

Client Name: Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

Client Reference: EL00315AH

**Page:** 1 of 6 Final

Certificate

of Analysis

This report supercedes reports issued on: N/A

plus cover page

**Date:** 02/06/08

Laboratory Identification		157119	lcs	mb				
Sample Identification		DUP5a	QC	QC				
Depth (m)								
Sampling Date recorded on COC		21/5/08						
Laboratory Extraction (Preparation) Date		28/5/08	28/5/08	28/5/08				
Laboratory Analysis Date		30/5/08	28/5/08	28/5/08				
Method: E002.2 BTEX by P&T	EQL							
Benzene	0.2	< 0.2	92%	< 0.2				
Toluene	0.5	< 0.5	92%	< 0.5				
Ethylbenzene	0.5	< 0.5	88%	< 0.5				
meta- and para-Xylene	1	<1	92%	<1				
ortho-Xylene	0.5	< 0.5	91%	< 0.5				
Total Xylene								
CDFB (Surr @ 10mg/kg)		91%	93%	89%				
Method: E003.2 Volatile TPH by P&T (vTPH) C6 - C9 Fraction	<b>EQL</b> 10	<10	90%	<10				

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.

E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.



Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

plus cover page

**Page:** 2 of 6

Certificate

Final

**Date:** 02/06/08

of Analysis

**Client Reference:** 

**Client Name:** 

EL00315AH

This report supercedes reports issued on: N/A

<b>Laboratory Identification</b>		157119	lcs	mb				
Sample Identification		DUP5a	QC	QC				
Depth (m)		 21/5/00						
Sampling Date recorded on COC		21/5/08						
Laboratory Extraction (Preparation) Date		28/5/08	28/5/08	28/5/08				
Laboratory Analysis Date		29/5/08	28/5/08	28/5/08				
Method: E006.2 Petroleum Hydrocarbons (TPH) C10 - C14 Fraction C15 - C28 Fraction C29 - C36 Fraction Sum of TPH C10 - C36	EQL 50 100 100	<50 <100 <100	99%   	<50 <100 <100 				

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone/Hexane (10:45:45). Analysis by GC/FID.



Coffey Environments Pty Ltd

Benedict Smith **Date:** 02/06/08

**Page:** 3 of 6

plus cover page

Final

Certificate

of Analysis

Client Reference: EL00315AH This report supercedes reports issued on: N/A

<b>Laboratory Identification</b>		157119	lcs	mb				
Sample Identification		DUP5a	QC	QC				
Depth (m)								
Sampling Date recorded on COC		21/5/08						
Laboratory Extraction (Preparation) Date		28/5/08	28/5/08	28/5/08				
Laboratory Analysis Date		29/5/08	29/5/08	29/5/08				
Method: E007.2 Polyaromatic Hydrocarbons (PAH) Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benz(a)anthracene Chrysene Benzo(b)&(k)fluoranthene Benzo(a) pyrene Indeno(1,2,3-c,d)pyrene Dibenz(a,h)anthracene	EQL 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	111% 101% 105% 107% 116% 115% 118% 115% 105% 130% 116% 116% 109% 123%	<0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5				
Benzo(g,h,i)perylene	0.5	< 0.5	128%	< 0.5				
Sum of reported PAHs		 1010/	 1120/	 119%				
2-FBP (Surr @ 5mg/kg) TP-d14 (Surr @ 5mg/kg)		101% 102%	113% 106%	119% 125%				

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E007.2: 8-10g soil extracted with 20ml DCM/Acetone/Hexane (10:45:45). Analysis by GC/MS.



**Client Name:** 

**Client Reference:** 

Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

EL00315AH

plus cover page

**Page:** 4 of 6

Certificate

Final

**Date:** 02/06/08 of Analysis

This report supercedes reports issued on: N/A

<b>Laboratory Identification</b>		157119	crm	lcs	mb			
Sample Identification		DUP5a	QC	QC	QC			
Depth (m)								
Sampling Date recorded on COC		21/5/08						
Laboratory Extraction (Preparation) Date		28/5/08	28/5/08	28/5/08	28/5/08			
Laboratory Analysis Date	_	29/5/08	28/5/08	29/5/08	29/5/08			
Method: E022.2								
Acid extractable metals (M7)	EQL							
Arsenic	1	6	109%	108%	<1			
Cadmium	0.1	0.2	92%	92%	< 0.1			
Chromium	1	8	102%	104%	<1			
Copper	2	24	107%	101%	<2			
Nickel	1	5	103%	101%	<1			
Lead	2	31	97%	100%	<2			
Zinc	5	39	93%	103%	<5			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.



**Client Name:** 

Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

**Page:** 5 of 6 plus cover page

Certificate

**Date:** 02/06/08

of Analysis

Final

Client Reference: EL00315AH

This report supercedes reports issued on: N/A

Laboratory Identification		157119	crm	lcs	mb			
Sample Identification		DUP5a	QC	QC	QC			
Depth (m)								
Sampling Date recorded on COC		21/5/08						
Laboratory Extraction (Preparation) Date		28/5/08	28/5/08	28/5/08	28/5/08			
Laboratory Analysis Date	_	28/5/08	28/5/08	28/5/08	28/5/08			
Method: E026.2 Acid extractable mercury Mercury	<b>EQL</b> 0.05	0.14	89%	99%	<0.05			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.



**Client Name:** 

**Contact Name:** 

Coffey Environments Pty Ltd

Benedict Smith **Date:** 02/06/08

**Page:** 6 of 6

plus cover page

Final

Certificate

of Analysis

Client Reference: EL00315AH This report supercedes reports issued on: N/A

Laboratory Identification		157119					
Sample Identification		DUP5a					
Depth (m)							
Sampling Date recorded on COC		21/5/08					
Laboratory Extraction (Preparation) Date		28/5/08					
Laboratory Analysis Date		29/5/08					
Method: E005.2 Moisture Moisture	EQL 	14					

Results expressed in % w/w unless otherwise specified

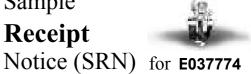
Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.



### Sample

# Receipt



Quality, Service, Support

	Client Details	Laboratory	Reference Information
Client Name: Client Phone:	Coffey Environments Pty Ltd 02 8083 1600	III	ve this information ready contacting Labmark.
Client Fax: Contact Name: Contact Email: Client Address:	02 8765 0762 Benedict Smith benedict_smith@coffey.com Level 1, 3 Rider Boulevard Rhodes NSW 2138	Laboratory Report: Quotation Number: Laboratory Address:	<b>E037774</b> - Not provided, standard prices apply Unit 1, 8 Leighton Pl. Asquith NSW 2077
Project Name: Project Number: CoC Serial Numbe	EL00315AH - Not provided -	Phone: Fax:	61 2 9476 6533 61 2 9476 8219
Purchase Order: Surcharge: Sample Matrix:	- Not provided - No surcharge applied (results by 6:30pm on due date) SOIL	Sample Receipt Contact: Email: Reporting Contact: Email:	ct: Jakleen El Galada jakleen.galada@labmark.com.au Jyothi Lal jyothi.lal@labmark.com.au
Date Sampled (ea	23/05/2008 eipt Notice issued: 27/05/2008	NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)
Reporting Requir	rements: Electronic Data Download required: N	lo li	nvoice Number: 32040

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order .

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals intact.

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period

**Analysis comments:** 

**Subcontracted Analyses:** 



Sample

## Receipt



**Quality, Service, Support** 

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID REVIEW TABLE									Re	ques	ted A	nalys	sis				
					Î												
			5		(PAH)		(ТРН)										
		λır	s (M7)		suoq.			(чТРН)									
		mercury	metals		rocar	pa	arbo	P&T (v									
	١.	ple n			Hyd	port	/droc	by P8									
	P&T	Acid extractable	extractable		Polyaromatic Hydrocarbons	Not Reported	Petroleum Hydrocarbons	TPH									
	BTEX by I	l ext	l ext	Moisture	/aror		oleu	Volatile									
No. Date Depth Client Sample ID	BTE	Acic	Acid	Moi	Poly	PREP	Peti	Volš									
157119 21/05 DUP5a	•	•	•	•	•	•	•	•									
Totals:	1	1	1	1	1	1	1	1									

'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



Sample

# Receipt



**Quality, Service, Support** 

Date Depth

157119 21/05

**Client Sample ID** 

DUP5a Totals:

				Re	quest	ed A	nalys	sis			
M7-T_S											



Chain of Custody

Laboratory Quotation / Order No.

ELOG3ISAH

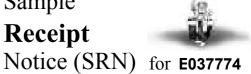
Short 2 # 2

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Special Liberatory Instructions Detection Limits			Turnaround Requi	w V	anily		)									REFE	RENCE	MUST BE D ON ALL OT PAGES



### Sample

# Receipt



Quality, Service, Support

	Client Details	Laboratory	Reference Information
Client Name: Client Phone:	Coffey Environments Pty Ltd 02 8083 1600	III	ve this information ready contacting Labmark.
Client Fax: Contact Name: Contact Email: Client Address:	02 8765 0762 Benedict Smith benedict_smith@coffey.com Level 1, 3 Rider Boulevard Rhodes NSW 2138	Laboratory Report: Quotation Number: Laboratory Address:	<b>E037774</b> - Not provided, standard prices apply Unit 1, 8 Leighton Pl. Asquith NSW 2077
Project Name: Project Number: CoC Serial Numbe	EL00315AH - Not provided -	Phone: Fax:	61 2 9476 6533 61 2 9476 8219
Purchase Order: Surcharge: Sample Matrix:	- Not provided - No surcharge applied (results by 6:30pm on due date) SOIL	Sample Receipt Contact: Email: Reporting Contact: Email:	ct: Jakleen El Galada jakleen.galada@labmark.com.au Jyothi Lal jyothi.lal@labmark.com.au
Date Sampled (ea	23/05/2008 eipt Notice issued: 27/05/2008	NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)
Reporting Requir	rements: Electronic Data Download required: N	lo li	nvoice Number: 32040

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order .

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals intact.

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period

**Analysis comments:** 

**Subcontracted Analyses:** 



Sample

## Receipt



**Quality, Service, Support** 

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID REVIEW TABLE									Re	ques	ted A	nalys	sis				
					Î												
			5		(PAH)		(ТРН)										
		λır	s (M7)		suoq.			(чТРН)									
		mercury	metals		rocar	pa	arbo	P&T (v									
	١.	ple n			Hyd	port	/droc	by P8									
	P&T	Acid extractable	extractable		Polyaromatic Hydrocarbons	Not Reported	Petroleum Hydrocarbons	TPH									
	BTEX by I	l ext	l ext	Moisture	/aror		oleu	Volatile									
No. Date Depth Client Sample ID	BTE	Acic	Acid	Moi	Poly	PREP	Peti	Volš									
157119 21/05 DUP5a	•	•	•	•	•	•	•	•									
Totals:	1	1	1	1	1	1	1	1									

'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



Sample

# Receipt



Quality, Service, Support

Notice (SRN) for E037774

						Re	ques	ted A	nalys	sis				
						Re	ques	ted A	analys	sis				
No. Date Depth 157119 21/05	Client Sample ID DUP5a	• M8 - M7-T_S												
	Totals:	1												



### Chain of Custody

Laboratory Quotation / Order No.

ELOG3ISAH

Short 2 # 2

Departs to: Access 6 Proce No.)	5		Sampled by	MIC	ic Co	وديني	0.3	N			igning () Dewatch		L		OFF Anna			
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Special Liberatory Instructions Detection Limits			Turnaround Requi	w V	anily		)									REFE	RENCE	MUST BE D ON ALL OT PAGES



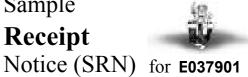
Report Date: 30/05/2008 Report Time: 5:26:13PM

200521534 (Sydney)

Invoice Number: 32167

### Sample

# Receipt



Quality, Service, Support

**Date Preliminary Report Due:** 

**Client Details Laboratory Reference Information** Client Name: Coffey Environments Pty Ltd Please have this information ready when contacting Labmark. **Client Phone:** 02 8083 1600 **Client Fax:** 02 8765 0762 Laboratory Report: E037901 **Contact Name: Benedict Smith** - Not provided, standard prices apply **Contact Email:** benedict\_smith@coffey.com **Quotation Number: Client Address:** Level 1, 3 Rider Boulevard **Laboratory Address:** Unit 1, 8 Leighton Pl. Rhodes NSW 2138 Asquith NSW 2077 Phone: **Project Name:** 61 2 9476 6533 Soil Analysis Fax: 61 2 9476 8219 **Project Number:** - Not provided -CoC Serial Number: 4331 Sample Receipt Contact: Jakleen El Galada **Purchase Order:** - Not provided -Email: jakleen.galada@labmark.com.au Surcharge: No surcharge applied (results by 6:30pm on **Reporting Contact:** Jyothi Lal due date) Email: jyothi.lal@labmark.com.au Sample Matrix: SOIL NATA Accreditation: 13542 Date Sampled (earliest date): 27/05/2008 **TGA GMP License:** 185-336 (Sydney) **Date Samples Received:** 30/05/2008 **APVMA License:** 6105 (Sydney) **Date Sample Receipt Notice issued:** 30/05/2008 **AQIS Approval:** NO356 (Sydney)

**AQIS Entry Permit:** 

Reporting Requirements: Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order.

10/06/2008

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used .

Sample container & chemical preservation suitable.

