

EMR

Lot:	10	Plan:	RP185905
Category:	HAZARDOUS CONTAMINANT		
LGA:	Brisbane City Council		
Site Name:	HAZARDOUS CONTAMINANT BRISBANE		
Street:	545 QUEEN STREET		
Suburb:	BRISBANE CITY	Post Code:	4000
Owner:	GPT FUNDS MANAGEMENT LIMITED		
Address:	LEVEL 52, 19 MARTIN PLACE		
	SYDNEY NSW		
Post Code:	2000		

Rec Type:	BP	ID:	70897
Region:		Hist. ID:	
AMA/AN:			
Notified By:	OTHER	Notif. Rec'd:	
Entry Date:	21/08/2007	Last Altered Date:	22/03/2017
File:	BNE33346		
Officer:			
Parcel Status:	C	Area:	m2

External References

Hazardous Contaminants

Xylene - average concentration 22.7 mg/kg. Benzene - average concentration 33.4 mg/kg. Toluene - average concentration 1.85 mg/kg. Total BTEX - 57.95 mg/kg. Napthalene - maximum concentration 49.8 mg/kg.

Notifiable Activities

HAZARDOUS CONTAMINANT

Comments

Create Date	User ID	Corr No	Officer Name	Date Final	How Finalized
21/08/2007	FRANCISK				
FILE NOTE FROM TAMARA EMMS DATED 21/8/2007 NOTIFIES OF HAZARDOUS CONTAMINANT. XYLENE - AVERAGE CONCENTRATION 22.7 MG/KG, BENZENE - AVERAGE CONCENTRATION 33.4 MG/KG TOLUENE - AVERAGE CONCENTRATION 1.85 MG/KG TOTAL BTEX - 57.95 MG/KG NAPHTHALENE - MAXIMUM CONCENTRATION - 49.8 MG/KG.					
07/09/2007	FRANCISK				
EMAIL RECEIVED FROM TPR WITH LETTER FROM APH REQUESTING EXTENSION INVESTIGATIONS CURRENTLY UNDERWAY STATUS CHANGED TO INVESTIGATE					
05/02/2008	LEWISAN				
OFFSITE DISPOSAL PERMIT GRANTED FOR DISPOSAL OF NO MORE THAN 850 CUBIC METRES OF MAH AND PAH CONTAMINATED SOIL GOING TO THIESS SERVICES P/L LANDFILL SWANBANK QLD 4306.					
05/02/2008	LEWISAN				
OFFSITE DISPOSAL PERMIT GRANTED 31-08-2007 FOR DISPOSAL OF NO MORE THAN 350 CUBIC METRES OF MAH AND PAH CONTAMINATED SOILS GOING TO THIESS SERVICES P/L LANDFILL SWANBANK QLD 4306					
08/02/2008	LEWISAN				
AMENDED INVESTIGATE TO NOTIFIABLE ACTIVITY AS REQUESTED FROM KIM BARRY DATED 8/2/08.					
11/02/2008	BUTCHERP				
DISPOSAL DATED ADDED. OFFSITE DISPOSAL PERMIT GRANTED 8/02/08 FOR DISPOSAL OF 60 CUBIC METRES OF MAH AND PAH CONTAMINATED SOIL AT THIESS SERVICES P/L LANDFILL, SWANBANK QLD 4306.					
13/02/2008	LEWISD				
AMENDED OWNER DETAILS FROM - APH, LEVEL 3, 345 ANN STREET, BRISBANE QLD 4000. - TO CURRENT AS PER QVAS.					
29/09/2015	luckeg				

Create Date	User ID	Corr No	Officer Name	Date Final	How Finalized
EMR SITE RECORD VALIDATION. AMENDED CATEGORY TO HAZ CONTAM AS ONLY ONE NA LISTED - HAZ CONTAM.					
22/03/2017	luckeg				
AMENDED HAZ CONTAM TO INCLUDE NAPHTHALENE - MAXIMUM CONCENTRATION 49.8 KG/KG. AS PER ORIGINAL MEMORANDUM ON FILE DATED 21 AUGUST 2007.					
22/03/2017	luckeg				
PAPER FILE SCANNED AND SAVED TO EDOCS FILE REF 101/0021935.					

Published on
DES Disclosure Log
RTI Act 2009

BNE33346



Queensland
Government

Enquiries to: P. Butcher
Telephone: (07) 3225 8416 / fax (07) 3247 3278
Your reference: 47365
Our reference: BNE33346

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

Permit to Remove and Dispose of Contaminated Soil

Pursuant to Section 424 of the *Environmental Protection Act* 1994 (EP Act) permission is given to the applicant

EMR updated 11/2/08

Mr Carl Deegan

sch 4 - signature

Douglas Partners Pty Ltd

439 Montague Road,

WEST END QLD 4101

Telephone: (07) 3237 8900

Fax: (07) 3237 8999

to remove and dispose of soil contaminated with MAH and PAH

from 545 Queen Street, BRISBANE QLD 4001

on Lot 10 on RP185905 and described in the following correspondence:

Application for Contaminated Soil Disposal Permit dated 25 January 2008, received on 29 January 2008.

The permit holder is responsible for ensuring that all personnel involved in the excavation, removal and disposal comply with the specific and standard conditions in Schedules 1 and 2 of this permit.

Signed

sch 4 - signature

Kim Barry

Principal Scientific Advisor (Waste and Contaminated Land Unit)

08/02/08

Cc: Thiess Services Pty Ltd, attn: Michele Blake, Fax: (07) 3715 1545.

Cc: EPA (Southern Region), attn: Chris Stewart, Fax: (07) 3247 3278.

Notice to Applicant

The conditions on this permit have been decided after consideration of the standard criteria (EP Act) and for the purpose of preventing environmental harm. The applicant may apply for a review or appeal against the decision within 10 business days of receipt of this notice (s521 and s531).

288 Edward Street Brisbane
Queensland 4000 Australia
GPO Box 2771, Brisbane Qld 4001
Telephone (07) 3225 1827
Facsimile (07) 3247 3278
Website www.env.qld.gov.au
ABN 87 221 158 786

Schedule 1 of 2 – Specific Conditions

The volume or mass of the contaminated soil shall not exceed 60 cubic metres .

The soil is to be disposed in accordance with the disposal facility approval letter dated 25/01/2008 at Thiess Services Pty Ltd landfill at Swanbank Road, SWANBANK, QLD 4306.

The soil must be disposed between 08/02/2008 and 08/08/2008.

Other Conditions:

The material must be stored at the disposal facility until it is adequately characterised by TCLP analysis.

Published on
DES Disclosure Log
RTI Act 2009

Schedule 2 of 2 – Standard Conditions

1. Volume / mass of contaminated soil

This permit applies to the specified volume or mass only. Any increases to the specified quantity will require a new disposal permit.

2. Disposal time period

Disposal must occur within the dates specified or a new disposal permit must be sought.

3. Excavation and loading

The holder of this disposal permit must take all reasonable precautions necessary to prevent the spillage of contaminated soil during loading and prevent contaminated soil being transported from the site of origin on vehicle tyres and plant and equipment.

4. Transportation

(a) *Transporter to be advised of permit conditions*

Prior to the removal of contaminated soil, the permit holder must provide a copy of the permit and conditions to the transporter.

(b) *Load to be secured*

The contaminated soil must be covered in the transportation vehicle to ensure that the contaminated soil or offensive or noxious gases are not released during transport.

(c) *Cleaning of vehicles and plant equipment*

An effective system must be employed for cleaning of vehicles and plant and equipment which are used to transport or handle contaminated soil which prevents release of contaminants onto any roadway or to any waters or stormwater drainage system.

(d) *Spillage*

Any spillage of contaminants must be cleaned up as quickly as practicable. Spillages must not be cleaned up by hosing, sweeping or otherwise releasing such contaminants or material to any stormwater drainage system, roadside gutter or waters.

5. Receival and disposal

(a) *Licence conditions*

The acceptance and disposal of the contaminated soil must comply with the licence conditions and the specific requirements of the disposal facility.

(b) *Disposal receipts*

Copies of disposal acceptance receipts are to be submitted to the Administering Authority within 10 business days of the date of disposal. The holder of, or person acting under a disposal permit, must comply with the conditions of the permit (s425 of the *Environmental Protection Act 1994*).
Maximum penalty - 100 penalty units.

6. Interim storage

Contaminated soil which is temporarily stored at the site of origin or approved for storage at a separate property must be stockpiled and securely covered and/or managed to ensure that:

- (a) rainwater is drained away from the stockpiles;
- (b) contaminated soil is not transported from the stockpile by wind or rainwater;
- (c) offensive odours or noxious gases are not released; and
- (d) soil underlying the stockpiles is not affected by contamination.

A report is to be provided to the Administering Authority within 28 days of final disposal that verifies that the storage area is fully cleared of contamination.

7. Treatment of soil

(a) Licensed facility

When treatment is to be undertaken at a licensed general waste disposal facility or regulated waste treatment and disposal facility, acceptance receipts must be provided to the Administering Authority within 10 days of contaminated soil delivery. The contamination level in the soil must be reduced to a level agreed by the Administering Authority. When contaminated soil is stored at such facility pending treatment, storage is to be undertaken according to condition 6.

(b) Other treatment sites

(i) Soil remediation and validation report.

The permit holder must provide a report of the soil remediation including chemical test results that validate that the contamination has been lowered to levels agreed with the Administering Authority. The report must provide evidence that the land underlying the treatment activity is not affected by contamination.

(ii) Environmental harm.

Treatment activities must be carried out to ensure that environmental harm is not caused and that contaminants including treatment agents are not released from the site by wind, stormwater or as offensive or noxious gases. The requirements of condition 6 also apply.

(c) Final disposal

When soil contamination has been reduced to levels acceptable to the Administering Authority, the soil may be disposed of as general fill unless otherwise specified in Schedule 1. The location of the final disposal site of the soil is to be identified after treatment by written advice to the Administering Authority.

****End of Document****

WARRD # BNE 2008/1280.
FILE # BNE 33346.



Douglas Partners
Geotechnics • Environment • Groundwater

Douglas Partners Pty Ltd
ABN 75 053 900 117
439 Montague Road
West End, QLD 4101
Australia

Phone (07) 3237 8900
Fax: (07) 3237 8999
brisbane@douglaspartners.com.au

JTC/CD

25 January, 2008

Contaminated Land Unit
Environmental Protection Agency
GPO Box 2771
BRISBANE QLD 4001



Attention: Chief Scientific Officer

DISPOSAL PERMIT APPLICATION
545 QUEEN STREET, BRISBANE

sch 4 - signature

Please find attached an application to dispose of approximately 60m³ (max. bulked volume) of soil contaminated with PAHs from the site located at Lot 10 on RP185905, 545 Queen Street, Brisbane.

A small excavation within weathered phyllite rock was undertaken by Hutchinson Builders sub contractors with the aim of installing a grease trap settling tank below the floor of the existing basement. Excavation of the surface soil (Stockpile 1) did not encounter any odour or contamination; however excavation of the lower soil profile (Stockpile 2) which required a rock breaker encountered PAH contamination and odour within fractured phyllite rock.

Douglas Partners environmental consultant Jacob Cumpstay sampled and tested the two separate stockpiles of soil and results (attached) indicate that Stockpile 1 is free of PAH, BTEX and heavy metals contamination. Stockpile 2, however, contains elevated levels of PAHs and for this reason a disposal permit is requested allowing the off-site disposal of approximately 60m² of contaminated soil to Swanbank Waste Management Facility.

Summary table of the laboratory test results not including TCLPs is attached, as well as photos of the stockpiles of excavated phyllite. Full laboratory results are also attached.

Sampling was carried out in reference to AS4482.1 – 2005, *Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds*, and standard operating procedures described in the *DP Field Procedures Manual* to ensure the representativeness and integrity of samples. Sampling strategies used was as follows:

- Grab samples collected at a ratio of approximately 1 per 20m³ allowing for characterisation of the stockpiles material.

All sampling data was recorded on DP Chain of Custody sheets, and the general sampling procedure comprised:

Integrated Practical Solutions



Offices: Sydney, Newcastle, Brisbane, Melbourne, Perth, Wyong, Campbelltown, Townsville, Cairns, Wollongong, Darwin
Principals: K A Boddie, J C Braybrooke, M Y Broise, G Castwood, J P Harvey, B W Ims, S R Jones, J Lean, A N Lee, R W Lumsdaine, F MacGregor, P McDonald, G W McIntosh, J M Nash, M J Thom, R Tong, T J Wiesner
A J Wilson, G R Wilson, G S Young
Senior Associates: R Billman, C Billorey, A Castles, G Hawkins, B McPherson, C Marals, J P Orr, R Preston, B Rippington, L Rockett, K Schultz, B Stewart, D Tiley, T Waters, F Watkins, W Wright
Associates: C Bell, D Carson, C Deegan, S Doranai, S Easton, M Gawn, M Jones, R Lloyd, S McQuinn, D McQuinn, D Martin, D Millard, A Murphy, D Murray, J Nane, F Quinn, J Poon, J Rumbold, C Stewart, J Vanden, N Weimann, D Woods

- Grab sampling by the sampler wearing disposable gloves that were changed prior to the collection of each sample.
- Transfer of samples into laboratory-prepared glass jars with teflon lined lids, and capping immediately.
- Various sampling for QA/QC purposes.
- Labelling of sample containers with individual and unique identification, including project number and sample location.
- Placement of the sample jars into ice-cooled, insulated and sealed containers for transport to the laboratory.

The Thiess landfill acceptance letter and official EPA application forms are attached, and copies sent to the site Third Party Reviewer, Dr. Yin Foong, who will provide you with a separate recommendation for the application.

Landfill acceptance (attached) has been obtained from Thiess Waste Management Facility, Swanbank for all the contaminated soil.

Thank you for consideration of this application. Please call if any clarification or additional information is required. Your early review of this application would be appreciated.

Regards,

DOUGLAS PARTNERS PTY LTD

Reviewed By:

sch 4 - signature

sch 4 - signature

Jacob Cumpstay
Environmental Engineer

Carl Deegan
Associate - Environment

Laboratory Results: Stockpiles SP1, SP2 – Grease Trap Excavation, 545 Queen Street, Brisbane

Sample ID	Date Sampled	Analyte (mg/kg)															
		Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3.cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene
AMDEL 08ENBR0001387																	
SP1-1	21.01.08	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	0.7
SP1-2	21.01.08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR
SP1-3	21.01.08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR
SP2-1	21.01.08	<0.5	0.6	<0.5	<0.5	5.8	1.2	11	8.1	4.7	4.6	7.5	6.3	3.6	4.9	2.5	60.8
SP2-2	21.01.08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	1.0	0.7	0.6	1.0	1.0	0.5	0.7	<0.5	6.6
SP2-3	21.01.08	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	3.0	2.6	2.1	1.8	3.5	2.8	1.7	2.5	1.6	22.7
EPA ¹		~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
HBIL-A ²		~	~	~	~	~	~	~	~	~	~	~	1	~	~	~	20
HBIL-F ³		~	~	~	~	~	~	~	~	~	~	~	5	~	~	~	100

Notes: 1 EPA's Environmental Investigation Level
2 EPA's Health-based Investigation Level Type A – Standard Residential, adjusted for cadmium, copper and zinc
3 EPA's Health-based Investigation Level Type F – Commercial / Industrial
<LOR Less than the laboratory's level of reporting
~ Not tested
~ Guideline level not yet available

Sample ID	Date Sampled	Lithology	Analyte (mg/kg)						
			Arsenic	Cadmium	Chromium	Copper	Nickel	Lead	Zinc
SP1-1	21.01.08	Weathered Phyllite	3.0	<1	51	51	33	6.6	54
SP1-2	21.01.08	Weathered Phyllite	7.1	<1	39	51	29	5.5	55
SP1-3	21.01.08	Weathered Phyllite	<3	<1	73	71	40	5.1	68
SP2-1	21.01.08	Weathered Phyllite	6.6	<1	52	40	32	24	67
SP2-2	21.01.08	Weathered Phyllite	3.0	<1	9.1	8.5	5.7	9.3	95
SP2-3	21.01.08	Weathered Phyllite	<3	<1	36	33	23	8.4	43
EIL ¹			20	3	50	60	60	300	200
HBIL-A ²			100	5	120,000	200	600	300	400
HBIL-F ³			500	100	600,000*	5,000	3,000	1,500	35,000

Notes: 1 EPA's Environmental Investigation Level
2 EPA's Health-based investigation Level Type A – Standard Residential, adjusted for cadmium, copper and zinc
3 EPA's Health-based investigation Level Type F – Commercial / Industrial
<LOR Less than the laboratory's level of reporting

Sample ID	Date Sampled	Analyte (mg/kg)					
		Benzene	Toluene	Ethylbenzene	m&p-Xylene	Ortho-Xylene	Total BTEX
SP1-1	21.01.08	<0.2	<1	<01	<2	<1	<LOR
SP1-2	21.01.08	<0.2	<1	<01	<2	<1	<LOR
SP1-3	21.01.08	<0.2	<1	<01	<2	<1	<LOR
SP2-1	21.01.08	<0.2	<1	<01	<2	<1	<LOR
SP2-2	21.01.08	<0.2	<1	<01	<2	<1	<LOR
SP2-3	21.01.08	<0.2	<1	<01	<2	<1	<LOR
QLD EPA-Unpublished		1	~	~	~	~	7

Notes: 1 EPA's Unpublished Guidelines for TPH/BTEX in soil, issued 1999
<LOR Less than the laboratory's level of reporting
- Not tested
~ Guideline level not yet available



Thiess Services Pty Ltd
ABN 69 010 725 247

69 Grindilla Road
Rocklea QLD 4106
Australia
P.O. Box 1127
Archerfield QLD 4108
Telephone (07) 3715 1500
Facsimile (07) 3715 1545

25 January, 2007

Douglas Partners
439 Montague Road
West End Qld 4101

ATTENTION:- Jacob Cumpstay

Dear Jacob,

Extension to - Approval No: I - 1828

Thiess Services Pty Ltd is willing to accept an additional 60m3 of PAH contaminated soil for lined disposal at Swanbank Waste Management Facility.

If an EPA Permit to Remove and Dispose of Contaminated Soil is required for this site, delivery of this material can only commence after Thiess Services has received a copy.

To assist with fast processing of loads at our weighbridge, please notify the weighbridge the afternoon prior to delivery and have all delivery drivers quote the above approval number. As well, ensure that this material is identified as the following on transport documentation.

APPROVAL NUMBER:	I - 1828
MATERIAL DESCRIPTION:	Contaminated Soil
DISPOSAL OPTION:	Lined Disposal

Our Swanbank Facility's entrance is approximately 1 kilometre past the Swanbank Power Station at the end of Swanbank Road, Swanbank Queensland. The Swanbank Facility's registered plan and license details are as follows:

Description:	Lots 103 & 104, on RP839073, County of Stanley, Parish of Bundamba.
EPA License:	SR2137.



Rates will be charged as follows;

Lined disposal rate: \$ 28.00 Tonne

NB: A minimum charge per load for disposal applies.

(This will be equal to the price of 1 tonne or \$35.00 which ever is higher)

All the above rates and charges are excluding GST, are valid for 90 days and are subject to the following conditions:

1. Conditions of the approval are met.
2. All material (as per tonnages quoted) is disposed here at TS Swanbank Waste Management Facility.
3. This quote is based on the tonnages advised. If these tonnages transpire to be significantly different from that estimated, please arrange a re-quote.

Payment methods can either be via cheque, credit card debit or by account.

Should you require any further information please do not hesitate me on (07) 3288 7344 or sch 4 - mobile phone

Yours Sincerely

sch 4 - signature

Michele Blake
Customer Service Manager
Swanbank Waste Management Facility

sch 4 - mobile phone

mblake@thiess-services.com.au



Queensland
Government

Enquiries to: M. Bickle
Telephone: (07) 3224 6166 / fax (07) 3247 3278
Your reference: 47365
Our reference: BNE33346

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

Permit to Remove and Dispose of Contaminated Soil

The Environmental Protection Agency – Waste and Contaminated Land Unit gives permission to the applicant

Mr Carl Deegan

Douglas Partners Pty Ltd

439 Montague Road,

WEST END QLD 4101

Telephone: (07) 3237 8900

Fax: (07) 3237 8999

to remove and dispose of soil contaminated with MAH and PAH

from 545 Queen Street, BRISBANE QLD 4001

on Lot 10 on RP185905 and described in the following correspondence:

Application for amended minor Contaminated Soil Disposal Permit (extension in volume) dated 20 September 2007, received on 20 September 2007 and TPR approval received 20 September 2007. The permit holder is responsible for ensuring that all personnel involved in the excavation, removal and disposal comply with the specific and standard conditions in Schedules 1 and 2 of this permit.

Signed

sch 4 - signature

Scott Robinson

Manager (Waste and Contaminated Land Unit)

21/09/07

Cc: Thiess Services Pty Ltd, attn: Darren Willson, Fax: (07) 3288 6795.

Cc: EPA (Southern Region), attn: Chris Stewart, Fax: (07) 3247 3278.

Notice to Applicant

The conditions on this permit have been decided after consideration of the standard criteria (EP Act) and for the purpose of preventing environmental harm. The applicant may apply for a review or appeal against the decision within 10 business days of receipt of this notice (s521 and s531).

288 Edward Street Brisbane
Queensland 4000 Australia
GPO Box 2771, Brisbane Qld 4001
Telephone (07) 3225 1827
Facsimile (07) 3247 3278
Website www.env.qld.gov.au
ABN 87 221 158 786

Schedule 1 of 2 – Specific Conditions

The volume or mass of the contaminated soil shall not exceed 850 cubic metres .

The soil is to be disposed in accordance with the disposal facility approval letter dated 20/09/07 at Thiess Services Pty Ltd landfill at Swanbank Road, SWANBANK, QLD 4306.

The soil must be disposed between 03/09/2007 and 03/03/2008.

Other Conditions:

The material must be stored at the disposal facility until it is adequately characterised by TCLP analysis.

NB: This permit supersedes the previous permit issued on 31 August 2007.

Published on
DES Disclosure Log
RTI Act 2009

Paul Butcher

From: Foong, Yin [yfoong@golder.com.au]
Sent: Thursday, 31 January 2008 4:27 PM
To: Paul Butcher
Cc: Jacob Cumpstay
Subject: RE: 545 Queen St disposal permit extension

Paul

As peer reviewer for the site, I recommend that the disposal permit be approved.

Rgds

Yin

Dr Yin FOONG

Principal Environmental Engineer

Golder Associates Pty Ltd

Brisbane Office

611 Coronation Drive, Toowong QLD 4066

(PO Box 1734, Milton BC 4064)

Phone: 07 3721 5400 Direct: 07 3721 5433

Fax: 07 3721 5401 Mobile sch 4 - mobile phone

From: Jacob Cumpstay [mailto:Jacob.Cumpstay@douglaspartners.com.au]

Sent: Tuesday, 29 January 2008 8:50 AM

To: paul.butcher@epa.qld.gov.au

Cc: Foong, Yin

Subject: FW: 545 Queen St disposal permit extension

Importance: High

Hi Paul,

Please find attached the original disposal permit for the site at 545 Queen Street. The permit is not due to expire until the 03/03/08, however the specified volume of 850m3 has already been disposed to landfill. On this basis it is requested that an updated permit be issued allowing for a further 60m3 of PAH contaminated material to be disposed off-site.

Landfill acceptance for the additional 60m3 is attached as well as a cover letter explaining the reason for needing the permit.

Should you require anything further, don't hesitate to contact me.

Kind Regards



Douglas Partners
 Geotechnics • Environment • Groundwater

Jacob Cumpstay | Environmental Engineer

439 Montague Road | WEST END QLD 4101

tel 07 3237 8902 | fax 07 3237 8999 | mob sch 4 - mobile phone

cumpstayj@douglaspartners.com.au | www.douglaspartners.com.au

1. The contents of this email are confidential and are intended for the named recipient(s) only. If you are not the intended recipient you are hereby notified that any use, disclosure or distribution of the information contained in this email is prohibited. If you have received this in error, please notify the sender immediately, and delete the email and any attachments.
2. The content of this message is not given or endorsed by Douglas Partners unless otherwise confirmed in writing by letter or fax independent of this message. Douglas Partners is not responsible for any unauthorised alterations to this email or any attachments.
3. It is the recipient's responsibility to check this email for viruses.

From: Foong, Yin [mailto:yfoong@golder.com.au]
Sent: Tuesday, 29 January 2008 8:18 AM
To: Paul Butcher
Cc: Jacob Cumpstay; Alan Lee; Mathew Gaskin; Kim Barry
Subject: 545 Queen St disposal permit extension

Hi Paul

Following discussions with Jacob of Douglas Partners, I have approved his request for disposal extension duration for the lot.

Approximately 60m3 due to contamination from water mixing with a stockpile in the basement.

Jacob will be emailing you a copy of the original disposal permit which has expired, reasons for extension and acceptance by landfill operator.

Thanks and Rgds

Yin

Dr Yin FOONG

Principal Environmental Engineer

Golder Associates Pty Ltd

Brisbane Office

611 Coronation Drive, Toowong QLD 4066

(PO Box 1734, Milton BC 4064)

Phone: 07 3721 5400 Direct: 07 3721 5433

Fax: 07 3721 5401 Mobile sch 4 - mobile phone

Published on
DES Disclosure Log
RTI Act 2009

BNE2007/11054
BNE33346

6th September, 2007

Our Ref: 545/PM/L012

Att: The Delegate of Administering Authority

Environmental Protection Agency
GPO Box 2771
Brisbane QLD 4001

EPA SOUTHERN REGION	
Correspondence No.	
File No.	PART
Action Officer	

**RE: 545 QUEEN STREET, EPA File: BNE33346
REQUEST FOR EXTENSION OF TIME FOR EMR LISTING**

To whom it may concern,

We refer to your letter dated 21st August 2007 regarding the EPA's intention to list the above site on the EMR. We respectfully request further time made of at least 30 days be granted before this listing is processed. We provide the following reasons for this request:

- Investigations are currently being conducted by Douglas partners across the 545 Queen Street site in all areas where soil is accessible in an attempt to delineate contamination;
- A complete site history for the subject site is currently being prepared by Douglas Partners;
- A Peer Reviewer (Dr. Yin Foong) has been commissioned and is currently working alongside Douglas Partners to help facilitate timely approvals;
- Approval of a minor disposal permit has been granted by the EPA which may result in the removal of the contaminated soil from the site and disposal to Swanbank Waste Management Facility;
- Investigations and environmental supervision by Douglas Partners will be ongoing throughout the project.

We take this opportunity to assure you that as the property owner, we intend to give this issue the full attention and due care that is warranted. If you have any queries please contact the undersigned.

Regards,
Australia-Pacific Holdings Pty Ltd

sch 4 - signature

John W. Tyson
Project Manager
APH Properties



Att:			
CC:	Kim Barry	EPA Contaminated Lands Unit	
	Dr. Yin Foong	Golder Associates	
	Jacob Cumpstay	Douglas Partners	
	Matthew Gaskin	Hutchinson Builders	Page 17 of 17

with Anne Marie



Queensland
Government

Enquiries to: M. Bickle
Telephone: (07) 3224 6166 / fax (07) 3247 3278
Your reference: 47365
Our reference: BNE33346

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

Permit to Remove and Dispose of Contaminated Soil

The Environmental Protection Agency – Waste and Contaminated Land Unit gives permission to the applicant

Mr Carl Deegan
Douglas Partners Pty Ltd
439 Montague Road,
WEST END QLD 4101
Telephone: (07) 3237 8900
Fax: (07) 3237 8999

EMR updated.
5/2/08

sch 4 - signature

Dear Registry,
Please add to
file.
Harko

sch 4 - signature

to remove and dispose of soil contaminated with MAH and PAH
from 545 Queen Street, BRISBANE QLD 4001

on Lot 10 on RP185905 and described in the following correspondence:

Application for amended minor Contaminated Soil Disposal Permit (extension in volume) dated 20 September 2007, received on 20 September 2007 and TPR approval received 20 September 2007. The permit holder is responsible for ensuring that all personnel involved in the excavation, removal and disposal comply with the specific and standard conditions in Schedules 1 and 2 of this permit.

