
APPENDIX E
Laboratory Reports and Chain of Custody Documentation



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CERTIFICATE OF ANALYSIS 15902

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Alex Doubleday

Sample log in details:

Your Reference:

45298.01, Macquarie Park

No. of samples:

16 Soils

Date samples received:

17/12/07

Date completed instructions received:

17/12/07

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:

20/12/07

Date of Preliminary Report:

Not issued

Issue Date:

20/12/07

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Results Approved By:

Tania Notaras
Manager

Jacinta Hurst
Operations Manager

Envirolab Reference: 15902

Revision No: R 00



vTPH & BTEX in Soil	UNITS	15902-1	15902-2	15902-3	15902-4	15902-5
Our Reference:	-----	7a/2.8-3.0	9a/0.3-0.5	10a/1.0-1.2	14/0.3-0.5	15/0.3-0.5
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
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	100	103	108	112

vTPH & BTEX in Soil	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Our Reference:	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
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	%	109	101	108	115	112

vTPH & BTEX in Soil	UNITS	15902-11	15902-12
Our Reference:	-----	13/0.3-0.5	13/2.9-3.0
Your Reference	-----	14/12/2007	14/12/2007
Date Sampled		Soil	Soil
Type of sample			
Date extracted	-	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007
vTPH C6 - C9	mg/kg	<25	<25
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	%	107	101

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	15902-1	15902-2	15902-3	15902-4	15902-5
Your Reference	-----	7a/2.8-3.0	9a/0.3-0.5	10a/1.0-1.2	14/0.3-0.5	15/0.3-0.5
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
TPH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	<100	<100	<100
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	110	108	112	112	103

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Your Reference	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
TPH C10 - C14	mg/kg	<50	<50	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	<100	<100	<100
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	109	109	111	108	111

sTPH in Soil (C10-C36)			
Our Reference:	UNITS	15902-11	15902-12
Your Reference	-----	13/0.3-0.5	13/2.9-3.0
Date Sampled	-----	14/12/2007	14/12/2007
Type of sample		Soil	Soil
Date extracted	-	18/12/2007	18/12/2007
Date analysed	-	19/12/2007	19/12/2007
TPH C10 - C14	mg/kg	<50	<50
TPH C15 - C28	mg/kg	<100	<100
TPH C29 - C36	mg/kg	<100	<100
Surrogate o-Terphenyl	%	107	108

PAHs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15902-1 7a/2.8-3.0 14/12/2007 Soil	15902-2 9a/0.3-0.5 14/12/2007 Soil	15902-3 10a/1.0-1.2 14/12/2007 Soil	15902-4 14/0.3-0.5 14/12/2007 Soil	15902-5 15/0.3-0.5 14/12/2007 Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
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	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<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	%	104	101	101	101	98

PAHs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15902-6 3a/0.8-1.0 14/12/2007 Soil	15902-7 7a/1.0-1.2 14/12/2007 Soil	15902-8 7a/3.6-3.9 14/12/2007 Soil	15902-9 11/0.8-1.0 14/12/2007 Soil	15902-10 12/0.8-1.0 14/12/2007 Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
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	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<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	<0.05	<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	%	101	101	102	101	101

PAHs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15902-11 13/0.3-0.5 14/12/2007 Soil	15902-12 13/2.9-3.0 14/12/2007 Soil	15902-13 BD2/141207 14/12/2007 Soil	15902-14 BD3/141207 14/12/2007 Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1
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	0.3	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.4	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.5	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.3	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.3	<0.1	<0.1	<0.1
Benzo(b,k)fluoranthene	mg/kg	0.4	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.3	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	<0.1	<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	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	102	103	102	98

Organochlorine Pesticides in soil	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Our Reference:	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007	20/12/2007	20/12/2007
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	<0.1	<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	0.2	<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	%	91	91	91	90	90

Organochlorine Pesticides in soil	UNITS	15902-11	15902-12
Our Reference:	-----	13/0.3-0.5	13/2.9-3.0
Your Reference	-----	14/12/2007	14/12/2007
Date Sampled		Soil	Soil
Type of sample			
Date extracted	-	18/12/2007	18/12/2007
Date analysed	-	20/12/2007	20/12/2007
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	%	91	92

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15902-6 3a/0.8-1.0 14/12/2007 Soil	15902-7 7a/1.0-1.2 14/12/2007 Soil	15902-8 7a/3.6-3.9 14/12/2007 Soil	15902-9 11/0.8-1.0 14/12/2007 Soil	15902-10 12/0.8-1.0 14/12/2007 Soil
Date extracted	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007	20/12/2007	20/12/2007
Arochlor 1016	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	%	91	91	91	90	90

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15902-11 13/0.3-0.5 14/12/2007 Soil	15902-12 13/2.9-3.0 14/12/2007 Soil
Date extracted	-	18/12/2007	18/12/2007
Date analysed	-	20/12/2007	20/12/2007
Arochlor 1016	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	%	91	92

Total Phenolics in Soil						
Our Reference:	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Your Reference	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0

Total Phenolics in Soil			
Our Reference:	UNITS	15902-11	15902-12
Your Reference	-----	13/0.3-0.5	13/2.9-3.0
Date Sampled	-----	14/12/2007	14/12/2007
Type of sample		Soil	Soil
Date extracted	-	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0

Acid Extractable metals in soil	UNITS	15902-1	15902-2	15902-3	15902-4	15902-5
Our Reference:	-----	7a/2.8-3.0	9a/0.3-0.5	10a/1.0-1.2	14/0.3-0.5	15/0.3-0.5
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Arsenic	mg/kg	7.4	6.8	8.4	5.3	5.5
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	15	16	20	19	16
Copper	mg/kg	12	5.5	20	1.7	20
Lead	mg/kg	38	23	25	22	71
Mercury	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Nickel	mg/kg	2.0	9.3	2.1	1.2	3.0
Zinc	mg/kg	11	5.4	4.7	2.9	8.5

Acid Extractable metals in soil	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Our Reference:	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Arsenic	mg/kg	8.9	<4.0	8.2	5.9	4.9
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	60	9.1	21	40	9.0
Copper	mg/kg	64	18	12	8.1	3.0
Lead	mg/kg	28	42	23	25	10
Mercury	mg/kg	0.23	<0.10	<0.10	<0.10	<0.10
Nickel	mg/kg	3.2	5.5	2.5	2.6	<1.0
Zinc	mg/kg	31	20	13	15	3.6

Acid Extractable metals in soil	UNITS	15902-11	15902-12	15902-13	15902-14
Our Reference:	-----	13/0.3-0.5	13/2.9-3.0	BD2/14/1207	BD3/14/1207
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled		Soil	Soil	Soil	Soil
Type of sample					
Date digested	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Arsenic	mg/kg	5.0	8.3	7.0	6.4
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	13	36	19	19
Copper	mg/kg	6.7	54	17	3.4
Lead	mg/kg	24	43	24	19
Mercury	mg/kg	<0.10	0.26	<0.10	<0.10
Nickel	mg/kg	3.8	2.2	2.1	4.9