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period

**Analysis comments:** 

**Subcontracted Analyses:** 



Report Date: 30/05/2008 Report Time: 5:26:13PM

Sample

## Receipt



**Quality, Service, Support** 

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID RI	EVIEW TABLE								Re	ques	ted A	nalys	sis				
No. Date Depth	Client Sample ID	BTEX by P&T	Acid extractable mercury	Acid extractable metals (M7)	Moisture	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (VTPH)									
158703 27/05	DUP2 6a	•	•	•	•	•	٠	•									
	Totals:	1	1	1	1	1	1	1									

'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



**Report Date : 30/05/2008 Report Time : 5:26:13PM** 

Sample

Receipt



**Quality, Service, Support** 

Notice (SRN) for E037901

						Re	ques	ted A	nalys	sis				
						Re	ques	ted A	nalys	iis				
No. Date Depth 158703 27/05	Client Sample ID DUP2 6a	M8 - M7-T_S												
	Totals:	1												



Chain of Custody

Laboratory Quotation / Order No.

Job Hot.

Steel 2 of 2

(Motoroid & ALS)			Sampled by	Nick	Comme	1					ning Official	Links		, c		
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Consists	Sample feature.	Costainer Type and Preservative	Sample F	4s	These Samples	Fisher	TIPHE	AAAs + ETEX	Metal	77	Analyses	Required				Serges Constitut on Recept
4-10-Tan-12-	Soll	CLASS THE GO		9	27/5/08					/						
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Special Laboratory Instructions:  Describes Livetin		42	Turniround Requi	nett S	day			Ti	-15	ex.	55	(8)	H/BT uerals	ex)	JOB NUME REFEREN SUBSECI	BER MUST BE GED ON ALL JENT PAGES



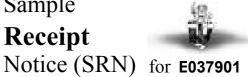
Report Date: 30/05/2008 Report Time: 5:26:13PM

200521534 (Sydney)

Invoice Number: 32167

### Sample

# Receipt



Quality, Service, Support

**Date Preliminary Report Due:** 

**Client Details Laboratory Reference Information** Client Name: Coffey Environments Pty Ltd Please have this information ready when contacting Labmark. **Client Phone:** 02 8083 1600 **Client Fax:** 02 8765 0762 Laboratory Report: E037901 **Contact Name: Benedict Smith** - Not provided, standard prices apply **Contact Email:** benedict\_smith@coffey.com **Quotation Number: Client Address:** Level 1, 3 Rider Boulevard **Laboratory Address:** Unit 1, 8 Leighton Pl. Rhodes NSW 2138 Asquith NSW 2077 Phone: **Project Name:** 61 2 9476 6533 Soil Analysis Fax: 61 2 9476 8219 **Project Number:** - Not provided -CoC Serial Number: 4331 Sample Receipt Contact: Jakleen El Galada **Purchase Order:** - Not provided -Email: jakleen.galada@labmark.com.au Surcharge: No surcharge applied (results by 6:30pm on **Reporting Contact:** Jyothi Lal due date) Email: jyothi.lal@labmark.com.au Sample Matrix: SOIL NATA Accreditation: 13542 Date Sampled (earliest date): 27/05/2008 **TGA GMP License:** 185-336 (Sydney) **Date Samples Received:** 30/05/2008 **APVMA License:** 6105 (Sydney) **Date Sample Receipt Notice issued:** 30/05/2008 **AQIS Approval:** NO356 (Sydney)

**AQIS Entry Permit:** 

**Reporting Requirements:** Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order.

10/06/2008

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used .

Sample container & chemical preservation suitable.

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period

**Analysis comments:** 

**Subcontracted Analyses:** 



Report Date: 30/05/2008 Report Time: 5:26:13PM

Sample

## Receipt



**Quality, Service, Support** 

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID RI	EVIEW TABLE								Re	ques	ted A	nalys	sis				
No. Date Depth	Client Sample ID	BTEX by P&T	Acid extractable mercury	Acid extractable metals (M7)	Moisture	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (VTPH)									
158703 27/05	DUP2 6a	•	•	•	•	•	٠	•									
	Totals:	1	1	1	1	1	1	1									

'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



**Report Date : 30/05/2008 Report Time : 5:26:13PM** 

Sample

Receipt



**Quality, Service, Support** 

Notice (SRN) for E037901

						Re	ques	ted A	nalys	sis				
						Re	ques	ted A	nalys	iis				
No. Date Depth 158703 27/05	Client Sample ID DUP2 6a	M8 - M7-T_S												
	Totals:	1												



Chain of Custody

Laboratory Quotation / Order No.

Job Hot.

Steel 2 of 2

(Motoroid & ALS)			Sampled by	Nick	Comme	1					ning Official	Links		, c		
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	-	34 35		5-27	++-	-			-	-	$\rightarrow$	1-1	-	++	-	-
	-	(13)	THE PARTY I	D - 1 - 2		-				1				$\Box$		
	-	36		5-13			$\vdash$									
		(19		1 - 2-7		1				/						
		37		9-430												
	V	<b>@</b> -		3-5-67												
Special Laboratory Instructions:  Describes Livetin		42	Turniround Requi	nett S	day			Ti	-15	ex.	55	(8)	H/BT uerals	ex)	JOB NUME REFEREN SUBSECI	BER MUST BE GED ON ALL JENT PAGES



**Report Date : 30/05/2008 Report Time : 5:31:25PM** 

### Sample

## Receipt



**Quality, Service, Support** 

Notice (SRN) for E037902

	Client Details	Laboratory	Reference Information
Client Name: Client Phone:	Coffey Environments Pty Ltd 02 8083 1600		ve this information ready contacting Labmark.
Client Fax: Contact Name: Contact Email: Client Address:	02 8765 0762 Benedict Smith benedict_smith@coffey.com Level 1, 3 Rider Boulevard Rhodes NSW 2138	Laboratory Report: Quotation Number: Laboratory Address:	<b>E037902</b> - Not provided, standard prices apply Unit 1, 8 Leighton Pl. Asquith NSW 2077
Project Name: Project Number: CoC Serial Number Purchase Order: Surcharge: Sample Matrix:	EL00315AH - Not provided - er: 4332 - Not provided - No surcharge applied (results by 6:30pm on due date) SOIL	Phone: Fax: Sample Receipt Contact Email: Reporting Contact: Email:	61 2 9476 6533 61 2 9476 8219 ct: Jakleen El Galada jakleen.galada@labmark.com.au Jyothi Lal jyothi.lal@labmark.com.au
Date Sampled (ea Date Samples Rec Date Sample Rec Date Preliminary	ceived: 30/05/2008 eipt Notice issued: 30/05/2008	NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)
Reporting Requir	rements: Electronic Data Download required: N	lo II	nvoice Number: 32168

Reporting Requirements: Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order .

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used .

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

**Preservation:** Chemical preservation of samples satisfactory for requested analytes.

#### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

**Analysis comments:** 

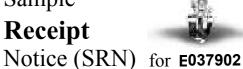
**Subcontracted Analyses:** 



Report Date: 30/05/2008 Report Time: 5:31:25PM

Sample

## Receipt



**Quality, Service, Support** 

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID RE	VIEW TABLE								Re	ques	ted A	nalys	sis				
No. Date Depth	Client Sample ID	BTEX by P&T	Acid extractable mercury	Acid extractable metals (M7)	Moisture	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (vTPH)									
158704 28/05	DUP2 9a	•	•	•	•	•	•	•									
	Totals:	1	1	1	1	1	1	1									

'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



**Report Date : 30/05/2008 Report Time : 5:31:25PM** 

Sample

# Receipt



**Quality, Service, Support** 

Notice (SRN) for E037902

					Re	ques	ted A	nalys	sis				
					Re	ques	ted A	analys	sis				
No. Date Depth Client Sample ID  158704 28/05 DUP2 9a  Totals:	- M8 - M7-T_S												
i otals:	1												



### Chain of Custody

Especiatory Question / Order No.

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Special Laboratory tradinications:  Detection Limits:			Turnecound Requi	n= 5/	laur				A	34/5	150	0		JOS NUMBE REFERENCI SUBSEQUE	R MUST BE ED ON ALL INT PAGES





results of tests, calibrations and/or measurements results of tests, canorations and included in this document are traceable to Australian/national standards. NATA is a signatory to Australian and a standards. NATA is a the APLAC mutual recognition arrangem mutual recognition of the equivalence calibration and inspection reports.



AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

SYDNEY License No. N0356

Quarantine Approved Premises criteria 5.1 for quarantine criteria 5.1 for quarantine containment level 1 (QCI) facilities. Class five criteria cover premises utilised for research, analysis and testing of biological material, soil, animal, plant and human products.

#### **CUSTOMER CENTRIC - ANALYTICAL CHEMISTS**

### FINAL CERTIFICATE OF ANALYSIS - ENVIRONMENTAL DIVISION

**Laboratory Report No:** E037906 Cover Page 1 of 3

Coffey Environments Pty Ltd **Client Name:** plus Sample Results

**Client Reference:** Soil Analysis Benedict Smith **Contact Name:** 

Date Received: 29/05/2008 4460 **Chain of Custody No: SOIL** Date Reported: 05/06/2008 **Sample Matrix:** 

This Final Certificate of Analysis consists of sample results, DQI's, method descriptions, laboratory definitions, and internationally recognised NATA accreditation and endorsement. The DQO compliance relates specifically to QA/QC results as performed as part of the sample analysis, and may provide an indication of sample result quality. Transfer of report ownership from Labmark to the client shall only occur once full & final payment has been settled and verified. All report copies may be retracted where full payment has not occured within the agreed settlement period.

#### QUALITY ASSURANCE CRITERIA

Accuracy: matrix spike: 1 in first 5-20, then 1 every 20 samples

> lcs, crm, method: 1 per analytical batch

surrogate spike: addition per target organic method

Precision: laboratory duplicate: 1 in first 5-10, then 1 every 10 samples

> laboratory triplicate: re-extracted & reported when duplicate

RPD values exceed acceptance criteria

**Holding Times:** soils, waters: Refer to LabMark Preservation & THT

table

VOC's 14 days water / soil

VAC's 7 days water or 14 days acidified

VAC's 14 days soil

SVOC's 7 days water, 14 days soil Pesticides 7 days water, 14 days soil Metals 6 months general elements

Mercury 28 days

Confirmation: target organic analysis: GC/MS, or confirmatory column

### QUALITY CONTROL GLOBAL ACCEPTANCE CRITERIA (GAC)

general analytes 70% - 130% recovery Accuracy: spike, lcs, crm

> surrogate: phenol analytes 50% - 130% recovery

> > organophosphorous pesticide analytes

60% - 130% recovery phenoxy acid herbicides, organotin

50% - 130% recovery

anion/cation bal: +/- 10% (0-3 meg/l),

+/- 5% (>3 meq/l)

Precision: method blank: not detected >95% of the reported EQL

> duplicate lab 0-30% (>10xEQL), 0-75% (5-10xEQL)

RPD (metals): 0-100% (<5xEQL)

0-50% (>10xEQL), 0-75% (5-10xEQL) duplicate lab

RPD: 0-100% (<5xEQL)

### QUALITY CONTROL ANALYTE SPECIFIC ACCEPTANCE CRITERIA (ASAC)

Accuracy: spike, lcs, crm analyte specific recovery data

surrogate: <3xsd of historical mean

Sensitivity: EQL: Typically 2-5 x Method Detection Limit **Uncertainty:** spike, lcs: measurement calculated from

historical analyte specific control

charts

#### RESULT ANNOTATION

Data Quality Objective matrix spike recovery bcs: batch specific lcs p: Data Quality Indicator d: laboratory duplicate laboratory control sample bmb: batch specific mb lcs:

**Estimated Ouantitation Limit** certified reference material t: laboratory triplicate crm:

RPD relative % difference method blank not applicable mb:

Quality Control (Report signatory) geoff.weir@labmark.com.au

Ivan Povolny Authorising Chemist (NATA signatory)

ivan.povolny@labmark.com.au

Authorising Chemist (NATA signatory)

meth.

simon.mills@labmark.com.au

This document is issued in accordance with NATA's accreditation requirements.

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#### CUSTOMER CENTRIC - ANALYTICAL CHEMISTS



Laboratory Report: E037906

Cover Page 2 of 3

#### **NEPC GUIDELINE COMPLIANCE - DQO**

#### GENERAL

- A. Results relate specifically to samples as received. Sample results are not corrected for matrix spike, lcs, or surrogate recovery data.
- B. EQL's are matrix dependant and may be increased due to sample dilution or matrix interference.
- C. Laboratory QA/QC samples are specific to this project.
- Inter-laboratory proficiency results are available upon request. NATA accreditation details available at www.nata.asn.au.
- E. VOC spikes & surrogates added to samples during extraction, SVOC spikes & surrogates added prior to extraction.
- F. Recovery data outside GAC limits shall be investigated and compared to ASAC (historical mean +/- 3sd). If recovery data <20%, then the relevant results for that compound are considered not reliable.
- G. Recovery data (ms, surrogate, crm, lcs) outside ASAC limits shall initiate an investigative action. Anomolous QC data is examined in conjunction with other QC samples and a final decision whether to accept or reject results is provided by the professional judgement of the senior analyst. The USEPA-CLP National Functional Guidelines are referred to for specific recommendations.
- H. Extraction (preparation) date refers to the date that sample preparation was initiated. Note that certain methods not requiring sample preparation (eg. VOCs in water, etc) may report a common extraction and analysis date.
- I. LabMark shall maintain an official copy of this Certificate of Analysis for all tracable reference purposes.

