/L    | +2+.            | +2+5             | :28     | 0% - 20%            |          |          |
|                                                  |                               |                                                             | EG020A-T: C1romi2m | 6""+/"6/!       | +2++5          | mg/L    | +258"           | +2568            | ,25     | 0% - 20%            |          |          |
| EB0909085-001                                    | Anonymo2s                     |                                                             | EG020A-T: Copper   | 6""+/,+8        | +2++5          | mg/L    | +2"#5           | +2"6#            | ,2!     | 0% - 20%            |          |          |
|                                                  |                               |                                                             | EG020A-T: Lead     | 6"/:!/5         | +2++5          | mg/L    | +2!5#           | +2!55            | !2,     | 0% - 20%            |          |          |
|                                                  |                               |                                                             | EG020A-T: Nickel   | 6""+/,+!/+      | +2++5          | mg/L    | +2585           | +256:            | +2:     | 0% - 20%            |          |          |
|                                                  |                               |                                                             | EG020A-T: Zinc     | 6""+###/##      | +2+.           | mg/L    | !2!6            | !2,,             | !2#     | 0% - 20%            |          |          |
|                                                  |                               |                                                             |                    |                 |                |         |                 |                  |         |                     |          |          |
|                                                  |                               | EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1005964) |                    |                 |                |         |                 |                  |         |                     |          |          |
|                                                  |                               |                                                             | Anonymo2s          | EG035T: Merc2ry | 6"/:!/6/#      | +2+++5  | mg/L            | G+2+++5          | G+2+++5 | +2+                 | No Limit |          |
|                                                  |                               |                                                             | Anonymo2s          | EG035T: Merc2ry | 6"/:!/6/#      | +2+++5  | mg/L            | G+2+++5          | G+2+++5 | +2+                 | No Limit |          |
|                                                  |                               | EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 1004531)  |                    |                 |                |         |                 |                  |         |                     |          |          |
|                                                  |                               | EB0909112-001                                               | Drain 1            |                 | EP074: Benzene | 65"/!/. | .               | µg/L             | G.      | G.                  | +2+      | No Limit |
|                                                  | EP074: Tol2ene                |                                                             |                    | 5+8/88/!        | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: Et1ylbenzene           |                                                             |                    | 5++"/5/"        | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: meta- & para-Xylene    |                                                             |                    | 108-38-3        | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  |                               |                                                             |                    | 5+##"/!.        | .              |         |                 |                  |         |                     |          |          |
|                                                  | EP074: Styrene                |                                                             |                    | 5++"/!.         | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: ort1o-Xylene           |                                                             |                    | :/6#            | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: Isopropylbenzene       |                                                             |                    | :8/8/8          | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: n-Propylbenzene        |                                                             |                    | 5+/,#./5        | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: 1,3,5-Trimet1ylbenzene |                                                             |                    | 5+8#6/8         | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: sec-B2ylbenzene        |                                                             |                    | 5,/8/8          | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: 1,2,4-Trimet1ylbenzene |                                                             |                    | :/#./#          | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: tert-B2ylbenzene       |                                                             |                    | :8/+##          | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: p-Isopropyltol2ene     |                                                             |                    | :/86/#          | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
|                                                  | EP074: n-B2ylbenzene          |                                                             |                    | 5+"/5/8         | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |
| EB0909114-014                                    | Anonymo2s                     |                                                             |                    |                 | EP074: Benzene | 65"/!/. | .               | µg/L             | G.      | G.                  | +2+      | No Limit |
|                                                  |                               |                                                             | EP074: Tol2ene     | 5+8/88/!        | .              | µg/L    | G.              | G.               | +2+     | No Limit            |          |          |

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| 2b-Matrix: WATER                                                       |                  | Laboratory Duplicate (DUP) Report  |                     |     |      |                 |                  |         |                     |
|------------------------------------------------------------------------|------------------|------------------------------------|---------------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                   | Client sample ID | Method: Compound                   | CAS Number          | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 1004531) - continued |                  |                                    |                     |     |      |                 |                  |         |                     |
| EB0909114-014                                                          | Anonymo2s        | EP074: Ethylbenzene                | 5+*/5"              | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: meta- & para-Xylene         | 108-38-3<br>5+*/1/. | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: Styrene                     | 5+*/1/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: ortho-Xylene                | 106-96-8<br>5+*/6#  | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: Isopropylbenzene            | 98-06-1<br>5+*/8/8  | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: n-Propylbenzene             | 5+*/5               | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,3,5-Trimethylbenzene      | 5+*/6/8             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: sec-B2tylbenzene            | 5+*/8/8             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,2,4-Trimethylbenzene      | 5+*/#               | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: tert-B2tylbenzene           | 5+*/##              | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: p-Isopropyltol2ene          | 5+*/86/#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: n-B2tylbenzene              | 5+*/1,5/8           | .   | µg/L | G.              | G.               | +2+     | No Limit            |
| EP074B: Oxygenated Compounds (QC Lot: 1004531)                         |                  |                                    |                     |     |      |                 |                  |         |                     |
| EB0909112-001                                                          | Drain 1          | EP074: Pinyl Acetate               | 5+8+*/"             | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: 2-B2tanone (MEK)            | 68/1/.              | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: 4-Met1yl-2-pentanone (MIBK) | 5+8/5+1/5           | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: 2-Hexanone (MBK)            | 5+68/#              | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: Pinyl Acetate               | 5+8+*/"             | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: 2-B2tanone (MEK)            | 68/1/.              | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
| EB0909114-014                                                          | Anonymo2s        | EP074: 4-Met1yl-2-pentanone (MIBK) | 5+8/5+1/5           | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
|                                                                        |                  | EP074: 2-Hexanone (MBK)            | 5+68/#              | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |
| EP074C: Sulfonated Compounds (QC Lot: 1004531)                         |                  |                                    |                     |     |      |                 |                  |         |                     |
| EB0909112-001                                                          | Drain 1          | EP074: Carbon dis2lfide            | 6/5/1+              | .   | µg/L | G.              | G.               | +2+     | No Limit            |
| EB0909114-014                                                          | Anonymo2s        | EP074: Carbon dis2lfide            | 6/5/1+              | .   | µg/L | G.              | G.               | +2+     | No Limit            |
| EP074D: Fumigants (QC Lot: 1004531)                                    |                  |                                    |                     |     |      |                 |                  |         |                     |
| EB0909112-001                                                          | Drain 1          | EP074: 2,2-Dic1loropropane         | 5+*/1/1/6           | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,2-Dic1loropropane         | 68/86/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: cis-1,3-Dic1loropropylene   | 5+*+5/1+5/.         | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: trans-1,3-Dic1loropropylene | 5+*+5/1+1/#         | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,2-Dibromoet1ane (EDB)     | 5+*+5/1/."          | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 2,2-Dic1loropropane         | 5+*/1/1/6           | .   | µg/L | G.              | G.               | +2+     | No Limit            |
| EB0909114-014                                                          | Anonymo2s        | EP074: 1,2-Dic1loropropane         | 68/86/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: cis-1,3-Dic1loropropylene   | 5+*+5/1+5/.         | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: trans-1,3-Dic1loropropylene | 5+*+5/1+1/#         | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,2-Dibromoet1ane (EDB)     | 5+*+5/1/."          | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 2,2-Dic1loropropane         | 5+*/1/1/6           | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: 1,2-Dic1loropropane         | 68/86/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1004531)              |                  |                                    |                     |     |      |                 |                  |         |                     |
| EB0909112-001                                                          | Drain 1          | EP074: 1,1-Dic1loroet1fene         | 6/1/1"              | .   | µg/L | G.              | G.               | +2+     | No Limit            |
|                                                                        |                  | EP074: Iodomet1fane                | 6"/88"              | .   | µg/L | G.              | G.               | +2+     | No Limit            |

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| 2b-Matrix: WATER                                                      |                  | Laboratory Duplicate (DUP) Report  |                    |     |      |                 |                  |         |                     |  |
|-----------------------------------------------------------------------|------------------|------------------------------------|--------------------|-----|------|-----------------|------------------|---------|---------------------|--|
| Laboratory sample ID                                                  | Client sample ID | Method: Compound                   | CAS Number         | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |  |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1004531) - continued |                  |                                    |                    |     |      |                 |                  |         |                     |  |
| EB0909112-001                                                         | Drain 1          | EP074: trans-1,2-Dic1loroet1ene    | 5-#/#+/.<br>6'/.1/ | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1-Dic1loroet1ane          | 5-#/.1/            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: cis-1,2-Dic1loroet1ene      | 65/.1/#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,1-Tric1loroet1ane       | 65/.1/#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1-Dic1loropropylene       | 65/.1/#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Carbon Tetrac1loride        | 5+6/+#1/           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,2-Dic1loroet1ane          | 6/+5/#             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Tric1loroet1ene             | 6"/.1/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Dibromomet1ane              | 6/++/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,2-Tric1loroet1ane       | 5"/1/8/.           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,3-Dic1loropropane         | 516/58"/           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Tetrac1loroet1ene           | #/+1/+/#           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,1,2-Tetrac1loroet1ane   | 55+/.6#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: trans-1,4-Dic1loro-2-b2tene | 5"6#155/.          | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: cis-1,4-Dic1loro-2-b2tene   | 6/.1/              | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,2,2-Tetrac1loroet1ane   | #158"/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,2,3-Tric1loropropane      | 6#45/6             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Pentac1loroet1ane           | #51/8              | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,2-Dibromo-3-c1loropropane | 86/#8/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Hexac1lorob2tadiene         | 6/65/8             | .   | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Dic1lorodif12oromet1ane     | 6"86/.             | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
|                                                                       |                  | EP074: C1loromet1ane               | 6/+5"/             | .+  | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Piny1 c1loride              | 6"/8./.            | .+  | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Bromomet1ane                | 6/++/.             | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
|                                                                       |                  | EP074: C1loroet1ane                | 6/#./"             | +   | µg/L | G.+             | G.+              | +2+     | No Limit            |  |
| EB0909114-014                                                         | Anonymo2s        | EP074: Tric1lorof12oromet1ane      | 6/.1/."            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1-Dic1loroet1ene          | 6'88"/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Iodomet1ane                 | 5-#/#+/.<br>6'/.1/ | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: trans-1,2-Dic1loroet1ene    | 5-#/.1/            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1-Dic1loroet1ane          | 65/.1/#            | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: cis-1,2-Dic1loroet1ene      | 6"/.1/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,1-Tric1loroet1ane       | 6"/.1/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1-Dic1loropropylene       | 5+6/+#1/           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Carbon Tetrac1loride        | 6/+5/#             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,2-Dic1loroet1ane          | 6"/.1/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Tric1loroet1ene             | 6"/.1/             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Dibromomet1ane              | 6/++/.             | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,1,2-Tric1loroet1ane       | 5"/1/8/.           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: 1,3-Dic1loropropane         | 516/58"/           | .   | µg/L | G.              | G.               | +2+     | No Limit            |  |
|                                                                       |                  | EP074: Tetrac1loroet1ene           |                    |     |      |                 |                  |         |                     |  |

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| Laboratory sample ID                                                  |  | Client sample ID | Method: Compound | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Laboratory Duplicate (DUP) Report |  |
|-----------------------------------------------------------------------|--|------------------|------------------|------------|-----|------|-----------------|------------------|---------|-----------------------------------|--|
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1004531) - continued |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EB0909114-014                                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| Anonymo2s                                                             |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.1.1.2-Tetrac1loroet1ane                                      |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: trans-1.4-Dic1loro-2-b2lene                                    |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: cis-1.4-Dic1loro-2-b2lene                                      |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.1.2.2-Tetrac1loroet1ane                                      |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2.3-Tric1loropropane                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Pentac1loroet1ane                                              |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2-Dibromo-3-c1loropropane                                    |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Hexac1lorob2tadiene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Dic1lorodif2loromet1ane                                        |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1loromet1ane                                                  |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Piny1 c1loride                                                 |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Bromomet1ane                                                   |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1loroet1ane                                                   |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Tric1lorof2loromet1ane                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074F: Halogenated Aromatic Compounds (QC Lot: 1004531)              |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EB0909112-001                                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| Drain 1                                                               |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1lorobenzene                                                  |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Bromobenzene                                                   |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 2-C1lorotol2ene                                                |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 4-C1lorotol2ene                                                |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.3-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.4-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2.4-Tric1lorobenzene                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2.3-Tric1lorobenzene                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1lorobenzene                                                  |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Bromobenzene                                                   |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 2-C1lorotol2ene                                                |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 4-C1lorotol2ene                                                |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.3-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.4-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2-Dic1lorobenzene                                            |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2.4-Tric1lorobenzene                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: 1.2.3-Tric1lorobenzene                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074G: Trihalomethanes (QC Lot: 1004531)                             |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EB0909112-001                                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| Drain 1                                                               |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1loroform                                                     |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Bromodic1loromet1ane                                           |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Dibromoc1loromet1ane                                           |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: Bromoform                                                      |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EP074: C1loroform                                                     |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| EB0909114-014                                                         |  |                  |                  |            |     |      |                 |                  |         |                                   |  |
| Anonymo2s                                                             |  |                  |                  |            |     |      |                 |                  |         |                                   |  |

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| Laboratory sample ID                                      |  |           | Client sample ID            | Method: Compound      | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%)  | Recovery Limits (%) |
|-----------------------------------------------------------|--|-----------|-----------------------------|-----------------------|------------|-----|------|-----------------|------------------|----------|---------------------|
| EP074G: Trihalomethanes (QC Lot: 1004531) - continued     |  |           |                             |                       |            |     |      |                 |                  |          |                     |
| E50909114-014                                             |  | Anonymo2s | EP074: Bromodichloromethane | 6 ./16"               | .          |     | µg/L | !               | !8               | .2.      | No Limit            |
|                                                           |  |           | EP074: Dibromochloromethane | 5!"/8/5               | .          |     | 5+   | :               | 5.26             | No Limit |                     |
|                                                           |  |           | EP074: Bromoform            | 6 ./!./!              | .          |     | G.   | G.              | +2+              | No Limit |                     |
| EP074H: Naphthalene (QC Lot: 1004531)                     |  |           |                             |                       |            |     |      |                 |                  |          |                     |
| E50909112-001                                             |  | Drain 1   | EP074: Nap1t1alene          | :5!/+/,               | 6          |     | µg/L | G6              | G6               | +2+      | No Limit            |
| E50909114-014                                             |  | Anonymo2s | EP074: Nap1t1alene          | :5!/+/,               | 6          |     | µg/L | G6              | G6               | +2+      | No Limit            |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1004532) |  |           |                             |                       |            |     |      |                 |                  |          |                     |
| E50909112-001                                             |  | Drain 1   | EP080: C6 - C9 Fraction     | ////                  | !+         |     | µg/L | G!+             | G!+              | +2+      | No Limit            |
| EP080: BTEX (QC Lot: 1004532)                             |  |           |                             |                       |            |     |      |                 |                  |          |                     |
| E50909112-001                                             |  | Drain 1   | EP080: Benzene              | 65"/./!               | 5          |     | µg/L | G5              | G5               | +2+      | No Limit            |
|                                                           |  |           | EP080: Tol2ene              | 5+8/88/,              | !          |     | µg/L | G!              | G!               | +2+      | No Limit            |
|                                                           |  |           | EP080: Et1ylbenzene         | 5+ +"/5"              | !          |     | µg/L | G!              | G!               | +2+      | No Limit            |
|                                                           |  |           | EP080: meta- & para-Xylene  | 108-38-3<br>5+ #"/./, | !          |     | µg/L | G!              | G!               | +2+      | No Limit            |
|                                                           |  |           | EP080: ort1o-Xylene         | : "/6/#               | !          |     | µg/L | G!              | G!               | +2+      | No Limit            |

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### Method Blank (MB) and Laboratory Control Spike (LCS) Report

1e =2ality control term Met1od / Laboratory Blank refers to an analyte free matrix to @1ic1 all reagents are added in t1e same vol12mes or proportions as 2sed in standard sample preparation. 1e 32rpose of t1is QC parameter is to monitor potential laboratory contamination. 1e =2ality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked wit1 target analytes. T1e p2rpose of t1is QC parameter is to monitor met1od precision and acc2racy independent of sample matrix. Dynamic Recovery Limits are based on statistical eval2ation of processed LCS.

2b-Matrix: **WATER**

| 2b-Matrix: WATER                                           | Method: Compound |        |      |         | Method Blank (MB) Report |                    | Laboratory Control Spike (LCS) Report |      |      |
|------------------------------------------------------------|------------------|--------|------|---------|--------------------------|--------------------|---------------------------------------|------|------|
|                                                            | CAS Number       | LOR    | Unit | Result  | Spike Concentration      | Spike Recovery (%) | LCS                                   | Low  | High |
| EG020T: Total Metals by ICP-MS (QCLot: 1006390)            |                  |        |      |         |                          |                    |                                       |      |      |
| EG020A-T: Arsenic                                          | 6""+,8/!         | +2++5  | mg/L | G+2++5  | 0.100 mg/L               |                    | :#2#                                  | 6#   | 5!+  |
| EG020A-T: Cadmi2m                                          | 6""+,!/:         | +2+++5 | mg/L | G+2+++5 | 0.100 mg/L               |                    | 5+,                                   | 8"   | 55!  |
| EG020A-T: C1romi2m                                         | 6""+,6/,         | +2+5   | mg/L | G+2+5   | 0.100 mg/L               |                    | 555                                   | 8!   | 5!"  |
| EG020A-T: Copper                                           | 6""+,./+8        | +2++5  | mg/L | G+2++5  | 0.200 mg/L               |                    | 5+!                                   | 8!   | 55#  |
| EG020A-T: Lead                                             | 6""./:/5         | +2++5  | mg/L | G+2++5  | 0.100 mg/L               |                    | 5+,                                   | 8.   | 55,  |
| EG020A-T: Nickel                                           | 6""+,+!/+        | +2++5  | mg/L | G+2++5  | 0.100 mg/L               |                    | 5+!                                   | 85   | 556  |
| EG020A-T: Zinc                                             | 6""+,###/        | +2++.  | mg/L | G+2++.  | 0.200 mg/L               |                    | 5+!                                   | 85   | 5!,  |
| EG035T: Total Recoverable Mercury by FIMS (QCLot: 1005964) |                  |        |      |         |                          |                    |                                       |      |      |
| EG035T: Merc2ry                                            | 6""./:/6/#       | +2+++5 | mg/L | G+2+++5 | 0.0100 mg/L              |                    | :2+                                   | 8+   | 55#  |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1004531)  |                  |        |      |         |                          |                    |                                       |      |      |
| EP074: Benzene                                             | 65""/!           | .      | µg/L | G.      | 10 µg/L                  |                    | :#25                                  | 6.   | 5!!  |
| EP074: Tol2ene                                             | 5+8/88/,         | .      | µg/L | G.      | 10 µg/L                  |                    | 5+5                                   | 652! | 5!"  |
| EP074: Et1ylbenzene                                        | 5++/"5"          | .      | µg/L | G.      | 10 µg/L                  |                    | :2!                                   | 6#   | 5!+  |
| EP074: meta- & para-Xylene                                 | 108-38-3         | .      | µg/L | G.      | 20 µg/L                  |                    | "25                                   | #8   | 5.!  |
| EP074: Styrene                                             | 5+#+"/!          | .      | µg/L | G.      | 10 µg/L                  |                    | :2.                                   | #8   | 5!6  |
| EP074: ort1o-Xylene                                        | :/6#             | .      | µg/L | G.      | 10 µg/L                  |                    | :#28                                  | 6#   | 5!!  |
| EP074: Isopropylbenzene                                    | :8/8/8           | .      | µg/L | G.      | 10 µg/L                  |                    | :28                                   | 6"   | 5!,  |
| EP074: n-Propylbenzene                                     | 5+:/#./5         | .      | µg/L | G.      | 10 µg/L                  |                    | :2.                                   | 6+   | 5!.  |
| EP074: 1.3.5-Trimet1ylbenzene                              | 5+8/#6/8         | .      | µg/L | G.      | 10 µg/L                  |                    | :2#                                   | 6"   | 5!5  |
| EP074: sec-B2tylbenzene                                    | 5././8/8         | .      | µg/L | G.      | 10 µg/L                  |                    | :2!                                   | 6!   | 5!"  |
| EP074: 1.2.4-Trimet1ylbenzene                              | :/#/#            | .      | µg/L | G.      | 10 µg/L                  |                    | :82.                                  | 6.2. | 5!"  |
| EP074: tert-B2tylbenzene                                   | :8/+##/##        | .      | µg/L | G.      | 10 µg/L                  |                    | :62+                                  | 652# | 5!8  |
| EP074: p-Isopropyltol2ene                                  | :/86/#           | .      | µg/L | G.      | 10 µg/L                  |                    | :2.                                   | #82. | 5.+  |
| EP074: n-B2tylbenzene                                      | 5+""/5/8         | .      | µg/L | G.      | 10 µg/L                  |                    | :28                                   | #6   | 5!#  |
| EP074B: Oxygenated Compounds (QCLot: 1004531)              |                  |        |      |         |                          |                    |                                       |      |      |
| EP074: Piny! Acetate                                       | 5+8/+/"          | +      | µg/L | G.+     | 100 µg/L                 |                    | :!2#                                  | #.   | 5"6  |
| EP074: 2-B2tanone (MEK)                                    | 68"/./,          | +      | µg/L | G.+     | 100 µg/L                 |                    | 5+8                                   | "    | 5.+  |
| EP074: 4-Met1yl-2-pentanone (MIBK)                         | 5+8/5+/5         | +      | µg/L | G.+     | 100 µg/L                 |                    | 5+5                                   | #.   | 5,6  |
| EP074: 2-Hexanone (MBK)                                    | :/5/68/#         | +      | µg/L | G.+     | 100 µg/L                 |                    | :828                                  | #!   | 5..  |
| EP074C: Sulfonated Compounds (QCLot: 1004531)              |                  |        |      |         |                          |                    |                                       |      |      |
| EP074: Carbon dis2lfide                                    | 6./5./+          | .      | µg/L | G.      | 10 µg/L                  |                    | "2.                                   | #8   | 5..  |
| EP074D: Fumigants (QCLot: 1004531)                         |                  |        |      |         |                          |                    |                                       |      |      |
| EP074: 2.2-Dic1loropropane                                 | :/!+/6           | .      | µg/L | G.      | 10 µg/L                  |                    | 882!                                  | #+26 | 5",  |

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| 2b-Matrix: WATER                                          |            |     |      | Method Blank (MB) Report |                     | Laboratory Control Spike (LCS) Report |      |      |      |
|-----------------------------------------------------------|------------|-----|------|--------------------------|---------------------|---------------------------------------|------|------|------|
| Method: Compound                                          | CAS Number | LOR | Unit | Result                   | Spike Concentration | Spike Recovery (%)                    | LCS  | Low  | High |
| EP074D: Fumigants (QC/Lot: 1004531) - continued           |            |     |      |                          |                     |                                       |      |      |      |
| EP074: 1,2-Dic1loropropane                                | 68/86/.    | .   | µg/L | G.                       | 10 µg/L             | :+2:                                  | #26  | 518  |      |
| EP074: cis-1,3-Dic1loropropylene                          | 5+#+5/+5/. | .   | µg/L | G.                       | 20 µg/L             | :#2.                                  | #8   | 5.5  |      |
| EP074: trans-1,3-Dic1loropropylene                        | 5+#+5/+1/# | .   | µg/L | G.                       | 20 µg/L             | :#2!                                  | #6   | 5+   |      |
| EP074: 1,2-Dibromoet1ane (EDB)                            | 5+#+/.     | .   | µg/L | G.                       | 10 µg/L             | :626                                  | #825 | 5!   |      |
| EP074E: Halogenated Aliphatic Compounds (QC/Lot: 1004531) |            |     |      |                          |                     |                                       |      |      |      |
| EP074: Dic1lorodif12oromet1ane                            | 6./65/8    | .+  | µg/L | G.+                      | 100 µg/L            | # 148                                 | !    | 5,+  |      |
| EP074: C1loromet1ane                                      | 6"/86/.    | .+  | µg/L | G.+                      | 100 µg/L            | 5#                                    | "25  | 5,+  |      |
| EP074: Piny1 c1loride                                     | 6./+5/"    | .+  | µg/L | G.+                      | 100 µg/L            | 5+8                                   | ..   | 5"   |      |
| EP074: Bromomet1ane                                       | 6"/8./.    | .+  | µg/L | G.+                      | 100 µg/L            | 5!#                                   | .62. | 5,+  |      |
| EP074: C1loroet1ane                                       | 6./++/.    | .+  | µg/L | G.+                      | 100 µg/L            | 5+5                                   | 6+   | 5,6  |      |
| EP074: Tric1lorod12oromet1ane                             | 6./#./"    | .+  | µg/L | G.+                      | 100 µg/L            | :#28                                  | #"   | 5..  |      |
| EP074: 1,1-Dic1loroet1ane                                 | 6././"     | .   | µg/L | G.                       | 10 µg/L             | 5+5                                   | #2:  | 5..  |      |
| EP074: Iodomet1ane                                        | 6"/88/"    | .   | µg/L | G.                       | 10 µg/L             | 55.                                   | .62! | 5,+  |      |
| EP074: trans-1,2-Dic1loroet1ene                           | 5.##+/.    | .   | µg/L | G.                       | 10 µg/L             | :28                                   | 6+   | 5!8  |      |
| EP074: 1,1-Dic1loroet1ane                                 | 6././.     | .   | µg/L | G.                       | 10 µg/L             | :2+                                   | #"   | 5,5# |      |
| EP074: cis-1,2-Dic1loroet1ene                             | 5.#/..!    | .   | µg/L | G.                       | 10 µg/L             | :#2"                                  | 65   | 5!8  |      |
| EP074: 1,1,1-Tric1loroet1ane                              | 65/..#     | .   | µg/L | G.                       | 10 µg/L             | :!2"                                  | #82" | 5..  |      |
| EP074: 1,1-Dic1loropropylene                              | ././8#     | .   | µg/L | G.                       | 10 µg/L             | :!28                                  | 652" | 5!6  |      |
| EP074: Carbon Tetracloride                                | ./././.    | .   | µg/L | G.                       | 10 µg/L             | 8:26                                  | #"   | 5."  |      |
| EP074: 1,2-Dic1loroet1ane                                 | 5+6/+#!    | .   | µg/L | G.                       | 10 µg/L             | 5+5                                   | #8   | 5."  |      |
| EP074: Tric1loroet1ene                                    | 6./+5#     | .   | µg/L | G.                       | 10 µg/L             | :#26                                  | 6!   | 5!6  |      |
| EP074: Dibromomet1ane                                     | 6"/./.     | .   | µg/L | G.                       | 10 µg/L             | :52#                                  | #2:  | 5,5# |      |
| EP074: 1,1,2-Tric1loroet1ane                              | 6./++/.    | .   | µg/L | G.                       | 10 µg/L             | :82.                                  | #2!  | 5.,  |      |
| EP074: 1,3-Dic1loropropene                                | 5"/!8/.    | .   | µg/L | G.                       | 10 µg/L             | 5+!                                   | 6,26 | 5,+  |      |
| EP074: Tetracloromet1ene                                  | 5!6/58/"   | .   | µg/L | G.                       | 10 µg/L             | :25                                   | 6,28 | 5!   |      |
| EP074: 1,1,1,2-Tetracloromet1ane                          | #./!/+5    | .   | µg/L | G.                       | 10 µg/L             | 5+6                                   | 85   | 5!   |      |
| EP074: trans-1,4-Dic1loro-2-b2tene                        | 55+!/6#    | .   | µg/L | G.                       | 10 µg/L             | 5+.                                   | !#   | 5,+  |      |
| EP074: cis-1,4-Dic1loro-2-b2tene                          | 5"6#55/.   | .   | µg/L | G.                       | 10 µg/L             | 5+8                                   | .525 | 5,+  |      |
| EP074: 1,1,2,2-Tetracloromet1ane                          | 6././.     | .   | µg/L | G.                       | 10 µg/L             | :2.                                   | 6!   | 5.,  |      |
| EP074: 1,2,3-Tric1loropropene                             | :#58/"     | .   | µg/L | G.                       | 10 µg/L             | 5+.                                   | :    | 5"8  |      |
| EP074: Pentac1loroet1ane                                  | 6#+/5!6    | .   | µg/L | G.                       | 10 µg/L             | :626                                  | #8   | 5,8  |      |
| EP074: 1,2-Dibromo-3-c1loropropene                        | :#5!8      | .   | µg/L | G.                       | 10 µg/L             | :82.                                  | !    | 5,+  |      |
| EP074: Hexac1lorob2tadiene                                | 86/#8/.    | .   | µg/L | G.                       | 10 µg/L             | 8:2!                                  | #!   | 5!"  |      |
| EP074F: Halogenated Aromatic Compounds (QC/Lot: 1004531)  |            |     |      |                          |                     |                                       |      |      |      |
| EP074: C1lorobenzene                                      | 5+8/+/+6   | .   | µg/L | G.                       | 10 µg/L             | :62"                                  | 66   | 5!+  |      |
| EP074: Bromobenzene                                       | 5+8/8#!5   | .   | µg/L | G.                       | 10 µg/L             | 5+5                                   | 6#   | 5!!  |      |
| EP074: 2-C1loratol2ene                                    | :./"/.8    | .   | µg/L | G.                       | 10 µg/L             | :2"                                   | 6,2. | 5!"  |      |
| EP074: 4-C1loratol2ene                                    | 5+#+/."    | .   | µg/L | G.                       | 10 µg/L             | :#26                                  | 6#   | 5!+  |      |
| EP074: 1,3-Dic1lorobenzene                                | :5!6!/5    | .   | µg/L | G.                       | 10 µg/L             | :25                                   | 6,2! | 5!+  |      |

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| 2b-Matrix: WATER                                                    |           |            |     | Method Blank (MB) Report |        |                     |                    | Laboratory Control Spike (LCS) Report |      |      |  |
|---------------------------------------------------------------------|-----------|------------|-----|--------------------------|--------|---------------------|--------------------|---------------------------------------|------|------|--|
| Method: Compound                                                    |           | CAS Number | LOR | Unit                     | Result | Spike Concentration | Spike Recovery (%) | LCS                                   | Low  | High |  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 1004531) - continued |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP074: 1,4-Dic1lorobenzene                                          | 5+/#/#6   | .          |     | µg/L                     | G.     | 10 µg/L             | 5+!                | 5+!                                   | 6#25 | 55:  |  |
| EP074: 1,2-Dic1lorobenzene                                          | :/+/5     | .          |     | µg/L                     | G.     | 10 µg/L             | 5+5                | 5+5                                   | 6626 | 558  |  |
| EP074: 1,2,4-Tric1lorobenzene                                       | 5!+8!/5   | .          |     | µg/L                     | G.     | 10 µg/L             | :82!               | :82!                                  | #82, | 5!8  |  |
| EP074: 1,2,3-Tric1lorobenzene                                       | 86/#5/#   | .          |     | µg/L                     | G.     | 10 µg/L             | 5+5                | 5+5                                   | 6.   | 5!.  |  |
| EP074G: Trihalomethanes (QCLot: 1004531)                            |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP074: C1loroform                                                   | #6/##,    | .          |     | µg/L                     | G.     | 10 µg/L             | :526               | :526                                  | 6525 | 5!6  |  |
| EP074: Bromodic1loromet1ane                                         | 6./!6/"   | .          |     | µg/L                     | G.     | 10 µg/L             | :52!               | :52!                                  | #8   | 5!.  |  |
| EP074: Dibromoc1loromet1ane                                         | 5!"/"8/5  | .          |     | µg/L                     | G.     | 10 µg/L             | ..:2#              | ..:2#                                 | #.   | 5,+  |  |
| EP074: Bromoform                                                    | 6./!/./!  | .          |     | µg/L                     | G.     | 10 µg/L             | ..:2#              | ..:2#                                 | #!   | 5,6  |  |
| EP074H: Naphthalene (QCLot: 1004531)                                |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP074: Nap11talene                                                  | :5!/+/,   | 6          |     | µg/L                     | G6     | 10 µg/L             | 5+"                | 5+"                                   | 8,25 | 55:  |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1004507)            |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP071: C10 - C14 Fraction                                           | ////      | .+         |     | µg/L                     | G.+    | 600 µg/L            | 6!26               | 6!26                                  | ".   | 55+  |  |
| EP071: C15 - C28 Fraction                                           | ////      | 5++        |     | µg/L                     | G5++   | 1020 µg/L           | 8"2"               | 8"2"                                  | .8   | 5,+  |  |
| EP071: C29 - C36 Fraction                                           | ////      | .+         |     | µg/L                     | G.+    | ////                | ////               | ////                                  | //// | //// |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1004532)            |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP080: C6 - C9 Fraction                                             | ////      | !+         |     | µg/L                     | G!+    | 160 µg/L            | 5+.                | 5+.                                   | 6,   | 5..  |  |
| EP080: BTEX (QCLot: 1004532)                                        |           |            |     |                          |        |                     |                    |                                       |      |      |  |
| EP080: Benzene                                                      | 65"/./!   | 5          |     | µg/L                     | G5     | 10 µg/L             | 5+5                | 5+5                                   | 662# | 5!!  |  |
| EP080: Tol2ene                                                      | 5+8/88/,  | !          |     | µg/L                     | G!     | 10 µg/L             | 5+.                | 5+.                                   | 6"   | 5!!  |  |
| EP080: Et1ylbenzene                                                 | 5++/"5"   | !          |     | µg/L                     | G!     | 10 µg/L             | 5+.                | 5+.                                   | 6,   | 5!#  |  |
| EP080: meta- & para-Xylene                                          | 108-38-3  | !          |     | µg/L                     | G!     | 20 µg/L             | 555                | 555                                   | 6+2" | 5!:  |  |
| EP080: ort1o-Xylene                                                 | 5+/#"/./! | !          |     | µg/L                     | G!     | 10 µg/L             | 55+                | 55+                                   | 6"2, | 5!#  |  |

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### Matrix Spike (MS) Report

1e 2ality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. 1e 32rpose 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.

2b-Matrix: **WATER**

| Laboratory sample ID                                       |           |                           | Client sample ID | Method/Compound | CAS Number | Spike Concentration | Spike Recovery (%) | Recovery Limits (%) |      |
|------------------------------------------------------------|-----------|---------------------------|------------------|-----------------|------------|---------------------|--------------------|---------------------|------|
| Matrix Spike (MS) Report                                   |           |                           |                  |                 |            |                     |                    |                     |      |
|                                                            |           |                           |                  |                 |            |                     | MS                 | Low                 | High |
| EG020T: Total Metals by ICP-MS (QCLot: 1006390)            |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0908843-005                                              | Anonymo2s | EG020A-T: Arsenic         | 6""+/8!          | 1.000 mg/L      | 5+5        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Cadmi2m         | 6""+/ /:         | 0.500 mg/L      | 5+5        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Chromi2m        | 6""+/6/          | 1.000 mg/L      | 5++        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Copper          | 6""+/+/8         | 1.000 mg/L      | :2+        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Lead            | 6" :/!5          | 1.000 mg/L      | :25        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Nickel          | 6""+/+/+         | 1.000 mg/L      | #28        | 6+                  | 5+                 |                     |      |
|                                                            |           | EG020A-T: Zinc            | 6""+/##/         | 1.000 mg/L      | #28        | 6+                  | 5+                 |                     |      |
| EG035T: Total Recoverable Mercury by FIMS (QCLot: 1005964) |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909083-007                                              | Anonymo2s | EG035T: Merc2ry           | 6" :/6/#         | 0.010 mg/L      | 5+6        | 6+                  | 5+                 |                     |      |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1004531)  |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909114-016                                              | Anonymo2s | EP074: Benzene            | 65"/ /!          | 10 µg/L         | 652!       | 6+                  | 5+                 |                     |      |
|                                                            |           | EP074: Tol2ene            | 5+8/88/          | 10 µg/L         | # 66.9     | 6+                  | 5+                 |                     |      |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1004531)   |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909114-016                                              | Anonymo2s | EP074: 1,1-Dic1loroet1ene | 6 /, /"          | 10 µg/L         | 8528       | 6+                  | 5+                 |                     |      |
|                                                            |           | EP074: Tric1loroet1ene    | 6+/5#            | 10 µg/L         | # 65.3     | 6+                  | 5+                 |                     |      |
| EP074F: Halogenated Aromatic Compounds (QCLot: 1004531)    |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909114-016                                              | Anonymo2s | EP074: C1lorobenzene      | 5+8:/+/6         | 10 µg/L         | 6.28       | 6+                  | 5+                 |                     |      |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1004532)   |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909114-016                                              | Anonymo2s | EP080: C6 - C9 Fraction   | ///              | 140 µg/L        | # 58.7     | 6+                  | 5+                 |                     |      |
| EP080: BTEX (QCLot: 1004532)                               |           |                           |                  |                 |            |                     |                    |                     |      |
| EB0909114-016                                              | Anonymo2s | EP080: Benzene            | 65"/ /!          | 10 µg/L         | 662.       | 6+                  | 5+                 |                     |      |
|                                                            |           | EP080: Tol2ene            | 5+8/88/          | 10 µg/L         | 6#25       | 6+                  | 5+                 |                     |      |



Environmental Division

**INTERPRETIVE QUALITY CONTROL REPORT**

|              |                                                  |                         |                                                    |
|--------------|--------------------------------------------------|-------------------------|----------------------------------------------------|
| Work Order   | : <b>EB0909112</b>                               | %Ae                     | : 5 of 6                                           |
| Client       | : SINCLAIR KNIGHT MERZ                           | Laboratory              | : Environmental Division Brisbane                  |
| Contact      | : MS ONA KANAS                                   | Contact                 | : Tim Kilmister                                    |
| Address      | : P O BOX 246<br>SPRING HILL QLD, AUSTRALIA 4004 | Address                 | : 32 Shand Street Stafford QLD Australia 4053      |
| E-mail       | : okanas@skm.com.au                              | E-mail                  | : Services.Brisbane@alsenviro.com                  |
| Telephone    | : +61 07 3244 7100                               | Telephone               | : +61-7-3243 7222                                  |
| Facsimile    | : +61 07 3244 7306                               | Facsimile               | : +61-7-3243 7218                                  |
| Project      | : QE09537 Greyhound Qld Ltd                      | QC Level                | : NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Site         | : 2222                                           | Date Samples Received   | : ,=2A+*2', =                                      |
| C-O-C number | : 2222                                           | Issue Date              | : 16-JUN-2009                                      |
| Sampler      | : O.KANAS                                        | No. of samples received | : 8                                                |
| Order number | : 2222                                           | No. of samples analysed | : 8                                                |
| Quote number | : EN/003/09                                      |                         |                                                    |

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

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## Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, %<sup>o</sup>, AS and NEPM >8==. A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **WATER**

Evaluation: \* = Holding time breach ; ✓ = Within holding time.

| Method                                           |  | Sample Date | Extraction / Preparation |                    | Analysis   |                              |
|--------------------------------------------------|--|-------------|--------------------------|--------------------|------------|------------------------------|
| Container / Client Sample ID(s)                  |  |             | Date extracted           | Due for extraction | Evaluation | Due for analysis             |
| EG020T: Total Metals by ICP-MS                   |  |             |                          |                    |            |                              |
| Clear Plastic Bottle - Unfiltered; Lab-acidified |  | 09-JUN-2009 | 11-JUN-2009              | 06-DEC-2009        | ✓          | 11-JUN-2009<br>06-DEC-2009   |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EG035T: Total Recoverable Mercury by FIMS        |  |             |                          |                    |            |                              |
| Clear Plastic Bottle - Unfiltered; Lab-acidified |  | 09-JUN-2009 | ----                     | 2222               | 2222       | 11-JUN-2009<br>07-JUL-2009   |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074A: Monocyclic Aromatic Hydrocarbons         |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074B: Oxygenated Compounds                     |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074C: Sulfonated Compounds                     |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ----                     | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074D: Fumigants                                |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074E: Halogenated Aliphatic Compounds          |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ----                     | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074F: Halogenated Aromatic Compounds           |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074G: Trihalomethanes                          |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |
| EP074H: Naphthalene                              |  |             |                          |                    |            |                              |
| Amber VOC Vial - HCl or NaHSO4                   |  | 09-JUN-2009 | ---                      | 222                | 2222       | 11-JUN-2009<br>'-2A+' '2', = |
| Drain 1                                          |  |             |                          |                    |            |                              |



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| Matrix: <b>WATER</b>                    |  |                |  |                          |  |             |  |               |  |
|-----------------------------------------|--|----------------|--|--------------------------|--|-------------|--|---------------|--|
| Method                                  |  | Sample Date    |  | Extraction / Preparation |  | Analysis    |  |               |  |
| Container / Client Sample ID(s)         |  | Date extracted |  | Due for extraction       |  | Evaluation  |  | Date analysed |  |
| EP080/071: Total Petroleum Hydrocarbons |  |                |  |                          |  |             |  |               |  |
| Amber Glass Bottle - Unpreserved        |  |                |  |                          |  |             |  |               |  |
| Drain 1                                 |  | 09-JUN-2009    |  | 11-JUN-2009              |  | 16-JUN-2009 |  | 15-JUN-2009   |  |
| Amber VOC Vial - HCl or NaHSO4          |  |                |  |                          |  |             |  | 21-JUL-2009   |  |
| Drain 1                                 |  | 09-JUN-2009    |  | ---                      |  | 222         |  | '2A+'2', =    |  |
| EP080: BTEX                             |  |                |  |                          |  |             |  |               |  |
| Amber VOC Vial - HCl or NaHSO4          |  |                |  |                          |  |             |  |               |  |
| Drain 1                                 |  | 09-JUN-2009    |  | ---                      |  | 222         |  | 11-JUN-2009   |  |
|                                         |  |                |  |                          |  |             |  | '2A+'2', =    |  |
|                                         |  |                |  |                          |  |             |  |               |  |

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## Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: \* = Qualit Control fre@enc not within s6cification G✓ = Qualit Control fre@enc within s6cification.

| Quality Control Sample Type      |          | Count |         | Rate (%) |          | Evaluation |  | Quality Control Specification                    |  |
|----------------------------------|----------|-------|---------|----------|----------|------------|--|--------------------------------------------------|--|
| Analytical Methods               |          | QC    | Regular | Actual   | Expected | Evaluation |  |                                                  |  |
| Laboratory Duplicates (DUP)      |          |       |         |          |          |            |  |                                                  |  |
| Total Mercury by FIMS            | EG035T   | 8     | 8       | 10.0     | 10.0     | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Total Metals by ICP-MS - Suite A | EG020A-T | 8     | 8       | 10.0     | 10.0     | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| TPH Volatiles/BTEX               | EP080    | 1     | 6       | 16.7     | 10.0     | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Volatile Organic Compounds       | EP074    | 8     | 8       | 12.5     | 10.0     | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Laboratory Control Samples (LCS) |          |       |         |          |          |            |  |                                                  |  |
| Total Mercury by FIMS            | EG035T   | 8     | 8       | 5.0      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Total Metals by ICP-MS - Suite A | EG020A-T | 8     | 8       | 5.0      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| TPH - Semivolatile Fraction      | EP071    | 8     | 8       | 5.3      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| TPH Volatiles/BTEX               | EP080    | 1     | 6       | 16.7     | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Volatile Organic Compounds       | EP074    | 8     | 8       | 6.3      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Method Blanks (MB)               |          |       |         |          |          |            |  |                                                  |  |
| Total Mercury by FIMS            | EG035T   | 8     | 8       | 5.0      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Total Metals by ICP-MS - Suite A | EG020A-T | 8     | 8       | 5.0      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| TPH - Semivolatile Fraction      | EP071    | 8     | 8       | 5.3      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| TPH Volatiles/BTEX               | EP080    | 1     | 6       | 16.7     | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Volatile Organic Compounds       | EP074    | 8     | 8       | 6.3      | 5.0      | ✓          |  | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |  |
| Matrix Spikes (MS)               |          |       |         |          |          |            |  |                                                  |  |
| Total Mercury by FIMS            | EG035T   | 8     | 8       | 5.0      | 5.0      | ✓          |  | ALS QCS3 requirement                             |  |
| Total Metals by ICP-MS - Suite A | EG020A-T | 8     | 8       | 5.0      | 5.0      | ✓          |  | ALS QCS3 requirement                             |  |
| TPH Volatiles/BTEX               | EP080    | 1     | 6       | 16.7     | 5.0      | ✓          |  | ALS QCS3 requirement                             |  |
| Volatile Organic Compounds       | EP074    | 8     | 8       | 6.3      | 5.0      | ✓          |  | ALS QCS3 requirement                             |  |

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 Work Order : EB0909112  
 Client : SINCLAIR KNIGHT MERZ  
 Project : QE09537 Greyhound Qld Ltd

13-054

## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods                      | Method   | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Total Metals by ICP-MS - Suite A        | EG020A-T | WATER  | (APHA 21st ed., 3125; USEPA SW846 - 6020; ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.                                                                                                                                                                                           |
| Total Mercury by FIMS                   | EG035T   | WATER  | AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl <sub>2</sub> )(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl <sub>2</sub> which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2) |
| TPH - Semivolatile Fraction             | EP071    | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                               |
| Volatile Organic Compounds              | EP074    | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                 |
| TPH Volatiles/BTEX                      | EP080    | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                 |
| Preparation Methods                     | Method   | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Digestion for Total Recoverable Metals  | EN25     | WATER  | USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                  |
| Separatory Funnel Extraction of Liquids | #.8(     | WATER  | USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.                                                                                                                                                                       |

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Work Order : EB0909112  
Client : SINCLAIR KNIGHT MERZ  
Project : QE09537 Greyhound Qld Ltd

13-054

## Summary of Outliers

### Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

### Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

| Compound Group Name                              | Laboratory Sample ID | Client Sample ID | Analyte                 | CAS Number | Data   | Limits  | Comment                                         |
|--------------------------------------------------|----------------------|------------------|-------------------------|------------|--------|---------|-------------------------------------------------|
| <b>Laboratory Control Spike (LCS) Recoveries</b> |                      |                  |                         |            |        |         |                                                 |
| EP074E: Halogenated Aliphatic Compounds          | 88181192,,           | 2222             | Dichlorodifluoromethane | 912982,    | 148 %  | 1'28-,L | Recovery greater than upper control limit       |
| <b>Matrix Spike (MS) Recoveries</b>              |                      |                  |                         |            |        |         |                                                 |
| EP074A: Monocyclic Aromatic Hydrocarbons         | EB0909114-016        | Anonymous        | Toluene                 | 8,;2,;-2-  | 66.9 % | 9,28-,L | Recovery less than lower data quality objective |
| EP074E: Halogenated Aliphatic Compounds          | EB0909114-016        | Anonymous        | Trichloroethene         | 79-01-6    | 65.3 % | 9,28-,L | Recovery less than lower data quality objective |
| EP080/071: Total Petroleum Hydrocarbons          | EB0909114-016        | Anonymous        | C6- C8 Fraction         | 2222       | 58.7 % | 9,28-,L | Recovery less than lower data quality objective |

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.

