

Client Reference: 72138, Macquarie Village

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	50196-1 101/1.0-1.4 20/12/2010 Soil	50196-2 102/0.1-0.2 20/12/2010 Soil	50196-3 102/0.5-0.6 20/12/2010 Soil	50196-4 102/1.0-1.1 20/12/2010 Soil	50196-5 103/0.1-0.2 20/12/2010 Soil
Date extracted	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	121	111	116	112	112

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	50196-6 104/0.1-0.2 20/12/2010 Soil	50196-7 107/0.1-0.2 20/12/2010 Soil	50196-8 107/0.5-0.6 20/12/2010 Soil	50196-9 109/0.1-0.2 20/12/2010 Soil	50196-10 109/0.5-0.6 20/12/2010 Soil
Date extracted	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	111	105	111	114

PCBs in Soil Our Reference: Your Reference Date Sampled Type of sample	UNITS ----- -----	50196-11 110/0.1-0.2 20/12/2010 Soil	50196-12 110/0.5-0.6 20/12/2010 Soil	50196-13 111/0.2-0.3 9/12/2010 Soil	50196-14 111/0.5-0.6 9/12/2010 Soil	50196-15 112/0.1-0.2 20/12/2010 Soil
Date extracted	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	107	114	117	115	112

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PCBs in Soil				
Our Reference:	UNITS	50196-16	50196-17	50196-18
Your Reference	-----	115/0.1-0.2	116/0.3-0.4	116/1.0-1.1
Date Sampled	-----	16/12/2010	17/12/2010	17/12/2010
Type of sample		Soil	Soil	Soil
Date extracted	-	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011
Arochlor 1016	mg/kg	<0.1	<0.1	<0.1
Arochlor 1221*	mg/kg	<0.1	<0.1	<0.1
Arochlor 1232	mg/kg	<0.1	<0.1	<0.1
Arochlor 1242	mg/kg	<0.1	<0.1	<0.1
Arochlor 1248	mg/kg	<0.1	<0.1	<0.1
Arochlor 1254	mg/kg	<0.1	<0.1	<0.1
Arochlor 1260	mg/kg	<0.1	<0.1	<0.1
Surrogate TCLMX	%	112	115	114

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Total Phenolics in Soil						
Our Reference:	UNITS	50196-1	50196-2	50196-3	50196-6	50196-7
Your Reference	-----	101/1.0-1.4	102/0.1-0.2	102/0.5-0.6	104/0.1-0.2	107/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	5/1/2011	5/1/2011	5/1/2011	5/1/2011	5/1/2011
Date analysed	-	5/1/2011	5/1/2011	5/1/2011	5/1/2011	5/1/2011
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0	<5.0	<5.0	<5.0

Total Phenolics in Soil					
Our Reference:	UNITS	50196-9	50196-10	50196-13	50196-14
Your Reference	-----	109/0.1-0.2	109/0.5-0.6	111/0.2-0.3	111/0.5-0.6
Date Sampled	-----	20/12/2010	20/12/2010	9/12/2010	9/12/2010
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	5/1/2011	5/1/2011	5/1/2011	5/1/2011
Date analysed	-	5/1/2011	5/1/2011	5/1/2011	5/1/2011
Total Phenolics (as Phenol)	mg/kg	<5.0	<5.0	<5.0	<5.0

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Acid Extractable metals in soil	UNITS	50196-1	50196-2	50196-3	50196-4	50196-5
Our Reference:	-----	101/1.0-1.4	102/0.1-0.2	102/0.5-0.6	102/1.0-1.1	103/0.1-0.2
Your Reference	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arsenic	mg/kg	9	<4	6	9	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	9	33	35	40	33
Copper	mg/kg	35	54	9	4	64
Lead	mg/kg	14	4	11	13	4
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	14	100	21	9	81
Zinc	mg/kg	62	42	10	5	39

