



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH21 0.5-0.7	BH21 1.0-1.2	BH21 1.5-1.7	BH23 0.5-0.7	BH23 2.5-2.7
				21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807210-005	ES0807210-006	ES0807210-007	ES0807210-009	ES0807210-012
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	94.3	----	----	----
Anthracene-d10	1719-06-8	0.1	%	----	93.8	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	108	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	101	78.5	85.1	100	95.5
Toluene-D8	2037-26-5	0.1	%	97.9	80.7	87.7	99.1	97.8
4-Bromofluorobenzene	460-00-4	0.1	%	91.5	79.2	85.3	90.4	91.9



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH24 1.0-1.2	BH24 2.5-2.7	BH22 1.5-1.7	BH18 1.0-1.2	DUP 4
				21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807210-015	ES0807210-017	ES0807210-020	ES0807210-023	ES0807210-027
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	13.3	10.1	8.9	17.4	13.5
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	13	10	7	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	8	10	7	12	13
Copper	7440-50-8	5	mg/kg	30	23	19	58	26
Lead	7439-92-1	5	mg/kg	22	<5	7	78	36
Nickel	7440-02-0	2	mg/kg	7	<2	<2	10	14
Zinc	7440-66-6	5	mg/kg	121	20	7	136	120
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	0.6	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	1.7	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	1.7	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	1.1	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	1.0	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	1.2	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	1.2	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	0.6	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	0.7	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				BH24 1.0-1.2	BH24 2.5-2.7	BH22 1.5-1.7	BH18 1.0-1.2	DUP 4
				21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00	21-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807210-015	ES0807210-017	ES0807210-020	ES0807210-023	ES0807210-027
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	92.6	----	----	90.7	----
2-Chlorophenol-D4	93951-73-6	0.1	%	85.7	----	----	84.8	----
2,4,6-Tribromophenol	118-79-6	0.1	%	89.8	----	----	88.5	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	86.4	----	----	80.4	----
Anthracene-d10	1719-06-8	0.1	%	86.2	----	----	82.0	----
4-Terphenyl-d14	1718-51-0	0.1	%	97.7	----	----	92.8	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	105	97.2	102	97.0	111
Toluene-D8	2037-26-5	0.1	%	104	100	103	106	105
4-Bromofluorobenzene	460-00-4	0.1	%	100	96.0	98.0	95.4	98.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID							
				Client sampling date / time							
				DUP 5	DUP 6	----	----	----			
				21-MAY-2008 15:00	21-MAY-2008 15:00	----	----	----			
Compound	CAS Number	LOR	Unit	ES0807210-028	ES0807210-030	----	----	----			
EA055: Moisture Content											
^ Moisture Content (dried @ 103°C)				----	1.0	%	13.4	13.8	----	----	----
EG005T: Total Metals by ICP-AES											
Arsenic	7440-38-2	5	mg/kg	9	6	----	----	----			
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----			
Chromium	7440-47-3	2	mg/kg	15	13	----	----	----			
Copper	7440-50-8	5	mg/kg	62	46	----	----	----			
Lead	7439-92-1	5	mg/kg	66	427	----	----	----			
Nickel	7440-02-0	2	mg/kg	9	6	----	----	----			
Zinc	7440-66-6	5	mg/kg	49	86	----	----	----			
EG035T: Total Recoverable Mercury by FIMS											
Mercury				7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons											
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----			
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----			
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----			
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----			
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----			
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----			
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----			
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----			
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----			
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----			
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	----			
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----			
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----			
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----			
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----			
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----			
EP080/071: Total Petroleum Hydrocarbons											
C6 - C9 Fraction				----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction				----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction				----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction				----	100	mg/kg	<100	<100	----	----	----
EP080: BTEX											
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----			
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----			
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----			



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				DUP 5	DUP 6			
				21-MAY-2008 15:00	21-MAY-2008 15:00			
Compound	CAS Number	LOR	Unit	ES0807210-028	ES0807210-030			
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5			
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5			
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	94.6				
2-Chlorophenol-D4	93951-73-6	0.1	%	89.9				
2,4,6-Tribromophenol	118-79-6	0.1	%	91.3				
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	86.5				
Anthracene-d10	1719-06-8	0.1	%	85.1				
4-Terphenyl-d14	1718-51-0	0.1	%	98.9				
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	102	104			
Toluene-D8	2037-26-5	0.1	%	102	103			
4-Bromofluorobenzene	460-00-4	0.1	%	94.5	97.8			



Surrogate Control Limits

Sub-Matrix: SOIL		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	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	10	136
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121



Chain of Custody

Laboratory Quotation / Order No.

EL00315AH

Job No:

No: 4025

Sheet 2 of 2

Dispatch to: Address: Phone No:	ALS	Sampled by:	NICK COWMAN	Consigment Officer:	L.C OFFICE
Attention:	ASHWINI	Project Manager: Project No:	BENEDICT SMITH	Date Dispatched:	9911-1000
Received by:	235	Date:	24/5	Time:	
		Received by:	[Signature]	Date:	22-5-08 12-10

Comments	Sample Name	Container Type and Preservative	Sample No.	Date Sampled	Analysis Required										Sample Condition or Receipt
					Pb	Pb	1015	MAHs - BTEX	MAHs	5-4	5-11				
broken	SOIL	GLASS JAR & 19	BH22	0.5-0.7	21/5/08	/			/	/	/				
		21P - 19 - BAG 19		1.0-1.2					/	/	/				
		20		1.5-1.7					/	/	/				
		21		2.5-2.7					/	/	/				
broken		22	BH18	0.5-0.7		/			/	/	/				
		23		1.0-1.2		/			/	/	/				
		24		1.5-1.7					/	/	/				
broken		25		2.5-2.7					/	/	/				
broken		26		3.5-3.7					/	/	/				
		27	DUP 4			/			/	/	/				
		28	DUP 5			/			/	/	/				
Revised Sample for to laboratory		29	DUP 5a			/			/	/	/				
		30	DUP 6			/			/	/	/				
		31	Trip Spike			/			/	/	/				
		32	Trip Blank			/			/	/	/				
		33	DH 24 2.7-3.0			/			/	/	/				
		34	TSC			/			/	/	/				

Special Laboratory Instructions

Correct on Lines:

Turnaround Required:

Standard

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

Copies: WHITE: To sign on release. YELLOW: If dispatched to intermediate Lab. Lab to sign on receipt and fax back to Coffey. BLUE: To be returned with results.

22/05/08

Dispatch to (Address & Phone No) ALS	Sampled by: NICK COWMAN	Consigning Officer: L.C OFFICE Date Dispatched: 9911-1000
Addressee: ASHWINI	Project Manager (Report results to): BENEDICT SMITH	Counsel Service: Consumable Note No:
Released by: BS	Date: 22/5	Time:
	Received by: 11/10/08	Date: 22-5-08
	Time: 	Time: 12+0

Comments	Sample Matrix	Container Type (and Preliminary)	Sample No.	Data Sampled	Analysis Required										Sample Condition (in receipt)
					PH	TH	Moisture	DTG	Moisture	Moisture	Moisture	Moisture	Moisture	Moisture	
1) broken	SOIL	CLAYES S&R	BH17	0.5-0.7	21	5/08									
2) broken		2.0-2.5		1.0-1.2											
3) broken				1.5-1.7											
				2.5-2.7											
			BH21	0.5-0.7											
				1.0-1.2											
				1.5-1.7											
				2.5-2.7											
			BH23	0.5-0.7											
				1.0-1.2											
				1.5-1.7											
				2.5-2.7											
				2.9-3.0											
			BH24	0.5-0.7											
				1.0-1.2											
				1.5-1.7											
				2.5-2.7											

Special Laboratory Instructions:

Detection Limits:

Turnaround Required:

Standard

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

Description for
Address &
Phone No:

ALS

Sampled by:

Nick Cowman

Conserving Officer:

L.C. OFFICER

Date Dispatched:

9/11/2000

Attention:

ASIWINI

Project Manager:
report results to:

BENEDICT S. SMITH

Carrier Service:

Consignment Note No.

Handed over by:

BSS

Date:

Time:

22/5

Received by:

selu

ALS Sydney

Date:

Time:

21/5/00

12:00

21-5-00

2:25 PM

Comments	Sample Matrix	Container Type and Preservation	Sample no.	Date Samples	Analyses Required										Sample Condition on Receipt
					PHOS	TPHs	MAHS + BTX	Metals	5-6	5-11					
Sample broken	SOIL	GLASS JAR 1.45	BH22 0.5-0.7	21/5/00	/	/	/	/	/	/					
		DUP 4	1.0-1.2					/	/						
			1.5-1.7					/	/						
			2.5-2.7					/	/						
Sample broken			BH22 0.5-0.7		/	/	/	/	/	/					
			1.0-1.2					/	/						
			1.5-1.7					/	/						
Sample broken			2.5-2.7					/	/						
sample broken			3.5-3.7					/	/						
			DUP 4		/	/	/	/	/	/					
			DUP 5		/	/	/	/	/	/					
Hereto send Ca to laboratory	acknowledged by selu		DUP 5a		/	/	/	/	/	/					
			DUP 6		/	/	/	/	/	/					
			TRIP SPIKE		/	/	/	/	/	/					
			TRIP blank		/	/	/	/	/	/					
			BH 24 2.4-3.0		/	/	/	/	/	/					
			TSC		/	/	/	/	/	/					

Hold as per B. Smith 23/5/00

4.2 PM

Special Laboratory Instructions

Detection Limits

Turnaround Required

20/5/00

JOB NUMBER MUST BE
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SUBSEQUENT PAGES

Dispatch to: (Address & Phone No)	ALS	Sampled by:	NICK COWMAN	Consigning Office:	L.C. OFFICE
Attention:	ASHWINI	Project Manager (report results to):	BENEDICT SMITH	Date Dispatched:	29/11/2000
			Counter Service:		
			Consignment Markings:		

Requisitioned by:	Date:	Time:	Received by:	Date:	Time:
GC	21/5		Sally Als Sydney	22/5/08	2:25pm
				24/5/08	11:00

Comments	Sample Matrix	Container Type and Preservation	Sample No	Date Samples	Analyses Required										Sample Condition at Recd at
					PHYS	TPH	AST = 100% Gravel = 100%	100%	5-4/100-100%	5-11					
Sample broken - 504		GLASS JAR	① B117	05-07	21/5/08	/	/	/	/	/	/	/	/	/	
Sample broken		212-1-2-14	②	10-12											
"			③	15-17											
			④	25-27											
			⑤ B121	05-07											
			⑥	10-12											
			⑦	15-17											
			⑧	25-27											
			⑨ B123	05-07											
			⑩	10-12											
			⑪	15-17											
			⑫	25-27											
			⑬	29-30											
			⑭ B124	05-07											
			⑮	10-12											
			⑯	15-17											
			⑰	25-27											

Environmental Division
Sydney
Work Order
ES0807210



Telephone: +61 2 9581 8555

Special Laboratory Instructions

Collection Limits

Turnaround Required

Copies: WHITE: kept on release YELLOW: not supplied to client (Lab) Lab to sign on receipt and fax back to Coffey BLUE: supplied to client

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

Description for
Address &
Phone No.

ALS

Sampled by:

Nick Cowman

Consigning Officer:

L.C. OFFICE

Date Dispatched:

9/11/2000

Attention:

ASHWINI

Project Manager:
report results to

BENEDICT S. SMITH

Carrier Service:

Consignment Note No.

Handed over by:

B.S.

Date

Time

22/5

Received by:

selu

ALS Sydney

Date

Time

21/5/00

12:00

21-5-00

2:25 PM

Comments	Sample Matrix	Container Type and Preservation	Sample no.	Date Samples	Analyses Required										Sample Condition on Receipt
					PHAS	TPHS	MAHS + BTX	Metals	5-6	5-11					
Sample broken	SOIL	GLASS JAR 1.45	BH22 0.5-0.7	21/5/00	/			/	/						
		DUP 4	1.0-1.2					/	/						
			1.5-1.7					/	/						
			2.5-2.7					/	/						
Sample broken			BH22 0.5-0.7		/			/	/						
			1.0-1.2					/	/						
			1.5-1.7					/	/						
Sample broken			2.5-2.7					/	/						
sample broken			3.5-3.7					/	/						
			DUP 4					/	/						
			DUP 5		/			/	/						
Hereto send Ca to laboratory	acknowledged by selu		DUP 5a		/			/	/						
			DUP 6					/	/						
			TRIP SPIKE					/	/						
			TRIP blank					/	/						
			BH 24 2.4-3.0					/	/						
			TSC					/	/						

Hold as per B. Smith 23/5/00

4.2 PM

Special Laboratory Instructions

Detection Limits

Turnaround Required

20/5/00

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

Dispatch to: (Address & Phone No)	ALS	Sampled by:	NICK COWMAN	Consigning Office:	L.C OFFICE
Attention:	ASHWINI	Project Manager (report results to)	BENEDICT SMITH	Date Dispatched:	29/11/2000
			Counter Service:		
			Consignment Markings:		

Requisitioned by:	Date:	Time:	Received by:	Date:	Time:
GC	21/5		Sally Als Sydney	22/5/08	2:25pm

Comments	Sample Matrix	Container Type and Preservation	Sample No	Date Samples	Analyses Required										Sample Condition at Rec of
					PHYS	TEMP	AST = 100% Gravimetric = 100%	100%	100%	100%	100%	100%	100%	100%	
Sample broken - 504		GLASS JAR	① B117	05-07	21/5/08	/	/	/	/	/	/	/	/	/	
Sample broken		GLASS JAR	②	10-12											
"			③	15-17											
			④	25-27											
			⑤ B121	05-07											
			⑥	10-12											
			⑦	15-17											
			⑧	25-27											
			⑨ B123	05-07											
			⑩	10-12											
			⑪	15-17											
			⑫	25-27											
			⑬	29-30											
			⑭ B124	05-07											
			⑮	10-12											
			⑯	15-17											
			⑰	25-27											

Environmental Division
Sydney
Work Order
ES0807210



Telephone: +61 2 9661 8555

Special Laboratory Procedures

Collection Limits

Turnaround Required

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0807402	Page	: 1 of 19
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Ashwini Sharma
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: EL00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 27-MAY-2008
C-O-C number	: 4327-9	Issue Date	: 03-JUN-2008
Sampler	: NICK COWMAN	No. of samples received	: 46
Site	: ----	No. of samples analysed	: 27
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Ashwini Sharma	Laboratory Manager	Inorganics
Hoa Nguyen		Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Organics
PHALAK INTAKESONE	Organics Co-ordinator	Organics

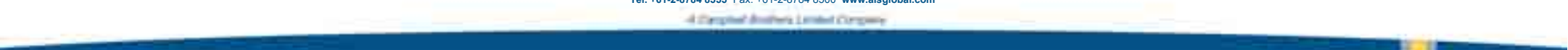
Environmental Division Sydney

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General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH25 1.0-1.2	BH25 2.5-2.7	BH28 0.5-0.7	BH29 0.5-0.7	BH29 1.5-1.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-001	ES0807402-002	ES0807402-003	ES0807402-004	ES0807402-005
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	15.6	20.8	14.0	25.0	12.8
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	9	11	12	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	12	9	15	22	13
Copper	7440-50-8	5	mg/kg	14	<5	16	<5	15
Lead	7439-92-1	5	mg/kg	98	19	14	20	17
Nickel	7440-02-0	2	mg/kg	<2	<2	<2	<2	<2
Zinc	7440-66-6	5	mg/kg	51	6	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	----	----	<0.10	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	----	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	----	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg	----	----	----	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg	----	----	----	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg	----	----	----	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg	----	----	----	<0.05	----
Aldrin	309-00-2	0.05	mg/kg	----	----	----	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	----	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	----	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	----	<0.05	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	----	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg	----	----	----	<0.05	----
4,4'-DDE	72-55-9	0.05	mg/kg	----	----	----	<0.05	----
Endrin	72-20-8	0.05	mg/kg	----	----	----	<0.05	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	----	<0.05	----
4,4'-DDD	72-54-8	0.05	mg/kg	----	----	----	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	----	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	----	<0.05	----
4,4'-DDT	50-29-3	0.2	mg/kg	----	----	----	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	----	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	----	----	----	<0.2	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH25 1.0-1.2	BH25 2.5-2.7	BH28 0.5-0.7	BH29 0.5-0.7	BH29 1.5-1.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-001	ES0807402-002	ES0807402-003	ES0807402-004	ES0807402-005
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	<0.5	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	----	135	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	----	119	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	----	83.5	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	86.1	----	----	106	----
2-Chlorophenol-D4	93951-73-6	0.1	%	81.4	----	----	86.3	----
2,4,6-Tribromophenol	118-79-6	0.1	%	85.2	----	----	89.6	----
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH25 1.0-1.2	BH25 2.5-2.7	BH28 0.5-0.7	BH29 0.5-0.7	BH29 1.5-1.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807402-001	ES0807402-002	ES0807402-003	ES0807402-004	ES0807402-005
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	72.9	----	----	76.0	----
Anthracene-d10	1719-06-8	0.1	%	87.4	----	----	84.8	----
4-Terphenyl-d14	1718-51-0	0.1	%	102	----	----	110	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	114	112	104	96.8	117
Toluene-D8	2037-26-5	0.1	%	109	109	103	98.6	119
4-Bromofluorobenzene	460-00-4	0.1	%	106	103	99.4	96.9	114



