



ENVIRONMENTAL INVESTIGATION SERVICES

REPORT

TO

SYDNEY FISH MARKET PTY LTD

ON

**ENVIRONMENTAL SITE ASSESSMENT AND
ACID SULFATE SOIL ASSESSMENT**

FOR

PROPOSED REDEVELOPMENT

AT

**SYDNEY FISH MARKETS, 56-60 PYRMONT BRIDGE
ROAD, PYRMONT, NSW**

VOLUME 2 OF 2

JUNE 2010

REF: E23982Krpt

EXECUTIVE SUMMARY

Conybeare Morrison International Pty Ltd and Reilly Design Group (CM+ & R), acting on behalf of Sydney Fish Market Pty Ltd commissioned Environmental Investigation Services (EIS), a division of Jeffery & Katauskas Pty Ltd (J&K), to undertake an environmental site assessment and acid sulfate soil assessment for the proposed redevelopment at Sydney Fish Markets, 56-60 Pyrmont Bridge Road, Pyrmont, NSW. The investigation area (referred to as 'the site' within this report) is identified as Lot 2 in DP827434, part of Lot 1 in DP734622 and part of Lot 1 in DP836351.

The primary objectives of the investigation were to:

- Assess the potential risk of significant widespread contamination of the site;
- Assess the soil and groundwater contamination conditions at the site in relation to the proposed land use;
- Undertake a waste classification assessment for off-site disposal of excavated soil associated with the proposed development works;
- Assess the soil conditions for acid sulfate soil potential; and
- Prepare a report presenting the results of the assessment/investigation.

The scope undertaken to achieve the objectives generally included a site history assessment including review of: historical aerial photographs; historical land titles records; historical archives held by City of Sydney Council in relation to development applications and building approvals; and review of WorkCover records, search of the on-line DECCW databases regarding notices or licenses, review of regional geology and groundwater conditions, and a limited soil and groundwater investigation in conjunction with the J&K geotechnical assessment.

Samples were obtained from 17 sampling locations (BH501 to BH504 inclusive, BH506 to BH508 inclusive and BH510 to BH519 inclusive) for this investigation. This density is approximately 60% of the minimum sampling density. The boreholes were generally drilled on a systematic grid with a spacing of approximately 40m between sampling points. Monitoring wells were also installed in five boreholes.

A range of fill and natural samples were analysed for heavy metals, total petroleum hydrocarbons (TPH), monocyclic aromatic hydrocarbons (BTEX compounds), polycyclic aromatic hydrocarbons (PAHs), organochlorine and organophosphorus pesticides (OCPs and OPPs), polychlorinated biphenyls (PCBs) and asbestos. Selected fill and natural soil samples from six boreholes were also analysed for acid sulfate soil potential (sPOCAS testing).

The search of historical information has indicated the following:

- The site was leased by the British Imperial Oil Company Ltd and the Shell Company of Australia Ltd from around 1902 to 1930. The Shell Company of Australia continued to lease the site until the early 1960s. Site use during this period has not been confirmed, however it is considered likely that various activities associated with petroleum storage, distribution and possibly oil refining processes were undertaken at the site during this time;
- The 1930 aerial photograph indicated that the site was located within an industrial area. Several large industrial-type buildings and circular storage towers/silos (possibly associated with petroleum storage and/or refinery processes) were located in the south section of the site. The towers/silos and buildings remained at the site until at least 1961;
- The New South Wales Fish Authority progressively leased portions of the site from 1965. These leases were transferred to the Fish Marketing Authority in the early 1970s and leased by various companies associated with the sale and distribution of seafood;
- There are no recorded notices listed on the NSW DECCW CLM or POEO register; and
- WorkCover have no records of UST licenses issued for the site.

Elevated concentrations of contaminants were encountered in the fill soil and groundwater samples obtained during this investigation at concentrations above the adopted site assessment criteria. In summary these included:

- Elevated concentrations of arsenic (1,300mg/kg), Total PAHs (149.7mg/kg) and benzo(a)pyrene (19mg/kg and 5.7mg/kg) in several soil samples obtained from BH504;
- Elevated concentrations of light fraction (C₆-C₉) TPH (ranging from 82mg/kg to 480mg/kg) in soil samples obtained from BH507, BH511 and BH517;
- Elevated concentrations of mid to heavy fraction (C₁₀-C₃₆) TPH (ranging from 1,070mg/kg to 15,370mg/kg) in soil samples obtained from BH503, BH507, BH508, BH511 and BH517;
- Elevated concentrations of mid to heavy fraction (C₁₀-C₃₆) TPH (1.3mg/L), light fraction (C₆-C₉) TPH (0.19mg/L) and oil and grease (57mg/kg) in the groundwater sample obtained from MW517;
- Elevated concentrations of phenanthrene (0.00452mg/L), fluoranthene (0.001mg/L) and total PAHs (0.0163mg/L) in the groundwater sample obtained from MW517.

Potential acid sulfate soils were also identified at the site and were considered to be associated with the natural alluvial soils. An acid sulfate soil management plan will be required prior to commencement of excavation works at the site.

Based on the results of the assessment, remediation and/or management of the site will be required. A remediation action plan (RAP) should be prepared detailing the remediation/management options for the site prior to the commencement of the proposed redevelopment works.

Prior to preparation of the RAP, an additional soil and groundwater investigation should be undertaken. The investigation should include the following:

- Additional soil sampling in the east and south sections of the site in order to meet the minimum sampling density specified by the EPA (now DECCW);
- Additional delineation of the groundwater contamination in the vicinity of BH/MW517 to better assess the contamination conditions encountered. This should include (as a minimum) the installation of three additional groundwater monitoring wells: one in the far south-west corner of the site; one in between BH510 and BH/MW517; and one in the vicinity of BH507. Consideration should also be given to an off-site well located to the west of BH/MW517. The additional groundwater assessment should address the effects of tidal movements on the migration of the groundwater contaminants;
- Additional soil sampling in the vicinity of BH504 to better assess the TPH and arsenic contamination;
- Further detailed analysis should be included to assess the nature of the TPH contamination. This could include a silica gel cleanup of the samples to remove any false positive results that could arise from the presence of fats and oils associated with food processing; and speciation of the hydrocarbons to gain a greater understanding of the potential health impacts of the TPH contamination;
- Ground penetrating radar (GPR) survey of the areas that surround BH/MW517 and BH503 to attempt to identify potential USTs; and
- Further sampling and analysis around BH504 and BH517 in order to attempt to reduce the waste classification from Restricted Solid Waste to General Solid Waste, or minimise the volume of Restricted Solid Waste.

The results of the additional investigation, together with the results of this investigation, should be used to prepare the RAP. A site survey should also be prepared detailing the site boundaries (applicable to this investigation) and included in the RAP.

Based on the scope of work undertaken for this assessment EIS consider that the site can be made suitable for the proposed redevelopment provided that the recommendations made within the report are adequately addressed.

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APPENDIX B

(Laboratory Reports and Chain of Custody Documents)



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CERTIFICATE OF ANALYSIS 40916

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	E23982K, Pyrmont
No. of samples:	14 Soils, 1 Water
Date samples received:	12/05/10
Date completed instructions received:	12/05/10

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

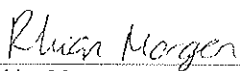
Report Details:

Date results requested by:	19/05/10
Date of Preliminary Report:	Not Issued
Issue Date:	19/05/10

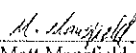
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Tests not covered by NATA are denoted with *.

Results Approved By:


Rhian Morgan
Metals Supervisor


Jacinta Hurst
Laboratory Manager


Matt Mansfield
Chemist

EnviroLab Reference: 40916
Revision No: R 00

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vTPH & BTEX in Soil						
Our Reference:	UNITS	40916-1	40916-2	40916-3	40916-6	40916-7
Your Reference	-----	BH513	BH514	BH514	BH515	BH516
Depth	-----	1.1-1.5	0.5-0.9	1.0-1.45	0.5-0.95	0.5-0.9
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	13/5/10	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	16/5/10	16/5/10	16/5/10	16/5/10	16/5/10
vTPH C6 - C9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	94	91	95	98	90

vTPH & BTEX in Soil					
Our Reference:	UNITS	40916-8	40916-10	40916-11	40916-12
Your Reference	-----	BH516	BH519	Dup1	Dup2
Depth	-----	1.1-1.4	0.5-0.8	-	-
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	16/5/10	16/5/10	16/5/10	16/5/10
vTPH C6 - C9	mg/kg	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	96	86	89	101

Client Reference: E23982K, Pymont

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	40916-1	40916-2	40916-3	40916-6	40916-7
Your Reference	-----	BH513	BH514	BH514	BH515	BH516
Depth	-----	1.1-1.5	0.5-0.9	1.0-1.45	0.5-0.95	0.5-0.9
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date analysed	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
TPH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	<100	<100	190
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	93	96	96	98	118

sTPH in Soil (C10-C36)					
Our Reference:	UNITS	40916-8	40916-10	40916-11	40916-12
Your Reference	-----	BH516	BH519	Dup1	Dup2
Depth	-----	1.1-1.4	0.5-0.8	-	-
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date analysed	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010
TPH C10 - C14	mg/kg	180	<50	<50	230
TPH C15 - C28	mg/kg	540	210	<100	660
TPH C29 - C36	mg/kg	<100	300	<100	<100
Surrogate o-Terphenyl	%	#	104	94	#

Client Reference: E23982K, Pymont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	40916-1 BH513 1.1-1.5 11/05/2010 Soil	40916-2 BH514 0.5-0.9 11/05/2010 Soil	40916-3 BH514 1.0-1.45 11/05/2010 Soil	40916-6 BH515 0.5-0.95 11/05/2010 Soil	40916-7 BH516 0.5-0.9 11/05/2010 Soil
Date extracted	-	13/5/10	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	14/5/10	14/5/10	14/5/10	14/5/10	14/5/10
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	2.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	0.1	<0.1	<0.1	0.3
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	0.4	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	0.4	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	0.2	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	0.3	<0.1	<0.1	0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	0.4	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	0.2	<0.05	<0.05	0.07
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.1	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	115	111	120	111	108

Client Reference: E23982K, Pyrmont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	40916-8 BH516 1.1-1.4 11/05/2010 Soil	40916-10 BH519 0.5-0.8 11/05/2010 Soil	40916-11 Dup1 - 11/05/2010 Soil	40916-12 Dup2 - 11/05/2010 Soil
Date extracted	-	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	14/5/10	14/5/10	14/5/10	14/5/10
Naphthalene	mg/kg	1.0	<0.1	<0.1	0.7
Acenaphthylene	mg/kg	<0.1	0.3	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.2	<0.1	<0.1	0.3
Phenanthrene	mg/kg	0.4	1.9	<0.1	0.5
Anthracene	mg/kg	<0.1	0.4	<0.1	<0.1
Fluoranthene	mg/kg	0.1	4.1	<0.1	<0.1
Pyrene	mg/kg	0.1	4.6	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	1.9	<0.1	<0.1
Chrysene	mg/kg	0.1	2.1	<0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	2.9	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.08	2.2	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	1.0	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	1.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	109	113	109	117

Client Reference: E23982K, Pymont

Organochlorine Pesticides in soil		40916-1	40916-2	40916-6	40916-7	40916-10
Our Reference:	UNITS	BH513	BH514	BH515	BH516	BH519
Your Reference	-----	1.1-1.5	0.5-0.9	0.5-0.95	0.5-0.9	0.5-0.8
Depth	-----	11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date analysed	-	18/05/2010	18/05/2010	18/05/2010	18/05/2010	18/05/2010
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	13
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	19
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	12
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	110	111	108	110	116

Organochlorine Pesticides in soil		
Our Reference:	UNITS	40916-11
Your Reference	-----	Dup1
Depth	-----	-
Date Sampled		11/05/2010
Type of sample		Soil
Date extracted	-	13/05/2010
Date analysed	-	18/05/2010
HCB	mg/kg	<0.1
alpha-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Surrogate TCLMX	%	110

Client Reference: E23982K, Pymont

Organophosphorus Pesticides						
Our Reference:	UNITS	40916-1	40916-2	40916-6	40916-7	40916-10
Your Reference	-----	BH513	BH514	BH515	BH516	BH519
Depth	-----	1.1-1.5	0.5-0.9	0.5-0.95	0.5-0.9	0.5-0.8
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date analysed	-	18/05/2010	18/05/2010	18/05/2010	18/05/2010	18/05/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	110	111	108	110	116

Organophosphorus Pesticides		
Our Reference:	UNITS	40916-11
Your Reference	-----	Dup1
Depth	-----	-
Date Sampled		11/05/2010
Type of sample		Soil
Date extracted	-	13/05/2010
Date analysed	-	18/05/2010
Diazinon	mg/kg	<0.1
Dimethoate	mg/kg	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1
Ronnel	mg/kg	<0.1
Chlorpyrifos	mg/kg	<0.1
Fenitrothion	mg/kg	<0.1
Bromophos-ethyl	mg/kg	<0.1
Ethion	mg/kg	<0.1
Surrogate TCLMX	%	110

Client Reference: E23982K, Pyrmont

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	40916-1 BH513 1.1-1.5 11/05/2010 Soil	40916-2 BH514 0.5-0.9 11/05/2010 Soil	40916-6 BH515 0.5-0.95 11/05/2010 Soil	40916-7 BH516 0.5-0.9 11/05/2010 Soil	40916-10 BH519 0.5-0.8 11/05/2010 Soil
Date extracted	-	13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date analysed	-	18/05/2010	18/05/2010	18/05/2010	18/05/2010	18/05/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	110	111	108	110	116

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	40916-11 Dup1 - 11/05/2010 Soil
Date extracted	-	13/05/2010
Date analysed	-	18/05/2010
Arochlor 1016	mg/kg	<0.1
Arochlor 1221*	mg/kg	<0.1
Arochlor 1232	mg/kg	<0.1
Arochlor 1242	mg/kg	<0.1
Arochlor 1248	mg/kg	<0.1
Arochlor 1254	mg/kg	<0.1
Arochlor 1260	mg/kg	<0.1
Surrogate TCLMX	%	110

Client Reference: E23982K, Pyrmont

Acid Extractable metals in soil						
Our Reference:	UNITS	40916-1	40916-2	40916-3	40916-6	40916-7
Your Reference	-----	BH513	BH514	BH514	BH515	BH516
Depth	-----	1.1-1.5	0.5-0.9	1.0-1.45	0.5-0.95	0.5-0.9
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	14/05/10	14/05/10	14/05/10	14/05/10	14/05/10
Date analysed	-	17/05/10	17/05/10	17/05/10	17/05/10	17/05/10
Arsenic	mg/kg	<4	5	<4	<4	5
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	5	14	8	8	25
Copper	mg/kg	6	16	7	13	31
Lead	mg/kg	24	45	21	31	85
Mercury	mg/kg	<0.1	0.4	<0.1	0.1	0.2
Nickel	mg/kg	1	4	6	3	25
Zinc	mg/kg	5	41	44	31	280

Acid Extractable metals in soil					
Our Reference:	UNITS	40916-8	40916-10	40916-11	40916-12
Your Reference	-----	BH516	BH519	Dup1	Dup2
Depth	-----	1.1-1.4	0.5-0.8	-	-
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date digested	-	14/05/10	14/05/10	14/05/10	14/05/10
Date analysed	-	17/05/10	17/05/10	17/05/10	17/05/10
Arsenic	mg/kg	<4	9	<4	<4
Cadmium	mg/kg	<0.5	0.7	<0.5	<0.5
Chromium	mg/kg	10	40	6	11
Copper	mg/kg	3	94	17	6
Lead	mg/kg	16	180	19	18
Mercury	mg/kg	<0.1	0.9	<0.1	<0.1
Nickel	mg/kg	2	36	2	3
Zinc	mg/kg	40	190	11	52

Client Reference: E23982K, Pyrmont

Moisture						
Our Reference:	UNITS	40916-1	40916-2	40916-3	40916-6	40916-7
Your Reference	-----	BH513	BH514	BH514	BH515	BH516
Depth	-----	1.1-1.5	0.5-0.9	1.0-1.45	0.5-0.95	0.5-0.9
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	13/5/10	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	13/5/10	13/5/10	13/5/10	13/5/10	13/5/10
Moisture	%	20	12	11	15	15

Moisture					
Our Reference:	UNITS	40916-8	40916-10	40916-11	40916-12
Your Reference	-----	BH516	BH519	Dup1	Dup2
Depth	-----	1.1-1.4	0.5-0.8	-	-
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	13/5/10	13/5/10	13/5/10	13/5/10
Date analysed	-	13/5/10	13/5/10	13/5/10	13/5/10
Moisture	%	11	15	23	16

Client Reference: E23982K, Pyrmont

Asbestos ID - soils						
Our Reference:	UNITS	40916-1	40916-2	40916-3	40916-6	40916-7
Your Reference	-----	BH513	BH514	BH514	BH515	BH516
Depth	-----	1.1-1.5	0.5-0.9	1.0-1.45	0.5-0.95	0.5-0.9
Date Sampled		11/05/2010	11/05/2010	11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Sample Description	-	Approx 30g Soil & Sand	Approx 30g Soil & Sand	Approx 30g Soil & Sand	Approx 30g Soil & Sand	Approx 30g Soil & Sand
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils		
Our Reference:	UNITS	40916-10
Your Reference	-----	BH519
Depth	-----	0.5-0.8
Date Sampled		11/05/2010
Type of sample		Soil
Date analysed	-	17/5/10
Sample Description	-	Approx 30g Soil & Sand
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected

Client Reference: E23982K, Pyrmont

vTPH & BTEX in Water				
Our Reference:	UNITS	40916-13	40916-14	40916-15
Your Reference	-----	TB1	Trip Spike 1	Rinsate 1
Depth	-----	-	-	-
Date Sampled		11/05/2010	11/05/2010	11/05/2010
Type of sample		Soil	Soil	Water
Date extracted	-	16/5/10	16/5/10	16/5/10
Date analysed	-	16/5/10	16/5/10	16/5/10
TPH C ₆ - C ₉	µg/L	[NA]	[NA]	<10
Benzene	µg/L	<1.0	88%	<1.0
Toluene	µg/L	<1.0	98%	<1.0
Ethylbenzene	µg/L	<1.0	89%	<1.0
m+p-xylene	µg/L	<2.0	89%	<2.0
o-xylene	µg/L	<1.0	89%	<1.0
Surrogate Dibromofluoromethane	%	115	105	120
Surrogate toluene-d8	%	99	107	98
Surrogate 4-BFB	%	96	97	93

Client Reference: E23982K, Pymont

sTPH in Water (C10-C36)		
Our Reference:	UNITS	40916-15
Your Reference	-----	Rinsate 1
Depth	-----	-
Date Sampled		11/05/2010
Type of sample		Water
Date extracted	-	14/05/2010
Date analysed	-	14/05/2010
TPH C10 - C14	µg/L	200
TPH C15 - C28	µg/L	740
TPH C29 - C36	µg/L	<100
Surrogate o-Terphenyl	%	97

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PAHs in Water		
Our Reference:	UNITS	40916-15
Your Reference	-----	Rinsate 1
Depth	-----	-
Date Sampled		11/05/2010
Type of sample		Water
Date extracted	-	14/5/10
Date analysed	-	14/5/10
Naphthalene	µg/L	<1
Acenaphthylene	µg/L	<1
Acenaphthene	µg/L	<1
Fluorene	µg/L	<1
Phenanthrene	µg/L	<1
Anthracene	µg/L	<1
Fluoranthene	µg/L	<1
Pyrene	µg/L	<1
Benzo(a)anthracene	µg/L	<1
Chrysene	µg/L	<1
Benzo(b+k)fluoranthene	µg/L	<2
Benzo(a)pyrene	µg/L	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1
Dibenzo(a,h)anthracene	µg/L	<1
Benzo(g,h,i)perylene	µg/L	<1
Surrogate p-Terphenyl-d14	%	60

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil						Base II Duplicate II %RPD		
Date extracted	-			13/5/10	[NT]	[NT]	LCS-10	13/5/10
Date analysed	-			16/5/10	[NT]	[NT]	LCS-10	16/5/10
vTPH C6 - C9	mg/kg	25	GC.16	<25	[NT]	[NT]	LCS-10	87%
Benzene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-10	98%
Toluene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-10	78%
Ethylbenzene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-10	74%
m+p-xylene	mg/kg	2	GC.16	<2.0	[NT]	[NT]	LCS-10	93%
o-Xylene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-10	85%
Surrogate aaa-Trifluorotoluene	%		GC.16	104	[NT]	[NT]	LCS-10	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			13/05/2010	[NT]	[NT]	LCS-10	13/05/2010
Date analysed	-			13/05/2010	[NT]	[NT]	LCS-10	13/05/2010
TPH C10 - C14	mg/kg	50	GC.3	<50	[NT]	[NT]	LCS-10	88%
TPH C15 - C28	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-10	101%
TPH C29 - C36	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-10	102%
Surrogate o-Terphenyl	%		GC.3	94	[NT]	[NT]	LCS-10	91%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			13/5/10	[NT]	[NT]	LCS-9	13/5/10
Date analysed	-			14/5/10	[NT]	[NT]	LCS-9	14/5/10
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	113%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	113%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	117%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	112%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	118%
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]

Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-9	110%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	[NT]	[NT]	LCS-9	126%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	102	[NT]	[NT]	LCS-9	112%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			13/05/2010	[NT]	[NT]	LCS-3	13/05/2010
Date analysed	-			18/05/2010	[NT]	[NT]	LCS-3	18/05/2010
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	107%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	109%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	104%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	106%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	110%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	112%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	115%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	113%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	116%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-3	105%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	107	[NT]	[NT]	LCS-3	113%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			13/05/2010	[NT]	[NT]	LCS-3	13/05/2010
Date analysed	-			18/05/2010	[NT]	[NT]	LCS-3	13/05/2010
Diazinon	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-3	110%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-3	97%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-3	112%
Surrogate TCLMX	%		GC.8	107	[NT]	[NT]	LCS-3	113%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			13/05/2010	[NT]	[NT]	LCS-3	13/05/2010
Date analysed	-			18/05/2010	[NT]	[NT]	LCS-3	18/05/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	LCS-3	128%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	107	[NT]	[NT]	LCS-3	81%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			14/05/10	[NT]	[NT]	LCS-3	14/05/10
Date analysed	-			17/05/10	[NT]	[NT]	LCS-3	17/05/10
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	[NT]	[NT]	LCS-3	112%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	[NT]	[NT]	LCS-3	110%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	113%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	116%

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Lead	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	111%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	[NT]	[NT]	LCS-3	95%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	115%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	113%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			13/5/10
Date analysed	-			13/5/10
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Asbestos ID - soils				
Date analysed	-			[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Date extracted	-			16/5/10	[NT]	[NT]	LCS-W1	16/5/10
Date analysed	-			16/5/10	[NT]	[NT]	LCS-W1	16/5/10
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	103%
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	126%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	103%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	97%
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	94%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	93%
Surrogate	%		GC.16	111	[NT]	[NT]	LCS-W1	126%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	104	[NT]	[NT]	LCS-W1	102%
Surrogate 4-BFB	%		GC.16	95	[NT]	[NT]	LCS-W1	91%

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			14/05/2010	[NT]	[NT]	LCS-W1	14/05/2010
Date analysed	-			14/05/2010	[NT]	[NT]	LCS-W1	14/05/2010
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W1	85%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	136%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	100%
Surrogate o-Terphenyl	%		GC.3	87	[NT]	[NT]	LCS-W1	96%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			14/5/10	[NT]	[NT]	LCS-W2	14/5/10
Date analysed	-			14/5/10	[NT]	[NT]	LCS-W2	14/5/10
Naphthalene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	125%
Acenaphthylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	117%
Phenanthrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	117%
Anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	113%
Pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	119%
Benzo(a)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	112%
Benzo(b+k)fluoranthene	µg/L	2	GC.12 subset	<2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	126%
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	109	[NT]	[NT]	LCS-W2	137%

Report Comments:

Total Petroleum Hydrocarbons in soil (semivol):# Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Asbestos was analysed by Approved Identifier: Matt Mansfield

Asbestos was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



EnviroLab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000
Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:
EnviroLab Reference:
Date received:
Date results expected to be reported:

E23982K, Pyrmont
40916
12/05/10
19/05/10

Samples received in appropriate condition for analysis:	YES
No. of samples provided	14 Soils, 1 Water
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

SAMPLE AND CHAIN OF CUSTODY FORM

TO: Envirolab Services Pty Ltd 12 Ashley Street Chatswood NSW 2067 Phone: (02) 99106200 Fax: (02) 99106201 Attention: Aileen	EIS Job Number: E23982K Date Results Required: Standard	FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page
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Sheet 1 / 1

Project: Proposed Redevelopment

Location: Pyrmont

Sampler: AM

Tests Required

Sample Preservation:

In esky on ice

Sampler: AIM

Date Sampled	Lab Ref:	Borehole/ Sample Number	Depth (m)	Sample Container	PID	Sample Description	Heavy Metals (8)	TPH/BTEX	PAH	OC/OP/PCB	Asbestos	TCLP Prep + M6, PAH	Phenols	VOC	sVOC	SPOCAS	BTEX	
11/5/10	1	BH513	1.1/1.5	Glass jar + Asb Bag	0.8	Fill	X	X	X	X	X							
	2	BH514	0.5/0.9	Glass jar + Asb Bag	0	Fill	X	X	X	X	X							
	3		1.0/1.45	Glass jar + Asb Bag	0	Fill	X	X	X		X							
	4		1.5/1.95	Glass jar + Asb Bag	0	Natural												
	5	↓	3.0/3.45	Glass jar + Asb Bag	0	Natural												
	6	BH515	0.5/0.95	Glass jar + Asb Bag	0	Fill	X	X	X	X	X							
	7	BH516	0.5/0.9	Glass jar + Asb Bag	0	Fill	X	X	X	X	X							
	8		1.1/1.4	Glass jar + Asb Bag	57.1	Natural	X	X	X									
	9	↓	1.5/1.95	Glass jar + Asb Bag	14.9	Natural												
	10	BH519	0.5/0.8	Glass jar + Asb Bag	0	Fill	X	X	X	X	X							
	11	Dup 1	-	Glass jar + Asb Bag	-	-	X	X	X	X								
	12	Dup 2	-	Glass jar + Asb Bag	-	-	X	X	X									
	13	TB 1	-	Glass jar + Asb Bag	-	-												X
	14	T-spike 1	-	Glass jar + Asb Bag	-	-												X
↓	15	Rinsck 1	-	2x 1L Anti-2x BTEX	-	Water		X	X									
				Glass jar + Asb Bag														
				Glass jar + Asb Bag														
				Glass jar + Asb Bag														
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Envirolab Services
 12 Ashley St
 Chatswood NSW 2067
 Ph: 9910 6200
 Job No: 40916
 Date received: 12/5/10
 Time received: 2 PM
 Received by: TML
 Temp: Cool Ambient
 Cooling: Ice/Coolpack
 Security: Intact/Broken/None

Remarks (comments/detection limits required):

Relinquished By: <i>B. Page</i>	Date: 12/5/10 Time: 9:30am	Received By: <i>[Signature]</i>	Date: 12/5/10	Relinquished By:	Date: Time:	Received By:
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EnviroLab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 40916-A

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	Additional Testing on 1 Soil
Date samples received:	12/05/10
Date completed instructions received:	21/05/10

Analysis Details:

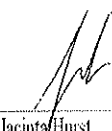
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	28/05/10
Date of Preliminary Report:	Not Issued
Issue Date:	27/05/10

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Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Laboratory Manager

EnviroLab Reference: 40916-A
Revision No: R 00



Metals in TCLP USEPA1311		
Our Reference:	UNITS	40916-A-10
Your Reference	-----	BH519
Depth	-----	0.5-0.8
Date Sampled		11/05/2010
Type of sample		Soil
Date extracted	-	25/05/10
Date analysed	-	26/05/10
pH of soil for fluid# determ.	pH units	9.60
pH of soil for fluid # determ. (acid)	pH units	1.20
Extraction fluid used	-	1
pH of final Leachate	pH units	5.90
Lead in TCLP	mg/L	0.1

PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	40916-A-10
Your Reference	-----	BH519
Depth	-----	0.5-0.8
Date Sampled		11/05/2010
Type of sample		Soil
Date extracted	-	26/5/10
Date analysed	-	27/5/10
Naphthalene in TCLP	mg/L	<0.001
Acenaphthylene in TCLP	mg/L	<0.001
Acenaphthene in TCLP	mg/L	<0.001
Fluorene in TCLP	mg/L	<0.001
Phenanthrene in TCLP	mg/L	<0.001
Anthracene in TCLP	mg/L	<0.001
Fluoranthene in TCLP	mg/L	<0.001
Pyrene in TCLP	mg/L	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001
Chrysene in TCLP	mg/L	<0.001
Benzo(b+k)fluoranthene in TCLP	mg/L	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001
Surrogate p-Terphenyl-d14	%	111

Method ID	Methodology Summary
LAB.4	Toxicity Characteristic Leaching Procedure (TCLP).
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
GC.12 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC.12	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			25/05/10	[NT]	[NT]	LCS-W1	25/05/10
Date analysed	-			26/05/10	[NT]	[NT]	LCS-W1	26/05/10
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			26/5/10	[NT]	[NT]	LCS-W1	26/5/10
Date analysed	-			27/5/10	[NT]	[NT]	LCS-W1	27/5/10
Naphthalene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	79%
Acenaphthylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	82%
Phenanthrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	79%
Anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	70%
Pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	79%
Benzo(a)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	85%
Benzo(b+k)fluoranthene in TCLP	mg/L	0.002	GC.12 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	87%
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	121	[NT]	[NT]	LCS-W1	108%

Report Comments:

Asbestos was analysed by Approved Identifier: Not applicable for this job

Asbestos was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for

Aileen Hie

From: Brendan Page [bpage@jkgroup.net.au]
Sent: Friday, 21 May 2010 02:12 PM
To: Aileen Hie
Subject: Additional Analyses - 40916 and 41031, Pyrmont

EIS

ENVIRONMENTAL INVESTIGATION SERVICES

A division of Jeffery & Katauskas Pty Ltd
ABN 17 003 550 801

Hi Aileen,

Could you please arrange for the following additional analyses to be undertaken on the soil samples in Envirolabs custody:

- * - 40916-10 (BH519 0.5-0.8), TCLP (acid) prep and leachate analysis for PAHs and lead; and
- 41031-1 (BH517 0.2-0.5), TCLP (acid) prep and leachate analysis for nickel.

All analyses is on a standard turnaround.

Regards,
For and on behalf of
ENVIRONMENTAL INVESTIGATION SERVICES

Brendan Page
Environmental Scientist

115 Wicks Road, Macquarie Park, NSW, 2113
PO Box 976, North Ryde BC, NSW, 1670
Tel: 02 9888 5000
Fax: 02 9888 5004
email: bpage@jkgroup.net.au
Web: www.jkgroup.net.au

*Envirolab Ref. 40916A
Due: 28/5/10
std T7A.*

*** IMPORTANT ***

This email and any attachments are confidential and may be privileged in which case neither is intended to be waived. If you have received this message in error, please notify us and remove it from your system. It is your responsibility to check any attachments for viruses and defects before opening or sending them on. At the Company's discretion we may send a paper copy for confirmation. In the event of any discrepancy between paper and electronic versions the paper version is to take precedence.

21/05/2010



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41031

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	10 Soils, 1 Water
Date samples received:	14/05/10
Date completed instructions received:	14/05/10

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	24/05/10
Date of Preliminary Report:	Not Issued
Issue Date:	20/05/10

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

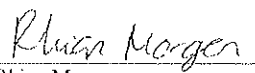
Accredited for compliance with ISO/IEC 17025.

Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Laboratory Manager


Matt Mansfield
Chemist


Rhian Morgan
Metals Supervisor

Envirolab Reference: 41031
Revision No: R 00



vTPH & BTEX in Soil	UNITS	41031-1	41031-2	41031-3	41031-4	41031-5
Our Reference:	-----	BH517	BH517	BH517	BH517	BH517
Your Reference	-----	0.2-0.5	0.5-0.95	1.5-1.95	3.0-3.45	4.5-4.95
Depth		13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Date analysed	-	18/5/10	18/5/10	18/5/10	18/5/10	18/5/10
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	450	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	68	86	97	83	72

vTPH & BTEX in Soil	UNITS	41031-6	41031-7	41031-9	41031-10
Our Reference:	-----	BH517	BH518	BH518	TB 2
Your Reference	-----	5.5-6.0	0.5-0.8	1.0-1.6	-
Depth		13/05/2010	13/05/2010	13/05/2010	13/05/2010
Date Sampled		Soil	Soil	Soil	Soil
Type of sample					
Date extracted	-	17/5/10	17/5/10	17/5/10	17/5/10
Date analysed	-	18/5/10	18/5/10	18/5/10	18/5/10
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	[NA]
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	83	83	71	83

Client Reference: E23982K, Pyrmont

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	41031-1	41031-2	41031-3	41031-4	41031-5
Your Reference	-----	BH517	BH517	BH517	BH517	BH517
Depth	-----	0.2-0.5	0.5-0.95	1.5-1.95	3.0-3.45	4.5-4.95
Date Sampled		13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	17/05/2010	17/05/2010	17/05/2010	17/05/2010	17/05/2010
Date analysed	-	17/05/2010	17/05/2010	17/05/2010	17/05/2010	17/05/2010
TPH C10 - C14	mg/kg	<50	<50	<50	11,000	190
TPH C15 - C28	mg/kg	<100	<100	<100	4,100	<100
TPH C29 - C36	mg/kg	<100	<100	<100	270	<100
Surrogate o-Terphenyl	%	135	124	124	#	135

sTPH in Soil (C10-C36)				
Our Reference:	UNITS	41031-6	41031-7	41031-9
Your Reference	-----	BH517	BH518	BH518
Depth	-----	5.5-6.0	0.5-0.8	1.0-1.6
Date Sampled		13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	17/05/2010	17/05/2010	17/05/2010
Date analysed	-	17/05/2010	17/05/2010	17/05/2010
TPH C10 - C14	mg/kg	160	<50	51
TPH C15 - C28	mg/kg	<100	550	150
TPH C29 - C36	mg/kg	<100	<100	<100
Surrogate o-Terphenyl	%	#	#	#

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41031-1 BH517 0.2-0.5 13/05/2010 Soil	41031-2 BH517 0.5-0.95 13/05/2010 Soil	41031-3 BH517 1.5-1.95 13/05/2010 Soil	41031-7 BH518 0.5-0.8 13/05/2010 Soil	41031-9 BH518 1.0-1.6 13/05/2010 Soil
Date extracted	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Date analysed	-	18/5/10	18/5/10	18/5/10	18/5/10	18/5/10
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.3	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	0.1	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	124	117	107	115	111

Client Reference: E23982K, Pymont

Organochlorine Pesticides in soil				
Our Reference:	UNITS	41031-1	41031-2	41031-7
Your Reference	-----	BH517	BH517	BH518
Depth	-----	0.2-0.5	0.5-0.95	0.5-0.8
Date Sampled		13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	17/5/10	17/5/10	17/5/10
Date analysed	-	17/5/10	17/5/10	17/5/10
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	121	116	114

Client Reference: E23982K, Pymont

Organophosphorus Pesticides				
Our Reference:	UNITS	41031-1	41031-2	41031-7
Your Reference	-----	BH517	BH517	BH518
Depth	-----	0.2-0.5	0.5-0.95	0.5-0.8
Date Sampled		13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	17/5/10	17/5/10	17/5/10
Date analysed	-	17/5/10	17/5/10	17/5/10
Diazinon	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	121	116	114

Envirolab Reference: 41031
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Client Reference: E23982K, Pymont

PCBs in Soil				
Our Reference:	UNITS	41031-1	41031-2	41031-7
Your Reference	-----	BH517	BH517	BH518
Depth	-----	0.2-0.5	0.5-0.95	0.5-0.8
Date Sampled		13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	17/5/10	17/5/10	17/5/10
Date analysed	-	17/5/10	17/5/10	17/5/10
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	121	116	114

Envirolab Reference: 41031

Revision No: R 00



Client Reference: E23982K, Pymont

Acid Extractable metals in soil						
Our Reference:	UNITS	41031-1	41031-2	41031-3	41031-7	41031-9
Your Reference	-----	BH517	BH517	BH517	BH518	BH518
Depth	-----	0.2-0.5	0.5-0.95	1.5-1.95	0.5-0.8	1.0-1.6
Date Sampled		13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	18/05/10	18/05/10	18/05/10	18/05/10	18/05/10
Date analysed	-	18/05/10	18/05/10	18/05/10	18/05/10	18/05/10
Arsenic	mg/kg	<4	6	<4	4	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	22	3	12	11	83
Copper	mg/kg	49	<1	150	10	26
Lead	mg/kg	5	1	68	42	11
Mercury	mg/kg	<0.1	<0.1	0.3	<0.1	<0.1
Nickel	mg/kg	150	1	4	5	20
Zinc	mg/kg	49	2	240	110	58

Client Reference: E23982K, Pymont

Miscellaneous Inorg - soil		
Our Reference:	UNITS	41031-7
Your Reference	-----	BH518
Depth	-----	0.5-0.8
Date Sampled		13/05/2010
Type of sample		Soil
Date prepared	-	18/5/2010
Date analysed	-	19/5/2010
pH 1:5 soil:water	pH Units	9.3

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Client Reference: E23982K, Pymont

Moisture						
Our Reference:	UNITS	41031-1	41031-2	41031-3	41031-7	41031-9
Your Reference	-----	BH517	BH517	BH517	BH518	BH518
Depth	-----	0.2-0.5	0.5-0.95	1.5-1.95	0.5-0.8	1.0-1.6
Date Sampled		13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Date analysed	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Moisture	%	6.2	3.2	16	8.9	7.7

Client Reference: E23982K, Pyrmont

Asbestos ID - soils						
Our Reference:	UNITS	41031-1	41031-2	41031-3	41031-7	41031-9
Your Reference	-----	BH517	BH517	BH517	BH518	BH518
Depth	-----	0.2-0.5	0.5-0.95	1.5-1.95	0.5-0.8	1.0-1.6
Date Sampled		13/05/2010	13/05/2010	13/05/2010	13/05/2010	13/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	17/5/10	17/5/10	17/5/10	17/5/10	17/5/10
Sample Description	-	Approx 25g Soil & Gravel	Approx 25g Sand	Approx 40g Soil	Approx 25g Soil & Stones	Approx 25g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

sPOCAS		
Our Reference:	UNITS	41031-7
Your Reference	-----	BH518
Depth	-----	0.5-0.8
Date Sampled		13/05/2010
Type of sample		Soil
Date prepared	-	18/5/10
Date analysed	-	18/5/10
pH _{KCl}	pH units	9.0
TAA pH 6.5	moles H ⁺ /l	<5
s-TAA pH 6.5	%w/w S	<0.01
pH _{ox}	pH units	7.8
TPA pH 6.5	moles H ⁺ /l	<5.0
s-TPA pH 6.5	%w/w S	<0.01
TSA pH 6.5	moles H ⁺ /l	<5.0
s-TSA pH 6.5	%w/w S	<0.01
ANCE	% CaCO ₃	4.7
a-ANCE	moles H ⁺ /l	945
s-ANCE	%w/w S	1.5
SKCl	%w/w S	0.049
SP	%w/w	0.099
SPOS	%w/w	0.050
a-SPOS	moles H ⁺ /l	31
CaKCl	%w/w	0.30
CaP	%w/w	2.0
CaA	%w/w	1.7
MgKCl	%w/w	0.010
MgP	%w/w	0.067
MgA	%w/w	0.057
SRAS	%w/w	<0.005
SHCl	%w/w S	0.051
SNAS	%w/w S	<0.005
a-SNAS	moles H ⁺ /l	<5
s-SNAS	%w/w S	<0.01
a-Net Acidity	moles H ⁺ /l	<10
Liming rate	kg CaCO ₃ /t	<0.75
a-Net Acidity without ANCE	moles H ⁺ /l	31
Liming rate without ANCE	kg CaCO ₃ /t	2.3

vTPH & BTEX in Water		
Our Reference:	UNITS	41031-11
Your Reference	-----	Rinsate 2
Depth	-----	-
Date Sampled		13/05/2010
Type of sample		Water
Date extracted	-	19/05/2010
Date analysed	-	19/05/2010
TPH C ₆ - C ₉	µg/L	18
Benzene	µg/L	<1.0
Toluene	µg/L	<1.0
Ethylbenzene	µg/L	<1.0
m+p-xylene	µg/L	<2.0
o-xylene	µg/L	<1.0
Surrogate Dibromofluoromethane	%	95
Surrogate toluene-d8	%	100
Surrogate 4-BFB	%	103

sTPH in Water (C10-C36)		
Our Reference:	UNITS	41031-11
Your Reference	-----	Rinsate 2
Depth	-----	-
Date Sampled		13/05/2010
Type of sample		Water
Date extracted	-	17/5/10
Date analysed	-	17/5/10
TPH C10 - C14	µg/L	700
TPH C15 - C28	µg/L	560
TPH C29 - C36	µg/L	<100
Surrogate o-Terphenyl	%	#

PAHs in Water		
Our Reference:	UNITS	41031-11
Your Reference	-----	Rinsate 2
Depth	-----	-
Date Sampled		13/05/2010
Type of sample		Water
Date extracted	-	17/5/10
Date analysed	-	18/5/10
Naphthalene	µg/L	<1
Acenaphthylene	µg/L	<1
Acenaphthene	µg/L	<1
Fluorene	µg/L	<1
Phenanthrene	µg/L	<1
Anthracene	µg/L	<1
Fluoranthene	µg/L	<1
Pyrene	µg/L	<1
Benzo(a)anthracene	µg/L	<1
Chrysene	µg/L	<1
Benzo(b+k)fluoranthene	µg/L	<2
Benzo(a)pyrene	µg/L	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1
Dibenzo(a,h)anthracene	µg/L	<1
Benzo(g,h,i)perylene	µg/L	<1
Surrogate <i>p</i> -Terphenyl-d ₁₄	%	90

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.
LAB.64	sPOCAS determined using titrimetric and ICP-AES techniques. Based on Acid Sulfate Soils Laboratory Methods Guidelines, Version 2.1 - June 2004.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil						Base II Duplicate II %RPD		
Date extracted	-			17/5/10	[NT]	[NT]	LCS-5	17/5/10
Date analysed	-			18/5/10	[NT]	[NT]	LCS-5	18/5/10
vTPH C6 - C9	mg/kg	25	GC.16	<25	[NT]	[NT]	LCS-5	77%
Benzene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-5	82%
Toluene	mg/kg	0.5	GC.16	<0.5	[NT]	[NT]	LCS-5	71%
Ethylbenzene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-5	66%
m+p-xylene	mg/kg	2	GC.16	<2.0	[NT]	[NT]	LCS-5	84%
o-Xylene	mg/kg	1	GC.16	<1.0	[NT]	[NT]	LCS-5	81%
Surrogate aaa-Trifluorotoluene	%		GC.16	91	[NT]	[NT]	LCS-5	87%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			17/05/2010	[NT]	[NT]	LCS-5	17/05/2010
Date analysed	-			17/05/2010	[NT]	[NT]	LCS-5	17/05/2010
TPH C10 - C14	mg/kg	50	GC.3	<50	[NT]	[NT]	LCS-5	107%
TPH C15 - C28	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-5	118%
TPH C29 - C36	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-5	118%
Surrogate o-Terphenyl	%		GC.3	132	[NT]	[NT]	LCS-5	126%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			17/5/10	[NT]	[NT]	LCS-5	17/5/10
Date analysed	-			18/5/10	[NT]	[NT]	LCS-5	18/5/10
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	90%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	92%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	94%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	89%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	100%
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]

Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-5	99%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	[NT]	[NT]	LCS-5	100%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	119	[NT]	[NT]	LCS-5	111%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			17/5/10	[NT]	[NT]	LCS-5	17/5/10
Date analysed	-			17/5/10	[NT]	[NT]	LCS-5	17/5/10
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	103%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	106%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	105%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	105%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	110%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	110%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	114%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	113%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	114%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-5	108%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	108	[NT]	[NT]	LCS-5	111%

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			[NT]	[NT]	[NT]	LCS-5	17/5/10
Date analysed	-			[NT]	[NT]	[NT]	LCS-5	17/5/10
Diazinon	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-5	120%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-5	101%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	LCS-5	120%
Surrogate TCLMX	%		GC.8	[NT]	[NT]	[NT]	LCS-5	108%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			[NT]	[NT]	[NT]	LCS-5	17/5/10
Date analysed	-			[NT]	[NT]	[NT]	LCS-5	17/5/10
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	LCS-5	130%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	[NT]	[NT]	[NT]	LCS-5	77%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			18/05/10	[NT]	[NT]	LCS-3	18/05/10
Date analysed	-			18/05/10	[NT]	[NT]	LCS-3	18/05/10
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	[NT]	[NT]	LCS-3	110%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	[NT]	[NT]	LCS-3	111%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	113%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	113%
Lead	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	110%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	[NT]	[NT]	LCS-3	98%

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Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	113%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	[NT]	[NT]	LCS-3	112%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base II Duplicate II %RPD		
Date prepared	-			[NT]	[NT]	[NT]	LCS-1	18/5/2010
Date analysed	-			[NT]	[NT]	[NT]	LCS-1	19/5/2010
pH 1:5 soil:water	pH Units		LAB.1	[NT]	[NT]	[NT]	LCS-1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			17/5/10
Date analysed	-			17/5/10
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Asbestos ID - soils				
Date analysed	-			[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
Date prepared	-			18/5/10	41031-7	18/5/10 18/5/10	LCS	18/5/10
Date analysed	-			18/5/10	41031-7	18/5/10 18/5/10	LCS	18/5/10
pH _{kd}	pH units		LAB.64	5.5	41031-7	9.0 9.2 RPD: 2	LCS	101%
TAA pH 6.5	moles H ⁺ /l	5	LAB.64	<5	41031-7	<5 <5	LCS	99%
s-TAA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41031-7	<0.01 <0.01	LCS	97%
pH _{ox}	pH units		LAB.64	4.2	41031-7	7.8 7.8 RPD: 0	LCS	113%
TPA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41031-7	<5.0 <5.0	LCS	72%
s-TPA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41031-7	<0.01 <0.01	LCS	72%
TSA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41031-7	<5.0 <5.0	LCS	72%
s-TSA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41031-7	<0.01 <0.01	LCS	72%
ANCE	% CaCO ₃	0.05	LAB.64	<0.05	41031-7	4.7 4.7 RPD: 0	[NR]	[NR]
a-ANCE	moles H ⁺ /l	5	LAB.64	<5	41031-7	945 945 RPD: 0	[NR]	[NR]
s-ANCE	%w/w S	0.05	LAB.64	<0.05	41031-7	1.5 1.5 RPD: 0	[NR]	[NR]

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Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
SKCl	%w/w S	0.005	LAB.64	<0.005	41031-7	0.049 0.045 RPD: 9	LCS	122%
SP	%w/w	0.005	LAB.64	<0.005	41031-7	0.099 0.099 RPD: 0	LCS	108%
SPOS	%w/w	0.005	LAB.64	<0.005	41031-7	0.050 0.054 RPD: 8	LCS	105%
a-SPOS	moles H ⁺ /l	5	LAB.64	<5.0	41031-7	31 34 RPD: 9	LCS	105%
CaKCl	%w/w	0.005	LAB.64	<0.005	41031-7	0.30 0.28 RPD: 7	LCS	105%
CaP	%w/w	0.005	LAB.64	<0.005	41031-7	2.0 2.1 RPD: 5	LCS	95%
CaA	%w/w	0.005	LAB.64	<0.005	41031-7	1.7 1.8 RPD: 6	[NR]	[NR]
MgKCl	%w/w	0.005	LAB.64	<0.005	41031-7	0.010 0.009 RPD: 11	LCS	100%
MgP	%w/w	0.005	LAB.64	<0.005	41031-7	0.067 0.069 RPD: 3	LCS	106%
MgA	%w/w	0.005	LAB.64	<0.005	41031-7	0.057 0.060 RPD: 5	[NR]	[NR]
SRAS	%w/w	0.005	LAB.64	<0.005	41031-7	<0.005 <0.005	[NR]	[NR]
SHCl	%w/w S	0.005	LAB.64	<0.005	41031-7	0.051 0.059 RPD: 15	LCS	103%
SNAS	%w/w S	0.005	LAB.64	<0.005	41031-7	<0.005 0.015	[NR]	[NR]
a-SNAS	moles H ⁺ /l	5	LAB.64	<5	41031-7	<5 6.8	[NR]	[NR]
s-SNAS	%w/w S	0.01	LAB.64	<0.01	41031-7	<0.01 0.011	[NR]	[NR]
a-Net Acidity	moles H ⁺ /l	10	LAB.64	<10	41031-7	<10 <10	LCS	102%
Liming rate	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41031-7	<0.75 <0.75	LCS	103%
a-Net Acidity without ANCE	moles H ⁺ /l	10	LAB.64	<10	41031-7	31 34 RPD: 9	[NR]	[NR]
Liming rate without ANCE	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41031-7	2.3 2.5 RPD: 8	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Date extracted	-			19/05/2010	[NT]	[NT]	LCS-W1	19/05/2010
Date analysed	-			19/05/2010	[NT]	[NT]	LCS-W1	19/05/2010
TPH C ₆ - C ₉	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	93%
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	87%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	94%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	94%
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	96%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	96%
Surrogate	%		GC.16	92	[NT]	[NT]	LCS-W1	95%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	98	[NT]	[NT]	LCS-W1	98%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Surrogate 4-BFB	%		GC.16	94	[NT]	[NT]	LCS-W1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			17/5/10	[NT]	[NT]	LCS-W3	17/5/10
Date analysed	-			17/5/10	[NT]	[NT]	LCS-W3	17/5/10
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W3	85%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W3	130%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W3	99%
Surrogate o-Terphenyl	%		GC.3	97	[NT]	[NT]	LCS-W3	104%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			17/5/10	[NT]	[NT]	LCS-W2	17/5/10
Date analysed	-			18/5/10	[NT]	[NT]	LCS-W2	18/5/10
Naphthalene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	85%
Acenaphthylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	95%
Phenanthrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	95%
Anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	89%
Pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	100%
Benzo(a)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	96%
Benzo(b+k)fluoranthene	µg/L	2	GC.12 subset	<2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	102%
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	124	[NT]	[NT]	LCS-W2	128%

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Report Comments:

Total Petroleum Hydrocarbons in water:# Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Total Petroleum Hydrocarbons in soil (semivol):# Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Asbestos was analysed by Approved Identifier: Matt Mansfield

Asbestos was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

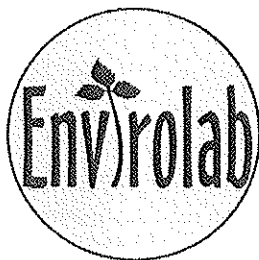
Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000

Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:

E23982K, Pyrmont

Envirolab Reference:

41031

Date received:

14/05/10

Date results expected to be reported:

24/05/10

Samples received in appropriate condition for analysis:

YES

No. of samples provided

10 Soils, 1 Water

Turnaround time requested:

Standard

Temperature on receipt

Cool

Cooling Method:

Ice Pack

Comments:

Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst

ph: 02 9910 6200 fax: 02 9910 6201

email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

SAMPLE AND CHAIN OF CUSTODY FORM

[illegible]



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41031-A

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	Additional Testing on 1 Soil
Date samples received:	14/05/10
Date completed instructions received:	21/05/10

Analysis Details:

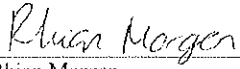
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	28/05/10
Date of Preliminary Report:	Not Issued
Issue Date:	27/05/10

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Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:


Rhian Morgan
Metals Supervisor

Envirolab Reference: 41031-A
Revision No: R 00



Metals in TCLP USEPA1311		
Our Reference:	UNITS	41031-A-1
Your Reference	-----	BH517
Depth	-----	0.2-0.5
Date Sampled		13/05/2010
Type of sample		Soil
Date extracted	-	25/05/10
Date analysed	-	26/05/10
pH of soil for fluid# determ.	pH units	8.70
pH of soil for fluid # determ. (acid)	pH units	1.20
Extraction fluid used	-	1
pH of final Leachate	pH units	5.30
Nickel in TCLP	mg/L	0.1

Method ID	Methodology Summary
LAB.4	Toxicity Characteristic Leaching Procedure (TCLP).
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			25/05/10	[NT]	[NT]	LCS-2	25/05/10
Date analysed	-			26/05/10	[NT]	[NT]	LCS-2	26/05/10
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-2	102%

Report Comments:

Asbestos was analysed by Approved Identifier: Not applicable for this job

Asbestos was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

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Aileen Hie

From: Brendan Page [bpage@jkgroup.net.au]
Sent: Friday, 21 May 2010 02:12 PM
To: Aileen Hie
Subject: Additional Analyses - 40916 and 41031, Pyrmont

EIS

ENVIRONMENTAL INVESTIGATION SERVICES

A division of Jeffery & Katauskas Pty Ltd
ABN 17 003 550 801

Hi Aileen,

Could you please arrange for the following additional analyses to be undertaken on the soil samples in Envirolabs custody:

- 40916-10 (BH519 0.5-0.8), TCLP (acid) prep and leachate analysis for PAHs and lead; and
- ☒ - 41031-1 (BH517 0.2-0.5), TCLP (acid) prep and leachate analysis for nickel.

All analyses is on a standard turnaround.

Regards,
For and on behalf of
ENVIRONMENTAL INVESTIGATION SERVICES

Brendan Page
Environmental Scientist

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Envirolab Ref: 41031A
pue: 28/5/10
std TIA.

*** IMPORTANT ***

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21/05/2010



Envirolab Services Pty Ltd
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CERTIFICATE OF ANALYSIS 41184

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	20 Soils, 2 Waters
Date samples received:	19/05/10
Date completed instructions received:	19/05/10

Analysis Details:

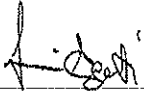
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

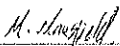
Date results requested by:	26/05/10
Date of Preliminary Report:	Not Issued
Issue Date:	26/05/10

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Results Approved By:


Giovanni Agosti
Technical Manager


Jacinta Hurst
Laboratory Manager


Matt Mansfield
Approved Signatory

Envirolab Reference: 41184
Revision No: R 00



vTPH & BTEX in Soil						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	21/5/10	21/5/10	21/5/10	21/5/10	21/5/10
vTPH C6 - C9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	104	104	106	106	105

vTPH & BTEX in Soil						
Our Reference:	UNITS	41184-9	41184-10	41184-11	41184-16	41184-17
Your Reference	-----	BH504	BH504	BH504	Dup10	T Spike 2
Depth	-----	0.5-0.95	1.3-1.6	1.6-1.95	-	-
Date Sampled		17/05/2010	17/05/2010	17/05/2010	17/05/2010	14/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	21/5/10	21/5/10	21/5/10	21/5/10	21/5/10
vTPH C6 - C9	mg/kg	<25	<25	<25	<25	[NA]
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	110%
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	110%
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	108%
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	108%
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	108%
Surrogate aaa-Trifluorotoluene	%	106	103	103	102	105

vTPH & BTEX in Soil				
Our Reference:	UNITS	41184-18	41184-19	41184-20
Your Reference	-----	T Spike 3	TB3	TB4
Depth	-----	-	-	-
Date Sampled		17/05/2010	14/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	20/5/10	20/5/10	20/5/10
Date analysed	-	21/5/10	21/5/10	21/5/10
Benzene	mg/kg	104%	<0.5	<0.5
Toluene	mg/kg	103%	<0.5	<0.5
Ethylbenzene	mg/kg	102%	<1.0	<1.0
m+p-xylene	mg/kg	102%	<2.0	<2.0
o-Xylene	mg/kg	102%	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	93	103	124

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
TPH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	340	400	260
TPH C29 - C36	mg/kg	<100	<100	480	1,100	650
Surrogate o-Terphenyl	%	90	87	108	114	102

sTPH in Soil (C10-C36)					
Our Reference:	UNITS	41184-9	41184-10	41184-11	41184-16
Your Reference	-----	BH504	BH504	BH504	Dup10
Depth	-----	0.5-0.95	1.3-1.6	1.6-1.95	-
Date Sampled		17/05/2010	17/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10
TPH C10 - C14	mg/kg	<50	<50	<50	<50
TPH C15 - C28	mg/kg	520	430	<100	220
TPH C29 - C36	mg/kg	380	250	<100	650
Surrogate o-Terphenyl	%	112	#	87	87

Client Reference: E23982K, Pymont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-1 BH501 0.5-0.95 14/05/2010 Soil	41184-2 BH501 1.5-1.95 14/05/2010 Soil	41184-4 BH502 0.3-0.8 14/05/2010 Soil	41184-6 BH503 0.1-0.4 17/05/2010 Soil	41184-8 BH504 0.2-0.5 17/05/2010 Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.2	<0.1	0.3	0.1	0.3
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.5	<0.1	0.5	0.2	1
Pyrene	mg/kg	0.6	<0.1	0.5	0.2	1.1
Benzo(a)anthracene	mg/kg	0.4	<0.1	0.3	0.1	0.6
Chrysene	mg/kg	0.5	<0.1	0.4	0.2	0.7
Benzo(b+k)fluoranthene	mg/kg	1.1	<0.2	0.5	0.3	1.1
Benzo(a)pyrene	mg/kg	0.9	0.05	0.4	0.2	0.8
Indeno(1,2,3-c,d)pyrene	mg/kg	0.6	<0.1	0.2	0.1	0.4
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.6	<0.1	0.3	0.1	0.4
Surrogate p-Terphenyl-d ₁₄	%	106	113	98	103	106

Client Reference: E23982K, Pymont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-9 BH504 0.5-0.95 17/05/2010 Soil	41184-10 BH504 1.3-1.6 17/05/2010 Soil	41184-11 BH504 1.6-1.95 17/05/2010 Soil	41184-16 Dup10 - 17/05/2010 Soil
Date extracted	-	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10
Naphthalene	mg/kg	0.3	0.5	<0.1	<0.1
Acenaphthylene	mg/kg	1.9	1.2	<0.1	0.1
Acenaphthene	mg/kg	0.1	0.1	<0.1	<0.1
Fluorene	mg/kg	0.3	0.6	<0.1	<0.1
Phenanthrene	mg/kg	8.6	5.4	<0.1	0.4
Anthracene	mg/kg	2.1	1.2	<0.1	<0.1
Fluoranthene	mg/kg	24	9.3	<0.1	1.0
Pyrene	mg/kg	25	9.7	<0.1	1.1
Benzo(a)anthracene	mg/kg	14	4.9	<0.1	0.6
Chrysene	mg/kg	13	4.9	<0.1	0.7
Benzo(b+k)fluoranthene	mg/kg	24	7.6	<0.2	1.1
Benzo(a)pyrene	mg/kg	19	5.7	0.06	0.8
Indeno(1,2,3-c,d)pyrene	mg/kg	8.7	2.2	<0.1	0.4
Dibenzo(a,h)anthracene	mg/kg	1.3	0.4	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	7.4	1.8	<0.1	0.4
Surrogate p-Terphenyl-d14	%	108	104	110	105

Client Reference: E23982K, Pyrmont

Organochlorine Pesticides in soil						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Date analysed	-	22/05/2010	22/05/2010	22/05/2010	22/05/2010	22/05/2010
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	0.3	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	0.5	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	118	104	115	122	121

Client Reference: E23982K, Pymont

Organochlorine Pesticides in soil			
Our Reference:	UNITS	41184-9	41184-16
Your Reference	-----	BH504	Dup10
Depth	-----	0.5-0.95	-
Date Sampled		17/05/2010	17/05/2010
Type of sample		Soil	Soil
Date extracted	-	20/05/2010	20/05/2010
Date analysed	-	22/05/2010	22/05/2010
HCB	mg/kg	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	117	121

Client Reference: E23982K, Pyrmont

Organophosphorus Pesticides						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Date analysed	-	20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	118	104	115	122	121

Organophosphorus Pesticides			
Our Reference:	UNITS	41184-9	41184-16
Your Reference	-----	BH504	Dup10
Depth	-----	0.5-0.95	-
Date Sampled		17/05/2010	17/05/2010
Type of sample		Soil	Soil
Date extracted	-	20/05/2010	20/05/2010
Date analysed	-	20/05/2010	20/05/2010
Diazinon	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	117	121

Client Reference: E23982K, Pymont

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-1 BH501 0.5-0.95 14/05/2010 Soil	41184-2 BH501 1.5-1.95 14/05/2010 Soil	41184-4 BH502 0.3-0.8 14/05/2010 Soil	41184-6 BH503 0.1-0.4 17/05/2010 Soil	41184-8 BH504 0.2-0.5 17/05/2010 Soil
Date extracted	-	20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Date analysed	-	20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	118	104	115	122	121

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-9 BH504 0.5-0.95 17/05/2010 Soil	41184-16 Dup10 - 17/05/2010 Soil
Date extracted	-	20/05/2010	20/05/2010
Date analysed	-	20/05/2010	20/05/2010
Arochlor 1016	mg/kg	<1	<0.1
Arochlor 1221*	mg/kg	<1	<0.1
Arochlor 1232	mg/kg	<1	<0.1
Arochlor 1242	mg/kg	<1	<0.1
Arochlor 1248	mg/kg	<1	<0.1
Arochlor 1254	mg/kg	<1	<0.1
Arochlor 1260	mg/kg	<1	<0.1
Surrogate TCLMX	%	117	121

Client Reference: E23982K, Pymont

Acid Extractable metals in soil						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date digested	-	21/05/10	21/05/10	21/05/10	21/05/10	21/05/10
Date analysed	-	21/05/10	21/05/10	21/05/10	21/05/10	21/05/10
Arsenic	mg/kg	7	7	8	<4	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	24	23	9	11	13
Copper	mg/kg	46	9	73	120	71
Lead	mg/kg	140	28	230	98	58
Mercury	mg/kg	0.4	0.1	0.1	0.2	<0.1
Nickel	mg/kg	19	2	7	14	11
Zinc	mg/kg	150	26	160	160	34

Acid Extractable metals in soil					
Our Reference:	UNITS	41184-9	41184-10	41184-11	41184-16
Your Reference	-----	BH504	BH504	BH504	Dup10
Depth	-----	0.5-0.95	1.3-1.6	1.6-1.95	-
Date Sampled		17/05/2010	17/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date digested	-	21/05/10	21/05/10	21/05/10	21/05/10
Date analysed	-	21/05/10	21/05/10	21/05/10	21/05/10
Arsenic	mg/kg	7	11	1,300	4
Cadmium	mg/kg	<0.5	0.5	1.7	<0.5
Chromium	mg/kg	11	14	9	16
Copper	mg/kg	130	600	300	54
Lead	mg/kg	170	230	260	67
Mercury	mg/kg	0.5	0.3	40	0.5
Nickel	mg/kg	4	18	6	11
Zinc	mg/kg	93	270	280	40

Client Reference: E23982K, Pymont

Miscellaneous Inorg - soil				
Our Reference:	UNITS	41184-1	41184-2	41184-4
Your Reference	-----	BH501	BH501	BH502
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8
Date Sampled		14/05/2010	14/05/2010	14/05/2010
Type of sample		Soil	Soil	Soil
Date prepared	-	21/05/2010	21/05/2010	21/05/2010
Date analysed	-	24/05/2010	24/05/2010	24/05/2010
pH 1:5 soil:water	pH Units	7.3	7.5	7.4

Envirolab Reference: 41184
Revision No: R 00



Client Reference: E23982K, Pymont

Moisture						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10	20/5/10
Moisture	%	9.8	20	6.2	4.2	5.7

Moisture					
Our Reference:	UNITS	41184-9	41184-10	41184-11	41184-16
Your Reference	-----	BH504	BH504	BH504	Dup10
Depth	-----	0.5-0.95	1.3-1.6	1.6-1.95	-
Date Sampled		17/05/2010	17/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	20/5/10	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10	20/5/10
Moisture	%	8.9	13	11	5.3

Client Reference: E23982K, Pyrmont

Asbestos ID - soils						
Our Reference:	UNITS	41184-1	41184-2	41184-4	41184-6	41184-8
Your Reference	-----	BH501	BH501	BH502	BH503	BH504
Depth	-----	0.5-0.95	1.5-1.95	0.3-0.8	0.1-0.4	0.2-0.5
Date Sampled		14/05/2010	14/05/2010	14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	21/5/10	21/5/10	21/5/10	21/5/10	21/5/10
Sample Description	-	Approx 40g Soil	Approx 30g Sandy Soil	Approx 20g Sandy Soil	Approx 20g Sandy Soil & Rocks	Approx 20g Sandy Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils				
Our Reference:	UNITS	41184-9	41184-10	41184-11
Your Reference	-----	BH504	BH504	BH504
Depth	-----	0.5-0.95	1.3-1.6	1.6-1.95
Date Sampled		17/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil
Date analysed	-	21/5/10	21/5/10	21/5/10
Sample Description	-	Approx 20g Sandy Soil	Approx 10g Soil	Approx 15g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

sPOCAS Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-1 BH501 0.5-0.95 14/05/2010 Soil	41184-2 BH501 1.5-1.95 14/05/2010 Soil	41184-4 BH502 0.3-0.8 14/05/2010 Soil
Date prepared	-	20/5/10	20/5/10	20/5/10
Date analysed	-	20/5/10	20/5/10	20/5/10
pH _{KCl}	pH units	9.3	7.6	9.5
TAA pH 6.5	moles H ⁺ /t	<5	<5	<5
s-TAA pH 6.5	%w/w S	<0.01	<0.01	<0.01
pH _{ox}	pH units	7.8	4.1	7.4
TPA pH 6.5	moles H ⁺ /t	<5.0	<5.0	<5.0
s-TPA pH 6.5	%w/w S	<0.01	<0.01	<0.01
TSA pH 6.5	moles H ⁺ /t	<5.0	<5.0	<5.0
s-TSA pH 6.5	%w/w S	<0.01	<0.01	<0.01
ANCE	% CaCO ₃	0.50	<0.05	1.1
a-ANCE	moles H ⁺ /t	100	<5	225
s-ANCE	%w/w S	0.16	<0.05	0.36
SKCl	%w/w S	<0.005	<0.005	0.010
SP	%w/w	0.014	0.064	0.042
SPOS	%w/w	0.011	0.060	0.032
a-SPOS	moles H ⁺ /t	6.6	38	20
Ca _{KCl}	%w/w	0.11	0.065	0.21
Ca _P	%w/w	0.21	0.078	0.53
Ca _A	%w/w	0.094	0.013	0.31
Mg _{KCl}	%w/w	0.009	0.008	<0.005
Mg _P	%w/w	0.032	0.011	0.018
Mg _A	%w/w	0.023	<0.005	0.015
SRAS	%w/w	<0.005	<0.005	<0.005
SHCl	%w/w S	<0.005	<0.005	0.019
SNAS	%w/w S	<0.005	<0.005	0.009
a-SNAS	moles H ⁺ /t	<5	<5	<5
s-SNAS	%w/w S	<0.01	<0.01	<0.01
a-Net Acidity	moles H ⁺ /t	<10	38	<10
Liming rate	kg CaCO ₃ /t	<0.75	2.8	<0.75
a-Net Acidity without ANCE	moles H ⁺ /t	<10	<10	20
Liming rate without ANCE	kg CaCO ₃ /t	<0.75	<0.75	1.5

vTPH & BTEX in Water			
Our Reference:	UNITS	41184-21	41184-22
Your Reference	-----	Rinsate3	Rinsate4
Depth	-----	-	-
Date Sampled		14/05/2010	17/05/2010
Type of sample		Water	Water
Date extracted	-	19/5/10	19/5/10
Date analysed	-	19/5/10	19/5/10
TPH C ₆ - C ₉	µg/L	<10	<10
Benzene	µg/L	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0
m+p-xylene	µg/L	<2.0	<2.0
o-xylene	µg/L	<1.0	<1.0
Surrogate Dibromofluoromethane	%	97	100
Surrogate toluene-d ₈	%	99	99
Surrogate 4-BFB	%	100	100

Client Reference: E23982K, Pymont

sTPH in Water (C10-C36)			
Our Reference:	UNITS	41184-21	41184-22
Your Reference	-----	Rinsate3	Rinsate4
Depth	-----	-	-
Date Sampled		14/05/2010	17/05/2010
Type of sample		Water	Water
Date extracted	-	21/5/10	21/5/10
Date analysed	-	21/5/10	21/5/10
TPH C10 - C14	µg/L	<50	<50
TPH C15 - C28	µg/L	<100	<100
TPH C29 - C36	µg/L	<100	<100
Surrogate o-Terphenyl	%	102	102

