

Appendix Q: Laboratory Analysis Reports and Chain of Custody Documentation

Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Mitch Hodgins

Report 503133-S
Project name PARRAMATTA
Project ID 51666
Received Date Jun 02, 2016

Client Sample ID			MW01 0.2-0.3	MW02 0.2-0.3	MW03 0.2-0.3	MW04 0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn03858	S16-Jn03859	S16-Jn03860	S16-Jn03861
Date Sampled			May 31, 2016	May 31, 2016	May 31, 2016	May 31, 2016
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	89	86	86	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	0.8	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	1.1	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.3	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	1.4	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			MW01 0.2-0.3	MW02 0.2-0.3	MW03 0.2-0.3	MW04 0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn03858	S16-Jn03859	S16-Jn03860	S16-Jn03861
Date Sampled			May 31, 2016	May 31, 2016	May 31, 2016	May 31, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	0.6	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	1.3	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	6.4	< 0.5
2-Fluorobiphenyl (surr.)	1	%	89	75	94	92
p-Terphenyl-d14 (surr.)	1	%	86	76	100	97
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Dibutylchloroendate (surr.)	1	%	137	123	120	129
Tetrachloro-m-xylene (surr.)	1	%	127	111	103	113
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			MW01 0.2-0.3	MW02 0.2-0.3	MW03 0.2-0.3	MW04 0.2-0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn03858	S16-Jn03859	S16-Jn03860	S16-Jn03861
Date Sampled			May 31, 2016	May 31, 2016	May 31, 2016	May 31, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Omethoate	2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	121	102	120	118
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	137	123	120	129
Tetrachloro-m-xylene (surr.)	1	%	127	111	103	113
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
Conductivity (1:5 aqueous extract at 25°C)	5	uS/cm	190	-	110	-
pH (1:5 Aqueous extract)	0.1	pH Units	8.4	-	8.4	-
% Moisture	1	%	10	19	6.5	12
Ion Exchange Properties						
Cation Exchange Capacity	0.05	meq/100g	7.9	-	6.9	-
Heavy Metals						
Arsenic	2	mg/kg	< 2	3.7	< 2	5.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	9.5	9.5	5.5	17
Copper	5	mg/kg	33	8.8	11	18
Lead	5	mg/kg	5.0	12	11	22
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	60	6.8	8.4	26
Zinc	5	mg/kg	28	30	22	37

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
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jun 06, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 06, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 06, 2016	14 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 06, 2016	14 Day
Polycyclic Aromatic Hydrocarbons - Method: E007 Polyaromatic Hydrocarbons (PAH)	Sydney	Jun 06, 2016	14 Day
Organochlorine Pesticides - Method: E013 Organochlorine Pesticides (OC)	Sydney	Jun 06, 2016	14 Day
Organophosphorus Pesticides - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS	Sydney	Jun 06, 2016	14 Day
Polychlorinated Biphenyls - Method: E013 Polychlorinated Biphenyls (PCB)	Sydney	Jun 06, 2016	28 Day
pH (1:5 Aqueous extract) - Method: LTM-GEN-7090 pH in soil by ISE	Sydney	Jun 08, 2016	7 Day
Metals M8 - Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS	Sydney	Jun 06, 2016	28 Day
Conductivity (1:5 aqueous extract at 25°C) - Method: LTM-INO-4030	Sydney	Jun 06, 2016	7 Day
Ion Exchange Properties	Melbourne	Jun 08, 2016	
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Jun 03, 2016	14 Day

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 503133
Phone: 02 8245 0300
Fax:

Received: Jun 2, 2016 5:00 PM
Due: Jun 9, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID														
1	MW01 0.2-0.3	May 31, 2016		Soil	S16-Jn03858	X		X	X	X	X	X			X	X	X	X	X
2	MW02 0.2-0.3	May 31, 2016		Soil	S16-Jn03859	X			X	X	X	X			X	X	X		X
3	MW03 0.2-0.3	May 31, 2016		Soil	S16-Jn03860	X		X	X	X	X	X			X	X	X	X	X
4	MW04 0.2-0.3	May 31, 2016		Soil	S16-Jn03861	X			X	X	X	X			X	X	X		X
5	TS	May 31, 2016		Water	S16-Jn03862											X			
6	TB	May 31, 2016		Water	S16-Jn03863											X			
7	MW01 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03864				X				X		X				
8	MW02 0.2-0.3	May 31, 2016		AUS Leachate - Reagent	S16-Jn03865				X				X		X				

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Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
				Water															
9	MW03 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03866				X				X		X				
10	MW04 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03867				X				X		X				
11	MW01 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03868				X					X	X				
12	MW02 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03869				X					X	X				
13	MW03 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03870				X					X	X				
14	MW04 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03871				X					X	X				
15	MW01 0-0.1	May 31, 2016		Soil	S16-Jn03872		X												
16	MW01 0.4-0.5	May 31, 2016		Soil	S16-Jn03873		X												

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Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
17	MW01 0.9-1.0	May 31, 2016		Soil	S16-Jn03874		X												
18	MW02 0-0.1	May 31, 2016		Soil	S16-Jn03875		X												
19	MW02 0.4-0.5	May 31, 2016		Soil	S16-Jn03876		X												
20	MW02 0.9-1.0	May 31, 2016		Soil	S16-Jn03877		X												
21	MW02 1.4-1.5	May 31, 2016		Soil	S16-Jn03878		X												
22	MW03 0-0.1	May 31, 2016		Soil	S16-Jn03879		X												
23	MW03 0.4-0.5	May 31, 2016		Soil	S16-Jn03880		X												
24	MW03 0.9-1.0	May 31, 2016		Soil	S16-Jn03881		X												
25	MW03 1.4-1.5	May 31, 2016		Soil	S16-Jn03882		X												
26	MW04 0-0.1	May 31, 2016		Soil	S16-Jn03883		X												
27	MW04 0.4-0.5	May 31, 2016		Soil	S16-Jn03884		X												

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Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
28	MW04 0.9-1.0	May 31, 2016		Soil	S16-Jn03885		X												
29	MW04 1.4-1.5	May 31, 2016		Soil	S16-Jn03886		X												
30	QA20160531-1	May 31, 2016		Soil	S16-Jn03887		X												
31	QC20160531-1	May 31, 2016		Soil	S16-Jn03888		X												
Test Counts						4	17	2	12	4	4	4	4	4	12	6	4	2	4

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							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
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	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	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	
Phorate	mg/kg	< 0.2			0.2	Pass	
Ronnel	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							
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							
Conductivity (1:5 aqueous extract at 25°C)	uS/cm	< 5			5	Pass	
Method Blank							
Ion Exchange Properties							
Cation Exchange Capacity	meq/100g	< 0.05			0.05	Pass	
Method Blank							
Heavy Metals							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Mercury	mg/kg	< 0.05			0.05	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	84			70-130	Pass	
TRH C10-C14	%	101			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	96			70-130	Pass	
Toluene	%	79			70-130	Pass	
Ethylbenzene	%	81			70-130	Pass	
m&p-Xylenes	%	81			70-130	Pass	
o-Xylene	%	80			70-130	Pass	
Xylenes - Total	%	81			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	92			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	96			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	%	78			70-130	Pass	
Benzo(g,h,i)perylene	%	73			70-130	Pass	
Benzo(k)fluoranthene	%	95			70-130	Pass	
Chrysene	%	103			70-130	Pass	
Dibenz(a,h)anthracene	%	74			70-130	Pass	
Fluoranthene	%	92			70-130	Pass	
Fluorene	%	89			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	72			70-130	Pass	
Naphthalene	%	97			70-130	Pass	
Phenanthrene	%	106			70-130	Pass	
Pyrene	%	100			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	113			70-130	Pass	
4,4'-DDD	%	120			70-130	Pass	
4,4'-DDE	%	113			70-130	Pass	
4,4'-DDT	%	110			70-130	Pass	
a-BHC	%	110			70-130	Pass	
Aldrin	%	108			70-130	Pass	
b-BHC	%	102			70-130	Pass	
d-BHC	%	117			70-130	Pass	
Dieldrin	%	112			70-130	Pass	
Endosulfan I	%	112			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan II			%	113			70-130	Pass	
Endosulfan sulphate			%	115			70-130	Pass	
Endrin			%	109			70-130	Pass	
Endrin aldehyde			%	117			70-130	Pass	
Endrin ketone			%	112			70-130	Pass	
g-BHC (Lindane)			%	108			70-130	Pass	
Heptachlor			%	104			70-130	Pass	
Heptachlor epoxide			%	111			70-130	Pass	
Hexachlorobenzene			%	99			70-130	Pass	
Methoxychlor			%	108			70-130	Pass	
Toxaphene			%	88			70-130	Pass	
LCS - % Recovery									
Organophosphorus Pesticides									
Dimethoate		%	111				70-130	Pass	
Fenitrothion		%	119				70-130	Pass	
Mevinphos		%	100				70-130	Pass	
LCS - % Recovery									
Polychlorinated Biphenyls									
Aroclor-1260		%	116				70-130	Pass	
LCS - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
TRH >C10-C16		%	105				70-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic		%	94				70-130	Pass	
Cadmium		%	95				70-130	Pass	
Chromium		%	97				70-130	Pass	
Copper		%	103				70-130	Pass	
Lead		%	97				70-130	Pass	
Mercury		%	103				70-130	Pass	
Nickel		%	101				70-130	Pass	
Zinc		%	100				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 C10-C14	S16-Jn01337	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S16-Jn03858	CP	%	118			70-130	Pass	
4,4'-DDD	S16-Jn03858	CP	%	130			70-130	Pass	
4,4'-DDE	S16-Jn03858	CP	%	120			70-130	Pass	
4,4'-DDT	S16-Jn03858	CP	%	106			70-130	Pass	
a-BHC	S16-Jn03858	CP	%	111			70-130	Pass	
Aldrin	S16-Jn03858	CP	%	113			70-130	Pass	
b-BHC	S16-Jn03858	CP	%	105			70-130	Pass	
d-BHC	S16-Jn03858	CP	%	120			70-130	Pass	
Dieldrin	S16-Jn03858	CP	%	117			70-130	Pass	
Endosulfan I	S16-Jn03858	CP	%	118			70-130	Pass	
Endosulfan II	S16-Jn03858	CP	%	118			70-130	Pass	
Endosulfan sulphate	S16-Jn03858	CP	%	119			70-130	Pass	
Endrin	S16-Jn03858	CP	%	110			70-130	Pass	
Endrin aldehyde	S16-Jn03858	CP	%	125			70-130	Pass	
Endrin ketone	S16-Jn03858	CP	%	120			70-130	Pass	
α-BHC (Lindane)	S16-Jn03858	CP	%	110			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	S16-Jn03858	CP	%	111			70-130	Pass	
Heptachlor epoxide	S16-Jn03858	CP	%	115			70-130	Pass	
Hexachlorobenzene	S16-Jn03858	CP	%	99			70-130	Pass	
Methoxychlor	S16-Jn03858	CP	%	127			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Dimethoate	S16-Jn02375	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	S16-Jn01942	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn01337	NCP	%	108			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Jn05146	NCP	%	70			70-130	Pass	
Cadmium	S16-Jn05146	NCP	%	89			70-130	Pass	
Chromium	S16-Jn03957	NCP	%	95			70-130	Pass	
Copper	S16-Jn05146	NCP	%	100			70-130	Pass	
Mercury	S16-Jn05146	NCP	%	95			70-130	Pass	
Nickel	S16-Jn05146	NCP	%	114			70-130	Pass	
Zinc	S16-Jn05146	NCP	%	117			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Jn03859	CP	%	83			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn03859	CP	%	91			70-130	Pass	
Toluene	S16-Jn03859	CP	%	87			70-130	Pass	
Ethylbenzene	S16-Jn03859	CP	%	83			70-130	Pass	
m&p-Xylenes	S16-Jn03859	CP	%	86			70-130	Pass	
o-Xylene	S16-Jn03859	CP	%	85			70-130	Pass	
Xylenes - Total	S16-Jn03859	CP	%	86			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn03859	CP	%	90			70-130	Pass	
TRH C6-C10	S16-Jn03859	CP	%	97			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Jn03859	CP	%	91			70-130	Pass	
Acenaphthylene	S16-Jn03859	CP	%	85			70-130	Pass	
Anthracene	S16-Jn03859	CP	%	92			70-130	Pass	
Benz(a)anthracene	S16-Jn03859	CP	%	93			70-130	Pass	
Benzo(a)pyrene	S16-Jn03859	CP	%	87			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Jn03859	CP	%	87			70-130	Pass	
Benzo(g,h,i)perylene	S16-Jn03859	CP	%	76			70-130	Pass	
Benzo(k)fluoranthene	S16-Jn03859	CP	%	101			70-130	Pass	
Chrysene	S16-Jn03859	CP	%	108			70-130	Pass	
Dibenz(a,h)anthracene	S16-Jn03859	CP	%	74			70-130	Pass	
Fluoranthene	S16-Jn03859	CP	%	103			70-130	Pass	
Fluorene	S16-Jn03859	CP	%	90			70-130	Pass	
Indeno(1,2,3-cd)pyrene	S16-Jn03859	CP	%	74			70-130	Pass	
Naphthalene	S16-Jn03859	CP	%	97			70-130	Pass	
Phenanthrene	S16-Jn03859	CP	%	109			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pyrene	S16-Jn03859	CP	%	113			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Fenitrothion	S16-Jn03859	CP	%	94			70-130	Pass	
Mevinphos	S16-Jn03859	CP	%	79			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Lead	S16-Jn02358	NCP	%	110			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	S16-Jn03858	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S16-Jn01942	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S16-Jn01942	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S16-Jn01942	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S16-Jn03858	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S16-Jn03858	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g,h,i)perylene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a,h)anthracene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4,4'-DDD	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDE	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4,4'-DDT	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
d-BHC	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn03858	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn03858	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S16-Jn03858	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfathion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S16-Jn03858	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S16-Jn03858	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1221	S16-Jn03858	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Aroclor-1232	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn03858	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn03858	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	S16-Jn01942	NCP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Jn01942	NCP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Jn01942	NCP	mg/kg	< 100	< 100	<1	30%	Pass

Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-My17110	NCP	%	23	23	1.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn06237	NCP	mg/kg	3.6	3.6	1.0	30%	Pass
Cadmium	S16-Jn06237	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn06237	NCP	mg/kg	7.9	6.8	14	30%	Pass
Copper	S16-Jn06237	NCP	mg/kg	57	62	8.0	30%	Pass
Lead	S16-Jn06237	NCP	mg/kg	25	21	18	30%	Pass
Mercury	S16-Jn06237	NCP	mg/kg	0.11	0.20	57	30%	Fail
Nickel	S16-Jn06237	NCP	mg/kg	23	24	2.0	30%	Pass
Zinc	S16-Jn06237	NCP	mg/kg	45	41	10	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Conductivity (1:5 aqueous extract at 25°C)	S16-Jn04887	NCP	uS/cm	74	70	5.0	30%	Pass
pH (1:5 Aqueous extract)	S16-Jn03860	CP	pH Units	8.4	8.2	pass	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
Bob Symons	Senior Analyst-Inorganic (NSW)
Emily Rosenberg	Senior Analyst-Metal (VIC)
Ivan Taylor	Senior Analyst-Metal (NSW)
Rhys Thomas	Senior Analyst-Asbestos (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

Uncertainty data is available on request

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **Mitch Hodgins**

Report **503133-W**
Project name **PARRAMATTA**
Project ID **51666**
Received Date **Jun 02, 2016**

Client Sample ID			TS Water	TB Water
Sample Matrix			S16-Jn03862	S16-Jn03863
Eurofins mgt Sample No.			May 31, 2016	May 31, 2016
Date Sampled				
Test/Reference	LOR	Unit		
BTEX				
Benzene	0.001	mg/L	98%	< 0.001
Toluene	0.001	mg/L	87%	< 0.001
Ethylbenzene	0.001	mg/L	83%	< 0.001
m&p-Xylenes	0.002	mg/L	85%	< 0.002
o-Xylene	0.001	mg/L	85%	< 0.001
Xylenes - Total	0.003	mg/L	85%	< 0.003
4-Bromofluorobenzene (surr.)	1	%	91	82

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

BTEX

- Method: TRH C6-C40 - LTM-ORG-2010

Testing Site

Sydney

Extracted

Jun 03, 2016

Holding Time

14 Day

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 503133
Phone: 02 8245 0300
Fax:

Received: Jun 2, 2016 5:00 PM
Due: Jun 9, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID														
1	MW01 0.2-0.3	May 31, 2016		Soil	S16-Jn03858	X		X	X	X	X	X			X	X	X	X	X
2	MW02 0.2-0.3	May 31, 2016		Soil	S16-Jn03859	X			X	X	X	X			X	X	X		X
3	MW03 0.2-0.3	May 31, 2016		Soil	S16-Jn03860	X		X	X	X	X	X			X	X	X	X	X
4	MW04 0.2-0.3	May 31, 2016		Soil	S16-Jn03861	X			X	X	X	X			X	X	X		X
5	TS	May 31, 2016		Water	S16-Jn03862											X			
6	TB	May 31, 2016		Water	S16-Jn03863											X			
7	MW01 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03864				X				X		X				
8	MW02 0.2-0.3	May 31, 2016		AUS Leachate - Reagent	S16-Jn03865				X				X		X				

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Sydney
NSW 2000
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Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
				Water															
9	MW03 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03866				X				X		X				
10	MW04 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03867				X				X		X				
11	MW01 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03868				X					X	X				
12	MW02 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03869				X					X	X				
13	MW03 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03870				X					X	X				
14	MW04 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03871				X					X	X				
15	MW01 0-0.1	May 31, 2016		Soil	S16-Jn03872		X												
16	MW01 0.4-0.5	May 31, 2016		Soil	S16-Jn03873		X												

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Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
17	MW01 0.9-1.0	May 31, 2016		Soil	S16-Jn03874		X												
18	MW02 0-0.1	May 31, 2016		Soil	S16-Jn03875		X												
19	MW02 0.4-0.5	May 31, 2016		Soil	S16-Jn03876		X												
20	MW02 0.9-1.0	May 31, 2016		Soil	S16-Jn03877		X												
21	MW02 1.4-1.5	May 31, 2016		Soil	S16-Jn03878		X												
22	MW03 0-0.1	May 31, 2016		Soil	S16-Jn03879		X												
23	MW03 0.4-0.5	May 31, 2016		Soil	S16-Jn03880		X												
24	MW03 0.9-1.0	May 31, 2016		Soil	S16-Jn03881		X												
25	MW03 1.4-1.5	May 31, 2016		Soil	S16-Jn03882		X												
26	MW04 0-0.1	May 31, 2016		Soil	S16-Jn03883		X												
27	MW04 0.4-0.5	May 31, 2016		Soil	S16-Jn03884		X												

Company Name: JBS & G Australia (NSW & WA) P/L
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NSW 2000
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Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
28	MW04 0.9-1.0	May 31, 2016		Soil	S16-Jn03885		X												
29	MW04 1.4-1.5	May 31, 2016		Soil	S16-Jn03886		X												
30	QA20160531-1	May 31, 2016		Soil	S16-Jn03887		X												
31	QC20160531-1	May 31, 2016		Soil	S16-Jn03888		X												
Test Counts						4	17	2	12	4	4	4	4	4	12	6	4	2	4

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

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

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									
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	
LCS - % Recovery									
BTEX									
Benzene			%	92			70-130	Pass	
Toluene			%	91			70-130	Pass	
Ethylbenzene			%	89			70-130	Pass	
m&p-Xylenes			%	91			70-130	Pass	
o-Xylene			%	91			70-130	Pass	
Xylenes - Total			%	91			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn02928	NCP	%	108			70-130	Pass	
Toluene	S16-Jn02928	NCP	%	92			70-130	Pass	
Ethylbenzene	S16-Jn02928	NCP	%	91			70-130	Pass	
m&p-Xylenes	S16-Jn02928	NCP	%	90			70-130	Pass	
o-Xylene	S16-Jn02928	NCP	%	90			70-130	Pass	
Xylenes - Total	S16-Jn02928	NCP	%	90			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Jn02927	NCP	mg/L	0.085	0.078	8.0	30%	Pass	
Toluene	S16-Jn02927	NCP	mg/L	0.001	0.001	15	30%	Pass	
Ethylbenzene	S16-Jn02927	NCP	mg/L	0.12	0.11	9.0	30%	Pass	
m&p-Xylenes	S16-Jn02927	NCP	mg/L	0.13	0.11	20	30%	Pass	
o-Xylene	S16-Jn02927	NCP	mg/L	0.001	0.001	6.0	30%	Pass	
Xylenes - Total	S16-Jn02927	NCP	mg/L	0.13	0.11	20	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

Authorised By

Nibha Vaidya	Analytical Services Manager
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

Uncertainty data is available on request

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Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Mitch Hodgins

Report 503133-L
Project name PARRAMATTA
Project ID 51666
Received Date Jun 02, 2016

Client Sample ID			MW01 0.2-0.3 AUS Leachate - Reagent Water	MW02 0.2-0.3 AUS Leachate - Reagent Water	MW03 0.2-0.3 AUS Leachate - Reagent Water	MW04 0.2-0.3 AUS Leachate - Reagent Water
Sample Matrix						
Eurofins mgt Sample No.			S16-Jn03864	S16-Jn03865	S16-Jn03866	S16-Jn03867
Date Sampled			May 31, 2016	May 31, 2016	May 31, 2016	May 31, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	116	71	73	69
p-Terphenyl-d14 (surr.)	1	%	147	105	111	107
Heavy Metals						
Arsenic	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Cadmium	0.0005	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chromium	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Copper	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Lead	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Mercury	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Nickel	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	9.7	8.3	8.6	8.6
pH (off)	0.1	pH Units	8.9	7.9	8.4	8.7

Client Sample ID			MW01 0.2-0.3 US Leachate	MW02 0.2-0.3 US Leachate	MW03 0.2-0.3 US Leachate	MW04 0.2-0.3 US Leachate
Sample Matrix			S16-Jn03868	S16-Jn03869	S16-Jn03870	S16-Jn03871
Eurofins mgt Sample No.			May 31, 2016	May 31, 2016	May 31, 2016	May 31, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	86	73	75	67
p-Terphenyl-d14 (surr.)	1	%	129	109	125	112
Heavy Metals						
Arsenic	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Cadmium	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Chromium	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Copper	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Lead	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
Mercury	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Nickel	0.05	mg/L	< 0.05	< 0.05	< 0.05	0.07
Zinc	0.05	mg/L	< 0.05	0.13	0.07	0.19
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.6	8.2	8.6	8.5
pH (off)	0.1	pH Units	5.3	5.2	5.2	5.2
pH (USA HCl addition)	0.1	pH Units	2.2	2.1	2.2	2.2

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
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 07, 2016	7 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Metals M8	Sydney	Jun 06, 2016	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
AUS Leaching Procedure	Sydney	Jun 06, 2016	7 Day
- Method: LTM-GEN-7010			
USA Leaching Procedure	Sydney	Jun 06, 2016	14 Day
- Method: E019 TCLP Preparation			

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 503133
Phone: 02 8245 0300
Fax:

Received: Jun 2, 2016 5:00 PM
Due: Jun 9, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID														
1	MW01 0.2-0.3	May 31, 2016		Soil	S16-Jn03858	X		X	X	X	X	X			X	X	X	X	X
2	MW02 0.2-0.3	May 31, 2016		Soil	S16-Jn03859	X			X	X	X	X			X	X	X		X
3	MW03 0.2-0.3	May 31, 2016		Soil	S16-Jn03860	X		X	X	X	X	X			X	X	X	X	X
4	MW04 0.2-0.3	May 31, 2016		Soil	S16-Jn03861	X			X	X	X	X			X	X	X		X
5	TS	May 31, 2016		Water	S16-Jn03862											X			
6	TB	May 31, 2016		Water	S16-Jn03863											X			
7	MW01 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03864				X				X		X				
8	MW02 0.2-0.3	May 31, 2016		AUS Leachate - Reagent	S16-Jn03865				X				X		X				

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Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
				Water															
9	MW03 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03866				X				X		X				
10	MW04 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03867				X				X		X				
11	MW01 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03868				X					X	X				
12	MW02 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03869				X					X	X				
13	MW03 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03870				X					X	X				
14	MW04 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03871				X					X	X				
15	MW01 0-0.1	May 31, 2016		Soil	S16-Jn03872		X												
16	MW01 0.4-0.5	May 31, 2016		Soil	S16-Jn03873		X												

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
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Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
17	MW01 0.9-1.0	May 31, 2016		Soil	S16-Jn03874		X												
18	MW02 0-0.1	May 31, 2016		Soil	S16-Jn03875		X												
19	MW02 0.4-0.5	May 31, 2016		Soil	S16-Jn03876		X												
20	MW02 0.9-1.0	May 31, 2016		Soil	S16-Jn03877		X												
21	MW02 1.4-1.5	May 31, 2016		Soil	S16-Jn03878		X												
22	MW03 0-0.1	May 31, 2016		Soil	S16-Jn03879		X												
23	MW03 0.4-0.5	May 31, 2016		Soil	S16-Jn03880		X												
24	MW03 0.9-1.0	May 31, 2016		Soil	S16-Jn03881		X												
25	MW03 1.4-1.5	May 31, 2016		Soil	S16-Jn03882		X												
26	MW04 0-0.1	May 31, 2016		Soil	S16-Jn03883		X												
27	MW04 0.4-0.5	May 31, 2016		Soil	S16-Jn03884		X												

Company Name: JBS & G Australia (NSW & WA) P/L
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Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
28	MW04 0.9-1.0	May 31, 2016		Soil	S16-Jn03885		X												
29	MW04 1.4-1.5	May 31, 2016		Soil	S16-Jn03886		X												
30	QA20160531-1	May 31, 2016		Soil	S16-Jn03887		X												
31	QC20160531-1	May 31, 2016		Soil	S16-Jn03888		X												
Test Counts						4	17	2	12	4	4	4	4	4	12	6	4	2	4

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								
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								
Heavy Metals								
Arsenic			mg/L	< 0.005		0.005	Pass	
Cadmium			mg/L	< 0.0005		0.0005	Pass	
Chromium			mg/L	< 0.01		0.01	Pass	
Copper			mg/L	< 0.01		0.01	Pass	
Lead			mg/L	< 0.005		0.005	Pass	
Mercury			mg/L	< 0.0002		0.0002	Pass	
Nickel			mg/L	< 0.005		0.005	Pass	
Zinc			mg/L	< 0.01		0.01	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S16-Jn03865	CP	%	90		70-130	Pass	
Cadmium	S16-Jn03865	CP	%	93		70-130	Pass	
Chromium	S16-Jn03865	CP	%	91		70-130	Pass	
Copper	S16-Jn03865	CP	%	93		70-130	Pass	
Lead	S16-Jn03865	CP	%	97		70-130	Pass	
Mercury	S16-Jn03865	CP	%	96		70-130	Pass	
Nickel	S16-Jn03865	CP	%	92		70-130	Pass	
Zinc	S16-Jn03865	CP	%	94		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S16-Jn03869	CP	%	90		70-130	Pass	
Cadmium	S16-Jn03869	CP	%	74		70-130	Pass	
Chromium	S16-Jn03869	CP	%	92		70-130	Pass	
Copper	S16-Jn03869	CP	%	98		70-130	Pass	
Lead	S16-Jn03869	CP	%	84		70-130	Pass	
Mercury	S16-Jn03869	CP	%	102		70-130	Pass	
Nickel	S16-Jn03869	CP	%	94		70-130	Pass	
Zinc	S16-Jn03869	CP	%	79		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			
Arsenic	S16-Jn03864	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Cadmium	S16-Jn03864	CP	mg/L	< 0.0005	< 0.0005	<1	30%	Pass	
Chromium	S16-Jn03864	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Copper	S16-Jn03864	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Lead	S16-Jn03864	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury	S16-Jn03864	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Nickel	S16-Jn03864	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc	S16-Jn03864	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S16-Jn03868	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Cadmium	S16-Jn03868	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chromium	S16-Jn03868	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Copper	S16-Jn03868	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Lead	S16-Jn03868	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Mercury	S16-Jn03868	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Nickel	S16-Jn03868	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Zinc	S16-Jn03868	CP	mg/L	< 0.05	< 0.05	<1	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
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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
Ivan Taylor	Senior Analyst-Metal (NSW)
Ryan Hamilton	Senior Analyst-Organic (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

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Certificate of Analysis



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: Mitch Hodgins
Report 503133-AID
Project Name PARRAMATTA
Project ID 51666
Received Date Jun 02, 2016
Date Reported Jun 09, 2016

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 PARRAMATTA
Project ID 51666
Date Sampled May 31, 2016
Report 503133-AID

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
MW01 0.2-0.3	16-Jn03858	May 31, 2016	Approximate Sample 508g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
MW02 0.2-0.3	16-Jn03859	May 31, 2016	Approximate Sample 527g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
MW03 0.2-0.3	16-Jn03860	May 31, 2016	Approximate Sample 504g Sample consisted of: Brown coarse grain soil and rocks	AF: Chrysotile asbestos detected in fibre cement fragments and as loose fibre bundles. Approximate raw weight of AF = 0.0693g* Estimated asbestos content in AF = 0.0208g* Total estimated asbestos concentration in AF = 0.0041% w/w* Organic fibre detected. ^{M11}
MW04 0.2-0.3	16-Jn03861	May 31, 2016	Approximate Sample 577g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

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	Jun 03, 2016	Indefinite

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 503133
Phone: 02 8245 0300
Fax:

Received: Jun 2, 2016 5:00 PM
Due: Jun 9, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID														
1	MW01 0.2-0.3	May 31, 2016		Soil	S16-Jn03858	X		X	X	X	X	X			X	X	X	X	X
2	MW02 0.2-0.3	May 31, 2016		Soil	S16-Jn03859	X			X	X	X	X			X	X	X		X
3	MW03 0.2-0.3	May 31, 2016		Soil	S16-Jn03860	X		X	X	X	X	X			X	X	X	X	X
4	MW04 0.2-0.3	May 31, 2016		Soil	S16-Jn03861	X			X	X	X	X			X	X	X		X
5	TS	May 31, 2016		Water	S16-Jn03862											X			
6	TB	May 31, 2016		Water	S16-Jn03863											X			
7	MW01 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03864				X				X		X				
8	MW02 0.2-0.3	May 31, 2016		AUS Leachate - Reagent	S16-Jn03865				X				X		X				

Company Name: JBS & G Australia (NSW & WA) P/L
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Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
				Water															
9	MW03 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03866				X				X		X				
10	MW04 0.2-0.3	May 31, 2016		AUS Leachate - Reagent Water	S16-Jn03867				X				X		X				
11	MW01 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03868				X					X	X				
12	MW02 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03869				X					X	X				
13	MW03 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03870				X					X	X				
14	MW04 0.2-0.3	May 31, 2016		US Leachate	S16-Jn03871				X					X	X				
15	MW01 0-0.1	May 31, 2016		Soil	S16-Jn03872		X												
16	MW01 0.4-0.5	May 31, 2016		Soil	S16-Jn03873		X												

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Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
17	MW01 0.9-1.0	May 31, 2016		Soil	S16-Jn03874		X												
18	MW02 0-0.1	May 31, 2016		Soil	S16-Jn03875		X												
19	MW02 0.4-0.5	May 31, 2016		Soil	S16-Jn03876		X												
20	MW02 0.9-1.0	May 31, 2016		Soil	S16-Jn03877		X												
21	MW02 1.4-1.5	May 31, 2016		Soil	S16-Jn03878		X												
22	MW03 0-0.1	May 31, 2016		Soil	S16-Jn03879		X												
23	MW03 0.4-0.5	May 31, 2016		Soil	S16-Jn03880		X												
24	MW03 0.9-1.0	May 31, 2016		Soil	S16-Jn03881		X												
25	MW03 1.4-1.5	May 31, 2016		Soil	S16-Jn03882		X												
26	MW04 0-0.1	May 31, 2016		Soil	S16-Jn03883		X												
27	MW04 0.4-0.5	May 31, 2016		Soil	S16-Jn03884		X												

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
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Phone: 02 8245 0300
Fax:

Received: Jun 2, 2016 5:00 PM
Due: Jun 9, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	HOLD	pH (1:5 Aqueous extract)	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Polychlorinated Biphenyls	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	BTEX	Moisture Set	Cation Exchange Capacity	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271																		X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794																			
External Laboratory																			
28	MW04 0.9-1.0	May 31, 2016		Soil	S16-Jn03885		X												
29	MW04 1.4-1.5	May 31, 2016		Soil	S16-Jn03886		X												
30	QA20160531-1	May 31, 2016		Soil	S16-Jn03887		X												
31	QC20160531-1	May 31, 2016		Soil	S16-Jn03888		X												
Test Counts						4	17	2	12	4	4	4	4	4	12	6	4	2	4

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 Standards 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 substantial 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

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
M11	NATA accreditation does not cover the performance of this service.