Signed
sch 4 - signature

Scott Robinson
Manager (Waste and Contaminated Land Unit)

21/09/07

Cc: Thiess Services Pty Ltd, attn: Darren Willson, Fax: (07) 3288 6795.

Cc: EPA (Southern Region), attn: Chris Stewart, Fax: (07) 3247 3278.

Notice to Applicant

The conditions on this permit have been decided after consideration of the standard criteria (EP Act) and for the purpose of preventing environmental harm. The applicant may apply for a review or appeal against the decision within 10 business days of receipt of this notice (s521 and s531).

with AnneMarie Lewis

288 Edward Street Brisbane
Queensland 4000 Australia
GPO Box 2771, Brisbane Qld 4001
Telephone (07) 3225 1827
Facsimile (07) 3247 3278
Website www.env.qld.gov.au
ABN 87 221 158 786

Schedule 1 of 2 – Specific Conditions

The volume or mass of the contaminated soil shall not exceed 850 cubic metres .

The soil is to be disposed in accordance with the disposal facility approval letter dated 20/09/07 at Thiess Services Pty Ltd landfill at Swanbank Road, SWANBANK, QLD 4306.

The soil must be disposed between 03/09/2007 and 03/03/2008.

Other Conditions:

The material must be stored at the disposal facility until it is adequately characterised by TCLP analysis.

NB: This permit supersedes the previous permit issued on 31 August 2007.

Published on
DES Disclosure Log
RTI Act 2009

Schedule 2 of 2 – Standard Conditions

1. Volume / mass of contaminated soil

This permit applies to the specified volume or mass only. Any increases to the specified quantity will require a new disposal permit.

2. Disposal time period

Disposal must occur within the dates specified or a new disposal permit must be sought.

3. Excavation and loading

The holder of this disposal permit must take all reasonable precautions necessary to prevent the spillage of contaminated soil during loading and prevent contaminated soil being transported from the site of origin on vehicle tyres and plant and equipment.

4. Transportation

(a) Transporter to be advised of permit conditions

Prior to the removal of contaminated soil, the permit holder must provide a copy of the permit and conditions to the transporter.

(b) Load to be secured

The contaminated soil must be covered in the transportation vehicle to ensure that the contaminated soil or offensive or noxious gases are not released during transport.

(c) Cleaning of vehicles and plant equipment

An effective system must be employed for cleaning of vehicles and plant and equipment which are used to transport or handle contaminated soil which prevents release of contaminants onto any roadway or to any waters or stormwater drainage system.

(d) Spillage

Any spillage of contaminants must be cleaned up as quickly as practicable. Spillages must not be cleaned up by hosing, sweeping or otherwise releasing such contaminants or material to any stormwater drainage system, roadside gutter or waters.

5. Receival and disposal

(a) Licence conditions

The acceptance and disposal of the contaminated soil must comply with the licence conditions and the specific requirements of the disposal facility.

(b) Disposal receipts

Copies of disposal acceptance receipts are to be submitted to the Administering Authority within 10 business days of the date of disposal. The holder of, or person acting under a disposal permit, must comply with the conditions of the permit (s425 of the *Environmental Protection Act 1994*).
Maximum penalty - 100 penalty units.

6. Interim storage

Contaminated soil which is temporarily stored at the site of origin or approved for storage at a separate property must be stockpiled and securely covered and/or managed to ensure that:

- (a) rainwater is drained away from the stockpiles;
- (b) contaminated soil is not transported from the stockpile by wind or rainwater;
- (c) offensive odours or noxious gases are not release; and
- (d) soil underlying the stockpiles is not affected by contamination.

A report is to be provided to the Administering Authority within 28 days of final disposal that verifies that the storage area is fully cleared of contamination.

7. Treatment of soil

(a) Licensed facility

When treatment is to be undertaken at a licensed general waste disposal facility or regulated waste treatment and disposal facility, acceptance receipts must be provided to the Administering Authority within 10 days of contaminated soil delivery. The contamination level in the soil must be reduced to a level agreed by the Administering Authority. When contaminated soil is stored at such facility pending treatment, storage is to be undertaken according to condition 6.

(b) Other treatment sites

(i) Soil remediation and validation report.

The permit holder must provide a report of the soil remediation including chemical test results that validate that the contamination has been lowered to levels agreed with the Administering Authority. The report must provide evidence that the land underlying the treatment activity is not affected by contamination.

(ii) Environmental harm.

Treatment activities must be carried out to ensure that environmental harm is not caused and that contaminants including treatment agents are not released from the site by wind, stormwater or as offensive or noxious gases. The requirements of condition 6 also apply.

(c) Final disposal

When soil contamination has been reduced to levels acceptable to the Administering Authority, the soil may be disposed of as general fill unless otherwise specified in Schedule 1. The location of the final disposal site of the soil is to be identified after treatment by written advice to the Administering Authority.

****End of Document****

Customer Sample ID BP5-5.0m
Amdel Sample Number 626059
Date Sampled 17/09/2007

SVOC

Test/Reference	PQL	Unit	
Pyrene	0.5	mg/kg	<0.5
Sum of PAHs	8	mg/kg	<8.0
2-Fluorobiphenyl - Surrogate	-	%	93
p-Terphenyl-D14 - Surrogate	-	%	94
Anthracene-d10 - Surrogate	-	%	96
Pyrene-d10 - Surrogate	-	%	99

Metals

Test/Reference	PQL	Unit	
3200 Total Metals in Soil by ICP/AES			
Arsenic	3	mg/kg	Pending
Cadmium	1	mg/kg	Pending
Chromium	2	mg/kg	Pending
Copper	1	mg/kg	Pending
Lead	5	mg/kg	Pending
Nickel	2	mg/kg	Pending
Zinc	2	mg/kg	Pending

Miscellaneous

Test/Reference	PQL	Unit	
5000 Moisture Content			
% Moisture	1	%	16

Sample History

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

Description	Extracted	Analysed
2100 PAH in Soil by GC		18/09/2007
3200 Total Metals in Soil by ICP/AES	18/09/2007	18/09/2007
5000 Moisture Content		18/09/2007

Sample Integrity

Custody Seals Intact (if used)	Yes
Attempt to Chill was evident	Yes
Samples correctly preserved	Yes
Organic samples had Teflon liners	Yes
Samples received with Zero Headspace	Yes
Samples received within Holding Time	Yes
Some samples have been subcontracted	No

Authorised By

Elizabeth Button	Senior Analyst - Environmental	Accreditation Number: 14356
Michael Mowle	Team Leader - Environmental	Accreditation Number: 14356

Laboratory Manager

Michael Mowle	Team Leader - Environmental
---------------	-----------------------------

sch 4 - signature

Interim Report. A final report will be issued once all testing is complete



- Indicates Not Requested

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

Amdel Limited shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Amdel Limited be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received. Sampled dates quoted in this report are those listed on the COC or sample jars, if no sample dates are noted, the date the samples are received at the laboratory have been used.

The samples were not collected by Amdel staff.

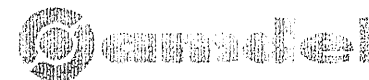
Published on
DES Disclosure Log
RTI Act 2009

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Company: Douglas Partners Pty Ltd	Project Name: Site Contamination	Project Number: 47365
Address: 439 Montague Road	Quote Reference: 1419-0031-06	Purchase Order No: 70705
West End 4101		
Contact: Jacob Cumpstay	Send Results to: Jacob.cumpstay@douglaspartners.com	Via: Mail: ☐ Fax: ☐ Email: ☐
Telephone: sch 4 - mobile phone	Results Required by*: 24 hrs ☒ 48 hrs ☐ 5 Day ☐ Other ☐	
Fax: 07 3237 8902	* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.	
Email: Jacob.cumpstay@douglaspartners.com.au		

[illegible]

** METALS (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Special Requirements (e.g. ^{PM} OHS issues etc.)

Sample Receipt Advice (Lab Use Only)

Date/Time: 17.09.07 12pm

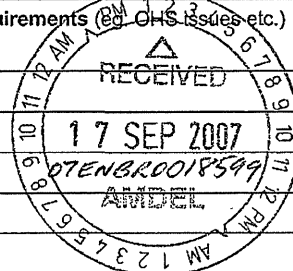
Date/Time: 17-09-07 13:40

Date/Time:

Date/Time: _____

Date/Time: _____

Date/Time: _____



All Samples Received in Good Condition ☒

All Documentation in Proper Order ☒

Samples Received with an Attempt to Chill ☒

Samples Received Within Holding Times ☐

Average sample temp on receipt: (°C) 34

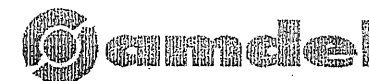
For enquires please quote Ref. No. 07ENB2001857

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@qribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Environmental Analysis Request – Chain Of Custody (COC)

Company: Douglas Partners Pty Ltd

Address: 439 Montague Road
West End 4101

Contact: Jacob Cumpstay

Telephone: sch 4 - mobile phone **Fax:** 07 3237 8902

Email: Jacob.cumpstay@douglaspartners.com.au

Project Name:	<u>Site Contamination</u>	Project Number:	<u>47365</u>
Quote Reference:	<u>1419-0031-06</u>	Purchase Order No:	

Send Results to: Jacob.cumpstay@douglaspartners.com Via: Mail: ☐ Fax: ☐ Email: ☐

Results Required by*: 24 hrs ☒ 48 hrs ☐ 5 Day ☐ Other ☐

* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

SAMPLE DESCRIPTION

ANALYSIS REQUIRED

[illegible]

Please Provide Field PID Readings where possible

Totals:

** METALS (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Chain of Custody

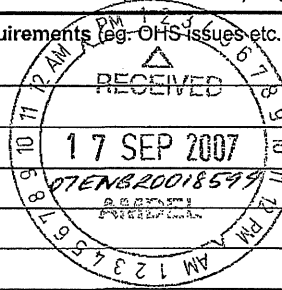
Relinquished by: Jacob Cumpstay
Received by: sch 4 - signature

Relinquished by: ✓
Received by: _____

Relinquished by: _____
Received by: _____

Date/Time: 17.09.07 12pm
Date/Time: 17-09-07 13.
Date/Time: _____
Date/Time: _____
Date/Time: _____
Date/Time: _____

Special Requirements (eg. OHS issues etc.)



Sample Receipt Advice (Lab Use Only)

All Samples Received in Good Condition ☒

All Documentation in Proper Order ☒

Samples Received with an Attempt to Chill ☒

Samples Received Within Holding Times ☐

Average sample temp on receipt: (°C) 3.4
For enquires please quote Ref. No. 07ENB20018599

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com

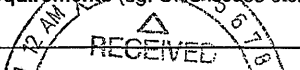


Company:	<u>Douglas Partners Pty Ltd</u>	Project Name:	<u>Site Contamination</u>	Project Number:	<u>47365</u>
Address:	<u>439 Montague Road</u>	Quote Reference:	<u>1419-0031-06</u>	Purchase Order No:	<u></u>
	<u>West End 4101</u>				
Contact:	<u>Jacob Cumpstay</u>	Send Results to:	<u>Jacob.cumpstay@douglaspartners.com</u>	Via:	Mail: ☐ Fax: ☐ Email: ☐
Telephone:	<u>sch 4 - mobile pho</u>	Fax:	<u>07 3237 8902</u>	Results Required by*:	<u>24 hrs ☒ 48 hrs ☐ 5 Day ☐ Other ☐</u>
Email:	<u>Jacob.cumpstay@douglaspartners.com.au</u>	* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.			

SAMPLE DESCRIPTION					ANALYSIS REQUIRED	
Lab ID	Sample ID	Date & Time Sampled	Soil / Water Other	Comments [#]	Metals - Sid 7	PAHs
626043	BP16-1.0m	15.09.07	S		X	X
44	BP16-2.0m	15.09.07	S		X	X
45	BP16-3.0m	15.09.07	S		X	X
46	BP16-5.0m	15.09.07	S		X	X
47	R-A	15.09.07	S		X	X
48	BP17-1.0m	15.09.07	S		X	X
49	BP17-2.0m	15.09.07	S		X	X
50	BP17-3.0m	15.09.07	S		X	X
51	BP17-4.0m	15.09.07	S		X	X
52	BP15-1.0m	15.09.07	S		X	X
53	BP15-3.0m	15.09.07	S		X	X
Totals:						

Please Provide Field PID Readings where possible

** **METALS** (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Chain of Custody		Special Requirements (eg. OHS issues etc.)	Sample Receipt Advice (Lab Use Only)
Relinquished by: <u>Jacob Cumpstay</u>	Date/Time: <u>17.09.07 12pm</u>		All Samples Received in Good Condition ☒
Received by: <u>sch 4 - signature</u>	Date/Time: <u>17-09-07 13:40</u>		All Documentation in Proper Order ☒
Relinquished by: _____	Date/Time: _____		Samples Received with an Attempt to Chill ☐
Received by: _____	Date/Time: _____		Samples Received Within Holding Times ☐
Relinquished by: _____	Date/Time: _____		Average sample temp on receipt: (°C) <u>36</u>
Received by: _____	Date/Time: _____		For enquires please quote Ref. No. <u>07ENB20018599</u>

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Environmental Analysis Request – Chain Of Custody (COC)

Company: Douglas Partners Pty Ltd
Address: 439 Montague Road
West End 4101
Contact: Jacob Cumpstay
Telephone: sch 4 - mobile phd Fax: 07 3237 8902
Email: Jacob.cumpstay@douglaspartners.com.au

Project Name:	<u>Site Contamination</u>	Project Number:	<u>47365</u>
Quote Reference:	<u>1419-0031-06</u>	Purchase Order No:	

Send Results to: Jacob.cumpstay@douglaspartners.com Via: Mail: ☐ Fax: ☐ Email: ☐

Results Required by*: 24 hrs ☒ 48 hrs ☐ 5 Day ☐ Other ☐ _____

* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

SAMPLE DESCRIPTION

ANALYSIS REQUIRED

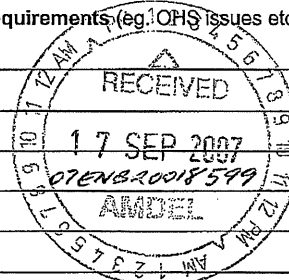
[illegible]

**** METALS** (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Chain of Custody

Relinquished by: <u>Jacob Cumpstay</u>	Date/Time: <u>17.09.07 12pm</u>
Received by: <u>sch 4 - signature</u>	Date/Time: <u>17-09-07</u>
Relinquished by: _____	Date/Time: _____
Received by: _____	Date/Time: _____
Relinquished by: _____	Date/Time: _____
Received by: _____	Date/Time: _____

Special Requirements (eg. OHS issues etc.)



Sample Receipt Advice (Lab Use Only)

All Samples Received in Good Condition ☒

All Documentation in Proper Order ☒

Samples Received with an Attempt to Chill ☒

Samples Received Within Holding Times ☒

Average sample temp on receipt: (°C) 3.4

For enquires please quote Ref. No. 07ENV320018549

Sample Receipt Advice

Client Name:	Douglas Partners	Date Received:	17 September 2007
Attention:	MR Jacob Cumpstay	Due Date:	18 September 2007
Client Reference number:	47365 Site Contamination	Turnaround:	24 Hour

Amdel Reference number:	07ENBR0018599	Your Amdel Contact:	David Bates +61 7 3902 4600
--------------------------------	---------------	----------------------------	--------------------------------

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

Job Information

Sample Integrity

Attempt to Chill was evident	Yes
Samples correctly preserved	Yes
Organic samples had Teflon liners	Yes
Samples received with Zero HeadSpace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No
Custody Seals Intact (if used)	Yes

Analysis Requested

Analysis Requested	Method Code	Number Of Samples
Total Metals in Soil by ICP/AES	3200	40
Moisture Content	5000	40
PAH in Soil by GC	2100	40

Note

- Turnaround time starts when samples are received at the Laboratory
- For samples received after 4pm, turnaround time starts the next working day
- For samples received on the last day of holding time, notification of testing requirements must be given at least 6 hours prior to the sample receipt deadlines; Should the laboratory not receive the information in the required timeframe a suitably qualified results may still be reported.
- Surcharges may apply for 24 and 48 hour turnaround.
- Water samples will be discarded after 4 weeks unless notified.
- Soil samples are chilled for 1 month and will be discarded after 3 months unless notified.
- UNLESS ADVISED OTHERWISE - Sample analysis will commence regardless of integrity issues and / or non-conformance and these will be recorded on the final report.
- Samples submitted for Micro analysis on a Friday may incur a \$150 surcharge and / or be analysed outside holding time (24 Hour Holding Time).

Logged in by : Jane Walker

Date : Mon 17 September 2007

Megan Bickle

From: Foong, Yin [yfoong@golder.com.au]
Sent: Thursday, 20 September 2007 8:41 PM
To: Paul Butcher; Megan Bickle
Cc: Jacob Cumpstay; John Tyson; Alan Lee
Subject: FW: 545 Queen Street - Disposal Permit Extension in Volume
Importance: High
Attachments: image001.jpg; Thiess Acceptance - Extension.pdf; bored pier plan.pdf; 07ENBR0018599-246814.pdf; COC-07ENBR0018599-20070917-1422.pdf; SRA-07ENBR0018599-20070917-1422.pdf; 20070920112704995.pdf; COC-07ENBR0018743-20070918-1717.pdf; SRA-07ENBR0018743-20070918-1717.pdf

Paul/Megan

As discuss, documentation for additional volume from Douglas is attached and approved by me as Peer reviewer.

Rgds
 Yin

From: Jacob Cumpstay [mailto:Jacob.Cumpstay@douglaspartners.com.au]
Sent: Thu 20/09/2007 5:43 PM
To: Foong, Yin
Subject: 545 Queen Street - Disposal Permit Extension in Volume

Yin,

Attached for your review are relevant documents in relation to obtaining an extended minor disposal permit for a further 500m³ of PAH contaminated soil from the site at 545 Queen Street, Brisbane. The following is relevant to this application:

- Prior to the drilling and excavation of spoil from bored pier locations BP1, BP2, BP3, BP4, BP5, BP6, BP7, BP8, BP15, and BP16 an air-track drilling rig was commissioned to allow soil samples to be collected from these locations. Analytical results from bored pier samples are attached in original form and as summary tables. Samples were collected over 1.0m intervals due to the nature of the drilling rig and the strength of the phyllite rock in which the samples were collected;
- Samples have been collected and analysed on a ratio much lower than 1 per 50m³ and therefore conform to EPA requirements;
- An updated acceptance letter has been provided by Thiess Waste Management Facility for the additional 500m³ of contaminated material and is attached;
- The total volume of spoil expected to be generated from the bored pier locations (allowing for bulking) is approximately 400m³. A plan is attached showing the bored pier locations that need to be drilled and the expected in-situ volume of spoil from each Bored Pier. The plan also shows the approximate area of PAH contaminated soil still existing in the eastern corner of the site surrounding pad footings and up against the building that needs to be excavated and removed off-site under this requested permit;
- An additional 100m³ (Bulked) of PAH contaminated soil is needed to be excavated from within the eastern contaminated corner of the site from around the pad footings of the building and from areas where validation samples returned results above EPA HBIL-A thresholds;

- The total additional volume of PAH contaminated soil that has been requested is 500m³ (Bulked). This will bring the original disposal permit volume to 850m³ (350m³ + 500m³).

I await your comment and approval before sending this request to the EPA

Regards



Jacob Cumpstay | Environmental Engineer

439 Montague Road | WEST END QLD 4101

tel 07 3237 8902 | fax 07 3237 8999 | mobile sch 4 - mobile phone

cumpstayj@douglaspartners.com.au | www.douglaspartners.com.au

 Please consider the environment before printing this email

1. The contents of this email are confidential and are intended for the named recipient(s) only. If you are not the intended recipient you are hereby notified that any use, disclosure or distribution of the information contained in this email is prohibited. If you have received this in error, please notify the sender immediately, and delete the email and any attachments.
2. The content of this message is not given or endorsed by Douglas Partners unless otherwise confirmed in writing by letter or fax independent of this message. Douglas Partners is not responsible for any unauthorised alterations to this email or any attachments.
3. It is the recipient's responsibility to check this email for viruses.

Published on
DES Disclosure Log
RTI Act 2009



**Thiess Services
Pty Ltd**
A.B.N. 69 010 725 247

Swanbank Landfill
Swanbank Road
Swanbank QLD 4305
Australia
Telephone (07) 3288 7344
Facsimile (07) 3288 6795

20th September 2007

Douglas Partners
439 Montague Road
West End Qld 4101

ATTENTION: Jacob Cumpstay

Dear Jacob,

Approval to Accept - Approval No: I - 1828

In addition to the original 350m³ of PAH contaminated soil that has come from the site at 545 Queen Street, Brisbane, Thiess Services Pty Ltd is willing to accept an additional 500m³ (Total of 850m³) of PAH contaminated soil for storage and classification at our Swanbank Waste Management Facility. The soil will be temporarily stored on our storage pad until leaching results are provided, enabling the selection of a permanent waste disposal area at the waste management facility.

The contaminated soil will be excavated from the site at 545 Queen Street, Brisbane (Lot 10 on RP185905) which is currently being managed under supervision by Douglas Partners Pty Ltd.

If an EPA Permit to Remove and Dispose of Contaminated Soil is required for this site, delivery of this material can only commence after Thiess Services has received a copy.

To assist with fast processing of loads at our weighbridge, please notify the weighbridge the afternoon prior to delivery and have all delivery drivers quote the above approval number. As well, ensure that this material is identified as the following on transport documentation.

APPROVAL NUMBER:	I - 1828
MATERIAL DESCRIPTION:	Contaminated Soil
DISPOSAL OPTION:	Storage (awaiting disposal classification)

Our Swanbank Facility's entrance is approximately 1 kilometre past the Swanbank Power Station at the end of Swanbank Road, Swanbank Queensland. The Swanbank Facility's registered plan and license details are as follows:

Description:	Lots 103 & 104, on RP839073, County of Stanley, Parish of Bundamba.
EPA License:	SR2137.



Rates will be charged as follows;

Storage Rate:	\$	7	Tonne
Disposal Rate:	\$	T.B.A	Tonne
Handling Rate:	\$	12	Tonne

NB: A minimum charge per load for disposal applies.

(This will be equal to the price of 1 tonne or \$0, whichever is higher.)

All the above rates and charges are excluding GST, are valid for 90 days and are subject to the following conditions:

- 1 Conditions of the approval are met.
- 2 All material (as per tonnages quoted) is disposed here at TS Swanbank Waste Management Facility.
- 3 This quote is based on the tonnages advised. If these tonnages transpire to be significantly different from that estimated, please arrange a re-quote.

Payment methods can either be via cheque, credit card debit or by account.

Should you require any further information please do not hesitate myself on the numbers listed above.

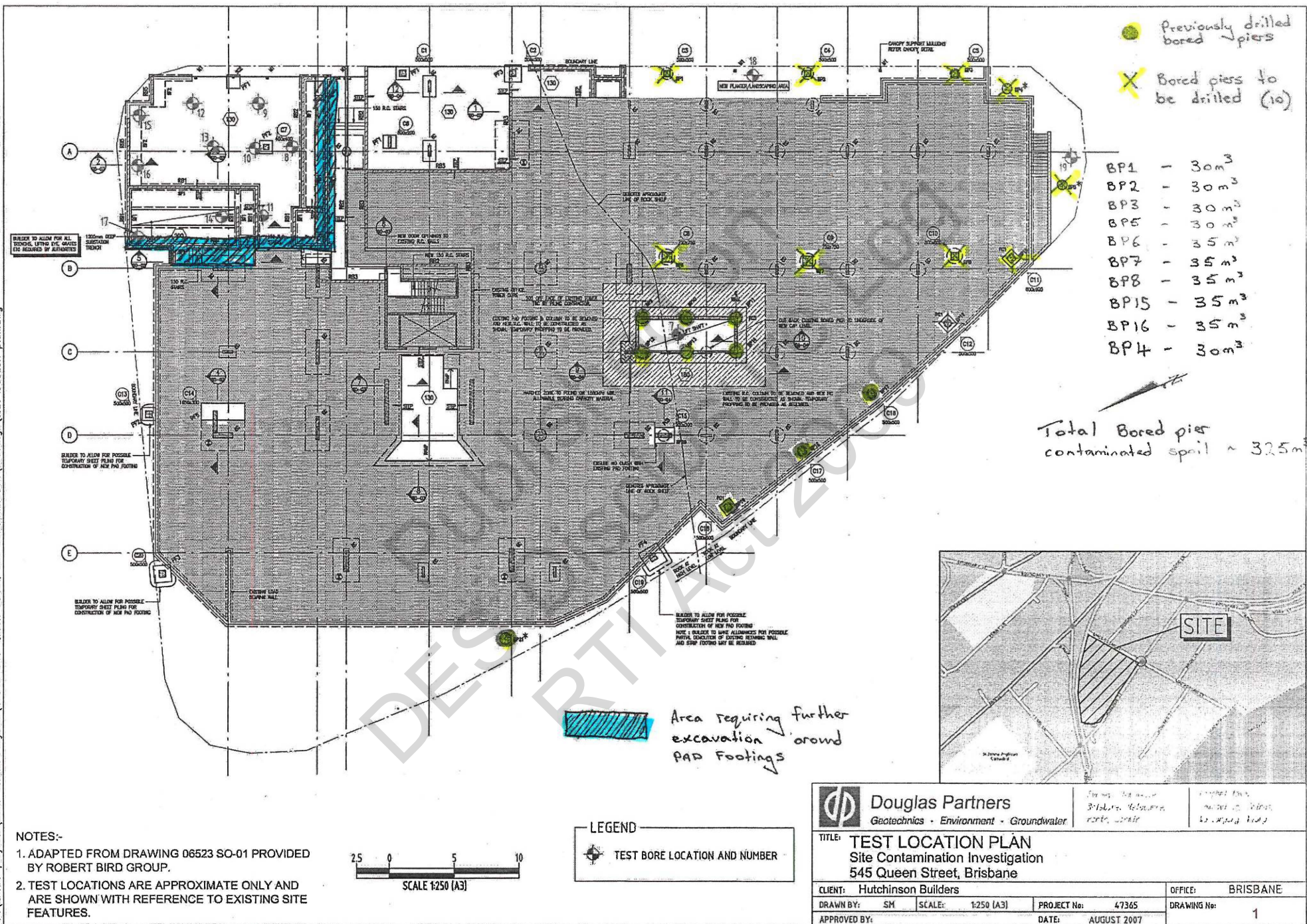
Yours Sincerely

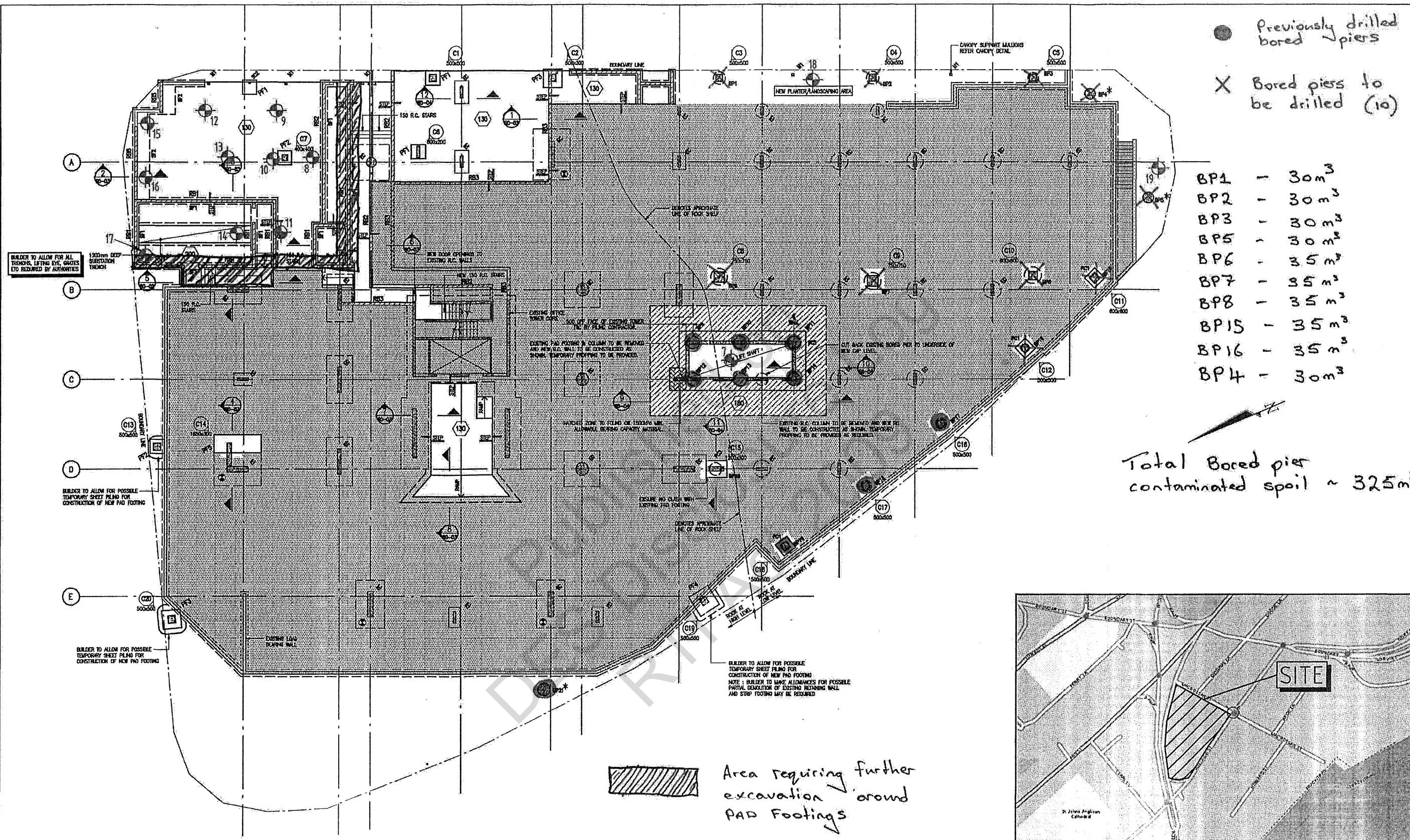
sch 4 - signature

Darren Willson
Sales Manager
Swanbank Waste Management Facility

sch 4 - mobile phone

Ph. 32887344
Fax. 32886795





NOTES:-

1. ADAPTED FROM DRAWING 06523 SO-01 PROVIDED BY ROBERT BIRD GROUP.
2. TEST LOCATIONS ARE APPROXIMATE ONLY AND ARE SHOWN WITH REFERENCE TO EXISTING SITE FEATURES.