PAHs in Water Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41184-21 Rinsate3 - 14/05/2010 Water	41184-22 Rinsate4 - 17/05/2010 Water
Date extracted	-	21/05/2010	21/05/2010
Date analysed	-	21/05/2010	21/05/2010
Naphthalene	µg/L	<1	<1
Acenaphthylene	µg/L	<1	<1
Acenaphthene	µg/L	<1	<1
Fluorene	µg/L	<1	<1
Phenanthrene	µg/L	<1	<1
Anthracene	µg/L	<1	<1
Fluoranthene	µg/L	<1	<1
Pyrene	µg/L	<1	<1
Benzo(a)anthracene	µg/L	<1	<1
Chrysene	µg/L	<1	<1
Benzo(b+k)fluoranthene	µg/L	<2	<2
Benzo(a)pyrene	µg/L	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1	<1
Dibenzo(a,h)anthracene	µg/L	<1	<1
Benzo(g,h,i)perylene	µg/L	<1	<1
Surrogate p-Terphenyl-d14	%	91	91

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.
LAB.64	sPOCAS determined using titrimetric and ICP-AES techniques. Based on Acid Sulfate Soils Laboratory Methods Guidelines, Version 2.1 - June 2004.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil						Base Duplicate %RPD		
Date extracted	-			20/5/10	41184-1	20/5/10 20/5/10	LCS-2	20/5/10
Date analysed	-			21/5/10	41184-1	21/5/10 21/5/10	LCS-2	21/5/10
vTPH C6 - C9	mg/kg	25	GC.16	<25	41184-1	<25 <25	LCS-2	105%
Benzene	mg/kg	0.5	GC.16	<0.5	41184-1	<0.5 <0.5	LCS-2	109%
Toluene	mg/kg	0.5	GC.16	<0.5	41184-1	<0.5 <0.5	LCS-2	101%
Ethylbenzene	mg/kg	1	GC.16	<1.0	41184-1	<1.0 <1.0	LCS-2	105%
m+p-xylene	mg/kg	2	GC.16	<2.0	41184-1	<2.0 <2.0	LCS-2	105%
o-Xylene	mg/kg	1	GC.16	<1.0	41184-1	<1.0 <1.0	LCS-2	110%
Surrogate aaa-Trifluorotoluene	%		GC.16	107	41184-1	104 103 RPD: 1	LCS-2	110%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)						Base Duplicate %RPD		
Date extracted	-			20/5/10	41184-1	20/5/10 20/5/10	LCS-2	20/5/10
Date analysed	-			20/5/10	41184-1	20/5/10 20/5/10	LCS-2	20/5/10
TPH C10 - C14	mg/kg	50	GC.3	<50	41184-1	<50 <50	LCS-2	82%
TPH C15 - C28	mg/kg	100	GC.3	<100	41184-1	<100 <100	LCS-2	98%
TPH C29 - C36	mg/kg	100	GC.3	<100	41184-1	<100 <100	LCS-2	92%
Surrogate o-Terphenyl	%		GC.3	84	41184-1	90 92 RPD: 2	LCS-2	60%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base Duplicate %RPD		
Date extracted	-			20/5/10	41184-1	20/5/10 20/5/10	LCS-2	20/5/10
Date analysed	-			20/5/10	41184-1	20/5/10 20/5/10	LCS-2	20/5/10
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	<0.1 <0.1	LCS-2	98%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	<0.1 <0.1	LCS-2	104%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.2 0.2 RPD: 0	LCS-2	103%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.5 0.6 RPD: 18	LCS-2	96%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.6 0.7 RPD: 15	LCS-2	108%
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.4 0.5 RPD: 22	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.5 0.6 RPD: 18	LCS-2	111%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	41184-1	1.1 1.1 RPD: 0	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	41184-1	0.9 0.8 RPD: 12	LCS-2	123%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.6 0.5 RPD: 18	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	41184-1	0.6 0.5 RPD: 18	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	112	41184-1	106 102 RPD: 4	LCS-2	113%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			20/05/2010	41184-1	20/05/2010 20/05/2010	LCS-2	20/05/2010
Date analysed	-			22/05/2010	41184-1	22/05/2010 22/05/2010	LCS-2	22/05/2010
HCB	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	118%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	105%
Heptachlor	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	70%
delta-BHC	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	119%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	117%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	41184-1	0.5 0.9 RPD: 57	LCS-2	113%
Dieldrin	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	117%
Endrin	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	101%
pp-DDD	mg/kg	0.1	GC-5	<0.1	41184-1	0.3 0.9 RPD: 100	LCS-2	103%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	41184-1	0.5 2.4 RPD: 131	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	LCS-2	113%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	106	41184-1	118 120 RPD: 2	LCS-2	95%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			20/05/2010	41184-1	20/05/2010 20/05/2010	LCS-2	20/05/2010
Date analysed	-			20/05/2010	41184-1	20/05/2010 20/05/2010	LCS-2	20/05/2010
Diazinon	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	LCS-2	140%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	LCS-2	120%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	41184-1	<0.1 <0.1	LCS-2	140%
Surrogate TCLMX	%		GC.8	106	41184-1	118 120 RPD: 2	LCS-2	97%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			20/05/2010	41184-1	20/05/2010 20/05/2010	LCS-2	20/05/2010
Date analysed	-			20/05/2010	41184-1	20/05/2010 20/05/2010	LCS-2	20/05/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	LCS-2	103%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	41184-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	106	41184-1	118 120 RPD: 2	LCS-2	95%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			21/05/10	41184-1	21/05/10 21/05/10	LCS-4	21/05/10
Date analysed	-			21/05/10	41184-1	21/05/10 21/05/10	LCS-4	21/05/10
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	41184-1	7 8 RPD: 13	LCS-4	106%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	41184-1	<0.5 2.8	LCS-4	108%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	41184-1	24 19 RPD: 23	LCS-4	106%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	41184-1	46 54 RPD: 16	LCS-4	108%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Lead	mg/kg	1	Metals.20 ICP-AES	<1	41184-1	140 120 RPD: 15	LCS-4	106%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	41184-1	0.4 0.3 RPD: 29	LCS-4	106%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	41184-1	19 16 RPD: 17	LCS-4	109%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	41184-1	150 160 RPD: 6	LCS-4	108%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base II Duplicate II %RPD		
Date prepared	-			21/05/2010	[NT]	[NT]	LCS-4	21/05/2010
Date analysed	-			24/05/2010	[NT]	[NT]	LCS-4	24/05/2010
pH 1:5 soil:water	pH Units		LAB.1	[NT]	[NT]	[NT]	LCS-4	98%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			20/5/10
Date analysed	-			20/5/10
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Asbestos ID - soils				
Date analysed	-			[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
Date prepared	-			20/5/10	41184-1	20/5/10 20/5/10	LCS	25/5/10
Date analysed	-			20/5/10	41184-1	20/5/10 20/5/10	LCS	25/5/10
pH _{kel}	pH units		LAB.64	5.2	41184-1	9.3 9.3 RPD: 0	LCS	101%
TAA pH 6.5	moles H ⁺ /t	5	LAB.64	<5	41184-1	<5 <5	LCS	110%
s-TAA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41184-1	<0.01 <0.01	LCS	107%
pH _{ox}	pH units		LAB.64	4.3	41184-1	7.8 7.8 RPD: 0	LCS	104%
TPA pH 6.5	moles H ⁺ /t	5	LAB.64	<5.0	41184-1	<5.0 <5.0	LCS	75%
s-TPA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41184-1	<0.01 <0.01	LCS	75%
TSA pH 6.5	moles H ⁺ /t	5	LAB.64	<5.0	41184-1	<5.0 <5.0	LCS	70%
s-TSA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41184-1	<0.01 <0.01	LCS	69%

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Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
ANCE	% CaCO ₃	0.05	LAB.64	<0.05	41184-1	0.50 0.69 RPD: 32	[NR]	[NR]
a-ANCE	moles H ⁺ /l	5	LAB.64	<5	41184-1	100 138 RPD: 32	[NR]	[NR]
s-ANCE	%w/w S	0.05	LAB.64	<0.05	41184-1	0.16 0.22 RPD: 32	[NR]	[NR]
SKCl	%w/w S	0.005	LAB.64	<0.005	41184-1	<0.005 <0.005	LCS	122%
SP	%w/w	0.005	LAB.64	<0.005	41184-1	0.014 0.008 RPD: 55	LCS	110%
SPOS	%w/w	0.005	LAB.64	<0.005	41184-1	0.011 0.005 RPD: 75	LCS	107%
a-SPOS	moles H ⁺ /l	5	LAB.64	<5.0	41184-1	6.6 <5.0	LCS	108%
CaKCl	%w/w	0.005	LAB.64	<0.005	41184-1	0.11 0.11 RPD: 0	LCS	91%
CaP	%w/w	0.005	LAB.64	<0.005	41184-1	0.21 0.18 RPD: 15	LCS	85%
CaA	%w/w	0.005	LAB.64	<0.005	41184-1	0.094 0.070 RPD: 29	[NR]	[NR]
MgKCl	%w/w	0.005	LAB.64	<0.005	41184-1	0.009 0.008 RPD: 12	LCS	90%
MgP	%w/w	0.005	LAB.64	<0.005	41184-1	0.032 0.027 RPD: 17	LCS	102%
MgA	%w/w	0.005	LAB.64	<0.005	41184-1	0.023 0.019 RPD: 19	[NR]	[NR]
SRAS	%w/w	0.005	LAB.64	<0.005	41184-1	<0.005 <0.005	[NR]	[NR]
SHCl	%w/w S	0.005	LAB.64	<0.005	41184-1	<0.005 <0.005	LCS	88%
SNAS	%w/w S	0.005	LAB.64	<0.005	41184-1	<0.005 <0.005	[NR]	[NR]
a-SNAS	moles H ⁺ /l	5	LAB.64	<5	41184-1	<5 <5	[NR]	[NR]
s-SNAS	%w/w S	0.01	LAB.64	<0.01	41184-1	<0.01 <0.01	[NR]	[NR]
a-Net Acidity	moles H ⁺ /l	10	LAB.64	<10	41184-1	<10 <10	LCS	106%
Liming rate	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41184-1	<0.75 <0.75	LCS	106%
a-Net Acidity without ANCE	moles H ⁺ /l	10	LAB.64	<10	41184-1	<10 <10	[NR]	[NR]
Liming rate without ANCE	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41184-1	<0.75 <0.75	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Date extracted	-			19/5/10	[NT]	[NT]	LCS-W1	19/5/10
Date analysed	-			19/5/10	[NT]	[NT]	LCS-W1	19/5/10
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	94%
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	94%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	93%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	93%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	95%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	93%
Surrogate	%		GC.16	100	[NT]	[NT]	LCS-W1	100%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	98	[NT]	[NT]	LCS-W1	99%
Surrogate 4-BFB	%		GC.16	97	[NT]	[NT]	LCS-W1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			21/5/10	[NT]	[NT]	LCS-W2	21/5/10
Date analysed	-			21/5/10	[NT]	[NT]	LCS-W2	21/5/10
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W2	77%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	128%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	97%
Surrogate	%		GC.3	109	[NT]	[NT]	LCS-W2	102%
o-Terphenyl								

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			21/05/2010	[NT]	[NT]	LCS-W1	21/05/2010
Date analysed	-			21/05/2010	[NT]	[NT]	LCS-W1	21/05/2010
Naphthalene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	83%
Acenaphthylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	91%
Phenanthrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	91%
Anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	84%
Pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	95%
Benzo(a)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	99%
Benzo(b+k)fluoranthene	µg/L	2	GC.12 subset	<2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	98%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	74	[NT]	[NT]	LCS-W1	85%
QUALITY CONTROL vTPH & BTEX in Soil	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
Date extracted	-	[NT]		[NT]		41184-2	20/5/10	
Date analysed	-	[NT]		[NT]		41184-2	21/5/10	
vTPH C6 - C9	mg/kg	[NT]		[NT]		41184-2	97%	
Benzene	mg/kg	[NT]		[NT]		41184-2	93%	
Toluene	mg/kg	[NT]		[NT]		41184-2	95%	
Ethylbenzene	mg/kg	[NT]		[NT]		41184-2	98%	
m+p-xylene	mg/kg	[NT]		[NT]		41184-2	100%	
o-Xylene	mg/kg	[NT]		[NT]		41184-2	104%	
Surrogate aaa-Trifluorotoluene	%	[NT]		[NT]		41184-2	101%	
QUALITY CONTROL sTPH in Soil (C10-C36)	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
Date extracted	-	[NT]		[NT]		41184-2	20/5/10	
Date analysed	-	[NT]		[NT]		41184-2	20/5/10	
TPH C10 - C14	mg/kg	[NT]		[NT]		41184-2	81%	
TPH C15 - C28	mg/kg	[NT]		[NT]		41184-2	116%	
TPH C29 - C36	mg/kg	[NT]		[NT]		41184-2	112%	
Surrogate o-Terphenyl	%	[NT]		[NT]		41184-2	87%	
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
Date extracted	-	[NT]		[NT]		41184-2	20/5/10	
Date analysed	-	[NT]		[NT]		41184-2	20/5/10	
Naphthalene	mg/kg	[NT]		[NT]		41184-2	85%	
Acenaphthylene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Acenaphthene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Fluorene	mg/kg	[NT]		[NT]		41184-2	87%	
Phenanthrene	mg/kg	[NT]		[NT]		41184-2	86%	
Anthracene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Fluoranthene	mg/kg	[NT]		[NT]		41184-2	81%	
Pyrene	mg/kg	[NT]		[NT]		41184-2	90%	
Benzo(a)anthracene	mg/kg	[NT]		[NT]		[NR]	[NR]	
Chrysene	mg/kg	[NT]		[NT]		41184-2	91%	

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QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Benzo(b+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	41184-2	94%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	41184-2	99%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41184-2	20/05/2010
Date analysed	-	[NT]	[NT]	41184-2	22/05/2010
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	41184-2	115%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	41184-2	105%
Heptachlor	mg/kg	[NT]	[NT]	41184-2	76%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	41184-2	116%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	41184-2	116%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	41184-2	101%
Dieldrin	mg/kg	[NT]	[NT]	41184-2	124%
Endrin	mg/kg	[NT]	[NT]	41184-2	106%
pp-DDD	mg/kg	[NT]	[NT]	41184-2	124%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	41184-2	113%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41184-2	121%

Client Reference: E23982K, Pymont

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41184-2	20/05/2010
Date analysed	-	[NT]	[NT]	41184-2	20/05/2010
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	[NT]	[NT]	41184-2	121%
Fenitrothion	mg/kg	[NT]	[NT]	41184-2	121%
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	41184-2	140%
Surrogate TCLMX	%	[NT]	[NT]	41184-2	111%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41184-2	20/05/2010
Date analysed	-	[NT]	[NT]	41184-2	20/05/2010
Arochlor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	[NT]	[NT]	41184-2	109%
Arochlor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41184-2	110%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	[NT]	[NT]	41184-2	21/05/10
Date analysed	-	[NT]	[NT]	41184-2	21/05/10
Arsenic	mg/kg	[NT]	[NT]	41184-2	95%
Cadmium	mg/kg	[NT]	[NT]	41184-2	100%
Chromium	mg/kg	[NT]	[NT]	41184-2	81%
Copper	mg/kg	[NT]	[NT]	41184-2	101%
Lead	mg/kg	[NT]	[NT]	41184-2	81%
Mercury	mg/kg	[NT]	[NT]	41184-2	101%
Nickel	mg/kg	[NT]	[NT]	41184-2	101%
Zinc	mg/kg	[NT]	[NT]	41184-2	86%

Report Comments:

Total Petroleum Hydrocarbons in soil: # Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

OC's in soil: The RPD for duplicate results is accepted due to the non homogenous nature of the sample/s.

PCB's in soil: PQL has been raised due to interference from analytes (other than those being tested) in the sample/s.

High Cd RPD: An acceptable RPD for Cd on the samples 1 and 1 duplicate could not be obtained due to the inhomogeneity of the Asbestos was analysed by Approved Identifier: Matt Mansfield

Asbestos was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



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SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000
Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:	E23982K, Pyrmont
EnviroLab Reference:	41184
Date received:	19/05/10
Date results expected to be reported:	26/05/10

Samples received in appropriate condition for analysis:	YES
No. of samples provided	20 Soils, 2 Waters
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

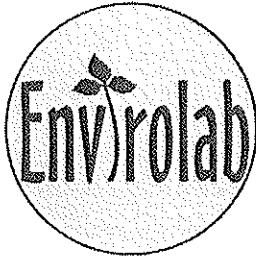
Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

SAMPLE AND CHAIN OF CUSTODY FORM

TO: Envirolab Services Pty Ltd 12 Ashley Street Chatswood NSW 2067 Phone: (02) 99106200 Fax: (02) 99106201 Attention: Aileen		EIS Job Number: E23982K Date Results Required: Standard Sheet 1/1		FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page															
Project: Proposed Redevelopment Location: Pyrmont Sampler: AM		Sample Preservation: In esky on ice																	
Tests Required																			
Date Sampled	Lab Ref:	Borehole/ Sample Number	Depth (m)	Sample Container	PID	Sample Description	Heavy Metals (8)	TPH/STEX	PAH	OC/OP	PCB	Asbestos	TCLP Prep + M6, PAH	Phenols	VOC	SVOC	SPOCAS + pH	STEX	
14/5/10	1	BH501	0.5/0.95	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X						X	
	2		1.5/1.95	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X						X	
	3		2.5/3.0	Glass jar + Asb Bag	0	Natural													
	4	BH502	0.3/0.8	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X						X	
	5		1.0/1.5	Glass jar + Asb Bag	0	Natural													
17/5/10	6	BH503	0.1/0.4	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X							
	7		0.5/0.95	Glass jar + Asb Bag	0	Natural													
	8	BH504	0.2/0.5	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X							
	9		0.5/0.95	Glass jar + Asb Bag	0	Fill	X	X	X	X	X	X							
	10		1.3/1.6	Glass jar + Asb Bag	0	Fill	X	X	X			X							
	11		1.6/1.95	Glass jar + Asb Bag	0	Fill	X	X	X			X							
	12		3.0/3.95	Glass jar + Asb Bag	0	Natural													
	13		4.5/4.95	Glass jar + Asb Bag	0	Natural													
-	14	Dup 7	-	Glass jar + Asb Bag	-														
-	15	Dup 9	-	Glass jar + Asb Bag	-														
-	16	Dup 10	-	Glass jar + Asb Bag	-		X	X	X	X									
14/5/10	17	Tspike 2		Glass jar + Asb Bag	-													X	
17/5/10	18	Tspike 3		Glass jar + Asb Bag	-													X	
14/5/10	19	TB 3		Glass jar + Asb Bag	-													X	
17/5/10	20	TB 4		Glass jar + Asb Bag	-													X	
14/5/10	21	Rinsate 3		1x Amber 2x Vials	-			X	X										
17/5/10	22	Rinsate 4			-			X	X										
				Glass jar + Asb Bag															
				Glass jar + Asb Bag															
				Glass jar + Asb Bag															
Remarks (comments/detection limits required):																			
Relinquished By:		Date: 14/5/10 Time: 9:30am		Received By:		Relinquished By:		Date:		Time:		Received By:							



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CERTIFICATE OF ANALYSIS 41184-A

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	Additional Testing on 5 Soils
Date samples received:	19/05/10
Date completed instructions received:	27/05/10

Analysis Details:

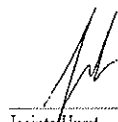
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	3/06/10
Date of Preliminary Report:	Not Issued
Issue Date:	31/05/10

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Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 41184-A
Revision No: R 00



Metals in TCLP USEPA1311						
Our Reference:	UNITS	41184-A-1	41184-A-4	41184-A-9	41184-A-10	41184-A-11
Your Reference	-----	BH501	BH502	BH504	BH504	BH504
Depth	-----	0.5-0.95	0.3-0.8	0.5-0.95	1.3-1.6	1.6-1.95
Date Sampled		14/05/2010	14/05/2010	17/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	27/05/2010	27/05/2010	27/05/2010	27/05/2010	27/05/2010
Date analysed	-	28/05/2010	28/05/2010	28/05/2010	28/05/2010	28/05/2010
pH of soil for fluid# determ.	pH units	8.40	8.50	8.30	7.90	7.60
pH of soil for fluid # determ. (acid)	pH units	1.90	2.00	1.90	1.80	1.80
Extraction fluid used	-	1	1	1	1	1
pH of final Leachate	pH units	5.20	5.30	5.10	5.10	5.10
Arsenic in TCLP	mg/L	[NA]	[NA]	[NA]	[NA]	0.7
Lead in TCLP	mg/L	0.4	0.8	0.1	0.06	<0.03
Mercury in TCLP	mg/L	[NA]	[NA]	[NA]	[NA]	<0.0005

Client Reference: E23982K, Pymont

PAHs in TCLP (USEPA 1311)				
Our Reference:	UNITS	41184-A-1	41184-A-9	41184-A-10
Your Reference	-----	BH501	BH504	BH504
Depth	-----	0.5-0.95	0.5-0.95	1.3-1.6
Date Sampled		14/05/2010	17/05/2010	17/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	28/05/2010	28/05/2010	28/05/2010
Date analysed	-	29/05/2010	29/05/2010	29/05/2010
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	0.003	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(b+k)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Surrogate p-Terphenyl-d14	%	104	102	114

Method ID	Methodology Summary
LAB.4	Toxicity Characteristic Leaching Procedure (TCLP).
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
GC.12 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC.12	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			27/05/2010	41184-A-11	27/05/2010 27/05/2010	LCS-W2	27/05/2010
Date analysed	-			28/05/2010	41184-A-11	28/05/2010 28/05/2010	LCS-W2	28/05/2010
Arsenic in TCLP	mg/L	0.05	Metals.20 ICP-AES	<0.05	41184-A-11	0.7 0.7 RPD: 0	LCS-W2	112%
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	41184-A-11	<0.03 <0.03	LCS-W2	103%
Mercury in TCLP	mg/L	0.0005	Metals.21 CV-AAS	<0.0005	41184-A-11	<0.0005 <0.0005	LCS-W2	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			28/05/2010	[NT]	[NT]	LCS-W1	28/05/2010
Date analysed	-			29/05/2010	[NT]	[NT]	LCS-W1	29/05/2010
Naphthalene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	76%
Acenaphthylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	96%
Phenanthrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	92%
Anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	89%
Pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	96%
Benzo(a)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	100%
Benzo(b+k)fluoranthene in TCLP	mg/L	0.002	GC.12 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	98%
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]

EnviroLab Reference: 41184-A
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Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Surrogate p-Terphenyl-d14	%		GC.12	95	[NT]	[NT]	LCS-W1	107%

Envirolab Reference: 41184-A
Revision No: R 00



Report Comments:

Asbestos was analysed by Approved Identifier: Not applicable for this job
Asbestos was authorised by Approved Signatory: Not applicable for this job
INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than
RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for

Aileen Hie

From: Brendan Page [bpage@jkgroup.net.au]
Sent: Thursday, 27 May 2010 07:25 AM
To: Aileen Hie
Subject: Additional Analyses - 41184 (E23982K, Pyrmont)

EnviroLab Ref: 41184A
Duc: 3/6/10
std TIA.

EIS

ENVIRONMENTAL INVESTIGATION SERVICES

A division of Jeffery & Katauskas Pty Ltd
ABN 17 003 550 801

Hi Aileen,

Could you please arrange for the following analyses to be undertaken on the samples in EnviroLab's custody:

- 41184-1 (BH501 0.5-0.95), TCLP (acid) prep and leachate analysis for PAHs and lead;
- 41184-4 (BH502 0.3-0.8), TCLP (acid) prep and leachate analysis for lead;
- 41184-9 (BH504 0.5-0.95), TCLP (acid) prep and leachate analysis for lead and PAHs;
- 41184-10 (BH504 1.3-1.6), TCLP (acid) prep and leachate analysis for lead and PAHs; and
- 41184-11 (BH504 1.6-1.95), TCLP (acid) prep and leachate analysis for arsenic, lead and mercury.

All analyses is to be on a standard turnaround. Cheers ☺

Regards,

For and on behalf of

ENVIRONMENTAL INVESTIGATION SERVICES

Brendan Page
Environmental Scientist

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PO Box 976, North Ryde BC, NSW, 1670
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27/05/2010



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ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41301

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	E23982K, Pyrmont
No. of samples:	21 Soils, 2 Waters
Date samples received:	21/05/10
Date completed instructions received:	21/05/10

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	28/05/10
Date of Preliminary Report:	not issued
Issue Date:	2/06/10

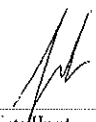
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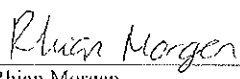
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Results Approved By:


Jacinta Hurst
Laboratory Manager


Matt Mansfield
Approved Signatory


Rhian Morgan
Metals Supervisor

Envirolab Reference: 41301
Revision No: R 01



vTPH & BTEX in Soil						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-7
Your Reference	-----	BH506	BH506	BH507	BH507	BH507
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	3.0-3.45
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	19/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	310	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	2.1	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	92	90	101	95	93

vTPH & BTEX in Soil						
Our Reference:	UNITS	41301-9	41301-10	41301-16	41301-18	41301-19
Your Reference	-----	BH508	BH508	Dup 11	Dup 13	T Spike 4
Depth	-----	0.3-0.5	1.5-1.95	-	-	-
Date Sampled		20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	[NA]
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	92%
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	90%
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	112%
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	89%
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	89%
Surrogate aaa-Trifluorotoluene	%	99	97	103	102	89

vTPH & BTEX in Soil			
Our Reference:	UNITS	41301-20	41301-21
Your Reference	-----	TB5	TB6
Depth	-----	-	-
Date Sampled		19/05/2010	20/05/2010
Type of sample		Soil	Soil
Date extracted	-	24/05/2010	24/05/2010
Date analysed	-	24/05/2010	24/05/2010
Benzene	mg/kg	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	98	99

Client Reference: E23982K, Pyrmont

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-7
Your Reference	-----	BH506	BH506	BH507	BH507	BH507
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	3.0-3.45
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	19/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
TPH C10 - C14	mg/kg	<50	110	<50	1,400	<50
TPH C15 - C28	mg/kg	<100	280	<100	340	<100
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	89	114	92	#	90

sTPH in Soil (C10-C36)					
Our Reference:	UNITS	41301-9	41301-10	41301-16	41301-18
Your Reference	-----	BH508	BH508	Dup 11	Dup 13
Depth	-----	0.3-0.5	1.5-1.95	-	-
Date Sampled		20/05/2010	20/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010
TPH C10 - C14	mg/kg	120	<50	<50	130
TPH C15 - C28	mg/kg	380	<100	<100	430
TPH C29 - C36	mg/kg	460	<100	<100	510
Surrogate o-Terphenyl	%	#	91	89	#

Client Reference: E23982K, Pymont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-1 BH506 0.5-1.0 19/05/2010 Soil	41301-2 BH506 1.65-2.05 19/05/2010 Soil	41301-5 BH507 0.5-0.8 19/05/2010 Soil	41301-6 BH507 1.6-2.05 19/05/2010 Soil	41301-9 BH508 0.3-0.5 20/05/2010 Soil
Date extracted	-	24/5/10	24/5/10	24/5/10	24/5/10	24/5/10
Date analysed	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
Naphthalene	mg/kg	<0.1	0.4	<0.1	3.3	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	0.1	<0.1
Acenaphthene	mg/kg	<0.1	0.1	<0.1	0.2	<0.1
Fluorene	mg/kg	<0.1	0.4	<0.1	0.2	<0.1
Phenanthrene	mg/kg	<0.1	0.7	<0.1	0.7	0.5
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	0.6	0.8
Pyrene	mg/kg	<0.1	<0.1	<0.1	0.6	0.9
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.3	0.5
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.3	0.5
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	0.5	1
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	0.3	0.6
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	0.2	0.4
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	0.2	0.4
Surrogate p-Terphenyl-d ₁₄	%	98	95	102	97	95

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-10 BH508 1.5-1.95 20/05/2010 Soil	41301-16 Dup 11 - 20/05/2010 Soil	41301-18 Dup 13 - 20/05/2010 Soil
Date extracted	-	24/5/10	24/5/10	24/5/10
Date analysed	-	25/5/10	25/5/10	25/5/10
Naphthalene	mg/kg	<0.1	<0.1	0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	0.1
Phenanthrene	mg/kg	<0.1	<0.1	0.8
Anthracene	mg/kg	<0.1	<0.1	0.3
Fluoranthene	mg/kg	0.1	<0.1	1.3
Pyrene	mg/kg	0.1	<0.1	1.4
Benzo(a)anthracene	mg/kg	<0.1	<0.1	0.8
Chrysene	mg/kg	<0.1	<0.1	0.8
Benzo(b+k)fluoranthene	mg/kg	<0.2	<0.2	0.4
Benzo(a)pyrene	mg/kg	0.09	<0.05	1.0
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.6
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.6
Surrogate p-Terphenyl-d14	%	100	98	97

Organochlorine Pesticides in soil						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-9
Your Reference	-----	BH506	BH506	BH507	BH507	BH508
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	0.3-0.5
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010	26/05/2010	26/05/2010
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	100	104	100	114

Client Reference: E23982K, Pymont

Organochlorine Pesticides in soil	UNITS	41301-10	41301-16	41301-18
Our Reference:	-----	BH508	Dup 11	Dup 13
Your Reference	-----	1.5-1.95	-	-
Depth		20/05/2010	20/05/2010	20/05/2010
Date Sampled		Soil	Soil	Soil
Type of sample				
Date extracted	-	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010
HCB	mg/kg	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	112	102

Organophosphorus Pesticides						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-9
Your Reference	-----	BH506	BH506	BH507	BH507	BH508
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	0.3-0.5
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010	26/05/2010	26/05/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	100	104	100	114

Organophosphorus Pesticides				
Our Reference:	UNITS	41301-10	41301-16	41301-18
Your Reference	-----	BH508	Dup 11	Dup 13
Depth	-----	1.5-1.95	-	-
Date Sampled		20/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010
Diazinon	mg/kg	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	112	102

Client Reference: E23982K, Pymont

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-1 BH506 0.5-1.0 19/05/2010 Soil	41301-2 BH506 1.85-2.05 19/05/2010 Soil	41301-5 BH507 0.5-0.8 19/05/2010 Soil	41301-6 BH507 1.6-2.05 19/05/2010 Soil	41301-9 BH508 0.3-0.5 20/05/2010 Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010	26/05/2010	26/05/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	100	104	100	114

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-10 BH508 1.5-1.95 20/05/2010 Soil	41301-16 Dup 11 - 20/05/2010 Soil	41301-18 Dup 13 - 20/05/2010 Soil
Date extracted	-	24/05/2010	24/05/2010	24/05/2010
Date analysed	-	26/05/2010	26/05/2010	26/05/2010
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	97	112	102

Client Reference: E23982K, Pymont

Acid Extractable metals in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-1 BH506 0.5-1.0 19/05/2010 Soil	41301-2 BH506 1.85-2.05 19/05/2010 Soil	41301-5 BH507 0.5-0.8 19/05/2010 Soil	41301-6 BH507 1.6-2.05 19/05/2010 Soil	41301-9 BH508 0.3-0.5 20/05/2010 Soil
Date digested	-	25/05/10	25/05/10	25/05/10	25/05/10	25/05/10
Date analysed	-	25/05/10	25/05/10	25/05/10	25/05/10	25/05/10
Arsenic	mg/kg	<4	9	<4	<4	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	31	8	60	13	15
Copper	mg/kg	16	11	25	76	110
Lead	mg/kg	9	52	17	130	130
Mercury	mg/kg	<0.1	<0.1	<0.1	0.3	0.2
Nickel	mg/kg	23	3	45	8	20
Zinc	mg/kg	22	7	54	340	120

Acid Extractable metals in soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-10 BH508 1.5-1.95 20/05/2010 Soil	41301-16 Dup 11 - 20/05/2010 Soil	41301-18 Dup 13 - 20/05/2010 Soil
Date digested	-	25/05/10	25/05/10	25/05/10
Date analysed	-	25/05/10	25/05/10	25/05/10
Arsenic	mg/kg	<4	<4	5
Cadmium	mg/kg	<0.5	<0.5	<0.5
Chromium	mg/kg	9	42	16
Copper	mg/kg	50	26	94
Lead	mg/kg	39	20	200
Mercury	mg/kg	<0.1	<0.1	0.4
Nickel	mg/kg	4	36	21
Zinc	mg/kg	110	31	130

Client Reference: E23982K, Pyrmont

Miscellaneous Inorg - soil						
Our Reference:	UNITS	41301-1	41301-2	41301-3	41301-4	41301-9
Your Reference	-----	BH506	BH506	BH506	BH506	BH508
Depth	-----	0.5-1.0	1.85-2.05	3.0-3.45	4.3-4.5	0.3-0.5
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/5/2010	24/5/2010	24/5/2010	24/5/2010	24/5/2010
Date analysed	-	25/5/2010	25/5/2010	25/5/2010	25/5/2010	25/5/2010
pH 1:5 soil:water	pH Units	11.4	9.3	10.0	9.3	9.6

Miscellaneous Inorg - soil						
Our Reference:	UNITS	41301-10	41301-11	41301-12	41301-13	41301-14
Your Reference	-----	BH508	BH508	BH508	BH508	BH508
Depth	-----	1.5-1.95	3.0-3.45	4.5-4.95	6.1-6.45	7.0-7.2
Date Sampled		20/05/2010	20/05/2010	20/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/5/2010	24/5/2010	24/5/2010	24/5/2010	24/5/2010
Date analysed	-	25/5/2010	25/5/2010	25/5/2010	25/5/2010	25/5/2010
pH 1:5 soil:water	pH Units	7.7	8.7	7.1	8.7	8.1