#### 2. CHAIN OF CUSTODY (COC) & SAMPLE RECEIPT NOTICE (SRN) REQUIREMENTS

- A. SRN issued to client upon sample receipt & login verification.
- B. Preservation & sampling date details specified on COC and SRN, unless noted.
- C. Sample Integrity & Validated Time of Sample Receipt (VTSR) Holding Times verified (preservation may extend holding time, refer to preservation chart).

#### 3. NATA ACCREDITED METHODS

- A. NATA accreditation held for each in-house method and sample matrix type reported, unless noted below (Refer to subcontracted test reports for NATA accreditation status).
- B. NATA accredited in-house laboratory methods are referenced from NEPC, ASTM, modified USEPA / APHA documents. Corporate Accreditation No. 13542.
- C. Subcontracted analyses: Refer to Sample Receipt Notice and additional DQO comments.

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#### CUSTOMER CENTRIC - ANALYTICAL CHEMISTS



**Laboratory Report: E037906** 

Cover Page 3 of 3

#### 4. QA/QC FREQUENCY COMPLIANCE TABLE SPECIFIC TO THIS REPORT

Matrix:	SOIL						
Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
1	BTEX by P&T	3	0	0%	0	0	0%
1	Volatile TPH by P&T (vTPH)	3	0	0%	0	0	0%
2	Petroleum Hydrocarbons (TPH)	3	0	0%	0	0	0%
3	Acid extractable metals (M7)	3	0	0%	0	0	0%
4	Acid extractable mercury	3	0	0%	0	0	0%
5	Moisture	3					

#### GLOSSARY:

#d number of discrete duplicate extractions/analyses performed.

%d-ratio NEPC guideline for laboratory duplicates is 1 in 10 samples (min 10%).

#t number of triplicate extractions/analyses performed.

#s number of spiked samples analysed.

%s-ratio USEPA guideline for laboratory matrix spikes is 1 in 20 samples (min 5%).

#### 5. ADDITIONAL COMMENTS SPECIFIC TO THIS REPORT

A. All tests were conducted by LabMark Environmental Sydney, NATA accreditation No. 13542, Corporate Site No. 13535, unless indicated below.

Laboratory QA/QC data shall relate specifically to this report, and may provide an indication of site specific sample result quality. LabMark <u>DOES NOT</u> report <u>NON-RELEVANT BATCH QA/QC</u> data. Acceptance of this self assessment certificate does not preclude any requirement for a QA/QC review by a accredited contaminated site EPA auditor, when and wherever necessary. Laboratory QA/QC self assessment references available upon request.



**Client Reference:** 

Coffey Environments Pty Ltd **Client Name:** 

Benedict Smith **Contact Name:** 

Soil Analysis

This report supercedes reports issued on: N/A

Final

Certificate

of Analysis

**Page:** 1 of 5

plus cover page

**Date:** 05/06/08

Laboratory Identification		158714	158715	158716	lcs	mb			
Sample Identification		Dup2a	Dup8a	Dup11a	QC	QC			
Depth (m)									
Sampling Date recorded on COC		23/5/08	23/5/08	23/5/08					
Laboratory Extraction (Preparation) Date		3/6/08	3/6/08	3/6/08	3/6/08	3/6/08			
Laboratory Analysis Date	_	4/6/08	4/6/08	4/6/08	3/6/08	3/6/08			
Method: E002.2 BTEX by P&T Benzene Toluene Ethylbenzene meta- and para-Xylene ortho-Xylene Total Xylene CDFB (Surr @ 10mg/kg)	EQL 0.2 0.5 0.5 1 0.5 	<0.2 <0.5 <0.5 <1 <0.5  90%	<0.2 <0.5 <0.5 <1 <0.5  88%	<0.2 <0.5 <0.5 <1 <0.5  90%	111% 109% 104% 109% 108% 	<0.2 <0.5 <0.5 <1 <0.5  100%			
Method: E003.2 Volatile TPH by P&T (vTPH) C6 - C9 Fraction	<b>EQL</b> 10	<10	<10	<10	107%	<10			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.

E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.



**Client Name:** 

Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

plus cover page

**Page:** 2 of 5

Certificate

**Date:** 05/06/08

of Analysis

Final

Client Reference: Soil Analysis This report supercedes reports issued on: N/A

Laboratory Identification		158714	158715	158716	lcs	mb			
Sample Identification		Dup2a	Dup8a	Dup11a	QC	QC			
Depth (m)									
Sampling Date recorded on COC		23/5/08	23/5/08	23/5/08					
Laboratory Extraction (Preparation) Date		3/6/08	3/6/08	3/6/08	3/6/08	3/6/08			
Laboratory Analysis Date		3/6/08	3/6/08	3/6/08	3/6/08	3/6/08			
Method: E006.2 Petroleum Hydrocarbons (TPH) C10 - C14 Fraction C15 - C28 Fraction C29 - C36 Fraction Sum of TPH C10 - C36	EQL 50 100 100 	<50 <100 <100 	<50 <100 110 110	2030 3860 <100 5890	 124%  	<50 <100 <100 			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone/Hexane (10:45:45). Analysis by GC/FID.



**Client Reference:** 

Client Name: Coffey Environments Pty Ltd

Soil Analysis

**Contact Name:** Benedict Smith

This report supercedes reports issued on: N/A

	<b>Page:</b> 3 of 5	Final
nts Pty Ltd	plus cover page	Certificate
	<b>Date:</b> 05/06/08	of Analysis

Laboratory Identification		158714	158715	158716	crm	lcs	mb		
Sample Identification		Dup2a	Dup8a	Dup11a	QC	QC	QC		
Depth (m)									
Sampling Date recorded on COC		23/5/08	23/5/08	23/5/08					
Laboratory Extraction (Preparation) Date		3/6/08	3/6/08	3/6/08	3/6/08	3/6/08	3/6/08		
Laboratory Analysis Date	=	4/6/08	4/6/08	4/6/08	4/6/08	4/6/08	4/6/08		
Method: E022.2 Acid extractable metals (M7) Arsenic Cadmium Chromium Copper Nickel Lead Zinc	EQL 1 0.1 1 2 1 2 5	5 <0.1 14 <2 <1 12 <5	7 0.1 4 41 13 15 70	4 0.6 6 16 5 22 153	92% 105% 99% 97% 96% 100% 94%	87% 104% 98% 95% 93% 103% 96%	<1 <0.1 <1 <2 <1 <2 <5		

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.



**Client Name:** 

Coffey Environments Pty Ltd

Benedict Smith **Contact Name:** 

plus cover page

**Page:** 4 of 5

Certificate

**Date:** 05/06/08

of Analysis

Final

**Client Reference:** Soil Analysis This report supercedes reports issued on: N/A

Laboratory Identification		158714	158715	158716	crm	lcs	mb		
Sample Identification		Dup2a	Dup8a	Dup11a	QC	QC	QC		
Depth (m) Sampling Date recorded on COC		 23/5/08	 23/5/08	 23/5/08					
Laboratory Extraction (Preparation) Date Laboratory Analysis Date		3/6/08 4/6/08	3/6/08 4/6/08	3/6/08 4/6/08	3/6/08 3/6/08	3/6/08 3/6/08	3/6/08 3/6/08		
Method: E026.2 Acid extractable mercury Mercury	<b>EQL</b> 0.05	<0.05	<0.05	<0.05	92%	95%	<0.05		

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.



E037906 **Laboratory Report No:** 

**Client Name:** 

Coffey Environments Pty Ltd

Benedict Smith

**Date:** 05/06/08 This report supercedes reports issued on: N/A

**Page:** 5 of 5

plus cover page

of Analysis

Certificate

Final

**Contact Name: Client Reference:** Soil Analysis

Laboratory Identification		158714	158715	158716				
Sample Identification		Dup2a	Dup8a	Dup11a				
Depth (m)								
Sampling Date recorded on COC		23/5/08	23/5/08	23/5/08				
Laboratory Extraction (Preparation) Date		3/6/08	3/6/08	3/6/08				
Laboratory Analysis Date	_	4/6/08	4/6/08	4/6/08				
Method: E005.2 Moisture Moisture	EQL 	22	14	13				

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.



Report Date: 2/06/2008 Report Time: 3:21:03PM

Sample

# Receipt



Quality, Service, Support

	Client Details	Laboratory Reference Information									
Client Name: Client Phone:	Coffey Environments Pty Ltd 02 8083 1600	Please have this information ready when contacting Labmark.									
Client Fax: Contact Name: Contact Email: Client Address:	02 8765 0762 Benedict Smith benedict_smith@coffey.com Level 1, 3 Rider Boulevard Rhodes NSW 2138	Laboratory Report: Quotation Number: Laboratory Address:	E037906  - Not provided, standard prices apply Unit 1, 8 Leighton Pl. Asquith NSW 2077								
Project Name: Project Number: CoC Serial Number Purchase Order: Surcharge: Sample Matrix:	Soil Analysis - Not provided - er: 4460 - Not provided - No surcharge applied (results by 6:30pm on due date) SOIL	Phone: Fax: Sample Receipt Contactemail: Reporting Contact: Email:	61 2 9476 6533 61 2 9476 8219								
Date Sampled (ea	29/05/2008 eipt Notice issued: 02/06/2008	NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)								
Reporting Requir	ements: Electronic Data Download required:N	0 <b>l</b> ı	nvoice Number: 32172								

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order.

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used.

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

**Analysis comments:** 

**Subcontracted Analyses:** 



**Report Date : 30/05/2008 Report Time : 6:09:42PM** 

Sample

# Receipt



Quality, Service, Support

Notice (SRN) for E037906

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID R	EVIEW TABLE								Re	ques	ted A	nalys	sis				
No. Date Depth	Client Sample ID	BTEX by P&T	Acid extractable mercury	Acid extractable metals (M7)	Moisture	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (vTPH)									
158714 23/05	Dup2a	•	•	•	•	•	٠	•									
158715 23/05	Dup8a	•	•	•	•	•	•	•									
158716 23/05	Dup11a	•	•	•	•	•	٠	•									
	Totals:	3	3	3	3	3	3	3									

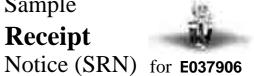
'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



Report Date: 30/05/2008 Report Time: 6:09:42PM

Sample

# Receipt



Quality, Service, Support

								Re	ques	ted A	nalys	sis				
				M7-T_S												
No.	Date	Depth	Client Sample ID	- M8												
158714			Dup2a	•												
158715			Dup8a	•												
158716	23/05		Dup11a	•												
			Totals:	3												Γ



Chain of Custody

No: 4460

coney -	Chain of	Custody	Laborato	ry Quotation / Orde	ar No:				Job	No.			Ste	m 3	01.3	
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Relinquished by: 5.0	nilla	_	Dute:	Time:	Received by	d):									Dates	Time
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11/2/1/2 - 1	405		Sumple T	8 1130 # 60C			-		711	_	_			-		
	×									An	alyses Rec	paired				
Comments	Sumple Matrix	Container Type and Preservative	Sam	ple Nb.	Date Sampled	PANE:	TPHS	MANS = BTEX	Metale:	3-11-5						Sample Condition on Hersipt
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9		(16)	B48 6	25-2.7		-			-		-	-	-	+		
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send to laborark	ae lenous	ilelse by self	Dip 7	0, 2 7 Op 2 Op 2a					-/				<u>7258</u>	1117		
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Copieus WHITE: Sign on release. YELL	LOW: If dispatched	to interstate Lab, Lab to sign on receipt an	id fax back to Cotte						2	il	6/ 8	-				



Report Date: 05/06/2008 **Report Time: 11:47:56** 

Invoice Number: 32264

# Sample

# Receipt



Quality, Service, Support

	Client Details		Laboratory	Reference Information
Client Name: Client Phone:	Coffey Environments Pty I 02 8083 1600	Ltd	III	e this information ready contacting Labmark.
Client Fax: Contact Name: Contact Email: Client Address:	02 8765 0762 Benedict Smith benedict_smith@coffey.co Level 1, 3 Rider Boulevard Rhodes NSW 2138		Laboratory Report: Quotation Number: Laboratory Address:	E037997 - Not provided, standard prices apply Unit 1, 8 Leighton Pl. Asquith NSW 2077
Project Name: Project Number: CoC Serial Numbe Purchase Order: Surcharge: Sample Matrix:	Soil - Not provided - r: - Not provided Not provided - No surcharge applied (res due date) SOIL	ults by 6:30pm on	Phone: Fax: Sample Receipt Contac Email: Reporting Contact: Email:	61 2 9476 6533 61 2 9476 8219 t: Jakleen El Galada jakleen.galada@labmark.com.au Jyothi Lal jyothi.lal@labmark.com.au
Date Sampled (ear Date Samples Rec Date Sample Rece Date Preliminary F	eived: 04/06/ ipt Notice issued: 05/06/	2008 2008	NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)

Reporting Requirements: Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order .

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used .

