Appendix J – Laboratory Report

eurofins | mgt

Certificate of Analysis

Coffey Environments Pty Ltd Wollongong
118 Auburn Street
Wollongong
NSW 2500

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Colee Quayle**

Report **531960-S**
Project name UOW-MLS-CONTAM.DSI
Project ID 754-WOLGE200229
Received Date Jan 27, 2017

Client Sample ID			**MLSCBH08 0.2-0.3**	**MLSCBH08 0.5-0.6**	**MLSCBH08 2.5-2.8**	**MLSCBH09 0.0-0.1**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16945**	**S17-Ja16946**	**S17-Ja16948**	**S17-Ja16949**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	-	-
TRH C10-C14	20	mg/kg	-	< 20	-	-
TRH C15-C28	50	mg/kg	-	< 50	-	-
TRH C29-C36	50	mg/kg	-	< 50	-	-
TRH C10-36 (Total)	50	mg/kg	-	< 50	-	-
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	-	-
Toluene	0.1	mg/kg	-	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	-	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	-	< 0.2	-	-
o-Xylene	0.1	mg/kg	-	< 0.1	-	-
Xylenes - Total	0.3	mg/kg	-	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	-	61	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	< 0.5	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	< 50	-	-
TRH C6-C10	20	mg/kg	-	< 20	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	< 20	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	-
Acenaphthene	0.5	mg/kg	-	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	-
Anthracene	0.5	mg/kg	-	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Chrysene	0.5	mg/kg	-	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	-
Fluoranthene	0.5	mg/kg	-	< 0.5	-	-
Fluorene	0.5	mg/kg	-	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	-

Client Sample ID			MLSCBH08 0.2-0.3	MLSCBH08 0.5-0.6	MLSCBH08 2.5-2.8	MLSCBH09 0.0-0.1
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16945**	**S17-Ja16946**	**S17-Ja16948**	**S17-Ja16949**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Naphthalene	0.5	mg/kg	-	< 0.5	-	-
Phenanthrene	0.5	mg/kg	-	< 0.5	-	-
Pyrene	0.5	mg/kg	-	< 0.5	-	-
Total PAH*	0.5	mg/kg	-	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	-	88	-	-
p-Terphenyl-d14 (surr.)	1	%	-	99	-	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	-	< 1	-	< 1
Dibutylchlorendate (surr.)	1	%	-	117	-	131
Tetrachloro-m-xylene (surr.)	1	%	-	122	-	115
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	-	< 2	-	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	-	< 0.2
EPN	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	-	< 0.2

Client Sample ID			MLSCBH08 0.2-0.3	MLSCBH08 0.5-0.6	MLSCBH08 2.5-2.8	MLSCBH09 0.0-0.1
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16945**	**S17-Ja16946**	**S17-Ja16948**	**S17-Ja16949**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Fenthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	-	< 2	-	< 2
Omethoate	2	mg/kg	-	< 2	-	< 2
Phorate	0.2	mg/kg	-	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	91	-	113
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	-	-
TRH >C16-C34	100	mg/kg	-	< 100	-	-
TRH >C34-C40	100	mg/kg	-	< 100	-	-
% Moisture	1	%	9.8	15	20	15
Heavy Metals						
Arsenic	2	mg/kg	< 2	4.1	6.2	32
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	11	13	14	28
Copper	5	mg/kg	56	23	11	53
Lead	5	mg/kg	< 5	20	8.7	16
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	8.4	< 5	6.4
Zinc	5	mg/kg	31	42	5.9	65

Client Sample ID			MLSCBH09 0.2-0.3	MLSCBH09 0.9-1.0	MLSCBH09 1.3-1.6	MLSCBH04 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16950**	**S17-Ja16951**	**S17-Ja16952**	**S17-Ja16953**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	-	-	< 20
TRH C10-C14	20	mg/kg	-	-	-	< 20
TRH C15-C28	50	mg/kg	-	-	-	< 50
TRH C29-C36	50	mg/kg	-	-	-	140
TRH C10-36 (Total)	50	mg/kg	-	-	-	140

Client Sample ID			MLSCBH09 0.2-0.3	MLSCBH09 0.9-1.0	MLSCBH09 1.3-1.6	MLSCBH04 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16950**	**S17-Ja16951**	**S17-Ja16952**	**S17-Ja16953**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
BTEX						
Benzene	0.1	mg/kg	-	-	-	< 0.1
Toluene	0.1	mg/kg	-	-	-	< 0.1
Ethylbenzene	0.1	mg/kg	-	-	-	< 0.1
m&p-Xylenes	0.2	mg/kg	-	-	-	< 0.2
o-Xylene	0.1	mg/kg	-	-	-	< 0.1
Xylenes - Total	0.3	mg/kg	-	-	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	-	-	63
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	-	-	< 0.5
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	-	-	< 50
TRH C6-C10	20	mg/kg	-	-	-	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	-	-	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	-	0.6	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	-	1.2	-	1.2
Acenaphthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Acenaphthylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	-	< 0.5	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Chrysene	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluoranthene	0.5	mg/kg	-	< 0.5	-	< 0.5
Fluorene	0.5	mg/kg	-	< 0.5	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Naphthalene	0.5	mg/kg	-	< 0.5	-	< 0.5
Phenanthrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Pyrene	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PAH*	0.5	mg/kg	-	< 0.5	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	-	103	-	96
p-Terphenyl-d14 (surr.)	1	%	-	116	-	114
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	-	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	-	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	-	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	-	-	< 0.05
a-BHC	0.05	mg/kg	-	-	-	< 0.05
Aldrin	0.05	mg/kg	-	-	-	< 0.05
b-BHC	0.05	mg/kg	-	-	-	< 0.05
d-BHC	0.05	mg/kg	-	-	-	< 0.05
Dieldrin	0.05	mg/kg	-	-	-	< 0.05
Endosulfan I	0.05	mg/kg	-	-	-	< 0.05
Endosulfan II	0.05	mg/kg	-	-	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	-	-	< 0.05
Endrin	0.05	mg/kg	-	-	-	< 0.05

Client Sample ID			MLSCBH09 0.2-0.3	MLSCBH09 0.9-1.0	MLSCBH09 1.3-1.6	MLSCBH04 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16950**	**S17-Ja16951**	**S17-Ja16952**	**S17-Ja16953**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Endrin aldehyde	0.05	mg/kg	-	-	-	< 0.05
Endrin ketone	0.05	mg/kg	-	-	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	-	-	< 0.05
Heptachlor	0.05	mg/kg	-	-	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	-	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	-	-	< 0.05
Methoxychlor	0.2	mg/kg	-	-	-	< 0.2
Toxaphene	1	mg/kg	-	-	-	< 1
Dibutylchlorendate (surr.)	1	%	-	-	-	116
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	112
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	-	-	< 0.2
Bolstar	0.2	mg/kg	-	-	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	-	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	-	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	-	-	< 0.2
Coumaphos	2	mg/kg	-	-	-	< 2
Demeton-S	0.2	mg/kg	-	-	-	< 0.2
Demeton-O	0.2	mg/kg	-	-	-	< 0.2
Diazinon	0.2	mg/kg	-	-	-	< 0.2
Dichlorvos	0.2	mg/kg	-	-	-	< 0.2
Dimethoate	0.2	mg/kg	-	-	-	< 0.2
Disulfoton	0.2	mg/kg	-	-	-	< 0.2
EPN	0.2	mg/kg	-	-	-	< 0.2
Ethion	0.2	mg/kg	-	-	-	< 0.2
Ethoprop	0.2	mg/kg	-	-	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	-	-	< 0.2
Fenitrothion	0.2	mg/kg	-	-	-	< 0.2
Fensulfothion	0.2	mg/kg	-	-	-	< 0.2
Fenthion	0.2	mg/kg	-	-	-	< 0.2
Malathion	0.2	mg/kg	-	-	-	< 0.2
Merphos	0.2	mg/kg	-	-	-	< 0.2
Methyl parathion	0.2	mg/kg	-	-	-	< 0.2
Mevinphos	0.2	mg/kg	-	-	-	< 0.2
Monocrotophos	2	mg/kg	-	-	-	< 2
Omethoate	2	mg/kg	-	-	-	< 2
Phorate	0.2	mg/kg	-	-	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	-	-	< 0.2
Pyrazophos	0.2	mg/kg	-	-	-	< 0.2
Ronnel	0.2	mg/kg	-	-	-	< 0.2
Terbufos	0.2	mg/kg	-	-	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	-	-	< 0.2
Tokuthion	0.2	mg/kg	-	-	-	< 0.2
Trichloronate	0.2	mg/kg	-	-	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	-	-	101
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	-	-	< 50
TRH >C16-C34	100	mg/kg	-	-	-	150
TRH >C34-C40	100	mg/kg	-	-	-	250

Client Sample ID			MLSCBH09 0.2-0.3	MLSCBH09 0.9-1.0	MLSCBH09 1.3-1.6	MLSCBH04 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16950**	**S17-Ja16951**	**S17-Ja16952**	**S17-Ja16953**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Chloride	10	mg/kg	17	-	41	-
Chromium (hexavalent)	1	mg/kg	-	-	-	< 1
Conductivity (1:5 aqueous extract at 25°C)	5	uS/cm	200	-	120	-
pH (1:5 Aqueous extract)	0.1	pH Units	7.4	-	4.3	-
Resistivity*	0.5	ohm.m	250	-	420	-
Sulphate (as SO4)	10	mg/kg	31	-	41	-
% Moisture	1	%	12	13	51	4.7
Heavy Metals						
Arsenic	2	mg/kg	-	-	-	2.4
Cadmium	0.4	mg/kg	-	-	-	< 0.4
Chromium	5	mg/kg	-	-	-	11
Copper	5	mg/kg	-	-	-	97
Lead	5	mg/kg	-	-	-	7.4
Mercury	0.1	mg/kg	-	-	-	< 0.1
Nickel	5	mg/kg	-	-	-	7.4
Zinc	5	mg/kg	-	-	-	49

Client Sample ID			MLSCBH04 0.4-0.5	MLSCBH05 0.1-0.2	MLSCBH05 0.6-0.7	MLSCBH06 0.5-0.6
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16954**	**S17-Ja16955**	**S17-Ja16956**	**S17-Ja16959**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	-	< 20	< 20
TRH C10-C14	20	mg/kg	-	-	< 20	< 20
TRH C15-C28	50	mg/kg	-	-	< 50	< 50
TRH C29-C36	50	mg/kg	-	-	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	-	-	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	-	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	-	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	-	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	-	61	65
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	-	-	< 0.5	< 0.5
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	-	-	< 50	< 50
TRH C6-C10	20	mg/kg	-	-	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	-	-	< 20	< 20
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			MLSCBH04 0.4-0.5	MLSCBH05 0.1-0.2	MLSCBH05 0.6-0.7	MLSCBH06 0.5-0.6
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16954**	**S17-Ja16955**	**S17-Ja16956**	**S17-Ja16959**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	105	-	83	-
p-Terphenyl-d14 (surr.)	1	%	114	-	99	-
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	-	-	-	< 0.5
Aroclor-1221	0.1	mg/kg	-	-	-	< 0.1
Aroclor-1232	0.5	mg/kg	-	-	-	< 0.5
Aroclor-1242	0.5	mg/kg	-	-	-	< 0.5
Aroclor-1248	0.5	mg/kg	-	-	-	< 0.5
Aroclor-1254	0.5	mg/kg	-	-	-	< 0.5
Aroclor-1260	0.5	mg/kg	-	-	-	< 0.5
Total PCB*	0.5	mg/kg	-	-	-	< 0.5
Dibutylchlorendate (surr.)	1	%	-	-	-	110
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	106
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	-	< 50	< 50
TRH >C16-C34	100	mg/kg	-	-	< 100	< 100
TRH >C34-C40	100	mg/kg	-	-	< 100	< 100
% Moisture	1	%	11	9.6	20	20
Heavy Metals						
Arsenic	2	mg/kg	4.3	2.9	3.9	5.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	19	18	20
Copper	5	mg/kg	36	60	11	9.6
Lead	5	mg/kg	12	22	12	15
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	10	< 5	< 5
Zinc	5	mg/kg	17	110	6.5	5.7