Miscellaneous Inorg - soil		
Our Reference:	UNITS	41301-15
Your Reference	-----	BH508
Depth	-----	7.7-7.8
Date Sampled		20/05/2010
Type of sample		Soil
Date prepared	-	24/5/2010
Date analysed	-	25/5/2010
pH 1:5 soil:water	pH Units	8.4

sPOCAS Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-1 BH506 0.5-1.0 19/05/2010 Soil	41301-2 BH506 1.85-2.05 19/05/2010 Soil	41301-3 BH506 3.0-3.45 19/05/2010 Soil	41301-4 BH506 4.3-4.5 19/05/2010 Soil	41301-9 BH508 0.3-0.5 20/05/2010 Soil
Date prepared	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
Date analysed	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
pH _{KCl}	pH units	11.0	10.2	7.3	7.1	9.3
TAA pH 6.5	moles H ⁺ /l	<5	<5	<5	<5	<5
s-TAA pH 6.5	%w/w S	<0.01	<0.01	<0.01	<0.01	<0.01
pH _{ox}	pH units	8.3	7.6	2.4	3.1	6.2
TPA pH 6.5	moles H ⁺ /l	<5.0	<5.0	383	17	<5.0
s-TPA pH 6.5	%w/w S	<0.01	<0.01	0.61	0.028	<0.01
TSA pH 6.5	moles H ⁺ /l	<5.0	<5.0	383	17	<5.0
s-TSA pH 6.5	%w/w S	<0.01	<0.01	0.61	0.028	<0.01
ANCE	% CaCO ₃	5.0	1.1	<0.05	<0.05	<0.05
a-ANCE	moles H ⁺ /l	1,000	225	<5	<5	<5
s-ANCE	%w/w S	1.6	0.36	<0.05	<0.05	<0.05
SKCl	%w/w S	0.032	0.052	0.16	0.008	0.010
SP	%w/w	0.053	0.21	1.0	0.11	0.093
SPOS	%w/w	0.022	0.15	0.89	0.10	0.083
a-SPOS	moles H ⁺ /l	13	96	553	63	52
CaKCl	%w/w	0.34	0.29	0.25	0.032	0.14
CaP	%w/w	1.8	0.64	0.33	0.031	0.24
CaA	%w/w	1.5	0.35	0.078	<0.005	0.098
MgKCl	%w/w	<0.005	<0.005	0.021	0.017	0.005
MgP	%w/w	0.039	0.021	0.034	0.017	0.016
MgA	%w/w	0.039	0.019	0.013	<0.005	0.011
SRAS	%w/w	<0.005	<0.005	<0.005	<0.005	<0.005
SHCl	%w/w S	0.039	0.028	0.12	0.005	0.011
SNAS	%w/w S	0.007	<0.005	<0.005	<0.005	<0.005
a-SNAS	moles H ⁺ /l	<5	<5	<5	<5	<5
s-SNAS	%w/w S	<0.01	<0.01	<0.01	<0.01	<0.01
a-Net Acidity	moles H ⁺ /l	<10	<10	439	33	52
Liming rate	kg CaCO ₃ /t	<0.75	<0.75	33	2.5	3.9
a-Net Acidity without ANCE	moles H ⁺ /l	13	96	NA	NA	NA
Liming rate without ANCE	kg CaCO ₃ /t	1.0	7.2	NA	NA	NA

sPOCAS Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-10 BH508 1.5-1.95 20/05/2010 Soil	41301-11 BH508 3.0-3.45 20/05/2010 Soil	41301-12 BH508 4.5-4.95 20/05/2010 Soil	41301-13 BH508 6.1-6.45 20/05/2010 Soil	41301-14 BH508 7.0-7.2 20/05/2010 Soil
Date prepared	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
Date analysed	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
pH _{KCl}	pH units	7.9	7.1	4.5	5.1	5.3
TAA pH 6.5	moles H ⁺ /t	<5	<5	12	5	5
s-TAA pH 6.5	%w/w S	<0.01	<0.01	0.020	<0.01	<0.01
pH _{ox}	pH units	5.6	3.0	3.5	4.5	4.3
TPA pH 6.5	moles H ⁺ /t	<5.0	72	17	<5.0	<5.0
s-TPA pH 6.5	%w/w S	<0.01	0.12	0.028	<0.01	<0.01
TSA pH 6.5	moles H ⁺ /t	<5.0	72	5.0	<5.0	<5.0
s-TSA pH 6.5	%w/w S	<0.01	0.12	<0.01	<0.01	<0.01
ANCE	% CaCO ₃	<0.05	<0.05	<0.05	<0.05	<0.05
a-ANCE	moles H ⁺ /t	<5	<5	<5	<5	<5
s-ANCE	%w/w S	<0.05	<0.05	<0.05	<0.05	<0.05
SKCl	%w/w S	0.007	0.018	0.006	<0.005	<0.005
SP	%w/w	0.055	0.25	0.082	0.009	0.005
SPOS	%w/w	0.048	0.23	0.076	0.006	<0.005
a-SPOS	moles H ⁺ /t	30	143	47	<5.0	<5.0
CaKCl	%w/w	0.099	0.078	0.028	0.039	0.032
CaP	%w/w	0.11	0.086	0.027	0.045	0.033
CaA	%w/w	0.011	0.007	<0.005	0.006	<0.005
MgKCl	%w/w	0.008	0.012	0.036	0.010	0.009
MgP	%w/w	0.009	0.012	0.037	0.021	0.009
MgA	%w/w	<0.005	<0.005	<0.005	0.011	<0.005
SRAS	%w/w	<0.005	<0.005	<0.005	<0.005	<0.005
SHCl	%w/w S	0.006	0.014	<0.005	<0.005	<0.005
SNAS	%w/w S	<0.005	<0.005	<0.005	<0.005	<0.005
a-SNAS	moles H ⁺ /t	<5	<5	<5	<5	<5
s-SNAS	%w/w S	<0.01	<0.01	<0.01	<0.01	<0.01
a-Net Acidity	moles H ⁺ /t	30	96	60	<10	<10
Liming rate	kg CaCO ₃ /t	2.2	7.2	4.5	<0.75	<0.75
a-Net Acidity without ANCE	moles H ⁺ /t	NA	NA	NA	NA	NA
Liming rate without ANCE	kg CaCO ₃ /t	NA	NA	NA	NA	NA

sPOCAS		
Our Reference:	UNITS	41301-15
Your Reference	-----	BH508
Depth	-----	7.7-7.8
Date Sampled		20/05/2010
Type of sample		Soil
Date prepared	-	25/5/10
Date analysed	-	25/5/10
pH _{KCl}	pH units	5.1
TAA pH 6.5	moles H ⁺ /l	7.5
s-TAA pH 6.5	%w/w S	0.012
pH _{ox}	pH units	3.9
TPA pH 6.5	moles H ⁺ /l	<5.0
s-TPA pH 6.5	%w/w S	<0.01
TSA pH 6.5	moles H ⁺ /l	<5.0
s-TSA pH 6.5	%w/w S	<0.01
ANCE	% CaCO ₃	<0.05
a-ANCE	moles H ⁺ /l	<5
s-ANCE	%w/w S	<0.05
SKCl	%w/w S	<0.005
SP	%w/w	<0.005
SPOS	%w/w	<0.005
a-SPOS	moles H ⁺ /l	<5.0
CaKCl	%w/w	0.041
CaP	%w/w	0.041
CaA	%w/w	<0.005
MgKCl	%w/w	0.011
MgP	%w/w	0.011
MgA	%w/w	<0.005
SRAS	%w/w	<0.005
SHCl	%w/w S	<0.005
SNAS	%w/w S	<0.005
a-SNAS	moles H ⁺ /l	<5
s-SNAS	%w/w S	<0.01
a-Net Acidity	moles H ⁺ /l	<10
Liming rate	kg CaCO ₃ /t	<0.75
a-Net Acidity without ANCE	moles H ⁺ /l	NA
Liming rate without ANCE	kg CaCO ₃ /t	NA

Client Reference: E23982K, Pymont

Moisture						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-7
Your Reference	-----	BH506	BH506	BH507	BH507	BH507
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	3.0-3.45
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	19/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	24/5/10	24/5/10	24/5/10	24/5/10	24/5/10
Date analysed	-	24/5/10	24/5/10	24/5/10	24/5/10	24/5/10
Moisture	%	9.2	30	8.3	22	27

Moisture					
Our Reference:	UNITS	41301-9	41301-10	41301-16	41301-18
Your Reference	-----	BH508	BH508	Dup 11	Dup 13
Depth	-----	0.3-0.5	1.5-1.95	-	-
Date Sampled		20/05/2010	20/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	24/5/10	24/5/10	24/5/10	24/5/10
Date analysed	-	24/5/10	24/5/10	24/5/10	24/5/10
Moisture	%	5.4	14	8.5	5.5

Asbestos ID - soils						
Our Reference:	UNITS	41301-1	41301-2	41301-5	41301-6	41301-9
Your Reference	-----	BH506	BH506	BH507	BH507	BH508
Depth	-----	0.5-1.0	1.85-2.05	0.5-0.8	1.6-2.05	0.3-0.5
Date Sampled		19/05/2010	19/05/2010	19/05/2010	19/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	25/5/10	25/5/10	25/5/10	25/5/10	25/5/10
Sample Description	-	Approx 10g Soil	Approx 20g Clay soil	Approx 10g Soil	Approx 20g Clay soil	Approx 10g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils		
Our Reference:	UNITS	41301-10
Your Reference	-----	BH508
Depth	-----	1.5-1.95
Date Sampled		20/05/2010
Type of sample		Soil
Date analysed	-	25/5/10
Sample Description	-	Approx 10g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected

Client Reference: E23982K, Pymont

vTPH & BTEX in Water			
Our Reference:	UNITS	41301-22	41301-23
Your Reference	-----	Rinsate 5	Rinsate 6
Depth	-----	-	-
Date Sampled		19/05/2010	20/05/2010
Type of sample		Water	Water
Date extracted	-	25/05/2010	25/05/2010
Date analysed	-	25/05/2010	25/05/2010
TPH C ₆ - C ₉	µg/L	18	18
Benzene	µg/L	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0
m+p-xylene	µg/L	<2.0	<2.0
o-xylene	µg/L	<1.0	<1.0
Surrogate Dibromofluoromethane	%	112	112
Surrogate toluene-d8	%	97	97
Surrogate 4-BFB	%	97	97

sTPH in Water (C10-C36)	UNITS	41301-22	41301-23
Our Reference:	-----	Rinsate 5	Rinsate 6
Your Reference	-----	-	-
Depth		19/05/2010	20/05/2010
Date Sampled		Water	Water
Type of sample			
Date extracted	-	25/5/10	25/5/10
Date analysed	-	25/5/10	25/5/10
TPH C10 - C14	µg/L	<50	<50
TPH C15 - C28	µg/L	<100	<100
TPH C29 - C36	µg/L	<100	<100
Surrogate o-Terphenyl	%	103	97

PAHs in Water Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41301-22 Rinsate 5 19/05/2010 Water	41301-23 Rinsate 6 20/05/2010 Water
Date extracted	-	25/5/10	25/5/10
Date analysed	-	26/5/10	26/5/10
Naphthalene	µg/L	<1	<1
Acenaphthylene	µg/L	<1	<1
Acenaphthene	µg/L	<1	<1
Fluorene	µg/L	<1	<1
Phenanthrene	µg/L	<1	<1
Anthracene	µg/L	<1	<1
Fluoranthene	µg/L	<1	<1
Pyrene	µg/L	<1	<1
Benzo(a)anthracene	µg/L	<1	<1
Chrysene	µg/L	<1	<1
Benzo(b+k)fluoranthene	µg/L	<2	<2
Benzo(a)pyrene	µg/L	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1	<1
Dibenzo(a,h)anthracene	µg/L	<1	<1
Benzo(g,h,i)perylene	µg/L	<1	<1
Surrogate <i>p</i> -Terphenyl-d ₁₄	%	102	99

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.64	sPOCAS determined using titrimetric and ICP-AES techniques. Based on Acid Sulfate Soils Laboratory Methods Guidelines, Version 2.1 - June 2004.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil						Base II Duplicate II %RPD		
Date extracted	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
Date analysed	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
vTPH C ₈ - C ₉	mg/kg	25	GC.16	<25	41301-1	<25 <25	LCS-1	90%
Benzene	mg/kg	0.5	GC.16	<0.5	41301-1	<0.5 <0.5	LCS-1	93%
Toluene	mg/kg	0.5	GC.16	<0.5	41301-1	<0.5 <0.5	LCS-1	90%
Ethylbenzene	mg/kg	1	GC.16	<1.0	41301-1	<1.0 <1.0	LCS-1	88%
m+p-xylene	mg/kg	2	GC.16	<2.0	41301-1	<2.0 <2.0	LCS-1	89%
o-Xylene	mg/kg	1	GC.16	<1.0	41301-1	<1.0 <1.0	LCS-1	93%
Surrogate aaa-Trifluorotoluene	%		GC.16	107	41301-1	92 101 RPD: 9	LCS-1	107%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
Date analysed	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
TPH C ₁₀ - C ₁₄	mg/kg	50	GC.3	<50	41301-1	<50 <50	LCS-1	60%
TPH C ₁₅ - C ₂₈	mg/kg	100	GC.3	<100	41301-1	<100 <100	LCS-1	72%
TPH C ₂₉ - C ₃₆	mg/kg	100	GC.3	<100	41301-1	<100 <100	LCS-1	70%
Surrogate o-Terphenyl	%		GC.3	92	41301-1	89 89 RPD: 0	LCS-1	88%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			24/5/10	41301-1	24/5/10 24/5/10	LCS-1	24/5/10
Date analysed	-			25/5/10	41301-1	25/5/10 25/5/10	LCS-1	25/5/10
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	87%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	89%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	89%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	83%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	94%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base Duplicate %RPD		
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	LCS-1	96%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	41301-1	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	41301-1	<0.05 <0.05	LCS-1	99%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	100	41301-1	98 93 RPD: 5	LCS-1	99%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base Duplicate %RPD		
Date extracted	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
Date analysed	-			26/05/2010	41301-1	26/05/2010 26/05/2010	LCS-1	26/05/2010
HCB	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	107%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	100%
Heptachlor	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	92%
delta-BHC	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	105%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	104%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	99%
Dieldrin	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	105%
Endrin	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	94%
pp-DDD	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	95%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	LCS-1	94%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	97	41301-1	97 99 RPD: 2	LCS-1	99%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
Date analysed	-			26/05/2010	41301-1	26/05/2010 26/05/2010	LCS-1	26/05/2010
Diazinon	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	LCS-1	96%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	LCS-1	67%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	41301-1	<0.1 <0.1	LCS-1	87%
Surrogate TCLMX	%		GC.8	97	41301-1	97 99 RPD: 2	LCS-1	97%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			24/05/2010	41301-1	24/05/2010 24/05/2010	LCS-1	24/05/2010
Date analysed	-			26/05/2010	41301-1	26/05/2010 26/05/2010	LCS-1	26/05/2010
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	LCS-1	99%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	41301-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	97	41301-1	97 99 RPD: 2	LCS-1	99%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			25/05/10	41301-1	25/05/10 25/05/10	LCS-1	25/05/10
Date analysed	-			25/05/10	41301-1	25/05/10 25/05/10	LCS-1	25/05/10
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	41301-1	<4 <4	LCS-1	98%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	41301-1	<0.5 <0.5	LCS-1	104%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	41301-1	31 37 RPD: 18	LCS-1	102%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	41301-1	16 18 RPD: 12	LCS-1	100%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Lead	mg/kg	1	Metals.20 ICP-AES	<1	41301-1	9 10 RPD: 11	LCS-1	97%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	41301-1	<0.1 <0.1	LCS-1	104%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	41301-1	23 29 RPD: 23	LCS-1	100%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	41301-1	22 24 RPD: 9	LCS-1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base II Duplicate II %RPD		
Date prepared	-			[NT]	41301-1	24/5/2010 24/5/2010	LCS-1	24/05/2010
Date analysed	-			[NT]	41301-1	25/5/2010 25/5/2010	LCS-1	25/05/2010
pH 1:5 soil:water	pH Units		LAB.1	[NT]	41301-1	11.4 11.4 RPD: 0	LCS-1	98%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
Date prepared	-			25/5/10	41301-1	25/5/10 25/5/10	LCS	25/5/10
Date analysed	-			25/5/10	41301-1	25/5/10 25/5/10	LCS	25/5/10
pH _{KCl}	pH units		LAB.64	5.3	41301-1	11.0 11.1 RPD: 1	LCS	101%
TAA pH 6.5	moles H ⁺ /l	5	LAB.64	<5	41301-1	<5 <5	LCS	99%
s-TAA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41301-1	<0.01 <0.01	LCS	97%
pH _{ox}	pH units		LAB.64	4.2	41301-1	8.3 8.4 RPD: 1	LCS	107%
TPA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41301-1	<5.0 <5.0	LCS	95%
s-TPA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41301-1	<0.01 <0.01	LCS	95%
TSA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41301-1	<5.0 <5.0	LCS	94%
s-TSA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41301-1	<0.01 <0.01	LCS	93%
ANCE	% CaCO ₃	0.05	LAB.64	<0.05	41301-1	5.0 4.9 RPD: 2	[NR]	[NR]
a-ANCE	moles H ⁺ /l	5	LAB.64	<5	41301-1	1000 975 RPD: 3	[NR]	[NR]
s-ANCE	%w/w S	0.05	LAB.64	<0.05	41301-1	1.6 1.6 RPD: 0	[NR]	[NR]
SKCl	%w/w S	0.005	LAB.64	<0.005	41301-1	0.032 0.028 RPD: 13	LCS	111%
SP	%w/w	0.005	LAB.64	<0.005	41301-1	0.053 0.051 RPD: 4	LCS	100%
SPOS	%w/w	0.005	LAB.64	<0.005	41301-1	0.022 0.022 RPD: 0	LCS	97%
a-SPOS	moles H ⁺ /l	5	LAB.64	<5.0	41301-1	13 14 RPD: 7	LCS	98%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
CaKCl	%w/w	0.005	LAB.64	<0.005	41301-1	0.34 0.34 RPD: 0	LCS	93%
CaP	%w/w	0.005	LAB.64	<0.005	41301-1	1.8 1.8 RPD: 0	LCS	78%
CaA	%w/w	0.005	LAB.64	<0.005	41301-1	1.5 1.4 RPD: 7	[NR]	[NR]
MgKCl	%w/w	0.005	LAB.64	<0.005	41301-1	<0.005 <0.005	LCS	91%
MgP	%w/w	0.005	LAB.64	<0.005	41301-1	0.039 0.038 RPD: 3	LCS	95%
MgA	%w/w	0.005	LAB.64	<0.005	41301-1	0.039 0.038 RPD: 3	[NR]	[NR]
SRAS	%w/w	0.005	LAB.64	<0.005	41301-1	<0.005 <0.005	[NR]	[NR]
SHCl	%w/w	0.005	LAB.64	<0.005	41301-1	0.039 0.039 RPD: 0	LCS	89%
S								
SNAS	%w/w	0.005	LAB.64	<0.005	41301-1	0.007 0.011 RPD: 44	[NR]	[NR]
S								
a-SNAS	moles H ⁺ /l	5	LAB.64	<5	41301-1	<5 5.1	[NR]	[NR]
s-SNAS	%w/w	0.01	LAB.64	<0.01	41301-1	<0.01 <0.01	[NR]	[NR]
S								
a-Net Acidity	moles H ⁺ /l	10	LAB.64	<10	41301-1	<10 <10	LCS	96%
Liming rate	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41301-1	<0.75 <0.75	LCS	96%
a-Net Acidity without ANCE	moles H ⁺ /l	10	LAB.64	<10	41301-1	13 14 RPD: 7	[NR]	[NR]
Liming rate without ANCE	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41301-1	1.0 1.0 RPD: 0	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			24/5/10
Date analysed	-			24/5/10
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Asbestos ID - soils				
Date analysed	-			[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Date extracted	-			25/05/2010	[NT]	[NT]	LCS-W1	25/05/2010
Date analysed	-			25/05/2010	[NT]	[NT]	LCS-W1	25/05/2010
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	108%
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	112%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	107%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	106%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	107%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	108%
Surrogate	%		GC.16	112	[NT]	[NT]	LCS-W1	112%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	99	[NT]	[NT]	LCS-W1	98%
Surrogate 4-BFB	%		GC.16	97	[NT]	[NT]	LCS-W1	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			25/5/10	[NT]	[NT]	LCS-W2	25/5/10
Date analysed	-			25/5/10	[NT]	[NT]	LCS-W2	25/5/10
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W2	84%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	105%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	83%
Surrogate	%		GC.3	105	[NT]	[NT]	LCS-W2	99%
o-Terphenyl								

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			25/5/10	[NT]	[NT]	LCS-W1	25/5/10
Date analysed	-			26/5/10	[NT]	[NT]	LCS-W1	26/5/10
Naphthalene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	84%
Acenaphthylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	90%
Phenanthrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	90%
Anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	82%
Pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	93%
Benzo(a)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	90%
Benzo(b+k)fluoranthene	µg/L	2	GC.12 subset	<2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W1	90%
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]

EnviroLab Reference: 41301
Revision No: R 01



Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base Duplicate %RPD		
Dibenzo(a,h)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	117	[NT]	[NT]	LCS-W1	97%
QUALITY CONTROL vTPH & BTEX in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery		
Date extracted	-	[NT]	[NT]		41301-2	24/05/2010		
Date analysed	-	[NT]	[NT]		41301-2	24/05/2010		
vTPH C6 - C9	mg/kg	[NT]	[NT]		41301-2	83%		
Benzene	mg/kg	[NT]	[NT]		41301-2	84%		
Toluene	mg/kg	[NT]	[NT]		41301-2	83%		
Ethylbenzene	mg/kg	[NT]	[NT]		41301-2	82%		
m+p-xylene	mg/kg	[NT]	[NT]		41301-2	83%		
o-Xylene	mg/kg	[NT]	[NT]		41301-2	86%		
Surrogate aaa-Trifluorotoluene	%	[NT]	[NT]		41301-2	101%		
QUALITY CONTROL sTPH in Soil (C10-C36)	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery		
Date extracted	-	[NT]	[NT]		41301-2	24/05/2010		
Date analysed	-	[NT]	[NT]		41301-2	24/05/2010		
TPH C10 - C14	mg/kg	[NT]	[NT]		41301-2	110%		
TPH C15 - C28	mg/kg	[NT]	[NT]		41301-2	114%		
TPH C29 - C36	mg/kg	[NT]	[NT]		41301-2	99%		
Surrogate o-Terphenyl	%	[NT]	[NT]		41301-2	101%		
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery		
Date extracted	-	[NT]	[NT]		41301-2	24/5/10		
Date analysed	-	[NT]	[NT]		41301-2	25/5/10		
Naphthalene	mg/kg	[NT]	[NT]		41301-2	92%		
Acenaphthylene	mg/kg	[NT]	[NT]		[NR]	[NR]		
Acenaphthene	mg/kg	[NT]	[NT]		[NR]	[NR]		
Fluorene	mg/kg	[NT]	[NT]		41301-2	93%		
Phenanthrene	mg/kg	[NT]	[NT]		41301-2	88%		
Anthracene	mg/kg	[NT]	[NT]		[NR]	[NR]		
Fluoranthene	mg/kg	[NT]	[NT]		41301-2	85%		
Pyrene	mg/kg	[NT]	[NT]		41301-2	95%		
Benzo(a)anthracene	mg/kg	[NT]	[NT]		[NR]	[NR]		
Chrysene	mg/kg	[NT]	[NT]		41301-2	92%		
Benzo(b+k)fluoranthene	mg/kg	[NT]	[NT]		[NR]	[NR]		

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Client Reference: E23982K, Pyrmont

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Benzo(a)pyrene	mg/kg	[NT]	[NT]	41301-2	99%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	41301-2	98%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41301-2	24/05/2010
Date analysed	-	[NT]	[NT]	41301-2	26/05/2010
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	41301-2	123%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	41301-2	118%
Heptachlor	mg/kg	[NT]	[NT]	41301-2	112%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	41301-2	125%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	41301-2	125%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	41301-2	118%
Dieldrin	mg/kg	[NT]	[NT]	41301-2	125%
Endrin	mg/kg	[NT]	[NT]	41301-2	109%
pp-DDD	mg/kg	[NT]	[NT]	41301-2	110%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	41301-2	107%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41301-2	108%

Client Reference: E23982K, Pymont

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41301-2	24/05/2010
Date analysed	-	[NT]	[NT]	41301-2	26/05/2010
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	[NT]	[NT]	41301-2	111%
Fenitrothion	mg/kg	[NT]	[NT]	41301-2	77%
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	41301-2	95%
Surrogate TCLMX	%	[NT]	[NT]	41301-2	102%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41301-2	24/05/2010
Date analysed	-	[NT]	[NT]	41301-2	26/05/2010
Arochlor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	[NT]	[NT]	41301-2	100%
Arochlor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41301-2	109%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	[NT]	[NT]	41301-2	25/05/10
Date analysed	-	[NT]	[NT]	41301-2	25/05/10
Arsenic	mg/kg	[NT]	[NT]	41301-2	96%
Cadmium	mg/kg	[NT]	[NT]	41301-2	100%
Chromium	mg/kg	[NT]	[NT]	41301-2	99%
Copper	mg/kg	[NT]	[NT]	41301-2	101%
Lead	mg/kg	[NT]	[NT]	41301-2	87%
Mercury	mg/kg	[NT]	[NT]	41301-2	101%
Nickel	mg/kg	[NT]	[NT]	41301-2	96%
Zinc	mg/kg	[NT]	[NT]	41301-2	95%

Report Comments:

Total Petroleum Hydrocarbons in soil (semivol):# Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Total Petroleum Hydrocarbons/BTEX in water:C6-C9 positive due to trihalomethanes.

Asbestos was analysed by Approved Identifier: Matt Mansfield

Asbestos was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



EnviroLab Services Pty Ltd
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12 Ashley St Chatswood NSW 2067
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enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000
Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:
EnviroLab Reference:
Date received:
Date results expected to be reported:

E23982K, Pyrmont
41301
21/05/10
28/05/10

Samples received in appropriate condition for analysis:	YES
No. of samples provided	21 Soils, 2 Waters
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

SAMPLE AND CHAIN OF CUSTODY FORM

TO: Envirolab Services Pty Ltd 12 Ashley Street Chatswood NSW 2067 Phone: (02) 99106200 Fax: (02) 99106201 Attention: Aileen				EIS Job Number: E23982K Date Results Required: Standard				FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page										
Project: Proposed Redevelopment Location: Pymont Sampler: AM				Tests Required				Sample Preservation: In esky on ice										
Date Sampled	Lab Ref:	Borehole/ Sample Number	Depth (m)	Sample Container	PID	Sample Description	Heavy Metals (8)	TPH/BTEX	PAH	OC/OP/ PCB	Asbestos	TCLP Prep + M6, PAH	Phenols	VOC	SVOC	SPOCAS + pH	BTEX	pH, Cl, Sulfate *
19/5/10	1	BH506	0.5/1.0	Glass jar + Asb Bag	0	Fill (F)	X	X	X	X	X						X	X
	2	BH	1.85/2.05	Glass jar + Asb Bag	0	F	X	X	X	X	X						X	
	3	BH	3.0/3.45	Glass jar + Asb Bag	0	Natural (N)											X	X
	4	BH	4.3/4.5	Glass jar + Asb Bag	0	N											X	X
	5	BH507	0.5/0.8	Glass jar + Asb Bag	3	F	X	X	X	X	X							
	6	BH	1.6/2.05	Glass jar + Asb Bag	94.7	F	X	X	X	X	X							
	7	BH	3.0/3.45	Glass jar + Asb Bag	21	N		X										
	8	BH	4.3/5.0	Glass jar + Asb Bag	14	N												
20/5/10	9	BH508	0.3/0.5	Glass jar + Asb Bag	0	F	X	X	X	X	X						X	
	10	BH	1.5/1.95	Glass jar + Asb Bag	0	F	X	X	X	X	X						X	X
	11	BH	3.0/3.45	Glass jar + Asb Bag	0	N											X	
	12	BH	4.5/4.95	Glass jar + Asb Bag	0	N											X	
	13	BH	6.1/6.45	Glass jar + Asb Bag	0	N											X	X
	14	BH	7.0/7.2	Glass jar + Asb Bag	0	N											X	
	15	BH	7.7/7.8	Glass jar + Asb Bag	0	N											X	
	16	Dup 11		Glass jar + Asb Bag			X	X	X	X								
	17	Dup 12		Glass jar + Asb Bag														
	18	Dup 13		Glass jar + Asb Bag			X	X	X	X								
20/5/10	19	TSP 4		Glass jar + Asb Bag													X	
19/5/10	20	TBS		Glass jar + Asb Bag													X	
20/5/10	21	TB6		Glass jar + Asb Bag													X	
19/5/10	22	Rinsate 5						X	X									
20/5/10	23	Rinsate 6						X	X									
		BH		Glass jar + Asb Bag														
		BH		Glass jar + Asb Bag														

Remarks (comments/detection limits required): * Please only include pH, sulfate + chloride results in a separate "A" report.

Relinquished By:	Date: 21/5/10 Time: 12pm	Received By:	Relinquished By:	Date: 21/5/10 Time: 12pm	Received By:
------------------	-----------------------------	--------------	------------------	-----------------------------	--------------

Date received: 21/5/10
 Time received: 3:00
 Received by: JHie
 Temp: Cool Ambient
 Cooling: Ice/Capack
 Security: Intact/Broken/None



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41301-B

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	Additional Testing on 4 Soils
Date samples received:	21/05/10
Date completed instructions received:	31/05/10

Analysis Details:

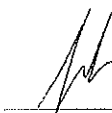
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

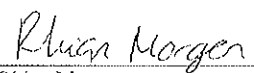
Report Details:

Date results requested by:	7/06/10
Date of Preliminary Report:	not issued
Issue Date:	7/06/10

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Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Laboratory Manager


Rhian Morgan
Metals Supervisor

Envirolab Reference: 41301-B
Revision No: R 00



Metals in TCLP USEPA1311					
Our Reference:	UNITS	41301-B-5	41301-B-6	41301-B-9	41301-B-18
Your Reference	-----	BH507	BH507	BH508	Dup 13
Depth	-----	0.5-0.8	1.6-2.05	0.3-0.5	-
Date Sampled		19/05/2010	19/05/2010	20/05/2010	20/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Date analysed	-	02/06/2010	02/06/2010	02/06/2010	02/06/2010
pH of soil for fluid# determ.	pH units	9.40	10.50	9.40	8.80
pH of soil for fluid # determ. (acid)	pH units	1.60	1.50	1.50	1.30
Extraction fluid used	-	1	1	1	1
pH of final Leachate	pH units	6.20	5.90	5.10	5.10
Lead in TCLP	mg/L	[NA]	0.2	0.4	0.5
Nickel in TCLP	mg/L	<0.02	[NA]	[NA]	[NA]

PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	41301-B-18
Your Reference	-----	Dup 13
Depth	-----	-
Date Sampled		20/05/2010
Type of sample		Soil
Date extracted	-	1/6/2010
Date analysed	-	1/6/2010
Naphthalene in TCLP	mg/L	<0.001
Acenaphthylene in TCLP	mg/L	<0.001
Acenaphthene in TCLP	mg/L	<0.001
Fluorene in TCLP	mg/L	<0.001
Phenanthrene in TCLP	mg/L	<0.001
Anthracene in TCLP	mg/L	<0.001
Fluoranthene in TCLP	mg/L	<0.001
Pyrene in TCLP	mg/L	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001
Chrysene in TCLP	mg/L	<0.001
Benzo(b+k)fluoranthene in TCLP	mg/L	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001
Surrogate <i>p</i> -Terphenyl-d ₁₄	%	122

Method ID	Methodology Summary
LAB.4	Toxicity Characteristic Leaching Procedure (TCLP).
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
GC.12 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC.12	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			01/06/2010	41301-B-18	01/06/2010 01/06/2010	LCS-W1	01/06/2010
Date analysed	-			02/06/2010	41301-B-18	02/06/2010 02/06/2010	LCS-W1	02/06/2010
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	41301-B-18	0.5 0.6 RPD: 18	LCS-W1	95%
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	97%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			1/6/2010	[NT]	[NT]	LCS-W1	1/6/2010
Date analysed	-			1/6/2010	[NT]	[NT]	LCS-W1	1/6/2010
Naphthalene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	89%
Acenaphthylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	91%
Phenanthrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	89%
Anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	80%
Pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	87%
Benzo(a)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	97%
Benzo(b+k)fluoranthene in TCLP	mg/L	0.002	GC.12 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	116%
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	114	[NT]	[NT]	LCS-W1	113%

EnviroLab Reference: 41301-B
Revision No: R 00



Report Comments:

Asbestos was analysed by Approved Identifier: Not applicable for this job

Asbestos was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for

Aileen Hie

From: Brendan Page [bpage@jkgroup.net.au]
Sent: Monday, 31 May 2010 07:46 AM
To: Aileen Hie
Subject: Additional Analyses, 41301 (E23982K, Pyrmont)

EIS

ENVIRONMENTAL INVESTIGATION SERVICES

A division of Jeffery & Katauskas Pty Ltd
ABN 17 003 550 801

Hi Aileen,

Could you please arrange for the following analyses to be undertaken on the samples in Envirolabs custody:

- 41301-5 (BH507 0.5-0.8), TCLP (acid) prep and leachate analysis for nickel;
- 41301-6 (BH507 1.6-2.05), TCLP (acid) prep and leachate analysis for lead;
- 41301-9 (BH508 0.3-0.5), TCLP (acid) prep and leachate analysis for lead; and
- 41301-18 (Dup 13), TCLP (acid) prep and leachate analysis for PAHs and lead;

All analyses is to be on a standard turnaround. Cheers ☺

Regards,
For and on behalf of
ENVIRONMENTAL INVESTIGATION SERVICES

Brendan Page
Environmental Scientist

115 Wicks Road, Macquarie Park, NSW, 2113
PO Box 976, North Ryde BC, NSW, 1670
Tel: 02 9888 5000
Fax: 02 9888 5004
email: bpage@jkgroup.net.au
Web: www.jkgroup.net.au

Envirolab Ref: 41301B
Due: 7/6/10
std TIA.

*** IMPORTANT ***

This email and any attachments are confidential and may be privileged in which case neither is intended to be waived. If you have received this message in error, please notify us and remove it from your system. It is your responsibility to check any attachments for viruses and defects before opening or sending them on. At the Company's discretion we may send a paper copy for confirmation. In the event of any discrepancy between paper and electronic versions the paper version is to take precedence.

