
APPENDIX C
Laboratory Results and Chain of Custody Documentation



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CERTIFICATE OF ANALYSIS

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Kurt Plambeck

Sample log in details:

EnviroLab Reference:

05/1272

Your Reference:

43034, Arncliffe

No. of samples:

19 Soils

Date samples received:

13/05/05

Date completed instructions received:

13/05/05

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 are reported on a dry weight basis for soils and on an as received basis for other matrices.

Heavy Metals were analysed by Advanced Analytical report A05/0683.

Asbestos was analysed by SGS Matraville report no: 37449, # 16 asbestos was 2mm in length hand picked found loose in soil.

sPOCAS analysed by SGS Cairns report 49313, please refer to Appendix 1 for results.

Report Details:

Date results requested by:

20/05/05

Date of Preliminary Report:

23/5/05

Date of Final Report:

23/05/05

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

Tests not covered by NATA are denoted with *.

INS: Insufficient sample for this test

NT: Not tested

NR: Not requested

PQL: Practical Quantitation limit

<: Less than

>: Greater than

Contact Details:

Please direct any queries to Tania Notaras

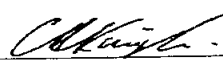
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Authorised Signatory

Chris Kimpton

Senior Chemist


Chris Kimpton
Senior Chemist



VOC's in soil		
Our Reference:	UNITS	05/1272-18
Your Reference	-----	110
Depth	-----	0-0.1
Type of sample		Soil
Date extracted	--	16/05/2005
Date analysed	--	21/05/2005
Chloromethane*	mg/kg	<10
Vinyl Chloride*	mg/kg	<10
Bromomethane*	mg/kg	<10
Chloroethane*	mg/kg	<10
1,1-Dichloroethene	mg/kg	<1.0
methylene chloride	mg/kg	<1.0
trans-1,2-dichloroethene	mg/kg	<1.0
1,1-dichloroethane	mg/kg	<1.0
2,2-dichloropropane	mg/kg	<1.0
cis-1,2-dichloroethene	mg/kg	<1.0
chloroform	mg/kg	<1.0
bromochloroethane	mg/kg	<1.0
1,1,1-trichloroethane	mg/kg	<1.0
1,1-dichloropropene	mg/kg	<1.0
carbon tetrachloride	mg/kg	<1.0
Benzene	mg/kg	<1.0
1,2-dichloroethane	mg/kg	<1.0
trichloroethene	mg/kg	<1.0
1,2-dichloropropane	mg/kg	<1.0
dibromomethane	mg/kg	<1.0
bromodichloromethane	mg/kg	<1.0
Toluene	mg/kg	<1.0
1,1,2-trichloroethane	mg/kg	<1.0
tetrachloroethene	mg/kg	<1.0
1,3-dichloropropane	mg/kg	<1.0
dibromochloromethane	mg/kg	<1.0
1,2-dibromomethane	mg/kg	<1.0
chlorobenzene	mg/kg	<1.0
Ethylbenzene	mg/kg	<1.0
1,1,1,2-tetrachloroethane	mg/kg	<1.0
m + p-Xylene	mg/kg	<2.0
o-Xylene	mg/kg	<1.0
styrene	mg/kg	<1.0
isopropylbenzene	mg/kg	<1.0
bromoform	mg/kg	<1.0
1,1,2,2-tetrachloroethane	mg/kg	<1.0

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

VOC's in soil Our Reference: Your Reference Depth Type of sample	UNITS ----- -----	05/1272-18 110 0-0.1 Soil
1,2,3-trichloropropane	mg/kg	<1.0
n-propyl benzene	mg/kg	<1.0
bromobenzene	mg/kg	<1.0
1,3,5-trimethyl benzene	mg/kg	<1.0
2-chlorotoluene	mg/kg	<1.0
4-chlorotoluene	mg/kg	<1.0
tert-butyl benzene	mg/kg	<1.0
1,2,4-trimethyl benzene	mg/kg	<1.0
sec-butyl benzene	mg/kg	<1.0
p-isopropyl toluene	mg/kg	<1.0
1,3-dichlorobenzene	mg/kg	<1.0
1,4-dichlorobenzene	mg/kg	<1.0
n-butyl benzene	mg/kg	<1.0
1,2-dichlorobenzene	mg/kg	<1.0
1,2-dibromo-3-chloropropane	mg/kg	<1.0
1,2,4-trichlorobenzene	mg/kg	<1.0
hexachlorobutadiene	mg/kg	<1.0
naphthalene	mg/kg	<1.0
1,2,3-trichlorobenzene	mg/kg	<1.0
Surrogate chlorobenzene-d5	%	104

vTPH & BTEX in Soil	UNITS	05/1272-1	05/1272-3	05/1272-4	05/1272-5	05/1272-7
Our Reference:	-----	101	101	102	103	104
Your Reference	-----	0.3-0.5	2.8-3.0	0.3-0.5	0.3-0.5	0.3-0.5
Depth	-----	Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	19/05/2005	19/05/2005	19/05/2005	19/05/2005	19/05/2005
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Toluene	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
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 chlorobenzene-d5	%	69	81	86	88	83

vTPH & BTEX in Soil	UNITS	05/1272-9	05/1272-10	05/1272-12	05/1272-13	05/1272-15
Our Reference:	-----	105	106	107	108	109
Your Reference	-----	0.3-0.5	0.3-0.5	0.2-0.3	0.3-0.5	0.3-0.5
Depth	-----	Soil	Soil	Soil	Soil	Soil
Type of sample						
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	19/05/2005	19/05/2005	19/05/2005	19/05/2005	19/05/2005
vTPH C ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<1.0	<1.0	<1.0	[NA]	<1.0
Toluene	mg/kg	<1.0	<1.0	<1.0	[NA]	<1.0
Ethylbenzene	mg/kg	<1.0	<1.0	<1.0	[NA]	<1.0
m + p-Xylene	mg/kg	<2.0	<2.0	<2.0	[NA]	<2.0
o-Xylene	mg/kg	<1.0	<1.0	<1.0	[NA]	<1.0
Surrogate chlorobenzene-d5	%	85	95	69	[NA]	88

vTPH & BTEX in Soil	UNITS	05/1272-16	05/1272-18
Our Reference:	-----	109	110
Your Reference	-----	1.2-1.4	0-0.1
Depth	-----	Soil	Soil
Type of sample			
Date extracted	--	16/05/2005	16/05/2005
Date analysed	--	19/05/2005	19/05/2005
vTPH C ₆ - C ₉	mg/kg	<25	<25
Benzene	mg/kg	<1.0	<1.0
Toluene	mg/kg	<1.0	<1.0
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 chlorobenzene-d5	%	88	96