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH30 0.5-0.7	BH30 2.5-2.7	BH31 0.5-0.7	BH31 1.0-1.2	BH33 0.5-0.7
				Client sampling date / time	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807402-006	ES0807402-007	ES0807402-008	ES0807402-009	ES0807402-010	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	21.7	13.5	15.4	14.1	6.6	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	7	11	7	<5	----	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----	
Chromium	7440-47-3	2	mg/kg	55	12	16	7	----	
Copper	7440-50-8	5	mg/kg	26	12	<5	<5	----	
Lead	7439-92-1	5	mg/kg	328	14	23	11	----	
Nickel	7440-02-0	2	mg/kg	33	<2	<2	<2	----	
Zinc	7440-66-6	5	mg/kg	146	<5	5	<5	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.1	<0.1	<0.1	<0.1	----	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	----	----	----	<0.10	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	----	----	<0.05	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	----	----	<0.05	
beta-BHC	319-85-7	0.05	mg/kg	----	----	----	----	<0.05	
gamma-BHC	58-89-9	0.05	mg/kg	----	----	----	----	<0.05	
delta-BHC	319-86-8	0.05	mg/kg	----	----	----	----	<0.05	
Heptachlor	76-44-8	0.05	mg/kg	----	----	----	----	<0.05	
Aldrin	309-00-2	0.05	mg/kg	----	----	----	----	<0.05	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	----	----	<0.05	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	----	----	<0.05	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	----	----	<0.05	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	----	----	<0.05	
Dieldrin	60-57-1	0.05	mg/kg	----	----	----	----	<0.05	
4,4'-DDE	72-55-9	0.05	mg/kg	----	----	----	----	<0.05	
Endrin	72-20-8	0.05	mg/kg	----	----	----	----	<0.05	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	----	----	<0.05	
4,4'-DDD	72-54-8	0.05	mg/kg	----	----	----	----	<0.05	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	----	----	<0.05	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	----	----	<0.05	
4,4'-DDT	50-29-3	0.2	mg/kg	----	----	----	----	<0.2	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	----	----	<0.05	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	----	----	<0.2	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	----	



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH30 0.5-0.7	BH30 2.5-2.7	BH31 0.5-0.7	BH31 1.0-1.2	BH33 0.5-0.7
				Client sampling date / time	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807402-006	ES0807402-007	ES0807402-008	ES0807402-009	ES0807402-010	
EP080/071: Total Petroleum Hydrocarbons - Continued									
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	----	
C15 - C28 Fraction	----	100	mg/kg	120	<100	<100	<100	----	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	----	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	----	----	127	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%	----	----	----	----	117	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%	----	----	----	----	81.3	
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%	107	102	99.2	98.7	----	
Toluene-D8	2037-26-5	0.1	%	103	104	94.7	99.0	----	
4-Bromofluorobenzene	460-00-4	0.1	%	101	103	94.1	94.0	----	



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH33 1.0-1.2	BH33 2.32.4	BH34 0.5-0.7	BH35 0.5-0.7	BH38 0.5-0.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-011	ES0807402-012	ES0807402-013	ES0807402-014	ES0807402-015
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	14.8	10.7	14.1	16.1	18.7
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	7	6	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	19	9	99	26	14
Copper	7440-50-8	5	mg/kg	34	6	26	9	8
Lead	7439-92-1	5	mg/kg	208	11	35	97	36
Nickel	7440-02-0	2	mg/kg	6	<2	79	16	3
Zinc	7440-66-6	5	mg/kg	46	<5	75	31	43
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.8	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	----	<0.10	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	----
4,4'-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	----
4,4'-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	----
4,4'-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH33 1.0-1.2	BH33 2.32.4	BH34 0.5-0.7	BH35 0.5-0.7	BH38 0.5-0.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-011	ES0807402-012	ES0807402-013	ES0807402-014	ES0807402-015
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	0.7	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	0.7	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	127	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	133	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	105	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	97.1	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	83.3	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	89.0	----	----	----	----
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH33 1.0-1.2	BH33 2.32.4	BH34 0.5-0.7	BH35 0.5-0.7	BH38 0.5-0.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807402-011	ES0807402-012	ES0807402-013	ES0807402-014	ES0807402-015
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	79.4	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%	86.9	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	111	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	99.9	99.5	101	95.7	104
Toluene-D8	2037-26-5	0.1	%	96.8	95.8	96.3	96.4	97.6
4-Bromofluorobenzene	460-00-4	0.1	%	94.8	94.6	92.8	93.2	94.2



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID		BH38 2.5-2.7		BH38 3.9-4.0		BH45 0.5-0.7		BH45 1.5-1.7		BH37 0.5-0.7	
				Client sampling date / time		26-MAY-2008 15:00		26-MAY-2008 15:00		26-MAY-2008 15:00		26-MAY-2008 15:00		26-MAY-2008 15:00	
Compound	CAS Number	LOR	Unit	ES0807402-016		ES0807402-017		ES0807402-018		ES0807402-019		ES0807402-020			
EA055: Moisture Content															
^ Moisture Content (dried @ 103°C)		----	1.0	%	19.4		23.3		15.8		16.2		8.7		
EG005T: Total Metals by ICP-AES															
Arsenic	7440-38-2	5	mg/kg	5		9		5		7		<5			
Cadmium	7440-43-9	1	mg/kg	<1		<1		<1		<1		<1			
Chromium	7440-47-3	2	mg/kg	17		12		10		19		155			
Copper	7440-50-8	5	mg/kg	39		7		16		<5		42			
Lead	7439-92-1	5	mg/kg	47		15		26		15		<5			
Nickel	7440-02-0	2	mg/kg	4		<2		4		<2		131			
Zinc	7440-66-6	5	mg/kg	69		6		92		<5		64			
EG035T: Total Recoverable Mercury by FIMS															
Mercury	7439-97-6	0.1	mg/kg	<0.1		<0.1		<0.1		<0.1		<0.1			
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls		----	0.10	mg/kg	----		----		<0.10		----		<0.10		
EP068A: Organochlorine Pesticides (OC)															
alpha-BHC	319-84-6	0.05	mg/kg	----		----		<0.05		----		<0.05			
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----		----		<0.05		----		<0.05			
beta-BHC	319-85-7	0.05	mg/kg	----		----		<0.05		----		<0.05			
gamma-BHC	58-89-9	0.05	mg/kg	----		----		<0.05		----		<0.05			
delta-BHC	319-86-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
Heptachlor	76-44-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
Aldrin	309-00-2	0.05	mg/kg	----		----		<0.05		----		<0.05			
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----		----		<0.05		----		<0.05			
trans-Chlordane	5103-74-2	0.05	mg/kg	----		----		<0.05		----		<0.05			
alpha-Endosulfan	959-98-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
cis-Chlordane	5103-71-9	0.05	mg/kg	----		----		<0.05		----		<0.05			
Dieldrin	60-57-1	0.05	mg/kg	----		----		<0.05		----		<0.05			
4,4'-DDE	72-55-9	0.05	mg/kg	----		----		<0.05		----		<0.05			
Endrin	72-20-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
beta-Endosulfan	33213-65-9	0.05	mg/kg	----		----		<0.05		----		<0.05			
4,4'-DDD	72-54-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
Endrin aldehyde	7421-93-4	0.05	mg/kg	----		----		<0.05		----		<0.05			
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----		----		<0.05		----		<0.05			
4,4'-DDT	50-29-3	0.2	mg/kg	----		----		<0.2		----		<0.2			
Endrin ketone	53494-70-5	0.05	mg/kg	----		----		<0.05		----		<0.05			
Methoxychlor	72-43-5	0.2	mg/kg	----		----		<0.2		----		<0.2			
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons															
Naphthalene	91-20-3	0.5	mg/kg	----		----		<0.5		----		<0.5			



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH38 2.5-2.7	BH38 3.9-4.0	BH45 0.5-0.7	BH45 1.5-1.7	BH37 0.5-0.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-016	ES0807402-017	ES0807402-018	ES0807402-019	ES0807402-020
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	116	----	131
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	129	----	134
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	81.3	----	91.6
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	106	----	99.7
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	94.5	----	84.8
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	91.9	----	84.9
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH38 2.5-2.7	BH38 3.9-4.0	BH45 0.5-0.7	BH45 1.5-1.7	BH37 0.5-0.7
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807402-016	ES0807402-017	ES0807402-018	ES0807402-019	ES0807402-020
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	81.5	----	80.5
Anthracene-d10	1719-06-8	0.1	%	----	----	93.0	----	94.7
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	108	----	106
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	94.4	93.1	107	96.9	95.2
Toluene-D8	2037-26-5	0.1	%	94.6	92.6	103	97.0	94.7
4-Bromofluorobenzene	460-00-4	0.1	%	94.0	89.6	101	95.1	91.9



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH37 1.5-1.7	BH37 2.5-2.7	DUP Z 1	DUP Z 3	DUP Z 5
				26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
				ES0807402-021	ES0807402-022	ES0807402-023	ES0807402-024	ES0807402-025
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	19.7	16.4	18.0	19.6	9.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	6	7	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	26	15	15	44	134
Copper	7440-50-8	5	mg/kg	<5	<5	26	33	32
Lead	7439-92-1	5	mg/kg	21	28	538	47	<5
Nickel	7440-02-0	2	mg/kg	<2	<2	8	28	106
Zinc	7440-66-6	5	mg/kg	<5	<5	184	60	61
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	----	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	----	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	----	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	----	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	----	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	----	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	----	----	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	----	----	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	----	----	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	----	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	120	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL				Client sample ID	BH37 1.5-1.7	BH37 2.5-2.7	DUP Z 1	DUP Z 3	DUP Z 5
Client sampling date / time					26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00	26-MAY-2008 15:00
Compound	CAS Number	LOR	Unit		ES0807402-021	ES0807402-022	ES0807402-023	ES0807402-024	ES0807402-025
EP080: BTEX - Continued									
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		----	----	----	----	89.7
2-Chlorophenol-D4	93951-73-6	0.1	%		----	----	----	----	88.6
2,4,6-Tribromophenol	118-79-6	0.1	%		----	----	----	----	94.3
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		----	----	----	----	80.6
Anthracene-d10	1719-06-8	0.1	%		----	----	----	----	91.6
4-Terphenyl-d14	1718-51-0	0.1	%		----	----	----	----	107
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		101	113	116	109	116
Toluene-D8	2037-26-5	0.1	%		98.5	118	108	105	110
4-Bromofluorobenzene	460-00-4	0.1	%		93.3	114	110	107	112



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	MW4 0.3-0.5	MW4 1.3-1.5	----	----	----
				Client sampling date / time	26-MAY-2008 15:00	26-MAY-2008 15:00	----	----	----
Compound	CAS Number	LOR	Unit	ES0807402-026	ES0807402-027	----	----	----	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	6.2	3.3	----	----	----	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	14	11	----	----	----	
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----	
Chromium	7440-47-3	2	mg/kg	9	25	----	----	----	
Copper	7440-50-8	5	mg/kg	17	19	----	----	----	
Lead	7439-92-1	5	mg/kg	9	17	----	----	----	
Nickel	7440-02-0	2	mg/kg	4	<2	----	----	----	
Zinc	7440-66-6	5	mg/kg	14	6	----	----	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----	
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----	



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				MW4 0.3-0.5	MW4 1.3-1.5	----	----	----
				26-MAY-2008 15:00	26-MAY-2008 15:00	----	----	----
Compound	CAS Number	LOR	Unit	ES0807402-026	ES0807402-027	----	----	----
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	96.1	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	89.6	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	92.0	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	80.6	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%	88.7	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	106	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	101	104	----	----	----
Toluene-D8	2037-26-5	0.1	%	115	112	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	113	110	----	----	----



Surrogate Control Limits

Sub-Matrix: SOIL		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	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	10	136
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121

Laboratory Quotation Order No.

Job 1.0

Disposer to: Address: Phone No:		Sampled by:		Consignment Officer: Date Dispatched:	
Attention:		Project Manager/ Report Number:		Claims Section: Consignment Note No.:	
Disposed by:		Date:		Time:	
Disposed by:		Date:		Time:	

Comments	Sample Station	Container Type and Preservative	Sample No.	Date Received	Analysis Required					Sample Contamination
					Pb	Cd	Cu	Fe	Mn	
	30	CLINICAL	34	20/10/00						
		(12)								
		(13)								
		35								
		36								
		(14)								
		37								
		(15)								
		38								
		39								
		(16)								
		(17)								
		40								
		(18)								
		41								
		(19)								
		42								

Special Laboratory Instructions:	Turnaround Required:
----------------------------------	----------------------

Detection Limits:	Turnaround Required:
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JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

Dispatched to Receiving Function Attention	ALG Assistant	Sampled by Project Manager Report results to	Dispatched Officer Date Dispatched Courier Service Commitment Reference
		[Signature] [Signature]	[Signature] [Signature]

Re-inspected by	Date	Time	Reason(s)	Date	Time
B Smith		27K			
			See #2 - 8-6 ^c	27/5/08	3.00pm

[illegible]

Source: U.S. Labor Dept.; <http://bit.ly/3448>

2018年12月

Laurenz Funkh

 ξ_{dew}

Colors: **WHITE**, top of head **YELLOW**, the spot below chin **black**, tail to tip of nose, feet & base of legs **BLUE**. To be retained with reds.