Acid Extractable metals in soil	UNITS	15902-11	15902-12	15902-13	15902-14
Our Reference:		13/0.3-0.5	13/2.9-3.0	BD2/141207	BD3/141207
Your Reference	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date Sampled	-----	Soil	Soil	Soil	Soil
Type of sample					
Zinc	mg/kg	9.5	38	4.6	5.4

Moisture						
Our Reference:	UNITS	15902-1	15902-2	15902-3	15902-4	15902-5
Your Reference	-----	7a/2.8-3.0	9a/0.3-0.5	10a/1.0-1.2	14/0.3-0.5	15/0.3-0.5
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Moisture	%	19	14	16	17	11

Moisture						
Our Reference:	UNITS	15902-6	15902-7	15902-8	15902-9	15902-10
Your Reference	-----	3a/0.8-1.0	7a/1.0-1.2	7a/3.6-3.9	11/0.8-1.0	12/0.8-1.0
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Moisture	%	16	18	17	18	8.1

Moisture					
Our Reference:	UNITS	15902-11	15902-12	15902-13	15902-14
Your Reference	-----	13/0.3-0.5	13/2.9-3.0	BD2/141207	BD3/141207
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Date analysed	-	18/12/2007	18/12/2007	18/12/2007	18/12/2007
Moisture	%	14	18	17	17

Asbestos ID - soils						
Our Reference:	UNITS	15902-1	15902-2	15902-6	15902-7	15902-9
Your Reference	-----	7a/2.8-3.0	9a/0.3-0.5	3a/0.8-1.0	7a/1.0-1.2	11/0.8-1.0
Date Sampled	-----	14/12/2007	14/12/2007	14/12/2007	14/12/2007	14/12/2007
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	19/12/2007	19/12/2007	19/12/2007	19/12/2007	19/12/2007
Sample Description	-	40g soil	40g soil	40g soil	40g soil	40g soil
Asbestos ID in soil	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
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	15902-10	15902-11
Your Reference	-----	12/0.8-1.0	13/0.3-0.5
Date Sampled	-----	14/12/2007	14/12/2007
Type of sample		Soil	Soil
Date analysed	-	19/12/2007	19/12/2007
Sample Description	-	40g soil	40g soil
Asbestos ID in soil	-	No asbestos detected	No asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected

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.14	Soil samples extracted with methanol and spiked into water prior to analysing 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	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC-ECD.
LAB.30	Total Phenolics - determined colorimetrically following disitillation.
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.
ASB.1	Qualitative identification of asbestos type fibres in bulk 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	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-3	18/12/07%
Date analysed	-			19/12/07	15902-1	19/12/2007 19/12/2007	LCS-3	19/12/07%
vTPH C ₆ - C ₉	mg/kg	25	GC.16	<25	15902-1	<25 <25	LCS-3	114%
Benzene	mg/kg	0.5	GC.14	<0.5	15902-1	<0.5 <0.5	LCS-3	138%
Toluene	mg/kg	0.5	GC.14	<0.5	15902-1	<0.5 <0.5	LCS-3	121%
Ethylbenzene	mg/kg	1	GC.14	<1.0	15902-1	<1.0 <1.0	LCS-3	125%
m + p-Xylene	mg/kg	2	GC.14	<2.0	15902-1	<2.0 <2.0	LCS-3	123%
o-Xylene	mg/kg	1	GC.14	<1.0	15902-1	<1.0 <1.0	LCS-3	121%
Surrogate aaa-Trifluorotoluene	%		GC.14	109	15902-1	87 96 RPD: 10	LCS-3	104%
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	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-3	18/12/07%
Date analysed	-			19/12/07	15902-1	19/12/2007 19/12/2007	LCS-3	19/12/07%
TPH C ₁₀ - C ₁₄	mg/kg	50	GC.3	<50	15902-1	<50 <50	LCS-3	102%
TPH C ₁₅ - C ₂₈	mg/kg	100	GC.3	<100	15902-1	<100 <100	LCS-3	124%
TPH C ₂₉ - C ₃₆	mg/kg	100	GC.3	<100	15902-1	<100 <100	LCS-3	115%
Surrogate o-Terphenyl	%		GC.3	105	15902-1	110 109 RPD: 1	LCS-3	110%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-3	18/12/07%
Date analysed	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-3	18/12/07%
Naphthalene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	102%
Acenaphthylene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	121%
Phenanthrene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	118%
Anthracene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	122%
Pyrene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	125%
Benzo(a)anthracene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	LCS-3	125%
Benzo(b,k)fluoranthene	mg/kg	0.2	GC.12	<0.2	15902-1	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12	<0.05	15902-1	<0.05 <0.05	LCS-3	119%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12	<0.1	15902-1	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	100	15902-1	104 105 RPD: 1	LCS-3	106%
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	-			18/12/07	15902-6	18/12/2007 18/12/2007	LCS-3	18/12/07%
Date analysed	-			20/12/07	15902-6	20/12/2007 20/12/2007	LCS-3	20/12/07%
HCB	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	99%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	103%
Heptachlor	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	107%
delta-BHC	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	101%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	105%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	15902-6	0.5 0.6 RPD: 18	LCS-3	103%
Dieldrin	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	100%
Endrin	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	99%
pp-DDD	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 0.1	LCS-3	105%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	15902-6	0.2 0.2 RPD: 0	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	LCS-3	105%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	92	15902-6	91 91 RPD: 0	LCS-3	88%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			18/12/07	15902-6	18/12/2007 18/12/2007	LCS-3	18/12/07%
Date analysed	-			20/12/07	15902-6	20/12/2007 20/12/2007	LCS-3	19/12/07%
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	LCS-3	103%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	15902-6	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	92	15902-6	91 91 RPD: 0	LCS-3	83%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Total Phenolics in Soil						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	15902-6	19/12/2007 19/12/2007	LCS-1	19/12/07%
Date analysed	-			19/12/07	15902-6	19/12/2007 19/12/2007	LCS-1	19/12/07%
Total Phenolics (as Phenol)	mg/kg	5	LAB.30	<5.0	15902-6	<5.0 <5.0	LCS-1	82%
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	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-8	18/12/07%
Date analysed	-			18/12/07	15902-1	18/12/2007 18/12/2007	LCS-8	18/12/07%
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4.0	15902-1	7.4 8.2 RPD: 10	LCS-8	98%
Cadmium	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	<1.0 <1.0	LCS-8	100%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	15 18 RPD: 18	LCS-8	102%
Copper	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	12 12 RPD: 0	LCS-8	103%
Lead	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	38 46 RPD: 19	LCS-8	98%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.10	15902-1	<0.10 <0.10	LCS-8	99%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	2.0 4.8 RPD: 82	LCS-8	101%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1.0	15902-1	11 15 RPD: 31	LCS-8	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results
Moisture						Base Duplicate %RPD
Date prepared	-			18/12/07	15902-1	18/12/2007 18/12/2007
Date analysed	-			18/12/07	15902-1	18/12/2007 18/12/2007
Moisture	%	0.1	LAB.8	<0.10	15902-1	19 19 RPD: 0