### Regular Sample Surrogates

- For all regular sample matrices, no surrogate recovery outliers occur.

### Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

### Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.



Environmental Division

**SAMPLE RECEIPT NOTIFICATION (SRN)**

**Comprehensive Report**

Work Order : **EB0909112**

Client : **SINCLAIR KNIGHT MERZ**

Contact : **MS ONA KANAS**

Address : **P O BOA BCD  
SPRING HILL E, ~ FA, STRALIA Q! C**

\* Email : **as@skm.com.au**

Telephone : **3D1 07 GBC7100**

Facsimile : **3D1 07 GBC77 D**

Project : **E\*! 7NG7 Greyhound Eld Ltd**

Order number : **0000**

: **0000**

Site : **0000**

Sampler : **O.KANAS**

Laboratory : **Environmental Division Brisbane**

Contact : **Tim Kilmister**

Address : **GBSHand Street Stallord ELD Australia Q NG**

\* Email : **Services.Brisbane@alsenviro.com**

Telephone : **3D4GBC7BBB**

Facsimile : **3D4GBC7B47**

Page : **4 ' I B**

Eute number : **ESB!! 7SINKNI0GBB;EN/00G-!7?**

EC Level : **NEPM, 4777 Schedule B;G? and ALS  
ECSGre@irement**

**Dates**

ate Samples Received : **! 7Q, NCB!! 7**

Client Re@ested Due Date : **4DA, NCB!! 7**

Issue Date : **4! Q, NCB!! 7 07:CG**

Scheduled ReportinMDate : **16-JUN-2009**

**Delivery Details**

Mode of Delivery : **Client Drop oll**

No. of coolers/boxes : **1 SMALL**

Security Seal : **Not intact.**

Temperature : **47.0 C**

No. of samples received : **4**

No. of samples analysed : **4**

**General Comments**

- This report contains the following information:
  - Sample Container; ?Preservation NonCompliances
  - Summary of Sample; ?and Re@ested Analysis
  - Re@ested Deliverables
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any turn around / tech% al @eries to the laboratory contact desim@ated above.
- Please direct any @eries related to sample condition / numberinM/ brea, aMes to MaMNe KaH.
- Analytical Cork for this Cork order Cill be conducted at ALS Brisbane.
- Sample Disposal QA@eous ;4CdaA ?Solid ;70 daA ?Irom date of completion of Cork order.



## Sample Container(s)/Preservation Non-Compliances

All comparisons are made aMains! pretreatment/preservation ASFAPHAF, SEPA standards.

- No sample container / preservation non-compliance exist.

## Summary of Sample(s) and Requested Analysis

Some items described beloC may be 2art 'I a laboratorA process neccessary lor the execution 'I client re@ested tasks. Pa/, aMes may contain additional a%alysesF (/ H a the determination 'I moisture content and preparation ta , FtHat are included in the pa/, aMe.

E Hen date; ? and/or time; ? are H Cn bracketedF these Have been assumed by the laboratory lor processinM purposes. 'I the amplinM time is displayed as 0:00 the %ormation was not provided by client.

Matrix: WATER

| Laboratory sample ID | Client sampling date / time | Client sample ID | E ATER CEP07C;water? Volatile Organic Compounds | E ATER - E -05T TPH/BTEX/8 Metals (Total) |
|----------------------|-----------------------------|------------------|-------------------------------------------------|-------------------------------------------|
| EB0909112-001        | ~%'(, N-2009 15:00          | Drain 1          | ✓                                               | ✓                                         |

## Requested Deliverables

### MR JEREMY WICKS

|                                                              |       |                   |
|--------------------------------------------------------------|-------|-------------------|
| *A, Certificate of Analysis - NATA ( COA )                   | Email | jwicks@skm.com.au |
| *A, Interpretive QC Report - DEFA, LT (Anon QCI Rep) ( QCI ) | Email | jwicks@skm.com.au |
| *A, QC Report - DEFA, LT (Anon QC Rep) - NATA ( QC )         | Email | jwicks@skm.com.au |
| *A4 - A, Sample Receipt Notification - Environmental ( SRN ) | Email | jwicks@skm.com.au |
| *A4 - A, Tax Invoice ( INV )                                 | Email | jwicks@skm.com.au |
| * Default - Chain of Custody ( COC )                         | Email | jwicks@skm.com.au |
| * EDI Format - ENMRG ( ENMRG )                               | Email | jwicks@skm.com.au |
| * EDI Format - ESDAT ( ESDAT )                               | Email | jwicks@skm.com.au |
| * EDI Format - XTab ( XTAB )                                 | Email | jwicks@skm.com.au |

### MS ONA KANAS

|                                                              |       |                   |
|--------------------------------------------------------------|-------|-------------------|
| *A, Certificate of Analysis - NATA ( COA )                   | Email | okanas@skm.com.au |
| *A, Interpretive QC Report - DEFA, LT (Anon QCI Rep) ( QCI ) | Email | okanas@skm.com.au |
| *A, QC Report - DEFA, LT (Anon QC Rep) - NATA ( QC )         | Email | okanas@skm.com.au |
| *A4 - A, Sample Receipt Notification - Environmental ( SRN ) | Email | okanas@skm.com.au |
| * Default - Chain of Custody ( COC )                         | Email | okanas@skm.com.au |
| * EDI Format - ENMRG ( ENMRG )                               | Email | okanas@skm.com.au |
| * EDI Format - ESDAT ( ESDAT )                               | Email | okanas@skm.com.au |
| * EDI Format - XTab ( XTAB )                                 | Email | okanas@skm.com.au |



Environmental Division

**CERTIFICATE OF ANALYSIS**

|              |                          |                         |                                                   |
|--------------|--------------------------|-------------------------|---------------------------------------------------|
| Work Order   | : EB0914886              | Page                    | : 1 of 18                                         |
| Client       | : SINCLAIR KNIGHT MERZ   | Laboratory              | : Environmental Division Brisbane                 |
| Contact      | : MS ONA KANAS           | Contact                 | : Kim Klimm                                       |
| Project      | : EASTERN BUSWAY PROJECT | Address                 | : 32 Shan Street Stafford QLD Australia 4011      |
|              | PO BOX 3848              |                         |                                                   |
|              | S' H BRISBANE E 4101     |                         |                                                   |
| E-mail       | : okanas@km.com.au       | E-mail                  | : Services.Brisbane@alsenviro.com                 |
| Telephone    | : +61 07 3026 7286       | Telephone               | : +61-7-3243 7222                                 |
| Facsimile    | : +61 07 3026 7306       | Facsimile               | : +61-7-3243 7218                                 |
| Project      | : &E09(1)                | QC Level                | : EPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Order number | : )                      | Date Samples Received   | : 18-SEP-2009                                     |
| C-O-C number | : )                      | Sample Date             | : 01-OCT-2009                                     |
| Sampler      | : )                      | No. of samples received | : 16                                              |
| Site         | : Cronulla Park          | No. of samples analysed | : 15                                              |
| Quote number | : E4001409               |                         |                                                   |

This report is issued in accordance with the reference. It is a preliminary report and has not been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comment
- Analytical Result
- Surrogate Control Limit



WORLD RECOGNISED  
**ACCREDITATION**

ALS is an 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 |
|----------------|----------------------------|------------------------|
| Kim McCauley   | Senior Inorganic Chemist   | Inorganic              |
| Matt Croft     | Organic Instrument Chemist | Organic                |
| Ancyl Wang     | Instrument Chemist         | Organic                |
| Stephen Hislop | Senior Inorganic Chemist   | Inorganic              |

RTI DL RELEASE - EHP

**Environmental Division Brisbane**  
Part of the **ALS Laboratory Group**  
32 Shan( Street Stafford( QLD Au tralia 40(1  
Tel. +61-7-3243 7222 Fax. +61-7-3243 7218 [www.alsglobal.com](http://www.alsglobal.com)  
A Campbell Brothers Limited Company



Page : 1 of 18  
Work Order : EB0914886  
Client : SINCLAIR KNIGHT ME-9  
Project : 8E09(I/

13-054

### General Comments

All analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those listed by the USEPA, APHA, EPA, and NEPM. In house developed procedures are employed in the absence of documented standard 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, in sufficient sample (reduced weight employed) or matrix interference,

when date1 and/or time1 are shown bracketed, these have been assumed by the laboratory for processing purposes. If the sampling time is listed as 0:00 the information was not provided by client.

Key: CAS Number = CAS registry number from data base maintained by Chemical Abstract Services. % Chemical Abstract Service is a division of the American Chemical Society.

LOR = Limit of reporting

LA = Highest result computed from individual analyte detection at or above the level of reporting

- EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EP075SIM: Poor surrogate recovery 'Phenol-d6' for samples 'EB0914886\_005\_006' due to matrix interferences, confirmed by re-analysis.
- PAH/phenols: Sample MW08 required dilution prior to analysis due to matrix interferences. LOR values have been adjusted accordingly.



## Analytical Results

Sub-Matrix: WATER

Client sample ID

Client sampling date / time

| Sub-Matrix: WATER                                |            | Client sample ID |      |                   | Client sampling date / time |                   |                   |                   |  |
|--------------------------------------------------|------------|------------------|------|-------------------|-----------------------------|-------------------|-------------------|-------------------|--|
| Compound                                         | CAS Number | LOR              | Unit | MW01              | MW02                        | MW03              | MW04              | MW05              |  |
|                                                  |            |                  |      | 17-SEP\$009 15:00 | 17-SEP\$009 15:00           | 17-SEP\$009 15:00 | 17-SEP\$009 15:00 | 17-SEP\$009 15:00 |  |
|                                                  |            |                  |      | EB0914886-001     | EB0914886-002               | EB0914886-003     | EB0914886-004     | EB0914886-005     |  |
| EG020F: Dissolved Metals by ICP-MS               |            |                  |      |                   |                             |                   |                   |                   |  |
| Arsenic                                          | 7440-38-2  | 0.001            | mg/L | : 0.001           | : 0.001                     | 0.001             | 0.007             | 0.003             |  |
| Cadmium                                          | 7440-43-9  | 0.0001           | mg/L | 0.0002            | 0.0003                      | 0.0007            | 0.0004            | : 0.0001          |  |
| Chromium                                         | 7440-47-3  | 0.001            | mg/L | 0.021             | 0.001                       | 0.012             | 0.003             | 0.019             |  |
| Copper                                           | 7440(0-8   | 0.001            | mg/L | 0.014             | 0.003                       | 0.020             | 0.004             | 0.004             |  |
| Lead                                             | 7439)92-1  | 0.001            | mg/L | 0.115             | 0.001                       | 0.048             | : 0.001           | 0.001             |  |
| Nickel                                           | 7440)0\$)0 | 0.001            | mg/L | 0.028             | 0.002                       | 0.124             | 0.009             | 0.012             |  |
| Zinc                                             | 7440-66-6  | 0.00(            | mg/L | 0.072             | 0.060                       | 0.463             | 0.013             | 0.018             |  |
| EG035F: Dissolved Mercury by FIMS                |            |                  |      |                   |                             |                   |                   |                   |  |
| Mercury                                          | 7439)97-6  | 0.0001           | mg/L | : 0.0001          | : 0.0001                    | <0.0001           | <0.0001           | <0.0001           |  |
| EP070: Total Petroleum Hydrocarbons - Speciation |            |                  |      |                   |                             |                   |                   |                   |  |
| Aliphatic C10-C14                                | ))))       | (0               | =g/L | ))))              | ))))                        | ))))              | : 0               | : 0               |  |
| Aliphatic C15-C28                                | ))))       | 100              | =g/L | ))))              | ))))                        | ))))              | <100              | <100              |  |
| Aliphatic C29-C36                                | ))))       | (0               | =g/L | ))))              | ))))                        | ))))              | : 0               | : 0               |  |
| Aromatic C10-C14                                 | ))))       | (0               | =g/L | ))))              | ))))                        | ))))              | 60                | 60                |  |
| Aromatic C15-C28                                 | ))))       | 100              | =g/L | ))))              | ))))                        | ))))              | <100              | <100              |  |
| Aromatic C29-C36                                 | ))))       | (0               | =g/L | ))))              | ))))                        | ))))              | : 0               | : 0               |  |
| EP074A: Monocyclic Aromatic Hydrocarbons         |            |                  |      |                   |                             |                   |                   |                   |  |
| Benzene                                          | 71-43-2    | 1                | =g/L | ))))              | ))))                        | \$                | 4                 | 2                 |  |
| Toluene                                          | 108-88-3   | \$               | =g/L | ))))              | ))))                        | \$                | \$                | \$                |  |
| Ethylbenzene                                     | 100-41-4   | \$               | =g/L | ))))              | ))))                        | \$                | \$                | \$                |  |
| meta- & para-Xylene                              | 108-38-3   | \$               | =g/L | ))))              | ))))                        | <4                | <4                | <4                |  |
| Styrene                                          | 100-42-5   | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| ortho-Xylene                                     | 95-47-6    | \$               | =g/L | ))))              | ))))                        | \$                | \$                | \$                |  |
| Isopropylbenzene                                 | 98-82-8    | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| n-Propylbenzene                                  | 103-65-1   | (                | =g/L | ))))              | ))))                        | : (               | 7                 | : (               |  |
| 1,3,5-Trimethylbenzene                           | 108-67-8   | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| sec-Butylbenzene                                 | 135-98-8   | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| 1,2,4-Trimethylbenzene                           | 95-63-6    | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| tert-Butylbenzene                                | 98-06-6    | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| p-Isopropyltoluene                               | 99-87-6    | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| n-Butylbenzene                                   | 104-51-8   | (                | =g/L | ))))              | ))))                        | : (               | : (               | : (               |  |
| EP074B: Oxygenated Compounds                     |            |                  |      |                   |                             |                   |                   |                   |  |
| Vinyl Acetate                                    | 108-05-4   | (0               | =g/L | ))))              | ))))                        | : 0               | : 0               | : 0               |  |
| 2-Butanone (MEK)                                 | 78-9)!)    | (0               | =g/L | ))))              | ))))                        | : 0               | : 0               | : 0               |  |
| 4-Methyl-2-pentanone (MIBK)                      | 108-10-1   | (0               | =g/L | ))))              | ))))                        | : 0               | : 0               | : 0               |  |
| 2-Hexanone (MBK)                                 | (91-78-6   | (0               | =g/L | ))))              | ))))                        | : 0               | : 0               | : 0               |  |
| EP074C: Sulfonated Compounds                     |            |                  |      |                   |                             |                   |                   |                   |  |

Client sample ID

Client sampling date / time

| Sub-Matrix: WATER                        |            | Client sample ID            |      |
|------------------------------------------|------------|-----------------------------|------|
|                                          |            | Client sampling date / time |      |
| Compound                                 | CAS Number | LOR                         | Unit |
| EP074C: Sulfonated Compounds - Continued |            |                             |      |
| Carbon disulfide                         | 75-15-0    | (                           | =g/L |
| EP074D: Fumigants                        |            |                             |      |
| 2,2-Dichloropropane                      | (94-20)Y   | (                           | =g/L |
| 1,2-Dichloropropane                      | 78-87-5    | (                           | =g/L |
| cis-1,3-Dichloropropylene                | 10061-01-5 | (                           | =g/L |
| trans-1,3-Dichloropropylene              | 10061-02-6 | (                           | =g/L |
| 1,2-Dibromoethane (EDB)                  | 106-93-4   | (                           | =g/L |
| EP074E: Halogenated Aliphatic Compounds  |            |                             |      |
| Dichlorodifluoromethane                  | 75-71-8    | (0                          | =g/L |
| Chloromethane                            | 74-87-3    | (0                          | =g/L |
| Vinyl chloride                           | /() 01-4   | (0                          | =g/L |
| Bromomethane                             | 74-83-9    | (0                          | =g/L |
| Chloroethane                             | /() 00)!   | (0                          | =g/L |
| Trichlorofluoromethane                   | 75-69-4    | (0                          | =g/L |
| 1,1-Dichloroethene                       | 75-35-4    | (                           | =g/L |
| Iodomethane                              | 74-88-4    | (                           | =g/L |
| trans-1,2-Dichloroethene                 | 156-60)(   | (                           | =g/L |
| 1,1-Dichloroethane                       | 75-34-3    | (                           | =g/L |
| cis-1,2-Dichloroethene                   | 156-59)\$  | (                           | =g/L |
| 1,1,1-Trichloroethane                    | 71-55-6    | (                           | =g/L |
| 1,1-Dichloropropylene                    | 563-58-6   | (                           | =g/L |
| Carbon Tetrachloride                     | 56-23-5    | (                           | =g/L |
| 1,2-Dichloroethane                       | 10/) 06-2  | (                           | =g/L |
| Trichloroethene                          | /9)01-6    | (                           | =g/L |
| Dibromomethane                           | 74-9()!    | (                           | =g/L |
| 1,1,2-Trichloroethane                    | /9)00)(    | (                           | =g/L |
| 1,3-Dichloropropane                      | 142-28-9   | (                           | =g/L |
| Tetrachloroethene                        | 127-18-4   | (                           | =g/L |
| 1,1,1,2-Tetrachloroethane                | 630)\$0-6  | (                           | =g/L |
| trans-1,4-Dichloro-2-butene              | 110-57-6   | (                           | =g/L |
| cis-1,4-Dichloro-2-butene                | 1476-11-5  | (                           | =g/L |
| 1,1,2,2-Tetrachloroethane                | /9-34-5    | (                           | =g/L |
| 1,2,3-Trichloropropane                   | 96-18-4    | (                           | =g/L |
| Pentachloroethane                        | 76-01-7    | (                           | =g/L |
| 1,2-Dibromo-3-chloropropane              | 96-12-8    | (                           | =g/L |
| Hexachlorobutadiene                      | 87-68-3    | (                           | =g/L |
| EP074F: Halogenated Aromatic Compounds   |            |                             |      |
| Chlorobenzene                            | 108-90)Y   | (                           | =g/L |





## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                  |  | Client sample ID |      | Client sampling date / time |  | Unit |  | MW01               | MW02               | MW03               | MW04               | MW05               |
|----------------------------------------------------|--|------------------|------|-----------------------------|--|------|--|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                                    |  | CAS Number       | LOR  |                             |  |      |  | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 |
| Compound                                           |  |                  |      |                             |  |      |  | EB0914886-001      | EB0914886-002      | EB0914886-003      | EB0914886-004      | EB0914886-005      |
| EP074F: Halogenated Aromatic Compounds - Continued |  |                  |      |                             |  |      |  |                    |                    |                    |                    |                    |
| Bromobenzene                                       |  | 108-86-1         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 2-Chlorotoluene                                    |  | 95-49-8          | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 4-Chlorotoluene                                    |  | 106-43-4         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 1,3-Dichlorobenzene                                |  | 541-73-1         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 1,4-Dichlorobenzene                                |  | 106-46-7         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 1,2-Dichlorobenzene                                |  | 90( 0-1          | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 1,2,4-Trichlorobenzene                             |  | 120-82-1         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| 1,2,3-Trichlorobenzene                             |  | 87-61-6          | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| EP074G: Trihalomethanes                            |  |                  |      |                             |  |      |  |                    |                    |                    |                    |                    |
| Chloroform                                         |  | 67-66-3          | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| Bromodichloromethane                               |  | 75-27-4          | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| Dibromochloromethane                               |  | 124-48-1         | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| Bromoform                                          |  | /)\$(/)\$        | (    | =g/L                        |  |      |  | )))                | )))                | :(                 | :(                 | :(                 |
| EP075(SIM)A: Phenolic Compounds                    |  |                  |      |                             |  |      |  |                    |                    |                    |                    |                    |
| Phenol                                             |  | 108-9( )\$       | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2-Chlorophenol                                     |  | 95-57-8          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2-Methylphenol                                     |  | 95-48-7          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 3- & 4-Methylphenol                                |  | 1319)/ )!        | \$ 0 | =g/L                        |  |      |  | )))                | )))                | )))                | ;\$ 0              | ;\$ 0              |
| 2-Nitrophenol                                      |  | 88-75-5          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2,4-Dimethylphenol                                 |  | 105-67-9         | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2,4-Dichlorophenol                                 |  | 120-83-2         | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2,6-Dichlorophenol                                 |  | 87-65-0          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 4-Chloro-3-Methylphenol                            |  | ( 9)( 0)/        | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2,4,6-Trichlorophenol                              |  | 88-06-2          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| 2,4,5-Trichlorophenol                              |  | 90( 95-4         | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| Pentachlorophenol                                  |  | 87-86-5          | \$ 0 | =g/L                        |  |      |  | )))                | )))                | )))                | ;\$ 0              | ;\$ 0              |
| 2,3,4,6-Tetrachlorophenol                          |  | 58-90)\$         | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons     |  |                  |      |                             |  |      |  |                    |                    |                    |                    |                    |
| Naphthalene                                        |  | 91-20)!          | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | 12.3               | 5.9                |
| 2-Methylnaphthalene                                |  | 91-57-6          | 1.0  | =g/L                        |  |      |  | )))                | )))                | )))                | <1.0               | <1.0               |
| Acenaphthylene                                     |  | \$08-96-8        | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Acenaphthene                                       |  | 83-32-9          | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Fluorene                                           |  | 86-73-7          | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Phenanthrene                                       |  | 85-01-8          | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Anthracene                                         |  | 120-12-7         | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Fluoranthene                                       |  | \$06-44-0        | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Pyrene                                             |  | 129)00)0         | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |
| Benz(a)anthracene                                  |  | 56-55-3          | 1.0  | =g/L                        |  |      |  | )))                | )))                | <1.0               | <1.0               | <1.0               |



## Analytical Results

Sub-Matrix: WATER

|                                                            |  | Client sample ID  |     | Client sampling date / time |      | MW01 |        | MW02          |       | MW03          |        | MW04          |        | MW05          |        |
|------------------------------------------------------------|--|-------------------|-----|-----------------------------|------|------|--------|---------------|-------|---------------|--------|---------------|--------|---------------|--------|
|                                                            |  | CAS Number        |     | LOR                         |      | Unit |        | EB0914886-001 |       | EB0914886-002 |        | EB0914886-003 |        | EB0914886-004 |        |
| Compound                                                   |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| Chrysene                                                   |  | 218-01-9          | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| Benzo(b)fluoranthene                                       |  | \$0( 99)\$        | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| Benzo(k)fluoranthene                                       |  | \$0( 08-9         | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| Benzo(a)pyrene                                             |  | ( 0-32-8          | 0.( |                             | =g/L |      | )))    |               | )))   |               | )))    |               | ; 0.(  |               | ; 0.(  |
| Indeno(1,2,3.cd)pyrene                                     |  | 19( 9(            | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| Dibenz(a,h)anthracene                                      |  | ( 0( 0(           | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| Benzo(g,h,i)perylene                                       |  | 191-24-2          | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | <1.0   |               | <1.0   |
| ^ Sum of polycyclic aromatic hydrocarbons                  |  | )))               | 1.0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | 12.3   |               | 5.9    |
| EP080/071: Total Petroleum Hydrocarbons                    |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| C6 - C9 Fraction                                           |  | )))               | \$0 |                             | =g/L |      | )))    |               | ;\$ 0 |               | )))    |               | ;\$ 0  |               | 30     |
| C10 - C14 Fraction                                         |  | )))               | ( 0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | )))    |               | 400    |
| C10 - C14 Fraction                                         |  | )))               | ( 0 |                             | =g/L |      | )))    |               | ;( 0  |               | )))    |               | ;( 0   |               | )))    |
| C15 - C28 Fraction                                         |  | )))               | 100 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | )))    |               | 850    |
| C15 - C28 Fraction                                         |  | )))               | 100 |                             | =g/L |      | )))    |               | <100  |               | )))    |               | <100   |               | )))    |
| C29 - C36 Fraction                                         |  | )))               | ( 0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | )))    |               | 170    |
| C29 - C36 Fraction                                         |  | )))               | ( 0 |                             | =g/L |      | )))    |               | ;( 0  |               | )))    |               | ;( 0   |               | )))    |
| ^ C10 - C36 Fraction (sum)                                 |  | )))               | ( 0 |                             | =g/L |      | )))    |               | )))   |               | )))    |               | )))    |               | 1430   |
| C10 - C36 Fraction (sum)                                   |  | )))               | ( 0 |                             | =g/L |      | )))    |               | ;( 0  |               | )))    |               | ;( 0   |               | )))    |
| EP080: BTEX                                                |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| Benzene                                                    |  | 71-43-2           | 1   |                             | =g/L |      | <1     |               | <1    |               | )))    |               | )))    |               | )))    |
| Toluene                                                    |  | 108-88-3          | \$  |                             | =g/L |      | \$\$\$ |               | ;\$   |               | \$\$\$ |               | \$\$\$ |               | \$\$\$ |
| Ethylbenzene                                               |  | 100-41-4          | \$  |                             | =g/L |      | \$\$\$ |               | ;\$   |               | \$\$\$ |               | \$\$\$ |               | \$\$\$ |
| meta- & para-Xylene                                        |  | 108-38-3 106-42-3 | \$  |                             | =g/L |      | \$\$\$ |               | ;\$   |               | \$\$\$ |               | \$\$\$ |               | \$\$\$ |
| ortho-Xylene                                               |  | 95-47-6           | \$  |                             | =g/L |      | \$\$\$ |               | ;\$   |               | \$\$\$ |               | \$\$\$ |               | \$\$\$ |
| EP070S: TPH Surrogates - Speciation                        |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| 2-Fluorobiphenyl                                           |  | 321-60-8          | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | )))    |               | 100    |
| 2-Bromonaphthalene                                         |  | 580-13-2          | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | )))    |               | 107    |
| EP074S: VOC Surrogates                                     |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| 1,2-Dichloroethane-D4                                      |  | 17060(0( 0        | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 87.4   |               | 84.1   |
| Toluene-D8                                                 |  | \$037-26-5        | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 99.7   |               | 92.6   |
| 4-Bromofluorobenzene                                       |  | 460(00-4          | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 104    |               | 97.1   |
| EP075(SIM)S: Phenolic Compound Surrogates                  |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |
| Phenol-d6                                                  |  | 13127-88-3        | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 30.4   |               | 12.2   |
| 2-Chlorophenol-D4                                          |  | 9( 951-73-6       | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 72.2   |               | 31.8   |
| 2,4,6-Tribromophenol                                       |  | 118-79-6          | 0.1 |                             | >    |      | )))    |               | )))   |               | )))    |               | 88.8   |               | 105    |
| EP075(SIM)T: PAH Surrogates                                |  |                   |     |                             |      |      |        |               |       |               |        |               |        |               |        |



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Client : SINCLAIR KNIGHT ME-9  
Project : & E09(I/

13-054

## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                       |             | Client sample ID            |      |                    |                    |                    |                    |                    |  |
|-----------------------------------------|-------------|-----------------------------|------|--------------------|--------------------|--------------------|--------------------|--------------------|--|
|                                         |             | Client sampling date / time |      |                    |                    |                    |                    |                    |  |
| Compound                                | CAS Number  | LOR                         | Unit |                    |                    |                    |                    |                    |  |
|                                         |             |                             |      | MW01               | MW02               | MW03               | MW04               | MW05               |  |
|                                         |             |                             |      | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 | 17-SEP)\$009 15:00 |  |
|                                         |             |                             |      | EB0914886-001      | EB0914886-002      | EB0914886-003      | EB0914886-004      | EB0914886-005      |  |
| EP075(SIM)T: PAH Surrogates - Continued |             |                             |      |                    |                    |                    |                    |                    |  |
| 2-Fluorobiphenyl                        | 321-60-8    | 0.1                         | ^    | ))))               | ))))               | 101                | 86.1               | 55.4               |  |
| Anthracene-d10                          | 1719)06-8   | 0.1                         | ^    | ))))               | ))))               | 82.5               | 108                | 80.7               |  |
| 4-Terphenyl-d14                         | 1718-51-0   | 0.1                         | ^    | ))))               | ))))               | 88.9               | 112                | 78.7               |  |
| EP080S: TPH(V)/BTEX Surrogates          |             |                             |      |                    |                    |                    |                    |                    |  |
| 1,2-Dichloroethane-D4                   | 17060)0/) 0 | 0.1                         | ^    | 87.3               | 94.1               | 97.3               | 94.0               | 99.4               |  |
| Toluene-D8                              | \$037-26-5  | 0.1                         | ^    | 94.9               | 97.4               | 103                | 95.5               | 100                |  |
| 4-Bromofluorobenzene                    | 460)00-4    | 0.1                         | ^    | 99.1               | 102                | 106                | 99.2               | 102                |  |

## Analytical Results

**Sub-Matrix: WATER**

| Sub-Matrix: WATER                                |                   | Client sample ID            |      |
|--------------------------------------------------|-------------------|-----------------------------|------|
|                                                  |                   | Client sampling date / time |      |
| Compound                                         | CAS Number        | LOR                         | Unit |
| EG020F: Dissolved Metals by ICP-MS               |                   |                             |      |
| Arsenic                                          | 7440-38-2         | 0.001                       | mg/L |
| Cadmium                                          | 7440-43-9         | 0.0001                      | mg/L |
| Chromium                                         | 7440-47-3         | 0.001                       | mg/L |
| Copper                                           | 7440( )0-8        | 0.001                       | mg/L |
| Lead                                             | 7439( )2-1        | 0.001                       | mg/L |
| Nickel                                           | 7440( )0\$0       | 0.001                       | mg/L |
| Zinc                                             | 7440-66-6         | 0.00(                       | mg/L |
| EG035F: Dissolved Mercury by FIMS                |                   |                             |      |
| Mercury                                          | 7439( )7-6        | 0.0001                      | mg/L |
| EP070: Total Petroleum Hydrocarbons - Speciation |                   |                             |      |
| Aliphatic C10-C14                                | ))))              | ( 0                         | =g/L |
| Aliphatic C15-C28                                | ))))              | 100                         | =g/L |
| Aliphatic C29-C36                                | ))))              | ( 0                         | =g/L |
| Aromatic C10-C14                                 | ))))              | ( 0                         | =g/L |
| Aromatic C15-C28                                 | ))))              | 100                         | =g/L |
| Aromatic C29-C36                                 | ))))              | ( 0                         | =g/L |
| EP074A: Monocyclic Aromatic Hydrocarbons         |                   |                             |      |
| Benzene                                          | 71-43-2           | 1                           | =g/L |
| Toluene                                          | 108-88-3          | \$                          | =g/L |
| Ethylbenzene                                     | 100-41-4          | \$                          | =g/L |
| meta- & para-Xylene                              | 108-38-3 106-42-3 | \$                          | =g/L |
| Styrene                                          | 100-42-5          | (                           | =g/L |
| ortho-Xylene                                     | 95-47-6           | \$                          | =g/L |
| Isopropylbenzene                                 | 98-82-8           | (                           | =g/L |
| n-Propylbenzene                                  | 103-65-1          | (                           | =g/L |
| 1,3,5-Trimethylbenzene                           | 108-67-8          | (                           | =g/L |
| sec-Butylbenzene                                 | 135-98-8          | (                           | =g/L |
| 1,2,4-Trimethylbenzene                           | 95-63-6           | (                           | =g/L |
| tert-Butylbenzene                                | 98-06-6           | (                           | =g/L |
| p-Isopropyltoluene                               | 99-87-6           | (                           | =g/L |
| n-Butylbenzene                                   | 104-51-8          | (                           | =g/L |
| EP074B: Oxygenated Compounds                     |                   |                             |      |
| Vinyl Acetate                                    | 108-05-4          | ( 0                         | =g/L |
| 2-Butanone (MEK)                                 | 78-9( )1          | ( 0                         | =g/L |
| 4-Methyl-2-pentanone (MIBK)                      | 108-10-1          | ( 0                         | =g/L |
| 2-Hexanone (MBK)                                 | ( 91-78-6         | ( 0                         | =g/L |
| EP074C: Sulfonated Compounds                     |                   |                             |      |



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Client : SINCLAIR KNIGH' ME-9  
Project : & E09(I/

13-054

## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                        |            | Client sample ID            |      |
|------------------------------------------|------------|-----------------------------|------|
|                                          |            | Client sampling date / time |      |
| Compound                                 | CAS Number | LOR                         | Unit |
| EP074C: Sulfonated Compounds - Continued |            |                             |      |
| Carbon disulfide                         | 75-15-0    | (                           | =g/L |
| EP074D: Fumigants                        |            |                             |      |
| 2,2-Dichloropropane                      | ( 94-20)   | (                           | =g/L |
| 1,2-Dichloropropane                      | 78-87-5    | (                           | =g/L |
| cis-1,3-Dichloropropylene                | 10061-01-5 | (                           | =g/L |
| trans-1,3-Dichloropropylene              | 10061-02-6 | (                           | =g/L |
| 1,2-Dibromoethane (EDB)                  | 106-93-4   | (                           | =g/L |
| EP074E: Halogenated Aliphatic Compounds  |            |                             |      |
| Dichlorodifluoromethane                  | 75-71-8    | (0                          | =g/L |
| Chloromethane                            | 74-87-3    | (0                          | =g/L |
| Vinyl chloride                           | /() 01-4   | (0                          | =g/L |
| Bromomethane                             | 74-83-9    | (0                          | =g/L |
| Chloroethane                             | /() 00)    | (0                          | =g/L |
| Trichlorofluoromethane                   | 75-69-4    | (0                          | =g/L |
| 1,1-Dichloroethene                       | 75-35-4    | (                           | =g/L |
| Iodomethane                              | 74-88-4    | (                           | =g/L |
| trans-1,2-Dichloroethene                 | 156-60)    | (                           | =g/L |
| 1,1-Dichloroethane                       | 75-34-3    | (                           | =g/L |
| cis-1,2-Dichloroethene                   | 156-59)\$  | (                           | =g/L |
| 1,1,1-Trichloroethane                    | 71-55-6    | (                           | =g/L |
| 1,1-Dichloropropylene                    | 563-58-6   | (                           | =g/L |
| Carbon Tetrachloride                     | 56-23-5    | (                           | =g/L |
| 1,2-Dichloroethane                       | 10/) 06-2  | (                           | =g/L |
| Trichloroethene                          | /9)01-6    | (                           | =g/L |
| Dibromomethane                           | 74-9()     | (                           | =g/L |
| 1,1,2-Trichloroethane                    | /9)00)     | (                           | =g/L |
| 1,3-Dichloropropane                      | 142-28-9   | (                           | =g/L |
| Tetrachloroethene                        | 127-18-4   | (                           | =g/L |
| 1,1,1,2-Tetrachloroethane                | 630)\$0-6  | (                           | =g/L |
| trans-1,4-Dichloro-2-butene              | 110-57-6   | (                           | =g/L |
| cis-1,4-Dichloro-2-butene                | 1476-11-5  | (                           | =g/L |
| 1,1,2,2-Tetrachloroethane                | /9-34-5    | (                           | =g/L |
| 1,2,3-Trichloropropane                   | 96-18-4    | (                           | =g/L |
| Pentachloroethane                        | 76-01-7    | (                           | =g/L |
| 1,2-Dibromo-3-chloropropane              | 96-12-8    | (                           | =g/L |
| Hexachlorobutadiene                      | 87-68-3    | (                           | =g/L |
| EP074F: Halogenated Aromatic Compounds   |            |                             |      |
| Chlorobenzene                            | 108-90)    | (                           | =g/L |



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                  |            | Client sample ID |      | Client sampling date / time |                   | Unit              |                   | MW06          | MW07          | MW08          | MW09          | Dup01         |
|----------------------------------------------------|------------|------------------|------|-----------------------------|-------------------|-------------------|-------------------|---------------|---------------|---------------|---------------|---------------|
| Compound                                           | CAS Number | LOR              | Unit | 17-SEP\$009 15:00           | 17-SEP\$009 15:00 | 17-SEP\$009 15:00 | 17-SEP\$009 15:00 | EB0914886-006 | EB0914886-007 | EB0914886-008 | EB0914886-009 | EB0914886-010 |
| EP074F: Halogenated Aromatic Compounds - Continued |            |                  |      |                             |                   |                   |                   |               |               |               |               |               |
| Bromobenzene                                       | 108-86-1   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 2-Chlorotoluene                                    | 95-49-8    | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 4-Chlorotoluene                                    | 106-43-4   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 1,3-Dichlorobenzene                                | 541-73-1   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 1,4-Dichlorobenzene                                | 106-46-7   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 1,2-Dichlorobenzene                                | 90( 0-1    | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 1,2,4-Trichlorobenzene                             | 120-82-1   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| 1,2,3-Trichlorobenzene                             | 87-61-6    | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| EP074G: Trihalomethanes                            |            |                  |      |                             |                   |                   |                   |               |               |               |               |               |
| Chloroform                                         | 67-66-3    | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| Bromodichloromethane                               | 75-27-4    | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| Dibromochloromethane                               | 124-48-1   | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| Bromoform                                          | /(/\$(/\$( | (                | =g/L | ;(                          | ;(                | ;(                | ;(                | ;(            | ;(            | ;(            | )))           | )))           |
| EP075(SIM)A: Phenolic Compounds                    |            |                  |      |                             |                   |                   |                   |               |               |               |               |               |
| Phenol                                             | 108-9(/\$( | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2-Chlorophenol                                     | 95-57-8    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2-Methylphenol                                     | 95-48-7    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 3- & 4-Methylphenol                                | 1319(/(/   | \$, 0            | =g/L | \$. 0                       | \$. 0             | \$. 0             | \$/, /            | \$. 0         | \$. 0         | \$/, /        | )))           | )))           |
| 2-Nitrophenol                                      | 88-75-5    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2,4-Dimethylphenol                                 | 105-67-9   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2,4-Dichlorophenol                                 | 120-83-2   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2,6-Dichlorophenol                                 | 87-65-0    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 4-Chloro-3-Methylphenol                            | (9)( 0)/   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2,4,6-Trichlorophenol                              | 88-06-2    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2,4,5-Trichlorophenol                              | 9(/ 95-4   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Pentachlorophenol                                  | 87-86-5    | \$, 0            | =g/L | \$. 0                       | \$. 0             | \$. 0             | \$/, /            | \$. 0         | \$. 0         | \$/, /        | )))           | )))           |
| 2,3,4,6-Tetrachlorophenol                          | 58-90(/\$( | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons     |            |                  |      |                             |                   |                   |                   |               |               |               |               |               |
| Naphthalene                                        | 91-20(/    | 1.0              | =g/L | 2.6                         | 6.7               | <3.8              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| 2-Methylnaphthalene                                | 91-57-6    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Acenaphthylene                                     | \$08-96-8  | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Acenaphthene                                       | 83-32-9    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Fluorene                                           | 86-73-7    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Phenanthrene                                       | 85-01-8    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Anthracene                                         | 120-12-7   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Fluoranthene                                       | \$06-44-0  | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Pyrene                                             | 129(00)0   | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |
| Benz(a)anthracene                                  | 56-55-3    | 1.0              | =g/L | <1.0                        | <1.0              | <1.0              | <3.8              | <1.0          | <1.0          | <3.8          | )))           | )))           |