FOR NUMBER MUST BE
REFERENCE ON ALL
SUBSEQUENT PAGES



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0807476	Page	: 1 of 13
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Ashwini Sharma
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: ENVILCOV00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 28-MAY-2008
C-O-C number	: 4458-4459-4460	Issue Date	: 05-JUN-2008
Sampler	: N.C	No. of samples received	: 48
Site	: ----	No. of samples analysed	: 25
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Ankit Joshi	Inorganic Chemist	Inorganics
Ashwini Sharma	Laboratory Manager	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Organics
Sanjeshni Jyoyi Mala		Inorganics
Sanjeshni Jyoyi Mala		Organics

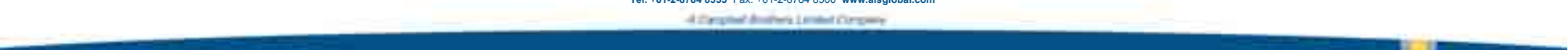
Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

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

A Campbell Brothers Limited Company





General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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

- **EP080: The trip spike and its control have been analysed for volatile TPH and BTEX only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained.**



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH5 0.3-0.5	BH5 1.0-1.2	BH5 1.3-1.5	BH5 2.5-2.7	BH11 0.5-0.7
				Client sampling date / time	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807476-001	ES0807476-002	ES0807476-003	ES0807476-004	ES0807476-005	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	12.3	15.1	13.9	7.8	15.6	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	9	8	<5	12	7	
Cadmium	7440-43-9	1	mg/kg	<1	6	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	10	10	6	10	6	
Copper	7440-50-8	5	mg/kg	70	38	14	26	19	
Lead	7439-92-1	5	mg/kg	53	42	8	9	30	
Nickel	7440-02-0	2	mg/kg	26	13	4	3	10	
Zinc	7440-66-6	5	mg/kg	248	341	80	20	79	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	<0.5	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	<0.5	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	<0.5	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	<0.5	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	<0.5	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	<0.5	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	<0.5	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	<0.5	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	<0.5	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	<0.5	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	<0.5	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	<0.5	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	<0.5	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	<0.5	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	<0.5	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	<0.5	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	14	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	110	2060	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	130	890	4380	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH5 0.3-0.5	BH5 1.0-1.2	BH5 1.3-1.5	BH5 2.5-2.7	BH11 0.5-0.7
				23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
				ES0807476-001	ES0807476-002	ES0807476-003	ES0807476-004	ES0807476-005
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	97.1	----	----	----	101
2-Chlorophenol-D4	93951-73-6	0.1	%	75.2	----	----	----	75.5
2,4,6-Tribromophenol	118-79-6	0.1	%	88.3	----	----	----	93.3
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	71.8	----	----	----	75.7
Anthracene-d10	1719-06-8	0.1	%	78.4	----	----	----	81.5
4-Terphenyl-d14	1718-51-0	0.1	%	82.4	----	----	----	98.5
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	104	86.3	94.2	79.7	82.4
Toluene-D8	2037-26-5	0.1	%	117	101	112	82.9	96.8
4-Bromofluorobenzene	460-00-4	0.1	%	118	94.9	111	81.4	96.7



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH11 1.5-1.7	BH11 3.3-3.5	BH12 0.7-1.0	BH12 1.5-1.7	BH12 3.8-4.0
				Client sampling date / time	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807476-006	ES0807476-007	ES0807476-008	ES0807476-009	ES0807476-010	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	24.6	14.0	8.5	11.2	10.6	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	13	7	8	9	12	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	14	11	10	8	9	
Copper	7440-50-8	5	mg/kg	16	61	46	66	37	
Lead	7439-92-1	5	mg/kg	57	59	25	21	24	
Nickel	7440-02-0	2	mg/kg	8	9	40	20	19	
Zinc	7440-66-6	5	mg/kg	79	150	220	132	97	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----	
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----	
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----	
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----	
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----	
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----	
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----	
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----	
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	<100	130	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: SOIL				Client sample ID	BH11 1.5-1.7	BH11 3.3-3.5	BH12 0.7-1.0	BH12 1.5-1.7	BH12 3.8-4.0
Client sampling date / time					23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
Compound	CAS Number	LOR	Unit		ES0807476-006	ES0807476-007	ES0807476-008	ES0807476-009	ES0807476-010
EP080: BTEX - Continued									
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		----	----	111	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%		----	----	93.8	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%		----	----	90.2	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.1	%		----	----	71.6	----	----
Anthracene-d10	1719-06-8	0.1	%		----	----	76.8	----	----
4-Terphenyl-d14	1718-51-0	0.1	%		----	----	87.8	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		83.5	81.6	92.1	95.5	95.6
Toluene-D8	2037-26-5	0.1	%		91.8	97.2	109	106	99.7
4-Bromofluorobenzene	460-00-4	0.1	%		90.6	99.9	112	107	101



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH13 0.3-0.5	BH13 1.5-1.7	BH13 2.5-2.7	BH20 0.5-0.7	BH20 1.0-1.2
				23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
				ES0807476-011	ES0807476-012	ES0807476-013	ES0807476-014	ES0807476-015
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	12.7	14.6	10.8	18.2	13.7
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	8	6	9	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	5	5	20	12
Copper	7440-50-8	5	mg/kg	25	47	26	8	8
Lead	7439-92-1	5	mg/kg	7	19	12	21	16
Nickel	7440-02-0	2	mg/kg	16	18	12	12	4
Zinc	7440-66-6	5	mg/kg	32	81	63	13	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	130	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH13 0.3-0.5	BH13 1.5-1.7	BH13 2.5-2.7	BH20 0.5-0.7	BH20 1.0-1.2
				23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807476-011	ES0807476-012	ES0807476-013	ES0807476-014	ES0807476-015
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	89.4	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	76.1	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	81.6	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	73.3	----	----
Anthracene-d10	1719-06-8	0.1	%	----	----	71.4	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	83.5	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	96.4	110	101	92.5	96.7
Toluene-D8	2037-26-5	0.1	%	103	124	111	103	110
4-Bromofluorobenzene	460-00-4	0.1	%	101	111	103	99.3	112



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH8 0.5-0.7	BH8 2.5-2.7	DUP2	DUP7	DUP8
				23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
				ES0807476-016	ES0807476-017	ES0807476-018	ES0807476-019	ES0807476-020
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	12.5	13.6	20.7	20.6	16.1
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	6	10	10	9
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	10	8	20	10	5
Copper	7440-50-8	5	mg/kg	39	37	<5	16	55
Lead	7439-92-1	5	mg/kg	27	31	27	42	17
Nickel	7440-02-0	2	mg/kg	28	9	<2	10	18
Zinc	7440-66-6	5	mg/kg	77	50	<5	79	70
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				BH8 0.5-0.7	BH8 2.5-2.7	DUP2	DUP7	DUP8
				23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00	23-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807476-016	ES0807476-017	ES0807476-018	ES0807476-019	ES0807476-020
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	108	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	88.6	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	94.8	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	73.8	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%	81.1	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	91.8	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	103	99.3	90.6	97.0	101
Toluene-D8	2037-26-5	0.1	%	110	112	95.2	101	115
4-Bromofluorobenzene	460-00-4	0.1	%	115	112	100	85.4	102



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				DUP10	DUP11	TRIP SPIKE	TRIP BLANK	TSC
				23-MAY-2008 15:00	23-MAY-2008 15:00	22-MAY-2008 15:00	22-MAY-2008 15:00	22-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807476-021	ES0807476-022	ES0807476-042	ES0807476-043	ES0807476-049
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	15.0	12.5	----	----	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	<5	----	----	----
Cadmium	7440-43-9	1	mg/kg	4	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	11	6	----	----	----
Copper	7440-50-8	5	mg/kg	31	10	----	----	----
Lead	7439-92-1	5	mg/kg	48	9	----	----	----
Nickel	7440-02-0	2	mg/kg	10	3	----	----	----
Zinc	7440-66-6	5	mg/kg	346	80	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	21	<10	22
C10 - C14 Fraction	----	50	mg/kg	160	3180	----	----	----
C15 - C28 Fraction	----	100	mg/kg	860	5020	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.4	<0.2	0.6
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	8.7	<0.5	10.3
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	1.3	<0.5	1.3
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	7.2	<0.5	7.4
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	2.9	<0.5	2.8
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	106	108	107	117	105
Toluene-D8	2037-26-5	0.1	%	101	102	100	94.3	84.7
4-Bromofluorobenzene	460-00-4	0.1	%	100	107	87.4	101	93.0



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121

Dispatch to: Address: Phone No:	ALS	Sampled by: N.C.	Designing Officer: L.C. office
Attention:	Admini	Project Manager (report results to): Bennett Smith	Date Dispatched: 9/11/00
Requisitioned by:	B. Smith	Date:	Time:
Received by:	Frank - ALS	Date:	Time:

Continued	Sample Matrix	Container Type and Preparation	Sample No.	Date Sampled	Analysis Requested										Sample Condition and Remarks
					PHAS	THAS	MOBIL + 100X	Metals	S-5	S-11					
	SOIL	JAR 23	BH30 1-0-1.2	23/5											
			(1) BH5 0-3-0.5												
			(2) 1-0-1.2												
			(3) 1-3-1.5												
			24 2-3-2.5												
			(4) 2-5-2.7												
			(5) BM11 0-5-0.7												
			25 1-0-1.2												
			(6) 1-5-1.7												
			26 2-5-2.7												
			(7) 3-3-3.5												
			27 4-3-4.5												
			28 9-0-7.2												
			29 8-5-8.7												
			30 11-0-10.2												
			31 12-2-12.5												
			32 BH30 1-0-1.2												

Environmental Division
Sydney
Work Order
ES0807476



Telephone +61 2 9784 8500

Special Laboratory Instructions:

Collection Notes:

Colors: WHITE Significance. YELLOW: Referenced to the State Lab. 100 to sign on receipt and the back to Coffey. BLUE: To be returned with results.

Same as No (23)

Turnaround Required

5 day as per Non-Hind

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES



Chain of Custody

Laboratory Caption / Order No.

Job No.

Sheet of

No: 4455

Dispatch to:
Vendor's
Form No.

ALS

Sampled by:

N.C.

Consignment Officer:

Date Dispatched:

L.C. Office
9911 0000

Attention:

Ashwini

Project Manager,
(signature to)

Benedict Smith

Course / Service:

Consignment Note No.:

Received by:

Frank

Date:

Time:

Received by:

Frank - ALS

Date:

28/5/18

Time:

1500

Comments	Sample Size	Container Type and Preservation	Sample No.	Date Sampled	Analytical Parameters										Sample Condition as received
					PH	TH	Ca ²⁺ & Mg ²⁺	Na/K	SS	SI					
	500L	JAR	33	BMB 0-3-0.5	23/5										
			(8)	0.7-1.0											
			(9)	1.5-1.7											
			34	2.3-2.5											
			(10)	3.8-4.0											
			35	6.8-7.0											
			36	8.3-8.5											
			37	9.8-10.0											
			(11)	BMB 0-2-0.5											
			38	0.7-1.0											
			(12)	1.5-1.7											
			(13)	2.5-2.7											
			39	3.9-4.0											
			40	5.3-6.5											
			41	6.7-7.0											
			42	TRIP SPIKE											
			43	TRIP BLANK											

Special Laboratory Instructions:

Detection Limits

Turnaround Time

5 days

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

Copies: WHITE: Sign on receipt YELLOW: If dispatched to alternate Lab. Lab to sign on receipt and fax back to Coffey. BLUE: To be returned with report



Chain of Custody

Laboratory Division / Order No:

Job No:

NO: 4180

Sheet 3 of 3

Dispatch to:
Address:
Phone No:

ALS

Sent by:

N.C.

Consigning Office:

L.C. Office

Date Dispatched:

9/11/00

Person:

Ashwin

Project Manager:
Report Supply To:

Benedict Smith

Consul Service:

Consignment Note No:

Requisitioned by:

B. Smith

Date:

Time:

Received by:

Frank - ALS

Date:

29/5/00

Time:

1500

Container	Sample Matrix	Container Type and Preservation	Sample No	Date Sampled	Analysis Required						Sample Condition on Receipt
					PAHs	TCs	Metals - EDTA	Merch	9-5	5-11	
	Soil	JAR	(14) BH20 0.5-0.7	25/5					/	/	
			(15) 1.0-1.2						/		
			44 2.0-2.2								
			45 2.5-2.7								
			(16) BHK 0.5-0.7		/				/		
			46 1.0-1.2								
			47 1.3-1.5								
			(17) 2.5-2.7						/	/	
			(18) Dep 1						/	/	
Send to Labmark	acknowledge by 5/6/00		(19) Dep 2						/	/	
			(20) Dep 7						/	/	
			(21) Dep 8						/	/	
Send to Labmark	acknowledge by 5/6/00		(22) Dep 9						/	/	
			(23) Dep 10						/	/	
			(24) Dep 11						/	/	
Phone forward to Labmark	acknowledge by 5/6/00		(25) Dep 11A						/	/	
Special Laboratory Instructions:			49 TSC						/	/	

Detection Limits:

Turnaround Required

5 days

Copies: WHITE: For on release YELLOW: For submission to relevant Lab, Lab sign on receipt and for work to Coffey BLUE: To be destroyed and retained.

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

4/2/00/01



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0807581	Page	: 1 of 14
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Ashwini Sharma
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: EL00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 29-MAY-2008
C-O-C number	: 4330-4332	Issue Date	: 11-JUN-2008
Sampler	: NICK COWMAN	No. of samples received	: 44
Site	: ----	No. of samples analysed	: 24
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Inorganic Chemist	Inorganics
Ashwini Sharma	Laboratory Manager	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Organics
Sanjeshni Jyoyi Mala		Inorganics
Sanjeshni Jyoyi Mala		Organics

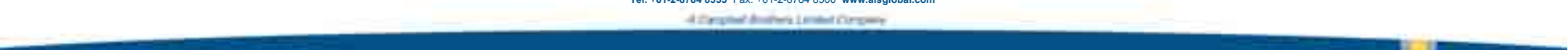
Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

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

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General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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

- **EG005T: LCS recovery for some elements falls outside ALS Dynamic Control Limit. However, it is within the acceptance criteria based on ALS DQO. No further action is required.**



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	MW11 0.5-0.7	MW11 1.5-1.7	MW11 3.9-4.0	MW12 0.5-0.7	MW12 1.0-1.2
				Client sampling date / time	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807581-001	ES0807581-002	ES0807581-003	ES0807581-004	ES0807581-005	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	19.9	24.2	15.4	21.3	22.0	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	9	6	<5	11	10	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	43	17	9	21	15	
Copper	7440-50-8	5	mg/kg	16	<5	26	6	<5	
Lead	7439-92-1	5	mg/kg	85	21	10	27	26	
Nickel	7440-02-0	2	mg/kg	22	<2	<2	3	<2	
Zinc	7440-66-6	5	mg/kg	68	8	<5	14	9	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	<0.5	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	<0.5	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	<0.5	----	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	<0.5	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	<0.5	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	MW11 0.5-0.7	MW11 1.5-1.7	MW11 3.9-4.0	MW12 0.5-0.7	MW12 1.0-1.2
				27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00
				ES0807581-001	ES0807581-002	ES0807581-003	ES0807581-004	ES0807581-005
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	67.9	----	----	71.9	----
2-Chlorophenol-D4	93951-73-6	0.1	%	65.0	----	----	65.2	----
2,4,6-Tribromophenol	118-79-6	0.1	%	58.5	----	----	59.7	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	91.4	----	----	92.0	----
Anthracene-d10	1719-06-8	0.1	%	90.2	----	----	93.3	----
4-Terphenyl-d14	1718-51-0	0.1	%	90.0	----	----	91.6	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	86.6	97.8	95.7	88.1	104
Toluene-D8	2037-26-5	0.1	%	89.5	91.5	97.7	85.3	107
4-Bromofluorobenzene	460-00-4	0.1	%	82.2	88.6	92.0	88.5	104



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW12 3.4-3.5	MW15 0.5-0.7	MW15 1.5-1.7	MW15 4.5-4.7	DUPZ 7
				27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807581-006	ES0807581-007	ES0807581-008	ES0807581-009	ES0807581-010
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	11.8	20.8	19.5	17.2	21.8
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	12	8	13	32	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	9	16	23	19	14
Copper	7440-50-8	5	mg/kg	<5	6	7	5	7
Lead	7439-92-1	5	mg/kg	10	27	36	16	34
Nickel	7440-02-0	2	mg/kg	<2	<2	<2	<2	<2
Zinc	7440-66-6	5	mg/kg	<5	9	19	<5	19
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				MW12 3.4-3.5	MW15 0.5-0.7	MW15 1.5-1.7	MW15 4.5-4.7	DUPZ 7
				27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00	27-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807581-006	ES0807581-007	ES0807581-008	ES0807581-009	ES0807581-010
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	69.1	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	65.0	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	60.8	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	91.5	----	----	----
Anthracene-d10	1719-06-8	0.1	%	----	93.4	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	92.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	98.8	90.0	87.7	97.9	84.6
Toluene-D8	2037-26-5	0.1	%	87.3	91.6	84.4	98.3	88.9
4-Bromofluorobenzene	460-00-4	0.1	%	88.5	87.5	93.1	97.7	95.6



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	DUPZ 6	MW16 0.5-0.7	MW16 1.0-1.2	MW16 2.5-2.7	BH36 0.3-0.4
				27-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00
				ES0807581-011	ES0807581-013	ES0807581-014	ES0807581-015	ES0807581-016
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	20.6	13.7	18.0	20.0	10.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	6	6	10	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	49	11	14	28	10
Copper	7440-50-8	5	mg/kg	16	<5	<5	<5	8
Lead	7439-92-1	5	mg/kg	61	11	13	23	24
Nickel	7440-02-0	2	mg/kg	28	<2	2	<2	4
Zinc	7440-66-6	5	mg/kg	56	<5	<5	<5	40
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	<0.10	----	----	<0.10
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	<0.05
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	0.06
4,4'-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	<0.2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	<0.5