Client Sample ID			QC1	MLSCBH01 0.2-0.3	MLSCBH01 1.1-1.2	MLSCBH02 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16961**	**S17-Ja16962**	**S17-Ja16963**	**S17-Ja16965**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	-	-	-
TRH C10-C14	20	mg/kg	< 20	-	-	-
TRH C15-C28	50	mg/kg	< 50	-	-	-
TRH C29-C36	50	mg/kg	180	-	-	-
TRH C10-36 (Total)	50	mg/kg	180	-	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	-
Toluene	0.1	mg/kg	< 0.1	-	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	-
o-Xylene	0.1	mg/kg	< 0.1	-	-	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	-	-
4-Bromofluorobenzene (surr.)	1	%	66	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	-	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	-	-	-
TRH C6-C10	20	mg/kg	< 20	-	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	-	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	0.6	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	1.2	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Total PAH*	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	88	-	82	-
p-Terphenyl-d14 (surr.)	1	%	102	-	100	-
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	-	-
a-BHC	0.05	mg/kg	< 0.05	-	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-	-

Client Sample ID			QC1	MLSCBH01 0.2-0.3	MLSCBH01 1.1-1.2	MLSCBH02 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16961**	**S17-Ja16962**	**S17-Ja16963**	**S17-Ja16965**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
b-BHC	0.05	mg/kg	< 0.05	-	-	-
d-BHC	0.05	mg/kg	< 0.05	-	-	-
Dieldrin	0.05	mg/kg	< 0.05	-	-	-
Endosulfan I	0.05	mg/kg	< 0.05	-	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-	-
Endrin	0.05	mg/kg	< 0.05	-	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Methoxychlor	0.2	mg/kg	< 0.2	-	-	-
Toxaphene	1	mg/kg	< 1	-	-	-
Dibutylchlorendate (surr.)	1	%	109	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	115	-	-	-
Organophosphorus Pesticides (OP)						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	-	-	-
Coumaphos	2	mg/kg	< 2	-	-	-
Demeton (total)	1	mg/kg	< 1	-	-	-
Diazinon	0.2	mg/kg	< 0.2	-	-	-
Dichlorvos	0.2	mg/kg	< 0.2	-	-	-
Dimethoate	0.2	mg/kg	< 0.2	-	-	-
Disulfoton	0.2	mg/kg	< 0.2	-	-	-
Ethoprop	0.2	mg/kg	< 0.2	-	-	-
Fenitrothion	0.2	mg/kg	< 0.2	-	-	-
Fensulfothion	0.2	mg/kg	< 0.2	-	-	-
Fenthion	0.2	mg/kg	< 0.2	-	-	-
Malathion	0.2	mg/kg	< 0.2	-	-	-
Methyl parathion	0.2	mg/kg	< 0.2	-	-	-
Mevinphos	0.2	mg/kg	< 0.2	-	-	-
Monocrotophos	2	mg/kg	< 2	-	-	-
Parathion	0.5	mg/kg	< 0.5	-	-	-
Phorate	0.2	mg/kg	< 0.2	-	-	-
Profenofos	0.2	mg/kg	< 0.2	-	-	-
Prothiofos	0.5	mg/kg	< 0.5	-	-	-
Ronnel	0.2	mg/kg	< 0.2	-	-	-
Stirophos	0.5	mg/kg	< 0.5	-	-	-
Trichloronate	0.2	mg/kg	< 0.2	-	-	-
Triphenylphosphate (surr.)	1	%	93	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	-	-
TRH >C16-C34	100	mg/kg	170	-	-	-
TRH >C34-C40	100	mg/kg	310	-	-	-
% Moisture	1	%	6.3	7.8	18	8.5

Client Sample ID			QC1	MLSCBH01 0.2-0.3	MLSCBH01 1.1-1.2	MLSCBH02 0.1-0.2
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16961**	**S17-Ja16962**	**S17-Ja16963**	**S17-Ja16965**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	2.7	2.3	6.5	3.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	16	23	65
Copper	5	mg/kg	110	160	27	82
Lead	5	mg/kg	14	13	10	22
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	16	5.2	< 5	12
Zinc	5	mg/kg	73	57	11	64

Client Sample ID			MLSCBH02 1.0-1.1	MLSCBH02 1.4-1.5	MLSCBH03 0.1-0.2	MLSCBH03 0.8-0.9
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16966**	**S17-Ja16967**	**S17-Ja16969**	**S17-Ja16970**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	-	-	-
TRH C10-C14	20	mg/kg	< 20	-	-	-
TRH C15-C28	50	mg/kg	< 50	-	-	-
TRH C29-C36	50	mg/kg	< 50	-	-	-
TRH C10-36 (Total)	50	mg/kg	< 50	-	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	-	-
Toluene	0.1	mg/kg	< 0.1	-	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-	-
o-Xylene	0.1	mg/kg	< 0.1	-	-	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	-	-
4-Bromofluorobenzene (surr.)	1	%	99	-	-	-
Halogenated Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	-	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	-	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	-	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	-	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	-	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	-	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	-	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	-	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	-	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	-	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	-	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	-	-
Bromoform	0.5	mg/kg	< 0.5	-	-	-
Bromomethane	0.5	mg/kg	< 0.5	-	-	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	-	-

Client Sample ID			MLSCBH02 1.0-1.1	MLSCBH02 1.4-1.5	MLSCBH03 0.1-0.2	MLSCBH03 0.8-0.9
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16966**	**S17-Ja16967**	**S17-Ja16969**	**S17-Ja16970**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Halogenated Volatile Organics						
Chlorobenzene	0.5	mg/kg	< 0.5	-	-	-
Chloroform	0.5	mg/kg	< 0.5	-	-	-
Chloromethane	0.5	mg/kg	< 0.5	-	-	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	-	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	-	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	-	-
Dibromomethane	0.5	mg/kg	< 0.5	-	-	-
Iodomethane	0.5	mg/kg	< 0.5	-	-	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	-	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	-	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	-	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	-	-
Trichloroethene	0.5	mg/kg	< 0.5	-	-	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	-	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	-	-
Fluorobenzene (surr.)	1	%	107	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	-	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	-	-	-
TRH C6-C10	20	mg/kg	< 20	-	-	-
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	-	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	-	-	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	-	-	1.2
Acenaphthene	0.5	mg/kg	< 0.5	-	-	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	-	-	< 0.5
Anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	-	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	-	-	< 0.5
Chrysene	0.5	mg/kg	< 0.5	-	-	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	-	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	-	-	< 0.5
Fluorene	0.5	mg/kg	< 0.5	-	-	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	-	-	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Pyrene	0.5	mg/kg	< 0.5	-	-	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	-	-	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	-	-	87
p-Terphenyl-d14 (surr.)	1	%	108	-	-	104
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	-	-

Client Sample ID			MLSCBH02 1.0-1.1	MLSCBH02 1.4-1.5	MLSCBH03 0.1-0.2	MLSCBH03 0.8-0.9
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16966**	**S17-Ja16967**	**S17-Ja16969**	**S17-Ja16970**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
a-BHC	0.05	mg/kg	< 0.05	-	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-	-
b-BHC	0.05	mg/kg	< 0.05	-	-	-
d-BHC	0.05	mg/kg	< 0.05	-	-	-
Dieldrin	0.05	mg/kg	< 0.05	-	-	-
Endosulfan I	0.05	mg/kg	< 0.05	-	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-	-
Endrin	0.05	mg/kg	< 0.05	-	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-	-
Methoxychlor	0.2	mg/kg	< 0.2	-	-	-
Toxaphene	1	mg/kg	< 1	-	-	-
Dibutylchlorendate (surr.)	1	%	95	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	91	-	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Bolstar	0.2	mg/kg	< 0.2	-	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	-	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	-	-
Coumaphos	2	mg/kg	< 2	-	-	-
Demeton-S	0.2	mg/kg	< 0.2	-	-	-
Demeton-O	0.2	mg/kg	< 0.2	-	-	-
Diazinon	0.2	mg/kg	< 0.2	-	-	-
Dichlorvos	0.2	mg/kg	< 0.2	-	-	-
Dimethoate	0.2	mg/kg	< 0.2	-	-	-
Disulfoton	0.2	mg/kg	< 0.2	-	-	-
EPN	0.2	mg/kg	< 0.2	-	-	-
Ethion	0.2	mg/kg	< 0.2	-	-	-
Ethoprop	0.2	mg/kg	< 0.2	-	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	-	-	-
Fenitrothion	0.2	mg/kg	< 0.2	-	-	-
Fensulfothion	0.2	mg/kg	< 0.2	-	-	-
Fenthion	0.2	mg/kg	< 0.2	-	-	-
Malathion	0.2	mg/kg	< 0.2	-	-	-
Merphos	0.2	mg/kg	< 0.2	-	-	-
Methyl parathion	0.2	mg/kg	< 0.2	-	-	-
Mevinphos	0.2	mg/kg	< 0.2	-	-	-
Monocrotophos	2	mg/kg	< 2	-	-	-
Omethoate	2	mg/kg	< 2	-	-	-
Phorate	0.2	mg/kg	< 0.2	-	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	-	-
Pyrazophos	0.2	mg/kg	< 0.2	-	-	-
Ronnel	0.2	mg/kg	< 0.2	-	-	-

Client Sample ID			MLSCBH02 1.0-1.1	MLSCBH02 1.4-1.5	MLSCBH03 0.1-0.2	MLSCBH03 0.8-0.9
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16966**	**S17-Ja16967**	**S17-Ja16969**	**S17-Ja16970**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Terbufos	0.2	mg/kg	< 0.2	-	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	-	-
Tokuthion	0.2	mg/kg	< 0.2	-	-	-
Trichloronate	0.2	mg/kg	< 0.2	-	-	-
Triphenylphosphate (surr.)	1	%	95	-	-	-
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	-	-	-
Aroclor-1221	0.1	mg/kg	< 0.1	-	-	-
Aroclor-1232	0.5	mg/kg	< 0.5	-	-	-
Aroclor-1242	0.5	mg/kg	< 0.5	-	-	-
Aroclor-1248	0.5	mg/kg	< 0.5	-	-	-
Aroclor-1254	0.5	mg/kg	< 0.5	-	-	-
Aroclor-1260	0.5	mg/kg	< 0.5	-	-	-
Total PCB*	0.5	mg/kg	< 0.5	-	-	-
Dibutylchlorendate (surr.)	1	%	95	-	-	-
Tetrachloro-m-xylene (surr.)	1	%	91	-	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	-	-
TRH >C16-C34	100	mg/kg	< 100	-	-	-
TRH >C34-C40	100	mg/kg	< 100	-	-	-
Chromium (hexavalent)	1	mg/kg	< 1	-	-	-
% Moisture	1	%	10	22	5.6	14
Heavy Metals						
Arsenic	2	mg/kg	5.0	< 2	3.9	6.2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	200	7.2	38	27
Copper	5	mg/kg	100	19	73	31
Lead	5	mg/kg	6.2	8.2	27	14
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	17	< 5	9.7	< 5
Zinc	5	mg/kg	41	6.9	89	16

Client Sample ID			MLSCBH07 0.3-0.4	QC2	QC2A
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16971**	**S17-Ja16972**	**S17-Ja16973**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit			
% Moisture	1	%	8.5	7.6	10
Heavy Metals					
Arsenic	2	mg/kg	3.8	2.7	2.6
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	20	14	15
Copper	5	mg/kg	61	53	60
Lead	5	mg/kg	33	15	16

Client Sample ID			MLSCBH07 0.3-0.4	QC2	QC2A
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S17-Ja16971**	**S17-Ja16972**	**S17-Ja16973**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit			
Heavy Metals					
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	7.4	9.6	10
Zinc	5	mg/kg	55	46	40

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B10			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Feb 02, 2017	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Feb 02, 2017	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2017	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 02, 2017	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Organochlorine Pesticides	Sydney	Feb 02, 2017	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Organophosphorus Pesticides (OP)	Sydney	Feb 02, 2017	14 Day
- Method: E014 Organophosphorus Pesticides (OP)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2017	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Feb 02, 2017	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
Halogenated Volatile Organics	Sydney	Feb 02, 2017	7 Day
- Method: E016 Volatile Halogenated Compounds (VHC)			
Organophosphorus Pesticides	Sydney	Feb 02, 2017	14 Day
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Feb 02, 2017	28 Day
- Method: E013 Polychlorinated Biphenyls (PCB)			
Chromium (hexavalent)	Sydney	Feb 02, 2017	28 Day
- Method: E043 /E057 Total Speciated Chromium			
Chloride	Sydney	Feb 03, 2017	28 Day
- Method: E033 /E045 /E047 Chloride			
Conductivity (1:5 aqueous extract at 25°C)	Sydney	Feb 03, 2017	7 Day
- Method: LTM-INO-4030			
pH (1:5 Aqueous extract)	Sydney	Feb 03, 2017	7 Day
- Method: LTM-GEN-7090 pH in soil by ISE			
Sulphate (as SO4)	Sydney	Feb 03, 2017	28 Day
- Method: E045 Sulphate			
% Moisture	Sydney	Jan 30, 2017	14 Day
- Method: LTM-GEN-7080 Moisture			