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13-054

## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                          |                   | Client sample ID |      | Client sampling date / time |      |      |       |       |  |  |  |  |  |
|------------------------------------------------------------|-------------------|------------------|------|-----------------------------|------|------|-------|-------|--|--|--|--|--|
| Compound                                                   | CAS Number        | LOR              | Unit | MW06                        | MW07 | MW08 | MW09  | Dup01 |  |  |  |  |  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| Chrysene                                                   | 218-01-9          | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| Benzo(b)fluoranthene                                       | \$0199            | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| Benzo(k)fluoranthene                                       | \$0108-9          | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| Benzo(a)pyrene                                             | (0-32-8           | 0.1              | =g/L | 0.1                         | 0.1  | <3.8 | )))   | )))   |  |  |  |  |  |
| Indeno(1,2,3.cd)pyrene                                     | 19191             | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| Dibenz(a,h)anthracene                                      | (19101            | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| Benzo(g,h,i)perylene                                       | 191-24-2          | 1.0              | =g/L | <1.0                        | <1.0 | <3.8 | )))   | )))   |  |  |  |  |  |
| ^ Sum of polycyclic aromatic hydrocarbons                  | )))               | 1.0              | =g/L | 2.6                         | 6.7  | <3.8 | )))   | )))   |  |  |  |  |  |
| EP080/071: Total Petroleum Hydrocarbons                    |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| C6 - C9 Fraction                                           | )))               | \$0              | =g/L | 30                          | 50   | 30   | ;\$ 0 | 30    |  |  |  |  |  |
| C10 - C14 Fraction                                         | )))               | (0               | =g/L | 50                          | 800  | )))  | )))   | )))   |  |  |  |  |  |
| C10 - C14 Fraction                                         | )))               | (0               | =g/L | )))                         | )))  | 580  | 60    | 450   |  |  |  |  |  |
| C15 - C28 Fraction                                         | )))               | 100              | =g/L | 180                         | 1480 | )))  | )))   | )))   |  |  |  |  |  |
| C15 - C28 Fraction                                         | )))               | 100              | =g/L | )))                         | )))  | 1700 | 100   | 1200  |  |  |  |  |  |
| C29 - C36 Fraction                                         | )))               | (0               | =g/L | 0                           | 170  | )))  | )))   | )))   |  |  |  |  |  |
| C29 - C36 Fraction                                         | )))               | (0               | =g/L | )))                         | )))  | 710  | 0     | 210   |  |  |  |  |  |
| ^ C10 - C36 Fraction (sum)                                 | )))               | (0               | =g/L | 240                         | 2450 | )))  | )))   | )))   |  |  |  |  |  |
| ^ C10 - C36 Fraction (sum)                                 | )))               | (0               | =g/L | )))                         | )))  | 2990 | 180   | 1820  |  |  |  |  |  |
| EP080: BTEX                                                |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| Benzene                                                    | 71-43-2           | 1                | =g/L | )))                         | )))  | )))  | <1    | 1     |  |  |  |  |  |
| Toluene                                                    | 108-88-3          | \$               | =g/L | )))                         | )))  | )))  | ;\$   | 4     |  |  |  |  |  |
| Ethylbenzene                                               | 100-41-4          | \$               | =g/L | )))                         | )))  | )))  | ;\$   | 2     |  |  |  |  |  |
| meta- & para-Xylene                                        | 108-38-3 106-42-3 | \$               | =g/L | )))                         | )))  | )))  | ;\$   | ;\$   |  |  |  |  |  |
| ortho-Xylene                                               | 95-47-6           | \$               | =g/L | )))                         | )))  | )))  | ;\$   | ;\$   |  |  |  |  |  |
| EP070S:TPH Surrogates - Speciation                         |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| 2-Fluorobiphenyl                                           | 321-60-8          | 0.1              | >    | 99.4                        | 107  | )))  | )))   | )))   |  |  |  |  |  |
| 2-Bromonaphthalene                                         | 580-13-2          | 0.1              | >    | 108                         | 112  | )))  | )))   | )))   |  |  |  |  |  |
| EP074S: VOC Surrogates                                     |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| 1,2-Dichloroethane-D4                                      | 170601010         | 0.1              | >    | 89.4                        | 85.4 | 85.2 | )))   | )))   |  |  |  |  |  |
| Toluene-D8                                                 | \$037-26-5        | 0.1              | >    | 94.8                        | 89.8 | 89.5 | )))   | )))   |  |  |  |  |  |
| 4-Bromofluorobenzene                                       | 460100-4          | 0.1              | >    | 97.0                        | 93.4 | 92.2 | )))   | )))   |  |  |  |  |  |
| EP075(SIM)S: Phenolic Compound Surrogates                  |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |
| Phenol-d6                                                  | 13127-88-3        | 0.1              | >    | 8.5                         | 13.2 | 26.8 | )))   | )))   |  |  |  |  |  |
| 2-Chlorophenol-D4                                          | 91951-73-6        | 0.1              | >    | 27.6                        | 34.0 | 63.4 | )))   | )))   |  |  |  |  |  |
| 2,4,6-Tribromophenol                                       | 118-79-6          | 0.1              | >    | 72.5                        | 87.3 | 104  | )))   | )))   |  |  |  |  |  |
| EP075(SIM)T: PAH Surrogates                                |                   |                  |      |                             |      |      |       |       |  |  |  |  |  |

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Client : SINCLAIR KNIGHT ME-9  
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13-054

## Analytical Results

Sub-Matrix: WATER

| Compound                                | Client sample ID |     | Client sampling date / time |  | Unit |  | MW06             | MW07             | MW08             | MW09             | Dup01            |
|-----------------------------------------|------------------|-----|-----------------------------|--|------|--|------------------|------------------|------------------|------------------|------------------|
|                                         | CAS Number       | LOR |                             |  |      |  | 17-SEP)009 15:00 | 17-SEP)009 15:00 | 17-SEP)009 15:00 | 17-SEP)009 15:00 | 17-SEP)009 15:00 |
| EP075(SIM)T: PAH Surrogates - Continued |                  |     |                             |  |      |  |                  |                  |                  |                  |                  |
| 2-Fluorobiphenyl                        | 321-60-8         | 0.1 | >                           |  |      |  | 55.8             | 77.4             | 72.4             | )))              | )))              |
| Anthracene-d10                          | 1719)06-8        | 0.1 | >                           |  |      |  | 80.9             | 97.0             | 92.7             | )))              | )))              |
| 4-Terphenyl-d14                         | 1718-51-0        | 0.1 | >                           |  |      |  | 79.3             | 92.9             | 89.6             | )))              | )))              |
| EP080S: TPH(V)/BTX Surrogates           |                  |     |                             |  |      |  |                  |                  |                  |                  |                  |
| 1,2-Dichloroethane-D4                   | 17060)0/) 0      | 0.1 | >                           |  |      |  | 100              | 95.1             | 94.7             | 103              | 100              |
| Toluene-D8                              | 037-26-5         | 0.1 | >                           |  |      |  | 97.6             | 92.4             | 92.1             | 97.2             | 92.6             |
| 4-Bromofluorobenzene                    | 460)00-4         | 0.1 | >                           |  |      |  | 99.0             | 95.4             | 94.2             | 96.0             | 93.0             |





## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                        |             | Client sample ID |      | Client sampling date / time |  | Dup02              |  | CR13               |  | CR14               |  | CR15               |  | Drain 1            |  |
|------------------------------------------|-------------|------------------|------|-----------------------------|--|--------------------|--|--------------------|--|--------------------|--|--------------------|--|--------------------|--|
|                                          |             |                  |      |                             |  | 17-SEP)\$009 15:00 |  | 17-SEP)\$009 15:00 |  | 17-SEP)\$009 15:00 |  | 17-SEP)\$009 15:00 |  | 17-SEP)\$009 15:00 |  |
| Compound                                 | CAS Number  | LOR              | Unit | EB0914886-011               |  | EB0914886-012      |  | EB0914886-013      |  | EB0914886-014      |  | EB0914886-015      |  |                    |  |
| EG020F: Dissolved Metals by ICP-MS       |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| Arsenic                                  | 7440-38-2   | 0.001            | mg/L | 0.007                       |  | 0.022              |  | ; 0.001            |  | 0.002              |  | ; 0.001            |  |                    |  |
| Cadmium                                  | 7440-43-9   | 0.0001           | mg/L | 0.0004                      |  | 0.0004             |  | ; 0.0001           |  | 0.0002             |  | 0.0011             |  |                    |  |
| Chromium                                 | 7440-47-3   | 0.001            | mg/L | 0.011                       |  | ; 0.001            |  | ; 0.001            |  | <0.001             |  | 0.002              |  |                    |  |
| Copper                                   | 7440)( 0-8  | 0.001            | mg/L | 0.015                       |  | 0.007              |  | 0.006              |  | 0.002              |  | 0.020              |  |                    |  |
| Lead                                     | 7439)92-1   | 0.001            | mg/L | 0.001                       |  | ; 0.001            |  | ; 0.001            |  | <0.001             |  | 0.013              |  |                    |  |
| Nickel                                   | 7440)(0\$)0 | 0.001            | mg/L | 0.046                       |  | 0.001              |  | 0.002              |  | 0.002              |  | 0.002              |  |                    |  |
| Zinc                                     | 7440-66-6   | 0.00(            | mg/L | 0.016                       |  | 0.025              |  | 0.015              |  | 0.057              |  | 0.090              |  |                    |  |
| EG035F: Dissolved Mercury by FIMS        |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| Mercury                                  | 7439)97-6   | 0.0001           | mg/L | ; 0.0001                    |  | ; 0.0001           |  | <0.0001            |  | <0.0001            |  | <0.0001            |  |                    |  |
| EP074A: Monocyclic Aromatic Hydrocarbons |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| Benzene                                  | 71-43-2     | 1                | =g/L | )))                         |  | \$                 |  | )))                |  | )))                |  | ;\$                |  |                    |  |
| Toluene                                  | 108-88-3    | \$               | =g/L | )))                         |  | \$                 |  | )))                |  | )))                |  | ;\$                |  |                    |  |
| Ethylbenzene                             | 100-41-4    | \$               | =g/L | )))                         |  | \$                 |  | )))                |  | )))                |  | ;\$                |  |                    |  |
| meta- & para-Xylene                      | 108-38-3    | \$               | =g/L | )))                         |  | <4                 |  | )))                |  | )))                |  | <4                 |  |                    |  |
| Styrene                                  | 100-42-5    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| ortho-Xylene                             | 95-47-6     | \$               | =g/L | )))                         |  | \$                 |  | )))                |  | )))                |  | ;\$                |  |                    |  |
| Isopropylbenzene                         | 98-82-8     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| n-Propylbenzene                          | 103-65-1    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| 1,3,5-Trimethylbenzene                   | 108-67-8    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| sec-Butylbenzene                         | 135-98-8    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| 1,2,4-Trimethylbenzene                   | 95-63-6     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| tert-Butylbenzene                        | 98-06-6     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| p-Isopropyltoluene                       | 99-87-6     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| n-Butylbenzene                           | 104-51-8    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| EP074B: Oxygenated Compounds             |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| Vinyl Acetate                            | 108-05-4    | (0               | =g/L | )))                         |  | : 0                |  | )))                |  | )))                |  | : 0                |  |                    |  |
| 2-Butanone (MEK)                         | 78-9)!      | (0               | =g/L | )))                         |  | : 0                |  | )))                |  | )))                |  | : 0                |  |                    |  |
| 4-Methyl-2-pentanone (MIBK)              | 108-10-1    | (0               | =g/L | )))                         |  | : 0                |  | )))                |  | )))                |  | : 0                |  |                    |  |
| 2-Hexanone (MBK)                         | ( 91-78-6   | (0               | =g/L | )))                         |  | : 0                |  | )))                |  | )))                |  | : 0                |  |                    |  |
| EP074C: Sulfonated Compounds             |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| Carbon disulfide                         | 75-15-0     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| EP074D: Fumigants                        |             |                  |      |                             |  |                    |  |                    |  |                    |  |                    |  |                    |  |
| 2,2-Dichloropropane                      | ( 94-20)/   | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| 1,2-Dichloropropane                      | 78-87-5     | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| cis-1,3-Dichloropropylene                | 10061-01-5  | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| trans-1,3-Dichloropropylene              | 10061-02-6  | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |
| 1,2-Dibromoethane (EDB)                  | 106-93-4    | (                | =g/L | )))                         |  | (                  |  | )))                |  | )))                |  | (                  |  |                    |  |



## Analytical Results

Sub-Matrix: WATER

| Compound                                |  | Client sample ID |     | Client sampling date / time |  | Dup02             |               | CR13              |               | CR14              |               | CR15              |               | Drain 1           |               |
|-----------------------------------------|--|------------------|-----|-----------------------------|--|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|
|                                         |  | CAS Number       | LOR | Unit                        |  | 17-SEP\$009 15:00 | EB0914886-011 | 17-SEP\$009 15:00 | EB0914886-012 | 17-SEP\$009 15:00 | EB0914886-013 | 17-SEP\$009 15:00 | EB0914886-014 | 17-SEP\$009 15:00 | EB0914886-015 |
| EP074E: Halogenated Aliphatic Compounds |  |                  |     |                             |  |                   |               |                   |               |                   |               |                   |               |                   |               |
| Dichlorodifluoromethane                 |  | 75-71-8          | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| Chloromethane                           |  | 74-87-3          | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| Vinyl chloride                          |  | / ( 01-4         | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| Bromomethane                            |  | 74-83-9          | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| Chloroethane                            |  | / ( 00)!         | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| Trichlorofluoromethane                  |  | 75-69-4          | (0  | =g/L                        |  | )))               |               | : ( 0             |               | )))               |               | )))               |               | : ( 0             |               |
| 1,1-Dichloroethene                      |  | 75-35-4          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Iodomethane                             |  | 74-88-4          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| trans-1,2-Dichloroethene                |  | 156-60)(         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1-Dichloroethane                      |  | 75-34-3          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| cis-1,2-Dichloroethene                  |  | 156-59)\$        | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1,1-Trichloroethane                   |  | 71-55-6          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1-Dichloropropylene                   |  | 563-58-6         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Carbon Tetrachloride                    |  | 56-23-5          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2-Dichloroethane                      |  | 10) 06-2         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Trichloroethene                         |  | / 9)01-6         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Dibromomethane                          |  | 74-9)(           | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1,2-Trichloroethane                   |  | / 9)00)(         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,3-Dichloropropane                     |  | 142-28-9         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Tetrachloroethene                       |  | 127-18-4         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1,1,2-Tetrachloroethane               |  | 630)\$0-6        | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| trans-1,4-Dichloro-2-butene             |  | 110-57-6         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| cis-1,4-Dichloro-2-butene               |  | 1476-11-5        | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,1,2,2-Tetrachloroethane               |  | / 9-34-5         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2,3-Trichloropropane                  |  | 96-18-4          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Pentachloroethane                       |  | 76-01-7          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2-Dibromo-3-chloropropane             |  | 96-12-8          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Hexachlorobutadiene                     |  | 87-68-3          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| EP074F: Halogenated Aromatic Compounds  |  |                  |     |                             |  |                   |               |                   |               |                   |               |                   |               |                   |               |
| Chlorobenzene                           |  | 108-90)(         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| Bromobenzene                            |  | 108-86-1         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 2-Chlorotoluene                         |  | 95-49-8          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 4-Chlorotoluene                         |  | 106-43-4         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,3-Dichlorobenzene                     |  | 541-73-1         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,4-Dichlorobenzene                     |  | 106-46-7         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2-Dichlorobenzene                     |  | 9)( 0-1          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2,4-Trichlorobenzene                  |  | 120-82-1         | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |
| 1,2,3-Trichlorobenzene                  |  | 87-61-6          | (   | =g/L                        |  | )))               |               | : (               |               | )))               |               | )))               |               | : (               |               |



## Analytical Results

Sub-Matrix: WATER

| Compound                                              |  | Client sample ID |     | Client sampling date / time |  | Dup02             |               | CR13              |               | CR14              |               | CR15              |               | Drain 1           |               |
|-------------------------------------------------------|--|------------------|-----|-----------------------------|--|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|
|                                                       |  | CAS Number       | LOR | Unit                        |  | 17-SEP\$009 15:00 | EB0914886-011 | 17-SEP\$009 15:00 | EB0914886-012 | 17-SEP\$009 15:00 | EB0914886-013 | 17-SEP\$009 15:00 | EB0914886-014 | 17-SEP\$009 15:00 | EB0914886-015 |
| <b>EP074G: Trihalomethanes</b>                        |  |                  |     |                             |  |                   |               |                   |               |                   |               |                   |               |                   |               |
| Chloroform                                            |  | 67-66-3          | (   | =g/L                        |  | )))               | )))           | :(                | :(            | )))               | )))           | )))               | )))           | :(                | :(            |
| Bromodichloromethane                                  |  | 75-27-4          | (   | =g/L                        |  | )))               | )))           | :(                | :(            | )))               | )))           | )))               | )))           | :(                | :(            |
| Dibromochloromethane                                  |  | 124-48-1         | (   | =g/L                        |  | )))               | )))           | :(                | :(            | )))               | )))           | )))               | )))           | :(                | :(            |
| Bromoform                                             |  | /(\$)(           | (   | =g/L                        |  | )))               | )))           | :(                | :(            | )))               | )))           | )))               | )))           | :(                | :(            |
| <b>EP075(SIM)A: Phenolic Compounds</b>                |  |                  |     |                             |  |                   |               |                   |               |                   |               |                   |               |                   |               |
| Phenol                                                |  | 108-9(\$         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2-Chlorophenol                                        |  | 95-57-8          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2-Methylphenol                                        |  | 95-48-7          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 3- & 4-Methylphenol                                   |  | 1319)(/)         | \$0 | =g/L                        |  | )))               | )))           | ;\$, 0            | ;\$, 0        | )))               | )))           | )))               | )))           | ;\$, 0            | ;\$, 0        |
| 2-Nitrophenol                                         |  | 88-75-5          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2,4-Dimethylphenol                                    |  | 105-67-9         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2,4-Dichlorophenol                                    |  | 120-83-2         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2,6-Dichlorophenol                                    |  | 87-65-0          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 4-Chloro-3-Methylphenol                               |  | ( 9)( 0)         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2,4,6-Trichlorophenol                                 |  | 88-06-2          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2,4,5-Trichlorophenol                                 |  | 9( 95-4          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Pentachlorophenol                                     |  | 87-86-5          | \$0 | =g/L                        |  | )))               | )))           | ;\$, 0            | ;\$, 0        | )))               | )))           | )))               | )))           | ;\$, 0            | ;\$, 0        |
| 2,3,4,6-Tetrachlorophenol                             |  | 58-90(\$         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| <b>EP075(SIM)B: Polynuclear Aromatic Hydrocarbons</b> |  |                  |     |                             |  |                   |               |                   |               |                   |               |                   |               |                   |               |
| Naphthalene                                           |  | 91-20(           | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| 2-Methylnaphthalene                                   |  | 91-57-6          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Acenaphthylene                                        |  | \$08-96-8        | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Acenaphthene                                          |  | 83-32-9          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Fluorene                                              |  | 86-73-7          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Phenanthrene                                          |  | 85-01-8          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Anthracene                                            |  | 120-12-7         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Fluoranthene                                          |  | \$06-44-0        | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Pyrene                                                |  | 129(00)0         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Benz(a)anthracene                                     |  | 56-55-3          | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Chrysene                                              |  | 218-01-9         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Benzo(b)fluoranthene                                  |  | \$0( 99)\$       | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Benzo(k)fluoranthene                                  |  | \$0( 08-9        | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Benzo(a)pyrene                                        |  | ( 0-32-8         | 0,( | =g/L                        |  | )))               | )))           | ;\$, 0            | ;\$, 0        | )))               | )))           | )))               | )))           | ;\$, 0            | ;\$, 0        |
| Indeno(1,2,3.cd)pyrene                                |  | 19( 9)( 9        | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Dibenz(a,h)anthracene                                 |  | ( 0)( 0)         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| Benzo(g,h,i)perylene                                  |  | 191-24-2         | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |
| ^ Sum of polycyclic aromatic hydrocarbons             |  | )))              | 1.0 | =g/L                        |  | )))               | )))           | <1.0              | <1.0          | )))               | )))           | )))               | )))           | <1.0              | <1.0          |



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13-054

## Analytical Results

Sub-Matrix: WATER

| Compound                                  | Client sample ID |     | Client sampling date / time |      | Unit |  | Dup02             | CR13          |                   | CR14          |                   | CR15          |                   | Drain 1       |                   |
|-------------------------------------------|------------------|-----|-----------------------------|------|------|--|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
|                                           | CAS Number       | LOR |                             |      |      |  | 17-SEP\$009 15:00 | EB0914886-011 | 17-SEP\$009 15:00 | EB0914886-012 | 17-SEP\$009 15:00 | EB0914886-013 | 17-SEP\$009 15:00 | EB0914886-014 | 17-SEP\$009 15:00 |
| EP080/071: Total Petroleum Hydrocarbons   |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| C6 - C9 Fraction                          | )))              | \$0 | =g/L                        | 60   | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| C10 - C14 Fraction                        | )))              | (0  | =g/L                        | 550  | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| C15 - C28 Fraction                        | )))              | 100 | =g/L                        | 1400 | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| C29 - C36 Fraction                        | )))              | (0  | =g/L                        | 280  | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| ^ C10 - C36 Fraction (sum)                | )))              | (0  | =g/L                        | 2280 | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| C10 - C36 Fraction (sum)                  | )))              | (0  | =g/L                        | )))  | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| EP080: BTEX                               |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| Benzene                                   | 71-43-2          | 1   | =g/L                        | 6    | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| Toluene                                   | 108-88-3         | \$  | =g/L                        | )))  | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| Ethylbenzene                              | 100-41-4         | \$  | =g/L                        | 7    | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| meta- & para-Xylene                       | 108-38-3         | \$  | =g/L                        | 6    | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| ortho-Xylene                              | 95-47-6          | \$  | =g/L                        | 4    | =g/L |  |                   |               |                   |               |                   |               |                   |               |                   |
| EP074S: VOC Surrogates                    |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| 1,2-Dichloroethane-D4                     | 17060/0/0        | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| Toluene-D8                                | \$037-26-5       | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| 4-Bromofluorobenzene                      | 460/00-4         | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| EP075(SIM)S: Phenolic Compound Surrogates |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| Phenol-d6                                 | 13127-88-3       | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| 2-Chlorophenol-D4                         | 91951-73-6       | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| 2,4,6-Tribromophenol                      | 118-79-6         | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| EP075(SIM)T: PAH Surrogates               |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| 2-Fluorobiphenyl                          | 321-60-8         | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| Anthracene-d10                            | 1719/06-8        | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| 4-Terphenyl-d14                           | 1718-51-0        | 0.1 | >                           | )))  | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| EP080S: TPH(V)/BTX Surrogates             |                  |     |                             |      |      |  |                   |               |                   |               |                   |               |                   |               |                   |
| 1,2-Dichloroethane-D4                     | 17060/0/0        | 0.1 | >                           | 98.3 | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| Toluene-D8                                | \$037-26-5       | 0.1 | >                           | 92.6 | >    |  |                   |               |                   |               |                   |               |                   |               |                   |
| 4-Bromofluorobenzene                      | 460/00-4         | 0.1 | >                           | 90.6 | >    |  |                   |               |                   |               |                   |               |                   |               |                   |

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13-054

### Surrogate Control Limits

| Sub-Matrix: WATER                         |             | Recovery Limits (%) |      |
|-------------------------------------------|-------------|---------------------|------|
| Compound                                  | CAS Number  | Low                 | High |
| EP070S:TPH Surrogates - Speciation        |             |                     |      |
| 2-Fluorobiphenyl                          | 321-60-8    | 60                  | 140  |
| 2-Bromonaphthalene                        | 580-13-2    | 60                  | 140  |
| EP074S: VOC Surrogates                    |             |                     |      |
| 1,2-Dichloroethane-D4                     | 17060(0)/0  | 80                  | 120  |
| Toluene-D8                                | \$037-26-5  | 88                  | 110  |
| 4-Bromofluorobenzene                      | 460(00)-4   | 86                  | 115  |
| EP075(SIM)S: Phenolic Compound Surrogates |             |                     |      |
| Phenol-d6                                 | 13127-88-3  | 10                  | 94   |
| 2-Chlorophenol-D4                         | 91 951-73-6 | \$!                 | 134  |
| 2,4,6-Tribromophenol                      | 118-79-6    | 10                  | 123  |
| EP075(SIM)T: PAH Surrogates               |             |                     |      |
| 2-Fluorobiphenyl                          | 321-60-8    | 43                  | 116  |
| Anthracene-d10                            | 1719(06)-8  | \$/                 | 133  |
| 4-Terphenyl-d14                           | 1718-51-0   | !!                  | 141  |
| EP080S: TPH(V)/BTX Surrogates             |             |                     |      |
| 1,2-Dichloroethane-D4                     | 17060(0)/0  | 80                  | 120  |
| Toluene-D8                                | \$037-26-5  | 88                  | 110  |
| 4-Bromofluorobenzene                      | 460(00)-4   | 86                  | 115  |

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Environmental Division

**QUALITY CONTROL REPORT**

Work Order : **EB0914886**

Client : **SINCLAIR KNIGHT MERZ**  
CE J@J : **MSD DANAS**  
^ °° leBB : **EASTERN BUSWAY PROJECT**  
PO BOX 3848  
ST- BRISBANE 4101

E-mail : **, ~~~-%, + / +, \$**  
Telep1 °° : **+61 07 3026 7286**  
6 ~% + & ° : **+61 07 3026 7306**

Project : **QE09537**  
Site : **Cronulla Park**  
C-O-C number : **\*\*\*\***  
Sampler : **\*\*\*\***  
Order number : **\*\*\*\***

Quote number : **EN/003/09**

~ @e : **OE EDC**  
G@HEI@JEI : **EnvilEnmenJ@A@BE B@BH@**  
CE J@J : **TimDK@nIB@l**  
^ °° leBB : **32 S1and Street Stafford QLD Australia 4053**

E-mail : **Services Brisbane@alsenviro.com**  
Telep1 °° : **+61-7-3243 7222**  
6 ~% + & ° : **+61-7-3243 7218**  
QC Level : **NEPM 1999 Sc1edule B(3) and ALS QCS3 requirement**

Date Samples Received : **18-SEP-2009**  
Issue Date : **01-OCT-2009**  
No. of samples received : **16**  
No. of samples analysed : **15**

This report supersedes any previous (2, (s) ?"1 t1is reference. Results apply to "1e % ~+2&(s) as submitted. All pages of "1is report 1ave been /1eeked and approved ~.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- 9" 1od Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits



WORLD RECOGNISED  
**ACCREDITATION**

NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

**Signatories**

This document has been electronically signed by "1e ~\$~1orized signatories indicated below. Electronic signing has 1°° carried out in compliance with procedures specified in 21 CFR Part 11.

| Signatories    | Position                  | Accreditation Category |
|----------------|---------------------------|------------------------|
| Kim McCabe     | Senior Inorganic C1°+%"   | Inorganics             |
| Matt Frost     | Organic Instrument C1°+%" | Organics               |
| Nancy Wang     | Instrument C1°+%"         | Organics               |
| Step1en - %& 2 | Senior Inorganic C1°+%"   | Inorganics             |



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Work Order EB0914886  
Client SINCLAIR KNIG- T MERZ  
Project QE09537

General Comments

The analytical procedures used by the Environmental Division have been developed from the internationally recognized procedures as used by USEPA, AP-A, AS and NEPM. In those 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 obtained, 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 low moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :  
Anonymous = Refers to samples where 1 are not specifically part of this work order but formed part of the QC process lot  
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.  
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 +<sup>o</sup> 10d precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS 9<sup>o</sup> 10d 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%.

| Sub-Matrix: WATER                                          |                  |                                                      | Laboratory Duplicate (DUP) Report |        |      |                 |                  |         |                     |
|------------------------------------------------------------|------------------|------------------------------------------------------|-----------------------------------|--------|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                       | Client sample ID | Method: Compound                                     | CAS Number                        | LOR    | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EG020F: Dissolved Metals by ICP-MS (QC Lot: 1111406)       |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EB0914767-001                                              | Anonymous        | EG020A-F: Cadmium                                    | 7440-43-9                         | 0.0001 | +@=" | 0.0002          | 0.0002           | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Arsenic                                    | 7440-38-2                         | 0.001  | +@=" | 0.001           | 0.002            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: C1, +\$+                                   | 7440-47-3                         | 0.001  | +@=" | <0.001          | <0.001           | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Copper                                     | 7440-50-8                         | 0.001  | +@=" | 0.034           | 0.035            | 0.0     | 0% - 20%            |
|                                                            |                  | EG020A-F: Lead                                       | 7439-92-1                         | 0.001  | +@=" | <0.001          | <0.001           | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Nickel                                     | 7440-02-0                         | 0.001  | +@=" | 0.001           | 0.001            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Zinc                                       | 7440-66-6                         | 0.005  | +@=" | 0.026           | 0.025            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Cadmium                                    | 7440-43-9                         | 0.0001 | +@=" | <0.0001         | <0.0001          | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Arsenic                                    | 7440-38-2                         | 0.001  | +@=" | 0.003           | 0.003            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: C1, +\$+                                   | 7440-47-3                         | 0.001  | +@=" | 0.019           | 0.017            | 10.7    | 0% - 50%            |
| EB0914886-005                                              | MW05             | EG020A-F: Copper                                     | 7440-50-8                         | 0.001  | +@=" | 0.004           | 0.004            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Lead                                       | 7439-92-1                         | 0.001  | +@=" | 0.001           | 0.001            | 0.0     | No Limit            |
|                                                            |                  | EG020A-F: Nickel                                     | 7440-02-0                         | 0.001  | +@=" | 0.012           | 0.012            | 0.0     | 0% - 50%            |
|                                                            |                  | EG020A-F: Zinc                                       | 7440-66-6                         | 0.005  | +@=" | 0.018           | 0.017            | 0.0     | No Limit            |
|                                                            |                  |                                                      |                                   |        |      |                 |                  |         |                     |
|                                                            |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EG035F: Dissolved Mercury by FIMS (QC Lot: 1111405)        |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EB0914767-001                                              | Anonymous        | EG035F: Mercury                                      | 7439-97-6                         | 0.0001 | +@=" | <0.0001         | <0.0001          | 0.0     | No Limit            |
| EB0914886-005                                              | MW05             | EG035F: Mercury                                      | 7439-97-6                         | 0.0001 | +@=" | <0.0001         | <0.0001          | 0.0     | No Limit            |
| EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 1107866) |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: Benzene                                       | 71-43-2                           | 1      | M@=" | H <sup>-</sup>  | H <sup>-</sup>   | 0.0     | No Limit            |
|                                                            |                  | EP074: Toluene                                       | 108-88-3                          | -      | M@=" | H <sup>-</sup>  | H <sup>-</sup>   | 0.0     | No Limit            |
|                                                            |                  | EP074: Et1>&1 <sup>o</sup> -C <sup>o</sup>           | 100-41-4                          | -      | M@=" | H <sup>-</sup>  | H <sup>-</sup>   | 0.0     | No Limit            |
|                                                            |                  | EP074: meta- & para-Xylene                           | 108-38-3                          | -      | M@=" | <4              | <4               | 0.0     | No Limit            |
|                                                            |                  | EP074: o1to-Xylene                                   | 106-42-3                          | -      | M@=" | H <sup>-</sup>  | H <sup>-</sup>   | 0.0     | No Limit            |
|                                                            |                  | EP074: Styrene                                       | 100-42-5                          | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Isopropylbenzene                              | 98-82-8                           | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: n-Propylbenzene                               | 103-65-1                          | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,3,5-Trimet1>&1 <sup>o</sup> -C <sup>o</sup> | 108-67-8                          | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: sec-Butylbenzene                              | 135-98-8                          | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2,4-Trimet1>&1 <sup>o</sup> -C <sup>o</sup> | 95-63-6                           | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: tert-Butylbenzene                             | 98-06-6                           | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: p-Isopropyltoluene                            | 99-87-6                           | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: n-Butylbenzene                                | 104-51-8                          | (      | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  |                                                      |                                   |        |      |                 |                  |         |                     |
|                                                            |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EP074B: Oxygenated Compounds (QC Lot: 1107866)             |                  |                                                      |                                   |        |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: Vinyl Acetate                                 | 108-05-4                          | 50     | M@=" | <50             | <50              | 0.0     | No Limit            |

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| Sub-Matrix: WATER                                          |                  |                                              | Laboratory Duplicate (DUP) Report |     |      |                 |                  |         |                     |
|------------------------------------------------------------|------------------|----------------------------------------------|-----------------------------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                       | Client sample ID | Method: Compound                             | CAS Number                        | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074B: Oxygenated Compounds (QC Lot: 1107866) - continued |                  |                                              |                                   |     |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: 2-Butanone (MEK)                      | 78-93-3                           | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
|                                                            |                  | EP074: 4-Methyl-2-pentanone (MIBK)           | 108-10-1                          | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
|                                                            |                  | EP074: 2-- exanone (MBK)                     | 591-78-6                          | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
| EP074C: Sulfonated Compounds (QC Lot: 1107866)             |                  |                                              |                                   |     |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: Carbon disulfide                      | 75-15-0                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
| EP074D: Fumigants (QC Lot: 1107866)                        |                  |                                              |                                   |     |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: 2,2-Dic1&, 2, 2 <sup>no</sup>         | 594-20-7                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2-Dic1&, 2, 2 <sup>no</sup>         | 78-87-5                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: cis-1,3-Dic1&, 2, 2>& <sup>no</sup>   | 10061-01-5                        | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: trans-1,3-Dic1&, 2, 2>& <sup>no</sup> | 10061-02-6                        | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2-Dibromoethane (EDB)               | 106-93-4                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1107866)  |                  |                                              |                                   |     |      |                 |                  |         |                     |
| EB0914886-003                                              | MW03             | EP074: 1,1-Dic1&, 1 <sup>no</sup>            | 75-35-4                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Iodomet1 <sup>no</sup>                | 74-88-4                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: trans-1,2-Dic1&, 1 <sup>no</sup>      | 156-60-5                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1-Dic1&, 1 <sup>no</sup>            | 75-34-3                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: cis-1,2-Dic1&, 1 <sup>no</sup>        | 156-59-2                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1,1-Tric1&, 1 <sup>no</sup>         | 71-55-6                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1-Dic1&, 2, 2>& <sup>no</sup>       | 563-56-6                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Carbon Tetrac1&, 1 <sup>no</sup>      | 56-23-5                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2-Dic1&, 1 <sup>no</sup>            | 107-06-2                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Tric1&, 1 <sup>no</sup>               | 79-01-6                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Dibromomet1 <sup>no</sup>             | 74-95-3                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1,2-Tric1&, 1 <sup>no</sup>         | 79-00-5                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,3-Dic1&, 2, 2 <sup>no</sup>         | 142-28-9                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Tetrac1&, 1 <sup>no</sup>             | 127-18-4                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1,1,2-Tetrac1&, 1 <sup>no</sup>     | 630-20-6                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: trans-1,4-Dic1&, 1 <sup>no</sup>      | 110-57-6                          | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: cis-1,4-Dic1&, 1 <sup>no</sup>        | 1476-11-5                         | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,1,2,2-Tetrac1&, 1 <sup>no</sup>     | 79-34-5                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2,3-Tric1&, 2, 2 <sup>no</sup>      | 96-18-4                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Pentac1&, 1 <sup>no</sup>             | 76-01-7                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: 1,2-Dibromo-3-c1&, 2, 2 <sup>no</sup> | 96-12-8                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: - "B"/ 1&, 1\$ <sup>no,10,10</sup>    | 87-68-3                           | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                            |                  | EP074: Dic1&, 1 <sup>no</sup>                | 75-71-8                           | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
|                                                            |                  | EP074: C1&, 1 <sup>no</sup>                  | 74-87-3                           | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
|                                                            |                  | EP074: Vinyl c1&, 1 <sup>no</sup>            | 75-01-4                           | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
| EP074: Bromomet1 <sup>no</sup>                             | 74-83-9          | 50                                           | M@="                              | <50 | <50  | 0.0             | No Limit         |         |                     |
| EP074: C1&, 1 <sup>no</sup>                                | 75-00-3          | 50                                           | M@="                              | <50 | <50  | 0.0             | No Limit         |         |                     |

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Client ) SINCLAIR KNIG- T MERZ  
Project ) QE09537

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| Sub-Matrix: <b>WATER</b>                                              |                  |                                  |            |     |      |                 |                  |         |                     |
|-----------------------------------------------------------------------|------------------|----------------------------------|------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                  | Client sample ID | Method: Compound                 | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074E: Halogenated Aliphatic Compounds (QC Lot: 1107866) - continued |                  |                                  |            |     |      |                 |                  |         |                     |
| EB0914886-003                                                         | MW03             | EP074: Tric1& , ~&\$ , +°°° 1°°° | 75-69-4    | 50  | M@=" | <50             | <50              | 0.0     | No Limit            |
| EP074F: Halogenated Aromatic Compounds (QC Lot: 1107866)              |                  |                                  |            |     |      |                 |                  |         |                     |
| EB0914886-003                                                         | MW03             | EP074: C1& , 1°°C°°°             | 108-90-7   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: Bromobenzene              | 108-86-1   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 2-C1& , ~&\$°°°           | 95-49-8    | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 4-C1& , ~&\$°°°           | 106-43-4   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 1,3-Dic1& , 1°°C°°°       | 541-73-1   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 1,4-Dic1& , 1°°C°°°       | 106-46-7   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 1,2-Dic1& , 1°°C°°°       | 95-50-1    | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 1,2,4-Tric1& , 1°°C°°°    | 120-82-1   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: 1,2,3-Tric1& , 1°°C°°°    | 87-61-6    | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
| EP074G: Trihalomethanes (QC Lot: 1107866)                             |                  |                                  |            |     |      |                 |                  |         |                     |
| EB0914886-003                                                         | MW03             | EP074: C1& , ~ , +               | 67-66-3    | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: Bromodic1& , +°°° 1°°°    | 75-27-4    | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: Dibromoc1& , +°°° 1°°°    | 124-48-1   | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
|                                                                       |                  | EP074: Bromoform                 | 5(°°°~     | (   | M@=" | H(              | H(               | 0.0     | No Limit            |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1107865)             |                  |                                  |            |     |      |                 |                  |         |                     |
| EB0914886-001                                                         | MW01             | EP080: C6 - C9 Fraction          | ****       | 20  | M@=" | <20             | <20              | 0.0     | No Limit            |
| EB0914886-011                                                         | Dup02            | EP080: C6 - C9 Fraction          | ****       | 20  | M@=" | 60              | 60               | 0.0     | No Limit            |
| EP080: BTEX (QC Lot: 1107865)                                         |                  |                                  |            |     |      |                 |                  |         |                     |
| EB0914886-001                                                         | MW01             | EP080: Benzene                   | 71-43-2    | 1   | M@=" | <1              | <1               | 0.0     | No Limit            |
|                                                                       |                  | EP080: Toluene                   | 108-88-3   |     | M@=" | H°              | H°               | 0.0     | No Limit            |
|                                                                       |                  | EP080: Et1>&1°°C°°°              | 100-41-4   | ~   | M@=" | H°              | H°               | 0.0     | No Limit            |
|                                                                       |                  | EP080: meta- & para-Xylene       | 108-38-3   | ~   | M@=" | H°              | H°               | 0.0     | No Limit            |
|                                                                       |                  |                                  | 106-42-3   |     |      |                 |                  |         |                     |
|                                                                       |                  | EP080: ort1o-Xylene              | 95-47-6    | ~   | M@=" | H°              | H°               | 0.0     | No Limit            |
|                                                                       |                  | EP080: Benzene                   | 71-43-2    | 1   | M@=" | 4               | 4                | 0.0     | No Limit            |
|                                                                       |                  | EP080: Toluene                   | 108-88-3   | ~   | M@=" | H°              | H°               | 0.0     | No Limit            |
| EB0914886-011                                                         | Dup02            | EP080: Et1>&1°°C°°°              | 100-41-4   | ~   | M@=" | 5               | 5                | 0.0     | No Limit            |
|                                                                       |                  | EP080: meta- & para-Xylene       | 108-38-3   | ~   | M@=" | 4               | 5                | 0.0     | No Limit            |
|                                                                       |                  |                                  | 106-42-3   |     |      |                 |                  |         |                     |
|                                                                       |                  | EP080: ort1o-Xylene              | 95-47-6    | ~   | M@=" | 4               | 4                | 0.0     | No Limit            |