Acid Extractable metals in soil	UNITS	50196-6	50196-7	50196-8	50196-9	50196-10
Our Reference:	-----	104/0.1-0.2	107/0.1-0.2	107/0.5-0.6	109/0.1-0.2	109/0.5-0.6
Your Reference	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arsenic	mg/kg	<4	<4	11	<4	7
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	17	39	22	65	17
Copper	mg/kg	59	61	4	43	10
Lead	mg/kg	3	4	17	7	18
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	110	110	13	69	6
Zinc	mg/kg	44	43	6	40	15

Acid Extractable metals in soil	UNITS	50196-11	50196-12	50196-13	50196-14	50196-15
Our Reference:	-----	110/0.1-0.2	110/0.5-0.6	111/0.2-0.3	111/0.5-0.6	112/0.1-0.2
Your Reference	-----	20/12/2010	20/12/2010	9/12/2010	9/12/2010	20/12/2010
Date Sampled		Soil	Soil	Soil	Soil	Soil
Type of sample						
Date digested	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011	04/01/2011	04/01/2011
Arsenic	mg/kg	18	8	7	<4	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	mg/kg	24	23	19	14	15
Copper	mg/kg	36	18	6	3	16
Lead	mg/kg	210	61	19	16	9
Mercury	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	7	6	5	2	13
Zinc	mg/kg	230	74	11	6	28

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Acid Extractable metals in soil				
Our Reference:	UNITS	50196-16	50196-17	50196-18
Your Reference	-----	115/0.1-0.2	116/0.3-0.4	116/1.0-1.1
Date Sampled	-----	16/12/2010	17/12/2010	17/12/2010
Type of sample		Soil	Soil	Soil
Date digested	-	04/01/2011	04/01/2011	04/01/2011
Date analysed	-	04/01/2011	04/01/2011	04/01/2011
Arsenic	mg/kg	<4	<4	<4
Cadmium	mg/kg	<0.5	<0.5	<0.5
Chromium	mg/kg	11	10	23
Copper	mg/kg	28	27	9
Lead	mg/kg	5	43	7
Mercury	mg/kg	<0.1	<0.1	<0.1
Nickel	mg/kg	28	13	21
Zinc	mg/kg	38	43	22

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Miscellaneous Inorg - soil				
Our Reference:	UNITS	50196-4	50196-18	50196-19
Your Reference	-----	102/1.0-1.1	116/1.0-1.1	103/1.0-1.1
Date Sampled	-----	20/12/2010	17/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil
Date prepared	-	5/1/2011	5/1/2011	5/1/2011
Date analysed	-	5/1/2011	5/1/2011	5/1/2011
pH 1:5 soil:water	pH Units	5.5	8.6	5.2
Chloride, Cl 1:5 soil:water	mg/kg	27	15	17
Sulphate, SO4 1:5 soil:water	mg/kg	31	45	40

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Moisture						
Our Reference:	UNITS	50196-1	50196-2	50196-3	50196-4	50196-5
Your Reference	-----	101/1.0-1.4	102/0.1-0.2	102/0.5-0.6	102/1.0-1.1	103/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	4/01/2011	4/01/2011	4/01/2011	4/01/2011	4/01/2011
Date analysed	-	5/01/2011	5/01/2011	5/01/2011	5/01/2011	5/01/2011
Moisture	%	15	16	21	22	5.9

Moisture						
Our Reference:	UNITS	50196-6	50196-7	50196-8	50196-9	50196-10
Your Reference	-----	104/0.1-0.2	107/0.1-0.2	107/0.5-0.6	109/0.1-0.2	109/0.5-0.6
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	4/01/2011	4/01/2011	4/01/2011	4/01/2011	4/01/2011
Date analysed	-	5/01/2011	5/01/2011	5/01/2011	5/01/2011	5/01/2011
Moisture	%	16	9.5	18	12	28