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

QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery
vTPH & BTEX in Soil			Base + Duplicate + %RPD		
Date extracted	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Date analysed	-	15902-11	19/12/2007 19/12/2007	15902-2	19/12/07%
vTPH C6 - C9	mg/kg	15902-11	<25 <25	15902-2	90%
Benzene	mg/kg	15902-11	<0.5 <0.5	15902-2	131%
Toluene	mg/kg	15902-11	<0.5 <0.5	15902-2	121%
Ethylbenzene	mg/kg	15902-11	<1.0 <1.0	15902-2	100%
m + p-Xylene	mg/kg	15902-11	<2.0 <2.0	15902-2	103%
o-Xylene	mg/kg	15902-11	<1.0 <1.0	15902-2	100%
Surrogate aaa-Trifluorotoluene	%	15902-11	107 110 RPD: 3	15902-2	105%
QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery
sTPH in Soil (C10-C36)			Base + Duplicate + %RPD		
Date extracted	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Date analysed	-	15902-11	19/12/2007 19/12/2007	15902-2	19/12/07%
TPH C10 - C14	mg/kg	15902-11	<50 <50	15902-2	98%
TPH C15 - C28	mg/kg	15902-11	<100 <100	15902-2	116%
TPH C29 - C36	mg/kg	15902-11	<100 <100	15902-2	110%
Surrogate o-Terphenyl	%	15902-11	107 105 RPD: 2	15902-2	107%
QUALITY CONTROL	UNITS	Dup. Sm#	Duplicate	Spike Sm#	Spike % Recovery
PAHs in Soil			Base + Duplicate + %RPD		
Date extracted	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Date analysed	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Naphthalene	mg/kg	15902-11	<0.1 <0.1	15902-2	94%
Acenaphthylene	mg/kg	15902-11	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	15902-11	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	15902-11	<0.1 <0.1	15902-2	114%
Phenanthrene	mg/kg	15902-11	0.3 <0.1	15902-2	112%
Anthracene	mg/kg	15902-11	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	15902-11	0.4 <0.1	15902-2	114%
Pyrene	mg/kg	15902-11	0.5 <0.1	15902-2	115%

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Benzo(a)anthracene	mg/kg	15902-11	0.3 <0.1	[NR]	[NR]
Chrysene	mg/kg	15902-11	0.3 <0.1	15902-2	125%
Benzo(b,k)fluoranthene	mg/kg	15902-11	0.4 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	15902-11	0.3 <0.05	15902-2	112%
Indeno(1,2,3-c,d)pyrene	mg/kg	15902-11	0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	15902-11	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	15902-11	0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	15902-11	102 102 RPD: 0	15902-2	100%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	15902-7	18/12/07%
Date analysed	-	[NT]	[NT]	15902-7	20/12/07%
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	15902-7	104%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	15902-7	106%
Heptachlor	mg/kg	[NT]	[NT]	15902-7	112%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	15902-7	106%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	15902-7	109%
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]	15902-7	104%
Dieldrin	mg/kg	[NT]	[NT]	15902-7	101%
Endrin	mg/kg	[NT]	[NT]	15902-7	100%
pp-DDD	mg/kg	[NT]	[NT]	15902-7	108%
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]	15902-7	107%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	15902-7	93%

QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	15902-7	18/12/07%
Date analysed	-	[NT]	[NT]	15902-7	20/12/07%
Arochlor 1016	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]	15902-7	115%
Arochlor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	15902-7	87%
QUALITY CONTROL Total Phenolics in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	LCS-7	19/12/07%
Date analysed	-	[NT]	[NT]	LCS-7	19/12/07%
Total Phenolics (as Phenol)	mg/kg	[NT]	[NT]	LCS-7	95%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Date analysed	-	15902-11	18/12/2007 18/12/2007	15902-2	18/12/07%
Arsenic	mg/kg	15902-11	5.0 4.8 RPD: 4	15902-2	95%
Cadmium	mg/kg	15902-11	<1.0 <1.0	15902-2	95%
Chromium	mg/kg	15902-11	13 14 RPD: 7	15902-2	96%
Copper	mg/kg	15902-11	6.7 7.5 RPD: 11	15902-2	103%
Lead	mg/kg	15902-11	24 26 RPD: 8	15902-2	93%
Mercury	mg/kg	15902-11	<0.10 <0.10	15902-2	96%
Nickel	mg/kg	15902-11	3.8 6.2 RPD: 48	15902-2	93%
Zinc	mg/kg	15902-11	9.5 13 RPD: 31	15902-2	95%
QUALITY CONTROL Moisture	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		
Date prepared	-	15902-6	18/12/2007 18/12/2007		
Date analysed	-	15902-6	18/12/2007 18/12/2007		
Moisture	%	15902-6	16 16 RPD: 0		
QUALITY CONTROL Moisture	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD		
Date prepared	-	15902-11	18/12/2007 18/12/2007		
Date analysed	-	15902-11	18/12/2007 18/12/2007		
Moisture	%	15902-11	14 14 RPD: 0		

Report Comments:

Asbestos: A portion of the supplied sample was sub-sampled for asbestos according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 30-40g of sample in it's own container.

PAH's in Soil: RPD accepted for duplicate result due to heterogeneous nature of the sample.

METALS: %RPD failed for sample 1 and 1d for Nickel due to the non-homogeneous nature of the sample. However the rest of the elements are within criteria.

Asbestos was analysed by Approved Identifier: Steven Dale

INS: Insufficient sample for this test

NT: Not tested

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

NA: Test not required

LCS: Laboratory Control Sample

NR: Not requested

<: Less than

>: Greater than

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.

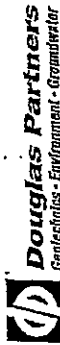
Surrogate Spike: Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria:

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: Generally 60-140% is acceptable.

! Amended (Please note that sample 7 becomes sample 7a, sample 9 becomes sample 9a, sample 10 becomes sample 10a, sample 3 becomes sample 3a)



CHAIN OF CUSTODY

Project Name: Macquarie Park
 Project No: 45298-01 Sampler: AAD
 Project Mgr: L.R. Mob. Phone: 0418 409 786
 Email: alexandra.doubleday@douglaspartners.com.au
 Date Required: 20/12/07 Lab Quote No.

To: EnviroLab Services
 54 Frenchs Rd, Willoughby NSW 2068
 Attn: Tania Nolas
 Phone: 02 9958 5801 Fax: 02 9958 5803
 Email: tnolas@envirolabservices.com.au

EnviroLab Services
 54 Frenchs Rd
 Willoughby NSW 2068
 Ph: 9958 5801
 Job No: 15902
 Date received: 17/12/07
 Received by: AM
 Time: 2:00pm
 Temp. 20°C Ambient
 Notes: Kitas Boken/None

Sample ID	Sample Depth	Lab ID	Sampling Date	Sample Type S, soil W, water	Container type	Analytes							
						8 Heavy metals	TPH / BTEX	PAH	PCB	OCP	Phenols	Asbestos	
7/2-8-3-0		1	14/12/07	S	G.	✓	✓	✓				✓	3a
9/0-3-0-5		2				✓	✓	✓				✓	3a
10/1-0-1-2		3				✓	✓	✓					3
14/0-3-0-5		4				✓	✓	✓					3
15/0-3-0-5		5				✓	✓	✓					3
3/0-8-1-0		6				✓	✓	✓	✓	✓	✓	✓	7a
2/1-0-1-2		7				✓	✓	✓	✓	✓	✓	✓	7a
2/3-6-3-9		8				✓	✓	✓	✓	✓	✓	✓	7
11/0-8-1-0		9				✓	✓	✓	✓	✓	✓	✓	7a
12/0-8-1-0		10				✓	✓	✓	✓	✓	✓	✓	7a
13/0-3-0-5		11				✓	✓	✓	✓	✓	✓	✓	7a
13/2-9-3-0		12				✓	✓	✓	✓	✓	✓		7