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

**Analysis comments:** 

**Subcontracted Analyses:** 



Report Date: 05/06/2008 **Report Time: 11:47:56** 

Sample

# Receipt



Quality, Service, Support

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT

REX by P&T  No. Date Depth Client Sample ID	Hydrocarbons (PAH)	arbons	rocarbons (TPH)	Р&Т (vТРН)						
No. Date Depth Client Sample ID	Moisture Polyaromatic I	olyaromatic	Petroleum Hydrocarbons	Volatile TPH by F						
159987 29/05 Dup2 11a		•		•						

requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

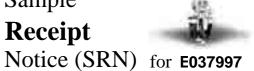
'PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



Report Date: 05/06/2008 **Report Time: 11:47:56** 

Sample

# Receipt



Quality, Service, Support

	L				Re	ques	ted A	nalys	sis				
	10												
No. Date Depth Client Sample ID	M8 - M7-T_S												
159987 29/05 Dup2 11a	•												
Totals:	1												

coffey 4334 Chain of Custody consultory Question - Order by: 175 No. Owners. Samplestin 692 C. A Francisco (Program Printed land Jane Department Attention Propert Palarages Contract Services Modern to Inc. E03)997 Consequences Note No. Helingweight by Personal La Andrews Programs Gursiae's Contract Type: Symple No. and Presentative Special college) we believe one TOR NOWBER MOST RE FILE SHOOT ON ALL FOR SHOOT OF THE SHOT OF THE SHOOT OF THE SHOOT OF THE SHOOT OF THE SHOOT OF THE SHOT Described Language 1 contoons Begand Western Compared at the contract of the first contract profits about 1, forther the profits of the design of the design of the contract of the design of the contract of the design of the contract of the con







AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

SYDNEY License No. N0356

Quarantine Approved premises criteria 5.1 for quarantine Quarantine Approved premises criteria 5.1 for quarantine containment level 1 (QCI) facilities. Class five criteria cover premises utilised for research, analysis, and/or testing of biological material, soil, animal, plant and human products.

#### **CUSTOMER CENTRIC - ANALYTICAL CHEMISTS**

Accredited for compliance with ISO/IEC 17025. The results of tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. NATA is a signatory to Australian and a standards. NATA is a the APLAC mutual recognition arrangem mutual recognition of the equivalence calibration and inspection reports.

### FINAL CERTIFICATE OF ANALYSIS - ENVIRONMENTAL DIVISION

**Laboratory Report No:** E038040 Cover Page 1 of 4

Coffey Environments Pty Ltd **Client Name:** plus Sample Results EL00315AH **Client Reference:** 

**Benedict Smith Contact Name:** Date Received: 05/06/2008 4348 **Chain of Custody No:** SOIL Date Reported: 16/06/2008 Sample Matrix:

This Final Certificate of Analysis consists of sample results, DQI's, method descriptions, laboratory definitions, and internationally recognised NATA accreditation and endorsement. The DQO compliance relates specifically to QA/QC results as performed as part of the sample analysis, and may provide an indication of sample result quality. Transfer of report ownership from Labmark to the client shall only occur once full & final payment has been settled and verified. All report copies may be retracted where full payment has not occured within the agreed settlement period.

#### QUALITY ASSURANCE CRITERIA

1 in first 5-20, then 1 every 20 samples Accuracy: matrix spike:

> lcs, crm, method: 1 per analytical batch

addition per target organic method surrogate spike:

Precision: laboratory duplicate: 1 in first 5-10, then 1 every 10 samples

> laboratory triplicate: re-extracted & reported when duplicate

RPD values exceed acceptance criteria

**Holding Times:** soils, waters: Refer to LabMark Preservation & THT

table

VOC's 14 days water / soil

VAC's 7 days water or 14 days acidified

VAC's 14 days soil

SVOC's 7 days water, 14 days soil Pesticides 7 days water, 14 days soil Metals 6 months general elements

Mercury 28 days

Confirmation: target organic analysis: GC/MS, or confirmatory column

Sensitivity: EOL:

(MDL)

### QUALITY CONTROL GLOBAL ACCEPTANCE CRITERIA (GAC)

general analytes 70% - 130% recovery Accuracy: spike, lcs, crm

> surrogate: phenol analytes 50% - 130% recovery

> > organophosphorous pesticide analytes

60% - 130% recovery

phenoxy acid herbicides, organotins

50% - 130% recovery

anion/cation bal: +/- 10% (0-3 meq/l),

+/- 5% (>3 meq/l)

Precision: method blank: not detected >95% of the reported EQL

> duplicate lab 0-30% (>10xEQL), 0-75% (5-10xEQL)

RPD (metals): 0-100% (<5xEQL)

duplicate lab 0-50% (>10xEQL), 0-75% (5-10xEQL)

RPD: 0-100% (<5xEQL)

## **OUALITY CONTROL** ANALYTE SPECIFIC ACCEPTANCE CRITERIA (ASAC)

Accuracy: spike, lcs, crm analyte specific recovery data

> surrogate: <3xsd of historical mean

Typically 2-5 x Method Detection Limit **Uncertainty:** measurement calculated from spike, lcs:

historical analyte specific control

charts

#### RESULT ANNOTATION

Data Quality Objective matrix spike recovery DOO: pending p:

DQI: Data Quality Indicator laboratory duplicate laboratory control sample d: lcs: EQL: **Estimated Quantitation Limit** laboratory triplicate certified reference material t: crm:

- - : RPD relative % difference not applicable method blank mb:

Quality Control (Report signatory) david.burns@labmark.com.au

Authorising Chemist (NATA signatory)

geoff.weir@labmark.com.au

Authorising Chemist (NATA signatory)

simon.mills@labmark.com.au

This document is issued in accordance with NATA's accreditation requirements.





Laboratory Report: E038040

Cover Page 2 of 4

## **NEPC GUIDELINE COMPLIANCE - DQO**

#### GENERAL

- A. Results relate specifically to samples as received. Sample results are not corrected for matrix spike, lcs, or surrogate recovery data.
- B. EQL's are matrix dependant and may be increased due to sample dilution or matrix interference.
- C. Laboratory QA/QC samples are specific to this project.
- D. Inter-laboratory proficiency results are available upon request. NATA accreditation details available at www.nata.asn.au.
- E. VOC spikes & surrogates added to samples during extraction, SVOC spikes & surrogates added prior to extraction.
- F. Recovery data outside GAC limits shall be investigated and compared to ASAC (historical mean +/- 3sd). If recovery data <20%, then the relevant results for that compound are considered not reliable.
- G. Recovery data (ms, surrogate, crm, lcs) outside ASAC limits shall initiate an investigative action. Anomolous QC data is examined in conjunction with other QC samples and a final decision whether to accept or reject results is provided by the professional judgement of the senior analyst. The USEPA-CLP National Functional Guidelines are referred to for specific recommendations.
- H. Extraction (preparation) date refers to the date that sample preparation was initiated. Note that certain methods not requiring sample preparation (eg. VOCs in water, etc) may report a common extraction and analysis date.
- I. LabMark shall maintain an official copy of this Certificate of Analysis for all tracable reference purposes.

#### 2. CHAIN OF CUSTODY (COC) & SAMPLE RECEIPT NOTICE (SRN) REQUIREMENTS

- A. SRN issued to client upon sample receipt & login verification.
- B. Preservation & sampling date details specified on COC and SRN, unless noted.
- C. Sample Integrity & Validated Time of Sample Receipt (VTSR) Holding Times verified (preservation may extend holding time, refer to preservation chart).

#### 3. NATA ACCREDITED METHODS

- A. NATA accreditation held for each method and sample matrix type reported, unless noted below.
- B. NATA accredited in-house laboratory methods are referenced from NEPC, ASTM, modified USEPA / APHA documents. Corporate Accreditation No. 13542.
- C. Subcontracted analyses: Refer to Sample Receipt Notice and additional DQO comments.





Laboratory Report: E038040

Cover Page 3 of 4

### 4. QA/QC FREQUENCY COMPLIANCE TABLE SPECIFIC TO THIS REPORT

Matrix:	SOIL						
Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
1	BTEX by P&T	1	0	0%	0	0	0%
1	Volatile TPH by P&T (vTPH)	1	0	0%	0	0	0%
2	Petroleum Hydrocarbons (TPH)	1	0	0%	0	0	0%
3	Acid extractable metals (M7)	1	0	0%	0	0	0%
4	Acid extractable mercury	1	0	0%	0	0	0%
5	Moisture	1					

#### GLOSSARY:

#d number of discrete duplicate extractions/analyses performed.

%d-ratio NEPC guideline for laboratory duplicates is 1 in 10 samples (min 10%).

#t number of triplicate extractions/analyses performed.

#s number of spiked samples analysed.

%s-ratio USEPA guideline for laboratory matrix spikes is 1 in 20 samples (min 5%).

#### 5. ADDITIONAL COMMENTS SPECIFIC TO THIS REPORT

A. All tests were conducted by LabMark Environmental Sydney, NATA accreditation No. 13542, Corporate Site No. 13535, unless indicated below.





**Laboratory Report: E038040** 

Cover Page 4 of 4

Laboratory QA/QC data shall relate specifically to this report, and may provide an indication of site specific sample result quality. LabMark DOES NOT report NON-RELEVANT BATCH QA/QC data. Acceptance of this self assessment certificate does not preclude any requirement for a QA/QC review by a accredited contaminated site EPA auditor, when and wherever necessary. Laboratory QA/QC self assessment references available upon request.



Coffey Environments Pty Ltd

**Contact Name:** Benedict Smith

plus cover page

**Page:** 1 of 5

Certificate

**Date:** 16/06/08

of Analysis

Final

Client Reference: EL00315AH This report supercedes reports issued on: N/A

Laboratory Identification		160206	lcs	mb				
Sample Identification		Dup 213a	QC	QC				
Depth (m)								
Sampling Date recorded on COC		3/6/08						
Laboratory Extraction (Preparation) Date		11/6/08	11/6/08	11/6/08				
Laboratory Analysis Date	_	16/6/08	11/6/08	11/6/08				
Method: E002.2 BTEX by P&T Benzene Toluene Ethylbenzene meta- and para-Xylene ortho-Xylene Total Xylene CDFB (Surr @ 10mg/kg)	EQL 0.2 0.5 0.5 1 0.5 	<0.2 <0.5 <0.5 <1 0.5 0.5 85%	118% 115% 96% 93% 91%  102%	<0.2 <0.5 <0.5 <1 <0.5  104%				
Method: E003.2 Volatile TPH by P&T (vTPH) C6 - C9 Fraction	<b>EQL</b> 10	<10	94%	<10				

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E002.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/PID/MSD.

E003.2: 8-10g soil extracted with 20ml methanol. Analysis by P&T/GC/FID.



**Client Name:** 

Coffey Environments Pty Ltd

**Benedict Smith Contact Name:** 

plus cover page **Date:** 16/06/08

**Page:** 2 of 5

Certificate

of Analysis

Final

EL00315AH **Client Reference:** This report supercedes reports issued on: N/A

Laboratory Identification		160206	lcs	mb				
Sample Identification		Dup 213a	QC	QC				
Depth (m)								
Sampling Date recorded on COC		3/6/08						
Laboratory Extraction (Preparation) Date		11/6/08	11/6/08	11/6/08				
Laboratory Analysis Date		12/6/08	11/6/08	11/6/08				
Method: E006.2 Petroleum Hydrocarbons (TPH) C10 - C14 Fraction C15 - C28 Fraction C29 - C36 Fraction Sum of TPH C10 - C36	EQL 50 100 100	<50 <100 <100 	 85%  	<50 <100 <100 				

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E006.2: 8-10g soil extracted with 20ml DCM/Acetone/Hexane (10:45:45). Analysis by GC/FID.



Coffey Environments Pty Ltd **Client Name:** 

**Benedict Smith Contact Name:** 

**Date:** 16/06/08

**Page:** 3 of 5

plus cover page

of Analysis

Final

Certificate

EL00315AH **Client Reference:** This report supercedes reports issued on: N/A

Laboratory Identification		160206	crm	lcs	mb			
Sample Identification		Dup 213a	QC	QC	QC			
Depth (m)								
Sampling Date recorded on COC		3/6/08						
Laboratory Extraction (Preparation) Date		11/6/08	11/6/08	11/6/08	11/6/08			
Laboratory Analysis Date		11/6/08	11/6/08	11/6/08	11/6/08			
Method: E022.2 Acid extractable metals (M7) Arsenic Cadmium Chromium Copper Nickel Lead Zinc	EQL 1 0.1 1 2 1 2 5	7 <0.1 15 16 1 24 34	95% 93% 97% 93% 94% 92% 91%	100% 103% 92% 100% 93% 97% 103%	<1 <0.1 <1 <2 <1 <2 <5			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E022.2: 0.5g digested in nitric/hydrochloric acid. Analysis by ICP-MS.



**Client Name:** 

Coffey Environments Pty Ltd

**Date:** 16/06/08

**Page:** 4 of 5

plus cover page

Final

Certificate

of Analysis

**Benedict Smith Contact Name:** 

EL00315AH **Client Reference:** This report supercedes reports issued on: N/A

Laboratory Identification		160206	crm	lcs	mb			
Sample Identification		Dup 213a	QC	QC	QC			
Depth (m)								
Sampling Date recorded on COC		3/6/08						
Laboratory Extraction (Preparation) Date		11/6/08	11/6/08	11/6/08	11/6/08			
Laboratory Analysis Date		12/6/08	11/6/08	11/6/08	11/6/08			
Method: E026.2 Acid extractable mercury Mercury	<b>EQL</b> 0.05	0.05	103%	92%	<0.05			

Results expressed in mg/kg dry weight unless otherwise specified

Comments:

E026.2: 0.5g digested with nitric/hydrochloric acid. Analysis by CV-ICP-MS or FIMS.