Moisture						
Our Reference:	UNITS	50196-11	50196-12	50196-13	50196-14	50196-15
Your Reference	-----	110/0.1-0.2	110/0.5-0.6	111/0.2-0.3	111/0.5-0.6	112/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	9/12/2010	9/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	4/01/2011	4/01/2011	4/01/2011	4/01/2011	4/01/2011
Date analysed	-	5/01/2011	5/01/2011	5/01/2011	5/01/2011	5/01/2011
Moisture	%	43	20	24	24	12

Moisture				
Our Reference:	UNITS	50196-16	50196-17	50196-18
Your Reference	-----	115/0.1-0.2	116/0.3-0.4	116/1.0-1.1
Date Sampled	-----	16/12/2010	17/12/2010	17/12/2010
Type of sample		Soil	Soil	Soil
Date prepared	-	4/01/2011	4/01/2011	4/01/2011
Date analysed	-	5/01/2011	5/01/2011	5/01/2011
Moisture	%	15	13	14

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Asbestos ID - soils						
Our Reference:	UNITS	50196-1	50196-2	50196-5	50196-6	50196-7
Your Reference	-----	101/1.0-1.4	102/0.1-0.2	103/0.1-0.2	104/0.1-0.2	107/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	5/01/2011	5/01/2011	5/01/2011	5/01/2011	5/01/2011
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Asbestos ID - soils					
Our Reference:	UNITS	50196-9	50196-11	50196-15	50196-16
Your Reference	-----	109/0.1-0.2	110/0.1-0.2	112/0.1-0.2	115/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	16/12/2010
Type of sample		Soil	Soil	Soil	Soil
Date analysed	-	5/01/2011	5/01/2011	5/01/2011	5/01/2011
Sample Description	-	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil	Approx 40g Soil
Asbestos ID in soil	-	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg	No asbestos found at reporting limit of 0.1g/kg
Trace Analysis	-	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected	Respirable fibres not detected

Method ID	Methodology Summary
GC.16	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS.
GC.3	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.
GC.12 subset	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
GC-5	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC.8	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
GC-6	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
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.1	pH - Measured using pH meter and electrode in accordance with APHA 20th ED, 4500-H+.
LAB.81	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA 21st ED, 4110-B.
LAB.8	Moisture content determined by heating at 105 deg C for a minimum of 4 hours.
ASB.1	Asbestos ID - Qualitative identification of asbestos type fibres in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques.

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH & BTEX in Soil						Base II Duplicate II %RPD		
Date extracted	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			05/01/2011	50196-1	05/01/2011 05/01/2011	LCS-3	05/01/2011
vTRH C6 - C9	mg/kg	25	GC.16	<25	50196-1	<25 <25	LCS-3	102%
Benzene	mg/kg	0.5	GC.16	<0.5	50196-1	<0.5 <0.5	LCS-3	107%
Toluene	mg/kg	0.5	GC.16	<0.5	50196-1	<0.5 <0.5	LCS-3	101%
Ethylbenzene	mg/kg	1	GC.16	<1.0	50196-1	<1.0 <1.0	LCS-3	94%
m+p-xylene	mg/kg	2	GC.16	<2.0	50196-1	<2.0 <2.0	LCS-3	104%
o-Xylene	mg/kg	1	GC.16	<1.0	50196-1	<1.0 <1.0	LCS-3	105%
Surrogate aaa-Trifluorotoluene	%		GC.16	116	50196-1	110 119 RPD: 8	LCS-3	114%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
sTRH in Soil (C10-C36)						Base II Duplicate II %RPD		
Date extracted	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			05/01/2011	50196-1	05/01/2011 05/01/2011	LCS-3	05/01/2011
TRH C10 - C14	mg/kg	50	GC.3	<50	50196-1	<50 <50	LCS-3	109%
TRH C15 - C28	mg/kg	100	GC.3	<100	50196-1	<100 <100	LCS-3	115%
TRH C29 - C36	mg/kg	100	GC.3	<100	50196-1	<100 <100	LCS-3	112%
Surrogate o-Terphenyl	%		GC.3	101	50196-1	104 97 RPD: 7	LCS-3	103%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Naphthalene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	93%
Acenaphthylene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	104%
Phenanthrene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	95%
Anthracene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	96%
Pyrene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	102%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(a)anthracene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	LCS-3	96%
Benzo(b+k)fluoranthene	mg/kg	0.2	GC.12 subset	<0.2	50196-1	<0.2 <0.2	[NR]	[NR]
Benzo(a)pyrene	mg/kg	0.05	GC.12 subset	<0.05	50196-1	<0.05 <0.05	LCS-3	90%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	GC.12 subset	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12 subset	104	50196-1	106 97 RPD: 9	LCS-3	116%