Phone: (02) 9809 0666

Fax: (02) 9809 4095

Lab Report No.
 Send Results to: Douglas Partners Address: 96 Hermitage Road, West Ryde 2114
 Relinquished by: A. Doubleday Signed: AM Date & Time: 17/12/07 Received By: AM Date & Time: 17/12/07

Relinquished by: A. Doubleday Signed: AM Date & Time: 17/12/07 Received By: AM Date & Time: 17/12/07



Envirolab Services Pty Ltd

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2068

ph 02 9958 5801 fax 02 9958 5803

email: tnotaras@envirolabservices.com.au

CERTIFICATE OF ANALYSIS 15962

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Galia Nikolaeva

Sample log in details:

Your Reference:

45298.01, Phase 1 Contamination Assess.

No. of samples:

1 Water, 4 Soils

Date samples received:

18/12/07

Date completed instructions received:

18/12/07

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:

21/12/07

Date of Preliminary Report:

Not Issued

Issue Date:

21/12/07

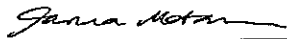
NATA accreditation number 2901. This document shall not be reproduced except in full.

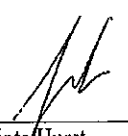
This document is issued in accordance with NATA's accreditation requirements.

Accredited for compliance with ISO/IEC 17025.

Tests not covered by NATA are denoted with *.

Results Approved By:


Tania Notaras
Manager


Jacinta Hurst
Operations Manager

Envirolab Reference: 15962

Revision No: R 00



vTPH & BTEX in Soil				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.5	<0.5	<0.5
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0
m + p-Xylene	mg/kg	<2.0	<2.0	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0
Surrogate aaa-Trifluorotoluene	%	76	74	102

sTPH in Soil (C10-C36)				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007
TPH C10 - C14	mg/kg	<50	<50	<50
TPH C15 - C28	mg/kg	<100	<100	<100
TPH C29 - C36	mg/kg	<100	<100	<100
Surrogate o-Terphenyl	%	109	113	103

PAHs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15962-2 16/0-0.2 18/12/2007 Soil	15962-3 16/0.2-0.5 18/12/2007 Soil	15962-4 17/0.2-0.5 18/12/2007 Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007
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	0.2	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.3	<0.1	<0.1
Pyrene	mg/kg	0.3	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b,k)fluoranthene	mg/kg	0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.1	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1
Surrogate p-Terphenyl-d14	%	99	98	99

Organochlorine Pesticides in soil				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007
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	%	95	96	95

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	15962-2 16/0-0.2 18/12/2007 Soil	15962-3 16/0.2-0.5 18/12/2007 Soil	15962-4 17/0.2-0.5 18/12/2007 Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	20/12/2007	20/12/2007	20/12/2007
Arochlor 1016	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	%	95	96	95

Total Phenolics in Soil				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date extracted	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0	<5.0

Acid Extractable metals in soil				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date digested	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007
Arsenic	mg/kg	<4.0	<4.0	5.2
Cadmium	mg/kg	<1.0	<1.0	<1.0
Chromium	mg/kg	19	15	14
Copper	mg/kg	36	37	19
Lead	mg/kg	15	15	16
Mercury	mg/kg	<0.10	<0.10	<0.10
Nickel	mg/kg	53	49	27
Zinc	mg/kg	40	38	19

Moisture				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date prepared	-	19/12/2007	19/12/2007	19/12/2007
Date analysed	-	19/12/2007	19/12/2007	19/12/2007
Moisture	%	15	11	15

Asbestos ID - soils				
Our Reference:	UNITS	15962-2	15962-3	15962-4
Your Reference	-----	16/0-0.2	16/0.2-0.5	17/0.2-0.5
Date Sampled	-----	18/12/2007	18/12/2007	18/12/2007
Type of sample		Soil	Soil	Soil
Date analysed	-	19/12/2007	19/12/2007	19/12/2007
Sample Description	-	40g soil	40g soil	40g soil
Asbestos ID in soil	-	No asbestos detected	No asbestos detected	No asbestos detected
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

vTPH & BTEX in Water		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	19/12/2007
Date analysed	-	20/12/2007
TPH C ₆ - C ₉	µg/L	<10
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	%	75
Surrogate toluene-d8	%	106
Surrogate 4-BFB	%	98

sTPH in Water (C10-C36)		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	19/12/2000
Date analysed	-	20/12/2007
TPH C10 - C14	µg/L	<50
TPH C15 - C28	µg/L	<100
TPH C29 - C36	µg/L	<100
Surrogate o-Terphenyl	%	107

PAHs in Water		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	19/12/2007
Date analysed	-	19/12/2007
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	%	107

Organochlorine Pesticides in water		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	19/12/07
Date analysed	-	21/12/07
HCB	µg/L	<0.2
alpha-BHC	µg/L	<0.2
gamma-BHC	µg/L	<0.2
beta-BHC	µg/L	<0.2
Heptachlor	µg/L	<0.2
delta-BHC	µg/L	<0.2
Aldrin	µg/L	<0.2
Heptachlor Epoxide	µg/L	<0.2
gamma-Chlordane	µg/L	<0.2
alpha-Chlordane	µg/L	<0.2
Endosulfan I	µg/L	<0.2
pp-DDE	µg/L	<0.2
Dieldrin	µg/L	<0.2
Endrin	µg/L	<0.2
pp-DDD	µg/L	<0.2
Endosulfan II	µg/L	<0.2
DDT	µg/L	<0.2
Endrin Aldehyde	µg/L	<0.2
Endosulfan Sulphate	µg/L	<0.2
Methoxychlor	µg/L	<0.2
Surrogate TCLMX	%	81

PCBs in Water		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	19/12/07
Date analysed	-	21/12/07
Arochlor 1016	µg/L	<2
Arochlor 1232	µg/L	<2
Arochlor 1242	µg/L	<2
Arochlor 1248	µg/L	<2
Arochlor 1254	µg/L	<2
Arochlor 1260	µg/L	<2
Surrogate TCLMX	%	81

Total Phenolics in Water		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date extracted	-	20/12/2007
Date analysed	-	20/12/2007
Total Phenolics (as Phenol)	mg/L	<0.050

HM in water - dissolved		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Date prepared	-	20/12/2007
Date analysed	-	20/12/2007
Arsenic-Dissolved	µg/L	2.3
Cadmium-Dissolved	µg/L	0.40
Chromium-Dissolved	µg/L	1.7
Copper-Dissolved	µg/L	3.0
Lead-Dissolved	µg/L	1.4
Mercury-Dissolved	µg/L	<0.50
Nickel-Dissolved	µg/L	8.7
Zinc-Dissolved	µg/L	140

Miscellaneous Inorganics		
Our Reference:	UNITS	15962-1
Your Reference	-----	GW7/181207
Date Sampled	-----	18/12/2007
Type of sample		Water
Chloride (titration) - water	mg/L	50
Sulphate, SO ₄	mg/L	290
Iron - Dissolved	mg/L	4.2
pH	pH Units	4.5
Calcium - Dissolved	mg/L	4.1
Magnesium - Dissolved	mg/L	11
Hardness by calculation	mgCaCO ₃ /L	56

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.14	Soil samples extracted with methanol and spiked into water prior to analysing 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	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with hexane/acetone and waters with dichloromethane and analysed by GC-ECD.
LAB.30	Total Phenolics - determined colorimetrically following distillation.
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	Qualitative identification of asbestos type fibres in bulk using Polarised Light Microscopy and Dispersion Staining Techniques.
GC.13	Water samples are analysed directly by purge and trap GC-MS.
Metals.22 ICP-MS	Determination of various metals by ICP-MS.
LAB.11	Chloride determined by argentometric titration.
LAB.9	Sulphate determined turbidimetrically.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.