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	DUPZ 6	MW16 0.5-0.7	MW16 1.0-1.2	MW16 2.5-2.7	BH36 0.3-0.4
				27-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00
				ES0807581-011	ES0807581-013	ES0807581-014	ES0807581-015	ES0807581-016
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	71.0	----	----	66.0
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	111	----	----	103
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	71.6	----	----	60.2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	66.4	----	----	65.6
2-Chlorophenol-D4	93951-73-6	0.1	%	----	63.3	----	----	62.1
2,4,6-Tribromophenol	118-79-6	0.1	%	----	57.8	----	----	55.6
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				DUPZ 6	MW16 0.5-0.7	MW16 1.0-1.2	MW16 2.5-2.7	BH36 0.3-0.4
				27-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807581-011	ES0807581-013	ES0807581-014	ES0807581-015	ES0807581-016
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	89.9	----	----	90.9
Anthracene-d10	1719-06-8	0.1	%	----	92.8	----	----	92.3
4-Terphenyl-d14	1718-51-0	0.1	%	----	90.6	----	----	91.6
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	85.4	93.1	95.9	82.0	95.6
Toluene-D8	2037-26-5	0.1	%	86.9	90.8	98.0	82.2	82.8
4-Bromofluorobenzene	460-00-4	0.1	%	89.8	90.5	94.7	84.1	85.5



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH36 1.5-1.7	MW14 1.0-1.2	MW14 2.5-2.7	BH27 1.0-1.2	MW10 0.5-0.7
				28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00
				ES0807581-017	ES0807581-018	ES0807581-019	ES0807581-020	ES0807581-021
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	23.6	13.6	19.9	20.6	22.9
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	5	8	7	5
Cadmium	7440-43-9	1	mg/kg	<1	2	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	24	22	28	12	25
Copper	7440-50-8	5	mg/kg	<5	280	<5	<5	<5
Lead	7439-92-1	5	mg/kg	18	240	17	15	15
Nickel	7440-02-0	2	mg/kg	<2	81	<2	<2	13
Zinc	7440-66-6	5	mg/kg	<5	992	<5	18	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.6	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	----	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg	----	----	----	<0.5	----
Fluorene	86-73-7	0.5	mg/kg	----	----	----	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg	----	----	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg	----	----	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg	----	----	----	<0.5	----
Pyrene	129-00-0	0.5	mg/kg	----	----	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg	----	----	----	<0.5	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	----	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	----	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	----	<0.5	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	----	<0.5	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	190	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	220	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				BH36 1.5-1.7	MW14 1.0-1.2	MW14 2.5-2.7	BH27 1.0-1.2	MW10 0.5-0.7
				28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807581-017	ES0807581-018	ES0807581-019	ES0807581-020	ES0807581-021
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	----	71.3	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	----	67.0	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	----	63.6	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	----	97.1	----
Anthracene-d10	1719-06-8	0.1	%	----	----	----	95.8	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	----	99.4	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	106	98.0	83.1	97.6	95.4
Toluene-D8	2037-26-5	0.1	%	96.6	93.1	87.5	115	98.4
4-Bromofluorobenzene	460-00-4	0.1	%	89.3	94.0	78.8	111	97.9



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				MW10 1.9-2.0	DUPZ 8	DUPZ 9	MW10 1.0-1.2	----
				28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	28-MAY-2008 15:00	----
Compound	CAS Number	LOR	Unit	ES0807581-022	ES0807581-023	ES0807581-041	ES0807581-043	----
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	14.7	21.5	18.9	17.4	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	6	9	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	18	10	14	19	----
Copper	7440-50-8	5	mg/kg	<5	6	<5	<5	----
Lead	7439-92-1	5	mg/kg	14	21	15	18	----
Nickel	7440-02-0	2	mg/kg	3	2	<2	7	----
Zinc	7440-66-6	5	mg/kg	6	136	<5	5	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.2	<0.1	<0.1	<0.1	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	85.6	95.4	112	100	----
Toluene-D8	2037-26-5	0.1	%	99.1	104	108	92.5	----
4-Bromofluorobenzene	460-00-4	0.1	%	109	109	118	109	----



Surrogate Control Limits

Sub-Matrix: SOIL		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	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	10	136
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121

Dispatch to: Address: Phone No:	ALS	Sampled by: NGA COWLING	Containing Chain: Date Drawn: 17/1/2008
Attention: ASHWINI	Product Manager: benedict sin	Counter Service: Consignment Reference:	
Requested by: 	Date: 27/1	Received by: 	Date: 27-5-08 12-15
		29/5/08 4:00pm ALS Sydney	

Comments	Sample No.	Container Type and Preservative	Sample Loc	Date Sampled	Analysis Requested						Sample Condition at Receipt
					ALPH	TPH	Metals - BTEX	Metals	S-S	S-H	
	24	GLASS 30%	(1) 0.5-0.7	27/5/08	/			/			
			(2) 1.0-1.2					/			
	25		(3) 1.5-1.7					/			
			(4) 2.5-2.7					/			
			(5) 3.0-4.0					/			
			(6) 0.5-0.7		/			/			
			(7) 1.0-1.2					/			
	26		(8) 1.5-1.7					/			
			(9) 2.0-2.5					/			
			(10) 2.5-2.7		/			/			
	27		(11) 3.0-4.0					/			
			(12) 4.5-5.0					/			
	28		(13) 5.5-6.0					/			
	29		(14) 6.5-7.0					/			
			(15) 7.5-8.0					/			
	30		(16) 8.5-9.0					/			
			(17) 9.5-10.0					/			
			(18) 10.5-11.0					/			
			(19) 11.5-12.0					/			
			(20) 12.5-13.0					/			
			(21) 13.5-14.0					/			
			(22) 14.5-15.0					/			
			(23) 15.5-16.0					/			
			(24) 16.5-17.0					/			
			(25) 17.5-18.0					/			
			(26) 18.5-19.0					/			
			(27) 19.5-20.0					/			
			(28) 20.5-21.0					/			
			(29) 21.5-22.0					/			
			(30) 22.5-23.0					/			
			(31) 23.5-24.0					/			
			(32) 24.5-25.0					/			
			(33) 25.5-26.0					/			
			(34) 26.5-27.0					/			
			(35) 27.5-28.0					/			
			(36) 28.5-29.0					/			
			(37) 29.5-30.0					/			
			(38) 30.5-31.0					/			
			(39) 31.5-32.0					/			
			(40) 32.5-33.0					/			
			(41) 33.5-34.0					/			
			(42) 34.5-35.0					/			
			(43) 35.5-36.0					/			
			(44) 36.5-37.0					/			
			(45) 37.5-38.0					/			
			(46) 38.5-39.0					/			
			(47) 39.5-40.0					/			
			(48) 40.5-41.0					/			
			(49) 41.5-42.0					/			
			(50) 42.5-43.0					/			
			(51) 43.5-44.0					/			
			(52) 44.5-45.0					/			
			(53) 45.5-46.0					/			
			(54) 46.5-47.0					/			
			(55) 47.5-48.0					/			
			(56) 48.5-49.0					/			
			(57) 49.5-50.0					/			
			(58) 50.5-51.0					/			
			(59) 51.5-52.0					/			
			(60) 52.5-53.0					/			
			(61) 53.5-54.0					/			
			(62) 54.5-55.0					/			
			(63) 55.5-56.0					/			
			(64) 56.5-57.0					/			
			(65) 57.5-58.0					/			
			(66) 58.5-59.0					/			
			(67) 59.5-60.0					/			
			(68) 60.5-61.0					/			
			(69) 61.5-62.0					/			
			(70) 62.5-63.0					/			
			(71) 63.5-64.0					/			
			(72) 64.5-65.0					/			
			(73) 65.5-66.0					/			
			(74) 66.5-67.0					/			
			(75) 67.5-68.0					/			
			(76) 68.5-69.0					/			
			(77) 69.5-70.0					/			
			(78) 70.5-71.0					/			
			(79) 71.5-72.0					/			
			(80) 72.5-73.0					/			
			(81) 73.5-74.0					/			
			(82) 74.5-75.0					/			
			(83) 75.5-76.0					/			
			(84) 76.5-77.0					/			
			(85) 77.5-78.0					/			
			(86) 78.5-79.0					/			
			(87) 79.5-80.0					/			
			(88) 80.5-81.0					/			
			(89) 81.5-82.0					/			
			(90) 82.5-83.0					/			
			(91) 83.5-84.0					/			
			(92) 84.5-85.0					/			
			(93) 85.5-86.0					/			
			(94) 86.5-87.0					/			
			(95) 87.5-88.0					/			
			(96) 88.5-89.0					/			
			(97) 89.5-90.0					/			
			(98) 90.5-91.0					/			
			(99) 91.5-92.0					/			
			(100) 92.5-93.0					/			
			(101) 93.5-94.0					/			
			(102) 94.5-95.0					/			
			(103) 95.5-96.0					/			
			(104) 96.5-97.0					/			
			(105) 97.5-98.0					/			
			(106) 98.5-99.0					/			
			(107) 99.5-100.0					/			

Special Laboratory Instructions

Delivery Details

Turnaround Required

5 day

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

Copies: WHITE: To be retained; YELLOW: To be retained; BLUE: To be retained

Dispute to: Subject & Name No: ALS	Site No: New Gorman	Consigning Office: LAO, Tullamore Date Dispatched: 23/11/2008
Attention: ASPHALT	Project Manager / Project Name: Benedict Smith	Courier Service: Consignment No.:
Requested by: 	Date: 27/5	Received by:
		Date: 25-5-08
		Date: 29/5/08

Comments	Sample No.	Container Type and Identification	Sample No.	Date Sampled	Analysis Requested										Comments
					PAHs	TPHs	MOHs - G/TX	Metals	SS	S-11					
Send to laboratory	3012	CLAY'S 3012	(10) DUP2 G	27/5/08					/						
			(12) DUP2 6a	↓					/						
			(13) MW16 0.5-0.7	28/5/08	/				/						
			(14) 1.0-1.2						/						
			31 1.5-1.7						/						
			(15) 2.5-2.7						/						
			32 2.5-2.7						/						
			(16) 3.0-0.4		/				/	/					
			33 1.0-1.2						/						
			(17) 1.5-1.7						/						
			34 2.5-2.7						/						
			35 0.5-0.7						/						
			(18) 1.0-1.2						/						
			36 1.5-1.7						/						
			(19) 2.5-2.7						/						
			37 3.9-4.0						/						
			(20) 31127 0.5-0.7	↓					/						

Specify Laboratory Instructions

42

Detection Limit

Turnaround Required

Solway

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

Copies: WHITE - For use only; YELLOW - For use only; BLUE - To be signed with authority

Dispatch to Address & Phone No. ALS	Sampled by Nick Counsell	Cleanup and Effluent Date Unleached 11/11/2011
Attention ASHWINI	Project Manager (Phone No.) BENEDICT S. O.	Counter Sign on Commence Date for

[illegible]

Saxx & Laboratory, Inc. 1-800-674-6115

2018年4月 15日

Background: 20 years

COODS WHITE, to be returned with receipt. YELLOW, to be returned with receipt. BLUE, to be returned with receipt.

JOHN J. MULLER MUST BE
REFERENCED ON ALL
SUSPECTED/CONFIDENTIAL PAGES

Dispatch to: Address & Phone No. ALS	Submitted by Nick Cowman	Consigning Officer LANE COVE OFFICE Date Dispatched 17/11/2008
Attention ASHWINI	Project Manager (specify results for) Benedict Smith	Courier Service Consignment Note No.
Requisitioned by 	Date 27/11	Received by
		Date 27-11-08
		Time 12:15
		Location Stephano 466 Ave Sydney

Comments	Sample Matrix	Container Type and Preservative	Sample No	Date Sampled	Analyses Requested										Sample Condition or Incident
					PAHs	TPHs	MSHs	BTEX	Metals	5-5	5-11				
	SOIL	GLASS BOTT	(1) 1.11 0.9.0.7	27/11/08	/				/						
			24						/						
			(2)						/						
			25						/						
			(3)						/						
			(4) M.0.2 0.5.0.7		/				/						
			(5)						/						
			26						/						
			(6)						/						
			(7) M.0.5 0.5.0.7		/				/						
			27						/						
			(8)						/						
			28						/						
			29						/						
			(9)						/						
			30						/						
			(10) DUPZ 7						/						

Environmental Division
 Sydney
 Work Order
ES0807581



1. September 2008 12:15:24 AM

Special Laboratory Instructions

Detection Limits

Turnaround Required

5 day

JOB NUMBER MUST BE
 REFERENCED ON ALL
 SUBSEQUENT PAGES

Requester's
Address &
Phone No.:

ALS

Sampled by:

Nick Common

Managing Office:

LAKE COVE

Date Dispatched:

11/11/2002

Attention:

ASHWINI

Project Manager
(report results to):

Benedict Smith

Counter Service:

Consignment Note No.

Requisitioned by:

[Signature]

Date:

Time:

Requisitioned by:

[Signature]

Date:

Time:

24-5-02 12:15

[Signature] 4-6
[Signature]

29/5/02 4:00pm

Comments	Sample Name	Container Type and Preservation	Sample No.	Date Sampled	Analysis Requested											Sample Condition on Receipt
					PAHs	TPHs	MOHs - BTEX	MOHs	S-5	S-11						
	CLASS ONE	(20) 100g	1-0-10	28/4/02	/				/							
		38	1-0-10													
		39	1-0-10													
		(20) 100g	1-0-10						/							
		40	1-0-10													
		(22)	1-0-10						/							
		41	1-0-10						/							
Send to Labmark.		(20) 100g	1-0-10						/							
		(20) 100g	1-0-10						/							
		43	1-0-10	28/5/02												
		44	1-0-10	28/5/02												
		45	1-0-10	27/5/02												

Special Laboratory Instructions:

Detection Limits:

Turnaround Required:

5 days

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0807705	Page	: 1 of 20
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Ashwini Sharma
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: EL00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 02-JUN-2008
C-O-C number	: 4333-36	Issue Date	: 12-JUN-2008
Sampler	: NC	No. of samples received	: 61
Site	: ----	No. of samples analysed	: 35
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Ankit Joshi	Inorganic Chemist	Inorganics
Celine Conceicao	Spectroscopist	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Organics
Hoa Nguyen		Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Organics

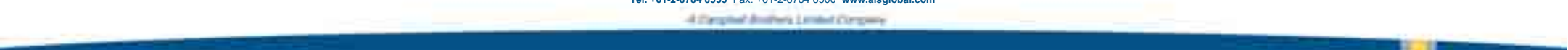
Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

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

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General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH41_1.5-1.7	DUPZ 12	BH40_0.5-0.7	BH40_1.3-1.4	BH46_0.5-0.7
				30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
				ES0807705-001	ES0807705-002	ES0807705-003	ES0807705-004	ES0807705-005
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	17.9	17.2	13.2	26.7	13.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	10	7	<5	10	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	10	13	12	29	13
Copper	7440-50-8	5	mg/kg	9	<5	12	<5	53
Lead	7439-92-1	5	mg/kg	14	12	41	20	233
Nickel	7440-02-0	2	mg/kg	<2	<2	6	<2	22
Zinc	7440-66-6	5	mg/kg	<5	<5	36	<5	218
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	<0.5	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH41_1.5-1.7	DUPZ 12	BH40_0.5-0.7	BH40_1.3-1.4	BH46_0.5-0.7
				30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-001	ES0807705-002	ES0807705-003	ES0807705-004	ES0807705-005
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	81.8	88.1	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	77.8	76.0	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	54.5	51.6	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	84.2	81.5	----	----
Anthracene-d10	1719-06-8	0.1	%	----	94.4	86.1	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	91.8	88.4	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	88.1	86.0	97.6	81.8	90.6
Toluene-D8	2037-26-5	0.1	%	85.6	88.9	95.8	89.7	95.1
4-Bromofluorobenzene	460-00-4	0.1	%	90.2	87.2	97.9	84.9	90.5