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
External Laboratory																					
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																
1	MLSCBH08 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16944				X												
2	MLSCBH08 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16945										X				X		
3	MLSCBH08 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16946	X					X	X	X		X	X			X	X	
4	MLSCBH08 1.0-1.3	Jan 23, 2017		Soil	S17-Ja16947				X												
5	MLSCBH08 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16948										X				X		
6	MLSCBH09	Jan 23, 2017		Soil	S17-Ja16949	X						X	X		X				X		

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.0-0.1																				
7	MLSCBH09 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16950												X		X		
8	MLSCBH09 0.9-1.0	Jan 23, 2017		Soil	S17-Ja16951						X								X		
9	MLSCBH09 1.3-1.6	Jan 23, 2017		Soil	S17-Ja16952												X		X		
10	MLSCBH04 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16953			X			X	X	X		X	X			X	X	
11	MLSCBH04 0.4-0.5	Jan 23, 2017		Soil	S17-Ja16954						X				X				X		
12	MLSCBH05 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16955										X				X		
13	MLSCBH05	Jan 23, 2017		Soil	S17-Ja16956	X					X				X	X			X	X	

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.6-0.7																				
14	MLSCBH05 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16957		X														
15	MLSCBH06 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16958				X												
16	MLSCBH06 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16959									X	X	X			X	X	
17	MLSCBH06 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16960				X												
18	QC1	Jan 23, 2017		Soil	S17-Ja16961														X		X
19	MLSCBH01 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16962										X				X		
20	MLSCBH01 1.1-1.2	Jan 23, 2017		Soil	S17-Ja16963						X				X				X		

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
21	MLSCBH01 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16964		X														
22	MLSCBH02 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16965										X				X		
23	MLSCBH02 1.0-1.1	Jan 23, 2017		Soil	S17-Ja16966	X		X			X	X	X	X	X	X		X	X	X	
24	MLSCBH02 1.4-1.5	Jan 23, 2017		Soil	S17-Ja16967										X				X		
25	MLSCBH02 2.4-2.5	Jan 23, 2017		Soil	S17-Ja16968				X												
26	MLSCBH03 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16969										X				X		
27	MLSCBH03 0.8-0.9	Jan 23, 2017		Soil	S17-Ja16970	X					X				X				X		

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
28	MLSCBH07 0.3-0.4	Jan 23, 2017		Soil	S17-Ja16971										X				X		
29	QC2	Jan 23, 2017		Soil	S17-Ja16972										X				X		
30	QC2A	Jan 23, 2017		Soil	S17-Ja16973										X				X		
31	WB1	Jan 23, 2017		Water	S17-Ja16974						X				X	X				X	
32	TRIP SPIKE	Jan 23, 2017		Water	S17-Ja16975											X					
33	TRIP BLANK	Jan 23, 2017		Water	S17-Ja16976					X						X					
34	MLSCBH 0.8-0.9	Jan 23, 2017		Soil	S17-Ja17019				X												
35	MLSCBH 0.1-0.2	Jan 23, 2017		Soil	S17-Ja17022				X												
Test Counts						5	2	2	7	1	9	4	4	2	20	8	2	1	23	6	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

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

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

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

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 20-130%

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Halogenated Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organophosphorus Pesticides (OP)							
Demeton (total)	mg/kg	< 1			1	Pass	
Parathion	mg/kg	< 0.5			0.5	Pass	
Profenofos	mg/kg	< 0.2			0.2	Pass	
Prothiofos	mg/kg	< 0.5			0.5	Pass	
Stirophos	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Chloride	mg/kg	< 10			10	Pass	
Chromium (hexavalent)	mg/kg	< 1			1	Pass	
Conductivity (1:5 aqueous extract at 25°C)	uS/cm	< 5			5	Pass	
Sulphate (as SO4)	mg/kg	< 10			10	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	119			70-130	Pass	
TRH C10-C14	%	72			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	100			70-130	Pass	
Toluene	%	96			70-130	Pass	
Ethylbenzene	%	94			70-130	Pass	
m&p-Xylenes	%	92			70-130	Pass	
o-Xylene	%	93			70-130	Pass	
Xylenes - Total	%	92			70-130	Pass	
LCS - % Recovery							
Halogenated Volatile Organics							
1.1-Dichloroethane	%	114			70-130	Pass	
1.1-Dichloroethene	%	112			70-130	Pass	
1.1.1-Trichloroethane	%	110			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	91			70-130	Pass	
1.1.2-Trichloroethane	%	110			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	98			70-130	Pass	
1.2-Dibromoethane	%	109			70-130	Pass	
1.2-Dichlorobenzene	%	115			70-130	Pass	
1.2-Dichloroethane	%	108			70-130	Pass	
1.2-Dichloropropane	%	110			70-130	Pass	
1.2.3-Trichloropropane	%	117			70-130	Pass	
1.3-Dichlorobenzene	%	115			70-130	Pass	
1.3-Dichloropropane	%	111			70-130	Pass	
1.4-Dichlorobenzene	%	115			70-130	Pass	
Bromodichloromethane	%	104			70-130	Pass	
Bromoform	%	88			70-130	Pass	
Carbon Tetrachloride	%	108			70-130	Pass	
Chlorobenzene	%	96			70-130	Pass	
Chloroform	%	113			70-130	Pass	
Chloromethane	%	120			70-130	Pass	
cis-1.2-Dichloroethene	%	115			70-130	Pass	
cis-1.3-Dichloropropene	%	104			70-130	Pass	
Dibromochloromethane	%	102			70-130	Pass	
Dibromomethane	%	111			70-130	Pass	
Iodomethane	%	71			70-130	Pass	
Methylene Chloride	%	101			70-130	Pass	
Tetrachloroethene	%	111			70-130	Pass	
trans-1.2-Dichloroethene	%	115			70-130	Pass	
trans-1.3-Dichloropropene	%	107			70-130	Pass	
Trichloroethene	%	110			70-130	Pass	
Trichlorofluoromethane	%	107			70-130	Pass	
Vinyl chloride	%	82			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	93			70-130	Pass	
TRH C6-C10	%	111			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	90			70-130	Pass	
Acenaphthylene	%	90			70-130	Pass	
Anthracene	%	102			70-130	Pass	
Benz(a)anthracene	%	74			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	78			70-130	Pass	
Benzo(g.h.i)perylene	%	125			70-130	Pass	
Benzo(k)fluoranthene	%	102			70-130	Pass	
Chrysene	%	108			70-130	Pass	
Dibenz(a.h)anthracene	%	105			70-130	Pass	
Fluoranthene	%	92			70-130	Pass	
Fluorene	%	89			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	92			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	79			70-130	Pass	
Pyrene	%	94			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	98			70-130	Pass	
4.4'-DDD	%	98			70-130	Pass	
4.4'-DDE	%	97			70-130	Pass	
4.4'-DDT	%	108			70-130	Pass	
a-BHC	%	100			70-130	Pass	
Aldrin	%	102			70-130	Pass	
b-BHC	%	109			70-130	Pass	
d-BHC	%	126			70-130	Pass	
Dieldrin	%	99			70-130	Pass	
Endosulfan I	%	101			70-130	Pass	
Endosulfan II	%	100			70-130	Pass	
Endosulfan sulphate	%	84			70-130	Pass	
Endrin	%	102			70-130	Pass	
Endrin aldehyde	%	95			70-130	Pass	
Endrin ketone	%	95			70-130	Pass	
g-BHC (Lindane)	%	98			70-130	Pass	
Heptachlor	%	105			70-130	Pass	
Heptachlor epoxide	%	98			70-130	Pass	
Hexachlorobenzene	%	94			70-130	Pass	
Methoxychlor	%	107			70-130	Pass	
Toxaphene	%	84			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	111			70-130	Pass	
Ethion	%	71			70-130	Pass	
Fenitrothion	%	113			70-130	Pass	
Methyl parathion	%	108			70-130	Pass	
Mevinphos	%	86			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	108			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides (OP)							
Prothiofos	%	92			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	73			70-130	Pass	
LCS - % Recovery							
Chloride	%	116			70-130	Pass	
Chromium (hexavalent)	%	96			70-130	Pass	
Sulphate (as SO4)	%	103			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	100			70-130	Pass	
Cadmium	%	100			70-130	Pass	
Copper	%	96			70-130	Pass	
Lead	%	98			70-130	Pass	
Mercury	%	95			70-130	Pass	
Nickel	%	97			70-130	Pass	
Zinc	%	96			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S17-Ja16791	NCP	%	96			70-130	Pass	
Cadmium	S17-Ja16791	NCP	%	100			70-130	Pass	
Copper	S17-Ja16791	NCP	%	95			70-130	Pass	
Lead	S17-Ja16791	NCP	%	100			70-130	Pass	
Mercury	S17-Ja16791	NCP	%	95			70-130	Pass	
Nickel	S17-Ja16791	NCP	%	95			70-130	Pass	
Zinc	S17-Ja16791	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S17-Ja12557	NCP	%	114			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S17-Fe00668	NCP	%	87			70-130	Pass	
Acenaphthylene	S17-Fe00668	NCP	%	86			70-130	Pass	
Anthracene	S17-Fe00668	NCP	%	97			70-130	Pass	
Benz(a)anthracene	S17-Fe00668	NCP	%	84			70-130	Pass	
Benzo(a)pyrene	S17-Fe00668	NCP	%	87			70-130	Pass	
Benzo(b&j)fluoranthene	S17-Fe00668	NCP	%	78			70-130	Pass	
Benzo(g.h.i)perylene	S17-Fe00668	NCP	%	103			70-130	Pass	
Benzo(k)fluoranthene	S17-Fe00668	NCP	%	93			70-130	Pass	
Chrysene	S17-Fe00668	NCP	%	97			70-130	Pass	
Dibenz(a.h)anthracene	S17-Fe00668	NCP	%	89			70-130	Pass	
Fluoranthene	S17-Fe00668	NCP	%	86			70-130	Pass	
Fluorene	S17-Fe00668	NCP	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S17-Fe00668	NCP	%	89			70-130	Pass	
Naphthalene	S17-Fe00668	NCP	%	88			70-130	Pass	
Phenanthrene	S17-Fe00668	NCP	%	73			70-130	Pass	
Pyrene	S17-Fe00668	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S17-Ja15639	NCP	%	106			70-130	Pass	
4.4'-DDD	S17-Ja15603	NCP	%	129			70-130	Pass	
4.4'-DDE	S17-Ja15639	NCP	%	103			70-130	Pass	
4.4'-DDT	S17-Ja15603	NCP	%	97			70-130	Pass	
a-BHC	S17-Ja15639	NCP	%	100			70-130	Pass	
Aldrin	S17-Ja15639	NCP	%	101			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
b-BHC	S17-Ja15639	NCP	%	101			70-130	Pass	
d-BHC	S17-Ja15639	NCP	%	124			70-130	Pass	
Dieldrin	S17-Ja15639	NCP	%	115			70-130	Pass	
Endosulfan I	S17-Ja15639	NCP	%	114			70-130	Pass	
Endosulfan II	S17-Ja15639	NCP	%	105			70-130	Pass	
Endosulfan sulphate	S17-Ja15603	NCP	%	82			70-130	Pass	
Endrin	S17-Ja15639	NCP	%	104			70-130	Pass	
Endrin aldehyde	S17-Ja15639	NCP	%	94			70-130	Pass	
Endrin ketone	S17-Ja15639	NCP	%	78			70-130	Pass	
g-BHC (Lindane)	S17-Ja15639	NCP	%	92			70-130	Pass	
Heptachlor	S17-Ja15639	NCP	%	99			70-130	Pass	
Heptachlor epoxide	S17-Ja15639	NCP	%	102			70-130	Pass	
Hexachlorobenzene	S17-Ja17315	NCP	%	78			70-130	Pass	
Methoxychlor	S17-Ja15639	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S17-Ja12557	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	S17-Ja16959	CP	%	113			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S17-Ja16961	CP	%	129			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S17-Ja16961	CP	%	110			70-130	Pass	
Toluene	S17-Ja16961	CP	%	107			70-130	Pass	
Ethylbenzene	S17-Ja16961	CP	%	106			70-130	Pass	
m&p-Xylenes	S17-Ja16961	CP	%	110			70-130	Pass	
o-Xylene	S17-Ja16961	CP	%	109			70-130	Pass	
Xylenes - Total	S17-Ja16961	CP	%	110			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S17-Ja16961	CP	%	84			70-130	Pass	
TRH C6-C10	S17-Ja16961	CP	%	129			70-130	Pass	
Spike - % Recovery									
Halogenated Volatile Organics				Result 1					
1.1-Dichloroethane	S17-Ja15615	NCP	%	118			70-130	Pass	
1.1-Dichloroethene	S17-Ja15615	NCP	%	115			70-130	Pass	
1.1.1-Trichloroethane	S17-Ja15615	NCP	%	110			70-130	Pass	
1.1.1.2-Tetrachloroethane	S17-Ja15615	NCP	%	90			70-130	Pass	
1.1.2-Trichloroethane	S17-Ja15615	NCP	%	112			70-130	Pass	
1.1.2.2-Tetrachloroethane	S17-Ja15615	NCP	%	101			70-130	Pass	
1.2-Dibromoethane	S17-Ja15615	NCP	%	111			70-130	Pass	
1.2-Dichlorobenzene	S17-Ja15615	NCP	%	114			70-130	Pass	
1.2-Dichloroethane	S17-Ja15615	NCP	%	110			70-130	Pass	
1.2-Dichloropropane	S17-Ja15615	NCP	%	112			70-130	Pass	
1.2.3-Trichloropropane	S17-Ja15615	NCP	%	120			70-130	Pass	
1.3-Dichlorobenzene	S17-Ja15615	NCP	%	112			70-130	Pass	
1.3-Dichloropropane	S17-Ja15615	NCP	%	113			70-130	Pass	
1.4-Dichlorobenzene	S17-Ja15615	NCP	%	113			70-130	Pass	
Bromodichloromethane	S17-Ja15615	NCP	%	100			70-130	Pass	
Bromoform	S17-Ja15615	NCP	%	82			70-130	Pass	
Carbon Tetrachloride	S17-Ja15615	NCP	%	104			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chlorobenzene	S17-Ja15615	NCP	%	96			70-130	Pass	
Chloroform	S17-Ja15615	NCP	%	116			70-130	Pass	
Chloromethane	S17-Ja15615	NCP	%	123			70-130	Pass	
cis-1.2-Dichloroethene	S17-Ja15615	NCP	%	119			70-130	Pass	
cis-1.3-Dichloropropene	S17-Ja15615	NCP	%	100			70-130	Pass	
Dibromochloromethane	S17-Ja15615	NCP	%	98			70-130	Pass	
Dibromomethane	S17-Ja15615	NCP	%	111			70-130	Pass	
Methylene Chloride	S17-Ja15615	NCP	%	119			70-130	Pass	
Tetrachloroethene	S17-Ja15615	NCP	%	110			70-130	Pass	
trans-1.2-Dichloroethene	S17-Ja15615	NCP	%	118			70-130	Pass	
trans-1.3-Dichloropropene	S17-Ja15615	NCP	%	103			70-130	Pass	
Trichloroethene	S17-Ja15615	NCP	%	111			70-130	Pass	
Trichlorofluoromethane	S17-Ja15615	NCP	%	111			70-130	Pass	
Vinyl chloride	S17-Ja15615	NCP	%	86			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	S17-Ja16806	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S17-Ja14093	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S17-Ja14093	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S17-Ja14093	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S17-Ja16946	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S17-Ja16946	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Omethoate	S17-Ja16946	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides (OP)				Result 1	Result 2	RPD			
Demeton (total)	S17-Ja16946	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Parathion	S17-Ja16946	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Profenofos	S17-Ja16946	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Prothiofos	S17-Ja16946	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Stirophos	S17-Ja16946	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S17-Ja14093	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S17-Ja14093	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S17-Ja14093	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Conductivity (1:5 aqueous extract at 25°C)	S17-Ja16785	NCP	uS/cm	120	110	2.0	30%	Pass	
pH (1:5 Aqueous extract)	S17-Ja16785	NCP	pH Units	4.2	4.2	pass	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S17-Ja16955	CP	%	9.6	9.6	1.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S17-Ja16959	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S17-Ja16959	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S17-Ja16959	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S17-Ja16959	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S17-Ja16959	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S17-Ja16959	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S17-Ja16959	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S17-Ja16959	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S17-Ja16959	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides (OP)				Result 1	Result 2	RPD			
Demeton (total)	S17-Ja10227	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Parathion	S17-Ja10227	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Profenofos	S17-Ja10227	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Prothiofos	S17-Ja10227	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Stirophos	S17-Ja10227	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S17-Ja16961	CP	mg/kg	2.7	2.3	16	30%	Pass	
Cadmium	S17-Ja16961	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S17-Ja16961	CP	mg/kg	13	30	83	30%	Fail	Q15
Lead	S17-Ja16961	CP	mg/kg	14	12	18	30%	Pass	
Mercury	S17-Ja16961	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Benzo(b&j)fluoranthene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S17-Ja16963	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Halogenated Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S17-Ja16807	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S17-Ja16966	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
b-BHC	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S17-Ja16966	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S17-Ja16966	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S17-Ja16966	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S17-Ja16966	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S17-Ja16966	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S17-Ja16970	CP	%	14	16	15	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S17-Ja16973	CP	mg/kg	2.6	2.8	6.0	30%	Pass	
Cadmium	S17-Ja16973	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S17-Ja16973	CP	mg/kg	15	23	42	30%	Fail	Q15
Copper	S17-Ja16973	CP	mg/kg	60	65	9.0	30%	Pass	
Lead	S17-Ja16973	CP	mg/kg	16	13	18	30%	Pass	
Mercury	S17-Ja16973	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Zinc	S17-Ja16973	CP	mg/kg	40	45	13	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins | mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