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	-			19/12/07	[NT]	[NT]	LCS-2	19/12/07%
Date analysed	-			20/12/07	[NT]	[NT]	LCS-2	20/12/07%
vTPH C6 - C9	mg/kg	25	GC.16	<25	[NT]	[NT]	LCS-2	106%
Benzene	mg/kg	0.5	GC.14	<0.5	[NT]	[NT]	LCS-2	129%
Toluene	mg/kg	0.5	GC.14	<0.5	[NT]	[NT]	LCS-2	103%
Ethylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-2	96%
m + p-Xylene	mg/kg	2	GC.14	<2.0	[NT]	[NT]	LCS-2	97%
o-Xylene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	LCS-2	97%
Surrogate aaa-Trifluorotoluene	%		GC.14	91	[NT]	[NT]	LCS-2	80%
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	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Date analysed	-			20/12/07	[NT]	[NT]	LCS-1	20/12/07%
TPH C10 - C14	mg/kg	50	GC.3	<50	[NT]	[NT]	LCS-1	106%
TPH C15 - C28	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-1	98%
TPH C29 - C36	mg/kg	100	GC.3	<100	[NT]	[NT]	LCS-1	109%
Surrogate o-Terphenyl	%		GC.3	110	[NT]	[NT]	LCS-1	113%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Date analysed	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Naphthalene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	106%
Acenaphthylene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	115%
Phenanthrene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	112%
Anthracene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	115%
Pyrene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	117%
Benzo(a)anthracene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	LCS-1	122%
Benzo(b,k)fluoranthene	mg/kg	0.2	GC.12	<0.2	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12	<0.05	[NT]	[NT]	LCS-1	115%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	100	[NT]	[NT]	LCS-1	101%
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	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Date analysed	-			21/12/07	[NT]	[NT]	LCS-1	20/12/07%
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-1	100%
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-1	102%
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-1	107%
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-1	103%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-1	106%
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-1	103%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-1	101%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-1	102%
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	LCS-1	105%
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-1	109%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	81	[NT]	[NT]	LCS-1	92%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Date analysed	-			21/12/07	[NT]	[NT]	LCS-1	20/12/07%
Arochlor 1016	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-1	117%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	81	[NT]	[NT]	LCS-1	90%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Total Phenolics in Soil						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	15962-4	19/12/2007 19/12/2007	LCS-1	19/12/07%
Date analysed	-			19/	15962-4	19/12/2007 19/12/2007	LCS-1	19/12/07%
Total Phenolics (as Phenol)	mg/kg	5	LAB.30	<5.0	15962-4	<5.0 <5.0	LCS-1	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	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Date analysed	-			19/12/07	[NT]	[NT]	LCS-1	19/12/07%
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4.0	[NT]	[NT]	LCS-1	95%
Cadmium	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	98%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	99%
Copper	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	99%
Lead	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	97%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.10	[NT]	[NT]	LCS-1	102%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	99%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1.0	[NT]	[NT]	LCS-1	98%

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank				
Date prepared	-			19/12/07				
Date analysed	-			[NT]				
Moisture	%	0.1	LAB.8	[NT]				
QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank				
Date analysed	-		AS4964-2004	[NT]				
QUALITY CONTROL vTPH & BTEX in Water	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			19/12/07	[NT]	[NT]	LCS-W1	19/12/07%
Date analysed	-			20/12/07	[NT]	[NT]	LCS-W1	20/12/07%
TPH C ₆ - C ₉	µg/L	10	GC.16	<10	[NT]	[NT]	LCS-W1	103%
Benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	104%
Toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	100%
Ethylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	108%
m+p-xylene	µg/L	2	GC.13	<2.0	[NT]	[NT]	LCS-W1	107%
o-xylene	µg/L	1	GC.13	<1.0	[NT]	[NT]	LCS-W1	100%
Surrogate Dibromofluoromethane	%		GC.13	99	[NT]	[NT]	LCS-W1	106%
Surrogate toluene-d8	%		GC.13	94	[NT]	[NT]	LCS-W1	94%
Surrogate 4-BFB	%		GC.13	79	[NT]	[NT]	LCS-W1	109%
QUALITY CONTROL sTPH in Water (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			19/12/07	[NT]	[NT]	LCS-W1	19/12/07%
Date analysed	-			20/12/07	[NT]	[NT]	LCS-W1	20/12/07%
TPH C ₁₀ - C ₁₄	µg/L	50	GC.3	<50	[NT]	[NT]	LCS-W1	74%
TPH C ₁₅ - C ₂₈	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	93%
TPH C ₂₉ - C ₃₆	µg/L	100	GC.3	<100	[NT]	[NT]	LCS-W1	89%
Surrogate o-Terphenyl	%		GC.3	96	[NT]	[NT]	LCS-W1	94%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Water						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	[NT]	[NT]	LCS-2	19/12/07%
Date analysed	-			19/12/07	[NT]	[NT]	LCS-2	19/12/07%
Naphthalene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	91%
Acenaphthylene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Fluorene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	98%
Phenanthrene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	99%
Anthracene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Pyrene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	95%
Benzo(a)anthracene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	99%
Chrysene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Benzo(b,k)fluoranthene	µg/L	2	GC.12	<2	[NT]	[NT]	LCS-2	107%
Benzo(a)pyrene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Indeno(1,2,3-c,d)pyrene	µg/L	1	GC.12	<1	[NT]	[NT]	LCS-2	101%
Dibenzo(a,h)anthracene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	µg/L	1	GC.12	<1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	104	[NT]	[NT]	LCS-2	109%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in water						Base II Duplicate II %RPD		
Date extracted	-			19/12/07	[NT]	[NT]	LCS-W1	19/12/07%
Date analysed	-			21/12/07	[NT]	[NT]	LCS-W1	21/12/07%
HCB	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
alpha-BHC	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	90%
gamma-BHC	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
beta-BHC	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	99%
Heptachlor	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	97%
delta-BHC	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
Aldrin	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	91%
Heptachlor Epoxide	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	96%
gamma-Chlordane	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
alpha-Chlordane	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
Endosulfan I	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
pp-DDE	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	95%
Dieldrin	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	97%
Endrin	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	97%
pp-DDD	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	98%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in water								
Endosulfan II	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
DDT	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	LCS-W1	89%
Methoxychlor	µg/L	0.2	GC-5	<0.2	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-5	80	[NT]	[NT]	LCS-W1	87%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
PCBs in Water								
Date extracted	-			19/12/07	[NT]	[NT]	LCS-W1	19/12/07%
Date analysed	-			21/12/07	[NT]	[NT]	LCS-W1	21/12/07%
Arochlor 1016	µg/L	2	GC-6	<2	[NT]	[NT]	[NR]	[NR]
Arochlor 1232	µg/L	2	GC-6	<2	[NT]	[NT]	[NR]	[NR]
Arochlor 1242	µg/L	2	GC-6	<2	[NT]	[NT]	[NR]	[NR]
Arochlor 1248	µg/L	2	GC-6	<2	[NT]	[NT]	[NR]	[NR]
Arochlor 1254	µg/L	2	GC-6	<2	[NT]	[NT]	LCS-W1	110%
Arochlor 1260	µg/L	2	GC-6	<2	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%		GC-6	[NT]	[NT]	[NT]	LCS-W1	91%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Total Phenolics in Water								
Date extracted	-			20/12/07	[NT]	[NT]	LCS-W1	20/12/07%
Date analysed	-			20/12/07	[NT]	[NT]	LCS-W1	20/12/07%
Total Phenolics (as Phenol)	mg/L	0.05	LAB.30	<0.050	[NT]	[NT]	LCS-W1	106%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
HM in water - dissolved								
Date prepared	-			[NT]	[NT]	[NT]	LCS-W1	20/12/07%
Date analysed	-			[NT]	[NT]	[NT]	LCS-W1	20/12/07%
Arsenic-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	100%
Cadmium-Dissolved	µg/L	0.1	Metals.22 ICP-MS	<0.10	[NT]	[NT]	LCS-W1	109%
Chromium-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	100%
Copper-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	96%
Lead-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	107%
Mercury-Dissolved	µg/L	0.5	Metals.21 CV-AAS	<0.50	[NT]	[NT]	LCS-W1	80%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
HM in water - dissolved								
Nickel-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	96%
Zinc-Dissolved	µg/L	1	Metals.22 ICP-MS	<1.0	[NT]	[NT]	LCS-W1	100%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Miscellaneous Inorganics								
Chloride (titration) - water	mg/L	20	LAB.11	<20	[NT]	[NT]	LCS-W1	107%
Sulphate, SO ₄	mg/L	5	LAB.9	<5	[NT]	[NT]	LCS-W1	102%
Iron - Dissolved	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	103%
pH	pH Units	0.1	LAB.1	<0.10	[NT]	[NT]	LCS-W1	100%
Calcium - Dissolved	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	101%
Magnesium - Dissolved	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	100%
Hardness by calculation	mgCaCO ₃ /L	1	Metals.20 ICP-AES	<1	[NT]	[NT]	[NR]	[NR]