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH52_0.2-0.3	BH52_1.0-1.2	MW19_0.5-0.7	MW17_0.5-0.7	MW17_1.5-1.7
				Client sampling date / time	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-006	ES0807705-007	ES0807705-008	ES0807705-009	ES0807705-010	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	14.3	13.0	24.3	5.0	16.4	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	5	<5	5	<5	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	6	5	12	9	3	
Copper	7440-50-8	5	mg/kg	12	12	20	53	13	
Lead	7439-92-1	5	mg/kg	34	13	19	26	188	
Nickel	7440-02-0	2	mg/kg	<2	<2	<2	30	2	
Zinc	7440-66-6	5	mg/kg	42	<5	6	97	43	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.6	<0.1	<0.1	<0.1	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	----	----	<0.5	<0.5	
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	----	<0.5	1.7	
Acenaphthene	83-32-9	0.5	mg/kg	----	----	----	<0.5	<0.5	
Fluorene	86-73-7	0.5	mg/kg	----	----	----	<0.5	2.0	
Phenanthrene	85-01-8	0.5	mg/kg	----	----	----	<0.5	9.6	
Anthracene	120-12-7	0.5	mg/kg	----	----	----	<0.5	3.5	
Fluoranthene	206-44-0	0.5	mg/kg	----	----	----	<0.5	9.0	
Pyrene	129-00-0	0.5	mg/kg	----	----	----	<0.5	7.2	
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	----	<0.5	4.1	
Chrysene	218-01-9	0.5	mg/kg	----	----	----	<0.5	3.1	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	----	<0.5	3.2	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	----	<0.5	1.4	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	----	<0.5	2.8	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	----	<0.5	1.1	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	----	<0.5	<0.5	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	----	<0.5	1.2	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	18	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	2210	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	370	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	BH52 _0.2-0.3	BH52 _1.0-1.2	MW19 _0.5-0.7	MW17 _0.5-0.7	MW17 _1.5-1.7
				31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00
				ES0807705-006	ES0807705-007	ES0807705-008	ES0807705-009	ES0807705-010
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	----	78.1	54.2
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	----	74.7	65.5
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	----	49.6	44.9
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	----	84.0	79.7
Anthracene-d10	1719-06-8	0.1	%	----	----	----	87.4	77.5
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	----	89.1	85.4
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	90.4	80.2	86.3	87.0	84.5
Toluene-D8	2037-26-5	0.1	%	95.5	85.9	87.0	92.3	90.4
4-Bromofluorobenzene	460-00-4	0.1	%	92.8	84.4	86.7	92.5	92.9



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	BH47_0.2-0.3	BH47_1.0-1.2	BH51_0.5-0.7	MW18_0.5-0.7	MW18_1.5-1.7
				Client sampling date / time	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-011	ES0807705-012	ES0807705-013	ES0807705-014	ES0807705-015	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	20.9	20.7	18.0	11.2	11.7	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	12	<5	6	<5	7	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	25	7	16	175	64	
Copper	7440-50-8	5	mg/kg	14	27	1010	32	26	
Lead	7439-92-1	5	mg/kg	27	38	352	18	20	
Nickel	7440-02-0	2	mg/kg	<2	3	15	9	3	
Zinc	7440-66-6	5	mg/kg	6	18	333	25	13	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	4.4	<0.1	<0.1	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	1.0	<0.5	----	
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	2.1	<0.5	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	2.0	<0.5	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	1.1	<0.5	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	0.9	<0.5	----	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	1.2	<0.5	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	1.1	<0.5	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	0.5	<0.5	----	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	0.6	<0.5	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	<100	<100	140	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	110	<100	<100	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH47_0.2-0.3	BH47_1.0-1.2	BH51_0.5-0.7	MW18_0.5-0.7	MW18_1.5-1.7
				31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00	31-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-011	ES0807705-012	ES0807705-013	ES0807705-014	ES0807705-015
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	87.0	----	95.7	100	----
2-Chlorophenol-D4	93951-73-6	0.1	%	97.3	----	112	94.7	----
2,4,6-Tribromophenol	118-79-6	0.1	%	48.8	----	51.6	29.6	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	79.9	----	81.5	83.2	----
Anthracene-d10	1719-06-8	0.1	%	85.9	----	78.7	81.8	----
4-Terphenyl-d14	1718-51-0	0.1	%	88.8	----	84.4	87.6	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	83.8	83.1	80.1	81.7	82.3
Toluene-D8	2037-26-5	0.1	%	86.2	88.3	88.4	91.0	96.3
4-Bromofluorobenzene	460-00-4	0.1	%	85.9	86.9	81.5	86.6	93.2



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW18 _4.3-4.4	DUPZ 14	BH39 _0.5-0.7	BH39 _2.5-2.7	MW13 0.5-0.7
				31-MAY-2008 15:00	31-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-016	ES0807705-017	ES0807705-018	ES0807705-019	ES0807705-020
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	12.2	19.6	16.4	21.5	18.6
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	7	9	10	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	37	20	14	27	79
Copper	7440-50-8	5	mg/kg	53	1320	23	<5	21
Lead	7439-92-1	5	mg/kg	803	906	64	19	21
Nickel	7440-02-0	2	mg/kg	13	16	19	4	56
Zinc	7440-66-6	5	mg/kg	248	413	95	6	51
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	0.4	4.0	0.2	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	----	----	<0.5	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	----	----	<0.5	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	----	----	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	----	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	----	<0.5	----	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	----	<0.5	----	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	----	<0.5	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	310	460	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	170	280	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

				MW18 _4.3-4.4	DUPZ 14	BH39 _0.5-0.7	BH39 _2.5-2.7	MW13 0.5-0.7
				31-MAY-2008 15:00	31-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-016	ES0807705-017	ES0807705-018	ES0807705-019	ES0807705-020
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	92.0	----	96.9
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	105	----	106
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	51.7	----	51.0
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	81.4	----	82.5
Anthracene-d10	1719-06-8	0.1	%	----	----	82.5	----	80.3
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	84.9	----	85.6
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	84.9	90.1	81.8	80.1	87.8
Toluene-D8	2037-26-5	0.1	%	90.6	92.9	90.4	89.7	84.7
4-Bromofluorobenzene	460-00-4	0.1	%	87.1	91.2	87.7	87.3	87.7



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	MW13 2.5-2.7	BH32 0.5-0.7	BH32 1.5-1.7	BH42 0.5-0.7	BH42 1.0-1.2
				Client sampling date / time	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-021	ES0807705-022	ES0807705-023	ES0807705-024	ES0807705-025	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	17.6	14.3	21.1	20.2	18.5	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	10	6	7	7	6	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	14	72	13	19	25	
Copper	7440-50-8	5	mg/kg	6	29	<5	<5	<5	
Lead	7439-92-1	5	mg/kg	13	146	16	16	16	
Nickel	7440-02-0	2	mg/kg	<2	56	<2	<2	<2	
Zinc	7440-66-6	5	mg/kg	<5	83	<5	6	<5	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	<0.10	----	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	<0.05	----	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	<0.05	----	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	<0.05	----	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	<0.05	----	----	----	
delta-BHC	319-86-8	0.05	mg/kg	----	<0.05	----	----	----	
Heptachlor	76-44-8	0.05	mg/kg	----	<0.05	----	----	----	
Aldrin	309-00-2	0.05	mg/kg	----	<0.05	----	----	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	<0.05	----	----	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	<0.05	----	----	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	<0.05	----	----	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	<0.05	----	----	----	
Dieldrin	60-57-1	0.05	mg/kg	----	<0.05	----	----	----	
4,4`-DDE	72-55-9	0.05	mg/kg	----	<0.05	----	----	----	
Endrin	72-20-8	0.05	mg/kg	----	<0.05	----	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	----	----	----	
4,4`-DDD	72-54-8	0.05	mg/kg	----	<0.05	----	----	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	<0.05	----	----	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	<0.05	----	----	----	
4,4`-DDT	50-29-3	0.2	mg/kg	----	<0.2	----	----	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	----	----	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	----	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	<0.5	----	



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	MW13 2.5-2.7	BH32 0.5-0.7	BH32 1.5-1.7	BH42 0.5-0.7	BH42 1.0-1.2
				Client sampling date / time	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-021	ES0807705-022	ES0807705-023	ES0807705-024	ES0807705-025	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Acenaphthylene	208-96-8	0.5	mg/kg	----	0.5	----	<0.5	----	
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	<0.5	----	
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	<0.5	----	
Phenanthrene	85-01-8	0.5	mg/kg	----	3.0	----	<0.5	----	
Anthracene	120-12-7	0.5	mg/kg	----	1.1	----	<0.5	----	
Fluoranthene	206-44-0	0.5	mg/kg	----	3.1	----	<0.5	----	
Pyrene	129-00-0	0.5	mg/kg	----	2.9	----	<0.5	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	1.6	----	<0.5	----	
Chrysene	218-01-9	0.5	mg/kg	----	1.1	----	<0.5	----	
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	1.2	----	<0.5	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	----	<0.5	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	1.3	----	<0.5	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	0.5	----	<0.5	----	
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	<0.5	----	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	0.7	----	<0.5	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50	
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
EP080: BTEX									
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	----	111	----	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%	----	126	----	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%	----	87.1	----	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%	----	94.5	----	88.2	----	
2-Chlorophenol-D4	93951-73-6	0.1	%	----	106	----	98.5	----	
2,4,6-Tribromophenol	118-79-6	0.1	%	----	50.1	----	49.9	----	
EP075(SIM)T: PAH Surrogates									



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW13 2.5-2.7	BH32 0.5-0.7	BH32 1.5-1.7	BH42 0.5-0.7	BH42 1.0-1.2
				29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00	29-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-021	ES0807705-022	ES0807705-023	ES0807705-024	ES0807705-025
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	----	77.8	----	83.6	----
Anthracene-d10	1719-06-8	0.1	%	----	81.6	----	84.1	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	84.2	----	87.2	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	83.3	96.9	83.0	77.1	90.2
Toluene-D8	2037-26-5	0.1	%	91.5	110	94.4	91.4	101
4-Bromofluorobenzene	460-00-4	0.1	%	91.8	101	90.0	90.2	99.4



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	DUPZ 10	DUPZ 11	BH44 0.5-0.7	BH44 1.5-1.7	MW9 0.5-0.7
				29-MAY-2008 15:00	29-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
				ES0807705-026	ES0807705-027	ES0807705-028	ES0807705-029	ES0807705-030
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	15.1	17.8	18.6	13.5	15.3
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	<5	<5	5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	28	10	8	6	8
Copper	7440-50-8	5	mg/kg	9	28	53	12	32
Lead	7439-92-1	5	mg/kg	30	59	9	19	48
Nickel	7440-02-0	2	mg/kg	11	7	44	<2	<2
Zinc	7440-66-6	5	mg/kg	20	87	19	<5	26
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	<0.5	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	<0.5	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: **SOIL**

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	DUPZ 10	DUPZ 11	BH44 0.5-0.7	BH44 1.5-1.7	MW9 0.5-0.7
				29-MAY-2008 15:00	29-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
				ES0807705-026	ES0807705-027	ES0807705-028	ES0807705-029	ES0807705-030
EP080: BTEX - Continued								
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	93.6	97.3	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	104	106	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	49.7	46.0	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	81.7	81.5	----	----
Anthracene-d10	1719-06-8	0.1	%	----	83.8	87.0	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	86.0	87.6	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	100	92.5	90.4	84.4	84.1
Toluene-D8	2037-26-5	0.1	%	110	106	99.6	95.8	95.5
4-Bromofluorobenzene	460-00-4	0.1	%	105	96.5	96.8	92.1	93.7



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Sub-Matrix: SOIL				Client sample ID	MW9 1.0-1.2	MW9 2.5-2.7	BH26 0.5-0.7	BH26 1.5-1.7	BH41 0.5-0.7
				Client sampling date / time	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-031	ES0807705-032	ES0807705-033	ES0807705-034	ES0807705-035	
EA055: Moisture Content									
^ Moisture Content (dried @ 103°C)	----	1.0	%	21.1	11.0	10.5	13.6	17.6	
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	<5	<5	7	12	6	
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1	
Chromium	7440-47-3	2	mg/kg	7	4	11	10	12	
Copper	7440-50-8	5	mg/kg	<5	32	16	<5	<5	
Lead	7439-92-1	5	mg/kg	12	11	891	16	14	
Nickel	7440-02-0	2	mg/kg	<2	<2	3	<2	5	
Zinc	7440-66-6	5	mg/kg	21	10	185	<5	10	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.10	mg/kg	----	----	<0.10	----	----	
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg	----	----	<0.05	----	----	
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	----	----	<0.05	----	----	
beta-BHC	319-85-7	0.05	mg/kg	----	----	<0.05	----	----	
gamma-BHC	58-89-9	0.05	mg/kg	----	----	<0.05	----	----	
delta-BHC	319-86-8	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor	76-44-8	0.05	mg/kg	----	----	<0.05	----	----	
Aldrin	309-00-2	0.05	mg/kg	----	----	<0.05	----	----	
Heptachlor epoxide	1024-57-3	0.05	mg/kg	----	----	<0.05	----	----	
trans-Chlordane	5103-74-2	0.05	mg/kg	----	----	<0.05	----	----	
alpha-Endosulfan	959-98-8	0.05	mg/kg	----	----	<0.05	----	----	
cis-Chlordane	5103-71-9	0.05	mg/kg	----	----	<0.05	----	----	
Dieldrin	60-57-1	0.05	mg/kg	----	----	<0.05	----	----	
4,4'-DDE	72-55-9	0.05	mg/kg	----	----	<0.05	----	----	
Endrin	72-20-8	0.05	mg/kg	----	----	<0.05	----	----	
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	----	<0.05	----	----	
4,4'-DDD	72-54-8	0.05	mg/kg	----	----	<0.05	----	----	
Endrin aldehyde	7421-93-4	0.05	mg/kg	----	----	<0.05	----	----	
Endosulfan sulfate	1031-07-8	0.05	mg/kg	----	----	<0.05	----	----	
4,4'-DDT	50-29-3	0.2	mg/kg	----	----	<0.2	----	----	
Endrin ketone	53494-70-5	0.05	mg/kg	----	----	<0.05	----	----	
Methoxychlor	72-43-5	0.2	mg/kg	----	----	<0.2	----	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	<0.5	



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

Compound	CAS Number	LOR	Unit	MW9 1.0-1.2	MW9 2.5-2.7	BH26 0.5-0.7	BH26 1.5-1.7	BH41 0.5-0.7
				30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
				ES0807705-031	ES0807705-032	ES0807705-033	ES0807705-034	ES0807705-035
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	<0.5
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	----	----	110	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	----	----	120	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	----	----	84.8	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	104	----	----	----	101
2-Chlorophenol-D4	93951-73-6	0.1	%	91.3	----	----	----	108
2,4,6-Tribromophenol	118-79-6	0.1	%	49.7	----	----	----	48.0
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW9 1.0-1.2	MW9 2.5-2.7	BH26 0.5-0.7	BH26 1.5-1.7	BH41 0.5-0.7
				30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00	30-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0807705-031	ES0807705-032	ES0807705-033	ES0807705-034	ES0807705-035
EP075(SIM)T: PAH Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.1	%	84.0	----	----	----	83.2
Anthracene-d10	1719-06-8	0.1	%	81.1	----	----	----	80.8
4-Terphenyl-d14	1718-51-0	0.1	%	91.2	----	----	----	88.9
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	83.9	99.6	114	85.5	98.9
Toluene-D8	2037-26-5	0.1	%	94.9	104	120	92.0	104
4-Bromofluorobenzene	460-00-4	0.1	%	93.8	101	112	95.1	102



Surrogate Control Limits

Sub-Matrix: SOIL		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	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	10	136
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	81	117
4-Bromofluorobenzene	460-00-4	74	121



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0807874	Page	: 1 of 8
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Ashwini Sharma
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: EL00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 04-JUN-2008
C-O-C number	: 4348	Issue Date	: 17-JUN-2008
Sampler	: NICK COWMAN	No. of samples received	: 7
Site	: ----	No. of samples analysed	: 6
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Celine Conceicao	Spectroscopist	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Organics
Hoa Nguyen		Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Organics
Sanjeshni Jyoyi Mala		Inorganics
Sanjeshni Jyoyi Mala		Organics

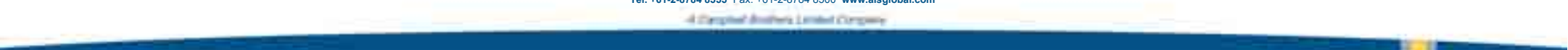
Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

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General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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

- **EP068 : Poor matrix spike recovery for Aldrin due to sample matrix . Confirmed by re-extraction and re-analysis.**
- **EP080: Level of Reporting raised for toluene due to ambient background levels in the laboratory.**