Authorised by:

Rhys Thomas

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

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Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Mitch Hodgins

Report 504746-S-V2
Project name PARRAMATTA
Project ID 51666
Received Date Jun 16, 2016

Client Sample ID			BH01 0.9-1.0 Soil	BH03 0-0.1 Soil	BH04 0-0.1 Soil	BH05 0-0.1 Soil
Sample Matrix			S16-Jn15048	S16-Jn15051	S16-Jn15053	S16-Jn15056
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	-	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	-	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	-	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	-	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	-	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	85	76	-	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH01 0.9-1.0	BH03 0-0.1	BH04 0-0.1	BH05 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15048	S16-Jn15051	S16-Jn15053	S16-Jn15056
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	103	111	99	61
p-Terphenyl-d14 (surr.)	1	%	124	129	102	60
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
α-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
β-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
δ-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
γ-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Dibutylchloroendate (surr.)	1	%	70	85	-	85
Tetrachloro-m-xylene (surr.)	1	%	57	95	-	87
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2

Client Sample ID			BH01 0.9-1.0 Soil	BH03 0-0.1 Soil	BH04 0-0.1 Soil	BH05 0-0.1 Soil
Sample Matrix			S16-Jn15048	S16-Jn15051	S16-Jn15053	S16-Jn15056
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Omethoate	2	mg/kg	< 0.2	< 0.2	-	< 0.2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	124	121	-	132
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibutylchlorendate (surr.)	1	%	70	85	-	85
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	-	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	-	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	-	580
Heavy Metals						
Arsenic	2	mg/kg	4.4	< 2	2.7	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	18	16	12	13
Copper	5	mg/kg	7.0	57	15	41
Lead	5	mg/kg	16	< 5	10	6.6
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	130	26	79
Zinc	5	mg/kg	11	51	19	47
% Moisture	1	%	15	9.1	8.7	6.7

Client Sample ID			BH07 0-0.1 Soil S16-Jn15059 Jun 10, 2016	BH08 0-0.1 Soil S16-Jn15061 Jun 10, 2016	BH09 0-0.1 Soil S16-Jn15063 Jun 10, 2016	BH10 0-0.1 Soil S16-Jn15065 Jun 10, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	-	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	-	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	-	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	-	< 50	280
TRH C10-36 (Total)	50	mg/kg	< 50	-	< 50	280
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	77	-	77	78
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	-	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	107	86	74	84
p-Terphenyl-d14 (surr.)	1	%	113	84	79	91
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05

Client Sample ID			BH07 0-0.1	BH08 0-0.1	BH09 0-0.1	BH10 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15059	S16-Jn15061	S16-Jn15063	S16-Jn15065
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Dibutylchloroendate (surr.)	1	%	68	-	83	88
Tetrachloro-m-xylene (surr.)	1	%	55	-	95	97
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Omethoate	2	mg/kg	< 0.2	-	< 0.2	< 0.2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			BH07 0-0.1	BH08 0-0.1	BH09 0-0.1	BH10 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15059	S16-Jn15061	S16-Jn15063	S16-Jn15065
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	127	-	79	96
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibutylchloredate (surr.)	1	%	68	-	83	88
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	-	< 100	240
TRH >C34-C40	100	mg/kg	< 100	-	< 100	420
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	17	9.8	11	10.0
Copper	5	mg/kg	51	62	51	61
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	150	70	100	89
Zinc	5	mg/kg	53	43	42	43
% Moisture	1	%	5.5	4.7	5.0	3.6

Client Sample ID			BH11 0-0.1	BH12 0-0.1	BH13 0-0.1	BH14 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15068	S16-Jn15071	S16-Jn15074	S16-Jn15076
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
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	%	-	-	-	89

Client Sample ID			BH11 0-0.1 Soil S16-Jn15068 Jun 10, 2016	BH12 0-0.1 Soil S16-Jn15071 Jun 10, 2016	BH13 0-0.1 Soil S16-Jn15074 Jun 10, 2016	BH14 0.9-1.0 Soil S16-Jn15076 Jun 10, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	-	-	< 0.5
TRH C6-C10	20	mg/kg	-	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	86	88	91	91
p-Terphenyl-d14 (surr.)	1	%	93	93	98	97
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
α-BHC	0.05	mg/kg	-	-	-	< 0.05
Aldrin	0.05	mg/kg	-	-	-	< 0.05
β-BHC	0.05	mg/kg	-	-	-	< 0.05
δ-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
γ-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

Client Sample ID			BH11 0-0.1 Soil	BH12 0-0.1 Soil	BH13 0-0.1 Soil	BH14 0.9-1.0 Soil
Sample Matrix			S16-Jn15068	S16-Jn15071	S16-Jn15074	S16-Jn15076
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	-	-	-	88
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	92
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	-	-	-	< 0.2
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	%	-	-	-	93
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	-	-	< 0.5
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	%	-	-	-	88
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

Client Sample ID			BH11 0-0.1	BH12 0-0.1	BH13 0-0.1	BH14 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15068	S16-Jn15071	S16-Jn15074	S16-Jn15076
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	4.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.2	9.3	7.7	9.3
Copper	5	mg/kg	56	59	49	< 5
Lead	5	mg/kg	< 5	< 5	< 5	5.5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	73	82	62	< 5
Zinc	5	mg/kg	37	43	50	5.6
% Moisture	1	%	4.4	5.3	6.7	10

Client Sample ID			BH15 0-0.1	BH16 0.2-0.3	BH17 0-0.1	BH18 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15079	S16-Jn15081	S16-Jn15083	S16-Jn15085
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
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	%	-	-	-	77
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	-	-	< 0.5
TRH C6-C10	20	mg/kg	-	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			BH15 0-0.1 Soil	BH16 0.2-0.3 Soil	BH17 0-0.1 Soil	BH18 0-0.1 Soil
Sample Matrix			S16-Jn15079	S16-Jn15081	S16-Jn15083	S16-Jn15085
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.2
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.0
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.1
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	3.3
2-Fluorobiphenyl (surr.)	1	%	89	97	89	88
p-Terphenyl-d14 (surr.)	1	%	96	105	96	93
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
α-BHC	0.05	mg/kg	-	-	-	< 0.05
Aldrin	0.05	mg/kg	-	-	-	< 0.05
β-BHC	0.05	mg/kg	-	-	-	< 0.05
δ-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
γ-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
Dibutylchloredate (surr.)	1	%	-	-	-	90
Tetrachloro-m-xylene (surr.)	1	%	-	-	-	100
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

Client Sample ID			BH15 0-0.1	BH16 0.2-0.3	BH17 0-0.1	BH18 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15079	S16-Jn15081	S16-Jn15083	S16-Jn15085
Date Sampled			Jun 10, 2016	Jun 10, 2016	Jun 10, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
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	-	-	-	< 0.2
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	%	-	-	-	92
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	-	-	< 0.5
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	%	-	-	-	90
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
Heavy Metals						
Arsenic	2	mg/kg	< 2	4.4	< 2	4.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.9	16	6.1	20
Copper	5	mg/kg	93	14	8.5	15
Lead	5	mg/kg	6.8	17	16	18
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	7.5	18	6.2	23
Zinc	5	mg/kg	41	18	39	27
% Moisture	1	%	4.5	13	12	12

Client Sample ID			BH19 0.2-0.3 Soil	BH20 0-0.1 Soil	BH21 0-0.1 Soil	BH22 0-0.1 Soil
Sample Matrix			S16-Jn15088	S16-Jn15090	S16-Jn15092	S16-Jn15094
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 14, 2016	Jun 10, 2016
Date Sampled						
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	-	240	-	< 50
TRH C29-C36	50	mg/kg	-	< 50	-	< 50
TRH C10-36 (Total)	50	mg/kg	-	240	-	< 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	%	-	81	-	75
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	92	91	88	92
p-Terphenyl-d14 (surr.)	1	%	95	101	102	109
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05

Client Sample ID			BH19 0.2-0.3 Soil S16-Jn15088 Jun 10, 2016	BH20 0-0.1 Soil S16-Jn15090 Jun 10, 2016	BH21 0-0.1 Soil S16-Jn15092 Jun 14, 2016	BH22 0-0.1 Soil S16-Jn15094 Jun 10, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
γ-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	-	< 1	< 1	< 1
Dibutylchloroendate (surr.)	1	%	-	115	91	85
Tetrachloro-m-xylene (surr.)	1	%	-	87	90	119
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Omethoate	2	mg/kg	-	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2

Client Sample ID			BH19 0.2-0.3 Soil	BH20 0-0.1 Soil	BH21 0-0.1 Soil	BH22 0-0.1 Soil
Sample Matrix			S16-Jn15088	S16-Jn15090	S16-Jn15092	S16-Jn15094
Eurofins mgt Sample No.			Jun 10, 2016	Jun 10, 2016	Jun 14, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	108	133	137
Acid Herbicides						
2,4-D	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4-DB	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4,5-T	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4,5-TP	0.5	mg/kg	-	-	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	-	-	< 0.5	< 0.5
Dicamba	0.5	mg/kg	-	-	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	-	-	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	-	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	-	-	< 0.5	< 0.5
MCPA	0.5	mg/kg	-	-	< 0.5	< 0.5
MCPB	0.5	mg/kg	-	-	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	-	-	< 0.5	< 0.5
Warfarin (surr.)	1	%	-	-	110	107
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1232	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibutylchloredate (surr.)	1	%	-	115	-	85
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	-	< 50
TRH >C16-C34	100	mg/kg	-	240	-	< 100
TRH >C34-C40	100	mg/kg	-	< 100	-	< 100
Heavy Metals						
Arsenic	2	mg/kg	2.5	< 2	< 2	3.1
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	16	< 5	< 5	< 5
Copper	5	mg/kg	19	8.2	< 5	22
Lead	5	mg/kg	69	11	< 5	< 5
Mercury	0.05	mg/kg	0.06	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	19	< 5	< 5	< 5
Zinc	5	mg/kg	82	41	< 5	12
% Moisture	1	%	13	6.8	8.7	8.7

Client Sample ID			BH22 0.2-0.3 Soil	BH22 0.6-0.7 Soil	BH22 1.5-1.6 Soil	BH23 0-0.1 Soil
Sample Matrix			S16-Jn15095	S16-Jn15096	S16-Jn15097	S16-Jn15100
Eurofins mgt Sample No.			Jun 14, 2016	Jun 10, 2016	Jun 14, 2016	Jun 10, 2016
Date Sampled						
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	%	-	78	-	83
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	96	89	85	71
p-Terphenyl-d14 (surr.)	1	%	117	108	106	88
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

Client Sample ID			BH22 0.2-0.3 Soil	BH22 0.6-0.7 Soil	BH22 1.5-1.6 Soil	BH23 0-0.1 Soil
Sample Matrix			S16-Jn15095	S16-Jn15096	S16-Jn15097	S16-Jn15100
Eurofins mgt Sample No.			Jun 14, 2016	Jun 10, 2016	Jun 14, 2016	Jun 10, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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
γ-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
Dibutylchloroendate (surr.)	1	%	-	87	-	90
Tetrachloro-m-xylene (surr.)	1	%	-	122	-	131
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
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	-	< 0.2	-	< 0.2
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

Client Sample ID			BH22 0.2-0.3	BH22 0.6-0.7	BH22 1.5-1.6	BH23 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15095	S16-Jn15096	S16-Jn15097	S16-Jn15100
Date Sampled			Jun 14, 2016	Jun 10, 2016	Jun 14, 2016	Jun 10, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	-	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	119	-	88
Acid Herbicides						
2,4-D	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4-DB	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4,5-T	0.5	mg/kg	-	< 0.5	-	< 0.5
2,4,5-TP	0.5	mg/kg	-	< 0.5	-	< 0.5
Actril (loxynil)	0.5	mg/kg	-	< 0.5	-	< 0.5
Dicamba	0.5	mg/kg	-	< 0.5	-	< 0.5
Dichlorprop	0.5	mg/kg	-	< 0.5	-	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	< 0.5	-	< 0.5
Dinoseb	0.5	mg/kg	-	< 0.5	-	< 0.5
MCPA	0.5	mg/kg	-	< 0.5	-	< 0.5
MCPB	0.5	mg/kg	-	< 0.5	-	< 0.5
Mecoprop	0.5	mg/kg	-	< 0.5	-	< 0.5
Warfarin (surr.)	1	%	-	107	-	107
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1232	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibutylchloredate (surr.)	1	%	-	87	-	90
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
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	2.5	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	5.8	< 5
Copper	5	mg/kg	170	< 5	< 5	< 5
Lead	5	mg/kg	< 5	< 5	8.6	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	26	< 5	9.3	< 5
% Moisture	1	%	4.3	7.0	6.9	7.3

Client Sample ID			BH24 0-0.1 Soil S16-Jn15102 Jun 14, 2016	BH26 0-0.1 Soil S16-Jn15105 Jun 14, 2016	BH27 0-0.1 Soil S16-Jn15107 Jun 14, 2016	BH28 0-0.1 Soil S16-Jn15109 Jun 14, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
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	%	-	85	-	78
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	89	89	84	86
p-Terphenyl-d14 (surr.)	1	%	112	111	107	108
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			BH24 0-0.1	BH26 0-0.1	BH27 0-0.1	BH28 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15102	S16-Jn15105	S16-Jn15107	S16-Jn15109
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Dibutylchloroendate (surr.)	1	%	91	85	86	88
Tetrachloro-m-xylene (surr.)	1	%	129	124	129	128
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Omethoate	2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			BH24 0-0.1	BH26 0-0.1	BH27 0-0.1	BH28 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15102	S16-Jn15105	S16-Jn15107	S16-Jn15109
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	106	76	107	106
Acid Herbicides						
2,4-D	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4-DB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-T	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2,4,5-TP	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Atril (loxynil)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dicamba	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
MCPA	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
MCPB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Warfarin (surr.)	1	%	118	98	107	118
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1232	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	-	< 0.5
Dibutylchloredate (surr.)	1	%	-	85	-	88
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
Heavy Metals						
Arsenic	2	mg/kg	< 2	2.0	2.1	2.0
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	8.1	< 5	< 5
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	7.1	< 5	< 5
% Moisture	1	%	8.7	8.3	7.8	7.9

Client Sample ID			BH29 0-0.1 Soil	BH30 0.6-0.7 Soil	BH30 1.7-1.8 Soil	BH31 0-0.1 Soil
Sample Matrix			S16-Jn15111	S16-Jn15113	S16-Jn15114	S16-Jn15116
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
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	%	-	-	70	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	-	< 0.5	-
TRH C6-C10	20	mg/kg	-	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	-	< 20	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	-	< 50	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	90	89	94	91
p-Terphenyl-d14 (surr.)	1	%	110	111	121	118
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

Client Sample ID			BH29 0-0.1 Soil S16-Jn15111 Jun 14, 2016	BH30 0.6-0.7 Soil S16-Jn15113 Jun 14, 2016	BH30 1.7-1.8 Soil S16-Jn15114 Jun 14, 2016	BH31 0-0.1 Soil S16-Jn15116 Jun 14, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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
Dibutylchloroendate (surr.)	1	%	-	-	90	85
Tetrachloro-m-xylene (surr.)	1	%	-	-	131	122
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
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	-	-	< 0.2	< 0.2
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

Client Sample ID			BH29 0-0.1	BH30 0.6-0.7	BH30 1.7-1.8	BH31 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15111	S16-Jn15113	S16-Jn15114	S16-Jn15116
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	-	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	-	110	103
Acid Herbicides						
2,4-D	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4-DB	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4,5-T	0.5	mg/kg	-	-	< 0.5	< 0.5
2,4,5-TP	0.5	mg/kg	-	-	< 0.5	< 0.5
Actril (loxynil)	0.5	mg/kg	-	-	< 0.5	< 0.5
Dicamba	0.5	mg/kg	-	-	< 0.5	< 0.5
Dichlorprop	0.5	mg/kg	-	-	< 0.5	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	-	< 0.5	< 0.5
Dinoseb	0.5	mg/kg	-	-	< 0.5	< 0.5
MCPA	0.5	mg/kg	-	-	< 0.5	< 0.5
MCPB	0.5	mg/kg	-	-	< 0.5	< 0.5
Mecoprop	0.5	mg/kg	-	-	< 0.5	< 0.5
Warfarin (surr.)	1	%	-	-	104	103
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	-	< 0.5	-
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	%	-	-	90	-
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	-
Heavy Metals						
Arsenic	2	mg/kg	2.2	3.8	4.6	2.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	5.8	5.6	< 5
Copper	5	mg/kg	6.7	< 5	5.9	8.7
Lead	5	mg/kg	< 5	5.3	15	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	5.3	10.0	17	7.4
% Moisture	1	%	8.8	15	14	5.5

Client Sample ID			BH32 0-0.1 Soil	BH33 0-0.1 Soil	BH33 0.6-0.7 Soil	BH34 0-0.1 Soil
Sample Matrix			S16-Jn15118	S16-Jn15120	S16-Jn15121	S16-Jn15123
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
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	%	-	92	77	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	-
TRH C6-C10	20	mg/kg	-	< 20	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	< 50	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	91	91	92	93
p-Terphenyl-d14 (surr.)	1	%	116	113	99	106
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	-
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-

Client Sample ID			BH32 0-0.1	BH33 0-0.1	BH33 0.6-0.7	BH34 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15118	S16-Jn15120	S16-Jn15121	S16-Jn15123
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Toxaphene	1	mg/kg	< 1	< 1	< 1	-
Dibutylchloroendate (surr.)	1	%	86	73	85	-
Tetrachloro-m-xylene (surr.)	1	%	123	91	118	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Coumaphos	2	mg/kg	< 2	< 2	< 2	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Monocrotophos	2	mg/kg	< 2	< 2	< 2	-
Omethoate	2	mg/kg	< 0.2	< 0.2	< 0.2	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-

Client Sample ID			BH32 0-0.1	BH33 0-0.1	BH33 0.6-0.7	BH34 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15118	S16-Jn15120	S16-Jn15121	S16-Jn15123
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	-
Triphenylphosphate (surr.)	1	%	106	115	103	-
Acid Herbicides						
2,4-D	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2,4-DB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2,4,5-T	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
2,4,5-TP	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Actril (loxynil)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dicamba	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dichlorprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dinitro-o-cresol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Dinoseb	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
MCPA	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
MCPB	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Mecoprop	0.5	mg/kg	< 0.5	< 0.5	< 0.5	-
Warfarin (surr.)	1	%	96	103	103	-
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 0.5	-
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 0.5	-
Total PCB*	0.5	mg/kg	-	< 0.5	< 0.5	-
Dibutylchloredate (surr.)	1	%	-	73	85	-
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	-
Heavy Metals						
Arsenic	2	mg/kg	2.0	2.2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	7.8	< 5
Copper	5	mg/kg	8.7	< 5	36	< 5
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	< 5	36	< 5
Zinc	5	mg/kg	< 5	< 5	19	< 5
% Moisture	1	%	8.3	8.9	5.7	9.8

Client Sample ID			BH35 0-0.1 Soil	BH36 0-0.1 Soil	BH37 0-0.1 Soil	BH37 0.4-0.5 Soil
Sample Matrix			S16-Jn15125	S16-Jn15127	S16-Jn15129	S16-Jn15130
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	-	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	-	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	-	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	-	86	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	-	86	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	97	-	79	78
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	-	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	93	93	93	94
p-Terphenyl-d14 (surr.)	1	%	105	106	108	107
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05

Client Sample ID			BH35 0-0.1	BH36 0-0.1	BH37 0-0.1	BH37 0.4-0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15125	S16-Jn15127	S16-Jn15129	S16-Jn15130
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	-	< 1	< 1
Dibutylchloroendate (surr.)	1	%	95	-	97	85
Tetrachloro-m-xylene (surr.)	1	%	130	-	108	98
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	-	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	-	< 2	< 2
Omethoate	2	mg/kg	< 0.2	-	< 0.2	< 0.2
Phorate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2

Client Sample ID			BH35 0-0.1 Soil	BH36 0-0.1 Soil	BH37 0-0.1 Soil	BH37 0.4-0.5 Soil
Sample Matrix			S16-Jn15125	S16-Jn15127	S16-Jn15129	S16-Jn15130
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	105	-	132	132
Acid Herbicides						
2.4-D	0.5	mg/kg	< 0.5	-	-	-
2.4-DB	0.5	mg/kg	< 0.5	-	-	-
2.4.5-T	0.5	mg/kg	< 0.5	-	-	-
2.4.5-TP	0.5	mg/kg	< 0.5	-	-	-
Actril (loxynil)	0.5	mg/kg	< 0.5	-	-	-
Dicamba	0.5	mg/kg	< 0.5	-	-	-
Dichlorprop	0.5	mg/kg	< 0.5	-	-	-
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	-	-
Dinoseb	0.5	mg/kg	< 0.5	-	-	-
MCPA	0.5	mg/kg	< 0.5	-	-	-
MCPB	0.5	mg/kg	< 0.5	-	-	-
Mecoprop	0.5	mg/kg	< 0.5	-	-	-
Warfarin (surr.)	1	%	102	-	-	-
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	-	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	95	-	97	85
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	-	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	-	160	< 100
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	3.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	7.6	15	13
Copper	5	mg/kg	< 5	51	53	5.8
Lead	5	mg/kg	< 5	< 5	< 5	17
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	50	140	6.0
Zinc	5	mg/kg	< 5	40	50	13
% Moisture	1	%	7.6	4.9	1.0	11

Client Sample ID			BH38 0-0.1 Soil	BH39 0-0.1 Soil	BH40 0-0.1 Soil	BH41 0-0.1 Soil
Sample Matrix			S16-Jn15133	S16-Jn15135	S16-Jn15137	S16-Jn15139
Eurofins mgt Sample No.			Jun 15, 2016	Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Date Sampled						
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	-	240	-
TRH C10-36 (Total)	50	mg/kg	< 50	-	240	-
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	%	71	-	74	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	< 0.5	-
TRH C6-C10	20	mg/kg	< 20	-	< 20	-
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	< 20	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	< 50	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	93	93	86	94
p-Terphenyl-d14 (surr.)	1	%	108	110	100	108
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	-

Client Sample ID			BH38 0-0.1	BH39 0-0.1	BH40 0-0.1	BH41 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15133	S16-Jn15135	S16-Jn15137	S16-Jn15139
Date Sampled			Jun 15, 2016	Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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	-
Dibutylchloroendate (surr.)	1	%	89	-	83	-
Tetrachloro-m-xylene (surr.)	1	%	95	-	83	-
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	-
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	< 0.2	-	< 0.2	-
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	-

Client Sample ID			BH38 0-0.1	BH39 0-0.1	BH40 0-0.1	BH41 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15133	S16-Jn15135	S16-Jn15137	S16-Jn15139
Date Sampled			Jun 15, 2016	Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	< 0.2	-	< 0.2	-
Triphenylphosphate (surr.)	1	%	141	-	128	-
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1232	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1242	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1248	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1254	0.5	mg/kg	< 0.5	-	< 0.5	-
Aroclor-1260	0.5	mg/kg	< 0.5	-	< 0.5	-
Total PCB*	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibutylchloredate (surr.)	1	%	89	-	83	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	< 50	-
TRH >C16-C34	100	mg/kg	< 100	-	120	-
TRH >C34-C40	100	mg/kg	110	-	470	-
Heavy Metals						
Arsenic	2	mg/kg	< 2	2.1	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	10	19	12	12
Copper	5	mg/kg	53	230	60	60
Lead	5	mg/kg	< 5	8.3	< 5	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	83	8.4	97	94
Zinc	5	mg/kg	40	38	46	45
% Moisture	1	%	3.3	9.1	4.4	3.4

Client Sample ID			BH42 0-0.1	BH43 0-0.1	BH44 0-0.1	BH45 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15141	S16-Jn15143	S16-Jn15145	S16-Jn15147
Date Sampled			Jun 15, 2016	Jun 14, 2016	Jun 14, 2016	Jun 15, 2016
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	55	-	-	< 50
TRH C29-C36	50	mg/kg	330	-	-	< 50
TRH C10-36 (Total)	50	mg/kg	385	-	-	< 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	%	82	-	-	72

Client Sample ID			BH42 0-0.1 Soil	BH43 0-0.1 Soil	BH44 0-0.1 Soil	BH45 0-0.1 Soil
Sample Matrix			S16-Jn15141	S16-Jn15143	S16-Jn15145	S16-Jn15147
Eurofins mgt Sample No.			Jun 15, 2016	Jun 14, 2016	Jun 14, 2016	Jun 15, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	-	-	< 0.5
TRH C6-C10	20	mg/kg	< 20	-	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	-	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	-	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	95	90	96	93
p-Terphenyl-d14 (surr.)	1	%	110	108	109	107
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
α-BHC	0.05	mg/kg	< 0.05	-	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	-	-	< 0.05
β-BHC	0.05	mg/kg	< 0.05	-	-	< 0.05
δ-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
γ-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

Client Sample ID			BH42 0-0.1	BH43 0-0.1	BH44 0-0.1	BH45 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15141	S16-Jn15143	S16-Jn15145	S16-Jn15147
Date Sampled			Jun 15, 2016	Jun 14, 2016	Jun 14, 2016	Jun 15, 2016
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	88	-	-	77
Tetrachloro-m-xylene (surr.)	1	%	81	-	-	78
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
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	< 0.2	-	-	< 0.2
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	%	140	-	-	110
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	-	-	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	-	-	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	-	-	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	-	-	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	-	-	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	-	-	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	-	-	< 0.5
Dibutylchlorendate (surr.)	1	%	88	-	-	77
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	-	-	< 50
TRH >C16-C34	100	mg/kg	200	-	-	< 100
TRH >C34-C40	100	mg/kg	420	-	-	< 100

Client Sample ID			BH42 0-0.1	BH43 0-0.1	BH44 0-0.1	BH45 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15141	S16-Jn15143	S16-Jn15145	S16-Jn15147
Date Sampled			Jun 15, 2016	Jun 14, 2016	Jun 14, 2016	Jun 15, 2016
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	2.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	13	14	13	15
Copper	5	mg/kg	67	70	59	43
Lead	5	mg/kg	< 5	< 5	< 5	9.8
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	100	86	83	78
Zinc	5	mg/kg	48	49	45	44
% Moisture	1	%	2.3	4.6	3.1	6.8

Client Sample ID			BH45 0.6-0.7	BH46 0-0.1	BH47 0-0.1	BH48 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15148	S16-Jn15154	S16-Jn15156	S16-Jn15159
Date Sampled			Jun 15, 2016	Jun 15, 2016	Jun 14, 2016	Jun 15, 2016
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	-	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	-	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	-	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	-	240
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	-	240
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	-	< 0.3
4-Bromofluorobenzene (surr.)	1	%	76	91	-	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	-	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	-	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	-	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.7	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	0.6	< 0.5	< 0.5

Client Sample ID			BH45 0.6-0.7 Soil	BH46 0-0.1 Soil	BH47 0-0.1 Soil	BH48 0-0.1 Soil
Sample Matrix			S16-Jn15148	S16-Jn15154	S16-Jn15156	S16-Jn15159
Eurofins mgt Sample No.			Jun 15, 2016	Jun 15, 2016	Jun 14, 2016	Jun 15, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	0.6	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	5.2	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	94	92	88	86
p-Terphenyl-d14 (surr.)	1	%	112	107	106	90
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	-	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
α-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
β-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
δ-BHC	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
γ-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	-	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	-	< 1
Dibutylchloroendate (surr.)	1	%	67	99	-	76
Tetrachloro-m-xylene (surr.)	1	%	80	95	-	94
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	-	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2

Client Sample ID			BH45 0.6-0.7 Soil	BH46 0-0.1 Soil	BH47 0-0.1 Soil	BH48 0-0.1 Soil
Sample Matrix			S16-Jn15148	S16-Jn15154	S16-Jn15156	S16-Jn15159
Eurofins mgt Sample No.			Jun 15, 2016	Jun 15, 2016	Jun 14, 2016	Jun 15, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	-	< 2
Omethoate	2	mg/kg	< 0.2	< 0.2	-	< 0.2
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	< 0.2
Triphenylphosphate (surr.)	1	%	110	122	-	74
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	-	< 0.5
Dibutylchlorendate (surr.)	1	%	67	99	-	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	-	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	-	160
TRH >C34-C40	100	mg/kg	< 100	< 100	-	300
Heavy Metals						
Arsenic	2	mg/kg	3.1	3.1	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	10	15	11	17
Copper	5	mg/kg	9.3	18	51	55
Lead	5	mg/kg	21	13	< 5	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	5.2	33	95	92
Zinc	5	mg/kg	24	27	39	48
% Moisture	1	%	11	7.6	5.5	4.4

Client Sample ID			BH49 0-0.1 Soil	BH50 0-0.1 Soil	BH51 0-0.1 Soil	BH52 0-0.1 Soil
Sample Matrix			S16-Jn15161	S16-Jn15163	S16-Jn15165	S16-Jn15167
Eurofins mgt Sample No.			Jun 14, 2016	Jun 15, 2016	Jun 15, 2016	Jun 15, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	-	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	-	570	110	< 50
TRH C10-36 (Total)	50	mg/kg	-	570	110	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	76	89	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	116	83	132	109
p-Terphenyl-d14 (surr.)	1	%	115	89	134	113
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05

Client Sample ID			BH49 0-0.1 Soil S16-Jn15161 Jun 14, 2016	BH50 0-0.1 Soil S16-Jn15163 Jun 15, 2016	BH51 0-0.1 Soil S16-Jn15165 Jun 15, 2016	BH52 0-0.1 Soil S16-Jn15167 Jun 15, 2016
Sample Matrix						
Eurofins mgt Sample No.						
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
d-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	-	< 1	< 1	< 1
Dibutylchloroendate (surr.)	1	%	-	80	79	73
Tetrachloro-m-xylene (surr.)	1	%	-	89	97	90
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Omethoate	2	mg/kg	-	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2

Client Sample ID			BH49 0-0.1	BH50 0-0.1	BH51 0-0.1	BH52 0-0.1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15161	S16-Jn15163	S16-Jn15165	S16-Jn15167
Date Sampled			Jun 14, 2016	Jun 15, 2016	Jun 15, 2016	Jun 15, 2016
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	82	70	139
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
Dibutylchloredate (surr.)	1	%	-	80	79	73
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	-	210	< 100	< 100
TRH >C34-C40	100	mg/kg	-	1200	270	< 100
Heavy Metals						
Arsenic	2	mg/kg	4.8	2.2	3.6	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	15	14	16	51
Copper	5	mg/kg	6.2	27	11	24
Lead	5	mg/kg	15	9.0	14	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	5.2	34	15	63
Zinc	5	mg/kg	17	32	27	28
% Moisture	1	%	11	11	11	7.6

Client Sample ID			BH53 0-0.1	QA20160610-1	QA20160610-2	QA20160614-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15169	S16-Jn15482	S16-Jn15483	S16-Jn15484
Date Sampled			Jun 14, 2016	Not Provided	Not Provided	Jun 14, 2016
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	-	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	-	< 20	110	< 20
TRH C15-C28	50	mg/kg	-	< 50	310	< 50
TRH C29-C36	50	mg/kg	-	< 50	590	< 50
TRH C10-36 (Total)	50	mg/kg	-	< 50	1010	< 50
BTEX						
Benzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	-	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	-	87	92	95

Client Sample ID			BH53 0-0.1 Soil	QA20160610-1 Soil	QA20160610-2 Soil	QA20160614-1 Soil
Sample Matrix			S16-Jn15169	S16-Jn15482	S16-Jn15483	S16-Jn15484
Eurofins mgt Sample No.			Jun 14, 2016	Not Provided	Not Provided	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	-	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	-	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	-	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	-	< 50	71	< 50
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	90	171	193	185
p-Terphenyl-d14 (surr.)	1	%	94	177	199	186
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	-	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
α-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
β-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
δ-BHC	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
γ-BHC (Lindane)	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	-	< 1	< 1	< 1

Client Sample ID			BH53 0-0.1 Soil	QA20160610-1 Soil	QA20160610-2 Soil	QA20160614-1 Soil
Sample Matrix			S16-Jn15169	S16-Jn15482	S16-Jn15483	S16-Jn15484
Eurofins mgt Sample No.			Jun 14, 2016	Not Provided	Not Provided	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Dibutylchlorendate (surr.)	1	%	-	74	92	87
Tetrachloro-m-xylene (surr.)	1	%	-	101	94	100
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	-	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	-	< 2	< 2	< 2
Omethoate	2	mg/kg	-	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	-	114	76	74
Acid Herbicides						
2,4-D	0.5	mg/kg	-	-	-	< 0.5
2,4-DB	0.5	mg/kg	-	-	-	< 0.5
2,4,5-T	0.5	mg/kg	-	-	-	< 0.5
2,4,5-TP	0.5	mg/kg	-	-	-	< 0.5
Actril (loxynil)	0.5	mg/kg	-	-	-	< 0.5
Dicamba	0.5	mg/kg	-	-	-	< 0.5
Dichlorprop	0.5	mg/kg	-	-	-	< 0.5
Dinitro-o-cresol	0.5	mg/kg	-	-	-	< 0.5
Dinoseb	0.5	mg/kg	-	-	-	< 0.5
MCPA	0.5	mg/kg	-	-	-	< 0.5
MCPB	0.5	mg/kg	-	-	-	< 0.5

Client Sample ID			BH53 0-0.1	QA20160610-1	QA20160610-2	QA20160614-1
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15169	S16-Jn15482	S16-Jn15483	S16-Jn15484
Date Sampled			Jun 14, 2016	Not Provided	Not Provided	Jun 14, 2016
Test/Reference	LOR	Unit				
Acid Herbicides						
Mecoprop	0.5	mg/kg	-	-	-	< 0.5
Warfarin (surr.)	1	%	-	-	-	124
Polychlorinated Biphenyls (PCB)						
Aroclor-1016	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Aroclor-1232	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Aroclor-1242	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Aroclor-1248	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Aroclor-1254	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Aroclor-1260	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Total PCB*	0.5	mg/kg	-	< 0.5	< 5	< 0.5
Dibutylchloredate (surr.)	1	%	-	74	92	87
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	-	< 50	71	< 50
TRH >C16-C34	100	mg/kg	-	< 100	880	< 100
TRH >C34-C40	100	mg/kg	-	< 100	190	< 100
Heavy Metals						
Arsenic	2	mg/kg	4.2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	10	5.8	5.5	< 5
Copper	5	mg/kg	23	47	7.3	< 5
Lead	5	mg/kg	11	< 5	11	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	38	50	< 5	< 5
Zinc	5	mg/kg	26	30	41	< 5
% Moisture	1	%	10	6.1	6.8	7.1

Client Sample ID			QA20160614-2	QA20160615-1	BH25 0-0.1
Sample Matrix			Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15485	S16-Jn15486	S16-Jn16059
Date Sampled			Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	69	< 50
TRH C10-36 (Total)	50	mg/kg	< 50	69	< 50
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	74	71	74

Client Sample ID			QA20160614-2	QA20160615-1	BH25 0-0.1
Sample Matrix			Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15485	S16-Jn15486	S16-Jn16059
Date Sampled			Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16 less Naphthalene (F2) ^{N01}	50	mg/kg	< 50	< 50	< 50
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	183	178	176
p-Terphenyl-d14 (surr.)	1	%	184	185	178
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4,4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4,4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4,4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
α-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
β-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
δ-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
γ-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1

Client Sample ID			QA20160614-2	QA20160615-1	BH25 0-0.1
Sample Matrix			Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15485	S16-Jn15486	S16-Jn16059
Date Sampled			Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit			
Organochlorine Pesticides					
Dibutylchlorendate (surr.)	1	%	88	81	81
Tetrachloro-m-xylene (surr.)	1	%	112	104	104
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Omethoate	2	mg/kg	< 0.2	< 0.2	< 0.2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	134	70	139
Acid Herbicides					
2,4-D	0.5	mg/kg	< 0.5	-	< 0.5
2,4-DB	0.5	mg/kg	< 0.5	-	< 0.5
2,4,5-T	0.5	mg/kg	< 0.5	-	< 0.5
2,4,5-TP	0.5	mg/kg	< 0.5	-	< 0.5
Actril (loxynil)	0.5	mg/kg	< 0.5	-	< 0.5
Dicamba	0.5	mg/kg	< 0.5	-	< 0.5
Dichlorprop	0.5	mg/kg	< 0.5	-	< 0.5
Dinitro-o-cresol	0.5	mg/kg	< 0.5	-	< 0.5
Dinoseb	0.5	mg/kg	< 0.5	-	< 0.5
MCPA	0.5	mg/kg	< 0.5	-	< 0.5
MCPB	0.5	mg/kg	< 0.5	-	< 0.5

Client Sample ID			QA20160614-2	QA20160615-1	BH25 0-0.1
Sample Matrix			Soil	Soil	Soil
Eurofins mgt Sample No.			S16-Jn15485	S16-Jn15486	S16-Jn16059
Date Sampled			Jun 14, 2016	Jun 15, 2016	Jun 14, 2016
Test/Reference	LOR	Unit			
Acid Herbicides					
Mecoprop	0.5	mg/kg	< 0.5	-	< 0.5
Warfarin (surr.)	1	%	107	-	110
Polychlorinated Biphenyls (PCB)					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	88	81	81
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
Heavy Metals					
Arsenic	2	mg/kg	2.1	2.0	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	33	< 5
Copper	5	mg/kg	< 5	27	< 5
Lead	5	mg/kg	< 5	6.7	< 5
Mercury	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Nickel	5	mg/kg	< 5	63	< 5
Zinc	5	mg/kg	< 5	46	< 5
% Moisture	1	%	9.6	8.5	7.5

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
JBS&G Suite 2			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 20, 2016	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jun 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 20, 2016	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Organochlorine Pesticides	Sydney	Jun 20, 2016	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Polychlorinated Biphenyls (PCB)	Sydney	Jun 20, 2016	28 Day
- Method: E013 Polychlorinated Biphenyls (PCB)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Jun 20, 2016	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
Organophosphorus Pesticides	Sydney	Jun 20, 2016	14 Day
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Acid Herbicides	Melbourne	Jun 21, 2016	14 Day
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			
% Moisture	Sydney	Jun 17, 2016	14 Day
- Method: LTM-GEN-7080 Moisture			

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Fax:

Received: Jun 16, 2016 6:30 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID										
1	BH01 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15048				X					X	X
2	BH01 0-1	Jun 10, 2016		Soil	S16-Jn15049	X									
3	BH02 0-1	Jun 10, 2016		Soil	S16-Jn15050	X									
4	BH03 0-0.1	Jun 10, 2016		Soil	S16-Jn15051			X						X	X
5	BH03 0-1	Jun 10, 2016		Soil	S16-Jn15052	X									
6	BH04 0-0.1	Jun 10, 2016		Soil	S16-Jn15053		X						X	X	
7	BH04 0-1	Jun 10, 2016		Soil	S16-Jn15054	X									
8	BH04 1-2	Jun 10, 2016		Soil	S16-Jn15055	X									
9	BH05 0-0.1	Jun 10, 2016		Soil	S16-Jn15056				X					X	X
10	BH05 0-1	Jun 10, 2016		Soil	S16-Jn15057	X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
11	BH06 0-1	Jun 10, 2016		Soil	S16-Jn15058	X									
12	BH07 0-0.1	Jun 10, 2016		Soil	S16-Jn15059				X					X	X
13	BH07 0-1	Jun 10, 2016		Soil	S16-Jn15060	X									
14	BH08 0-0.1	Jun 10, 2016		Soil	S16-Jn15061		X						X	X	
15	BH08 0-1	Jun 10, 2016		Soil	S16-Jn15062	X									
16	BH09 0-0.1	Jun 10, 2016		Soil	S16-Jn15063				X					X	X
17	BH09 0-1	Jun 10, 2016		Soil	S16-Jn15064	X									
18	BH10 0-0.1	Jun 10, 2016		Soil	S16-Jn15065				X					X	X
19	BH10 0-1	Jun 10, 2016		Soil	S16-Jn15066	X									
20	BH10 1-2	Jun 10, 2016		Soil	S16-Jn15067	X									
21	BH11 0-0.1	Jun 10, 2016		Soil	S16-Jn15068		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
22	BH11 0-1	Jun 10, 2016		Soil	S16-Jn15069										
23	BH11 1-2	Jun 10, 2016		Soil	S16-Jn15070	X									
24	BH12 0-0.1	Jun 10, 2016		Soil	S16-Jn15071		X						X	X	
25	BH12 0-1	Jun 10, 2016		Soil	S16-Jn15072	X									
26	BH12 1-2	Jun 10, 2016		Soil	S16-Jn15073	X									
27	BH13 0-0.1	Jun 10, 2016		Soil	S16-Jn15074		X						X	X	
28	BH13 0-1	Jun 10, 2016		Soil	S16-Jn15075	X									
29	BH14 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15076				X					X	X
30	BH14 0-1	Jun 10, 2016		Soil	S16-Jn15077	X									
31	BH14 1-2	Jun 10, 2016		Soil	S16-Jn15078	X									
32	BH15 0-0.1	Jun 10, 2016		Soil	S16-Jn15079		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
33	BH15 0-1	Jun 10, 2016		Soil	S16-Jn15080										
34	BH16 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15081		X						X	X	
35	BH16 0-1	Jun 10, 2016		Soil	S16-Jn15082	X									
36	BH17 0-0.1	Jun 10, 2016		Soil	S16-Jn15083		X						X	X	
37	BH17 0-1	Jun 10, 2016		Soil	S16-Jn15084	X									
38	BH18 0-0.1	Jun 10, 2016		Soil	S16-Jn15085				X					X	X
39	BH18 0-1	Jun 10, 2016		Soil	S16-Jn15086	X									
40	BH18 1-2	Jun 10, 2016		Soil	S16-Jn15087	X									
41	BH19 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15088		X						X	X	
42	BH19 0-1	Jun 10, 2016		Soil	S16-Jn15089	X									
43	BH20 0-0.1	Jun 10, 2016		Soil	S16-Jn15090				X					X	X
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
44	BH20 0-1	Jun 10, 2016		Soil	S16-Jn15091										
45	BH21 0-0.1	Jun 14, 2016		Soil	S16-Jn15092		X	X	X	X			X	X	
46	BH21 0-1	Jun 14, 2016		Soil	S16-Jn15093	X									
47	BH22 0-0.1	Jun 10, 2016		Soil	S16-Jn15094				X	X				X	X
48	BH22 0.2-0.3	Jun 14, 2016		Soil	S16-Jn15095		X						X	X	
49	BH22 0.6-0.7	Jun 10, 2016		Soil	S16-Jn15096				X	X				X	X
50	BH22 1.5-1.6	Jun 14, 2016		Soil	S16-Jn15097		X						X	X	
51	BH22 0-1	Jun 14, 2016		Soil	S16-Jn15098	X									
52	BH22 1-2	Jun 14, 2016		Soil	S16-Jn15099	X									
53	BH23 0-0.1	Jun 10, 2016		Soil	S16-Jn15100				X	X				X	X
54	BH23 0-1	Jun 14, 2016		Soil	S16-Jn15101	X									
							X	X	X	X			X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
55	BH24 0-0.1	Jun 14, 2016		Soil	S16-Jn15102										
56	BH24 0-1	Jun 14, 2016		Soil	S16-Jn15103	X									
57	BH25 0-1	Jun 14, 2016		Soil	S16-Jn15104	X									
58	BH26 0-0.1	Jun 14, 2016		Soil	S16-Jn15105				X	X				X	X
59	BH26 0-1	Jun 14, 2016		Soil	S16-Jn15106	X									
60	BH27 0-0.1	Jun 14, 2016		Soil	S16-Jn15107		X	X	X	X			X	X	
61	BH27 0-1	Jun 14, 2016		Soil	S16-Jn15108	X									
62	BH28 0-0.1	Jun 14, 2016		Soil	S16-Jn15109				X	X				X	X
63	BH28 0-1	Jun 14, 2016		Soil	S16-Jn15110	X									
64	BH29 0-0.1	Jun 14, 2016		Soil	S16-Jn15111		X						X	X	
65	BH29 0-1	Jun 14, 2016		Soil	S16-Jn15112	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
66	BH30 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15113										
67	BH30 1.7-1.8	Jun 14, 2016		Soil	S16-Jn15114				X	X				X	X
68	BH30 0-1	Jun 14, 2016		Soil	S16-Jn15115	X									
69	BH31 0-0.1	Jun 14, 2016		Soil	S16-Jn15116		X	X	X	X			X	X	
70	BH31 0-1	Jun 14, 2016		Soil	S16-Jn15117	X									
71	BH32 0-0.1	Jun 14, 2016		Soil	S16-Jn15118		X	X	X	X			X	X	
72	BH32 0-1	Jun 14, 2016		Soil	S16-Jn15119	X									
73	BH33 0-0.1	Jun 14, 2016		Soil	S16-Jn15120				X	X				X	X
74	BH33 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15121				X	X				X	X
75	BH33 0-1	Jun 14, 2016		Soil	S16-Jn15122	X									
76	BH34 0-0.1	Jun 14, 2016		Soil	S16-Jn15123		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
77	BH34 0-1	Jun 14, 2016		Soil	S16-Jn15124										
78	BH35 0-0.1	Jun 14, 2016		Soil	S16-Jn15125				X	X				X	X
79	BH35 0-1	Jun 14, 2016		Soil	S16-Jn15126	X									
80	BH36 0-0.1	Jun 14, 2016		Soil	S16-Jn15127		X						X	X	
81	BH36 0-1	Jun 14, 2016		Soil	S16-Jn15128	X									
82	BH37 0-0.1	Jun 14, 2016		Soil	S16-Jn15129				X					X	X
83	BH37 0.4-0.5	Jun 14, 2016		Soil	S16-Jn15130				X					X	X
84	BH37 0-1	Jun 14, 2016		Soil	S16-Jn15131	X									
85	BH37 1-2	Jun 14, 2016		Soil	S16-Jn15132	X									
86	BH38 0-0.1	Jun 15, 2016		Soil	S16-Jn15133				X					X	X
87	BH38 0-1	Jun 15, 2016		Soil	S16-Jn15134	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
88	BH39 0-0.1	Jun 14, 2016		Soil	S16-Jn15135										
89	BH39 0-1	Jun 14, 2016		Soil	S16-Jn15136	X									
90	BH40 0-0.1	Jun 15, 2016		Soil	S16-Jn15137				X					X	X
91	BH40 0-1	Jun 15, 2016		Soil	S16-Jn15138	X									
92	BH41 0-0.1	Jun 14, 2016		Soil	S16-Jn15139		X						X	X	
93	BH41 0-1	Jun 15, 2016		Soil	S16-Jn15140	X									
94	BH42 0-0.1	Jun 15, 2016		Soil	S16-Jn15141				X					X	X
95	BH42 0-1	Jun 15, 2016		Soil	S16-Jn15142	X									
96	BH43 0-0.1	Jun 14, 2016		Soil	S16-Jn15143		X						X	X	
97	BH43 0-1	Jun 15, 2016		Soil	S16-Jn15144	X									
98	BH44 0-0.1	Jun 14, 2016		Soil	S16-Jn15145		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
99	BH44 0-1	Jun 15, 2016		Soil	S16-Jn15146										
100	BH45 0-0.1	Jun 15, 2016		Soil	S16-Jn15147				X					X	X
101	BH45 0.6-0.7	Jun 15, 2016		Soil	S16-Jn15148				X					X	X
102	BH45 0-1	Jun 15, 2016		Soil	S16-Jn15149	X									
103	BH45 1-2	Jun 15, 2016		Soil	S16-Jn15150	X									
104	BH45 2-3	Jun 15, 2016		Soil	S16-Jn15151	X									
105	BH45 3-4	Jun 15, 2016		Soil	S16-Jn15152	X									
106	BH45 4-5	Jun 15, 2016		Soil	S16-Jn15153	X									
107	BH46 0-0.1	Jun 15, 2016		Soil	S16-Jn15154				X					X	X
108	BH46 0-1	Jun 15, 2016		Soil	S16-Jn15155	X									
109	BH47 0-0.1	Jun 14, 2016		Soil	S16-Jn15156		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
110	BH47 0-1	Jun 15, 2016		Soil	S16-Jn15157										
111	BH47 1-2	Jun 15, 2016		Soil	S16-Jn15158	X									
112	BH48 0-0.1	Jun 15, 2016		Soil	S16-Jn15159				X					X	X
113	BH48 0-1	Jun 15, 2016		Soil	S16-Jn15160	X									
114	BH49 0-0.1	Jun 14, 2016		Soil	S16-Jn15161		X						X	X	
115	BH49 0-1	Jun 15, 2016		Soil	S16-Jn15162	X									
116	BH50 0-0.1	Jun 15, 2016		Soil	S16-Jn15163				X					X	X
117	BH50 0-1	Jun 15, 2016		Soil	S16-Jn15164	X									
118	BH51 0-0.1	Jun 15, 2016		Soil	S16-Jn15165				X					X	X
119	BH51 0-1	Jun 15, 2016		Soil	S16-Jn15166	X									
120	BH52 0-0.1	Jun 15, 2016		Soil	S16-Jn15167				X					X	X
						X									

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 504746
Phone: 02 8245 0300
Fax:

Received: Jun 16, 2016 6:30 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
121	BH52 0-1	Jun 15, 2016		Soil	S16-Jn15168										
122	BH53 0-0.1	Jun 14, 2016		Soil	S16-Jn15169		X						X	X	
123	BH10 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15170		X				X		X		
124	BH10 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15171		X					X	X		
125	BH18 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15172		X				X		X		
126	BH18 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15173		X					X	X		
127	BH21 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15174		X				X		X		
							X					X	X		

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
128	BH21 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15175										
129	BH22 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15176		X				X		X		
130	BH22 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15177		X					X	X		
131	BH26 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15178		X				X		X		
132	BH26 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15179		X					X	X		
133	BH33 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15180		X				X		X		
134	BH33 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15181		X					X	X		
							X				X		X		

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
135	BH37 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15182										
136	BH37 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15183		X					X	X		
137	BH45 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15184		X				X		X		
138	BH45 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15185		X					X	X		
139	QA20160610-1	Not Provided		Soil	S16-Jn15482	X			X					X	X
140	QA20160610-2	Not Provided		Soil	S16-Jn15483	X			X					X	X
141	QA20160614-1	Jun 14, 2016		Soil	S16-Jn15484	X			X	X				X	X

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
142	QA20160614-2	Jun 14, 2016		Soil	S16-Jn15485	X			X	X				X	X
143	QA20160615-1	Jun 15, 2016		Soil	S16-Jn15486	X			X					X	X
144	BH25 0-0.1	Jun 14, 2016		Soil	S16-Jn16059				X	X				X	X
145	QA20160614-2	Jun 14, 2016		AUS Leachate	S16-Jn16534		X				X		X		
146	QA20160614-2	Jun 14, 2016		US Leachate	S16-Jn16535		X					X	X		
Test Counts						70	45	5	41	17	9	9	45	63	36

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							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
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	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	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	
Phorate	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Acid Herbicides							
2,4-D	mg/kg	< 0.5			0.5	Pass	
2,4-DB	mg/kg	< 0.5			0.5	Pass	
2,4,5-T	mg/kg	< 0.5			0.5	Pass	
2,4,5-TP	mg/kg	< 0.5			0.5	Pass	
Actril (loxynil)	mg/kg	< 0.5			0.5	Pass	
Dicamba	mg/kg	< 0.5			0.5	Pass	
Dichlorprop	mg/kg	< 0.5			0.5	Pass	
Dinitro-o-cresol	mg/kg	< 0.5			0.5	Pass	
Dinoseb	mg/kg	< 0.5			0.5	Pass	
MCPA	mg/kg	< 0.5			0.5	Pass	
MCPB	mg/kg	< 0.5			0.5	Pass	
Mecoprop	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Polychlorinated Biphenyls (PCB)							
Aroclor-1016	mg/kg	< 0.5			0.5	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total PCB*	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							
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	
Mercury	mg/kg	< 0.05			0.05	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	86			70-130	Pass	
TRH C10-C14	%	90			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	90			70-130	Pass	
Toluene	%	91			70-130	Pass	
Ethylbenzene	%	90			70-130	Pass	
m&p-Xylenes	%	93			70-130	Pass	
o-Xylene	%	93			70-130	Pass	
Xylenes - Total	%	93			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	101			70-130	Pass	
TRH C6-C10	%	92			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	100			70-130	Pass	
Anthracene	%	114			70-130	Pass	
Benz(a)anthracene	%	110			70-130	Pass	
Benzo(a)pyrene	%	79			70-130	Pass	
Benzo(b&j)fluoranthene	%	79			70-130	Pass	
Benzo(g,h,i)perylene	%	91			70-130	Pass	
Benzo(k)fluoranthene	%	95			70-130	Pass	
Chrysene	%	105			70-130	Pass	
Dibenz(a,h)anthracene	%	86			70-130	Pass	
Fluoranthene	%	113			70-130	Pass	
Fluorene	%	99			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	88			70-130	Pass	
Naphthalene	%	98			70-130	Pass	
Phenanthrene	%	119			70-130	Pass	
Pyrene	%	113			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	98			70-130	Pass	
4,4'-DDD	%	100			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4,4'-DDE	%	104			70-130	Pass	
4,4'-DDT	%	103			70-130	Pass	
a-BHC	%	98			70-130	Pass	
Aldrin	%	99			70-130	Pass	
b-BHC	%	92			70-130	Pass	
d-BHC	%	104			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	99			70-130	Pass	
Endosulfan II	%	98			70-130	Pass	
Endosulfan sulphate	%	105			70-130	Pass	
Endrin	%	95			70-130	Pass	
Endrin aldehyde	%	116			70-130	Pass	
Endrin ketone	%	97			70-130	Pass	
g-BHC (Lindane)	%	96			70-130	Pass	
Heptachlor	%	84			70-130	Pass	
Heptachlor epoxide	%	96			70-130	Pass	
Hexachlorobenzene	%	92			70-130	Pass	
Methoxychlor	%	103			70-130	Pass	
Toxaphene	%	106			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Dimethoate	%	79			70-130	Pass	
Fenitrothion	%	96			70-130	Pass	
Methyl parathion	%	110			70-130	Pass	
LCS - % Recovery							
Acid Herbicides							
2,4-D	%	104			70-130	Pass	
2,4-DB	%	103			70-130	Pass	
2,4,5-T	%	121			70-130	Pass	
2,4,5-TP	%	102			70-130	Pass	
Actril (loxynil)	%	101			70-130	Pass	
Dicamba	%	90			70-130	Pass	
Dichlorprop	%	105			70-130	Pass	
Dinitro-o-cresol	%	84			70-130	Pass	
Dinoseb	%	102			70-130	Pass	
MCPA	%	98			70-130	Pass	
MCPB	%	105			70-130	Pass	
Mecoprop	%	100			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls (PCB)							
Aroclor-1260	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	87			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	91			70-130	Pass	
Cadmium	%	96			70-130	Pass	
Chromium	%	92			70-130	Pass	
Copper	%	95			70-130	Pass	
Lead	%	96			70-130	Pass	
Mercury	%	95			70-130	Pass	
Nickel	%	91			70-130	Pass	
Zinc	%	95			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S16-Jn16278	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Jn15051	CP	%	76			70-130	Pass	
TRH C10-C14	S16-Jn15051	CP	%	87			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn15051	CP	%	80			70-130	Pass	
Toluene	S16-Jn15051	CP	%	74			70-130	Pass	
Ethylbenzene	S16-Jn15051	CP	%	73			70-130	Pass	
m&p-Xylenes	S16-Jn15051	CP	%	76			70-130	Pass	
o-Xylene	S16-Jn15051	CP	%	75			70-130	Pass	
Xylenes - Total	S16-Jn15051	CP	%	76			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn15051	CP	%	86			70-130	Pass	
TRH C6-C10	S16-Jn15051	CP	%	88			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Jn15051	CP	%	98			70-130	Pass	
Acenaphthylene	S16-Jn15051	CP	%	88			70-130	Pass	
Anthracene	S16-Jn15051	CP	%	99			70-130	Pass	
Benz(a)anthracene	S16-Jn15051	CP	%	105			70-130	Pass	
Benzo(a)pyrene	S16-Jn15051	CP	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Jn15051	CP	%	83			70-130	Pass	
Benzo(g,h,i)perylene	S16-Jn15051	CP	%	76			70-130	Pass	
Benzo(k)fluoranthene	S16-Jn15051	CP	%	102			70-130	Pass	
Chrysene	S16-Jn15051	CP	%	103			70-130	Pass	
Dibenz(a,h)anthracene	S16-Jn15051	CP	%	75			70-130	Pass	
Fluoranthene	S16-Jn15051	CP	%	108			70-130	Pass	
Fluorene	S16-Jn15051	CP	%	97			70-130	Pass	
Indeno(1,2,3-cd)pyrene	S16-Jn15051	CP	%	77			70-130	Pass	
Naphthalene	S16-Jn15051	CP	%	97			70-130	Pass	
Phenanthrene	S16-Jn15051	CP	%	115			70-130	Pass	
Pyrene	S16-Jn15051	CP	%	107			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDD	S16-Jn15051	CP	%	106			70-130	Pass	
4,4'-DDE	S16-Jn15051	CP	%	89			70-130	Pass	
4,4'-DDT	S16-Jn15051	CP	%	101			70-130	Pass	
a-BHC	S16-Jn15051	CP	%	81			70-130	Pass	
Aldrin	S16-Jn15051	CP	%	84			70-130	Pass	
b-BHC	S16-Jn15051	CP	%	76			70-130	Pass	
d-BHC	S16-Jn15051	CP	%	91			70-130	Pass	
Dieldrin	S16-Jn15051	CP	%	88			70-130	Pass	
Endosulfan I	S16-Jn15051	CP	%	87			70-130	Pass	
Endosulfan II	S16-Jn15051	CP	%	96			70-130	Pass	
Endosulfan sulphate	S16-Jn15051	CP	%	105			70-130	Pass	
Endrin	S16-Jn15051	CP	%	86			70-130	Pass	
Endrin aldehyde	S16-Jn15051	CP	%	114			70-130	Pass	
Endrin ketone	S16-Jn15051	CP	%	116			70-130	Pass	
g-BHC (Lindane)	S16-Jn15051	CP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	S16-Jn15051	CP	%	87			70-130	Pass	
Heptachlor epoxide	S16-Jn15051	CP	%	84			70-130	Pass	
Hexachlorobenzene	S16-Jn15051	CP	%	74			70-130	Pass	
Methoxychlor	S16-Jn15051	CP	%	114			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls (PCB)				Result 1					
Aroclor-1260	S16-Jn15051	CP	%	73			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn15051	CP	%	97			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Jn15051	CP	%	98			70-130	Pass	
Cadmium	S16-Jn15051	CP	%	103			70-130	Pass	
Chromium	S16-Jn15051	CP	%	73			70-130	Pass	
Copper	S16-Jn15051	CP	%	90			70-130	Pass	
Lead	S16-Jn15051	CP	%	90			70-130	Pass	
Mercury	S16-Jn15051	CP	%	96			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Jn15076	CP	%	118			70-130	Pass	
Acenaphthylene	S16-Jn15076	CP	%	109			70-130	Pass	
Anthracene	S16-Jn15076	CP	%	104			70-130	Pass	
Benz(a)anthracene	S16-Jn15076	CP	%	121			70-130	Pass	
Benzo(a)pyrene	S16-Jn15076	CP	%	103			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Jn15076	CP	%	76			70-130	Pass	
Benzo(g,h,i)perylene	S16-Jn15076	CP	%	73			70-130	Pass	
Benzo(k)fluoranthene	S16-Jn15076	CP	%	88			70-130	Pass	
Chrysene	S16-Jn15076	CP	%	124			70-130	Pass	
Dibenz(a,h)anthracene	S16-Jn15076	CP	%	79			70-130	Pass	
Fluoranthene	S16-Jn15076	CP	%	119			70-130	Pass	
Fluorene	S16-Jn15076	CP	%	116			70-130	Pass	
Indeno(1,2,3-cd)pyrene	S16-Jn15076	CP	%	76			70-130	Pass	
Naphthalene	S16-Jn15076	CP	%	111			70-130	Pass	
Phenanthrene	S16-Jn15076	CP	%	111			70-130	Pass	
Pyrene	S16-Jn15076	CP	%	120			70-130	Pass	
Spike - % Recovery									
Acid Herbicides				Result 1					
2,4-D	S16-Jn15094	CP	%	108			70-130	Pass	
Actril (loxynil)	S16-Jn15094	CP	%	105			70-130	Pass	
Dichlorprop	S16-Jn15094	CP	%	107			70-130	Pass	
MCPA	S16-Jn15094	CP	%	100			70-130	Pass	
MCPB	S16-Jn15094	CP	%	105			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Jn15096	CP	%	96			70-130	Pass	
Acenaphthylene	S16-Jn15096	CP	%	89			70-130	Pass	
Anthracene	S16-Jn15096	CP	%	114			70-130	Pass	
Benz(a)anthracene	S16-Jn15096	CP	%	101			70-130	Pass	
Benzo(a)pyrene	S16-Jn15096	CP	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Jn15096	CP	%	111			70-130	Pass	
Benzo(g,h,i)perylene	S16-Jn15096	CP	%	124			70-130	Pass	
Benzo(k)fluoranthene	S16-Jn15096	CP	%	90			70-130	Pass	
Chrysene	S16-Jn15096	CP	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a,h)anthracene	S16-Jn15096	CP	%	126			70-130	Pass	
Fluoranthene	S16-Jn15096	CP	%	111			70-130	Pass	
Fluorene	S16-Jn15096	CP	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S16-Jn15096	CP	%	122			70-130	Pass	
Naphthalene	S16-Jn15096	CP	%	96			70-130	Pass	
Phenanthrene	S16-Jn15096	CP	%	120			70-130	Pass	
Pyrene	S16-Jn15096	CP	%	111			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	S16-Jn15096	CP	%	106			70-130	Pass	
4.4'-DDE	S16-Jn15096	CP	%	109			70-130	Pass	
4.4'-DDT	S16-Jn15096	CP	%	120			70-130	Pass	
a-BHC	S16-Jn15096	CP	%	106			70-130	Pass	
Aldrin	S16-Jn15096	CP	%	107			70-130	Pass	
b-BHC	S16-Jn15096	CP	%	101			70-130	Pass	
d-BHC	S16-Jn15096	CP	%	119			70-130	Pass	
Dieldrin	S16-Jn15096	CP	%	105			70-130	Pass	
Endosulfan I	S16-Jn15096	CP	%	103			70-130	Pass	
Endosulfan II	S16-Jn15096	CP	%	105			70-130	Pass	
Endosulfan sulphate	S16-Jn15096	CP	%	112			70-130	Pass	
Endrin	S16-Jn15096	CP	%	110			70-130	Pass	
Endrin aldehyde	S16-Jn15096	CP	%	119			70-130	Pass	
Endrin ketone	S16-Jn15096	CP	%	113			70-130	Pass	
g-BHC (Lindane)	S16-Jn15096	CP	%	107			70-130	Pass	
Heptachlor	S16-Jn15096	CP	%	122			70-130	Pass	
Heptachlor epoxide	S16-Jn15096	CP	%	102			70-130	Pass	
Hexachlorobenzene	S16-Jn15096	CP	%	102			70-130	Pass	
Methoxychlor	S16-Jn15096	CP	%	115			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Fenitrothion	S16-Jn15096	CP	%	98			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Jn15096	CP	%	96			70-130	Pass	
Cadmium	S16-Jn15096	CP	%	101			70-130	Pass	
Chromium	S16-Jn15096	CP	%	96			70-130	Pass	
Copper	S16-Jn15096	CP	%	97			70-130	Pass	
Lead	S16-Jn15096	CP	%	102			70-130	Pass	
Mercury	S16-Jn15096	CP	%	101			70-130	Pass	
Nickel	S16-Jn15096	CP	%	95			70-130	Pass	
Zinc	S16-Jn15096	CP	%	100			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Jn15100	CP	%	70			70-130	Pass	
TRH C10-C14	S16-Jn15100	CP	%	93			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn15100	CP	%	82			70-130	Pass	
Toluene	S16-Jn15100	CP	%	74			70-130	Pass	
Ethylbenzene	S16-Jn15100	CP	%	73			70-130	Pass	
m&p-Xylenes	S16-Jn15100	CP	%	76			70-130	Pass	
o-Xylene	S16-Jn15100	CP	%	75			70-130	Pass	
Xylenes - Total	S16-Jn15100	CP	%	75			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1				
Naphthalene	S16-Jn15100	CP	%	80		70-130	Pass	
TRH C6-C10	S16-Jn15100	CP	%	74		70-130	Pass	
Spike - % Recovery								
Polychlorinated Biphenyls (PCB)				Result 1				
Aroclor-1260	S16-Jn15100	CP	%	99		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1				
TRH >C10-C16	S16-Jn15100	CP	%	89		70-130	Pass	
Spike - % Recovery								
Polycyclic Aromatic Hydrocarbons				Result 1				
Acenaphthene	S16-Jn15114	CP	%	100		70-130	Pass	
Acenaphthylene	S16-Jn15114	CP	%	85		70-130	Pass	
Anthracene	S16-Jn15114	CP	%	119		70-130	Pass	
Benz(a)anthracene	S16-Jn15114	CP	%	100		70-130	Pass	
Benzo(a)pyrene	S16-Jn15114	CP	%	75		70-130	Pass	
Benzo(b&j)fluoranthene	S16-Jn15114	CP	%	110		70-130	Pass	
Benzo(g,h,i)perylene	S16-Jn15114	CP	%	124		70-130	Pass	
Benzo(k)fluoranthene	S16-Jn15114	CP	%	89		70-130	Pass	
Chrysene	S16-Jn15114	CP	%	105		70-130	Pass	
Dibenz(a,h)anthracene	S16-Jn15114	CP	%	124		70-130	Pass	
Fluoranthene	S16-Jn15114	CP	%	112		70-130	Pass	
Fluorene	S16-Jn15114	CP	%	95		70-130	Pass	
Indeno(1,2,3-cd)pyrene	S16-Jn15114	CP	%	122		70-130	Pass	
Naphthalene	S16-Jn15114	CP	%	98		70-130	Pass	
Phenanthrene	S16-Jn15114	CP	%	125		70-130	Pass	
Pyrene	S16-Jn15114	CP	%	113		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S16-Jn15114	CP	%	87		70-130	Pass	
Cadmium	S16-Jn15114	CP	%	99		70-130	Pass	
Chromium	S16-Jn15114	CP	%	86		70-130	Pass	
Copper	S16-Jn15114	CP	%	89		70-130	Pass	
Lead	S16-Jn15114	CP	%	111		70-130	Pass	
Mercury	S16-Jn15114	CP	%	97		70-130	Pass	
Nickel	S16-Jn15114	CP	%	88		70-130	Pass	
Zinc	S16-Jn15114	CP	%	88		70-130	Pass	
Spike - % Recovery								
Organophosphorus Pesticides				Result 1				
Fenitrothion	S16-Jn15120	CP	%	100		70-130	Pass	
Methyl parathion	S16-Jn15120	CP	%	110		70-130	Pass	
Spike - % Recovery								
Acid Herbicides				Result 1				
2,4-D	S16-Jn15120	CP	%	108		70-130	Pass	
Actril (loxynil)	S16-Jn15120	CP	%	104		70-130	Pass	
Dichlorprop	S16-Jn15120	CP	%	107		70-130	Pass	
MCPA	S16-Jn15120	CP	%	100		70-130	Pass	
MCPB	S16-Jn15120	CP	%	108		70-130	Pass	
Spike - % Recovery								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1				
TRH C6-C9	S16-Jn15133	CP	%	88		70-130	Pass	
TRH C10-C14	S16-Jn15133	CP	%	89		70-130	Pass	
Spike - % Recovery								
BTEX				Result 1				

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzene	S16-Jn15133	CP	%	98			70-130	Pass	
Toluene	S16-Jn15133	CP	%	79			70-130	Pass	
Ethylbenzene	S16-Jn15133	CP	%	77			70-130	Pass	
m&p-Xylenes	S16-Jn15133	CP	%	80			70-130	Pass	
o-Xylene	S16-Jn15133	CP	%	79			70-130	Pass	
Xylenes - Total	S16-Jn15133	CP	%	79			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn15133	CP	%	85			70-130	Pass	
TRH C6-C10	S16-Jn15133	CP	%	105			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls (PCB)				Result 1					
Aroclor-1260	S16-Jn15133	CP	%	73			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn15133	CP	%	97			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Jn15133	CP	%	90			70-130	Pass	
Cadmium	S16-Jn15133	CP	%	96			70-130	Pass	
Chromium	S16-Jn15133	CP	%	83			70-130	Pass	
Copper	S16-Jn15133	CP	%	84			70-130	Pass	
Lead	S16-Jn15133	CP	%	85			70-130	Pass	
Mercury	S16-Jn15133	CP	%	94			70-130	Pass	
Nickel	S16-Jn15133	CP	%	80			70-130	Pass	
Zinc	S16-Jn15133	CP	%	80			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDD	S16-Jn15154	CP	%	90			70-130	Pass	
4,4'-DDE	S16-Jn15154	CP	%	101			70-130	Pass	
4,4'-DDT	S16-Jn15154	CP	%	83			70-130	Pass	
a-BHC	S16-Jn15154	CP	%	82			70-130	Pass	
Aldrin	S16-Jn15154	CP	%	96			70-130	Pass	
b-BHC	S16-Jn15154	CP	%	79			70-130	Pass	
d-BHC	S16-Jn15154	CP	%	79			70-130	Pass	
Dieldrin	S16-Jn15154	CP	%	87			70-130	Pass	
Endosulfan I	S16-Jn15154	CP	%	87			70-130	Pass	
Endosulfan II	S16-Jn15154	CP	%	86			70-130	Pass	
Endosulfan sulphate	S16-Jn15154	CP	%	110			70-130	Pass	
Endrin	S16-Jn15154	CP	%	79			70-130	Pass	
Endrin aldehyde	S16-Jn15154	CP	%	85			70-130	Pass	
Endrin ketone	S16-Jn15154	CP	%	83			70-130	Pass	
g-BHC (Lindane)	S16-Jn15154	CP	%	78			70-130	Pass	
Heptachlor	S16-Jn15154	CP	%	82			70-130	Pass	
Heptachlor epoxide	S16-Jn15154	CP	%	82			70-130	Pass	
Hexachlorobenzene	S16-Jn15154	CP	%	88			70-130	Pass	
Methoxychlor	S16-Jn15154	CP	%	97			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Fenitrothion	S16-Jn15154	CP	%	98			70-130	Pass	
Methyl parathion	S16-Jn15154	CP	%	120			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Jn15482	CP	%	76			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14	S16-Jn15482	CP	%	94			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn15482	CP	%	78			70-130	Pass	
Toluene	S16-Jn15482	CP	%	71			70-130	Pass	
Ethylbenzene	S16-Jn15482	CP	%	73			70-130	Pass	
m&p-Xylenes	S16-Jn15482	CP	%	79			70-130	Pass	
o-Xylene	S16-Jn15482	CP	%	84			70-130	Pass	
Xylenes - Total	S16-Jn15482	CP	%	81			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn15482	CP	%	92			70-130	Pass	
TRH C6-C10	S16-Jn15482	CP	%	76			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls (PCB)				Result 1					
Aroclor-1260	S16-Jn15482	CP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn15482	CP	%	101			70-130	Pass	
Spike - % Recovery									
Acid Herbicides				Result 1					
2,4-D	S16-Jn15485	CP	%	109			70-130	Pass	
Actril (loxynil)	S16-Jn15485	CP	%	105			70-130	Pass	
Dichlorprop	S16-Jn15485	CP	%	110			70-130	Pass	
MCPA	S16-Jn15485	CP	%	101			70-130	Pass	
MCPB	S16-Jn15485	CP	%	110			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDE	S16-Jn15486	CP	%	102			70-130	Pass	
a-BHC	S16-Jn15486	CP	%	100			70-130	Pass	
Aldrin	S16-Jn15486	CP	%	97			70-130	Pass	
b-BHC	S16-Jn15486	CP	%	92			70-130	Pass	
d-BHC	S16-Jn15486	CP	%	106			70-130	Pass	
Dieldrin	S16-Jn15486	CP	%	103			70-130	Pass	
Endosulfan I	S16-Jn15486	CP	%	101			70-130	Pass	
Endosulfan II	S16-Jn15486	CP	%	104			70-130	Pass	
Endosulfan sulphate	S16-Jn15486	CP	%	102			70-130	Pass	
Endrin	S16-Jn15486	CP	%	91			70-130	Pass	
Endrin aldehyde	S16-Jn15486	CP	%	121			70-130	Pass	
Endrin ketone	S16-Jn15486	CP	%	101			70-130	Pass	
g-BHC (Lindane)	S16-Jn15486	CP	%	97			70-130	Pass	
Heptachlor	S16-Jn15486	CP	%	110			70-130	Pass	
Heptachlor epoxide	S16-Jn15486	CP	%	98			70-130	Pass	
Hexachlorobenzene	S16-Jn15486	CP	%	90			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	S16-Jn15048	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S16-Jn15048	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S16-Jn15048	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S16-Jn15048	CP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate								
BTX				Result 1	Result 2	RPD		
Benzene	S16-Jn15048	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S16-Jn15048	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S16-Jn15048	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S16-Jn15048	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S16-Jn15048	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S16-Jn15048	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S16-Jn15048	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn15048	CP	mg/kg	< 1	< 1	<1	30%	Pass

Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S16-Jn15048	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfthion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S16-Jn15048	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S16-Jn15048	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15048	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15048	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	S16-Jn15048	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Jn15048	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Jn15048	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15048	CP	mg/kg	4.4	4.4	<1	30%	Pass
Cadmium	S16-Jn15048	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15048	CP	mg/kg	18	21	13	30%	Pass
Copper	S16-Jn15048	CP	mg/kg	7.0	5.9	18	30%	Pass
Lead	S16-Jn15048	CP	mg/kg	16	20	24	30%	Pass
Mercury	S16-Jn15048	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15048	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S16-Jn15048	CP	mg/kg	11	10	9.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15048	CP	%	15	15	1.0	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Jn15074	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15074	CP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	S16-Jn15074	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15074	CP	mg/kg	7.7	9.1	17	30%	Pass
Copper	S16-Jn15074	CP	mg/kg	49	57	14	30%	Pass
Lead	S16-Jn15074	CP	mg/kg	< 5	< 5	<1	30%	Pass
Mercury	S16-Jn15074	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15074	CP	mg/kg	62	67	8.0	30%	Pass
Zinc	S16-Jn15074	CP	mg/kg	50	46	10	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15074	CP	%	6.7	6.0	11	30%	Pass
Duplicate								
Acid Herbicides				Result 1	Result 2	RPD		
2,4-D	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-DB	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-T	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-TP	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Actril (loxylin)	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dicamba	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorprop	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinitro-o-cresol	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinoseb	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPA	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPB	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Mecoprop	S16-Jn15092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S16-Jn15094	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Endosulfan II	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn15094	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn15094	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S16-Jn15094	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfthion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S16-Jn15094	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S16-Jn15094	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15094	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Chrysene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Jn15095	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15095	CP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	S16-Jn15095	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15095	CP	mg/kg	< 5	< 5	<1	30%	Pass
Copper	S16-Jn15095	CP	mg/kg	170	160	9.0	30%	Pass
Lead	S16-Jn15095	CP	mg/kg	< 5	< 5	<1	30%	Pass
Mercury	S16-Jn15095	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15095	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S16-Jn15095	CP	mg/kg	26	25	6.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15095	CP	%	4.3	4.5	3.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	S16-Jn15096	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	S16-Jn15096	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	S16-Jn15096	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	S16-Jn15096	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTX				Result 1	Result 2	RPD		
Benzene	S16-Jn15096	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S16-Jn15096	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S16-Jn15096	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S16-Jn15096	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S16-Jn15096	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S16-Jn15096	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S16-Jn15096	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15096	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15096	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	S16-Jn15096	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Jn15096	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Jn15096	CP	mg/kg	< 100	< 100	<1	30%	Pass

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Jn15113	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15113	CP	mg/kg	3.8	4.1	7.0	30%	Pass
Cadmium	S16-Jn15113	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15113	CP	mg/kg	5.8	9.6	48	30%	Fail
Copper	S16-Jn15113	CP	mg/kg	< 5	5.1	13	30%	Pass
Lead	S16-Jn15113	CP	mg/kg	5.3	< 5	8.0	30%	Pass
Mercury	S16-Jn15113	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15113	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S16-Jn15113	CP	mg/kg	10.0	12	19	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15113	CP	%	15	16	5.0	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S16-Jn15118	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfothion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S16-Jn15118	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S16-Jn15118	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass

Duplicate								
Acid Herbicides				Result 1	Result 2	RPD		
2.4-D	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4-DB	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-T	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2.4.5-TP	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Actril (loxylinil)	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dicamba	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorprop	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinitro-o-cresol	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinoseb	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPA	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPB	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Mecoprop	S16-Jn15118	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	S16-Jn15130	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	S16-Jn15130	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	S16-Jn15130	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	S16-Jn15130	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTX				Result 1	Result 2	RPD		
Benzene	S16-Jn15130	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S16-Jn15130	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S16-Jn15130	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S16-Jn15130	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S16-Jn15130	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S16-Jn15130	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S16-Jn15130	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Acenaphthylene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Anthracene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benz(a)anthracene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(a)pyrene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S16-Jn15130	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
a-BHC	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn15130	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn15130	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15130	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15130	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	S16-Jn15130	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Jn15130	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Jn15130	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15130	CP	mg/kg	3.5	3.6	3.0	30%	Pass
Cadmium	S16-Jn15130	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15130	CP	mg/kg	13	13	<1	30%	Pass
Copper	S16-Jn15130	CP	mg/kg	5.8	5.6	4.0	30%	Pass
Lead	S16-Jn15130	CP	mg/kg	17	17	3.0	30%	Pass
Mercury	S16-Jn15130	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15130	CP	mg/kg	6.0	5.0	17	30%	Pass
Zinc	S16-Jn15130	CP	mg/kg	13	13	2.0	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15130	CP	%	11	12	12	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S16-Jn15148	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass

Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Disulfoton	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfothion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenthion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S16-Jn15148	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S16-Jn15148	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn15154	CP	mg/kg	3.1	3.6	16	30%	Pass
Cadmium	S16-Jn15154	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S16-Jn15154	CP	mg/kg	15	14	6.0	30%	Pass
Copper	S16-Jn15154	CP	mg/kg	18	19	8.0	30%	Pass
Lead	S16-Jn15154	CP	mg/kg	13	14	8.0	30%	Pass
Mercury	S16-Jn15154	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Nickel	S16-Jn15154	CP	mg/kg	33	36	11	30%	Pass
Zinc	S16-Jn15154	CP	mg/kg	27	31	11	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn15154	CP	%	7.6	8.0	5.0	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD		
TRH C6-C9	S16-Jn15167	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C10-C14	S16-Jn15167	CP	mg/kg	< 20	< 20	<1	30%	Pass
TRH C15-C28	S16-Jn15167	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH C29-C36	S16-Jn15167	CP	mg/kg	< 50	< 50	<1	30%	Pass
Duplicate								
BTEX				Result 1	Result 2	RPD		
Benzene	S16-Jn15167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Toluene	S16-Jn15167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Ethylbenzene	S16-Jn15167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
m&p-Xylenes	S16-Jn15167	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
o-Xylene	S16-Jn15167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
Xylenes - Total	S16-Jn15167	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
TRH C6-C10	S16-Jn15167	CP	mg/kg	< 20	< 20	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S16-Jn15167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
d-BHC	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn15167	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn15167	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn15167	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15167	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15167	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	S16-Jn15167	CP	mg/kg	< 50	< 50	<1	30%	Pass
TRH >C16-C34	S16-Jn15167	CP	mg/kg	< 100	< 100	<1	30%	Pass
TRH >C34-C40	S16-Jn15167	CP	mg/kg	< 100	< 100	<1	30%	Pass
Duplicate								
Acid Herbicides				Result 1	Result 2	RPD		
2,4-D	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4-DB	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-T	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
2,4,5-TP	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Actril (loxylin)	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dicamba	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dichlorprop	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinitro-o-cresol	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dinoseb	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPA	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
MCPB	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Mecoprop	S16-Jn15484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S16-Jn15485	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-BHC	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-BHC	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-BHC	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Endosulfan sulphate	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-BHC (Lindane)	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S16-Jn15485	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S16-Jn15485	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Toxaphene	S16-Jn15485	CP	mg/kg	< 1	< 1	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD		
Aroclor-1016	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1232	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1242	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1248	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1254	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Aroclor-1260	S16-Jn15485	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
% Moisture	S16-Jn16059	CP	%	7.5	8.0	6.0	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
Bob Symons	Senior Analyst-Inorganic (NSW)
Rhys Thomas	Senior Analyst-Asbestos (NSW)
Ryan Hamilton	Senior Analyst-Organic (NSW)
Ryan Hamilton	Senior Analyst-Volatile (NSW)
Ivan Taylor	Senior Analyst-Metal (NSW)
Mele Singh	Senior Analyst-Organic (VIC)



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](#).

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Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Mitch Hodgins

Report 504746-L
Project name PARRAMATTA
Project ID 51666
Received Date Jun 16, 2016

Client Sample ID			BH10 0-0.1 AUS Leachate - Reagent Water	BH10 0-0.1 US Leachate	BH18 0-0.1 AUS Leachate - Reagent Water	BH18 0-0.1 US Leachate
Sample Matrix			S16-Jn15170	S16-Jn15171	S16-Jn15172	S16-Jn15173
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	108	125	97	101
p-Terphenyl-d14 (surr.)	1	%	111	129	100	99
Heavy Metals						
Arsenic	0.005	mg/L	< 0.005	< 0.01	0.006	< 0.01
Cadmium	0.0005	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.005
Chromium	0.01	mg/L	< 0.01	< 0.05	0.02	< 0.05
Copper	0.01	mg/L	< 0.01	< 0.05	0.01	< 0.05
Lead	0.005	mg/L	< 0.005	< 0.01	0.011	< 0.01
Mercury	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002	< 0.001
Nickel	0.005	mg/L	< 0.005	< 0.05	0.015	< 0.05
Zinc	0.01	mg/L	< 0.01	< 0.05	0.03	< 0.05
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	-	4.0	-
pH (initial)	0.1	pH Units	9.7	-	8.5	-
pH (off)	0.1	pH Units	9.5	-	9.6	-

Client Sample ID			BH10 0-0.1 AUS Leachate - Reagent Water	BH10 0-0.1 US Leachate	BH18 0-0.1 AUS Leachate - Reagent Water	BH18 0-0.1 US Leachate
Sample Matrix			S16-Jn15170	S16-Jn15171	S16-Jn15172	S16-Jn15173
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	-	1.0	-	1.0
pH (initial)	0.1	pH Units	-	9.9	-	8.5
pH (off)	0.1	pH Units	-	13	-	4..90
pH (USA HCl addition)	0.1	pH Units	-	2.5	-	2.1

Client Sample ID			BH21 0-0.1 AUS Leachate - Reagent Water	BH21 0-0.1 US Leachate	BH22 0-0.1 AUS Leachate - Reagent Water	BH22 0-0.1 US Leachate
Sample Matrix			S16-Jn15174	S16-Jn15175	S16-Jn15176	S16-Jn15177
Eurofins mgt Sample No.			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.005
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	< 0.001	< 0.001	< 0.001	0.005
2-Fluorobiphenyl (surr.)	1	%	102	29	96	51
p-Terphenyl-d14 (surr.)	1	%	106	26	99	50
Heavy Metals						
Arsenic	0.005	mg/L	< 0.005	0.02	< 0.005	0.03
Cadmium	0.0005	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.005
Chromium	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
Copper	0.01	mg/L	< 0.01	< 0.05	< 0.01	0.05
Lead	0.005	mg/L	< 0.005	0.02	< 0.005	< 0.01
Mercury	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002	< 0.001
Nickel	0.005	mg/L	< 0.005	< 0.05	< 0.005	< 0.05
Zinc	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	-	4.0	-
pH (initial)	0.1	pH Units	7.9	-	7.6	-
pH (off)	0.1	pH Units	5.9	-	9.1	-

Client Sample ID			BH21 0-0.1	BH21 0-0.1	BH22 0-0.1	BH22 0-0.1
Sample Matrix			AUS Leachate - Reagent Water	US Leachate	AUS Leachate - Reagent Water	US Leachate
Eurofins mgt Sample No.			S16-Jn15174	S16-Jn15175	S16-Jn15176	S16-Jn15177
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	-	1.0	-	1.0
pH (initial)	0.1	pH Units	-	7.9	-	7.6
pH (off)	0.1	pH Units	-	13	-	13
pH (USA HCl addition)	0.1	pH Units	-	2.1	-	2.0

Client Sample ID			BH26 0-0.1	BH26 0-0.1	BH33 0-0.1	BH33 0-0.1
Sample Matrix			AUS Leachate - Reagent Water	US Leachate	AUS Leachate - Reagent Water	US Leachate
Eurofins mgt Sample No.			S16-Jn15178	S16-Jn15179	S16-Jn15180	S16-Jn15181
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	89	96	81	76
p-Terphenyl-d14 (surr.)	1	%	89	95	81	72
Heavy Metals						
Arsenic	0.005	mg/L	< 0.005	< 0.01	< 0.005	< 0.01
Cadmium	0.0005	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.005
Chromium	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
Copper	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
Lead	0.005	mg/L	< 0.005	< 0.01	< 0.005	0.02
Mercury	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002	< 0.001
Nickel	0.005	mg/L	< 0.005	< 0.05	< 0.005	< 0.05
Zinc	0.01	mg/L	< 0.01	< 0.05	< 0.01	0.17
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	-	4.0	-
pH (initial)	0.1	pH Units	7.3	-	7.1	-
pH (off)	0.1	pH Units	9.5	-	6.0	-

Client Sample ID			BH26 0-0.1	BH26 0-0.1	BH33 0-0.1	BH33 0-0.1
Sample Matrix			AUS Leachate - Reagent Water	US Leachate	AUS Leachate - Reagent Water	US Leachate
Eurofins mgt Sample No.			S16-Jn15178	S16-Jn15179	S16-Jn15180	S16-Jn15181
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	-	1.0	-	1.0
pH (initial)	0.1	pH Units	-	7.3	-	7.1
pH (off)	0.1	pH Units	-	5.2	-	5.6
pH (USA HCl addition)	0.1	pH Units	-	2.0	-	2.0

Client Sample ID			BH37 0-0.1	BH37 0-0.1	BH45 0-0.1	BH45 0-0.1
Sample Matrix			AUS Leachate - Reagent Water	US Leachate	AUS Leachate - Reagent Water	US Leachate
Eurofins mgt Sample No.			S16-Jn15182	S16-Jn15183	S16-Jn15184	S16-Jn15185
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.002	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	105	104	99	100
p-Terphenyl-d14 (surr.)	1	%	111	109	98	101
Heavy Metals						
Arsenic	0.005	mg/L	< 0.005	< 0.01	< 0.005	< 0.01
Cadmium	0.0005	mg/L	< 0.0005	< 0.005	< 0.0005	< 0.005
Chromium	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
Copper	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
Lead	0.005	mg/L	< 0.005	< 0.01	< 0.005	< 0.01
Mercury	0.0002	mg/L	< 0.0002	< 0.001	< 0.0002	< 0.001
Nickel	0.005	mg/L	< 0.005	0.12	< 0.005	< 0.05
Zinc	0.01	mg/L	< 0.01	< 0.05	< 0.01	< 0.05
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	-	4.0	-
pH (initial)	0.1	pH Units	9.2	-	8.9	-
pH (off)	0.1	pH Units	8.7	-	9.0	-

Client Sample ID			BH37 0-0.1	BH37 0-0.1	BH45 0-0.1	BH45 0-0.1
Sample Matrix			AUS Leachate - Reagent Water	US Leachate	AUS Leachate - Reagent Water	US Leachate
Eurofins mgt Sample No.			S16-Jn15182	S16-Jn15183	S16-Jn15184	S16-Jn15185
Date Sampled			Jun 14, 2016	Jun 14, 2016	Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	-	1.0	-	1.0
pH (initial)	0.1	pH Units	-	9.2	-	8.8
pH (off)	0.1	pH Units	-	5.2	-	5.2
pH (USA HCl addition)	0.1	pH Units	-	2.1	-	2.2

Client Sample ID			QA20160614-2	QA20160614-2
Sample Matrix			AUS Leachate	US Leachate
Eurofins mgt Sample No.			S16-Jn16534	S16-Jn16535
Date Sampled			Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Acenaphthene	0.001	mg/L	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	71	101
p-Terphenyl-d14 (surr.)	1	%	71	100
Heavy Metals				
Arsenic	0.001	mg/L	0.003	< 0.01
Cadmium	0.0002	mg/L	< 0.0002	< 0.005
Chromium	0.001	mg/L	< 0.001	< 0.05
Copper	0.001	mg/L	< 0.001	< 0.05
Lead	0.001	mg/L	< 0.001	< 0.01
Mercury	0.0001	mg/L	< 0.0001	< 0.001
Nickel	0.001	mg/L	< 0.001	< 0.05
Zinc	0.005	mg/L	< 0.005	< 0.05
AUS Leaching Procedure				
Leachate Fluid ^{C01}		comment	4.0	-
pH (initial)	0.1	pH Units	6.5	-
pH (off)	0.1	pH Units	7.1	-

Client Sample ID			QA20160614-2	QA20160614-2
Sample Matrix			AUS Leachate	US Leachate
Eurofins mgt Sample No.			S16-Jn16534	S16-Jn16535
Date Sampled			Jun 14, 2016	Jun 14, 2016
Test/Reference	LOR	Unit		
USA Leaching Procedure				
Leachate Fluid ^{C01}		comment	-	1.0
pH (initial)	0.1	pH Units	-	6.5
pH (off)	0.1	pH Units	-	5.1
pH (USA HCl addition)	0.1	pH Units	-	2.3

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
JBS&G Suite 2			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 21, 2016	7 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Metals M8	Sydney	Jun 20, 2016	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
AUS Leaching Procedure	Sydney	Jun 20, 2016	7 Day
- Method: LTM-GEN-7010			
USA Leaching Procedure	Sydney	Jun 20, 2016	14 Day
- Method: E019 TCLP Preparation			

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NSW 2000
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Project ID: 51666

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Phone: 02 8245 0300
Fax:

Received: Jun 16, 2016 6:30 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID										
1	BH01 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15048				X					X	X
2	BH01 0-1	Jun 10, 2016		Soil	S16-Jn15049	X									
3	BH02 0-1	Jun 10, 2016		Soil	S16-Jn15050	X									
4	BH03 0-0.1	Jun 10, 2016		Soil	S16-Jn15051				X					X	X
5	BH03 0-1	Jun 10, 2016		Soil	S16-Jn15052	X									
6	BH04 0-0.1	Jun 10, 2016		Soil	S16-Jn15053		X						X	X	
7	BH04 0-1	Jun 10, 2016		Soil	S16-Jn15054	X									
8	BH04 1-2	Jun 10, 2016		Soil	S16-Jn15055	X									
9	BH05 0-0.1	Jun 10, 2016		Soil	S16-Jn15056				X					X	X
10	BH05 0-1	Jun 10, 2016		Soil	S16-Jn15057	X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
11	BH06 0-1	Jun 10, 2016		Soil	S16-Jn15058	X									
12	BH07 0-0.1	Jun 10, 2016		Soil	S16-Jn15059				X					X	X
13	BH07 0-1	Jun 10, 2016		Soil	S16-Jn15060	X									
14	BH08 0-0.1	Jun 10, 2016		Soil	S16-Jn15061		X						X	X	
15	BH08 0-1	Jun 10, 2016		Soil	S16-Jn15062	X									
16	BH09 0-0.1	Jun 10, 2016		Soil	S16-Jn15063				X					X	X
17	BH09 0-1	Jun 10, 2016		Soil	S16-Jn15064	X									
18	BH10 0-0.1	Jun 10, 2016		Soil	S16-Jn15065				X					X	X
19	BH10 0-1	Jun 10, 2016		Soil	S16-Jn15066	X									
20	BH10 1-2	Jun 10, 2016		Soil	S16-Jn15067	X									
21	BH11 0-0.1	Jun 10, 2016		Soil	S16-Jn15068		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
22	BH11 0-1	Jun 10, 2016		Soil	S16-Jn15069										
23	BH11 1-2	Jun 10, 2016		Soil	S16-Jn15070	X									
24	BH12 0-0.1	Jun 10, 2016		Soil	S16-Jn15071		X						X	X	
25	BH12 0-1	Jun 10, 2016		Soil	S16-Jn15072	X									
26	BH12 1-2	Jun 10, 2016		Soil	S16-Jn15073	X									
27	BH13 0-0.1	Jun 10, 2016		Soil	S16-Jn15074		X						X	X	
28	BH13 0-1	Jun 10, 2016		Soil	S16-Jn15075	X									
29	BH14 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15076				X					X	X
30	BH14 0-1	Jun 10, 2016		Soil	S16-Jn15077	X									
31	BH14 1-2	Jun 10, 2016		Soil	S16-Jn15078	X									
32	BH15 0-0.1	Jun 10, 2016		Soil	S16-Jn15079		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
33	BH15 0-1	Jun 10, 2016		Soil	S16-Jn15080										
34	BH16 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15081		X						X	X	
35	BH16 0-1	Jun 10, 2016		Soil	S16-Jn15082	X									
36	BH17 0-0.1	Jun 10, 2016		Soil	S16-Jn15083		X						X	X	
37	BH17 0-1	Jun 10, 2016		Soil	S16-Jn15084	X									
38	BH18 0-0.1	Jun 10, 2016		Soil	S16-Jn15085				X					X	X
39	BH18 0-1	Jun 10, 2016		Soil	S16-Jn15086	X									
40	BH18 1-2	Jun 10, 2016		Soil	S16-Jn15087	X									
41	BH19 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15088		X						X	X	
42	BH19 0-1	Jun 10, 2016		Soil	S16-Jn15089	X									
43	BH20 0-0.1	Jun 10, 2016		Soil	S16-Jn15090				X					X	X
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
44	BH20 0-1	Jun 10, 2016		Soil	S16-Jn15091										
45	BH21 0-0.1	Jun 14, 2016		Soil	S16-Jn15092		X	X	X	X			X	X	
46	BH21 0-1	Jun 14, 2016		Soil	S16-Jn15093	X									
47	BH22 0-0.1	Jun 10, 2016		Soil	S16-Jn15094				X	X				X	X
48	BH22 0.2-0.3	Jun 14, 2016		Soil	S16-Jn15095		X						X	X	
49	BH22 0.6-0.7	Jun 10, 2016		Soil	S16-Jn15096				X	X				X	X
50	BH22 1.5-1.6	Jun 14, 2016		Soil	S16-Jn15097		X						X	X	
51	BH22 0-1	Jun 14, 2016		Soil	S16-Jn15098	X									
52	BH22 1-2	Jun 14, 2016		Soil	S16-Jn15099	X									
53	BH23 0-0.1	Jun 10, 2016		Soil	S16-Jn15100				X	X				X	X
54	BH23 0-1	Jun 14, 2016		Soil	S16-Jn15101	X									
							X	X	X	X			X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
55	BH24 0-0.1	Jun 14, 2016		Soil	S16-Jn15102										
56	BH24 0-1	Jun 14, 2016		Soil	S16-Jn15103	X									
57	BH25 0-1	Jun 14, 2016		Soil	S16-Jn15104	X									
58	BH26 0-0.1	Jun 14, 2016		Soil	S16-Jn15105				X	X				X	X
59	BH26 0-1	Jun 14, 2016		Soil	S16-Jn15106	X									
60	BH27 0-0.1	Jun 14, 2016		Soil	S16-Jn15107		X	X	X	X			X	X	
61	BH27 0-1	Jun 14, 2016		Soil	S16-Jn15108	X									
62	BH28 0-0.1	Jun 14, 2016		Soil	S16-Jn15109				X	X				X	X
63	BH28 0-1	Jun 14, 2016		Soil	S16-Jn15110	X									
64	BH29 0-0.1	Jun 14, 2016		Soil	S16-Jn15111		X						X	X	
65	BH29 0-1	Jun 14, 2016		Soil	S16-Jn15112	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
66	BH30 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15113										
67	BH30 1.7-1.8	Jun 14, 2016		Soil	S16-Jn15114				X	X				X	X
68	BH30 0-1	Jun 14, 2016		Soil	S16-Jn15115	X									
69	BH31 0-0.1	Jun 14, 2016		Soil	S16-Jn15116		X	X	X	X			X	X	
70	BH31 0-1	Jun 14, 2016		Soil	S16-Jn15117	X									
71	BH32 0-0.1	Jun 14, 2016		Soil	S16-Jn15118		X	X	X	X			X	X	
72	BH32 0-1	Jun 14, 2016		Soil	S16-Jn15119	X									
73	BH33 0-0.1	Jun 14, 2016		Soil	S16-Jn15120				X	X				X	X
74	BH33 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15121				X	X				X	X
75	BH33 0-1	Jun 14, 2016		Soil	S16-Jn15122	X									
76	BH34 0-0.1	Jun 14, 2016		Soil	S16-Jn15123		X						X	X	
						X									

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
77	BH34 0-1	Jun 14, 2016		Soil	S16-Jn15124										
78	BH35 0-0.1	Jun 14, 2016		Soil	S16-Jn15125				X	X				X	X
79	BH35 0-1	Jun 14, 2016		Soil	S16-Jn15126	X									
80	BH36 0-0.1	Jun 14, 2016		Soil	S16-Jn15127		X						X	X	
81	BH36 0-1	Jun 14, 2016		Soil	S16-Jn15128	X									
82	BH37 0-0.1	Jun 14, 2016		Soil	S16-Jn15129				X					X	X
83	BH37 0.4-0.5	Jun 14, 2016		Soil	S16-Jn15130				X					X	X
84	BH37 0-1	Jun 14, 2016		Soil	S16-Jn15131	X									
85	BH37 1-2	Jun 14, 2016		Soil	S16-Jn15132	X									
86	BH38 0-0.1	Jun 15, 2016		Soil	S16-Jn15133				X					X	X
87	BH38 0-1	Jun 15, 2016		Soil	S16-Jn15134	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
88	BH39 0-0.1	Jun 14, 2016		Soil	S16-Jn15135										
89	BH39 0-1	Jun 14, 2016		Soil	S16-Jn15136	X									
90	BH40 0-0.1	Jun 15, 2016		Soil	S16-Jn15137				X					X	X
91	BH40 0-1	Jun 15, 2016		Soil	S16-Jn15138	X									
92	BH41 0-0.1	Jun 14, 2016		Soil	S16-Jn15139		X						X	X	
93	BH41 0-1	Jun 15, 2016		Soil	S16-Jn15140	X									
94	BH42 0-0.1	Jun 15, 2016		Soil	S16-Jn15141				X					X	X
95	BH42 0-1	Jun 15, 2016		Soil	S16-Jn15142	X									
96	BH43 0-0.1	Jun 14, 2016		Soil	S16-Jn15143		X						X	X	
97	BH43 0-1	Jun 15, 2016		Soil	S16-Jn15144	X									
98	BH44 0-0.1	Jun 14, 2016		Soil	S16-Jn15145		X						X	X	
						X									

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NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 504746
Phone: 02 8245 0300
Fax:

Received: Jun 16, 2016 6:30 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
99	BH44 0-1	Jun 15, 2016		Soil	S16-Jn15146										
100	BH45 0-0.1	Jun 15, 2016		Soil	S16-Jn15147				X					X	X
101	BH45 0.6-0.7	Jun 15, 2016		Soil	S16-Jn15148				X					X	X
102	BH45 0-1	Jun 15, 2016		Soil	S16-Jn15149	X									
103	BH45 1-2	Jun 15, 2016		Soil	S16-Jn15150	X									
104	BH45 2-3	Jun 15, 2016		Soil	S16-Jn15151	X									
105	BH45 3-4	Jun 15, 2016		Soil	S16-Jn15152	X									
106	BH45 4-5	Jun 15, 2016		Soil	S16-Jn15153	X									
107	BH46 0-0.1	Jun 15, 2016		Soil	S16-Jn15154				X					X	X
108	BH46 0-1	Jun 15, 2016		Soil	S16-Jn15155	X									
109	BH47 0-0.1	Jun 14, 2016		Soil	S16-Jn15156		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
110	BH47 0-1	Jun 15, 2016		Soil	S16-Jn15157										
111	BH47 1-2	Jun 15, 2016		Soil	S16-Jn15158	X									
112	BH48 0-0.1	Jun 15, 2016		Soil	S16-Jn15159				X					X	X
113	BH48 0-1	Jun 15, 2016		Soil	S16-Jn15160	X									
114	BH49 0-0.1	Jun 14, 2016		Soil	S16-Jn15161		X						X	X	
115	BH49 0-1	Jun 15, 2016		Soil	S16-Jn15162	X									
116	BH50 0-0.1	Jun 15, 2016		Soil	S16-Jn15163				X					X	X
117	BH50 0-1	Jun 15, 2016		Soil	S16-Jn15164	X									
118	BH51 0-0.1	Jun 15, 2016		Soil	S16-Jn15165				X					X	X
119	BH51 0-1	Jun 15, 2016		Soil	S16-Jn15166	X									
120	BH52 0-0.1	Jun 15, 2016		Soil	S16-Jn15167				X					X	X
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
121	BH52 0-1	Jun 15, 2016		Soil	S16-Jn15168										
122	BH53 0-0.1	Jun 14, 2016		Soil	S16-Jn15169		X						X	X	
123	BH10 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15170		X				X		X		
124	BH10 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15171		X					X	X		
125	BH18 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15172		X				X		X		
126	BH18 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15173		X					X	X		
127	BH21 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15174		X				X		X		
							X					X	X		

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
128	BH21 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15175										
129	BH22 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15176		X				X		X		
130	BH22 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15177		X					X	X		
131	BH26 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15178		X				X		X		
132	BH26 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15179		X					X	X		
133	BH33 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15180		X				X		X		
134	BH33 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15181		X					X	X		
							X				X		X		

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
135	BH37 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15182										
136	BH37 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15183		X					X	X		
137	BH45 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15184		X				X		X		
138	BH45 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15185		X					X	X		
139	QA20160610-1	Not Provided		Soil	S16-Jn15482	X			X					X	X
140	QA20160610-2	Not Provided		Soil	S16-Jn15483	X			X					X	X
141	QA20160614-1	Jun 14, 2016		Soil	S16-Jn15484	X			X	X				X	X

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
142	QA20160614-2	Jun 14, 2016		Soil	S16-Jn15485	X			X	X				X	X
143	QA20160615-1	Jun 15, 2016		Soil	S16-Jn15486	X			X					X	X
144	BH25 0-0.1	Jun 14, 2016		Soil	S16-Jn16059				X	X				X	X
145	QA20160614-2	Jun 14, 2016		AUS Leachate	S16-Jn16534		X				X		X		
146	QA20160614-2	Jun 14, 2016		US Leachate	S16-Jn16535		X					X	X		
Test Counts						70	45	5	41	17	9	9	45	63	36

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								
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								
Heavy Metals								
Arsenic			mg/L	< 0.005		0.005	Pass	
Cadmium			mg/L	< 0.0005		0.0005	Pass	
Chromium			mg/L	< 0.01		0.01	Pass	
Copper			mg/L	< 0.01		0.01	Pass	
Lead			mg/L	< 0.005		0.005	Pass	
Mercury			mg/L	< 0.0002		0.0002	Pass	
Nickel			mg/L	< 0.005		0.005	Pass	
Zinc			mg/L	< 0.01		0.01	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1		Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S16-Jn15173	CP	%	99		70-130	Pass	
Cadmium	S16-Jn15173	CP	%	97		70-130	Pass	
Chromium	S16-Jn15173	CP	%	93		70-130	Pass	
Copper	S16-Jn15173	CP	%	87		70-130	Pass	
Lead	S16-Jn15173	CP	%	89		70-130	Pass	
Mercury	S16-Jn15173	CP	%	83		70-130	Pass	
Nickel	S16-Jn15173	CP	%	93		70-130	Pass	
Zinc	S16-Jn15173	CP	%	88		70-130	Pass	
Spike - % Recovery								
Heavy Metals				Result 1				
Arsenic	S16-Jn15176	CP	%	97		70-130	Pass	
Cadmium	S16-Jn15176	CP	%	97		70-130	Pass	
Chromium	S16-Jn15176	CP	%	92		70-130	Pass	
Copper	S16-Jn15176	CP	%	94		70-130	Pass	
Lead	S16-Jn15176	CP	%	96		70-130	Pass	
Mercury	S16-Jn15176	CP	%	98		70-130	Pass	
Nickel	S16-Jn15176	CP	%	96		70-130	Pass	
Zinc	S16-Jn15176	CP	%	99		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			
Arsenic	S16-Jn15171	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Cadmium	S16-Jn15171	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Chromium	S16-Jn15171	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Copper	S16-Jn15171	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Lead	S16-Jn15171	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Mercury	S16-Jn15171	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Nickel	S16-Jn15171	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Zinc	S16-Jn15171	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S16-Jn15174	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Cadmium	S16-Jn15174	CP	mg/L	< 0.0005	< 0.0005	<1	30%	Pass	
Chromium	S16-Jn15174	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Copper	S16-Jn15174	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
Lead	S16-Jn15174	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Mercury	S16-Jn15174	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Nickel	S16-Jn15174	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
Zinc	S16-Jn15174	CP	mg/L	< 0.01	< 0.01	<1	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
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
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-Organic (NSW)
Ivan Taylor	Senior Analyst-Metal (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](#).