Nibha Vaidya	Analytical Services Manager
Nibha Vaidya	Senior Analyst-Asbestos (NSW)
Ryan Hamilton	Senior Analyst-Inorganic (NSW)
Ryan Hamilton	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)

Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Certificate of Analysis

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Coffey Environments Pty Ltd Wollongong
118 Auburn Street
Wollongong
NSW 2500

Attention:	Colee Quayle
Report	531960-AID
Project Name	UOW-MLS-CONTAM.DSI
Project ID	754-WOLGE200229
Received Date	Jan 27, 2017
Date Reported	Feb 03, 2017

Methodology:

Asbestos ID	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. Bulk samples include building materials, soils and ores.
Subsampling Soil Samples	The whole sample submitted is first dried and then sieved through a 10mm sieve followed by a 2mm sieve. All fibrous matter viz greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) Iron ores - Sampling and Sample preparation procedures is employed. Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis in accordance with AS 4964-2004.
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated and where required interfering organic fibres or matter may be removed by treating the sample for several hours at a temperature not exceeding 400 ± 30°C. The resultant material is then ground and examined in accordance with AS 4964-2004.
Limit of Reporting	The nominal detection limit of the AS4964 method is around 0.01%. The examination of large sample sizes (at least 500 ml is recommended) may improve the likelihood of identifying asbestos material in the greater than 2 mm fraction. The NEPM screening level of 0.001% w/w asbestos in soil for FA and AF (i.e. non-bonded/friable asbestos) only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. NOTE: NATA News, September 2011 – page 34, states, “Weighing of fibres is problematic and can lead to loss of fibres and potential exposure for laboratory analysts. To request laboratories to report information which is outside the scope of AS 4964-2004 and the scope of their accreditation is misleading and is most unwise” therefore such values reported are outside the scope of Eurofins | mgt NATA accreditation as designated by an asterisk.

Project Name UOW-MLS-CONTAM.DSI
Project ID 754-WOLGE200229
Date Sampled Jan 23, 2017
Report 531960-AID

Client Sample ID	Eurofins | mgt Sample No.	Date Sampled	Sample Description	Result
MLSCBH08 0.5-0.6	17-Ja16946	Jan 23, 2017	Approximate Sample 80g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
MLSCBH09 0.0-0.1	17-Ja16949	Jan 23, 2017	Approximate Sample 24g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
MLSCBH05 0.6-0.7	17-Ja16956	Jan 23, 2017	Approximate Sample 98g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
MLSCBH02 1.0-1.1	17-Ja16966	Jan 23, 2017	Approximate Sample 104g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
MLSCBH03 0.8-0.9	17-Ja16970	Jan 23, 2017	Approximate Sample 69g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 30, 2017	Indefinite

eurofins | mgt

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
External Laboratory																					
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																
1	MLSCBH08 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16944				X												
2	MLSCBH08 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16945										X				X		
3	MLSCBH08 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16946	X					X	X	X		X	X			X	X	
4	MLSCBH08 1.0-1.3	Jan 23, 2017		Soil	S17-Ja16947				X												
5	MLSCBH08 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16948										X				X		
6	MLSCBH09	Jan 23, 2017		Soil	S17-Ja16949	X						X	X		X				X		

eurofins | mgt

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.0-0.1																				
7	MLSCBH09 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16950												X		X		
8	MLSCBH09 0.9-1.0	Jan 23, 2017		Soil	S17-Ja16951						X								X		
9	MLSCBH09 1.3-1.6	Jan 23, 2017		Soil	S17-Ja16952												X		X		
10	MLSCBH04 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16953			X			X	X	X		X	X			X	X	
11	MLSCBH04 0.4-0.5	Jan 23, 2017		Soil	S17-Ja16954						X				X				X		
12	MLSCBH05 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16955										X				X		
13	MLSCBH05	Jan 23, 2017		Soil	S17-Ja16956	X					X				X	X			X	X	

eurofins | mgt

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.6-0.7																				
14	MLSCBH05 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16957		X														
15	MLSCBH06 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16958				X												
16	MLSCBH06 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16959									X	X	X			X	X	
17	MLSCBH06 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16960				X												
18	QC1	Jan 23, 2017		Soil	S17-Ja16961														X		X
19	MLSCBH01 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16962										X				X		
20	MLSCBH01 1.1-1.2	Jan 23, 2017		Soil	S17-Ja16963						X				X				X		

eurofins | mgt

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
21	MLSCBH01 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16964		X														
22	MLSCBH02 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16965										X				X		
23	MLSCBH02 1.0-1.1	Jan 23, 2017		Soil	S17-Ja16966	X		X			X	X	X	X	X	X		X	X	X	
24	MLSCBH02 1.4-1.5	Jan 23, 2017		Soil	S17-Ja16967										X				X		
25	MLSCBH02 2.4-2.5	Jan 23, 2017		Soil	S17-Ja16968				X												
26	MLSCBH03 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16969										X				X		
27	MLSCBH03 0.8-0.9	Jan 23, 2017		Soil	S17-Ja16970	X					X				X				X		

eurofins | mgt

ABN – 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
28	MLSCBH07 0.3-0.4	Jan 23, 2017		Soil	S17-Ja16971										X				X		
29	QC2	Jan 23, 2017		Soil	S17-Ja16972										X				X		
30	QC2A	Jan 23, 2017		Soil	S17-Ja16973										X				X		
31	WB1	Jan 23, 2017		Water	S17-Ja16974						X				X	X				X	
32	TRIP SPIKE	Jan 23, 2017		Water	S17-Ja16975											X					
33	TRIP BLANK	Jan 23, 2017		Water	S17-Ja16976					X						X					
34	MLSCBH 0.8-0.9	Jan 23, 2017		Soil	S17-Ja17019				X												
35	MLSCBH 0.1-0.2	Jan 23, 2017		Soil	S17-Ja17022				X												
Test Counts						5	2	2	7	1	9	4	4	2	20	8	2	1	23	6	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

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

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

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

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
COC	Chain of custody
SRA	Sample Receipt Advice
ISO	International Stardards Organisation
AS	Australian Standards
WA DOH	Western Australia Department of Health
NOHSC	National Occupational Health and Safety Commission
ACM	Bonded asbestos-containing material means any material containing more than 1% asbestos and comprises asbestos-containing-material which is in sound condition, although possibly broken or fragmented, and where the asbestos is bound in a matrix such as cement or resin. Common examples of ACM include but are not limited to: pipe and boiler insulation, sprayed-on fireproofing, troweled-on acoustical plaster, floor tile and mastic, floor linoleum, transite shingles, roofing materials, wall and ceiling plaster, ceiling tiles, and gasket materials. This term is restricted to material that cannot pass a 7 mm x 7 mm sieve. This sieve size is selected because it approximates the thickness of common asbestos cement sheeting and for fragments to be smaller than this would imply a high degree of damage and hence potential for fibre release.
FA	FA comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. This type of friable asbestos is defined here as asbestos material that is in a degraded condition such that it can be broken or crumbled by hand pressure. This material is typically unbonded or was previously bonded and is now significantly degraded (crumbling).
PACM	Presumed Asbestos-Containing Material means thermal system insulation and surfacing material found in buildings, vessels, and vessel sections constructed no later than 1980 that are assumed to contain greater than one percent asbestos but have not been sampled or analyzed to verify or negate the presence of asbestos.
AF	Asbestos fines (AF) are defined as free fibres, or fibre bundles, smaller than 7mm. It is the free fibres which present the greatest risk to human health, although very small fibres (< 5 microns in length) are not considered to be such a risk. AF also includes small fragments of bonded ACM that pass through a 7 mm x 7 mm sieve. (Note that for bonded ACM fragments to pass through a 7 mm x 7 mm sieve implies a substatntial degree of damage which increases the potential for fibre release.)
AC	Asbestos cement means a mixture of cement and asbestos fibres (typically 90:10 ratios).