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	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
HCB	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	89%
gamma-BHC	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	75%
Heptachlor	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	86%
delta-BHC	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	83%
Heptachlor Epoxide	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	92%
gamma-Chlordane	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	71%
Dieldrin	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	111%
Endrin	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	91%
pp-DDD	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	75%
Endosulfan II	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	LCS-3	104%
Methoxychlor	mg/kg	0.1	GC-5	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-5	112	50196-1	121 109 RPD: 10	LCS-3	119%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Diazinon	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Dimethoate	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Ronnel	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	LCS-3	105%
Fenitrothion	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	LCS-3	116%
Bromophos-ethyl	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	GC.8	<0.1	50196-1	<0.1 <0.1	LCS-3	90%
Surrogate TCLMX	%		GC.8	112	50196-1	121 109 RPD: 10	LCS-3	134%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Date analysed	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-3	04/01/2011
Arochlor 1016	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	LCS-3	111%
Arochlor 1260	mg/kg	0.1	GC-6	<0.1	50196-1	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		GC-6	112	50196-1	121 109 RPD: 10	LCS-3	113%

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	-			5/1/2011	50196-1	5/1/2011 5/1/2011	LCS-1	5/1/2011
Date analysed	-			5/1/2011	50196-1	5/1/2011 5/1/2011	LCS-1	5/1/2011
Total Phenolics (as Phenol)	mg/kg	5	LAB.30	<5.0	50196-1	<5.0 <5.0	LCS-1	90%

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QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date digested	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-1	04/01/2011
Date analysed	-			04/01/2011	50196-1	04/01/2011 04/01/2011	LCS-1	04/01/2011
Arsenic	mg/kg	4	Metals.20 ICP-AES	<4	50196-1	9 9 RPD: 0	LCS-1	107%
Cadmium	mg/kg	0.5	Metals.20 ICP-AES	<0.5	50196-1	<0.5 <0.5	LCS-1	103%
Chromium	mg/kg	1	Metals.20 ICP-AES	<1	50196-1	9 9 RPD: 0	LCS-1	101%
Copper	mg/kg	1	Metals.20 ICP-AES	<1	50196-1	35 34 RPD: 3	LCS-1	108%
Lead	mg/kg	1	Metals.20 ICP-AES	<1	50196-1	14 14 RPD: 0	LCS-1	101%
Mercury	mg/kg	0.1	Metals.21 CV-AAS	<0.1	50196-1	<0.1 <0.1	LCS-1	104%
Nickel	mg/kg	1	Metals.20 ICP-AES	<1	50196-1	14 14 RPD: 0	LCS-1	105%
Zinc	mg/kg	1	Metals.20 ICP-AES	<1	50196-1	62 64 RPD: 3	LCS-1	101%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorg - soil						Base II Duplicate II %RPD		
Date prepared	-			5/1/2011	50196-4	5/1/2011 5/1/2011	LCS-1	5/1/2011
Date analysed	-			5/1/2011	50196-4	5/1/2011 5/1/2011	LCS-1	5/1/2011
pH 1:5 soil:water	pH Units		LAB.1	[NT]	50196-4	5.5 5.5 RPD: 0	LCS-1	101%
Chloride, Cl 1:5 soil:water	mg/kg	2	LAB.81	<2.0	50196-4	27 [N/T]	LCS-1	104%
Sulphate, SO4 1:5 soil:water	mg/kg	2	LAB.81	<2.0	50196-4	31 [N/T]	LCS-1	112%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank
Moisture				
Date prepared	-			04/01/2011
Date analysed	-			05/01/2011
Moisture	%	0.1	LAB.8	<0.10