LEGEND

TEST BORE LOCATION AND NUMBER



Douglas Partners

Geotechnics • Environment • Groundwater

Survey, Assessment,
Drilling, Remediation,
Earth Science

Project Two,
Brisbane, Australia,
Brisbane City

TITLE: **TEST LOCATION PLAN**
Site Contamination Investigation
545 Queen Street, Brisbane

CLIENT: Hutchinson Builders

DRAWN BY: SM

SCALE: 1:250 (A3)

PROJECT No: 47365

APPROVED BY:

DATE: AUGUST 2007

OFFICE: BRISBANE

DRAWING No: 1



This document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17205

Accreditation Number: 14356



Interim Certificate of Analysis

Douglas Partners
439 Montague Road
WEST END QLD 4101
Australia

Attention: Jacob Cumpstay

Project 07ENBR0018599
Client Reference 47365
Site Contamination
Order Number 70705
Received Date 17/09/2007 01:40:00 PM

Customer Sample ID		BP1-1.0m	BP1-2.0m	BP1-3.0m
Amdel Sample Number		626019	626020	626021
Date Sampled		14/09/2007	14/09/2007	14/09/2007
SVOC				
Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5
Anthracene	0.5	mg/kg	0.8	<0.5
Benz(a)anthracene	0.5	mg/kg	4.1	1.1
Benzo(a)pyrene	0.5	mg/kg	4.2	0.7
Benzo(b)&(k)fluoranthene	1	mg/kg	6.9	1.6
Benzo(g,h,i)perylene	0.5	mg/kg	2.2	0.6
Chrysene	0.5	mg/kg	3.0	0.7
Dibenz(ah)anthracene	0.5	mg/kg	2.7	1.3
Fluoranthene	0.5	mg/kg	5.5	1.1
Fluorene	0.5	mg/kg	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	1.9	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5
Phenanthrene	0.5	mg/kg	2.9	0.6
Pyrene	0.5	mg/kg	5.4	1.2
Sum of PAHs	8	mg/kg	<42	<12
2-Fluorobiphenyl - Surrogate	-	%	97	93
p-Terphenyl-D14 - Surrogate	-	%	100	122
Anthracene-d10 - Surrogate	-	%	101	97
Pyrene-d10 - Surrogate	-	%	96	98
Metals				
Test/Reference	PQL	Unit		
3200 Total Metals in Soil by ICP/AES				
Arsenic	3	mg/kg	7.1	4.9
Cadmium	1	mg/kg	<1	<1
Chromium	2	mg/kg	55	28
Copper	1	mg/kg	35	25
Lead	5	mg/kg	38	12
Nickel	2	mg/kg	38	20
Zinc	2	mg/kg	59	58
Miscellaneous				
Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	9	5

First Reported: 18 September 2007

Date Printed: 18 September 2007

Amdel Ltd 1/21 Smallwood Pl Murarrie QLD Australia 4172
ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Page 1 of 14
Interim Report Number: 246814



Customer Sample ID	BP1-4.0m	BP1-5.0m	BP1-6.0m
Amdel Sample Number	626022	626023	626024
Date Sampled	14/09/2007	14/09/2007	14/09/2007
SVOC			
Test/Reference	PQL	Unit	

2100 PAH in Soil by GC

Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	2.3	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	1.5	<0.5	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	2.9	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	0.7	<0.5	<0.5
Chrysene	0.5	mg/kg	1.3	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	1.9	0.7	<0.5
Fluoranthene	0.5	mg/kg	3.7	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	0.8	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	1.7	<0.5	<0.5
Pyrene	0.5	mg/kg	3.5	<0.5	<0.5
Sum of PAHs	8	mg/kg	<23	<8.2	<8.0
2-Fluorobiphenyl - Surrogate	-	%	101	99	95
p-Terphenyl-D14 - Surrogate	-	%	129	128	94
Anthracene-d10 - Surrogate	-	%	105	112	97
Pyrene-d10 - Surrogate	-	%	126	104	100

Metals

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

3200 Total Metals in Soil by ICP/AES

Arsenic	3	mg/kg	4.3	7.4	6.0
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	25	140	140
Copper	1	mg/kg	22	66	46
Lead	5	mg/kg	10	<5	<5
Nickel	2	mg/kg	19	67	68
Zinc	2	mg/kg	52	59	63

Miscellaneous

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

5000 Moisture Content

% Moisture	1	%	5	8	8
------------	---	---	---	---	---

Customer Sample ID	BP2-1.0m	BP2-2.0m	BP2-3.0m
Amdel Sample Number	626025	626026	626027
Date Sampled	14/09/2007	14/09/2007	14/09/2007
SVOC			
Test/Reference	PQL	Unit	

2100 PAH in Soil by GC

Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5

Customer Sample ID	BP2-1.0m	BP2-2.0m	BP2-3.0m
Amdel Sample Number	626025	626026	626027
Date Sampled	14/09/2007	14/09/2007	14/09/2007

SVOC

Test/Reference	PQL	Unit			
Anthracene	0.5	mg/kg	0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	3.0	1.2	<0.5
Benzo(a)pyrene	0.5	mg/kg	3.1	1.6	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	5.5	2.4	<1
Benzo(g,h,i)perylene	0.5	mg/kg	2.3	0.8	<0.5
Chrysene	0.5	mg/kg	2.3	1.0	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	1.9	1.6	0.9
Fluoranthene	0.5	mg/kg	4.1	1.9	0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	1.8	0.7	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	1.4	1.0	<0.5
Pyrene	0.5	mg/kg	4.3	1.8	<0.5
Sum of PAHs	8	mg/kg	<32	<17	<8.4
2-Fluorobiphenyl - Surrogate	-	%	97	96	103
p-Terphenyl-D14 - Surrogate	-	%	98	96	101
Anthracene-d10 - Surrogate	-	%	102	96	96
Pyrene-d10 - Surrogate	-	%	96	93	92

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	9.0	5.6	3.4
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	48	35	18
Copper	1	mg/kg	33	21	14
Lead	5	mg/kg	110	58	17
Nickel	2	mg/kg	31	22	14
Zinc	2	mg/kg	130	70	39

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	9	6	8

Customer Sample ID	BP2-4.0m	BP2-5.0m	BP2-6.0m
Amdel Sample Number	626028	626029	626030
Date Sampled	14/09/2007	14/09/2007	14/09/2007

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	0.7	0.6	0.8
Benzo(a)pyrene	0.5	mg/kg	1.0	0.7	0.9
Benzo(b)&(k)fluoranthene	1	mg/kg	1.6	1.3	1.7
Benzo(g,h,i)perylene	0.5	mg/kg	0.6	<0.5	<0.5



Customer Sample ID	BP2-4.0m	BP2-5.0m	BP2-6.0m
Amdel Sample Number	626028	626029	626030
Date Sampled	14/09/2007	14/09/2007	14/09/2007

SVOC					
Test/Reference	PQL	Unit			
Chrysene	0.5	mg/kg	0.6	<0.5	0.7
Dibenz(ah)anthracene	0.5	mg/kg	0.8	<0.5	<0.5
Fluoranthene	0.5	mg/kg	1.0	0.9	1.2
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	0.5	<0.5	0.6
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	1.1	0.9	1.1
Sum of PAHs	8	mg/kg	<11	<9.4	<11
2-Fluorobiphenyl - Surrogate	-	%	94	99	97
p-Terphenyl-D14 - Surrogate	-	%	89	97	94
Anthracene-d10 - Surrogate	-	%	92	96	93
Pyrene-d10 - Surrogate	-	%	84	99	97

Metals					
Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	4.3	3.9	3.8
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	23	18	29
Copper	1	mg/kg	16	15	15
Lead	5	mg/kg	32	34	26
Nickel	2	mg/kg	16	14	17
Zinc	2	mg/kg	51	46	47

Miscellaneous					
Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	4	7	3

Customer Sample ID	BP3-1.0m	BP3-2.0m	BP3-3.0m
Amdel Sample Number	626031	626032	626033
Date Sampled	14/09/2007	14/09/2007	14/09/2007

SVOC					
Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	0.6
Benz(a)anthracene	0.5	mg/kg	<0.5	1.4	4.3
Benzo(a)pyrene	0.5	mg/kg	<0.5	2.2	4.1
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	3.4	9.0
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	1.7	2.9
Chrysene	0.5	mg/kg	<0.5	1.3	2.2
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	1.8	<0.5
Fluoranthene	0.5	mg/kg	<0.5	2.3	4.8
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	1.5	4.5

Customer Sample ID	BP3-1.0m	BP3-2.0m	BP3-3.0m
Amdel Sample Number	626031	626032	626033
Date Sampled	14/09/2007	14/09/2007	14/09/2007
SVOC			
Test/Reference	PQL	Unit	
Naphthalene	0.5	mg/kg	<0.5
Phenanthrene	0.5	mg/kg	<0.5
Pyrene	0.5	mg/kg	<0.5
Sum of PAHs	8	mg/kg	<8.0
2-Fluorobiphenyl - Surrogate	-	%	97
p-Terphenyl-D14 - Surrogate	-	%	112
Anthracene-d10 - Surrogate	-	%	95
Pyrene-d10 - Surrogate	-	%	99

Metals				
Test/Reference	PQL	Unit		
3200 Total Metals in Soil by ICP/AES				
Arsenic	3	mg/kg	3.2	6.8
Cadmium	1	mg/kg	<1	<1
Chromium	2	mg/kg	9.6	20
Copper	1	mg/kg	12	26
Lead	5	mg/kg	30	47
Nickel	2	mg/kg	6.1	19
Zinc	2	mg/kg	73	110

Miscellaneous				
Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	19	14

Customer Sample ID	BP3-4.0m	BP3-5.0m	BP7-1.0m
Amdel Sample Number	626034	626035	626036
Date Sampled	14/09/2007	14/09/2007	17/09/2007
SVOC			
Test/Reference	PQL	Unit	
2100 PAH in Soil by GC			
Acenaphthene	0.5	mg/kg	<0.5
Acenaphthylene	0.5	mg/kg	<0.5
Anthracene	0.5	mg/kg	<0.5
Benz(a)anthracene	0.5	mg/kg	1.2
Benzo(a)pyrene	0.5	mg/kg	1.5
Benzo(b)&(k)fluoranthene	1	mg/kg	2.5
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5
Chrysene	0.5	mg/kg	0.6
Dibenz(ah)anthracene	0.5	mg/kg	<0.5
Fluoranthene	0.5	mg/kg	2.4
Fluorene	0.5	mg/kg	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	0.8
Naphthalene	0.5	mg/kg	<0.5
Phenanthrene	0.5	mg/kg	1.5
Pyrene	0.5	mg/kg	1.9
Sum of PAHs	8	mg/kg	<16
2-Fluorobiphenyl - Surrogate	-	%	107



Customer Sample ID			BP3-4.0m	BP3-5.0m	BP7-1.0m
Amdel Sample Number			626034	626035	626036
Date Sampled			14/09/2007	14/09/2007	17/09/2007
SVOC					
Test/Reference	PQL	Unit			
p-Terphenyl-D14 - Surrogate	-	%	119	111	129
Anthracene-d10 - Surrogate	-	%	98	95	99
Pyrene-d10 - Surrogate	-	%	104	100	110
Metals					
Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	4.9	4.7	9.6
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	24	25	22
Copper	1	mg/kg	15	18	44
Lead	5	mg/kg	30	16	120
Nickel	2	mg/kg	17	18	42
Zinc	2	mg/kg	56	52	120
Miscellaneous					
Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	8	11	12

Customer Sample ID			BP7-2.0m	BP7-3.0m	BP7-5.0m
Amdel Sample Number			626037	626039	626040
Date Sampled			17/09/2007	17/09/2007	17/09/2007
SVOC					
Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	3.9	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	4.1	1.1	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	11	1.2	<1
Benzo(g,h,i)perylene	0.5	mg/kg	3.3	<0.5	<0.5
Chrysene	0.5	mg/kg	1.7	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	3.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	3.9	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	4.9	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	0.8	<0.5	<0.5
Pyrene	0.5	mg/kg	3.8	<0.5	<0.5
Sum of PAHs	8	mg/kg	<43	<8.8	<8.0
2-Fluorobiphenyl - Surrogate	-	%	101	103	97
p-Terphenyl-D14 - Surrogate	-	%	126	107	102
Anthracene-d10 - Surrogate	-	%	95	99	91
Pyrene-d10 - Surrogate	-	%	109	103	93
Metals					
Test/Reference	PQL	Unit			



Customer Sample ID	BP7-2.0m	BP7-3.0m	BP7-5.0m
Amdel Sample Number	626037	626039	626040
Date Sampled	17/09/2007	17/09/2007	17/09/2007

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	5.4	4.5	5.6
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	15	17	150
Copper	1	mg/kg	14	13	57
Lead	5	mg/kg	40	17	5.5
Nickel	2	mg/kg	15	14	84
Zinc	2	mg/kg	63	50	88

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	14	14	14

Customer Sample ID	R-B	R-C	BP16-1.0m
Amdel Sample Number	626041	626042	626043
Date Sampled	17/09/2007	17/09/2007	15/09/2007

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	0.8	<0.5	<0.5
Anthracene	0.5	mg/kg	0.9	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	9.3	0.5	0.9
Benzo(a)pyrene	0.5	mg/kg	8.2	0.8	1.4
Benzo(b)&(k)fluoranthene	1	mg/kg	23	1.5	2.1
Benzo(g,h,i)perylene	0.5	mg/kg	4.8	<0.5	<0.5
Chrysene	0.5	mg/kg	3.6	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	7.7	<0.5	<0.5
Fluoranthene	0.5	mg/kg	8.6	0.5	1.2
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	8.4	0.5	0.6
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	3.8	<0.5	<0.5
Pyrene	0.5	mg/kg	8.5	<0.5	1.0
Sum of PAHs	8	mg/kg	<89	<8.8	<12
2-Fluorobiphenyl - Surrogate	-	%	107	112	115
p-Terphenyl-D14 - Surrogate	-	%	126	116	121
Anthracene-d10 - Surrogate	-	%	95	97	94
Pyrene-d10 - Surrogate	-	%	113	104	111

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	7.8	5.0	4.9
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	23	21	27
Copper	1	mg/kg	35	14	12

First Reported: 18 September 2007

Amdel Ltd 1/21 Smallwood Pl Murarrie QLD Australia 4172

Page 7 of 14

Date Printed: 18 September 2007

ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Interim Report Number : 246814



Customer Sample ID		R-B	R-C	BP16-1.0m
Amdel Sample Number		626041	626042	626043
Date Sampled		17/09/2007	17/09/2007	15/09/2007
Metals				
Test/Reference	PQL	Unit		
Lead	5	mg/kg	120	19
Nickel	2	mg/kg	32	17
Zinc	2	mg/kg	120	51
Miscellaneous				
Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	10	15

Customer Sample ID		BP16-2.0m	BP16-3.0m	BP16-5.0m
Amdel Sample Number		626044	626045	626046
Date Sampled		15/09/2007	15/09/2007	15/09/2007
SVOC				
Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	0.9	<0.5
Benzo(a)pyrene	0.5	mg/kg	1.3	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	2.1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5
Fluoranthene	0.5	mg/kg	1.3	0.5
Fluorene	0.5	mg/kg	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	0.6	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5
Pyrene	0.5	mg/kg	1.0	<0.5
Sum of PAHs	8	mg/kg	<12	<8.0
2-Fluorobiphenyl - Surrogate	-	%	116	109
p-Terphenyl-D14 - Surrogate	-	%	123	125
Anthracene-d10 - Surrogate	-	%	97	103
Pyrene-d10 - Surrogate	-	%	108	113

Metals				
Test/Reference	PQL	Unit		
3200 Total Metals in Soil by ICP/AES				
Arsenic	3	mg/kg	4.2	7.7
Cadmium	1	mg/kg	<1	<1
Chromium	2	mg/kg	24	94
Copper	1	mg/kg	10	18
Lead	5	mg/kg	12	9.4
Nickel	2	mg/kg	14	19
Zinc	2	mg/kg	45	33
Miscellaneous				
Test/Reference	PQL	Unit		

Customer Sample ID			BP16-2.0m	BP16-3.0m	BP16-5.0m
Amdel Sample Number			626044	626045	626046
Date Sampled			15/09/2007	15/09/2007	15/09/2007
Miscellaneous					
Test/Reference	PQL	Unit			
<hr/>					
5000 Moisture Content					
% Moisture	1	%	10	12	20

Customer Sample ID		R-A	BP17-1.0m	BP17-2.0m
Amdel Sample Number		626047	626048	626049
Date Sampled		15/09/2007	15/09/2007	15/09/2007
SVOC				
Test/Reference	PQL	Unit		

2100 PAH in Soil by GC

Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	1.3	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	2.1	0.9
Benzo(a)pyrene	0.5	mg/kg	<0.5	1.9	1.0
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	3.8	1.8
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	0.8	<0.5
Chrysene	0.5	mg/kg	<0.5	1.0	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	<0.5	5.0	1.8
Fluorene	0.5	mg/kg	<0.5	0.9	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	1.7	0.7
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	5.0	1.2
Pyrene	0.5	mg/kg	<0.5	4.0	1.3
Sum of PAHs	8	mg/kg	<8.0	<30	<13
2-Fluorobiphenyl - Surrogate	-	%	102	103	107
p-Terphenyl-D14 - Surrogate	-	%	112	117	113
Anthracene-d10 - Surrogate	-	%	101	101	96
Pyrene-d10 - Surrogate	-	%	104	108	102

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	8.4	7.2	11
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	100	58	130
Copper	1	mg/kg	28	18	32
Lead	5	mg/kg	9.4	26	10
Nickel	2	mg/kg	29	15	25
Zinc	2	mg/kg	41	31	26

Miscellaneous					
Test/Reference	PQL	Unit			

5000 Moisture Content					
% Moisture	1	%	11	17	19

Customer Sample ID	BP17-3.0m	BP17-4.0m	BP15-1.0m
Amdel Sample Number	626050	626051	626052
Date Sampled	15/09/2007	15/09/2007	15/09/2007

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5	0.6
Benzo(a)pyrene	0.5	mg/kg	<0.5	<0.5	0.8
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1	1.3
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	0.6	<0.5	0.7
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5	0.6
Sum of PAHs	8	mg/kg	<8.1	<8.0	<9.0
2-Fluorobiphenyl - Surrogate	-	%	94	101	97
p-Terphenyl-D14 - Surrogate	-	%	101	108	118
Anthracene-d10 - Surrogate	-	%	94	96	98
Pyrene-d10 - Surrogate	-	%	96	102	107

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	12	6.4	7.5
Cadmium	1	mg/kg	<1	<1	<1
Chromium	2	mg/kg	180	130	49
Copper	1	mg/kg	39	50	22
Lead	5	mg/kg	6.0	<5	19
Nickel	2	mg/kg	33	59	26
Zinc	2	mg/kg	24	69	70

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	21	19	17

Customer Sample ID	BP15-3.0m	BP5-0.2m	BP5-0.5m
Amdel Sample Number	626053	626054	626055
Date Sampled	15/09/2007	17/09/2007	17/09/2007

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	1.1	<0.5



Customer Sample ID			BP15-3.0m	BP5-0.2m	BP5-0.5m
Amdel Sample Number			626053	626054	626055
Date Sampled			15/09/2007	17/09/2007	17/09/2007
SVOC					
Test/Reference	PQL	Unit			
Benzo(a)pyrene	0.5	mg/kg	<0.5	0.9	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	2.6	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	1.0	<0.5
Chrysene	0.5	mg/kg	<0.5	1.3	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	1.1	<0.5
Fluoranthene	0.5	mg/kg	<0.5	1.1	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	0.7	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	1.1	<0.5
Sum of PAHs	8	mg/kg	<8.0	<14	<8.0
2-Fluorobiphenyl - Surrogate	-	%	97	93	93
p-Terphenyl-D14 - Surrogate	-	%	108	97	103
Anthracene-d10 - Surrogate	-	%	89	97	97
Pyrene-d10 - Surrogate	-	%	97	99	106
Metals					
Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	6.9	Pending	Pending
Cadmium	1	mg/kg	<1	Pending	Pending
Chromium	2	mg/kg	30	Pending	Pending
Copper	1	mg/kg	30	Pending	Pending
Lead	5	mg/kg	19	Pending	Pending
Nickel	2	mg/kg	19	Pending	Pending
Zinc	2	mg/kg	65	Pending	Pending
Miscellaneous					
Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	34	3	17

Customer Sample ID			BP5-1.0m	BP5-2.0m	BP5-4.0m
Amdel Sample Number			626056	626057	626058
Date Sampled			17/09/2007	17/09/2007	17/09/2007
SVOC					
Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5



Customer Sample ID	BP5-1.0m	BP5-2.0m	BP5-4.0m
Amdel Sample Number	626056	626057	626058
Date Sampled	17/09/2007	17/09/2007	17/09/2007

SVOC

Test/Reference	PQL	Unit			
Fluoranthene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.0	<8.0	<8.0
2-Fluorobiphenyl - Surrogate	-	%	93	93	99
p-Terphenyl-D14 - Surrogate	-	%	104	107	106
Anthracene-d10 - Surrogate	-	%	96	99	97
Pyrene-d10 - Surrogate	-	%	102	104	101

Metals

Test/Reference	PQL	Unit			
3200 Total Metals in Soil by ICP/AES					
Arsenic	3	mg/kg	Pending	Pending	Pending
Cadmium	1	mg/kg	Pending	Pending	Pending
Chromium	2	mg/kg	Pending	Pending	Pending
Copper	1	mg/kg	Pending	Pending	Pending
Lead	5	mg/kg	Pending	Pending	Pending
Nickel	2	mg/kg	Pending	Pending	Pending
Zinc	2	mg/kg	Pending	Pending	Pending

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	17	20	14

Customer Sample ID	BP5-5.0m
Amdel Sample Number	626059
Date Sampled	17/09/2007

SVOC

Test/Reference	PQL	Unit	
2100 PAH in Soil by GC			
Acenaphthene	0.5	mg/kg	<0.5
Acenaphthylene	0.5	mg/kg	<0.5
Anthracene	0.5	mg/kg	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5
Benzo(a)pyrene	0.5	mg/kg	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5
Chrysene	0.5	mg/kg	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5
Fluoranthene	0.5	mg/kg	<0.5
Fluorene	0.5	mg/kg	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5
Naphthalene	0.5	mg/kg	<0.5
Phenanthrene	0.5	mg/kg	<0.5



Queensland
Government

ies to: P. Butcher
phone: (07) 3225 8416 / fax (07) 3247 3278
our reference: 47365
Our reference: BNE33346

Environmental Protection Agency
Incorporating the
Queensland Parks and Wildlife Service

MINOR PERMIT
EMR updated 5/02/08
sch 4 - si

Permit to Remove and Dispose of Contaminated Soil

The Environmental Protection Agency – Waste and Contaminated Land Unit gives permission to the applicant

Mr Carl Deegan

Douglas Partners Pty Ltd

439 Montague Road,

WEST END QLD 4101

Telephone: (07) 3237 8900

Fax: (07) 3237 8999

to remove and dispose of soil contaminated with MAH and PAH

from 545 Queen Street, BRISBANE QLD 4001

on Lot 10 on RP185905 and described in the following correspondence:

Application for minor Contaminated Soil Disposal Permit dated 28 August 2007, received on 31 August 2007 and TPR approval received 29 August 2007.

The permit holder is responsible for ensuring that all personnel involved in the excavation, removal and disposal comply with the specific and standard conditions in Schedules 1 and 2 of this permit.

Signed

sch 4 - signature

Kim Barry

Principal Scientific Advisor (Waste and Contaminated Land Unit)

31/08/07

Cc: Thiess Services Pty Ltd, attn: Darren Willson, Fax: (07) 3288 6795.

Cc: EPA (Southern Region), attn: Chris Stewart, Fax: (07) 3247 3278.

Notice to Applicant

The conditions on this permit have been decided after consideration of the standard criteria (EP Act) and for the purpose of preventing environmental harm. The applicant may apply for a review or appeal against the decision within 10 business days of receipt of this notice (s521 and s531).

File A

288 Edward Street Brisbane
Queensland 4000 Australia
GPO Box 2771, Brisbane Qld 4001
Telephone (07) 3225 1827
Facsimile (07) 3247 3278
Website www.env.qld.gov.au
ABN 87 221 158 786

Schedule 1 of 2 – Specific Conditions

The volume or mass of the contaminated soil shall not exceed 350 cubic metres .

The soil is to be disposed in accordance with the disposal facility approval letter dated 28/08/07 at Thiess Services Pty Ltd landfill at Swanbank Road, SWANBANK, QLD 4306.

The soil must be disposed between 03/09/2007 and 03/03/2008.

Other Conditions:

The material must be stored at the disposal facility until it is adequately characterised by TCLP analysis.

Published on
DES Disclosure Log
RTI Act 2009

Schedule 2 of 2 – Standard Conditions

1. Volume / mass of contaminated soil

This permit applies to the specified volume or mass only. Any increases to the specified quantity will require a new disposal permit.