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Authorised by:

Nibha Vaidya Senior Analyst - Asbestos(NSW)

Glenn Jackson
National Operations Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

Uncertainty data is available on request

eurofins | mgt

Certificate of Analysis

Coffey Environments Pty Ltd Wollongong
118 Auburn Street
Wollongong
NSW 2500

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Colee Quayle**

Report **531960-W**
Project name UOW-MLS-CONTAM.DSI
Project ID 754-WOLGE200229
Received Date Jan 27, 2017

Client Sample ID			**WB1**	**TRIP SPIKE**	**TRIP BLANK**
Sample Matrix			**Water**	**Water**	**Water**
Eurofins | mgt Sample No.			**S17-Ja16974**	**S17-Ja16975**	**S17-Ja16976**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	0.02	mg/L	< 0.02	-	< 0.02
TRH C10-C14	0.05	mg/L	0.07	-	-
TRH C15-C28	0.1	mg/L	< 0.1	-	-
TRH C29-C36	0.1	mg/L	< 0.1	-	-
TRH C10-36 (Total)	0.1	mg/L	< 0.1	-	-
BTEX					
Benzene	0.001	mg/L	< 0.001	98%	< 0.001
Toluene	0.001	mg/L	< 0.001	99%	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	92%	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	92%	< 0.002
o-Xylene	0.001	mg/L	< 0.001	92%	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	92%	< 0.003
4-Bromofluorobenzene (surr.)	1	%	98	101	91
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.01	mg/L	< 0.01	-	-
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05	-	-
TRH C6-C10	0.02	mg/L	< 0.02	-	-
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	-	-
Polycyclic Aromatic Hydrocarbons					
Acenaphthene	0.001	mg/L	< 0.001	-	-
Acenaphthylene	0.001	mg/L	< 0.001	-	-
Anthracene	0.001	mg/L	< 0.001	-	-
Benz(a)anthracene	0.001	mg/L	< 0.001	-	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	-	-
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001	-	-
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	-	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	-	-
Chrysene	0.001	mg/L	< 0.001	-	-
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	-	-
Fluoranthene	0.001	mg/L	< 0.001	-	-
Fluorene	0.001	mg/L	< 0.001	-	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	-	-
Naphthalene	0.001	mg/L	< 0.001	-	-
Phenanthrene	0.001	mg/L	< 0.001	-	-
Pyrene	0.001	mg/L	< 0.001	-	-

Client Sample ID			WB1	TRIP SPIKE	TRIP BLANK
Sample Matrix			**Water**	**Water**	**Water**
Eurofins | mgt Sample No.			**S17-Ja16974**	**S17-Ja16975**	**S17-Ja16976**
Date Sampled			**Jan 23, 2017**	**Jan 23, 2017**	**Jan 23, 2017**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Total PAH*	0.001	mg/L	< 0.001	-	-
2-Fluorobiphenyl (surr.)	1	%	112	-	-
p-Terphenyl-d14 (surr.)	1	%	127	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
TRH >C10-C16	0.05	mg/L	< 0.05	-	-
TRH >C16-C34	0.1	mg/L	< 0.1	-	-
TRH >C34-C40	0.1	mg/L	< 0.1	-	-
Heavy Metals					
Arsenic	0.001	mg/L	< 0.001	-	-
Cadmium	0.0002	mg/L	< 0.0002	-	-
Chromium	0.001	mg/L	< 0.001	-	-
Copper	0.001	mg/L	0.041	-	-
Lead	0.001	mg/L	< 0.001	-	-
Mercury	0.0001	mg/L	< 0.0001	-	-
Nickel	0.001	mg/L	< 0.001	-	-
Zinc	0.005	mg/L	0.010	-	-

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B10			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Feb 01, 2017	7 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jan 30, 2017	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 30, 2017	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 01, 2017	7 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 01, 2017	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Jan 30, 2017	28 Day
- Method: LTM-MET-3040 Metals in Waters by ICP-MS			

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
External Laboratory																					
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**																
1	MLSCBH08 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16944				X												
2	MLSCBH08 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16945										X				X		
3	MLSCBH08 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16946	X					X	X	X		X	X			X	X	
4	MLSCBH08 1.0-1.3	Jan 23, 2017		Soil	S17-Ja16947				X												
5	MLSCBH08 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16948										X				X		
6	MLSCBH09	Jan 23, 2017		Soil	S17-Ja16949	X						X	X		X				X		

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.0-0.1																				
7	MLSCBH09 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16950												X		X		
8	MLSCBH09 0.9-1.0	Jan 23, 2017		Soil	S17-Ja16951						X								X		
9	MLSCBH09 1.3-1.6	Jan 23, 2017		Soil	S17-Ja16952												X		X		
10	MLSCBH04 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16953			X			X	X	X		X	X			X	X	
11	MLSCBH04 0.4-0.5	Jan 23, 2017		Soil	S17-Ja16954						X				X				X		
12	MLSCBH05 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16955										X				X		
13	MLSCBH05	Jan 23, 2017		Soil	S17-Ja16956	X					X				X	X			X	X	

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
	0.6-0.7																				
14	MLSCBH05 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16957		X														
15	MLSCBH06 0.0-0.1	Jan 23, 2017		Soil	S17-Ja16958				X												
16	MLSCBH06 0.5-0.6	Jan 23, 2017		Soil	S17-Ja16959									X	X	X			X	X	
17	MLSCBH06 1.5-1.8	Jan 23, 2017		Soil	S17-Ja16960				X												
18	QC1	Jan 23, 2017		Soil	S17-Ja16961														X		X
19	MLSCBH01 0.2-0.3	Jan 23, 2017		Soil	S17-Ja16962										X				X		
20	MLSCBH01 1.1-1.2	Jan 23, 2017		Soil	S17-Ja16963						X				X				X		

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
21	MLSCBH01 2.5-2.8	Jan 23, 2017		Soil	S17-Ja16964		X														
22	MLSCBH02 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16965										X				X		
23	MLSCBH02 1.0-1.1	Jan 23, 2017		Soil	S17-Ja16966	X		X			X	X	X	X	X	X		X	X	X	
24	MLSCBH02 1.4-1.5	Jan 23, 2017		Soil	S17-Ja16967										X				X		
25	MLSCBH02 2.4-2.5	Jan 23, 2017		Soil	S17-Ja16968				X												
26	MLSCBH03 0.1-0.2	Jan 23, 2017		Soil	S17-Ja16969										X				X		
27	MLSCBH03 0.8-0.9	Jan 23, 2017		Soil	S17-Ja16970	X					X				X				X		

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW-MLS-CONTAM.DSI
Project ID: 754-WOLGE200229

Order No.:
Report #: 531960
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Jan 27, 2017 2:49 PM
Due: Feb 3, 2017
Priority: 5 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos Absence /Presence	CANCELLED	Chromium (hexavalent)	HOLD	TRH C6-C9	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	Metals M8	BTEX	Aggressivity Soil Set	Halogenated Volatile Organics	Moisture Set	Total Recoverable Hydrocarbons	Eurofins | mgt Suite B10
Melbourne Laboratory - NATA Site # 1254 & 14271																					
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																					
Perth Laboratory - NATA Site # 18217																					
28	MLSCBH07 0.3-0.4	Jan 23, 2017		Soil	S17-Ja16971										X				X		
29	QC2	Jan 23, 2017		Soil	S17-Ja16972										X				X		
30	QC2A	Jan 23, 2017		Soil	S17-Ja16973										X				X		
31	WB1	Jan 23, 2017		Water	S17-Ja16974						X				X	X				X	
32	TRIP SPIKE	Jan 23, 2017		Water	S17-Ja16975											X					
33	TRIP BLANK	Jan 23, 2017		Water	S17-Ja16976					X						X					
34	MLSCBH 0.8-0.9	Jan 23, 2017		Soil	S17-Ja17019				X												
35	MLSCBH 0.1-0.2	Jan 23, 2017		Soil	S17-Ja17022				X												
Test Counts						5	2	2	7	1	9	4	4	2	20	8	2	1	23	6	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

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

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

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

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 20-130%

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	115			70-130	Pass	
TRH C10-C14	%	129			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	108			70-130	Pass	
Toluene	%	105			70-130	Pass	
Ethylbenzene	%	104			70-130	Pass	
m&p-Xylenes	%	103			70-130	Pass	
o-Xylene	%	104			70-130	Pass	
Xylenes - Total	%	103			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	110			70-130	Pass	
TRH C6-C10	%	113			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	105			70-130	Pass	
Benz(a)anthracene	%	92			70-130	Pass	
Benzo(a)pyrene	%	96			70-130	Pass	
Benzo(b&j)fluoranthene	%	94			70-130	Pass	
Benzo(g.h.i)perylene	%	110			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	107			70-130	Pass	
Dibenz(a.h)anthracene	%	87			70-130	Pass	
Fluoranthene	%	100			70-130	Pass	
Fluorene	%	105			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	117			70-130	Pass	
Phenanthrene	%	106			70-130	Pass	
Pyrene	%	103			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	116			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	100			70-130	Pass	
Cadmium	%	99			70-130	Pass	
Chromium	%	92			70-130	Pass	
Copper	%	98			70-130	Pass	
Lead	%	90			70-130	Pass	
Mercury	%	99			70-130	Pass	
Nickel	%	96			70-130	Pass	
Zinc	%	102			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S17-Ja17318	NCP	%	81			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S17-Ja17318	NCP	%	76			70-130	Pass	
Toluene	S17-Ja17318	NCP	%	77			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ethylbenzene	S17-Ja17318	NCP	%	79			70-130	Pass	
m&p-Xylenes	S17-Ja17318	NCP	%	82			70-130	Pass	
o-Xylene	S17-Ja17318	NCP	%	82			70-130	Pass	
Xylenes - Total	S17-Ja17318	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S17-Ja17318	NCP	%	87			70-130	Pass	
TRH C6-C10	S17-Ja17318	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M17-Ja10741	NCP	%	106			70-130	Pass	
Cadmium	M17-Ja10741	NCP	%	109			70-130	Pass	
Chromium	M17-Ja10741	NCP	%	122			70-130	Pass	
Copper	M17-Ja10741	NCP	%	98			70-130	Pass	
Lead	M17-Ja10741	NCP	%	117			70-130	Pass	
Mercury	M17-Ja10741	NCP	%	117			70-130	Pass	
Nickel	M17-Ja10741	NCP	%	101			70-130	Pass	
Zinc	M17-Ja10741	NCP	%	102			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S17-Ja16974	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S17-Ja16974	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S17-Ja16974	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S17-Ja16974	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S17-Ja16974	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S17-Ja16974	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S17-Ja16974	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S17-Ja16974	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S17-Ja16974	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S17-Ja09891	NCP	mg/L	0.001	0.001	4.0	30%	Pass	
Cadmium	S17-Ja09891	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	M17-Ja10740	NCP	mg/L	0.001	0.001	8.0	30%	Pass	
Copper	M17-Ja10740	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Lead	S17-Ja09891	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury	S17-Ja09891	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	M17-Ja10740	NCP	mg/L	0.002	0.001	20	30%	Pass	
Zinc	S17-Ja09891	NCP	mg/L	0.008	0.007	16	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

Nibha Vaidya	Analytical Services Manager
Ryan Hamilton	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)

Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

Melbourne
3-5 Kingston Town Close
Oakleigh Vic 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 18217

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**Coffey Environments Pty Ltd Wollongong**
Contact name:	Colee Quayle
Project name:	UOW-MLS-CONTAM.DSI
Project ID:	754-WOLGE200229
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jan 27, 2017 2:49 PM
Eurofins | mgt reference:	**531960**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 7.2 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