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QUALITY CONTROL Asbestos ID - soils	UNITS	PQL	METHOD	Blank	
Date analysed	-			[NT]	
QUALITY CONTROL vTRH & BTEX in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	05/01/2011 05/01/2011	50196-2	05/01/2011
vTRH C6 - C9	mg/kg	50196-11	<25 <25	50196-2	95%
Benzene	mg/kg	50196-11	<0.5 <0.5	50196-2	100%
Toluene	mg/kg	50196-11	<0.5 <0.5	50196-2	95%
Ethylbenzene	mg/kg	50196-11	<1.0 <1.0	50196-2	86%
m+p-xylene	mg/kg	50196-11	<2.0 <2.0	50196-2	97%
o-Xylene	mg/kg	50196-11	<1.0 <1.0	50196-2	98%
Surrogate aaa-Trifluorotoluene	%	50196-11	110 104 RPD: 6	50196-2	118%
QUALITY CONTROL sTRH in Soil (C10-C36)	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	05/01/2011 05/01/2011	50196-2	05/01/2011
TRH C10 - C14	mg/kg	50196-11	<50 <50	50196-2	101%
TRH C15 - C28	mg/kg	50196-11	<100 <100	50196-2	105%
TRH C29 - C36	mg/kg	50196-11	<100 <100	50196-2	96%
Surrogate o-Terphenyl	%	50196-11	99 95 RPD: 4	50196-2	98%
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Naphthalene	mg/kg	50196-11	<0.1 <0.1	50196-2	86%
Acenaphthylene	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	50196-11	<0.1 <0.1	50196-2	85%
Phenanthrene	mg/kg	50196-11	<0.1 0.1	50196-2	87%
Anthracene	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	50196-11	0.3 0.4 RPD: 29	50196-2	87%
Pyrene	mg/kg	50196-11	0.3 0.4 RPD: 29	50196-2	90%
Benzo(a)anthracene	mg/kg	50196-11	0.2 0.2 RPD: 0	[NR]	[NR]
Chrysene	mg/kg	50196-11	0.2 0.3 RPD: 40	50196-2	88%
Benzo(b+k)fluoranthene	mg/kg	50196-11	0.4 0.6 RPD: 40	[NR]	[NR]
Benzo(a)pyrene	mg/kg	50196-11	0.2 0.3 RPD: 40	50196-2	80%
Indeno(1,2,3-c,d)pyrene	mg/kg	50196-11	0.2 0.2 RPD: 0	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	50196-11	0.2 0.2 RPD: 0	[NR]	[NR]

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QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
<i>Surrogate</i> p-Terphenyl-d14	%	50196-11	106 104 RPD: 2	50196-2	98%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
HCB	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	50196-11	<0.1 <0.1	50196-2	82%
gamma-BHC	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	50196-11	<0.1 <0.1	50196-2	70%
Heptachlor	mg/kg	50196-11	<0.1 <0.1	50196-2	84%
delta-BHC	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	50196-11	<0.1 <0.1	50196-2	77%
Heptachlor Epoxide	mg/kg	50196-11	<0.1 <0.1	50196-2	86%
gamma-Chlordane	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	50196-11	<0.1 <0.1	50196-2	66%
Dieldrin	mg/kg	50196-11	0.1 0.1 RPD: 0	50196-2	104%
Endrin	mg/kg	50196-11	<0.1 <0.1	50196-2	88%
pp-DDD	mg/kg	50196-11	<0.1 <0.1	50196-2	70%
Endosulfan II	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	50196-11	<0.1 <0.1	50196-2	99%
Methoxychlor	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
<i>Surrogate</i> TCLMX	%	50196-11	107 111 RPD: 4	50196-2	113%