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW20 0.5-0.7	1.0-1.2	1.9-2.0	DUP 213	
				03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	----
Compound	CAS Number	LOR	Unit	ES0807874-001	ES0807874-002	ES0807874-003	ES0807874-006	----
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	37.1	18.7	14.4	26.5	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	7	7	9	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	20	15	12	17	----
Copper	7440-50-8	5	mg/kg	17	17	12	20	----
Lead	7439-92-1	5	mg/kg	32	32	12	24	----
Nickel	7440-02-0	2	mg/kg	2	<2	<2	<2	----
Zinc	7440-66-6	5	mg/kg	93	61	6	42	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.10	mg/kg	<0.10	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	----	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	----	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	----	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	----	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	----	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	----	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	----	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	----	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	----	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	----	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	----	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	----	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	----	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	----	----	----	----
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	----	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	----	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	----	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				MW20 0.5-0.7	1.0-1.2	1.9-2.0	DUP 213	----
				03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	----
Compound	CAS Number	LOR	Unit	ES0807874-001	ES0807874-002	ES0807874-003	ES0807874-006	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	0.8	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	1.4	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	1.3	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	0.6	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	0.6	----	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	0.6	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	----
EP080: BTEX								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	81.0	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	119	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	87.8	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	64.3	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	55.8	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	49.2	----	----	----	----
EP075(SIM)T: PAH Surrogates								



Analytical Results

Sub-Matrix: SOIL

				Client sample ID	MW20 0.5-0.7	1.0-1.2	1.9-2.0	DUP 213	
				Client sampling date / time	03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	03-JUN-2008 15:00	----
Compound	CAS Number	LOR	Unit		ES0807874-001	ES0807874-002	ES0807874-003	ES0807874-006	----
EP075(SIM)T: PAH Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.1	%		83.7	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%		84.5	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%		89.9	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.1	%		90.7	97.4	97.1	84.7	----
Toluene-D8	2037-26-5	0.1	%		89.8	91.8	91.6	81.6	----
4-Bromofluorobenzene	460-00-4	0.1	%		82.9	86.2	83.4	77.6	----



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				TBA	TBC			
				03-JUN-2008 15:00	03-JUN-2008 15:00			
Compound	CAS Number	LOR	Unit	ES0807874-004	ES0807874-005			
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	----	----
Zinc	7440-66-6	0.001	mg/L	<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----
Toluene	108-88-3	2	µg/L	<5	<5	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	94.7	104	----	----	----
Toluene-D8	2037-26-5	0.1	%	83.1	88.7	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%	83.6	92.4	----	----	----



Surrogate Control Limits

Sub-Matrix: SOIL		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	136
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	10	136
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2,4,6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
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	88	110
4-Bromofluorobenzene	460-00-4	86	115

Dispatch to Address & Phone No:	ALS	Sampled by	Nina Cawman	Consigning Office	Lane Cove
Attention	ASHWINI	Project Manager (contact number)	BENJAMIN SMITH	Date Dispatched	9/11/2008
Relinquished by		Date	4/6/08	Time	12:25
		Received by		Date	4/6/08
			Say Vaping AUS.	Time	3:30pm

Comments	Sample Name	Container Type and Preservation	Sample No	Date Submitted	Analyses Required										Sample Condition on Receipt
					Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	Metals	
	Soil	GLASS SOIL	(1) MLW20	0.5-0.7	3/6/08	/	/	/	/	/	/	/	/	/	
			(2)	1.5-1.7											
			(3)	1.9-2.0											
		26 GLASS JARRED	TBA (4)		/	/	/	/	/	/	/	/	/	/	
		50ml VIAL	TBC (5)		/	/	/	/	/	/	/	/	/	/	
Send to labmark			Dup 213 (6)		/	/	/	/	/	/	/	/	/	/	
		Acknowledge say	Dup 213a (7)		/	/	/	/	/	/	/	/	/	/	

Environmental Division
Sydney

Work Order

ES0807874



For more information

Special Laboratory Instructions

Detection Limits

Turnaround Frequency

JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0808102	Page	: 1 of 11
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Victor Kedicioglu
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: ENVILCOV00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: ----	Date Samples Received	: 10-JUN-2008
C-O-C number	: 9842	Issue Date	: 19-JUN-2008
Sampler	: NF, NC	No. of samples received	: 21
Site	: ----	No. of samples analysed	: 20
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Celine Conceicao	Spectroscopist	Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Organics
Sanjeshni Jyoyi Mala		Organics

Environmental Division Sydney

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

Key : CAS Number = Chemistry Abstract Services number

LOR = Limit of reporting

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

- **EG020 F: Chromium LOR raised due to matrix interference.**
- **EP080: Level of Reporting raised for toluene due to ambient background levels in the laboratory.**
- **EP080: Sample TRIP SPIKE contains volatile compounds spiked into the sample containers prior to dispatch from the laboratory. BTEX compounds spiked at 20 ug/L.**
- **Poor matrix spike recovery for Mercury was confirmed by reanalysis.**



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				MW20	MW19	MW2	MW4	MW7
				05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-001	ES0808102-002	ES0808102-003	ES0808102-004	ES0808102-005
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	0.003	<0.001	0.004	<0.001
Cadmium	7440-43-9	0.0001	mg/L	0.0008	<0.0001	<0.0001	<0.0001	0.0002
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.005	<0.001
Copper	7440-50-8	0.001	mg/L	0.001	0.001	0.003	0.001	0.020
Lead	7439-92-1	0.001	mg/L	<0.001	0.001	<0.001	<0.001	0.006
Nickel	7440-02-0	0.001	mg/L	<0.001	0.007	0.004	0.003	0.029
Zinc	7440-66-6	0.005	mg/L	0.010	0.019	0.031	0.027	0.144
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
3- & 4-Methylphenol	1319-77-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2,4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2,4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2,6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	<2.0	<2.0	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	1.1	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Indeno(1,2,3-cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				MW20	MW19	MW2	MW4	MW7
				05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-001	ES0808102-002	ES0808102-003	ES0808102-004	ES0808102-005
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	130	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	360	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	<50	<50
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	18.4	22.6	15.9	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	32.9	42.5	32.2	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	60.2	64.0	48.2	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	91.0	91.9	72.4	----	----
Anthracene-d10	1719-06-8	0.1	%	94.8	96.9	72.5	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	113	126	90.0	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	99.2	115	96.5	113	107
Toluene-D8	2037-26-5	0.1	%	98.6	107	94.9	116	110
4-Bromofluorobenzene	460-00-4	0.1	%	94.1	104	80.9	104	96.8



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				MW6	MW8	MW9	MW10	MW11
				05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-006	ES0808102-007	ES0808102-008	ES0808102-009	ES0808102-010
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.001	0.016	0.092	<0.001	0.002
Cadmium	7440-43-9	0.0001	mg/L	0.0002	0.0005	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.005	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L	0.002	0.038	0.003	0.004	0.003
Lead	7439-92-1	0.001	mg/L	<0.001	0.160	<0.001	<0.001	0.003
Nickel	7440-02-0	0.001	mg/L	0.023	0.012	0.053	0.001	0.002
Zinc	7440-66-6	0.005	mg/L	0.143	0.262	0.047	0.039	0.071
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.0002	<0.0001	<0.0001	<0.0001
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	----	<1.0	----	----	----
2-Chlorophenol	95-57-8	1.0	µg/L	----	<1.0	----	----	----
2-Methylphenol	95-48-7	1.0	µg/L	----	<1.0	----	----	----
3- & 4-Methylphenol	1319-77-3	1.0	µg/L	----	<1.0	----	----	----
2-Nitrophenol	88-75-5	1.0	µg/L	----	<1.0	----	----	----
2,4-Dimethylphenol	105-67-9	1.0	µg/L	----	<1.0	----	----	----
2,4-Dichlorophenol	120-83-2	1.0	µg/L	----	<1.0	----	----	----
2,6-Dichlorophenol	87-65-0	1.0	µg/L	----	<1.0	----	----	----
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L	----	<1.0	----	----	----
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	----	<1.0	----	----	----
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	----	<1.0	----	----	----
Pentachlorophenol	87-86-5	2.0	µg/L	----	<2.0	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	----	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L	----	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L	----	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L	----	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L	----	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L	----	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L	----	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L	----	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	----	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L	----	<1.0	----	----	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	----	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	----	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	----	<1.0	----	----	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	----	<1.0	----	----	----



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				MW6	MW8	MW9	MW10	MW11
				05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00	05-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-006	ES0808102-007	ES0808102-008	ES0808102-009	ES0808102-010
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	----	<1.0	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L	<100	200	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L	<50	100	<50	<50	<50
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	17.0	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	36.7	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	57.9	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	78.9	----	----	----
Anthracene-d10	1719-06-8	0.1	%	----	80.8	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	99.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	117	88.2	119	114	100
Toluene-D8	2037-26-5	0.1	%	120	89.2	121	109	103
4-Bromofluorobenzene	460-00-4	0.1	%	109	76.4	110	102	94.3



Analytical Results

Sub-Matrix: WATER

Client sample ID

Client sampling date / time

				DUP01	DUP2	MW12	MW14	MW15
				05-JUN-2008 15:00	05-JUN-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-011	ES0808102-012	ES0808102-013	ES0808102-015	ES0808102-016
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	0.004	<0.001	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L	0.002	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L	0.019	<0.001	0.004	0.006	0.003
Lead	7439-92-1	0.001	mg/L	0.006	0.002	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	0.028	0.008	0.004	0.004	0.005
Zinc	7440-66-6	0.005	mg/L	0.161	0.027	0.045	0.019	0.038
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	----	----	<1.0	<1.0	----
2-Chlorophenol	95-57-8	1.0	µg/L	----	----	<1.0	<1.0	----
2-Methylphenol	95-48-7	1.0	µg/L	----	----	<1.0	<1.0	----
3- & 4-Methylphenol	1319-77-3	1.0	µg/L	----	----	<1.0	<1.0	----
2-Nitrophenol	88-75-5	1.0	µg/L	----	----	<1.0	<1.0	----
2,4-Dimethylphenol	105-67-9	1.0	µg/L	----	----	<1.0	<1.0	----
2,4-Dichlorophenol	120-83-2	1.0	µg/L	----	----	<1.0	<1.0	----
2,6-Dichlorophenol	87-65-0	1.0	µg/L	----	----	<1.0	<1.0	----
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L	----	----	<1.0	<1.0	----
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	----	----	<1.0	<1.0	----
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	----	----	<1.0	<1.0	----
Pentachlorophenol	87-86-5	2.0	µg/L	----	----	<2.0	<2.0	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	----	----	<1.0	<1.0	----
Acenaphthylene	208-96-8	1.0	µg/L	----	----	<1.0	<1.0	----
Acenaphthene	83-32-9	1.0	µg/L	----	----	<1.0	<1.0	----
Fluorene	86-73-7	1.0	µg/L	----	----	<1.0	<1.0	----
Phenanthrene	85-01-8	1.0	µg/L	----	----	<1.0	<1.0	----
Anthracene	120-12-7	1.0	µg/L	----	----	<1.0	<1.0	----
Fluoranthene	206-44-0	1.0	µg/L	----	----	<1.0	<1.0	----
Pyrene	129-00-0	1.0	µg/L	----	----	<1.0	<1.0	----
Benz(a)anthracene	56-55-3	1.0	µg/L	----	----	<1.0	<1.0	----
Chrysene	218-01-9	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	----	----	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	----	<0.5	<0.5	----
Indeno(1,2,3-cd)pyrene	193-39-5	1.0	µg/L	----	----	<1.0	<1.0	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	----	----	<1.0	<1.0	----



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				DUP01	DUP2	MW12	MW14	MW15
				05-JUN-2008 15:00	05-JUN-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-011	ES0808102-012	ES0808102-013	ES0808102-015	ES0808102-016
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	----	----	<1.0	<1.0	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	160	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	280	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	<50	<50
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<5	<5	<5	<5	<5
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	----	----	20.6	31.4	----
2-Chlorophenol-D4	93951-73-6	0.1	%	----	----	55.5	76.1	----
2,4,6-Tribromophenol	118-79-6	0.1	%	----	----	69.1	82.2	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	----	----	78.4	94.4	----
Anthracene-d10	1719-06-8	0.1	%	----	----	84.6	96.5	----
4-Terphenyl-d14	1718-51-0	0.1	%	----	----	108	132	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	109	99.0	99.7	95.0	96.4
Toluene-D8	2037-26-5	0.1	%	107	110	103	102	103
4-Bromofluorobenzene	460-00-4	0.1	%	99.1	97.5	101	102	102



Analytical Results

Sub-Matrix: WATER

Client sample ID

Client sampling date / time

				MW16	TRIP SPIKE	TRIP BLANK	WB1	MW13
				06-JUN-2008 15:00	04-MAY-2008 15:00	04-MAY-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-017	ES0808102-018	ES0808102-019	ES0808102-020	ES0808102-021
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	<0.001	<0.001
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	<0.0001	0.0002
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L	0.003	----	----	<0.001	0.005
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	0.002	----	----	<0.001	0.004
Zinc	7440-66-6	0.005	mg/L	0.013	----	----	<0.005	0.048
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	<0.0001	<0.0001
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	<1.0	----	----	----	<1.0
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	----	----	----	<1.0
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	----	----	----	<1.0
3- & 4-Methylphenol	1319-77-3	1.0	µg/L	<1.0	----	----	----	<1.0
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	----	----	----	<1.0
2,4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	----	----	----	<1.0
2,4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	----	----	----	<1.0
2,6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	----	----	----	<1.0
4-Chloro-3-Methylphenol	59-50-7	1.0	µg/L	<1.0	----	----	----	<1.0
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	<1.0	----	----	----	<1.0
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	<1.0	----	----	----	<1.0
Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	----	----	----	<2.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	----	----	----	<1.0
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	----	----	----	<1.0
Acenaphthene	83-32-9	1.0	µg/L	<1.0	----	----	----	<1.0
Fluorene	86-73-7	1.0	µg/L	<1.0	----	----	----	<1.0
Phenanthrene	85-01-8	1.0	µg/L	<1.0	----	----	----	<1.0
Anthracene	120-12-7	1.0	µg/L	<1.0	----	----	----	<1.0
Fluoranthene	206-44-0	1.0	µg/L	<1.0	----	----	----	<1.0
Pyrene	129-00-0	1.0	µg/L	<1.0	----	----	----	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	----	----	----	<1.0
Chrysene	218-01-9	1.0	µg/L	<1.0	----	----	----	<1.0
Benzo(b)fluoranthene	205-99-2	1.0	µg/L	<1.0	----	----	----	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	----	----	----	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	----	----	<0.5
Indeno(1,2,3-cd)pyrene	193-39-5	1.0	µg/L	<1.0	----	----	----	<1.0
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	----	----	----	<1.0



Analytical Results

Sub-Matrix: **WATER**

Client sample ID

Client sampling date / time

				MW16	TRIP SPIKE	TRIP BLANK	WB1	MW13
				06-JUN-2008 15:00	04-MAY-2008 15:00	04-MAY-2008 15:00	06-JUN-2008 15:00	06-JUN-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808102-017	ES0808102-018	ES0808102-019	ES0808102-020	ES0808102-021
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	----	----	----	<1.0
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	----	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	----	----	<50	<50
C15 - C28 Fraction	----	100	µg/L	<100	----	----	<100	<100
C29 - C36 Fraction	----	50	µg/L	<50	----	----	<50	<50
EP080: BTEX								
Benzene	71-43-2	1	µg/L	<1	20	<1	<1	<1
Toluene	108-88-3	2	µg/L	<5	19	<5	<5	<5
Ethylbenzene	100-41-4	2	µg/L	<2	18	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	18	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	18	<2	<2	<2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	22.4	----	----	----	22.9
2-Chlorophenol-D4	93951-73-6	0.1	%	63.2	----	----	----	59.4
2,4,6-Tribromophenol	118-79-6	0.1	%	83.0	----	----	----	69.5
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	95.7	----	----	----	82.7
Anthracene-d10	1719-06-8	0.1	%	102	----	----	----	84.9
4-Terphenyl-d14	1718-51-0	0.1	%	135	----	----	----	120
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	93.1	100	106	95.2	95.8
Toluene-D8	2037-26-5	0.1	%	96.9	103	95.5	106	101
4-Bromofluorobenzene	460-00-4	0.1	%	93.8	97.8	95.9	103	97.6



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	94
2-Chlorophenol-D4	93951-73-6	23	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	27	133
4-Terphenyl-d14	1718-51-0	33	141
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	80	120
Toluene-D8	2037-26-5	88	110
4-Bromofluorobenzene	460-00-4	86	115

Dispatch to
Address &
Phone No:

ALS

 Sampled by: Nathan Fuser/
Nick Wilson

Consigning Officer: LCOU

Date Dispatched: 6/6/08

Attention:

Sample Keep

 Project Manager
(optional results file)

Benedict Smith

Courier Service:

Consignment Note No:

Requisitioned by:

Nathan Fuser

Date:

Time:

Received by:

Date:

Time:

~~6/6/08~~
~~11:00am~~

Frank - ALS

06/6/08

1800

Comments	Sample Matrix	Container Type and Preservation	Sample No	Date Sampled	Analysis Requested										Sample Condition on Receipt
					PAHs	TPHs	Metals - BTX	Metals							
	Water	1 x 200ml water 1 x 20ml methyl (gas) 2 x 40ml water (gas)	MW120 ①	Stages											
		"	MW121 ②												
		"	MW122 ③												
		"	MW123 ④												
		"	MW124 ⑤												
		"	MW125 ⑥												
		"	MW126 ⑦												
		"	MW127 ⑧												
		"	MW128 ⑨												
		"	MW129 ⑩												
		"	MW130 ⑪												
		"	MW131 ⑫												
		"	DUP01 ⑬												
		"	DUP01A ⑭												
		"	DUP2 ⑮												
		"	DUP2A ⑯												
		"	MW12 ⑰	6/6/08											

Special Laboratory Instructions:

 Please forward Dup2A and DUP01A to Labmark for analysis then
Contact Ben Smith if you have any questions

Detection Limits:

Turnaround Required:

 JOB NUMBER MUST BE
REFERENCED ON ALL
SUBSEQUENT PAGES

Laboratory Question / Order No.