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Certificate of Analysis



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: Mitch Hodgins
Report 504746-AID
Project Name PARRAMATTA
Project ID 51666
Received Date Jun 16, 2016
Date Reported Jun 22, 2016

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 $400 \pm 30^{\circ}\text{C}$. 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 PARRAMATTA
Project ID 51666
Date Sampled Jun 15, 2016
Report 504746-AID

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH01 0-1	16-Jn15049	Jun 10, 2016	Approximate Sample 578g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH02 0-1	16-Jn15050	Jun 10, 2016	Approximate Sample 749g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH03 0-1	16-Jn15052	Jun 10, 2016	Approximate Sample 777g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH04 0-1	16-Jn15054	Jun 10, 2016	Approximate Sample 681g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH04 1-2	16-Jn15055	Jun 10, 2016	Approximate Sample 540g Sample consisted of: Red-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH05 0-1	16-Jn15057	Jun 10, 2016	Approximate Sample 664g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH06 0-1	16-Jn15058	Jun 10, 2016	Approximate Sample 690g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH07 0-1	16-Jn15060	Jun 10, 2016	Approximate Sample 701g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH08 0-1	16-Jn15062	Jun 10, 2016	Approximate Sample 755g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH09 0-1	16-Jn15064	Jun 10, 2016	Approximate Sample 745g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH10 0-1	16-Jn15066	Jun 10, 2016	Approximate Sample 784g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH10 1-2	16-Jn15067	Jun 10, 2016	Approximate Sample 734g Sample consisted of: Brown fine grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH11 0-1	16-Jn15069	Jun 10, 2016	Approximate Sample 705g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH11 1-2	16-Jn15070	Jun 10, 2016	Approximate Sample 729g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH12 0-1	16-Jn15072	Jun 10, 2016	Approximate Sample 740g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH12 1-2	16-Jn15073	Jun 10, 2016	Approximate Sample 651g Sample consisted of: Brown coarse grain soil and rocks	AF: Chrysotile, amosite and crocidolite asbestos detected in fibre cement fragments. Approximate raw weight of AF = 0.0706g Estimated asbestos content in AF = 0.0141g* Total estimated asbestos concentration in AF = 0.0022% w/w* Organic fibre detected. ^{M11}
BH13 0-1	16-Jn15075	Jun 10, 2016	Approximate Sample 780g Sample consisted of: Grey-brown coarse grain soil and rocks	AF: Chrysotile asbestos detected in the form of loose fibre bundles. Approximate raw weight of AF = 0.0006g* Estimated asbestos content in AF = 0.0006g* Total estimated asbestos concentration in AF = 0.0001% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. ^{M11}
BH14 0-1	16-Jn15077	Jun 10, 2016	Approximate Sample 615g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH14 1-2	16-Jn15078	Jun 10, 2016	Approximate Sample 627g Sample consisted of: Brown coarse grain soil and rocks	FA: Chrysotile, amosite and crocidolite asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.0734g Estimated asbestos content in FA = 0.0440g* Total estimated asbestos concentration in FA = 0.0070% w/w* Organic fibre detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH15 0-1	16-Jn15080	Jun 10, 2016	Approximate Sample 637g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH16 0-1	16-Jn15082	Jun 10, 2016	Approximate Sample 898g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH17 0-1	16-Jn15084	Jun 10, 2016	Approximate Sample 639g Sample consisted of: Brown coarse grain soil and rocks	FA: Chrysotile asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.0063g Estimated asbestos content in FA = 0.0044g* Total estimated asbestos concentration in FA = 0.0007% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. ^{M11}
BH18 0-1	16-Jn15086	Jun 10, 2016	Approximate Sample 638g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH18 1-2	16-Jn15087	Jun 10, 2016	Approximate Sample 606g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH19 0-1	16-Jn15089	Jun 10, 2016	Approximate Sample 512g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH20 0-1	16-Jn15091	Jun 10, 2016	Approximate Sample 648g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH21 0-1	16-Jn15093	Jun 14, 2016	Approximate Sample 651g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH22 0-1	16-Jn15098	Jun 14, 2016	Approximate Sample 740g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH22 1-2	16-Jn15099	Jun 14, 2016	Approximate Sample 742g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH23 0-1	16-Jn15101	Jun 14, 2016	Approximate Sample 690g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH24 0-1	16-Jn15103	Jun 14, 2016	Approximate Sample 708g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH25 0-1	16-Jn15104	Jun 14, 2016	Approximate Sample 733g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH26 0-1	16-Jn15106	Jun 14, 2016	Approximate Sample 727g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH27 0-1	16-Jn15108	Jun 14, 2016	Approximate Sample 738g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH28 0-1	16-Jn15110	Jun 14, 2016	Approximate Sample 686g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH29 0-1	16-Jn15112	Jun 14, 2016	Approximate Sample 760g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH30 0-1	16-Jn15115	Jun 14, 2016	Approximate Sample 681g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH31 0-1	16-Jn15117	Jun 14, 2016	Approximate Sample 651g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH32 0-1	16-Jn15119	Jun 14, 2016	Approximate Sample 733g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH33 0-1	16-Jn15122	Jun 14, 2016	Approximate Sample 648g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH34 0-1	16-Jn15124	Jun 14, 2016	Approximate Sample 661g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH35 0-1	16-Jn15126	Jun 14, 2016	Approximate Sample 717g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH36 0-1	16-Jn15128	Jun 14, 2016	Approximate Sample 802g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH37 0-1	16-Jn15131	Jun 14, 2016	Approximate Sample 735g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH37 1-2	16-Jn15132	Jun 14, 2016	Approximate Sample 704g Sample consisted of: Brown fine grain soil and rocks	AF: Chrysotile asbestos detected in the form of loose fibre bundles. Approximate raw weight of AF = 0.0009g* Estimated asbestos content in AF = 0.0009g* Total estimated asbestos concentration in AF = 0.0001% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. ^{M11}
BH38 0-1	16-Jn15134	Jun 15, 2016	Approximate Sample 774g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH39 0-1	16-Jn15136	Jun 14, 2016	Approximate Sample 717g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH40 0-1	16-Jn15138	Jun 15, 2016	Approximate Sample 704g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH41 0-1	16-Jn15140	Jun 15, 2016	Approximate Sample 713g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH42 0-1	16-Jn15142	Jun 15, 2016	Approximate Sample 901g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH43 0-1	16-Jn15144	Jun 15, 2016	Approximate Sample 761g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH44 0-1	16-Jn15146	Jun 15, 2016	Approximate Sample 643g Sample consisted of: Brown coarse grain soil and rocks	FA: Chrysotile asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.0067g Estimated asbestos content in FA = 0.0054g* Total estimated asbestos concentration in FA = 0.0008% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. ^{M11}
BH45 0-1	16-Jn15149	Jun 15, 2016	Approximate Sample 654g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH45 1-2	16-Jn15150	Jun 15, 2016	Approximate Sample 599g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
BH45 2-3	16-Jn15151	Jun 15, 2016	Approximate Sample 602g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH45 3-4	16-Jn15152	Jun 15, 2016	Approximate Sample 638g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH45 4-5	16-Jn15153	Jun 15, 2016	Approximate Sample 596g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH46 0-1	16-Jn15155	Jun 15, 2016	Approximate Sample 661g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH47 0-1	16-Jn15157	Jun 15, 2016	Approximate Sample 670g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH47 1-2	16-Jn15158	Jun 15, 2016	Approximate Sample 564g Sample consisted of: Brown coarse grain soil and rocks	FA: Chrysotile asbestos detected in weathered fibre cement fragments. Approximate raw weight of FA = 0.0027g Estimated asbestos content in FA = 0.0016g* Total estimated asbestos concentration in FA = 0.0003% w/w* No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. ^{M11}
BH48 0-1	16-Jn15160	Jun 15, 2016	Approximate Sample 793g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH49 0-1	16-Jn15162	Jun 15, 2016	Approximate Sample 696g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH50 0-1	16-Jn15164	Jun 15, 2016	Approximate Sample 662g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH51 0-1	16-Jn15166	Jun 15, 2016	Approximate Sample 638g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
BH52 0-1	16-Jn15168	Jun 15, 2016	Approximate Sample 743g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
QA20160610-1	16-Jn15482	not provided	Approximate Sample 789g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

Client Sample ID	Eurofins mgt Sample No.	Date Sampled	Sample Description	Result
QA20160610-2	16-Jn15483	not provided	Approximate Sample 649g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
QA20160614-1	16-Jn15484	Jun 14, 2016	Approximate Sample 762g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
QA20160614-2	16-Jn15485	Jun 14, 2016	Approximate Sample 723g Sample consisted of: Yellow-brown coarse grain soil	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}
QA20160615-1	16-Jn15486	Jun 15, 2016	Approximate Sample 685g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected at the reporting limit of 0.001% w/w.* Organic fibre detected. No respirable fibres detected. ^{M11}

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	Jun 21, 2016	Indefinite

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 504746
Phone: 02 8245 0300
Fax:

Received: Jun 16, 2016 6:30 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID										
1	BH01 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15048				X					X	X
2	BH01 0-1	Jun 10, 2016		Soil	S16-Jn15049	X									
3	BH02 0-1	Jun 10, 2016		Soil	S16-Jn15050	X									
4	BH03 0-0.1	Jun 10, 2016		Soil	S16-Jn15051			X						X	X
5	BH03 0-1	Jun 10, 2016		Soil	S16-Jn15052	X									
6	BH04 0-0.1	Jun 10, 2016		Soil	S16-Jn15053		X						X	X	
7	BH04 0-1	Jun 10, 2016		Soil	S16-Jn15054	X									
8	BH04 1-2	Jun 10, 2016		Soil	S16-Jn15055	X									
9	BH05 0-0.1	Jun 10, 2016		Soil	S16-Jn15056				X					X	X
10	BH05 0-1	Jun 10, 2016		Soil	S16-Jn15057	X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
11	BH06 0-1	Jun 10, 2016		Soil	S16-Jn15058	X									
12	BH07 0-0.1	Jun 10, 2016		Soil	S16-Jn15059				X					X	X
13	BH07 0-1	Jun 10, 2016		Soil	S16-Jn15060	X									
14	BH08 0-0.1	Jun 10, 2016		Soil	S16-Jn15061		X						X	X	
15	BH08 0-1	Jun 10, 2016		Soil	S16-Jn15062	X									
16	BH09 0-0.1	Jun 10, 2016		Soil	S16-Jn15063				X					X	X
17	BH09 0-1	Jun 10, 2016		Soil	S16-Jn15064	X									
18	BH10 0-0.1	Jun 10, 2016		Soil	S16-Jn15065				X					X	X
19	BH10 0-1	Jun 10, 2016		Soil	S16-Jn15066	X									
20	BH10 1-2	Jun 10, 2016		Soil	S16-Jn15067	X									
21	BH11 0-0.1	Jun 10, 2016		Soil	S16-Jn15068		X						X	X	
						X									

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
22	BH11 0-1	Jun 10, 2016		Soil	S16-Jn15069										
23	BH11 1-2	Jun 10, 2016		Soil	S16-Jn15070	X									
24	BH12 0-0.1	Jun 10, 2016		Soil	S16-Jn15071		X						X	X	
25	BH12 0-1	Jun 10, 2016		Soil	S16-Jn15072	X									
26	BH12 1-2	Jun 10, 2016		Soil	S16-Jn15073	X									
27	BH13 0-0.1	Jun 10, 2016		Soil	S16-Jn15074		X						X	X	
28	BH13 0-1	Jun 10, 2016		Soil	S16-Jn15075	X									
29	BH14 0.9-1.0	Jun 10, 2016		Soil	S16-Jn15076				X					X	X
30	BH14 0-1	Jun 10, 2016		Soil	S16-Jn15077	X									
31	BH14 1-2	Jun 10, 2016		Soil	S16-Jn15078	X									
32	BH15 0-0.1	Jun 10, 2016		Soil	S16-Jn15079		X						X	X	
						X									

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Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
33	BH15 0-1	Jun 10, 2016		Soil	S16-Jn15080										
34	BH16 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15081		X						X	X	
35	BH16 0-1	Jun 10, 2016		Soil	S16-Jn15082	X									
36	BH17 0-0.1	Jun 10, 2016		Soil	S16-Jn15083		X						X	X	
37	BH17 0-1	Jun 10, 2016		Soil	S16-Jn15084	X									
38	BH18 0-0.1	Jun 10, 2016		Soil	S16-Jn15085				X					X	X
39	BH18 0-1	Jun 10, 2016		Soil	S16-Jn15086	X									
40	BH18 1-2	Jun 10, 2016		Soil	S16-Jn15087	X									
41	BH19 0.2-0.3	Jun 10, 2016		Soil	S16-Jn15088		X						X	X	
42	BH19 0-1	Jun 10, 2016		Soil	S16-Jn15089	X									
43	BH20 0-0.1	Jun 10, 2016		Soil	S16-Jn15090				X					X	X
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
44	BH20 0-1	Jun 10, 2016		Soil	S16-Jn15091										
45	BH21 0-0.1	Jun 14, 2016		Soil	S16-Jn15092		X	X	X	X			X	X	
46	BH21 0-1	Jun 14, 2016		Soil	S16-Jn15093	X									
47	BH22 0-0.1	Jun 10, 2016		Soil	S16-Jn15094				X	X				X	X
48	BH22 0.2-0.3	Jun 14, 2016		Soil	S16-Jn15095		X						X	X	
49	BH22 0.6-0.7	Jun 10, 2016		Soil	S16-Jn15096				X	X				X	X
50	BH22 1.5-1.6	Jun 14, 2016		Soil	S16-Jn15097		X						X	X	
51	BH22 0-1	Jun 14, 2016		Soil	S16-Jn15098	X									
52	BH22 1-2	Jun 14, 2016		Soil	S16-Jn15099	X									
53	BH23 0-0.1	Jun 10, 2016		Soil	S16-Jn15100				X	X				X	X
54	BH23 0-1	Jun 14, 2016		Soil	S16-Jn15101	X									
							X	X	X	X			X	X	

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Received: Jun 16, 2016 6:30 PM
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Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Asbestos - WA guidelines	Polycyclic Aromatic Hydrocarbons	Organochlorine Pesticides	Organophosphorus Pesticides	Acid Herbicides	AUS Leaching Procedure	USA Leaching Procedure	Metals M8	Moisture Set	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
55	BH24 0-0.1	Jun 14, 2016		Soil	S16-Jn15102										
56	BH24 0-1	Jun 14, 2016		Soil	S16-Jn15103	X									
57	BH25 0-1	Jun 14, 2016		Soil	S16-Jn15104	X									
58	BH26 0-0.1	Jun 14, 2016		Soil	S16-Jn15105				X	X				X	X
59	BH26 0-1	Jun 14, 2016		Soil	S16-Jn15106	X									
60	BH27 0-0.1	Jun 14, 2016		Soil	S16-Jn15107		X	X	X	X			X	X	
61	BH27 0-1	Jun 14, 2016		Soil	S16-Jn15108	X									
62	BH28 0-0.1	Jun 14, 2016		Soil	S16-Jn15109				X	X				X	X
63	BH28 0-1	Jun 14, 2016		Soil	S16-Jn15110	X									
64	BH29 0-0.1	Jun 14, 2016		Soil	S16-Jn15111		X						X	X	
65	BH29 0-1	Jun 14, 2016		Soil	S16-Jn15112	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
66	BH30 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15113										
67	BH30 1.7-1.8	Jun 14, 2016		Soil	S16-Jn15114				X	X				X	X
68	BH30 0-1	Jun 14, 2016		Soil	S16-Jn15115	X									
69	BH31 0-0.1	Jun 14, 2016		Soil	S16-Jn15116		X	X	X	X			X	X	
70	BH31 0-1	Jun 14, 2016		Soil	S16-Jn15117	X									
71	BH32 0-0.1	Jun 14, 2016		Soil	S16-Jn15118		X	X	X	X			X	X	
72	BH32 0-1	Jun 14, 2016		Soil	S16-Jn15119	X									
73	BH33 0-0.1	Jun 14, 2016		Soil	S16-Jn15120				X	X				X	X
74	BH33 0.6-0.7	Jun 14, 2016		Soil	S16-Jn15121				X	X				X	X
75	BH33 0-1	Jun 14, 2016		Soil	S16-Jn15122	X									
76	BH34 0-0.1	Jun 14, 2016		Soil	S16-Jn15123		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
77	BH34 0-1	Jun 14, 2016		Soil	S16-Jn15124										
78	BH35 0-0.1	Jun 14, 2016		Soil	S16-Jn15125				X	X				X	X
79	BH35 0-1	Jun 14, 2016		Soil	S16-Jn15126	X									
80	BH36 0-0.1	Jun 14, 2016		Soil	S16-Jn15127		X						X	X	
81	BH36 0-1	Jun 14, 2016		Soil	S16-Jn15128	X									
82	BH37 0-0.1	Jun 14, 2016		Soil	S16-Jn15129				X					X	X
83	BH37 0.4-0.5	Jun 14, 2016		Soil	S16-Jn15130				X					X	X
84	BH37 0-1	Jun 14, 2016		Soil	S16-Jn15131	X									
85	BH37 1-2	Jun 14, 2016		Soil	S16-Jn15132	X									
86	BH38 0-0.1	Jun 15, 2016		Soil	S16-Jn15133				X					X	X
87	BH38 0-1	Jun 15, 2016		Soil	S16-Jn15134	X									
							X						X	X	

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
88	BH39 0-0.1	Jun 14, 2016		Soil	S16-Jn15135										
89	BH39 0-1	Jun 14, 2016		Soil	S16-Jn15136	X									
90	BH40 0-0.1	Jun 15, 2016		Soil	S16-Jn15137				X					X	X
91	BH40 0-1	Jun 15, 2016		Soil	S16-Jn15138	X									
92	BH41 0-0.1	Jun 14, 2016		Soil	S16-Jn15139		X						X	X	
93	BH41 0-1	Jun 15, 2016		Soil	S16-Jn15140	X									
94	BH42 0-0.1	Jun 15, 2016		Soil	S16-Jn15141				X					X	X
95	BH42 0-1	Jun 15, 2016		Soil	S16-Jn15142	X									
96	BH43 0-0.1	Jun 14, 2016		Soil	S16-Jn15143		X						X	X	
97	BH43 0-1	Jun 15, 2016		Soil	S16-Jn15144	X									
98	BH44 0-0.1	Jun 14, 2016		Soil	S16-Jn15145		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
99	BH44 0-1	Jun 15, 2016		Soil	S16-Jn15146										
100	BH45 0-0.1	Jun 15, 2016		Soil	S16-Jn15147				X					X	X
101	BH45 0.6-0.7	Jun 15, 2016		Soil	S16-Jn15148				X					X	X
102	BH45 0-1	Jun 15, 2016		Soil	S16-Jn15149	X									
103	BH45 1-2	Jun 15, 2016		Soil	S16-Jn15150	X									
104	BH45 2-3	Jun 15, 2016		Soil	S16-Jn15151	X									
105	BH45 3-4	Jun 15, 2016		Soil	S16-Jn15152	X									
106	BH45 4-5	Jun 15, 2016		Soil	S16-Jn15153	X									
107	BH46 0-0.1	Jun 15, 2016		Soil	S16-Jn15154				X					X	X
108	BH46 0-1	Jun 15, 2016		Soil	S16-Jn15155	X									
109	BH47 0-0.1	Jun 14, 2016		Soil	S16-Jn15156		X						X	X	
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
110	BH47 0-1	Jun 15, 2016		Soil	S16-Jn15157										
111	BH47 1-2	Jun 15, 2016		Soil	S16-Jn15158	X									
112	BH48 0-0.1	Jun 15, 2016		Soil	S16-Jn15159				X					X	X
113	BH48 0-1	Jun 15, 2016		Soil	S16-Jn15160	X									
114	BH49 0-0.1	Jun 14, 2016		Soil	S16-Jn15161		X						X	X	
115	BH49 0-1	Jun 15, 2016		Soil	S16-Jn15162	X									
116	BH50 0-0.1	Jun 15, 2016		Soil	S16-Jn15163				X					X	X
117	BH50 0-1	Jun 15, 2016		Soil	S16-Jn15164	X									
118	BH51 0-0.1	Jun 15, 2016		Soil	S16-Jn15165				X					X	X
119	BH51 0-1	Jun 15, 2016		Soil	S16-Jn15166	X									
120	BH52 0-0.1	Jun 15, 2016		Soil	S16-Jn15167				X					X	X
						X									

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
121	BH52 0-1	Jun 15, 2016		Soil	S16-Jn15168										
122	BH53 0-0.1	Jun 14, 2016		Soil	S16-Jn15169		X						X	X	
123	BH10 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15170		X				X		X		
124	BH10 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15171		X					X	X		
125	BH18 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15172		X				X		X		
126	BH18 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15173		X					X	X		
127	BH21 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15174		X				X		X		
							X					X	X		

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
128	BH21 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15175										
129	BH22 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15176		X				X		X		
130	BH22 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15177		X					X	X		
131	BH26 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15178		X				X		X		
132	BH26 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15179		X					X	X		
133	BH33 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15180		X				X		X		
134	BH33 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15181		X					X	X		
							X				X		X		

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
135	BH37 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15182										
136	BH37 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15183		X					X	X		
137	BH45 0-0.1	Jun 14, 2016		AUS Leachate - Reagent Water	S16-Jn15184		X				X		X		
138	BH45 0-0.1	Jun 14, 2016		US Leachate	S16-Jn15185		X					X	X		
139	QA20160610-1	Not Provided		Soil	S16-Jn15482	X			X					X	X
140	QA20160610-2	Not Provided		Soil	S16-Jn15483	X			X					X	X
141	QA20160614-1	Jun 14, 2016		Soil	S16-Jn15484	X			X	X				X	X

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Melbourne Laboratory - NATA Site # 1254 & 14271										X					
Sydney Laboratory - NATA Site # 18217						X	X	X	X		X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794															
External Laboratory															
142	QA20160614-2	Jun 14, 2016		Soil	S16-Jn15485	X			X	X				X	X
143	QA20160615-1	Jun 15, 2016		Soil	S16-Jn15486	X			X					X	X
144	BH25 0-0.1	Jun 14, 2016		Soil	S16-Jn16059				X	X				X	X
145	QA20160614-2	Jun 14, 2016		AUS Leachate	S16-Jn16534		X				X		X		
146	QA20160614-2	Jun 14, 2016		US Leachate	S16-Jn16535		X					X	X		
Test Counts						70	45	5	41	17	9	9	45	63	36

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 Standards 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 substantial 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

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
M11	NATA accreditation does not cover the performance of this service.

Authorised by:

Rhys Thomas

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

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Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: **Mitch Hodgins**

Report **504877-W**
Project name **PARRAMATTA**
Project ID **51666**
Received Date **Jun 17, 2016**

Client Sample ID			RINSATE
Sample Matrix			Water
Eurofins mgt Sample No.			S16-Jn16846
Date Sampled			Jun 15, 2016
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	0.59
TRH C15-C28	0.1	mg/L	0.3
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-36 (Total)	0.1	mg/L	0.89
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	95
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene ^{N02}	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	0.18
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			RINSATE
Sample Matrix			Water
Eurofins mgt Sample No.			S16-Jn16846
Date Sampled			Jun 15, 2016
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	127
p-Terphenyl-d14 (surr.)	1	%	147
Organochlorine Pesticides			
Chlordanes - Total	0.001	mg/L	< 0.001
4,4'-DDD	0.0001	mg/L	< 0.0001
4,4'-DDE	0.0001	mg/L	< 0.0001
4,4'-DDT	0.0001	mg/L	< 0.0001
α-BHC	0.0001	mg/L	< 0.0001
Aldrin	0.0001	mg/L	< 0.0001
β-BHC	0.0001	mg/L	< 0.0001
δ-BHC	0.0001	mg/L	< 0.0001
Dieldrin	0.0001	mg/L	< 0.0001
Endosulfan I	0.0001	mg/L	< 0.0001
Endosulfan II	0.0001	mg/L	< 0.0001
Endosulfan sulphate	0.0001	mg/L	< 0.0001
Endrin	0.0001	mg/L	< 0.0001
Endrin aldehyde	0.0001	mg/L	< 0.0001
Endrin ketone	0.0001	mg/L	< 0.0001
γ-BHC (Lindane)	0.0001	mg/L	< 0.0001
Heptachlor	0.0001	mg/L	< 0.0001
Heptachlor epoxide	0.0001	mg/L	< 0.0001
Hexachlorobenzene	0.0001	mg/L	< 0.0001
Methoxychlor	0.0001	mg/L	< 0.0001
Toxaphene	0.01	mg/L	< 0.01
Dibutylchloroendate (surr.)	1	%	125
Tetrachloro-m-xylene (surr.)	1	%	88
Organophosphorus Pesticides			
Azinphos-methyl	0.002	mg/L	< 0.005
Bolstar	0.002	mg/L	< 0.005
Chlorfenvinphos	0.002	mg/L	< 0.005
Chlorpyrifos	0.02	mg/L	< 0.02
Chlorpyrifos-methyl	0.002	mg/L	< 0.005
Coumaphos	0.02	mg/L	< 0.02
Demeton-S	0.02	mg/L	< 0.02
Demeton-O	0.002	mg/L	< 0.005
Diazinon	0.002	mg/L	< 0.005
Dichlorvos	0.002	mg/L	< 0.005
Dimethoate	0.002	mg/L	< 0.005
Disulfoton	0.002	mg/L	< 0.005
EPN	0.002	mg/L	< 0.005
Ethion	0.002	mg/L	< 0.005
Ethoprop	0.002	mg/L	< 0.005
Ethyl parathion	0.002	mg/L	< 0.005
Fenitrothion	0.002	mg/L	< 0.005
Fensulfothion	0.002	mg/L	< 0.005
Fenthion	0.002	mg/L	< 0.005
Malathion	0.002	mg/L	< 0.005
Merphos	0.002	mg/L	< 0.005

Client Sample ID			RINSATE
Sample Matrix			Water
Eurofins mgt Sample No.			S16-Jn16846
Date Sampled			Jun 15, 2016
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Methyl parathion	0.002	mg/L	< 0.005
Mevinphos	0.002	mg/L	< 0.005
Monocrotophos	0.002	mg/L	< 0.005
Naled	0.002	mg/L	< 0.005
Omethoate	0.002	mg/L	< 0.005
Phorate	0.002	mg/L	< 0.005
Pirimiphos-methyl	0.02	mg/L	< 0.02
Pyrazophos	0.002	mg/L	< 0.005
Ronnel	0.002	mg/L	< 0.005
Terbufos	0.002	mg/L	< 0.005
Tetrachlorvinphos	0.002	mg/L	< 0.005
Tokuthion	0.002	mg/L	< 0.005
Trichloronate	0.002	mg/L	< 0.005
Triphenylphosphate (surr.)	1	%	78
Polychlorinated Biphenyls			
Aroclor-1016	0.001	mg/L	< 0.001
Aroclor-1221	0.001	mg/L	< 0.001
Aroclor-1232	0.001	mg/L	< 0.001
Aroclor-1242	0.001	mg/L	< 0.001
Aroclor-1248	0.001	mg/L	< 0.001
Aroclor-1254	0.001	mg/L	< 0.001
Aroclor-1260	0.001	mg/L	< 0.001
Total PCB*	0.001	mg/L	< 0.001
Dibutylchloroendate (surr.)	1	%	125
Tetrachloro-m-xylene (surr.)	1	%	88
Acid Herbicides			
2,4-D	0.001	mg/L	< 0.002
2,4-DB	0.001	mg/L	< 0.002
2,4,5-T	0.001	mg/L	< 0.002
2,4,5-TP	0.001	mg/L	< 0.002
Actril (loxyneil)	0.001	mg/L	< 0.002
Dicamba	0.001	mg/L	< 0.002
Dichlorprop	0.001	mg/L	< 0.002
Dinitro-o-cresol	0.001	mg/L	< 0.002
Dinoseb	0.001	mg/L	< 0.002
MCPA	0.001	mg/L	< 0.002
MCPB	0.001	mg/L	< 0.002
Mecoprop	0.001	mg/L	< 0.002
Warfarin (surr.)	1	%	76
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
TRH >C10-C16	0.05	mg/L	0.18
TRH >C16-C34	0.1	mg/L	0.3
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	< 0.001
Lead	0.001	mg/L	< 0.001

Client Sample ID			RINSATE
Sample Matrix			Water
Eurofins mgt Sample No.			S16-Jn16846
Date Sampled			Jun 15, 2016
Test/Reference	LOR	Unit	
Heavy Metals			
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005

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
JBS&G Suite 2			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Jun 21, 2016	7 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jun 17, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jun 17, 2016	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Melbourne	Jun 21, 2016	7 Day
- Method: USEPA 8270 Polycyclic Aromatic Hydrocarbons			
Organochlorine Pesticides	Melbourne	Jun 21, 2016	7 Day
- Method: USEPA 8081 Organochlorine Pesticides			
Polychlorinated Biphenyls	Melbourne	Jun 21, 2016	7 Day
- Method: USEPA 8082 Polychlorinated Biphenyls			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Jun 21, 2016	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Jun 17, 2016	28 Day
- Method: LTM-MET-3040 Metals in Waters by ICP-MS			
Organophosphorus Pesticides	Melbourne	Jun 21, 2016	7 Day
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Acid Herbicides	Melbourne	Jun 21, 2016	14 Day
- Method: LTM-ORG-2180 Phenoxy Acid Herbicides			

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 504877
Phone: 02 8245 0300
Fax:

Received: Jun 17, 2016 5:00 PM
Due: Jun 22, 2016
Priority: 3 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						Organophosphorus Pesticides	Acid Herbicides	JBS&G Suite 2
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								X
Brisbane Laboratory - NATA Site # 20794								
External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	RINSATE	Jun 15, 2016		Water	S16-Jn16846	X	X	X
Test Counts						1	1	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

mg/l: milligrams per litre

ug/l: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100ml: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

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

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							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.001			0.001	Pass	
4,4'-DDD	mg/L	< 0.0001			0.0001	Pass	
4,4'-DDE	mg/L	< 0.0001			0.0001	Pass	
4,4'-DDT	mg/L	< 0.0001			0.0001	Pass	
a-BHC	mg/L	< 0.0001			0.0001	Pass	
Aldrin	mg/L	< 0.0001			0.0001	Pass	
b-BHC	mg/L	< 0.0001			0.0001	Pass	
d-BHC	mg/L	< 0.0001			0.0001	Pass	
Dieldrin	mg/L	< 0.0001			0.0001	Pass	
Endosulfan I	mg/L	< 0.0001			0.0001	Pass	
Endosulfan II	mg/L	< 0.0001			0.0001	Pass	
Endosulfan sulphate	mg/L	< 0.0001			0.0001	Pass	
Endrin	mg/L	< 0.0001			0.0001	Pass	
Endrin aldehyde	mg/L	< 0.0001			0.0001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin ketone	mg/L	< 0.0001			0.0001	Pass	
g-BHC (Lindane)	mg/L	< 0.0001			0.0001	Pass	
Heptachlor	mg/L	< 0.0001			0.0001	Pass	
Heptachlor epoxide	mg/L	< 0.0001			0.0001	Pass	
Hexachlorobenzene	mg/L	< 0.0001			0.0001	Pass	
Methoxychlor	mg/L	< 0.0001			0.0001	Pass	
Toxaphene	mg/L	< 0.01			0.01	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/L	< 0.002			0.002	Pass	
Bolstar	mg/L	< 0.002			0.002	Pass	
Chlorfenvinphos	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos	mg/L	< 0.02			0.02	Pass	
Chlorpyrifos-methyl	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.02			0.02	Pass	
Demeton-S	mg/L	< 0.02			0.02	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
EPN	mg/L	< 0.002			0.002	Pass	
Ethion	mg/L	< 0.002			0.002	Pass	
Ethoprop	mg/L	< 0.002			0.002	Pass	
Ethyl parathion	mg/L	< 0.002			0.002	Pass	
Fenitrothion	mg/L	< 0.002			0.002	Pass	
Fensulfothion	mg/L	< 0.002			0.002	Pass	
Fenthion	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Merphos	mg/L	< 0.002			0.002	Pass	
Methyl parathion	mg/L	< 0.002			0.002	Pass	
Mevinphos	mg/L	< 0.002			0.002	Pass	
Monocrotophos	mg/L	< 0.002			0.002	Pass	
Naled	mg/L	< 0.002			0.002	Pass	
Omethoate	mg/L	< 0.002			0.002	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Pirimiphos-methyl	mg/L	< 0.02			0.02	Pass	
Pyrazophos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Terbufos	mg/L	< 0.002			0.002	Pass	
Tetrachlorvinphos	mg/L	< 0.002			0.002	Pass	
Tokuthion	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.001			0.001	Pass	
Aroclor-1221	mg/L	< 0.001			0.001	Pass	
Aroclor-1232	mg/L	< 0.001			0.001	Pass	
Aroclor-1242	mg/L	< 0.001			0.001	Pass	
Aroclor-1248	mg/L	< 0.001			0.001	Pass	
Aroclor-1254	mg/L	< 0.001			0.001	Pass	
Aroclor-1260	mg/L	< 0.001			0.001	Pass	
Total PCB*	mg/L	< 0.001			0.001	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acid Herbicides							
2.4-D	mg/L	< 0.001			0.001	Pass	
2.4-DB	mg/L	< 0.001			0.001	Pass	
2.4.5-T	mg/L	< 0.001			0.001	Pass	
2.4.5-TP	mg/L	< 0.001			0.001	Pass	
Actril (loxynil)	mg/L	< 0.001			0.001	Pass	
Dicamba	mg/L	< 0.001			0.001	Pass	
Dichlorprop	mg/L	< 0.001			0.001	Pass	
Dinitro-o-cresol	mg/L	< 0.001			0.001	Pass	
Dinoseb	mg/L	< 0.001			0.001	Pass	
MCPA	mg/L	< 0.001			0.001	Pass	
MCPB	mg/L	< 0.001			0.001	Pass	
Mecoprop	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							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	87			70-130	Pass	
TRH C10-C14	%	82			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	96			70-130	Pass	
Toluene	%	97			70-130	Pass	
Ethylbenzene	%	97			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	98			70-130	Pass	
Xylenes - Total	%	99			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	97			70-130	Pass	
TRH C6-C10	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	128			70-130	Pass	
Acenaphthylene	%	124			70-130	Pass	
Anthracene	%	89			70-130	Pass	
Benz(a)anthracene	%	93			70-130	Pass	
Benzo(a)pyrene	%	94			70-130	Pass	
Benzo(b&j)fluoranthene	%	98			70-130	Pass	
Benzo(g,h,i)perylene	%	95			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chrysene	%	120			70-130	Pass	
Dibenz(a,h)anthracene	%	101			70-130	Pass	
Fluoranthene	%	91			70-130	Pass	
Fluorene	%	124			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	95			70-130	Pass	
Naphthalene	%	124			70-130	Pass	
Phenanthrene	%	129			70-130	Pass	
Pyrene	%	120			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
4.4'-DDD	%	94			70-130	Pass	
4.4'-DDE	%	96			70-130	Pass	
4.4'-DDT	%	88			70-130	Pass	
α-BHC	%	97			70-130	Pass	
Aldrin	%	102			70-130	Pass	
δ-BHC	%	108			70-130	Pass	
Dieldrin	%	125			70-130	Pass	
Endosulfan I	%	92			70-130	Pass	
Endosulfan II	%	122			70-130	Pass	
Endosulfan sulphate	%	106			70-130	Pass	
Endrin	%	100			70-130	Pass	
Endrin aldehyde	%	98			70-130	Pass	
Endrin ketone	%	118			70-130	Pass	
γ-BHC (Lindane)	%	84			70-130	Pass	
Heptachlor	%	78			70-130	Pass	
Heptachlor epoxide	%	126			70-130	Pass	
Hexachlorobenzene	%	96			70-130	Pass	
Methoxychlor	%	81			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	83			70-130	Pass	
Dimethoate	%	82			70-130	Pass	
Ethion	%	91			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	76			70-130	Pass	
Mevinphos	%	105			70-130	Pass	
LCS - % Recovery							
Acid Herbicides							
2.4-D	%	122			70-130	Pass	
2.4-DB	%	82			70-130	Pass	
2.4.5-T	%	111			70-130	Pass	
2.4.5-TP	%	111			70-130	Pass	
Actril (loxynil)	%	100			70-130	Pass	
Dicamba	%	109			70-130	Pass	
Dichlorprop	%	105			70-130	Pass	
Dinitro-o-cresol	%	102			70-130	Pass	
Dinoseb	%	107			70-130	Pass	
MCPA	%	107			70-130	Pass	
MCPB	%	93			70-130	Pass	
Mecoprop	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	84			70-130	Pass	
LCS - % Recovery							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heavy Metals									
Arsenic			%	93			70-130	Pass	
Cadmium			%	95			70-130	Pass	
Chromium			%	92			70-130	Pass	
Copper			%	92			70-130	Pass	
Lead			%	96			70-130	Pass	
Mercury			%	97			70-130	Pass	
Nickel			%	94			70-130	Pass	
Zinc			%	94			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	S16-Jn16622	NCP	%	81			70-130	Pass	
TRH C10-C14	M16-Jn12821	NCP	%	95			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn16622	NCP	%	98			70-130	Pass	
Toluene	S16-Jn16622	NCP	%	99			70-130	Pass	
Ethylbenzene	S16-Jn16622	NCP	%	100			70-130	Pass	
m&p-Xylenes	S16-Jn16622	NCP	%	101			70-130	Pass	
o-Xylene	S16-Jn16622	NCP	%	102			70-130	Pass	
Xylenes - Total	S16-Jn16622	NCP	%	101			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn16622	NCP	%	100			70-130	Pass	
TRH C6-C10	S16-Jn16622	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M16-Jn18363	NCP	%	123			70-130	Pass	
Acenaphthylene	M16-Jn18363	NCP	%	125			70-130	Pass	
Anthracene	M16-Jn18363	NCP	%	75			70-130	Pass	
Benz(a)anthracene	M16-Jn18363	NCP	%	79			70-130	Pass	
Benzo(a)pyrene	M16-Jn18363	NCP	%	111			70-130	Pass	
Benzo(b&j)fluoranthene	M16-Jn18363	NCP	%	118			70-130	Pass	
Benzo(g,h,i)perylene	M16-Jn18363	NCP	%	115			70-130	Pass	
Benzo(k)fluoranthene	M16-Jn18363	NCP	%	114			70-130	Pass	
Chrysene	M16-Jn18363	NCP	%	120			70-130	Pass	
Dibenz(a,h)anthracene	M16-Jn18363	NCP	%	120			70-130	Pass	
Fluoranthene	M16-Jn18363	NCP	%	75			70-130	Pass	
Fluorene	M16-Jn18363	NCP	%	124			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M16-Jn18363	NCP	%	115			70-130	Pass	
Naphthalene	B16-Jn16480	NCP	%	79			70-130	Pass	
Phenanthrene	M16-Jn18363	NCP	%	117			70-130	Pass	
Pyrene	M16-Jn18363	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4,4'-DDD	M16-My30245	NCP	%	72			70-130	Pass	
4,4'-DDE	M16-My30245	NCP	%	73			70-130	Pass	
4,4'-DDT	M16-My30245	NCP	%	72			70-130	Pass	
a-BHC	M16-My30245	NCP	%	70			70-130	Pass	
Aldrin	M16-My30245	NCP	%	80			70-130	Pass	
d-BHC	M16-My30245	NCP	%	72			70-130	Pass	
Dieldrin	M16-My30245	NCP	%	107			70-130	Pass	
Endosulfan I	M16-My30245	NCP	%	71			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan II	M16-My30245	NCP	%	96			70-130	Pass	
Endosulfan sulphate	M16-My30245	NCP	%	79			70-130	Pass	
Endrin	M16-My30245	NCP	%	75			70-130	Pass	
Endrin aldehyde	M16-My30245	NCP	%	78			70-130	Pass	
Endrin ketone	M16-My30245	NCP	%	107			70-130	Pass	
g-BHC (Lindane)	M16-My30245	NCP	%	74			70-130	Pass	
Heptachlor epoxide	M16-My30245	NCP	%	76			70-130	Pass	
Hexachlorobenzene	M16-My30245	NCP	%	95			70-130	Pass	
Methoxychlor	M16-My30245	NCP	%	72			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	M16-Jn12821	NCP	%	95			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	S16-Jn16620	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	M16-Jn13048	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M16-Jn13048	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M16-Jn13048	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Jn16620	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S16-Jn16620	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S16-Jn16620	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S16-Jn16620	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S16-Jn16620	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S16-Jn16620	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S16-Jn16620	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S16-Jn16620	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Acenaphthylene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Anthracene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benz(a)anthracene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(a)pyrene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(b,j)fluoranthene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(g,h,i)perylene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Benzo(k)fluoranthene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Chrysene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Dibenz(a,h)anthracene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluoranthene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Fluorene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Indeno(1,2,3-cd)pyrene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Naphthalene	B16-Jn16479	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Phenanthrene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Pyrene	M16-Jn18362	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
4,4'-DDD	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
4,4'-DDE	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
4,4'-DDT	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
a-BHC	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Aldrin	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
b-BHC	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
d-BHC	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Dieldrin	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endosulfan I	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endosulfan II	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endosulfan sulphate	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endrin	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endrin aldehyde	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Endrin ketone	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
g-BHC (Lindane)	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Heptachlor	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Heptachlor epoxide	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Hexachlorobenzene	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Methoxychlor	M16-Jn09819	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Toxaphene	M16-Jn09819	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1221	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1232	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1242	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1248	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1254	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Aroclor-1260	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Total PCB*	M16-Jn09819	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
TRH >C10-C16	M16-Jn13048	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH >C16-C34	M16-Jn13048	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C34-C40	M16-Jn13048	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S16-Jn18456	NCP	mg/L	0.001	< 0.001	7.0	30%	Pass
Cadmium	S16-Jn18456	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium	S16-Jn18456	NCP	mg/L	0.021	0.021	1.0	30%	Pass
Copper	S16-Jn18456	NCP	mg/L	0.007	0.007	3.0	30%	Pass
Lead	S16-Jn18456	NCP	mg/L	0.005	0.005	2.0	30%	Pass
Mercury	S16-Jn18456	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Nickel	S16-Jn18456	NCP	mg/L	0.014	0.013	3.0	30%	Pass
Zinc	S16-Jn18456	NCP	mg/L	0.066	0.064	2.0	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
Ivan Taylor	Senior Analyst-Metal (NSW)
Mele Singh	Senior Analyst-Organic (VIC)
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](#).