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QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Diazinon	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Dimethoate	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos-methyl	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Ronnel	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	50196-11	<0.1 <0.1	50196-2	105%
Fenitrothion	mg/kg	50196-11	<0.1 <0.1	50196-2	112%
Bromophos-ethyl	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	50196-11	<0.1 <0.1	50196-2	92%
Surrogate TCLMX	%	50196-11	107 111 RPD: 4	50196-2	115%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Arochlor 1016	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Arochlor 1221*	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Arochlor 1232	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Arochlor 1242	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Arochlor 1248	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Arochlor 1254	mg/kg	50196-11	<0.1 <0.1	50196-2	108%
Arochlor 1260	mg/kg	50196-11	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%	50196-11	107 111 RPD: 4	50196-2	97%
QUALITY CONTROL Total Phenolics in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	50196-2	5/1/2011
Date analysed	-	[NT]	[NT]	50196-2	5/1/2011
Total Phenolics (as Phenol)	mg/kg	[NT]	[NT]	50196-2	85%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date digested	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Date analysed	-	50196-11	04/01/2011 04/01/2011	50196-2	04/01/2011
Arsenic	mg/kg	50196-11	18 19 RPD: 5	50196-2	94%
Cadmium	mg/kg	50196-11	<0.5 <0.5	50196-2	82%
Chromium	mg/kg	50196-11	24 22 RPD: 9	50196-2	85%
Copper	mg/kg	50196-11	36 43 RPD: 18	50196-2	110%
Lead	mg/kg	50196-11	210 280 RPD: 29	50196-2	79%
Mercury	mg/kg	50196-11	0.1 0.1 RPD: 0	50196-2	107%
Nickel	mg/kg	50196-11	7 7 RPD: 0	50196-2	95%

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QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Zinc	mg/kg	50196-11	230 240 RPD: 4	50196-2	86%

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.

Asbestos ID was analysed by Approved Identifier: Paul Ching
Asbestos ID was authorised by Approved Signatory: Matt Mansfield

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Quality Control Definitions

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

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

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

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

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

Laboratory Acceptance Criteria

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



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CERTIFICATE OF ANALYSIS 50196-A

Client:

Douglas Partners
96 Hermitage Rd
West Ryde
NSW 2114

Attention: Gavin Boyd

Sample log in details:

Your Reference:
No. of samples:
Date samples received:
Date completed instructions received:

72138, Macquarie Village
Additional Testing on 7 Soils
24/12/2010
12/01/11

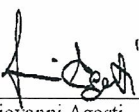
Analysis Details:

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: 14/01/11
Date of Preliminary Report: Not issued
Issue Date: 14/01/11
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:


Giovanni Agosti
Technical Manager


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 50196-A
Revision No: R 00



PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	50196-A-17
Your Reference	-----	116/0.3-0.4
Date Sampled	-----	17/12/2010
Type of sample		Soil
Date extracted	-	13/01/2011
Date analysed	-	13/01/2011
Naphthalene in TCLP	mg/L	<0.001
Acenaphthylene in TCLP	mg/L	<0.001
Acenaphthene in TCLP	mg/L	<0.001
Fluorene in TCLP	mg/L	<0.001
Phenanthrene in TCLP	mg/L	<0.001
Anthracene in TCLP	mg/L	<0.001
Fluoranthene in TCLP	mg/L	<0.001
Pyrene in TCLP	mg/L	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001
Chrysene in TCLP	mg/L	<0.001
Benzo(b+k)fluoranthene in TCLP	mg/L	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001
Surrogate p-Terphenyl-d14	%	114