ADDITIONAL SAMPLES MLSCBH 0.8-0.9 AND MLSCBH 0.1-0.2 PLACED ON HOLD

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Colee Quayle - Colee_Quayle@coffey.com.

coffey

Consigning Office:	Wollongong				
Report Results to:	Colee Quayle	Mobile:	0403242431	Email:	colee.quayle@coffey.com
Invoices to:	Colee Quayle	Phone:	0242011400	Email:	colee.quayle@coffey.com

Project No:	754-WOLGE200229	Task No:	Laboratory
Project Name:	UOW-MLS - Contam. DSI	Laboratory:	Eurofins
Sampler's Name:	Jarrad Mawbey	Project Manager:	Colee Quayle
Special Instructions:			

Analysis Request Section

Lab No.	Sample ID	Sample Depth	Sample Date	Matrix (Soil...etc)		T-A-T (specify)	TRH	BTEX	PAH	Metals (8)	OCP/OPP	PCB	Asbestos ID	Phenols	Chromium VI	Aggressivity		Hold	NOTES
	MLSCBH08	0.0-0.1	23/01/2017	Soil	J, I, Z	5 Day												X	
	MLSCBH08	0.2-0.3	23/01/2017	Soil	J, I, Z	5 Day				X									
	MLSCBH08	0.5-0.6	23/01/2017	Soil	J, I, Z	5 Day	X	X	X	X	X		X						Suite B1, M8, PAH, B14
	MLSCBH08	1.0-1.3	23/01/2017	Soil	J, I, Z	5 Day												X	
	MLSCBH08	2.5-2.8	23/01/2017	Soil	J, I, Z	5 Day				X									
	MLSCBH09	0.0-0.1	23/01/2017	Soil	J, I, Z	5 Day				X	X		X						Suite M8, B14
	MLSCBH09	0.2-0.3	23/01/2017	Soil	J, I, Z	5 Day										X			Aggressivity
	MLSCBH09	0.9-1.0	23/01/2017	Soil	J, I, Z	5 Day			X										
	MLSCBH09	1.3-1.6	23/01/2017	Soil	J, I, Z	5 Day										X			Aggressivity
	MLSCBH04	0.1-0.2	24/01/2017	Soil	J, I, Z	5 Day	X	X	X	X	X				X				Suite B10 + CrVI
	MLSCBH04	0.4-0.5	24/01/2017	Soil	J, I, Z	5 Day			X	X									Suite M8, PAH
	MLSCBH05	0.1-0.2	24/01/2017	Soil	J, I, Z	5 Day				X									Suite M8
	MLSCBH05	0.6-0.7	24/01/2017	Soil	J, I, Z	5 Day	X	X	X	X			X						Suite B7, Asb ID
	MLSCBH05	1.5-1.8	24/01/2017	Soil	J, I,	5 Day												X	
	MLSCBH06	0.0-0.1	24/01/2017	Soil	J, I, Z	5 Day												X	
	MLSCBH06	0.5-0.6	24/01/2017	Soil	J, I, Z	5 Day	X	X		X		X							Suite B5, PCB
	MLSCBH06	1.5-1.8	24/01/2017	Soil	J, I,	5 Day												X	
	QC1		24/01/2017	Soil	J, I, Z	5 Day	X	X	X	X	X								Suite B10

RELINQUISHED BY			RECEIVED BY		
Name:	Jarrad Mawbey	Date: 24/01/2017	Name: EM	Date: 30/1/17	
Coffey Environments		Time:	Company: Eurofins	Time: 10:20	
Name:		Date:	Name:	Date:	
Company:		Time:	Company:	Time:	

Sample Receipt Advice: (Lab Use Only)

All Samples Recieved in Good Condition ☐

All Documentation is in Proper Order ☐

Samples Received Properly Chilled ☐

Lab. Ref/Batch No. 531960

***Container Type & Preservation Codes:** **P** - Plastic, **G**- Glass Bottle, **J** - Glass Jar, **V**- Vial, **Z** - Ziplock bag, **N** - Nitric Acid Preserved, **C** - Hydrochloric Acid Preserved, **S** - Sulphuric Acid Preserved, **I** - Ice, **ST** - Sodium Thiosulfate, **NP** - No Preservative

coffey

Consigning Office:	Wollongong				
Report Results to:	Colee Quayle	Mobile:	0403242431	Email:	colee.quayle@coffey.com
Invoices to:	Colee Quayle	Phone:	0242011400	Email:	colee.quayle@coffey.com

Project No:	754-WOLGE200229	Task No:	Laboratory
Project Name:	UOW-MLS - Contam. DSI	Laboratory:	Eurofins
Sampler's Name:	Jarrad Mawbey	Project Manager:	Colee Quayle
Special Instructions:			

Lab No.	Sample ID	Sample Depth	Sample Date	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	TRH	BTEX	PAH	Metals (8)	OCP/OPP	PCB	Asbestos ID	Phenols	VHC	TRH C6-C9	Chromium VI	Hold	NOTES
	MLSCBH01	0.2-0.3	25/01/2017	Soil	J, I, Z	5 Day				X									Suite:M8
	MLSCBH01	1.1-1.2	25/01/2017	Soil	J, I, Z	5 Day			X	X									Suite:M8, PAH
	MLSCBH01	2.5-2.8	25/01/2017	Soil	J, I, Z	5 Day												X	
	MLSCBH02	0.1-0.2	25/01/2017	Soil	J, I, Z	5 Day				X									Suite:M8
	MLSCBH02	1.0-1.1	25/01/2017	Soil	J, I, Z	5 Day	X	X	X	X	X	X	X		X		X		Suite B10 +others as listed
	MLSCBH02	1.4-1.5	25/01/2017	Soil	J, I, Z	5 Day				X									Suite M8
	MLSCBH02	2.4-2.5	25/01/2017	Soil	J, I, Z	5 Day												X	
	MLSCBH03	0.1-0.2	25/01/2017	Soil	J, I, Z	5 Day				X									Suite:M8
	MLSCBH03	0.8-0.9	25/01/2017	Soil	J, I, Z	5 Day			X	X			X						Suite:M8, PAH, Asb ID
	MLSCBH07	0.3-0.4	25/01/2017	Soil	J, I, Z	5 Day				X									Suite:M8
	QC2		25/01/2017	Soil	J,I	5 Day				X									Suite:M8
	QC2a		25/01/2017	Soil	J,I	5 Day				X									Forward to ALS for analysis
	WB1		25/01/2017	Water	J, V, N, NP, G	5 Day	X	X	X	X									Suite B7
	Trip Spike		25/01/2017	Soil	V,I	5 Day		X											
	Trip Blank		25/01/2017	Soil	V,I	5 Day		X								X			

RELINQUISHED BY				RECEIVED BY			
Name:	Jarrad Mawbey	Date:	27/01/2017	Name:		Date:	
Coffey Environments		Time:	0600hrs	Company:		Time:	
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

All Samples Recieved in Good Condition ☐

All Documentation is in Proper Order ☐

Samples Received Properly Chilled ☐

Lab. Ref/Batch No.

***Container Type & Preservation Codes:** P - Plastic, G- Glass Bottle, J - Glass Jar, V- Vial, Z - Ziplock bag, N - Nitric Acid Preserved, C - Hydrochloric Acid Preserved, S - Sulphuric Acid Preserved, I - Ice, ST - Sodium Thiosulfate, NP - No Preservative

eurofins | mgt

Certificate of Analysis

Coffey Environments Pty Ltd Wollongong
118 Auburn Street
Wollongong
NSW 2500

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Colee Quayle**

Report **532530-W**
Project name UOW MLS BUILDING
Project ID 754-WOLGE200229
Received Date Feb 02, 2017

Client Sample ID			**MW1**	**WB1**	**QC1**	**MW1**
Sample Matrix			**Water**	**Water**	**Water**	**Water (Ultra-trace)**
Eurofins | mgt Sample No.			**S17-Fe01816**	**S17-Fe01817**	**S17-Fe01818**	**S17-Fe02043**
Date Sampled			**Feb 01, 2017**	**Feb 01, 2017**	**Feb 01, 2017**	**Feb 01, 2017**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
4-Bromofluorobenzene (surr.)	1	%	92	90	91	-
Halogenated Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	-

Client Sample ID			MW1	WB1	QC1	MW1
Sample Matrix			Water	Water	Water	Water (Ultra-trace)
Eurofins | mgt Sample No.			S17-Fe01816	S17-Fe01817	S17-Fe01818	S17-Fe02043
Date Sampled			Feb 01, 2017	Feb 01, 2017	Feb 01, 2017	Feb 01, 2017
Test/Reference	LOR	Unit				
Halogenated Volatile Organics						
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Fluorobenzene (surr.)	1	%	117	118	119	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.00005	mg/L	-	-	-	< 0.00005
Acenaphthylene	0.00005	mg/L	-	-	-	< 0.00005
Anthracene	0.00005	mg/L	-	-	-	< 0.00005
Benz(a)anthracene	0.00005	mg/L	-	-	-	< 0.00005
Benzo(a)pyrene	0.00001	mg/L	-	-	-	< 0.00001
Benzo(b&j)fluoranthene[N07]	0.00005	mg/L	-	-	-	< 0.00005
Benzo(g.h.i)perylene	0.00005	mg/L	-	-	-	< 0.00005
Benzo(k)fluoranthene	0.00005	mg/L	-	-	-	< 0.00005
Chrysene	0.00005	mg/L	-	-	-	< 0.00005
Dibenz(a.h)anthracene	0.00005	mg/L	-	-	-	< 0.00005
Fluoranthene	0.00005	mg/L	-	-	-	< 0.00005
Fluorene	0.00005	mg/L	-	-	-	< 0.00005
Indeno(1.2.3-cd)pyrene	0.00005	mg/L	-	-	-	< 0.00005
Naphthalene	0.00005	mg/L	-	-	-	< 0.00005
Phenanthrene	0.00005	mg/L	-	-	-	< 0.00005
Pyrene	0.00005	mg/L	-	-	-	< 0.00005
Total PAH*	0.00005	mg/L	-	-	-	< 0.00005
2-Fluorobiphenyl (surr.)	1	%	-	-	-	95
p-Terphenyl-d14 (surr.)	1	%	-	-	-	92
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	-
Chromium (hexavalent)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Total Dissolved Solids	5	mg/L	3100	45	3200	-

Client Sample ID			MW1	WB1	QC1	MW1
Sample Matrix			Water	Water	Water	Water (Ultra-trace)
Eurofins | mgt Sample No.			S17-Fe01816	S17-Fe01817	S17-Fe01818	S17-Fe02043
Date Sampled			Feb 01, 2017	Feb 01, 2017	Feb 01, 2017	Feb 01, 2017
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	-
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Copper (filtered)	0.001	mg/L	0.003	< 0.001	0.004	-
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	-
Nickel (filtered)	0.001	mg/L	0.051	< 0.001	0.051	-
Zinc (filtered)	0.005	mg/L	0.15	< 0.005	0.15	-
Alkali Metals						
Calcium	0.5	mg/L	49	0.7	48	-
Magnesium	0.5	mg/L	97	< 0.5	95	-
Hardness Set						
Hardness mg equivalent CaCO3/L	1	mg/L	520	2.1	510	-

Client Sample ID			WB1	QC1
Sample Matrix			Water (Ultra-trace)	Water (Ultra-trace)
Eurofins | mgt Sample No.			S17-Fe02044	S17-Fe02045
Date Sampled			Feb 01, 2017	Feb 01, 2017
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.00005	mg/L	< 0.00005	< 0.00005
Acenaphthylene	0.00005	mg/L	< 0.00005	< 0.00005
Anthracene	0.00005	mg/L	< 0.00005	< 0.00005
Benz(a)anthracene	0.00005	mg/L	< 0.00005	< 0.00005
Benzo(a)pyrene	0.00001	mg/L	< 0.00001	< 0.00001
Benzo(b&j)fluoranthene[N07]	0.00005	mg/L	< 0.00005	< 0.00005
Benzo(g.h.i)perylene	0.00005	mg/L	< 0.00005	< 0.00005
Benzo(k)fluoranthene	0.00005	mg/L	< 0.00005	< 0.00005
Chrysene	0.00005	mg/L	< 0.00005	< 0.00005
Dibenz(a.h)anthracene	0.00005	mg/L	< 0.00005	< 0.00005
Fluoranthene	0.00005	mg/L	< 0.00005	< 0.00005
Fluorene	0.00005	mg/L	< 0.00005	< 0.00005
Indeno(1.2.3-cd)pyrene	0.00005	mg/L	< 0.00005	< 0.00005
Naphthalene	0.00005	mg/L	< 0.00005	< 0.00005
Phenanthrene	0.00005	mg/L	< 0.00005	< 0.00005
Pyrene	0.00005	mg/L	< 0.00005	< 0.00005
Total PAH*	0.00005	mg/L	< 0.00005	< 0.00005
2-Fluorobiphenyl (surr.)	1	%	95	105
p-Terphenyl-d14 (surr.)	1	%	96	104