Report Comments:

Asbestos was analysed by Approved Identifier: Steven Dale

INS: Insufficient sample for this test
RPD: Relative Percent Difference
NR: Not requested

NT: Not tested
NA: Test not required
<: Less than

PQL: Practical Quantitation Limit
LCS: Laboratory Control Sample
>: Greater than

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:

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: Generally 60-140% is acceptable.



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CHAIN OF CUSTODY

Project Name: Phase I Contamination Assessment
Project Mgr: S.F. [Signature]
Email: mikolaleva@gmail.com
Date Required: Lab Quote No. [Signature]

To: **EnviroLab Services**
Attn: Tania Notaras
Phone: 02 9958 5801 Fax: 02 9958 5803
Email: tnotaras@envirolabservices.com.au

Analytes										Notes					
Sample ID	Sample Depth	Lab ID	Sampling Date	S - soil W - water	Container type	8TH	TPT/BTEX	PAT	Phenols		PCB	OCP	Asbestos	-chloride -sulphate filtered iron	
GWT181207		1	18/12/07	W	G.P	✓	✓	✓	✓	✓	✓	✓	✓	✓	! Could we please have the results early Friday afternoon. Thames
K30-0.2		2		S	G	✓	✓	✓	✓	✓	✓	✓	✓	✓	
K50.2-0.5		3	✓	↓	↓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
K40.2-0.5		4		↓	↓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
H40-0.2		5			↓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<div>EnviroLab Services 34 Francis Rd Willoughby NSW 2068 Tel: 0025 5994</div> <div>Job No: 15962 Date received: 18/12/07 Received by: AM Time: 3:30pm Temp: 20°C/Ambient Security: Intact/Broken/None</div>															

Phone: (02) 9809 0666
Fax: (02) 9809 4095

Lab Report No. _____ Address: 96 Hermitage Road, West Ryde 2114
 Deculos Partners

Date & Time: 18/12/07

Received By:

Received By:

Date & Time:



Envirolab Services Pty Ltd

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2068

ph 02 9958 5801 fax 02 9958 5803

email: tnotaras@envirolabservices.com.au

CERTIFICATE OF ANALYSIS 15902-A

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Alex Doubleday

Sample log in details:

Your Reference:

45298.01, Macquarie Park

No. of samples:

Additional Testing on 4 Soils

Date samples received:

17/12/07

Date completed instructions received:

21/12/07

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:

9/01/08

Date of Preliminary Report:

Not issued

Issue Date:

2/01/08

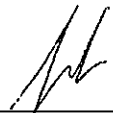
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Accredited for compliance with ISO/IEC 17025.

Tests not covered by NATA are denoted with *.

Results Approved By:



Jacinta Hurst
Operations Manager

Envirolab Reference: 15902-A

Revision No: R 00



Page 1 of 6

Metals in TCLP					
Our Reference:	UNITS	15902-A-6	15902-A-7	15902-A-9	15902-A-11
Your Reference	-----	3a/0.8-1.0	7a/1.0-1.2	11/0.8-1.0	13/0.3-0.5
Type of sample	-----	Soil	Soil	Soil	Soil
Date Sampled		14/12/2007	14/12/2007	14/12/2007	14/12/2007
Date extracted	-	27/12/2007	27/12/2007	27/12/2007	27/12/2007
Date analysed	-	31/12/2007	31/12/2007	31/12/2007	[NA]
pH of soil for fluid# determ.	pH units	7.00	7.60	5.30	7.20
pH of soil for fluid # determ. (acid)	pH units	1.70	1.70	1.70	1.80
Extraction fluid used	-	1	1	1	1
pH of final Leachate	pH units	4.90	4.90	4.90	4.90
Chromium in TCLP	mg/L	<0.01	[NA]	<0.01	[NA]
Lead in TCLP	mg/L	[NA]	<0.03	<0.03	[NA]
Nickel in TCLP	mg/L	[NA]	<0.02	[NA]	[NA]

PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	15902-A-11
Your Reference	-----	13/0.3-0.5
Type of sample	-----	Soil
Date Sampled		14/12/2007
Date extracted	-	28/12/07
Date analysed	-	28/12/07
Naphthalene	mg/L	<0.001
Acenaphthylene	mg/L	<0.001
Acenaphthene	mg/L	<0.001
Fluorene	mg/L	<0.001
Phenanthrene	mg/L	<0.001
Anthracene	mg/L	<0.001
Fluoranthene	mg/L	<0.001
Pyrene	mg/L	<0.001
Benzo(a)anthracene	mg/L	<0.001
Chrysene	mg/L	<0.001
Benzo(b,k)fluoranthene	mg/L	<0.002
Benzo(a)pyrene	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene	mg/L	<0.001
Dibenzo(a,h)anthracene	mg/L	<0.001
Benzo(g,h,i)perylene	mg/L	<0.001
Surrogate p-Terphenyl-d14	%	75

Method ID	Methodology Summary
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
GC.12	Leachates are extracted 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						Base II Duplicate II %RPD		
Date extracted	-			31/12/07	[NT]	[NT]	LCS-W2	31/12/07%
Date analysed	-			31/12/07	[NT]	[NT]	LCS-W2	31/12/07%
Chromium in TCLP	mg/L	0.01	Metals.20 ICP-AES	<0.01	[NT]	[NT]	LCS-W2	105%
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W2	100%
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	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	-			28/12/07	[NT]	[NT]	LCS-W1	28/12/07%
Date analysed	-			28/12/07	[NT]	[NT]	LCS-W1	28/12/07%
Naphthalene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	79%
Acenaphthylene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	92%
Phenanthrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	101%
Anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	99%
Pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	105%
Benzo(a)anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	113%
Benzo(b,k)fluoranthene	mg/L	0.002	GC.12	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	77%
Indeno(1,2,3-c,d)pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	140	[NT]	[NT]	LCS-W1	140%

Report Comments:

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

INS: Insufficient sample for this test

NT: Not tested

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

NA: Test not required

LCS: Laboratory Control Sample

NR: Not requested

<: Less than

>: Greater than

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:

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: Generally 60-140% is acceptable.

Aileen Hie

From: Jacinta Hurst
Sent: Friday, 21 December 2007 4:47 PM
To: Aileen Hie
Subject: FW: job 15902 and 15962

Regards

Jacinta Hurst
Envirolab Services Pty Ltd
54 Frenchs Rd Willoughby NSW 2068
ph 02 9958 5801 mob 0407 003 037
fax 02 9958 5803

From: Galia Nikolaeva [mailto:Galia.Nikolaeva@douglaspartners.com.au]
Sent: Friday, 21 December 2007 04:13
To: Jacinta Hurst
Subject: Re: job 15902 and 15962

Jacinta,

Sorry for the last minute notice, but Could you please do TCLP test of the following samples:

- 6 3a/0.8-1.0 for Cr
- 7 7a/1.0-1.2 for Pb and Ni
- 9 11/0.8-1.0 for Cr and Pb
- 11 13/0.3-0.5 for B(a)P
- 16/0-0.2 for Cr, Pb, Ni and B(a)P

Thanks for your help!
Merry Christmas!

Galia Nikolaeva
Environmental Scientist
Douglas Partners
Ph: 8878 0607
Fax: 9809 4095
Mob: 0418651227
email: nikolaevag@douglaspartners.com.au

Envirolab Ref: 15902A
Doe: 9/1/08
std TIA.

From: Jacinta Hurst [mailto:JHurst@envirolabservices.com.au]
Sent: Friday, 21 December 2007 3:29 PM
To: Galia Nikolaeva
Subject: Results for registration '15962 - 45298.01, Phase 1 Contamination Assess.'

Please refer to attached for:
a copy of the Certificate of Analysis
a copy of the COC
an excel file containing the results

Please note that a hard copy will not be posted.

21/12/2007



Envirolab Services Pty Ltd

ABN 37 112 535 645

54 Frenchs Rd Willoughby NSW 2068

ph 02 9958 5801 fax 02 9958 5803

email: tnotaras@envirolabservices.com.au

CERTIFICATE OF ANALYSIS 15962-A

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Galia Nikolaeva

Sample log in details:

Your Reference:

45298.01, Phase 1 Contamination Assess.

No. of samples:

Additional Testing on 1 Soil

Date samples received:

18/12/07

Date completed instructions received:

21/12/07

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:

9/01/08

Date of Preliminary Report:

Not Issued

Issue Date:

2/01/08

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Accredited for compliance with ISO/IEC 17025.

Tests not covered by NATA are denoted with *.

Results Approved By:


Jacinta Hurst
Operations Manager

Envirolab Reference: 15962-A

Revision No: R 00



Page 1 of 6

Metals in TCLP		
Our Reference:	UNITS	15962-A-2
Your Reference	-----	16/0-0.2
Type of sample	-----	Soil
Date Sampled		18/12/2007
Date extracted	-	27/12/2007
Date analysed	-	31/12/2007
pH of soil for fluid# determ.	pH units	7.30
pH of soil for fluid # determ. (acid)	pH units	1.80
Extraction fluid used	-	1
pH of final Leachate	pH units	4.90
Chromium in TCLP	mg/L	<0.01
Lead in TCLP	mg/L	<0.03
Nickel in TCLP	mg/L	0.06

PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	15962-A-2
Your Reference	-----	16/0-0.2
Type of sample	-----	Soil
Date Sampled		18/12/2007
Date extracted	-	31/12/07
Date analysed	-	31/12/07
Naphthalene	mg/L	<0.001
Acenaphthylene	mg/L	<0.001
Acenaphthene	mg/L	<0.001
Fluorene	mg/L	<0.001
Phenanthrene	mg/L	<0.001
Anthracene	mg/L	<0.001
Fluoranthene	mg/L	<0.001
Pyrene	mg/L	<0.001
Benzo(a)anthracene	mg/L	<0.001
Chrysene	mg/L	<0.001
Benzo(b,k)fluoranthene	mg/L	<0.002
Benzo(a)pyrene	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene	mg/L	<0.001
Dibenzo(a,h)anthracene	mg/L	<0.001
Benzo(g,h,i)perylene	mg/L	<0.001
Surrogate p-Terphenyl-d14	%	89

Method ID	Methodology Summary
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
Metals.20 ICP-AES	Determination of various metals by ICP-AES.
GC.12	Leachates are extracted 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						Base II Duplicate II %RPD		
Date extracted	-			31/12/07	[NT]	[NT]	LCS-2	31/12/07%
Date analysed	-			31/12/07	[NT]	[NT]	LCS-2	31/12/07%
Chromium in TCLP	mg/L	0.01	Metals.20 ICP-AES	<0.01	[NT]	[NT]	LCS-2	105%
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-2	100%
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	[NT]	[NT]	LCS-2	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	-			31/12/07	[NT]	[NT]	LCS-W1	31/12/07%
Date analysed	-			31/12/07	[NT]	[NT]	LCS-W1	31/12/07%
Naphthalene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	89%
Acenaphthylene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	98%
Phenanthrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	101%
Anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	99%
Pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	103%
Benzo(a)anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	116%
Benzo(b,k)fluoranthene	mg/L	0.002	GC.12	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	LCS-W1	78%
Indeno(1,2,3-c,d)pyrene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/L	0.001	GC.12	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	89	[NT]	[NT]	LCS-W1	102%

Report Comments:

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

INS: Insufficient sample for this test

NT: Not tested

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

NA: Test not required

LCS: Laboratory Control Sample

NR: Not requested

<: Less than

>: Greater than

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:

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: Generally 60-140% is acceptable.