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### Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term 9<sup>th</sup> 10d / Laboratory Blank refers to an analyte free matrix to ?1/1 all reagents are added in "1e same volumes or proportions as used in standard sample preparation. The purpose of "1s 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 ?"1 target analytes. The purpose of "1s 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**

| Sub-Matrix: <b>WATER</b>                                          |           |        |      | Method Blank (MB) Report |                    |                     |                | Laboratory Control Spike (LCS) Report |  |  |  |
|-------------------------------------------------------------------|-----------|--------|------|--------------------------|--------------------|---------------------|----------------|---------------------------------------|--|--|--|
| Method: Compound                                                  |           |        |      | Spike Concentration      | Spike Recovery (%) | Recovery Limits (%) |                |                                       |  |  |  |
| CAS Number                                                        | LOR       | Unit   | Low  |                          |                    | High                |                |                                       |  |  |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1111406)               |           |        |      |                          |                    |                     |                |                                       |  |  |  |
| EG020A-F: Arsenic                                                 | 7440-38-2 | 0.001  | +@=" | <0.001                   | 0.100 mg/L         | 106                 | 80             | 124                                   |  |  |  |
| EG020A-F: Cadmium                                                 | 7440-43-9 | 0.0001 | +@=" | <0.0001                  | 0.100 mg/L         | 108                 | 89             | 117                                   |  |  |  |
| EG020A-F: C1, +\$+                                                | 7440-47-3 | 0.001  | +@=" | <0.001                   | 0.100 mg/L         | 116                 | 85             | 127                                   |  |  |  |
| EG020A-F: Copper                                                  | 7440-50-8 | 0.001  | +@=" | <0.001                   | 0.200 mg/L         | 106                 | 85             | 119                                   |  |  |  |
| EG020A-F: Lead                                                    | 7439-92-1 | 0.001  | +@=" | <0.001                   | 0.100 mg/L         | 105                 | 88             | 116                                   |  |  |  |
| EG020A-F: Nickel                                                  | 7440-02-0 | 0.001  | +@=" | <0.001                   | 0.100 mg/L         | 107                 | 85             | 119                                   |  |  |  |
| EG020A-F: Zinc                                                    | 7440-66-6 | 0.005  | +@=" | <0.005                   | 0.200 mg/L         | 112                 | 86             | 130                                   |  |  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1111405)                |           |        |      |                          |                    |                     |                |                                       |  |  |  |
| EG035F: Mercury                                                   | 7439-97-6 | 0.0001 | +@=" | <0.0001                  | 0.010 mg/L         | 98.9                | 81             | 115                                   |  |  |  |
| EP070: Total Petroleum Hydrocarbons - Speciation (QCLot: 1108610) |           |        |      |                          |                    |                     |                |                                       |  |  |  |
| EP070: Alip1atic C10-C14                                          | ****      | 50     | M@=" | <50                      | 5400 µg/L          | 119                 | 70             | 130                                   |  |  |  |
| EP070: Alip1atic C15-C28                                          | ****      | 100    | M@=" | <100                     | 17280 µg/L         | 86.1                | 70             | 130                                   |  |  |  |
| EP070: Alip1atic C29-C36                                          | ****      | 50     | M@=" | <50                      | ****               | ****                | ****           | ****                                  |  |  |  |
| EP070: Aromatic C10-C14                                           | ****      | 50     | M@=" | <50                      | 2310 µg/L          | 116                 | 70             | 130                                   |  |  |  |
| EP070: Aromatic C15-C28                                           | ****      | 100    | M@=" | <100                     | 3750 µg/L          | 120                 | 70             | 130                                   |  |  |  |
| EP070: Aromatic C29-C36                                           | ****      | 50     | M@=" | <50                      | ****               | ****                | ****           | ****                                  |  |  |  |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1107866)         |           |        |      |                          |                    |                     |                |                                       |  |  |  |
| EP074: Benzene                                                    | 71-43-2   | 1      | M@=" | H <sup>-</sup>           | 10 µg/L            | 89.6                | 5(             | 122                                   |  |  |  |
| EP074: Toluene                                                    | 108-88-3  | ,      | M@=" | H <sup>-</sup>           | 10 µg/L            | 101                 | 71.2           | 124                                   |  |  |  |
| EP074: Et1>&1°°C°°                                                | 100-41-4  | ,      | M@=" | H <sup>-</sup>           | 10 µg/L            | 95.4                | 54             | 120                                   |  |  |  |
| EP074: meta- & para-Xylene                                        | 108-38-3  | ,      | M@=" | <4                       | 20 µg/L            | 84.6                | 68             | 132                                   |  |  |  |
|                                                                   | 106-42-3  |        |      |                          |                    |                     |                |                                       |  |  |  |
| EP074: Styrene                                                    | 100-42-5  | (      | M@=" | H(                       | 10 µg/L            | 102                 | 68             | 127                                   |  |  |  |
| EP074: ort1o-Xylene                                               | 95-47-6   | ,      | M@=" | H <sup>-</sup>           | 10 µg/L            | 88.5                | 54             | 122                                   |  |  |  |
| EP074: Isopropylbenzene                                           | 98-82-8   | (      | M@=" | H(                       | 10 µg/L            | 85.5                | 74             | 123                                   |  |  |  |
| EP074: n-Propylbenzene                                            | 103-65-1  | (      | M@=" | H(                       | 10 µg/L            | 83.5                | 48             | 125                                   |  |  |  |
| EP074: 1.3.5-Trimet1>&1°°C°°                                      | 108-67-8  | (      | M@=" | H(                       | 10 µg/L            | 87.6                | 74             | 121                                   |  |  |  |
| EP074: sec-Butylbenzene                                           | 135-98-8  | (      | M@=" | H(                       | 10 µg/L            | 89.8                | 5 <sup>-</sup> | 124                                   |  |  |  |
| EP074: 1.2.4-Trimet1>&1°°C°°                                      | 95-63-6   | (      | M@=" | H(                       | 10 µg/L            | 88.4                | 73.5           | 124                                   |  |  |  |
| EP074: tert-Butylbenzene                                          | 98-06-6   | (      | M@=" | H(                       | 10 µg/L            | 89.0                | 71.6           | 128                                   |  |  |  |
| EP074: p-Isopropyltoluene                                         | 99-87-6   | (      | M@=" | H(                       | 10 µg/L            | 90.2                | 68.3           | 130                                   |  |  |  |
| EP074: n-Butylbenzene                                             | 104-51-8  | (      | M@=" | H(                       | 10 µg/L            | 89.3                | 45             | 126                                   |  |  |  |
| EP074B: Oxygenated Compounds (QCLot: 1107866)                     |           |        |      |                          |                    |                     |                |                                       |  |  |  |
| EP074: Vinyl Acetate                                              | 108-05-4  | 50     | M@=" | <50                      | 100 µg/L           | 91.1                | 4(             | 147                                   |  |  |  |



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| Sub-Matrix: WATER                                         |            |    |      | Method Blank (MB) Report |               | Laboratory Control Spike (LCS) Report |      |      |  |
|-----------------------------------------------------------|------------|----|------|--------------------------|---------------|---------------------------------------|------|------|--|
| Method: Compound                                          |            |    |      | Result                   | Concentration | Spike Recovery (%)                    | Low  | High |  |
| EP074B: Oxygenated Compounds (QCLot: 1107866) - continued |            |    |      |                          |               |                                       |      |      |  |
| EP074: 2-Butanone (MEK)                                   | 78-93-3    | 50 | M@=" | <50                      | 100 µg/L      | 88.0                                  | 54   | 130  |  |
| EP074: 4-Methyl-2-pentanone (MIBK)                        | 108-10-1   | 50 | M@=" | <50                      | 100 µg/L      | 91.9                                  | 4    | 137  |  |
| EP074: 2- exanone (MBK)                                   | 591-78-6   | 50 | M@=" | <50                      | 100 µg/L      | 103                                   | 4    | 135  |  |
| EP074C: Sulfonated Compounds (QCLot: 1107866)             |            |    |      |                          |               |                                       |      |      |  |
| EP074: Carbon disulfide                                   | 75-15-0    | (  | M@=" | H(                       | 10 µg/L       | 89.6                                  | 68   | 135  |  |
| EP074D: Fumigants (QCLot: 1107866)                        |            |    |      |                          |               |                                       |      |      |  |
| EP074: 2,2-Dic1&, 2, 2 <sup>no</sup>                      | 594-20-7   | (  | M@=" | H(                       | 10 µg/L       | 87.9                                  | 60.7 | 143  |  |
| EP074: 1,2-Dic1&, 2, 2 <sup>no</sup>                      | 78-87-5    | (  | M@=" | H(                       | 10 µg/L       | 90.5                                  | 48.5 | 128  |  |
| EP074: cis-1,3-Dic1&, 2, 2>& <sup>no</sup>                | 10061-01-5 | (  | M@=" | H(                       | 20 µg/L       | 93.9                                  | 68   | 131  |  |
| EP074: trans-1,3-Dic1&, 2, 2>& <sup>no</sup>              | 10061-02-6 | (  | M@=" | H(                       | 20 µg/L       | 8(,                                   | 45   | 140  |  |
| EP074: 1,2-Dibromoethane (EDB)                            | 106-93-4   | (  | M@=" | H(                       | 10 µg/L       | 103                                   | 68.1 | 132  |  |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1107866)  |            |    |      |                          |               |                                       |      |      |  |
| EP074: Dic1&, " &\$, + <sup>no</sup> , 1 <sup>no</sup>    | 75-71-8    | 50 | M@=" | <50                      | 100 µg/L      | 84.3                                  | (    | 130  |  |
| EP074: C1&, + <sup>no</sup> , 1 <sup>no</sup>             | 74-87-3    | 50 | M@=" | <50                      | 100 µg/L      | 93.0                                  | 43.1 | 130  |  |
| EP074: Vinyl c1&, 1 <sup>no</sup>                         | 75-01-4    | 50 | M@=" | <50                      | 100 µg/L      | 78.2                                  | 53   | 144  |  |
| EP074: Bromomet1 <sup>no</sup>                            | 74-83-9    | 50 | M@=" | <50                      | 100 µg/L      | 58.4                                  | (5,( | 130  |  |
| EP074: C1&, <sup>no</sup> , 1 <sup>no</sup>               | 75-00-3    | 50 | M@=" | <50                      | 100 µg/L      | 86.2                                  | 70   | 137  |  |
| EP074: Tric1&, " &\$, + <sup>no</sup> , 1 <sup>no</sup>   | 75-69-4    | 50 | M@=" | <50                      | 100 µg/L      | 89.8                                  | 64   | 135  |  |
| EP074: 1,1-Dic1&, <sup>no</sup> , 1 <sup>no</sup>         | 75-35-4    | (  | M@=" | H(                       | 10 µg/L       | 85.8                                  | 63.9 | 135  |  |
| EP074: Iodomet1 <sup>no</sup>                             | 74-88-4    | (  | M@=" | H(                       | 10 µg/L       | 78.7                                  | (5,  | 130  |  |
| EP074: trans-1,2-Dic1&, <sup>no</sup> , 1 <sup>no</sup>   | 156-60-5   | (  | M@=" | H(                       | 10 µg/L       | 87.7                                  | 48   | 128  |  |
| EP074: 1,1-Dic1&, <sup>no</sup> , 1 <sup>no</sup>         | 75-34-3    | (  | M@=" | H(                       | 10 µg/L       | 88.6                                  | 64   | 136  |  |
| EP074: cis-1,2-Dic1&, <sup>no</sup> , 1 <sup>no</sup>     | 156-59-2   | (  | M@=" | H(                       | 10 µg/L       | 58.5                                  | 71   | 128  |  |
| EP074: 1,1,1-Tric1&, <sup>no</sup> , 1 <sup>no</sup>      | 71-55-6    | (  | M@=" | H(                       | 10 µg/L       | 91.7                                  | 68.4 | 135  |  |
| EP074: 1,1-Dic1&, 2, 2>& <sup>no</sup>                    | 563-58-6   | (  | M@=" | H(                       | 10 µg/L       | 89.6                                  | 71.4 | 127  |  |
| EP074: Carbon Tetrac1&, 1 <sup>no</sup>                   | 56-23-5    | (  | M@=" | H(                       | 10 µg/L       | 91.9                                  | 64   | 134  |  |
| EP074: 1,2-Dic1&, <sup>no</sup> , 1 <sup>no</sup>         | 107-06-2   | (  | M@=" | H(                       | 10 µg/L       | 88.8                                  | 68   | 134  |  |
| EP074: Tric1&, <sup>no</sup> , 1 <sup>no</sup>            | 79-01-6    | (  | M@=" | H(                       | 10 µg/L       | 90.7                                  | 5    | 127  |  |
| EP074: Dibromomet1 <sup>no</sup>                          | 74-95-3    | (  | M@=" | H(                       | 10 µg/L       | 91.6                                  | 63.9 | 136  |  |
| EP074: 1,1,2-Tric1&, <sup>no</sup> , 1 <sup>no</sup>      | 79-00-5    | (  | M@=" | H(                       | 10 µg/L       | 114                                   | 48,  | 133  |  |
| EP074: 1,3-Dic1&, 2, 2 <sup>no</sup>                      | 142-28-9   | (  | M@=" | H(                       | 10 µg/L       | 102                                   | 73.7 | 130  |  |
| EP074: Tetrac1&, <sup>no</sup> , 1 <sup>no</sup>          | 127-18-4   | (  | M@=" | H(                       | 10 µg/L       | 103                                   | 73.8 | 132  |  |
| EP074: 1,1,1,2-Tetrac1&, <sup>no</sup> , 1 <sup>no</sup>  | 630-20-6   | (  | M@=" | H(                       | 10 µg/L       | 118                                   | 81   | 123  |  |
| EP074: trans-1,4-Dic1&, " &\$, 1 <sup>no</sup>            | 110-57-6   | (  | M@=" | H(                       | 10 µg/L       | 97.4                                  | 4    | 130  |  |
| EP074: cis-1,4-Dic1&, " &\$, 1 <sup>no</sup>              | 1476-11-5  | (  | M@=" | H(                       | 10 µg/L       | 92.3                                  | 51.1 | 130  |  |
| EP074: 1,1,2,2-Tetrac1&, <sup>no</sup> , 1 <sup>no</sup>  | 79-34-5    | (  | M@=" | H(                       | 10 µg/L       | 106                                   | 5    | 133  |  |
| EP074: 1,2,3-Tric1&, 2, 2 <sup>no</sup>                   | 96-18-4    | (  | M@=" | H(                       | 10 µg/L       | 95.8                                  | (8   | 148  |  |
| EP074: Pentac1&, <sup>no</sup> , 1 <sup>no</sup>          | 76-01-7    | (  | M@=" | H(                       | 10 µg/L       | 85.5                                  | 68   | 138  |  |
| EP074: 1,2-Dibromo-3-c1&, 2, 2 <sup>no</sup>              | 96-12-8    | (  | M@=" | H(                       | 10 µg/L       | 83.0                                  | (    | 150  |  |

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Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                                    |  |            |     | Method Blank (MB) Report |        |                     |                    | Laboratory Control Spike (LCS) Report |                |                     |      |
|----------------------------------------------------------------------|--|------------|-----|--------------------------|--------|---------------------|--------------------|---------------------------------------|----------------|---------------------|------|
| Method: Compound                                                     |  | CAS Number | LOR | Unit                     | Result | Spike Concentration | Spike Recovery (%) | LCS                                   | Low            | Recovery Limits (%) | High |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1107866) - continued |  |            |     |                          |        |                     |                    |                                       |                |                     |      |
| EP074: - °B' 18, 1\$ <sup>°</sup> °°°                                |  | 87-68-3    | (   | M@="                     | H(     | 10 µg/L             |                    | 99.0                                  | 4 <sup>~</sup> |                     | 142  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 1107866)              |  |            |     |                          |        |                     |                    |                                       |                |                     |      |
| EP074: C1&, 1 <sup>°</sup> C <sup>°°</sup>                           |  | 108-90-7   | (   | M@="                     | H(     | 10 µg/L             |                    | 101                                   | 55             |                     | 120  |
| EP074: Bromobenzene                                                  |  | 108-86-1   | (   | M@="                     | H(     | 10 µg/L             |                    | 88.3                                  | 54             |                     | 122  |
| EP074: 2-C1&, °&\$ <sup>°°</sup>                                     |  | 95-49-8    | (   | M@="                     | H(     | 10 µg/L             |                    | 89.5                                  | 75.3           |                     | 124  |
| EP074: 4-C1&, °&\$ <sup>°°</sup>                                     |  | 106-43-4   | (   | M@="                     | H(     | 10 µg/L             |                    | 91.6                                  | 5(             |                     | 120  |
| EP074: 1,3-Dic1&, 1 <sup>°</sup> C <sup>°°</sup>                     |  | 541-73-1   | (   | M@="                     | H(     | 10 µg/L             |                    | 89.9                                  | 5(             |                     | 120  |
| EP074: 1,4-Dic1&, 1 <sup>°</sup> C <sup>°°</sup>                     |  | 106-46-7   | (   | M@="                     | H(     | 10 µg/L             |                    | 89.9                                  | 76.1           |                     | 119  |
| EP074: 1,2-Dic1&, 1 <sup>°</sup> C <sup>°°</sup>                     |  | 95-50-1    | (   | M@="                     | H(     | 10 µg/L             |                    | 8 <sup>~</sup>                        | 55.5           |                     | 118  |
| EP074: 1,2,4-Tric1&, 1 <sup>°</sup> C <sup>°°</sup>                  |  | 120-82-1   | (   | M@="                     | H(     | 10 µg/L             |                    | 8 <sup>~</sup>                        | 68.3           |                     | 128  |
| EP074: 1,2,3-Tric1&, 1 <sup>°</sup> C <sup>°°</sup>                  |  | 87-61-6    | (   | M@="                     | H(     | 10 µg/L             |                    | 98.9                                  | 5(             |                     | 125  |
| EP074G: Trihalomethanes (QCLot: 1107866)                             |  |            |     |                          |        |                     |                    |                                       |                |                     |      |
| EP074: C1&, ° +                                                      |  | 67-66-3    | (   | M@="                     | H(     | 10 µg/L             |                    | 92.4                                  | 71.1           |                     | 127  |
| EP074: Bromodic1&, + <sup>°°</sup> 1 <sup>°°</sup>                   |  | 75-27-4    | (   | M@="                     | H(     | 10 µg/L             |                    | 91.6                                  | 68             |                     | 132  |
| EP074: Dibromoc1&, + <sup>°°</sup> 1 <sup>°°</sup>                   |  | 124-48-1   | (   | M@="                     | H(     | 10 µg/L             |                    | 108                                   | 48             |                     | 130  |
| EP074: Bromoform                                                     |  | 5(°°)      | (   | M@="                     | H(     | 10 µg/L             |                    | 101                                   | 4 <sup>~</sup> |                     | 137  |
| EP075(SIM)A: Phenolic Compounds (QCLot: 1108171)                     |  |            |     |                          |        |                     |                    |                                       |                |                     |      |
| EP075(SIM): P1 <sup>°°</sup> &                                       |  | 108-95-2   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 31.0                                  | 24             |                     | 70   |
| EP075(SIM): 2-C1&, 21 <sup>°°</sup> &                                |  | 95-57-8    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 44.(                                  | (5             |                     | 105  |
| EP075(SIM): 2-Met1>&2 <sup>°°</sup> &                                |  | 95-48-7    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 60.6                                  | 51             |                     | 98   |
| EP075(SIM): 3- & 4-Met1>&2 <sup>°°</sup> &                           |  | 1319-77-3  | ~   | M@="                     | <2.0   | 10 µg/L             |                    | 48.9                                  | 45             |                     | 85   |
| EP075(SIM): 2-Nitrop1 <sup>°°</sup> &                                |  | 88-75-5    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 74.1                                  | 48             |                     | 132  |
| EP075(SIM): 2,4-Dimet1>&2 <sup>°°</sup> &                            |  | 105-67-9   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 48.4                                  | 44             |                     | 112  |
| EP075(SIM): 2,4-Dic1&, 21 <sup>°°</sup> &                            |  | 120-83-2   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 78.5                                  | 60             |                     | 114  |
| EP075(SIM): 2,6-Dic1&, 21 <sup>°°</sup> &                            |  | 87-65-0    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 90.4                                  | (8             |                     | 118  |
| EP075(SIM): 4-C1loro-3-Met1>&2 <sup>°°</sup> &                       |  | 59-50-7    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 8 <sup>~</sup>                        | 60             |                     | 120  |
| EP075(SIM): 2,4,6-Tric1&, 21 <sup>°°</sup> &                         |  | 88-06-2    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 97.4                                  | (8             |                     | 127  |
| EP075(SIM): 2,4,5-Tric1&, 21 <sup>°°</sup> &                         |  | 95-95-4    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 91.8                                  | (8             |                     | 123  |
| EP075(SIM): Pentac1&, 21 <sup>°°</sup> &                             |  | 87-86-5    | ~   | M@="                     | <2.0   | 10 µg/L             |                    | 44.4                                  | 22.1           |                     | 130  |
| EP075(SIM): 2,3,4,6-Tetrac1&, 21 <sup>°°</sup> &                     |  | 58-90-2    | 1   | M@="                     | <1.0   | ****                |                    | ****                                  | ****           |                     | **** |
| EP075(SIM)A: Phenolic Compounds (QCLot: 1113033)                     |  |            |     |                          |        |                     |                    |                                       |                |                     |      |
| EP075(SIM): P1 <sup>°°</sup> &                                       |  | 108-95-2   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 36.5                                  | 12.4           |                     | 60   |
| EP075(SIM): 2-C1&, 21 <sup>°°</sup> &                                |  | 95-57-8    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 58.4                                  | 28.2           |                     | 119  |
| EP075(SIM): 2-Met1>&2 <sup>°°</sup> &                                |  | 95-48-7    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 64.2                                  | 32.7           |                     | 119  |
| EP075(SIM): 3- & 4-Met1>&2 <sup>°°</sup> &                           |  | 1319-77-3  | ~   | M@="                     | <2.0   | 5 µg/L              |                    | 93.4                                  | 27.1           |                     | 119  |
| EP075(SIM): 2-Nitrop1 <sup>°°</sup> &                                |  | 88-75-5    | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 121                                   | 50.2           |                     | 147  |
| EP075(SIM): 2,4-Dimet1>&2 <sup>°°</sup> &                            |  | 105-67-9   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 108                                   | 31.2           |                     | 142  |
| EP075(SIM): 2,4-Dic1&, 21 <sup>°°</sup> &                            |  | 120-83-2   | 1   | M@="                     | <1.0   | 5 µg/L              |                    | 88.~                                  | 44             |                     | 143  |

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Client SINCLAIR KNIG- T MERZ  
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13-054

Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                               |          |     | Method Blank (MB) Report |                     | Laboratory Control Spike (LCS) Report |      |      |      |
|-----------------------------------------------------------------|----------|-----|--------------------------|---------------------|---------------------------------------|------|------|------|
| Method: Compound                                                |          |     | Result                   | Spike Concentration | Spike Recovery (%)                    | Low  | High |      |
| EP075(SIM)A: Phenolic Compounds (QCLot: 1113033) - continued    |          |     |                          |                     |                                       |      |      |      |
| EP075(SIM): 2,6-Dic1&, 2 1° &                                   | 87-65-0  | 1   | M@="                     | <1.0                | 5 µg/L                                | 74.9 | 45.4 | 131  |
| EP075(SIM): 4-C1loro-3-Met1>&2° &                               | 59-50-7  | 1   | M@="                     | <1.0                | 5 µg/L                                | 88.8 | 45.2 | 133  |
| EP075(SIM): 2,4,6-Tric1&, 2 1° &                                | 88-06-2  | 1   | M@="                     | <1.0                | 5 µg/L                                | 75.0 | 45.8 | 125  |
| EP075(SIM): 2,4,5-Tric1&, 2 1° &                                | 95-96-4  | 1   | M@="                     | <1.0                | 5 µg/L                                | 85.0 | 45.7 | 126  |
| EP075(SIM): Pentac1&, 2 1° &                                    | 87-86-5  | 1   | M@="                     | <2.0                | 5 µg/L                                | 51.0 | 45.3 | 149  |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1108171) |          |     |                          |                     |                                       |      |      |      |
| EP075(SIM): Nap1°&°                                             | 91-20-3  | 1   | M@="                     | <1.0                | 5 µg/L                                | 81.2 | 46   | 113  |
| EP075(SIM): 2-Met1>&°2 1°&°                                     | 91-57-6  | 1   | M@="                     | <1.0                | 5 µg/L                                | 86.3 | 50   | 120  |
| EP075(SIM): Acenap1°>&°                                         | 208-96-8 | 1   | M@="                     | <1.0                | 5 µg/L                                | 98.3 | 51   | 118  |
| EP075(SIM): Acenap1°°                                           | 83-32-9  | 1   | M@="                     | <1.0                | 5 µg/L                                | 76.0 | 50   | 114  |
| EP075(SIM): Fluorene                                            | 86-73-7  | 1   | M@="                     | <1.0                | 5 µg/L                                | 84.7 | ((   | 118  |
| EP075(SIM): P1°°°°° 1,°°                                        | 85-01-8  | 1   | M@="                     | <1.0                | 5 µg/L                                | 93.5 | 54   | 110  |
| EP075(SIM): Ant1, °°°                                           | 120-12-7 | 1   | M@="                     | <1.0                | 5 µg/L                                | 73.1 | 49   | 117  |
| EP075(SIM): Fluorant1°°                                         | 206-44-0 | 1   | M@="                     | <1.0                | 5 µg/L                                | 80.5 | 51   | 117  |
| EP075(SIM): Pyrene                                              | 129-00-0 | 1   | M@="                     | <1.0                | 5 µg/L                                | 80.0 | 51   | 117  |
| EP075(SIM): Benz(a)ant1, °°°                                    | 56-55-3  | 1   | M@="                     | <1.0                | 5 µg/L                                | 80.2 | 53   | 120  |
| EP075(SIM): C1, >°°°                                            | 218-01-9 | 1   | M@="                     | <1.0                | 5 µg/L                                | 76.0 | 48   | 114  |
| EP075(SIM): Benzo(b)fluorant1°°                                 | 205-99-2 | 1   | M@="                     | <1.0                | 5 µg/L                                | 92.3 | 48   | 130  |
| EP075(SIM): Benzo(k)fluorant1°°                                 | 207-08-9 | 1   | M@="                     | <1.0                | 5 µg/L                                | 5° 8 | 43   | 126  |
| EP075(SIM): Benzo(a)pyrene                                      | 50-32-8  | 0.5 | M@="                     | <0.5                | 5 µg/L                                | 82.4 | 44   | 120  |
| EP075(SIM): Indeno(1,2,3.cd)pyrene                              | 193-39-5 | 1   | M@="                     | <1.0                | 5 µg/L                                | 80.0 | 45   | 129  |
| EP075(SIM): Dibenz(a,1,°°° 1, °°°                               | 53-70-3  | 1   | M@="                     | <1.0                | 5 µg/L                                | 78.6 | 47   | 131  |
| EP075(SIM): Benzo(g,1,°2° >&°°                                  | 191-24-2 | 1   | M@="                     | <1.0                | 5 µg/L                                | 79.1 | 42   | 126  |
| EP075(SIM): Sum of polycyclic aromatic 1>°, °, 1°°              | ****     | 1   | M@="                     | <1.0                | ****                                  | **** | **** | **** |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1113033) |          |     |                          |                     |                                       |      |      |      |
| EP075(SIM): Nap1°&°°                                            | 91-20-3  | 1   | M@="                     | <1.0                | 5 µg/L                                | 108  | 50   | 131  |
| EP075(SIM): Acenap1°>&°°                                        | 208-96-8 | 1   | M@="                     | <1.0                | 5 µg/L                                | 84.5 | 49.3 | 121  |
| EP075(SIM): Acenap1°°°                                          | 83-32-9  | 1   | M@="                     | <1.0                | 5 µg/L                                | 107  | 56.8 | 129  |
| EP075(SIM): Fluorene                                            | 86-73-7  | 1   | M@="                     | <1.0                | 5 µg/L                                | 112  | 58.4 | 127  |
| EP075(SIM): P1°°°°° 1,°°                                        | 85-01-8  | 1   | M@="                     | <1.0                | 5 µg/L                                | 110  | 4° ° | 131  |
| EP075(SIM): Ant1, °°°                                           | 120-12-7 | 1   | M@="                     | <1.0                | 5 µg/L                                | 110  | 61.1 | 128  |
| EP075(SIM): Fluorant1°°                                         | 206-44-0 | 1   | M@="                     | <1.0                | 5 µg/L                                | 120  | 61.2 | 132  |
| EP075(SIM): Pyrene                                              | 129-00-0 | 1   | M@="                     | <1.0                | 5 µg/L                                | 123  | 64   | 133  |
| EP075(SIM): Benz(a)ant1, °°°                                    | 56-55-3  | 1   | M@="                     | <1.0                | 5 µg/L                                | 123  | 64.3 | 138  |
| EP075(SIM): C1, >°°°                                            | 218-01-9 | 1   | M@="                     | <1.0                | 5 µg/L                                | 108  | 60.2 | 133  |
| EP075(SIM): Benzo(b)fluorant1°°                                 | 205-99-2 | 1   | M@="                     | <1.0                | 5 µg/L                                | 98.4 | 61.6 | 142  |
| EP075(SIM): Benzo(k)fluorant1°°                                 | 207-08-9 | 1   | M@="                     | <1.0                | 5 µg/L                                | 85.8 | 55.1 | 133  |
| EP075(SIM): Benzo(a)pyrene                                      | 50-32-8  | 0.5 | M@="                     | <0.5                | 5 µg/L                                | 105  | (5.5 | 133  |
| EP075(SIM): Indeno(1,2,3.cd)pyrene                              | 193-39-5 | 1   | M@="                     | <1.0                | 5 µg/L                                | 107  | 64.2 | 135  |

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Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                                           |            |     |      | Method Blank (MB) Report |                     | Laboratory Control Spike (LCS) Report |      |      |      |
|-----------------------------------------------------------------------------|------------|-----|------|--------------------------|---------------------|---------------------------------------|------|------|------|
| Method: Compound                                                            | CAS Number | LOR | Unit | Result                   | Spike Concentration | Spike Recovery (%)                    | LCS  | Low  | High |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1113033) - continued |            |     |      |                          |                     |                                       |      |      |      |
| EP075(SIM): Dibenz(a,1,2,3,4,5,6,7,8)                                       | 53-70-3    | 1   | M@=" | <1.0                     | 5 µg/L              | 105                                   | 105  | 63.2 | 136  |
| EP075(SIM): Benzo(g,1,2,3,4,5,6,7,8)                                        | 191-24-2   | 1   | M@=" | <1.0                     | 5 µg/L              | 108                                   | 108  | 64.3 | 136  |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1107865)                    |            |     |      |                          |                     |                                       |      |      |      |
| EP080: C6 - C9 Fraction                                                     | ***        | 20  | M@=" | <20                      | 160 µg/L            | 100                                   | 100  | 73   | 135  |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1108172)                    |            |     |      |                          |                     |                                       |      |      |      |
| EP071: C10 - C14 Fraction                                                   | ***        | 50  | M@=" | <50                      | 600 µg/L            | 76.0                                  | 76.0 | 49   | 110  |
| EP071: C15 - C28 Fraction                                                   | ***        | 100 | M@=" | <100                     | 1020 µg/L           | 89.2                                  | 89.2 | 58   | 130  |
| EP071: C29 - C36 Fraction                                                   | ***        | 50  | M@=" | <50                      | ****                | ****                                  | **** | **** | **** |
| EP080/074: Total Petroleum Hydrocarbons (QCLot: 1113059)                    |            |     |      |                          |                     |                                       |      |      |      |
| EP071-- X: C10 - C14 Fraction                                               | ***        | 50  | M@=" | <50                      | 798 µg/L            | 5(                                    | 5(   | 64   | 124  |
| EP071-- X: C15 - C28 Fraction                                               | ***        | 100 | M@=" | <100                     | 804 µg/L            | 77.1                                  | 77.1 | 70   | 130  |
| EP071-- X: C29 - C36 Fraction                                               | ***        | 50  | M@=" | <50                      | 800 µg/L            | 78.8                                  | 78.8 | 68   | 128  |
| EP071-- X: C10 - C36 Fraction (sum)                                         | ***        | 50  | M@=" | <50                      | ****                | ****                                  | **** | **** | **** |
| EP080: BTEX (QCLot: 1107865)                                                |            |     |      |                          |                     |                                       |      |      |      |
| EP080: Benzene                                                              | 71-43-2    | 1   | M@=" | <1                       | 10 µg/L             | 84.5                                  | 84.5 | 55.4 | 122  |
| EP080: Toluene                                                              | 108-88-3   | ,   | M@=" | H <sup>-</sup>           | 10 µg/L             | 104                                   | 104  | 74   | 122  |
| EP080: Et1>&1 <sup>o</sup> -C <sup>o</sup>                                  | 100-41-4   | ,   | M@=" | H <sup>-</sup>           | 10 µg/L             | 101                                   | 101  | 73   | 126  |
| EP080: meta- & para-Xylene                                                  | 108-38-3   | ,   | M@=" | H <sup>-</sup>           | 20 µg/L             | 101                                   | 101  | 70.4 | 129  |
| EP080: 106-42-3                                                             | 106-42-3   |     |      |                          |                     |                                       |      |      |      |
| EP080: ort1o-Xylene                                                         | 95-47-6    | ,   | M@=" | H <sup>-</sup>           | 10 µg/L             | 85.5                                  | 85.5 | 74.3 | 126  |

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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.

Sub-Matrix: **WATER**

| Sub-Matrix: WATER                                         |                  |                                  |            | Matrix Spike (MS) Report |                    |                     |     |
|-----------------------------------------------------------|------------------|----------------------------------|------------|--------------------------|--------------------|---------------------|-----|
| Laboratory sample ID                                      | Client sample ID | Method/Compound                  | CAS Number | Spike Concentration      | Spike Recovery (%) | Recovery Limits (%) | MS  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 1111406)       |                  |                                  |            |                          |                    |                     |     |
| EB0914770-005                                             | Anonymous        | EG020A-F: Arsenic                | 7440-38-2  | 0.100 mg/L               | 125                | 70                  | 130 |
|                                                           |                  | EG020A-F: Cadmium                | 7440-43-9  | 0.100 mg/L               | 107                | 70                  | 130 |
|                                                           |                  | EG020A-F: Chromium, +6           | 7440-47-3  | 0.100 mg/L               | 113                | 70                  | 130 |
|                                                           |                  | EG020A-F: Copper                 | 7440-50-8  | 0.2 mg/L                 | 104                | 70                  | 130 |
|                                                           |                  | EG020A-F: Lead                   | 7439-92-1  | 0.100 mg/L               | 97.1               | 70                  | 130 |
|                                                           |                  | EG020A-F: Nickel                 | 7440-02-0  | 0.100 mg/L               | 103                | 70                  | 130 |
| EG035F: Dissolved Mercury by FIMS (QCLot: 1111405)        | Anonymous        | EG020A-F: Zinc                   | 7440-66-6  | 0.2 mg/L                 | 127                | 70                  | 130 |
|                                                           |                  | EG035F: Mercury                  | 7439-97-6  | 0.010 mg/L               | 55.4               | 70                  | 130 |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 1107866) |                  |                                  |            |                          |                    |                     |     |
| EB0914886-004                                             | MW04             | EP074: Benzene                   | 71-43-2    | 10 µg/L                  | 88.4               | 70                  | 130 |
|                                                           |                  | EP074: Toluene                   | 108-88-3   | 10 µg/L                  | 89.6               | 70                  | 130 |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 1107866)  |                  |                                  |            |                          |                    |                     |     |
| EB0914886-004                                             | MW04             | EP074: 1,1-Dichloroethane        | 75-35-4    | 10 µg/L                  | 98.1               | 70                  | 130 |
|                                                           |                  | EP074: Trichloroethane           | 79-01-6    | 10 µg/L                  | 83.3               | 70                  | 130 |
| EP074F: Halogenated Aromatic Compounds (QCLot: 1107866)   |                  |                                  |            |                          |                    |                     |     |
| EB0914886-004                                             | MW04             | EP074: C18, 1-methyl-naphthalene | 108-90-7   | 10 µg/L                  | 93.3               | 70                  | 130 |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1107865)  |                  |                                  |            |                          |                    |                     |     |
| EB0914886-002                                             | MW02             | EP080: C6 - C9 Fraction          | ****       | 140 µg/L                 | 84.4               | 70                  | 130 |
| EP080: BTEX (QCLot: 1107865)                              |                  |                                  |            |                          |                    |                     |     |
| EB0914886-002                                             | MW02             | EP080: Benzene                   | 71-43-2    | 10 µg/L                  | 91.2               | 70                  | 130 |
|                                                           |                  | EP080: Toluene                   | 108-88-3   | 10 µg/L                  | 93.9               | 70                  | 130 |





Environmental Division

**INTERPRETIVE QUALITY CONTROL REPORT**

|              |                                |                         |                                                   |
|--------------|--------------------------------|-------------------------|---------------------------------------------------|
| Work Order   | : EB0914886                    | %a@                     | ) 1 ~ 9                                           |
| Client       | ) S'NCLA " " N " o~ @ERZ       | Lab ra " r>             | ) Envir nmen"al Divisi n Brisbane                 |
| Con"ak"      | ) @S L NA " ANAS               | Con"ak"                 | ) Tim Kilmis"er                                   |
| Address      | ) EASTERN B" S, A ° % ' L PEC" | Address                 | ) 32 Shand Street Stafford QLD Australia 4053     |
|              | %L BL ! 848                    |                         |                                                   |
|              | STH BRISBANE 4101              |                         |                                                   |
| E-mail       | #okanas@skm.com.au             | E-mail                  | #Services.Brisbane@alsenviro.com                  |
| Telephone    | #+61 07 3026 7286              | Telephone               | #+61-7-3243 7222                                  |
| Facsimile    | #+61 07 3026 7306              | Facsimile               | #+61-7-3243 7218                                  |
| Project      | #QE09537                       | QC Level                | #NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Site         | #Cronulla Park                 | Date Samples Received   | #18-SEP-2009                                      |
| C-O-C number | #####                          | Issue Date              | #01-OCT-2009                                      |
| Sampler      | #####                          | No. of samples received | #16                                               |
| Order number | #####                          | No. of samples analysed | #15                                               |
| Quote number | #EN/003/09                     |                         |                                                   |

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

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## Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting sample. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

| Method                                                                  |             | Sample Date | Extraction / Preparation |                    | Analysis      |                  |
|-------------------------------------------------------------------------|-------------|-------------|--------------------------|--------------------|---------------|------------------|
| Container / Client Sample ID(s)                                         |             |             | Date extracted           | Due for extraction | Date analysed | Due for analysis |
| EG020F: Dissolved Metals by ICP-MS                                      |             |             |                          |                    |               |                  |
| Clear Plastic Bottle - Nitric Acid; Filtered                            |             |             |                          |                    |               |                  |
| MW02,<br>MW04,<br>MW06,<br>MW08,<br>MW09,<br>Dup02,<br>CR14,<br>Drain 1 | 17-SEP-2009 | ---         | \$\$\$                   | 25-SEP-2009        | 16-MAR-2010   | ✓                |
| EG035F: Dissolved Mercury by FILMS                                      |             |             |                          |                    |               |                  |
| Clear Plastic Bottle - Nitric Acid; Filtered                            |             |             |                          |                    |               |                  |
| MW02,<br>MW04,<br>MW06,<br>MW08,<br>MW09,<br>Dup02,<br>CR14,<br>Drain 1 | 17-SEP-2009 | ---         | \$\$\$                   | 25-SEP-2009        | 15-OCT-2009   | ✓                |
| EP070: Total Petroleum Hydrocarbons - Speciation                        |             |             |                          |                    |               |                  |
| Amber Glass Bottle - Unpreserved                                        |             |             |                          |                    |               |                  |
| MW05,<br>MW07                                                           | 17-SEP-2009 | 25-SEP-2009 | 24-SEP-2009              | 26-SEP-2009        | 01-NOV-2009   | ✓                |
| EP074A: Monocyclic Aromatic Hydrocarbons                                |             |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4                                          |             |             |                          |                    |               |                  |
| MW04,<br>MW06,<br>MW08,<br>MW09,<br>CR13,<br>Drain 1                    | 17-SEP-2009 | ---         | \$\$\$                   | 27-SEP-2009        | 01-OCT-2009   | ✓                |

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Matrix: **WATER** Evaluation: \* = Holding time breach ; ✓ = Within holding time.

| Method                                    |                                    | Sample Date | Extraction / Preparation |                    | Analysis      |                  |
|-------------------------------------------|------------------------------------|-------------|--------------------------|--------------------|---------------|------------------|
| Container / Client Sample ID(s)           |                                    |             | Date extracted           | Due for extraction | Date analysed | Due for analysis |
| EP074B: Oxygenated Compounds              |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW06,<br>MW05,<br>MW07,<br>CR13, | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |
| EP074C: Sulfonated Compounds              |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW05,<br>MW07,<br>CR13,          | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |
| EP074D: Fumigants                         |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW05,<br>MW07,<br>CR13,          | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |
| EP074E: Halogenated Aliphatic Compounds   |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW05,<br>MW06,<br>MW07,<br>CR13, | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |
| EP074F: Halogenated Aromatic Compounds    |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW05,<br>MW07,<br>CR13,          | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |
| EP074G: Trihalomethanes                   |                                    |             |                          |                    |               |                  |
| Amber VOC Vial - HCl or NaHSO4            |                                    |             |                          |                    |               |                  |
| MW03,<br>MW05,<br>MW07,<br>CR13,          | MW04,<br>MW06,<br>MW08,<br>Drain 1 | 17-SEP-2009 | ---                      | \$\$\$             | 27-SEP-2009   | 01-OCT-2009      |

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Matrix: **WATER**  
Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

| Method                                                                                    |                                                                         | Sample Date | Extraction / Preparation |                    | Evaluation | Analysis      |                  |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------|--------------------------|--------------------|------------|---------------|------------------|
| Container / Client Sample ID(s)                                                           |                                                                         |             | Date extracted           | Due for extraction |            | Date analysed | Due for analysis |
| EP075(SIM)A: Phenolic Compounds                                                           |                                                                         |             |                          |                    |            |               |                  |
| Amber Glass Bottle - Unpreserved<br>MW08,<br>Drain 1                                      | CR13,                                                                   | 17-SEP-2009 | 22-SEP-2009              | 24-SEP-2009        | ✓          | 23-SEP-2009   | 01-NOV-2009      |
|                                                                                           | MW05,<br>MW07                                                           | 17-SEP-2009 | 25-SEP-2009              | 24-SEP-2009        | ✗          | 25-SEP-2009   | 04-NOV-2009      |
| EP075(SIM)B: Polynuclear Aromatic Hydrocarbons                                            |                                                                         |             |                          |                    |            |               |                  |
| Amber Glass Bottle - Unpreserved<br>MW03,<br>CR13,                                        | MW08,<br>Drain 1                                                        | 17-SEP-2009 | 22-SEP-2009              | 24-SEP-2009        | ✓          | 23-SEP-2009   | 01-NOV-2009      |
|                                                                                           | MW05,<br>MW07                                                           | 17-SEP-2009 | 25-SEP-2009              | 24-SEP-2009        | ✗          | 25-SEP-2009   | 04-NOV-2009      |
| EP080/071: Total Petroleum Hydrocarbons                                                   |                                                                         |             |                          |                    |            |               |                  |
| Amber Glass Bottle - Unpreserved<br>MW01,<br>MW03,<br>MW09,<br>Dup02,<br>CR14,<br>Drain 1 | MW02,<br>MW08,<br>Dup01,<br>CR13,<br>CR15,                              | 17-SEP-2009 | 22-SEP-2009              | 24-SEP-2009        | ✓          | 24-SEP-2009   | 01-NOV-2009      |
|                                                                                           | MW05,<br>MW07                                                           | 17-SEP-2009 | 25-SEP-2009              | 24-SEP-2009        | ✗          | 30-SEP-2009   | 04-NOV-2009      |
|                                                                                           | MW02,<br>MW04,<br>MW06,<br>MW07,<br>MW09,<br>Dup02,<br>CR14,<br>Drain 1 | 17-SEP-2009 | 25-SEP-2009              | 24-SEP-2009        | \$\$\$\$   | 27-SEP-2009   | 01-OCT-2009      |
|                                                                                           | MW02,<br>Dup01,<br>CR14,<br>CR15,                                       | 17-SEP-2009 | ---                      | \$\$\$             | \$\$\$\$   | 27-SEP-2009   | 01-OCT-2009      |
| EP080: BTEX                                                                               |                                                                         |             |                          |                    |            |               |                  |
| Amber VOC Vial - HCl or NaHSO4<br>MW01,<br>MW09,<br>Dup02,<br>CR15                        | MW02,<br>Dup01,<br>CR14,<br>CR15,                                       | 17-SEP-2009 | ---                      | \$\$\$             | \$\$\$\$   | 27-SEP-2009   | 01-OCT-2009      |
|                                                                                           | MW02,<br>Dup01,<br>CR14,<br>CR15,                                       | 17-SEP-2009 | ---                      | \$\$\$             | \$\$\$\$   | 27-SEP-2009   | 01-OCT-2009      |

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## Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: \* = Qualit; Control freuenc; not within s, ecification E✓ = Qualit; Control freuenc; within s, ecification.

| Quality Control Sample Type          |            | Count |         | Rate (%) |          | Quality Control Specification |                                                  |
|--------------------------------------|------------|-------|---------|----------|----------|-------------------------------|--------------------------------------------------|
| Analytical Methods                   |            | QC    | Regular | Actual   | Expected | Evaluation                    |                                                  |
| Laboratory Duplicates (DUP)          |            |       |         |          |          |                               |                                                  |
| Dissolved Mercury by FIMS            | EG035F     | 2     | 20      | 10.0     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | 2     | 20      | 10.0     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | 2     | 1"      | 13.3     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Volatile Organic Compounds           | EP074      | 1     | 8       | 12.5     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Laboratory Control Samples (LCS)     |            |       |         |          |          |                               |                                                  |
| Dissolved Mercury by FIMS            | EG035F     | 1     | 20      | 5.0      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | 1     | 20      | 5.0      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| PAH/Phenols (GC/MS - SIM)            | EP075(SIM) | 2     | 10      | 20.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Semivolatile Fraction          | EP071      | 1     | 14      | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Semivolatile Fraction          | EP071-HX   | 1     | 4       | 25.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Speciation                     | EP070      | 1     | 4       | 25.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | 1     | 1"      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Volatile Organic Compounds           | EP074      | 1     | 8       | 12.5     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Method Blanks (MB)                   |            |       |         |          |          |                               |                                                  |
| Dissolved Mercury by FIMS            | EG035F     | 1     | 20      | 5.0      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | 1     | 20      | 5.0      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| PAH/Phenols (GC/MS - SIM)            | EP075(SIM) | 2     | 10      | 20.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Semivolatile Fraction          | EP071      | 1     | 14      | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Semivolatile Fraction          | EP071-HX   | 1     | 4       | 25.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Speciation                     | EP070      | 1     | 4       | 25.0     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                   | EP080      | 1     | 1"      | 6.7      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Volatile Organic Compounds           | EP074      | 1     | 8       | 12.5     | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Matrix Spikes (MS)                   |            |       |         |          |          |                               |                                                  |
| Dissolved Mercury by FIMS            | EG035F     | 1     | 20      | 5.0      | 5.0      | ✓                             | ALS QCS3 requirement                             |
| Dissolved Metals by ICP-MS - Suite A | EG020A-F   | 1     | 20      | 5.0      | 5.0      | ✓                             | ALS QCS3 requirement                             |
| TPH Volatiles/BTEX                   | EP080      | 1     | 1"      | 6.7      | 5.0      | ✓                             | ALS QCS3 requirement                             |
| Volatile Organic Compounds           | EP074      | 1     | 8       | 12.5     | 5.0      | ✓                             | ALS QCS3 requirement                             |

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## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods                      | Method    | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dissolved Metals by ICP-MS - Suite A    | EG020A-F  | WATER  | (APHA 21st ed., 3125; USEPA SW846 - 6020; ALS QWI-EN/EG020): Samples are 0.45 um filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.                                                                                                                                                                                         |
| Dissolved Mercury by FIMS               | EG035F    | WATER  | AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl <sub>2</sub> )(Cold Vapour generation) AAS) Samples are 0.45 um filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl <sub>2</sub> which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2) |
| TPH - Speciation                        | EP070     | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                             |
| TPH - Semivolatile Fraction             | EP071     | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                             |
| TPH - Semivolatile Fraction             | EP071-HX  | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                             |
| Volatile Organic Compounds              | EP074     | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                               |
| PAH/Phenols (GC/MS - SIM)               | EP075SIM7 | WATER  | USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                                          |
| TPH Volatiles/BTEX                      | EP080     | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                                                                                                                                                                                                                                               |
| Preparation Methods                     | Method    | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Separatory Funnel Extraction of Liquids | ORG14     | WATER  | USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container.                                                                                                                                                                                                                     |

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| Preparation Methods                     |  | Method   | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------|--|----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Separatory Funnel Extraction of Liquids |  | ORG14-HX | WATER  | Variation of USEPA SW 846 - 3510B: 500 mL to 0.5L of sample is transferred to a separatory funnel and serially extracted three times using 30mL DCM for each extract. The resultant extracts are combined, dehydrated, and exchanged into 5 mL of hexane for analysis. ALS default excludes sediment which may be resident in the container. |

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## Summary of Outliers

### Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

#### Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outliers occur.