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins | mgt Suite B1			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Feb 02, 2017	7 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Feb 02, 2017	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2017	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2017	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Halogenated Volatile Organics	Sydney	Feb 02, 2017	7 Day
- Method: E016 Volatile Halogenated Compounds (VHC)			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 02, 2017	7 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Chromium (hexavalent)	Melbourne	Feb 03, 2017	28 Day
- Method: Cr (VI) by MGT 1170A			
Total Dissolved Solids	Sydney	Feb 06, 2017	7 Day
- Method: 4110 Total Dissolved Solids dried at 180 ± 2°C			
Metals M8 filtered	Sydney	Feb 02, 2017	28 Day
- Method: LTM-MET-3040 Metals in Waters by ICP-MS			
Hardness Set			
Calcium	Sydney	Feb 02, 2017	180 Day
- Method: LTM-MET-3010 Alkali Metals, S, Si and P by ICP-AES			
Magnesium	Sydney	Feb 02, 2017	180 Day
- Method: LTM-MET-3010 Alkali Metals, S, Si and P by ICP-AES			
Hardness mg equivalent CaCO3/L	Sydney	Feb 02, 2017	28 Day
- Method: E020.1 Hardness in water			

eurofins | mgt

ABN– 50 005 085 521
e.mail : EnviroSales@eurofins.com
web : www.eurofins.com.au

Melbourne
2-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 18217

Company Name: Coffey Environments Pty Ltd Wollongong
Address: 118 Auburn Street
Wollongong
NSW 2500

Project Name: UOW MLS BUILDING
Project ID: 754-WOLGE200229

Order No.:
Report #: 532530
Phone: 02 4201 1400
Fax: 02 4201 1401

Received: Feb 2, 2017 3:00 PM
Due: Feb 6, 2017
Priority: 2 Day
Contact Name: Colee Quayle

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Chromium (hexavalent)	Total Dissolved Solids	Polycyclic Aromatic Hydrocarbons	Metals M8 filtered	Hardness Set	Halogenated Volatile Organics	Eurofins | mgt Suite B1
Melbourne Laboratory - NATA Site # 1254 & 14271						X						
Sydney Laboratory - NATA Site # 18217							X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 18217												
External Laboratory												
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**							
1	MW1	Feb 01, 2017		Water	S17-Fe01816	X	X		X	X	X	X
2	WB1	Feb 01, 2017		Water	S17-Fe01817	X	X		X	X	X	X
3	QC1	Feb 01, 2017		Water	S17-Fe01818	X	X		X	X	X	X
4	MW1	Feb 01, 2017		Water (Ultra-trace)	S17-Fe02043			X				
5	WB1	Feb 01, 2017		Water (Ultra-trace)	S17-Fe02044			X				
6	QC1	Feb 01, 2017		Water (Ultra-trace)	S17-Fe02045			X				
Test Counts						3	3	3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
4. Results are uncorrected for matrix spikes or surrogate recoveries.
5. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
6. Samples were analysed on an 'as received' basis. 7. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

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

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

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

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per Kilogram

ug/l: micrograms per litre

ppb: Parts per billion

org/100ml: Organisms per 100 millilitres

MPN/100mL: Most Probable Number of organisms per 100 millilitres

mg/l: milligrams per litre

ppm: Parts per million

%: Percentage

NTU: Nephelometric Turbidity Units

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery
CRM	Certified Reference Material - reported as percent recovery
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands. In the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
Batch Duplicate	A second piece of analysis from a sample outside of the clients batch of samples but run within the laboratory batch of analysis.
Batch SPIKE	Spike recovery reported on a sample from outside of the clients batch of samples but run within the laboratory batch of analysis.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs 20-130%

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total	mg/L	< 0.003			0.003	Pass	
Method Blank							
Halogenated Volatile Organics							
1.1-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001			0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001			0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
Bromodichloromethane	mg/L	< 0.001			0.001	Pass	
Bromoform	mg/L	< 0.001			0.001	Pass	
Bromomethane	mg/L	< 0.001			0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001			0.001	Pass	
Chlorobenzene	mg/L	< 0.001			0.001	Pass	
Chloroform	mg/L	< 0.005			0.005	Pass	
Chloromethane	mg/L	< 0.001			0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Dibromochloromethane	mg/L	< 0.001			0.001	Pass	
Dibromomethane	mg/L	< 0.001			0.001	Pass	
Iodomethane	mg/L	< 0.001			0.001	Pass	
Methylene Chloride	mg/L	< 0.001			0.001	Pass	
Tetrachloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Trichloroethene	mg/L	< 0.001			0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001			0.001	Pass	
Vinyl chloride	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.00005			0.00005	Pass	
Acenaphthylene	mg/L	< 0.00005			0.00005	Pass	
Anthracene	mg/L	< 0.00005			0.00005	Pass	
Benz(a)anthracene	mg/L	< 0.00005			0.00005	Pass	
Benzo(a)pyrene	mg/L	< 0.00001			0.00001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.00005			0.00005	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.00005			0.00005	Pass	
Benzo(k)fluoranthene	mg/L	< 0.00005			0.00005	Pass	
Chrysene	mg/L	< 0.00005			0.00005	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.00005			0.00005	Pass	
Fluoranthene	mg/L	< 0.00005			0.00005	Pass	
Fluorene	mg/L	< 0.00005			0.00005	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.00005			0.00005	Pass	
Naphthalene	mg/L	< 0.00005			0.00005	Pass	
Phenanthrene	mg/L	< 0.00005			0.00005	Pass	
Pyrene	mg/L	< 0.00005			0.00005	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
Chromium (hexavalent)	mg/L	< 0.001			0.001	Pass	
Total Dissolved Solids	mg/L	< 5			5	Pass	
Method Blank							
Heavy Metals							
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	103			70-130	Pass	
TRH C10-C14	%	97			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	104			70-130	Pass	
Toluene	%	100			70-130	Pass	
Ethylbenzene	%	96			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	98			70-130	Pass	
Xylenes - Total	%	99			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Halogenated Volatile Organics							
1.1-Dichloroethane	%	101			70-130	Pass	
1.1-Dichloroethene	%	101			70-130	Pass	
1.1.1-Trichloroethane	%	97			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	78			70-130	Pass	
1.1.2-Trichloroethane	%	96			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	81			70-130	Pass	
1.2-Dibromoethane	%	95			70-130	Pass	
1.2-Dichlorobenzene	%	98			70-130	Pass	
1.2-Dichloropropane	%	96			70-130	Pass	
1.2.3-Trichloropropane	%	100			70-130	Pass	
1.3-Dichlorobenzene	%	98			70-130	Pass	
1.3-Dichloropropane	%	96			70-130	Pass	
1.4-Dichlorobenzene	%	98			70-130	Pass	
Bromodichloromethane	%	91			70-130	Pass	
Carbon Tetrachloride	%	95			70-130	Pass	
Chlorobenzene	%	81			70-130	Pass	
Chloromethane	%	108			70-130	Pass	
cis-1.2-Dichloroethene	%	102			70-130	Pass	
cis-1.3-Dichloropropene	%	88			70-130	Pass	
Dibromochloromethane	%	89			70-130	Pass	
Dibromomethane	%	95			70-130	Pass	
Iodomethane	%	74			70-130	Pass	
Methylene Chloride	%	100			70-130	Pass	
Tetrachloroethene	%	94			70-130	Pass	
trans-1.2-Dichloroethene	%	101			70-130	Pass	
trans-1.3-Dichloropropene	%	91			70-130	Pass	
Trichloroethene	%	96			70-130	Pass	
Trichlorofluoromethane	%	101			70-130	Pass	
Vinyl chloride	%	79			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	94			70-130	Pass	
TRH C6-C10	%	109			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	102			70-130	Pass	
Anthracene	%	105			70-130	Pass	
Benz(a)anthracene	%	92			70-130	Pass	
Benzo(a)pyrene	%	96			70-130	Pass	
Benzo(b&j)fluoranthene	%	94			70-130	Pass	
Benzo(g.h.i)perylene	%	110			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	107			70-130	Pass	
Dibenz(a.h)anthracene	%	87			70-130	Pass	
Fluoranthene	%	100			70-130	Pass	
Fluorene	%	105			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	117			70-130	Pass	
Phenanthrene	%	106			70-130	Pass	
Pyrene	%	103			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16			%	101			70-130	Pass	
LCS - % Recovery									
Chromium (hexavalent)			%	103			70-130	Pass	
Total Dissolved Solids			%	97			80-120	Pass	
LCS - % Recovery									
Alkali Metals									
Calcium			%	101			70-130	Pass	
Magnesium			%	109			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S17-Fe00018	NCP	%	97			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S17-Fe00018	NCP	%	98			70-130	Pass	
Toluene	S17-Fe00018	NCP	%	94			70-130	Pass	
Ethylbenzene	S17-Fe00018	NCP	%	90			70-130	Pass	
m&p-Xylenes	S17-Fe00018	NCP	%	92			70-130	Pass	
o-Xylene	S17-Fe00018	NCP	%	91			70-130	Pass	
Xylenes - Total	S17-Fe00018	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Halogenated Volatile Organics				Result 1					
1.1-Dichloroethane	S17-Ja16276	NCP	%	105			70-130	Pass	
1.1-Dichloroethene	S17-Ja16276	NCP	%	106			70-130	Pass	
1.1.1-Trichloroethane	S17-Ja16276	NCP	%	102			70-130	Pass	
1.1.1.2-Tetrachloroethane	S17-Ja16276	NCP	%	103			70-130	Pass	
1.1.2-Trichloroethane	S17-Ja16276	NCP	%	102			70-130	Pass	
1.1.2.2-Tetrachloroethane	S17-Ja16276	NCP	%	106			70-130	Pass	
1.2-Dibromoethane	S17-Ja16276	NCP	%	102			70-130	Pass	
1.2-Dichlorobenzene	S17-Ja16276	NCP	%	100			70-130	Pass	
1.2-Dichloroethane	S17-Ja16276	NCP	%	101			70-130	Pass	
1.2-Dichloropropane	S17-Ja16276	NCP	%	102			70-130	Pass	
1.2.3-Trichloropropane	S17-Ja16276	NCP	%	105			70-130	Pass	
1.3-Dichlorobenzene	S17-Ja16276	NCP	%	99			70-130	Pass	
1.3-Dichloropropane	S17-Ja16276	NCP	%	103			70-130	Pass	
1.4-Dichlorobenzene	S17-Ja16276	NCP	%	99			70-130	Pass	
Bromodichloromethane	S17-Ja16276	NCP	%	100			70-130	Pass	
Bromoform	S17-Ja16276	NCP	%	103			70-130	Pass	
Bromomethane	S17-Ja16276	NCP	%	104			70-130	Pass	
Carbon Tetrachloride	S17-Ja16276	NCP	%	103			70-130	Pass	
Chlorobenzene	S17-Ja16276	NCP	%	102			70-130	Pass	
Chloroform	S17-Ja16276	NCP	%	104			70-130	Pass	
Chloromethane	S17-Ja16276	NCP	%	113			70-130	Pass	
cis-1.2-Dichloroethene	S17-Ja16276	NCP	%	104			70-130	Pass	
cis-1.3-Dichloropropene	S17-Ja16276	NCP	%	94			70-130	Pass	
Dibromochloromethane	S17-Ja16276	NCP	%	100			70-130	Pass	
Dibromomethane	S17-Ja16276	NCP	%	102			70-130	Pass	
Iodomethane	S17-Ja16276	NCP	%	90			70-130	Pass	
Methylene Chloride	S17-Ja16276	NCP	%	102			70-130	Pass	
Tetrachloroethene	S17-Ja16276	NCP	%	99			70-130	Pass	
trans-1.2-Dichloroethene	S17-Ja16276	NCP	%	104			70-130	Pass	
trans-1.3-Dichloropropene	S17-Ja16276	NCP	%	97			70-130	Pass	
Trichloroethene	S17-Ja16276	NCP	%	102			70-130	Pass	
Trichlorofluoromethane	S17-Ja16276	NCP	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Vinyl chloride	S17-Ja16276	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S17-Fe00018	NCP	%	88			70-130	Pass	
TRH C6-C10	S17-Fe00018	NCP	%	90			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	S17-Fe01817	CP	%	92			70-130	Pass	
Spike - % Recovery									
Alkali Metals				Result 1					
Calcium	S17-Fe01817	CP	%	93			70-130	Pass	
Magnesium	S17-Fe01817	CP	%	101			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S17-Fe00017	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S17-Fe00017	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S17-Fe00017	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S17-Fe00017	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S17-Fe00017	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S17-Fe00017	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S17-Fe00017	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Halogenated Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dibromoethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromodichloromethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromoform	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Bromomethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Carbon Tetrachloride	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chlorobenzene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chloroform	S17-Ja17059	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chloromethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.2-Dichloroethene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
cis-1.3-Dichloropropene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromochloromethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibromomethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Iodomethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Methylene Chloride	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Tetrachloroethene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate									
Halogenated Volatile Organics				Result 1	Result 2	RPD			
trans-1.2-Dichloroethene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
trans-1.3-Dichloropropene	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Trichloroethene	S17-Ja17059	NCP	mg/L	0.002	0.002	3.0	30%	Pass	
Trichlorofluoromethane	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Vinyl chloride	S17-Ja17059	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S17-Fe00017	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S17-Fe00017	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	S17-Fe01816	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate									
Alkali Metals				Result 1	Result 2	RPD			
Calcium	S17-Fe01816	CP	mg/L	49	49	1.0	30%	Pass	
Magnesium	S17-Fe01816	CP	mg/L	97	98	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Dissolved Solids	S17-Fe01818	CP	mg/L	3200	3200	1.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