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	05/1272-1	05/1272-3	05/1272-4	05/1272-5	05/1272-7
Your Reference	-----	101	101	102	103	104
Depth	-----	0.3-0.5	2.8-3.0	0.3-0.5	0.3-0.5	0.3-0.5
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	17/05/2005	17/05/2005	17/05/2005	17/05/2005	17/05/2005
TPH C10 - C14	mg/kg	<100	<100	<100	<100	<100
TPH C15 - C28	mg/kg	<100	<100	<100	<100	<100
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate	%	97	96	96	95	98

sTPH in Soil (C10-C36)						
Our Reference:	UNITS	05/1272-9	05/1272-10	05/1272-12	05/1272-13	05/1272-15
Your Reference	-----	105	106	107	108	109
Depth	-----	0.3-0.5	0.3-0.5	0.2-0.3	0.3-0.5	0.3-0.5
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	17/05/2005	17/05/2005	17/05/2005	17/05/2005	17/05/2005
TPH C10 - C14	mg/kg	<100	<100	<100	<100	<100
TPH C15 - C28	mg/kg	<100	<100	<100	<100	<100
TPH C29 - C36	mg/kg	<100	<100	<100	<100	<100
Surrogate	%	95	95	95	98	93

sTPH in Soil (C10-C36)			
Our Reference:	UNITS	05/1272-16	05/1272-18
Your Reference	-----	109	110
Depth	-----	1.2-1.4	0-0.1
Type of sample		Soil	Soil
Date extracted	--	16/05/2005	16/05/2005
Date analysed	--	17/05/2005	17/05/2005
TPH C10 - C14	mg/kg	<100	<100
TPH C15 - C28	mg/kg	<100	<100
TPH C29 - C36	mg/kg	<100	<100
Surrogate	%	94	100

PAHs in Soil Our Reference: Your Reference Depth Type of sample	UNITS ----- -----	05/1272-1 101 0.3-0.5 Soil	05/1272-3 101 2.8-3.0 Soil	05/1272-4 102 0.3-0.5 Soil	05/1272-5 103 0.3-0.5 Soil	05/1272-7 104 0.3-0.5 Soil
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	20/05/2005	20/05/2005	20/05/2005	20/05/2005	20/05/2005
Naphthalene	mg/kg	<0.10	<0.10	<0.10	0.40	<0.10
Acenaphthylene	mg/kg	<0.10	<0.10	<0.10	1.6	<0.10
Acenaphthene	mg/kg	<0.10	<0.10	<0.10	0.20	<0.10
Fluorene	mg/kg	<0.10	<0.10	<0.10	1.2	<0.10
Phenanthrene	mg/kg	0.30	<0.10	1.5	8.4	0.60
Anthracene	mg/kg	<0.10	<0.10	0.60	2.2	0.20
Fluoranthene	mg/kg	0.20	0.10	2.7	11	0.90
Pyrene	mg/kg	0.20	0.10	3.2	9.3	0.90
Benzo(a)anthracene	mg/kg	0.10	<0.10	1.4	4.4	0.40
Chrysene	mg/kg	0.10	<0.10	1.5	3.8	0.40
Benzo(b,k)fluoranthene	mg/kg	<0.20	<0.20	1.6	4.3	0.40
Benzo(k)fluoranthene	mg/kg	<0.10	<0.10	0.70	1.9	0.20
Benzo(a)pyrene	mg/kg	<0.050	0.050	1.6	3.7	0.40
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.10	<0.10	0.70	1.8	0.20
Dibenzo(a,h)anthracene	mg/kg	<0.10	<0.10	0.20	0.40	<0.10
Benzo(g,h,i)perylene	mg/kg	<0.10	<0.10	0.70	1.4	0.20
Surrogate 2-fluorobiphenyl	%	102	128	120	107	121

PAHs in Soil Our Reference: Your Reference Depth Type of sample	UNITS ----- -----	05/1272-9 105 0.3-0.5 Soil	05/1272-10 106 0.3-0.5 Soil	05/1272-12 107 0.2-0.3 Soil	05/1272-13 108 0.3-0.5 Soil	05/1272-15 109 0.3-0.5 Soil
Date extracted	--	16/05/2005	16/05/2005	16/05/2005	16/05/2005	16/05/2005
Date analysed	--	20/05/2005	20/05/2005	20/05/2005	20/05/2005	20/05/2005
Naphthalene	mg/kg	<0.10	<0.10	<0.10	0.20	<0.10
Acenaphthylene	mg/kg	<0.10	0.10	0.10	<0.10	<0.10
Acenaphthene	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Fluorene	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Phenanthrene	mg/kg	0.40	0.60	1.4	0.40	<0.10
Anthracene	mg/kg	0.20	0.30	0.60	0.10	<0.10
Fluoranthene	mg/kg	1.3	1.8	2.1	0.30	0.20
Pyrene	mg/kg	1.4	1.9	2.1	0.30	0.20
Benzo(a)anthracene	mg/kg	0.80	1.1	0.90	<0.10	0.10
Chrysene	mg/kg	0.80	1.0	1.1	0.10	0.10
Benzo(b,k)fluoranthene	mg/kg	1.1	1.5	1.3	<0.20	<0.20
Benzo(k)fluoranthene	mg/kg	0.50	0.70	0.60	<0.10	0.10
Benzo(a)pyrene	mg/kg	0.90	1.4	1.2	0.050	0.090
Indeno(1,2,3-c,d)pyrene	mg/kg	0.50	0.80	0.60	<0.10	<0.10
Dibenzo(a,h)anthracene	mg/kg	<0.10	0.10	0.10	<0.10	<0.10
Benzo(g,h,i)perylene	mg/kg	0.50	0.70	0.50	<0.10	<0.10
Surrogate 2-fluorobiphenyl	%	115	112	81	112	110