2. Disposal time period

Disposal must occur within the dates specified or a new disposal permit must be sought.

3. Excavation and loading

The holder of this disposal permit must take all reasonable precautions necessary to prevent the spillage of contaminated soil during loading and prevent contaminated soil being transported from the site of origin on vehicle tyres and plant and equipment.

4. Transportation

(a) *Transporter to be advised of permit conditions*

Prior to the removal of contaminated soil, the permit holder must provide a copy of the permit and conditions to the transporter.

(b) *Load to be secured*

The contaminated soil must be covered in the transportation vehicle to ensure that the contaminated soil or offensive or noxious gases are not released during transport.

(c) *Cleaning of vehicles and plant equipment*

An effective system must be employed for cleaning of vehicles and plant and equipment which are used to transport or handle contaminated soil which prevents release of contaminants onto any roadway or to any waters or stormwater drainage system.

(d) *Spillage*

Any spillage of contaminants must be cleaned up as quickly as practicable. Spillages must not be cleaned up by hosing, sweeping or otherwise releasing such contaminants or material to any stormwater drainage system, roadside gutter or waters.

5. Receival and disposal

(a) *Licence conditions*

The acceptance and disposal of the contaminated soil must comply with the licence conditions and the specific requirements of the disposal facility.

(b) *Disposal receipts*

Copies of disposal acceptance receipts are to be submitted to the Administering Authority within 10 business days of the date of disposal. The holder of, or person acting under a disposal permit, must comply with the conditions of the permit (s425 of the *Environmental Protection Act 1994*).

Maximum penalty - 100 penalty units.

6. Interim storage

Contaminated soil which is temporarily stored at the site of origin or approved for storage at a separate property must be stockpiled and securely covered and/or managed to ensure that:

- (a) rainwater is drained away from the stockpiles;
- (b) contaminated soil is not transported from the stockpile by wind or rainwater;
- (c) offensive odours or noxious gases are not released; and
- (d) soil underlying the stockpiles is not affected by contamination.

A report is to be provided to the Administering Authority within 28 days of final disposal that verifies that the storage area is fully cleared of contamination.

7. Treatment of soil

(a) Licensed facility

When treatment is to be undertaken at a licensed general waste disposal facility or regulated waste treatment and disposal facility, acceptance receipts must be provided to the Administering Authority within 10 days of contaminated soil delivery. The contamination level in the soil must be reduced to a level agreed by the Administering Authority. When contaminated soil is stored at such facility pending treatment, storage is to be undertaken according to condition 6.

(b) Other treatment sites

(i) Soil remediation and validation report.

The permit holder must provide a report of the soil remediation including chemical test results that validate that the contamination has been lowered to levels agreed with the Administering Authority. The report must provide evidence that the land underlying the treatment activity is not affected by contamination.

(ii) Environmental harm.

Treatment activities must be carried out to ensure that environmental harm is not caused and that contaminants including treatment agents are not released from the site by wind, stormwater or as offensive or noxious gases. The requirements of condition 6 also apply.

(c) Final disposal

When soil contamination has been reduced to levels acceptable to the Administering Authority, the soil may be disposed of as general fill unless otherwise specified in Schedule 1. The location of the final disposal site of the soil is to be identified after treatment by written advice to the Administering Authority.

****End of Document****

Paul Butcher

From: Foong, Yin [yfoong@golder.com.au]
Sent: Wednesday, 29 August 2007 4:43 PM
To: Paul Butcher; Megan Bickle
Cc: Jacob Cumpstay; Kim Barry; mgaskin@hutchinsonbuilders.com.au; Administration, BNE-Enviro
Subject: FW: 545 Queen St 'minor' disposal Permit application*

Hi Paul/Megan

Jacob from Douglas will be couriering the 'minor' disposal application to you as informed in his email below. Note that the site has not been listed on the EMR yet. Kim has more information on the site if you require the background.

As 'Peer Reviewer', I have reviewed the disposal permit submitted by Douglas and recommend that approval be granted by EPA.

Rgds

Yin

Dr Yin FOONG

Principal Environmental Engineer

Golder Associates Pty Ltd

Brisbane Office

611 Coronation Drive, Toowong QLD 4066

(PO Box 1734, Milton BC 4064)

Phone: 07 3721 5400 Direct: 07 3721 5433

Fax: 07 3721 5401 Mobile sch 4 - mobile phone

From: Jacob Cumpstay [mailto:Jacob.Cumpstay@douglaspartners.com.au]

Sent: Wednesday, 29 August 2007 4:23 PM

To: Foong, Yin

Subject: RE: 545 Queen St 'minor' disposal Permit application*

Yin,

All changes made to disposal permit, including renewed acceptance letter from Thiess Services. I will print all documents (including lab reports, bore logs etc) either late tonight or early tomorrow morning and get couriered to EPA in the AM tomorrow (Thursday).

Please CC me on email to EPA so that i have Megans Email address.

Rgds

Jacob

From: Foong, Yin [mailto:yfoong@golder.com.au]

Sent: Wed 8/29/2007 4:07 PM

To: Jacob Cumpstay

Cc: Administration, BNE-Enviro

Subject: 545 Queen St 'minor' disposal Permit application*

Jacob

Have you made those changes and ready to be submitted by courier to EPA tomorrow am?

I will send a note to Paul and Megan regarding this as a matter of urgency.

Rgds

Yin

Dr Yin FOONG

Principal Environmental Engineer

Golder Associates Pty Ltd

Brisbane Office

611 Coronation Drive, Toowong QLD 4066

(PO Box 1734, Milton BC 4064)

Phone: 07 3721 5400 Direct: 07 3721 5433

Fax: 07 3721 5401 Mobile: sch 4 - mobile phone

Published on
DES Disclosure Log
RTI Act 2009



Bne 2007/110585
Bne 33346
Douglas Partners
Geotechnics • Environment • Groundwater

Douglas Partners Pty Ltd
ABN 75 053 980 117
439 Montague Road
West End Qld 4101
Australia

Phone (07) 3237 8900
Fax (07) 3237 8999
www.douglaspartners.com.au

Document Transmittal

TO EPA Contaminated Land Unit
Floor 15, 288 Edward Street
BRISBANE QLD 4000

ATTENTION Mr Paul Butcher & Ms Megan Bickle

DATE 30 August 2007 PROJECT No. 47365

We enclose the following:

Quantity	Title	Comments
1 Copy	Application for Minor Disposal Permit, Lot 10 on RP185905, 545 Queen Street, Brisbane, QLD.	

Sent to you ☐ Project completed
☐ For your records
☒ For your approval/comments

☐ Being returned
☐ As requested by
☐ To be checked and returned

Sent via ☐ Mail
☒ Courier
☐ Facsimile



Annemarie Lewis

From: Kim Barry
Sent: Thursday, 3 April 2008 3:51 PM
To: Annemarie Lewis
Subject: FW: 545 Queen Street Brisbane

✓ Called Nelson
Jamie
15/4/08 12:39

Kim Barry
Acting Team Leader
Contaminated Land Unit
Environmental Operations
Environmental Protection Agency
Tel: (07) 3225 1045 Fax: (07) 3247 3278
E-mail: kim.barry@epa.qld.gov.au
http://www.epa.qld.gov.au/environmental_management/land/contaminated_land/

From: Jamie Nelson [mailto:Jamie.Nelson@gpt.com.au]
Sent: Tuesday, 1 April 2008 4:34 PM
To: Kim Barry
Subject: 545 Queen Street Brisbane

Dear Kim,

I work for the The GPT Group who is the owner of the land and development project located at 545 Queen Street Brisbane City. We have recently been advised that the site has been placed on the QLD Environmental Management Register and as such we wish to review any related details on the matter. On the assumption that this information is accessible we wish to request a copy of the third party report that was completed when the site was assessed in this regard.

The relevant details of the site are as follows.

- Site ID is 70897
- File number is BNE33346
- Site is Lot 10 of RP185905
- Address is 545 Queen Street Brisbane City

Your assistance in providing this report is very much appreciated. If you have any questions please do not hesitate to call.

Kind regards,

Jamie Nelson
Office Development Manager
The GPT Group
Level 52, MLC Centre, 19 Martin Place, Sydney NSW 2000
Phone: 61 2 8239 3597
Mobile: sch 4 - mobile phone

Fax: 61 2 9225 9318
Email: Jamie.Nelson@gpt.com.au

www.gpt.com.au



As part of our Work/Life Balance Program, GPT is encouraging our employees in Australia to complete their work by 3pm on Fridays for the duration of the NSW daylight saving period (28 October 2007 to 6 April 2008)

This email (including attachments) is confidential. If you are not the intended recipient you must not copy, use, disclose, distribute or rely on the information contained in it. If you have received this email in error, please notify the sender immediately by reply email and delete the email from your system. Confidentiality and legal privilege attached to this communication are not waived or lost by reason of mistaken delivery to you. GPT does not guarantee that this email or the attachment(s) are unaffected by computer virus, corruption or other defects. GPT may monitor incoming and outgoing emails for compliance with its Email Policy. Please note that our servers may not be located in your country.

Published on
DES Disclosure Log
RTI Act 2009



Douglas Partners

Geotechnics • Environment • Groundwater

Integrated Practical Solutions

APPLICATION FOR MINOR DISPOSAL PERMIT

**LOT 10 on RP185905, 545 QUEEN STREET,
BRISBANE, QLD**

**prepared for
HUTCHINSON BUILDERS**

For submission to QLD EPA

DP Project 47365



JTC/CD
30 August 2007

Contaminated Land Unit
Environmental Protection Agency
GPO Box 2771
BRISBANE QLD 4001

Attention: Chief Scientific Officer

MINOR DISPOSAL PERMIT APPLICATION 545 QUEEN STREET, BRISBANE

Please find attached an application to dispose of approximately 350m³ (max. bulked volume) of soil contaminated with PAHs and xylene from the site located at Lot 10 on RP185905, 545 Queen Street, Brisbane.

Soil from the eastern corner of the site (test locations 8 – 17) will be excavated and disposed to Swanbank waste management facility. Soil will be unloaded at the Swanbank waste management facility storage pad and kept there until TCLP results are provided to the landfill administrator allowing the material to be permanently disposed in the correct section of the landfill.

See the attached Drawing 1 for site and test location plan.

A total disposal volume of 350m³ has been requested to allow for soil bulking. Actual total in-situ volume of contaminated soil has been estimated at approximately 250m³.

If remnant contamination still exists following remediation and validation sampling, (e.g. significantly above HBIL-A thresholds) a second disposal permit application will be submitted for disposal of remaining contaminated soil to landfill.

Summary table of the laboratory test results not including TCLPs is attached, as well as a drawing showing the sample locations. Full laboratory results as well as test location bore logs are also attached.

Sampling was carried out in reference to *AS4482.1 – 2005, Guide to the investigation and sampling of sites with potentially contaminated soil, Part 1: Non-volatile and semi-volatile compounds*, and standard operating procedures described in the *DP Field Procedures Manual* to ensure the representativeness and integrity of samples. Sampling strategies used were as follows:

- An approximate 3 m x 3 m grid was used to determine sampling locations over the suspected contaminated area of the site.

Integrated Practical Solutions

All sampling data was recorded on DP Chain of Custody sheets, and the general sampling procedure comprised:

- Grab sampling by the sampler wearing disposable gloves that were changed prior to the collection of each sample.
- Transfer of samples into laboratory-prepared glass jars with teflon lined lids, and capping immediately.
- Various sampling for QA/QC purposes.
- Labelling of sample containers with individual and unique identification, including project number and sample location.
- Placement of the sample jars into ice-cooled, insulated and sealed containers for transport to the laboratory.

The landfill acceptance and official EPA application forms are attached, and copies sent to the site peer reviewer, Dr. Yin Foong, who will provide you with a separate recommendation for the application.

Landfill acceptance (attached) has been obtained from Thiess Waste Management Facility, Swanbank for all the contaminated soil.

Thank you for consideration of this application. Please call if any clarification or additional information is required. Your early review of this application would be appreciated.

Regards,

DOUGLAS PARTNERS PTY LTD

Reviewed By:

sch 4 - signature

sch 4 - signature

Jacob Cumpstay
Environmental Engineer

Carl Deegan
Associate - Environment

APPLICATION FORM PART A

Published on
DES Disclosure Log
RTI Act 2009

Application Form

Part A

General details for all applications

OFFICIAL USE ONLY

DATE RECEIVED

--	--	--

FILE REF

--

PROJECT REF

--

COMPLETE FORM

☐

ENTERED BY [SIGNATURE]

--

DATE

--	--	--

RECEIPTING DETAILS ONLY

DATE RECEIPTED

--	--	--

RECEIPT NUMBER

--

AMOUNT RECEIVED

\$

--

PROCESSED BY (INITIALS AND NAME)

--

GUIDE

- The applicant is the person intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the address of a person and cannot be a post office box.

If more than one applicant as part of a partnership, complete the "Joint applicant details" form and attach to this PART A form.

Important information for applicants

This form asks for general applicant details and a description of the proposed project and any associated activities. The completed form must be submitted together with relevant activity specific [Part B] forms and any other associated forms included in your application kit.

Specific details must accompany this form to enable your application to be processed. The guide provided will help you complete your application correctly. If you have any difficulties completing the form, contact the Ecoaccess Customer Service Unit desk on 1300 368 326. Please number all attachments alphabetically (e.g. 'Attachment A').

(Commercial and confidential information must be marked clearly. If subsequent activities are added to the project, you will be required to resubmit this application with details of the additional activity).

Tick relevant boxes below if the applicant(s) are:

- ☐ an individual or sole trader
- ☐ individuals in a partnership
- ☐ individual(s) acting on behalf of an unincorporated organisation
- **Go to Section 1**
- ☒ an incorporated company
- ☐ an incorporated association
- ☐ a statutory authority
- ☐ a body politic
- **Go to Section 2**

1. Individual applicant(s) details⁽¹⁾

APPLICANT'S FULL NAME		TITLE	DATE OF BIRTH
REGISTERED ADDRESS		POST CODE	
TELEPHONE	FACSIMILE	E-MAIL	
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS)		POST CODE	

Guardian details (if applicable)

A parent or legal guardian must complete the following details if an applicant is under 18 years of age.

GUARDIAN'S FULL NAME	DATE OF BIRTH
GUARDIAN'S REGISTERED ADDRESS	POST CODE
GUARDIAN'S SIGNATURE	DATE

→ **Go to Section 3**

2. Applicant details

2. The applicant is the registered legal entity (not a business trading name) intending to carry out the activity and in whose name the relevant permits or licences are to be issued.

The registered address is legally required for the serving of notices. It is the registered business address of the company making the application and cannot be a post office box.

Enter the Australian Business Number (ABN); or the Australian Company Number (ACN) of the incorporated company; or the Association Number (AN) of the incorporated association; or the title and section of the legislation that gives the statutory corporation its legal status.

REGISTERED LEGAL ENTITY NAME Douglas Partners Pty Ltd		
TRADING NAME (IF APPLICABLE) as above		
REGISTERED ADDRESS 439 Montague Road West End Qld		POST CODE 4101
TELEPHONE 3237 8945	FASCIMILE 3237 8999	E-MAIL/WEBSITE deeganc@douglaspartners.com.au
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) As above		POST CODE
ABN/ACN/AN OR TITLE AND SECTION OF LEGISLATION 75 053 980 117		

Principal contact or person in charge details

PRINCIPAL CONTACT/PERSON IN CHARGE FULL NAME Carl Deegan		TITLE Mr
POSITION IN CORPORATION Associate - Environment		
TELEPHONE 3237 8945	FASCIMILE 3237 8999	E-MAIL/WEBSITE deeganc@douglaspartners.com.au
POSTAL ADDRESS (WRITE "AS ABOVE" IF THE SAME AS REGISTERED ADDRESS) as above		POST CODE

Authorised signatory

The authorised signatory is the person authorised to sign an application on behalf of a corporation and in doing so declares that the corporation will be bound by the conditions associated with the granting of the licence or permit.

AUTHORIZED SIGNATORY FULL NAME Carl Deegan	TITLE As above
POSITION IN CORPORATION As above	

3. Project details

Pre-lodgement

Have you previously attended a pre-lodgement meeting or submitted a pre-lodgement form for this project?

☒ NO ☐ YES

PROJECT NUMBER (IF APPLICABLE) N.A.
--

Project description

Briefly describe the proposed activities, works, development or management. Attach a separate sheet if there is insufficient space below.

DESCRIPTION Excavate and dispose of contaminated soil / weathered phyllite rock off-site.
--

Approvals required

Please list all Part B application forms you are attaching to this form.

APPLICATION FORMS Application for Disposal Permit
--

Project site

Where will the activities be conducted? Provide the street address, real property description(s) of the land(s) in which the project is located and local government area. If you require more space, attach a separate sheet.

This information should at least provide enough details to allow an EPA or QPWS officer to locate the site of the proposal.

STREET ADDRESS 545 Queen Street, Brisbane	
LOT 10	PLAN RP185905
LOCAL GOVERNMENT AREA Brisbane	

If possible, provide a specific location within a protected area, a property name or an attached map with the project area clearly delineated. Also include the map name/details.

Give as much information as possible to accurately locate your activity, for example maps with contextual or boundary lines on plan or GPS boundary co-ordinates.

SPECIFIC LOCATION/PROPERTY NAME N.A.
PROTECTED AREA N.A.
GEOGRAPHICAL CO-ORDINATES N.A.

Geographical co-ordinates can include northing/easting, longitude/latitude.

Attachments

List all attached documents, including maps containing information supporting this application in the space below. If there are no attachments mark "N/A."

Label all attachments alphabetically (e.g. 'Attachment A')

ATTACHMENTS (LABEL ALL ATTACHMENTS ALPHABETICALLY – E.G. "ATTACHMENT A") Drawing 1 showing site location & sample locations
--

4. Applicant's certification

Note: If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Freedom of Information Act 1992* and the *Evidence Act 1977*.

APPLICANT(1) SIGNATURE

sch 4 - signature

Joint applicant signatures (if applicable)

APPLICANT(2) SIGNATURE

APPLICANT(3) SIGNATURE

APPLICANT(4) SIGNATURE

APPLICANT(5) SIGNATURE

DATE

28 August 2007

Complete the following checklist.

- ☒ Application form(s) signed and completed
- ☐ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information attached (e.g. maps)

Please return your completed application kit to:

**Ecoaccess Customer Service Unit
Environmental Protection Agency**

PO Box 15155
City East
Queensland 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
Email: eco.access@epa.qld.gov.au

APPLICATION FORM PART B

Published on
DES Disclosure Log
RTI Act 2009

Application form

Contaminated Land – Part B

Contaminated soil disposal permit

This form asks for specific details in relation an application under Section 424 of the *Environmental Protection Act 1994* for a permit to undertake off-site disposal of contaminated soil which is required before you can proceed lawfully with your project and any associated activities.

Please read the information sheets and any guidelines included with your application kit to understand the environmental management and conservation issues, policies and procedures that relate to the activities proposed. Your application must be accompanied by a General Details – Part A application form.

1. Specific information requirements

1.1 Please provide details of site(s) from which soil is to be removed

If you require additional space, attach the information requested and make reference to that sheet here.

FULL STREET ADDRESS OF SITE(S) 545 QUEEN STREET, BRISBANE, 4001	
LOT 10	PLAN RP185905
LOCAL GOVERNMENT AUTHORITY BRISBANE	

1.2 Has a site investigation report been submitted to the Environmental Protection Agency (EPA)?



NO



YES

EPA project reference or file number?
(IF KNOWN)

1.3 Please tick the relevant box in reference to a copy of current Certificate of Title



Enclosed with this application



Submitted previously to EPA within a site investigation / validation report

1.4 Has the site been used for a notifiable activity as per Schedule 2 of the Environmental Protection Act 1994?



NO



YES (PLEASE SPECIFY)

Site is not known to have been used for any notifiable activity in the past



1.5 Is the site presently being used for a notifiable activity?

☒ NO ☐ YES (PLEASE SPECIFY)

1.6 Is the site currently on the Environmental Management Register or Contaminated Land Register?

☒ YES ☐ NO (If no, you must submit a notification form to the EPA)

1.7 Has contaminated soil been removed from this site in the past?

☒ NO (Go to question 19) ☐ YES

1.8 Was approval for off-site disposal obtained?

☐ NO ☐ YES

1.9 What is the approximate volume (in cubic metres) of soil to be removed (allowing for excavation bulking)?

250m³ in-situ – up to 350m³ allowing for excavation bulking

1.10 How did you calculate the volume of soil to be removed?

From scaled site plans, laboratory soil analysis results and soil bore logs (All attached)

1.11 What are the dates between which soil will be moved to the disposal location?

(As per Section 424(7) of the EP Act, permits will only be valid between dates stipulated in the disposal permit)

FROM DATE:

1 September, 2007

TO DATE:

1 December, 2007

1.12 Justification of request?

State reason(s) why on-site treatment or management is not proposed

Soil is contaminated with PAHs and xylenes. Disposal classification is currently waiting TCLP analysis results. Landfill storage at Thiess Waste Management Facility will occur until soil has been appropriately classified as per landfill acceptance provided by Thiess Services (attached).

1.13 Will validation sampling be undertaken to confirm that all soil has been removed?

☐

NO

☒

YES

1.14 Provide a description of contamination present in soil to be removed?

M&P Xylenes: 23.2 mg/kg
Naphthalene: 49.8 mg/kg
Total PAH: 60.1 mg/kg
B(a)P 4.1 mg/kg

1.15 Please tick relevant boxes to indicate that you have attached the following information with this application?

☒

Scaled diagram showing soil sampling locations and contamination source(s)

☒

Tabulation of soil analysis results

☐

Toxicity Characteristic Leaching Procedure (TCLP) results from relevant soil samples

☒

Laboratory reports and sample receipt advices for all soil analysis

☒

Explanation of location and depths of samples, how samples were collected, and how sample integrity was maintained

1.16 Written acceptance from owner of site receiving contaminated soil?

(a)

☐

Soil being removed to a local government-administered landfill

NAME AND ADDRESS OF LOCAL GOVERNMENT-ADMINISTERED LANDFILL

☐

Written acceptance from local government authority is enclosed

(b)

☒

Soil being removed not going to a local government-administered landfill

☐

Copy of Certificate of Title for the disposal location site

LOT(S) **103 & 104**

PLAN(S) **RP839073**

FULL STREET ADDRESS OF SITE(S)

SWANBANK LANDFILL, SWANBANK ROAD, SWANBANK, QLD, 4305

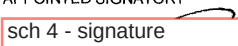
☒ Written acceptance from registered owner of site is enclosed with this application

2. Declaration

Please read the certification below before signing. The proposed permit holder or their appointed signatory must sign this form.

Note: If you have not told the truth in this application you may be liable for prosecution under the relevant Acts or Regulations.

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the *Oaths Act 1867*.
- I understand that all information supplied on or with this application form may be disclosed publicly in accordance with the *Freedom of Information Act 1992* and the *Evidence Act 1977*.

APPLICANT'S NAME CARL DEEGAN, DOUGLAS PARTNERS PTY LTD	PRINT NAME OF APPOINTED SIGNATORY (IF APPLICABLE)
APPLICANT'S SIGNATURE / APPOINTED SIGNATORY  sch 4 - signature	DATE 28 AUGUST 2007

3. Applicant checklist

- ☒ Application form(s) completed and signed
- ☐ Permit fees paid or enclosed (if applicable)
- ☒ Supporting information and accreditation attached (if applicable)

Please return your completed application kit to:

**Licences and Permits Co-ordination Unit
Environmental Protection Agency**

PO Box 155
Brisbane
Queensland 4002

Enquiries: **1300 368 326**
Facsimile: (07) 3115 9600
eco.access@epa.qld.gov.au

For information regarding fees, refer to the information sheet on contaminated soil disposal. You may apply for an exemption from disclosing information contained in a document submitted, or proposed to be submitted with this application (see Section 564 of the *Environment Protection Act 1994*)

RESULTS SUMMARY TABLES

Published on
DES Disclosure Log
RTI Act 2009

Table 4: Results of Laboratory Analyses – Heavy Metals, pH and PCBs

Sample ID	Date Sampled	Lithology	Analyte (mg/kg)									
			Arsenic	Cadmium	Chromium	Copper	Nickel	Lead	Zinc	Mercury	Total PCBs	pH
ALS Batch EB0708924												
1	10.08.07		<5	<1	18	7	14	<5	31	<0.1	<0.10	9.7
2	10.08.07		<5	<1	24	27	26	<5	39	<0.1	<0.10	9.1
3	10.08.07		<5	<1	67	45	58	5	51	<0.1	<0.10	9.2
4	10.08.07		<5	<1	60	34	42	<5	35	<0.1	<0.10	6.8
5	10.08.07		8	<1	10	37	12	7	49	<0.1	<0.10	6.4
6	10.08.07		<5	<1	59	10	36	<5	38	<0.1	<0.10	7.3
EIL ¹			20	3	50	60	60	300	200	1	1	6-8*
HBIL-A ²			100	5	120,000	200	600	300	400	15	10	6-8*
HBIL-F ³			500	100	600,000*	5,000	3,000	1,500	35,000	75	50	6-8*

Notes:

- 1 EPA's Environmental Investigation Level
- 2 EPA's Health-based investigation Level Type A – Standard Residential, adjusted for cadmium, copper and zinc
- 3 EPA's Health-based Investigation Level Type F – Commercial / Industrial
- <LOR Less than the laboratory's level of reporting
- * Background levels
- Not tested
- ~ Guideline level not yet available

Table 5: Results of Laboratory Analyses – OC/OP Pesticides, Phenols and VOCs (Volatile Organics)

Table of Results of Laboratory Analyses for OC/OPs, Phenols, Fumigants, Carbon Disulfide, and VOCs (Volatile Organics)											
Sample ID	Date Sampled	Lithology	Analyte (mg/kg)								
			OC/OPs	Phenols	Oxygenated Compounds	Carbon Disulfide	Fumigants	Halogenated Aliphatic Compounds	Halogenated Aromatic Compounds	Trihalomethanes	Naphthalene
ALS Batch EB0708924											
1	10.08.07		<LOR	<LOR	<LOR	<0.5	<LOR	<LOR	<LOR	<LOR	<5
2	10.08.07		<LOR	<LOR	<LOR	<0.5	<LOR	<LOR	<LOR	<LOR	<5
3	10.08.07		<LOR	<LOR	<LOR	<0.5	<LOR	<LOR	<LOR	<LOR	151
4	10.08.07		<LOR	<LOR	<LOR	<0.5	<LOR	<LOR	<LOR	<LOR	235
5	10.08.07		<LOR	<LOR	-	-	-	-	-	-	-
6	10.08.07		<LOR	<LOR	-	-	-	-	-	-	-
EIL ¹			Various ⁴	~	~	~	~	~	~	~	~
HBIL-A ²			Various ⁴	8,500	~	~	~	~	~	~	~
HBIL-F ³			Various ⁴	42,500	~	~	~	~	~	~	~

- Notes:**
- 1 EPA's Environmental Investigation Level
 - 2 EPA's Health-based Investigation Level Type A – Standard Residential, adjusted for cadmium, copper and zinc
 - 3 EPA's Health-based Investigation Level Type F – Commercial / Industrial
 - 4 Various levels apply for different pesticides
 - <LOR Less than the laboratory's level of reporting
 - Not tested
 - ~ Guideline level not yet available

Table 6: Results of Laboratory Analyses – PAHs (Semi-volatile Organics)