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Certificate of Analysis

JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000



NATA Accredited
Accreditation Number 1261
Site Number 18217

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

Attention: Mitch Hodgins

Report 503811-W-V2
Project name PARRAMATTA
Project ID 51666
Received Date Jun 08, 2016

Client Sample ID			MW01 Water	MW02 Water	MW03 Water	QA20160608-1 Water
Sample Matrix			S16-Jn08302	S16-Jn08303	S16-Jn08304	S16-Jn08305
Eurofins mgt Sample No.			Jun 08, 2016	Jun 08, 2016	Jun 08, 2016	Jun 08, 2016
Date Sampled						
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
4-Bromofluorobenzene (surr.)	1	%	98	97	86	87
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.01	mg/L	0.14	0.47	0.15	0.13
Chloride	1	mg/L	93	< 1	320	73
Conductivity (at 25°C)	1	uS/cm	530	380	1100	500
Nitrate (as N)	0.02	mg/L	1.7	8.3	2.2	2.1
pH	0.1	pH Units	7.3	6.7	6.5	6.9
Sulphate (as S)	2	mg/L	< 2	7.2	11	< 2
Total Dissolved Solids	5	mg/L	320	370	610	320
Alkalinity (speciated)						
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	130	130	13	120
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	< 5	< 5	< 5

Client Sample ID			MW01	MW02	MW03	QA20160608-1
Sample Matrix			Water	Water	Water	Water
Eurofins mgt Sample No.			S16-Jn08302	S16-Jn08303	S16-Jn08304	S16-Jn08305
Date Sampled			Jun 08, 2016	Jun 08, 2016	Jun 08, 2016	Jun 08, 2016
Test/Reference	LOR	Unit				
Alkali Metals						
Calcium	0.5	mg/L	55	41	6.1	56
Magnesium	0.5	mg/L	30	10	17	30
Potassium	0.5	mg/L	8.4	66	1.5	8.4
Sodium	0.5	mg/L	96	30	190	97
Heavy Metals						
Arsenic (filtered)	0.001	mg/L	0.004	0.005	< 0.001	0.004
Cadmium (filtered)	0.0001	mg/L	0.0001	0.0002	0.0002	0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	0.003	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.001	0.023	0.002	< 0.001
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Nickel (filtered)	0.001	mg/L	0.010	0.013	0.011	0.009
Zinc (filtered)	0.005	mg/L	0.017	0.13	0.049	0.015

Client Sample ID			RINSATE	TS	TB
Sample Matrix			Water	Water	Water
Eurofins mgt Sample No.			S16-Jn08306	S16-Jn08307	S16-Jn08308
Date Sampled			Jun 08, 2016	Jun 07, 2016	Jun 07, 2016
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	0.02	mg/L	< 0.02	-	-
TRH C10-C14	0.05	mg/L	< 0.05	-	-
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	105%	< 0.001
Toluene	0.001	mg/L	< 0.001	96%	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	89%	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	90%	< 0.002
o-Xylene	0.001	mg/L	< 0.001	91%	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	91%	< 0.003
4-Bromofluorobenzene (surr.)	1	%	88	99	88
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene ^{N02}	0.01	mg/L	< 0.01	-	-
TRH C6-C10	0.02	mg/L	< 0.02	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	-	-
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	-	-
Ammonia (as N)	0.01	mg/L	< 0.01	-	-
Chloride	1	mg/L	< 1	-	-
Conductivity (at 25°C)	1	uS/cm	1.1	-	-
Nitrate (as N)	0.02	mg/L	< 0.02	-	-

Client Sample ID			RINSATE	TS	TB
Sample Matrix			Water	Water	Water
Eurofins mgt Sample No.			S16-Jn08306	S16-Jn08307	S16-Jn08308
Date Sampled			Jun 08, 2016	Jun 07, 2016	Jun 07, 2016
Test/Reference	LOR	Unit			
pH	0.1	pH Units	7.2	-	-
Sulphate (as S)	2	mg/L	< 2	-	-
Total Dissolved Solids	5	mg/L	18	-	-
Alkalinity (speciated)					
Bicarbonate Alkalinity (as CaCO ₃)	5	mg/L	< 5	-	-
Carbonate Alkalinity (as CaCO ₃)	5	mg/L	< 5	-	-
Alkali Metals					
Calcium	0.5	mg/L	< 0.5	-	-
Magnesium	0.5	mg/L	6.2	-	-
Potassium	0.5	mg/L	1.1	-	-
Sodium	0.5	mg/L	17	-	-
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	< 0.001	-	-
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	< 0.005	-	-

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 B6 (filtered metals)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jun 09, 2016	7 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 08, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 08, 2016	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 09, 2016	7 Day
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters by ICP-MS	Sydney	Jun 08, 2016	28 Day
Eurofins mgt Suite B11B			
Ammonia (as N) - Method: E036/E050 Ammonia as N	Sydney	Jun 08, 2016	28 Day
Chloride - Method: E033 /E045 /E047 Chloride	Sydney	Jun 16, 2016	28 Day
Conductivity (at 25°C) - Method: LTM-INO-4030	Sydney	Jun 10, 2016	28 Day
Nitrate (as N) - Method: APHA 4500-NO3 Nitrate Nitrogen by FIA	Melbourne	Jun 10, 2016	7 Day
Sulphate (as S) - Method: E045 Sulphate	Sydney	Jun 16, 2016	28 Day
Total Dissolved Solids - Method: 4110 Total Dissolved Solids dried at 180 ± 2°C	Sydney	Jun 08, 2016	7 Day
Alkalinity (speciated) - Method: E035 Alkalinity	Sydney	Jun 16, 2016	14 Day
Alkali Metals - Method: E022/E030 Unfiltered Cations in Water	Sydney	Jun 08, 2016	180 Day
pH - Method: LTM-GEN-7090 pH in water by ISE	Sydney	Jun 10, 2016	1 Day
Eurofins mgt Suite B6			
Metals M8 - Method: LTM-MET-3040 Metals in Waters by ICP-MS	Sydney	Jun 08, 2016	28 Day

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 503811
Phone: 02 8245 0300
Fax:

Received: Jun 8, 2016 5:00 PM
Due: Jun 16, 2016
Priority: 5 Day
Contact Name: Mitch Hodgins

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						pH	BTEX	Eurofins mgt Suite B11B	Eurofins mgt Suite B6	Eurofins mgt Suite B6 (filtered metals)
Melbourne Laboratory - NATA Site # 1254 & 14271								X		
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
External Laboratory										
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
1	MW01	Jun 08, 2016		Water	S16-Jn08302	X		X		X
2	MW02	Jun 08, 2016		Water	S16-Jn08303	X		X		X
3	MW03	Jun 08, 2016		Water	S16-Jn08304	X		X		X
4	QA20160608-1	Jun 08, 2016		Water	S16-Jn08305	X		X		X
5	RINSATE	Jun 08, 2016		Water	S16-Jn08306	X		X	X	
6	TS	Jun 07, 2016		Water	S16-Jn08307		X			
7	TB	Jun 07, 2016		Water	S16-Jn08308		X			
Test Counts						5	2	5	1	4

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							
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							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Conductivity (at 25°C)	uS/cm	< 1			1	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Sulphate (as S)	mg/L	< 2			2	Pass	
Total Dissolved Solids	mg/L	1			5	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	< 5			5	Pass	
Carbonate Alkalinity (as CaCO ₃)	mg/L	< 5			5	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Sodium	mg/L	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	121			70-130	Pass	
TRH C10-C14	%	102			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	107			70-130	Pass	
Toluene	%	104			70-130	Pass	
Ethylbenzene	%	102			70-130	Pass	
m&p-Xylenes	%	102			70-130	Pass	
o-Xylene	%	101			70-130	Pass	
Xylenes - Total	%	102			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	103			70-130	Pass	
TRH C6-C10	%	113			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	106			70-130	Pass	
LCS - % Recovery							
Ammonia (as N)	%	84			70-130	Pass	
Conductivity (at 25°C)	%	102			70-130	Pass	
Nitrate (as N)	%	99			70-130	Pass	
Sulphate (as S)	%	106			70-130	Pass	
Total Dissolved Solids	%	99			80-120	Pass	
LCS - % Recovery							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO ₃)	%	101			70-130	Pass	
LCS - % Recovery							
Alkali Metals							
Calcium	%	101			70-130	Pass	
Magnesium	%	104			70-130	Pass	
Potassium	%	90			70-130	Pass	
Sodium	%	94			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	96			70-130	Pass	
Arsenic (filtered)	%	105			70-130	Pass	
Cadmium	%	104			70-130	Pass	
Cadmium (filtered)	%	102			70-130	Pass	
Chromium	%	98			70-130	Pass	
Chromium (filtered)	%	107			70-130	Pass	
Copper	%	98			70-130	Pass	
Copper (filtered)	%	108			70-130	Pass	
Lead	%	100			70-130	Pass	
Lead (filtered)	%	101			70-130	Pass	
Mercury	%	105			70-130	Pass	
Mercury (filtered)	%	97			70-130	Pass	
Nickel	%	96			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel (filtered)			%	107			70-130	Pass	
Zinc			%	92			70-130	Pass	
Zinc (filtered)			%	106			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
				Result 1					
Ammonia (as N)	S16-Jn08302	CP	%	82			70-130	Pass	
Chloride	S16-Jn08302	CP	%	117			70-130	Pass	
Nitrate (as N)	M16-Jn08973	NCP	%	93			70-130	Pass	
Sulphate (as S)	S16-Jn08302	CP	%	104			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S16-Jn08303	CP	%	94			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn08303	CP	%	97			70-130	Pass	
Spike - % Recovery									
Alkali Metals				Result 1					
Calcium	S16-Jn08303	CP	%	97			70-130	Pass	
Magnesium	S16-Jn08303	CP	%	98			70-130	Pass	
Potassium	S16-Jn08303	CP	%	90			70-130	Pass	
Sodium	S16-Jn08303	CP	%	92			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Jn08305	CP	%	109			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn08305	CP	%	102			70-130	Pass	
Toluene	S16-Jn08305	CP	%	100			70-130	Pass	
Ethylbenzene	S16-Jn08305	CP	%	99			70-130	Pass	
m&p-Xylenes	S16-Jn08305	CP	%	101			70-130	Pass	
o-Xylene	S16-Jn08305	CP	%	100			70-130	Pass	
Xylenes - Total	S16-Jn08305	CP	%	101			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn08305	CP	%	98			70-130	Pass	
TRH C6-C10	S16-Jn08305	CP	%	102			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic (filtered)	S16-Jn08305	CP	%	109			70-130	Pass	
Cadmium (filtered)	S16-Jn08305	CP	%	109			70-130	Pass	
Chromium (filtered)	S16-Jn08305	CP	%	107			70-130	Pass	
Copper (filtered)	S16-Jn08305	CP	%	87			70-130	Pass	
Mercury (filtered)	S16-Jn08305	CP	%	96			70-130	Pass	
Nickel (filtered)	S16-Jn08305	CP	%	103			70-130	Pass	
Zinc (filtered)	S16-Jn08305	CP	%	107			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Jn08253	NCP	%	81			70-130	Pass	
Cadmium	S16-Jn08253	NCP	%	72			70-130	Pass	
Chromium	S16-Jn08253	NCP	%	113			70-130	Pass	
Copper	S16-Jn08253	NCP	%	103			70-130	Pass	
Lead	S16-Jn08253	NCP	%	101			70-130	Pass	
Mercury	S16-Jn08253	NCP	%	128			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nickel	S16-Jn08253	NCP	%	105			70-130	Pass	
Zinc	S16-Jn07603	NCP	%	74			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 C10-C14	S16-Jn08302	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	S16-Jn08302	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	S16-Jn08302	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S16-Jn08302	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	S16-Jn08302	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S16-Jn08302	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	S16-Jn08302	CP	mg/L	0.14	0.14	1.0	30%	Pass	
Chloride	S16-Jn08302	CP	mg/L	93	90	4.0	30%	Pass	
Nitrate (as N)	M16-Jn08973	NCP	mg/L	0.98	0.99	1.0	30%	Pass	
Sulphate (as S)	S16-Jn08302	CP	mg/L	< 2	< 2	<1	30%	Pass	
Duplicate									
Alkalinity (speciated)				Result 1	Result 2	RPD			
Bicarbonate Alkalinity (as CaCO ₃)	S16-Jn06292	NCP	mg/L	35	40	<1	30%	Pass	
Carbonate Alkalinity (as CaCO ₃)	S16-Jn06292	NCP	mg/L	< 5	< 5	<1	30%	Pass	
Duplicate									
Alkali Metals				Result 1	Result 2	RPD			
Calcium	S16-Jn08302	CP	mg/L	55	54	2.0	30%	Pass	
Magnesium	S16-Jn08302	CP	mg/L	30	29	3.0	30%	Pass	
Potassium	S16-Jn08302	CP	mg/L	8.4	8.2	3.0	30%	Pass	
Sodium	S16-Jn08302	CP	mg/L	96	93	4.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic (filtered)	S16-Jn08302	CP	mg/L	0.004	0.004	3.0	30%	Pass	
Cadmium (filtered)	S16-Jn08302	CP	mg/L	0.0001	0.0001	<1	30%	Pass	
Chromium (filtered)	S16-Jn08302	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper (filtered)	S16-Jn08302	CP	mg/L	0.001	0.001	13	30%	Pass	
Lead (filtered)	S16-Jn08302	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury (filtered)	S16-Jn08302	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	S16-Jn08302	CP	mg/L	0.010	0.010	4.0	30%	Pass	
Zinc (filtered)	S16-Jn08302	CP	mg/L	0.017	0.017	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Total Dissolved Solids	S16-Jn12044	NCP	mg/L	190	200	8.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S16-Jn08304	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Jn08304	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S16-Jn08304	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S16-Jn08304	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S16-Jn08304	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S16-Jn08304	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S16-Jn08304	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass	

Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	S16-Jn08304	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
TRH C6-C10	S16-Jn08304	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Duplicate								
				Result 1	Result 2	RPD		
Conductivity (at 25°C)	S16-Jn08304	CP	uS/cm	1100	1100	<1	30%	Pass

Comments

Report revised to reflect amendment to Method Blank result for TDS.

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.

Authorised By

Nibha Vaidya	Analytical Services Manager
Bob Symons	Senior Analyst-Inorganic (NSW)
Huong Le	Senior Analyst-Inorganic (VIC)
Ivan Taylor	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](#).

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JBS & G Australia (NSW & WA) P/L
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: Pongsathorn Patanan

Report 505174-W
Project name PARRAMATTA
Project ID 51666
Received Date Jun 21, 2016

Client Sample ID			MW04A	TS	TB
Sample Matrix			Water	Water	Water
Eurofins mgt Sample No.			S16-Jn19281	S16-Jn19282	S16-Jn19283
Date Sampled			Jun 21, 2016	Jun 09, 2016	Jun 09, 2016
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	0.02	mg/L	< 0.02	-	-
TRH C10-C14	0.05	mg/L	< 0.05	-	-
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	90%	< 0.001
Toluene	0.001	mg/L	< 0.001	92%	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001	93%	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	94%	< 0.002
o-Xylene	0.001	mg/L	< 0.001	95%	< 0.001
Xylenes - Total	0.003	mg/L	< 0.003	94%	< 0.003
4-Bromofluorobenzene (surr.)	1	%	93	102	94
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene ^{N02}	0.01	mg/L	< 0.01	-	-
TRH C6-C10	0.02	mg/L	< 0.02	-	-
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	-	-
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	-	-
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	-	-
Ammonia (as N)	0.01	mg/L	0.03	-	-
Chloride	1	mg/L	300	-	-
Conductivity (at 25°C)	1	uS/cm	950	-	-
Nitrate (as N)	0.02	mg/L		-	-
pH	0.1	pH Units	5.3	-	-
Sulphate (as S)	2	mg/L	13	-	-
Total Dissolved Solids	5	mg/L	550	-	-
Alkalinity (speciated)					
Bicarbonate Alkalinity (as CaCO3)	5	mg/L	36	-	-
Carbonate Alkalinity (as CaCO3)	5	mg/L	< 5	-	-

Client Sample ID			MW04A	TS	TB
Sample Matrix			Water	Water	Water
Eurofins mgt Sample No.			S16-Jn19281	S16-Jn19282	S16-Jn19283
Date Sampled			Jun 21, 2016	Jun 09, 2016	Jun 09, 2016
Test/Reference	LOR	Unit			
Alkali Metals					
Calcium	0.5	mg/L	4.2	-	-
Magnesium	0.5	mg/L	13	-	-
Potassium	0.5	mg/L	0.6	-	-
Sodium	0.5	mg/L	190	-	-
Heavy Metals					
Arsenic (filtered)	0.001	mg/L	< 0.001	-	-
Cadmium (filtered)	0.0001	mg/L	< 0.0001	-	-
Chromium (filtered)	0.001	mg/L	< 0.001	-	-
Copper (filtered)	0.001	mg/L	< 0.001	-	-
Lead (filtered)	0.001	mg/L	< 0.001	-	-
Mercury (filtered)	0.0001	mg/L	< 0.0001	-	-
Nickel (filtered)	0.001	mg/L	0.008	-	-
Zinc (filtered)	0.005	mg/L	0.031	-	-

DRAFT

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 B6 (filtered metals)			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: TRH C6-C36 - LTM-ORG-2010	Sydney	Jun 21, 2016	7 Day
BTEX - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 21, 2016	14 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 21, 2016	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Sydney	Jun 21, 2016	7 Day
Metals M8 filtered - Method: LTM-MET-3040 Metals in Waters by ICP-MS	Sydney	Jun 22, 2016	28 Day
Eurofins mgt Suite B11B			
Ammonia (as N) - Method: E036/E050 Ammonia as N	Sydney	Jun 21, 2016	28 Day
Chloride - Method: E033 /E045 /E047 Chloride	Sydney	Jun 22, 2016	28 Day
Conductivity (at 25°C) - Method: LTM-INO-4030	Sydney	Jun 22, 2016	28 Day
Nitrate (as N) - Method: APHA 4500-NO3 Nitrate Nitrogen by FIA	Melbourne	Jun 21, 2016	7 Day
Sulphate (as S) - Method: E045 Sulphate	Sydney	Jun 22, 2016	28 Day
Total Dissolved Solids - Method: 4110 Total Dissolved Solids dried at 180 ± 2°C	Sydney	Jun 21, 2016	7 Day
Alkalinity (speciated) - Method: E035 Alkalinity	Sydney	Jun 21, 2016	14 Day
Alkali Metals - Method: E022/E030 Unfiltered Cations in Water	Sydney	Jun 21, 2016	180 Day
pH - Method: LTM-GEN-7090 pH in water by ISE	Sydney	Jun 22, 2016	1 Day

Company Name: JBS & G Australia (NSW & WA) P/L
Address: Level 1, 50 Margaret St
Sydney
NSW 2000
Project Name: PARRAMATTA
Project ID: 51666

Order No.:
Report #: 505174
Phone: 02 8245 0300
Fax:

Received: Jun 21, 2016 5:15 PM
Due: Jun 22, 2016
Priority: 1 Day
Contact Name: Pongsathorn Patanan

Eurofins | mgt Analytical Services Manager : Nibha Vaidya

Sample Detail						pH	BTEX	Eurofins mgt Suite B11B	Eurofins mgt Suite B6 (filtered metals)
Melbourne Laboratory - NATA Site # 1254 & 14271								X	
Sydney Laboratory - NATA Site # 18217						X	X	X	X
Brisbane Laboratory - NATA Site # 20794									
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	MW04A	Jun 21, 2016		Water	S16-Jn19281	X		X	X
2	TS	Jun 09, 2016		Water	S16-Jn19282		X		
3	TB	Jun 09, 2016		Water	S16-Jn19283		X		
Test Counts						1	2	1	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							
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							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Chloride	mg/L	< 1			1	Pass	
Conductivity (at 25°C)	uS/cm	< 1			1	Pass	
Sulphate (as S)	mg/L	< 2			2	Pass	
Total Dissolved Solids	mg/L	< 5			5	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO ₃)	mg/L	< 5			5	Pass	
Carbonate Alkalinity (as CaCO ₃)	mg/L	< 5			5	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Sodium	mg/L	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium (filtered)	mg/L	< 0.0001			0.0001	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	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	80			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14			%	103			70-130	Pass	
LCS - % Recovery									
BTEX									
Benzene		%	91				70-130	Pass	
Toluene		%	91				70-130	Pass	
Ethylbenzene		%	93				70-130	Pass	
m&p-Xylenes		%	94				70-130	Pass	
o-Xylene		%	94				70-130	Pass	
Xylenes - Total		%	94				70-130	Pass	
LCS - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
Naphthalene		%	88				70-130	Pass	
TRH C6-C10		%	93				70-130	Pass	
LCS - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
TRH >C10-C16		%	108				70-130	Pass	
LCS - % Recovery									
Ammonia (as N)		%	102				70-130	Pass	
Chloride		%	104				70-130	Pass	
Conductivity (at 25°C)		%	105				70-130	Pass	
Sulphate (as S)		%	96				70-130	Pass	
LCS - % Recovery									
Alkalinity (speciated)									
Bicarbonate Alkalinity (as CaCO3)		%	120				70-130	Pass	
LCS - % Recovery									
Alkali Metals									
Calcium		%	107				70-130	Pass	
Magnesium		%	105				70-130	Pass	
Potassium		%	101				70-130	Pass	
Sodium		%	98				70-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic (filtered)		%	92				70-130	Pass	
Cadmium (filtered)		%	93				70-130	Pass	
Chromium (filtered)		%	91				70-130	Pass	
Copper (filtered)		%	95				70-130	Pass	
Lead (filtered)		%	98				70-130	Pass	
Mercury (filtered)		%	98				70-130	Pass	
Nickel (filtered)		%	95				70-130	Pass	
Zinc (filtered)		%	94				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	S16-Jn16579	NCP	%	73			70-130	Pass	
TRH C10-C14	S16-Jn16578	NCP	%	105			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Jn16579	NCP	%	97			70-130	Pass	
Toluene	S16-Jn16579	NCP	%	95			70-130	Pass	
Ethylbenzene	S16-Jn16579	NCP	%	93			70-130	Pass	
m&p-Xylenes	S16-Jn16579	NCP	%	93			70-130	Pass	
o-Xylene	S16-Jn16579	NCP	%	93			70-130	Pass	
Xylenes - Total	S16-Jn16579	NCP	%	93			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Jn16579	NCP	%	96			70-130	Pass	
TRH C6-C10	S16-Jn16579	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Jn16578	NCP	%	110			70-130	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	S16-Jn19284	NCP	%	127			70-130	Pass	
Chloride	S16-Jn19281	CP	%	92			70-130	Pass	
Sulphate (as S)	S16-Jn19281	CP	%	101			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Cadmium (filtered)	S16-Jn13280	NCP	%	114			70-130	Pass	
Chromium (filtered)	S16-Jn13280	NCP	%	109			70-130	Pass	
Copper (filtered)	S16-Jn13280	NCP	%	94			70-130	Pass	
Mercury (filtered)	S16-Jn13280	NCP	%	76			70-130	Pass	
Nickel (filtered)	S16-Jn13280	NCP	%	104			70-130	Pass	
Zinc (filtered)	S16-Jn13280	NCP	%	109			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	S16-Jn16578	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	S16-Jn16576	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	S16-Jn16576	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	S16-Jn16576	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Jn16578	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S16-Jn16578	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S16-Jn16578	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S16-Jn16578	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S16-Jn16578	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S16-Jn16578	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S16-Jn16578	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	S16-Jn16578	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S16-Jn16576	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	S16-Jn16576	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S16-Jn16576	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	S16-Jn19284	NCP	mg/L	0.97	0.96	1.0	30%	Pass	
Chloride	S16-Jn19281	CP	mg/L	300	310	1.0	30%	Pass	
Conductivity (at 25°C)	S16-Jn19281	CP	uS/cm	950	960	1.0	30%	Pass	
Sulphate (as S)	S16-Jn19281	CP	mg/L	13	14	6.0	30%	Pass	
Total Dissolved Solids	S16-Jn19281	CP	mg/L	550	600	9.0	30%	Pass	

Duplicate								
Alkali Metals				Result 1	Result 2	RPD		
Calcium	S16-Jn19281	CP	mg/L	4.2	4.3	2.0	30%	Pass
Magnesium	S16-Jn19281	CP	mg/L	13	13	1.0	30%	Pass
Potassium	S16-Jn19281	CP	mg/L	0.6	0.6	5.0	30%	Pass
Sodium	S16-Jn19281	CP	mg/L	190	180	2.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic (filtered)	S16-Jn19281	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Cadmium (filtered)	S16-Jn19281	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Chromium (filtered)	S16-Jn19281	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper (filtered)	S16-Jn19281	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead (filtered)	S16-Jn19281	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Mercury (filtered)	S16-Jn19281	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Nickel (filtered)	S16-Jn19281	CP	mg/L	0.008	0.008	2.0	30%	Pass
Zinc (filtered)	S16-Jn19281	CP	mg/L	0.031	0.030	4.0	30%	Pass

DRAFT

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.

Authorised By

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

Glenn Jackson

National Operations Manager

- 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](#).

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CERTIFICATE OF ANALYSIS

148594

Client:

JBS & G (NSW & WA) Pty Ltd
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: M Hodgins

Sample log in details:

Your Reference:	<u>51666, Parramatta</u>
No. of samples:	5 Soils
Date samples received / completed instructions received	17/06/2016 / 20/06/2016

Analysis Details:

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

Report Details:

Date results requested by: / Issue Date:	22/06/16 / 22/06/16
Date of Preliminary Report:	Not Issued

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

Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 148594
Revision No: R 00



vTRH(C6-C10)/BTEXN in Soil						
Our Reference:	UNITS	148594-1	148594-2	148594-3	148594-4	148594-5
Your Reference	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
	-					
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
TRHC ₆ - C ₉	mg/kg	<25	<25	<25	<25	<25
TRHC ₆ - C ₁₀	mg/kg	<25	<25	<25	<25	<25
vTPHC ₆ - C ₁₀ less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	111	112	110	113	111

svTRH (C10-C40) in Soil						
Our Reference:	UNITS	148594-1	148594-2	148594-3	148594-4	148594-5
Your Reference	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
	-					
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	22/06/2016	22/06/2016
TRHC ₁₀ - C ₁₄	mg/kg	<50	<50	<50	<50	<50
TRHC ₁₅ - C ₂₈	mg/kg	<100	<100	<100	<100	<100
TRHC ₂₉ - C ₃₆	mg/kg	<100	170	<100	<100	<100
TRH>C ₁₀ -C ₁₆	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₀ - C ₁₆ less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH>C ₁₆ -C ₃₄	mg/kg	<100	210	<100	<100	<100
TRH>C ₃₄ -C ₄₀	mg/kg	100	<100	<100	<100	<100
Surrogate o-Terphenyl	%	79	82	78	77	77

PAHs in Soil Our Reference: Your Reference	UNITS ----- -	148594-1 QC20160610-1	148594-2 QC20160610-2	148594-3 QC20160614-1	148594-4 QC20160614-2	148594-5 QC20160615-1
Date Sampled Type of sample	----- -	10/06/2016 Soil	10/06/2016 Soil	14/06/2016 Soil	14/06/2016 Soil	15/06/2016 Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Total Positive PAHs	mg/kg	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate p-Terphenyl-d14	%	103	92	79	78	82

Organochlorine Pesticides in soil	UNITS	148594-1	148594-2	148594-3	148594-4	148594-5
Our Reference:	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
Your Reference	-					
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.3	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	80	82	79	78	80

Organophosphorus Pesticides						
Our Reference:	UNITS	148594-1	148594-2	148594-3	148594-4	148594-5
Your Reference	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
	-					
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	80	82	79	78	80

PCBs in Soil Our Reference: Your Reference	UNITS ----- -	148594-1 QC20160610-1	148594-2 QC20160610-2	148594-3 QC20160614-1	148594-4 QC20160614-2	148594-5 QC20160615-1
Date Sampled Type of sample	----- -	10/06/2016 Soil	10/06/2016 Soil	14/06/2016 Soil	14/06/2016 Soil	15/06/2016 Soil
Date extracted	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	80	82	79	78	80

Acid Extractable metals in soil						
Our Reference:	UNITS	148594-1	148594-2	148594-3	148594-4	148594-5
Your Reference	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
	-					
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	9	5	<1	1	17
Copper	mg/kg	66	9	<1	<1	9
Lead	mg/kg	5	13	1	1	16
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	58	4	<1	<1	12
Zinc	mg/kg	36	47	2	2	23

Triazine Herbicides in Soil			
Our Reference:	UNITS	148594-3	148594-4
Your Reference	-----	QC20160614-1	QC20160614-2
	-		
Date Sampled	-----	14/06/2016	14/06/2016
Type of sample		Soil	Soil
Date prepared	-	21/06/2016	21/06/2016
Date analysed	-	21/06/2016	21/06/2016
Atrazine	mg/kg	<0.5	<0.5
Ametryn	mg/kg	<0.5	<0.5
Cyanazine	mg/kg	<0.5	<0.5
Hexazinone	mg/kg	<0.5	<0.5
Irgarol	mg/kg	<0.5	<0.5
Metribuzin	mg/kg	<0.5	<0.5
Prometryn	mg/kg	<0.5	<0.5
Propazine	mg/kg	<0.5	<0.5
Simazine	mg/kg	<0.5	<0.5
Terbutryn	mg/kg	<0.5	<0.5
Terbutylazine	mg/kg	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d ₁₄	%	81	78

Phenoxy Acid Herbicides in Soil			
Our Reference:	UNITS	148594-3	148594-4
Your Reference	-----	QC20160614-1	QC20160614-2
	-		
Date Sampled	-----	14/06/2016	14/06/2016
Type of sample		Soil	Soil
Date extracted	-	21/06/2016	21/06/2016
Date analysed	-	22/06/2016	22/06/2016
Clopyralid	mg/kg	<0.5	<0.5
3,5-Dichlorobenzoic acid	mg/kg	<0.5	<0.5
o-chlorophenoxy acetic acid	mg/kg	<0.5	<0.5
4-CPA	mg/kg	<0.5	<0.5
Dicamba	mg/kg	<0.5	<0.5
MCPP	mg/kg	<0.5	<0.5
MCPA	mg/kg	<0.5	<0.5
Dichlorprop	mg/kg	<0.5	<0.5
2,4-D	mg/kg	<0.5	<0.5
Bromoxynil	mg/kg	<0.5	<0.5
Triclopyr	mg/kg	<0.5	<0.5
2,4,5-TP	mg/kg	<0.5	<0.5
2,4,5-T	mg/kg	<0.5	<0.5
MCPB	mg/kg	<0.5	<0.5
Dinoseb	mg/kg	<1	<1
2,4-DB	mg/kg	<0.5	<0.5
loxynil	mg/kg	<1	<1
Picloram	mg/kg	<1	<1
DCPA (Chlorthal) Diacid	mg/kg	<0.5	<0.5
Acifluorfen	mg/kg	<2	<2
2,4,6-T	mg/kg	<0.5	<0.5
2,6-D	mg/kg	<0.5	<0.5
Surrogate 2.4- DCPA	%	100	110

Moisture Our Reference: Your Reference	UNITS ----- -	148594-1 QC20160610-1	148594-2 QC20160610-2	148594-3 QC20160614-1	148594-4 QC20160614-2	148594-5 QC20160615-1
Date Sampled Type of sample	----- -	10/06/2016 Soil	10/06/2016 Soil	14/06/2016 Soil	14/06/2016 Soil	15/06/2016 Soil
Date prepared	-	21/06/2016	21/06/2016	21/06/2016	21/06/2016	21/06/2016
Date analysed	-	22/06/2016	22/06/2016	22/06/2016	22/06/2016	22/06/2016
Moisture	%	6.6	5.5	8.7	11	11

Metals in TCLP USEPA 1311		
Our Reference:	UNITS	148594-4
Your Reference	-----	QC20160614-2
	-	
Date Sampled	-----	14/06/2016
Type of sample		Soil
Date extracted	-	21/06/2016
Date analysed	-	21/06/2016
pH of soil for fluid# determ.	pH units	8.3
pH of soil TCLP (after HCl)	pH units	1.6
Extraction fluid used	-	1
pH of final Leachate	pH units	4.9
Arsenic in TCLP	mg/L	<0.05
Cadmium in TCLP	mg/L	<0.01
Chromium in TCLP	mg/L	<0.01
Copper in TCLP	mg/L	<0.01
Lead in TCLP	mg/L	<0.03
Mercury in TCLP	mg/L	<0.0005
Nickel in TCLP	mg/L	<0.02
Zinc in TCLP	mg/L	0.02

PAHs in TCLP (USEPA 1311)		
Our Reference:	UNITS	148594-4
Your Reference	-----	QC20160614-2
	-	
Date Sampled	-----	14/06/2016
Type of sample		Soil
Date extracted	-	21/06/2016
Date analysed	-	21/06/2016
Naphthalene in TCLP	mg/L	<0.001
Acenaphthylene in TCLP	mg/L	<0.001
Acenaphthene in TCLP	mg/L	<0.001
Fluorene in TCLP	mg/L	<0.001
Phenanthrene in TCLP	mg/L	<0.001
Anthracene in TCLP	mg/L	<0.001
Fluoranthene in TCLP	mg/L	<0.001
Pyrene in TCLP	mg/L	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001
Chrysene in TCLP	mg/L	<0.001
Benzo(b)fluoranthene in TCLP	mg/L	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001
Total +ve PAH's	mg/L	NIL (+)VE
Surrogate p-Terphenyl-d14	%	96

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-014	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'TEQ PQL' values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'TEQ zero' values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'TEQ half PQL' values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-008	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-006	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
Ext-054	Analysed by MPL Envirolab
Inorg-008	Moisture content determined by heating at 105+/-5 deg C for a minimum of 12 hours.
Inorg-004	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004.
EXTRACT.7	Toxicity Characteristic Leaching Procedure (TCLP).
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.