**Client Name:** 

**Contact Name:** 

Coffey Environments Pty Ltd

Benedict Smith **Date:** 16/06/08

**Page:** 5 of 5

plus cover page

Final

Certificate

of Analysis

Client Reference: EL00315AH This report supercedes reports issued on: N/A

Laboratory Identification		160206					
Sample Identification		Dup 213a					
Depth (m) Sampling Date recorded on COC		 3/6/08					
Laboratory Extraction (Preparation) Date Laboratory Analysis Date		11/6/08 12/6/08					
Method: E005.2 Moisture Moisture	EQL 	24					

Results expressed in % w/w unless otherwise specified

Comments:

E005.2: Moisture by gravimetric analysis. Results are in % w/w.



Report Date: 5/06/2008 Report Time: 5:47:53PM

# Sample

# Receipt



Quality, Service, Support

Client Name:

**Client Phone:** 

**Contact Name:** 

**Contact Email:** 

**Client Address:** 

**Project Name:** 

**Project Number:** 

**Client Fax:** 

Client Details	Laboratory	Reference Information
Coffey Environments Pty Ltd 02 8083 1600	<b>I</b>	ve this information ready contacting Labmark.
02 8765 0762 Benedict Smith	Laboratory Report:	E038040
benedict_smith@coffey.com	<b>Quotation Number:</b>	- Not provided, standard prices apply
Level 1, 3 Rider Boulevard Rhodes NSW 2138	Laboratory Address:	Unit 1, 8 Leighton Pl. Asquith NSW 2077
EL00315AH	Phone:	61 2 9476 6533
- Not provided -	Fax:	61 2 9476 8219
r: 4348	Sample Receipt Contact	ct: Jakleen El Galada

CoC Serial Number: 4348

**Purchase Order:** - Not provided -

Surcharge: No surcharge applied (results by 6:30pm on

due date)

Sample Matrix: SOIL Email: jakleen.galada@labmark.com.au

**Reporting Contact:** Jyothi Lal

Email: jyothi.lal@labmark.com.au

Invoice Number: 32309

**NATA Accreditation:** 13542 Date Sampled (earliest date): 03/06/2008 **TGA GMP License:** 185-336 (Sydney) **Date Samples Received:** 05/06/2008 **APVMA License:** 6105 (Sydney) **Date Sample Receipt Notice issued:** 05/06/2008 **AQIS Approval:** NO356 (Sydney) **Date Preliminary Report Due:** 16/06/2008 **AQIS Entry Permit:** 200521534 (Sydney)

**Reporting Requirements:** Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order.

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals not used .

Sample container & chemical preservation suitable.

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

Preservation: Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

**Analysis comments:** 

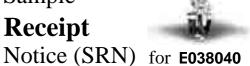
**Subcontracted Analyses:** 



Report Date: 5/06/2008 Report Time: 5:47:53PM

Sample

# Receipt



Quality, Service, Support

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID REVIEW TABLE								Re	ques	ted A	nalys	sis				
No. Date Depth Client Sample ID	BTEX by P&T	Acid extractable mercury	Acid extractable metals (M7)	Moisture	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (vTPH)									
160206 03/06 Dup 213a	•	•	•	•	•	•	٠									
Totals:	1	1	1	1	1	1	1									

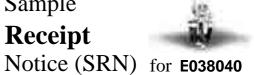
<sup>&#</sup>x27;PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



**Report Date : 5/06/2008** Report Time: 5:47:53PM

Sample

# Receipt



Quality, Service, Support

		Requested Analysis														
		M7-T_S														
No. Date Depth	Client Sample ID	M8 - M7														
160206 03/06	Dup 213a	•														П
	Totals:	1														

coffey Q. 3 75.70 Chain of Custody Consequences of Assess Conference Consultation (Process Sungary by Cyclescoli in Quantities (Constitution) America. Buch Control Service Родека Макчене Attacher arrival news 3000 Consequence by to 74% i oate Receive this Microscope of the 6800 Frank كالمروس والمروس والمروس والمراس Continue 1994 Sumper No. Committee's ing Shous allow **COLSTOR** JOB NOWBER MUST RE REFERENCED ON ALC SURSEON NT PAGES  $S_{\rm Quee, ch}$  Laborator albamos be  $\epsilon_{\rm c}$ Turning and Recurso getes teach areh-\$ 5/6/08 13 45 Courts WHETE 1991 remove MELLOW happen and in remove the Contrary accretion between the BLUE Television and accomplish





results of tests, calibrations and/or measurements



AUSTRALIAN QUARANTINE AND INSPECTION SERVICE

SYDNEY License No. N0356

Quarantine Approved Premises criteria 5.1 for quarantine criteria 5.1 for quarantine containment level 1 (QCI) facilities. Class five criteria cover premises utilised for research, analysis and testing of biological material, soil, animal, plant and human products.

#### **CUSTOMER CENTRIC - ANALYTICAL CHEMISTS**

results of tests, canorations and retraceable to included in this document are traceable to Australian/national standards. NATA is a signatory to Australian and a standards. NATA is a the APLAC mutual recognition arrangem mutual recognition of the equivalence calibration and inspection reports.

### FINAL CERTIFICATE OF ANALYSIS - ENVIRONMENTAL DIVISION

**Laboratory Report No:** E038088 Cover Page 1 of 3 Coffey Environments Pty Ltd **Client Name:** plus Sample Results

ENVILCOV00315AH **Client Reference:** 

Benedict Smith **Contact Name:** 

Date Received: 11/06/2008 09842 **Chain of Custody No: WATER** Date Reported: 19/06/2008 **Sample Matrix:** 

This Final Certificate of Analysis consists of sample results, DQI's, method descriptions, laboratory definitions, and internationally recognised NATA accreditation and endorsement. The DQO compliance relates specifically to QA/QC results as performed as part of the sample analysis, and may provide an indication of sample result quality. Transfer of report ownership from Labmark to the client shall only occur once full & final payment has been settled and verified. All report copies may be retracted where full payment has not occured within the agreed settlement period.

#### QUALITY ASSURANCE CRITERIA

Accuracy: matrix spike: 1 in first 5-20, then 1 every 20 samples

> lcs, crm, method: 1 per analytical batch

surrogate spike: addition per target organic method

Precision: laboratory duplicate: 1 in first 5-10, then 1 every 10 samples

> laboratory triplicate: re-extracted & reported when duplicate

RPD values exceed acceptance criteria

**Holding Times:** soils, waters: Refer to LabMark Preservation & THT

table

VOC's 14 days water / soil

VAC's 7 days water or 14 days acidified

VAC's 14 days soil

SVOC's 7 days water, 14 days soil Pesticides 7 days water, 14 days soil Metals 6 months general elements

Mercury 28 days

Confirmation: target organic analysis: GC/MS, or confirmatory column

### QUALITY CONTROL GLOBAL ACCEPTANCE CRITERIA (GAC)

general analytes 70% - 130% recovery Accuracy: spike, lcs, crm

surrogate:

phenol analytes 50% - 130% recovery organophosphorous pesticide analytes

60% - 130% recovery phenoxy acid herbicides, organotin

50% - 130% recovery

anion/cation bal: +/- 10% (0-3 meg/l),

+/- 5% (>3 meq/l)

Precision: method blank: not detected >95% of the reported EQL

> duplicate lab 0-30% (>10xEQL), 0-75% (5-10xEQL)

RPD (metals): 0-100% (<5xEQL)

0-50% (>10xEQL), 0-75% (5-10xEQL) duplicate lab

RPD: 0-100% (<5xEQL)

### QUALITY CONTROL ANALYTE SPECIFIC ACCEPTANCE CRITERIA (ASAC)

Accuracy: spike, lcs, crm analyte specific recovery data

> surrogate: <3xsd of historical mean

Sensitivity: EQL: Typically 2-5 x Method Detection Limit **Uncertainty:** spike, lcs: measurement calculated from

historical analyte specific control

charts

# RESULT ANNOTATION

Data Quality Objective matrix spike recovery bcs: batch specific lcs p: Data Quality Indicator d: laboratory duplicate laboratory control sample bmb: batch specific mb lcs:

**Estimated Ouantitation Limit** certified reference material t: laboratory triplicate crm:

RPD relative % difference method blank not applicable mb:

Ivan Povolny Quality Control (Report signatory)

ivan.povolny@labmark.com.au

Authorising Chemist (NATA signatory) geoff.weir@labmark.com.au

mar ll

Authorising Chemist (NATA signatory) simon.mills@labmark.com.au

This document is issued in accordance with NATA's accreditation requirements.

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Laboratory Report: E038088

Cover Page 2 of 3

### NEPC GUIDELINE COMPLIANCE - DQO

#### GENERAL

- A. Results relate specifically to samples as received. Sample results are not corrected for matrix spike, lcs, or surrogate recovery data.
- B. EQL's are matrix dependant and may be increased due to sample dilution or matrix interference.
- C. Laboratory QA/QC samples are specific to this project.
- Inter-laboratory proficiency results are available upon request. NATA accreditation details available at www.nata.asn.au.
- E. VOC spikes & surrogates added to samples during extraction, SVOC spikes & surrogates added prior to extraction.
- F. Recovery data outside GAC limits shall be investigated and compared to ASAC (historical mean +/- 3sd). If recovery data <20%, then the relevant results for that compound are considered not reliable.
- G. Recovery data (ms, surrogate, crm, lcs) outside ASAC limits shall initiate an investigative action. Anomolous QC data is examined in conjunction with other QC samples and a final decision whether to accept or reject results is provided by the professional judgement of the senior analyst. The USEPA-CLP National Functional Guidelines are referred to for specific recommendations.
- H. Extraction (preparation) date refers to the date that sample preparation was initiated. Note that certain methods not requiring sample preparation (eg. VOCs in water, etc) may report a common extraction and analysis date.
- I. LabMark shall maintain an official copy of this Certificate of Analysis for all tracable reference purposes.

### 2. CHAIN OF CUSTODY (COC) & SAMPLE RECEIPT NOTICE (SRN) REQUIREMENTS

- A. SRN issued to client upon sample receipt & login verification.
- B. Preservation & sampling date details specified on COC and SRN, unless noted.
- C. Sample Integrity & Validated Time of Sample Receipt (VTSR) Holding Times verified (preservation may extend holding time, refer to preservation chart).

#### 3. NATA ACCREDITED METHODS

- A. NATA accreditation held for each in-house method and sample matrix type reported, unless noted below (Refer to subcontracted test reports for NATA accreditation status).
- B. NATA accredited in-house laboratory methods are referenced from NEPC, ASTM, modified USEPA / APHA documents. Corporate Accreditation No. 13542.
- C. Subcontracted analyses: Refer to Sample Receipt Notice and additional DQO comments.

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Laboratory Report: E038088

Cover Page 3 of 3

#### 4. QA/QC FREQUENCY COMPLIANCE TABLE SPECIFIC TO THIS REPORT

Matrix:	WATER						
Page:	Method:	Totals:	#d	%d-ratio	#t	#s	%s-ratio
1	BTEX by P&T	2	0	0%	0	0	0%
1	Volatile TPH by P&T (vTPH)	2	0	0%	0	0	0%
2	Petroleum Hydrocarbons (TPH)	2	0	0%	0	0	0%
3	Filtered metals (M7)	2	0	0%	0	0	0%
4	Filtered mercury	2	0	0%	0	0	0%

#### GLOSSARY:

#d number of discrete duplicate extractions/analyses performed.

%d-ratio NEPC guideline for laboratory duplicates is 1 in 10 samples (min 10%).

#t number of triplicate extractions/analyses performed.

#s number of spiked samples analysed.

%s-ratio USEPA guideline for laboratory matrix spikes is 1 in 20 samples (min 5%).

# 5. ADDITIONAL COMMENTS SPECIFIC TO THIS REPORT

A. All tests were conducted by LabMark Environmental Sydney, NATA accreditation No. 13542, Corporate Site No. 13535, unless indicated below.

Laboratory QA/QC data shall relate specifically to this report, and may provide an indication of site specific sample result quality. LabMark <u>DOES NOT</u> report <u>NON-RELEVANT BATCH QA/QC</u> data. Acceptance of this self assessment certificate does not preclude any requirement for a QA/QC review by a accredited contaminated site EPA auditor, when and wherever necessary. Laboratory QA/QC self assessment references available upon request.



Coffey Environments Pty Ltd

**Page:** 1 of 4 plus cover page

Certificate

of Analysis

**Contact Name:** 

**Client Name:** 

**Benedict Smith** 

**Date:** 19/06/08

This report supercedes reports issued on: N/A

Final

**Client Reference:** 

ENVILCOV00315AH

**Laboratory Identification** 160806 160807 lcs mb Sample Identification QC Dup01a Dup02a OC Depth (m) Sampling Date recorded on COC 5/6/08 5/6/08 Laboratory Extraction (Preparation) Date 16/6/08 16/6/08 16/6/08 16/6/08 Laboratory Analysis Date 19/6/08 19/6/08 17/6/08 17/6/08 **Method** : **E002.1** BTEX by P&T **EOL** Benzene <1 2 97% <1 Toluene 97% 1 <1 <1 <1 Ethylbenzene <1 96% <1 <1 meta- & para-Xylene 2 <2 <2 94% <2 ortho-Xylene <1 <1 92% <1 Total Xylene 4-BFB (Surr @ 100ug/l) 96% 96% 101% 101% Method: E003.1 Volatile TPH by P&T (vTPH) **EQL** 50 C6-C9 < 50 < 50 98% < 50

Results expressed in ug/l unless otherwise specified

Comments:

E002.1: Direct injection into P&T/GC/PID/MSD.