Nibha Vaidya	Analytical Services Manager
Huong Le	Senior Analyst-Inorganic (VIC)
Ryan Hamilton	Senior Analyst-Inorganic (NSW)
Ryan Hamilton	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)

Glenn Jackson

National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

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

Measurement uncertainty of test data is available on request or please click here.

eurofins | mgt

Melbourne
3-5 Kingston Town Close
Oakleigh Vic 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 18217

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**Coffey Environments Pty Ltd Wollongong**
Contact name:	Colee Quayle
Project name:	UOW MLS BUILDING
Project ID:	754-WOLGE200229
COC number:	Not provided
Turn around time:	2 Day
Date/Time received:	Feb 2, 2017 3:00 PM
Eurofins | mgt reference:	**532530**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 10.2 degrees Celsius.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

Nibha Vaidya on Phone : +61 (2) 9900 8400 or by e.mail: NibhaVaidya@eurofins.com

Results will be delivered electronically via e.mail to Colee Quayle - Colee_Quayle@coffey.com.

coffey

Consigning Office	Wollongong				
Report Results to:	Colee Quayle	Mobile	0403242431	Email:	colee.quayle@coffey .com
Invoices to:	Colee Quayle	Phone:	0403242431	Email:	colee.quayle@coffey .com

Project No:	754-WOLGE200229	Task No:	GME
Project Name	UoW MLS Building	Laboratory	Wollongong
Sampler's Name:	Jarrad Mawbey	Project Manager	Colee Quayle
Special Instructions:	**Please note that PAH includes ultra trace**		

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	TRH	BTEX	PAH (ultra trace)	VHC	Metals (8)	Chromium VI	Hardness	TDS					NOTES
	MW1	1/02/2017		Water	V, P,G,N,C,S,I,NP	48HR	X	X	X	X	X	X	X	X					Combo B1, M8, PAH
	WB1	1/02/2017		Water	V, P,G,N,C,S,I,NP	48HR	X	X	X	X	X	X	X	X					Combo B1, M8,PAH
	QC1	1/02/2017		Water	V, P,G,N,C,S,I,NP	48HR	X	X	X	X	X	X	X	X					Combo B1, M8,PAH

RELINQUISHED BY				RECEIVED BY			
Name:	Jarrad Mawbey	Date:	1/02/2017	Name:	EM	Date:	2/2/17
Coffey Environments		Time:	1400	Company:	EVROF N/S	Time:	3:00PM
Name:		Date:	→	Name:		Date:	
Company:		Time:		Company:		Time:	

Sample Receipt Advice: (Lab Use Only)

- All Samples Recieved in Good Condition ☑
- All Documentation is in Proper Order ☑
- Samples Received Properly Chilled ☑

Lab. Ref/Batch No. 532530

*Container Type & Preservation Codes: P - Plastic, G- Glass Bottle, J - Glass Jar, V- Vial, Z - Ziplock bag, N - Nitric Acid Preserved, C - Hydrochloric Acid Preserved, S - Sulphuric Acid Preserved, I - Ice, ST - Sodium Thiosulfate, NP - No Preservative

Appendix K – Coffey, 2013 Laboratory Results

Table 1: Analytical Results - Waste Classification Assessment
Car Park 7 - University of Wollongong NSW

			Heavy Metals								TRH		BTEX				PAH		
			Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	TRH C6-C9	TRH C10-C36	Benzene	Toluene	Ethylbenzene	Xylene Total	Benzo(a)pyrene	Total PAHs	Asbestos
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
EQL			2	0.4	5	5	5	0.1	5	5	20	50	0.1	0.1	0.1	0.3	0.5	0.5	-
CT1 - threshold for General Solid Waste			**100**	**20**	**100**	**-**	**100**	**4**	**40**	**-**	**650**	**10,000**	**10**	**288**	**600**	**1000**	**0.8**	**200**	**-**
CT2 - threshold for Restricted Solid Waste			**400**	**80**	**400**	**-**	**400**	**16**	**160**	**-**	**2600**	**40,000**	**40**	**1152**	**2400**	**4000**	**3.2**	**800**	**-**
Background Concentrations			**5-40**	**0.5-14**	**5-131**	**5-466**	**3-1465**	**0.1-3.4**	**5-160**	**0.5-3820**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**NL**	**-**
Sample ID	**Sample Depth**	**Sample Date**																	
BH01	1.2-1.4	16-Jul-13	4	< 0.4	14	8	7	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH02	0.4-0.6	24-Jul-13	5.5	< 0.4	14	11	< 5	< 0.05	< 5	12	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH03	0.1-0.3	16-Jul-13	3.9	< 0.4	51	29	< 5	< 0.05	< 5	12	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
DUP1	Duplicate of BH03 0.1-0.3		6.9	< 0.4	19	5.5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH04	0.3-0.6	16-Jul-13	< 2	< 0.4	7	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH05	0.25-0.5	16-Jul-13	2.5	< 0.4	12	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
DUP3	Duplicate of BH05 0.25-0.5		4	< 0.4	22	29	< 5	< 0.05	< 5	9.3	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH05	1.5-1.9	16-Jul-13	6	1	18	23	16	< 0.05	9	24	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH06	0.3-0.4	16-Jul-13	6.7	< 0.4	9.4	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH06	0.7-1.15	16-Jul-13	4.9	0.5	18	36	11	< 0.05	6.3	23	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH07	0.2-0.4	16-Jul-13	9	1	5	85	20	0	12	62	< 20	< 50	< 0.1	0.2	< 0.1	0.4	< 0.5	1.1	ND
BH08	0.7-1.0	16-Jul-13	3.2	< 0.4	68	16	< 5	< 0.05	< 5	9.4	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH08	1.5-1.9	16-Jul-13	5.2	0.6	26	14	8.2	< 0.05	< 5	< 5	< 20	< 50	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	< 0.5	ND
BH10	0.4-0.5	24-Jul-13	3.9	< 0.4	< 5	22	13	< 0.05	7	28	< 20	< 50	< 0.1	0.2	< 0.1	0.8	0.6	4.9	ND

Table 2: Analytical Results - Preliminary Contamination Assessment
Car Park 7 - University of Wollongong NSW

			Heavy Metals								TRH						BTEX				PAH			OCP									OPP		
			Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	TRH C6-C10 less BTEX (F1)	TRH >C10-C16 less Naphthalene (F2)	TRH C6 - C10	TPH >C10 - C16	TRH >C16 - C34	TRH >C34 - C40	Benzene	Toluene	Ethylbenzene	Xylene Total	Naphthalene	Carcinogenic PAHs as B(a)P TPE	Total PAHs	Chlordane	Endosulfan I	Endrin	Heptachlor	Aldrin + Dieldrin	DDD+DDT+DDE	Methoxychlor	Other OCP	Chlorpyrifos	Total OPP	Asbestos
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
EQL			2	0.4	5	5	5	0.1	5	5	20	50	20	50	100	100	0.1	0.1	0.1	0.3	0.5		0.5	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
NEPM 2013 Commercial/Industrial D Soil HSL for Vapour Intrusion, 0 to <1m, Clay			-	-	-	-	-	-	-	-	**310**	**NL**	-	-	-	-	**4**	**NL**	**NL**	**NL**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Commercial/Industrial D Soil HSL for Vapour Intrusion, 1m to <2m, Clay			-	-	-	-	-	-	-	-	**480**	**NL**	-	-	-	-	**6**	**NL**	**NL**	**NL**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Commercial/Industrial D Soil HSL for Vapour Intrusion, 2m to <4m, Clay			-	-	-	-	-	-	-	-	**NL**	**NL**	-	-	-	-	**9**	**NL**	**NL**	**NL**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 Commercial/Industrial D Soil HSL for Vapour Intrusion, 4m+, Clay			-	-	-	-	-	-	-	-	**NL**	**NL**	-	-	-	-	**20**	**NL**	**NL**	**NL**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 EILs Commercial/industrial			**160**	**-**	**310**	**280**	**1800**	**-**	**55**	**360**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**370**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3**	**-**	**-**	**-**	**-**	**-**
NEPM 2013 ESLs Commercial/industrial, Fine Soil			-	-	-	-	-	-	-	-	-	-	**215**	**170**	**2500**	**6600**	**95**	**135**	**185**	**95**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NEPM 2013 HILs Commercial/industrial D Soil			**3000**	**900**	**3600**	**240000**	**1500**	**730**	**6000**	**400000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	-	**40**	**4000**	**530**	**-**	**100**	**50**	**45**	**-**	**2500**	**-**	**2000**	**-**	**-**
Management Limits - Fine Soil			-	-	-	-	-	-	-	-	-	-	**800**	**1000**	**5000**	**10,000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample ID	**Sample Depth**	**Sample Date**																																
BH01	1.2-1.4	16-Jul-13	4	< 0.4	14	8	7	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH02	0.4-0.6	24-Jul-13	5.5	< 0.4	14	11	< 5	< 0.05	< 5	12	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH03	0.1-0.3	16-Jul-13	3.9	< 0.4	51	29	< 5	< 0.05	< 5	12	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
DUP1	Duplicate of BH03 0.1-0.3		6.9	< 0.4	19	5.5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
	RPD %		*57*	-	*91*	*136*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-
BH04	0.3-0.6	16-Jul-13	< 2	< 0.4	7	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH05	0.25-0.5	16-Jul-13	2.5	< 0.4	12	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
DUP3	Duplicate of BH05 0.25-0.5		4	< 0.4	22	29	< 5	< 0.05	< 5	9.3	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
	RPD %		46	-	*59*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-
BH05	1.5-1.9	16-Jul-13	6	1	18	23	16	< 0.05	9	24	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH06	0.3-0.4	16-Jul-13	6.7	< 0.4	9.4	< 5	< 5	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH06	0.7-1.15	16-Jul-13	4.9	0.5	18	36	11	< 0.05	6.3	23	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH07	0.2-0.4	16-Jul-13	9	1	5	85	20	0	12	62	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	0.2	< 0.1	0.4	< 0.5	0.6	1.1	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH08	0.7-1.0	16-Jul-13	3.2	< 0.4	68	16	< 5	< 0.05	< 5	9.4	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH08	1.5-1.9	16-Jul-13	5.2	0.6	26	14	8.2	< 0.05	< 5	< 5	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	< 0.1	< 0.1	< 0.3	< 0.5	0.6	< 0.5	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND
BH10	0.4-0.5	24-Jul-13	3.9	< 0.4	< 5	22	13	< 0.05	7	28	< 20	< 50	< 20	< 50	< 100	< 100	< 0.1	0.2	< 0.1	0.8	0.6	0.6	4.9	<0.1	<0.1	< 0.05	< 0.05	<0.1	<0.3	< 0.2	<LOR	< 0.5	<LOR	ND