Client Reference: 72138, Macquarie Village

Metals in TCLP USEPA1311						
Our Reference:	UNITS	50196-A-2	50196-A-5	50196-A-6	50196-A-7	50196-A-9
Your Reference	-----	102/0.1-0.2	103/0.1-0.2	104/0.1-0.2	107/0.1-0.2	109/0.1-0.2
Date Sampled	-----	20/12/2010	20/12/2010	20/12/2010	20/12/2010	20/12/2010
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	13/01/2010	13/01/2010	13/01/2010	13/01/2010	13/01/2010
Date analysed	-	13/01/2011	13/01/2011	13/01/2011	13/01/2011	13/01/2011
pH of soil for fluid# determ.	pH units	9.60	9.80	9.90	9.70	8.80
pH of soil for fluid # determ. (acid)	pH units	1.50	1.60	1.60	1.50	1.50
Extraction fluid used	-	1	1	1	1	1
pH of final Leachate	pH units	5.40	5.50	5.20	5.50	5.20
Nickel in TCLP	mg/L	0.1	0.05	0.09	0.1	0.04

Metals in TCLP USEPA1311			
Our Reference:	UNITS	50196-A-11	50196-A-17
Your Reference	-----	110/0.1-0.2	116/0.3-0.4
Date Sampled	-----	20/12/2010	17/12/2010
Type of sample		Soil	Soil
Date extracted	-	13/01/2010	13/01/2010
Date analysed	-	13/01/2011	13/01/2011
pH of soil for fluid# determ.	pH units	9.80	9.90
pH of soil for fluid # determ. (acid)	pH units	1.70	1.70
Extraction fluid used	-	1	1
pH of final Leachate	pH units	5.10	6.70
Lead in TCLP	mg/L	0.1	[NA]

Client Reference: 72138, Macquarie Village

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

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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	-			13/01/2011	[NT]	[NT]	LCS-W1	13/01/2011
Date analysed	-			13/01/2011	[NT]	[NT]	LCS-W1	13/01/2011
Naphthalene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	78%
Acenaphthylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	93%
Phenanthrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	95%
Anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	94%
Pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	99%
Benzo(a)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	98%
Benzo(b+k)fluoranthene in TCLP	mg/L	0.002	GC.12 subset	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	LCS-W1	95%
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	GC.12 subset	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		GC.12	89	[NT]	[NT]	LCS-W1	117%

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QUALITY CONTROL Metals in TCLP USEPA1311	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base Duplicate %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			13/01/2010	50196-A-2	13/01/2010 13/01/2010	LCS-W1	13/01/2011
Date analysed	-			13/01/2011	50196-A-2	13/01/2011 13/01/2011	LCS-W1	13/01/2011
Lead in TCLP	mg/L	0.03	Metals.20 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	103%
Nickel in TCLP	mg/L	0.02	Metals.20 ICP-AES	<0.02	50196-A-2	0.1 0.1 RPD: 0	LCS-W1	105%
QUALITY CONTROL Metals in TCLP USEPA1311	UNITS	Dup. Sm#		Duplicate Base + Duplicate + %RPD		Spike Sm#	Spike % Recovery	
Date extracted	-	[NT]		[NT]		50196-A-5	13/01/2011	
Date analysed	-	[NT]		[NT]		50196-A-5	13/01/2011	
Lead in TCLP	mg/L	[NT]		[NT]		[NR]	[NR]	
Nickel in TCLP	mg/L	[NT]		[NT]		50196-A-5	101%	

Report Comments:

Asbestos ID was analysed by Approved Identifier:
Asbestos ID was authorised by Approved Signatory:

Not applicable for this job
Not applicable for this job

INS: Insufficient sample for this test
NA: Test not required
<: Less than

PQL: Practical Quantitation Limit
RPD: Relative Percent Difference
>: Greater than

NT: Not tested
NA: Test not required
LCS: Laboratory Control Sample

Quality Control Definitions

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

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

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

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

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

Laboratory Acceptance Criteria

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