E003.1: Direct injection into P&T/GC/FID.



**Client Name:** 

**Client Reference:** 

Coffey Environments Pty Ltd

ENVILCOV00315AH

**Contact Name:** Benedict Smith

**Date:** 19/06/08

plus cover page

**Page:** 2 of 4

Certificate of Analysis

Final

19/06/08 of A

This report supercedes reports issued on: N/A

<b>Laboratory Identification</b>		160806	160807	lcs	mb			
Sample Identification		Dup01a	Dup02a	QC	QC			
Depth (m)								
Sampling Date recorded on COC		5/6/08	5/6/08					
Laboratory Extraction (Preparation) Date		12/6/08	12/6/08	12/6/08	12/6/08			
Laboratory Analysis Date		18/6/08	18/6/08	16/6/08	16/6/08			
Method: E004.1 Petroleum Hydrocarbons (TPH) C10-C14 Fraction C15-C28 Fraction C29-C36 Fraction Sum of TPH C10 - C36	EQL 50 200 50	90 <200 <50 90	160 <200 <50 160	 79%  	<50 <200 <50			

Results expressed in ug/l unless otherwise specified

Comments:

E004.1: Triple extraction with DCM. Analysis by GC/FID.



**Client Name:** 

Coffey Environments Pty Ltd

Benedict Smith **Contact Name:** 

**Date:** 19/06/08

plus cover page

**Page:** 3 of 4

Certificate

of Analysis

Final

This report supercedes reports issued on: N/A **Client Reference:** ENVILCOV00315AH

Laboratory Identification		160806	160807	lcs	mb			
Sample Identification		Dup01a	Dup02a	QC	QC			
Depth (m)								
Sampling Date recorded on COC		5/6/08	5/6/08					
Laboratory Extraction (Preparation) Date		13/6/08	13/6/08	13/6/08	13/6/08			
Laboratory Analysis Date		13/6/08	13/6/08	13/6/08	13/6/08			
Method: E022.1								
Filtered metals (M7)	EQL							
Arsenic	1	*<5	*<5	112%	<1			
Cadmium	0.1	0.2	< 0.1	108%	< 0.1			
Chromium	1	*<5	*<5	114%	<1			
Copper	1	18	<1	116%	<1			
Nickel	1	27	7	113%	<1			
Lead	1	6	<1	104%	<1			
Zinc	5	123	6	114%	<5			

Results expressed in ug/l unless otherwise specified

Comments: \*EQL increased due to matrix interference.

E022.1: Filtered HNO3 preserved sample directly analysed by ICP-MS.



Coffey Environments Pty Ltd

**Benedict Smith Contact Name:** 

plus cover page

**Page:** 4 of 4

Certificate

**Date:** 19/06/08

of Analysis

Final

**Client Reference:** ENVILCOV00315AH This report supercedes reports issued on: N/A

Laboratory Identification		160806	160807	lcs	mb			
Sample Identification		Dup01a	Dup02a	QC	QC			
Depth (m)								
Sampling Date recorded on COC		5/6/08	5/6/08					
Laboratory Extraction (Preparation) Date		13/6/08	13/6/08	13/6/08	13/6/08			
Laboratory Analysis Date		16/6/08	16/6/08	16/6/08	16/6/08			
Method: E026.1 Filtered mercury Mercury	<b>EQL</b> 0.1	<0.1	<0.1	89%	<0.1			

Results expressed in ug/l unless otherwise specified

Comments:

E026.1: Analysis by CV-ICP-MS or FIMS following BrCl pre-treatment.



**Report Date : 11/06/2008 Report Time : 6:30:53PM** 

Sample

# Receipt



Quality, Service, Support

Notice (SRN) for E038088

	Client Details	Laboratory	Reference Information
Client Name: Client Phone:	Coffey Environments Pty Ltd 02 8083 1600	II.	ve this information ready contacting Labmark.
Client Fax: Contact Name:	02 8765 0762 Benedict Smith	Laboratory Report:	E038088
Contact Email: Client Address:	benedict_smith@coffey.com Level 1, 3 Rider Boulevard Rhodes NSW 2138	Quotation Number: Laboratory Address:	<ul> <li>Not provided, standard prices apply</li> <li>Unit 1, 8 Leighton Pl.</li> <li>Asquith NSW 2077</li> </ul>
Project Name: Project Number:	ENVILCOV00315AH - Not provided -	Phone: Fax:	61 2 9476 6533 61 2 9476 8219
CoC Serial Number Purchase Order: Surcharge:	er: 09842 - Not provided - No surcharge applied (results by 6:30pm on due date) WATER	Sample Receipt Contact Email: Reporting Contact: Email:	ct: Ros Schacht Ros.Schacht@labmark.com.au Geoff Weir geoff.weir@labmark.com.au
Date Sampled (earliest date): 05/06/2008 Date Samples Received: 11/06/2008 Date Sample Receipt Notice issued: 11/06/2008 Date Preliminary Report Due: 19/06/2008		NATA Accreditation: TGA GMP License: APVMA License: AQIS Approval: AQIS Entry Permit:	13542 185-336 (Sydney) 6105 (Sydney) NO356 (Sydney) 200521534 (Sydney)
Reporting Requir	ements: Electronic Data Download required:	No I	nvoice Number: 32364

Reporting Requirements: Electronic Data Download required: No

Sample Condition: COC received with samples. Report number and lab ID's defined on COC.

Samples received in good order .

Samples received with cooling media: Crushed ice .

Samples received chilled. Security seals intact .

Sample container & chemical preservation suitable .

Comments:

**Holding Times:** Date received allows for sufficient time to meet Technical Holding Times.

**Preservation:** Chemical preservation of samples satisfactory for requested analytes.

### **Important Notes:**

LabMark shall responsibly dispose of spent customer soil and water samples which includes the disintegration of the sample label. A sample disposal fee of \$1.00 is applicable on all samples received by the laboratory regardless of whether they have undergone analytical testing. Sample disposal of environmental samples shall be 31 days (water) and 3 months (soil, HN03 preserved samples) after laboratory receipt, unless otherwise requested in writing by the client. Samples requested to be held in non-refrigerated storage shall incur \$5.00/ sample/ 3 months. Additional refrigerated storage shall incur \$30/ sample/ 3 months. Combination prices apply only if requested. Transfer of report ownership from LabMark to the client shall occur once full and final payment has been settled and verified. All report copies may be retracted where full payment does not occur within the agreed settlement period.

**Analysis comments:** 

**Subcontracted Analyses:** 



**Report Date : 11/06/2008 Report Time : 6:30:53PM** 

Sample

# Receipt



Quality, Service, Support

Notice (SRN) for E038088

The table below represents LabMark's understanding and interpretation of the customer supplied sample COC request (refer to SRN comments section on first page for external subcontracting method details). Please confirm that your COC request has been entered correctly. Due to THT and TAT requirements, testing shall commence immediately as per this table, unless the customer intervenes with a correction prior to testing.

GRID REVI	IEW TABLE								Re	quest	ed A	nalys	is				
No. Date Depth Cl	lient Sample ID	BTEX by P&T	Filtered mercury	Filtered metals (M7)	PREP Not Reported	Petroleum Hydrocarbons (TPH)	Volatile TPH by P&T (vTPH)										
160806 05/06 Du	up01a	•	•	•	•	•	•										
160807 05/06 Du	up02a	•	•	•	•	•	•										
To	otals:	2	2	2	2	2	2										

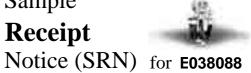
<sup>&#</sup>x27;PREP Not Reported' refers to an internal laboratory instruction - client confirmation of this parameter is not required.



Report Date: 11/06/2008 Report Time: 6:30:53PM

Sample

# Receipt



Quality, Service, Support

						Re	ques	ted A	nalys	sis				
		M7-F_W												
No. Date Depth	Client Sample ID	M8 - M7												
160806 05/06	Dup01a	•												
160807 05/06	Dup02a	•												
	Totals:	2												

coffey >	Chain of Custody	L368r3'ery Oceans on / Distait Mg	non merijasi Ekologogogogom	763 (1 1 - <b>2</b> .
STATE ALS	E03808	Nich Wathan Figer/	1000 porter 6/6/08	-·· <u>-</u>
Sumple	Ke0.0+	MONTHER BONDER SMIT	M Commission Coloss Colony Commission Coloss Colony	}
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Concessors	Constant Tope  Consta	See 12	Arayees Sequent	\$ 100 m
	0.000 1 x 500 m1 combod 1 x 250 m1 m2 b3d posic) 8 2 x 40 x 1 x 10 (400)	MU39 (2)		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MW 7 6 1 1 1 MW 6 6 1 1 1 1 MW 8 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sydnisy Walk Order  S0808102
		Awc (C)		
160807	1:	1) 0°0 <b>1</b> 4	, <u>, , , , , , , , , , , , , , , , , , </u>	Para I A Steam of
Stop Little area in abuse on a supplier of the stop of	# flease forward Lovald Ben Small		LARMONR For analysi <b>s</b> Thous.	A PERSONNER MUST RE IS REFERENCES IN ACT IN SUBSEQUENT PAGES





# **Environmental Division**

# **CERTIFICATE OF ANALYSIS**

Work Order : **ES0807194** 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 Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

LANE COVE WEST NSW, AUSTRALIA 2066

 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 : ----

 C-O-C number
 : 4322-24
 Date Samples Received
 : 22-MAY-2008

 Sampler
 : NC
 Issue Date
 : 02-JUN-2008

Site : ---

No. of samples received : 37

Quote number : EN/007/08 No. of samples analysed : 20

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	
Celine Conceicao	Spectroscopist	Inorganics	
Edwandy Fadjar	Senior Organic Chemist	Organics	
Hoa Nguyen		Inorganics	
Pabi Subba	Senior Organic Chemist (Volatile)	Inorganics	
PHALAK INTHAKESONE	Organics Co-ordinator	Inorganics	
PHALAK INTHAKESONE	Organics Co-ordinator	Organics	

Page : 3 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



### **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 preformed, 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 insuffient 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

Page : 4 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

72-54-8

7421-93-4

1031-07-8

53494-70-5

50-29-3

72-43-5

91-20-3

0.05

0.05

0.05

0.2

0.05

0.2

0.5

mg/kg

mg/kg

mg/kg

mg/kg

mg/kg

mg/kg

mg/kg

< 0.05

< 0.05

< 0.05

< 0.2

< 0.05

< 0.2

< 0.5

----

< 0.5

----

----

----

----

Project : EL00315AH

4.4`-DDD

4.4`-DDT

Endrin aldehyde

**Endrin ketone** 

Methoxychlor

Naphthalene

Endosulfan sulfate

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons





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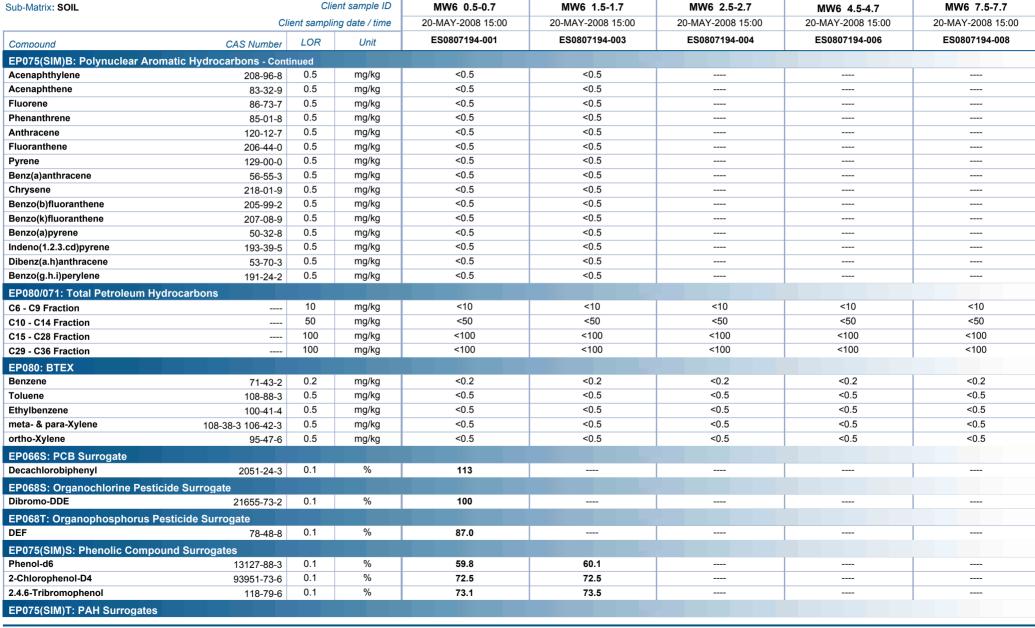
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Page : 5 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