31/05/2010



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41426

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	22 Soils, 1 Water
Date samples received:	25/05/10
Date completed instructions received:	25/05/10

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

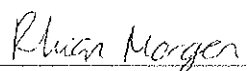
Date results requested by:	1/06/10
Date of Preliminary Report:	Not Issued
Issue Date:	1/06/10

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Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Laboratory Manager


Matt Mansfield
Approved Signatory


Rhian Morgan
Metals Supervisor

Envirolab Reference: 41426
Revision No: R 00



vTPH & BTEX in Soil	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Our Reference:	-----	BH510	BH510	BH511	BH511	BH511
Your Reference	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	26/5/2010	26/5/2010	26/5/2010	26/5/2010	26/5/2010
Date analysed	-	26/5/2010	26/5/2010	26/5/2010	26/5/2010	26/5/2010
vTPH C6 - C9	mg/kg	<25	<25	<25	82	480
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	115	122	122	135	116

vTPH & BTEX in Soil	UNITS	41426-10	41426-13	41426-14	41426-15	41426-16
Our Reference:	-----	BH511	BH512	BH512	BH512	BH512
Your Reference	-----	4.5-4.95	0.32-0.4	0.9-1.0	1.4-1.5	2.9-3.0
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	26/5/2010	26/5/2010	26/5/2010	26/5/2010	26/5/2010
Date analysed	-	26/5/2010	26/5/2010	26/5/2010	26/5/2010	26/5/2010
vTPH C6 - C9	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
m+p-xylene	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	87	112	120	117	109

vTPH & BTEX in Soil	UNITS	41426-21	41426-23
Our Reference:	-----	Trip Blank 7	Trip Spike 5
Your Reference	-----	-	-
Depth		21/05/2010	21/05/2010
Date Sampled		Soil	Soil
Type of sample			
Date extracted	-	26/5/2010	26/5/2010
Date analysed	-	26/5/2010	26/5/2010
Benzene	mg/kg	<0.5	94%
Toluene	mg/kg	<0.5	87%
Ethylbenzene	mg/kg	<1.0	87%
m+p-xylene	mg/kg	<2.0	87%
o-Xylene	mg/kg	<1.0	87%
Surrogate aaa-Trifluorotoluene	%	118	97

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Your Reference	-----	BH510	BH510	BH511	BH511	BH511
Depth	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
TPH C10 - C14	mg/kg	<50	<50	<50	4,900	2,100
TPH C15 - C28	mg/kg	310	150	180	2,400	1,300
TPH C29 - C36	mg/kg	250	<100	240	1,100	410
Surrogate o-Terphenyl	%	125	123	#	#	#

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	41426-10	41426-13	41426-14	41426-15	41426-16
Your Reference	-----	BH511	BH512	BH512	BH512	BH512
Depth	-----	4.5-4.95	0.32-0.4	0.9-1.0	1.4-1.5	2.9-3.0
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
TPH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	220	<100	<100
TPH C29 - C36	mg/kg	<100	<100	150	<100	<100
Surrogate o-Terphenyl	%	110	104	109	110	110

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41426-1 BH510 1.0-1.45 21/05/2010 Soil	41426-2 BH510 3.0-3.45 21/05/2010 Soil	41426-7 BH511 0.3-0.8 21/05/2010 Soil	41426-8 BH511 1.5-1.95 21/05/2010 Soil	41426-9 BH511 3.0-3.45 21/05/2010 Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Naphthalene	mg/kg	0.4	0.1	<0.1	5.7	1.7
Acenaphthylene	mg/kg	0.3	0.4	<0.1	0.2	0.1
Acenaphthene	mg/kg	0.3	<0.1	<0.1	0.1	0.1
Fluorene	mg/kg	0.6	0.2	<0.1	0.5	0.3
Phenanthrene	mg/kg	3.1	2.4	0.1	0.6	0.8
Anthracene	mg/kg	1	0.5	<0.1	<0.1	0.2
Fluoranthene	mg/kg	4.3	3.1	0.2	0.2	1.2
Pyrene	mg/kg	4.3	2.9	0.2	0.2	1.2
Benzo(a)anthracene	mg/kg	2.7	1.7	0.1	0.1	0.7
Chrysene	mg/kg	2.2	1.5	0.1	0.2	0.6
Benzo(b+k)fluoranthene	mg/kg	3.6	2.2	0.2	<0.2	1.1
Benzo(a)pyrene	mg/kg	2.7	1.6	0.2	0.1	0.8
Indeno(1,2,3-c,d)pyrene	mg/kg	1.2	0.8	0.1	0.1	0.4
Dibenzo(a,h)anthracene	mg/kg	0.2	0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.9	0.6	0.1	<0.1	0.3
Surrogate p-Terphenyl-d ₁₄	%	97	93	94	95	98

Client Reference: E23982K, Pyrmont

PAHs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41426-13 BH512 0.32-0.4 21/05/2010 Soil	41426-14 BH512 0.9-1.0 21/05/2010 Soil	41426-15 BH512 1.4-1.5 21/05/2010 Soil	41426-16 BH512 2.9-3.0 21/05/2010 Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10
Naphthalene	mg/kg	<0.1	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	0.2	<0.1	0.2
Acenaphthene	mg/kg	<0.1	0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	0.1	<0.1	0.1
Phenanthrene	mg/kg	0.8	2.0	1.3	1.4
Anthracene	mg/kg	<0.1	0.4	0.4	0.4
Fluoranthene	mg/kg	1.1	2.4	2.9	2.2
Pyrene	mg/kg	1	2.3	2.5	1.9
Benzo(a)anthracene	mg/kg	0.6	1.2	1.7	1.2
Chrysene	mg/kg	0.5	1.1	1.6	1.0
Benzo(b+k)fluoranthene	mg/kg	0.9	1.8	2.1	1.5
Benzo(a)pyrene	mg/kg	0.6	1.3	1.5	1.0
Indeno(1,2,3-c,d)pyrene	mg/kg	0.3	0.6	0.7	0.5
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3	0.5	0.5	0.4
Surrogate p-Terphenyl-d ₁₄	%	60	128	94	102

Organochlorine Pesticides in soil	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Our Reference:	-----	BH510	BH510	BH511	BH511	BH511
Your Reference	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	93	96	98	97	98

Organochlorine Pesticides in soil	UNITS	41426-13	41426-14
Our Reference:	-----	BH512	BH512
Your Reference	-----	0.32-0.4	0.9-1.0
Depth		21/05/2010	21/05/2010
Date Sampled		Soil	Soil
Type of sample			
Date extracted	-	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10
HCB	mg/kg	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	87	102

Client Reference: E23982K, Pymont

Organophosphorus Pesticides		41426-1	41426-2	41426-7	41426-8	41426-9
Our Reference:	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Your Reference	-----	BH510	BH510	BH511	BH511	BH511
Depth	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	93	96	98	97	98

Organophosphorus Pesticides		41426-13	41426-14
Our Reference:	UNITS	41426-13	41426-14
Your Reference	-----	BH512	BH512
Depth	-----	0.32-0.4	0.9-1.0
Date Sampled		21/05/2010	21/05/2010
Type of sample		Soil	Soil
Date extracted	-	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10
Diazinon	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	87	102

Client Reference: E23982K, Pymont

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41426-1 BH510 1.0-1.45 21/05/2010 Soil	41426-2 BH510 3.0-3.45 21/05/2010 Soil	41426-7 BH511 0.3-0.8 21/05/2010 Soil	41426-8 BH511 1.5-1.95 21/05/2010 Soil	41426-9 BH511 3.0-3.45 21/05/2010 Soil
Date extracted	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10	26/05/10	26/05/10	26/05/10
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	93	96	98	97	98

PCBs in Soil Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41426-13 BH512 0.32-0.4 21/05/2010 Soil	41426-14 BH512 0.9-1.0 21/05/2010 Soil
Date extracted	-	26/05/10	26/05/10
Date analysed	-	26/05/10	26/05/10
Arochlor 1016	mg/kg	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1
Surrogate TCLMX	%	87	102

Client Reference: E23982K, Pymont

Acid Extractable metals in soil	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Our Reference:	-----	BH510	BH510	BH511	BH511	BH511
Your Reference	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	26/05/2010	26/05/2010	26/05/2010	26/05/2010	26/05/2010
Date analysed	-	27/05/2010	27/05/2010	27/05/2010	27/05/2010	27/05/2010
Arsenic	mg/kg	11	5	4	4	25
Cadmium	mg/kg	<0.5	1.8	<0.5	<0.5	<0.5
Chromium	mg/kg	19	15	52	7	85
Copper	mg/kg	47	120	62	58	74
Lead	mg/kg	170	210	87	110	390
Mercury	mg/kg	2.0	1.1	0.3	0.3	1.6
Nickel	mg/kg	6	8	43	3	31
Zinc	mg/kg	72	160	97	68	140

Acid Extractable metals in soil	UNITS	41426-13	41426-14	41426-15	41426-16
Our Reference:	-----	BH512	BH512	BH512	BH512
Your Reference	-----	0.32-0.4	0.9-1.0	1.4-1.5	2.9-3.0
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil
Type of sample					
Date digested	-	26/05/2010	26/05/2010	26/05/2010	26/05/2010
Date analysed	-	27/05/2010	27/05/2010	27/05/2010	27/05/2010
Arsenic	mg/kg	<4	6	<4	5
Cadmium	mg/kg	<0.5	<0.5	0.5	0.9
Chromium	mg/kg	2	8	6	11
Copper	mg/kg	33	100	25	65
Lead	mg/kg	71	300	56	230
Mercury	mg/kg	0.2	1.7	0.4	0.4
Nickel	mg/kg	1	4	1	9
Zinc	mg/kg	130	160	330	1,500

Client Reference: E23982K, Pyrmont

Miscellaneous Inorg - soil					
Our Reference:	UNITS	41426-2	41426-3	41426-4	41426-5
Your Reference	-----	BH510	BH510	BH510	BH510
Depth	-----	3.0-3.45	4.5-4.95	6.0-6.5	7.5-7.95
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	27/5/2010	27/5/2010	27/5/2010	27/5/2010
Date analysed	-	27/5/2010	27/5/2010	27/5/2010	27/5/2010
pH 1:5 soil:water	pH Units	9.4	7.9	7.8	7.3

Client Reference: E23982K, Pymont

Moisture						
Our Reference:	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Your Reference	-----	BH510	BH510	BH511	BH511	BH511
Depth	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	26/5/10	26/5/10	26/5/10	26/5/10	26/5/10
Date analysed	-	26/5/10	26/5/10	26/5/10	26/5/10	26/5/10
Moisture	%	26	19	12	14	19

Moisture						
Our Reference:	UNITS	41426-10	41426-13	41426-14	41426-15	41426-16
Your Reference	-----	BH511	BH512	BH512	BH512	BH512
Depth	-----	4.5-4.95	0.32-0.4	0.9-1.0	1.4-1.5	2.9-3.0
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	26/5/10	26/5/10	26/5/10	26/5/10	26/5/10
Date analysed	-	26/5/10	26/5/10	26/5/10	26/5/10	26/5/10
Moisture	%	18	17	10	10	17

Moisture		
Our Reference:	UNITS	41426-21
Your Reference	-----	Trip Blank 7
Depth	-----	-
Date Sampled		21/05/2010
Type of sample		Soil
Date prepared	-	26/5/10
Date analysed	-	26/5/10
Moisture	%	9.2

Asbestos ID - soils						
Our Reference:	UNITS	41426-1	41426-2	41426-7	41426-8	41426-9
Your Reference	-----	BH510	BH510	BH511	BH511	BH511
Depth	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	27/5/10	27/5/10	27/5/10	27/5/10	27/5/10
Sample Description	-	Approx 15g Soil	Approx 10g Soil	Approx 10g Soil	Approx 35g Soil & Rocks	Approx 15g Soil & Rocks
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils					
Our Reference:	UNITS	41426-13	41426-14	41426-15	41426-16
Your Reference	-----	BH512	BH512	BH512	BH512
Depth	-----	0.32-0.4	0.9-1.0	1.4-1.5	2.9-3.0
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil
Date analysed	-	27/5/10	27/5/10	27/5/10	27/5/10
Sample Description	-	Approx 20g Soil & Rocks	Approx 40g SOil & Rocks	Approx 40g Soil & Rocks	Approx 30g Clay Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

sPOCAS Our Reference: Your Reference Depth Date Sampled Type of sample	UNITS ----- -----	41426-2 BH510 3.0-3.45 21/05/2010 Soil	41426-3 BH510 4.5-4.95 21/05/2010 Soil	41426-4 BH510 6.0-6.5 21/05/2010 Soil	41426-5 BH510 7.5-7.95 21/05/2010 Soil
Date prepared	-	27/5/2010	27/5/2010	27/5/2010	27/5/2010
Date analysed	-	27/5/2010	27/5/2010	27/5/2010	27/5/2010
pH _{kd}	pH units	9.1	6.7	6.1	4.5
TAA pH 6.5	moles H ⁺ /l	<5	<5	<5	12
s-TAA pH 6.5	%w/w S	<0.01	<0.01	<0.01	0.020
pH _{ox}	pH units	7.4	2.4	3.1	4.2
TPA pH 6.5	moles H ⁺ /l	<5.0	190	40	5.0
s-TPA pH 6.5	%w/w S	<0.01	0.30	0.064	<0.01
TSA pH 6.5	moles H ⁺ /l	<5.0	190	37	<5.0
s-TSA pH 6.5	%w/w S	<0.01	0.30	0.060	<0.01
ANCE	% CaCO ₃	0.73	<0.05	<0.05	<0.05
a-ANCE	moles H ⁺ /l	145	<5	<5	<5
s-ANCE	%w/w S	0.23	<0.05	<0.05	<0.05
SKCl	%w/w S	0.007	0.021	0.017	<0.005
SP	%w/w	0.015	0.35	0.16	0.016
SPOS	%w/w	0.009	0.33	0.14	0.014
a-SPOS	moles H ⁺ /l	5.3	207	87	8.8
CaKCl	%w/w	0.21	0.053	0.039	0.011
CaP	%w/w	0.34	0.063	0.044	0.013
CaA	%w/w	0.14	0.010	0.005	<0.005
MgKCl	%w/w	<0.005	0.020	0.028	0.029
MgP	%w/w	0.018	0.022	0.028	0.035
MgA	%w/w	0.016	<0.005	<0.005	0.005
SRAS	%w/w	<0.005	<0.005	<0.005	<0.005
SHCl	%w/w S	0.008	0.019	0.013	<0.005
SNAS	%w/w S	<0.005	<0.005	<0.005	<0.005
a-SNAS	moles H ⁺ /l	<5	<5	<5	<5
s-SNAS	%w/w S	<0.01	<0.01	<0.01	<0.01
a-Net Acidity	moles H ⁺ /l	<10	196	89	21
Liming rate	kg CaCO ₃ /t	<0.75	15	6.7	1.6
a-Net Acidity without ANCE	moles H ⁺ /l	<10	NA	NA	NA
Liming rate without ANCE	kg CaCO ₃ /t	<0.75	NA	NA	NA

vTPH & BTEX in Water		
Our Reference:	UNITS	41426-22
Your Reference	-----	Rinsate 7
Depth	-----	-
Date Sampled		21/05/2010
Type of sample		Water
Date extracted	-	27/5/2010
Date analysed	-	27/5/2010
TPH C ₆ - C ₉	µg/L	26
Benzene	µg/L	<1.0
Toluene	µg/L	<1.0
Ethylbenzene	µg/L	<1.0
m+p-xylene	µg/L	<2.0
o-xylene	µg/L	<1.0
Surrogate Dibromofluoromethane	%	105
Surrogate toluene-d ₈	%	100
Surrogate 4-BFB	%	100

sTPH in Water (C10-C36)		
Our Reference:	UNITS	41426-22
Your Reference	-----	Rinsate 7
Depth	-----	-
Date Sampled		21/05/2010
Type of sample		Water
Date extracted	-	1/6/2010
Date analysed	-	1/6/2010
TPH C10 - C14	µg/L	<50
TPH C15 - C28	µg/L	<100
TPH C29 - C36	µg/L	<100
Surrogate o-Terphenyl	%	104

PAHs in Water	UNITS	41426-22
Our Reference:	-----	Rinsate 7
Your Reference	-----	-
Depth		
Date Sampled		21/05/2010
Type of sample		Water
Date extracted	-	26/5/10
Date analysed	-	26/5/10
Naphthalene	µg/L	<1
Acenaphthylene	µg/L	<1
Acenaphthene	µg/L	<1
Fluorene	µg/L	<1
Phenanthrene	µg/L	<1
Anthracene	µg/L	<1
Fluoranthene	µg/L	<1
Pyrene	µg/L	<1
Benzo(a)anthracene	µg/L	<1
Chrysene	µg/L	<1
Benzo(b+k)fluoranthene	µg/L	<2
Benzo(a)pyrene	µg/L	<1
Indeno(1,2,3-c,d)pyrene	µg/L	<1
Dibenzo(a,h)anthracene	µg/L	<1
Benzo(g,h,i)perylene	µg/L	<1
Surrogate p-Terphenyl-d14	%	104

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
AS4964-2004	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.
LAB.64	sPOCAS determined using titrimetric and ICP-AES techniques. Based on Acid Sulfate Soils Laboratory Methods Guidelines, Version 2.1 - June 2004.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil						Base II Duplicate II %RPD		
Date extracted	-			26/5/2010	41426-1	26/5/2010 26/5/2010	LCS-2	26/5/2010
Date analysed	-			26/5/2010	41426-1	26/5/2010 26/5/2010	LCS-2	26/5/2010
vTPH C ₆ - C ₉	mg/kg	25	GC.16	<25	41426-1	<25 <25	LCS-2	99%
Benzene	mg/kg	0.5	GC.16	<0.5	41426-1	<0.5 <0.5	LCS-2	101%
Toluene	mg/kg	0.5	GC.16	<0.5	41426-1	<0.5 <0.5	LCS-2	98%
Ethylbenzene	mg/kg	1	GC.16	<1.0	41426-1	<1.0 <1.0	LCS-2	98%
m+p-xylene	mg/kg	2	GC.16	<2.0	41426-1	<2.0 <2.0	LCS-2	98%
o-Xylene	mg/kg	1	GC.16	<1.0	41426-1	<1.0 <1.0	LCS-2	101%
Surrogate aaa-Trifluorotoluene	%		GC.16	128	41426-1	115 120 RPD: 4	LCS-2	120%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Date analysed	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
TPH C ₁₀ - C ₁₄	mg/kg	50	GC.3	<50	41426-1	<50 <50	LCS-2	81%
TPH C ₁₅ - C ₂₈	mg/kg	100	GC.3	<100	41426-1	310 220 RPD: 34	LCS-2	95%
TPH C ₂₉ - C ₃₆	mg/kg	100	GC.3	<100	41426-1	250 180 RPD: 33	LCS-2	91%
Surrogate o-Terphenyl	%		GC.3	108	41426-1	125 115 RPD: 8	LCS-2	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Date analysed	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.4 0.3 RPD: 29	LCS-2	86%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.3 0.2 RPD: 40	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.3 0.2 RPD: 40	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.6 0.4 RPD: 40	LCS-2	101%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	3.1 2.3 RPD: 30	LCS-2	88%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	1 0.7 RPD: 35	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	4.3 3.4 RPD: 23	LCS-2	83%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	4.3 3.4 RPD: 23	LCS-2	100%

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base Duplicate %RPD		
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	2.7 1.9 RPD: 35	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	2.2 1.6 RPD: 32	LCS-2	100%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	41426-1	3.6 2.4 RPD: 40	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	41426-1	2.7 1.8 RPD: 40	LCS-2	100%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	1.2 0.9 RPD: 29	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.2 0.1 RPD: 67	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	41426-1	0.9 0.6 RPD: 40	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	92	41426-1	97 97 RPD: 0	LCS-2	97%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base Duplicate %RPD		
Date extracted	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Date analysed	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
HCB	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	106%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	106%
Heptachlor	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	104%
delta-BHC	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	104%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	110%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	107%
Dieldrin	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	113%
Endrin	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	108%
pp-DDD	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	115%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	LCS-2	105%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	99	41426-1	93 94 RPD: 1	LCS-2	97%

Envirolab Reference: 41426
Revision No: R 00



QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Date analysed	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Diazinon	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	LCS-2	101%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	LCS-2	102%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	41426-1	<0.1 <0.1	LCS-2	97%
Surrogate TCLMX	%		GC.8	99	41426-1	93 94 RPD: 1	LCS-2	93%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Date analysed	-			26/05/10	41426-1	26/05/10 26/05/10	LCS-2	26/05/10
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	LCS-2	106%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	41426-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	99	41426-1	93 94 RPD: 1	LCS-2	92%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			26/05/2010	41426-1	26/05/2010 26/05/2010	LCS-4	26/05/2010
Date analysed	-			27/05/2010	41426-1	27/05/2010 27/05/2010	LCS-4	27/05/2010
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	41426-1	11 8 RPD: 32	LCS-4	100%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	41426-1	<0.5 <0.5	LCS-4	103%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	41426-1	19 18 RPD: 5	LCS-4	102%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	41426-1	47 72 RPD: 42	LCS-4	105%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Lead	mg/kg	1	Metals.20 ICP-AES	<1	41426-1	170 210 RPD: 21	LCS-4	100%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	41426-1	2.0 2.8 RPD: 33	LCS-4	104%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	41426-1	6 8 RPD: 29	LCS-4	102%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	41426-1	72 110 RPD: 42	LCS-4	104%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base II Duplicate II %RPD		
Date prepared	-			[NT]	[NT]	[NT]	LCS-1	27/5/2010
Date analysed	-			[NT]	[NT]	[NT]	LCS-1	27/5/2010
pH 1:5 soil:water	pH Units		LAB.1	[NT]	[NT]	[NT]	LCS-1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			26/5/10
Date analysed	-			26/5/10
Moisture	%	0.1	LAB.8	<0.10

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Asbestos ID - soils				
Date analysed	-			[NT]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base II Duplicate II %RPD		
Date prepared	-			27/5/2010	41426-2	27/5/2010 27/5/2010	LCS	27/5/2010
Date analysed	-			27/5/2010	41426-2	27/5/2010 27/5/2010	LCS	27/5/2010
pH _{kei}	pH units		LAB.64	5.5	41426-2	9.1 9.1 RPD: 0	LCS	101%
TAA pH 6.5	moles H ⁺ /l	5	LAB.64	<5	41426-2	<5 <5	LCS	96%
s-TAA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41426-2	<0.01 <0.01	LCS	94%
pH _{ox}	pH units		LAB.64	4.2	41426-2	7.4 7.3 RPD: 1	LCS	109%
TPA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41426-2	<5.0 <5.0	LCS	93%
s-TPA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41426-2	<0.01 <0.01	LCS	93%
TSA pH 6.5	moles H ⁺ /l	5	LAB.64	<5.0	41426-2	<5.0 <5.0	LCS	92%
s-TSA pH 6.5	%w/w S	0.01	LAB.64	<0.01	41426-2	<0.01 <0.01	LCS	92%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sPOCAS						Base Duplicate %RPD		
ANCE	% CaCO ₃	0.05	LAB.64	<0.05	41426-2	0.73 0.60 RPD: 20	[NR]	[NR]
a-ANCE	moles H ⁺ /l	5	LAB.64	<5	41426-2	145 120 RPD: 19	[NR]	[NR]
s-ANCE	%w/w S	0.05	LAB.64	<0.05	41426-2	0.23 0.19 RPD: 19	[NR]	[NR]
SKCl	%w/w S	0.005	LAB.64	<0.005	41426-2	0.007 0.007 RPD: 0	LCS	96%
SP	%w/w	0.005	LAB.64	<0.005	41426-2	0.015 0.016 RPD: 6	LCS	101%
SPOS	%w/w	0.005	LAB.64	<0.005	41426-2	0.009 0.009 RPD: 0	LCS	100%
a-SPOS	moles H ⁺ /l	5	LAB.64	<5.0	41426-2	5.3 5.4 RPD: 2	LCS	100%
CaKCl	%w/w	0.005	LAB.64	<0.005	41426-2	0.21 0.21 RPD: 0	LCS	90%
CaP	%w/w	0.005	LAB.64	<0.005	41426-2	0.34 0.33 RPD: 3	LCS	86%
CaA	%w/w	0.005	LAB.64	<0.005	41426-2	0.14 0.12 RPD: 15	[NR]	[NR]
MgKCl	%w/w	0.005	LAB.64	<0.005	41426-2	<0.005 <0.005	LCS	87%
MgP	%w/w	0.005	LAB.64	<0.005	41426-2	0.018 0.016 RPD: 12	LCS	104%
MgA	%w/w	0.005	LAB.64	<0.005	41426-2	0.016 0.014 RPD: 13	[NR]	[NR]
SRAS	%w/w	0.005	LAB.64	<0.005	41426-2	<0.005 <0.005	[NR]	[NR]
SHCl	%w/w S	0.005	LAB.64	<0.005	41426-2	0.008 0.009 RPD: 12	LCS	87%
SNAS	%w/w S	0.005	LAB.64	<0.005	41426-2	<0.005 <0.005	[NR]	[NR]
a-SNAS	moles H ⁺ /l	5	LAB.64	<5	41426-2	<5 <5	[NR]	[NR]
s-SNAS	%w/w S	0.01	LAB.64	<0.01	41426-2	<0.01 <0.01	[NR]	[NR]
a-Net Acidity	moles H ⁺ /l	10	LAB.64	<10	41426-2	<10 <10	LCS	98%
Liming rate	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41426-2	<0.75 <0.75	LCS	98%
a-Net Acidity without ANCE	moles H ⁺ /l	10	LAB.64	<10	41426-2	<10 <10	[NR]	[NR]
Liming rate without ANCE	kg CaCO ₃ /t	0.75	LAB.64	<0.75	41426-2	<0.75 <0.75	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base Duplicate %RPD		
Date extracted	-			27/5/2010	[NT]	[NT]	LCS-W1	27/5/2010
Date analysed	-			27/5/2010	[NT]	[NT]	LCS-W1	27/5/2010
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	113%
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	111%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	113%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	113%
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	113%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	113%
Surrogate	%		GC.16	106	[NT]	[NT]	LCS-W1	105%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	100	[NT]	[NT]	LCS-W1	100%
Surrogate 4-BFB	%		GC.16	98	[NT]	[NT]	LCS-W1	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			31/5/2010	[NT]	[NT]	LCS-W1	31/5/2010
Date analysed	-			31/5/2010	[NT]	[NT]	LCS-W1	31/5/2010
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W1	68%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	120%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	88%
Surrogate o-Terphenyl	%		GC.3	90	[NT]	[NT]	LCS-W1	82%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			26/5/10	[NT]	[NT]	LCS-W2	26/5/10
Date analysed	-			26/5/10	[NT]	[NT]	LCS-W2	26/5/10
Naphthalene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	88%
Acenaphthylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	101%
Phenanthrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	92%
Anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	88%
Pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	98%
Benzo(a)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	76%
Benzo(b+k)fluoranthene	µg/L	2	GC.12 subset	<2	[NT]	[NT]	[NR]	[NR]

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Benzo(a)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	LCS-W2	108%
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12 subset	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	107	[NT]	[NT]	LCS-W2	96%
QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery			
vTPH & BTEX in Soil			Base + Duplicate + %RPD					
Date extracted	-	[NT]	[NT]	41426-2	26/5/2010			
Date analysed	-	[NT]	[NT]	41426-2	26/5/2010			
vTPH C6 - C9	mg/kg	[NT]	[NT]	41426-2	102%			
Benzene	mg/kg	[NT]	[NT]	41426-2	103%			
Toluene	mg/kg	[NT]	[NT]	41426-2	102%			
Ethylbenzene	mg/kg	[NT]	[NT]	41426-2	102%			
m+p-xylene	mg/kg	[NT]	[NT]	41426-2	102%			
o-Xylene	mg/kg	[NT]	[NT]	41426-2	105%			
Surrogate aaa-Trifluorotoluene	%	[NT]	[NT]	41426-2	132%			
QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery			
sTPH in Soil (C10-C36)			Base + Duplicate + %RPD					
Date extracted	-	[NT]	[NT]	41426-2	26/05/10			
Date analysed	-	[NT]	[NT]	41426-2	26/05/10			
TPH C10 - C14	mg/kg	[NT]	[NT]	41426-2	104%			
TPH C15 - C28	mg/kg	[NT]	[NT]	41426-2	120%			
TPH C29 - C36	mg/kg	[NT]	[NT]	41426-2	115%			
Surrogate o-Terphenyl	%	[NT]	[NT]	41426-2	116%			
QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery			
PAHs in Soil			Base + Duplicate + %RPD					
Date extracted	-	[NT]	[NT]	41426-2	26/05/10			
Date analysed	-	[NT]	[NT]	41426-2	26/05/10			
Naphthalene	mg/kg	[NT]	[NT]	41426-2	84%			
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]			
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]			
Fluorene	mg/kg	[NT]	[NT]	41426-2	103%			
Phenanthrene	mg/kg	[NT]	[NT]	41426-2	83%			
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]			
Fluoranthene	mg/kg	[NT]	[NT]	41426-2	81%			
Pyrene	mg/kg	[NT]	[NT]	41426-2	96%			

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QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	41426-2	88%
Benzo(b+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	41426-2	98%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	41426-2	97%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41426-2	26/05/10
Date analysed	-	[NT]	[NT]	41426-2	26/05/10
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	41426-2	105%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	41426-2	101%
Heptachlor	mg/kg	[NT]	[NT]	41426-2	109%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	41426-2	104%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	41426-2	110%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	41426-2	106%
Dieldrin	mg/kg	[NT]	[NT]	41426-2	113%
Endrin	mg/kg	[NT]	[NT]	41426-2	110%
pp-DDD	mg/kg	[NT]	[NT]	41426-2	115%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	41426-2	102%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41426-2	96%

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QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41426-2	26/05/10
Date analysed	-	[NT]	[NT]	41426-2	26/05/10
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ronnel	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	[NT]	[NT]	41426-2	102%
Fenitrothion	mg/kg	[NT]	[NT]	41426-2	96%
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	41426-2	96%
Surrogate TCLMX	%	[NT]	[NT]	41426-2	91%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	41426-2	26/05/10
Date analysed	-	[NT]	[NT]	41426-2	26/05/10
Arochlor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1221*	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	[NT]	[NT]	41426-2	103%
Arochlor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	41426-2	92%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	[NT]	[NT]	41426-2	26/05/2010
Date analysed	-	[NT]	[NT]	41426-2	27/05/2010
Arsenic	mg/kg	[NT]	[NT]	41426-2	100%
Cadmium	mg/kg	[NT]	[NT]	41426-2	91%
Chromium	mg/kg	[NT]	[NT]	41426-2	95%
Copper	mg/kg	[NT]	[NT]	41426-2	113%
Lead	mg/kg	[NT]	[NT]	41426-2	101%
Mercury	mg/kg	[NT]	[NT]	41426-2	94%
Nickel	mg/kg	[NT]	[NT]	41426-2	96%
Zinc	mg/kg	[NT]	[NT]	41426-2	118%

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QUALITY CONTROL sTPH in Water (C10-C36)	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	[NR]	[NR]
Date analysed	-	[NT]	[NT]	[NR]	[NR]
TPH C10 - C14	µg/L	[NT]	[NT]	[NR]	[NR]
TPH C15 - C28	µg/L	[NT]	[NT]	[NR]	[NR]
TPH C29 - C36	µg/L	[NT]	[NT]	[NR]	[NR]
Surrogate o-Terphenyl	%	[NT]	[NT]	[NR]	[NR]

Report Comments:

TPH in soil: # Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Asbestos was analysed by Approved Identifier: Matt Mansfield

Asbestos was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000
Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:	E23982K, Pyrmont
Envirolab Reference:	41426
Date received:	25/05/10
Date results expected to be reported:	1/06/10

Samples received in appropriate condition for analysis:	YES
No. of samples provided	22 Soils, 1 Water
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice Pack

Comments:

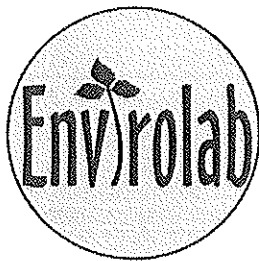
Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

SAMPLE AND CHAIN OF CUSTODY FORM

TO: Envirolab Services Pty Ltd 12 Ashloy Street Chatswood NSW 2067 Phone: (02) 99106200 Fax: (02) 99106201 Attention: Aileen				EIS Job Number: E23982K Date Results Required: Standard				FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page									
Project: Proposed Redevelopment Location: Pyrmont Sampler: AM				Tests Required				Sample Preservation: In esky on ice									
Date Sampled	Lab Ref:	Borehole/ Sample Number	Depth (m)	Sample Container	PID	Sample Description	Heavy Metals (8)	TPH/BTEX	PAH	OC/OP/PCB	Asbestos	TCLP Prep + M6, PAH	Phenols	VOC	SVOC	SPOCAS + pH	BTEX
21/5/10	1	BH510	1.0/1.45	Glass jar + Asb Bag	0	Fill (F)	X	X	X	X	X						
	2		3.0/3.45	Glass jar + Asb Bag x 2	0	F	X	X	X	X	X					X	
	3		4.5/4.95	Glass jar + Asb Bag x 2	0	Natural (N)										X	
	4		6.0/6.5	Glass jar + Asb Bag x 2	0	N										X	
	5		7.5/7.95	Glass jar + Asb Bag x 2	0	N										X	
	6	✓	8.5/9.0	Glass jar + Asb Bag	0	N											
	7	BH511	0.3/0.8	Glass jar + Asb Bag	0	F	X	X	X	X	X						
	8		1.5/1.45	Glass jar + Asb Bag	100	F	X	X	X	X	X						
	9		3.0/3.45	Glass jar + Asb Bag	324	F	X	X	X	X	X						
	10		4.5/4.95	Glass jar + Asb Bag	8.3	N	X										
	11		6.0/6.45	Glass jar + Asb Bag	1.4	N											
	12	✓	7.5/7.95	Glass jar + Asb Bag	2.0	N											
	13	BH512	0.32/0.4	Glass jar + Asb Bag	0	F	X	X	X	X	X						
	14		0.9/1.0	Glass jar + Asb Bag	0	F	X	X	X	X	X						
	15		1.4/1.5	Glass jar + Asb Bag	0	F	X	X	X	X	X						
	16		2.9/3.0	Glass jar + Asb Bag	0	F	X	X	X	X	X						
	17		3.3/3.45	Glass jar + Asb Bag	0	N											
	18		4.4/4.5	Glass jar + Asb Bag	0	N											
	19		5.9/6.0	Glass jar + Asb Bag	0	N											
	20	Dup 14	-	Glass jar + Asb Bag	-	-											
	21	TB 7	-	Glass jar + Asb Bag	-	Sand											X
2	22	Rinsaker	-	1 x 1L Amber 1 x Vial	-	Water	X	X									
✓	23	T spike 5	-	Glass jar + Asb Bag	-	Sand											X
				Glass jar + Asb Bag													
				Glass jar + Asb Bag													
Remarks (comments/detection limits required):																	
Relinquished By:		Date: 25/5/10 Time: 10:00am		Received By:		Relinquished By:		Date: 25/5/10 Time: 3pm		Received By:		Date: 25/5/10 Time: 3pm		Received By: Z.L.			