Sample ID	Date Sampled	Analyte (mg/kg)																Total PAHs
		Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3.cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	
ALS EB0708924																		
1	10.08.07	3.8	<0.5	<0.5	<0.5	2.2	<0.5	1.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.6
2	10.08.07	<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	<LOR
3	10.08.07	9.4	<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	9.4
4	10.08.07	49.8	<0.5	<0.5	<0.5	3.0	<0.5	2.9	2.4	0.8	0.7	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	60.1
5	10.08.07	0.6	<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	0.6
6	10.08.07	<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	<LOR
Amdel 07ENBR00116272																		
7-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.5	0.5	1.2	1.1	<0.5	<0.5	<0.5	<0.5	3.3
7-2.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
8-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
8-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
9-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	1.8	0.7	4.2	3.6	1.8	1.9	3.2	3.7	1.1	1.5	1.3	24.8	24.8
9-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
10-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
10-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
11-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.6	<0.5	<0.5	<0.5	<0.5	<LOR
11-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	2.7	0.9	6.1	0.6	2.4	2.4	4.0	4.1	1.3	<0.5	<0.5	<0.5	24.5
12-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	1.0	0.7	0.6	1.3	1.3	0.6	<0.5	<0.5	<0.5	6.6
12-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR

Sample ID	Date Sampled	Analyte (mg/kg)																
		Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3.cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	Total PAHs
13-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<1	0.6	<0.5	<0.5	<0.5	1.1	
13-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
14-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
14-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.5	<0.5	<0.5	<1	0.8	<0.5	<0.5	<0.5	1.8	
15-0.5m	22.08.07	2.7	<0.5	<0.5	<0.5	1.3	<0.5	2.3	2.0	1.1	1.1	2.0	2.1	<0.5	<0.5	0.8	15.4	
15-1.0m	22.08.07	0.9	<0.5	<0.5	<0.5	1.3	<0.5	0.8	0.8	<0.5	<0.5	1.2	0.7	<0.5	<0.5	<0.5	4.4	
15-2.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.5	<0.5	<0.5	<0.5	0.5	
16-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
16-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
16-2.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
17-0.5m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
17-1.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
17-2.0m	22.08.07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<LOR	
EPA ¹		~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	
HBIL-A ²		~	~	~	~	~	~	~	~	~	~	~	~	1	~	~	~	20
HBIL-F ³		~	~	~	~	~	~	~	~	~	~	~	~	5	~	~	~	100

Notes: 1 EPA's Unpublished Guidelines for TPH/BTEX in soil, issued 1999
2 EPA's Health-based investigation Level Type A – Standard Residential, adjusted for cadmium, copper and zinc
3 EPA's Health-based Investigation Level Type F – Commercial / Industrial
<LOR Less than the laboratory's level of reporting
- Not tested
~ Guideline level not yet available

Table 4 (cont'd): Results of Laboratory Analyses – MAHs

Sample ID	Date Sampled	Analyte (mg/kg)															
		Benzene	Toluene	Ethylbenzene	m&p-Xylene	Total BTEX	Styrene	o-xylene	Isopropylbenzene	n-propylbenzene	1,3,5-Trimethylbenzene	Sec-butylbenzene	1,2,4-trimethylbenzene	Tert-Butylbenzene	p-Isopropyltoluene	n-buylbenzene	TOTAL MAHs
ALS EB0708924																	
1	10.08.07	<0.2	<0.5	<0.5	<0.5	<LOR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
2	10.08.07	<0.2	<0.5	<0.5	<0.5	<LOR	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<LOR
3	10.08.07	<0.2	<0.5	<0.5	9.0	9.0	<0.5	3.8	<0.5	1.0	6.1	<0.5	13.4	<0.5	1.3	1.9	36.5
4	10.08.07	<0.2	1.2	3.4	23.2	27.8	<0.5	9.3	0.8	1.7	11.1	<0.5	31.2	<0.5	2.4	3.0	87.3
Amdel 07ENBR00116272																	
EPA ¹		1	~	~	~	7	~	~	~	~	~	~	~	~	~	~	~
USEPA-Residential ²		0.64	520	400	~	~	1,700	~	570	240	21	220	52	390	~	240	~
USEPA-Industrial ³		1.4	520	400	~	~	1,700	~	2,000	240	70	220	170	390	~	240	~

Notes:

- 1 EPA's Unpublished Guidelines for TPH/BTEX in soil, issued 1999
- 2 United States Environmental Protection Agency Preliminary Remediation Goal for residential soil
- 3 United States Environmental Protection Agency Preliminary Remediation Goal for industrial soil
- <LOR Less than the laboratory's level of reporting
- Not tested
- ~ Guideline level not yet available

LANDFILL ACCEPTANCE LETTER

Published on
DES Disclosure Log
RTI Act 2009



**Thiess Services
Pty Ltd**
A B N 69 010 725 247

Swanbank Landfill
Swanbank Road
Swanbank QLD 4305
Australia
Telephone (07) 3288 7344
Facsimile (07) 3288 6795

28th August 2007

Douglas Partners
439 Montague Road
West End Qld 4101

ATTENTION: Jacob Cumpstay

Dear Jacob,

Approval to Accept - Approval No: I - 1828

Thiess Services Pty Ltd is willing to accept approximately 350m³ of contaminated soil for storage and classification at Swanbank Waste Management Facility. The soil will be temporarily stored on our storage pad until leaching results are provided, enabling the selection of a permanent waste disposal area at the waste management facility.

The contaminated soil will be excavated from the site at 545 Queen Street, Brisbane (Lot 10 on RP185905) which is currently being managed under supervision by Douglas Partners Pty Ltd.

If an EPA Permit to Remove and Dispose of Contaminated Soil is required for this site, delivery of this material can only commence after Thiess Services has received a copy.

To assist with fast processing of loads at our weighbridge, please notify the weighbridge the afternoon prior to delivery and have all delivery drivers quote the above approval number. As well, ensure that this material is identified as the following on transport documentation.

APPROVAL NUMBER:	I - 1828
MATERIAL DESCRIPTION:	Contaminated Soil
DISPOSAL OPTION:	Storage (awaiting disposal classification)

Our Swanbank Facility's entrance is approximately 1 kilometre past the Swanbank Power Station at the end of Swanbank Road, Swanbank Queensland. The Swanbank Facility's registered plan and license details are as follows:

Description:	Lots 103 & 104, on RP839073, County of Stanley, Parish of Bundamba.
EPA License:	SR2137.



Rates will be charged as follows;

Storage Rate:	\$	7	Tonne
Disposal Rate:	\$	T.B.A	Tonne
Handling Rate:	\$	12	Tonne

NB: A minimum charge per load for disposal applies.

(This will be equal to the price of 1 tonne or \$0, whichever is higher.)

All the above rates and charges are excluding GST, are valid for 90 days and are subject to the following conditions:

- 1 Conditions of the approval are met.
- 2 All material (as per tonnages quoted) is disposed here at TS Swanbank Waste Management Facility.
- 3 This quote is based on the tonnages advised. If these tonnages transpire to be significantly different from that estimated, please arrange a re-quote.

Payment methods can either be via cheque, credit card debit or by account.

Should you require any further information please do not hesitate myself on the numbers listed above.

Yours Sincerely

sch 4 - signature

Darren Willson
Sales Manager
Swanbank Waste Management Facility

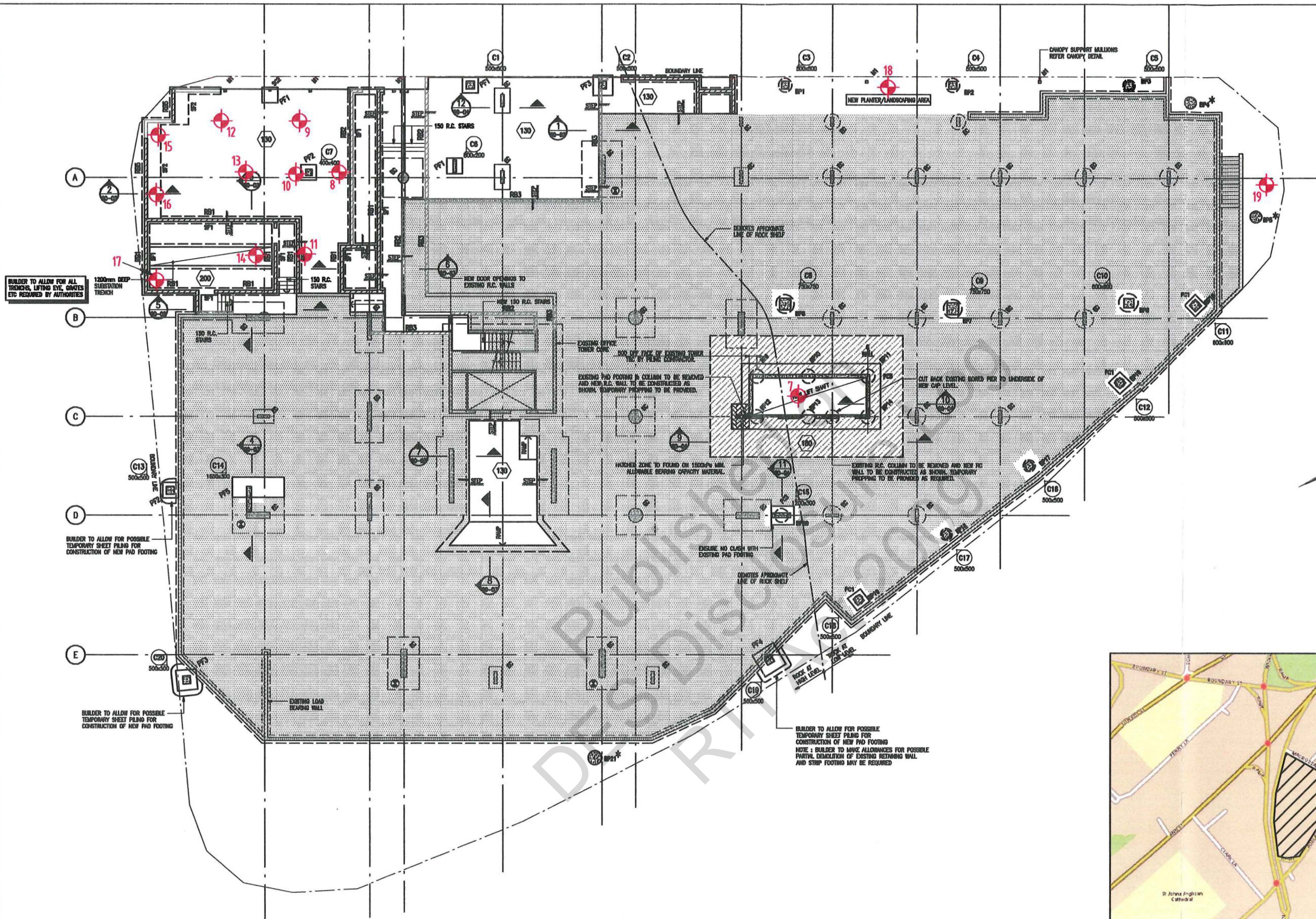
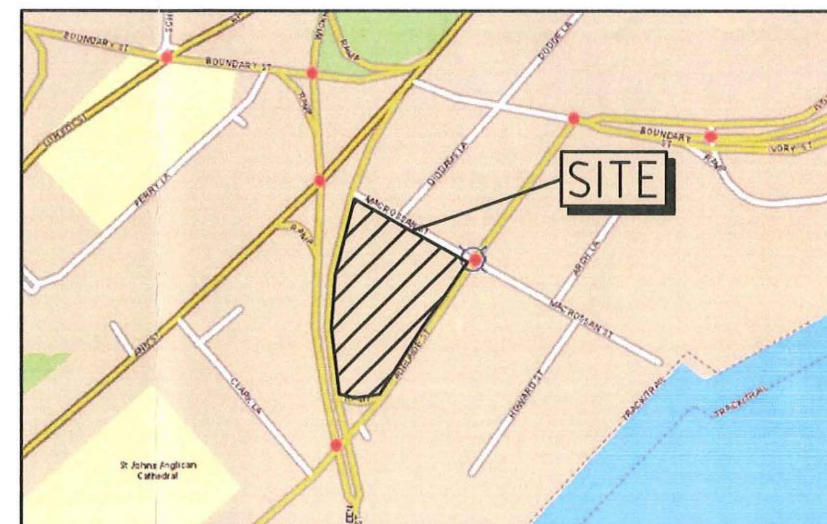
M. sch 4 - mobile phone

Ph. 32887344

Fax. 32886795

TEST LOCATION PLAN

Published on
DES Disclosure Log
RTI Act 2009



NOTES:-

1. ADAPTED FROM DRAWING 06523 SO-01 PROVIDED BY ROBERT BIRD GROUP.
2. TEST LOCATIONS ARE APPROXIMATE ONLY AND ARE SHOWN WITH REFERENCE TO EXISTING SITE FEATURES.



LEGEND

TEST BORE LOCATION AND NUMBER



Douglas Partners

Geotechnics · Environment · Groundwater

Sydney, Melbourne, Brisbane, Melbourne, Perth, London

Perth, London, Melbourne, Brisbane, Sydney

TITLE: **TEST LOCATION PLAN**
Site Contamination Investigation
545 Queen Street, Brisbane

CLIENT: Hutchinson Builders

DRAWN BY: SM

SCALE: 1:250 (A3)

PROJECT No: 47365

APPROVED BY:

DATE: AUGUST 2007

OFFICE: BRISBANE

DRAWING No:

1

TEST BORE REPORTS

Published on
DES Disclosure Log
RTI Act 2009

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 8
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite		0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
		A	2.0		<5ppm
		A	3.0		<5ppm
		A	4.0		<5ppm
4	TEST BORE DISCONTINUED AT 4.0m				

DRILLER: Team Rock Anchors

LOGGED: JTC

CASING: Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	PL	Point load strength Is(50) MPa
B	Bulk sample	S	Standard penetration test
C	Core drilling	U	Tube sample (x mm dia.)
pp	Pocket penetrometer (kPa)	PID	Photo Ionisation Detector

CHECKED
Initials:
Date:



Douglas Partners
Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 9
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
		A	2.0		<5ppm
2		A	3.0		<5ppm
		A	4.0		<5ppm
4	4.0	TEST BORE DISCONTINUED AT 4.0m			

RIG: Air-Track

DRILLER: Team Rock Anchors

LOGGED: JTC

CASING: Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample
B Bulk sample
C Core drilling
pp Pocket penetrometer (kPa)
PL Point load strength Is(50) MPa
S Standard penetration test
U_s Tube sample (x mm dia.)
PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 10
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0		
	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track **DRILLER:** Team Rock Anchors **LOGGED:** JTC **CASING:** Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _t Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 11
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
		A	2.0		<5ppm
3		A	3.0		<5ppm
		A	4.0		<5ppm
4	4.0	TEST BORE DISCONTINUED AT 4.0m			

RIG: Air-Track

DRILLER: Team Rock Anchors

LOGGED: JTC

CASING: Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _s Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 12
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0		
	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track

DRILLER: Team Rock Anchors

LOGGED: JTC

CASING: Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A	Auger sample	PL	Point load strength Is(50) MPa
B	Bulk sample	S	Standard penetration test
C	Core drilling	U _s	Tube sample (x mm dia.)
pp	Pocket penetrometer (kPa)	PID	Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 13
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0	TEST BORE DISCONTINUED AT 4.0m	

RIG: Air-Track **DRILLER:** Team Rock Anchors **LOGGED:** JTC **CASING:** Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _s Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 14
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0		
	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track **DRILLER:** Team Rock Anchors **LOGGED:** JTC **CASING:** Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _t Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 15
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing				
		Type	Depth (m)	Results	Headspace PID (ppm)	
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite		A	0.0		<5ppm
			A	0.5		<5ppm
			A	1.0		<5ppm
			A	2.0		<5ppm
			A	3.0		<5ppm
			A	4.0		<5ppm
4	4.0	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track

DRILLER: Team Rock Anchors

LOGGED: JTC

CASING: Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _s Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 16
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0		
	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track **DRILLER:** Team Rock Anchors **LOGGED:** JTC **CASING:** Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample
B Bulk sample
C Core drilling
pp Pocket penetrometer (kPa)
PL Point load strength Is(50) MPa
S Standard penetration test
U_s Tube sample (x mm dia.)
PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
Geotechnics • Environment • Groundwater

TEST BORE REPORT

CLIENT: Hutchinson Builders
PROJECT: Site Contamination Investigation
LOCATION: 545 Queen Street, Brisbane

PROJECT No: 47365
SURFACE LEVEL: --
DIP OF HOLE: 90°

BORE No: 17
DATE: 21.08.2007
SHEET 1 OF 1
AZIMUTH: --

Depth (m)	Description of Strata	Sampling & In Situ Testing			
		Type	Depth (m)	Results	Headspace PID (ppm)
1	PHYLLITE - low to medium strength, moderately weathered light brown and orange-brown phyllite	A	0.0		<5ppm
		A	0.5		<5ppm
		A	1.0		<5ppm
2		A	2.0		<5ppm
		A	3.0		<5ppm
4	4.0		4.0		
	TEST BORE DISCONTINUED AT 4.0m				

RIG: Air-Track **DRILLER:** Team Rock Anchors **LOGGED:** JTC **CASING:** Nil

TYPE OF BORING: Solid Flight air hammer

WATER OBSERVATIONS: No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND

A Auger sample	PL Point load strength Is(50) MPa
B Bulk sample	S Standard penetration test
C Core drilling	U _s Tube sample (x mm dia.)
pp Pocket penetrometer (kPa)	PID Photo Ionisation Detector

CHECKED

Initials:

Date:



Douglas Partners
 Geotechnics • Environment • Groundwater

LABORATORY ANALYSIS REPORTS

Published on
DES Disclosure Log
RTI Act 2009

CHAIN OF CUSTODY DOCUMENTATION



Australian Laboratory Services Pty Ltd

CLIENT: Douglas Partners

SAMPLER: JTC

ADDRESS / OFFICE: 439 Montague Road West End

MOBILE: sch 4 - mobile ph

PROJECT MANAGER (PM): Jacob Cumpstay

PHONE: (07) 3237 8902

PROJECT ID: 47365

EMAIL REPORT TO: cumpstay@douglaspartners.com.au

SITE: Queen Street

P.O. NO.: 66762

EMAIL INVOICE TO: (if different to report)

RESULTS REQUIRED (Date): 14.08.07

QUOTE NO.: EN/020/06

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

FOR LABORATORY USE ONLY

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

COOLER SEAL (circle appropriate)

Intact: Yes No N/A

SAMPLE TEMPERATURE

CHILLED: Yes No

Notes: e.g. Highly contaminated samples,
Extra volume for QC or trace LORs etc.
Suite codes : W-5,

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

CONTAINER INFORMATION

ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	8 Heavy Metals	PCBs	pH	Phenols	PAHs	OC/OPs	VOCs						
1	1	S	10.08.07		J	1	X	X	X	X	X	X	X						
2	2	S	10.08.07		J	1	X	X	X	X	X	X	X						
3	3	S	10.08.07		J	1	X	X	X	X	X	X	X						
4	4	S	10.08.07		J	1	X	X	X	X	X	X	X						
5	5	S	10.08.07		J	1	X	X	X	X	X	X	X						
6	6	S	10.08.07		J	1	X	X	X	X	X	X	X						
	7	S	10.08.07		J	1	X	X	X	X	X	X	X						
	8	S	10.08.07		J	1	X	X	X	X	X	X	X						

Environmental Division
Brisbane
Work Order
EB0708924



Telephone : + 61-7-3243 7222

RELINQUISHED BY:

RECEIVED BY

METHOD OF SHIPMENT

Name: Jacob Cumpstay

Date: 10.08.07

Name: sch 4 - signature

Date: 10/8/07

Con' Note No:

Douglas Partners

Time:

Of:

ALS

Time: 1625

Name:

Date:

Name:

Date:

Transport Co:

Of:

Time:

Of:

Time:

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved;

V = VOA Vial HCl Preserved; VS = VOA Vial Sulphuric Preserved; SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;

Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bad for Acid Sulphate Soils; B = Unpreserved Bag.

ALS Environmental



ALS Environmental

SAMPLE RECEIPT NOTIFICATION (SRN)

Comprehensive report

Client Details

Client : DOUGLAS PARTNERS PTY LTD
 Contact : MR JACOB CUMPSTAY
 Address : 439 MONTAGUE ROAD WEST END QLD AUSTRALIA 4101

 Project : 47365
 Order number : 66762
 C-O-C Number : - Not provided -
 Site : QUEEN STREET
 Sampler : JTC

 E-mail : cumpstayj@douglaspartners.com.au
 Telephone : 32378900
 Facsimile : 32378999

Laboratory Details

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

 Quote number : EP20070013
 Work order : EB0708924

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

Dates

Date Samples Received : 10 Aug 2007 SRA Issue Date : 13 Aug 2007
 Scheduled Reporting Date : 16 Aug 2007 Client Requested Date : 14 Aug 2007

Delivery Details

Mode of Delivery : Client Drop off. Temperature : 5.2 C - Ice bricks present
 No. of coolers/boxes : 2 SIX PACK No. of samples - Received 6
 Security Seal : Intact. - Analysed 6

Comments

- Samples received in appropriately pretreated and preserved containers.
- Sample(s) have been received within recommended holding times.
- Sample Disposal - Aqueous (14 days), Solid (90 days) from date of completion of work order.
- Please direct any queries related to sample condition / numbering / breakages to Maggie Kahi.
- Please direct any turn around / technical queries to the laboratory contact designated above.
- Analytical work for this work order will be conducted at ALSE Brisbane.
- When the sampling time is not supplied on the COC documentation, ALSE defaults the sampling time to that of the COC 'relinquishment' time (if supplied). If this also is not supplied, ALSE defaults the sampling time to the 'time of receipt at Laboratory'.

Disclaimer : This document contains privileged and confidential information intended only for the use of the addressee. If you are not the addressee, you are hereby notified that you must not disseminate, copy or take action of its contents. If you have received this document in error, please notify ALS immediately.

SAMPLE RECEIPT NOTIFICATION (SRN) - continued

Client : DOUGLAS PARTNERS PTY LTD
Project : 47365

Work Order : EB0708924
ALS Quote Reference : EP20070013



Summary of Sample(s) / Container(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as moisture and preparation tasks, that form an implicit part of that package.

ALS Sample ID.	Client Sample ID - Sample Date	Requested Analysis									
		EA002 - SOIL pH (1:5)	EA055-103 - SOIL Moisture Content	EP074 (solids) - SOIL Volatile Organic Compounds	S-02 - SOIL 8 Metals (incl. Digestion)	S-13 - SOIL OC/OP/PCB	S-14A - SOIL PAH/Phenols (16 PAH - SIM)				
EB0708924-001	1 - 10 Aug 2007	●	●	●	●	●	●				
EB0708924-002	2 - 10 Aug 2007	●	●	●	●	●	●				
EB0708924-003	3 - 10 Aug 2007	●	●	●	●	●	●				
EB0708924-004	4 - 10 Aug 2007	●	●	●	●	●	●				
EB0708924-005	5 - 10 Aug 2007	●			●	●	●				
EB0708924-006	6 - 10 Aug 2007	●			●	●	●				
Total(s) :		6	4	4	6	6	6				

SAMPLE RECEIPT NOTIFICATION (SRN) - continued

Client : DOUGLAS PARTNERS PTY LTD
Project : 47365

Work Order : EB0708924
ALS Quote Reference : EP20070013



Requested Reports

● **MR JACOB CUMPSTAY**

- A4 - AU Certificate of Analysis - NEPM format	Email	cumpstayj@douglaspartners.com.au
- A4 - AU Interpretive Quality Control Report - NEPM format	Email	cumpstayj@douglaspartners.com.au
- A4 - AU Quality Control Report - NEPM format	Email	cumpstayj@douglaspartners.com.au
- EDI Format - XTab	Email	cumpstayj@douglaspartners.com.au
- EDI Format - ENMRG	Email	cumpstayj@douglaspartners.com.au
- A4 - AU Sample Receipt Notification - Comprehensive format	Email	cumpstayj@douglaspartners.com.au
- Default - Chain of Custody	Email	cumpstayj@douglaspartners.com.au
- A4 - AU Tax Invoice	Email	cumpstayj@douglaspartners.com.au

Sample Container(s) / Preservation Non-Compliance Log

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

● **No sample container / preservation non-compliance exist.**

Published on
DES Disclosure Log
RTI Act 2009



ALS Environmental

CERTIFICATE OF ANALYSIS

<i>Client</i>	: DOUGLAS PARTNERS PTY LTD	<i>Laboratory</i>	: Environmental Division Brisbane	<i>Page</i>	: 1 of 12
<i>Contact</i>	: MR JACOB CUMPSTAY	<i>Contact</i>	: Tim Kilmister	<i>Work Order</i>	: EB0708924
<i>Address</i>	: 439 MONTAGUE ROAD WEST END QLD AUSTRALIA 4101	<i>Address</i>	: 32 Shand Street Stafford QLD Australia 4053		
<i>E-mail</i>	: cumpstayj@douglaspartners.com.au	<i>E-mail</i>	: Services.Brisbane@alsenviro.com		
<i>Telephone</i>	: 32378900	<i>Telephone</i>	: +61-7-3243 7222	<i>Date received</i>	: 10 Aug 2007
<i>Facsimile</i>	: 32378999	<i>Facsimile</i>	: +61-7-3243 7218	<i>Date issued</i>	: 17 Aug 2007
<i>Project</i>	: 47365	<i>Quote number</i>	: EN/020/07	<i>No. of samples</i>	- Received : 6
<i>Order number</i>	: 66762				- Analysed : 6
<i>C-O-C number</i>	: - Not provided -				
<i>Site</i>	: QUEEN STREET				

ALSE - Excellence in Analytical Testing



NATA Accredited Laboratory
825

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

Accredited for compliance with
ISO/IEC 17025.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatory</i>	<i>Position</i>	<i>Department</i>
Carsten Emrich	Senior Organic Chemist	Organics - NATA 825 (818 - Brisbane)
Kim McCabe	Senior Inorganic Chemist	Inorganics - NATA 825 (818 - Brisbane)

Page Number : 2 of 12
Client : DOUGLAS PARTNERS PTY LTD
Work Order : EB0708924



Comments

This report for the ALSE reference EB0708924 supersedes any previous reports with this reference. Results apply to the samples as submitted. All pages of this report have been checked and approved for release.

This report contains the following information:

- **Analytical Results for Samples Submitted**
- **Surrogate Recovery Data**

The analytical procedures used by ALS Environmental have been developed from established internationally-recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported herein. Reference methods from which ALSE methods are based are provided in parenthesis.

When moisture determination has been performed, results are reported on a dry weight basis. When a reported 'less than' result is higher than the LOR, this may be due to primary sample extracts/digestion dilution and/or insufficient sample amount for analysis. Surrogate Recovery Limits are static and based on USEPA SW846 or ALS-QWI/EN38 (in the absence of specified USEPA limits). Where LOR of reported result differ from standard LOR, this may be due to high moisture, reduced sample amount or matrix interference. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number, LOR = Limit of Reporting. * Indicates failed Surrogate Recoveries.

Specific comments for Work Order **EB0708924**

EP066, EP068: Poor matrix spike recovery due to matrix interference.

EG005T: EB0708924-002 (2) & EB0708921-012 duplicate failed due to sample heterogeneity. EB0708924-003 (3) matrix spike failed due to sample matrix interference. Matrix spike results have been confirmed through redigestion and analysis.