### Analytical Results

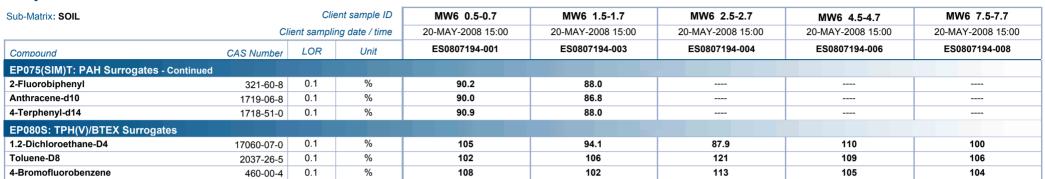


Page : 6 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

# **Analytical Results**

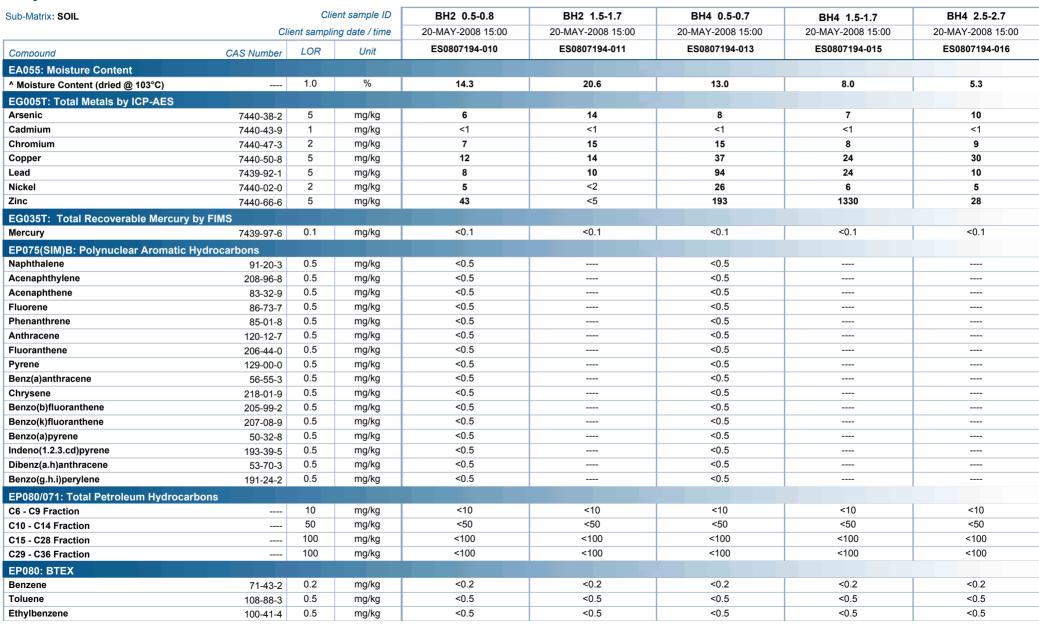




Page : 7 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



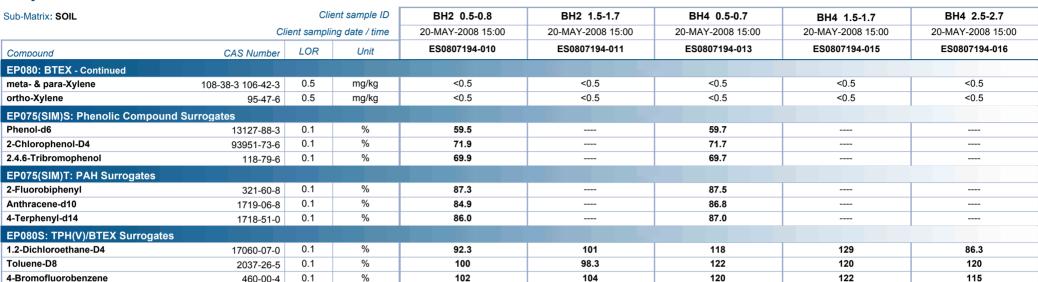


Page : 8 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

460-00-4

Project EL00315AH

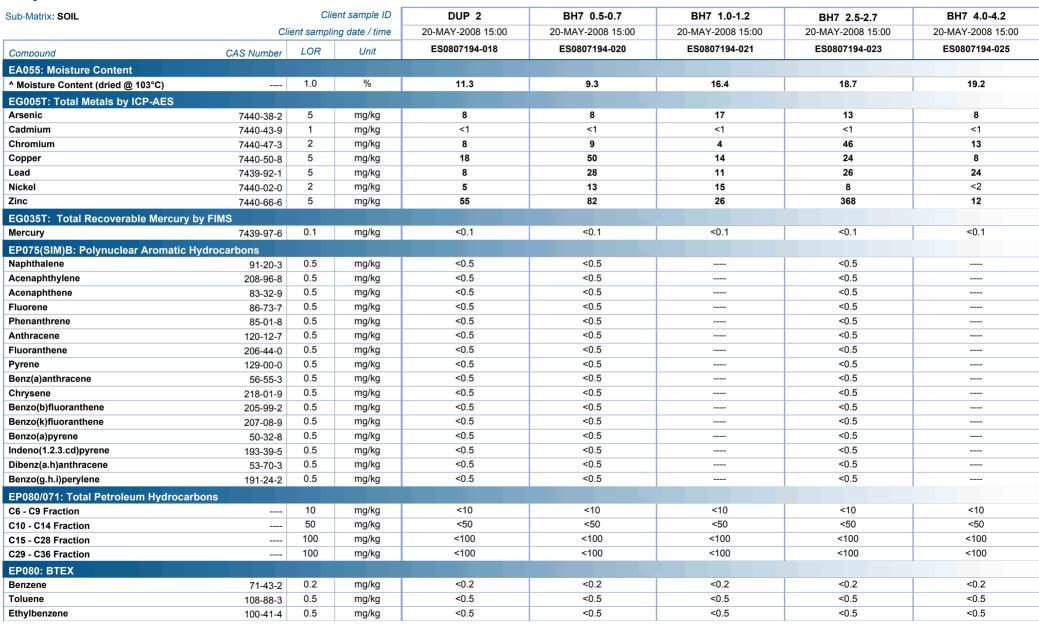




Page : 9 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

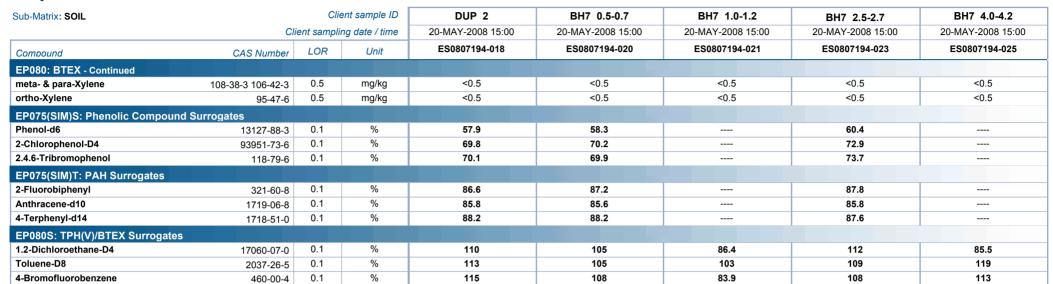




Page : 10 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

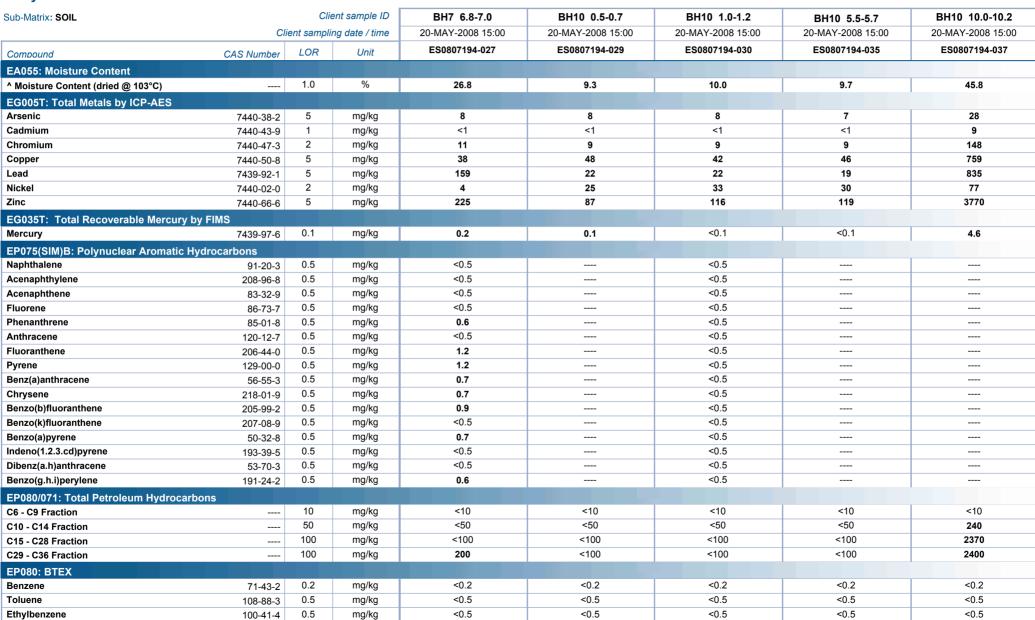




Page : 11 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

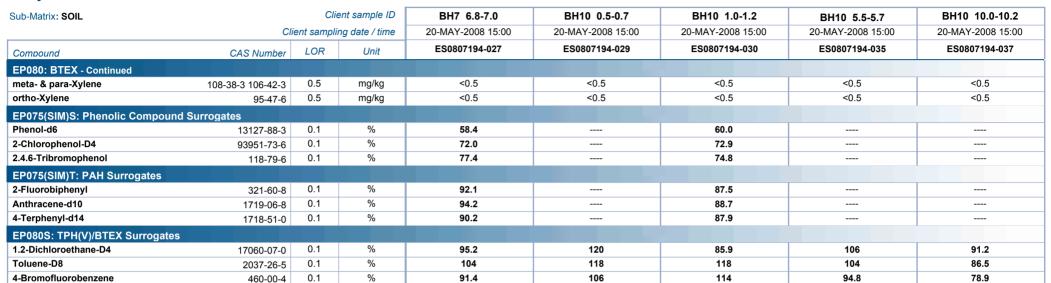




Page : 12 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



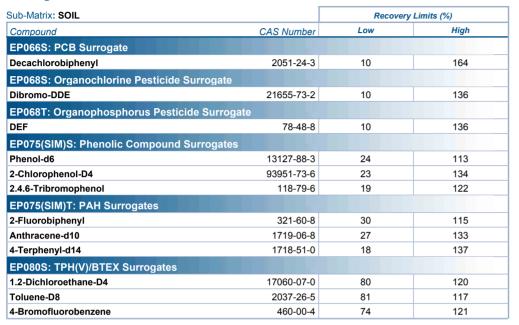


Page : 13 of 13 Work Order : ES0807194

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

# **Surrogate Control Limits**





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## **Environmental Division**

# **CERTIFICATE OF ANALYSIS**

Work Order : **ES0807197** Page : 1 of 11

Client : COFFEY ENVIRONMENTS PTY LTD Laboratory : Environmental Division Sydney

Contact : MS BENEDICT SMITH Contact : Ashwini Sharma

Address : 8/12 MARS ROAD Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

LANE COVE WEST NSW, AUSTRALIA 2066

 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 : ----

 C-O-C number
 : 4320-21
 Date Samples Received
 : 22-MAY-2008

 Sampler
 : NC & BS
 Issue Date
 : 30-MAY-2008

Site : ---

Quote number : EN/007/08 No. of samples received : 27

Quote number : EN/007/08 No. of samples analysed : 14

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved 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	Inorganics	
Edwandy Fadjar	Senior Organic Chemist	Organics	
Hoa Nguyen		Inorganics	

Page : 3 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



#### **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 preformed, results are reported on a dry weight basis.

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Key: CAS Number = Chemistry Abstract Services number