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www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41426-A

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	Additional Testing on 8 Soils
Date samples received:	25/05/10
Date completed instructions received:	02/06/10

Analysis Details:

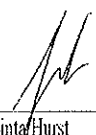
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	9/06/10
Date of Preliminary Report:	Not Issued
Issue Date:	9/06/10

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Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 41426-A
Revision No: R 00



Metals in TCLP USEPA1311						
Our Reference:	UNITS	41426-A-1	41426-A-2	41426-A-7	41426-A-8	41426-A-9
Your Reference	-----	BH510	BH510	BH511	BH511	BH511
Depth	-----	1.0-1.45	3.0-3.45	0.3-0.8	1.5-1.95	3.0-3.45
Date Sampled		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	03/06/2010	03/06/2010	03/06/2010	03/06/2010	03/06/2010
Date analysed	-	04/06/2010	04/06/2010	04/06/2010	04/06/2010	04/06/2010
pH of soil for fluid# determ.	pH units	8.20	8.70	9.20	9.40	9.50
pH of soil for fluid # determ. (acid)	pH units	1.30	1.30	1.30	1.30	1.30
Extraction fluid used	-	1	1	1	1	1
pH of final Leachate	pH units	5.20	5.10	5.40	5.10	5.40
Lead in TCLP	mg/L	1.2	0.6	[NA]	1	0.4
Nickel in TCLP	mg/L	[NA]	[NA]	0.04	[NA]	[NA]

Metals in TCLP USEPA1311				
Our Reference:	UNITS	41426-A-14	41426-A-15	41426-A-16
Your Reference	-----	BH512	BH512	BH512
Depth	-----	0.9-1.0	1.4-1.5	2.9-3.0
Date Sampled		21/05/2010	21/05/2010	21/05/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	03/06/2010	03/06/2010	03/06/2010
Date analysed	-	04/06/2010	[NA]	04/06/2010
pH of soil for fluid# determ.	pH units	9.60	9.50	9.50
pH of soil for fluid # determ. (acid)	pH units	1.30	1.30	1.30
Extraction fluid used	-	1	1	1
pH of final Leachate	pH units	5.30	5.10	5.10
Lead in TCLP	mg/L	2.8	[NA]	2.5

PAHs in TCLP (USEPA 1311)	UNITS	41426-A-1	41426-A-2	41426-A-14	41426-A-15	41426-A-16
Our Reference:	-----	BH510	BH510	BH512	BH512	BH512
Your Reference	-----	1.0-1.45	3.0-3.45	0.9-1.0	1.4-1.5	2.9-3.0
Depth		21/05/2010	21/05/2010	21/05/2010	21/05/2010	21/05/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	03/06/2010	03/06/2010	03/06/2010	03/06/2010	03/06/2010
Date analysed	-	03/06/2010	03/06/2010	03/06/2010	03/06/2010	03/06/2010
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	0.002	<0.001	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(b+k)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Surrogate p-Terphenyl-d14	%	120	118	112	109	116

Method ID	Methodology Summary
LAB.4	Toxicity Characteristic Leaching Procedure (TCLP).
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
GC.12 subset	Leachates are extracted with Dichloromethane and analysed by GC-MS.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC.12	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			03/06/2010	41426-A-7	03/06/2010 03/06/2010	LCS-W1	03/06/2010
Date analysed	-			04/06/2010	41426-A-7	04/06/2010 04/06/2010	LCS-W1	04/06/2010
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	104%
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	41426-A-7	0.04 0.03 RPD: 29	LCS-W1	105%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			03/06/2010	[NT]	[NT]	LCS-W1	03/06/2010
Date analysed	-			03/06/2010	[NT]	[NT]	LCS-W1	03/06/2010
Naphthalene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	94%
Acenaphthylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	109%
Phenanthrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	105%
Anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	98%
Pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	110%
Benzo(a)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	112%
Benzo(b+k)fluoranthene in TCLP	mg/L	0.002	GC.12 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	105%
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	109	[NT]	[NT]	LCS-W1	106%

Report Comments:

Asbestos was analysed by Approved Identifier: Not applicable for this job

Asbestos was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for

Aileen Hie

From: Brendan Page [bpage@jkgroup.net.au]
Sent: Wednesday, 2 June 2010 07:20 AM
To: Aileen Hie
Subject: Additional Analyses 41426 (E23982K, Pyrmont)

EIS

ENVIRONMENTAL INVESTIGATION SERVICES

A division of Jeffery & Katauskas Pty Ltd
ABN 17 003 550 801

Hi Aileen,

Could you please arrange for the following analyses to be undertaken on the samples in Envirolabs custody:

- 41426-1 (BH510 1.0-1.45), TCLP (acid) prep and leachate analysis for PAHs and lead;
- 41426-2 (BH510 3.0-3.45), TCLP (acid) prep and leachate analysis for PAHs and lead;
- 41426-7 (BH511 0.3-0.8), TCLP (acid) prep and leachate analysis for nickel;
- 41426-8 (BH11 1.5-1.95), TCLP (acid) prep and leachate analysis for lead;
- 41426-9 (BH511 3.0-3.45), TCLP (acid) prep and leachate analysis for lead;
- 41426-14 (BH512 0.9-1.0), TCLP (acid) prep and leachate analysis for PAHs and lead;
- 41426-15 (BH512 1.4-1.5), TCLP (acid) prep and leachate analysis for PAHs; and
- 41426-16 (BH512 2.9-3.0), TCLP prep and leachate analysis for PAHs and lead.

All analyses is to be on a standard turnaround. Cheers ☺

Regards,
For and on behalf of
ENVIRONMENTAL INVESTIGATION SERVICES

Brendan Page
Environmental Scientist

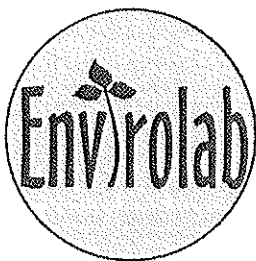
115 Wicks Road, Macquarie Park, NSW, 2113
PO Box 976, North Ryde BC, NSW, 1670
Tel: 02 9888 5000
Fax: 02 9888 5004
email: bpage@jkgroup.net.au
Web: www.jkgroup.net.au

Envirolab Ref: 41426A
Due: 9/6/10
std +1A,

*** IMPORTANT ***

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2/06/2010



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 41592

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC
NSW 1670

Attention: Brendan Page

Sample log in details:

Your Reference:	<u>E23982K, Pyrmont</u>
No. of samples:	8 Waters
Date samples received:	28/05/10
Date completed instructions received:	28/05/10

Analysis Details:

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by:	4/06/10
Date of Preliminary Report:	Not Issued
Issue Date:	3/06/10

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Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 41592
Revision No: R 00



VOCs in water Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	41592-1 MW508 28/05/2010 Water	41592-2 MW512 28/05/2010 Water	41592-3 MW513 28/05/2010 Water	41592-4 MW516 28/05/2010 Water	41592-5 MW517 28/05/2010 Water
Date extracted	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Date analysed	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Dichlorodifluoromethane	µg/L	<10	<10	<10	<10	<100
Chloromethane	µg/L	<10	<10	<10	<10	<100
Vinyl Chloride	µg/L	<10	<10	<10	<10	<100
Bromomethane	µg/L	<10	<10	<10	<10	<100
Chloroethane	µg/L	<10	<10	<10	<10	<100
Trichlorofluoromethane	µg/L	<10	<10	<10	<10	<100
1,1-Dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Trans-1,2-dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1-dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Cis-1,2-dichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Bromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Chloroform	µg/L	<1.0	<1.0	<1.0	<1.0	<10
2,2-dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2-dichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1,1-trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1-dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Cyclohexane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Carbon tetrachloride	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Dibromomethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2-dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Trichloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Bromodichloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
trans-1,3-dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
cis-1,3-dichloropropene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1,2-trichloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,3-dichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Dibromochloromethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2-dibromoethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Tetrachloroethene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1,1,2-tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Chlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Ethylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Bromoform	µg/L	<1.0	<1.0	<1.0	<1.0	<10
m+p-xylene	µg/L	<2.0	<2.0	<2.0	<2.0	<20
Styrene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,1,2,2-tetrachloroethane	µg/L	<1.0	<1.0	<1.0	<1.0	<10

VOCs in water Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	41592-1 MW508 28/05/2010 Water	41592-2 MW512 28/05/2010 Water	41592-3 MW513 28/05/2010 Water	41592-4 MW516 28/05/2010 Water	41592-5 MW517 28/05/2010 Water
o-xylene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2,3-trichloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Isopropylbenzene	µg/L	<1.0	<1.0	<1.0	<1.0	22
Bromobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
n-propyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	11
2-chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
4-chlorotoluene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,3,5-trimethyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Tert-butyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2,4-trimethyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,3-dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Sec-butyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	13
1,4-dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
4-isopropyl toluene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2-dichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
n-butyl benzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2-dibromo-3-chloropropane	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2,4-trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Hexachlorobutadiene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
1,2,3-trichlorobenzene	µg/L	<1.0	<1.0	<1.0	<1.0	<10
Surrogate Dibromofluoromethane	%	93	89	96	93	93
Surrogate toluene-d8	%	99	99	99	99	99
Surrogate 4-BFB	%	99	97	99	98	108

VOCs in water Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	41592-6 GW Dup 1 28/05/2010 Water
Date extracted	-	01/06/2010
Date analysed	-	01/06/2010
Dichlorodifluoromethane	µg/L	<10
Chloromethane	µg/L	<10
Vinyl Chloride	µg/L	<10
Bromomethane	µg/L	<10
Chloroethane	µg/L	<10
Trichlorofluoromethane	µg/L	<10
1,1-Dichloroethene	µg/L	<1.0
Trans-1,2-dichloroethene	µg/L	<1.0
1,1-dichloroethane	µg/L	<1.0
Cis-1,2-dichloroethene	µg/L	<1.0
Bromochloromethane	µg/L	<1.0
Chloroform	µg/L	<1.0
2,2-dichloropropane	µg/L	<1.0
1,2-dichloroethane	µg/L	<1.0
1,1,1-trichloroethane	µg/L	<1.0
1,1-dichloropropene	µg/L	<1.0
Cyclohexane	µg/L	<1.0
Carbon tetrachloride	µg/L	<1.0
Benzene	µg/L	<1.0
Dibromomethane	µg/L	<1.0
1,2-dichloropropane	µg/L	<1.0
Trichloroethene	µg/L	<1.0
Bromodichloromethane	µg/L	<1.0
trans-1,3-dichloropropene	µg/L	<1.0
cis-1,3-dichloropropene	µg/L	<1.0
1,1,2-trichloroethane	µg/L	<1.0
Toluene	µg/L	<1.0
1,3-dichloropropane	µg/L	<1.0
Dibromochloromethane	µg/L	<1.0
1,2-dibromoethane	µg/L	<1.0
Tetrachloroethene	µg/L	<1.0
1,1,1,2-tetrachloroethane	µg/L	<1.0
Chlorobenzene	µg/L	<1.0
Ethylbenzene	µg/L	<1.0
Bromoform	µg/L	<1.0
m+p-xylene	µg/L	<2.0
Styrene	µg/L	<1.0
1,1,2,2-tetrachloroethane	µg/L	<1.0
o-xylene	µg/L	<1.0

VOCs in water Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	41592-6 GW Dup 1 28/05/2010 Water
1,2,3-trichloropropane	µg/L	<1.0
Isopropylbenzene	µg/L	<1.0
Bromobenzene	µg/L	<1.0
n-propyl benzene	µg/L	<1.0
2-chlorotoluene	µg/L	<1.0
4-chlorotoluene	µg/L	<1.0
1,3,5-trimethyl benzene	µg/L	<1.0
Tert-butyl benzene	µg/L	<1.0
1,2,4-trimethyl benzene	µg/L	<1.0
1,3-dichlorobenzene	µg/L	<1.0
Sec-butyl benzene	µg/L	<1.0
1,4-dichlorobenzene	µg/L	<1.0
4-isopropyl toluene	µg/L	<1.0
1,2-dichlorobenzene	µg/L	<1.0
n-butyl benzene	µg/L	<1.0
1,2-dibromo-3-chloropropane	µg/L	<1.0
1,2,4-trichlorobenzene	µg/L	<1.0
Hexachlorobutadiene	µg/L	<1.0
1,2,3-trichlorobenzene	µg/L	<1.0
Surrogate Dibromofluoromethane	%	93
Surrogate toluene-d8	%	98
Surrogate 4-BFB	%	97

Client Reference: E23982K, Pyrmont

vTPH & BTEX in Water						
Our Reference:	UNITS	41592-1	41592-2	41592-3	41592-4	41592-5
Your Reference	-----	MW508	MW512	MW513	MW516	MW517
Date Sampled	-----	28/05/2010	28/05/2010	28/05/2010	28/05/2010	28/05/2010
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Date analysed	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
TPH C ₆ - C ₉	µg/L	<10	<10	<10	<10	<100
Surrogate Dibromofluoromethane	%	93	89	96	93	93
Surrogate toluene-d8	%	99	99	99	99	99
Surrogate 4-BFB	%	99	97	99	98	108

vTPH & BTEX in Water				
Our Reference:	UNITS	41592-6	41592-7	41592-8
Your Reference	-----	GW Dup 1	GW Trip Blank	GW Trip Spike
Date Sampled	-----	28/05/2010	28/05/2010	28/05/2010
Type of sample		Water	Water	Water
Date extracted	-	01/06/2010	01/06/2010	01/06/2010
Date analysed	-	01/06/2010	01/06/2010	01/06/2010
TPH C ₆ - C ₉	µg/L	<10	[NA]	[NA]
Benzene	µg/L	[NA]	<1.0	101%
Toluene	µg/L	[NA]	<1.0	107%
Ethylbenzene	µg/L	[NA]	<1.0	106%
m+p-xylene	µg/L	[NA]	<2.0	106%
o-xylene	µg/L	[NA]	<1.0	106%
Surrogate Dibromofluoromethane	%	93	95	97
Surrogate toluene-d8	%	98	100	100
Surrogate 4-BFB	%	97	96	100

Client Reference: E23982K, Pyrmont

sTPH in Water (C10-C36)						
Our Reference:	UNITS	41592-1	41592-2	41592-3	41592-5	41592-6
Your Reference	-----	MW508	MW512	MW513	MW517	GW Dup 1
Date Sampled	-----	28/05/2010	28/05/2010	28/05/2010	28/05/2010	28/05/2010
Type of sample		Water	Water	Water	Water	Water
Date extracted	-	1/6/2010	1/6/2010	1/6/2010	1/6/2010	1/6/2010
Date analysed	-	1/6/2010	1/6/2010	1/6/2010	1/6/2010	1/6/2010
TPH C10 - C14	µg/L	<50	<50	<50	830	<50
TPH C15 - C28	µg/L	190	<100	<100	470	<100
TPH C29 - C36	µg/L	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	71	88	74	#	79

Client Reference: E23982K, Pymont

PAHs in Water - Low Level Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	41592-1 MW508 28/05/2010 Water	41592-2 MW512 28/05/2010 Water	41592-3 MW513 28/05/2010 Water	41592-5 MW517 28/05/2010 Water	41592-6 GW Dup 1 28/05/2010 Water
Date extracted	-	1/6/2010	1/6/2010	1/6/2010	1/6/2010	1/6/2010
Date analysed	-	1/6/2010	1/6/2010	1/6/2010	1/6/2010	1/6/2010
Naphthalene	µg/L	<0.1	<0.1	<0.1	1.2	<0.1
Acenaphthylene	µg/L	<0.1	<0.1	<0.1	0.1	<0.1
Acenaphthene	µg/L	<0.1	<0.1	<0.1	4.0	<0.1
Fluorene	µg/L	<0.1	<0.1	<0.1	3.8	<0.1
Phenanthrene	µg/L	<0.1	<0.1	<0.1	4.2	<0.1
Anthracene	µg/L	<0.1	<0.1	<0.1	0.7	<0.1
Fluoranthene	µg/L	<0.1	<0.1	<0.1	0.8	<0.1
Pyrene	µg/L	<0.1	<0.1	<0.1	0.6	<0.1
Benzo(a)anthracene	µg/L	<0.1	<0.1	<0.1	0.1	<0.1
Chrysene	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b+k)fluoranthene	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	78	105	89	98	90

Client Reference: E23982K, Pymont

HM in water - dissolved						
Our Reference:	UNITS	41592-1	41592-2	41592-3	41592-4	41592-5
Your Reference	-----	MW508	MW512	MW513	MW516	MW517
Date Sampled	-----	28/05/2010	28/05/2010	28/05/2010	28/05/2010	28/05/2010
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Date analysed	-	01/06/2010	01/06/2010	01/06/2010	01/06/2010	01/06/2010
Arsenic-Dissolved	µg/L	5	5	<1	2	12
Cadmium-Dissolved	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium-Dissolved	µg/L	<1	<1	1	<1	<1
Copper-Dissolved	µg/L	<1	<1	<1	2	<1
Lead-Dissolved	µg/L	<1	1	<1	71	<1
Mercury-Dissolved	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel-Dissolved	µg/L	18	6	11	3	5
Zinc-Dissolved	µg/L	22	55	9	31	84

HM in water - dissolved		
Our Reference:	UNITS	41592-6
Your Reference	-----	GW Dup 1
Date Sampled	-----	28/05/2010
Type of sample		Water
Date prepared	-	01/06/2010
Date analysed	-	01/06/2010
Arsenic-Dissolved	µg/L	<1
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	µg/L	<1
Copper-Dissolved	µg/L	<1
Lead-Dissolved	µg/L	<1
Mercury-Dissolved	µg/L	<0.5
Nickel-Dissolved	µg/L	10
Zinc-Dissolved	µg/L	8

Client Reference: E23982K, Pymont

Miscellaneous Inorganics						
Our Reference:	UNITS	41592-1	41592-2	41592-3	41592-5	41592-6
Your Reference	-----	MW508	MW512	MW513	MW517	GW Dup 1
Date Sampled	-----	28/05/2010	28/05/2010	28/05/2010	28/05/2010	28/05/2010
Type of sample		Water	Water	Water	Water	Water
Date prepared	-	31/5/2010	31/5/2010	31/5/2010	31/5/2010	31/5/2010
Date analysed	-	31/5/2010	31/5/2010	31/5/2010	31/5/2010	31/5/2010
pH	pH Units	6.3	6.8	6.7	6.8	[NA]
Electrical Conductivity	µS/cm	1,100	800	690	1,100	[NA]
Oil & Grease (LLE)	mg/L	<5	<5	<5	<5	<5
Hardness	mgCaCO3 /L	304	186	236	315	[NA]
Calcium - Dissolved	mg/L	79	59	78	65	[NA]
Magnesium - Dissolved	mg/L	26	9.5	10	37	[NA]

Method ID	Methodology Summary
GC.13	Water samples are analysed directly by purge and trap GC-MS.
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Metals.22 ICP-MS	Determination of various metals by ICP-MS.
Metals.21 CV-AAS	Determination of Mercury by Cold Vapour AAS.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.2	Conductivity and Salinity - measured using a conductivity cell and dedicated meter, in accordance with APHA2510 20th ED and Rayment & Higginson.
LAB.3	Oil & Grease - determine gravimetrically following extraction with Hexane/tert-Methyl Butyl Ether, in accordance with APHA 20th ED, 5220-B.
Metals.20 ICP-AES	Determination of various metals by ICP-AES.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in water						Base II Duplicate II %RPD		
Date extracted	-			01/06/2010	[NT]	[NT]	LCS-W1	01/06/2010
Date analysed	-			01/06/2010	[NT]	[NT]	LCS-W1	01/06/2010
Dichlorodifluoromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Chloromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Vinyl Chloride	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Bromomethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Chloroethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
Trichlorofluoromethane	µg/L	10	GC.13	<10	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Trans-1,2-dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,1-dichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	93%
Cis-1,2-dichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromochloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Chloroform	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	93%
2,2-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	87%
1,1,1-trichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	93%
1,1-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Cyclohexane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Carbon tetrachloride	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Dibromomethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Trichloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	95%
Bromodichloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	94%
trans-1,3-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
cis-1,3-dichloropropene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,1,2-trichloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3-dichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Dibromochloromethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	94%
1,2-dibromoethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Tetrachloroethene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	94%
1,1,1,2-tetrachloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Chlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Ethylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromoform	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
m+p-xylene	µg/L	2	GC.13	<2.0	[NT]	[NT]	[NR]	[NR]
Styrene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]

Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
VOCs in water						Base II Duplicate II %RPD		
1,1,2,2-tetrachloroethane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
o-xylene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,3-trichloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Isopropylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Bromobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
n-propyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
2-chlorotoluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
4-chlorotoluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3,5-trimethyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Terl-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trimethyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,3-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Sec-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,4-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
4-isopropyl toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
n-butyl benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2-dibromo-3-chloropropane	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,4-trichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Hexachlorobutadiene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
1,2,3-trichlorobenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	[NR]	[NR]
Surrogate	%		GC.13	102	[NT]	[NT]	LCS-W1	99%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.13	101	[NT]	[NT]	LCS-W1	100%
Surrogate 4-BFB	%		GC.13	97	[NT]	[NT]	LCS-W1	99%

Client Reference: E23982K, Pyrmont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTPH & BTEX in Water						Base II Duplicate II %RPD		
Date extracted	-			01/06/2010	[NT]	[NT]	LCS-W1	01/06/2010
Date analysed	-			01/06/2010	[NT]	[NT]	LCS-W1	01/06/2010
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	[NR]	[NR]
Benzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	87%
Toluene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	94%
Ethylbenzene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	93%
m+p-xylene	µg/L	2	GC.16	<2.0	[NT]	[NT]	LCS-W1	95%
o-xylene	µg/L	1	GC.16	<1.0	[NT]	[NT]	LCS-W1	95%
Surrogate	%		GC.16	102	[NT]	[NT]	LCS-W1	95%
Dibromofluoromethane								
Surrogate toluene-d8	%		GC.16	101	[NT]	[NT]	LCS-W1	99%
Surrogate 4-BFB	%		GC.16	97	[NT]	[NT]	LCS-W1	100%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTPH in Water (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			1/6/2010	[NT]	[NT]	LCS-W2	1/6/2010
Date analysed	-			1/6/2010	[NT]	[NT]	LCS-W2	1/6/2010
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W2	73%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	105%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W2	93%
Surrogate	%		GC.3	105	[NT]	[NT]	LCS-W2	93%
o-Terphenyl								

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water - Low Level						Base II Duplicate II %RPD		
Date extracted	-			1/6/2010	[NT]	[NT]	LCS-W1	1/6/2010
Date analysed	-			1/6/2010	[NT]	[NT]	LCS-W1	1/6/2010
Naphthalene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	89%
Acenaphthylene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	91%
Phenanthrene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	89%
Anthracene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]

Client Reference: E23982K, Pymont

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water - Low Level						Base II Duplicate II %RPD		
Fluoranthene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	80%
Pyrene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	87%
Benzo(a)anthracene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	97%
Benzo(b+k)fluoranthene	µg/L	0.2	GC.12 subset	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	LCS-W1	116%
Indeno(1,2,3-c,d)pyrene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	0.1	GC.12 subset	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	114	[NT]	[NT]	LCS-W1	113%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
HM in water - dissolved						Base II Duplicate II %RPD		
Date prepared	-			01/06/2010	41592-1	01/06/2010 01/06/2010	LCS-W1	01/06/2010
Date analysed	-			01/06/2010	41592-1	01/06/2010 01/06/2010	LCS-W1	01/06/2010
Arsenic-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	5 5 RPD: 0	LCS-W1	100%
Cadmium-Dissolved	µg/L	0.1	Metals.22 ICP-MS	<0.1	41592-1	<0.1 <0.1	LCS-W1	99%
Chromium-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	<1 <1	LCS-W1	104%
Copper-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	<1 <1	LCS-W1	103%
Lead-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	<1 <1	LCS-W1	108%
Mercury-Dissolved	µg/L	0.5	Metals.21 CV-AAS	<0.5	41592-1	<0.5 <0.5	LCS-W1	101%
Nickel-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	18 18 RPD: 0	LCS-W1	103%
Zinc-Dissolved	µg/L	1	Metals.22 ICP-MS	<1	41592-1	22 22 RPD: 0	LCS-W1	100%

Envirolab Reference: 41592
Revision No: R 00



QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorganics						Base Duplicate %RPD		
Date prepared	-			31/5/2010	41592-1	31/5/2010 31/5/2010	LCS-W1	31/5/2010
Date analysed	-			31/5/2010	41592-1	31/5/2010 31/5/2010	LCS-W1	31/5/2010
pH	pH Units		LAB.1	[NT]	41592-1	6.3 6.3 RPD: 0	LCS-W1	98%
Electrical Conductivity	µS/cm	1	LAB.2	<1.0	41592-1	1100 1100 RPD: 0	LCS-W1	102%
Oil & Grease (LLE)	mg/L	5	LAB.3	<5	41592-1	<5 [N/T]	LCS-W1	88%
Hardness	mgCaCO ₃ /L	1		1	41592-1	304 298 RPD: 2	[NR]	[NR]
Calcium - Dissolved	mg/L	0.03	Metals.20 ICP-AES	<0.03	41592-1	79 78 RPD: 1	LCS-W1	101%
Magnesium - Dissolved	mg/L	0.03	Metals.20 ICP-AES	<0.03	41592-1	26 25 RPD: 4	LCS-W1	98%
QUALITY CONTROL	UNITS	Dup. Sm#		Duplicate		Spike Sm#	Spike % Recovery	
HM in water - dissolved				Base + Duplicate + %RPD				
Date prepared	-	[NT]		[NT]		41592-2	01/06/2010	
Date analysed	-	[NT]		[NT]		41592-2	01/06/2010	
Arsenic-Dissolved	µg/L	[NT]		[NT]		41592-2	120%	
Cadmium-Dissolved	µg/L	[NT]		[NT]		41592-2	116%	
Chromium-Dissolved	µg/L	[NT]		[NT]		41592-2	116%	
Copper-Dissolved	µg/L	[NT]		[NT]		41592-2	105%	
Lead-Dissolved	µg/L	[NT]		[NT]		41592-2	118%	
Mercury-Dissolved	µg/L	[NT]		[NT]		41592-2	112%	
Nickel-Dissolved	µg/L	[NT]		[NT]		41592-2	108%	
Zinc-Dissolved	µg/L	[NT]		[NT]		41592-2	105%	
QUALITY CONTROL	UNITS	Dup. Sm#		Duplicate		Spike Sm#	Spike % Recovery	
Miscellaneous Inorganics				Base + Duplicate + %RPD				
Date prepared	-	[NT]		[NT]		41592-2	01/06/2010	
Date analysed	-	[NT]		[NT]		41592-2	01/06/2010	
pH	pH Units	[NT]		[NT]		[NR]	[NR]	
Electrical Conductivity	µS/cm	[NT]		[NT]		[NR]	[NR]	
Oil & Grease (LLE)	mg/L	[NT]		[NT]		[NR]	[NR]	
Hardness	mgCaCO ₃ /L	[NT]		[NT]		[NR]	[NR]	
Calcium - Dissolved	mg/L	[NT]		[NT]		41592-2	98%	
Magnesium - Dissolved	mg/L	[NT]		[NT]		41592-2	97%	

Report Comments:

VOC's in water:PQL has been raised due to interference from analytes(other than those being tested) in the sample/s.

Total Petroleum Hydrocarbons /BTEX in water:PQL has been raised due to interference from analytes(other than those being tested) in the sample/s.

Total Petroleum Hydrocarbons in water:# Percent recovery is not possible to report as the high concentration of analytes in the sample/s have caused interference.

Asbestos was analysed by Approved Identifier: Not applicable for this job

Asbestos was authorised by Approved Signatory: Not applicable for this job

INS: Insufficient sample for this test NT: Not tested PQL: Practical Quantitation Limit <: Less than >: Greater than

RPD: Relative Percent Difference NA: Test not required LCS: Laboratory Control Sample NR: Not requested

Quality Control Definitions

Blank: This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.

Duplicate: This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.

Matrix Spike: A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the sample batch were within laboratory acceptance criteria.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes and LCS: Generally 70-130% for inorganics/metals; 60-140% for organics and 10-140% for

SVOC and speciated phenols is acceptable. Surrogates: 60-140% is acceptable for general organics and 10-140% for



Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client:

Environmental Investigation Services
PO Box 976
North Ryde BC NSW 1670

ph: 02 9888 5000
Fax: 02 9888 5001

Attention: Brendan Page

Sample log in details:

Your reference:
Envirolab Reference:
Date received:
Date results expected to be reported:

E23982K, Pyrmont
41592
28/05/10
4/06/10

Samples received in appropriate condition for analysis:	YES
No. of samples provided	8 Waters
Turnaround time requested:	Standard
Temperature on receipt	Cool
Cooling Method:	Ice

Comments:

Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples.

Contact details:

Please direct any queries to Aileen Hie or Jacinta Hurst
ph: 02 9910 6200 fax: 02 9910 6201
email: ahie@envirolabservices.com.au or jhurst@envirolabservices.com.au

TO: Envirolab Services Pty Ltd 12 Ashley St, Chatswood 2067 Phone: (02) 9910 6200 Fax: (02) 9910 6201 Attention: Aileen				FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page bpage@jkgroup.net.au							
SAMPLE AND CHAIN OF CUSTODY FORM				Sheet 1 / 2							
EIS Job Number: E23982K				Sample Preservation: In esky on ice							
Project: Proposed Development Location: Pyrmont Sampler: BP				Tests Required							
				Heavy metals	TPH	VOCs	PAHs (low level)	Oil and Grease	EC, pH, Hardness	BTEX	Comments/Detection Limits Required  Envirolab Services 12 Ashley St Chatswood NSW 2067 Ph: 9910 6200 Job No: 41592 Date received: 28/5/10 Time received: 4pm Received By: [Signature] Tensol Corporation Cooling: Ice/Refrigerant Security: Locked/Unlocked/None
Date Sampled	Time Sampled	Location	Sample/Borehole Number	Sample Container	PID (ppm/Odour)	Sample Description					
28-5-10		①	MW 508	3x 1L Amber Bottles 1x 0.5L Amber Bottles 2x BTEX Vials 2x HDPE Plastic Bottles		Water					
		②	MW 512	3x 1L Amber Bottles 1x 0.5L Amber Bottles 2x BTEX Vials 2x HDPE Plastic Bottles							
		③	MW 513	3x 1L Amber Bottles 1x 0.5L Amber Bottles 2x BTEX Vials 2x HDPE Plastic Bottles							
		④	MW 516	3x 1L Amber Bottles 1x 0.5L Amber Bottles 2x BTEX Vials 2x HDPE Plastic Bottles							
		⑤	MW 517	3x 1L Amber Bottles 1x 0.5L Amber Bottles 2x BTEX Vials 2x HDPE Plastic Bottles							
Relinquished By: [Signature]				Date: 28/5/10 Time: 4:00pm		Received By: [Signature]		Date: 28/5/10 Time: 4pm		Remarks: MW516 TPH C6-C9 only All analysis PQLs to ANZECC (2000) Detection Limits Please	
Relinquished By:				Date:		Received By:		Date:		Time:	

TO: Envirolab Services Pty Ltd 12 Ashley St, Chatswood 2067 Phone: (02) 9910 6200 Fax: (02) 9910 6201 Attention: Aileen		SAMPLE AND CHAIN OF CUSTODY FORM				FROM: Environmental Investigation Services Rear 115 Wicks Road Macquarie Park NSW 2113 Phone: (02) 9888 5000 Fax: (02) 9888 5004 Contact: Brendan Page bpage@jkgroup.net.au																																																																																	
Date Results Required: Standard		EIS Job Number: E23982K				Sheet 2/2																																																																																	
Project: Proposed Development Location: Pyrmont Sampler: BP		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" rowspan="2">Tests Required</th> <th rowspan="2">Heavy metals &</th> <th rowspan="2">TPH</th> <th rowspan="2">VOCs</th> <th rowspan="2">PAHs (low level)</th> <th rowspan="2">Oil and Grease</th> <th rowspan="2">EC, pH, Hardness</th> <th rowspan="2">BTEX</th> <th rowspan="2">Comments/Detection Limits Required</th> </tr> <tr> </tr> </thead> <tbody> <tr> <td>28-5-10</td> <td>↓</td> <td>XXX</td> <td>XX</td> <td>XX</td> <td>XX</td> <td>XX</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Tests Required		Heavy metals &	TPH	VOCs	PAHs (low level)	Oil and Grease	EC, pH, Hardness	BTEX	Comments/Detection Limits Required	28-5-10	↓	XXX	XX	XX	XX	XX																						X										X																															
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28-5-10	↓	XXX	XX	XX	XX	XX																																																																																	
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Date: 28/5/10 Time: 4:00pm Relinquished By: [Signature]		Date: 28/5/10 Time: 4:00pm Received By: [Signature]		Remarks: All analysis POLs to ANZECC (2000) Detection Limits Please																																																																																			



ANALYTICAL REPORT

8 June 2010

Jeffery and Katauskas Pty Ltd
115 Wicks Road
Macquarie Park
North Ryde BC
NSW 1670

Attention: Brendan Page

Your Reference: E23982K - Proposed Development - Pyrmont

Our Reference: SE78671

Samples: 1 Water

Received: 31/05/2010

Preliminary Report Sent: Not Issued

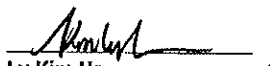
These samples were analysed in accordance with your written instructions.