Method ID	Methodology Summary
Org-012	Leachates are extracted with Dichloromethane and analysed by GC-MS.
Org-012	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
TRHC ₆ - C ₉	mg/kg	25	Org-016	<25	148594-3	<25 <25	LCS-6	114%
TRHC ₆ - C ₁₀	mg/kg	25	Org-016	<25	148594-3	<25 <25	LCS-6	114%
Benzene	mg/kg	0.2	Org-016	<0.2	148594-3	<0.2 <0.2	LCS-6	109%
Toluene	mg/kg	0.5	Org-016	<0.5	148594-3	<0.5 <0.5	LCS-6	114%
Ethylbenzene	mg/kg	1	Org-016	<1	148594-3	<1 <1	LCS-6	116%
m+p-xylene	mg/kg	2	Org-016	<2	148594-3	<2 <2	LCS-6	116%
o-Xylene	mg/kg	1	Org-016	<1	148594-3	<1 <1	LCS-6	114%
naphthalene	mg/kg	1	Org-014	<1	148594-3	<1 <1	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	113	148594-3	110 107 RPD: 3	LCS-6	112%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH(C10-C40) in Soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
TRHC ₁₀ - C ₁₄	mg/kg	50	Org-003	<50	148594-3	<50 <50	LCS-6	99%
TRHC ₁₅ - C ₂₈	mg/kg	100	Org-003	<100	148594-3	<100 <100	LCS-6	85%
TRHC ₂₈ - C ₃₆	mg/kg	100	Org-003	<100	148594-3	<100 <100	LCS-6	92%
TRH>C ₁₀ -C ₁₆	mg/kg	50	Org-003	<50	148594-3	<50 <50	LCS-6	99%
TRH>C ₁₆ -C ₃₄	mg/kg	100	Org-003	<100	148594-3	<100 <100	LCS-6	85%
TRH>C ₃₄ -C ₄₀	mg/kg	100	Org-003	<100	148594-3	<100 <100	LCS-6	92%
Surrogate o-Terphenyl	%		Org-003	82	148594-3	78 78 RPD: 0	LCS-6	109%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Naphthalene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	97%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	118%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	104%
Anthracene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	88%
Pyrene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	81%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	LCS-6	93%
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	<0.2	148594-3	<0.2 <0.2	[NR]	[NR]

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in Soil						Base II Duplicate II %RPD		
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	148594-3	<0.05 <0.05	LCS-6	95%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	81	148594-3	79 87 RPD: 10	LCS-6	82%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organochlorine Pesticides in soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
HCB	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	72%
gamma-BHC	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
beta-BHC	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	105%
Heptachlor	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	84%
delta-BHC	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aldrin	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	89%
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	104%
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
pp-DDE	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	89%
Dieldrin	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	108%
Endrin	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	90%
pp-DDD	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	86%
Endosulfan II	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
pp-DDT	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	LCS-6	88%
Methoxychlor	mg/kg	0.1	Org-005	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Surrogate TCMX	%		Org-005	81	148594-3	79 81 RPD: 2	LCS-6	78%

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Organophosphorus Pesticides						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Chlorpyrifos	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	102%
Chlorpyrifos-methyl	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Diazinon	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	91%
Dimethoate	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Ethion	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	107%
Fenitrothion	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	92%
Malathion	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	91%
Parathion	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	110%
Ronnel	mg/kg	0.1	Org-008	<0.1	148594-3	<0.1 <0.1	LCS-6	105%
Surrogate TCMX	%		Org-008	81	148594-3	79 81 RPD: 2	LCS-6	86%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PCBs in Soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	LCS-6	101%
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	148594-3	<0.1 <0.1	[NR]	[NR]
Surrogate TCLMX	%		Org-006	81	148594-3	79 81 RPD: 2	LCS-6	86%

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QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Acid Extractable metals in soil						Base II Duplicate II %RPD		
Date prepared	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Arsenic	mg/kg	4	Metals-020	<4	148594-3	<4 <4	LCS-6	109%
Cadmium	mg/kg	0.4	Metals-020	<0.4	148594-3	<0.4 <0.4	LCS-6	102%
Chromium	mg/kg	1	Metals-020	<1	148594-3	<1 <1	LCS-6	107%
Copper	mg/kg	1	Metals-020	<1	148594-3	<1 <1	LCS-6	107%
Lead	mg/kg	1	Metals-020	<1	148594-3	1 <1	LCS-6	104%
Mercury	mg/kg	0.1	Metals-021	<0.1	148594-3	<0.1 <0.1	LCS-6	104%
Nickel	mg/kg	1	Metals-020	<1	148594-3	<1 <1	LCS-6	101%
Zinc	mg/kg	1	Metals-020	<1	148594-3	2 1 RPD: 67	LCS-6	101%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Triazine Herbicides in Soil						Base II Duplicate II %RPD		
Date prepared	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Date analysed	-			21/06/2016	148594-3	21/06/2016 21/06/2016	LCS-6	21/06/2016
Atrazine	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	LCS-6	85%
Ametryn	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Cyanazine	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Hexazinone	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Irgarol	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Metribuzin	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Prometryn	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	LCS-6	85%
Propazine	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	LCS-6	99%
Simazine	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Terbutryn	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Terbutylazine	mg/kg	0.5	Org-012	<0.5	148594-3	<0.5 <0.5	[NR]	[NR]
Surrogate p-Terphenyl-d ₁₄	%		Org-012	81	148594-3	81 77 RPD: 5	LCS-6	79%

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Phenoxy Acid Herbicides in Soil						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	[NT]	[NT]	LCS-1	21/06/2016
Date analysed	-			22/06/2016	[NT]	[NT]	LCS-1	22/06/2016
Clopyralid	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
3,5-Dichlorobenzoic acid	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
o-chlorophenoxy acetic acid	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
4-CPA	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Dicamba	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	LCS-1	99%
MOPP	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	LCS-1	100%
MCPA	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	LCS-1	98%
Dichlorprop	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
2,4-D	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	LCS-1	95%
Bromoxynil	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Triclopyr	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
2,4,5-TP	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
2,4,5-T	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	LCS-1	94%
MCPB	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Dinoseb	mg/kg	1	Ext-054	<1	[NT]	[NT]	[NR]	[NR]
2,4-DB	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Ioxynil	mg/kg	1	Ext-054	<1	[NT]	[NT]	[NR]	[NR]
Picloram	mg/kg	1	Ext-054	<1	[NT]	[NT]	[NR]	[NR]
DCPA (Chlorthal) Diacid	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Acifluorfen	mg/kg	2	Ext-054	<2	[NT]	[NT]	[NR]	[NR]
2,4,6-T	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
2,6-D	mg/kg	0.5	Ext-054	<0.5	[NT]	[NT]	[NR]	[NR]
Surrogate 2,4- DCPA	%	60	Ext-054	100	[NT]	[NT]	LCS-1	98%

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Metals in TCLP USEPA1311						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	[NT]	[NT]	LCS-W1	21/06/2016
Date analysed	-			21/06/2016	[NT]	[NT]	LCS-W1	21/06/2016
Arsenic in TCLP	mg/L	0.05	Metals-020 ICP-AES	<0.05	[NT]	[NT]	LCS-W1	105%
Cadmium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	107%
Chromium in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	103%
Copper in TCLP	mg/L	0.01	Metals-020 ICP-AES	<0.01	[NT]	[NT]	LCS-W1	107%
Lead in TCLP	mg/L	0.03	Metals-020 ICP-AES	<0.03	[NT]	[NT]	LCS-W1	97%
Mercury in TCLP	mg/L	0.0005	Metals-021 CV-AAS	<0.0005	[NT]	[NT]	LCS-W1	92%
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	102%
Zinc in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	[NT]	[NT]	LCS-W1	106%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
PAHs in TCLP (USEPA 1311)						Base II Duplicate II %RPD		
Date extracted	-			21/06/2016	[NT]	[NT]	LCS-W2	21/06/2016
Date analysed	-			21/06/2016	[NT]	[NT]	LCS-W2	21/06/2016
Naphthalene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	88%
Acenaphthylene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Acenaphthene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Fluorene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	116%
Phenanthrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	102%
Anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Fluoranthene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	92%
Pyrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	84%
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Chrysene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	95%
Benzo(b,j,k)fluoranthene in TCLP	mg/L	0.002	Org-012	<0.002	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	LCS-W2	92%
Indeno(1,2,3-c,d)pyrene -TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	119	[NT]	[NT]	LCS-W2	110%

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
TRHC ₆ - C ₉	mg/kg	[NT]	[NT]	148594-4	105%
TRHC ₆ - C ₁₀	mg/kg	[NT]	[NT]	148594-4	105%
Benzene	mg/kg	[NT]	[NT]	148594-4	99%
Toluene	mg/kg	[NT]	[NT]	148594-4	106%
Ethylbenzene	mg/kg	[NT]	[NT]	148594-4	108%
m+p-xylene	mg/kg	[NT]	[NT]	148594-4	107%
o-Xylene	mg/kg	[NT]	[NT]	148594-4	104%
naphthalene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate aaa- Trifluorotoluene	%	[NT]	[NT]	148594-4	106%
QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	22/06/2016
TRHC ₁₀ - C ₁₄	mg/kg	[NT]	[NT]	148594-4	99%
TRHC ₁₅ - C ₂₈	mg/kg	[NT]	[NT]	148594-4	88%
TRHC ₂₉ - C ₃₆	mg/kg	[NT]	[NT]	148594-4	81%
TRH>C ₁₀ -C ₁₆	mg/kg	[NT]	[NT]	148594-4	99%
TRH>C ₁₆ -C ₃₄	mg/kg	[NT]	[NT]	148594-4	88%
TRH>C ₃₄ -C ₄₀	mg/kg	[NT]	[NT]	148594-4	81%
Surrogate o-Terphenyl	%	[NT]	[NT]	148594-4	77%
QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
Naphthalene	mg/kg	[NT]	[NT]	148594-4	86%
Acenaphthylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	[NT]	[NT]	148594-4	110%
Phenanthrene	mg/kg	[NT]	[NT]	148594-4	96%
Anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	[NT]	[NT]	148594-4	80%
Pyrene	mg/kg	[NT]	[NT]	148594-4	73%
Benzo(a)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	[NT]	[NT]	148594-4	85%
Benzo(b,j+k)fluoranthene	mg/kg	[NT]	[NT]	[NR]	[NR]
Benzo(a)pyrene	mg/kg	[NT]	[NT]	148594-4	86%
Indeno(1,2,3-c,d)pyrene	mg/kg	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL PAHs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Benzo(g,h,i)perylene	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%	[NT]	[NT]	148594-4	78%
QUALITY CONTROL Organochlorine Pesticides in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
HCB	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-BHC	mg/kg	[NT]	[NT]	148594-4	82%
gamma-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
beta-BHC	mg/kg	[NT]	[NT]	148594-4	102%
Heptachlor	mg/kg	[NT]	[NT]	148594-4	81%
delta-BHC	mg/kg	[NT]	[NT]	[NR]	[NR]
Aldrin	mg/kg	[NT]	[NT]	148594-4	87%
Heptachlor Epoxide	mg/kg	[NT]	[NT]	148594-4	84%
gamma-Chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
alpha-chlordane	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan I	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDE	mg/kg	[NT]	[NT]	148594-4	86%
Dieldrin	mg/kg	[NT]	[NT]	148594-4	104%
Endrin	mg/kg	[NT]	[NT]	148594-4	86%
pp-DDD	mg/kg	[NT]	[NT]	148594-4	83%
Endosulfan II	mg/kg	[NT]	[NT]	[NR]	[NR]
pp-DDT	mg/kg	[NT]	[NT]	[NR]	[NR]
Endrin Aldehyde	mg/kg	[NT]	[NT]	[NR]	[NR]
Endosulfan Sulphate	mg/kg	[NT]	[NT]	148594-4	82%
Methoxychlor	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCMX	%	[NT]	[NT]	148594-4	74%

Client Reference: 51666, Parramatta

QUALITY CONTROL Organophosphorus Pesticides	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
Azinphos-methyl (Guthion)	mg/kg	[NT]	[NT]	[NR]	[NR]
Bromophos-ethyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Chlorpyrifos	mg/kg	[NT]	[NT]	148594-4	92%
Chlorpyrifos-methyl	mg/kg	[NT]	[NT]	[NR]	[NR]
Diazinon	mg/kg	[NT]	[NT]	[NR]	[NR]
Dichlorvos	mg/kg	[NT]	[NT]	148594-4	85%
Dimethoate	mg/kg	[NT]	[NT]	[NR]	[NR]
Ethion	mg/kg	[NT]	[NT]	148594-4	104%
Fenitrothion	mg/kg	[NT]	[NT]	148594-4	101%
Malathion	mg/kg	[NT]	[NT]	148594-4	105%
Parathion	mg/kg	[NT]	[NT]	148594-4	97%
Ronnel	mg/kg	[NT]	[NT]	148594-4	94%
Surrogate TCMX	%	[NT]	[NT]	148594-4	79%
QUALITY CONTROL PCBs in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date extracted	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
Aroclor 1016	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1221	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1232	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1242	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1248	mg/kg	[NT]	[NT]	[NR]	[NR]
Aroclor 1254	mg/kg	[NT]	[NT]	148594-4	101%
Aroclor 1260	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate TCLMX	%	[NT]	[NT]	148594-4	79%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
Arsenic	mg/kg	[NT]	[NT]	148594-4	102%
Cadmium	mg/kg	[NT]	[NT]	148594-4	107%
Chromium	mg/kg	[NT]	[NT]	148594-4	106%
Copper	mg/kg	[NT]	[NT]	148594-4	107%
Lead	mg/kg	[NT]	[NT]	148594-4	106%
Mercury	mg/kg	[NT]	[NT]	148594-4	100%
Nickel	mg/kg	[NT]	[NT]	148594-4	104%
Zinc	mg/kg	[NT]	[NT]	148594-4	104%

Client Reference: 51666, Parramatta

QUALITY CONTROL Triazine Herbicides in Soil	UNITS	Dup. Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Spike % Recovery
Date prepared	-	[NT]	[NT]	148594-4	21/06/2016
Date analysed	-	[NT]	[NT]	148594-4	21/06/2016
Atrazine	mg/kg	[NT]	[NT]	148594-4	85%
Ametryn	mg/kg	[NT]	[NT]	[NR]	[NR]
Cyanazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Hexazinone	mg/kg	[NT]	[NT]	[NR]	[NR]
Irgarol	mg/kg	[NT]	[NT]	[NR]	[NR]
Metribuzin	mg/kg	[NT]	[NT]	[NR]	[NR]
Prometryn	mg/kg	[NT]	[NT]	148594-4	88%
Propazine	mg/kg	[NT]	[NT]	148594-4	102%
Simazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Terbutryn	mg/kg	[NT]	[NT]	[NR]	[NR]
Terbuthylazine	mg/kg	[NT]	[NT]	[NR]	[NR]
Surrogate <i>p</i> -Terphenyl- d ₁₄	%	[NT]	[NT]	148594-4	81%

Report Comments:

Acid Herbicides in soil analysed by MPL with report number 182241

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

Asbestos ID was analysed by Approved Identifier:

Not applicable for this job

Asbestos ID was authorised by Approved Signatory:

Not applicable for this job

INS: Insufficient sample for this test

PQL: Practical Quantitation Limit

NT: Not tested

NR: Test not required

RPD: Relative Percent Difference

NA: Test not required

<: Less than

>: Greater than

LCS: Laboratory Control Sample

Quality Control Definitions

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

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

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

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

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

Laboratory Acceptance Criteria

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

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

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

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.



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Envirolab Services Pty Ltd - Sydney | ABN 37 112 535 645

CERTIFICATE OF ANALYSIS

148594-A

Client:

JBS & G (NSW & WA) Pty Ltd
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: M Hodgins

Sample log in details:

Your Reference:	51666, Parramatta
No. of samples:	Additional Testing on 5 Soils
Date samples received / completed instructions received	17/06/2016 / 23/06/16

Analysis Details:

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

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

Report Details:

Date results requested by: / Issue Date:	23/06/16 / 23/06/16
Date of Preliminary Report:	Not Issued

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

Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 148594-A
Revision No: R 00



Asbestos ID - soils NEPM - ASB-001						
Our Reference:	UNITS	148594-A-1	148594-A-2	148594-A-3	148594-A-4	148594-A-5
Your Reference	-----	QC20160610-1	QC20160610-2	QC20160614-1	QC20160614-2	QC20160615-1
Date Sampled	-----	10/06/2016	10/06/2016	14/06/2016	14/06/2016	15/06/2016
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	23/06/2016	23/06/2016	23/06/2016	23/06/2016	23/06/2016
Sample mass tested	g	759.4	553.46	767.21	811.34	718.76
Sample Description	-	Grey coarse-grained soil & rocks	Brown sandy soil	Beige sandy soil & rocks	Beige sandy soil & rocks	Grey fine-grained soil & rocks
Asbestos ID in soil (as per AS4964)	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected
Total Asbestos ^{#1}	g/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos ID in soil <0.1g/kg*	-	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
ACM >7mm Estimation*	g	0.0000	0.0000	0.0000	0.0000	0.0000
FA and AF Estimation*	g	0.0000	0.0000	0.0000	0.0000	0.0000
ACM>7mm Estimation*	%(w/w)	<0.01	<0.01	<0.01	<0.01	<0.01
FA and AF Estimation ^{**2}	%(w/w)	<0.001	<0.001	<0.001	<0.001	<0.001

Method ID	Methodology Summary
ASB-001	Asbestos ID - Identification of asbestos in soil samples using Polarised Light Microscopy and Dispersion Staining Techniques. Minimum 500mL soil sample was analysed as recommended by "National Environment Protection (Assessment of site contamination) Measure, Schedule B1 and "The Guidelines from the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia - May 2009" with a reporting limit of 0.1g/kg (0.01% w/w) as per Australian Standard AS4964-2004. Results reported denoted with * are outside our scope of NATA accreditation. NOTE #1 Total Asbestos g/kg was analysed and reported as per Australian Standard AS4964 (This is the sum of ACM >7mm, <7mm and FA/AF) NOTE #2 The screening level of 0.001% w/w asbestos in soil for FA and AF only applies where the FA and AF are able to be quantified by gravimetric procedures. This screening level is not applicable to free fibres. Estimation = Estimated asbestos weight Results reported with "--" is equivalent to no visible asbestos identified using Polarised Light microscopy and Dispersion Staining Techniques.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

Report Comments:

Asbestos ID-Soil NEPM

This report is consistent with the reporting recommendations in the National Environment Protection (Assessment of Site Contamination) Measure, Schedule B1, May 2013.

This is reported outside our scope of NATA accreditation.

Asbestos ID was analysed by Approved Identifier: Paul Ching

Asbestos ID was authorised by Approved Signatory: Paul Ching

INS: Insufficient sample for this test

NR: Test not required

<: Less than

PQL: Practical Quantitation Limit

RPD: Relative Percent Difference

>: Greater than

NT: Not tested

NA: Test not required

LCS: Laboratory Control Sample

Quality Control Definitions

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

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

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

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

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

Laboratory Acceptance Criteria

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

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

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

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.



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Envirolab Services Pty Ltd - Sydney | ABN 37 112 535 645

CERTIFICATE OF ANALYSIS

148156

Client:

JBS & G (NSW & WA) Pty Ltd
Level 1, 50 Margaret St
Sydney
NSW 2000

Attention: P Patanan, M Hodgins

Sample log in details:

Your Reference:	51666, Parramatta
No. of samples:	1 Water
Date samples received / completed instructions received	09/06/16 / 09/06/16

Analysis Details:

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

Report Details:

Date results requested by: / Issue Date:	16/06/16 / 15/06/16
Date of Preliminary Report:	Not Issued

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Results Approved By:


Jacinta Hurst
Laboratory Manager

Envirolab Reference: 148156
Revision No: R 00



vTRH(C6-C10)/BTEXN in Water		
Our Reference:	UNITS	148156-1
Your Reference	-----	QC20160608-1
	-	
Date Sampled	-----	8/06/2016
Type of sample		Water
Date extracted	-	10/06/2016
Date analysed	-	11/06/2016
TRHC ₆ - C ₉	µg/L	<10
TRHC ₆ - C ₁₀	µg/L	<10
TRHC ₆ - C ₁₀ less BTEX (F1)	µg/L	<10
Benzene	µg/L	<1
Toluene	µg/L	<1
Ethylbenzene	µg/L	<1
m+p-xylene	µg/L	<2
o-xylene	µg/L	<1
Naphthalene	µg/L	<1
Surrogate Dibromofluoromethane	%	102
Surrogate toluene-d8	%	98
Surrogate 4-BFB	%	99

svTRH (C10-C40) in Water		
Our Reference:	UNITS	148156-1
Your Reference	-----	QC20160608-1
	-	
Date Sampled	-----	8/06/2016
Type of sample		Water
Date extracted	-	10/06/2016
Date analysed	-	10/06/2016
TRHC ₁₀ - C ₁₄	µg/L	<50
TRHC ₁₅ - C ₂₈	µg/L	<100
TRHC ₂₉ - C ₃₆	µg/L	<100
TRH>C ₁₀ - C ₁₆	µg/L	<50
TRH>C ₁₀ - C ₁₆ less Naphthalene (F2)	µg/L	<50
TRH>C ₁₆ - C ₃₄	µg/L	<100
TRH>C ₃₄ - C ₄₀	µg/L	<100
Surrogate o-Terphenyl	%	90

HM in water - dissolved		
Our Reference:	UNITS	148156-1
Your Reference	-----	QC20160608-1
	-	
Date Sampled	-----	8/06/2016
Type of sample		Water
Date prepared	-	10/06/2016
Date analysed	-	10/06/2016
Arsenic-Dissolved	µg/L	4
Cadmium-Dissolved	µg/L	<0.1
Chromium-Dissolved	µg/L	<1
Copper-Dissolved	µg/L	<1
Lead-Dissolved	µg/L	<1
Mercury-Dissolved	µg/L	<0.05
Nickel-Dissolved	µg/L	8
Zinc-Dissolved	µg/L	15

Miscellaneous Inorganics		
Our Reference:	UNITS	148156-1
Your Reference	-----	QC20160608-1
	-	
Date Sampled	-----	8/06/2016
Type of sample		Water
Date prepared	-	09/06/2016
Date analysed	-	09/06/2016
pH	pH Units	7.5
Electrical Conductivity	µS/cm	480

Ion Balance		
Our Reference:	UNITS	148156-1
Your Reference	-----	QC20160608-1
	-	
Date Sampled	-----	8/06/2016
Type of sample		Water
Date prepared	-	09/06/2016
Date analysed	-	09/06/2016
Calcium - Dissolved	mg/L	59
Potassium - Dissolved	mg/L	10
Sodium - Dissolved	mg/L	130
Magnesium - Dissolved	mg/L	32
Hydroxide Alkalinity (OH ⁻) as CaCO ₃	mg/L	<5
Bicarbonate Alkalinity as CaCO ₃	mg/L	120
Carbonate Alkalinity as CaCO ₃	mg/L	<5
Total Alkalinity as CaCO ₃	mg/L	120
Sulphate, SO ₄	mg/L	8
Chloride, Cl	mg/L	86
Ionic Balance	%	39

Method ID	Methodology Summary
Org-016	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-013	Water samples are analysed directly by purge and trap GC-MS.
Org-003	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Metals-022 ICP-MS	Determination of various metals by ICP-MS.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Inorg-001	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
Inorg-002	Conductivity and Salinity - measured using a conductivity cell at 25oC in accordance with APHA latest edition 2510 and Rayment & Lyons.
Metals-020	Determination of various metals by ICP-AES.
Inorg-006	Alkalinity - determined titrimetrically in accordance with APHA latest edition, 2320-B.
Inorg-081	Anions - a range of Anions are determined by Ion Chromatography, in accordance with APHA latest edition, 4110-B. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
Inorg-040	The concentrations of the major ions (mg/L) are converted to milliequivalents and summed. The ionic balance should be within +/- 10% ie total anions = total cations +/-10%.

QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
vTRH(C6-C10)/BTEXN in Water						Base II Duplicate II %RPD		
Date extracted	-			10/06/2016	[NT]	[NT]	LCS-W2	10/06/2016
Date analysed	-			11/06/2016	[NT]	[NT]	LCS-W2	11/06/2016
TRHC ₆ - C ₉	µg/L	10	Org-016	<10	[NT]	[NT]	LCS-W2	114%
TRHC ₆ - C ₁₀	µg/L	10	Org-016	<10	[NT]	[NT]	LCS-W2	114%
Benzene	µg/L	1	Org-016	<1	[NT]	[NT]	LCS-W2	116%
Toluene	µg/L	1	Org-016	<1	[NT]	[NT]	LCS-W2	117%
Ethylbenzene	µg/L	1	Org-016	<1	[NT]	[NT]	LCS-W2	113%
m+p-xylene	µg/L	2	Org-016	<2	[NT]	[NT]	LCS-W2	112%
o-xylene	µg/L	1	Org-016	<1	[NT]	[NT]	LCS-W2	117%
Naphthalene	µg/L	1	Org-013	<1	[NT]	[NT]	[NR]	[NR]
Surrogate Dibromofluoromethane	%		Org-016	101	[NT]	[NT]	LCS-W2	100%
Surrogate toluene-d8	%		Org-016	98	[NT]	[NT]	LCS-W2	100%
Surrogate 4-BFB	%		Org-016	100	[NT]	[NT]	LCS-W2	100%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
svTRH (C10-C40) in Water						Base II Duplicate II %RPD		
Date extracted	-			10/06/2016	[NT]	[NT]	LCS-W1	10/06/2016
Date analysed	-			10/06/2016	[NT]	[NT]	LCS-W1	10/06/2016
TRHC ₁₀ - C ₁₄	µg/L	50	Org-003	<50	[NT]	[NT]	LCS-W1	96%
TRHC ₁₅ - C ₂₈	µg/L	100	Org-003	<100	[NT]	[NT]	LCS-W1	99%
TRHC ₂₉ - C ₃₆	µg/L	100	Org-003	<100	[NT]	[NT]	LCS-W1	100%
TRH>C ₁₀ - C ₁₆	µg/L	50	Org-003	<50	[NT]	[NT]	LCS-W1	96%
TRH>C ₁₆ - C ₃₄	µg/L	100	Org-003	<100	[NT]	[NT]	LCS-W1	99%
TRH>C ₃₄ - C ₄₀	µg/L	100	Org-003	<100	[NT]	[NT]	LCS-W1	100%
Surrogate o-Terphenyl	%		Org-003	82	[NT]	[NT]	LCS-W1	105%
QUALITYCONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
HM in water - dissolved						Base II Duplicate II %RPD		
Date prepared	-			10/06/2016	[NT]	[NT]	LCS-W1	10/06/2016
Date analysed	-			10/06/2016	[NT]	[NT]	LCS-W1	10/06/2016
Arsenic-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	103%
Cadmium-Dissolved	µg/L	0.1	Metals-022 ICP-MS	<0.1	[NT]	[NT]	LCS-W1	104%
Chromium-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	102%
Copper-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	104%
Lead-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	104%

Client Reference: 51666, Parramatta

QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
HM in water - dissolved						Base II Duplicate II %RPD		
Mercury-Dissolved	µg/L	0.05	Metals-021	<0.05	[NT]	[NT]	LCS-W1	96%
Nickel-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	105%
Zinc-Dissolved	µg/L	1	Metals-022 ICP-MS	<1	[NT]	[NT]	LCS-W1	103%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Miscellaneous Inorganics						Base II Duplicate II %RPD		
Date prepared	-			09/06/2016	[NT]	[NT]	LCS-W1	09/06/2016
Date analysed	-			09/06/2016	[NT]	[NT]	LCS-W1	09/06/2016
pH	pH Units		Inorg-001	[NT]	[NT]	[NT]	LCS-W1	101%
Electrical Conductivity	µS/cm	1	Inorg-002	<1	[NT]	[NT]	LCS-W1	97%
QUALITY CONTROL	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results	Spike Sm#	Spike % Recovery
Ion Balance						Base II Duplicate II %RPD		
Date prepared	-			09/06/2016	[NT]	[NT]	LCS-W2	09/06/2016
Date analysed	-			09/06/2016	[NT]	[NT]	LCS-W2	09/06/2016
Calcium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	LCS-W2	109%
Potassium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	LCS-W2	105%
Sodium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	LCS-W2	105%
Magnesium - Dissolved	mg/L	0.5	Metals-020	<0.5	[NT]	[NT]	LCS-W2	109%
Hydroxide Alkalinity (OH ⁻) as CaCO ₃	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NR]	[NR]
Bicarbonate Alkalinity as CaCO ₃	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NR]	[NR]
Carbonate Alkalinity as CaCO ₃	mg/L	5	Inorg-006	<5	[NT]	[NT]	[NR]	[NR]
Total Alkalinity as CaCO ₃	mg/L	5	Inorg-006	<5	[NT]	[NT]	LCS-W2	111%
Sulphate, SO ₄	mg/L	1	Inorg-081	<1	[NT]	[NT]	LCS-W2	97%
Chloride, Cl	mg/L	1	Inorg-081	<1	[NT]	[NT]	LCS-W2	91%
Ionic Balance	%		Inorg-040	[NT]	[NT]	[NT]	[NR]	[NR]

Report Comments:

The mass imbalance may be caused by other ions that have not been measured.