PAHs in Soil Our Reference: Your Reference Depth Type of sample	UNITS ----- -----	05/1272-16 109 1.2-1.4 Soil	05/1272-18 110 0-0.1 Soil
Date extracted	--	16/05/2005	16/05/2005
Date analysed	--	20/05/2005	20/05/2005
Naphthalene	mg/kg	<0.10	<0.10
Acenaphthylene	mg/kg	<0.10	<0.10
Acenaphthene	mg/kg	<0.10	<0.10
Fluorene	mg/kg	<0.10	<0.10
Phenanthrene	mg/kg	<0.10	<0.10
Anthracene	mg/kg	<0.10	<0.10
Fluoranthene	mg/kg	0.20	<0.10
Pyrene	mg/kg	0.20	<0.10
Benzo(a)anthracene	mg/kg	<0.10	<0.10
Chrysene	mg/kg	0.10	<0.10
Benzo(b,k)fluoranthene	mg/kg	<0.20	<0.20
Benzo(k)fluoranthene	mg/kg	0.10	<0.10
Benzo(a)pyrene	mg/kg	0.10	<0.050
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.10	<0.10
Dibenzo(a,h)anthracene	mg/kg	<0.10	<0.10
Benzo(g,h,i)perylene	mg/kg	<0.10	<0.10
Surrogate 2-fluorobiphenyl	%	127	119

Organochlorine Pesticides in soil					
Our Reference:	UNITS	05/1272-1	05/1272-4	05/1272-13	05/1272-18
Your Reference	-----	101	102	108	110
Depth	-----	0.3-0.5	0.3-0.5	0.3-0.5	0-0.1
Type of sample		Soil	Soil	Soil	Soil
Date extracted	--	16/5/05	16/5/05	16/5/05	16/5/05
Date analysed	--	17/5/05	17/5/05	17/5/05	17/5/05
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	113	113	116

Organophosphorus Pesticides					
Our Reference:	UNITS	05/1272-1	05/1272-4	05/1272-13	05/1272-18
Your Reference	-----	101	102	108	110
Depth	-----	0.3-0.5	0.3-0.5	0.3-0.5	0-0.1
Type of sample		Soil	Soil	Soil	Soil
Date extracted	--	16/5/05	16/5/05	16/5/05	16/5/05
Date analysed	--	17/5/05	17/5/05	17/5/05	17/5/05
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	113	113	116

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

PCBs in Soil Our Reference: Your Reference Depth Type of sample	UNITS ----- -----	05/1272-1 101 0.3-0.5 Soil	05/1272-4 102 0.3-0.5 Soil	05/1272-13 108 0.3-0.5 Soil	05/1272-18 110 0-0.1 Soil
Date extracted	--	16/5/05	16/5/05	16/5/05	16/5/05
Date analysed	--	17/5/05	17/5/05	17/5/05	17/5/05
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	113	113	116

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

Total Phenolics in Soil					
Our Reference:	UNITS	05/1272-1	05/1272-4	05/1272-13	05/1272-18
Your Reference	-----	101	102	108	110
Depth	-----	0.3-0.5	0.3-0.5	0.3-0.5	0-0.1
Type of sample		Soil	Soil	Soil	Soil
Total Phenolics (as Phenol)	mg/kg	<0.50	<0.50	0.58	0.68

Acid extractable metals in soil	UNITS	05/1272-1	05/1272-3	05/1272-4	05/1272-5	05/1272-7
Our Reference:	-----	101	101	102	103	104
Your Reference	-----	0.3-0.5	2.8-3.0	0.3-0.5	0.3-0.5	0.3-0.5
Depth	-----	Soil	Soil	Soil	Soil	Soil
Type of sample						
Arsenic	mg/kg	17	7.4	2.9	4.7	3.3
Cadmium	mg/kg	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	7.6	11	13	10	18
Copper	mg/kg	28	15	32	33	31
Lead	mg/kg	150	140	83	130	65
Mercury	mg/kg	<0.10	<0.10	<0.10	0.40	<0.10
Nickel	mg/kg	13	6.9	10	3.1	9.8
Zinc	mg/kg	66	180	68	41	53

Acid extractable metals in soil	UNITS	05/1272-9	05/1272-10	05/1272-12	05/1272-13	05/1272-15
Our Reference:	-----	105	106	107	108	109
Your Reference	-----	0.3-0.5	0.3-0.5	0.2-0.3	0.3-0.5	0.3-0.5
Depth	-----	Soil	Soil	Soil	Soil	Soil
Type of sample						
Arsenic	mg/kg	3.2	4.0	7.1	2.5	3.8
Cadmium	mg/kg	1.6	11	2.1	<1.0	<1.0
Chromium	mg/kg	10	20	16	110	41
Copper	mg/kg	270	20	760	180	9.3
Lead	mg/kg	450	41	180	20	14
Mercury	mg/kg	0.20	<0.10	<0.10	<0.10	<0.10
Nickel	mg/kg	5.8	3.5	12	280	6.7
Zinc	mg/kg	580	140	910	420	19

Acid extractable metals in soil	UNITS	05/1272-16	05/1272-18	05/1272-19
Our Reference:	-----	109	110	Z2
Your Reference	-----	1.2-1.4	0-0.1	
Depth	-----	Soil	Soil	Soil
Type of sample				
Arsenic	mg/kg	3.9	2.4	2.0
Cadmium	mg/kg	<1.0	<1.0	<1.0
Chromium	mg/kg	8.9	2.7	13
Copper	mg/kg	8.8	4.1	27
Lead	mg/kg	35	1.0	20
Mercury	mg/kg	<0.10	<0.10	<0.10
Nickel	mg/kg	2.6	1.5	27
Zinc	mg/kg	270	7.8	230

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

Miscellaneous Inorg - soil				
Our Reference:	UNITS	05/1272-3	05/1272-6	05/1272-14
Your Reference	-----	101	103	108
Depth	-----	2.8-3.0	2.8-3.0	1.3-1.5
Type of sample		Soil	Soil	Soil
pH 1:5 soil:water	pH Units	7.2	7.8	7.5
Chloride, Cl soil 1:5 soil:water	mg/kg	520	200	70
Sulphate, SO ₄ 1:5 soil:water	mg/kg	<5.0	<5.0	<5.0

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

Asbestos	UNITS	05/1272-2	05/1272-4	05/1272-5	05/1272-9	05/1272-16
Our Reference:	-----	101	102	103	105	109
Your Reference	-----	1.3-1.5	0.3-0.5	0.3-0.5	0.3-0.5	1.2-1.4
Depth						
Type of sample		Soil	Soil	Soil	Soil	Soil
Sample Description		20 soil & rocks	20 soil & clay	20 soil, sand & rocks	20 soil & sand	20 soil
Asbestos ID in soil		No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected

.Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

sPOCAS					
Our Reference:	UNITS	05/1272-6	05/1272-8	05/1272-11	05/1272-17
Your Reference	-----	103	104	106	109
Depth	-----	2.8-3.0	2.8-3.0	1.3-1.5	2.8-3.0
Type of sample		Soil	Soil	Soil	Soil
POCAS		#	#	#	#

Method ID	Methodology Summary
GC.14	Soil samples extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
GC.16	Soil samples 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	Samples are extracted with Dichlormethane and analysed by GC-FID.
GC.12	Samples are extracted with Dichlormethane and analysed by GC-MS.
GC-5	Samples are extracted and analysed by GC with dual ECD's.
GC.8	üý...
GC.15	Samples are extracted with Dichlormethane and analysed by GC-MS.
GC-6	Samples are extracted and analysed by GC-ECD.
LAB.30	Total Phenolics - determined colorimetrically following distillation. Based on APHA 20th ED, 5530-D.
Ext-038	Analysed by Advanced Analytical Australia Pty Ltd. NATA accreditation 15109.
LAB.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.11	Chloride determined by argentometric titration.
LAB.9	Sulphate determined by Barium Chromate precipitation and determined colorimetrically.
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. Accreditation does not cover the identification of Synthetic Mineral Fibre.
Ext-002	Analysis subcontracted to SGS Environmental Cairns.