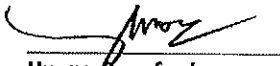
For and on Behalf of:
SGS ENVIRONMENTAL SERVICES

Sample Receipt:	Angela Mamalicos	AU.SampleReceipt.Sydney@sgs.com
Production Manager:	Huong Crawford	Huong.Crawford@sgs.com

Results Approved and/or Authorised by:


Dong Liang
Quality Manager


Ly Kim Ha
Organics Signatory


Huong Crawford
Metals Signatory



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ABN 44 000 964 278

Environmental Services Unit 16/33 Maddox Street Alexandria NSW 2015 Australia
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VOCs in Water - 72 List Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78671-1 GW Dup 2 Water 28/05/2010
Date extracted (VOCs)		1/06/2010
Date analysed (VOCs)		1/06/2010
Dichlorodifluoromethane (CFC-12)	µg/L	<5.0
Chloromethane	µg/L	<5.0
Vinyl Chloride (chloroethene)	µg/L	<0.3
Bromomethane	µg/L	<10
Chloroethane	µg/L	<5.0
Trichlorofluoromethane	µg/L	<1.0
Acetone (2-propanone)	µg/L	<10
1,1-Dichloroethene	µg/L	<0.5
Methyl Iodine (iodomethane)	µg/L	<5
Acrylonitrile	µg/L	<0.5
Methylene Chloride (DCM)	µg/L	<5
Allyl Chloride	µg/L	<0.5
Carbon Disulphide	µg/L	<0.5
<i>trans</i> -1,2-Dichloroethene	µg/L	<0.5
Methyl-tert-butyl ether (MtBE)	µg/L	<2
1,1-Dichloroethane	µg/L	<0.5
2-Butanone (MEK)	µg/L	<10
<i>cis</i> -1,2-Dichloroethene	µg/L	<0.5
Bromochloromethane	µg/L	<0.5
Chloroform	µg/L	<0.5
2,2-Dichloropropane	µg/L	<0.5
1,2-Dichloroethane	µg/L	<0.5
1,1,1-Trichloroethane	µg/L	<0.5
1,1-Dichloropropene	µg/L	<0.5
Carbon tetrachloride	µg/L	<0.5
Benzene	µg/L	<0.5
Dibromomethane	µg/L	<0.5
1,2-Dichloropropane	µg/L	<0.5
Trichloroethene (TCE)	µg/L	<0.5
2-Nitropropane	µg/L	<100
Bromodichloromethane	µg/L	<0.5
<i>cis</i> -1,3-Dichloropropene	µg/L	<0.5
4-Methyl-2-Pentanone (MIBK)	µg/L	<5
<i>trans</i> -1,3-Dichloropropene	µg/L	<0.5
1,1,2-Trichloroethane	µg/L	<0.5
Toluene	µg/L	<0.5



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VOCs in Water - 72 List Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78671-1 GW Dup 2 Water 28/05/2010
1,3-Dichloropropane	µg/L	<0.5
2-Hexanone (MBK)	µg/L	<5
Dibromochloromethane	µg/L	<0.5
1,2-Dibromoethane (EDB)	µg/L	<0.5
Tetrachloroethene (PCE-perchloroethylen	µg/L	<0.5
1,1,1,2-Tetrachloroethane	µg/L	<0.5
Chlorobenzene	µg/L	<0.5
Ethyl benzene	µg/L	<0.5
Bromoform	µg/L	<0.5
<i>m/p</i> -Xylenes	µg/L	<1
Cis-1,4-dichloro-2-butene	µg/L	<1
Styrene (vinyl benzene)	µg/L	<0.5
1,1,2,2-Tetrachloroethane	µg/L	<0.5
<i>o</i> -Xylene	µg/L	<0.5
1,2,3-Trichloropropane	µg/L	<0.5
Trans-1,4-dichloro-2-butene	µg/L	<1
Isopropylbenzene (Cumene)	µg/L	24
Bromobenzene	µg/L	<0.5
<i>n</i> -Propylbenzene	µg/L	11
2-Chlorotoluene	µg/L	<0.5
4-Chlorotoluene	µg/L	<0.5
1,3,5-Trimethylbenzene	µg/L	<0.5
<i>tert</i> -Butylbenzene	µg/L	2.7
1,2,4-Trimethylbenzene	µg/L	<0.5
<i>sec</i> -Butylbenzene	µg/L	12
1,3-Dichlorobenzene	µg/L	<0.5
1,4-Dichlorobenzene	µg/L	<0.3
<i>p</i> -Isopropyl toluene	µg/L	<0.5
1,2-Dichlorobenzene	µg/L	<0.5
<i>n</i> -Butylbenzene	µg/L	1.6
1,2-Dibromo-3-chloropropane	µg/L	<0.5
1,2,4-Trichlorobenzene	µg/L	<0.5
Naphthalene	µg/L	<0.5
Hexachlorobutadiene	µg/L	<1
1,2,3-Trichlorobenzene	µg/L	<0.5
Vinyl acetate	µg/L	<10
Dibromofluoromethane	%	100
1,2-Dichloroethane-d4	%	100
Toluene-d8 (Surrogate 2)	%	100



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www.au.sgs.com

VOCs in Water - 72 List Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78671-1 GW Dup 2 Water 28/05/2010
4-Bromofluorobenzene <i>Surrogate 3</i>	%	93

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TRH in water with C6-C9 by P/T		
Our Reference:	UNITS	SE78671-1
Your Reference	-----	GW Dup 2
Sample Matrix	-----	Water
Date Sampled		28/05/2010
Date Extracted (TRH C6-C9 PT)		1/06/2010
Date Analysed (TRH C6-C9 PT)		1/06/2010
TRH C6 - C9 P&T in µg/L	µg/L	190
Date Extracted (TRH C10-C36)		3/06/2010
Date Analysed (TRH C10-C36)		3/06/2010
TRH C10 - C14	µg/L	790
TRH C15 - C28	µg/L	456
TRH C29 - C36	µg/L	<200



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PAHs in Water-Low Level		
Our Reference:	UNITS	SE78671-1
Your Reference	-----	GW Dup 2
Sample Matrix	-----	Water
Date Sampled		28/05/2010
Date Extracted		3/06/2010
Date Analysed		3/06/2010
Naphthalene	µg/L	0.7
Acenaphthylene	µg/L	0.3
Acenaphthene	µg/L	3.8
Fluorene	µg/L	4.0
Phenanthrene	µg/L	3.9
Anthracene	µg/L	1
Fluoranthene	µg/L	1
Pyrene	µg/L	0.7
Benzo[a]anthracene	µg/L	0.1
Chrysene	µg/L	<0.1
Benzo[b,k]fluoranthene	µg/L	<0.2
Benzo[a]pyrene	µg/L	<0.1
Indeno[123-cd]pyrene	µg/L	<0.1
Dibenzo[ah]anthracene	µg/L	<0.1
Benzo[ghi]perylene	µg/L	<0.1
1-Methylnaphthalene	µg/L	2.7
2-Methylnaphthalene	µg/L	1.0
Total PAHs (sum)	µg/L	<19.79
p-Terphenyl-d14	%	118
Nitrobenzene-d5	%	126
2-Fluorobiphenyl	%	106



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Inorganics	UNITS	SE78671-1
Our Reference:	-----	GW Dup 2
Your Reference	-----	Water
Sample Matrix		28/05/2010
Date Sampled		
Date Extracted (Oil & Grease)		4/06/2010
Date Analysed (Oil & Grease)		4/06/2010
Oil & Grease gravimetric	mg/L	57



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Trace HM (ICP-MS)-Dissolved		
Our Reference:	UNITS	SE78671-1
Your Reference	-----	GW Dup 2
Sample Matrix	-----	Water
Date Sampled		28/05/2010
Date Extracted (Metals-ICPMS)		2/06/2010
Date Analysed (Metals-ICPMS)		2/06/2010
Arsenic	µg/L	11
Cadmium	µg/L	<0.1
Chromium	µg/L	<1
Copper	µg/L	<1
Lead	µg/L	<1
Nickel	µg/L	4
Zinc	µg/L	76



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Mercury Cold Vapor/Hg Analyser	UNITS	SE78671-1
Our Reference:	-----	GW Dup 2
Your Reference	-----	Water
Sample Matrix		28/05/2010
Date Sampled		
Date Extracted (Mercury)		1/06/2010
Date Analysed (Mercury)		1/06/2010
Mercury (Dissolved)	mg/L	<0.0001



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Method ID	Methodology Summary
AN433	Volatile Organic Compounds - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-019	Volatile Organic Compounds - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEI-025	Oil & Grease - determined by liquid-liquid extraction with n-hexane, and then gravimetric measurement of the oil & grease residue, based on APHA 21st Edition, 5520B.
AN318	Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
VOCs in Water - 72 List								
Date extracted (VOCs)				1/6/10	[NT]	[NT]	LCS	1/6/10
Date analysed (VOCs)				1/6/10	[NT]	[NT]	LCS	1/6/10
Dichlorodifluoromethane (CFC-12)	µg/L	5	AN433	<5.0	[NT]	[NT]	[NR]	[NR]
Chloromethane	µg/L	5	AN433	<5.0	[NT]	[NT]	[NR]	[NR]
Vinyl Chloride (chloroethene)	µg/L	0.3	AN433	<0.3	[NT]	[NT]	[NR]	[NR]
Bromomethane	µg/L	10	AN433	<10	[NT]	[NT]	[NR]	[NR]
Chloroethane	µg/L	5	AN433	<5.0	[NT]	[NT]	[NR]	[NR]
Trichlorofluoromethane	µg/L	1	AN433	<1.0	[NT]	[NT]	[NR]	[NR]
Acetone (2-propanone)	µg/L	10	AN433	<10	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	117%
Methyl Iodine (iodomethane)	µg/L	5	AN433	<5	[NT]	[NT]	[NR]	[NR]
Acrylonitrile	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Methylene Chloride (DCM)	µg/L	5	AN433	<5	[NT]	[NT]	[NR]	[NR]
Allyl Chloride	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Carbon Disulphide	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
trans-1,2-Dichloroethene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Methyl-tert-butyl ether (MTBE)	µg/L	2	AN433	<2	[NT]	[NT]	[NR]	[NR]
1,1-Dichloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
2-Butanone (MEK)	µg/L	10	AN433	<10	[NT]	[NT]	[NR]	[NR]
cis-1,2-Dichloroethene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Bromochloromethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Chloroform	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	84%
2,2-Dichloropropane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2-Dichloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	113%
1,1,1-Trichloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,1-Dichloropropene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Carbon tetrachloride	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Benzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	110%
Dibromomethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2-Dichloropropane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Trichloroethene (TCE)	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	111%
2-Nitropropane	µg/L	100	AN433	<100	[NT]	[NT]	[NR]	[NR]
Bromodichloromethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
cis-1,3-Dichloropropene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
VOCs in Water - 72 List								
4-Methyl-2-Pentanone (MIBK)	µg/L	5	AN433	<5	[NT]	[NT]	[NR]	[NR]
trans-1,3-Dichloropropene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,1,2-Trichloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Toluene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	113%
1,3-Dichloropropane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
2-Hexanone (MBK)	µg/L	5	AN433	<5	[NT]	[NT]	[NR]	[NR]
Dibromochloromethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2-Dibromoethane (EDB)	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Tetrachloroethene (PCE-perchloroethylen)	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,1,1,2-Tetrachloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Chlorobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	122%
Ethyl benzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	123%
Bromoform	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
m/p-Xylenes	µg/L	1	AN433	<1	[NT]	[NT]	LCS	123%
Cis-1,4-dichloro-2-butene	µg/L	1	AN433	<1	[NT]	[NT]	[NR]	[NR]
Styrene (vinyl benzene)	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,1,2,2-Tetrachloroethane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
o-Xylene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	LCS	118%
1,2,3-Trichloropropane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Trans-1,4-dichloro-2-butene	µg/L	1	AN433	<1	[NT]	[NT]	[NR]	[NR]
Isopropylbenzene (Cumene)	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Bromobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
n-Propylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
2-Chlorotoluene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
4-Chlorotoluene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,3,5-Trimethylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
tert-Butylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2,4-Trimethylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
sec-Butylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,3-Dichlorobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,4-Dichlorobenzene	µg/L	0.3	AN433	<0.3	[NT]	[NT]	[NR]	[NR]
p-Isopropyl toluene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2-Dichlorobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
n-Butylbenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]



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VOCs in Water - 72 List								
1,2-Dibromo-3-chloropropane	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
1,2,4-Trichlorobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Naphthalene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Hexachlorobutadiene	µg/L	1	AN433	<1	[NT]	[NT]	[NR]	[NR]
1,2,3-Trichlorobenzene	µg/L	0.5	AN433	<0.5	[NT]	[NT]	[NR]	[NR]
Vinyl acetate	µg/L	10	AN433	<10	[NT]	[NT]	[NR]	[NR]
Dibromofluoromethane	%	0	SEO-019	96	[NT]	[NT]	LCS	99%
1,2-Dichloroethane-d4	%	0	SEO-019	96	[NT]	[NT]	LCS	95%
Toluene-d8: Surrogate 2	%	0	SEO-019	101	[NT]	[NT]	LCS	98%
4-Bromofluorobenzene Surrogate 3	%	0	SEO-019	93	[NT]	[NT]	LCS	101%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
TRH in water with C6-C9 by P/T								
Date Extracted (TRH C6-C9 PT)				01/06/10	[NT]	[NT]	LCS	01/06/10
Date Analysed (TRH C6-C9 PT)				01/06/10	[NT]	[NT]	LCS	01/06/10
TRH C6 - C9 P&T in µg/L	µg/L	40	SEO-018	<40	[NT]	[NT]	LCS	102%
Date Extracted (TRH C10-C36)				03/06/10	[NT]	[NT]	LCS	03/06/10
Date Analysed (TRH C10-C36)				03/06/10	[NT]	[NT]	LCS	03/06/10
TRH C10 - C14	µg/L	100	SEO-020	<100	[NT]	[NT]	LCS	89%
TRH C15 - C28	µg/L	200	SEO-020	<200	[NT]	[NT]	LCS	96%
TRH C29 - C36	µg/L	200	SEO-020	<200	[NT]	[NT]	LCS	89%



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PAHs in Water-Low Level								
Date Extracted				03/06/10	[NT]	[NT]	LCS	03/06/10
Date Analysed				03/06/10	[NT]	[NT]	LCS	03/06/10
Naphthalene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	108%
Acenaphthylene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	112%
Acenaphthene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	125%
Fluorene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Phenanthrene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	119%
Anthracene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	121%
Fluoranthene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	123%
Pyrene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	125%
Benzo[a]anthracene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo[b,k]fluoranthene	µg/L	0.2	SEO-030	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo[a]pyrene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	LCS	107%
Indeno[123-cd]pyrene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo[ah]anthracene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo[ghi]perylene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
1-Methylnaphthalene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
2-Methylnaphthalene	µg/L	0.1	SEO-030	<0.1	[NT]	[NT]	[NR]	[NR]
Total PAHs (sum)	µg/L	1.8	SEO-030	<2	[NT]	[NT]	[NR]	[NR]
p-Terphenyl-d14	%	0	SEO-030	129	[NT]	[NT]	LCS	126%
Nitrobenzene-d5	%	0	SEO-030	126	[NT]	[NT]	LCS	116%
2-Fluorobiphenyl	%	0	SEO-030	110	[NT]	[NT]	LCS	118%



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Inorganics								
Date Extracted (Oil & Grease)				4/06/2010	[NT]	[NT]	LCS	4/06/2010
Date Analysed (Oil & Grease)				4/06/2010	[NT]	[NT]	LCS	4/06/2010
Oil & Grease gravimetric	mg/L	5	SEI-025	<5	[NT]	[NT]	LCS	72%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Trace HM (ICP-MS)-Dissolved								
Date Extracted (Metals-ICPMS)				2/06/2010	[NT]	[NT]	LCS	2/06/2010
Date Analysed (Metals-ICPMS)				2/06/2010	[NT]	[NT]	LCS	2/06/2010
Arsenic	µg/L	1	AN318	<1	[NT]	[NT]	LCS	97%
Cadmium	µg/L	0.1	AN318	<0.1	[NT]	[NT]	LCS	99%
Chromium	µg/L	1	AN318	<1	[NT]	[NT]	LCS	97%
Copper	µg/L	1	AN318	<1	[NT]	[NT]	LCS	95%
Lead	µg/L	1	AN318	<1	[NT]	[NT]	LCS	106%
Nickel	µg/L	1	AN318	<1	[NT]	[NT]	LCS	93%
Zinc	µg/L	1	AN318	<1	[NT]	[NT]	LCS	93%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Mercury Cold Vapor/Hg Analyser								
Date Extracted (Mercury)				01/06/2010	[NT]	[NT]	LCS	01/06/2010
Date Analysed (Mercury)				01/06/2010	[NT]	[NT]	LCS	01/06/2010
Mercury (Dissolved)	mg/L	0.0001	SEM-005	<0.0001	[NT]	[NT]	LCS	103%



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Result Codes

[INS] : Insufficient Sample for this test
[NR] : Not Requested
[NT] : Not tested
[LOR] : Limit of reporting

[RPD] : Relative Percentage Difference
* : Not part of NATA Accreditation
[N/A] : Not Applicable

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.

Date Organics extraction commenced:

NATA Corporate Accreditation No. 2562, Site No 4354

Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)

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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.

Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.

Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.

Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.

Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>



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SAMPLE RECEIPT ADVICE (SRA)

1 June 2010

Client Details

Requested By : **Brendan Page**
Client : Jeffery and Katauskas Pty Ltd
Contact : Brendan Page
Address : 115 Wicks Road
Macquarie Park
North Ryde BC NSW 1670

Email : eis@jkggroup.net.au
Telephone : 02 9888 5000
Facsimile : 02 9888 5001

Project : E23982K - Proposed Development - Pyrmont
Order Number :
Samples : 1 Water

Laboratory Details

Laboratory : SGS Environmental Services
Manager : Edward Ibrahim

Address : Unit 16, 33 Maddox Street
Alexandria NSW 2015

Email : au.samplereceipt.sydney@sgs.com
Telephone : 61 2 8594 0400
Facsimile : 61 2 8594 0499

Report No : **SE78671**
No. of Samples : 1
Due Date : 8/06/2010

Date Instructions Received : 31/05/2010
Sample Receipt Date : 31/05/2010

Samples received in good order : YES
Samples received without headspace : YES
Upon receipt sample temperature : Cool
Sample containers provided by : Other Lab
Turnaround time requested : Standard

Samples received in correct containers : YES
Sufficient quantity supplied : YES
Cooling Method : Ice Pack
Samples clearly Labelled : YES
Completed documentation received : YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

Sample received 31/05/10@4:30pm.

To the extent not inconsistent with the other provisions of this document and unless specifically agreed otherwise in writing by SGS, all SGS services are rendered in accordance with the applicable SGS General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm as at the date of this document. Attention is drawn to the limitations of liability and to the clauses of indemnification.

The signed chain of custody will be returned to you with the original report.



SAMPLE RECEIPT ADVICE (SRA) - continued

Client : Jeffery and Katauskas Pty Ltd Report No : SE78671
Project : E23982K - Proposed Development - Pyrmont

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.

Please indicate ASAP if your request differs from these details.

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

Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep. water 8HM (diss)	VOCs in Water-SGS Nat. 72 List	TRH in water with C6-C9 by P/T	PAHs in Water-Low Level	Inorganics	Trace HM (ICP-MS)-Dissolved	Mercury Cold Vapor/Hg Analyser
1	GW Dup 2	X	X	X	X	X	X	X

Sample No.	Description
1	GW Dup 2



ANALYTICAL REPORT

24 May 2010

Jeffery and Katauskas Pty Ltd

115 Wicks Road
Macquarie Park
North Ryde BC
NSW 1670

Attention: Brendan Page

Your Reference: E23982K - Proposed Redevelopment - Pymont

Our Reference: SE78266

Samples: 2 Soils

Received: 17/05/2010

Preliminary Report Sent: Not Issued

These samples were analysed in accordance with your written instructions.

For and on Behalf of:

SGSENVIRONMENTAL SERVICES

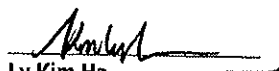
Sample Receipt: Angela Mamalicos

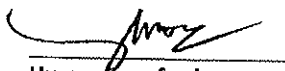
AU.SampleReceipt.Sydney@sgs.com

Production Manager: Huong Crawford

Huong.Crawford@sgs.com

Results Approved and/or Authorised by:


Ly Kim Ha
Organics Signatory


Huong Crawford
Metals Signatory



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ABN 44 000 964 278

Environmental Services Unit 16/33 Maddox Street Alexandria NSW 2015 Australia
t +61 (0)2 8594 0400 f + 61 (0)2 8594 0499
www.au.sgs.com

BTEX in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78266-1 Dup 5 Soil 13/05/2010
Date Extracted (BTEX)		18/05/2010
Date Analysed (BTEX)		18/05/2010
Benzene	mg/kg	<0.1
Toluene	mg/kg	<0.1
Ethylbenzene	mg/kg	<0.1
Total Xylenes	mg/kg	<0.3
BTEX Surrogate (%)	%	103



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TRH in soil with C6-C9 by P/T		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted (TRH C6-C9 PT)		18/05/2010
Date Analysed (TRH C6-C9 PT)		18/05/2010
TRH C6 - C9 P&T	mg/kg	<20
Date Extracted (TRH C10-C36)		18/05/2010
Date Analysed (TRH C10-C36)		18/05/2010
TRH C10 - C14	mg/kg	<20
TRH C15 - C28	mg/kg	<50
TRH C29 - C36	mg/kg	<50



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PAHs in Soil		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted		18/05/2010
Date Analysed		18/05/2010
Naphthalene	mg/kg	<0.10
2-Methylnaphthalene	mg/kg	<0.10
1-Methylnaphthalene	mg/kg	<0.10
Acenaphthylene	mg/kg	<0.10
Acenaphthene	mg/kg	<0.10
Fluorene	mg/kg	<0.10
Phenanthrene	mg/kg	<0.10
Anthracene	mg/kg	<0.10
Fluoranthene	mg/kg	<0.10
Pyrene	mg/kg	<0.10
Benzo[a]anthracene	mg/kg	<0.10
Chrysene	mg/kg	<0.10
Benzo[b,k]fluoranthene	mg/kg	<0.20
Benzo[a]pyrene	mg/kg	<0.05
Indeno[123-cd]pyrene	mg/kg	<0.10
Dibenzo[ah]anthracene	mg/kg	<0.10
Benzo[ghi]perylene	mg/kg	<0.10
Total PAHs (sum)	mg/kg	<1.7
Nitrobenzene-d5	%	114
2-Fluorobiphenyl	%	102
p-Terphenyl-d14	%	108



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OC Pesticides in Soil		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted		18/05/2010
Date Analysed		18/05/2010
HCB	mg/kg	<0.1
<i>alpha</i> -BHC	mg/kg	<0.1
gamma-BHC (Lindane)	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
Aldrin	mg/kg	<0.1
<i>beta</i> -BHC	mg/kg	<0.1
<i>delta</i> -BHC	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
<i>o,p</i> -DDE	mg/kg	<0.1
<i>alpha</i> -Endosulfan	mg/kg	<0.1
<i>trans</i> -Chlordane	mg/kg	<0.1
<i>cis</i> -Chlordane	mg/kg	<0.1
<i>trans</i> -Nonachlor	mg/kg	<0.1
<i>p,p</i> -DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
<i>o,p</i> -DDD	mg/kg	<0.1
<i>o,p</i> -DDT	mg/kg	<0.1
<i>beta</i> -Endosulfan	mg/kg	<0.1
<i>p,p</i> -DDD	mg/kg	<0.1
<i>p,p</i> -DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Endrin Ketone	mg/kg	<0.1
2,4,5,6-Tetrachloro-m-xylene (Surrogate)	%	128



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OP Pesticides in Soil by GCMS		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted		18/05/2010
Date Analysed		18/05/2010
Dichlorvos	mg/kg	<1
Dimethoate	mg/kg	<1
Diazinon	mg/kg	<0.5
Fenitrothion	mg/kg	<0.2
Malathion	mg/kg	<0.20
Chlorpyrifos-ethyl	mg/kg	<0.2
Parathion-ethyl	mg/kg	<0.2
Bromofos-ethyl	mg/kg	<0.2
Methidathion	mg/kg	<0.5
Ethion	mg/kg	<0.2
Azinphos-methyl	mg/kg	<0.20
2-fluorobiphenyl (Surr)	%	102
d14-p-Terphenyl (Surr)	%	108

PCBs in Soil		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted		18/05/2010
Date Analysed		18/05/2010
Arochlor 1016	mg/kg	<0.1
Arochlor 1221	mg/kg	<0.1
Arochlor 1232	mg/kg	<0.1
Arochlor 1242	mg/kg	<0.1
Arochlor 1248	mg/kg	<0.1
Arochlor 1254	mg/kg	<0.1
Arochlor 1260	mg/kg	<0.1
Arochlor 1262	mg/kg	<0.1
Arochlor 1268	mg/kg	<0.1
Total Positive PCB	mg/kg	<0.90
PCB_Surrogate 1	%	128



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Metals in Soil by ICP-OES		
Our Reference:	UNITS	SE78266-1
Your Reference:	-----	Dup 5
Sample Matrix:	-----	Soil
Date Sampled		13/05/2010
Date Extracted (Metals)		21/05/2010
Date Analysed (Metals)		21/05/2010
Arsenic	mg/kg	<3
Cadmium	mg/kg	0.4
Chromium	mg/kg	18
Copper	mg/kg	47
Lead	mg/kg	5
Nickel	mg/kg	130
Zinc	mg/kg	64



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www.au.sgs.com

Mercury Cold Vapor/Hg Analyser		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Extracted (Mercury)		20/05/2010
Date Analysed (Mercury)		20/05/2010
Mercury	mg/kg	<0.05



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Moisture		
Our Reference:	UNITS	SE78266-1
Your Reference	-----	Dup 5
Sample Matrix	-----	Soil
Date Sampled		13/05/2010
Date Analysed (moisture)		18/05/2010
Moisture	%	6



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Method ID	Methodology Summary
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEO-005	OC/OP/PCB - Determination of a suite of Organochlorine Pesticides, Chlorinated Organo-phosphorus Pesticides and Polychlorinated Biphenyls (PCB's) by liquid-liquid extraction using dichloromethane for waters, or mechanical extraction using acetone / hexane for soils, followed by instrumentation analysis using GC/ECD. Based on USEPA 8081/8082.
AN420	Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates, and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD/FID technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
SEM-010	Determination of elements by ICP-OES following appropriate sample preparation / digestion process. Based on USEPA 6010C / APHA 21st Edition, 3120B.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 ± 5°C.



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
BTEX in Soil								
Date Extracted (BTEX)				18/05/10	[NT]	[NT]	LCS	18/05/10
Date Analysed (BTEX)				18/05/10	[NT]	[NT]	LCS	18/05/10
Benzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	86%
Toluene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	84%
Ethylbenzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	82%
Total Xylenes	mg/kg	0.3	SEO-018	<0.3	[NT]	[NT]	LCS	79%
BTEX Surrogate (%)	%	0	SEO-018	116	[NT]	[NT]	LCS	84%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
TRH in soil with C6-C9 by P/T								
Date Extracted (TRH C6-C9 PT)				18/05/10	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/10
Date Analysed (TRH C6-C9 PT)				18/05/10	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/10
TRH C6 - C9 P&T	mg/kg	20	SEO-018	<20	SE78266-1	<20 [N/T]	LCS	100%
Date Extracted (TRH C10-C36)				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
Date Analysed (TRH C10-C36)				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
TRH C10 - C14	mg/kg	20	SEO-020	<20	SE78266-1	<20 <20	LCS	101%
TRH C15 - C28	mg/kg	50	SEO-020	<50	SE78266-1	<50 <50	LCS	104%
TRH C29 - C36	mg/kg	50	SEO-020	<50	SE78266-1	<50 <50	LCS	79%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PAHs in Soil								
Date Extracted				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
Date Analysed				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
Naphthalene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	96%
2-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
1-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Acenaphthylene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	104%
Acenaphthene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	113%
Fluorene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	109%
Anthracene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	120%
Fluoranthene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	116%
Pyrene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	LCS	119%
Benzo[a]anthracene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Benzo[b,k]fluoranthene	mg/kg	0.2	SEO-030	<0.20	SE78266-1	<0.20 <0.20	[NR]	[NR]
Benzo[a]pyrene	mg/kg	0.05	SEO-030	<0.05	SE78266-1	<0.05 <0.05	LCS	101%
Indeno[123-cd]pyrene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Dibenzo[ah]anthracene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Benzo[ghi]perylene	mg/kg	0.1	SEO-030	<0.10	SE78266-1	<0.10 <0.10	[NR]	[NR]
Total PAHs (sum)	mg/kg	1.75	SEO-030	<1.7	SE78266-1	<1.7 <1.7	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	84	SE78266-1	114 116 RPD: 2	LCS	128%
2-Fluorobiphenyl	%	0	SEO-030	96	SE78266-1	102 100 RPD: 2	LCS	108%
p-Terphenyl-d14	%	0	SEO-030	100	SE78266-1	108 108 RPD: 0	LCS	123%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OC Pesticides in Soil								
Date Extracted				18/05/2010	[NT]	[NT]	LCS	18/05/2010
Date Analysed				18/05/2010	[NT]	[NT]	LCS	18/05/2010
HCB	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>alpha</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>gamma</i> -BHC (Lindane)	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Heptachlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	120%
Aldrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	114%
<i>beta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>delta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	102%
Heptachlor Epoxide	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>o,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>alpha</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>trans</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>cis</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>trans</i> -Nonachlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Dieldrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	124%
Endrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	129%
<i>o,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>o,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>beta</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	78%
Endosulfan Sulphate	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Methoxychlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Ketone	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
2,4,5,6-Tetrachloro-m-xylene (Surrogate)	%	0	SEO-005	130	[NT]	[NT]	LCS	119%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OP Pesticides in Soil by GCMS								
Date Extracted				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
Date Analysed				18/05/2010	SE78266-1	18/05/2010 18/05/2010	LCS	18/05/2010
Dichlorvos	mg/kg	1	AN420	<1	SE78266-1	<1 <1	LCS	93%
Dimethoate	mg/kg	1	AN420	<1	SE78266-1	<1 <1	[NR]	[NR]
Diazinon	mg/kg	0.5	AN420	<0.5	SE78266-1	<0.5 <0.5	LCS	74%
Fenitrothion	mg/kg	0.2	AN420	<0.2	SE78266-1	<0.2 <0.2	[NR]	[NR]
Malathion	mg/kg	0.2	AN420	<0.20	SE78266-1	<0.20 <0.20	[NR]	[NR]
Chlorpyrifos-ethyl	mg/kg	0.2	AN420	<0.2	SE78266-1	<0.2 <0.2	LCS	93%
Parathion-ethyl	mg/kg	0.2	AN420	<0.2	SE78266-1	<0.2 <0.2	[NR]	[NR]
Bromofos-ethyl	mg/kg	0.2	AN420	<0.2	SE78266-1	<0.2 <0.2	[NR]	[NR]
Methidathion	mg/kg	0.5	AN420	<0.5	SE78266-1	<0.5 <0.5	[NR]	[NR]
Ethion	mg/kg	0.2	AN420	<0.2	SE78266-1	<0.2 <0.2	LCS	88%
Azinphos-methyl	mg/kg	0.2	AN420	<0.20	SE78266-1	<0.20 <0.20	[NR]	[NR]
2-fluorobiphenyl (Surr)	%	0	AN420	96	SE78266-1	102 100 RPD: 2	LCS	90%
d14-p-Terphenyl (Surr)	%	0	AN420	100	SE78266-1	108 108 RPD: 0	LCS	108%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PCBs in Soil								
Date Extracted				18/05/2010	[NT]	[NT]	LCS	18/05/2010
Date Analysed				18/05/2010	[NT]	[NT]	LCS	18/05/2010
Arochlor 1016	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1260	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	70%
Arochlor 1262	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1268	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Total Positive PCB	mg/kg	0.9	SEO-005	<0.90	[NT]	[NT]	[NR]	[NR]
PCB_Surrogate 1	%	0	SEO-005	130	[NT]	[NT]	LCS	123%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Metals in Soil by ICP-OES								
Date Extracted (Metals)				21/05/2010	[NT]	[NT]	LCS	21/05/2010
Date Analysed (Metals)				21/05/2010	[NT]	[NT]	LCS	21/05/2010
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	99%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	101%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	101%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	100%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	101%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	101%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	99%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Mercury Cold Vapor/Hg Analyser								
Date Extracted (Mercury)				20/05/2010	[NT]	[NT]	LCS	20/05/2010
Date Analysed (Mercury)				20/05/2010	[NT]	[NT]	LCS	20/05/2010
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	104%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank
Hold sample-NO test required				
Sample on HOLD		[NT]		[NT]

QUALITY CONTROL	UNITS	LOR	METHOD	Blank
Moisture				
Date Analysed (moisture)				[NT]
Moisture	%	1	AN002	<1



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Result Codes

[INS] : Insufficient Sample for this test
[NR] : Not Requested
[NT] : Not tested
[LOR] : Limit of reporting

[RPD] : Relative Percentage Difference
* : Not part of NATA Accreditation
[N/A] : Not Applicable

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.

Date Organics extraction commenced:

NATA Corporate Accreditation No. 2562, Site No 4354

Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)

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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.

Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.

Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.

Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.

Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>



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SAMPLE RECEIPT ADVICE (SRA)

17 May 2010

Client Details

Requested By : Brendan Page
Client : Jeffery and Katauskas Pty Ltd
Contact : Brendan Page
Address : 115 Wicks Road
Macquarie Park
North Ryde BC NSW 1670

Email : bpage@jkgroup.net.au
Telephone : 02 9888 5000
Facsimile : 02 9888 5001

Project : E23982K - Proposed Redevelopment - Pyrmont
Order Number :
Samples : 2 Soils

Laboratory Details

Laboratory : SGS Environmental Services
Manager : Edward Ibrahim

Address : Unit 16, 33 Maddox Street
Alexandria NSW 2015

Email : au.samplereceipt.sydney@sgs.com
Telephone : 61 2 8594 0400
Facsimile : 61 2 8594 0499

Report No : SE78266
No. of Samples : 2
Due Date : 24/05/2010

Date Instructions Received : 17/05/2010
Sample Receipt Date : 17/05/2010

Samples received in good order : YES
Samples received without headspace : YES
Upon receipt sample temperature : Cool
Sample containers provided by : Other Lab
Turnaround time requested : Standard

Samples received in correct container: YES
Sufficient quantity supplied : YES
Cooling Method : Ice Pack
Samples clearly Labelled : YES
Completed documentation received : YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

To the extent not inconsistent with the other provisions of this document and unless specifically agreed otherwise in writing by SGS, all SGS services are rendered in accordance with the applicable SGS General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm as at the date of this document. Attention is drawn to the limitations of liability and to the clauses of indemnification.

The signed chain of custody will be returned to you with the original report.



SAMPLE RECEIPT ADVICE (SRA) - continued

Client : Jeffery and Katauskas Pty Ltd
Project : E23982K - Proposed Redevelopment - Pyrmont

Report No : SE78266

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.

Please indicate ASAP if your request differs from these details.

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

Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep & Inorganics - All	BTEX in Soil	TRH in soil with C6-C9 by P/T	PAHs in Soil	OC Pesticides in Soil	OP Pesticides in Soil by GC/MS	PCBs in Soil	Metals in Soil by ICP-OES	Mercury Cold Vapor/Hg Analyser	Hold sample-NO test required	Moisture
1	Dup 5	X	X	X	X	X	X	X	X	X		X
2	Dup 6										X	

Sample No.	Description
1	Dup 5
2	Dup 6

101

SGS Environmental Services
Unit 16/ 33 Maddox Street
ALEXANDRIA
Phone: (02) 8594 0400
Fax: (02) 8594 0499

Attention: Matt/Jamie

Date Results Required: Standard

EIS Job Number: E23982K

Sheet 1 / 1

FROM:

Environmental Investigation Services
Rear 115 Wicks Road
Macquarie Park NSW 2113
Phone: (02) 9888 5000
Fax: (02) 9888 5004

Contact: Brendan Page
bp@page@ikgroup.net.au

Sample Preservation:
In esky on ice

Tests Required

Comments/Detection Limits

Project: Proposed Redevelopment
Location: Pyrmont
Sampler: AM

Date Sampled	Time Sampled	Location	Sample/ Borehole Number	Depth (m)	Sample Container	PID (ppm/ Odour)	Sample Description	HM (g)	TPH/BTEX	PAHs	OC/OP/P	Comments/Detection Limits Required
13/5/10	.		Dup 5			-	Soil	X	X	X/X	X	
↓	?		Dup 6			-	↓					Hold

Relinquished By:

Date: 3/1/81

Received by

Remarks:

Relinquished By:

Date:

Received By:

Time:



ANALYTICAL REPORT

28 May 2010

Jeffery and Katauskas Pty Ltd
115 Wicks Road
Macquarie Park
North Ryde BC
NSW 1670

Attention: Brendan Page

Your Reference: E23982K - Proposed Redevelopment - Pyrmont

Our Reference: SE78396

Samples: 1 Soil
Received: 20/5/10

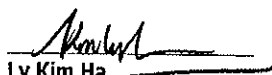
Preliminary Report Sent: Not Issued

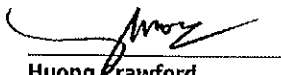
These samples were analysed in accordance with your written instructions.