Page Number : 3 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EA002 : pH (Soils)								
pH Value		0.1	pH Unit	9.7	9.1	9.2	6.8	6.4
EA055: Moisture Content								
Moisture Content (dried @ 103°C)		1.0	%	2.2	3.2	6.6	6.8	3.8
EG005T: Total Metals by ICP-AES								
Aluminium	7429-90-5	50	mg/kg	5280	---	---	---	---
Antimony	7440-36-0	5	mg/kg	<5	---	---	---	---
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	8
Barium	7440-39-3	10	mg/kg	20	---	---	---	---
Beryllium	7440-41-7	1	mg/kg	<1	---	---	---	---
Boron	7440-42-8	50	mg/kg	<50	---	---	---	---
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	18	24	67	60	10
Cobalt	7440-48-4	2	mg/kg	9	---	---	---	---
Copper	7440-50-8	5	mg/kg	7	27	45	34	37
Iron	7439-89-6	50	mg/kg	12900	---	---	---	---
Lead	7439-92-1	5	mg/kg	<5	<5	5	<5	7
Manganese	7439-96-5	5	mg/kg	440	---	---	---	---
Molybdenum	7439-98-7	2	mg/kg	<2	---	---	---	---
Nickel	7440-02-0	2	mg/kg	14	26	58	42	12
Selenium	7782-49-2	5	mg/kg	<5	---	---	---	---
Silver	7440-22-4	2	mg/kg	<2	---	---	---	---
Strontium	7440-24-6	2	mg/kg	<2	---	---	---	---
Tin	7440-31-5	5	mg/kg	<5	---	---	---	---
Vanadium	7440-62-2	5	mg/kg	10	---	---	---	---
Zinc	7440-66-6	5	mg/kg	31	39	51	35	49
Calcium	7440-70-2	50	mg/kg	1460	---	---	---	---
Magnesium	7439-95-4	50	mg/kg	3560	---	---	---	---
Sodium	7440-23-5	50	mg/kg	600	---	---	---	---
Potassium	7440-09-7	50	mg/kg	570	---	---	---	---
Sulphur as S	63705-05-5	50	mg/kg	<50	---	---	---	---
Phosphorus	7723-14-0	50	mg/kg	670	---	---	---	---
Titanium	7440-32-6	10	mg/kg	<10	---	---	---	---
Thallium	7440-28-0	5	mg/kg	<5	---	---	---	---
EG035T: Total Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls		0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10

Page Number : 4 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Analytical Results

Client Sample ID : Sample Matrix Type / Description : Sample Date / Time : Laboratory Sample ID :				1 SOIL 10 Aug 2007 15:00 EB0708924-001	2 SOIL 10 Aug 2007 15:00 EB0708924-002	3 SOIL 10 Aug 2007 15:00 EB0708924-003	4 SOIL 10 Aug 2007 15:00 EB0708924-004	5 SOIL 10 Aug 2007 15:00 EB0708924-005
Analyte	CAS number	LOR	Units					
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

Page Number : 5 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Analytical Results

Client Sample ID : Sample Matrix Type / Description : Sample Date / Time : Laboratory Sample ID :				1 SOIL 10 Aug 2007 15:00 EB0708924-001	2 SOIL 10 Aug 2007 15:00 EB0708924-002	3 SOIL 10 Aug 2007 15:00 EB0708924-003	4 SOIL 10 Aug 2007 15:00 EB0708924-004	5 SOIL 10 Aug 2007 15:00 EB0708924-005
Analyte	CAS number	LOR	Units					
EP068B: Organophosphorus Pesticides (OP)								
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	---
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	<0.5	1.2	---
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	3.4	---
meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	9.0	23.2	---
	106-42-3							
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	3.8	9.3	---
Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	<0.5	0.8	---
n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	1.0	1.7	---
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	6.1	11.1	---
sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	13.4	31.2	---
tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	1.3	2.4	---
n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	1.9	3.0	---
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	<5	<5	---
2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	<5	<5	---
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	<5	<5	---
2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	<5	<5	---
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074D: Fumigants								
2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	<5	<5	---
Chloromethane	74-87-3	5	mg/kg	<5	<5	<5	<5	---
Vinyl chloride	75-01-4	5	mg/kg	<5	<5	<5	<5	---

Page Number : 6 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID : Sample Matrix Type / Description : Sample Date / Time : Laboratory Sample ID :				1 SOIL 10 Aug 2007 15:00 EB0708924-001	2 SOIL 10 Aug 2007 15:00 EB0708924-002	3 SOIL 10 Aug 2007 15:00 EB0708924-003	4 SOIL 10 Aug 2007 15:00 EB0708924-004	5 SOIL 10 Aug 2007 15:00 EB0708924-005
Analyte	CAS number	LOR	Units					
EP074E: Halogenated Aliphatic Compounds								
Bromomethane	74-83-9	5	mg/kg	<5	<5	<5	<5	---
Chloroethane	75-00-3	5	mg/kg	<5	<5	<5	<5	---
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	<5	<5	---
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---

Analytical Results

Client Sample ID : Sample Matrix Type / Description : Sample Date / Time : Laboratory Sample ID :				1 SOIL 10 Aug 2007 15:00 EB0708924-001	2 SOIL 10 Aug 2007 15:00 EB0708924-002	3 SOIL 10 Aug 2007 15:00 EB0708924-003	4 SOIL 10 Aug 2007 15:00 EB0708924-004	5 SOIL 10 Aug 2007 15:00 EB0708924-005
Analyte	CAS number	LOR	Units					
EP074G: Trihalomethanes								
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074H: Naphthalene								
Naphthalene	91-20-3	5	mg/kg	<5	<5	151	235	---
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2.0	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	3.8	<0.5	9.4	49.8	0.6
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	2.2	<0.5	<0.5	3.0	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	1.5	<0.5	<0.5	2.9	<0.5
Pyrene	129-00-0	0.5	mg/kg	1.1	<0.5	<0.5	2.4	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	0.8	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	0.7	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	<0.5	0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	138	121	177	142	146

Page Number : 8 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	56.1	77.6	70.7	55.6	66.5
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	76.6	83.2	82.0	76.9	81.3
EP074S: VOC Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	100	100	95.4	99.6	---
Toluene-D8	2037-26-5	0.1	%	97.1	95.8	90.3	95.4	---
4-Bromofluorobenzene	460-00-4	0.1	%	81.9	90.5	85.9	90.6	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	103	102	104	104	102
2-Chlorophenol-D4	93951-73-6	0.1	%	101	101	103	108	95.8
2,4,6-Tribromophenol	118-79-6	0.1	%	94.4	75.6	116	83.8	72.1
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	110	110	108	114	102
Anthracene-d10	1719-06-8	0.1	%	89.6	112	76.1	108	101
4-Terphenyl-d14	1718-51-0	0.1	%	104	113	87.2	113	105

Published on
 DES Disclosure
 RTI Act 2009

Page Number : 9 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Analytical Results

Client Sample ID : 6							
Sample Matrix Type / Description : SOIL							
Sample Date / Time : 10 Aug 2007 15:00							
Laboratory Sample ID : EB0708924-006							
Analyte	CAS number	LOR	Units				
EA002 : pH (Soils)							
pH Value		0.1	pH Unit	7.3			
EA055: Moisture Content							
Moisture Content (dried @ 103°C)		1.0	%	3.6			
EG005T: Total Metals by ICP-AES							
Arsenic	7440-38-2	5	mg/kg	<5			
Cadmium	7440-43-9	1	mg/kg	<1			
Chromium	7440-47-3	2	mg/kg	59			
Copper	7440-50-8	5	mg/kg	10			
Lead	7439-92-1	5	mg/kg	<5			
Nickel	7440-02-0	2	mg/kg	36			
Zinc	7440-66-6	5	mg/kg	38			
EG035T: Total Mercury by FIMS							
Mercury	7439-97-6	0.1	mg/kg	<0.1			
EP066: Polychlorinated Biphenyls (PCB)							
Total Polychlorinated biphenyls		0.10	mg/kg	<0.10			
EP068A: Organochlorine Pesticides (OC)							
alpha-BHC	319-84-6	0.05	mg/kg	<0.05			
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05			
beta-BHC	319-85-7	0.05	mg/kg	<0.05			
gamma-BHC	58-89-9	0.05	mg/kg	<0.05			
delta-BHC	319-86-8	0.05	mg/kg	<0.05			
Heptachlor	76-44-8	0.05	mg/kg	<0.05			
Aldrin	309-00-2	0.05	mg/kg	<0.05			
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05			
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05			
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05			
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05			
Dieldrin	60-57-1	0.05	mg/kg	<0.05			
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05			
Endrin	72-20-8	0.05	mg/kg	<0.05			
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05			
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05			
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05			
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05			
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2			
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05			
Methoxychlor	72-43-5	0.2	mg/kg	<0.2			

Page Number : 10 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Analytical Results

Analytical Results				Client Sample ID :	6				
				Sample Matrix Type / Description :	SOIL				
				Sample Date / Time :	10 Aug 2007 15:00				
				Laboratory Sample ID :	EB0708924-006				
Analyte	CAS number	LOR	Units						
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05					
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05					
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2					
Dimethoate	60-51-5	0.05	mg/kg	<0.05					
Diazinon	333-41-5	0.05	mg/kg	<0.05					
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05					
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2					
Malathion	121-75-5	0.05	mg/kg	<0.05					
Fenthion	55-38-9	0.05	mg/kg	<0.05					
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05					
Parathion	56-38-2	0.2	mg/kg	<0.2					
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05					
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05					
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05					
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05					
Prothiofos	34643-46-4	0.05	mg/kg	<0.05					
Ethion	563-12-2	0.05	mg/kg	<0.05					
Carbophenothion	786-19-6	0.05	mg/kg	<0.05					
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05					
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg	<0.5					
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5					
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5					
3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1.0					
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5					
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5					
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5					
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5					
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5					
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5					
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5					
Pentachlorophenol	87-86-5	2.0	mg/kg	<2.0					
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	<0.5					
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5					
Acenaphthene	83-32-9	0.5	mg/kg	<0.5					
Fluorene	86-73-7	0.5	mg/kg	<0.5					

Page Number : 11 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Analytical Results

Client Sample ID :
Sample Matrix Type / Description :
Sample Date / Time :
Laboratory Sample ID :

6
SOIL
10 Aug 2007
15:00

EB0708924-006

Analyte	CAS number	LOR	Units					
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Phenanthrene	85-01-8	0.5	mg/kg	<0.5				
Anthracene	120-12-7	0.5	mg/kg	<0.5				
Fluoranthene	206-44-0	0.5	mg/kg	<0.5				
Pyrene	129-00-0	0.5	mg/kg	<0.5				
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5				
Chrysene	218-01-9	0.5	mg/kg	<0.5				
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5				
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5				
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5				
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5				
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5				
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5				
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	121				
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	78.8				
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	81.4				
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	91.4				
2-Chlorophenol-D4	93951-73-6	0.1	%	93.3				
2,4,6-Tribromophenol	118-79-6	0.1	%	73.7				
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	97.5				
Anthracene-d10	1719-06-8	0.1	%	97.1				
4-Terphenyl-d14	1718-51-0	0.1	%	97.7				

Page Number : 12 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Surrogate Control Limits

Matrix Type: SOIL - Surrogate Control Limits

Surrogate Control Limits

Method name	Analyte name	Lower Limit	Upper Limit
EP066: Polychlorinated Biphenyls (PCB)			
EP066S: PCB Surrogate	Decachlorobiphenyl	10	164
EP068: Pesticides by GCMS			
EP068S: Organochlorine Pesticide Surrogate	Dibromo-DDE	10	136
EP068T: Organophosphorus Pesticide Surrogate	DEF	10	110
EP074: Volatile Organic Compounds			
EP074S: VOC Surrogates	1,2-Dichloroethane-D4	80	120
	Toluene-D8	81	117
	4-Bromofluorobenzene	74	121
EP075(SIM): PAH/Phenols (SIM)			
EP075(SIM)S: Phenolic Compound Surrogates	Phenol-d6	24	113
	2-Chlorophenol-D4	23	134
	2,4,6-Tribromophenol	19	122
EP075(SIM)T: PAH Surrogates	2-Fluorobiphenyl	30	115
	Anthracene-d10	27	133
	4-Terphenyl-d14	18	137

Sample Receipt Advice



Customer Service - 1300 552 389

Client Name: Douglas Partners
Attention: Anita Krueger
Client Reference number: 47365
Site Contamination

Date Received: 22 August 2007
Due Date: 23 August 2007
Turnaround: 24 Hour

Amdel Reference number: 07ENBR0016272

Your Amdel Contact: David Bates
+61 7 3902 4600

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

Job Information

Sample Integrity

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

Analysis Requested

Analysis Requested	Method Code	Number Of Samples
Moisture Content	5000	26
PAH in Soil by GC	2100	26
MAH in Soil by P&T	1300	26

590144
590145
590146
590149
590150

Note

- Turnaround time starts when samples are received at the Laboratory
- For samples received after 4pm, turnaround time starts the next working day
- For samples received on the last day of holding time, notification of testing requirements must be given at least 6 hours prior to the sample receipt deadlines; Should the laboratory not receive the information in the required timeframe a suitably qualified results may still be reported.
- Surcharges may apply for 24 and 48 hour turnaround.
- Water samples will be discarded after 4 weeks unless notified.
- Soil samples are chilled for 1 month and will be discarded after 3 months unless notified.
- UNLESS ADVISED OTHERWISE - Sample analysis will commence regardless of integrity issues and / or non-conformance and these will be recorded on the final report.
- Samples submitted for Micro analysis on a Friday may incur a \$150 surcharge and / or be analysed outside holding time (24 Hour Holding Time).

Logged in by : Jane Walker

Date : Wed 22 August 2007

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdei.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Environmental Analysis Request – Chain Of Custody (COC)

Company: Douglas Partners Pty Ltd
Address: 439 Montague Road
West End 4101
Contact: Anita Krueger
Telephone: sch 4 - mobile phone **Fax:** 07 3237 8907
Email: kruegera@douglaspartners.com.au

Project Name:	Site Contamination	Project Number:	47365
Quote Reference:	1419-0031-06	Purchase Order No:	69661

Send Results to: kruegera@douglaspartners.com **Via:** **Mail:** ☐ **Fax:** ☐ **Email:** ☐

Results Required by*: 24 hrs ☐ 48 hrs ☐ 5 Day ☐ Other ☒ 23.08.07

* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

[illegible]

**** METALS** (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

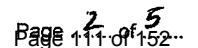
Chain of Custody		Special Requirements (eg. OHS issues etc.)	Sample Receipt Advice (Lab Use Only)
Relinquished by: Anita Krueger	Date/Time: 21.08.07		All Samples Received in Good Condition ☒
Received by: P Chew	Date/Time: 21.8.07 4.30pm		All Documentation in Proper Order ☒
Relinquished by:	Date/Time:		Samples Received with an Attempt to Chill ☒
Received by:	Date/Time:		Samples Received Within Holding Times ☒
Relinquished by:	Date/Time:		Average sample temp on receipt: (°C) 10.3
Received by:	Date/Time:		For enquires please quote Ref. No. 07ENBROO 16272

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Ph: (03) 9538 2277 **Fax:** (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Company:	Douglas Partners Pty Ltd	Project Name:	Site Contamination	Project Number:	47365
Address:	439 Montague Road	Quote Reference:	1419-0031-06	Purchase Order No:	69661
	West End 4101				
Contact:	Anita Krueger	Send Results to:	kruegera@douglaspartners.com	Via:	Mail: ☐ Fax: ☐ Email: ☐
Telephone:	sch 4 - mobile phone	Results Required by*:	24 hrs ☐ 48 hrs ☐ 5 Day ☐ Other ☒ 23.08.07		
	Fax: 07 3237 8907				
Email:	kruegera@douglaspartners.com.au				

* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

[illegible]

**** METALS** (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Tl, V, Zn

Chain of Custody		Special Requirements (eg. OHS issues etc.)	Sample Receipt Advice (Lab Use Only)
Relinquished by: Anita Krueger	Date/Time: 21.08.07		All Samples Received in Good Condition ☒
Received by: P Chew	Date/Time: 21.8.07 4.30pm		All Documentation in Proper Order ☒
Relinquished by:	Date/Time:		Samples Received with an Attempt to Chill ☒
Received by:	Date/Time:		Samples Received Within Holding Times ☒
Relinquished by:	Date/Time:		Average sample temp on receipt: (°C) 10.3
Received by:	Date/Time:		For enquires please quote Ref. No. 07ENB20016272

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Company:	Douglas Partners Pty Ltd	Project Name:	Site Contamination	Project Number:	47365
Address:	439 Montague Road West End 4101	Quote Reference:	1419-0031-06	Purchase Order No:	69661
Contact:	Anita Krueger	Send Results to:	kruegera@douglaspartners.com	Via:	Mail: ☐ Fax: ☐ Email: ☐
Telephone:	sch 4 - mobile phone	Results Required by*:	24 hrs ☐ 48 hrs ☐ 5 Day ☒ Other ☐		
Fax:	07 3237 8907	* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.			
Email:	kruegera@douglaspartners.com.au				

[illegible]

** METALS (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Chain of Custody		Special Requirements (eg. OHS issues etc.)
Relinquished by: Anita Krueger	sch 4 - signal	Date/Time: 21.08.07
Received by: P Chew		Date/Time: 21.8.07 4:30pm
Relinquished by:		Date/Time:
Received by:		Date/Time:
Relinquished by:		Date/Time:
Received by:		Date/Time:

Sample Receipt Advice (Lab Use Only)

All Samples Received in Good Condition ☒

All Documentation in Proper Order ☒

Samples Received with an Attempt to Chill ☒

Samples Received Within Holding Times ☒

Average sample temp on receipt: (°C) 10.3

For enquires please quote Ref. No. 07ENB20016272

Ph: (03) 9538 2277 Fax: (03) 9538 2278
1868 Dandenong Road Clayton VIC 3168
E: amdel.sample@gribbles.com.au

Ph: (07) 3902 4600 Fax: (07) 3902 4646
1/21 Smallwood Place Murarrie QLD 4172
E: BrisbaneEnviro@amdel.com

Ph: (02) 4902 4800 Fax: (02) 4902 4891
99 Mitchell Road Cardiff NSW 2285
E: Enviro_Sydney@amdel.com

Ph: (02) 8874 0500 Fax: (02) 8874 0515
7B, 277 Lane Cove Rd Nth Ryde NSW 2113
E: Enviro_Sydney@amdel.com



Environmental Analysis Request – Chain Of Custody (COC)

Company: Douglas Partners Pty Ltd
Address: 439 Montague Road
 West End 4101
Contact: Anita Krueger
Telephone: sch 4 - mobile phone **Fax:** 07 3237 8907
Email: kruegera@douglaspartners.com.au

Project Name: Site Contamination Project Number: 47365
Quote Reference: 1419-0031-06 Purchase Order No: 69661

Send Results to: kruegera@douglaspartners.com Via: Mail: ☐ Fax: ☐ Email: ☐

Results Required by*: 24 hrs ☐ 48 hrs ☐ 5 Day ☒ Other ☐ _____

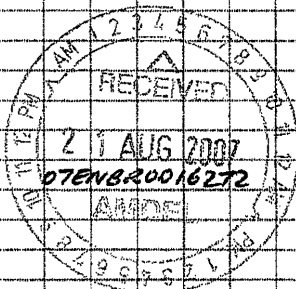
* Note: TAT of less than 5 days must be pre-arranged with the laboratory and surcharges may apply.

SAMPLE DESCRIPTION

ANALYSIS REQUIRED

Lab ID	Sample ID	Date & Time Sampled	Soil / Water Other	Comments [#]
—	15-3.0m	21.08.07	S	HOLD
—	15-4.0m	21.08.07	S	HOLD
—	16-3.0m	21.08.07	S	HOLD
—	16-4.0m	21.08.07	S	HOLD
—	17-3.0m	21.08.07	S	HOLD
—	17-4.0m	21.08.07	S	HOLD
—	RI	21-08-07	S	HOLD
				Totals:

Please Provide Field PID Readings where possible



Please Provide Field PID Readings where possible

Totals:

**** METALS** (Please circle): Ag, Al, As, B, Ba, Be, Bi, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Sn, Ti, V, Zn

Chain of Custody

Relinquished by: Anita Krueger sch 4 - sig
Received by: P Chew
Relinquished by: _____
Received by: _____
Relinquished by: _____
Received by: _____

Date/Time: 21.08.07

Date/Time: 21.8.07 40.30pm

Date/Time: _____

Date/Time: _____

Date/Time: _____

Date/Time: _____

Special Requirements (eg. OHS issues etc.)

Sample Receipt Advice (Lab Use Only)

All Samples Received in Good Condition ☒

All Documentation in Proper Order ☒

Samples Received with an Attempt to Chill ☒

Samples Received Within Holding Times ☒

Average sample temp on receipt: (°C) 10.3
For enquires please quote Ref. No. 07ENBR0016272



This document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17205

Accreditation Number: 14356
Accreditation Number: 1464



Certificate of Analysis

Douglas Partners
439 Montague Road
WEST END QLD 4101
Australia

Attention: Anita Krueger

Project **07ENBR0016272**
Client Reference **47365**
Site Contamination
Order Number **69661**
Received Date **22/08/2007 08:00:00 AM**

Customer Sample ID	7-1.0m	7-2.0m	8-0.5m
Amdel Sample Number	590015	590016	590017
Date Sampled	21/08/2007	21/08/2007	21/08/2007
VOC			
Test/Reference	PQL	Unit	
1300 MAH in Soil by P&T			
1,2,4-Trimethylbenzene	1	mg/kg	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1
Benzene	0.2	mg/kg	<0.2
Ethylbenzene	1	mg/kg	<1
Isopropylbenzene	0.5	mg/kg	<0.5
Meta- & Para- Xylene	2	mg/kg	<2
Naphthalene	1	mg/kg	<1
n-Butylbenzene	1	mg/kg	<1
n-Propylbenzene	1	mg/kg	<1
Ortho-Xylene	1	mg/kg	<1
p-Isopropyltoluene	1	mg/kg	<1
sec-Butylbenzene	1	mg/kg	<1
Styrene	0.5	mg/kg	<0.5
tert-Butylbenzene	1	mg/kg	<1
Toluene	1	mg/kg	<1
Total Xylenes	3	mg/kg	<3
Toluene-D8 - Surrogate	1	%	103
4-Bromofluorobenzene - Surrogate	1	%	102
Pentafluorobenzene-Surrogate	1	%	95
SVOC			
Test/Reference	PQL	Unit	
2100 PAH in Soil by GC			
Acenaphthene	0.5	mg/kg	<0.5
Acenaphthylene	0.5	mg/kg	<0.5
Anthracene	0.5	mg/kg	<0.5
Benz(a)anthracene	0.5	mg/kg	0.5
Benzo(a)pyrene	0.5	mg/kg	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	1.2
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5
Chrysene	0.5	mg/kg	0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5
Fluoranthene	0.5	mg/kg	0.6
Fluorene	0.5	mg/kg	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5
Naphthalene	0.5	mg/kg	<0.5

First Reported: 23 August 2007

Date Printed: 29 August 2007

Amdel Ltd 1/21 Smallwood Pl Murarrie QLD Australia 4172

ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Page 1 of 15

Final Report Number : 241620

Customer Sample ID	7-1.0m	7-2.0m	8-0.5m
Amdel Sample Number	590015	590016	590017
Date Sampled	21/08/2007	21/08/2007	21/08/2007

SVOC

Test/Reference	PQL	Unit		
Phenanthrene	0.5	mg/kg	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.9	<8.0
Pyrene-d10 - Surrogate	-	%	95	105

Miscellaneous

Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	8	10

Customer Sample ID	8-1.0m	9-0.5m	9-1.0m
Amdel Sample Number	590018	590019	590020
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC

Test/Reference	PQL	Unit		
1300 MAH in Soil by P&T				
1,2,4-Trimethylbenzene	1	mg/kg	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2
Naphthalene	1	mg/kg	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1
Toluene	1	mg/kg	<1	<1
Total Xylenes	3	mg/kg	<3	<3
Toluene-D8 - Surrogate	1	%	100	98
4-Bromofluorobenzene - Surrogate	1	%	99	100
Pentafluorobenzene-Surrogate	1	%	95	95

SVOC

Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	0.7
Benz(a)anthracene	0.5	mg/kg	<0.5	1.8
Benzo(a)pyrene	0.5	mg/kg	<0.5	3.7
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	3.2
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	1.3
Chrysene	0.5	mg/kg	<0.5	1.9
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	1.5

Customer Sample ID		8-1.0m	9-0.5m	9-1.0m
Amdel Sample Number		590018	590019	590020
Date Sampled		21/08/2007	21/08/2007	21/08/2007
SVOC				
Test/Reference	PQL Unit			
Fluoranthene	0.5 mg/kg	<0.5	4.2	<0.5
Fluorene	0.5 mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5 mg/kg	<0.5	1.1	<0.5
Naphthalene	0.5 mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5 mg/kg	<0.5	1.8	<0.5
Pyrene	0.5 mg/kg	<0.5	3.6	<0.5
Sum of PAHs	8 mg/kg	<8.0	<27	<8.0
Pyrene-d10 - Surrogate	- %	104	109	110
Miscellaneous				
Test/Reference	PQL Unit			
5000 Moisture Content				
% Moisture	1 %	5	7	3
Customer Sample ID				
Amdel Sample Number				
Date Sampled				
VOC				
Test/Reference	PQL Unit	10-0.5m	10-1.0m	11-0.5m
1300 MAH in Soil by P&T				
1,2,4-Trimethylbenzene	1 mg/kg	<1	<1	<1
1,3,5-Trimethylbenzene	1 mg/kg	<1	<1	<1
Benzene	0.2 mg/kg	<0.2	<0.2	<0.2
Ethylbenzene	1 mg/kg	<1	<1	<1
Isopropylbenzene	0.5 mg/kg	<0.5	<0.5	<0.5
Meta- & Para- Xylene	2 mg/kg	<2	<2	<2
Naphthalene	1 mg/kg	<1	<1	<1
n-Butylbenzene	1 mg/kg	<1	<1	<1
n-Propylbenzene	1 mg/kg	<1	<1	<1
Ortho-Xylene	1 mg/kg	<1	<1	<1
p-Isopropyltoluene	1 mg/kg	<1	<1	<1
sec-Butylbenzene	1 mg/kg	<1	<1	<1
Styrene	0.5 mg/kg	<0.5	<0.5	<0.5
tert-Butylbenzene	1 mg/kg	<1	<1	<1
Toluene	1 mg/kg	<1	<1	<1
Total Xylenes	3 mg/kg	<3	<3	<3
Toluene-D8 - Surrogate	1 %	98	97	100
4-Bromofluorobenzene - Surrogate	1 %	99	101	100
Pentafluorobenzene-Surrogate	1 %	93	96	93
SVOC				
Test/Reference	PQL Unit			
2100 PAH in Soil by GC				
Acenaphthene	0.5 mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5 mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5 mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5 mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene	0.5 mg/kg	<0.5	<0.5	0.6

Customer Sample ID		10-0.5m	10-1.0m	11-0.5m
Amdel Sample Number		590021	590022	590023
Date Sampled		21/08/2007	21/08/2007	21/08/2007
SVOC				
Test/Reference	PQL	Unit		
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5
Fluoranthene	0.5	mg/kg	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.0	<8.1
Pyrene-d10 - Surrogate	-	%	107	106
Miscellaneous				
Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	7	12
				8
VOC				
Test/Reference	PQL	Unit		
1300 MAH in Soil by P&T				
1,2,4-Trimethylbenzene	1	mg/kg	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2
Naphthalene	1	mg/kg	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1
Toluene	1	mg/kg	<1	<1
Total Xylenes	3	mg/kg	<3	<3
Toluene-D8 - Surrogate	1	%	100	101
4-Bromofluorobenzene - Surrogate	1	%	99	99
Pentafluorobenzene-Surrogate	1	%	94	94
				95
SVOC				
Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5

Customer Sample ID			11-1.0m	12-0.5m	12-1.0m
Amdel Sample Number			590024	590025	590026
Date Sampled			21/08/2007	21/08/2007	21/08/2007
SVOC					
Test/Reference	PQL	Unit			
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	0.9	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	2.4	0.7	<0.5
Benzo(a)pyrene	0.5	mg/kg	4.1	1.3	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	4.0	1.3	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5	<0.5
Chrysene	0.5	mg/kg	2.4	0.6	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	6.1	1.1	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	1.3	0.6	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	2.7	<0.5	<0.5
Pyrene	0.5	mg/kg	0.6	1.0	<0.5
Sum of PAHs	8	mg/kg	<28	<11	<8.0
Pyrene-d10 - Surrogate	-	%	111	107	104