QUALITY CONTROL VOC's in soil	UNITS	PQL	METHOD	Blank
Chloromethane*	mg/kg	10	GC.14	<10
Vinyl Chloride*	mg/kg	10	GC.14	<10
Bromomethane*	mg/kg	10	GC.14	<10
Chloroethane*	mg/kg	10	GC.14	<10
1,1-Dichloroethene	mg/kg	1	GC.14	<1.0
methylene chloride	mg/kg	1	GC.14	<1.0
trans-1,2-dichloroethene	mg/kg	1	GC.14	<1.0
1,1-dichloroethane	mg/kg	1	GC.14	<1.0
2,2-dichloropropane	mg/kg	1	GC.14	<1.0
cis-1,2-dichloroethene	mg/kg	1	GC.14	<1.0
chloroform	mg/kg	1	GC.14	<1.0
bromochloroethane	mg/kg	1	GC.14	<1.0
1,1,1-trichloroethane	mg/kg	1	GC.14	<1.0
1,1-dichloropropene	mg/kg	1	GC.14	<1.0
carbon tetrachloride	mg/kg	1	GC.14	<1.0
Benzene	mg/kg	1	GC.14	<1.0
1,2-dichloroethane	mg/kg	1	GC.14	<1.0
trichloroethene	mg/kg	1	GC.14	<1.0
1,2-dichloropropane	mg/kg	1	GC.14	<1.0
dibromomethane	mg/kg	1	GC.14	<1.0
bromodichloromethane	mg/kg	1	GC.14	<1.0
Toluene	mg/kg	1	GC.14	<1.0
1,1,2-trichloroethane	mg/kg	1	GC.14	<1.0
tetrachloroethene	mg/kg	1	GC.14	<1.0
1,3-dichloropropane	mg/kg	1	GC.14	<1.0
dibromochloromethane	mg/kg	1	GC.14	<1.0
1,2-dibromomethane	mg/kg	1	GC.14	<1.0
chlorobenzene	mg/kg	1	GC.14	<1.0
Ethylbenzene	mg/kg	1	GC.14	<1.0
1,1,1,2-tetrachloroethane	mg/kg	1	GC.14	<1.0
m + p-Xylene	mg/kg	2	GC.14	<2.0
o-Xylene	mg/kg	1	GC.14	<1.0
styrene	mg/kg	1	GC.14	<1.0
isopropylbenzene	mg/kg	1	GC.14	<1.0
bromoform	mg/kg	1	GC.14	<1.0
1,1,2,2-tetrachloroethane	mg/kg	1	GC.14	<1.0
1,2,3-trichloropropane	mg/kg	1	GC.14	<1.0
n-propyl benzene	mg/kg	1	GC.14	<1.0
bromobenzene	mg/kg	1	GC.14	<1.0
1,3,5-trimethyl benzene	mg/kg	1	GC.14	<1.0
2-chlorotoluene	mg/kg	1	GC.14	<1.0

QUALITY CONTROL VOC's in soil	UNITS	PQL	METHOD	Blank				
4-chlorotoluene	mg/kg	1	GC.14	<1.0				
tert-butyl benzene	mg/kg	1	GC.14	<1.0				
1,2,4-trimethyl benzene	mg/kg	1	GC.14	<1.0				
sec-butyl benzene	mg/kg	1	GC.14	<1.0				
p-isopropyl toluene	mg/kg	1	GC.14	<1.0				
1,3-dichlorobenzene	mg/kg	1	GC.14	<1.0				
1,4-dichlorobenzene	mg/kg	1	GC.14	<1.0				
n-butyl benzene	mg/kg	1	GC.14	<1.0				
1,2-dichlorobenzene	mg/kg	1	GC.14	<1.0				
1,2-dibromo-3-chloropropane	mg/kg	1	GC.14	<1.0				
1,2,4-trichlorobenzene	mg/kg	1	GC.14	<1.0				
hexachlorobutadiene	mg/kg	1	GC.14	<1.0				
naphthalene	mg/kg	1	GC.14	<1.0				
1,2,3-trichlorobenzene	mg/kg	1	GC.14	<1.0				
Surrogate chlorobenzene-d5	%		GC.14	[NT]				
QUALITY CONTROL VTPH & BTEX in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
VTPH C6 - C9	mg/kg	25	GC.16	<25	[NT]	[NT]	Batch	94%
Benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	99%
Toluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	99%
Ethylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	98%
m + p-Xylene	mg/kg	2	GC.14	<2.0	[NT]	[NT]	Batch	97%
o-Xylene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	99%
Surrogate chlorobenzene-d5	%		GC.14		[NT]	[NT]	Batch	100%
QUALITY CONTROL sTPH in Soil (C10-C36)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
TPH C10 - C14	mg/kg	50	GC.3	<100	[NT]	[NT]	Batch	74%
TPH C15 - C28	mg/kg	100	GC.3	<100	[NT]	[NT]	Batch	82%
TPH C29 - C36	mg/kg	100	GC.3	<100	[NT]	[NT]	Batch	68%
Surrogate	%		GC.3	[NT]	[NT]	[NT]	Batch	86%
QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
Naphthalene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	97%
Acenaphthylene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Acenaphthene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Fluorene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	98%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
PAHs in Soil								
Phenanthrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	99%
Anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Fluoranthene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	98%
Pyrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	101%
Benzo(a)anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Chrysene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	95%
Benzo(b,k)fluoranthene	mg/kg	0.2	GC.12	<0.20	[NT]	[NT]	Batch	[NT]
Benzo(k)fluoranthene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Benzo(a)pyrene	mg/kg	0.05	GC.12	<0.050	[NT]	[NT]	Batch	96%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Surrogate 2-fluorobiphenyl	%		GC.12	[NT]	[NT]	[NT]	Batch	117%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
Organochlorine Pesticides in soil								
alpha-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	85%
HCB	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
beta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	71%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
Heptachlor	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	86%
delta-BHC	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
Aldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	83%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	81%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
pp-DDE	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	68%
Dieldrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	82%
Endrin	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	81%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
pp-DDD	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	64%
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
pp-DDT	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	[NT]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	[NT]	[NT]	05/1272-1	78%
Surrogate TCLMX	%		GC-5	[NT]	[NT]	[NT]	05/1272-1	124%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
Organophosphorus Pesticides								
Dimethoate	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	81%
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	79%
Ronnel	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	78%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	85%
Malathion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	[NT]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	80%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	74%
Ethion	mg/kg	0.1	GC.8	<0.1	[NT]	[NT]	05/1272-1	79%
Surrogate TCLMX	%		GC.15	[NT]	[NT]	[NT]	05/1272-1	[NT]
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
PCBs in Soil								
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	[NT]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	[NT]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	[NT]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	[NT]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	100%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	[NT]	[NT]	05/1272-1	[NT]
Surrogate TCLMX	%		GC.12	[NT]	[NT]	[NT]	05/1272-1	[NT]
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
Total Phenolics in Soil								
Total Phenolics (as Phenol)	mg/kg	0.5	LAB.30	<0.50	05/1272-1	<0.50 <0.50	Batch	113%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
Acid extractable metals in soil								
Arsenic	mg/kg	1	Ext-038	<1.0	05/1272-10	4.0 3.7 RPD: 8	Batch	95%
Cadmium	mg/kg	1	Ext-038	<1.0	05/1272-10	11 11 RPD: 0	Batch	95%
Chromium	mg/kg	1	Ext-038	<1.0	05/1272-10	20 16 RPD: 22	Batch	94%
Copper	mg/kg	1	Ext-038	<1.0	05/1272-10	20 24 RPD: 18	Batch	101%
Lead	mg/kg	1	Ext-038	<1.0	05/1272-10	41 33 RPD: 22	Batch	94%
Mercury	mg/kg	0.1	Ext-038	<0.10	05/1272-10	<0.10 0.12	Batch	95%
Nickel	mg/kg	1	Ext-038	<1.0	05/1272-10	3.5 3.6 RPD: 3	Batch	94%
Zinc	mg/kg	1	Ext-038	<1.0	05/1272-10	140 180 RPD: 25	Batch	87%

• Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

QUALITY CONTROL Miscellaneous Inorg - soil	UNITS	PQL	METHOD	Blank
pH 1:5 soil:water	pH Units		LAB.1	[NT]
Chloride, Cl soil 1:5 soil:water	mg/kg	5	LAB.11	<25
Sulphate, SO4 1:5 soil:water	mg/kg	5	LAB.9	<25
QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Moisture	%	0.1	LAB.8	<0.10
QUALITY CONTROL sPOCAS	UNITS	PQL	METHOD	Blank
POCAS		#	Ext-002	0.00



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CERTIFICATE OF ANALYSIS

Client:

Douglas Partners
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Kurt Plambeck

Sample log in details:

Envirolab Reference:	05/1342
Your Reference:	43034, Arncliffe
No. of samples:	2 Sand/Sludge mixes
Date samples received:	26/05/05
Date completed instructions received:	26/05/05

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 are reported on a dry weight basis for soils and on an as received basis for other matrices.

Metals in soil and Cyanide analysed by SGS Matraville report no: 37731.

The PQL is raised for PAH due to the sample matrix.

Unable to report surrogate recovery due to interference.

Report Details:

Date results requested by:	2/06/05
Date of Preliminary Report:	Not issued
Date of Final Report:	5/06/05

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Tests not covered by NATA are denoted with *.

INS: Insufficient sample for this test

NR: Not requested

<: Less than

NT: Not tested

PQL: Practical Quantitation limit

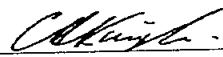
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Contact Details:

Please direct any queries to Tania Notaras
ph: 02 9958 5801 fax: 02 9958 5803

Authorised Signatory

Chris Kimpton
Senior Chemist


Chris Kimpton
Senior Chemist



Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

vTPH & BTEX in Soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15	05/1342-2 23
Date extracted	--	27/05/2005	27/05/2005
Date analysed	--	28/05/2005	28/05/2005
vTPH C ₆ - C ₉	mg/kg	<25	<25
Benzene	mg/kg	[NT]	<1.0
Toluene	mg/kg	[NT]	<1.0
Ethylbenzene	mg/kg	[NT]	<1.0
m + p-Xylene	mg/kg	[NT]	<2.0
o-Xylene	mg/kg	[NT]	<1.0
Surrogate chlorobenzene-d5	%	89	86

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

sTPH in Soil (C10-C36)			
Our Reference:	UNITS	05/1342-1	05/1342-2
Your Reference	-----	110/0.15	23

Date extracted	--	27/05/2005	27/05/2005
Date analysed	--	28/05/2005	28/05/2005
TPH C10 - C14	mg/kg	71,000	40,000
TPH C15 - C28	mg/kg	25,000	6,500
TPH C29 - C36	mg/kg	910	<100
Surrogate	%	#	133

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

PAHs in Soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15
Date extracted	--	27/05/2005
Date analysed	--	30/05/2005
Naphthalene	mg/kg	<10
Acenaphthylene	mg/kg	<10
Acenaphthene	mg/kg	<10
Fluorene	mg/kg	<10
Phenanthrene	mg/kg	<10
Anthracene	mg/kg	<10
Fluoranthene	mg/kg	<1
Pyrene	mg/kg	<1
Benzo(a)anthracene	mg/kg	<1
Chrysene	mg/kg	<1
Benzo(b,k)fluoranthene	mg/kg	<2
Benzo(a)pyrene	mg/kg	<0.5
Indeno(1,2,3-c,d)pyrene	mg/kg	<1
Dibenzo(a,h)anthracene	mg/kg	<1
Benzo(g,h,i)perylene	mg/kg	<1
Surrogate 2-fluorobiphenyl	%	#

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

Acid extractable metals in soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1	05/1342-2
		110/0.15	23
Arsenic	mg/kg	<3	<3
Cadmium	mg/kg	<0.5	<0.5
Chromium	mg/kg	2	4
Copper	mg/kg	13	56
Lead	mg/kg	3	10
Mercury	mg/kg	<0.05	<0.05
Nickel	mg/kg	1	3
Zinc	mg/kg	24	72