#### Regular Sample Surrogates

Sub-Matrix: WATER

| Compound Group Name                       | Laboratory Sample ID | Client Sample ID | Analyte   | CAS Number | Data  | Limits  | Comment                                         |
|-------------------------------------------|----------------------|------------------|-----------|------------|-------|---------|-------------------------------------------------|
| <b>Samples Submitted</b>                  |                      |                  |           |            |       |         |                                                 |
| EP075(SIM)S: Phenolic Compound Surrogates | EB0914886-005        | MW05             | Phenol-d6 | 13127-88-3 | 8.7 % | 10-94 % | Recovery less than lower data quality objective |
| EP075(SIM)S: Phenolic Compound Surrogates | EB0914886-006        | MW06             | Phenol-d6 | 13127-88-3 | 8.5 % | 10-94 % | Recovery less than lower data quality objective |

### Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

Matrix: WATER

| Method             |              | Extraction / Preparation |                    | Analysis      |                  |
|--------------------|--------------|--------------------------|--------------------|---------------|------------------|
| Container / Client | Sample ID(s) | Date extracted           | Due for extraction | Date analysed | Due for analysis |
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DL Documents

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Page # 3 ~ 3  
Work Order # EB0914886  
Client # SINCLAIR KNIGHT MERZ  
Project # QE09537

13-054

Matrix: **WATER**

| Method                                                                     |       | Extraction / Preparation |                    | Analysis      |              |
|----------------------------------------------------------------------------|-------|--------------------------|--------------------|---------------|--------------|
| Container / Client Sample ID(s)                                            |       | Date extracted           | Due for extraction | Date analysed | Days overdue |
| EP080/071: Total Petroleum Hydrocarbons - Analysis Holding Time Compliance |       |                          |                    |               |              |
| Amber Glass Bottle - Unpreserved                                           |       |                          |                    |               |              |
| MW04,                                                                      | MW05, | 25-SEP-2009              | 24-SEP-2009        | \$\$\$\$      | \$\$\$\$     |
| MW06,                                                                      | MW07  |                          |                    | \$\$\$\$      | \$\$\$\$     |

### Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.

RTI DL RELEASE - EHP



Environmental Division

**SAMPLE RECEIPT NOTIFICATION (SRN)**

**Comprehensive Report**

Work Order : **EB0914886**

|              |                                                              |               |                                                         |
|--------------|--------------------------------------------------------------|---------------|---------------------------------------------------------|
| Client       | * <b>SINCLAIR KNIGHT MERZ</b>                                | Laboratory    | * Environmental Division Brisbane                       |
| Contact      | * MS ONA KANAS                                               | Contact       | * Tim Kilmister                                         |
| Address      | * EASTERN BUSWAY PROJECT<br>PO BOX 3848<br>STH BRISBANE 4101 | Address       | * 32 Shand Street Stafford QLD Australia<br>4053        |
| E-mail       | * " " & " / " 2                                              | E-mail        | * Services.Brisbane@alsenviro.com                       |
| Telephone    | * 861 07 3026 7286                                           | Telephone     | * 861-7-3243 7222                                       |
| 5'0&('       | * 861 07 3026 7306                                           | 5'0&('        | * 861-7-3243 7218                                       |
| Project      | * QE09537                                                    | Page          | * 1 "!                                                  |
| Order n2,2 ~ | * ++++                                                       |               |                                                         |
| C-O-C n2,2 ~ | * ++++                                                       | # Note n2,2 ~ | * ES2009SINKNI0322 (EN003@;                             |
| Site         | * " " 2lla Park                                              |               |                                                         |
| Sam7' ~      | * ++++                                                       | QC Level      | * NEPM 1999 Schedule B(3) and ALS<br>QCS3 req2( " , " " |

**Dates**

|                       |               |                          |                      |
|-----------------------|---------------|--------------------------|----------------------|
| Date Samples Received | * 18-SEP-2009 | Issue Date               | * 21-SEP-2009 17:30  |
| Client Requested Date | * 25-SEP-2009 | Scheduled Reporting Date | * <b>01-OCT-2009</b> |

**Delivery Details**

|                      |                     |                         |                             |
|----------------------|---------------------|-------------------------|-----------------------------|
| Mode of Delivery     | * " ( "             | Temperature             | * 10.1, 7.3' C - Ice 7' & " |
| No. of coolers @ A & | * 1 LARGE, 1 MEDIUM | No. of samples received | * 16                        |
| Security Seal        | * Intact.           | No. of samples analysed | * 15                        |

**General Comments**

- This report contains the following information:
  - + Sample Container(s) @ reservation Non-Com7' " 0 &
  - + Summary of Sample(s) and Requested Analysis
  - + Requested Deliverables
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any turnaround @ technical queries to the laboratory contact designated above.
- Please direct any queries related to sample condition @ numbering @ breakages to Maggie Kahi.
- Analytical work for this work order will be conducted at ALS Brisbane.
- Sample Disposal - Aq2 " 2s (14 days), Solid (90 days) from date of completion of work order.



## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against 7<sup>th</sup> ed., 1999 @ Preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exist.

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a 7<sup>th</sup> ed. 1999 > 7<sup>th</sup> ed. necessary for the A 0 2tion of client 7<sup>th</sup> ed. 1999 tasks. Packages may contain additional analyses, 82ch 7<sup>th</sup> ed. & the determination of 7<sup>th</sup> ed. 1999 content and 7<sup>th</sup> ed. 1999 tasks, that are included in the 7<sup>th</sup> ed. 1999 / When 7<sup>th</sup> ed. 1999 (s) 7<sup>th</sup> ed. 1999, (s) 7<sup>th</sup> ed. 1999 shown 2<sup>nd</sup> ed. 1999 & have been 7<sup>th</sup> ed. 1999 by the laboratory for 7<sup>th</sup> ed. 1999 & 7<sup>th</sup> ed. 1999 s. If 7<sup>th</sup> ed. 1999 & 7<sup>th</sup> ed. 1999 time is 7<sup>th</sup> ed. 1999 as 0:00 the information was not provided by client.

< 7<sup>th</sup> ed. 1999 (A: WATER

| Laboratory sample ID | Client sampling date / time | Client sample ID | (On Hold) WATER No analysis req 2 & 7 <sup>th</sup> ed. 1999 | WATER - EP070 (Water) TPH S7eciation - All 7 <sup>th</sup> ed. 1999 & Aromatic H-drocarbons C10-C35 | WATER - EP075 K gr7 removed SVOCs with no miscellaneous 7 <sup>th</sup> ed. 1999 & 7 <sup>th</sup> ed. 1999 | WATER - EP075 SIM Phenols only SIM Phenols only | WATER - W-02 8 Metals | WATER - W-05 TPH 7 <sup>th</sup> ed. 1999 Metals | WATER - W-10 TPH 7 <sup>th</sup> ed. 1999 |
|----------------------|-----------------------------|------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------|--------------------------------------------------|-------------------------------------------|
| EB0914886-001        | 17-SEP-2009 15:00           | MW01             |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-002        | 17-SEP-2009 15:00           | MW02             |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-003        | 17-SEP-2009 15:00           | MW03             |                                                              |                                                                                                     |                                                                                                             |                                                 | ✓                     |                                                  | ✓                                         |
| EB0914886-004        | 17-SEP-2009 15:00           | MW04             |                                                              |                                                                                                     |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-005        | 17-SEP-2009 15:00           | MW05             |                                                              |                                                                                                     |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-006        | 17-SEP-2009 15:00           | MW06             |                                                              | ✓                                                                                                   |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-007        | 17-SEP-2009 15:00           | MW07             |                                                              | ✓                                                                                                   |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-008        | 17-SEP-2009 15:00           | MW08             |                                                              |                                                                                                     | ✓                                                                                                           | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-009        | 17-SEP-2009 15:00           | MW09             |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-010        | 17-SEP-2009 15:00           | %2701            |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-011        | 17-SEP-2009 15:00           | %27              |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-012        | 17-SEP-2009 15:00           | CR13             |                                                              |                                                                                                     |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-013        | 17-SEP-2009 15:00           | CR14             |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-014        | 17-SEP-2009 15:00           | CR15             |                                                              |                                                                                                     |                                                                                                             |                                                 |                       | ✓                                                |                                           |
| EB0914886-015        | 17-SEP-2009 15:00           | Drain 1          |                                                              |                                                                                                     |                                                                                                             | ✓                                               | ✓                     |                                                  | ✓                                         |
| EB0914886-016        | 17-SEP-2009 15:00           | Tri7 Blank       | ✓                                                            |                                                                                                     |                                                                                                             |                                                 |                       |                                                  |                                           |

## Requested Deliverables

### MR JEREMY WICKS

|                                                               |       |               |   |
|---------------------------------------------------------------|-------|---------------|---|
| + *AU Certificate of Analysis - NATA ( COA )                  | Email | 6C(0-&.-/0",/ | 2 |
| + *AU Inter7retive QC Re7ort - DEFAULT (Anon QCI Re7) ( QCI ) | Email | 6C(0-&.-/0",/ | 2 |
| + *AU QC Re7ort - DEFAULT (Anon QC Re7) - NATA ( QC )         | Email | 6C(0-&.-/0",/ | 2 |
| + A4 - AU Sam7le Recei7t Notification - Environmental ( SRN ) | Email | 6C(0-&.-/0",/ | 2 |
| + A4 - AU Tax Invoice ( INV )                                 | Email | 6C(0-&.-/0",/ | 2 |
| + % ! 2lt - Chain of C2stody ( COC )                          | Email | 6C(0-&.-/0",/ | 2 |
| + EDI Format - ENMRG ( ENMRG )                                | Email | 6C(0-&.-/0",/ | 2 |
| + EDI Format - ESDAT ( ESDAT )                                | Email | 6C(0-&.-/0",/ | 2 |
| + EDI Format - XTab ( XTAB )                                  | Email | 6C(0-&.-/0",/ | 2 |

### MS ONA KANAS

|                                                               |       |              |   |
|---------------------------------------------------------------|-------|--------------|---|
| + *AU Certificate of Analysis - NATA ( COA )                  | Email | "-""&.-/0",/ | 2 |
| + *AU Inter7retive QC Re7ort - DEFAULT (Anon QCI Re7) ( QCI ) | Email | "-""&.-/0",/ | 2 |
| + *AU QC Re7ort - DEFAULT (Anon QC Re7) - NATA ( QC )         | Email | "-""&.-/0",/ | 2 |
| + A4 - AU Sam7le Recei7t Notification - Environmental ( SRN ) | Email | "-""&.-/0",/ | 2 |
| + % ! 2lt - Chain of C2stody ( COC )                          | Email | "-""&.-/0",/ | 2 |
| + EDI Format - ENMRG ( ENMRG )                                | Email | "-""&.-/0",/ | 2 |
| + EDI Format - ESDAT ( ESDAT )                                | Email | "-""&.-/0",/ | 2 |
| + EDI Format - XTab ( XTAB )                                  | Email | "-""&.-/0",/ | 2 |



Environmental Division

**CERTIFICATE OF ANALYSIS**

|                     |                                                             |                                |                                                  |
|---------------------|-------------------------------------------------------------|--------------------------------|--------------------------------------------------|
| <b>Work Order</b>   | <b>: EB0916017</b>                                          | <b>Page</b>                    | 1 of 6                                           |
| <b>Client</b>       | <b>SINCLAIR KNIGHT MERZ</b>                                 | <b>Laboratory</b>              | Environmental Division Brisbane                  |
| <b>Contact</b>      | <b>MR JE" EMY WICKS</b>                                     | <b>Contact</b>                 | Tim Klimister                                    |
| <b>Address</b>      | 32 CORDELIA STREE#<br>SOUTH B" " B\$+ E QLD, AUSTRALIA 4101 | <b>Address</b>                 | 32 Shand Street Stafford QLD Australia 401&      |
| <b>E-mail</b>       | jwicks@skm.com.au                                           | <b>E-mail</b>                  | Services.Brisbane@alsenviro.com                  |
| <b>Telephone</b>    | 2222                                                        | <b>Telephone</b>               | 961-7-3243 7222                                  |
| <b>Facsimile</b>    | 2222                                                        | <b>Facsimile</b>               | 961-7-3243 7218                                  |
| <b>Project</b>      | , E09537                                                    | <b>QC Level</b>                | +EPM 1999 Schedule B(3) and ALS QCS3 requirement |
| <b>Order number</b> | 2222                                                        | <b>Date Samples Received</b>   | 08-OCT-2009                                      |
| <b>C-O-C number</b> | 2222                                                        | <b>Issue Date</b>              | ' 0-OCT-2009                                     |
| <b>Sampler</b>      | 2222                                                        | <b>No. of samples received</b> | 15                                               |
| <b>Site</b>         | Cronulla Park                                               | <b>No. of samples analysed</b> | 15                                               |
| <b>Quote number</b> | E+>00&ø9                                                    |                                |                                                  |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with "> EC 170'17

**WORLD RECOGNISED 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.

| Signatories | Position                   | Accreditation Category |
|-------------|----------------------------|------------------------|
| Matt Frost  | Organic Instrument Chemist | Organics               |

**Environmental Division Brisbane**

Part of the **ALS Laboratory Group**

32 Shand Street Stafford QLD Australia 401&  
Tel. +61-7-3243 7222 Fax. +61-7-3243 7218 [www.alsglobal.com](http://www.alsglobal.com)

A Campbell Brothers Limited Company



Page 1 of 6  
Work Order EB0916017  
Client SINCLAIR KNIGHT ME" B  
Project , E09537

13-054

### General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the U" EPA, APHA, AS and +EPM. 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 = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                           |            | Client sample ID |      | Client sampling date / time |      | Unit | MW01 | MW02 | MW03 | MW04 | MW05 |      |      |      |
|-------------------------------------------------------------|------------|------------------|------|-----------------------------|------|------|------|------|------|------|------|------|------|------|
| Compound                                                    | CAS Number | LOR              | Unit | MW01                        | MW02 |      |      |      |      |      |      | MW03 | MW04 | MW05 |
|                                                             |            |                  |      |                             |      |      |      |      |      |      |      |      |      |      |
| EP071 SG: Total Petroleum Hydrocarbons - Silica gel cleanup |            |                  |      |                             |      |      |      |      |      |      |      |      |      |      |
| C10 - C14 Fraction                                          | 2222       | 10               | Jg/L | C10                         | C10  | C10  | C10  | C10  | C10  | C10  | C10  |      |      |      |
| C15 - C28 Fraction                                          | 2222       | 100              | Jg/L | <100                        | <100 | <100 | <100 | <100 | <100 | <100 | <100 |      |      |      |
| C29 - C36 Fraction                                          | 2222       | 10               | Jg/L | C10                         | C10  | C10  | C10  | C10  | C10  | C10  | C10  |      |      |      |
| ^ C10 - C36 Fraction (sum)                                  | 2222       | 10               | Jg/L | C10                         | C10  | C10  | C10  | C10  | C10  | C10  | C10  |      |      |      |
| EP080/071: Total Petroleum Hydrocarbons                     |            |                  |      |                             |      |      |      |      |      |      |      |      |      |      |
| C6 - C9 Fraction                                            | 2222       | ' 0              | Jg/L | C' 0                        | C' 0 | C' 0 | C' 0 | C' 0 | 50   | 50   | 50   |      |      |      |
| C10 - C14 Fraction                                          | 2222       | 10               | Jg/L | 60                          | C10  | C10  | 70   | 410  | 370  | 370  | 370  |      |      |      |
| C15 - C28 Fraction                                          | 2222       | 100              | Jg/L | 130                         | <100 | <100 | 120  | 880  | 1190 | 1190 | 1190 |      |      |      |
| C29 - C36 Fraction                                          | 2222       | 10               | Jg/L | 60                          | C10  | C10  | 60   | 290  | 410  | 410  | 410  |      |      |      |
| ^ C10 - C36 Fraction (sum)                                  | 2222       | 10               | Jg/L | 250                         | C10  | C10  | 240  | 1580 | 1960 | 1960 | 1960 |      |      |      |
| EP080: BTX                                                  |            |                  |      |                             |      |      |      |      |      |      |      |      |      |      |
| Benzene                                                     | 71-43-2    | 1                | Jg/L | <1                          | <1   | <1   | <1   | 6    | 3    | 3    | 3    |      |      |      |
| Toluene                                                     | 102-1-2    | '                | Jg/L | C'                          | C'   | C'   | C'   | C'   | C'   | C'   | C'   |      |      |      |
| Ethylbenzene                                                | 100-41-4   | '                | Jg/L | C'                          | C'   | C'   | C'   | C'   | C'   | C'   | C'   |      |      |      |
| meta- & para-Xylene                                         | 108-38-3   | '                | Jg/L | C'                          | C'   | C'   | C'   | 4    | C'   | C'   | C'   |      |      |      |
| ortho-Xylene                                                | 95-47-6    | '                | Jg/L | C'                          | C'   | C'   | C'   | C'   | C'   | C'   | C'   |      |      |      |
| EP080S: TPH(V)/BTX Surrogates                               |            |                  |      |                             |      |      |      |      |      |      |      |      |      |      |
| 1,2-Dichloroethane-D4                                       | 17060-07-0 | 0.1              | K    | 107                         | 110  | 107  | 107  | 105  | 104  | 104  | 104  |      |      |      |
| Toluene-D8                                                  | ' 037-2621 | 0.1              | K    | 108                         | 110  | 97.1 | 97.1 | 106  | 104  | 104  | 104  |      |      |      |
| 4-Bromofluorobenzene                                        | ' 60202.   | 0.1              | K    | 105                         | 109  | 95.9 | 95.9 | 113  | 109  | 109  | 109  |      |      |      |



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                           |              | Client sample ID |      | Client sampling date / time |                   |                   |                   |                   |
|-------------------------------------------------------------|--------------|------------------|------|-----------------------------|-------------------|-------------------|-------------------|-------------------|
| Compound                                                    | CAS Number   | LOR              | Unit | MW06                        | MW07              | MW08              | MW09              | Dup01             |
|                                                             |              |                  |      | 07-OCT-2009 15:00           | 07-OCT-2009 15:00 | 07-OCT-2009 15:00 | 07-OCT-2009 15:00 | 07-OCT-2009 15:00 |
|                                                             |              |                  |      | EB0916017-006               | EB0916017-007     | EB0916017-008     | EB0916017-009     | EB0916017-010     |
| EP071 SG: Total Petroleum Hydrocarbons - Silica gel cleanup |              |                  |      |                             |                   |                   |                   |                   |
| C10 - C14 Fraction                                          | 2222 10      |                  | Jg/L | C10                         | C10               | 2222              | C10               | C10               |
| C15 - C28 Fraction                                          | 2222 100     |                  | Jg/L | <100                        | <100              | 2222              | <100              | <100              |
| C29 - C36 Fraction                                          | 2222 10      |                  | Jg/L | C10                         | C10               | 2222              | C10               | C10               |
| ^ C10 - C36 Fraction (sum)                                  | 2222 10      |                  | Jg/L | C10                         | C10               | 2222              | C10               | C10               |
| EP080/071: Total Petroleum Hydrocarbons                     |              |                  |      |                             |                   |                   |                   |                   |
| C6 - C9 Fraction                                            | 2222 10      |                  | Jg/L | 30                          | 50                | 50                | C'0               | C'0               |
| C10 - C14 Fraction                                          | 2222 10      |                  | Jg/L | 350                         | 590               | 2222              | 60                | C10               |
| C15 - C28 Fraction                                          | 2222 100     |                  | Jg/L | 960                         | 1300              | 2222              | 180               | <100              |
| C29 - C36 Fraction                                          | 2222 10      |                  | Jg/L | 220                         | 270               | 2222              | 60                | C10               |
| ^ C10 - C36 Fraction (sum)                                  | 2222 10      |                  | Jg/L | 1530                        | 2170              | 2222              | 310               | C10               |
| EP080: BTX                                                  |              |                  |      |                             |                   |                   |                   |                   |
| Benzene                                                     | 71-43-2      | 1                | Jg/L | 1                           | 4                 | 2                 | <1                | <1                |
| Toluene                                                     | 108-10-6     | 1                | Jg/L | 3                           | C'                | C'                | C'                | C'                |
| Ethylbenzene                                                | 100-41-4     | 1                | Jg/L | C'                          | 3                 | 8                 | C'                | C'                |
| meta- & para-Xylene                                         | 108-38-3     | 1                | Jg/L | C'                          | 3                 | 8                 | C'                | C'                |
| ortho-Xylene                                                | 95-47-6      | 1                | Jg/L | C'                          | C'                | 2                 | C'                | C'                |
| EP080S: TPH(V)/BTX Surrogates                               |              |                  |      |                             |                   |                   |                   |                   |
| 1,2-Dichloroethane-D4                                       | 17060-07-0   | 0.1              | K    | 102                         | 969               | 106               | 104               | 111               |
| Toluene-D8                                                  | 103-037-2621 | 0.1              | K    | 103                         | 978               | 100               | 106               | 111               |
| 4-Bromofluorobenzene                                        | 103-037-2602 | 0.1              | K    | 101                         | 106               | 114               | 105               | 109               |



## Analytical Results

Sub-Matrix: WATER

| Sub-Matrix: WATER                                           |  | Client sample ID |  | Client sampling date / time |  | Unit |  | Dup02         |  | CR13          |  | CR14          |  | CR15          |  | Creek         |  |
|-------------------------------------------------------------|--|------------------|--|-----------------------------|--|------|--|---------------|--|---------------|--|---------------|--|---------------|--|---------------|--|
| Compound                                                    |  | CAS Number       |  | LOR                         |  | Unit |  | EB0916017-011 |  | EB0916017-012 |  | EB0916017-013 |  | EB0916017-014 |  | EB0916017-015 |  |
| EP071 SG: Total Petroleum Hydrocarbons - Silica gel cleanup |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |               |  |
| C10 - C14 Fraction                                          |  | 2222             |  | 10                          |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| C15 - C28 Fraction                                          |  | 2222             |  | 100                         |  | Jg/L |  | <100          |  | <100          |  | <100          |  | <100          |  | <100          |  |
| C29 - C36 Fraction                                          |  | 2222             |  | 10                          |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| ^ C10 - C36 Fraction (sum)                                  |  | 2222             |  | 10                          |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| EP080/071: Total Petroleum Hydrocarbons                     |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |               |  |
| C6 - C9 Fraction                                            |  | 2222             |  | 10                          |  | Jg/L |  | 30            |  | C10           |  | C10           |  | C10           |  | C10           |  |
| C10 - C14 Fraction                                          |  | 2222             |  | 10                          |  | Jg/L |  | 330           |  | 110           |  | C10           |  | C10           |  | 80            |  |
| C15 - C28 Fraction                                          |  | 2222             |  | 100                         |  | Jg/L |  | 840           |  | 330           |  | <100          |  | 160           |  | 350           |  |
| C29 - C36 Fraction                                          |  | 2222             |  | 10                          |  | Jg/L |  | 180           |  | 80            |  | C10           |  | 100           |  | 130           |  |
| ^ C10 - C36 Fraction (sum)                                  |  | 2222             |  | 10                          |  | Jg/L |  | 1360          |  | 520           |  | C10           |  | 260           |  | 570           |  |
| EP080: BTX                                                  |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |               |  |
| Benzene                                                     |  | 71-43-2          |  | 1                           |  | Jg/L |  | <1            |  | <1            |  | <1            |  | <1            |  | <1            |  |
| Toluene                                                     |  | 108-10-6         |  | 1                           |  | Jg/L |  | 2             |  | C10           |  | C10           |  | C10           |  | C10           |  |
| Ethylbenzene                                                |  | 100-41-4         |  | 1                           |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| meta- & para-Xylene                                         |  | 108-38-3         |  | 1                           |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| ortho-Xylene                                                |  | 95-47-6          |  | 1                           |  | Jg/L |  | C10           |  | C10           |  | C10           |  | C10           |  | C10           |  |
| EP080S: TPH(V)/BTX Surrogates                               |  |                  |  |                             |  |      |  |               |  |               |  |               |  |               |  |               |  |
| 1,2-Dichloroethane-D4                                       |  | 17060-07-0       |  | 0.1                         |  | K    |  | 112           |  | 110           |  | 106           |  | 108           |  | 104           |  |
| Toluene-D8                                                  |  | 100-41-4         |  | 0.1                         |  | K    |  | 98.3          |  | 105           |  | 106           |  | 105           |  | 102           |  |
| 4-Bromofluorobenzene                                        |  | 108-38-3         |  | 0.1                         |  | K    |  | 102           |  | 106           |  | 104           |  | 105           |  | 94.4          |  |





Surrogate Control Limits

|                                |            |                     |      |
|--------------------------------|------------|---------------------|------|
| Sub-Matrix: WATER              |            | Recovery Limits (%) |      |
| Compound                       | CAS Number | Low                 | High |
| EP080S: TPH(V)/BTEX Surrogates |            |                     |      |
| 1,2-Dichloroethane-D4          | 17060207-0 | : 0                 | 120  |
| Toluene-D8                     | ' 037-2621 | ::                  | 110  |
| 4-Bromofluorobenzene           | . 602002.  | : 6                 | 115  |

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Environmental Division

**QUALITY CONTROL REPORT**

Work Order : **EB0916017**

Client : **SINCLAIR KNIGHT MERZ**  
Contact : **R JEREMY WICKS**  
Address : **CORDELIA STREET  
SOUTH BRISBANE . QLD / AUSTRALIA 01**

E-mail : **jwicks@skm.com.au**  
Telephone : **( ) ( ) ( )**  
Facsimile : **( ) ( ) ( )**

Project : **E09537**  
Site : **Cronulla Park**  
C-O-C number : **( ) ( ) ( )**  
Sampler : **( ) ( ) ( )**  
Order number : **( ) ( ) ( )**

Reference : **EN/003/09**

IF : **# 1 ~ 6**  
Reference : **# Environment # Divi Hon Bri # Fr**  
Contact : **# Tim Kilmister**  
Address : **( ) Shand Street Stafford . LD Australia 01**  
E-mail : **Services.Brisbane@alsenviro.com**  
Telephone : **(34 5) (0 3 7) ( )**  
Facsimile : **(34 5) (0 3 7) 7**  
Level : **NEPM 1999 Schedule B(3) and ALS . CS3 requirement**  
Date Samples Received : **(17) ( ) ( ) 19**  
Issue Date : **( ) ( ) ( ) 19**  
No. of samples received : **( )**  
No. of samples analysed : **( )**

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 & 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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This document is issued in accordance with NATA accreditation requirements.

WORLD RECOGNISED ACCREDITATION  
Accredited for compliance with ISO/IEC 170) (

**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 1 CFR Part 11.

Signatories  
Matt Frost

Position  
Organic Instrument Chemist

Accreditation Category  
Organics

Environmental Division Brisbane

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Work Order : EB0916017  
Client : SINCLAIR KNIGHT MERZ  
Project : . E09537

13-054

### 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 . C process lot

CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

RPD = Relative Percentage Difference

# = Indicates failed .

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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 . WI-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 ) 0 times LOR:- 0%- 50%; Result > ) 0 times LOR:- 0% - ) 1H/

| Sub-Matrix: WATER                                         |                  | Laboratory Duplicate (DUP) Report |                       |     |      |                 |                  |         |                     |  |  |
|-----------------------------------------------------------|------------------|-----------------------------------|-----------------------|-----|------|-----------------|------------------|---------|---------------------|--|--|
| Laboratory sample ID                                      | Client sample ID | Method: Compound                  | CAS Number            | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |  |  |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1129380) |                  |                                   |                       |     |      |                 |                  |         |                     |  |  |
| EB0916017-001                                             | MW01             | EP071: C15 - C) 8 Fraction        | ))))                  | !!  | J?=- | ~!              | E !!             | ) /!    | No Limit            |  |  |
|                                                           |                  | EP071: C10 - C10 Fraction         | ))))                  | (!  | J?=- | 4!              | E(!              | ) 0 /~  | No Limit            |  |  |
|                                                           |                  | EP071: C) 9 - C36 Fraction        | ))))                  | (!  | J?=- | 4!              | E(!              | ! /     | No Limit            |  |  |
|                                                           |                  | EP071: C15 - C) 8 Fraction        | ))))                  | !!  | J?=- | ~~!             | ~ !              | ( /)    | No Limit            |  |  |
| EB0916017-011                                             | CR13             | EP071: C10 - C10 Fraction         | ))))                  | (!  | J?=- | !               | 7!               | ~! /~   | No Limit            |  |  |
|                                                           |                  | EP071: C) 9 - C36 Fraction        | ))))                  | (!  | J?=- | 7!              | 7!               | ! /     | No Limit            |  |  |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1130329) |                  |                                   |                       |     |      |                 |                  |         |                     |  |  |
| EB0916017-001                                             | MW01             | EP080: C6 - C9 Fraction           | ))))                  | ) ! | J?=- | E !             | E !              | ! /     | No Limit            |  |  |
| EB0916017-011                                             | ~2! )            | EP080: C6 - C9 Fraction           | ))))                  | ) ! | J?=- | ) !             | ) !              | ! /     | No Limit            |  |  |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 1130330) |                  |                                   |                       |     |      |                 |                  |         |                     |  |  |
| EB0916017-015                                             | Creek            | EP080: C6 - C9 Fraction           | ))))                  | ) ! | J?=- | E !             | E !              | ! /     | No Limit            |  |  |
| EB0916050) !                                              | Anonymous        | EP080: C6 - C9 Fraction           | ))))                  | ) ! | J?=- | E !             | E !              | ! /     | No Limit            |  |  |
| EP080: BTEX (QC Lot: 1130329)                             |                  |                                   |                       |     |      |                 |                  |         |                     |  |  |
| EB0916017-001                                             | MW01             | EP080: Benzene                    | 5 ) 0 )               | )   | J?=- | E               | E                | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Toluene                    | !7)77~                | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Ethylbenzene               | !!) 0 ) 0             | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: meta- & para-Xylene        | 108-38-3<br>!4) 0 ) ~ | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: ortho-Xylene               | 9( 05)4               | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Benzene                    | 5 ) 0 ) )             | )   | J?=- | E               | E                | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Toluene                    | !7)77~                | )   | J?=- | )               | )                | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Ethylbenzene               | !!) 0 ) 0             | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: meta- & para-Xylene        | 108-38-3<br>!4) 0 ) ~ | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: ortho-Xylene               | 9( 05)4               | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
| EP080: BTEX (QC Lot: 1130330)                             |                  |                                   |                       |     |      |                 |                  |         |                     |  |  |
| EB0916017-015                                             | Creek            | EP080: Benzene                    | 5 ) 0 ) )             | )   | J?=- | E               | E                | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Toluene                    | !7)77~                | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Ethylbenzene               | !!) 0 ) 0             | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: meta- & para-Xylene        | 108-38-3<br>!4) 0 ) ~ | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: ortho-Xylene               | 9( 05)4               | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
| EB0916050) !                                              | Anonymous        | EP080: Benzene                    | 5 ) 0 ) )             | )   | J?=- | E               | E                | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Toluene                    | !7)77~                | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: Ethylbenzene               | !!) 0 ) 0             | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |
|                                                           |                  | EP080: meta- & para-Xylene        | 108-38-3<br>!4) 0 ) ~ | )   | J?=- | E)              | E)               | ! /     | No Limit            |  |  |



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| Sub-Matrix: <b>WATER</b>                  |                  |                            |                      |     |      |                 |                  |         |                     |
|-------------------------------------------|------------------|----------------------------|----------------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                      | Client sample ID | Method: Compound           | CAS Number           | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP080: BTEX (QC Lot: 1130330) - continued |                  |                            |                      |     |      |                 |                  |         |                     |
| EB0916050)! !                             | Anonymous        | EP080: meta- & para-Xylene | 108-38-3<br>14) 0) ) | )   | J?=' | E)              | E)               | I/I     | No Limit            |
|                                           |                  | EP080: ortho-Xylene        | 9( 05)4              | )   | J?=' | E)              | E)               | I/I     | No Limit            |

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Project : E09537

13-054

### 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 . C 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 . C 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**

| Sub-Matrix: WATER                                                            |                      |     |      | Method Blank (MB) Report |                     |                    |      | Laboratory Control Spike (LCS) Report |      |      |  |
|------------------------------------------------------------------------------|----------------------|-----|------|--------------------------|---------------------|--------------------|------|---------------------------------------|------|------|--|
| Method: Compound                                                             | CAS Number           | LOR | Unit | Result                   | Spike Concentration | Spike Recovery (%) | LCS  | Low                                   | High |      |  |
| EP071 SG: Total Petroleum Hydrocarbons - Silica gel cleanup (QCLot: 1129379) |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP071SG: C10 - C10 Fraction                                                  | ))))                 | (   | J?=- | E(!                      | 576 µg/L            |                    | 40/) | 09                                    |      | I    |  |
| EP071SG: C15 - C) 8 Fraction                                                 | ))))                 | !!  | J?=- | E !!                     | 1010 µg/L           |                    | 45/9 | (7                                    |      | 'I   |  |
| EP071SG: C) 9 - C36 Fraction                                                 | ))))                 | (   | J?=- | E(!                      | ))))                |                    | )))) | ))))                                  |      | )))) |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1129380)                     |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP071: C10 - C10 Fraction                                                    | ))))                 | (   | J?=- | E(!                      | 600 µg/L            |                    | 55/~ | 09                                    |      | I    |  |
| EP071: C15 - C) 8 Fraction                                                   | ))))                 | !!  | J?=- | E !!                     | !) 0 µg/L           |                    | !(   | (7                                    |      | 'I   |  |
| EP071: C) 9 - C36 Fraction                                                   | ))))                 | (   | J?=- | E(!                      | ))))                |                    | )))) | ))))                                  |      | )))) |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1130329)                     |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP080: C6 - C9 Fraction                                                      | ))))                 | )!  | J?=- | E)!                      | 160 µg/L            |                    | ! 5  | 5~                                    |      | '(   |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1130330)                     |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP080: C6 - C9 Fraction                                                      | ))))                 | )!  | J?=- | E)!                      | 160 µg/L            |                    | ! 9  | 5~                                    |      | '(   |  |
| EP080: BTEX (QCLot: 1130329)                                                 |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP080: Benzene                                                               | 5 ) 0~)              |     | J?=- | E                        | 10 µg/L             |                    | 9/9  | 55/4                                  |      | )    |  |
| EP080: Toluene                                                               | !777~                | )   | J?=- | E                        | 10 µg/L             |                    | !5   | 50                                    |      | )    |  |
| EP080: Ethylbenzene                                                          | !! ) 0 )             | )   | J?=- | E                        | 10 µg/L             |                    | 9/9  | 5~                                    |      | ) 4  |  |
| EP080: meta- & para-Xylene                                                   | 108-38-3<br>!4 ) 0~) | )   | J?=- | E                        | ) 0 µg/L            |                    | !~   | 5! 0                                  |      | ) 9  |  |
| EP080: ortho-Xylene                                                          | 9! 05!4              | )   | J?=- | E                        | 10 µg/L             |                    | ! )  | 50/~                                  |      | ) 4  |  |
| EP080: BTEX (QCLot: 1130330)                                                 |                      |     |      |                          |                     |                    |      |                                       |      |      |  |
| EP080: Benzene                                                               | 5 ) 0~)              |     | J?=- | E                        | 10 µg/L             |                    | !4   | 55/4                                  |      | )    |  |
| EP080: Toluene                                                               | !777~                | )   | J?=- | E                        | 10 µg/L             |                    | !(   | 50                                    |      | )    |  |
| EP080: Ethylbenzene                                                          | !! ) 0 )             | )   | J?=- | E                        | 10 µg/L             |                    | !~   | 5~                                    |      | ) 4  |  |
| EP080: meta- & para-Xylene                                                   | 108-38-3<br>!4 ) 0~) | )   | J?=- | E                        | ) 0 µg/L            |                    | !~   | 5! 0                                  |      | ) 9  |  |
| EP080: ortho-Xylene                                                          | 9! 05!4              | )   | J?=- | E                        | 10 µg/L             |                    | ! 0  | 50/~                                  |      | ) 4  |  |

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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 . C parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data . uality Objectives (D . Os). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

|                                                          |                  |                           | Matrix Spike (MS) Report |                    |        |                     |
|----------------------------------------------------------|------------------|---------------------------|--------------------------|--------------------|--------|---------------------|
|                                                          |                  |                           | Spike Concentration      | Spike Recovery (%) | MS     | Recovery Limits (%) |
| Laboratory sample ID                                     | Client sample ID | Method/Compound           | CAS Number               |                    |        |                     |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1129380) |                  |                           |                          |                    |        |                     |
| EB0916017-00)                                            | MW0)             | EP071: C10 - C10 Fraction | ))))                     | 600 µg/L           | 5 / 0  | 5!                  |
|                                                          |                  | EP071: C15 - C18 Fraction | ))))                     | ! ) 0 µg/L         | 7(/ 0  | 5!                  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1130329) |                  |                           |                          |                    |        |                     |
| EB0916017-00)                                            | MW0)             | EP080: C6 - C9 Fraction   | ))))                     | 00 µg/L            | 9!/ )  | 5!                  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 1130330) |                  |                           |                          |                    |        |                     |
| EB0916050)!!                                             | Anonymous        | EP080: C6 - C9 Fraction   | ))))                     | 00 µg/L            | 9' / 0 | 5!                  |
| EP080: BTEX (QCLot: 1130329)                             |                  |                           |                          |                    |        |                     |
| EB0916017-00)                                            | MW0)             | EP080: Benzene            | 5 ) 0' )                 | 10 µg/L            | 95/7   | 5!                  |
|                                                          |                  | EP080: Toluene            | !7)77)                   | 10 µg/L            | !'     | 5!                  |
| EP080: BTEX (QCLot: 1130330)                             |                  |                           |                          |                    |        |                     |
| EB0916050)!!                                             | Anonymous        | EP080: Benzene            | 5 ) 0' )                 | 10 µg/L            | !      | 5!                  |
|                                                          |                  | EP080: Toluene            | !7)77)                   | 10 µg/L            | !'     | 5!                  |



Environmental Division

**INTERPRETIVE QUALITY CONTROL REPORT**

|              |                                    |                         |                                                    |
|--------------|------------------------------------|-------------------------|----------------------------------------------------|
| Work Order   | : <b>EB0916017</b>                 | 1 ?                     | : &%                                               |
| 4 " \$t      | : SINC' AI" KNIGHT 5 E" B          | 1&r' t&ry               | : Environm \$t' Divi~ ion Bri~ 1' \$~              |
| 4 &\$t' ct   | : 5 " E" E5 Y WICKS                | 4 &\$t' ct              | : Tim Kilmister                                    |
| Address      | : 32 CORDELIA STREET               | Address                 | : 32 Shand Street Stafford QLD Australia 4053      |
|              | SOUTH BRISBANE QLD, AUSTRALIA 4101 |                         |                                                    |
| E-mail       | : jwicks@skm.com.au                | E-mail                  | : Services.Brisbane@alsenviro.com                  |
| Telephone    | : ****                             | Telephone               | : +61-7-3243 7222                                  |
| Facsimile    | : ****                             | Facsimile               | : +61-7-3243 7218                                  |
| Project      | : QE09537                          | QC Level                | : NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Site         | : Cronulla Park                    |                         |                                                    |
| C-O-C number | : ****                             | Date Samples Received   | : 08-OCT-2009                                      |
| Sampler      | : ****                             | Issue Date              | : 20-OCT-2009                                      |
| Order number | : ****                             | No. of samples received | : !)                                               |
| Quote number | : EN/003/09                        | No. of samples analysed | : !)                                               |

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 Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers





Page : 2 & 5  
Work Order : 000015716  
Client : SINCLAIR KNIGHT MERZ  
Project : QE09537

13-054

## Analysis Holding Time Compliance

The following report summarises extraction ? preparation and analysis times and compares with recommended holding times. Dates reported represent first date ' & extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative= from which the analysis aliquot was taken. Elapsed period ' analysis represents number ' & days from sampling where %' extraction ? digestion is involved or period from extraction ? digestion where this is present. For composite samples, sampling date is assumed ' be # \$ ' & the oldest sample contributing ' the composite. Sample date for laboratory produced leachates is assumed as the completion date ' & the leaching process. Outliers for holding time are based ' USEPA SW 8.5 " APHA " AS and ' 9; <1::: =0A listing ' & breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according ' the analytes being determined ' % the resulting solution. For %%-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days)E Mercury (28 days= F other metals (180 days=0 A recorded breach therefore does %' guarantee a breach for all non-volatile parameters.