Aileen Hie

From: Jacinta Hurst
Sent: Friday, 21 December 2007 4:47 PM
To: Aileen Hie
Subject: FW: job 15902 and 15962

Regards

Jacinta Hurst
Envirolab Services Pty Ltd
54 Frenchs Rd Willoughby NSW 2068
ph 02 9958 5801 mob 0407 003 037
fax 02 9958 5803

From: Galia Nikolaeva [mailto:Galia.Nikolaeva@douglaspartners.com.au]
Sent: Friday, 21 December 2007 04:13
To: Jacinta Hurst
Subject: Re: job 15902 and 15962

Jacinta,

Sorry for the last minute notice, but Could you please do TCLP test of the following samples:

3a/0.8-1.0 for Cr

7a/1.0-1.2 for Pb and Ni

11/0.8-1.0 for Cr and Pb

13/0.3-0.5 for B(a)P

2 16/0-0.2 for Cr, Pb, Ni and B(a)P 3

Thanks for your help!
Merry Christmas!

Galia Nikolaeva
Environmental Scientist
Douglas Partners
Ph: 8878 0607
Fax: 9809 4095
Mob: 0418651227
email: nikolaevag@douglaspartners.com.au

Envirolab Ref: 15962A

Due: 9/1/08

std TIA.

From: Jacinta Hurst [mailto:JHurst@envirolabservices.com.au]
Sent: Friday, 21 December 2007 3:29 PM
To: Galia Nikolaeva
Subject: Results for registration '15962 - 45298.01, Phase 1 Contamination Assess.'

Please refer to attached for:
a copy of the Certificate of Analysis
a copy of the COC
an excel file containing the results

Please note that a hard copy will not be posted.

21/12/2007

APPENDIX F
Quality Assurance/Quality Control Procedures and Results

QA/QC PROCEDURES AND RESULTS

Quality assurance and control formed an integral part of this assessment. The results of the QA/QC assessments are detailed below.

The Data Quality Indicators (DQI's) have been addressed within the report as follows in Table F1.

Table F1 – DQIs and Evaluation Procedures

DQI	Evaluation Procedure
Documentation completeness	Completion of field and laboratory documentation including chain of custody, test bore reports.
Data completeness	Sampling density appropriate for preliminary assessment, analysis of appropriate contaminants, analysis of appropriate soil horizons, analysis of appropriate QA samples etc
Data comparability	Use of NATA accredited analytical methods, use of consistent sampling technique, commitment to equipment decontamination, field sample storage techniques etc.
Data representativeness	Sampling from targeted areas and a broad grid pattern across the site in order to obtain samples representative of contamination present.
Precision and accuracy for sampling and analysis	Use of NATA accredited analytical methods, achievement of 30-50% RPD for replicate analysis (as appropriate) and achievement of laboratory QC criteria.

As indicated above, the DQIs for sampling and analysis were achieved and the quality of the data satisfactorily meets the objectives of the current assessment.

FIELD QUALITY ASSURANCE AND QUALITY CONTROL

The field QC procedures for sampling as prescribed in Douglas Partners *Field Procedures Manual* were followed at all times during the validation assessment. Field sampling comprised replicate sampling, at a rate of approximately one replicate sample for every ten original samples and one trip blank.

Rinsate Sample

Rinsate (Field Blank) samples are used to provide an indication of any cross contamination which may occur between samples. Disposable sampling equipment was used during this assessment, eliminating the chance of cross contamination, and therefore no need for rinsate samples.

Relative Percentage Difference

Seventeen samples were selected for analytical analysis, including two replicate samples. A measure of the consistency of results is derived by the calculation of relative percentage differences (RPDs) for replicate samples. A RPD of $\pm 30\%$ is generally considered acceptable by the EPA, although some exceptions apply. The comparative results of analysis were included in Table F2.

Table F2 – Comparative Results of Replicate Sample Analysis for Heavy Metals and PAH's

Sample ID	As	Cd	Cr	Cu	Pb	Hg	Ni	Zn	B(a)P	PAH
14/0.3-0.5	5.3	<1	19	1.7	22	<0.1	1.2	2.9	<0.05	<0.2
BD3/141207 ¹	6.4	<1	19	3.4	19	<0.1	4.9	5.4	<0.05	<0.2
RPD (%)	19	0	0	67	15	0	121	60	0	0
10a/1.0-1.2	8.4	<1	20	20	25	<0.1	2.1	4.7	<0.05	<0.2
BD2/141207 ¹	7	<1	19	17	24	<0.1	2.1	4.6	<0.05	<0.2
RPD (%)	18	0	5	16	4	0	0	2	0	0

Notes:

1 field replicate of sample above

Bold RPD greater than $\pm 30\%$

All the RPD results for heavy metals fall within the typical acceptable range ($\pm 30\%$) with the exception of:

- Sample 14/0.3-0.5 and its replicate BD3/ 141207– Cu (67%), Ni (121%), Zn (60%)

However, it is considered that the elevated RPD's do not materially compromise the analytical results obtained, as:

- The actual concentration differences in the majority of the replicate pairs are small;
- All concentrations were close to the detection limit;

- The detected levels of contaminants were well within the site assessment criteria;
- Replicate samples were collected instead of duplicate samples to minimise the loss of volatiles; and
- The heterogeneous nature of the filling.

It is therefore considered that the results indicate an acceptable consistency between the sample and its replicate and indicate suitable field sampling methodology was adopted and laboratory precision was achieved.

Laboratory QA/QC Procedures

The analytical laboratory is accredited by the National Association of Testing Authorities (NATA) and is required to conduct in-house QA/QC procedures. These are normally incorporated into every analytical run and include the following:-

Reagent Blank

A reagent blank sample is prepared and analysed at the beginning of every analytical run, following calibration of the analytical apparatus. The laboratory results for reagent blanks for soil analysis indicated that concentrations of all analytes were below respective laboratory practical quantitation (detection) limits. These results are included in the laboratory report in Appendix E.

Spike Recovery

This is a sample replicate prepared by adding a known amount of analyte prior to analysis, and then treated exactly the same as all other samples. The recovery result indicates the proportion of the known concentration of the analyte that is detected during analysis. These results are included in the laboratory report in Appendix E.

The spike recovery rates are compared with limits as specified in Envirolab Services Quality Control System, and any exceedances are highlighted in the report.

As no exceedances and no comments were noted on the report, it is considered that the results indicate that the analytical results are not significantly affected by matrix interference.

Surrogate Recovery

This sample is prepared by adding a known amount of surrogate, which behaves similarly to the analyte, prior to analysis to each sample. The recovery result indicates the proportion of the known concentration of the surrogate that is detected during analysis.

As no exceedances and no comments were noted on the report, it is considered that the results indicate that the analytical results are not significantly affected by matrix interference.

Duplicates

These are additional portions of a sample which are analysed in exactly the same manner as all other samples. The duplicate sample results are included in the laboratory results in Appendix E.

In overall terms, therefore, the data quality objectives have been attained and the quality of the investigation data is considered acceptable.