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

Miscellaneous Inorg - soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15
Total Cyanide pH 1:5 soil:water	mg/kg pH Units	<0.50 8.2

VOC's in soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15
Date extracted	--	5/06/2005
Date analysed	--	5/06/2005
Chloromethane*	mg/kg	<10
Vinyl Chloride*	mg/kg	<10
Bromomethane*	mg/kg	<10
Chloroethane*	mg/kg	<10
1,1-Dichloroethene	mg/kg	<1.0
trans-1,2-dichloroethene	mg/kg	<1.0
1,1-dichloroethane	mg/kg	<1.0
2,2-dichloropropane	mg/kg	<1.0
cis-1,2-dichloroethene	mg/kg	<1.0
chloroform	mg/kg	<1.0
bromochloroethane	mg/kg	<1.0
1,1,1-trichloroethane	mg/kg	<1.0
1,1-dichloropropene	mg/kg	<1.0
carbon tetrachloride	mg/kg	<1.0
Benzene	mg/kg	<1.0
1,2-dichloroethane	mg/kg	<1.0
trichloroethene	mg/kg	<1.0
1,2-dichloropropane	mg/kg	<1.0
dibromomethane	mg/kg	<1.0
bromodichloromethane	mg/kg	<1.0
Toluene	mg/kg	<1.0
1,1,2-trichloroethane	mg/kg	<1.0
tetrachloroethene	mg/kg	<1.0
1,3-dichloropropane	mg/kg	<1.0
dibromochloromethane	mg/kg	<1.0
1,2-dibromomethane	mg/kg	<1.0
chlorobenzene	mg/kg	<1.0
Ethylbenzene	mg/kg	<1.0
1,1,1,2-tetrachloroethane	mg/kg	<1.0
m + p-Xylene	mg/kg	<2.0
o-Xylene	mg/kg	<1.0
styrene	mg/kg	<1.0
isopropylbenzene	mg/kg	<1.0
bromoform	mg/kg	<1.0
1,1,2,2-tetrachloroethane	mg/kg	<1.0
1,2,3-trichloropropane	mg/kg	<1.0
n-propyl benzene	mg/kg	<1.0

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1272

Moisture						
Our Reference:	UNITS	05/1272-1	05/1272-3	05/1272-4	05/1272-5	05/1272-7
Your Reference	-----	101	101	102	103	104
Depth	-----	0.3-0.5	2.8-3.0	0.3-0.5	0.3-0.5	0.3-0.5
Type of sample		Soil	Soil	Soil	Soil	Soil
Moisture	%	21	24	12	9.2	12

Moisture						
Our Reference:	UNITS	05/1272-9	05/1272-10	05/1272-12	05/1272-13	05/1272-15
Your Reference	-----	105	106	107	108	109
Depth	-----	0.3-0.5	0.3-0.5	0.2-0.3	0.3-0.5	0.3-0.5
Type of sample		Soil	Soil	Soil	Soil	Soil
Moisture	%	19	17	15	10	20

Moisture			
Our Reference:	UNITS	05/1272-16	05/1272-18
Your Reference	-----	109	110
Depth	-----	1.2-1.4	0-0.1
Type of sample		Soil	Soil
Moisture	%	15	0.70

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

VOC's in soil Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15
bromobenzene	mg/kg	<1.0
1,3,5-trimethyl benzene	mg/kg	<1.0
2-chlorotoluene	mg/kg	<1.0
4-chlorotoluene	mg/kg	<1.0
tert-butyl benzene	mg/kg	<1.0
1,2,4-trimethyl benzene	mg/kg	<1.0
sec-butyl benzene	mg/kg	<1.0
p-isopropyl toluene	mg/kg	<1.0
1,3-dichlorobenzene	mg/kg	<1.0
1,4-dichlorobenzene	mg/kg	<1.0
n-butyl benzene	mg/kg	<1.0
1,2-dichlorobenzene	mg/kg	<1.0
1,2-dibromo-3-chloropropane	mg/kg	<1.0
1,2,4-trichlorobenzene	mg/kg	<1.0
hexachlorobutadiene	mg/kg	<1.0
naphthalene	mg/kg	<1.0
1,2,3-trichlorobenzene	mg/kg	<1.0
Surrogate chlorobenzene-d5	%	120

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

Moisture Our Reference: Your Reference	UNITS ----- -----	05/1342-1 110/0.15	05/1342-2 23
Moisture	%	18	9.8

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.
SEM-010	Analysis carried out by SGS Matraville - Determination of various metals by ICP-AES following aqua regia digest for soils.
SEM-005	Analysis carried out by SGS Matraville - Determination of Mercury by Cold Vapour Generation Atomic Absorption Spectroscopy.
SEI-043	Cyanide - determined colourimetrically, following steam stripping from an acidified sample. Based on APHA 20th ED, 4500-CN_C,E.
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.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
vTPH & BTEX in Soil								
vTPH C6 - C9	mg/kg	25	GC.16	<25	[NT]	[NT]	Batch	74%
Benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	86%
Toluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	74%
Ethylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	74%
m + p-Xylene	mg/kg	2	GC.14	<2.0	[NT]	[NT]	Batch	78%
o-Xylene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	Batch	74%
Surrogate chlorobenzene-d5	%		GC.14	[NT]	[NT]	[NT]	Batch	83%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
sTPH in Soil (C10-C36)								
TPH C10 - C14	mg/kg	50	GC.3	<50	[NT]	[NT]	Control	79%
TPH C15 - C28	mg/kg	100	GC.3	<100	[NT]	[NT]	Control	79%
TPH C29 - C36	mg/kg	100	GC.3	<100	[NT]	[NT]	Control	93%
Surrogate	%		GC.3	[NT]	[NT]	[NT]	Control	88%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
PAHs in Soil								
Naphthalene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	85%
Acenaphthylene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Acenaphthene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Fluorene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	96%
Phenanthrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	97%
Anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Fluoranthene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	100%
Pyrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	105%
Benzo(a)anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Chrysene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	101%
Benzo(b,k)fluoranthene	mg/kg	0.2	GC.12	<0.20	[NT]	[NT]	Batch	[NT]
Benzo(a)pyrene	mg/kg	0.05	GC.12	<0.050	[NT]	[NT]	Batch	98%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12	<0.10	[NT]	[NT]	Batch	[NT]
Surrogate 2- fluorobiphenyl	%		GC.12	[NT]	[NT]	[NT]	Batch	105%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
Acid extractable metals in soil								
Arsenic	mg/kg	3		<3	[NT]	[NT]	Sand	91%
Cadmium	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	Sand	92%
Chromium	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	Sand	89%
Copper	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	Sand	90%
Lead	mg/kg	2	SEM-010	<2	[NT]	[NT]	Sand	88%
Mercury	mg/kg	0.05	SEM-005	<0.05	[NT]	[NT]	Sand	101%
Nickel	mg/kg	0.2	SEM-010	<0.2	[NT]	[NT]	Sand	89%
Zinc	mg/kg	0.5	SEM-010	<0.5	[NT]	[NT]	Sand	89%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
Miscellaneous Inorg - soil								
Total Cyanide	mg/kg	0.5	SEI-043	<0.50	[NT]	[NT]	Control	82%
pH 1:5 soil:water	pH Units		LAB.1	[NT]	[NT]	[NT]	Control	[NT]
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
VOC's in soil								
Chloromethane*	mg/kg	10	GC.14	<10	[NT]	[NT]	05/1342-1	[NT]
Vinyl Chloride*	mg/kg	10	GC.14	<10	[NT]	[NT]	05/1342-1	[NT]
Bromomethane*	mg/kg	10	GC.14	<10	[NT]	[NT]	05/1342-1	[NT]
Chloroethane*	mg/kg	10	GC.14	<10	[NT]	[NT]	05/1342-1	[NT]
1,1-Dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
trans-1,2-dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1-dichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
2,2-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
cis-1,2-dichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
chloroform	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
bromochloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1,1-trichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1-dichloropropene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
carbon tetrachloride	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
Benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2-dichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
trichloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
dibromomethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
bromodichloromethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
Toluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1,2-trichloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
tetrachloroethene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,3-dichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]