For and on Behalf of:
SGS ENVIRONMENTAL SERVICES

Sample Receipt: Angela Mamalicos AU.SampleReceipt.Sydney@sgs.com
Production Manager: Huong Crawford Huong.Crawford@sgs.com

Results Approved and/or Authorised by:


Ly Kim Ha
Organics Signatory


Huong Crawford
Metals Signatory



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BTEX in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78396-1 Dup 8 Soil 14/05/2010
Date Extracted (BTEX)		24/05/2010
Date Analysed (BTEX)		24/05/2010
Benzene	mg/kg	<0.1
Toluene	mg/kg	<0.1
Ethylbenzene	mg/kg	<0.1
Total Xylenes	mg/kg	<0.3
BTEX Surrogate (%)	%	71



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TRH in soil with..C6-C9 by P/T		
Our Reference:	UNITS	SE78396-1
Your Reference	-----	Dup 8
Sample Matrix	-----	Soil
Date Sampled		14/05/2010
Date Extracted (TRH C6-C9 PT)		24/05/2010
Date Analysed (TRH C6-C9 PT)		24/05/2010
TRH C6 - C9 P&T	mg/kg	<20
Date Extracted (TRH C10-C36)		24/05/2010
Date Analysed (TRH C10-C36)		24/05/2010
TRH C10 - C14	mg/kg	<20
TRH C15 - C28	mg/kg	210
TRH C29 - C36	mg/kg	210



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PAHs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78396-1 Dup 8 Soil 14/05/2010
Date Extracted		24/05/2010
Date Analysed		24/05/2010
Naphthalene	mg/kg	<0.10
2-Methylnaphthalene	mg/kg	<0.10
1-Methylnaphthalene	mg/kg	<0.10
Acenaphthylene	mg/kg	<0.10
Acenaphthene	mg/kg	<0.10
Fluorene	mg/kg	<0.10
Phenanthrene	mg/kg	0.31
Anthracene	mg/kg	<0.10
Fluoranthene	mg/kg	0.64
Pyrene	mg/kg	0.65
Benzo[a]anthracene	mg/kg	0.40
Chrysene	mg/kg	0.38
Benzo[b,k]fluoranthene	mg/kg	0.69
Benzo[a]pyrene	mg/kg	0.43
Indeno[123-cd]pyrene	mg/kg	0.29
Dibenzo[ah]anthracene	mg/kg	<0.10
Benzo[ghi]perylene	mg/kg	0.28
Total PAHs (sum)	mg/kg	<4.87
Nitrobenzene-d5	%	108
2-Fluorobiphenyl	%	106
op-Terphenyl-14	%	110



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OC Pesticides in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78396-1 Dup 8 Soil 14/05/2010
Date Extracted		24/05/2010
Date Analysed		24/05/2010
HCB	mg/kg	<0.1
<i>alpha</i> -BHC	mg/kg	<0.1
gamma-BHC (Lindane)	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
Aldrin	mg/kg	<0.1
<i>beta</i> -BHC	mg/kg	<0.1
<i>delta</i> -BHC	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
<i>o,p</i> -DDE	mg/kg	<0.1
<i>alpha</i> -Endosulfan	mg/kg	<0.1
<i>trans</i> -Chlordane	mg/kg	<0.1
<i>cis</i> -Chlordane	mg/kg	<0.1
<i>trans</i> -Nonachlor	mg/kg	<0.1
<i>p,p</i> -DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
<i>o,p</i> -DDD	mg/kg	<0.1
<i>o,p</i> -DDT	mg/kg	<0.1
<i>beta</i> -Endosulfan	mg/kg	<0.1
<i>p,p</i> -DDD	mg/kg	<0.1
<i>p,p</i> -DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Endrin Ketone	mg/kg	<0.1
2,4,5,6-Tetrachloro-m-xylene (Surrogate)	%	127



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OP Pesticides in Soil by GCMS Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78396-1 Dup 8 Soil 14/05/2010
Date Extracted		24/05/2010
Date Analysed		24/05/2010
Dichlorvos	mg/kg	<1
Dimethoate	mg/kg	<1
Diazinon	mg/kg	<0.5
Fenitrothion	mg/kg	<0.2
Malathion	mg/kg	<0.20
Chlorpyrifos-ethyl	mg/kg	<0.2
Parathion-ethyl	mg/kg	<0.2
Bromofos-ethyl	mg/kg	<0.2
Methidathion	mg/kg	<0.5
Ethion	mg/kg	<0.2
Azinphos-methyl	mg/kg	<0.20
2-fluorobiphenyl (Surr)	%	106
d14-p-Terphenyl (Surr)	%	110



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PCBs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78396-1 Dup 8 Soil 14/05/2010
Date Extracted		24/05/2010
Date Analysed		24/05/2010
Arochlor 1016	mg/kg	<0.1
Arochlor 1221	mg/kg	<0.1
Arochlor 1232	mg/kg	<0.1
Arochlor 1242	mg/kg	<0.1
Arochlor 1248	mg/kg	<0.1
Arochlor 1254	mg/kg	<0.1
Arochlor 1260	mg/kg	<0.1
Arochlor 1262	mg/kg	<0.1
Arochlor 1268	mg/kg	<0.1
Total Positive PCB	mg/kg	<0.90
PCB_Surrogate 1	%	127



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Metals in Soil by ICP-OES		
Our Reference:	UNITS	SE78396-1
Your Reference	-----	Dup 8
Sample Matrix	-----	Soil
Date Sampled		14/05/2010
Date Extracted (Metals)		27/05/2010
Date Analysed (Metals)		27/05/2010
Arsenic	mg/kg	11
Cadmium	mg/kg	0.4
Chromium	mg/kg	9.1
Copper	mg/kg	92
Lead	mg/kg	260
Nickel	mg/kg	5.2
Zinc	mg/kg	120



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Mercury Cold Vapor/Hg Analyser		
Our Reference:	UNITS	SE78396-1
Your Reference	-----	Dup 8
Sample Matrix	-----	Soil
Date Sampled		14/05/2010
Date Extracted (Mercury)		26/05/2010
Date Analysed (Mercury)		26/05/2010
Mercury	mg/kg	0.06

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Moisture		
Our Reference:	UNITS	SE78396-1
Your Reference	-----	Dup 8
Sample Matrix	-----	Soil
Date Sampled		14/05/2010
Date Analysed (moisture)		24/05/2010
Moisture	%	6



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Method ID	Methodology Summary
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEO-005	OC/OP/PCB - Determination of a suite of Organochlorine Pesticides, Chlorinated Organo-phosphorus Pesticides and Polychlorinated Biphenyls (PCB's) by liquid-liquid extraction using dichloromethane for waters, or mechanical extraction using acetone / hexane for soils, followed by instrumentation analysis using GC/ECD. Based on USEPA 8081/8082.
AN420	Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates, and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD/FID technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
SEM-010	Determination of elements by ICP-OES following appropriate sample preparation / digestion process. Based on USEPA 6010C / APHA 21st Edition, 3120B.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 ± 5°C.

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
BTEX in Soil								
Date Extracted (BTEX)				24/05/10	[NT]	[NT]	LCS	24/05/10
Date Analysed (BTEX)				24/05/10	[NT]	[NT]	LCS	24/05/10
Benzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	91%
Toluene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	91%
Ethylbenzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	87%
Total Xylenes	mg/kg	0.3	SEO-018	<0.3	[NT]	[NT]	LCS	89%
BTEX Surrogate (%)	%	0	SEO-018	72	[NT]	[NT]	LCS	77%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
TRH in soil with..C6-C9 by P/T								
Date Extracted (TRH C6-C9 PT)				24/05/10	[NT]	[NT]	LCS	24/05/10
Date Analysed (TRH C6-C9 PT)				24/05/10	[NT]	[NT]	LCS	24/05/10
TRH C6 - C9 P&T	mg/kg	20	SEQ-018	<20	[NT]	[NT]	LCS	121%
Date Extracted (TRH C10-C36)				24/05/10	[NT]	[NT]	LCS	24/05/10
Date Analysed (TRH C10-C36)				24/05/10	[NT]	[NT]	LCS	24/05/10
TRH C10 - C14	mg/kg	20	SEO-020	<20	[NT]	[NT]	LCS	100%
TRH C15 - C28	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	116%
TRH C29 - C36	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	95%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PAHs in Soil								
Date Extracted				24/05/2010	[NT]	[NT]	LCS	24/05/2010
Date Analysed				24/05/2010	[NT]	[NT]	LCS	24/05/2010
Naphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	102%
2-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
1-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Acenaphthylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	100%
Acenaphthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	119%
Fluorene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	109%
Anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	123%
Fluoranthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	119%
Pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	110%
Benzo[a]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[b,k]fluoranthene	mg/kg	0.2	SEO-030	<0.20	[NT]	[NT]	[NR]	[NR]
Benzo[a]pyrene	mg/kg	0.05	SEO-030	<0.05	[NT]	[NT]	LCS	114%
Indeno[123-cd]pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Dibenzo[a,h]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[ghi]perylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Total PAHs (sum)	mg/kg	1.75	SEO-030	<1.7	[NT]	[NT]	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	122	[NT]	[NT]	LCS	84%
2-Fluorobiphenyl	%	0	SEO-030	128	[NT]	[NT]	LCS	92%
p-Terphenyl-d14	%	0	SEO-030	88	[NT]	[NT]	LCS	94%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OC Pesticides in Soil								
Date Extracted				24/05/2010	SE78396-1	24/05/2010 24/05/2010	LCS	24/05/2010
Date Analysed				24/05/2010	SE78396-1	24/05/2010 24/05/2010	LCS	24/05/2010
HCB	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>alpha</i> -BHC	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
gamma-BHC (Lindane)	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Heptachlor	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	106%
Aldrin	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	100%
<i>beta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>delta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	87%
Heptachlor Epoxide	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>o,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>alpha</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>trans</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>cis</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>trans</i> -Nonachlor	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>p,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Dieldrin	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	108%
Endrin	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	119%
<i>o,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>o,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>beta</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>p,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
<i>p,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	93%
Endosulfan Sulphate	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Methoxychlor	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Endrin Ketone	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
2,4,5,6-Tetrachloro-m-xy lene (Surrogate)	%	0	SEO-005	109	SE78396-1	127 127 RPD: 0	LCS	107%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OP Pesticides in Soil by GCMS								
Date Extracted				24/05/2010	[NT]	[NT]	LCS	24/05/2010
Date Analysed				24/05/2010	[NT]	[NT]	LCS	24/05/2010
Dichlorvos	mg/kg	1	AN420	<1	[NT]	[NT]	LCS	121%
Dimethoate	mg/kg	1	AN420	<1	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	0.5	AN420	<0.5	[NT]	[NT]	LCS	91%
Fenitrothion	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Malathion	mg/kg	0.2	AN420	<0.20	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	LCS	89%
Parathion-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Bromofos-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Methidathion	mg/kg	0.5	AN420	<0.5	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	LCS	104%
Azinphos-methyl	mg/kg	0.2	AN420	<0.20	[NT]	[NT]	[NR]	[NR]
2-fluorobiphenyl (Surr)	%	0	AN420	128	[NT]	[NT]	LCS	120%
d14-p-Terphenyl (Surr)	%	0	AN420	88	[NT]	[NT]	LCS	126%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PCBs in Soil								
Date Extracted				24/05/2010	SE78396-1	24/05/2010 24/05/2010	LCS	24/05/2010
Date Analysed				24/05/2010	SE78396-1	24/05/2010 24/05/2010	LCS	24/05/2010
Arochlor 1016	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1260	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	LCS	91%
Arochlor 1262	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1268	mg/kg	0.1	SEO-005	<0.1	SE78396-1	<0.1 <0.1	[NR]	[NR]
Total Positive PCB	mg/kg	0.9	SEO-005	<0.90	SE78396-1	<0.90 <0.90	[NR]	[NR]
PCB_Surrogate 1	%	0	SEO-005	109	SE78396-1	127 127 RPD: 0	LCS	99%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate	Spike Sm#	Matrix Spike % Recovery
Metals in Soil by ICP-OES						Base + Duplicate + %RPD		Duplicate + %RPD
Date Extracted (Metals)				27/05/2010	[NT]	[NT]	LCS	27/05/2010
Date Analysed (Metals)				27/05/2010	[NT]	[NT]	LCS	27/05/2010
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	93%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	96%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	97%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	96%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	96%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	96%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	94%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate	Spike Sm#	Matrix Spike % Recovery
Mercury Cold Vapor/Hg Analyser						Base + Duplicate + %RPD		Duplicate + %RPD
Date Extracted (Mercury)				26/05/2010	[NT]	[NT]	LCS	26/05/2010
Date Analysed (Mercury)				26/05/2010	[NT]	[NT]	LCS	26/05/2010
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	110%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank
Moisture				
Date Analysed (moisture)				[NT]
Moisture	%	1	AN002	<1



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Result Codes

[INS]	: Insufficient Sample for this test	[RPD]	: Relative Percentage Difference
[NR]	: Not Requested	*	: Not part of NATA Accreditation
[NT]	: Not tested	[N/A]	: Not Applicable
[LOR]	: Limit of reporting		

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.

Date Organics extraction commenced:

NATA Corporate Accreditation No. 2562, Site No 4354

Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)

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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.

Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.

Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.

Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.

Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>



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SGS Australia Pty Ltd
ABN 44 000 964 278

Environmental Services Unit 16/33 Maddox Street Alexandria NSW 2015 Australia
t +61 (0)2 8594 0400 f + 61 (0)2 8594 0499 www.au.sgs.com



SAMPLE RECEIPT ADVICE (SRA)

24 May 2010

Client Details

Requested By : **Brendan Page**
Client : Jeffery and Katauskas Pty Ltd
Contact : Administration Manager
Address : 115 Wicks Road
Macquarie Park
North Ryde BC NSW 1670

Email : eis@jkgroup.net.au
Telephone : 02 9888 5000
Facsimile : 02 9888 5001

Project : E23982K - Proposed Redevelopment - Pyrmont
Order Number :
Samples : 1 Soil

Laboratory Details

Laboratory : SGS Environmental Services
Manager : Edward Ibrahim

Address : Unit 16, 33 Maddox Street
Alexandria NSW 2015

Email : au.samlereceipt.sydney@sgs.com
Telephone : 61 2 8594 0400
Facsimile : 61 2 8594 0499

Report No : **SE78396**
No. of Samples : 1
Due Date : 28/05/2010

Date Instructions Received : 20/05/2010
Sample Receipt Date : 20/5/10

Samples received in good order : YES
Samples received without headspace : YES
Upon receipt sample temperature : Cool
Sample containers provided by : Other Lab
Turnaround time requested : Standard

Samples received in correct containers : YES
Sufficient quantity supplied : YES
Cooling Method : Ice Pack
Samples clearly Labelled : YES
Completed documentation received : YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

Samples received 20/5/10 @ 4:45pm.

To the extent not inconsistent with the other provisions of this document and unless specifically agreed otherwise in writing by SGS, all SGS services are rendered in accordance with the applicable SGS General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm as at the date of this document. Attention is drawn to the limitations of liability and to the clauses of indemnification.

The signed chain of custody will be returned to you with the original report.



SAMPLE RECEIPT ADVICE (SRA) - continued

Client : Jeffery and Katauskas Pty Ltd Report No : SE78396
Project : E23982K - Proposed Redevelopment - Pyrmont

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.

Please indicate ASAP if your request differs from these details.

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

Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep, soil 8 HM	BTEX in Soil	TRH in soil with C6-C9 by P/T	PAHs in Soil	OC Pesticides in Soil	OP Pesticides in Soil by GC/MS	PCBs in Soil	Metals in Soil by ICP-OES	Mercury Cold Vapor/Hg Analyser	Moisture
1	Dup 8	X	X	X	X	X	X	X	X	X	X

Sample No.	Description
1	Dup 8

TO:
SGS Environmental Services
Unit 16/ 33 Maddox Street
ALEXANDRIA
Phone: (02) 8594 0400
Fax: (02) 8594 0499

Attention: Matt/Jamie

Date Results Required: Standard

EIS Job Number: E23982K

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FROM:
Environmental Investigation Services

Rear 115 Wicks Road
Macquarie Park NSW 2113

Phone: (02) 9888 5000
Fax: (02) 9888 5004

Contact: Brendan Page
bpage@ixgroup.net.au

Sample Preservation:
In esky on ice

Tests Required

Comments/Detection Limits
Required

Relinquished By:	Relinquished By:
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Date: 10/10/11
Time: 1:10

Received By:

Date:

Received By:

Remarks:

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ANALYTICAL REPORT

1 June 2010

Jeffery and Katauskas Pty Ltd
115 Wicks Road
Macquarie Park
North Ryde BC
NSW 1670

Attention: Brendan Page

Your Reference: E23982K - Proposed Redevelopment - Pymont

Our Reference: SE78564

Samples: 1 Soil

Received: 26/05/2010

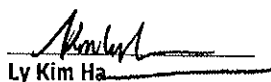
Preliminary Report Sent: Not Issued

These samples were analysed in accordance with your written instructions.

For and on Behalf of:
SGS ENVIRONMENTAL SERVICES

Sample Receipt:	Angela Mamalicos	AU.SampleReceipt.Sydney@sgs.com
Production Manager:	Huong Crawford	Huong.Crawford@sgs.com

Results Approved and/or Authorised by:


Ly Kim Ha
Organics Signatory


Huong Crawford
Metals Signatory



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BTEX in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78564-1 Dup 15 Soil 21/05/2010
Date Extracted (BTEX)		28/05/2010
Date Analysed (BTEX)		28/05/2010
Benzene	mg/kg	<0.1
Toluene	mg/kg	<0.1
Ethylbenzene	mg/kg	<0.1
Total Xylenes	mg/kg	<0.3
BTEX Surrogate (%)	%	87



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TRH in soil with C6-C9 by P/T		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Extracted (TRH C6-C9 PT)		28/05/2010
Date Analysed (TRH C6-C9 PT)		28/05/2010
TRH C6 - C9 P&T	mg/kg	<20
Date Extracted (TRH C10-C36)		28/05/2010
Date Analysed (TRH C10-C36)		28/05/2010
TRH C10 - C14	mg/kg	<20
TRH C15 - C28	mg/kg	<50
TRH C29 - C36	mg/kg	<50



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PAHs in Soil		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Extracted		28/05/2010
Date Analysed		28/05/2010
Naphthalene	mg/kg	<0.10
2-Methylnaphthalene	mg/kg	<0.10
1-Methylnaphthalene	mg/kg	<0.10
Acenaphthylene	mg/kg	<0.10
Acenaphthene	mg/kg	<0.10
Fluorene	mg/kg	<0.10
Phenanthrene	mg/kg	<0.10
Anthracene	mg/kg	<0.10
Fluoranthene	mg/kg	<0.10
Pyrene	mg/kg	<0.10
Benzo[a]anthracene	mg/kg	<0.10
Chrysene	mg/kg	<0.10
Benzo[b,k]fluoranthene	mg/kg	<0.20
Benzo[a]pyrene	mg/kg	<0.05
Indeno[123-cd]pyrene	mg/kg	<0.10
Dibenzo[ah]anthracene	mg/kg	<0.10
Benzo[ghi]perylene	mg/kg	<0.10
Total PAHs (sum)	mg/kg	<1.7
Nitrobenzene-d5	%	90
2-Fluorobiphenyl	%	98
p-Terphenyl-d14	%	100



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OC Pesticides in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78564-1 Dup 15 Soil 21/05/2010
Date Extracted		28/05/2010
Date Analysed		28/05/2010
HCB	mg/kg	<0.1
<i>alpha</i> -BHC	mg/kg	<0.1
gamma-BHC (Lindane)	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
Aldrin	mg/kg	<0.1
<i>beta</i> -BHC	mg/kg	<0.1
<i>delta</i> -BHC	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
<i>o,p</i> -DDE	mg/kg	<0.1
<i>alpha</i> -Endosulfan	mg/kg	<0.1
<i>trans</i> -Chlordane	mg/kg	<0.1
<i>cis</i> -Chlordane	mg/kg	<0.1
<i>trans</i> -Nonachlor	mg/kg	<0.1
<i>p,p</i> -DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
<i>o,p</i> -DDD	mg/kg	<0.1
<i>o,p</i> -DDT	mg/kg	<0.1
<i>beta</i> -Endosulfan	mg/kg	<0.1
<i>p,p</i> -DDD	mg/kg	<0.1
<i>p,p</i> -DDT	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Endrin Ketone	mg/kg	<0.1
2,4,5,6-Tetrachloro-m-xylene (Surrogate)	%	103



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OP Pesticides in Soil by GCMS		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Extracted		28/05/2010
Date Analysed		28/05/2010
Dichlorvos	mg/kg	<1
Dimethoate	mg/kg	<1
Diazinon	mg/kg	<0.5
Fenitrothion	mg/kg	<0.2
Malathion	mg/kg	<0.20
Chlorpyrifos-ethyl	mg/kg	<0.2
Parathion-ethyl	mg/kg	<0.2
Bromofos-ethyl	mg/kg	<0.2
Methidathion	mg/kg	<0.5
Ethion	mg/kg	<0.2
Azinphos-methyl	mg/kg	<0.20
2-fluorobiphenyl (Surr)	%	98
d14-p-Terphenyl (Surr)	%	100

PCBs in Soil Our Reference: Your Reference Sample Matrix Date Sampled	UNITS ----- -----	SE78564-1 Dup 15 Soil 21/05/2010
Date Extracted		28/05/2010
Date Analysed		28/05/2010
Arochlor 1016	mg/kg	<0.1
Arochlor 1221	mg/kg	<0.1
Arochlor 1232	mg/kg	<0.1
Arochlor 1242	mg/kg	<0.1
Arochlor 1248	mg/kg	<0.1
Arochlor 1254	mg/kg	<0.1
Arochlor 1260	mg/kg	<0.1
Arochlor 1262	mg/kg	<0.1
Arochlor 1268	mg/kg	<0.1
Total Positive PCB	mg/kg	<0.90
PCB_Surrogate 1	%	103



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Metals in Soil by ICP-OES		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Extracted (Metals)		28/05/2010
Date Analysed (Metals)		28/05/2010
Arsenic	mg/kg	<3
Cadmium	mg/kg	<0.3
Chromium	mg/kg	1.6
Copper	mg/kg	23
Lead	mg/kg	37
Nickel	mg/kg	0.7
Zinc	mg/kg	36



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Mercury Cold Vapor/Hg Analyser		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Extracted (Mercury)		28/05/2010
Date Analysed (Mercury)		28/05/2010
Mercury	mg/kg	0.19

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Moisture		
Our Reference:	UNITS	SE78564-1
Your Reference	-----	Dup 15
Sample Matrix	-----	Soil
Date Sampled		21/05/2010
Date Analysed (moisture)		28/05/2010
Moisture	%	17

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Method ID	Methodology Summary
SEO-018	BTEX / C6-C9 Hydrocarbons - Soil samples are extracted with methanol, purged and concentrated by a purge and trap apparatus, and then analysed using GC/MS technique. Water samples undergo the same analysis without the extraction step. Based on USEPA 5030B and 8260B.
SEO-020	Total Recoverable Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/FID. Where applicable Solid Phase Extraction Manifold technique is used for aliphatic / aromatic fractionation.
SEO-030	Polynuclear Aromatic Hydrocarbons - determined by solvent extraction with dichloromethane / acetone for soils and dichloromethane for waters, followed by instrumentation analysis using GC/MS SIM mode.
SEO-005	OC/OP/PCB - Determination of a suite of Organochlorine Pesticides, Chlorinated Organo-phosphorus Pesticides and Polychlorinated Biphenyls (PCB's) by liquid-liquid extraction using dichloromethane for waters, or mechanical extraction using acetone / hexane for soils, followed by instrumentation analysis using GC/ECD. Based on USEPA 8081/8082.
AN420	Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates, and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD/FID technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
SEM-010	Determination of elements by ICP-OES following appropriate sample preparation / digestion process. Based on USEPA 6010C / APHA 21st Edition, 3120B.
SEM-005	Mercury - determined by Cold-Vapour AAS following appropriate sample preparation or digestion process. Based on APHA 21st Edition, 3112B.
AN002	Preparation of soils, sediments and sludges undergo analysis by either air drying, compositing, subsampling and 1:5 soil water extraction where required. Moisture content is determined by drying the sample at 105 ± 5°C.



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
BTEX in Soil								
Date Extracted (BTEX)				28/05/10	[NT]	[NT]	LCS	28/05/10
Date Analysed (BTEX)				28/05/10	[NT]	[NT]	LCS	28/05/10
Benzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	76%
Toluene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	75%
Ethylbenzene	mg/kg	0.1	SEO-018	<0.1	[NT]	[NT]	LCS	73%
Total Xylenes	mg/kg	0.3	SEO-018	<0.3	[NT]	[NT]	LCS	70%
BTEX Surrogate (%)	%	0	SEO-018	99	[NT]	[NT]	LCS	92%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
TRH in soil with C6-C9 by P/T								
Date Extracted (TRH C6-C9 PT)				28/05/10	[NT]	[NT]	LCS	28/05/10
Date Analysed (TRH C6-C9 PT)				28/05/10	[NT]	[NT]	LCS	28/05/10
TRH C6 - C9 P&T	mg/kg	20	SEO-018	<20	[NT]	[NT]	LCS	92%
Date Extracted (TRH C10-C36)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Date Analysed (TRH C10-C36)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
TRH C10 - C14	mg/kg	20	SEO-020	<20	[NT]	[NT]	LCS	117%
TRH C15 - C28	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	126%
TRH C29 - C36	mg/kg	50	SEO-020	<50	[NT]	[NT]	LCS	96%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PAHs in Soil								
Date Extracted				28/5/10	[NT]	[NT]	LCS	28/5/10
Date Analysed				28/5/10	[NT]	[NT]	LCS	28/5/10
Naphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	116%
2-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
1-Methylnaphthalene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Acenaphthylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	106%
Acenaphthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	121%
Fluorene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Phenanthrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	116%
Anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	123%
Fluoranthene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	123%
Pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	LCS	116%
Benzo[a]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[b,k]fluoranthene	mg/kg	0.2	SEO-030	<0.20	[NT]	[NT]	[NR]	[NR]
Benzo[a]pyrene	mg/kg	0.05	SEO-030	<0.05	[NT]	[NT]	LCS	117%
Indeno[123-cd]pyrene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Dibenzo[ah]anthracene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Benzo[ghi]perylene	mg/kg	0.1	SEO-030	<0.10	[NT]	[NT]	[NR]	[NR]
Total PAHs (sum)	mg/kg	1.75	SEO-030	<1.7	[NT]	[NT]	[NR]	[NR]
Nitrobenzene-d5	%	0	SEO-030	120	[NT]	[NT]	LCS	86%
2-Fluorobiphenyl	%	0	SEO-030	108	[NT]	[NT]	LCS	96%
p-Terphenyl-d14	%	0	SEO-030	110	[NT]	[NT]	LCS	100%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OC Pesticides in Soil								
Date Extracted				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Date Analysed				28/05/2010	[NT]	[NT]	LCS	28/05/2010
HCB	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>alpha</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
gamma-BHC (Lindane)	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Heptachlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	112%
Aldrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	102%
<i>beta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>delta</i> -BHC	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	87%
Heptachlor Epoxide	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>o,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>alpha</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>trans</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>cis</i> -Chlordane	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>trans</i> -Nonachlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDE	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Dieldrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	106%
Endrin	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	119%
<i>o,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>o,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>beta</i> -Endosulfan	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDD	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
<i>p,p</i> -DDT	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	116%
Endosulfan Sulphate	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Methoxychlor	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Endrin Ketone	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
2,4,5,6-Tetrachloro-m-xy lene (Surrogate	%	0	SEO-005	100	[NT]	[NT]	LCS	99%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
OP Pesticides in Soil by GCMS								
Date Extracted				28/5/10	[NT]	[NT]	LCS	28/5/10
Date Analysed				28/5/10	[NT]	[NT]	LCS	28/5/10
Dichlorvos	mg/kg	1	AN420	<1	[NT]	[NT]	LCS	89%
Dimethoate	mg/kg	1	AN420	<1	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	0.5	AN420	<0.5	[NT]	[NT]	LCS	66%
Fenitrothion	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Malathion	mg/kg	0.2	AN420	<0.20	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	LCS	87%
Parathion-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Bromofos-ethyl	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	[NR]	[NR]
Methidathion	mg/kg	0.5	AN420	<0.5	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	0.2	AN420	<0.2	[NT]	[NT]	LCS	92%
Azinphos-methyl	mg/kg	0.2	AN420	<0.20	[NT]	[NT]	[NR]	[NR]
2-fluorobiphenyl (Surr)	%	0	AN420	108	[NT]	[NT]	LCS	94%
d14-p-Terphenyl (Surr)	%	0	AN420	110	[NT]	[NT]	LCS	122%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
PCBs in Soil								
Date Extracted				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Date Analysed				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Arochlor 1016	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1221	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1260	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	LCS	85%
Arochlor 1262	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Arochlor 1268	mg/kg	0.1	SEO-005	<0.1	[NT]	[NT]	[NR]	[NR]
Total Positive PCB	mg/kg	0.9	SEO-005	<0.90	[NT]	[NT]	[NR]	[NR]
PCB_Surrogate 1	%	0	SEO-005	100	[NT]	[NT]	LCS	100%



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Metals in Soil by ICP-OES								
Date Extracted (Metals)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Date Analysed (Metals)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Arsenic	mg/kg	3	SEM-010	<3	[NT]	[NT]	LCS	99%
Cadmium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	104%
Chromium	mg/kg	0.3	SEM-010	<0.3	[NT]	[NT]	LCS	102%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	103%
Lead	mg/kg	1	SEM-010	<1	[NT]	[NT]	LCS	102%
Nickel	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	101%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	LCS	100%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Mercury Cold Vapor/Hg Analyser								
Date Extracted (Mercury)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Date Analysed (Mercury)				28/05/2010	[NT]	[NT]	LCS	28/05/2010
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	LCS	103%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank
Moisture				
Date Analysed (moisture)				[NT]
Moisture	%	1	AN002	<1



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Result Codes

[INS] : Insufficient Sample for this test
[NR] : Not Requested
[NT] : Not tested
[LOR] : Limit of reporting

[RPD] : Relative Percentage Difference
* : Not part of NATA Accreditation
[N/A] : Not Applicable

Report Comments

Samples analysed as received. Solid samples expressed on a dry weight basis.

Date Organics extraction commenced:

NATA Corporate Accreditation No. 2562, Site No 4354

Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)

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This document is to be treated as an original within the meaning of UCP 600. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.

Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.

Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.

Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.

Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>



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SAMPLE RECEIPT ADVICE (SRA)

27 May 2010

Client Details

Requested By : Brendan Page
Client : Jeffery and Katauskas Pty Ltd
Contact : Brendan Page
Address : 115 Wicks Road
Macquarie Park
North Ryde BC NSW 1670

Email : eis@jkgroup.net.au
Telephone : 02 9888 5000
Facsimile : 02 9888 5001

Project : E23982K - Proposed Redevelopment - Pyrmont
Order Number :
Samples : 1 Soil

Laboratory Details

Laboratory : SGS Environmental Services
Manager : Edward Ibrahim

Address : Unit 16, 33 Maddox Street
Alexandria NSW 2015

Email : au.samplereceipt.sydney@sgs.com
Telephone : 61 2 8594 0400
Facsimile : 61 2 8594 0499

Report No : SE78564
No. of Samples : 1
Due Date : 2/06/2010

Date Instructions Received : 26/05/2010
Sample Receipt Date : 26/05/2010

Samples received in good order : YES
Samples received without headspace : YES
Upon receipt sample temperature : Cool
Sample containers provided by : Other Lab
Turnaround time requested : Standard

Samples received in correct container: YES
Sufficient quantity supplied : YES
Cooling Method : Ice Pack
Samples clearly Labelled : YES
Completed documentation received : YES

Samples will be held for 1 month for water samples and 3 months for soil samples from date of receipt of samples, unless otherwise instructed.

Comments

To the extent not inconsistent with the other provisions of this document and unless specifically agreed otherwise in writing by SGS, all SGS services are rendered in accordance with the applicable SGS General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm as at the date of this document. Attention is drawn to the limitations of liability and to the clauses of indemnification.

The signed chain of custody will be returned to you with the original report.

Date Results Required: Standard

EIS Job Number: E23982K

Sheet 1 of 1

Fax: (02) 8594 0499

SAMPLE AND CHAIN OF CUSTODY FORM

Fax: (02) 9888 5004

Contact: Brendan Page
bpage@ikgroup.net.au

Sample Preservation:

Project: Proposed Redevelopment
Location: Pyrmont
Sampler: AM

[illegible]

Received By: *Danah*

Received By:

Time:

Received By:



SAMPLE RECEIPT ADVICE (SRA) - continued

Client : Jeffery and Katauskas Pty Ltd Report No : SE78564
 Project : E23982K - Proposed Redevelopment - Pyrmont

Summary of Samples and Requested Analysis

The table below represents SGS Environmental Service's understanding and interpretation of the customer supplied sample request.

Please indicate ASAP if your request differs from these details.

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

Note that a small X in the table below indicates some testing has not been requested in the package.

Sample No.	Description	Metals Prep, soil 8 HM	BTEX in Soil	TRH in soil with C6-C9 by P/T	PAHs in Soil	OC Pesticides in Soil	OP Pesticides in Soil by GCMS	PCBs in Soil	Metals in Soil by ICP-OES	Mercury Cold Vapor/Hg Analyser	Moisture
1	Dup 15	X	X	X	X	X	X	X	X	X	X

Sample No.	Description
1	Dup 15