Matrix: **WATER**

Evaluation: \* = Holding time breach ; ✓ = Within holding time.

| Method                                                       |             | Sample Date | Extraction / Preparation |                    | Analysis      |                  |
|--------------------------------------------------------------|-------------|-------------|--------------------------|--------------------|---------------|------------------|
| Container / Client Sample ID(s)                              |             |             | Date extracted           | Due for extraction | Date analysed | Due for analysis |
| EP071 SG: Total Petroleum Hydrocarbons - Silica gel cleanup  |             |             |                          |                    |               |                  |
| Amber Glass Bottle - Unpreserved                             |             |             |                          |                    |               |                  |
| MW02,<br>MW04,<br>MW06,<br>MW09,<br>Dup02,<br>CR14,<br>Creek | 07-OCT-2009 | 14-OCT-2009 | 14-OCT-2009              | ✓                  | 16-OCT-2009   | 23-NOV-2009      |
|                                                              |             |             |                          |                    |               |                  |
| EP080/071: Total Petroleum Hydrocarbons                      |             |             |                          |                    |               |                  |
| Amber Glass Bottle - Unpreserved                             |             |             |                          |                    |               |                  |
| MW02,<br>MW04,<br>MW06,<br>MW09,<br>Dup02,<br>CR14,<br>Creek | 07-OCT-2009 | 14-OCT-2009 | 14-OCT-2009              | ✓                  | 16-OCT-2009   | 23-NOV-2009      |
|                                                              |             |             |                          |                    |               |                  |
| Amber VOC Vial - HCl                                         |             |             |                          |                    |               |                  |
| Creek                                                        | 07-OCT-2009 | ---         | ---                      | ***                | 14-OCT-2009   | 21-OCT-2009      |
|                                                              |             |             |                          |                    |               |                  |
| Amber VOC Vial - HCl                                         |             |             |                          |                    |               |                  |
| MW02,<br>MW04,<br>MW06,<br>MW08,<br>Dup01,<br>CR13,<br>CR15  | 07-OCT-2009 | ---         | ---                      | ***                | 15-OCT-2009   | 21-OCT-2009      |
|                                                              |             |             |                          |                    |               |                  |

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|             |     |  |
|-------------|-----|--|
|             |     |  |
|             | --- |  |
| 07-OCT-2009 |     |  |
|             |     |  |



Page : '8.5  
Work Order : 000001576  
Client : SINCLAIR KNIGHT MERZ  
Project : QE09537

13-054

## Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: \* = Quality Control Frequency not within specification E = Quality Control Frequency within specification.

| Quality Control Sample Type                              |         | Count |         | Rate (%) |          | Quality Control Specification |                                                  |
|----------------------------------------------------------|---------|-------|---------|----------|----------|-------------------------------|--------------------------------------------------|
| Analytical Methods                                       |         | QC    | Regular | Actual   | Expected | Evaluation                    |                                                  |
| Laboratory Duplicates (DUP)                              |         |       |         |          |          |                               |                                                  |
| TPH - Semivolatile Fraction                              | "9"6I   | 2     | 1       | 14.3     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                                       | "9"8"   |       | 38      | 10.5     | 10.0     | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Laboratory Control Samples (LCS)                         |         |       |         |          |          |                               |                                                  |
| TPH - Semivolatile Fraction                              | "9"6I   | 1     | 1       | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Total Petroleum Hydrocarbons - Silica Gel Clean Up | EP071SG | 1     | 1       | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                                       | "9"8"   | 2     | 38      | 5.3      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Method Blanks (MB)                                       |         |       |         |          |          |                               |                                                  |
| TPH - Semivolatile Fraction                              | "9"6I   | 1     | 1       | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH - Total Petroleum Hydrocarbons - Silica Gel Clean Up | EP071SG | 1     | 1       | 7.1      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| TPH Volatiles/BTEX                                       | "9"8"   | 2     | 38      | 5.3      | 5.0      | ✓                             | NEPM 1999 Schedule B(3) and ALS QCS3 requirement |
| Matrix Spikes (MS)                                       |         |       |         |          |          |                               |                                                  |
| TPH - Semivolatile Fraction                              | "9"6I   | 1     | 1       | 7.1      | 5.0      | ✓                             | ALS QCS3 requirement                             |
| TPH Volatiles/BTEX                                       | "9"8"   | 2     | 38      | 5.3      | 5.0      | ✓                             | ALS QCS3 requirement                             |

DL Documents

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Page : ) ' & 5  
Work Order : 0000015"6  
Client : SINCLAIR KNIGHT MERZ  
Project : QE09537

13-054

## Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

| Analytical Methods                                           | Method   | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------|----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TPH - Semivolatile Fraction                                  | "9"6!    | WATER  | USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                         |
| TPH - Total Petroleum Hydrocarbons - Silica Gel Clean Up     | EP071SG  | WATER  | (USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C36. This method is compliant with NEPM (1999) Schedule B(3) (Method 506.1)                                                                                                                                                               |
| TPH Volatiles/BTEX                                           | "9"8"    | WATER  | USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2)                                                                                                                           |
| Preparation Methods                                          | Method   | Matrix | Method Descriptions                                                                                                                                                                                                                                                                                                                                                            |
| Separatory Funnel Extraction of Liquids                      | ORG14    | WATER  | USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). ALS default excludes sediment which may be resident in the container. |
| Separatory Funnel Extraction of Liquids - Silica Gel Cleanup | ORG14-SG | WATER  | USEPA SW 846 - 3510B 500 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. ALS default excludes sediment which may be resident in the container. This method is compliant with NEPM (1999) Schedule B(3) (Appdx. 2). |

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Page : 5 & 5  
Work Order : 1516  
Client : SINCLAIR KNIGHT MERZ  
Project : QE09537

13-054

## Summary of Outliers

### Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report0 Surrogate recovery limits are static and based % USEPA SW8.5 or ALS-QW/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

### Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

- For all matrices, no Method Blank value outliers occur.
- For all matrices, no Duplicate outliers occur.
- For all matrices, no Laboratory Control outliers occur.
- For all matrices, no Matrix Spike outliers occur.

### Regular Sample Surrogates

Sub-Matrix: WATER

| Compound Group Name           | Laboratory Sample ID | Client Sample ID | Analyte    | CAS Number | Data  | Limits  | Comment                                            |
|-------------------------------|----------------------|------------------|------------|------------|-------|---------|----------------------------------------------------|
| Samples Submitted             |                      |                  |            |            |       |         |                                                    |
| EP080S: TPH(V)/BTX Surrogates | 1516                 | Dup01            | Toluene-D8 | 2037-26-5  | 111 K | 8811" K | Recovery greater than upper data quality objective |

### Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- No Analysis Holding Time Outliers exist.

### Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- No Quality Control Sample Frequency Outliers exist.



Environmental Division

**SAMPLE RECEIPT NOTIFICATION (SRN)**

**Comprehensive Report**

Work Order : **EB0916017**

|                                                                              |                                                                       |                                                |                                                           |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------|
| Client Ref: <b>EB0916017</b>                                                 | * <b>SINCLAIR KNIGHT MERZ</b>                                         | \$\$\$2000.00                                  | * Environment Division Brisbane                           |
| Client Name: <b>MS ONA KANAS</b>                                             | * <b>MS ONA KANAS</b>                                                 | \$\$\$0.00                                     | * Tim Kilmister                                           |
| Address: <b>EASTERN BUSWAY PROJECT<br/>PO BOX LM4M<br/>STH BRISBANE 4101</b> | * <b>EASTERN BUSWAY PROJECT<br/>PO BOX LM4M<br/>STH BRISBANE 4101</b> | Address                                        | * LNSO 2nd Street StP Rd, LD A2& 405L                     |
| E-mail: <b>" - \$&amp;. &amp; - / 0" / \$2</b>                               | * <b>" - \$&amp;. &amp; - / 0" / \$2</b>                              | E-mail: <b>" - \$&amp;. &amp; - / 0" / \$2</b> | * <b>Services.Brisb\$ " - \$&amp;. &amp; - / 0" / \$2</b> |
| Tele70: <b>* 861 07 L N6 7NM8</b>                                            | * <b>* 861 07 L N6 7NM8</b>                                           | Tele70: <b>* 861 07 L N6 7NM8</b>              | * <b>861-7-LN4L 7NNN</b>                                  |
| 5\$0& (,): <b>* 861 07 L N6 7L~3</b>                                         | * <b>* 861 07 L N6 7L~3</b>                                           | 5\$0& (,): <b>* 861 07 L N6 7L~3</b>           | * <b>861-7-LN4L 7NM</b>                                   |
| Project: <b>* , E095L4</b>                                                   | * <b>* , E095L4</b>                                                   | P\$8                                           | * <b>1 " PN</b>                                           |
| Order n2,2 ~: <b>* +++++</b>                                                 | * <b>* +++++</b>                                                      |                                                |                                                           |
| C-O-C n2,2 ~: <b>* +++++</b>                                                 | * <b>* +++++</b>                                                      | , 2ote n2,2 ~                                  | * <b>ESN009SINKNIOLNN(EN@ L@ ;</b>                        |
| Site: <b>* ~"~ 2"\$ P\$~</b>                                                 | * <b>* ~"~ 2"\$ P\$~</b>                                              |                                                |                                                           |
| S\$, 7" ~: <b>* +++++</b>                                                    | * <b>* +++++</b>                                                      | , C Level                                      | * <b>NEPM 1999 ScO, 2le B:L; \$nd ALS</b>                 |
|                                                                              |                                                                       |                                                | , CSL re<2(, ~"                                           |

**Dates**

|                          |                     |                         |                      |
|--------------------------|---------------------|-------------------------|----------------------|
| %\$te S\$, 7les R 0 (1 , | * ~ MOCT-N~7        | Iss2e D\$               | * 1L-OCT-N009 11:54  |
| Client R <2ested D2e D\$ | * <b>NO-OCT-N~7</b> | ScO, 2led R 7orting D\$ | * <b>20-OCT-2009</b> |

**Delivery Details**

|                   |                   |                           |                             |
|-------------------|-------------------|---------------------------|-----------------------------|
| Mode oPDelivery   | * \$~( ~          | Tem7 ~ \$~2~              | * 7.0, L/L' C - Ice 7" & ~" |
| No. oPcoolers@ A& | * <b>N MEDIUM</b> | No. oPs\$, 7les received  | * 15                        |
| Serc2rity Se\$'   | * Int\$0 /        | No. oPs\$, 7les \$~\$>& , | * 15                        |

**General Comments**

- TQs re7ort cont\$ins tOe P"" Aing inP", \$°("""  
+ S\$, 7le Cont\$ (" ~: & ; @reserv\$tion Non-Com7(\$ 0 &  
+ S2,, \$ry oP\$, 7' :& ; \$nd R <2ested An\$> & (&  
+ R <2ested Deliver\$2' &
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- **For sample MW08 we are only able to do analysis of C6-9/BTEX as only Vials and a Nitric Acid Filtered Clear**  
**Container were received. To do analysis for TPH C10-36 and TPH Silic Gel Clean up the preferred container is a**  
**Amber Glass Unpreserved.**
- Ple\$se direct \$ny t2rn \$"" 2nd @ecO'(0\$I <2eries to tOe I\$2"" \$tory cont\$ct design\$ted \$2"1 /
- Ple\$se direct \$ny <2eries rel\$ted to s\$, 7le condition @2mbering @re\$- \$ges to M\$ggie K\$Q(/
- An\$>°(\$I Aork Ror tQs Aork order Aill be cond2cted \$t ALS Brisb\$"" /
- S\$, 7le Dis7"&\$I - A<2 " 2s (14 d\$>&, Solid (90 d\$>& Rrom d\$te oPcom7letion oPAork order.



## Sample Container(s)/Preservation Non-Compliances

All com7\$risons \$re m\$de \$8\$inst 7~ °~ \$°, °° @7& ~1 \$tion AS, APHA, USEPA st\$°, \$~, &/

- No sample container / preservation non-compliance exist.

## Summary of Sample(s) and Requested Analysis

Some items described 2 "" A m\$y be 7\$rt " P \$ l\$2"" \$°"">  
7rocess ~ 00 && \$ry Rr °O eA0 2tion " P client ~ <2 &°  
°\$sks. P\$0-\$ges , \$y 0""° \$in \$, (° (" "" \$l \$° \$lyses, &200 \$&  
°Ce °, °, (" \$tion " P , (" &° 2re content \$nd 7~ 7\$°\$ (" "  
°\$sks, tC\$t \$re incl2ded in tCe 7\$0-\$8 /  
WcEn °, ° :& \$°, @ °, :& \$re &O' An 2~\$cketed, °O&  
C\$ve been \$&&med by °O l\$2"" \$tory Rr 7""0 && ("8  
72~7"& s. IP tO s\$, 7ling time is , (&7\$yed \$s 0:00 tO  
("P", \$tion A\$s not 7rovided by client.

< \$°°A WATER

| Laboratory sample ID | Client sampling date / time | Client sample ID | WATER - EP071SC<br>TPH Silic\$ Cel Cle\$N U7 | WATER - W-04<br>TPH@TEX | WATER - W-1M<br>TPH/C6 - C9;@TEX |
|----------------------|-----------------------------|------------------|----------------------------------------------|-------------------------|----------------------------------|
| EB0916017-001        | 07-OCT-N009 15:00           | MW01             | ✓                                            | ✓                       |                                  |
| EB0916017-00N        | 07-OCT-N009 15:00           | MW0N             | ✓                                            | ✓                       |                                  |
| EB0916017-00L        | 07-OCT-N009 15:00           | MW0L             | ✓                                            | ✓                       |                                  |
| EB0916017-004        | 07-OCT-N009 15:00           | MW04             | ✓                                            | ✓                       |                                  |
| EB0916017-005        | 07-OCT-N009 15:00           | MW05             | ✓                                            | ✓                       |                                  |
| EB0916017-006        | 07-OCT-N009 15:00           | MW06             | ✓                                            | ✓                       |                                  |
| EB0916017-007        | 07-OCT-N009 15:00           | MW07             | ✓                                            | ✓                       |                                  |
| EB0916017-00M        | 07-OCT-N009 15:00           | MW0M             |                                              |                         | ✓                                |
| EB0916017-009        | 07-OCT-N009 15:00           | MW09             | ✓                                            | ✓                       |                                  |
| EB0916017-010        | 07-OCT-N009 15:00           | %2701            | ✓                                            | ✓                       |                                  |
| EB0916017-011        | 07-OCT-N009 15:00           | %27~ N           | ✓                                            | ✓                       |                                  |
| EB0916017-01N        | 07-OCT-N009 15:00           | R1L              | ✓                                            | ✓                       |                                  |
| EB0916017-01L        | 07-OCT-N009 15:00           | R14              | ✓                                            | ✓                       |                                  |
| EB0916017-014        | 07-OCT-N009 15:00           | R15              | ✓                                            | ✓                       |                                  |
| EB0916017-015        | 07-OCT-N009 15:00           | -                | ✓                                            | ✓                       |                                  |

## Requested Deliverables

### MR JEREMY WICKS

|                                                                  |        |                 |     |
|------------------------------------------------------------------|--------|-----------------|-----|
| + BAU CertiR\$te oPAn\$lysis - NATA ( COA ;                      | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + BAU Inter7retive , C R 7ort - DEFAULT (Anon , CI R 7; ( , CI ; | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + BAU , C R 7ort - DEFAULT (Anon , C R 7; - NATA ( , C ;         | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + A4 - AU S\$, 7le R 0 ( 7t NotiR\$tion - Environment\$I ( SRN ; | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + A4 - AU T\$AInvoice ( INH ;                                    | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + % R\$2lt - CQ\$in oPC2stody ( COC ;                            | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + EDI Form\$t - ENMRC ( ENMRC ;                                  | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + EDI Form\$t - ESDAT ( ESDAT ;                                  | Em\$(' | 0A(0-&.&-./0"/, | \$2 |
| + EDI Form\$t - XT\$b ( XTAB ;                                   | Em\$(' | 0A(0-&.&-./0"/, | \$2 |

### MS ONA KANAS

|                                                                  |        |                    |     |
|------------------------------------------------------------------|--------|--------------------|-----|
| + BAU CertiR\$te oPAn\$lysis - NATA ( COA ;                      | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + BAU Inter7retive , C R 7ort - DEFAULT (Anon , CI R 7; ( , CI ; | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + BAU , C R 7ort - DEFAULT (Anon , C R 7; - NATA ( , C ;         | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + A4 - AU S\$, 7le R 0 ( 7t NotiR\$tion - Environment\$I ( SRN ; | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + % R\$2lt - CQ\$in oPC2stody ( COC ;                            | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + EDI Form\$t - ENMRC ( ENMRC ;                                  | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + EDI Form\$t - ESDAT ( ESDAT ;                                  | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |
| + EDI Form\$t - XT\$b ( XTAB ;                                   | Em\$(' | "- \$~\$&.&-./0"/, | \$2 |



## Certificate of Analysis

Sinclair Knight Merz  
369 Anne Street  
Brisbane QLD 4000  
Australia

Attention: Jeremy Wicks

**Project** 09ENME0031585  
**Client Reference** QE09537  
Cronulla Park  
**Received Date** 18/09/2009 12:10:00 PM

|                           |                   |                   |
|---------------------------|-------------------|-------------------|
| <b>Customer Sample ID</b> | <b>Trip01</b>     | <b>Trip02</b>     |
| <b>Sample Matrix</b>      | <b>WATER</b>      | <b>WATER</b>      |
| <b>Labmark Sample No.</b> | <b>1732403</b>    | <b>1732404</b>    |
| <b>Date Sampled</b>       | <b>17/09/2009</b> | <b>17/09/2009</b> |

### VOC

| Test/Reference | PQL | Unit |
|----------------|-----|------|
|----------------|-----|------|

#### 1100 BTEX & (C6-C9) in Water by P&T

|                                  |     |      |       |     |
|----------------------------------|-----|------|-------|-----|
| 4-Bromofluorobenzene - Surrogate | -   | %    | 89    | 86  |
| Benzene                          | 0.5 | µg/L | 1.6   | 6.7 |
| Toluene                          | 1   | µg/L | 4.6   | 1.1 |
| Ethylbenzene                     | 1   | µg/L | 2.4   | 7.6 |
| Meta- & Para- Xylene             | 2   | µg/L | <2.0  | 7.3 |
| Ortho-Xylene                     | 1   | µg/L | <1.0  | 4.1 |
| Total Xylenes                    | 3   | µg/L | <3.0  | 11  |
| C6-C9 Fraction                   | 20  | µg/L | <20.0 | 44  |

### SVOC

| Test/Reference | PQL | Unit |
|----------------|-----|------|
|----------------|-----|------|

#### 2000 TPH (C10 - C36) in Water by GC

|                  |     |      |      |      |
|------------------|-----|------|------|------|
| C10-C14 Fraction | 40  | µg/L | 720  | 520  |
| C15-C28 Fraction | 100 | µg/L | 1230 | 1210 |
| C29-C36 Fraction | 100 | µg/L | <100 | <100 |

### Metals

| Test/Reference | PQL | Unit |
|----------------|-----|------|
|----------------|-----|------|

#### 3100 Dissolved Metals in Water By ICP/MS

|          |   |      |     |     |
|----------|---|------|-----|-----|
| Arsenic  | 5 | µg/L | 20  | 12  |
| Cadmium  | 5 | µg/L | <5  | <5  |
| Chromium | 5 | µg/L | 7.5 | 14  |
| Copper   | 5 | µg/L | <5  | 5.2 |
| Lead     | 5 | µg/L | <5  | <5  |
| Nickel   | 5 | µg/L | 9.0 | 44  |
| Zinc     | 5 | µg/L | 21  | 12  |

#### 3400 Dissolved Mercury in Water by FIMS

|         |     |      |      |      |
|---------|-----|------|------|------|
| Mercury | 0.1 | µg/L | <0.1 | <0.1 |
|---------|-----|------|------|------|

### Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

| Description                              | Testing Site   | Extracted  | Analysed   |
|------------------------------------------|----------------|------------|------------|
| 1100 BTEX & (C6-C9) in Water by P&T      | Melbourne 1645 | 23/09/2009 | 25/09/2009 |
| 2000 TPH (C10 - C36) in Water by GC      | Melbourne 1645 | 23/09/2009 | 25/09/2009 |
| 3100 Dissolved Metals in Water By ICP/MS | Melbourne 1645 | 22/09/2009 | 23/09/2009 |
| 3400 Dissolved Mercury in Water by FIMS  | Melbourne 1645 | 22/09/2009 | 23/09/2009 |





Environmental Division

**CERTIFICATE OF ANALYSIS**

|               |                                                     |                         |                                                   |
|---------------|-----------------------------------------------------|-------------------------|---------------------------------------------------|
| Work Order    | : EB0903142                                         | Page                    | : 1 of 7                                          |
| Amendment     | : 1                                                 |                         |                                                   |
| Client        | : SINCLAIR KNIGHT MERZ                              | Laboratory              | : Environmental                                   |
| Contact       | : MR JEREMY WILKS                                   | Contact                 | : Tilm Klumister                                  |
| Address       | : 32 ORDELIA STREET<br>BRISBANE QLD, AUSTRALIA 4101 | Address                 | : 32 Shand Street Stafford QLD Australia 4053     |
| E-mail        | : j.wilks@skm.com.au                                | E-mail                  | : Services@Brisbane.alsenviro.com.au              |
| Telephone     | : 3026 7526                                         | Telephone               | : +61-7-3243 7222                                 |
| Facsimile     | : 3026 7526                                         | Facsimile               | : +61-7-3243 7218                                 |
| Project       | : QB10035                                           | Q Level                 | : NEPM 1999 Schedule B(3) and ALS Q'S3 re)irement |
| Order Number  | : 3026 7526                                         | Date Samples Received   | : 26-FEB-2009                                     |
| Order Number  | : 3026 7526                                         | Sample Date             | : 02-MAR-2009                                     |
| Sample Number | : K1 and                                            | No. of samples received | : 4                                               |
| Site          | : former Slac Creek Landfill                        | No. of samples analysed | : 4                                               |
| Quote Number  | : EN/003/0&                                         |                         |                                                   |

This report supersedes any previous report(s) and is the only valid reference. Results are the property of ALS. All pages of this report have been reviewed and approved for release.

This Certificate of Analysis contains the following information:

- General comments
- Analytical Results
- Subsequent limits



NATA Accredited Laboratory 825

This document is a NATA  
accredited reference

Accredited to ISO 17025

**Signatories**

This document has been electronically signed by the authorised signatories indicated below. Electronic signing has been carried out in accordance with procedures specified in Part 11.

| Signatories    | Position                 | Accreditation Category |
|----------------|--------------------------|------------------------|
| Andrew Goodwin | Senior Organic Chemist   | Organics               |
| Stephen Hislop | Senior Inorganic Chemist | Inorganics             |
| Stephen Hislop | Senior Inorganic Chemist | Organics               |

RTI DL RELEASE - EHP

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A Campbell Brothers Limited Company



Page : 3 of 7  
Work Order : EB0903142 Amendment 1  
Client : SINCLAIR KNIGHT MERZ  
Project : QB10035

General Comments

The analytical procedures used by the Environmental Protection Agency have been developed for established internationally recognized procedures published by the USEPA, APHA, AS and NEPM. The developed procedures are employed, the absence of documented standard or by client request.

Where a reported result is less than the detection limit, it is reported as a detection limit basis.

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Where a reported result is less than the detection limit, it is reported as a detection limit basis.

When date and/or time are how, bracketed, these have been assumed by the laboratory for processing purposes. If the sampling time is displayed as 0:00, the format was provided by client.

Key:

- AS Number = AS registry number for database maintained by the Environmental Abstracts Service, a division of the American Chemical Society.
- LOR = Limit of reporting
- AS = The result is not detected for the dual analyte detection, at or above the level of reporting.

- EG020F (Dissolved Metals): Sample EB0903034-012 shows poor matrix spike recovery due to matrix interference. Confirmed by re-analysis.
- This report has been amended to allow the distribution of an Electronic Data Deliverable (EDD) not previously provided. All analysis results are as per the previous report.
- VOC: Samples show high failing surrogate recovery for 1,2-Dichloroethane-D4. This has been deemed acceptable as all associated sample results are less than LOR.



## Analytical Results

Substrate : WATER

|                                          |            | Client sample ID |      | Client sampling date / time |                   |                   |                   |
|------------------------------------------|------------|------------------|------|-----------------------------|-------------------|-------------------|-------------------|
| Compound                                 | CAS Number | LOR              | Unit | CR13                        | CR14              | CR15              | CREEK             |
| EG020F: Dissolved Metals by ICP-MS       |            |                  |      | 26-FEB-2009 11:40           | 26-FEB-2009 11:40 | 26-FEB-2009 11:40 | 26-FEB-2009 11:40 |
|                                          |            |                  |      | EB0903142-001               | EB0903142-002     | EB0903142-003     | EB0903142-004     |
| Arsenic                                  | 7440-38-2  | 0.001            | mg/L | 0.016                       | 0.002             | 0.0001            | <0.001            |
| Cadmium                                  | 7440-43-9  | 0.0001           | mg/L | 0.00001                     | 0.0001            | 0.0001            | 0.00001           |
| Chromium                                 | 7440-47-3  | 0.001            | mg/L | 0.0001                      | 0.0001            | <0.001            | <0.001            |
| Copper                                   | 7440-78-9  | 0.001            | mg/L | 0.0001                      | 0.005             | <0.001            | 0.002             |
| Lead                                     | 7439-92-1  | 0.001            | mg/L | 0.0001                      | 0.001             | <0.001            | <0.001            |
| Nickel                                   | 7440-02-0  | 0.001            | mg/L | 0.001                       | 0.004             | 0.0001            | 0.001             |
| Zinc                                     | 7440-06-5  | 0.001            | mg/L | 0.042                       | 0.105             | 0.046             | 0.098             |
| EG035F: Dissolved Mercury by FIMS        |            |                  |      |                             |                   |                   |                   |
| Mercury                                  | 7439-97-6  | 0.0001           | mg/L | 0.00001                     | 0.00001           | <0.0001           | <0.0001           |
| EP074A: Monocyclic Aromatic Hydrocarbons |            |                  |      |                             |                   |                   |                   |
| Benzene                                  | 71-43-2    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| Toluene                                  | 108-88-3   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| Ethylbenzene                             | 100-41-4   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| meta- & para-Xylene                      | 108-38-3   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| Styrene                                  | 100-42-5   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| ortho-Xylene                             | 95-47-6    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| Isopropylbenzene                         | 98-82-8    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| n-Propylbenzene                          | 103-65-1   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 1,3,5-Trimethylbenzene                   | 108-67-8   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| sec-Butylbenzene                         | 135-98-8   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 1,2,4-Trimethylbenzene                   | 95-63-6    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| tert-Butylbenzene                        | 98-06-6    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| p-Isopropyltoluene                       | 99-87-6    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| n-Butylbenzene                           | 104-51-8   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| EP074B: Oxygenated Compounds             |            |                  |      |                             |                   |                   |                   |
| Vinyl Acetate                            | 108-05-4   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 2-Butanone (MEK)                         | 78-93-3    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 4-Methyl-2-pentanone (MIBK)              | 108-10-1   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 2-Hexanone (MBK)                         | ~91-78-6   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| EP074C: Sulfonated Compounds             |            |                  |      |                             |                   |                   |                   |
| Carbon disulfide                         | 75-15-0    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| EP074D: Fumigants                        |            |                  |      |                             |                   |                   |                   |
| 2,2-Dichloropropane                      | ~94-20-7   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 1,2-Dichloropropane                      | 78-87-5    | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| cis-1,3-Dichloropropylene                | 10061-01-5 | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| trans-1,3-Dichloropropylene              | 10061-02-6 | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |
| 1,2-Dibromoethane (EDB)                  | 106-93-4   | ~                | µg/L | 0"                          | 0"                | 0"                | 0"                |



## Analytical Results

Substrate : WATER

| Subj. atri. : WATER                     |  | Client sample ID |     | Client sampling date / time |               | CR13 |               | CR14 |               | CR15 |               | CREEK |  |     |      |
|-----------------------------------------|--|------------------|-----|-----------------------------|---------------|------|---------------|------|---------------|------|---------------|-------|--|-----|------|
| Compound                                |  | CAS Number       | LOR | Unit                        | EB0903142-001 |      | EB0903142-002 |      | EB0903142-003 |      | EB0903142-004 |       |  |     |      |
| EP074E: Halogenated Aliphatic Compounds |  |                  |     |                             |               |      |               |      |               |      |               |       |  |     |      |
| Dichlorodifluoromethane                 |  | 75-71-8          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Chloromethane                           |  | 74-87-3          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Vinyl chloride                          |  | 75-01-4          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Bromomethane                            |  | 74-83-9          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Chloroethane                            |  | 75-00-3          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Trichlorofluoromethane                  |  | 75-69-4          | "0  | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1-Dichloroethene                      |  | 75-35-4          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Iodomethane                             |  | 74-88-4          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| trans-1,2-Dichloroethene                |  | 156-60-"         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1-Dichloroethane                      |  | 75-34-3          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| cis-1,2-Dichloroethene                  |  | 156-59-2         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1,1-Trichloroethane                   |  | 71-55-6          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1-Dichloropropylene                   |  | 563-58-6         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Carbon Tetrachloride                    |  | 56-23-5          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2-Dichloroethane                      |  | 107-06-2         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Trichloroethene                         |  | 79,01-6          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Dibromomethane                          |  | 74-95-3          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1,2-Trichloroethane                   |  | 79,00-"          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,3-Dichloropropane                     |  | 142-28-9         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Tetrachloroethene                       |  | 127-18-4         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1,1,2-Tetrachloroethane               |  | 630-20,\$        | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| trans-1,4-Dichloro-2-butene             |  | 110-57-6         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| cis-1,4-Dichloro-2-butene               |  | 1476-11-5        | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,1,2,2-Tetrachloroethane               |  | 79-34-5          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2,3-Trichloropropane                  |  | 96-18-4          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Pentachloroethane                       |  | 76-01-7          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2-Dibromo-3-chloropropane             |  | 96-12-8          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Hexachlorobutadiene                     |  | 87-68-3          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| EP074F: Halogenated Aromatic Compounds  |  |                  |     |                             |               |      |               |      |               |      |               |       |  |     |      |
| Chlorobenzene                           |  | 108,90-7         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| Bromobenzene                            |  | 108-86-1         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 2-Chlorotoluene                         |  | 95-49,&          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 4-Chlorotoluene                         |  | 106-43-4         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,3-Dichlorobenzene                     |  | 541-73-1         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,4-Dichlorobenzene                     |  | 106-46-7         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2-Dichlorobenzene                     |  | 9,"0-1           | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2,4-Trichlorobenzene                  |  | 120-82-1         | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |
| 1,2,3-Trichlorobenzene                  |  | 87-61-6          | "   | µg/L                        |               | 0"0  |               | 0"0  |               | 0"0  |               | 0"0   |  | 0"0 | µg/L |



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Work Order : EB0903142 Amendment 1  
Client : SINCLAIR KNIGHT MERZ  
Project : QB10035

13-054

## Analytical Results

Substrate : WATER

| Subj. atri. : WATER                     | Client sample ID            |     |      |      |
|-----------------------------------------|-----------------------------|-----|------|------|
|                                         | Client sampling date / time |     |      |      |
| Compound                                | CAS Number                  | LOR | Unit |      |
| EP074G: Trihalomethanes                 |                             |     |      |      |
| Chloroform                              | 67-66-3                     | "   | µg/L | 0"   |
| Bromodichloromethane                    | 75-27-4                     | "   | µg/L | 0"   |
| Dibromochloromethane                    | 124-48-1                    | "   | µg/L | 0"   |
| Bromoform                               | 75-25-2                     | "   | µg/L | 0"   |
| EP074H: Naphthalene                     |                             |     |      |      |
| Naphthalene                             | 91-20-3                     | 7   | µg/L | <7   |
| EP080/071: Total Petroleum Hydrocarbons |                             |     |      |      |
| C6 - C9 Fraction                        | ----                        | 20  | µg/L | <20  |
| C10 - C14 Fraction                      | ----                        | "0  | µg/L | 60   |
| C15 - C28 Fraction                      | ----                        | 100 | µg/L | 300  |
| C29 - C36 Fraction                      | ----                        | "0  | µg/L | 60   |
| EP074S: VOC Surrogates                  |                             |     |      |      |
| 1,2-Dichloroethane-D4                   | 17050-07-0                  | 0.1 | K    | 169  |
| Toluene-D8                              | 2037-26-5                   | 0.1 | K    | 89.6 |
| 4-Bromofluorobenzene                    | 460-00-4                    | 0.1 | K    | 102  |
| EP080S: TPH(V)/BTX Surrogates           |                             |     |      |      |
| 1,2-Dichloroethane-D4                   | 17050-07-0                  | 0.1 | K    | 117  |
| Toluene-D8                              | 2037-26-5                   | 0.1 | K    | 100  |
| 4-Bromofluorobenzene                    | 460-00-4                    | 0.1 | K    | 110  |

| CR13                                    | CR14              | CR15              | CREEK             |      |
|-----------------------------------------|-------------------|-------------------|-------------------|------|
| 26-FEB-2009 11:40                       | 26-FEB-2009 11:40 | 26-FEB-2009 11:40 | 26-FEB-2009 11:40 | ---- |
| EB0903142-001                           | EB0903142-002     | EB0903142-003     | EB0903142-004     |      |
| EP074G: Trihalomethanes                 |                   |                   |                   |      |
| Chloroform                              | 0"                | 0"                | 0"                | ---- |
| Bromodichloromethane                    | 0"                | 0"                | 0"                | ---- |
| Dibromochloromethane                    | 0"                | 0"                | 0"                | ---- |
| Bromoform                               | 0"                | 0"                | 0"                | ---- |
| EP074H: Naphthalene                     |                   |                   |                   |      |
| Naphthalene                             | <7                | <7                | <7                | ---- |
| EP080/071: Total Petroleum Hydrocarbons |                   |                   |                   |      |
| C6 - C9 Fraction                        | <20               | <20               | <20               | ---- |
| C10 - C14 Fraction                      | 60                | 0"0               | 0"0               | ---- |
| C15 - C28 Fraction                      | 300               | <100              | <100              | ---- |
| C29 - C36 Fraction                      | 60                | 0"0               | 0"0               | ---- |
| EP074S: VOC Surrogates                  |                   |                   |                   |      |
| 1,2-Dichloroethane-D4                   | 169               | 163               | 160               | ---- |
| Toluene-D8                              | 89.6              | 91.6              | 90.8              | ---- |
| 4-Bromofluorobenzene                    | 102               | 94.3              | 92.2              | ---- |
| EP080S: TPH(V)/BTX Surrogates           |                   |                   |                   |      |
| 1,2-Dichloroethane-D4                   | 117               | 113               | 111               | ---- |
| Toluene-D8                              | 100               | 91.6              | 90.8              | ---- |
| 4-Bromofluorobenzene                    | 110               | 102               | 99.6              | ---- |

DL Documents

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Work Order : EB0903142 Amendment 1  
Client : SINCLAIR KNIGHT MERZ  
Project : QB10035

### Surrogate Control Limits

| Substrate: WATER                      |             | Recovery Limits (%) |      |
|---------------------------------------|-------------|---------------------|------|
| Compound                              | CAS Number  | Low                 | High |
| <b>EP074S: VOC Surrogates</b>         |             |                     |      |
| 1,2-Dichloroethane-D4                 | 17050, 07-0 | 80                  | 120  |
| Toluene-D8                            | 2037-26-5   | 80                  | 110  |
| 4-Bromofluorobenzene                  | 460, 00-4   | 80                  | 115  |
| <b>EP080S: TPH(V)/BTEX Surrogates</b> |             |                     |      |
| 1,2-Dichloroethane-D4                 | 17050, 07-0 | 80                  | 120  |
| Toluene-D8                            | 2037-26-5   | 80                  | 110  |
| 4-Bromofluorobenzene                  | 460, 00-4   | 80                  | 115  |

13-054



Environmental Division

QUALITY CONTROL REPORT

|               |                                 |                    |                                                     |
|---------------|---------------------------------|--------------------|-----------------------------------------------------|
| Work Order    | : EB0903142                     | 83Ae               | : 689.                                              |
| Amendment     | : 1                             |                    |                                                     |
| 4e-t          | : SINCLAIR KNIGHT MERZ          |                    |                                                     |
| 8>13D         | : EF7G?F?EH71 ICKS              | : 3<8=318=>        | : ?>@=8>Ae>1347E@518>7CHe<3>e                       |
| Add#55        | : L) 7" FB?; IA7STF??           | 8>13D              | : IA7K14A5te=                                       |
|               | CFISCAC?7L;B 1A) STFA; IA7K6, 6 | Add#55             | : L) 7S13>d7St#eet7S13998#7L ;B7A25t=3187K, ) L     |
| ?+43i4        | : 8D1H1 5HA 08AG2               | ?+43i4             | : Se=@#5C#5<3>el 345>@=8D8A                         |
| Te4D18>e      | : L, ) 475) ) 4                 | Te4D18>e           | : %46+5+L) KL 75)))                                 |
| 23D5A14e      | : ++++                          | 23D5A14e           | : %46+5+L) KL 75) 6&                                |
| 8=88D         | : L C6,, L)                     | L 7e@4             | : C?8E76...77 SD1ed247CL(73>17A; SL CSL7e) 21#eAe>t |
| Site          | : 28=Ae=8431B57D#eH7;3>d944     |                    |                                                     |
| * + 7>2A<e=   | : ++++                          | B31e7S3A D457FeD#d | : ) 4+2?C+), , :                                    |
| S3A D#e=      | : KC 13>d                       | I552e7B3e          | : , ) #EAF+), , :                                   |
| * #e=72A<e=   | : ++++                          | C8G89753B57FeD#d   | : K                                                 |
| L 281e7>2A<e= | : ? C*, L*, &                   | C8G89753B57S-3#ed  | : K                                                 |

1157 #D8#7 2D#e=5de57 3>>7 D#e@8257 #D8#5(7 D1t17 1157 #e9#e>D#G Fe52457 3DD#7 187 11e7 53A D#5(7 357 52<A1ttedG A44D3Ae57 8971157 #D8#7 13@7 #e>7 D1eD#d7 3>d7 3D#8@17 9#e435eG

1157L 234y7 8>1#847#D8#7D8181>571e7984#B-A7>98=A38>:

- 3<8=318=>7E2D4D3e7B) 8(7FeD#49F-e431@7#e=@>13Ae7B90#e>D#7F8B(73>d7AD#D3>D#7;A it5
- E et18d7C43#7EC(73>d7;3<8=38=>7 8>1#847D1#7; CS(7FeD#49F-eD8@=>73>d7AD#D3>D#7;A it5
- E31#D5DI#7ES(7FeD#49F-eD8@=>73>d7AD#D3>D#7;A it5



WORLD RECOGNISED  
ACCREDITATION

|                           |                     |                 |                          |
|---------------------------|---------------------|-----------------|--------------------------|
| CATA#Ded17;3<8=38=>78)    | 7                   | Signatories     | Accreditation Category   |
| 1157#8D2Ae>1757552ed7>7   | 3DD8#3>D#D1t17CATA7 | Signatories     | Position                 |
| 3DDed13it8>7e) 21#eAe>15C |                     | E31t1eD7B88dD1> | Se>18=7 #A3>1D7 1eA15t   |
| AD#ed1798=7D8#3>D#D1t17   | ISO1? 765, ) ) C    | SteD1e>Hislop   | Senior Inorganic C1emist |
|                           |                     | Step1en Hislop  | Senior Inorganic C1emist |
|                           |                     |                 | O-A3>1D5                 |
|                           |                     |                 | Inorganics               |
|                           |                     |                 | Organics                 |





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General Comments

- (1e analytical proced2res 2sed by t1e Environmental Division 1ave been developed from established internationally recognized proced2res s2c1 as t1ose p2blis1ed by t1e USEPA, APHA, AS and NEPM. In 1o2se developed proced2res are employed in t1e absence of doc2mented standards or by client req2est.
- 1ere moist2re determination 1as been performed, res2lts are reported on a dry weig1t basis.
  - 1ere a reported less t1an (<) res2lt is 1ig1er t1an t1e LOR, t1is may be d2e to primary sample eDract/digestate dil2tion and/or ins2ffient sample for analysis.
  - 1ere t1e LOR of a reported res2lt differs from standard LOR, t1is may be d2e to 1ig1 moist2re content, ins2fficient sample (red2ced weig1t employed) or matriDinterference.
- Key :
- Anonymo2s = Refers to samples w1ic1 are not specifically part of t1is work order b2t formed part of t1e QC process lot
  - CAS N2mber = CAS registry n2mber from database maintained by C1emical Abstracts Services. T1e C1emical Abstracts Service is a division of t1e American C1emical Society.
  - LOR = Limit of reporting
  - RPD = Relative Percentage Difference
  - # = Indicates failed QC



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## Laboratory Duplicate (DUP) Report