Job No.

Project

Site

Description Authority Project	Sampled by 	Controlling Officer Date Organized
Affected	Project Manager Team Leads	Contact Service Communication Notes
History / Notes	Date Time	Received by Date Time

Comments	Sample Type	Container Type and Preservative	Sample No.	Date Sampled	Analysis Required						Sample Question or Remark
					Plots	TP-S	Moles - BTEX	Metals			
					not received						
			15								
			16								
			17								
			18								
			19								
			20								
			21								
			22								

Environmental Division
 Sydney
 Work Order
ES0808102



Sample No. and Project No.

Received Example

21 MW13 6/6/18
 22 Dupos 5/6/18

Send to Laboratory for analysis Date / Time / Location	The trip spare vials and one of the trip blank vials were added 4/5/18 please advise Benedict Smith if these samples are within holding time also speak to Ben Smith about sample analysis, we will send samples to be tested to be * No metal vials left for WBT	JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES
---	--	---



Chain of Custody

L. A. Andrew, L. Jackson, and J. Grayson

Accounting and Finance

NOI 00-267

$$\frac{1}{2} \leq \frac{1}{2} \leq 1$$

1. 2012-13
 2. 2013-14
 3. 2014-15

ALS

SEYOUS LEW

NAME: Nathan Fenger/
Nick Larson

Company City: COU

LCOU

5400 C401X7W2 66109

615109

$$A = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

Sample Keeper

* Financial Manager
* 1990-1994

Benedict Smith

Cross Country

Cross Section

© 2007 The Authors
Journal compilation © 2007 Blackwell Publishing Ltd

 Δf

Optimal: 27110:20

Nathan Fowler

○

1. *Journal of the American Medical Association*, 1997; 278: 1019-1024.

30-8140

As Sir

— 200 —

•

CHOR

11.32pm

FILE

12:00

Comments	Container Type and Description	Sample No.	Net Sample	Water	Soil	Leachate	Analysis Requested	Sample Concentration
	Water 1 x 500ml amber 1 x 250ml metal (paste) 2 x 40ml vial glass	MW 20 (1)	5/6/08					
		MW 19 (2)						
		MW 2 (3)						
		MW 4 (5)						
		MW 7 (6)						
		MW 6 (6)						
		MW 8 (7)						
		MW 9 (8)						
		MW 10 (9)						
		MW 11 (10)						
		DUP 01 (11)						
		DUP 01 14	acknowledged sep					
		DUP 2 (12)						
		DUP 2A (13)	acknowledged sep					
TV		MW 12 (13)	6/6/08					

Environmental Division
System
Work Order
ES0808102



ES0808102

Environmental Division
Society

Work Order:

ES0808102



1. *Chlorophyll a* and *Chlorophyll b* (mg/g dry weight)

Equation (1) can be written as

USE: 17.07.94

From: WHITE SIGNATURE YELLOW (10/10/10) To: [redacted] Subject: [redacted]

* Please forward DUPA and DUPDA to LaMare for analysis. thp
 contact Ben Smith if you have any questions. thp

JOB NUMBER MUST BE
REPEATED ON ALL
SUBSEQUENT PAGES



Chain of Custody

Laboratory Name / Order No

Lab. Encl: 2000364H and 2 x 2

No: 0011/0117

Customer Project Reference	AL9	Submitted by	Nathan Fuser / Nick Lowan	Collecting Office	LCR
Project	Sample receipt	Project Manager	Benedict Smith	Date Received	6/6/08
Received by	Nathan Fuser	Date	6/6/08	Time	11:30am
		Received by	Ben Smith	Date	6/6/08
			2:00pm	Time	2:00pm

Containers	Sample Matrix	Container Type and Description	Sample No.	Date Sampled	Analysis Required					Sample Condition at Receipt
					100%	100%	100%	100%	100%	
		Water 1 x 500ml amber, 1 x 250ml plastic, 2 x 400ml glassial	UWB3 (21)	6/6/08						
			↓							
			MW14 (15)							
			MW15 (16)							
			MW16 (17)							
		2 x 400ml glassial	TIP Spike (18)	4/5/08						
		✓ "	TIP Blank (19)	4/5/08						
		Water 1 x 500ml amber	UWB1 (20)	6/6/08						
			✓ UWB2 (20)	6/6/08						
		Extra Sample	22 DIP03	5/6/08						

The two spike wells and one of the tip blank wells were tested 4/5/08
 please advise Benedict Smith if these samples are within holding time. Also speak
 to Ben Smith about required analysis, he will select samples to be
 tested.

OS NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES



Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: ES0808325	Page	: 1 of 8
Client	: COFFEY ENVIRONMENTS PTY LTD	Laboratory	: Environmental Division Sydney
Contact	: MS BENEDICT SMITH	Contact	: Victor Kedicioglu
Address	: 8/12 MARS ROAD LANE COVE WEST NSW, AUSTRALIA 2066	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: benedict_smith@coffey.com	E-mail	: Ashwini.Sharma@alsenviro.com
Telephone	: 9911 1000	Telephone	: +61-2-8784 8555
Facsimile	: 9911 1001	Facsimile	: +61-2-8784 8500
Project	: ENVICOV00315AH	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: REBATCH OF ES0807210	Date Samples Received	: 12-JUN-2008
C-O-C number	: ----	Issue Date	: 19-JUN-2008
Sampler	: ----	No. of samples received	: 8
Site	: ----	No. of samples analysed	: 8
Quote number	: EN/007/08		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

This document is issued in accordance with NATA accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Signatories

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

Signatories	Position	Accreditation Category
Hoa Nguyen	Senior Organic Chemist (Volatile)	Inorganics
Pabi Subba	Senior Organic Chemist (Volatile)	Inorganics
Pabi Subba	Senior Inorganic Chemist	Organics
Sarah Millington		Inorganics

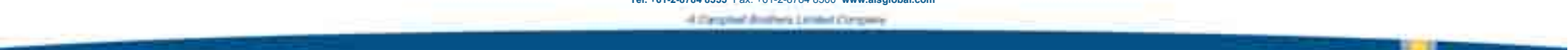
Environmental Division Sydney

Part of the **ALS Laboratory Group**

277-289 Woodpark Road Smithfield NSW Australia 2164

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

A Campbell Brothers Limited Company



Page : 3 of 8
Work Order : ES0808325
Client : COFFEY ENVIRONMENTS PTY LTD
Project : ENVICOV00315AH



General Comments

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

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

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

Key : CAS Number = Chemistry Abstract Services number
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting



Analytical Results

Sub-Matrix: SOIL

Client sample ID

Client sampling date / time

				BH23 0.5-0.7	BH18 1.0-1.2	BH4 0.5-0.7	BH28 0.5-0.7	MW6 1.0-1.2
				21-MAY-2008 15:00	21-MAY-2008 15:00	20-MAY-2008 15:00	26-MAY-2008 15:00	20-MAY-2008 15:00
Compound	CAS Number	LOR	Unit	ES0808325-001	ES0808325-002	ES0808325-003	ES0808325-004	ES0808325-005
EA055: Moisture Content								
^ Moisture Content (dried @ 103°C)	----	1.0	%	13.0	17.6	----	----	----
EN33: TCLP Leach								
Initial pH	----	0.1	pH Unit	----	7.6	8.7	5.8	6.5
After HCl pH	----	0.1	pH Unit	----	1.6	1.6	1.5	1.5
Extraction Fluid Number	----	1	-	----	1	1	1	1
Final pH	----	0.1	pH Unit	----	5.0	4.9	4.8	4.8
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	----	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	74.4	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	67.0	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	64.1	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	71.2	----	----	----	----
Anthracene-d10	1719-06-8	0.1	%	78.2	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	75.1	----	----	----	----



Analytical Results

Sub-Matrix: SOIL				Client sample ID	BH33 1.0-1.2	BH9 1.0-1.2	BH30 0.5-0.7	----	----
				Client sampling date / time	26-MAY-2008 15:00	19-MAY-2008 15:00	26-MAY-2008 15:00	----	----
Compound	CAS Number	LOR	Unit		ES0808325-006	ES0808325-007	ES0808325-008	----	----
EN33: TCLP Leach									
Initial pH	----	0.1	pH Unit		5.6	8.7	8.5	----	----
After HCl pH	----	0.1	pH Unit		1.5	1.5	1.7	----	----
Extraction Fluid Number	----	1	-		1	1	1	----	----
Final pH	----	0.1	pH Unit		4.8	4.9	4.9	----	----



Analytical Results

Sub-Matrix: TCLP LEACHATE

Client sample ID

Client sampling date / time

				BH18 1.0-1.2	BH4 0.5-0.7	BH28 0.5-0.7	MW6 1.0-1.2	BH33 1.0-1.2
				16-JUN-2008 12:00	16-JUN-2008 12:00	16-JUN-2008 12:00	16-JUN-2008 12:00	16-JUN-2008 12:00
Compound	CAS Number	LOR	Unit	ES0808325-002	ES0808325-003	ES0808325-004	ES0808325-005	ES0808325-006
EG005C: Leachable Metals by ICPAES								
Arsenic	7440-38-2	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium	7440-43-9	0.05	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05
Chromium	7440-47-3	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Copper	7440-50-8	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Lead	7439-92-1	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc	7440-66-6	0.1	mg/L	0.2	0.2	<0.1	0.2	0.2
EG035C: Leachable Mercury by FIMS								
Mercury	7439-97-6	0.0010	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	32.0	39.1	40.6	32.3	40.2
2-Chlorophenol-D4	93951-73-6	0.1	%	70.9	76.1	76.8	69.1	80.0
2,4,6-Tribromophenol	118-79-6	0.1	%	75.2	83.3	86.3	79.6	86.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	103	119	116	107	119
Anthracene-d10	1719-06-8	0.1	%	108	121	129	111	124
4-Terphenyl-d14	1718-51-0	0.1	%	105	119	120	108	114



Analytical Results

Sub-Matrix: TCLP LEACHATE

Client sample ID

Client sampling date / time

				BH9 1.0-1.2	BH30 0.5-0.7			
				16-JUN-2008 12:00	16-JUN-2008 12:00			
				ES0808325-007	ES0808325-008			
Compound	CAS Number	LOR	Unit					
EG005C: Leachable Metals by ICPAES								
Arsenic	7440-38-2	0.1	mg/L	<0.1	<0.1	----	----	----
Cadmium	7440-43-9	0.05	mg/L	<0.05	<0.05	----	----	----
Chromium	7440-47-3	0.1	mg/L	<0.1	<0.1	----	----	----
Copper	7440-50-8	0.1	mg/L	<0.1	<0.1	----	----	----
Lead	7439-92-1	0.1	mg/L	<0.1	0.4	----	----	----
Nickel	7440-02-0	0.1	mg/L	0.1	<0.1	----	----	----
Zinc	7440-66-6	0.1	mg/L	0.9	0.9	----	----	----
EG035C: Leachable Mercury by FIMS								
Mercury	7439-97-6	0.0010	mg/L	<0.0010	<0.0010	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	32.1	31.5	----	----	----
2-Chlorophenol-D4	93951-73-6	0.1	%	69.7	66.9	----	----	----
2,4,6-Tribromophenol	118-79-6	0.1	%	82.0	82.4	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	110	113	----	----	----
Anthracene-d10	1719-06-8	0.1	%	108	112	----	----	----
4-Terphenyl-d14	1718-51-0	0.1	%	109	113	----	----	----



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	24	113
2-Chlorophenol-D4	93951-73-6	23	134
2.4.6-Tribromophenol	118-79-6	19	122
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	30	115
Anthracene-d10	1719-06-8	27	133
4-Terphenyl-d14	1718-51-0	18	137

Sub-Matrix: TCLP LEACHATE		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	94
2-Chlorophenol-D4	93951-73-6	23	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	27	133
4-Terphenyl-d14	1718-51-0	33	141

Frank Ferraro

Frank 12/6/8 1500

From: Victor Kedicicoglu
Sent: Thursday, 12 June 2008 10:31 AM
To: Simplex Sydney
Cc: Benedict Smith
Subject: FW: ENVILCOV00315AH - TCLP Analysis

Frank, please see below for work order number.

Please also note that Benedict has requested further testing as well (detailed below).

Thanks,
 Victor

From: Benedict Smith [mailto:Benedict_Smith@coffey.com]
Sent: Thursday, 12 June 2008 8:59 AM
To: Victor Kedicicoglu
Subject: RE: ENVILCOV00315AH - TCLP Analysis

I think the number is ES0808325

BENEDICT SMITH
 Environmental Scientist

Coffey Environmental
 8/12 Macle Road Lane Cove West NSW 2066 Australia
 T (+61) (2) 9911 1829 F (+61) (2) 9911 1902
www.coffey.com.au/coffeyenvironment

Environmental Division
 Sydney
 Work Order
ES0808325



For phone call 02 9911 1829

From: Victor Kedicicoglu [mailto:Victor.Kedicicoglu@simplexenviro.com]
Sent: Wednesday, 11 June 2008 5:47 PM
To: Benedict Smith
Subject: RE: ENVILCOV00315AH - TCLP Analysis

Benedict,

Do you have the ALS work order for these samples?

Regards,
 Victor

From: Benedict Smith [mailto:Benedict_Smith@coffey.com]
Sent: Wednesday, 11 June 2008 2:43 PM
To: Victor Kedicicoglu
Subject: RE: ENVILCOV00315AH - TCLP Analysis

Hi Victor

Can we please also have PAH analysis (B123 0.5 0.7 and PAH, TPH, BTEX and Metals on B122 0.5 0.7.

Thanks

*Revised to include B123 and B122
 with Victor.*

12/06/2008

17/6/08

Frank 12/6/8 1500

Frank Ferraro

From: Victor Kedicioğlu
Sent: Thursday, 12 June 2008 10:31 AM
To: Samples Sydney
Cc: Benedict Smith
Subject: FW: ENVILCOV00315AH - TCLP Analysis

Frank, please see below for work order number.

Please also note that Benedict has requested further testing as well (detailed below).