Client Reference: 43034, Arncliffe

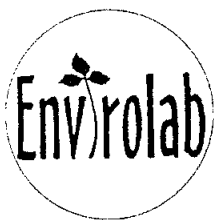
Envirolab Reference: 05/1342

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
VOC's in soil								
dibromochloromethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2-dibromomethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
chlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
Ethylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1,1,2-tetrachloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
m + p-Xylene	mg/kg	2	GC.14	<2.0	[NT]	[NT]	05/1342-1	[NT]
o-Xylene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
styrene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
isopropylbenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
bromoform	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,1,2,2-tetrachloroethane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2,3-trichloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
n-propyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
bromobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,3,5-trimethyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
2-chlorotoluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
4-chlorotoluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
tert-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2,4-trimethyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
sec-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
p-isopropyl toluene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,3-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,4-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
n-butyl benzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2-dichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2-dibromo-3-chloropropane	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2,4-trichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
hexachlorobutadiene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
napthalene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
1,2,3-trichlorobenzene	mg/kg	1	GC.14	<1.0	[NT]	[NT]	05/1342-1	[NT]
Surrogate chlorobenzene-d5	%		GC.14	[NT]	[NT]	[NT]	05/1342-1	[NT]

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1342

QUALITY CONTROL Moisture	UNITS	PQL	METHOD	Blank
Moisture	%	0.1	LAB.8	[NT]



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

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Kurt Plambeck

Sample log in details:

EnviroLab Reference:

05/1342A

Your Reference:

43034, Arncliffe Proposed

No. of samples:

2 Soils

Date samples received:

26/05/05

Date completed instructions received:

05/06/05

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 are reported on a dry weight basis for soils and on an as received basis for other matrices.

Report Details:

Date results requested by:

9/06/05

Date of Preliminary Report:

Not Issued

Date of Final Report:

9/06/05

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Tests not covered by NATA are denoted with *.

INS: Insufficient sample for this test

NT: Not tested

NR: Not requested

PQL: Practical Quantitation limit

<: Less than

>: Greater than

Contact Details:

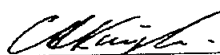
Authorised Signatory

Please direct any queries to Tania Notaras

ph: 02 9958 5801 fax: 02 9958 5803

Chris Kimpton

Senior Chemist


Chris Kimpton
Senior Chemist



Client Reference: 43034, Arncliffe Proposed

Envirolab Reference: 05/1342A

sTPH in Soil (C10-C36)			
Our Reference:	UNITS	05/1342A-1	05/1342A-2
Your Reference	-----	110/0.15	Z3
Type of sample	-----	Soil	Soil
Date extracted	--	7/06/2005	7/06/2005
Date analysed	--	8/06/2005	8/06/2005
TPH C10 - C14	mg/kg	66,000	40,000
TPH C15 - C28	mg/kg	34,000	5,300
TPH C29 - C36	mg/kg	1,400	<100
Surrogate	%	84	119

Client Reference: 43034, Arncliffe Proposed

Envirolab Reference: 05/1342A

Method ID	Methodology Summary
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.



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

Client:

Douglas Partners

96 Hermitage Rd

West Ryde

NSW 2114

Attention: Kurt Plambeck

Sample log in details:

Envirolab Reference:

05/1377

Your Reference:

43034, Arncliffe

No. of samples:

4 Waters

Date samples received:

31/05/05

Date completed instructions received:

31/05/05

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 are reported on a dry weight basis for soils and on an as received basis for other matrices.

Metals analysed by NMI, NATA Accreditation number 198, Report Number N05/016009.

Hardness by calculation from NMI data.

Report Details:

Date results requested by:

8/06/05

Date of Preliminary Report:

Not Issued

Date of Final Report:

8/06/05

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Tests not covered by NATA are denoted with *.

INS: Insufficient sample for this test

NT: Not tested

NR: Not requested

PQL: Practical Quantitation limit

<: Less than

>: Greater than

Contact Details:

Please direct any queries to Tania Notaras

ph: 02 9958 5801 fax: 02 9958 5803

Authorised Signatory

Chris Kimpton

Senior Chemist


Chris Kimpton
Senior Chemist



Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

vTPH & BTEX in Water				
Our Reference:	UNITS	05/1377-1	05/1377-2	05/1377-3
Your Reference	-----	W101	W104	W109
Type of sample	-----	Water	Water	Water
Date extracted	--	7/06/2005	7/06/2005	7/06/2005
Date analysed	--	7/06/2005	7/06/2005	7/06/2005
TPH C ₆ - C ₉	µg/L	<10	<10	<10
Benzene	µg/L	<1.0	<1.0	<1.0
Toluene	µg/L	<1.0	<1.0	<1.0
Ethylbenzene	µg/L	<1.0	<1.0	<1.0
m+p-xylene	µg/L	<2.0	<2.0	<2.0
o-xylene	µg/L	<1.0	<1.0	<1.0
Surrogate chlorobenzene-d5	%	77	74	60