(1e 62ality control term Laboratory 12plicate refers to a randomly selected intralaboratory split. Laboratory 2plicates provide information regarding met1od precision and sample 1eterogeneity. (1e permitted ranges for 11e Relative Percent Deviation (RPD) of Laboratory 12plicates are specified in ALS Met1od +° -EN/38 and are dependent on 11e magnit2de of res2lts in comparison to 11e level of reporting: Res2lt < 10 times LOR:- No Limit; Res2lt between 10 and ) 0 times LOR:- 0% - 50%; Res2lt > ) 0 times LOR:- 0% - ) °°A5

| S2b-MatriD: WATER                                         |                  |                                     | Laboratory Duplicate (DUP) Report |       |      |                 |                  |         |                     |
|-----------------------------------------------------------|------------------|-------------------------------------|-----------------------------------|-------|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                      | Client sample ID | Method: Compound                    | CAS Number                        | LOR   | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EG020F: Dissolved Metals by ICP-MS (QC Lot: 905995)       |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB090314) >°°                                             | CR13             | no ) 0A-F: Cadmi2m                  | 7440-43-9                         | °5°°° | mg/L | 9°5°°°          | 9°5°°°           | °5°     | No Limit            |
|                                                           |                  | no ) 0A-F: Arsenic                  | DI!°>°?> )                        | °5°°  | mg/L | °5° E           | °5°              | °5°     | 0% - 50%            |
|                                                           |                  | no ) 0A-F: C1romi2m                 | DI!°>ID>°                         | °5°°  | mg/L | 9°5°°           | 9°5°°            | °5°     | No Limit            |
|                                                           |                  | no ) 0A-F: Copper                   | DI!°> °>?                         | °5°°  | mg/L | 9°5°°           | 9°5°°            | °5°     | No Limit            |
|                                                           |                  | no ) 0A-F: Lead                     | 7439-9) >                         | °5°°  | mg/L | 9°5°°           | 9°5°°            | °5°     | No Limit            |
|                                                           |                  | no ) 0A-F: Nickel                   | DI!°>° ) >°                       | °5°°  | mg/L | °5°°            | °5°°             | °5°     | No Limit            |
| EG035F: Dissolved Mercury by FIMS (QC Lot: 903748)        |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB090) 389-045                                            | Anonymo2s        | EG035F: Merc2ry                     | 7439-97-6                         | °5°°° | mg/L | 9°5°°°          | 9°5°°°           | °5°     | No Limit            |
| EB0903130-001                                             | Anonymo2s        | EG035F: Merc2ry                     | 7439-97-6                         | °5°°° | mg/L | 9°5°°°          | 9°5°°°           | °5°     | No Limit            |
| EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 903712) |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB0903099-001                                             | Anonymo2s        | EP074: Benzene                      | D > 1° > )                        | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: Tol2ene                      | °? > 2° > )                       | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: Et1ylbenzene                 | °° > 1° > )                       | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: meta- & para-Xylene          | 108-38-8                          | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  |                                     | °E > 1° > )                       | ,     |      |                 |                  |         |                     |
|                                                           |                  | EP074: Styrene                      | °° > 1° > )                       | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: ort1o-Xylene                 | 95-47-6                           | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: Isopropylbenzene             | 98-8) >?                          | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: n-Propylbenzene              | °° > E > )                        | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: 1.3.5-Trimet1ylbenzene       | °? > ED >?                        | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: sec-B2tylbenzene             | 135-98-8                          | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: 1.) 4-Trimet1ylbenzene       | 95-63-6                           | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: tert-B2tylbenzene            | 98-06-6                           | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           |                  | EP074: p-Isopropyltol2ene           | 99-87-6                           | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                           | °! > °?          | ,                                   | µg/L                              | 9,    | 9,   | °5°             | No Limit         |         |                     |
| EP074B: Oxygenated Compounds (QC Lot: 903712)             |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB0903099-001                                             | Anonymo2s        | EP074: Vinyl Acetate                | °? > ° > 1°                       | ,     | µg/L | 9°              | 9°               | °5°     | No Limit            |
|                                                           |                  | EP074: ) > 2tanone (MEK)            | 78-93-3                           | ,     | µg/L | 9°              | 9°               | °5°     | No Limit            |
|                                                           |                  | EP074: 4-Met1yl-) -pentanone (MIBK) | °? > °°                           | ,     | µg/L | 9°              | 9°               | °5°     | No Limit            |
|                                                           |                  | EP074: ) -HeDanone (MBK)            | 591-78-6                          | ,     | µg/L | 9°              | 9°               | °5°     | No Limit            |
| EP074C: Sulfonated Compounds (QC Lot: 903712)             |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB0903099-001                                             | Anonymo2s        | EP074: Carbon dis2lfide             | D > ° >°                          | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |
| EP074D: Fumigants (QC Lot: 903712)                        |                  |                                     |                                   |       |      |                 |                  |         |                     |
| EB0903099-001                                             | Anonymo2s        | EP074: ) 3-Dic1loropropane          | 594-) >D                          | ,     | µg/L | 9,              | 9,               | °5°     | No Limit            |

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## Laboratory Duplicate (DUP) Report



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| S2b-MatrixID: WATER                                                 |                  |                               |            |     |      |                 |                  |         |                     |
|---------------------------------------------------------------------|------------------|-------------------------------|------------|-----|------|-----------------|------------------|---------|---------------------|
| Laboratory sample ID                                                | Client sample ID | Method: Compound              | CAS Number | LOR | Unit | Original Result | Duplicate Result | RPD (%) | Recovery Limits (%) |
| EP074F: Halogenated Aromatic Compounds (QC Lot: 903712) - continued |                  |                               |            |     |      |                 |                  |         |                     |
| EB0903099-001                                                       | Anonymo2s        | EP074: 1,4-Dic1lorobenzene    | "E>IE>D    | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: 1.) -Dic1lorobenzene   | 95-50-1    | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: 1.) 4-Tric1lorobenzene | ) ">?)>    | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: 1.) 3-Tric1lorobenzene | ?D>E >E    | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
| EP074G: Trihalomethanes (QC Lot: 903712)                            |                  |                               |            |     |      |                 |                  |         |                     |
| EB0903099-001                                                       | Anonymo2s        | EP074: C1loroform             | ED>EE>~    | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: Bromodic1lorometh1ane  | D,>) D>I   | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: Dibromoc1lorometh1ane  | )>I?>      | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
|                                                                     |                  | EP074: Bromoform              | D,>) ,>)   | ,   | µg/L | 9,              | 9,               | °5°     | No Limit            |
| EP074H: Naphthalene (QC Lot: 903712)                                |                  |                               |            |     |      |                 |                  |         |                     |
| EB0903099-001                                                       | Anonymo2s        | EP074: Nap1t1alene            | 91-) ">~   | D   | µg/L | 9D              | 9D               | °5°     | No Limit            |
| EP080/071: Total Petroleum Hydrocarbons (QC Lot: 903711)            |                  |                               |            |     |      |                 |                  |         |                     |
| EB0903090-001                                                       | Anonymo2s        | EP080: C6 - C9 Fraction       | >>>>       | )°  | µg/L | 9)°             | 9)°              | °5°     | No Limit            |

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### Method Blank (MB) and Laboratory Control Spike (LCS) Report

(1e 62ality control term Met1od / Laboratory Blank refers to an analyte free matrixD to 71ic1 all reagents are added in t1e same vol2mes or proportions as 2sed in standard sample preparation. (1e p2rpose of t1is QC parameter is to monitor potential laboratory contamination. (1e 62ality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrixD spiked wit1 target analytes. T1e p2rpose of t1is QC parameter is to monitor met1od precision and acc2racy independent of sample matrixD Dynamic Recovery Limits are based on statistical eval2ation of processed LCS.

S2b-MatrixD: WATER

S2b-MatriID: WATER

| Method: Compound                                         |              |      |                          | Laboratory Control Spike (LCS) Report |                    |      |      |
|----------------------------------------------------------|--------------|------|--------------------------|---------------------------------------|--------------------|------|------|
| CAS Number                                               | LOR          | Unit | Method Blank (MB) Report | Spike Concentration                   | Spike Recovery (%) | Low  | High |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 905995)       |              |      |                          |                                       |                    |      |      |
| °5°° ) OA-F: Arsenic                                     | Dil!°>~?> )  | mg/L | 9°5°°                    | 0.100 mg/L                            | °D                 | D, ) | , )  |
| °5°° ) OA-F: Cadmi2m                                     | 7440-43-9    | mg/L | 9°5°°                    | 0.100 mg/L                            | °                  | 79   | ~    |
| °5°° ) OA-F: C1romi2m                                    | Dil!°>ID>~   | mg/L | 9°5°°                    | 0.100 mg/L                            | 09                 | ?!   | )?   |
| Dil!°>,°>?                                               | °5°°         | mg/L | 9°5°°                    | °5)00 mg/L                            | 90.)               | ?    | )    |
| °5°° ) OA-F: Copper                                      | °5°°         | mg/L | 9°5°°                    | 0.100 mg/L                            | °°                 | ?~   | )~   |
| °5°° ) OA-F: Lead                                        | 7439-9)>     | mg/L | 9°5°°                    | 0.100 mg/L                            | 99.7               | D?   | )!   |
| °5°° ) OA-F: Nickel                                      | Dil!°>° ) >° | mg/L | 9°5°°                    | °5)00 mg/L                            | ,                  | ?    | ~°   |
| °5°° ) OA-F: Zinc                                        | Dil!°>EE>E   | mg/L | 9°5°°                    |                                       |                    |      |      |
| EG035F: Dissolved Mercury by FIMS (QCLot: 903748)        |              |      |                          |                                       |                    |      |      |
| EG035F: Merc2ry                                          | 7439-97-6    | mg/L | 9°5°°                    | 0.010 mg/L                            | ?                  | ?!   | )°   |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 903712) |              |      |                          |                                       |                    |      |      |
| EP074: Benzene                                           | D >!°> )     | µg/L | 9,                       | 10 µg/L                               | 88.9               | D, ) | )    |
| EP074: Tol2ene                                           | °?>??>~      | µg/L | 9,                       | 10 µg/L                               | D)5                | D 5) | )!   |
| EP074: Et1ylbenzene                                      | °°>I >I      | µg/L | 9,                       | 10 µg/L                               | ?E5D               | DE   | )°   |
| EP074: meta- & para-Xylene                               | 108-38-3     | µg/L | 9,                       | °0 µg/L                               | ??5                | E?   | ~ )  |
| °E>I ) >~                                                |              |      |                          |                                       |                    |      |      |
| °°>! ) >,                                                | µg/L         | 9,   | 10 µg/L                  | °?                                    | E?                 | E?   | )D   |
| 95-47-6                                                  | µg/L         | 9,   | 10 µg/L                  | 9) 5~                                 | DE                 | DE   | )    |
| 98-8) >?                                                 | µg/L         | 9,   | 10 µg/L                  | 89.7                                  | D!                 | D!   | )~   |
| °°>E;>                                                   | µg/L         | 9,   | 10 µg/L                  | 89.4                                  | D°                 | D°   | )    |
| °?>ED>?                                                  | µg/L         | 9,   | 10 µg/L                  | 91.7                                  | D!                 | D!   | )    |
| 135-98-8                                                 | µg/L         | 9,   | 10 µg/L                  | 93.)                                  | D)                 | D)   | )!   |
| 95-63-6                                                  | µg/L         | 9,   | 10 µg/L                  | 96.4                                  | D°5,               | D°5, | )!   |
| 98-06-6                                                  | µg/L         | 9,   | 10 µg/L                  | 9) 5D                                 | D 5E               | D 5E | )?   |
| 99-87-6                                                  | µg/L         | 9,   | 10 µg/L                  | ?D5                                   | E?5~               | E?5~ | ~°   |
| °!>, >?                                                  | µg/L         | 9,   | 10 µg/L                  | 95.9                                  | ED                 | ED   | )E   |
| EP074B: Oxygenated Compounds (QCLot: 903712)             |              |      |                          |                                       |                    |      |      |
| °?>°>I                                                   | µg/L         | 9,°  | 100 µg/L                 | ??5,                                  | E,                 | ID   |      |
| 78-93-3                                                  | µg/L         | 9,°  | 100 µg/L                 | # 159                                 | !                  | ~°   |      |
| °?>°>                                                    | µg/L         | 9,°  | 100 µg/L                 |                                       | E~                 | °D   |      |
| 591-78-6                                                 | µg/L         | 9,°  | 100 µg/L                 | 98.6                                  | E)                 | ~    | ,    |
| EP074C: Sulfonated Compounds (QCLot: 903712)             |              |      |                          |                                       |                    |      |      |
| D, >°>                                                   | µg/L         | 9,   | 10 µg/L                  | # 6) 5E                               | E?                 | ~    | ,    |
| EP074D: Fumigants (QCLot: 903712)                        |              |      |                          |                                       |                    |      |      |
| 594-)°>D                                                 | µg/L         | 9,   | 10 µg/L                  | ,                                     | E°5D               | !°   |      |

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S2b-MatriD: WATER

| Method: Compound                                        |  |                                 | CAS Number | LOR  | Unit | Result   | Method Blank (MB) Report |                    |                     | Laboratory Control Spike (LCS) Report |      |  |
|---------------------------------------------------------|--|---------------------------------|------------|------|------|----------|--------------------------|--------------------|---------------------|---------------------------------------|------|--|
|                                                         |  |                                 |            |      |      |          | Spike Concentration      | Spike Recovery (%) | Recovery Limits (%) | Low                                   | High |  |
| EP074D: Fumigants (QCLot: 903712) - continued           |  |                                 |            |      |      |          |                          |                    |                     |                                       |      |  |
| EP074: 1.) -Dic1loropropane                             |  | D?>?D> , °°E >° > , °°E >° ) >E |            | µg/L | 9, ° | 10 µg/L  | 93.8                     | 69.7               | ) ?                 |                                       |      |  |
| EP074: cis-1.3-Dic1loropropylene                        |  |                                 |            | µg/L | 9, ° | ) 0 µg/L | 96.3                     | E?                 | ~                   |                                       |      |  |
| EP074: trans-1.3-Dic1loropropylene                      |  |                                 |            | µg/L | 9, ° | ) 0 µg/L | °?                       | ED                 | !°                  |                                       |      |  |
| EP074: 1.) -Dibromoet1ane (EDB)                         |  | 106-98-4                        |            | µg/L | 9, ° | 10 µg/L  | ??5E                     | E?5                | ~ )                 |                                       |      |  |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 903712) |  |                                 |            |      |      |          |                          |                    |                     |                                       |      |  |
| EP074: Dic1lorodif12oromet1ane                          |  | D, >D >? , °                    |            | µg/L | 9, ° | 100 µg/L | ?°5, °                   | )                  | ~°                  |                                       |      |  |
| EP074: C1loromet1ane                                    |  | D!>?D>~ , °                     |            | µg/L | 9, ° | 100 µg/L | EE5D                     | !°5                | ~°                  |                                       |      |  |
| EP074: Vinyl c1loride                                   |  | D, >° >! , °                    |            | µg/L | 9, ° | 100 µg/L | # 163                    | ~ , °              | !!                  |                                       |      |  |
| EP074: Bromomet1ane                                     |  | 74-83-9                         |            | µg/L | 9, ° | 100 µg/L | 9) 5! , D5, °            |                    | ~°                  |                                       |      |  |
| EP074: C1loroet1ane                                     |  | D, >°°°~ , °                    |            | µg/L | 9, ° | 100 µg/L | ° )                      | D°                 | °D                  |                                       |      |  |
| EP074: Tric1lorof12oromet1ane                           |  | 75-69-4                         |            | µg/L | 9, ° | 100 µg/L | # 135                    | E! , °             | ~ , °               |                                       |      |  |
| EP074: 1.1-Dic1loroet1ane                               |  | D, >° >! , °                    |            | µg/L | 9, ° | 10 µg/L  | ? , °                    | 63.9               | ~ , °               |                                       |      |  |
| EP074: Iodomet1ane                                      |  | D!>??>! , °                     |            | µg/L | 9, ° | 10 µg/L  | ?°5, °                   | D5)                | ~°                  |                                       |      |  |
| EP074: trans-1.) -Dic1loroet1ane                        |  | .E>E°> , °                      |            | µg/L | 9, ° | 10 µg/L  | 96.6                     | D°                 | ) ?                 |                                       |      |  |
| EP074: 1.1-Dic1loroet1ane                               |  | D, >°!>~ , °                    |            | µg/L | 9, ° | 10 µg/L  | ° )                      | E!                 | °E                  |                                       |      |  |
| EP074: cis-1.) -Dic1loroet1ane                          |  | 156-59-1                        |            | µg/L | 9, ° | 10 µg/L  | )                        | D                  | ) ?                 |                                       |      |  |
| EP074: 1.1.1-Tric1loroet1ane                            |  | D >°, >E , °                    |            | µg/L | 9, ° | 10 µg/L  | ) E                      | E?5!               | ~ , °               |                                       |      |  |
| EP074: 1.1-Dic1loropropylene                            |  | .E>°, >E , °                    |            | µg/L | 9, ° | 10 µg/L  | 93.5                     | D 5!               | ) D                 |                                       |      |  |
| EP074: Carbon Tetracloride                              |  | .E>° > , °                      |            | µg/L | 9, ° | 10 µg/L  | ~                        | E!                 | °                   |                                       |      |  |
| EP074: 1.) -Dic1loroet1ane                              |  | °D>°E> , °                      |            | µg/L | 9, ° | 10 µg/L  | # 156                    | E?                 | °                   |                                       |      |  |
| EP074: Tric1loroet1ane                                  |  | 79-01-6                         |            | µg/L | 9, ° | 10 µg/L  | ° , °                    | D)                 | ) D                 |                                       |      |  |
| EP074: Dibromomet1ane                                   |  | 74-95-3                         |            | µg/L | 9, ° | 10 µg/L  | ? , °                    | 63.9               | °E                  |                                       |      |  |
| EP074: 1.1.) -Tric1loroet1ane                           |  | 79-00-5                         |            | µg/L | 9, ° | 10 µg/L  | 91.4                     | 69.)               | ~                   |                                       |      |  |
| EP074: 1.3-Dic1loropropane                              |  | ! ) > 8-9                       |            | µg/L | 9, ° | 10 µg/L  | 90.7                     | D°5D               | ~°                  |                                       |      |  |
| EP074: Tetracl1oroet1ane                                |  | )D>° ?>! , °                    |            | µg/L | 9, ° | 10 µg/L  | DE5E                     | D°5?               | ~ )                 |                                       |      |  |
| EP074: 1.1.1.) -Tetracl1oroet1ane                       |  | E°°>° ) >°E                     |            | µg/L | 9, ° | 10 µg/L  | ?°5)                     | ? , °              | ~                   |                                       |      |  |
| EP074: trans-1.4-Dic1loro-) >/2tene                     |  | °> D>E                          |            | µg/L | 9, ° | 10 µg/L  | E                        | ) E                | ~°                  |                                       |      |  |
| EP074: cis-1.4-Dic1loro-) >/2tene                       |  | !DE>° > , °                     |            | µg/L | 9, ° | 10 µg/L  | ) ! , °                  | 5                  | ~°                  |                                       |      |  |
| EP074: 1.1.) 9 -Tetracl1oroet1ane                       |  | 79-34-5                         |            | µg/L | 9, ° | 10 µg/L  | ° )                      | D)                 | ~                   |                                       |      |  |
| EP074: 1.) :3-Tric1loropropane                          |  | 96-18-4                         |            | µg/L | 9, ° | 10 µg/L  | # 157                    | 59                 | !?                  |                                       |      |  |
| EP074: Pentac1loroet1ane                                |  | DE>° >D                         |            | µg/L | 9, ° | 10 µg/L  | ?D5, °                   | E?                 | ~?                  |                                       |      |  |
| EP074: 1.) -Dibromo-3-c1loropropane                     |  | 96-11) >?                       |            | µg/L | 9, ° | 10 µg/L  | ~ , °                    | )                  | ° , °               |                                       |      |  |
| EP074: HeDac1lorob2tadiene                              |  | ?D>E?>~ , °                     |            | µg/L | 9, ° | 10 µg/L  | ° )                      | E)                 | ! )                 |                                       |      |  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 903712)  |  |                                 |            |      |      |          |                          |                    |                     |                                       |      |  |
| EP074: C1lorobenzene                                    |  | 108-90-7                        |            | µg/L | 9, ° | 10 µg/L  | ?°5°                     | DD                 | ) °                 |                                       |      |  |
| EP074: Bromobenzene                                     |  | °?>?E> , °                      |            | µg/L | 9, ° | 10 µg/L  | ??5D                     | DE                 | ) )                 |                                       |      |  |
| EP074: ) -C1loratol2ene                                 |  | 95-49-8                         |            | µg/L | 9, ° | 10 µg/L  | 97.7                     | D.5°               | ) !                 |                                       |      |  |
| EP074: 4-C1loratol2ene                                  |  | °E>°!> , °                      |            | µg/L | 9, ° | 10 µg/L  | 97.7                     | DE                 | ) °                 |                                       |      |  |
| EP074: 1.3-Dic1lorobenzene                              |  | ! >D°> , °                      |            | µg/L | 9, ° | 10 µg/L  | 93.9                     | D.5)               | ) °                 |                                       |      |  |

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Work Order : EB090314) Amendment 1  
Client : SINCLAIR KNIGHT MERZ  
Project : + °°°° ,

13-054

| S2b-MatrixID: WATER                                                |            |     |      | Method Blank (MB) Report |                     | Laboratory Control Spike (LCS) Report |                     |      |  |
|--------------------------------------------------------------------|------------|-----|------|--------------------------|---------------------|---------------------------------------|---------------------|------|--|
| Method: Compound                                                   | CAS Number | LOR | Unit | Result                   | Spike Concentration | Spike Recovery (%)                    | Recovery Limits (%) |      |  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 903712) - continued |            |     |      |                          |                     |                                       |                     |      |  |
| EP074: 1,4-Dic1lorobenzene                                         | °E>IE>D    | ,   | µg/L | 9,                       | 10 µg/L             | 96.8                                  | DE5                 | 119  |  |
| EP074: 1.) -Dic1lorobenzene                                        | 95-50-1    | ,   | µg/L | 9,                       | 10 µg/L             | 99.3                                  | DD5D                | ?    |  |
| EP074: 1.) 4-Tric1lorobenzene                                      | ) °>?>     | ,   | µg/L | 9,                       | 10 µg/L             | 90.3                                  | E?5"                | ) ?  |  |
| EP074: 1.) 3-Tric1lorobenzene                                      | ?D>E>E     | ,   | µg/L | 9,                       | 10 µg/L             | 95.7                                  | D,                  | ) ,  |  |
| EP074G: Trihalomethanes (QCLot: 903712)                            |            |     |      |                          |                     |                                       |                     |      |  |
| EP074: C1loroform                                                  | ED>EE>~    | ,   | µg/L | 9,                       | 10 µg/L             | ?                                     | D 5                 | ) D  |  |
| EP074: Bromodic1loromet1ane                                        | D,>D>I     | ,   | µg/L | 9,                       | 10 µg/L             | D                                     | E?                  | ~ )  |  |
| EP074: Dibromoc1loromet1ane                                        | )>?>       | ,   | µg/L | 9,                       | 10 µg/L             | ?D5,                                  | 69                  | ~    |  |
| EP074: Bromoform                                                   | D,>,>      | ,   | µg/L | 9,                       | 10 µg/L             | ?~5?                                  | E)                  | "D   |  |
| EP074H: Naphthalene (QCLot: 903712)                                |            |     |      |                          |                     |                                       |                     |      |  |
| EP074: Nap1t1alene                                                 | 91-) °>~   | D   | µg/L | 9D                       | 10 µg/L             | °!                                    | ?~5                 | 119  |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 903711)            |            |     |      |                          |                     |                                       |                     |      |  |
| EP080: C6 - C9 Fraction                                            | >>>>       | ) ° | µg/L | 9) °                     | 160 µg/L            | 98.0                                  | D~                  | ~ ,  |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 903863)            |            |     |      |                          |                     |                                       |                     |      |  |
| EP071: C10 - C14 Fraction                                          | >>>>       | °   | µg/L | 9,°                      | 600 µg/L            | D) 5D                                 | 49                  | °    |  |
| EP071: C15 - C) 8 Fraction                                         | >>>>       | °°  | µg/L | 9 °°                     | ° ) 0 µg/L          | 81.9                                  | , ?                 | ~    |  |
| EP071: C) 9 - C36 Fraction                                         | >>>>       | °   | µg/L | 9,°                      | >>>>                | >>>>                                  | >>>>                | >>>> |  |

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## Matrix Spike (MS) Report

The QC parameter is to monitor potential matrix effects on analyte recovery. The QC parameter is calculated as the ratio of the peak area of the spiked sample to the peak area of the unspiked sample. The QC parameter ranges from 0.8 to 1.2. A QC parameter outside this range indicates a significant matrix effect.

**S2b-MatriD: WATER**

| S2b-MatriID: WATER                                       |                  |                           |             | Matrix Spike (MS) Report |                    |                     |  |
|----------------------------------------------------------|------------------|---------------------------|-------------|--------------------------|--------------------|---------------------|--|
| Laboratory sample ID                                     | Client sample ID | Method/Compound           | CAS Number  | Spike Concentration      | Spike Recovery (%) | Recovery Limits (%) |  |
| EG020F: Dissolved Metals by ICP-MS (QCLot: 905995)       |                  |                           |             |                          |                    |                     |  |
| EB0903141-003                                            | CR14             | 0A-F: Arsenic             | DI<°>~?> )  | 0.100 mg/L               | °~                 | D°                  |  |
|                                                          |                  | 0A-F: Cadmi2m             | 7440-43-9   | 0.100 mg/L               | 98.9               | D°                  |  |
|                                                          |                  | 0A-F: C4romi2m            | DI<°>ID>~   | 0.100 mg/L               | 97.6               | D°                  |  |
|                                                          |                  | 0A-F: Copper              | DI<°> °>? ) | °5) mg/L                 | 95.8               | D°                  |  |
|                                                          |                  | 0A-F: Lead                | 7439-9) >   | 0.100 mg/L               | 95.9               | D°                  |  |
|                                                          |                  | 0A-F: Nickel              | DI<°>° ) >° | 0.100 mg/L               | 9)5!               | D°                  |  |
|                                                          |                  | 0A-F: Zinc                | DI!<°>EE>E  | °5) mg/L                 | °                  | D°                  |  |
| EG035F: Dissolved Mercury by FIMS (QCLot: 903748)        |                  |                           |             |                          |                    |                     |  |
| EB090) 389-046                                           | Anonymo2s        | EG035F: Merc2ry           | 7439-97-6   | 0.010 mg/L               | ?                  | D°                  |  |
| EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 903712) |                  |                           |             |                          |                    |                     |  |
| EB0903141-003                                            | Anonymo2s        | EP074: Benzene            | D >!<°> )   | 10 µg/L                  | D,5                | D°                  |  |
|                                                          |                  | EP074: Tol2ene            | °?>?>~      | 10 µg/L                  | 71.9               | D°                  |  |
| EP074E: Halogenated Aliphatic Compounds (QCLot: 903712)  |                  |                           |             |                          |                    |                     |  |
| EB0903141-003                                            | Anonymo2s        | EP074: 1,1-Dic1loroet1ene | D, >~>! )   | 10 µg/L                  | °                  | D°                  |  |
|                                                          |                  | EP074: Tric1loroet1ene    | 79-01-6     | 10 µg/L                  | D?5,               | D°                  |  |
| EP074F: Halogenated Aromatic Compounds (QCLot: 903712)   |                  |                           |             |                          |                    |                     |  |
| EB0903141-003                                            | Anonymo2s        | EP074: C1lorobenzene      | 108-90-7    | 10 µg/L                  | 84.9               | D°                  |  |
| EP080/071: Total Petroleum Hydrocarbons (QCLot: 903711)  |                  |                           |             |                          |                    |                     |  |
| EB0903141-003                                            | Anonymo2s        | EP080: C6 - C9 Fraction   | >>>>        | 140 µg/L                 | D,5?               | D°                  |  |





Environmental Division

**SAMPLE RECEIPT NOTIFICATION (SRN)**

**Comprehensive Report**

Work Order : **EB0903142**

Client : **\* SINCLAIR KNIGHT MERZ**  
 Contact : **\* < R JEREMY WICKS**  
 Address : **32 CORDELIA STREET**  
**BRISBANE QLD, AUSTRALIA 4101**  
 E-mail : **jwic4s5 s4m.com.au**  
 Telephone : **3026 7526**  
 Facsimile : **,,,,**  
 Project : **~ #\$\$\$+**  
 Order number : **,,,,**  
 C-O-C number : **,,,,**  
 Site : **Former Slac4s cree4 Landfill**  
 Sampler : **K.Chand**

ALS Division : **\* Environment\$I Division Brisb\$**  
 Analyst : **\* Tim Kilmister**  
 Address : **32 Shand Street Stafford QLD Australia**  
**"\$+~**  
 E-mail : **Services.Brisbane5 alsenviro.com**  
 Telephone : **+61-7-3243 7222**  
 Facsimile : **+61-7-3243 7218**  
 Page : **# )( ~**  
 Quote number : **ES2008SINKNI0045 (EN/003/08)**  
 QC Level : **NEPM 1999 Schedule B(3) and ALS**  
**QCS3 requirement**

**Dates**

Date Samples Received : **26-FEB-2009**  
 Client Requested Due Date : **02-MAR-2009**  
 Issue Date : **26-FEB-2009 13:24**  
 Scheduled Reporting Date : **02-MAR-2009**

**Delivery Details**

Mode of Delivery : **Client Drop off**  
 No. of coolers/boxes : **1 LARGE**  
 Security Seal : **Intact.**  
 Temperature : **4.6 C - Ice present**  
 No. of samples received : **"**  
 No. of samples analysed : **"**

**General Comments**

- This report contains the following information:
  - , Sample Container(s)/Preservation Non-Compliances
  - , Summary of Sample(s) and Requested Analysis
  - , Requested Deliverables
- **Samples received in appropriately pretreated and preserved containers.**
- **Sample(s) have been received within recommended holding times.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Please direct any queries related to sample condition / numbering / breakages to Maggie Kahi.
- Analytical work for this work order will be conducted at ALS Brisbane.
- Sample Disposal - Aqueous (14 days), Solid (90 days) from date of completion of work order.



## Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exist.

## Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested analyses. Samples may contain additional analyses, such as the determination of moisture content and preparation analyses, that are included in the package.

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.

Matrix: WATER

| Laboratory sample ID | Client sampling date / time | Client sample ID | WATER - W-02<br>8 Metals | WATER - W-09<br>9C-D |
|----------------------|-----------------------------|------------------|--------------------------|----------------------|
| EB0903142-001        | 26-FEB-2009 11:40           | CR13             | ✓                        | ✓                    |
| EB0903142-002        | 26-FEB-2009 11:40           | CR14             | ✓                        | ✓                    |
| EB0903142-003        | 26-FEB-2009 11:40           | CR15             | ✓                        | ✓                    |
| EB0903142-004        | 26-FEB-2009 11:40           | CREEK            | ✓                        | ✓                    |

## Requested Deliverables

### MR JEREMY WICKS

|                                                             |       |                    |
|-------------------------------------------------------------|-------|--------------------|
| *AU Certificate of Analysis - NATA ( COA )                  | Email | jwic4s5 s4m.com.au |
| *AU Interpretive QC Report - DEFAULT (Anon QCI Rep) ( QCI ) | Email | jwic4s5 s4m.com.au |
| *AU QC Report - DEFAULT (Anon QC Rep) - NATA ( QC )         | Email | jwic4s5 s4m.com.au |
| A4 - AU Sample Receipt Notification - Environmental ( SRN ) | Email | jwic4s5 s4m.com.au |
| A4 - AU Tax Invoice ( INV )                                 | Email | jwic4s5 s4m.com.au |
| Default - Chain of Custody ( COC )                          | Email | jwic4s5 s4m.com.au |
| EDI Format - ESDAT ( ESDAT )                                | Email | jwic4s5 s4m.com.au |

## Labmark Internal Quality Control Review

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. Matrix spike recoveries are calculated on an 'As Received' basis; the parent sample result is moisture corrected after the % recovery is determined.
3. Proficiency trial results are available on request.
4. Actual PQLs are matrix dependant. Quoted PQLs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spike or surrogate recoveries.
6. Test samples duplicated or spiked, are for this job only and are identified in the following QC report.
7. SVOC analyses on waters are performed on homogenized, unfiltered sample, unless noted otherwise.
8. When individual results are qualified in the body of a report, refer to the qualifier descriptions that follow.
9. Samples were analysed on an as received basis.
10. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sampling and Preservation Chart for Soils & Waters' for holding times. (LM-FOR-ADM-020)

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Acknowledgement.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitability qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

**\*\*NOTE:** pH duplicates are reported as a range NOT as an RPD

### Quality Control Results

Laboratory: **EN\_METALS**

| Sample, Test, Result Reference           | Units | Result 1 |                        | Acceptance Limits      | Pass Limits | Qualifying Codes |
|------------------------------------------|-------|----------|------------------------|------------------------|-------------|------------------|
| 1737175 [ Method Blank ]                 |       |          |                        |                        |             |                  |
| 3400 Dissolved Mercury in Water by FIMS  |       |          |                        |                        |             |                  |
| Mercury                                  | µg/L  | <0.1     |                        | < 0.1                  | Pass        |                  |
| 1737185 [ Method Blank ]                 |       |          |                        |                        |             |                  |
| 3100 Dissolved Metals in Water By ICP/MS |       |          |                        |                        |             |                  |
| Antimony                                 | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Arsenic                                  | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Barium                                   | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Beryllium                                | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Boron                                    | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Cadmium                                  | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Chromium                                 | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Cobalt                                   | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Copper                                   | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Lead                                     | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Manganese                                | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Molybdenum                               | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Nickel                                   | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Selenium                                 | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Tin                                      | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Vanadium                                 | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| Zinc                                     | µg/L  | <5       |                        | < 5                    | Pass        |                  |
| 1737176 [ Laboratory Control Sample ]    |       |          |                        |                        |             |                  |
| 3400 Dissolved Mercury in Water by FIMS  |       |          |                        |                        |             |                  |
| Mercury                                  | µg/L  | 9.6      | Expected Value<br>10.0 | Percent Recovery<br>96 | 80-120 %    | Pass             |

**Laboratory: EN\_METALS**

| Sample, Test, Result Reference           | Units | Result 1 |                |                  | Acceptance Limits | Pass Limits | Qualifying Codes |
|------------------------------------------|-------|----------|----------------|------------------|-------------------|-------------|------------------|
| 1737186 [ Laboratory Control Sample ]    |       |          |                |                  |                   |             |                  |
| 3100 Dissolved Metals in Water By ICP/MS |       |          | Expected Value | Percent Recovery |                   |             |                  |
| Antimony                                 | µg/L  | 97       | 100.0          | 97               | 80-120 %          | Pass        |                  |
| Arsenic                                  | µg/L  | 97       | 100.0          | 97               | 80-120 %          | Pass        |                  |
| Barium                                   | µg/L  | 100      | 100.0          | 100              | 80-120 %          | Pass        |                  |
| Beryllium                                | µg/L  | 93       | 100.0          | 93               | 80-120 %          | Pass        |                  |
| Boron                                    | µg/L  | 110      | 100.0          | 107              | 80-120 %          | Pass        |                  |
| Cadmium                                  | µg/L  | 100      | 100.0          | 105              | 80-120 %          | Pass        |                  |
| Chromium                                 | µg/L  | 100      | 100.0          | 101              | 80-120 %          | Pass        |                  |
| Cobalt                                   | µg/L  | 99       | 100.0          | 99               | 80-120 %          | Pass        |                  |
| Copper                                   | µg/L  | 100      | 100.0          | 100              | 80-120 %          | Pass        |                  |
| Lead                                     | µg/L  | 100      | 100.0          | 102              | 80-120 %          | Pass        |                  |
| Manganese                                | µg/L  | 98       | 100.0          | 98               | 80-120 %          | Pass        |                  |
| Molybdenum                               | µg/L  | 92       | 100.0          | 92               | 80-120 %          | Pass        |                  |
| Nickel                                   | µg/L  | 98       | 100.0          | 98               | 80-120 %          | Pass        |                  |
| Selenium                                 | µg/L  | 94       | 100.0          | 94               | 80-120 %          | Pass        |                  |
| Tin                                      | µg/L  | 100      | 100.0          | 100              | 80-120 %          | Pass        |                  |
| Vanadium                                 | µg/L  | 99       | 100.0          | 99               | 80-120 %          | Pass        |                  |
| Zinc                                     | µg/L  | 100      | 100.0          | 100              | 80-120 %          | Pass        |                  |

**Laboratory: EN\_SVOC**

| Sample, Test, Result Reference        | Units | Result 1 |                |                  | Acceptance Limits | Pass Limits | Qualifying Codes |
|---------------------------------------|-------|----------|----------------|------------------|-------------------|-------------|------------------|
| 1736842 [ Method Blank ]              |       |          |                |                  |                   |             |                  |
| 2000 TPH (C10 - C36) in Water by GC   |       |          |                |                  |                   |             |                  |
| C10-C14 Fraction                      | µg/L  | <40      |                |                  | < 40              | Pass        |                  |
| C15-C28 Fraction                      | µg/L  | <100     |                |                  | < 100             | Pass        |                  |
| C29-C36 Fraction                      | µg/L  | <100     |                |                  | < 100             | Pass        |                  |
| 1736843 [ Laboratory Control Sample ] |       |          |                |                  |                   |             |                  |
| 2000 TPH (C10 - C36) in Water by GC   |       |          | Expected Value | Percent Recovery |                   |             |                  |
| C10-C14 Fraction                      | µg/L  | 2600     | 200.0          | 104              | 70-130 %          | Pass        |                  |
| C15-C28 Fraction                      | µg/L  | 2890     | 200.0          | 116              | 70-130 %          | Pass        |                  |
| C29-C36 Fraction                      | µg/L  | 2840     | 200.0          | 114              | 70-130 %          | Pass        |                  |

**Laboratory: EN\_VOC**

| Sample, Test, Result Reference        | Units | Result 1 |                |                  | Acceptance Limits | Pass Limits | Qualifying Codes |
|---------------------------------------|-------|----------|----------------|------------------|-------------------|-------------|------------------|
| 1736430 [ Method Blank ]              |       |          |                |                  |                   |             |                  |
| 1100 MAH(BTEX & C6-C9) in Water P&T   |       |          |                |                  |                   |             |                  |
| Benzene                               | µg/L  | <0.5     |                |                  | < 0.5             | Pass        |                  |
| C6-C9 Fraction                        | µg/L  | <20.0    |                |                  | < 20              | Pass        |                  |
| Ethylbenzene                          | µg/L  | <1.0     |                |                  | < 1               | Pass        |                  |
| Meta- & Para- Xylene                  | µg/L  | <2.0     |                |                  | < 2               | Pass        |                  |
| Ortho-Xylene                          | µg/L  | <1.0     |                |                  | < 1               | Pass        |                  |
| Toluene                               | µg/L  | <1.0     |                |                  | < 1               | Pass        |                  |
| Total Xylenes                         | µg/L  | <3.0     |                |                  | < 3               | Pass        |                  |
| 4-Bromofluorobenzene - Surrogate      | %     | 87       |                |                  | 70-130 %          | Pass        |                  |
| 1736432 [ Laboratory Control Sample ] |       |          |                |                  |                   |             |                  |
| 1100 MAH(BTEX & C6-C9) in Water P&T   |       |          | Expected Value | Percent Recovery |                   |             |                  |
| Benzene                               | µg/L  | 12       | 10.0           | 117              | 70-130 %          | Pass        |                  |
| C6-C9 Fraction                        | µg/L  | 170      | 140.0          | 124              | 70-130 %          | Pass        |                  |
| Ethylbenzene                          | µg/L  | 11       | 10.0           | 114              | 70-130 %          | Pass        |                  |
| Meta- & Para- Xylene                  | µg/L  | 25       | 20.0           | 124              | 70-130 %          | Pass        |                  |
| Ortho-Xylene                          | µg/L  | 12       | 10.0           | 116              | 70-130 %          | Pass        |                  |
| Toluene                               | µg/L  | 12       | 10.0           | 117              | 70-130 %          | Pass        |                  |
| Total Xylenes                         | µg/L  | 36       | 30.0           | 122              | 70-130 %          | Pass        |                  |
| 4-Bromofluorobenzene - Surrogate      | %     | 101      |                |                  | 70-130 %          | Pass        |                  |

#### Sample Integrity

|                                      |     |
|--------------------------------------|-----|
| Custody Seals Intact (if used)       | Yes |
| Attempt to Chill was evident         | Yes |
| Samples correctly preserved          | Yes |
| Organic samples had Teflon liners    | Yes |
| Samples received with Zero Headspace | Yes |
| Samples received within HoldingTime  | Yes |
| Some samples have been subcontracted | Yes |

#### Authorised By

|                 |                         |                            |
|-----------------|-------------------------|----------------------------|
| Alex Petridis   | Senior Analyst - SVOC   |                            |
| Ruth Callander  | Client Services Officer |                            |
| Mark Herbstreit | Senior Analyst - Metals | Accreditation Number: 1645 |
| Khoa Pham       | Analyst - VOC           | Accreditation Number: 1645 |
| Olga Alieva     | Analyst - SVOC          | Accreditation Number: 1645 |
| Patricia Hua    | Senior Analyst          | Accreditation Number: 1645 |

#### Laboratory Manager

|               |                                |                     |
|---------------|--------------------------------|---------------------|
| David Elliott | Laboratory Manager - Melbourne |                     |
|               |                                | 49-Sch4 - Signature |

#### Final Report

- Indicates Not Requested \* Indicates NATA accreditation does not cover the performance of this service

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The samples were not collected by Laboratory staff.

## Appendix F Volatile Gas Sampling

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## Client Contact

## *Landfill monitoring for volatile organic compounds for Sinclair Knight Merz*

*Ona Kanas  
Sinclair Knight Merz  
32 Cordelia Street  
South Brisbane Qld 4101*

## Client Reference

*Order Number QE 9537*

## Investigation Period

*29 October 2009*

## Simtars Investigator(s)

*Rex Marshall (ph 3810 6348)*

## Reviewed

*Joel Franklin*

## Approved Signatory

49-Sch4 - Signature

## Report Date

*2 December 2009*

## 1 Objectives

Ms Ona Kanas of SKM requested that Simtars undertake monitoring for volatile organic compounds at five borehole sites in Logan area. Rex Marshall of Simtars carried out the monitoring on 29 October 2009.

## 2 Scope of Work

The five bore hole sites on the corner of Compton and Kingston Roads at Logan were located in field area called Cronulla Park previously used as a landfill site. The bore holes were sleeved and capped with a valve and a padlocked cover.

Sampling of volatile organic compounds was carried out using SKC activated charcoal tubes as a trapping medium as per NIOSH method 1501. Approximately 20 litres of air from the bore holes was passed through the charcoal tubes which were then sent for analysis for 73 organic compounds by gas chromatography-mass spectrometry techniques.

Borehole MW08 showed higher levels of production of condensation during sampling so the condensate generated was collected for analysis of volatile organic compounds also.

## 3 Results

Results of the monitoring for volatile organic compounds are shown in the Appendix.

## 4 Weather

The weather conditions at Archerfield Airport on 29 October 2009 were a fine day with an average temperature of 23.9 degree Celcius, average Relative Humidity of 46 % and an average Mean Sea Level Pressure of 1022.5 hPa.