Thanks,
 Victor

From: Benedict Smith [mailto:Benedict_Smith@coffey.com]
Sent: Thursday, 12 June 2008 8:50 AM
To: Victor Kedicioğlu
Subject: RE: ENVILCOV00315AH - TCLP Analysis

I think the number is ES0808325

BENEDICT SMITH
 Environmental Scientist

Coffey Environmental
 8/12 Mann Road Lane Cove West NSW 2086 Australia
 T (+61) (2) 9911 1820 F (+61) (2) 9911 1002
www.coffey.com.au/environment

Environmental Division
 Sydney
 Work Order

ES0808325



Telephone: (02) 9911 1820

From: Victor Kedicioğlu [mailto:Victor.Kedicioğlu@akseenviro.com]
Sent: Wednesday, 11 June 2008 5:47 PM
To: Benedict Smith
Subject: RE: ENVILCOV00315AH - TCLP Analysis

Benedict,

Do you have the A/S work order for these samples?

Regards,
 Victor

From: Benedict Smith [mailto:Benedict_Smith@coffey.com]
Sent: Wednesday, 11 June 2008 2:43 PM
To: Victor Kedicioğlu
Subject: RE: ENVILCOV00315AH - TCLP Analysis

Hi Victor

Can we please also have PAH analysis BH23 0.5-0.7 and PAH, TPH, BTEX and Metals on BH22 0.5-0.7

Thanks

Revised Assessment previously
 Earth Works

12/06/2008

Run

BENEDICT SMITH
Environmental Scientist

Coffey Environmental

8/12 Mars Road Latho Cove West NSW 2066 Australia
T (+61) (2) 9911 1829 F (+61) (2) 9911 1002
www.coffey.com.au/environment

From: Victor Kedrioglu [mailto:Victor.Kedrioglu@alsenviro.com]
Sent: Wednesday, 11 June 2008 10:43 AM
To: Samples Sydney; Kerry Stefanovic; Rohit Prakash
Cc: Benedict Smith
Subject: FW: ENVILCOV00315AH - TCLP Analysis

Frank, could you please re-batch these samples today.

Kerry, please assign an SRA date of 1/7/06 to this work order.

Thanks,
Victor

From: Benedict Smith [mailto:Benedict_Smith@coffey.com]
Sent: Wednesday, 11 June 2008 10:29 AM
To: Ashwini Sharma
Subject: ENVILCOV00315AH - TCLP Analysis

Please schedule the following samples for TCLP metals and BaP analysis ...

7	BH18 1.0-1.2	<i>Samples not in ENVIDATA</i>
2	BH14 0.5-0.7	
4	BH28 0.5-0.7	<i>Samples collected 12/06/08 as per attached memo...</i>
5	MW6 1.0-1.2	
6	BH33 1.0-1.2	
3	BH9 1.0-1.2	
8	BH30 0.5-0.7	

BENEDICT SMITH
Environmental Scientist

Coffey Environmental

8/12 Mars Road Latho Cove West NSW 2066 Australia
T (+61) (2) 9911 1829 F (+61) (2) 9911 1002
www.coffey.com.au/environment

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12/06/2008

Drawn by: Address: Phone No:			Sampled by:			Consignor: Office Date Dispatched:			
Address:			Project Manager: Project No:			Courier Service: Consignment No:			
Requisitioned by:			Date:	Time:	Received by:			Date:	Time:
					<i>13/6/12</i>				
Comments	Sample Name	Customer Tag - and Description	Sample No	Date Sampled	Analysis Required				Sample Control at Home
					PHOS	SPH	LEADS	BIOM	

URGENT

Environmental Division
 Sydney
 Work Order
ES0808422



Telephone: 02 9339 4000

Special Laboratory Instructions:

Detection Limit:

Timepoint Required:

JOB NUMBER MUST BE
 REFERENCED ON ALL
 SUBSEQUENT PAGES

Dispatch to:
Address:
Phone No:

ALS

Sampled by:

N. [Signature]

Consigning Office:

L.C. OFFICE

Date Dispatched:

9/11/00

Attention:

Project Manager:
Report results to:

B. [Signature]

Counter Service:

Consignment Note No:

Requisitioned by:

N. [Signature]

Date:

Time:

Stirling

Date:

Time:

Comments	Sample Name	Container Type and Preservative	Sample No.	Analysis Required										Sample Condition on Receipt
				PHAs	TPHs	MOAs - BTEX	Metals	Ammonia						
	WATER	250ml plastic preserved	mw1											
			mw2											
			mw3											
			mw4											
			mw5											
			mw6											
			mw7											
			mw8											
			mw9											
			mw10											
			mw11											
			mw12											
			mw13											
			mw14											
			mw15											
			mw16											
			mw17											
			mw18											
			mw19											
			mw20											
			QCA											

URGENT

Environmental Division
Sydney
Work Order

ES0808630



Telephone: (02) 262/84 8555

Special Laboratory Instructions:

Detection Limit:

Turnaround Required:

24 hours

JOB NUMBER MUST BE
REPRODUCED ON ALL
SUBSEQUENT PAGES

Dispatch to
Address &
Phone No

ALS

Sampled by:

N. [Signature]

Consigning Officer:

L.C. OFFICE

Date Dispatched

9/11/1000

Attention

Project Manager
Report results to

B. [Signature]

Counter Service

Consignment Note No:

Requisitioned by:

N. [Signature]

Date

Time

SEULGIN

Date

Time

✓

✓

ink - ALS

18/6/18

1700

Comments

Sample Name

Container Type
and Preservative

Sample No.

Analysis Required

Sample
Condition
on Receipt

WATER 250ml plastic
preserved

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

PHAs

TPHs

MOAs - BTEX

Metals

✓

URGENT

Environmental Division
Sydney
Work Order

ES0808630



Telephone: +61 2 9284 8555

Special Laboratory Instructions

Detection Limit

Turnaround Required:

24 hours

JOB NUMBER MUST BE
REPRODUCED ON ALL
SUBSEQUENT PAGES

Appendix J

QA/QC Assessment

**Contamination Assessment
630 - 726 Princes Highway, Tempe**

DATA COMPLETENESS

Field Considerations

	Yes / No	Comments
Were all critical locations sampled?	Yes	As identified in site history and walkover, all areas of potential environmental concern were investigated.
Were all critical depths sampled?	Yes	
Were the SOPs appropriate and complied with?	Yes	All Coffey Environments Scientists followed the relevant procedures.
Was the sampler adequately experienced?	Yes	
Was the field documentation complete?	Yes	Daily field logs were compiled onsite by the Coffey Environments Scientist.
Is a copy of the signed chain of custody form for each batch of samples included?	Yes	Please see Appendix H

Laboratory Considerations

	Yes / No	Comment
Were all critical samples analysed according to sampling plan?	Yes	
Were analytes analysed as per sampling plan?	Yes	
Were the laboratory methods appropriate?	Yes	See Table I1
Were the laboratory methods adopted NATA endorsed?	Yes	ALS Laboratories only use NATA accredited methods.
Was the NATA Seal on the	Yes	

	Yes / No	Comment
laboratory reports?		
Were the laboratory reports signed by an authorised person?	Yes	
Were the laboratory PQLs below the criteria?		
Was sample documentation complete?	Yes	All COC's were completed and receipted, all sample locations and nomenclature were completed to procedure.
Were sample holding times complied with?		See Table I2

COMPLETENESS CONCLUSION

	Yes / No	Comment
Was data adequately complete?	Yes	There were no data errors or gaps in information.

DATA COMPARABILITY

Field considerations

	Yes / No	Comment
Was there more than one sampling round?	Yes	There was one soil sampling program, carried out over 10days. All samples were collected by the same person (or under the supervision of the same person) and stored under chilled conditions at all times prior to dispatch to the laboratory. Two rounds of groundwater sampling occurred, with the same person (or supervising person) carrying out the events.
Were the same sampling methodology and SOPs used for all sampling?	Yes	Similar soil sampling methodologies were used, although since all sampling was done from either un-disturbed soil samples from drill auger flights or collected directly from in-situ location and followed the respective Coffey Environments Standard Operating Procedures (SOPs), the different methodologies are not considered to significantly affect the comparability of the data.
Was all sampling undertaken by the same sampler?	Yes	Soil sampling was undertaken by Nick Cowman and Priya Dass, Environmental Scientists from Coffey Environments. The first groundwater sampling event was conducted by Nathan Fuser, under the supervision of Nick Cowman. The second round of groundwater sampling was conducted by Nick Cowman. Coffey Environments SOPs for soil and groundwater sampling were followed at all times by all staff, therefore multiple samplers are not considered to affect the comparability of the data.
Were sample containers, preservation, filtering the same?	Yes	All samples containers were provided from ALS Laboratories in a sealed condition. The recommended containers and preservatives, along with filters were used.
Could climatic conditions (temperature, rainfall, wind) have influenced data comparability?	No	
Were the same types of samples collected (filtered, size fractions etc) for each media?	Yes	

Laboratory Considerations

	Yes / No	Comment
Were the same analytical methods used (including clean up)?	Yes	
Were the PQLs the same?	Yes	
Were the same laboratories used?	Yes	ALS Australia laboratories in Smithfield, Sydney, were used for the primary sample analysis and Labmark in Asquith, Sydney, were used for triplicate/inter-laboratory samples.
Were the units reported the same?		

COMPARABILITY CONCLUSION

	Yes / No	Comment
Was data adequately comparable?	Yes	

DATA REPRESENTATIVENESS

Field Considerations

	Yes / No	Comment
Was appropriate media sampled?	Yes	Regular sample intervals in both fill and natural material were collected, including any specific areas identified as being potentially contaminated. Samples were also taken at the boundary of fill and natural materials.
Were all media identified sampled?	Yes	
Were the samples properly and adequately preserved? This includes keeping the samples chilled, where applicable.	Yes	All collected samples were immediately placed in ice chilled cooler boxes for transport, under COC conditions. All sample jars were sealed, with no remaining headspace.
Were the samples in proper custody between the field and reaching the laboratory?	Yes	
Were the samples received by the laboratory in good condition?	Yes	There were some sample breakages, occurring during transport. However none of the lost samples were crucial for following the SAQP and alternative samples were used for analysis.

Laboratory Considerations

	Yes / No	Comment
Were all samples analysed according to SAQP?	Yes	

REPRESENTATIVENESS CONCLUSION

	Yes / No	Comment
Was data adequately representative?	Yes	Sufficient samples were collected from the site, at selected locations to provide a representative interpretation of site conditions.

DATA PRECISION AND ACCURACY

Field considerations

	Yes / No	Comment
Were the SOPs appropriate and complied with?	Yes	All Coffey Environments personnel are knowledgeable in the most recent SOP.

Laboratory Considerations:

Number of Quality Control Samples:

Soil

	Metals	TPH/ BTEX	PAH	Chlorinated hydrocarbons	Asbestos
No. samples	137	137	54	14	50
Field QC Samples					
Intra-lab Duplicates	23	23		1	0
Inter-lab Duplicates	9	9		0	0
Wash Blanks	0	0	0	0	0
Trip Spikes	8	8	3	2	0
Lab QC samples					
Lab Blanks	15	13	11	6	n/a
Lab Dupes	29	24	16	8	n/a
Matrix Spikes	15	13	11	6	n/a
Lab Control	15	13	11	6	n/a
Surrogate Spikes	n/a	n/a	n/a	n/a	n/a

Groundwater

	Metals	Ammonia	TPH/ BTEX	PAH	Phenolic compounds
No. samples	15	30	15	15	15
Field QC Samples					
Intra-lab Duplicates	2	2	2	2	2
Inter-lab Duplicates	2	0	2	2	2
Wash Blanks	1	1	1	1	1
Trip Spikes	1	1	1	1	1
Trip Blank	1	1	1	1	1
Lab QC samples					
Lab Blanks	3	n/a	3	n/a	1
Lab Dupes	1	n/a	5	1	n/a
Matrix Spikes / Dupes	3	n/a	3	n/a	n/a
Lab Control	3	n/a	1	1	1
Surrogate Spikes	n/a	n/a	n/a	n/a	n/a

Field QA/QC

	Yes / No	Comment
Were an adequate number of field duplicates analysed?	Yes	All field duplicates submitted to the laboratory were analysed. The ratio of field duplicates collected was also sufficient for QA/QC purposes. This ratio followed field intra-laboratory duplicates and field inter-laboratory triplicates were analysed at a rate of 1 in 10 samples and 1 in 20 samples.
Were the RPDs of the field duplicates within control limits?		RPDs were in excess of the 50% control limit for multiple primary samples. In both samples BH9 2.5-2.7 and DUP 1, there were exceedances of RPD's for Mercury by 67%. In BH21 1.0-1.2 and DUP 5 an RPD exceedance for Copper of 51% was detected. BH181.0-1.2 exceeded RPD with DUP6 by 138% for Lead. Another high exceedance occurred in BH30 0.5-0.7 and the duplicate DUPZ1, of 122% with Nickel and 114% of Chromium. In BH39 0.5-0.7 and DUPZ11 Nickel exceeded RPDs by 92%. Multiple analyte RPD exceedances were also observed at BH30 0.5-0.7 and DUPZ3 of 101% Chromium, 122% exceedance of Copper and 161% of Nickel. MW15 1.5-1.7 exceeded its RPD of DUPZ7 by 74% in Arsenic. BH27 1.0-1.2 and DUPZ 8 exceeded by 153%. In MW13 0.5-0.7 and DUPZ10, multiple exceedances occurred in Chromium, Nickel and Zinc of 95%, 134% and 87% respectively. There were some exceedances in RPDs as shown above, however none of the primary samples nor the duplicates were recorded as higher than the specified guideline thresholds and therefore are not considered to affect data interpretation and outcome accuracy.
Were an adequate number of trip blanks analysed?	Yes	A trip blank was collected for majority of sample batches sent to the laboratory for analysis. No trip blank was collected for the Ammonia only groundwater sampling event.
Were an adequate number of trip spikes analysed?	Yes	A trip spike was collected for majority of sample batches sent to the laboratory for analysis. No trip spike was collected for the Ammonia only groundwater sampling event.
Were the trip spikes recoveries within control limits?	Yes	

Were an adequate number of wash blanks analysed?	Yes	It should be noted wash blanks were not collected from soil sampling as disposable equipment was used. Where samples were collected from machine buckets, care was taken to ensure samples were collected from within the soil and out of contact with the bucket itself.
Lab QA/QC		
Were an adequate number of laboratory blank samples analysed?	Yes	
Were the blanks free of contaminants?	Yes	See Certificate of Analysis for the relevant samples.
Were an adequate number of laboratory matrix spikes and laboratory control samples analysed?	Yes	
Were an adequate number of surrogate spike samples analysed?	Yes	
Were the spikes recoveries within control limits?	Yes	All surrogate recoveries were in the control limits (70%-130%)
Were an adequate number of laboratory duplicates analysed?	Yes	
Were the laboratory duplicate RPDs within control limits?	Yes	

PRECISION AND ACCURACY CONCLUSION

	Yes / No	Comment
Was data adequately precise and accurate?	Yes	There were some RPD exceedances for multiple analytes in multiple primary samples and duplicate samples. However, all of these exceedances occurred in analytes that were either below or above guideline thresholds and, therefore, did not affect the interpretation of the data.

Table I1: Laboratory Methodologies

Analysis	Medium	ALS	NATA Registered
Metals	Soil	APHA 21 ED 3120 USEPA SW 846 - 6010	Yes
Mercury	Soil	AS 3550	Yes
BTEX	Soil	USEPA SW 846 – 8260	Yes
TPH	Soil	USEPA SW 846 – 8260 USEPA SW 846 – 8015A	Yes
PAH	Soil	USEPA SW 846 - 8270	Yes
Metals	Water	APHA 21 ED 3120 USEPA SW 846 - 6010	Yes
Mercury	Water	AS 3550	Yes
Ammonia	Water	APHA 21 ED 4500	Yes
BTEX	Water	USEPA SW 846 – 8260	Yes
TPH	Water	USEPA SW 846 – 8260 USEPA SW 846 – 8015A	Yes
PAH	Water	USEPA SW 846 - 8270	Yes
Phenolic compounds	Water	USEPA SW 846 - 8270	Yes

Table I2: Holding Times

Analysis	Soil - Holding Time (days)	Water - Holding Time (days)	Holding Times Met
Metals	6 months	6 months	Yes
Mercury	28	28	
Cyanide	14	14	Yes
BTEX	14	14	Yes
TPH C6-C9	14	14	Yes
TPH C10-C36	40	40	Yes
PAH	40	40	Yes
Phenolic compounds	40	28	Yes
Chlorinated hydrocarbons	40	40	Yes
Asbestos	Not specified	NA	Yes