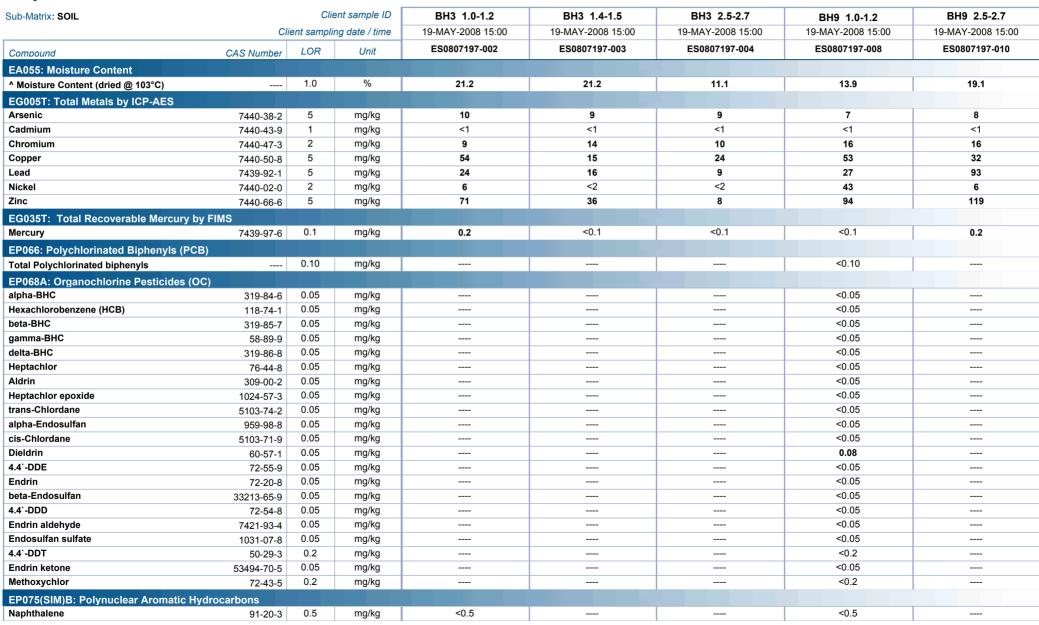
LOR = Limit of reporting

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

Page : 4 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

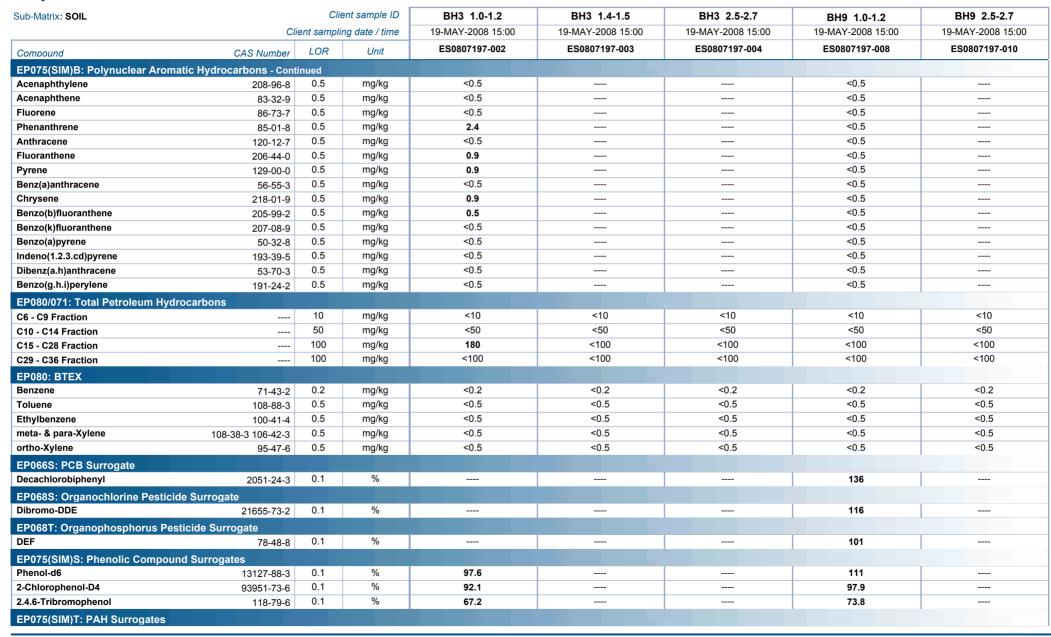




Page : 5 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

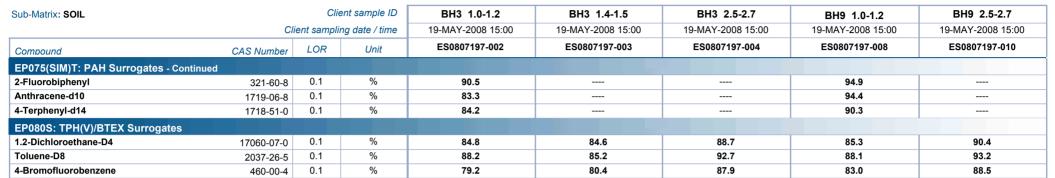




Page : 6 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

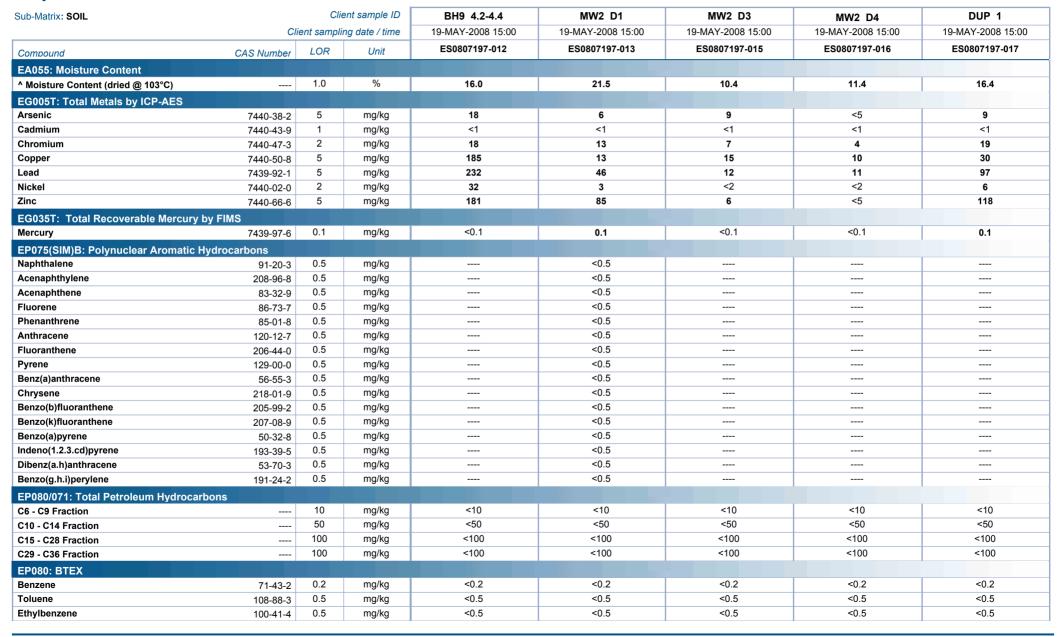




Page : 7 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

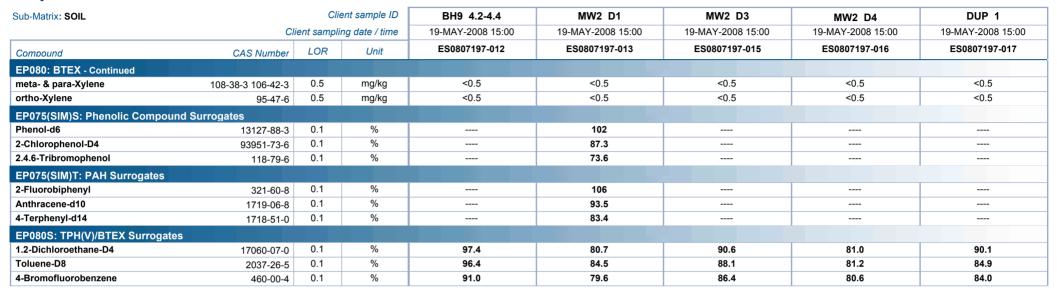




Page : 8 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

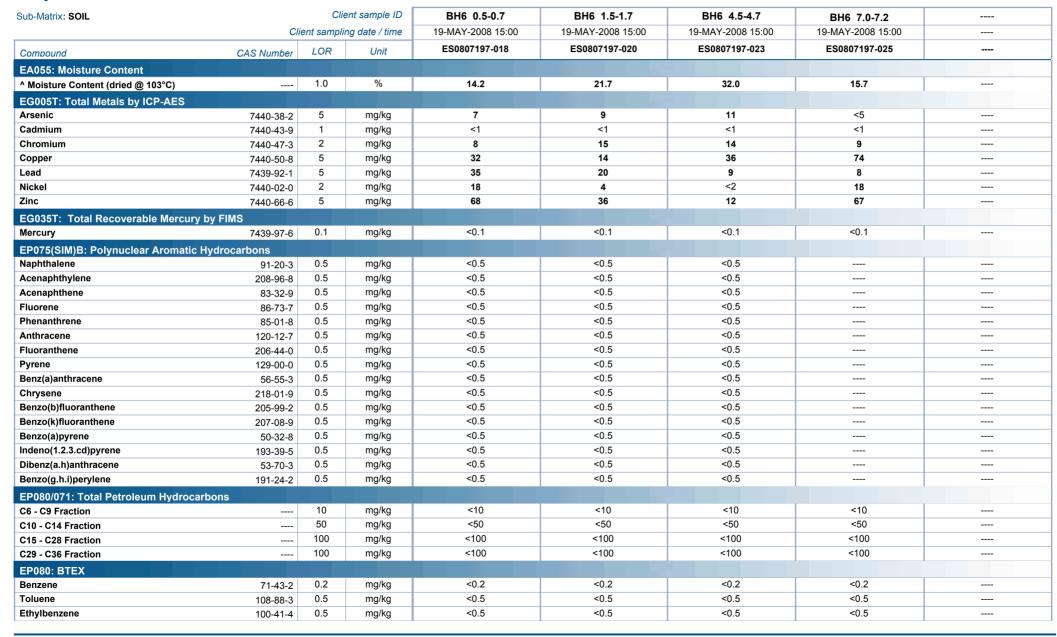




Page : 9 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

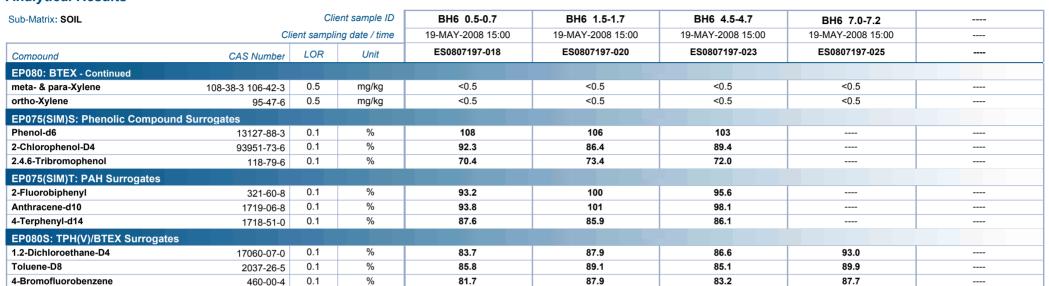




Page : 10 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



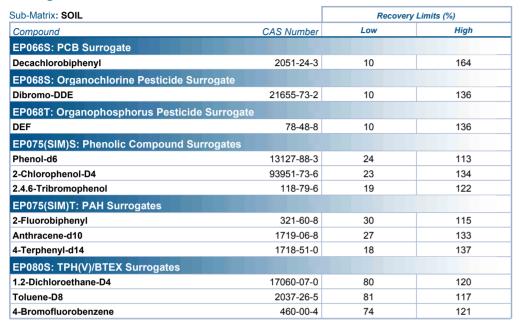


Page : 11 of 11 Work Order : ES0807197

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

# **Surrogate Control Limits**





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## **Environmental Division**

## CERTIFICATE OF ANALYSIS

: ES0807210 **Work Order** Page : 1 of 11

Client COFFEY ENVIRONMENTS PTY LTD Laboratory : Environmental Division Sydney

Contact : MS BENEDICT SMITH Contact : Ashwini Sharma

Address : 8/12 MARS ROAD Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

LANE COVE WEST NSW. AUSTRALIA 2066

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

C-O-C number : 4325-26 **Date Samples Received** : 22-MAY-2008 Sampler Issue Date : 30-MAY-2008

Site

: 26 Quote number : EN/007/08 No. of samples analysed : 12

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.

No. of samples received

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits



NATA Accredited Laboratory 825

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Edwandy Fadjar	Senior Organic Chemist	Inorganics
Edwandy Fadjar	Senior Organic Chemist	Organics
Hoa Nguyen		Inorganics
Sarah Millington	Senior Inorganic Chemist	Inorganics
Victor Kedicioglu	Business Manager - NSW	Inorganics

Page : 3 of 11 Work Order : ES0807210

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH



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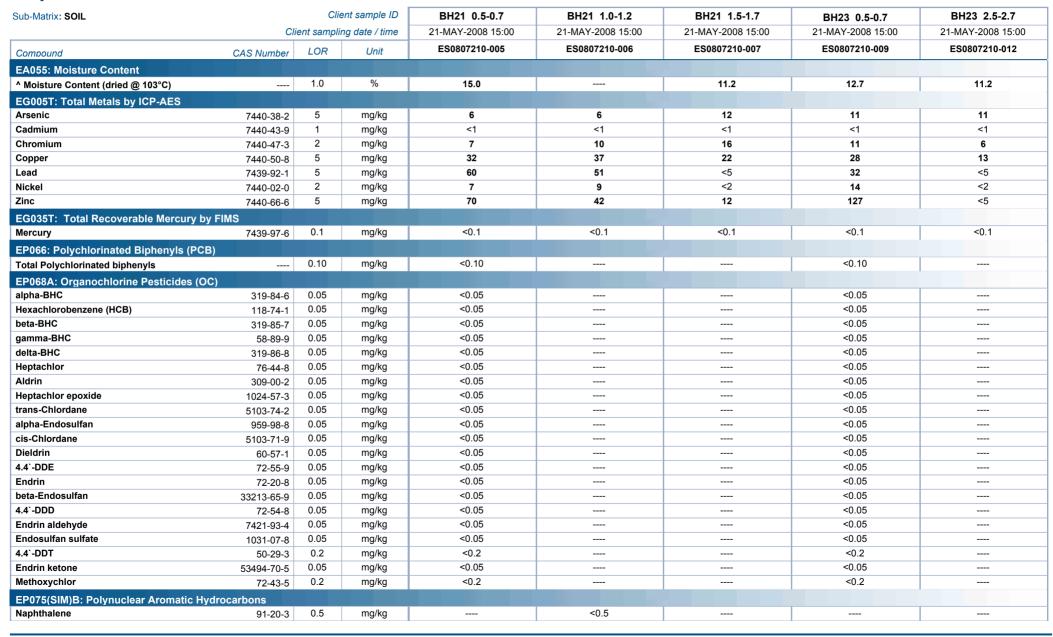
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Page : 4 of 11 Work Order : ES0807210

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH





Page : 5 of 11 Work Order : ES0807210

Client : COFFEY ENVIRONMENTS PTY LTD

Project : EL00315AH