## 5 Discussion

The sample collected from borehole number MW08 showed the highest level of volatile organic compounds. (see Appendix). The condensate sample from this borehole was analysed for volatile organic compounds and was shown to contain less than detectable levels of volatile organic compounds.

The laboratory undertaking the analysis commented that the mixture of organic compounds present in four of the air samples collected was similar to that of mineral turps solvent mixture.

## 6 Acknowledgments

The cooperation and assistance of client staff members during the project was most appreciated.



## 7 References

|                                          |                                                          |
|------------------------------------------|----------------------------------------------------------|
| Leeder Consulting Laboratories, Victoria | Method MA-15.WW.01 Volatile Organic Compounds            |
| NIOSH Manual of Analytical Methods       | Method 1500: 'Hydrocarbons 36-126 deg C BP'              |
|                                          | Method 1501: 'Hydrocarbons Aromatic'                     |
| Workcover, New South Wales               | Method WCA.207 Analysis of VOCs in Workplace Air by GCMS |

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## 8 Appendix

**Table 1: Volatile Organic Compounds (mg/m<sup>3</sup>) detected in Cronulla Park Boreholes**

| Compound                        | MW03 | MW04 | MW05 | MW07 | MW08 |
|---------------------------------|------|------|------|------|------|
| <b>Aliphatic Hydrocarbons</b>   |      |      |      |      |      |
| 2-methylbutane                  | <0.2 | 1.1  | 0.2  | 0.6  | 2.1  |
| n-pentane                       | <0.2 | 1.4  | <0.2 | 0.6  | 1.3  |
| 2-methylpentane                 | <0.2 | 0.9  | <0.2 | 0.5  | 1.9  |
| 3-methylpentane                 | <0.2 | 0.7  | <0.2 | 0.3  | 1.3  |
| methylcyclopentane              | <0.2 | 0.3  | <0.2 | 0.3  | 1.0  |
| n-hexane                        | <0.2 | 1.1  | 0.2  | 0.6  | 2.3  |
| 3-methylhexane                  | <0.2 | 0.9  | <0.2 | 0.4  | 1.6  |
| cyclohexane                     | <0.2 | 0.6  | <0.2 | 0.4  | 1.6  |
| methylcyclohexane               | <0.2 | 2.7  | 0.6  | 0.7  | 4.1  |
| 2,2,4-trimethylpentane          | <0.2 | 0.6  | <0.2 | 0.3  | 1.8  |
| n-heptane                       | <0.2 | 0.7  | <0.2 | 0.4  | 1.7  |
| n-octane                        | <0.2 | 0.2  |      | 0.4  | 1.5  |
| n-nonane                        | <0.2 | <0.2 | 2.0  | 2.5  | 7.7  |
| n-decane                        | <0.2 | <0.2 | 5.1  | 1.7  | 14.7 |
| n-undecane                      | <0.2 | <0.2 | 1.8  | <0.2 | 7.8  |
| n-dodecane                      | <0.2 | <0.2 | <0.2 | <0.2 | 0.3  |
| alpha-pinene                    | <0.2 | <0.2 | <0.2 | <0.2 | 2.4  |
| D-limonene                      | <0.2 | <0.2 | <0.2 | <0.2 | 1.2  |
| <b>Chlorinated Hydrocarbons</b> |      |      |      |      |      |
| chlorobenzene                   | <0.2 | 0.8  | 0.7  | <0.2 | <0.2 |
| 1,4-dichlorobenzene             | <0.2 | 0.8  | 2.1  | 1.1  | <0.2 |
| <b>Aromatic Hydrocarbons</b>    |      |      |      |      |      |
| benzene                         | <0.2 | 0.6  | 0.3  | 0.7  | 0.6  |
| ethylbenzene                    | <0.2 | 0.1  | 1.1  | 0.2  | 6.6  |
| isopropylbenzene                | <0.2 | 2.1  | 1.4  | 1.5  | 1.9  |
| 1,2,3-trimethylbenzene          | <0.1 | 0.2  | <0.1 | 0.4  | <0.1 |
| 1,2,4-trimethylbenzene          | 3    | 0.5  | 3.5  | 0.6  | 6.2  |
| 1,3,5-trimethylbenzene          | <0.2 | <0.1 | 1.7  | 0.2  | 1.8  |
| p/m-xylene                      | <0.2 | <0.1 | 2.7  | 0.8  | 5.2  |
| o-xylene                        | <0.2 | 0.1  | 0.7  | <0.1 | 0.7  |
| <b>Ketones</b>                  |      |      |      |      |      |
| acetone                         | <0.2 | <0.2 | 0.6  | <0.2 | <0.2 |
| <b>Alcohols</b>                 |      |      |      |      |      |
| 2-ethyl hexanol                 | <1.0 | <1.0 | 3.7  | 4.9  | <1.0 |
|                                 |      |      |      |      |      |
| <b>Total VOC#</b>               | <2.0 | 374  | 342  | 481  | 666  |

# total VOC result considered semi-qualitative due to mass spectra measurement technique



## Appendix G QAQC Data Validation Assessment

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## G.1 Project Data Quality Objectives

The following defines the data quality objectives for the investigation.

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Documentation and data <b>completeness</b> | <ul style="list-style-type: none"> <li>Site conditions properly described.</li> <li>Sampling locations properly described and located.</li> <li>Completion of field records, chain of custody documentation, laboratory test certificates from NATA-registered laboratories.</li> <li>Samples are collected from all areas of potential environmental concern.</li> <li>Samples are tested for all potential contaminants of concern.</li> <li>Sampling events cover worst case conditions on more than one occasion.</li> <li>95% completeness for the investigation.</li> </ul> |
| Data <b>comparability</b>                  | <ul style="list-style-type: none"> <li>Use of appropriate techniques for the sampling, storage and transportation of samples.</li> <li>Use of NATA certified laboratory using NEPM procedures.</li> <li>Use of NATA certified check laboratory.</li> </ul>                                                                                                                                                                                                                                                                                                                        |
| Data <b>representativeness</b>             | <ul style="list-style-type: none"> <li>Collection of representative samples from each sampling location.</li> <li>Collection of representative samples across the sub-site.</li> <li>Use of appropriate techniques for the sampling, storage and transportation of samples.</li> </ul>                                                                                                                                                                                                                                                                                            |
| <b>Precision</b> for sampling and analysis | <ul style="list-style-type: none"> <li>Use of properly trained and qualified field personnel.</li> <li>Use of blind field duplicates to be collected at a minimum rate of 1 in 10.</li> <li>Relative Percentage Differences (RPD) to be less than 30% for inorganic and 50% for organic analyses.</li> <li>Acceptable quality of rinsate blanks.</li> </ul>                                                                                                                                                                                                                       |
| <b>Accuracy</b> for sampling and analysis  | <ul style="list-style-type: none"> <li>Achieve laboratory QC criteria.</li> <li>Blanks returned with no contamination.</li> <li>All matrix and surrogates returned acceptable results.</li> <li>All laboratory duplicates within acceptable ranges.</li> <li>All control results within acceptable ranges.</li> </ul>                                                                                                                                                                                                                                                             |



## G.2 Quality Assurance

### G.2.1 Field QA/QC Samples

The Quality Assurance and Quality Control (QA/QC) protocols used in the fieldwork conducted for this investigation is outlined in **Table G-1**.

■ **Table G-1 Field QA/QC Assessment**

| Field Procedure                                  | QA Procedure Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sampling Team                                    | All fieldwork was undertaken by professionally qualified environmental scientists or engineers trained in conducting site contamination investigations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Sample Location Logs                             | All test pit/ monitoring wells were recorded using a GPS unit with sub metre accuracy.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preservation                                     | <p>All samples were submitted to the laboratory in appropriately preserved containers consisting of eskies containing sample bottles and jars covered in crushed ice.</p> <p>Exceptions to this are included below:</p> <ul style="list-style-type: none"> <li>- EB0907913 – Due to small volume of water achieved, sample MW08 did not have an appropriately preserved bottle for metals analysis. The analysis was continued based on the age of the sample (&lt;6 hours) and the suitability of the unpreserved sample provided to ALS.</li> <li>- EB0908932 – Samples for MW07 have been annotated as being incorrectly preserved, however it is noted that the correct sample containers have been provided to ALS. Subsequently, the sample is considered to have been preserved appropriately for the analysis undertaken</li> <li>- EB0916017 – Due to the small volume of sample achieved from MW08, the requested analysis was unable to undertaken.</li> </ul>                                                                                                                                                                                                                                                                                                                                                              |
| Rinsate Blanks                                   | A total of three rinsate blanks were collected from equipment used to collect soil samples (one each day). One rinsate sample was collected from equipment used during the water sampling. No analytes were detected with the exception of zinc that was found at levels consistent with background zinc levels in the region's drinking water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Blind Field Duplicates (for testing by Main Lab) | <p>Blind field duplicate samples were collected from the Landfill capping layer and sampled based on Australian Standard AS4482.1-2005. A duplicate sample ratio of 1 per 10 samples has been achieved for the investigation.</p> <p>Three field blind duplicate samples of soil were submitted for analysis.</p> <p>The RPDs were within the QA/QC Criteria (50% organics and 20% for inorganics).</p> <p>Four field duplicate samples of water were collected from monitoring wells, one during each sampling round. Three metal samples exceeded the QA/QC criteria of 20% and one sample did not meet the TPH QA/QC criteria of 50%.</p> <p>Exceedances of metals identified in groundwater samples are likely a result of low sample concentration exaggerating the % RPD, and are not expected to affect the integrity of the results.</p> <p>Where hydrocarbons have not met the % RPD criteria, it is likely that this can be contributed to the difficulty in sampling volatiles within the groundwater matrix. As a slight hydrocarbon sheen was identified on groundwater sampled from this location, it is plausible that this may have led to difficulty in achieving homogeneous samples during this sample event. It is noted that regardless, both samples are in exceedances of the Dutch Investigation Criteria.</p> |



| Field Procedure                              | QA Procedure Description                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Split Samples (for Inter-Laboratory Testing) | Inter-laboratory duplicate samples were submitted for two sample events .<br>Analysis of split samples was not undertaken for the majority of the testing. The absence of split sampling is not expected to affect the data validity, given the proven data replicability, the results of the limited split sampling and the use of a NATA accredited laboratory for all analytical testing. |

### G.2.2 Laboratory QA/QC Assessment

ALS was the primary laboratory used for this investigation. ALS is NATA-accredited for the specified tests. All tests have been undertaken with consideration to the requirements of NEPM (1999).

A data validation process was used to assess the effectiveness of the overall analytical process and to assess the use of data. **Table G-2** outlines the data validation criteria, qualifications to the data, overall QA/QC procedures used for the laboratory testing program and an assessment of laboratory's QA/QC performance.

■ **Table G-2 Laboratory QA/QC Assessment**

| Protocol                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Holding Times              | Holding times are the permissible elapsed time in days from the collection of the sample to its extraction and/or analysis. All samples taken as part of this investigation were extracted and analysed within the recommended holding times with the exception of 4 samples for water testing and 4 samples for soil testing which were not major exceedances.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Method / Laboratory Blanks | 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. In total 37 method blanks for water and 8 method blanks for soil were analysed.<br>The QC criterion is no detectable contamination and the QC criterion was met in all cases.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Laboratory Duplicates      | Laboratory duplicates are field samples that are split in the laboratory and subsequently analysed a number of times in the same batch. These sub-samples are selected by the laboratory to assess the accuracy and precision of the analytical method. Intra-laboratory duplicates are performed on a frequency of 1 per 10 samples.<br>ALS undertakes QA/QC procedures such as calibration standards, laboratory control samples, surrogates, reference materials, sample duplicates and matrix spikes. The QC criterion is 20% for metals and inorganic analytes, and 50% for organic analytes. The frequency of laboratory duplicates was met in all cases. In total 20 laboratory duplicates for soil and 50 laboratory duplicate for leachate (water) were analysed as part of the laboratory QA/QC.<br>One laboratory duplicate sample exceeded RPD criteria of 50% for Ammonia as N, which returned an RPD of 156%. The recorded concentrations were above the acceptance criteria of five times the LOR.<br>Two laboratory soil samples had missing or incorrect parent samples.<br>Given the total number of samples analysed and the conformity of all other laboratory duplicates, this result is not considered to affect the interpretation of the laboratory data. |
| Laboratory                 | A laboratory control standard (LCS) is a standard reference material used in preparing primary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



| Protocol           | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control Samples    | <p>standards. The concentration should be equivalent to a mid range standard to confirm the primary calibration. Laboratory control samples are performed on a frequency of 1 per 20 samples or at least one per analytical run. The QA/QC criterion is 70% to 130% recovery. In total 11 LCS for soil and 45 LCS for water were analysed.</p> <p>Five water sample and 2 soil sample LCS recoveries did not meet the nominated acceptance criteria.</p>                                                                                                                                                                                                                                                   |
| Matrix Spikes (MS) | <p>MSs are field samples to which a predetermined stock solution of known concentration has been added. The samples are then analysed for recovery of the known addition. Recoveries should be within the stated laboratory control limits of 70% to 130%, and duplicates should have RPDs of less than 50%. In total 9 matrix spikes for soil (from 87 analytes analysed) and 26 matrix spikes for water were analysed (from a total of 241 analytes analysed). This met the sampling frequency of 1 in 20 samples for water and soil samples.</p> <p>All MS met the nominated QA/QC acceptance criteria with the exception of one soil MS where recovery was less than lower data quality objective.</p> |
| Surrogate Spikes   | <p>Surrogate spikes provide a means of checking, for every analysis that no gross errors have occurred at any stage of the procedure leading to significant analyte loss. Recoveries should be within the stated laboratory control limits of 70 to 130%.</p> <p>The majority of the surrogate recoveries fell within the nominated acceptance criteria. However, in 11 cases (4 for soil and 7 for water analytes) the surrogate recovery RPD Recovery less than lower data quality objective.</p>                                                                                                                                                                                                        |
| QA/QC Conclusion   | <p>The QA/QC indicators either all complied with the required QA/QC acceptance criteria or showed variations that were not considered to significantly affect the quality of the data. It is therefore concluded that, for the purposes of the investigation, the QA/QC results are adequate and the quality of the data is acceptable for use in this environmental assessment.</p>                                                                                                                                                                                                                                                                                                                       |



### G.3 QA/QC Data Tables

■ **Table G-3 Soil RPD Values**

| Analyte               | MW09 0.0-0.1 | Dup 01 | RPD% | TP2 0.2-0.3 | Dup 02 | RPD% | TP3 0.2-0.3 | Dup 03 | RPD% |
|-----------------------|--------------|--------|------|-------------|--------|------|-------------|--------|------|
| <b>Metals (mg/kg)</b> |              |        |      |             |        |      |             |        |      |
| Arsenic               | <5           | <5     |      | <5          | <5     |      | <5          | <5     |      |
| Cadmium               | <1           | <1     |      | <1          | <1     |      | <1          | <1     |      |
| Chromium              | 12           | 9      | 28.6 | 5           | 6      | 18.2 | 5           | 3      | 50.0 |
| Copper                | <5           | <5     |      | <5          | <5     |      | <5          | <5     |      |
| Lead                  | <5           | <5     |      | <5          | <5     |      | <5          | <5     |      |
| Nickel                | <2           | <2     |      | <2          | <2     |      | <2          | <2     |      |
| Zinc                  | <5           | <5     |      | <5          | <5     |      | <5          | <5     |      |
| Mercury               | <0.1         | <0.1   |      | <0.1        | <0.1   |      | <0.1        | <0.1   |      |
| <b>TPH (µg/L)</b>     |              |        |      |             |        |      |             |        |      |
| C6 - C9               |              | <10    |      | <10         | <10    |      | <10         | <10    |      |
| C10 - C14             |              | <50    |      | <50         | <50    |      | <50         | <50    |      |
| C15 - C28             |              | <100   |      | <100        | <100   |      | <100        | <100   |      |
| C29 - C36             |              | <100   |      | <100        | <100   |      | <100        | <100   |      |
| C10 - C136            |              | <250   |      | <250        | <250   |      | <250        | <250   |      |
| <b>BTEX (µg/L)</b>    |              |        |      |             |        |      |             |        |      |
| Benzene               |              | <0.2   |      | <0.2        | <0.2   |      | <0.2        | <0.2   |      |
| Toluene               |              | <0.5   |      | <0.5        | <0.5   |      | <0.5        | <0.5   |      |
| Ethylbenzene          |              | <0.5   |      | <0.5        | <0.5   |      | <0.5        | <0.5   |      |
| meta- & para-Xylene   |              | <0.5   |      | <0.5        | <0.5   |      | <0.5        | <0.5   |      |
| ortho-Xylene          |              | <0.5   |      | <0.5        | <0.5   |      | <0.5        | <0.5   |      |





■ Table G-4 Groundwater RPD Values

| Analyte                        | MW06      | DUP04   | RPD% | MW06      | DUP05   | RPD% | MW07      | DUP02   | RPD% | MW06      | DUP02 | RPD% |
|--------------------------------|-----------|---------|------|-----------|---------|------|-----------|---------|------|-----------|-------|------|
|                                | 18-May-09 |         |      | 02-Jun-09 |         |      | 17-Sep-09 |         |      | 07-Oct-09 |       |      |
| Metals (mg/L)                  |           |         |      |           |         |      |           |         |      |           |       |      |
| Arsenic                        | 0.008     | 0.009   | 12   | 0.025     | 0.026   | 4    | 0.008     | 0.007   | 13   |           |       |      |
| Cadmium                        | <0.0001   | <0.0001 |      | <0.0001   | <0.0001 |      | 0.0006    | 0.0004  | 40   |           |       |      |
| Chromium^                      | 0.001     | <0.001  |      | <0.001    | <0.001  |      | 0.018     | 0.011   | 48   |           |       |      |
| Copper                         | <0.001    | <0.001  |      | <0.001    | <0.001  |      | 0.009     | 0.015   | 50   |           |       |      |
| Lead                           | <0.001    | <0.001  |      | <0.001    | <0.001  |      | 0.001     | 0.001   | 0    |           |       |      |
| Nickel                         | 0.016     | 0.019   | 17   | 0.013     | 0.014   | 7    | 0.046     | 0.046   | 0    |           |       |      |
| Zinc                           | 0.029     | 0.028   | 4    | 0.038     | 0.039   | 3    | 0.016     | 0.016   | 0    |           |       |      |
| Mercury                        | <0.0001   | <0.0001 |      | <0.0001   | <0.0001 |      | <0.0001   | <0.0001 |      |           |       |      |
| TPH (ug/L)                     |           |         |      |           |         |      |           |         |      |           |       |      |
| C6 - C9                        | 50        | 40      | 22   | 40        | 40      | 0    | 50        | 60      | 18   | 30        | 30    | 0    |
| C10 - C14                      | 840       | 500     | 51   |           | 590     |      | 800       | 550     | 37   | 350       | 330   | 6    |
| C15 - C28                      | 2500      | 1200    | 70   |           | 1100    |      | 1480      | 1400    | 6    | 960       | 840   | 13   |
| C29 - C36                      | 710       | 210     | 109  |           | 120     |      | 170       | 280     | 49   | 220       | 180   | 20   |
| Total C10 - C36                | 4050      | 1910    | 72   |           | 1810    |      | 2450      | 2280    | 7    | 1530      | 1360  | 12   |
| TPH Silica Gel Clean Up (ug/L) |           |         |      |           |         |      |           |         |      |           |       |      |
| C10 - C14                      |           |         |      |           |         |      |           |         |      | <50       | <50   |      |
| C15 - C28                      |           |         |      |           |         |      |           |         |      | <100      | <100  |      |
| C29 - C36                      |           |         |      |           |         |      |           |         |      | <50       | <50   |      |
| C10 - C36                      |           |         |      |           |         |      |           |         |      | <50       | <50   |      |
| BTEX (ug/L)                    |           |         |      |           |         |      |           |         |      |           |       |      |
| Benzene                        | 2         | 2       | 0    |           | 2.0     |      |           |         |      | 1.0       | <1    |      |
| Toluene                        | 10        | 8       | 22   |           | 7.0     |      |           |         |      | 3.0       | 2     | 40   |
| Ethylbenzene                   | <2        | <2      |      |           | 2.0     |      |           |         |      | <2        | <2    |      |
| meta&paraXylene                | 2         | 2       | 0    |           | 2.0     |      |           |         |      | <2        | <2    |      |
| ortho-Xylene                   | <2        | <2      |      |           | <2      |      |           |         |      | <2        | <2    |      |



■ **Table G-5 Soil Sampling Rinsate Samples**

| Analyte                     | Rinsate 1<br>during soil<br>sampling | Rinsate 2<br>during soil<br>sampling | Rinsate 3<br>during soil<br>sampling |
|-----------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|                             | 11-May-09                            | 12-May-09                            | 13-May-09                            |
| <b>Heavy Metals (mg/L)</b>  |                                      |                                      |                                      |
| Arsenic                     | <0.001                               | <0.001                               | <0.001                               |
| Cadmium                     | <0.0001                              | <0.0001                              | <0.0001                              |
| Chromium <sup>^</sup>       | <0.001                               | <0.001                               | <0.001                               |
| Copper                      | <0.001                               | <0.001                               | <0.001                               |
| Lead                        | <0.001                               | <0.001                               | <0.001                               |
| Nickel                      | <0.001                               | <0.001                               | <0.001                               |
| Zinc                        | 0.005                                | 0.008                                | <0.001                               |
| Mercury                     | <0.0001                              | <0.0001                              | <0.0001                              |
| <b>OC Pesticides (µg/L)</b> |                                      |                                      |                                      |
| alpha-BHC                   | <20                                  | <20                                  | <20                                  |
| Hexachlorobenzene (HCB)     | <50                                  | <50                                  | <50                                  |
| beta-BHC                    | <100                                 | <100                                 | <100                                 |
| gamma-BHC                   | <50                                  | <50                                  | <50                                  |
| delta-BHC                   | <200                                 | <200                                 | <200                                 |
| Endrin aldehyde             | <1                                   | <1                                   | <1                                   |
| Endosulfan sulphate         | <2                                   | <2                                   | <2                                   |
| 4,4'-DDT                    | <2                                   | <2                                   | <2                                   |
| Endrin ketone               | <2                                   | <2                                   | <2                                   |
| Methoxychlor                | <2                                   | <2                                   | <2                                   |



■ **Table G-6 Groundwater Sampling Rinsate Samples**

| Analyte                    | Rinsate 4<br>during water<br>sampling |
|----------------------------|---------------------------------------|
|                            | 18-May-09                             |
| <b>Heavy Metals (mg/L)</b> |                                       |
| Arsenic                    | <0.001                                |
| Cadmium                    | <0.0001                               |
| Chromium <sup>^</sup>      | <0.001                                |
| Copper                     | <0.001                                |
| Lead                       | <0.001                                |
| Nickel                     | <0.001                                |
| Zinc                       | 0.005                                 |
| Mercury                    | <0.0001                               |
| <b>TPH (µg/L)</b>          |                                       |
| C6 - C9 Fraction           | <20                                   |
| C10 - C14 Fraction         | <50                                   |
| C15 - C28 Fraction         | <100                                  |
| C29 - C36 Fraction         | <50                                   |
| Total C10 - C36 Fraction*  | <200                                  |
| <b>BTEX (µg/L)</b>         |                                       |
| Benzene                    | <1                                    |
| Toluene                    | <2                                    |
| Ethylbenzene               | <2                                    |
| meta- & para-Xylene        | <2                                    |
| ortho-Xylene               | <2                                    |



## Appendix H Stage 1 Search Data

RTI DL RELEASE - EHP

**SEARCH RESPONSE**  
**ENVIRONMENTAL MANAGEMENT REGISTER (EMR)**  
**CONTAMINATED LAND REGISTER (CLR)**

73(2)Irrelevant

Transaction ID: 1107775      EMR Site Id: 3350      02 February 2009  
Client Reference: 11790159  
Cheque Number:

This response relates to a search request received for the site:  
Lot: 658      Plan: SL12298

**EMR RESULT**

The above site IS included on the Environmental Management Register.  
Lot: 658      Plan: SL12298  
Address: 146-178 KINGSTON RD  
SLACKS CREEK 4127

The site has been subject to the following Notifiable Activity pursuant to section 374 of the  
*Environmental Protection Act 1994*.  
LANDFILL - disposing of waste (excluding inert construction and demolition waste).

**CLR RESULT**

The above site is NOT included on the Contaminated Land Register.

**ADDITIONAL ADVICE**

**Note: Searches maybe conducted online through the State Government Website  
[www.smartservice.qld.gov.au](http://www.smartservice.qld.gov.au) or Citec Confirm [www.confirm.com.au](http://www.confirm.com.au).**

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen  
**Registrar, Contaminated Land Unit**

# CURRENT RESERVE SEARCH

NATURAL RESOURCES AND WATER, QUEENSLAND

Request No: 5806651  
Search Date: 02/02/2009 11:49

Title Reference: 49019095  
Date GAZETTED: 25/06/1988  
PAGE: 2411

Opening Ref: RES 9012  
Purpose: LOCAL GOVERNMENT  
Sub-Purpose: ENTERTAINMENT AND RECREATION  
Local Name: SLACKS CREEK ENTERTAINMENT CENTRE  
Address: KINGSTON - BEENLEIGH RD, SLACKS CREEK  
County (R) No: R4016 STANLEY  
File Ref: RES 24916

## TRUSTEES

LOGAN CITY COUNCIL GAZETTED ON 25/06/1988 PAGE 2421

## LAND DESCRIPTION

LOT 658 CROWN PLAN SL12298 GAZETTED ON 25/06/1988 PAGE 2411  
County of STANLEY Parish of YEERONGHILL  
Local Government: LOGAN

Area: 10.240000 Ha. (SURVEYED)

## EASEMENTS AND ENCUMBRANCES

ADMINISTRATIVE ADVICES - NIL  
UNREGISTERED DEALINGS - NIL

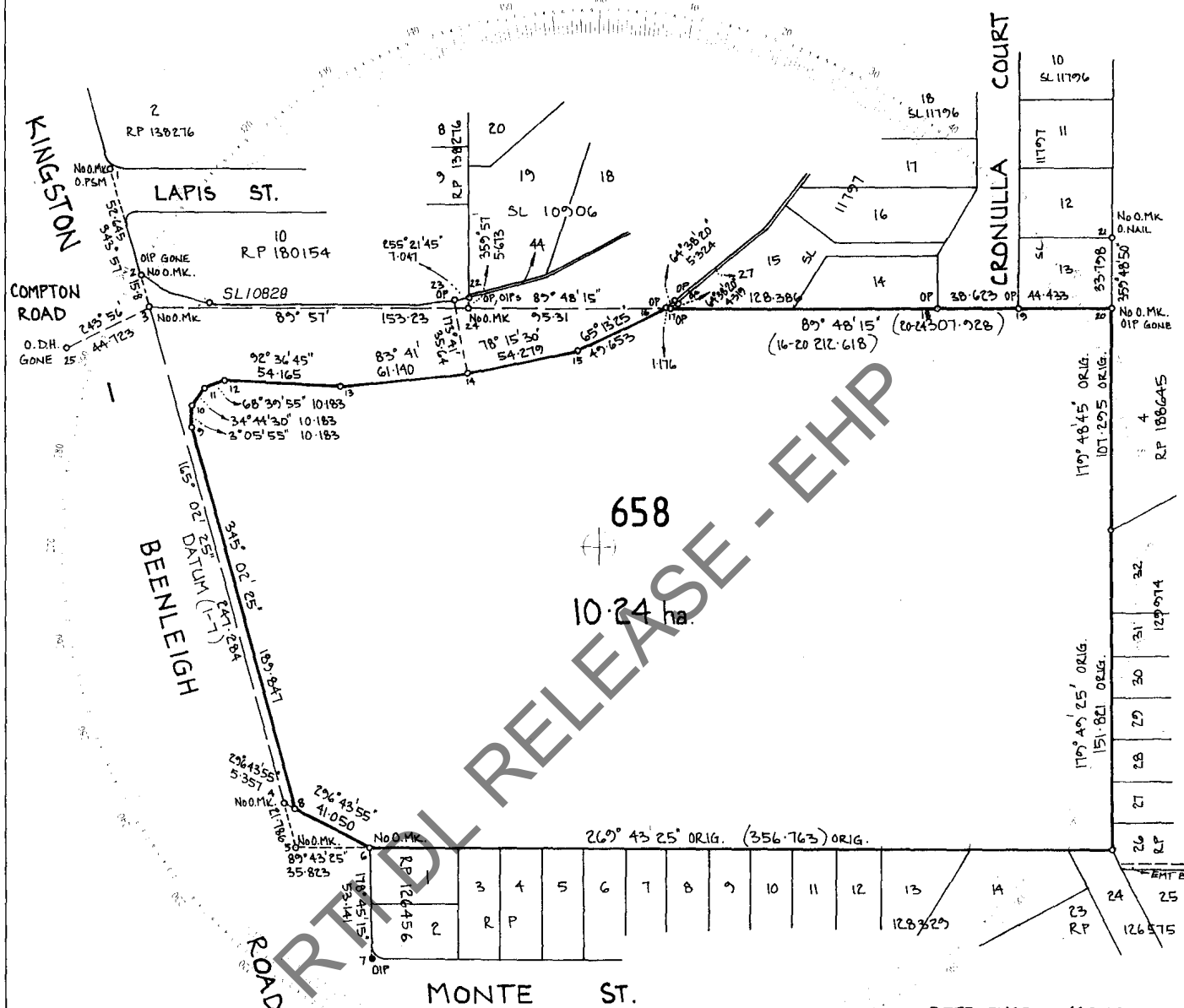
## CERTIFICATE OF TITLE ISSUED - No

\*\* End of Current Reserve Search \*\*

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Requested By: CITEC CONFIRM

**For Additional Plan &  
Document Notings  
Refer to CISP**

ORIGINAL INFORMATION COPIED AND COMPILED  
FROM SL 9781 AND SL 11797 IN THE  
DEPARTMENT OF GEOGRAPHIC INFORMATION,  
BRISBANE.



NEW ROAD

658 (3-4-6-7-10-11-12-13-14-15-16-24) ..... 8050m<sup>2</sup>

BRANDED PEG PLACED AT STATIONS 8,9,11-15.

**PERMANENT MARKS**

| PM    | BEARING | DIST. | No.   |
|-------|---------|-------|-------|
| 1-OPM | 89° 51' | 4.025 | 42560 |

**REFERENCE MARKS**

| STN | TO            | BEARING      | DIST.  |
|-----|---------------|--------------|--------|
| 2   | OIP GONE      | 215° 32' 35" | 2.296  |
| 8   | PIN           | 9° 32' 35"   | 0.714  |
| 9   | SCREW IN KERB | 215° 12' 20" | 5.545  |
| 10  | SCREW IN CONK | AT STATION   |        |
| 12  | SCREW IN KERB | 325° 58' 54" | 3.307  |
| 16  | SCREW IN KERB | 315° 56' 40" | 18.60  |
| 20  | OIP GONE      | 298° 26' 05" | 6.735  |
| 21  | O.NAIL IN M/H | 351° 56' 05" | 11.131 |
| 22  | OIP           | 75° 50'      | 1.173  |
| 22  | OIP           | 265° 59'     | 1.017  |
| 25  | O.SCREW GONE  | 0° 04'       | 3.213  |

| ORIGINAL FOR 197                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 658         | PREVIOUS PLAN | SL 9781    | PROCLAIMED SURVEY AREA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MINING FIELD | LAND AGENTS DISTRICT | LOCAL AUTHORITY | LOGAN CITY COUNCIL |            |         |          |           |          |              |     |                   |  |          |  |         |         |        |  |                                                                                                                                             |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|-----------------|--------------------|------------|---------|----------|-----------|----------|--------------|-----|-------------------|--|----------|--|---------|---------|--------|--|---------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>I, PHILIP JOHN O'CALLAGHAN, hereby certify that I/the company have surveyed the land comprised in this plan (either personally or by PERSONALLY for whose work I/the company accept responsibility), that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulations 1978 and that the said survey was completed on 12-2-88.</p> <p>49-Sch 4 - Signature 12-2-88</p> <p>Licensed Surveyor Date</p> <p>SURVEY RECORDS NOT LODGED</p> |             |               |            | <p><b>PLAN OF LOT 658</b></p> <p></p> <p>SCALE 1:2000</p> <table border="1"> <tr> <th>AUTHORITY</th> <th>D.M.S. REF.</th> <th>DRAWN</th> <th>REGISTERED</th> <th>CHARTED</th> <th>MAP REF.</th> </tr> <tr> <td>Res. 9012</td> <td>88K2/157</td> <td>P.S. 12-2-88</td> <td>RPS</td> <td>A.A.F. 9542-44222</td> <td></td> </tr> <tr> <td>RC 44483</td> <td></td> <td>R1273/B</td> <td>21-5-88</td> <td>4.7.88</td> <td></td> </tr> </table> |              | AUTHORITY            | D.M.S. REF.     | DRAWN              | REGISTERED | CHARTED | MAP REF. | Res. 9012 | 88K2/157 | P.S. 12-2-88 | RPS | A.A.F. 9542-44222 |  | RC 44483 |  | R1273/B | 21-5-88 | 4.7.88 |  | <p><b>SUBURB</b><br/><b>TOWN</b> SLACKS CREEK</p> <p><b>PARISH</b> YEERONGPILLY</p> <p><b>County</b> STANLEY</p> <p><b>PLAN SL12298</b></p> |  |
| AUTHORITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | D.M.S. REF. | DRAWN         | REGISTERED | CHARTED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | MAP REF.     |                      |                 |                    |            |         |          |           |          |              |     |                   |  |          |  |         |         |        |  |                                                                                                                                             |  |
| Res. 9012                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 88K2/157    | P.S. 12-2-88  | RPS        | A.A.F. 9542-44222                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                      |                 |                    |            |         |          |           |          |              |     |                   |  |          |  |         |         |        |  |                                                                                                                                             |  |
| RC 44483                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             | R1273/B       | 21-5-88    | 4.7.88                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                      |                 |                    |            |         |          |           |          |              |     |                   |  |          |  |         |         |        |  |                                                                                                                                             |  |

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Beenleigh Project Aerial Photography Run 4 Q538-22 Flight Date: 27/07/1955 Scale 1:12500





Beenleigh Project Aerial Photography Run 4 Q2655-202 Flight Date: 12/08/1973 Scale 1:12500



Beenleigh Project Aerial Photography Run 11 QP4286-19 Flight Date: 28/08/1983 Scale 1:25000





Beenleigh Project Aerial Photography Run 4 Q4658-121 Flight Date: 9/08/1993 Scale 1:25000





Beenleigh Project Aerial Photography Run 4W QE5665-012Flight Date: 29/07/1997 Scale 1:25000

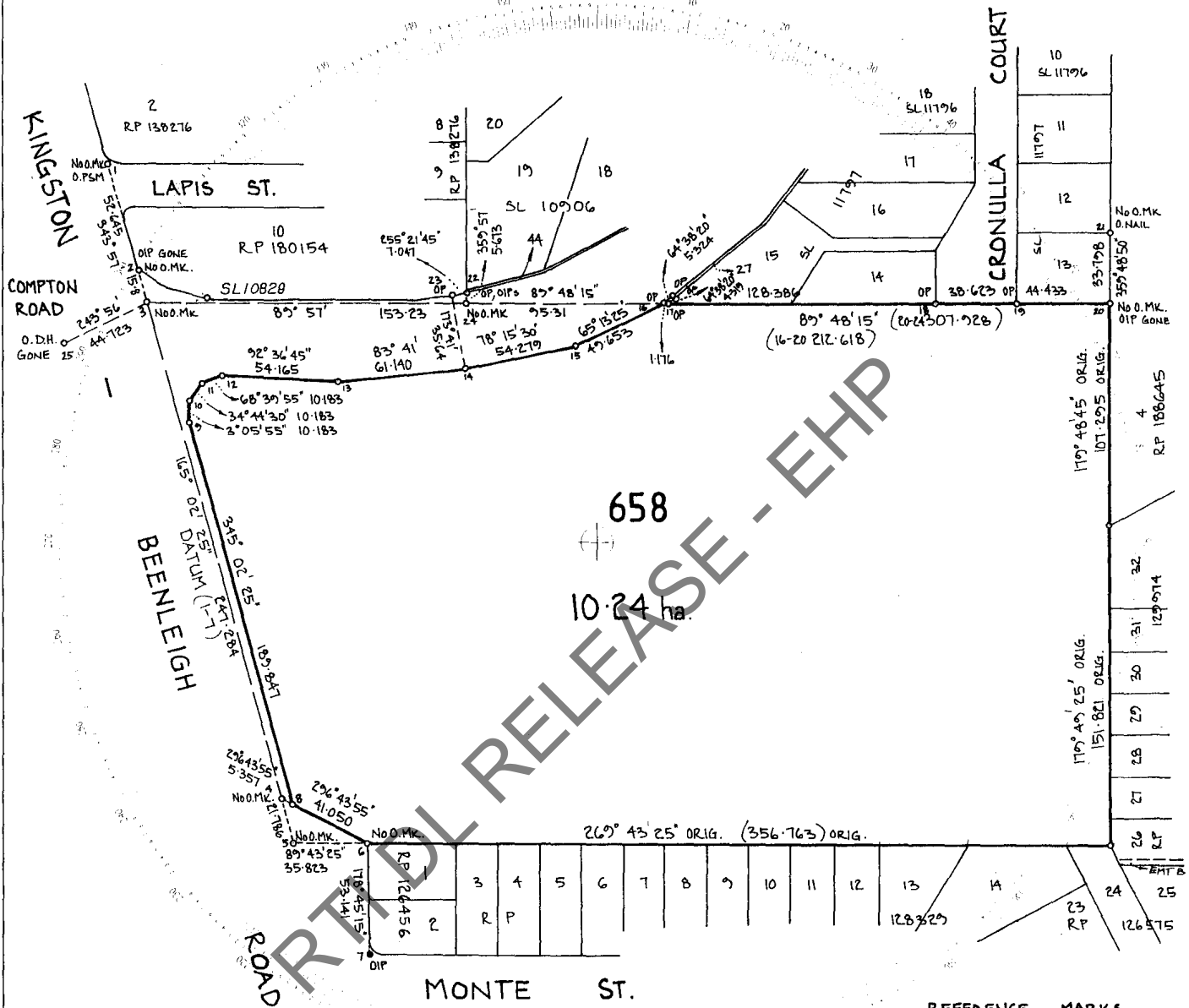




Beenleigh Project Aerial Photography Run 4 QAP5932-018Flight Date: 11/03/2002 Scale 1:25000

For Additional Plan &  
Document Notings  
Refer to CISP

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BRANDED PEG PLACED AT STATIONS 8,9,11-15.

|                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                       |              |                                                                                                                        |                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| ORIGINAL FOR/EST<br>658                                                                                                                                                                                                                                                                                                                                                                                       | PREVIOUS PLAN<br>SL 9781 | PROCLAIMED SURVEY AREA                                                | MINING FIELD | LAND AGENTS DISTRICT                                                                                                   | LOCAL AUTHORITY<br>LOGAN CITY COUNCIL |
| <b>I. PHILIP JOHN O'CALLAGHAN</b><br>hereby certify that I/the company have surveyed the land comprised in this plan (either personally or by PERSONALLY<br>for whose work I/the company accept responsibility), that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulations 1978 and that the said survey was completed on 12-2-88 |                          |                                                                       |              |                                                                                                                        |                                       |
| 49-Sch 4 - Signature<br>16-2-88<br>Licensd Surveyor                                                                                                                                                                                                                                                                                                                                                           |                          | MERIDIAN<br>PLAN BEARING<br>A.M.G. BEARING<br>MERIDIAN OF<br>SL 10828 |              | PLAN OF LOT 658<br><br>SCALE 1:2000 |                                       |
| SURVEY RECORDS<br>NOT LODGED                                                                                                                                                                                                                                                                                                                                                                                  |                          | AUTHORITY<br>Res. 9012 88K2/157<br>R.C. 44483                         |              | D.M.S. REF.<br>P.S. 12-2-88<br>R1273/B 21-5-88<br>A.A.F. 9542-44222                                                    |                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                       |              | SUBURB<br>TOWN SLACKS CREEK<br>PARISH YEERONGPILLY<br>County STANLEY<br>PLAN SL12298                                   |                                       |



## Appendix I Limitations of Investigation

1. This report has been prepared by Sinclair Knight Merz Pty Limited ("SKM") for the sole use of Greyhounds Queensland Limited ("the Client") and in accordance with the scope of services detailed in the SKM proposal dated 26 August 2009 and accepted by the Client on the 2 September 2009 ("the Agreement").

2. Undertaking an assessment or study of the on-site conditions may provide information regarding the potential for exposure to the presence of contaminated or inadequate bearing ground and/or groundwater. All reports and conclusions that deal with subsurface conditions are based on interpretation and judgement and as a result have uncertainty attached to them.

You should be aware that this report contains interpretations and conclusions which are uncertain, due to the nature of the investigations. No study can completely eliminate risk, and even a rigorous assessment and/or sampling programme may not detect all problem areas within a site. The following information sets out the limitations of this report.

3. This report should only be presented in full and should not be used to support any objective other than those detailed within the Agreement. In particular, this report does not contain sufficient information to enable it to be used for any use other than the Project specific requirements for which this report was created/prepared, which are detailed in the Agreement.

SKM accepts no liability to the Client for any loss and/or damage incurred as a result of changes to the usage, size, design, layout, location or any other material change to the intended purpose contemplated under the Agreement.

4. It is imperative to note that this report only considers the site conditions current at the time of investigation, and to be aware that conditions may have changed due to natural forces and/or operations on or near the site. Any decisions based on the findings of this report must take into account any subsequent changes in site conditions and/or developments in legislative and regulatory requirements. SKM accepts no liability to the Client for any loss and/or damage incurred as a result of a change in the site conditions and/or regulatory/legislative framework since the date of this report and/or the time at which the investigation took place.

5. This report is based on an interpretation of factual information available and the professional opinion and judgement of SKM. Unless stated to the contrary, SKM has not verified the accuracy or completeness of any information received from the Client or a third party during the performance of the services under the Agreement, and SKM accepts no liability to the Client for any loss and/or damage incurred as a result of any inaccurate or incomplete information.



6. This report provides information on-site conditions as revealed through selective sampling. The findings are the result of standard assessment techniques used in accordance with normal practices and standards, and (to the best of our knowledge) they represent a reasonable interpretation of the current conditions at the site. However, these findings, interpretations and assumptions cannot be substantiated for areas that remain untested. For these untested areas, this report should be regarded as preliminary advice only.

7. Any reliance on this report by a third party shall be entirely at such party's own risk. SKM provides no warranty or guarantee to any third party, express or implied, as to the information and/or professional advice indicated in this report, and accepts no liability for or in respect of any use or reliance upon this report by a third party.

8. This report makes no comment on the presence of hazards or hazardous materials, not specifically covered in its scope.

RTI DL RELEASE - EHP