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

sTPH in Water (C10-C36)	UNITS	05/1377-1	05/1377-2	05/1377-3
Our Reference:	-----	W101	W104	W109
Your Reference	-----	Water	Water	Water
Type of sample				
Date extracted	--	6/06/2005	6/06/2005	6/06/2005
Date analysed	--	7/06/2005	7/06/2005	7/06/2005
TPH C10 - C14	µg/L	<50	<50	<50
TPH C15 - C28	µg/L	<100	<100	<100
TPH C29 - C36	µg/L	<100	<100	<100
Surrogate	%	95	90	94

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

Metals in water (dissolved) Our Reference: Your Reference Type of sample	UNITS ----- -----	05/1377-1 W101 Water	05/1377-3 W109 Water	05/1377-4 ZW30/5 Water
Arsenic	mg/L	<0.001	0.001	<0.001
Cadmium	mg/L	0.0036	<0.001	<0.001
Chromium	mg/L	<0.005	0.002	0.002
Copper	mg/L	<0.005	0.001	0.001
Lead	mg/L	0.0019	<0.001	<0.001
Mercury	mg/L	0.0002	0.0002	0.0002
Nickel	mg/L	0.009	0.002	0.004
Zinc	mg/L	0.68	0.008	0.010

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

Miscellaneous Inorganics			
Our Reference:	UNITS	05/1377-1	05/1377-2
Your Reference	-----	W101	W104
Type of sample	-----	Water	Water
Hardness (Total) as CaCO ₃	mg/L	4,000	330
pH	pH Units	7.1	7.2
Electrical Conductivity	µS/cm	24,000	960

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

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.13	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.
Ext-020	Analysis subcontracted to Australian Government - National Measurement Institute.
LAB.7	Hardness by titrimetric determination.
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.

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
vTPH & BTEX in Water								
TPH C6 - C9	µg/L	10	GC.16	<10	[NT]	[NT]	Water	79%
Benzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	Water	86%
Toluene	µg/L	1	GC.13	<1.0	[NT]	[NT]	Water	86%
Ethylbenzene	µg/L	1	GC.13	<1.0	[NT]	[NT]	Water	87%
m+p-xylene	µg/L	2	GC.13	<2.0	[NT]	[NT]	Water	89%
o-xylene	µg/L	1	GC.13	<1.0	[NT]	[NT]	Water	89%
Surrogate chlorobenzene-d5	%		GC.13	[NT]	[NT]	[NT]	Water	86%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + % RPD	Spike Sm#	Matrix Spike % Recovery
sTPH in Water (C10-C36)								
TPH C10 - C14	µg/L	50	GC.3	<50	[NT]	[NT]	Water	65%
TPH C15 - C28	µg/L	100	GC.3	<100	[NT]	[NT]	Water	118%
TPH C29 - C36	µg/L	100	GC.3	<100	[NT]	[NT]	Water	98%
Surrogate	%		GC.16	[NT]	[NT]	[NT]	Water	85%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank				
Metals in water (dissolved)								
Calcium	mg/L	0.01	Ext-020	<0.01				
Magnesium	mg/L	0.03	Ext-020	<0.03				
Arsenic	mg/L	0.001	Ext-020	<0.001				
Cadmium	mg/L	0.0002	Ext-020	<0.000 2				
Chromium	mg/L	0.001	Ext-020	<0.001				
Copper	mg/L	0.001	Ext-020	<0.001				
Lead	mg/L	0.001	Ext-020	<0.001				
Mercury	mg/L	0.0001	Ext-020	<0.000 1				
Nickel	mg/L	0.001	Ext-020	<0.001				
Zinc	mg/L	0.001	Ext-020	<0.001				

Client Reference: 43034, Arncliffe

Envirolab Reference: 05/1377

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery
Miscellaneous Inorganics								
Hardness (Total) as CaCO ₃	mg/L	1	LAB.7	<1	[NT]	[NT]	LCS	[NT]
pH	pH Units		LAB.1	[NT]	[NT]	[NT]	LCS	100%
Electrical Conductivity	µS/cm	1	LAB.2	<1.0	[NT]	[NT]	LCS	105%

Appendix 1RESULTS I

Our Reference	Your Reference	Moisture % H ₂ O	pH _{KCl}	TAA (pH 6.5) kgH ₂ SO ₄ /tonne	pH _{ox}	TPA (pH 6.5) kgH ₂ SO ₄ /tonne	TSA (pH 6.5) kgH ₂ SO ₄ /tonne	ANC _E % CaCO ₃
Blank		-	6.0	-	5.6	-	-	-
1272-6	103/2.8	25	5.5	0.5	1.9	51	51	<0.1
Repeat 1272-6	Repeat 103/2.8	-	5.5	0.5	1.9	51	50	-
1272-8	104/2.8-3.0	26	8.6	<0.5	3.3	5.4	5.4	<0.1
1272-11	106/1.3	15	6.3	<0.5	6.7	<0.5	<0.5	<0.1
1272-17	109/2.8	13	6.0	<0.5	2.5	8.6	8.3	<0.1
Limit of Reporting		1	0.1	0.5	0.1	0.5	0.5	0.1
ASSMAC [†] method		2B1	23A	23F	23B	23G	23H	23Q

sPOCAS performed by SGS Cairns report no: 49313.

* NATA accreditation does not cover the performance of this analysis.

† ASSMAC - Acid Sulfate Soils Management Advisory Committee - Acid Sulfate Soil Manual, August 1998

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RESULTS II

Our Reference	Your Reference	S _{KCl} [*] % w/w	S _P [*] % w/w	S _{POS} [*] % w/w	Ca _{KCl} [*] % w/w	Ca _P [*] % w/w	Ca _A [*] % w/w	Mg _{KCl} [*] % w/w	Mg _P [*] % w/w	Mg _A [*] % w/w
49313-01	1272-6	0.059	1.8	1.8	0.031	0.039	0.008	0.034	0.036	<0.005
R49313-01	Repeat 1272-6	0.064	1.7	1.6	0.030	0.037	0.007	0.034	0.034	<0.005
49313-02	1272-8	0.022	0.48	0.45	0.21	0.38	0.17	0.025	0.042	0.017
49313-03	1272-11	<0.005	0.008	0.008	0.062	0.069	0.007	0.008	0.010	<0.005
49313-04	1272-17	0.019	0.36	0.34	0.028	0.028	<0.005	0.010	0.009	<0.005
	Limit of Reporting	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
	ASSMAC Method	23Ce	23De	23Ee	23Vh	23Wh	23Xh	23Sm	23Tm	23Um

Results determined on a dry basis.



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