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	9	8	7

Customer Sample ID			13-0.5m	13-1.0m	14-0.5m
Amdel Sample Number			590027	590028	590029
Date Sampled			21/08/2007	21/08/2007	21/08/2007
VOC					
Test/Reference	PQL	Unit			
1300 MAH in Soil by P&T					
1,2,4-Trimethylbenzene	1	mg/kg	<1	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2	<2
Naphthalene	1	mg/kg	<1	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1	<1
Toluene	1	mg/kg	<1	<1	<1
Total Xylenes	3	mg/kg	<3	<3	<3
Toluene-D8 - Surrogate	1	%	97	97	96
4-Bromofluorobenzene - Surrogate	1	%	99	100	99
Pentafluorobenzene-Surrogate	1	%	93	93	95

SVOC

First Reported: 23 August 2007

Date Printed: 29 August 2007

Amdel Ltd 1/21 Smallwood Pl Murarrie QLD Australia 4172

ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Page 5 of 15

Final Report Number : 241620

Customer Sample ID	13-0.5m	13-1.0m	14-0.5m
Amdel Sample Number	590027	590028	590029
Date Sampled	21/08/2007	21/08/2007	21/08/2007

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	0.6	<0.5	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	0.5	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.1	<8.0	<8.0
Pyrene-d10 - Surrogate	-	%	112	108	106

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	8	7	16

Customer Sample ID	14-1.0m	15-0.5m	15-1.0m
Amdel Sample Number	590030	590031	590032
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC

Test/Reference	PQL	Unit			
1300 MAH in Soil by P&T					
1,2,4-Trimethylbenzene	1	mg/kg	<1	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2	<2
Naphthalene	1	mg/kg	<1	2.3	<1
n-Butylbenzene	1	mg/kg	<1	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1	<1
Toluene	1	mg/kg	<1	<1	<1
Total Xylenes	3	mg/kg	<3	<3	<3
Toluene-D8 - Surrogate	1	%	95	99	98
4-Bromofluorobenzene - Surrogate	1	%	99	100	98

First Reported: 23 August 2007

Amdel Ltd 1/21 Smallwood Pl Murarrie QLD Australia 4172

Page 6 of 15

Date Printed: 29 August 2007

ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Final Report Number : 241620

Customer Sample ID	14-1.0m	15-0.5m	15-1.0m
Amdel Sample Number	590030	590031	590032
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC			
Test/Reference	PQL	Unit	
Pentafluorobenzene-Surrogate	1	%	96 93 92

SVOC			
Test/Reference	PQL	Unit	

2100 PAH in Soil by GC

Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	1.1	<0.5
Benzo(a)pyrene	0.5	mg/kg	0.8	2.1	0.7
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	2.0	1.2
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	0.8	<0.5
Chrysene	0.5	mg/kg	<0.5	1.1	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	0.5	2.3	0.8
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	2.7	0.9
Phenanthrene	0.5	mg/kg	<0.5	1.3	<0.5
Pyrene	0.5	mg/kg	0.5	2.0	0.8
Sum of PAHs	8	mg/kg	<8.3	<18	<9.4
Pyrene-d10 - Surrogate	-	%	109	105	107

Miscellaneous

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

5000 Moisture Content

% Moisture	1	%	14	12	5
------------	---	---	----	----	---

Customer Sample ID	15-2.0m	16-0.5m	16-1.0m
Amdel Sample Number	590033	590034	590035
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC			
Test/Reference	PQL	Unit	

1300 MAH in Soil by P&T

1,2,4-Trimethylbenzene	1	mg/kg	<1	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2	<2
Naphthalene	1	mg/kg	1.9	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1	<1

Customer Sample ID	15-2.0m	16-0.5m	16-1.0m
Amdel Sample Number	590033	590034	590035
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC

Test/Reference	PQL	Unit			
Toluene	1	mg/kg	<1	<1	<1
Total Xylenes	3	mg/kg	<3	<3	<3
Toluene-D8 - Surrogate	1	%	98	97	96
4-Bromofluorobenzene - Surrogate	1	%	98	98	98
Pentafluorobenzene-Surrogate	1	%	92	93	92

SVOC

Test/Reference	PQL	Unit			
2100 PAH in Soil by GC					
Acenaphthene	0.5	mg/kg	<0.5	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	0.5	<0.5	<0.5
Benzo(b)(k)fluoranthene	1	mg/kg	<1	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluoranthene	0.5	mg/kg	<0.5	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.0	<8.0	<8.0
Pyrene-d10 - Surrogate	-	%	107	108	114

Miscellaneous

Test/Reference	PQL	Unit			
5000 Moisture Content					
% Moisture	1	%	4	7	8

Customer Sample ID	16-2.0m	17-0.5m	17-1.0m
Amdel Sample Number	590036	590037	590038
Date Sampled	21/08/2007	21/08/2007	21/08/2007

VOC

Test/Reference	PQL	Unit			
1300 MAH in Soil by P&T					
1,2,4-Trimethylbenzene	1	mg/kg	<1	<1	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1	<1	<1
Benzene	0.2	mg/kg	<0.2	<0.2	<0.2
Ethylbenzene	1	mg/kg	<1	<1	<1
Isopropylbenzene	0.5	mg/kg	<0.5	<0.5	<0.5
Meta- & Para- Xylene	2	mg/kg	<2	<2	<2
Naphthalene	1	mg/kg	<1	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1	<1

Customer Sample ID		16-2.0m	17-0.5m	17-1.0m
Amdel Sample Number		590036	590037	590038
Date Sampled		21/08/2007	21/08/2007	21/08/2007
VOC				
Test/Reference	PQL	Unit		
p-Isopropyltoluene	1	mg/kg	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1
Toluene	1	mg/kg	<1	<1
Total Xylenes	3	mg/kg	<3	<3
Toluene-D8 - Surrogate	1	%	97	96
4-Bromofluorobenzene - Surrogate	1	%	98	99
Pentafluorobenzene-Surrogate	1	%	93	94
SVOC				
Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	<0.5	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5
Fluoranthene	0.5	mg/kg	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.0	<8.0
Pyrene-d10 - Surrogate	-	%	114	111
Miscellaneous				
Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	16	4

Customer Sample ID		17-2.0m	R2
Amdel Sample Number		590039	590040
Date Sampled		21/08/2007	21/08/2007
VOC			
Test/Reference	PQL	Unit	
1300 MAH in Soil by P&T			
1,2,4-Trimethylbenzene	1	mg/kg	<1
1,3,5-Trimethylbenzene	1	mg/kg	<1
Benzene	0.2	mg/kg	<0.2
Ethylbenzene	1	mg/kg	<1
Isopropylbenzene	0.5	mg/kg	<0.5
Meta- & Para- Xylene	2	mg/kg	<2

Customer Sample ID	17-2.0m	R2
Amdel Sample Number	590039	590040
Date Sampled	21/08/2007	21/08/2007

VOC

Test/Reference	PQL	Unit		
Naphthalene	1	mg/kg	<1	<1
n-Butylbenzene	1	mg/kg	<1	<1
n-Propylbenzene	1	mg/kg	<1	<1
Ortho-Xylene	1	mg/kg	<1	<1
p-Isopropyltoluene	1	mg/kg	<1	<1
sec-Butylbenzene	1	mg/kg	<1	<1
Styrene	0.5	mg/kg	<0.5	<0.5
tert-Butylbenzene	1	mg/kg	<1	<1
Toluene	1	mg/kg	<1	<1
Total Xylenes	3	mg/kg	<3	<3
Toluene-D8 - Surrogate	1	%	96	98
4-Bromofluorobenzene - Surrogate	1	%	99	99
Pentafluorobenzene-Surrogate	1	%	92	92

SVOC

Test/Reference	PQL	Unit		
2100 PAH in Soil by GC				
Acenaphthene	0.5	mg/kg	<0.5	<0.5
Acenaphthylene	0.5	mg/kg	<0.5	<0.5
Anthracene	0.5	mg/kg	<0.5	<0.5
Benz(a)anthracene	0.5	mg/kg	<0.5	<0.5
Benzo(a)pyrene	0.5	mg/kg	<0.5	<0.5
Benzo(b)&(k)fluoranthene	1	mg/kg	<1	<1
Benzo(g,h,i)perylene	0.5	mg/kg	<0.5	<0.5
Chrysene	0.5	mg/kg	<0.5	<0.5
Dibenz(ah)anthracene	0.5	mg/kg	<0.5	<0.5
Fluoranthene	0.5	mg/kg	<0.5	<0.5
Fluorene	0.5	mg/kg	<0.5	<0.5
Indeno(123-cd)pyrene	0.5	mg/kg	<0.5	<0.5
Naphthalene	0.5	mg/kg	<0.5	<0.5
Phenanthrene	0.5	mg/kg	<0.5	<0.5
Pyrene	0.5	mg/kg	<0.5	<0.5
Sum of PAHs	8	mg/kg	<8.0	<8.0
Pyrene-d10 - Surrogate	-	%	113	116

Miscellaneous

Test/Reference	PQL	Unit		
5000 Moisture Content				
% Moisture	1	%	6	3

Sample History

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

Description	Extracted	Analysed
1300 MAH in Soil by P&T		27/08/2007
2100 PAH in Soil by GC	22/08/2007	23/08/2007
5000 Moisture Content		23/08/2007

Amdel Internal Quality Control Review

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. Amdel QC Acceptance/Rejection criteria are available on request.
3. Proficiency trial results are available on request.
4. Actual PQLs are matrix dependant. Quotes PQLs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spike or surrogate recoveries.
6. Test samples duplicated or spiked, are for this job only and are identified in the following QC report.
7. SVOC analyses on waters are performed on homogenized, unfiltered sample, unless noted otherwise.
8. When individual results are qualified in the body of a report, refer to the qualifier descriptions that follow.

Holding Times

Please refer to 'Sampling and Preservation Chart for Soils & Waters' for holding times. (Amdel form AD-FOR_ADM-020)

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

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

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

Quality Control Results

Laboratory: **EN_PREP**

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
590144 [Duplicate of 590096]							
5000 Moisture Content			Result 2	RPD			
%Moisture	%	8	8	N/A	N/A	N/A	
590146 [Duplicate of 590093]							
5000 Moisture Content			Result 2	RPD			
%Moisture	%	3	3	N/A	N/A	N/A	

Laboratory: **EN_SVOC**

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
590254 [Method Blank]							
2100 PAH in Soil by GC							
Acenaphthene	mg/kg	<0.5			< 0.5	T	
Acenaphthylene	mg/kg	<0.5			< 0.5	T	
Anthracene	mg/kg	<0.5			< 0.5	T	
Benz(a)anthracene	mg/kg	<0.5			< 0.5	T	
Benzo(a)pyrene	mg/kg	<0.5			< 0.5	T	
Benzo(b)&(k)fluoranthene	mg/kg	<1			< 1	T	
Benzo(g,h,i)perylene	mg/kg	<0.5			< 0.5	T	
Chrysene	mg/kg	<0.5			< 0.5	T	
Dibenz(ah)anthracene	mg/kg	<0.5			< 0.5	T	
Fluoranthene	mg/kg	<0.5			< 0.5	T	
Fluorene	mg/kg	<0.5			< 0.5	T	
Indeno(123-cd)pyrene	mg/kg	<0.5			< 0.5	T	
Naphthalene	mg/kg	<0.5			< 0.5	T	
Phenanthrene	mg/kg	<0.5			< 0.5	T	
Pyrene	mg/kg	<0.5			< 0.5	T	
Sum of PAHs	mg/kg	<8.0			< 8	T	
Pyrene-d10- PAH- SURROGATE	%	107			70-130 %	T	

Laboratory: EN_SVOC

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
590333 [Method Blank]							
2100 PAH in Soil by GC							
Acenaphthene	mg/kg	<0.5			< 0.5	T	
Acenaphthylene	mg/kg	<0.5			< 0.5	T	
Anthracene	mg/kg	<0.5			< 0.5	T	
Benz(a)anthracene	mg/kg	<0.5			< 0.5	T	
Benzo(a)pyrene	mg/kg	<0.5			< 0.5	T	
Benzo(b)&(k)fluoranthene	mg/kg	<1			< 1	T	
Benzo(g,h,i)perylene	mg/kg	<0.5			< 0.5	T	
Chrysene	mg/kg	<0.5			< 0.5	T	
Dibenz(ah)anthracene	mg/kg	<0.5			< 0.5	T	
Fluoranthene	mg/kg	<0.5			< 0.5	T	
Fluorene	mg/kg	<0.5			< 0.5	T	
Indeno(123-cd)pyrene	mg/kg	<0.5			< 0.5	T	
Naphthalene	mg/kg	<0.5			< 0.5	T	
Phenanthrene	mg/kg	<0.5			< 0.5	T	
Pyrene	mg/kg	<0.5			< 0.5	T	
Sum of PAHs	mg/kg	<8.0			< 8	T	
Pyrene-d10- PAH- SURROGATE	%	108			70-130 %	T	
590141 [Duplicate of 590019]							
2100 PAH in Soil by GC							
			Result 2	RPD			
AcenaphtheneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
AcenaphthyleneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
AnthraceneDB	mg/kg	<0.5	0.7	28	0-30 %	T	
Benz(a)anthraceneDB	mg/kg	1.3	1.8	35	0-30 %	F	Q15
Benzo(a)pyreneDB	mg/kg	2.6	3.7	33	0-30 %	F	Q15
Benzo(b)&(k)fluorantheneDB	mg/kg	2.3	3.2	34	0-30 %	F	Q15
Benzo(g,h,i)peryleneDB	mg/kg	1.0	1.3	26	0-30 %	T	
ChryseneDB	mg/kg	1.3	1.9	38	0-30 %	F	Q15
Dibenz(ah)anthraceneDB	mg/kg	1.2	1.5	N/A	N/A	N/A	
FluorantheneDB	mg/kg	2.8	4.2	39	0-30 %	F	Q15
FluoreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Indeno(123-cd)pyreneDB	mg/kg	0.9	1.1	12	0-30 %	T	
NaphthaleneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
PhenanthreneDB	mg/kg	1.3	1.8	31	0-30 %	F	Q15
PyreneDB	mg/kg	2.4	3.6	40	0-30 %	F	Q15
Sum of PAHsDB	mg/kg	<20	<27	N/A	N/A	N/A	
Pyrene-d10- PAH- SURROGATE	%	103	N/A	N/A	70-130 %	T	
590142 [Duplicate of 590018]							
2100 PAH in Soil by GC							
			Result 2	RPD			
AcenaphtheneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
AcenaphthyleneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
AnthraceneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benz(a)anthraceneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benzo(a)pyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benzo(b)&(k)fluorantheneDB	mg/kg	<1	<1	<1	0-30 %	T	
Benzo(g,h,i)peryleneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
ChryseneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Dibenz(ah)anthraceneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
FluorantheneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
FluoreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Indeno(123-cd)pyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
NaphthaleneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
PhenanthreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
PyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Sum of PAHsDB	mg/kg	<8.0	<8.0	N/A	N/A	N/A	
Pyrene-d10- PAH- SURROGATE	%	113	N/A	N/A	70-130 %	T	

First Reported: 23 August 2007

Date Printed: 29 August 2007

Amdel Ltd 1/21 Smallwood PI Murarrie QLD Australia 4172
ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Page 12 of 15

Final Report Number : 241620

Laboratory: **EN_SVOC**

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
590357 [Duplicate of 590020]							
2100 PAH in Soil by GC			Result 2	RPD			
AcenaphtheneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
AcenaphthyleneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
AnthraceneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benz(a)anthraceneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benzo(a)pyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Benzo(b)&(k)fluorantheneDB	mg/kg	<1	<1	<1	0-30 %	T	
Benzo(g,h,i)peryleneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
ChryseneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Dibenz(ah)anthraceneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
FluorantheneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
FluoreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
indeno(123-cd)pyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
NaphthaleneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
PhenanthreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
PyreneDB	mg/kg	<0.5	<0.5	<1	0-30 %	T	
Sum of PAHsDB	mg/kg	<8.0	<8.0	N/A	N/A	N/A	
Pyrene-d10- PAH- SURROGATE	%	102	N/A	N/A	70-130 %	T	

Laboratory: **EN_VOC**

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
595416 [Laboratory Control Sample]							
1300 VOCs in Soil by P&T			Expected Value	Percent Recovery			
1,1,1-Trichloroethane	mg/kg	9.5	N/A	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane	mg/kg	8.6	N/A	N/A	N/A	N/A	
1,1,2-Trichloroethane	mg/kg	9.4	N/A	N/A	N/A	N/A	
1,1-Dichloroethane	mg/kg	9.7	N/A	N/A	N/A	N/A	
1,1-Dichloroethene	mg/kg	9.7	N/A	N/A	N/A	N/A	
1,2-Dichlorobenzene	mg/kg	9.3	N/A	N/A	N/A	N/A	
1,2-Dichloroethane	mg/kg	9.6	N/A	N/A	N/A	N/A	
1,2-Dichloropropane	mg/kg	9.7	N/A	N/A	N/A	N/A	
1,3-Dichlorobenzene	mg/kg	9.3	N/A	N/A	N/A	N/A	
1,4-Dichlorobenzene	mg/kg	9.5	N/A	N/A	N/A	N/A	
Benzene	mg/kg	9.7	N/A	N/A	N/A	N/A	
Bromodichloromethane	mg/kg	9.4	N/A	N/A	N/A	N/A	
Bromoform	mg/kg	8.4	N/A	N/A	N/A	N/A	
Carbon Tetrachloride	mg/kg	9.6	N/A	N/A	N/A	N/A	
Chloroform	mg/kg	9.7	N/A	N/A	N/A	N/A	
cis-1,3-Dichloropropene	mg/kg	9.5	N/A	N/A	N/A	N/A	
Dibromochloromethane	mg/kg	9.3	N/A	N/A	N/A	N/A	
Ethylbenzene	mg/kg	8.8	N/A	N/A	N/A	N/A	
Methylene Chloride	mg/kg	9.3	N/A	N/A	N/A	N/A	
Tetrachloroethene	mg/kg	9.6	N/A	N/A	N/A	N/A	
Toluene	mg/kg	9.6	N/A	N/A	N/A	N/A	
trans-1,2-Dichloroethene	mg/kg	9.4	N/A	N/A	N/A	N/A	
trans-1,3-Dichloropropene	mg/kg	9.6	N/A	N/A	N/A	N/A	
Trichloroethene	mg/kg	9.5	N/A	N/A	N/A	N/A	

Laboratory: EN_VOC

Sample, Test, Result Reference	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Codes
590144 [Duplicate of 590096]							
1300 MAH in Soil by P&T			Result 2	RPD			
1,2,4-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
1,3,5-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
BenzeneDB	mg/kg	<0.2	<0.2	N/A	N/A	N/A	
EthylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
IsopropylbenzeneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
Meta- & Para- XyleneDB	mg/kg	<2	<2	N/A	N/A	N/A	
NaphthaleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-PropylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Ortho-XyleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
p-IsopropyltolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
sec-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
StyreneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
tert-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
TolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Total XylenesDB	mg/kg	<3	<3	N/A	N/A	N/A	
4-Bromofluorobenzene - Surrogate	%	98	N/A	N/A	70-130 %	T	
Pentafluorobenzene-Surrogate	%	93	N/A	N/A	70-130 %	T	
Toluene-D8 - Surrogate	%	100	N/A	N/A	70-130 %	T	
590145 [Duplicate of 590109]							
1300 MAH in Soil by P&T			Result 2	RPD			
1,2,4-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
1,3,5-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
BenzeneDB	mg/kg	<0.2	<0.2	N/A	N/A	N/A	
EthylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
IsopropylbenzeneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
Meta- & Para- XyleneDB	mg/kg	<2	<2	N/A	N/A	N/A	
NaphthaleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-PropylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Ortho-XyleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
p-IsopropyltolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
sec-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
StyreneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
tert-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
TolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Total XylenesDB	mg/kg	<3	<3	N/A	N/A	N/A	
4-Bromofluorobenzene - Surrogate	%	99	N/A	N/A	70-130 %	T	
Pentafluorobenzene-Surrogate	%	94	N/A	N/A	70-130 %	T	
Toluene-D8 - Surrogate	%	96	N/A	N/A	70-130 %	T	

First Reported: 23 August 2007

Date Printed: 29 August 2007

Amdel Ltd 1/21 Smallwood PI Murarrie QLD Australia 4172
ABN: 30 008 127 802 Telephone: (07) 3902 4600 Facsimile: (07) 3902 4646

Page 14 of 15

Final Report Number : 241620

Laboratory: **EN_VOC**

Sample, Test, Result Reference	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Codes
590146 [Duplicate of 590093]							
1300 MAH in Soil by P&T							
1,2,4-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
1,3,5-TrimethylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
BenzeneDB	mg/kg	<0.2	<0.2	N/A	N/A	N/A	
EthylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
IsopropylbenzeneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
Meta- & Para- XyleneDB	mg/kg	<2	<2	N/A	N/A	N/A	
NaphthaleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
n-PropylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Ortho-XyleneDB	mg/kg	<1	<1	N/A	N/A	N/A	
p-IsopropyltolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
sec-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
StyreneDB	mg/kg	<0.5	<0.5	N/A	N/A	N/A	
tert-ButylbenzeneDB	mg/kg	<1	<1	N/A	N/A	N/A	
TolueneDB	mg/kg	<1	<1	N/A	N/A	N/A	
Total XylenesDB	mg/kg	<3	<3	N/A	N/A	N/A	
4-Bromofluorobenzene - Surrogate	%	99	N/A	N/A	70-130 %	T	
Pentafluorobenzene-Surrogate	%	95	N/A	N/A	70-130 %	T	
Toluene-D8 - Surrogate	%	99	N/A	N/A	70-130 %	T	

Sample Integrity

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

Qualifier Codes/Comments

Code Description

Q15 The RPD reported passes Amdel's Acceptance Criteria as stipulated in AS-POL-002. The Criteria displayed in this report are for results >10 x PQL; the results of this sample are < 10 x PQL

Authorised By

Elizabeth Button Senior Analyst - Environmental
 Laura Schofield Production Manager - Organics

Accreditation Number: 14356
 Accreditation Number: 1464

Laboratory Manager

Michael Mowle Team Leader - Environmental

sch 4 - signature

Final Report

- Indicates Not Requested

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

Amdel Limited shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Amdel Limited be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received. Sampled dates quoted in this report are those listed on the COC or sample jars; if no sample dates are noted, the date the samples are received at the laboratory have been used.

The samples were not collected by Amdel staff.

7th September 2007

Ref: mg / 013

Golder Associates Pty Ltd
611 Coronation Drive,
Toowoong, QLD, 4066

Fax: 3721 5401

Attention: Dr Yin Foong

PROJECT: 545 Queen Street
SUBJECT: Excavator Operator Wesley Gudgeon

Dear Sir,

This letter serves as confirmation that the excavator operator, Mr Wesley Gudgeon, who was exposed to the contaminates in question, has been back at work since Thursday the 16th of August 2007.

The incident occurred in the afternoon of Friday the 10th of August, meaning that Mr Gudgeon missed a total of 3 working days as the 15th of August was the Exhibition Public Holiday.

Mr Wesley Gudgeon has advised Hutchinson Builders that no follow up medical observation was necessary.

If you require any additional information do not hesitate to contact the undersigned.

Yours faithfully,
For and on behalf of
J HUTCHINSON PTY LTD

sch 4 - signature

Matthew Gaskin
Contract Administrator

cc. John Tyson – APH 545 Queen Street Pty Ltd
cc. Peter Haildey – Hutchinson Builders

ATTN PAUL WATT

FAXED

FORM 3

V3.2.98

QUEENSLAND GOVERNMENT

INCIDENT RECORD/REPORT

WORKPLACE HEALTH AND SAFETY ACT 1988

Type of Incident: ☐ work injury ☐ serious bodily injury ☒ work caused illness ☐ dangerous event Notify Workplace Health and Safety ☒ Yes ☐ No Was injury/illness fatal? ☐ Yes ☒ No			
Details of injured person			
Given names		Surname	
WESLEY		GUDGEON	
Residential Address		D.O.B.	
		☒ Male ☐ Female	
Basis of employment		Type of employment	
Full time ☐ Part time ☐ Casual ☒ Volunteer ☐ Member of public ☐ Other ☐ Self-employed ☐		Occupation ☒ <u>MACHINE OPERATOR</u> Administration ☐ Tradesperson ☐ Apprentice/trainee ☐ Technical ☐ Professional ☐ Student ☐ Other ☐	
Nature of work injury or work caused illness, eg. Fracture, sprain & strain, burns etc <u>EXPOSURE TO NOXIOUS FUMES</u>			
Bodily location of injury or work caused illness <u>RESPIRATORY SYSTEM + RASH TO FACE</u>			
Medical treatment nil ☐ first aid ☐ doctor only ☒ Hospital admitted to: <u>HOSPITAL VISIT on SUNDAY</u>			
Mechanism of injury/disease <u>Cannot treat properly until results of toxicity test on soil</u>			
Falls, trips and slips ☐ Sound and pressure ☐ Biological factors ☐ Hitting objects with part of body ☐ Body stressing ☐ Mental stress ☐ Heat radiation and electricity ☐ Chemicals and other substance ☒ Other and unspecified mechanisms of injury ☐			
Agency of injury/disease			
Machinery and (mainly) fixed plant ☐ Mobile plant and transport ☒ Animal, human and biological agencies ☐ Powered equipment, tools and appliances ☐ Non-powered handtools, appliances and equipment ☐ Environmental agencies ☐ Chemicals and chemical products ☐ Materials and substances ☐ Other and unspecified agencies ☐			
Details of how incident occurred			
Day <u>10</u> Month <u>8</u> Year <u>07</u>		Time of incident: ☐ 1 ☐ 2 ☐ 3 ☐ 4 am/pm	
Description of incident (Attach report) <u>EXPOSED TO NOXIOUS FUMES</u>			
<u>WHILST EXCAVATING SUB-STATION CABLE TRENCH</u>			
Name of employer/principal contractor		Location address of workplace where incident occurred	
K. D. ANDERSON HUTCHINSON Bros		Area 2 - SAS	
Address of employer/principal contractor		Address of workplace where incident occurred	
584 MILTON RD TOOWONG		QUEEN ST, BRISBANE	
Name of W.H.S.O.		sch 4 - mobile phone	
MARK SUMON			
And phone No. (if any)		Phone (sch 4 - mobile phone)	
Employer/Principal Contractor Signature		sch 4 - signature	
Day <u>13</u> Month <u>8</u> Year <u>07</u>			
OFFICE USE ONLY			
District Reference		Action	
Plant No.			
Date: Day Month Year			
Workplace/Construction Workplace No.			

* This report will be re-issued
Report.

sch 4 - signature

6

INCIDENT REPORT FORM

Page 1/2

TYPE OF INCIDENT

fatality	serious injury	dangerous event	equipment damage
work caused illness or incapacity	serious electrical event	first aid incident	near miss incident

PROJECT DETAILS (if applicable)

Workplace or Project **545 QUEEN ST.**

Site Address **AS ABOVE.**

INJURED PARTY DETAILS (if applicable)

Surname **GUDGEON** Given Name(s) **WESLEY.**

Contact Address sch 4 - personal information

Contact Number **D.O.B. sch 4 - personal information**

Employed by

INCIDENT DETAILS

Time **12.30 pm** Date **10.8.07.**

Location of Incident (i.e. where on site?) **Area 2 - Cnr Macrossan + Adelaide St.**

Brief Incident description **Exposure to Noxious Fumes whilst excavating for sub-station cable trench.**

Nature of Injury **Exposure to Noxious Fumes.**

Bodily Location **Respiratory System + rash to face.**

Medical Treatment Required

NIL	Ambulance
First Aid ONLY	Admitted to Hospital
Doctor ONLY ☒	

On site First Aid Treatment Administered **No - told only to wash face + hands + to drink water to dilute.**

Describe the sequence of events in relation to the incident (attach additional documentation if required)

Whilst excavating in reasonably hard rock, a smell was detected. Only mild at first, but increased quite alarmingly on increase of depth of excavation. They stopped work and notified Hutchinson staff.

* Work halted immediately + area cordoned off.

What factors do you believe contributed to the incident?

Nil.

INCIDENT REPORT FORM

Page 2/2

EQUIPMENT DAMAGE

Did any property damage occur: ☐ Yes ☒ No ☐ Estimated Cost: \$

IF YES, Describe Type of Equipment: Owner:

ADDITIONAL FACTORS

What qualifications applicable to the work were held?

Who was supervising the work?

List relevant work method statements developed.

List any relevant training undertaken.

If subcontractor list the date the WMS was submitted?

Other (specify):

WITNESS DETAILS

Other persons involved:

Name	<input type="text"/>	Phone	<input type="text"/>	Statement	☐ Yes ☐ No
Name	<input type="text"/>	Phone	<input type="text"/>	Statement	☐ Yes ☐ No

Were photographs taken: ☐ Yes ☐ No By Whom:

Was the scene disturbed in any way after the incident? ☐ Yes ☒ No

If YES, How?

ACTION TAKEN TO PREVENT RECURRENCE

Action	Date Completed	Signed
1. On advise from Soil tester, wearing of		
2. appropriate face masks will eliminate		
3. risk but no access will be allowed		
4. until receipt of soil test + recommended procedures		

Supervisor: sch 4 - signature

Manager:

State Authority Notified: ☒ Yes ☐ No

Full Investigation required: ☐ Yes ☒ No

Details:

Additional Comments:

Person who filled out form: sch 4 - signature

Signed: Date: 10.8.07

Site Manager Name: sch 4 - signature

Signed: Date: 10.8.07

To be faxed to Health and Safety Manager within 24 hours of event: (07) 3335 5005

FILE NOTE

URGENT



Queensland Government

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

Enquiries
Telephone
Your reference
Our reference

Annemarie Lewis
(07) 3227 7258

21/8/2007

Added
Site ID 70897

DB
21/8/07

TO: DEBBIE

FROM: KAREN FRANCIS

SUBJECT: 'U' LIST ~~HAZARDOUS CONTAMINANT~~

LOT/PLAN/S L10 RP 185905

PUT IN AS "U"
CHECK CISP
CHECK QVAS

MAKE A NOTE TO CHANGE NOTIFIABLE TO HAZ. ONCE
CHANGED TO NOTIFIABLE

* CREATE FILE
* GIVE BACK TO TAMARA.

Annemarie Lewis
Acting Senior Administration officer (EMR/CLR)

Memorandum



Queensland Government

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

Enquiries
Telephone
Your reference
Our reference

Tamara Emms
(07) 3227 7667

~~22 May 2007~~ 21 AUGUST 2007

To: Karen Francis
From: Tamara Emms, Environmental Officer
Subject: URGENT EMR Listing – 545 Queen St, Brisbane

Hi Karen,

Can you please list the site below on the EMR:

Lot 10 on RP185905

With the following contaminants:

Xylene – average concentration 22.7 mg/kg

Benzene – average concentration 33.4 mg/kg

Toluene – average concentration 1.85 mg/kg

Total BTEX – 57.95 mg/kg

Naphthalene – maximum concentration 49.8 mg/kg

sch 4 - signature

Tamara Emms
Environmental Officer

File note of meeting/discussion

☒ Meeting ☐ Telephone

Date: 17/8/07 Time: 2pm

Between Miguel Zavaleta-Romero and Tamara Emms of EPA W&A
And Matthee Gaskin and Peter Haidley of Hutchinson Builders

Subject: Lot 10 on RP185905 – 545 Queen St

A call was received at approximately 3pm on Friday 10/8/07 from Matthew Gaskin (MG) from Hutchinson Builders regarding an incident with a noxious gas being released from bedrock during excavation in the south eastern corner of the above site (see attached incident report form). The site was then closed for further investigation. At this time Jacob Cumpstay (JC) from Douglas Partners was contacted by MG for initial soil sampling. The results of these samples were obtained on Thursday 16/8/07 showing elevated levels of naphthalene and xylene (TBD mg/kg). Greg O'Brien (GO) from the EPA was consulted on the site as GO was involved in the gasworks sites adjacent to the site in question. There was some confusion as to why this site was not on the EMR until it was suggested that the contaminated had migrated onto the site from adjacent contaminated sites and that the site in question was never part of the original gasworks site. This theory needs to be confirmed. (No gasworks was identified in the surrounding lots across the streets)

The site is currently being refurbished into office space with the south east corner to be the position for an Energex transformer station. The building is not to be demolished but a number of deep piers are intended on the site.

Miguel Zavaleta (MZ) and Tamara Emms (TE) visited the site on Friday 17/8/07 at 2pm to discuss the incident, current site management and proposed works. Work was still continuing on other areas of the site. The area under investigation required a retaining wall to be constructed due to the depth of the excavation and the potential for the street scape to collapse. Workers involved in this construction were appropriately outfitted in PPE including respirators, protective eyewear, coveralls and gloves. The stormwater drain had also be disconnected from the mains to ensure no contamination migrated off site through this route.

The area of concern is approx 50 m² nearby the east corner of the site which is formed by the intersection of Adelaide Street and Macrossan St. The release occurred when excavation was conducted on the bed rock, at approx 1.5 -2.5 mbgl of Macrossan St.

It was determined that Douglas Partners had appointed Yin Foong (YF) as a TPR for the site and investigation will be conducted in accordance with the TPR recommendation. MZ at this point advised MG and PH that a TPR should be appointed by the EPA and the likely point of contact was GO.

During conversations with JC, it was proposed that the site was to be listed on the EMR. TE contacted JC at 12.34pm on 20/8/07 to confirm if this had occurred.

H:\Contaminated Land\Tamaral\Gasworks\545 Queen St (Gasworks) File note of meeting2.doc

HUTCHINSON
BUILDERS
Established 1912

J. HUTCHINSON PTY LTD
A.B.N. 52 009 778 330
584 Milton Road (Cnr Sylvan Rd)
Toowong Qld 4066

MATTHEW GASKIN
Contract Administrator

Mobil sch 4 - mobile phor

Telephone (07) 3335 5000

Facsimile (07) 3335 5005

Email: mgaskin@hutchinsonbuilders.com.au

www.hutchinsonbuilders.com.au

HUTCHINSON
BUILDERS
Established 1912

J. HUTCHINSON PTY LTD
A.B.N. 52 009 778 330
584 Milton Road (Cnr Sylvan Rd)
Toowong Qld 4066

PETER HAIDLEY
Site Manager

Mobil sch 4 - mobile pl

Telephone (07) 3335 5000

Facsimile (07) 3335 5005

Email: phaidley@hutchinsonbuilders.com.au

www.hutchinsonbuilders.com.au

FAXED

Page 1/2

INCIDENT REPORT FORM

TYPE OF INCIDENT

fatality	serious injury	dangerous event	equipment damage
work caused illness or incapacity	serious electrical event	first aid incident	near miss incident

PROJECT DETAILS (if applicable)

Workplace or Project **545 QUEEN ST.**

Site Address **AS ABOVE.**

INJURED PARTY DETAILS (if applicable)

Surname **GUDGEON** Given Name(s) **WESLEY.**

Contact Address

Contact Number D.O.B.

Employed by

INCIDENT DETAILS

Time **12.30 pm** Date **10.8.07.**

Location of Incident (i.e. where on site?) **Area 2 - Cnr Macrossan + Adelaide St.**

Brief Incident description **Exposure to Noxious Fumes whilst excavating for sub-station cable trench.**

Nature of Injury **Exposure to Noxious Fumes.**

Bodily Location **Respiratory System + rash to face.**

Medical Treatment Required
 NIL Ambulance
 First Aid ONLY Admitted to Hospital
 Doctor ONLY ☒

On site First Aid Treatment Administered **No - told only to wash face + hands + to drink water to dilute.**

Describe the sequence of events in relation to the incident (attach additional documentation if required)

Whilst excavating in reasonably hard rock, a smell was detected. Only mild at first, but increased quite alarmingly on increase of depth of excavation. They stopped work and notified Hutchinson staff.
 * Work halted immediately + area cordoned off.

What factors do you believe contributed to the incident?

Nil.

INCIDENT REPORT FORM

FAXED Page 2/2

EQUIPMENT DAMAGE

Did any property damage occur:

Yes

No ☒

Estimated Cost:

\$ —

IF YES, Describe Type of Equipment

—

Owner:

—

ADDITIONAL FACTORS

What qualifications applicable to the work were held?

Excavator license

Who was supervising the work?

Ken Anderson Demolitions

List relevant work method statements developed.

N/A - UNUSUAL OCCURENCE.

List any relevant training undertaken.

—

If subcontractor list the date the WMS was submitted?

—

Other (specify):

SWMS's will be drawn up on receipt of toxicity Report.

WITNESS DETAILS

Other persons involved:

Name

Phone

Statement

Yes

No

Name

Phone

Statement

Yes

No

Were photographs taken:

Yes

No

By Whom:

Was the scene disturbed in any way after the incident?

Yes

No ☒

If YES, How?

ACTION TAKEN TO PREVENT RECURRENCE

	Action	Date Completed	Signed
1.	On advise from Soil tester, wearing of		
2.	appropriate face masks will eliminate		
3.	risk, but no access will be allowed		
4.	until receipt of soil test + recommended procedures		

sch 4 - signature

Supervisor:

sch 4 - signature

Manager:

State Authority Notified:

Yes ☒

No

Details:

Full investigation required:

Yes

No ☒

Additional Comments:

Person who filled out form:

GARY TURNER

Site Manager Name:

G. Turner for PETER HANDLEY

Signed

sch 4 - signature

Date: 10.6.07

Signed

sch 4 - signature

Date: 10.6.07.

To be faxed to Health and Safety Manager within 24 hours of event: (07) 3335 5005

ATTN PAUL WATT

FAXED

FORM 3

V3.2.98

QUEENSLAND GOVERNMENT

INCIDENT RECORD/REPORT

WORKPLACE HEALTH AND SAFETY ACT 1995

Type of Incident:

☐ work injury ☐ serious bodily injury ☒ work caused illness ☐ dangerous event
Notify Workplace Health and Safety ☒ Yes ☐ No
Was injury/illness fatal? ☐ Yes ☒ No

Details of injured person

Given names	WESLEY	Surname	GUDGEON.
Residential Address		D.O.B	
		☒ Male ☐ Female	

Basis of employment

Full time ☐ Part time ☐
Casual ☒ Volunteer ☐
Member of public ☐ Other ☐
Self-employed ☐

Type of employment

Occupation MACHINE OPERATOR
Administration ☐ Tradesperson ☐ Apprentice/trainee ☐
Technical ☐ Professional ☐ Student ☐
Other ☐

Nature of work injury or work caused illness, eg. Fracture, sprain & strain, burns etc EXPOSURE TO NOXIOUS FUMES

Bodily location of injury or work caused illness

Medical treatment nil ☐ first aid ☐ doctor only ☒

RESPIRATORY SYSTEM RASH TO FACE.

Hospital admitted to: HOSPITAL VISIT ON SUNDAY
(if overnight)

Mechanism of injury/disease

Falls, trips and slips ☐ Sound and pressure ☐
Hitting objects with part of body ☐ Body stressing ☐ Mental stress ☐
Heat radiation and electricity ☐ Chemicals and other substance ☐ Other and unspecified mechanisms of injury ☒
Cannot treat properly until results of toxicity test on soil.

Agency of injury/disease

Machinery and (mainly) fixed plant ☐ Mobile plant and transport ☒ Animal, human and biological agencies ☐
Powered equipment, tools and appliances ☐ Non-powered handtools, appliances and equipment ☐ Environmental agencies ☐
Chemicals and chemical products ☐ Materials and substances ☐ Other and unspecified agencies ☐

Details of how incident occurred

Day 10 Month 8 Year 07 Time of incident: ☐ 1 ☒ 2 ☐ 3 ☐ am/pm

Description of incident (Attach report) EXPOSED TO NOXIOUS FUMES

WHILST EXCAVATING SUB-STATION CABLE TRENCH

Name of employer/ principal contractor

K. O. ANDERSON
HUTCHINSON Bros

Address of employer/principal contractor

584 MILTON RD
TOOWONG

Location address of workplace where incident occurred

(Area 2-) 545
QUEEN ST, BRISBANE

Name of W.H.S.O And phone No. (if any)

MARK SUTTON

sch 4 - mobile phone

Phone (

sch 4 - mobile phone

Employer/Principal Contractor Signature

sch 4 - signature

Day 13 Month 8 Year 07.

OFFICE USE ONLY

District Reference ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Plant No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Date: Day Month Year

Workplace/Construction Workplace No. ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Action

* This report will be re-issued on receipt of soil toxicity Report.

sch 4 - signature

GARY S TURNER

sch 4 - mobile phone

SITE MANAGER.


CERTIFICATE OF ANALYSIS

<i>Client</i>	: DOUGLAS PARTNERS PTY LTD	<i>Laboratory</i>	: Environmental Division Brisbane	<i>Page</i>	: 1 of 12
<i>Contact</i>	: MR JACOB CUMPSTAY	<i>Contact</i>	: Tim Kilmister	<i>Work Order</i>	: EB0708924
<i>Address</i>	: 439 MONTAGUE ROAD WEST END QLD AUSTRALIA 4101	<i>Address</i>	: 32 Shand Street Stafford QLD Australia 4053		
<i>E-mail</i>	: cumpstayj@douglaspartners.com.au	<i>E-mail</i>	: Services.Brisbane@alsenviro.com		
<i>Telephone</i>	: 32378900	<i>Telephone</i>	: +61-7-3243 7222		
<i>Facsimile</i>	: 32378999	<i>Facsimile</i>	: +61-7-3243 7218		
<i>Project</i>	: 47365	<i>Quote number</i>	: EN/020/07	<i>Date received</i>	: 10 Aug 2007
<i>Order number</i>	: 66762			<i>Date issued</i>	: 17 Aug 2007
<i>C-O-C number</i>	: - Not provided -			<i>No. of samples</i>	- Received : 6
<i>Site</i>	: QUEEN STREET				Analysed : 6

ALSE - Excellence in Analytical Testing


NATA Accredited Laboratory
825

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

Accredited for compliance with
ISO/IEC 17025.

This document has been electronically signed by those names that appear on this report and are the authorised signatories. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatory</i>	<i>Position</i>	<i>Department</i>
Carsten Emrich	Senior Organic Chemist	Organics - NATA 825 (818 - Brisbane)
Kim McCabe	Senior Inorganic Chemist	Inorganics - NATA 825 (818 - Brisbane)

Comments

This report for the ALSE reference EB0708924 supersedes any previous reports with this reference. Results apply to the samples as submitted. All pages of this report have been checked and approved for release.

This report contains the following information:

- Analytical Results for Samples Submitted
- Surrogate Recovery Data

The analytical procedures used by ALS Environmental have been developed from established internationally-recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported herein. Reference methods from which ALSE methods are based are provided in parenthesis.

When moisture determination has been performed, results are reported on a dry weight basis. When a reported 'less than' result is higher than the LOR, this may be due to primary sample extracts/digestion dilution and/or insufficient sample amount for analysis. Surrogate Recovery Limits are static and based on USEPA SW846 or ALS-QW/EN38 (in the absence of specified USEPA limits). Where LOR of reported result differ from standard LOR, this may be due to high moisture, reduced sample amount or matrix interference. When date(s) and/or time(s) are shown bracketed, these have been assumed by the laboratory for process purposes. Abbreviations: CAS number = Chemical Abstract Services number, LOR = Limit of Reporting. * Indicates failed Surrogate Recoveries.

Specific comments for Work Order EB0708924

EP066, EP068: Poor matrix spike recovery due to matrix interference.

EG005T: EB0708924-002 (2) & EB0708921-012 duplicate failed due to sample heterogeneity. EB0708924-003 (3) matrix spike failed due to sample matrix interference. Matrix spike results have been confirmed through redigestion and analysis.

Page Number : 3 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EA002 : pH (Soils)								
pH Value		0.1	pH Unit	9.7	9.1	9.2	6.8	6.4
EA055: Moisture Content								
Moisture Content (dried @ 103°C)		1.0	%	2.2	3.2	6.6	6.8	3.8
EG005T: Total Metals by ICP-AES								
Aluminium	7429-90-5	50	mg/kg	5280	—	—	—	—
Antimony	7440-36-0	5	mg/kg	<5	—	—	—	—
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	8
Barium	7440-39-3	10	mg/kg	20	—	—	—	—
Beryllium	7440-41-7	1	mg/kg	<1	—	—	—	—
Boron	7440-42-8	50	mg/kg	<50	—	—	—	—
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	18	24	67	60	10
Cobalt	7440-48-4	2	mg/kg	9	—	—	—	—
Copper	7440-50-8	5	mg/kg	7	27	45	34	37
Iron	7439-89-6	50	mg/kg	12900	—	—	—	—
Lead	7439-92-1	5	mg/kg	<5	<5	5	<5	7
Manganese	7439-96-5	5	mg/kg	440	—	—	—	—
Molybdenum	7439-98-7	2	mg/kg	<2	—	—	—	—
Nickel	7440-02-0	2	mg/kg	14	26	58	42	12
Selenium	7782-49-2	5	mg/kg	<5	—	—	—	—
Silver	7440-22-4	2	mg/kg	<2	—	—	—	—
Strontium	7440-24-6	2	mg/kg	<2	—	—	—	—
Tin	7440-31-5	5	mg/kg	<5	—	—	—	—
Vanadium	7440-62-2	5	mg/kg	10	—	—	—	—
Zinc	7440-66-6	5	mg/kg	31	39	51	35	49
Calcium	7440-70-2	50	mg/kg	1460	—	—	—	—
Magnesium	7439-95-4	50	mg/kg	3560	—	—	—	—
Sodium	7440-23-5	50	mg/kg	600	—	—	—	—
Potassium	7440-09-7	50	mg/kg	570	—	—	—	—
Sulphur as S	63705-05-5	50	mg/kg	<50	—	—	—	—
Phosphorus	7723-14-0	50	mg/kg	670	—	—	—	—
Titanium	7440-32-6	10	mg/kg	<10	—	—	—	—
Thallium	7440-28-0	5	mg/kg	<5	—	—	—	—
EG035T: Total Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls		0.10	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10

Page Number : 4 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

A Campbell Brothers Limited Company

Page Number : 5 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample
 Sample Matrix Type / Description
 Sample Date /

Laboratory Sample

m xylene - 22.65
m benzene - 33.35
m toluene - 1.85
 naphthalene max 49.8

Analyte	CAS number	LOR	Unit	3 SOIL 10 Aug 2007 15:00 EB0708924-003	4 SOIL 10 Aug 2007 15:00 EB0708924-004	5 SOIL 10 Aug 2007 15:00 EB0708924-005
EP068B: Organophosphorus Pesticides (OP)						
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05
EP074A: Monocyclic Aromatic Hydrocarbons						
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	---
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	---
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	---
meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	<0.5	---
	106-42-3			9.0	23.2	---
Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	---
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	---
Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	---
n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	---
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	---
sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	---
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	---
tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	---
p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	---
n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	---
EP074B: Oxygenated Compounds						
Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	---
2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	---
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	---
2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	---
EP074C: Sulfonated Compounds						
Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	---
EP074D: Fumigants						
2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	---
1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	---
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	---
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	---
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	---
EP074E: Halogenated Aliphatic Compounds						
Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	---
Chloromethane	74-87-3	5	mg/kg	<5	<5	---
Vinyl chloride	75-01-4	5	mg/kg	<5	<5	---

Page Number : 6 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EP074E: Halogenated Aliphatic Compounds								
Bromomethane	74-83-9	5	mg/kg	<5	<5	<5	<5	---
Chloroethane	75-00-3	5	mg/kg	<5	<5	<5	<5	---
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	<5	<5	---
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---

A Campbell Brothers Limited Company

Page Number : 7 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EP074G: Trihalomethanes								
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	—
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	—
Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	—
EP074H: Naphthalene								
Naphthalene	91-20-3	5	mg/kg	<5	<5	151	235	—
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2.0	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	3.8	<0.5	9.4	49.8	0.6
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg	2.2	<0.5	<0.5	3.0	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	1.5	<0.5	<0.5	2.9	<0.5
Pyrene	129-00-0	0.5	mg/kg	1.1	<0.5	<0.5	2.4	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	0.8	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	0.7	<0.5
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	<0.5	0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	138	121	177	142	146

Page Number : 8 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Analytical Results

Client Sample ID :				1	2	3	4	5
Sample Matrix Type / Description :				SOIL	SOIL	SOIL	SOIL	SOIL
Sample Date / Time :				10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00	10 Aug 2007 15:00
Laboratory Sample ID :				EB0708924-001	EB0708924-002	EB0708924-003	EB0708924-004	EB0708924-005
Analyte	CAS number	LOR	Units					
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.1	%	56.1	77.6	70.7	55.6	66.5
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.1	%	76.6	83.2	82.0	76.9	81.3
EP074S: VOC Surrogates								
1,2-Dichloroethane-D4	17060-07-0	0.1	%	100	100	95.4	99.6	---
Toluene-D8	2037-26-5	0.1	%	97.1	95.8	90.3	95.4	---
4-Bromofluorobenzene	460-00-4	0.1	%	81.9	90.5	85.9	90.6	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.1	%	103	102	104	104	102
2-Chlorophenol-D4	93951-73-6	0.1	%	101	101	103	108	95.8
2,4,6-Tribromophenol	118-79-6	0.1	%	94.4	75.6	116	83.8	72.1
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.1	%	110	110	108	114	102
Anthracene-d10	1719-06-8	0.1	%	89.6	112	76.1	108	101
4-Terphenyl-d14	1718-51-0	0.1	%	104	113	87.2	113	105

Page Number : 9 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID : 6
 Sample Matrix Type / Description : SOIL
 Sample Date / Time : 10 Aug 2007 15:00
 Laboratory Sample ID : EB0708924-006

Analyte	CAS number	LOR	Units				
EA002 : pH (Soils)							
pH Value		0.1	pH Unit	7.3			
EA055: Moisture Content							
Moisture Content (dried @ 103°C)		1.0	%	3.6			
EG005T: Total Metals by ICP-AES							
Arsenic	7440-38-2	5	mg/kg	<5			
Cadmium	7440-43-9	1	mg/kg	<1			
Chromium	7440-47-3	2	mg/kg	59			
Copper	7440-50-8	5	mg/kg	10			
Lead	7439-92-1	5	mg/kg	<5			
Nickel	7440-02-0	2	mg/kg	36			
Zinc	7440-66-6	5	mg/kg	38			
EG035T: Total Mercury by FIMS							
Mercury	7439-97-6	0.1	mg/kg	<0.1			
EP066: Polychlorinated Biphenyls (PCB)							
Total Polychlorinated biphenyls		0.10	mg/kg	<0.10			
EP068A: Organochlorine Pesticides (OC)							
alpha-BHC	319-84-6	0.05	mg/kg	<0.05			
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05			
beta-BHC	319-85-7	0.05	mg/kg	<0.05			
gamma-BHC	58-89-9	0.05	mg/kg	<0.05			
delta-BHC	319-86-8	0.05	mg/kg	<0.05			
Heptachlor	76-44-8	0.05	mg/kg	<0.05			
Aldrin	309-00-2	0.05	mg/kg	<0.05			
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05			
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05			
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05			
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05			
Dieldrin	60-57-1	0.05	mg/kg	<0.05			
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05			
Endrin	72-20-8	0.05	mg/kg	<0.05			
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05			
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05			
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05			
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05			
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2			
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05			
Methoxychlor	72-43-5	0.2	mg/kg	<0.2			

Page Number : 10 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID : 6
 Sample Matrix Type / Description : SOIL
 Sample Date / Time : 10 Aug 2007 15:00
 Laboratory Sample ID : EB0708924-006

Analyte	CAS number	LOR	Units				
EP068B: Organophosphorus Pesticides (OP)							
Dichlorvos	62-73-7	0.05	mg/kg	<0.05			
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05			
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2			
Dimethoate	60-51-5	0.05	mg/kg	<0.05			
Diazinon	333-41-5	0.05	mg/kg	<0.05			
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05			
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2			
Malathion	121-75-5	0.05	mg/kg	<0.05			
Fenthion	55-38-9	0.05	mg/kg	<0.05			
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05			
Parathion	56-38-2	0.2	mg/kg	<0.2			
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05			
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05			
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05			
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05			
Prothiofos	34643-46-4	0.05	mg/kg	<0.05			
Ethion	563-12-2	0.05	mg/kg	<0.05			
Carbophenothion	786-19-6	0.05	mg/kg	<0.05			
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05			
EP075(SIM)A: Phenolic Compounds							
Phenol	108-95-2	0.5	mg/kg	<0.5			
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5			
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5			
3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1.0			
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5			
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5			
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5			
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5			
4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5			
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5			
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5			
Pentachlorophenol	87-86-5	2.0	mg/kg	<2.0			
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Naphthalene	91-20-3	0.5	mg/kg	<0.5			
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5			
Acenaphthene	83-32-9	0.5	mg/kg	<0.5			
Fluorene	86-73-7	0.5	mg/kg	<0.5			

A Campbell Brothers Limited Company

Page Number : 11 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



ALS Environmental

Analytical Results

Client Sample ID : 6
 Sample Matrix Type / Description : SOIL
 Sample Date / Time : 10 Aug 2007 15:00
 Laboratory Sample ID : EB0708924-006

Analyte	CAS number	LOR	Units				
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Phenanthrene	85-01-8	0.5	mg/kg	<0.5			
Anthracene	120-12-7	0.5	mg/kg	<0.5			
Fluoranthene	206-44-0	0.5	mg/kg	<0.5			
Pyrene	129-00-0	0.5	mg/kg	<0.5			
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5			
Chrysene	218-01-9	0.5	mg/kg	<0.5			
Benzo(b)fluoranthene	205-99-2	0.5	mg/kg	<0.5			
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5			
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5			
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5			
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5			
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5			
EP066S: PCB Surrogate							
Decachlorobiphenyl	2051-24-3	0.1	%	121			
EP068S: Organochlorine Pesticide Surrogate							
Dibromo-DDE	21655-73-2	0.1	%	78.8			
EP068T: Organophosphorus Pesticide Surrogate							
DEF	78-48-8	0.1	%	81.4			
EP075(SIM)S: Phenolic Compound Surrogates							
Phenol-d6	13127-88-3	0.1	%	91.4			
2-Chlorophenol-D4	93951-73-6	0.1	%	93.3			
2.4.6-Tribromophenol	118-79-6	0.1	%	73.7			
EP075(SIM)T: PAH Surrogates							
2-Fluorobiphenyl	321-60-8	0.1	%	97.5			
Anthracene-d10	1719-06-8	0.1	%	97.1			
4-Terphenyl-d14	1718-51-0	0.1	%	97.7			

Page Number : 12 of 12
 Client : DOUGLAS PARTNERS PTY LTD
 Work Order : EB0708924



Surrogate Control Limits

Matrix Type: SOIL - Surrogate Control Limits

Surrogate Control Limits

Method name	Analyte name	Lower Limit	Upper Limit
EP066: Polychlorinated Biphenyls (PCB)			
EP066S: PCB Surrogate	Decachlorobiphenyl	10	164
EP068: Pesticides by GCMS			
EP068S: Organochlorine Pesticide Surrogate	Dibromo-DDE	10	136
EP068T: Organophosphorus Pesticide Surrogate	DEF	10	110
EP074: Volatile Organic Compounds			
EP074S: VOC Surrogates	1,2-Dichloroethane-D4	80	120
	Toluene-D8	81	117
	4-Bromofluorobenzene	74	121
EP075(SIM): PAH/Phenols (SIM)			
EP075(SIM)S: Phenolic Compound Surrogates	Phenol-d6	24	113
	2-Chlorophenol-D4	23	134
	2,4,6-Tribromophenol	19	122
EP075(SIM)T: PAH Surrogates	2-Fluorobiphenyl	30	115
	Anthracene-d10	27	133
	4-Terphenyl-d14	18	137