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

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

Quality Control Definitions

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

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

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

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

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

Laboratory Acceptance Criteria

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

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

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

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

05756

Porra CHAIN OF CUSTODY

1 of 2



PROJECT NO.: 51666						LABORATORY BATCH NO.:						
PROJECT NAME: Parramatta						SAMPLERS: P.P.						
DATE NEEDED BY: STD						QC LEVEL: NEPM (2013)						
PHONE: Sydney 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688												
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2) M.Hedgins@jbsg.com.au; (3) P.Patanan@jbsg.com.au												
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:												
						Asbestos* H.M. PAH TPH/BTEX OC/PC/PAH/PCB ASL/PCP* pH/EC/EC						
						IDENTIFICATION NEPM/WA						
						503133						
SAMPLE ID		MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH						NOTES:
MW01	0-0.1	Soil	31/5/16		jar + bag + ice		X	X	X	X	X	
	0.2-0.3						X	X	X	X	X	
	0.4-0.5											
	0.9-1.0											
MW02	0-0.1						X	X	X	X	X	
	0.2-0.3						X	X	X	X	X	
	0.4-0.5											
	0.9-1.0											
	1.4-1.5											
MW03	0-0.1						X	X	X	X	X	
	0.2-0.3						X	X	X	X	X	
	0.4-0.5											
	0.9-1.0											
	1.4-1.5											
MW04	0-0.1						X	X	X	X	X	
	0.2-0.3						X	X	X	X	X	
	0.4-0.5											
	0.9-1.0											
	1.4-1.5											

RELINQUISHED BY:		METHOD OF SHIPMENT:		RECEIVED BY:		FOR RECEIVING LAB USE ONLY:	
NAME: P.Patanan	DATE: 2/6/16	CONSIGNMENT NOTE NO.		NAME: P.Patanan	DATE: 5:00 pm	COOLER SEAL - Yes..... No Intact Broken	
OF: JBS&G		TRANSPORT CO.		DATE:		COOLER TEMP deg C	
NAME:	DATE:	CONSIGNMENT NOTE NO.		NAME:	DATE:	COOLER SEAL - Yes..... No Intact Broken	
OF:		TRANSPORT CO.		OF:		COOLER TEMP deg C	

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsrd.; C = Sodium Hydroxide Prsrd; VC = Hydrochloric Acid Prsrd Vial; VS = Sulfuric Acid Prsrd Vial; S = Sulfuric Acid Prsrd; Z = Zinc Prsrd; E = EDTA Prsrd; ST = Sterile Bottle; O = Other

08702

CHAIN OF CUSTODY

1 of 14



PROJECT NO.: 51666		LABORATORY BATCH NO.:						
PROJECT NAME: <i>Perumathu</i>		SAMPLERS: P.P.						
DATE NEEDED BY: <i>By 200 22/6/16</i>		QC LEVEL: NEPM (2013)						
PHONE: <i>Sydney</i> : 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688								
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2) <i>M.Hodgins</i>@jbsg.com.au; (3) <i>P.Patung</i>@jbsg.com.au								
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:								
J82 = TRH, BTEX, PAH, OCP, PCB, H.M., Asbestos = NEPM 2013								
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	IDENTIFICATION	TYPE OF ASBESTOS ANALYSIS	NOTES:
BH01	0-0.1	20.1	10/6/16	var + ice				
	0.2-0.3							
	0.4-0.5							
	0.9-1.0							
	0-1			big bag				
BH02	0-0.1							
	0.2-0.3							
	0.4-0.5			bag				
	0-1							
BH03	0-0.1							
	0.2-0.3							
	0.4-0.5			bag				
	0-1							
BH04	0-0.1							
	0.2-0.3							
	0.4-0.5			bag				
	0-1							
	1-2			bag				
				bag				

IMSO Forms013 - Chain of Custody - Generic

08703

CHAIN OF CUSTODY

PROJECT NO.: 51666		LABORATORY BATCH NO.:						
PROJECT NAME: Permatath		SAMPLERS: P.P.						
DATE NEEDED BY: STD		QC LEVEL: NEPM (2013)						
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688								
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2) <u>phed@jbsg.com.au</u> ; (3) <u>pf@permatath.com.au</u>								
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:								
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	IDENTIFICATION	NEPM/WA	NOTES:
BA05 0-0.1		10/6/16		jar + ice				
0.2-0.3								
0.4-0.5								
0-1				bag				
BH06 0-0.1								
0.2-0.3								
0.4-0.5				bag				
0-1								
BH07 0-0.1								
0.2-0.3								
0.4-0.5				bag				
0-1								
BH08 0-0.1								
0.2-0.3								
0.4-0.5				bag				
0-1								
BH09 0-0.1								
0.2-0.3								
0.4-0.5								

RELINQUISHED BY: P. Permatath DATE: 10/6/16

NAME: P. Permatath DATE: 10/6/16

OF: JBS&G NAME: P. Permatath DATE: 10/6/16

NAME: P. Permatath DATE: 10/6/16

OF: P. Permatath DATE: 10/6/16

METHOD OF SHIPMENT: jar + ice

CONSIGNMENT NOTE NO. 10/6/16

TRANSPORT CO. 10/6/16

CONSIGNMENT NOTE NO. 10/6/16

TRANSPORT CO. 10/6/16

RECEIVED BY: SS NAME: SS

DATE: 10/6/16 OF: SS

NAME: SS DATE: 10/6/16

OF: SS DATE: 10/6/16

FOR RECEIVING LAB USE ONLY:

COOLER SEAL - Yes No Intact Broken

COOLER TEMP. deg C

COOLER SEAL - Yes No Intact Broken

COOLER TEMP. deg C

Condition: 8 = Bacterial; 9 = Fungal; 10 = Soil; 11 = Soil; 12 = Soil; 13 = Soil; 14 = Soil; 15 = Soil; 16 = Soil; 17 = Soil; 18 = Soil; 19 = Soil; 20 = Soil; 21 = Soil; 22 = Soil; 23 = Soil; 24 = Soil; 25 = Soil; 26 = Soil; 27 = Soil; 28 = Soil; 29 = Soil; 30 = Soil; 31 = Soil; 32 = Soil; 33 = Soil; 34 = Soil; 35 = Soil; 36 = Soil; 37 = Soil; 38 = Soil; 39 = Soil; 40 = Soil; 41 = Soil; 42 = Soil; 43 = Soil; 44 = Soil; 45 = Soil; 46 = Soil; 47 = Soil; 48 = Soil; 49 = Soil; 50 = Soil; 51 = Soil; 52 = Soil; 53 = Soil; 54 = Soil; 55 = Soil; 56 = Soil; 57 = Soil; 58 = Soil; 59 = Soil; 60 = Soil; 61 = Soil; 62 = Soil; 63 = Soil; 64 = Soil; 65 = Soil; 66 = Soil; 67 = Soil; 68 = Soil; 69 = Soil; 70 = Soil; 71 = Soil; 72 = Soil; 73 = Soil; 74 = Soil; 75 = Soil; 76 = Soil; 77 = Soil; 78 = Soil; 79 = Soil; 80 = Soil; 81 = Soil; 82 = Soil; 83 = Soil; 84 = Soil; 85 = Soil; 86 = Soil; 87 = Soil; 88 = Soil; 89 = Soil; 90 = Soil; 91 = Soil; 92 = Soil; 93 = Soil; 94 = Soil; 95 = Soil; 96 = Soil; 97 = Soil; 98 = Soil; 99 = Soil; 100 = Soil; 101 = Soil; 102 = Soil; 103 = Soil; 104 = Soil; 105 = Soil; 106 = Soil; 107 = Soil; 108 = Soil; 109 = Soil; 110 = Soil; 111 = Soil; 112 = Soil; 113 = Soil; 114 = Soil; 115 = Soil; 116 = Soil; 117 = Soil; 118 = Soil; 119 = Soil; 120 = Soil; 121 = Soil; 122 = Soil; 123 = Soil; 124 = Soil; 125 = Soil; 126 = Soil; 127 = Soil; 128 = Soil; 129 = Soil; 130 = Soil; 131 = Soil; 132 = Soil; 133 = Soil; 134 = Soil; 135 = Soil; 136 = Soil; 137 = Soil; 138 = Soil; 139 = Soil; 140 = Soil; 141 = Soil; 142 = Soil; 143 = Soil; 144 = Soil; 145 = Soil; 146 = Soil; 147 = Soil; 148 = Soil; 149 = Soil; 150 = Soil; 151 = Soil; 152 = Soil; 153 = Soil; 154 = Soil; 155 = Soil; 156 = Soil; 157 = Soil; 158 = Soil; 159 = Soil; 160 = Soil; 161 = Soil; 162 = Soil; 163 = Soil; 164 = Soil; 165 = Soil; 166 = Soil; 167 = Soil; 168 = Soil; 169 = Soil; 170 = Soil; 171 = Soil; 172 = Soil; 173 = Soil; 174 = Soil; 175 = Soil; 176 = Soil; 177 = Soil; 178 = Soil; 179 = Soil; 180 = Soil; 181 = Soil; 182 = Soil; 183 = Soil; 184 = Soil; 185 = Soil; 186 = Soil; 187 = Soil; 188 = Soil; 189 = Soil; 190 = Soil; 191 = Soil; 192 = Soil; 193 = Soil; 194 = Soil; 195 = Soil; 196 = Soil; 197 = Soil; 198 = Soil; 199 = Soil; 200 = Soil; 201 = Soil; 202 = Soil; 203 = Soil; 204 = Soil; 205 = Soil; 206 = Soil; 207 = Soil; 208 = Soil; 209 = Soil; 210 = Soil; 211 = Soil; 212 = Soil; 213 = Soil; 214 = Soil; 215 = Soil; 216 = Soil; 217 = Soil; 218 = Soil; 219 = Soil; 220 = Soil; 221 = Soil; 222 = Soil; 223 = Soil; 224 = Soil; 225 = Soil; 226 = Soil; 227 = Soil; 228 = Soil; 229 = Soil; 230 = Soil; 231 = Soil; 232 = Soil; 233 = Soil; 234 = Soil; 235 = Soil; 236 = Soil; 237 = Soil; 238 = Soil; 239 = Soil; 240 = Soil; 241 = Soil; 242 = Soil; 243 = Soil; 244 = Soil; 245 = Soil; 246 = Soil; 247 = Soil; 248 = Soil; 249 = Soil; 250 = Soil; 251 = Soil; 252 = Soil; 253 = Soil; 254 = Soil; 255 = Soil; 256 = Soil; 257 = Soil; 258 = Soil; 259 = Soil; 260 = Soil; 261 = Soil; 262 = Soil; 263 = Soil; 264 = Soil; 265 = Soil; 266 = Soil; 267 = Soil; 268 = Soil; 269 = Soil; 270 = Soil; 271 = Soil; 272 = Soil; 273 = Soil; 274 = Soil; 275 = Soil; 276 = Soil; 277 = Soil; 278 = Soil; 279 = Soil; 280 = Soil; 281 = Soil; 282 = Soil; 283 = Soil; 284 = Soil; 285 = Soil; 286 = Soil; 287 = Soil; 288 = Soil; 289 = Soil; 290 = Soil; 291 = Soil; 292 = Soil; 293 = Soil; 294 = Soil; 295 = Soil; 296 = Soil; 297 = Soil; 298 =



3 of 14

CHAIN OF CUSTODY

08704

PROJECT NO.:		LABORATORY BATCH NO.:									
PROJECT NAME:		SAMPLERS:									
DATE NEEDED BY:		QC LEVEL: NEPM (2013)									
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688											
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2) @jbsg.com.au; (3) @jbsg.com.au											
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL: Ascp/TCLP* = (metals/PAHs)											
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	IDENTIFICATION	TYPE OF ASBESTOS ANALYSIS	NOTES:			
BH09 0-1	Soil	10/11/16		jeopardie bag							
BH10 0-0.1				jeopardie bag							
0.2-0.3											
0.4-0.5											
0.9-1.0											
1.4-1.5											
0-1											
1-2											
BH11 0-0.1				4 bag							
0.2-0.3				4 bag							
0.4-0.5											
0.9-1.0											
1.4-1.5											
0-1											
1-2											
BH12 0-0.1				4 bag							
0.2-0.3				4 bag							
0.4-0.5											
0.9-1.0											
RELINQUISHED BY:		DATE:		METHOD OF SHIPMENT:		RECEIVED BY:		FOR RECEIVING LAB USE ONLY:			
NAME:	DATE:	CONSIGNMENT NOTE NO.	TRANSPORT CO.	CONSIGNMENT NOTE NO.	TRANSPORT CO.	NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
OF: JBS&G						NAME:	DATE:	COOLER TEMP	deg C		
NAME:	DATE:	CONSIGNMENT NOTE NO.	TRANSPORT CO.	CONSIGNMENT NOTE NO.	TRANSPORT CO.	NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
OF:						NAME:	DATE:	COOLER TEMP	deg C		
Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv; C = Sodium Hydroxide Presv; VC = Hydrochloric Acid Presv Vial; VS = Sulfuric Acid Presv Vial; S = Sulfuric Acid Presv; Z = Zinc Presv; E = EDTA Presv; ST = Sterile Bottle; O = Other											
IMSO FormSO13 - Chain of Custody - Generic											



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CHAIN OF CUSTODY

08705

PROJECT NO.:		LABORATORY BATCH NO.:							
PROJECT NAME:		SAMPLERS:							
DATE NEEDED BY:		QC LEVEL: NEPM (2013)							
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NEPM/NA	NOTES:
BH12	1-4-1.5	Soil	10/6/16	jar + ice					
↓	0-1			bag					
BH13	0-0.1			bag					
↓	0.2-0.3								
↓	0.4-0.5								
BH14	0-1			bag					
↓	0-0.1								
↓	0.2-0.3								
↓	0.4-0.5								
↓	0.9-1.0								
BH15	0-1			bag					
↓	1-2			bag					
↓	0-0.1								
↓	0.2-0.3								
↓	0.4-0.5								
BH16	0-1			bag					
↓	0-0.1								
↓	0.2-0.3								
RELINQUISHED BY:		DATE:		METHOD OF SHIPMENT:		RECEIVED BY:		NAME:	
NAME:		DATE:		CONSIGNMENT NOTE NO.		NAME:		DATE:	
OF: JBS&G		DATE:		TRANSPORT CO.		NAME:		DATE:	
NAME:		DATE:		CONSIGNMENT NOTE NO.		NAME:		DATE:	
OF:		DATE:		TRANSPORT CO.		NAME:		DATE:	
Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv.; C = Sodium Hydroxide Presv.; VC = Hydrochloric Acid Presv. Vial; V5 = Sulfuric Acid Presv. Vial; S = Sulfuric Acid Presv.; Z = Zinc Presv.; E = EDTA Presv.; ST = Sterile Bottle, O = Other		IMSO Forms 013 - Chain of Custody - Generic							

PROJECT NO.:				LABORATORY BATCH NO.:					
PROJECT NAME:				SAMPLERS:					
DATE NEEDED BY:				QC LEVEL: NEPM (2013)					
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminnsw@ibsg.com.au; (2) @ibsg.com.au; (3) @ibsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NEPM/WA	NOTES:
BH16	04-0.5	10/6/16		jar tie					
BH17	0-0.1			bag					
BH18	0-0.1			bag					
BH19	0-0.1			bag					
BH20	0-0.1			bag					

08707

CHAIN OF CUSTODY

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PROJECT NO.:				LABORATORY BATCH NO.:				
PROJECT NAME:				SAMPLERS:				
DATE NEEDED BY:				QC LEVEL: NEPM (2013)				
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688								
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au								
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:								
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NOTES
BH20	0.4-0.5 Soil	10/6/16		jar + ice				
BH21	0-0.1	14/6/16		bag				
BH22	0-0.1			bag				
BH23	0-0.1			bag				
BH24	0-0.1			bag				
BH25	0-0.1			bag				
BH26	0-0.1			bag				
BH27	0-0.1			bag				
BH28	0-0.1			bag				
BH29	0-0.1			bag				
BH30	0-0.1			bag				
BH31	0-0.1			bag				
BH32	0-0.1			bag				
BH33	0-0.1			bag				
BH34	0-0.1			bag				
BH35	0-0.1			bag				
BH36	0-0.1			bag				
BH37	0-0.1			bag				
BH38	0-0.1			bag				
BH39	0-0.1			bag				
BH40	0-0.1			bag				
BH41	0-0.1			bag				
BH42	0-0.1			bag				
BH43	0-0.1			bag				
BH44	0-0.1			bag				
BH45	0-0.1			bag				
BH46	0-0.1			bag				
BH47	0-0.1			bag				
BH48	0-0.1			bag				
BH49	0-0.1			bag				
BH50	0-0.1			bag				
BH51	0-0.1			bag				
BH52	0-0.1			bag				
BH53	0-0.1			bag				
BH54	0-0.1			bag				
BH55	0-0.1			bag				
BH56	0-0.1			bag				
BH57	0-0.1			bag				
BH58	0-0.1			bag				
BH59	0-0.1			bag				
BH60	0-0.1			bag				
BH61	0-0.1			bag				
BH62	0-0.1			bag				
BH63	0-0.1			bag				
BH64	0-0.1			bag				
BH65	0-0.1			bag				
BH66	0-0.1			bag				
BH67	0-0.1			bag				
BH68	0-0.1			bag				
BH69	0-0.1			bag				
BH70	0-0.1			bag				
BH71	0-0.1			bag				
BH72	0-0.1			bag				
BH73	0-0.1			bag				
BH74	0-0.1			bag				
BH75	0-0.1			bag				
BH76	0-0.1			bag				
BH77	0-0.1			bag				
BH78	0-0.1			bag				
BH79	0-0.1			bag				
BH80	0-0.1			bag				
BH81	0-0.1			bag				
BH82	0-0.1			bag				
BH83	0-0.1			bag				
BH84	0-0.1			bag				
BH85	0-0.1			bag				
BH86	0-0.1			bag				
BH87	0-0.1			bag				
BH88	0-0.1			bag				
BH89	0-0.1			bag				
BH90	0-0.1			bag				
BH91	0-0.1			bag				
BH92	0-0.1			bag				
BH93	0-0.1			bag				
BH94	0-0.1			bag				
BH95	0-0.1			bag				
BH96	0-0.1			bag				
BH97	0-0.1			bag				
BH98	0-0.1			bag				
BH99	0-0.1			bag				
BH100	0-0.1			bag				

RECEIVED BY:		FOR RECEIVING LAB USE ONLY:	
NAME: BS	COOLER SEAL - Yes	No	Intact
DATE: 14/6	COOLER SEAL - Yes	No	Intact
OF: SP	COOLER SEAL - Yes	No	Intact
NAME: SP	COOLER SEAL - Yes	No	Intact
OF: SP	COOLER SEAL - Yes	No	Intact



08708

CHAIN OF CUSTODY

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PROJECT NO.:				LABORATORY BATCH NO.:					
PROJECT NAME:				SAMPLERS:					
DATE NEEDED BY:				QC LEVEL: NEPM (2013)					
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ANALYSIS	IDENTIFICATION	NEPM/WA	NOTES
BH24 0-0.1	Soil	14/6/16		jor + ice		OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1				# bag		Asbestos *	X		
BH25 0-0.1						OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1				# bag		Asbestos *	X		
BH26 0-0.1						OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1				# bag		Asbestos *	X		
BH27 0-0.1						OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1				# bag		Asbestos *	X		
BH28 0-0.1						OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1						Asbestos *	X		
BH29 0-0.1						OCp/MP/Hg	X		
↓ 0.3-0.4						PAH/Hg	X		
↓ 0.6-0.7						Asbestos *			
↓ 0-1						Asbestos *	X		

RELINQUISHED BY:		METHOD OF SHIPMENT:		RECEIVED BY:		FOR RECEIVING LAB USE ONLY:			
NAME:	DATE:	CONSIGNMENT NOTE NO.	TRANSPORT CO.	NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
OF: JBS&G				NAME: SS	DATE: 16/06	COOLER SEAL - Yes	No	Intact	Broken
NAME:		CONSIGNMENT NOTE NO.	TRANSPORT CO.	OF:		COOLER TEMP	deg C		
OF:				NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
				OF:		COOLER TEMP	deg C		

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv.; C = Sodium Hydroxide Presv.; VC = Hydrochloric Acid Presv. Vial; VS = Sulfuric Acid Presv. Vial; S = Sulfuric Acid Presv.; Z = Zinc Presv.; E = EDTA Presv.; ST = Sterile Bottle; O = Other

IMSO Form 5013 - Chain of Custody - Generic

PROJECT NO.:				LABORATORY BATCH NO.:					
PROJECT NAME:				SAMPLERS:					
DATE NEEDED BY:				QC LEVEL: NEPM (2013)					
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminnsw@ibsg.com.au; (2)@ibsg.com.au; (3)@ibsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NEPM/MA	NOTES:
BH28 0-1	Soil	14/6/16		For tickle bag					
BH29 0-0.1				For tickle bag					
0.2-3				For tickle bag					
0.6-0.7				For tickle bag					
0-1				For tickle bag					
BH30 0-0.1				For tickle bag					
0.2-0.3				For tickle bag					
0.6-0.7				For tickle bag					
17-18				For tickle bag					
0-1				For tickle bag					
BH31 0-0.1				For tickle bag					
0.2-0.3				For tickle bag					
0.6-0.7				For tickle bag					
0-1				For tickle bag					
BH32 0-0.1				For tickle bag					
0.2-0.3				For tickle bag					
0.6-0.7				For tickle bag					
0-1				For tickle bag					
BH33 0-0.1				For tickle bag					

RELINQUISHED BY: NAME: DATE:

OF: JBS&G NAME: DATE:

OF: NAME: DATE:

METHOD OF SHIPMENT: CONSIGNMENT NOTE NO. TRANSPORT CO. CONSIGNMENT NOTE NO. TRANSPORT CO.

RECEIVED BY: NAME: DATE: OF: NAME: DATE: OF:

FOR RECEIVING LAB USE ONLY: COOLER SEAL - Yes..... No..... Intact..... Broken..... COOLER TEMP..... deg C COOLER SEAL - Yes..... No..... Intact..... Broken..... COOLER TEMP..... deg C

Container & Preservation Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presvd.; C = Sodium Hydroxide Presvd.; VC = Sulfuric Acid Presvd.; VS = Sulfuric Acid Presvd. Vial; S = Sulfuric Acid Presvd.; Z = Zinc Presvd.; E = EDTA Presvd.; ST = Sterile Bottle; O = Other

08710

CHAIN OF CUSTODY

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PROJECT NO.:		LABORATORY BATCH NO.:							
PROJECT NAME:		SAMPLERS:							
DATE NEEDED BY:		QC LEVEL: NEPM (2013)							
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NEPM/MA	NOTES:
BH33	0.2-0.3	Soil	14/6/16						
	0.6-0.7			jar rice					
	1.2-1.3								
	0-1			bag					
BH34	0-0.1								
	0.2-0.3								
	0.6-0.7			bag					
	0-1								
BH35	0-0.1								
	0.2-0.3								
	0.6-0.7			bag					
	0-1								
BH36	0-0.1								
	0.2-0.3								
	0.4-0.5								
	0-1			bag					
BH37	0-0.1								
	0.2-0.3								
	0.4-0.5								
	0-1								
	0.2-0.3								
	0.4-0.5								

RELINQUISHED BY:		RECEIVED BY:		FOR RECEIVING LAB USE ONLY:			
NAME:	DATE:	NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
OF: JBS&G		NAME: SS	DATE: 14/6	COOLER SEAL - Yes	No	Intact	Broken
NAME:	DATE:	NAME:	DATE:	COOLER TEMP deg C		Intact	Broken
OF:		NAME:	DATE:	COOLER SEAL - Yes..... No		Intact	Broken
		NAME:	DATE:	COOLER TEMP deg C			

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presvd.; C = Sodium Hydroxide Presvd.; VC = Hydrochloric Acid Presvd Vial; VS = Sulfuric Acid Presvd Vial; S = Sulfuric Acid Presvd; Z = Zinc Presvd; E = EDTA Presvd; ST = Sterile Bottle; O = Other

IMSO Form013 - Chain of Custody - Generic



08711

CHAIN OF CUSTODY

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PROJECT NO.:		LABORATORY BATCH NO.:							
PROJECT NAME:		SAMPLERS:							
DATE NEEDED BY:		QC LEVEL: NEPM (2013)							
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ASBESTOS ANALYSIS	IDENTIFICATION	NEPM/WA	NOTES:
BH37 0.9-1.0	Soil	14/6/16		jar rice					
1.4-1.5									
1.9-2.0									
2.4-2.5									
0-1									
1-2				bag					
BH38 0-0.1		15/6/16		bag					
0.2-0.3									
0.4-0.5									
0-1				bag					
BH39 0-0.1									
0.2-0.3									
0.4-0.5									
0-1				bag					
BH40 0-0.1									
0.2-0.3									
0.4-0.5									
0-1				bag					
BH41 0-0.1									

RELINQUISHED BY:		RECEIVED BY:		FOR RECEIVING LAB USE ONLY			
NAME:	DATE:	NAME:	DATE:	COOLER SEAL - Yes	No	Intact	Broken
OF: JBS&G		NAME: SS	16/6				
NAME:	DATE:	OF:	DATE:	COOLER SEAL - Yes	No	Intact <td>Broken</td>	Broken
				COOLER SEAL - Yes	No	Intact <td>Broken</td>	Broken
				COOLER SEAL - Yes	No	Intact <td>Broken</td>	Broken

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv.; C = Sodium Hydroxide Presv.; VC = Hydrochloric Acid Presv. Vial; VS = Sulfuric Acid Presv. Vial; S = Sulfuric Acid Presv.; Z = Zinc Presv.; E = EDTA Presv.; ST = Sterile Bottle; O = Other

IMS0 Forms013 - Chain of Custody - Generic

08713

PROJECT NO.:		LABORATORY BATCH NO.:							
PROJECT NAME:		SAMPLERS:							
DATE NEEDED BY:		QC LEVEL: NEPM (2013)							
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688									
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au									
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:									
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	IDENTIFICATION	TYPE OF ASBESTOS ANALYSIS	NEPM/WA	NOTES:
BH45	1.4-1.5	Soil	15/6/16	jar + ice					
	2.0-2.1								
	3.0-3.1								
	4.3-4.4								
	0-1								
	1-2								
	2-3								
	3-4								
	4-5								
BH46	0-0.1			bag					
	0.3-0.4			bag					
	0.6-0.7			bag					
	0.8-0.9			bag					
	0-1			bag					
BH47	0-0.1								
	0.3-0.4								
	0.7-0.8								
	1.9-2.0								
	3.9-4.0								
RELINQUISHED BY:				RECEIVED BY:				FOR RECEIVING LAB USE ONLY:	
NAME:	DATE:	CONSIGNMENT NOTE NO.		NAME:		DATE:		COOLER SEAL - Yes	No
OF: JBS&G		TRANSPORT CO.		NAME:		DATE:		COOLER SEAL - Yes	No
NAME:	DATE:	CONSIGNMENT NOTE NO.		NAME:		DATE:		COOLER SEAL - Yes	No
OF:		TRANSPORT CO.		NAME:		DATE:		COOLER SEAL - Yes	No
Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv.; C = Sodium Hydroxide Presv.; VC = Hydrochloric Acid Presv. Vial; VS = Sulfuric Acid Presv. Vial; S = Sulfuric Acid Presv.; Z = Zinc Presv.; E = EDTA Presv.; ST = Sterile Bottle; O = Other									

MSO Forms013 - Chain of Custody - Generic



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CHAIN OF CUSTODY

08715

PROJECT NO.:		LABORATORY BATCH NO.:					
PROJECT NAME:		SAMPLERS:					
DATE NEEDED BY:		QC LEVEL: NEPM (2013)					
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688							
SEND REPORT & INVOICE TO: (1) adminnsw@jbsg.com.au; (2) @jbsg.com.au; (3) @jbsg.com.au							
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:							
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	NOTES	
BH52 0-0.1	Soil	15/6/16		jar tie			
0.2-0.3							
0.4-0.5							
0-1				bag			
BH53 0-0.1							
0.2-0.3							
0.4-0.5							
0-1							
QA20160610-1		10/6/16		+ bag			
QA20160614-1		14/6/16					
QA20160615-1		15/6/16					
QC20160610-1		10/6/16					
QC20160614-1		14/6/16					
QC20160615-1		15/6/16					
TS/TB				visaly rice			
RELINQUISHED BY:		RECEIVED BY:		METHOD OF SHIPMENT:		FOR RECEIVING LAB USE ONLY	
NAME:	DATE:	NAME:	DATE:	NAME:	DATE:	COOLER SEAL	Intact
OF: JBS&G		OF: 16/10		OF: 16/10		COOLER SEAL	Intact
NAME:	DATE:	NAME:	DATE:	NAME:	DATE:	COOLER SEAL	Intact
OF:		OF:		OF:		COOLER SEAL	Intact
Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presvd; C = Sodium Hydroxide Presvd; VC = Hydrochloric Acid Presvd Vial; VS = Sulfuric Acid Presvd Vial; S = Sulfuric Acid Presvd; Z = Zinc Presvd; E = EDTA Presvd; ST = Sterile Bottle; O = Other							



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CHAIN OF CUSTODY

08715

PROJECT NO.:		LABORATORY BATCH NO								
PROJECT NAME:		SAMPLERS:								
DATE NEEDED BY:		QC LEVEL: NEPM (2013)								
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688										
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au										
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:										
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	NOTES:				
BH52 0-0.1	Soil	15/6/16		jar + tie						
0.2-0.3										
0.4-0.5										
0-1				bag						
BH53 0-0.1										
0.2-0.3										
0.4-0.5										
0-1										
QA20160610-1		10/6/16		+ bag						
QA20160614-1		14/6/16								
QA20160615-1		15/6/16								
QC20160610-1		10/6/16								
QC20160614-1		14/6/16								
QC20160615-1		15/6/16								
TS/TB				vial + tie						
RELINQUISHED BY:				RECEIVED BY:		FOR RECEIVING LAB USE ONLY				
NAME:	DATE:	CONSIGNMENT NOTE NO.		NAME:	DATE:	COOLER SEAL	Yes	No	Intact	Broken
OF: JBS&G		TRANSPORT CO.		OF: 16/6	18:30	COOLER TEMP	deg C			
NAME:	DATE:	CONSIGNMENT NOTE NO.		NAME:	DATE:	COOLER SEAL	Yes	No	Intact	Broken
OF:		TRANSPORT CO		OF:		COOLER TEMP	deg C			
Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presvd; C = Sodium Hydroxide Presvd; VC = Hydrochloric Acid Presvd; VS = Sulfuric Acid Presvd; S = EDTA Presvd; ST = Sterile Bottle; O = Other										

[illegible]

05762

CHAIN OF CUSTODY

[illegible]

08725

[illegible]

Environlab



CHAIN OF CUSTODY

08718

PROJECT NO.: 51666		LABORATORY BATCH NO.:			
PROJECT NAME: Pennington		SAMPLERS: P.P.			
DATE NEEDED BY: By COB 22/6/16		QC LEVEL: NEPM (2013)			
PHONE: Sydney: 02 8745 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688					
SEND REPORT & INVOICE TO: (1) adminsw@jbsg.com.au; (2) <i>Pennington</i> @jbsg.com.au; (3) <i>Pennington</i> @jbsg.com.au					
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL: <i>ASLPH/CLP* - metals + PAH</i>					
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH
0620160610-1	Soil	10/6/16		jar + bag tie	
0620160614-1		14/6/16			
0620160615-1		15/6/16			
RELINQUISHED BY: <i>Pennington</i> DATE: 17/6/16 NAME: <i>Pennington</i> DATE: 17/6/16 OF: JBS&G NAME: DATE: OF: DATE: OF: DATE: OF: DATE:					
METHOD OF SHIPMENT: CONSIGNMENT NOTE NO. TRANSPORT CO. CONSIGNMENT NOTE NO. TRANSPORT CO.					
RECEIVED BY: NAME: DATE: OF: DATE: NAME: DATE: OF: DATE:					
FOR RECEIVING LAB USE ONLY COOLER SEAL - Yes No Intact Broken COOLER TEMP - deg C COOLER SEAL - Yes No Intact Broken COOLER TEMP - deg C					
TYPE OF ASBESTOS ANALYSIS		IDENTIFICATION		NEPM/MA	
NOTES:					

col
received w/s
148594
28



14 of 14

CHAIN OF CUSTODY

08715

PROJECT NO.: PROJECT NAME: DATE NEEDED BY:				LABORATORY BATCH NO			
PHONE: Sydney: 02 8245 0300 Perth: 08 9488 0100 Brisbane: 07 3112 2688				SAMPLERS:			
SEND REPORT & INVOICE TO: (1) admin@jbsg.com.au; (2)@jbsg.com.au; (3)@jbsg.com.au				QC LEVEL: NEPM (2013)			
COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:							
SAMPLE ID	MATRIX	DATE	TIME	TYPE & PRESERVATIVE	pH	TYPE OF ANALYSIS	NOTES
BHS2 0-0.1	Soil	15/6/16		jar tie			
0.2-0.3							
0.4-0.5							
0-1							
BHS3 0-0.1							
0.2-0.3							
0.4-0.5							
0-1							
QA20160610-1		14/6/16		+ bag			
QA20160614-1		14/6/16					
QA20160615-1		15/6/16					
QC20160610-1		14/6/16					
QC20160614-1		14/6/16					
QC20160615-1		15/6/16					
TS/TS							

Envirolab Services
12 Ashley St
Chatswood NSW 2067
Ph: (02) 9910 6200

Job No: 148594

Date Received: 17-06-16
Time Received: 14:00
Received by: D.F.
Temp: 000 Ambient
Cooling: Ice/No Ice
Security: Intact/Broken/None

FOR RECEIVING LAB USE ONLY	
COOLER SEAL - Yes	No
COOLER TEMP - log C	No
COOLER SEAL - Yes	No
COOLER TEMP - log C	No
COOLER SEAL - Yes	No
COOLER TEMP - log C	No

RECEIVED BY:  18:30

NAME:  18:30

DATE: 16/6

OF:  18:30

NAME:  18:30

DATE:  18:30

OF:  18:30

METHOD OF SHIPMENT:	
CONSIGNMENT NOTE NO.	TRANSPORT CO.
CONSIGNMENT NOTE NO.	TRANSPORT CO.
CONSIGNMENT NOTE NO.	TRANSPORT CO.

RELINQUISHED BY: NAME: DATE:

OF: JBS&G NAME: DATE:

OF: NAME: DATE:

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Presv; C = Sodium Hydroxide Presv; VC = Hydrochloric Acid Presv; VJ = Sulfuric Acid Presv; L = EDTA Presv; ST = Sterile Bottle; O = Other

TMISO Forms013 - Chain of Custody - Generic

12345

Aileen Hie

From: Pongsathorn Patanan <PPatanan@jbsg.com.au>
Sent: Thursday, 23 June 2016 10:09 AM
To: Hinoko Miyazaki
Cc: Aileen Hie; Mitchell Hodgins
Subject: RE: Results for Registration 148594 51666, Parramatta

Hi,

As discussed, can I please get all 5 samples for this job analysed for Asbestos NEPM 2013 on same day TAT?

Kind regards



Pongsathorn Patanan (Eagle) | Environmental Consultant | JBS&G
Sydney | Melbourne | Adelaide | Perth | Brisbane
Level 1, 50 Margaret Street Sydney NSW 2000

T: 02 8245 0300 | M: 0401 370 363 | www.jbsg.com.au

Contaminated Land | Groundwater Remediation | Auditing and Compliance | Assessments and Approvals | Occupational Hygiene and Monitoring

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From: Jeremy Faircloth [mailto:JFaircloth@envirolab.com.au]
Sent: Wednesday, 22 June 2016 6:24 PM
To: AdminNSW <adminNSW@jbsg.com.au>; Mitchell Hodgins <MHodgins@jbsg.com.au>; Pongsathorn Patanan <PPatanan@jbsg.com.au>
Subject: Results for Registration 148594 51666, Parramatta

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

Envirolab Ref: 148594A

Due: 23/6/16

same day TIA

Please note that a hard copy will not be posted.

Enquiries should be made directly to:
sydney@envirolab.com.au

Regards

Envirolab Services
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
www.envirolabservices.com.au

CHAIN OF CUSTODY

Container & Preservative Codes: P = Plastic; J = Soil Jar; B = Glass Bottle; N = Nitric Acid Prsvd.; C = Sulfuric Acid Prsvd Vial; VS = Hydrochloric Acid Prsvd Vial; VC = Sodium Hydroxide Prsvd; S = Sulfuric Acid Prsvd Vial; Z = Zinc Prsvd; E = EDTA Prsvd; ST = Sterile Bottle; O = Other

Appendix R: Summary Statistical Calculation Sheets

	A	B	C	D	E	F	G	H	I	J	K	L	
1	UCL Statistics for Data Sets with Non-Detects												
2													
3	User Selected Options												
4	Date/Time of Computation			24/06/2016 8:26:40 AM									
5	From File			WorkSheet.xls									
6	Full Precision			OFF									
7	Confidence Coefficient			95%									
8	Number of Bootstrap Operations			2000									
9													
10													
11	Ni												
12													
13	General Statistics												
14	Total Number of Observations				45		Number of Distinct Observations				38		
15							Number of Missing Observations				27		
16	Minimum				4		Mean				54.77		
17	Maximum				150		Median				58		
18	SD				39.93		Std. Error of Mean				5.953		
19	Coefficient of Variation				0.729		Skewness				0.43		
20													
21	Normal GOF Test												
22	Shapiro Wilk Test Statistic				0.919		Shapiro Wilk GOF Test						
23	5% Shapiro Wilk Critical Value				0.945		Data Not Normal at 5% Significance Level						
24	Lilliefors Test Statistic				0.12		Lilliefors GOF Test						
25	5% Lilliefors Critical Value				0.132		Data appear Normal at 5% Significance Level						
26	Data appear Approximate Normal at 5% Significance Level												
27													
28	Assuming Normal Distribution												
29	95% Normal UCL					95% UCLs (Adjusted for Skewness)							
30	95% Student's-t UCL				64.77		95% Adjusted-CLT UCL (Chen-1995)					64.97	
31							95% Modified-t UCL (Johnson-1978)					64.84	
32													
33	Gamma GOF Test												
34	A-D Test Statistic				1.262		Anderson-Darling Gamma GOF Test						
35	5% A-D Critical Value				0.771		Data Not Gamma Distributed at 5% Significance Level						
36	K-S Test Statistic				0.15		Kolmogrov-Smirnoff Gamma GOF Test						
37	5% K-S Critical Value				0.135		Data Not Gamma Distributed at 5% Significance Level						
38	Data Not Gamma Distributed at 5% Significance Level												
39													
40	Gamma Statistics												
41	k hat (MLE)				1.348		k star (bias corrected MLE)				1.273		
42	Theta hat (MLE)				40.63		Theta star (bias corrected MLE)				43.03		
43	nu hat (MLE)				121.3		nu star (bias corrected)				114.6		
44	MLE Mean (bias corrected)				54.77		MLE Sd (bias corrected)				48.55		
45							Approximate Chi Square Value (0.05)				90.85		
46	Adjusted Level of Significance				0.0447		Adjusted Chi Square Value				90.15		
47													
48	Assuming Gamma Distribution												
49	95% Approximate Gamma UCL (use when n>=50))				69.06		95% Adjusted Gamma UCL (use when n<50)					69.6	
50													
51	Lognormal GOF Test												
52	Shapiro Wilk Test Statistic				0.878		Shapiro Wilk Lognormal GOF Test						
53	5% Shapiro Wilk Critical Value				0.945		Data Not Lognormal at 5% Significance Level						
54	Lilliefors Test Statistic				0.182		Lilliefors Lognormal GOF Test						
55	5% Lilliefors Critical Value				0.132		Data Not Lognormal at 5% Significance Level						
56	Data Not Lognormal at 5% Significance Level												
57													
58	Lognormal Statistics												

	A	B	C	D	E	F	G	H	I	J	K	L
59	Minimum of Logged Data					1.386	Mean of logged Data					3.588
60	Maximum of Logged Data					5.011	SD of logged Data					1.068
61												
62	Assuming Lognormal Distribution											
63	95% H-UCL				94.88	90% Chebyshev (MVUE) UCL					98.43	
64	95% Chebyshev (MVUE) UCL				114.6	97.5% Chebyshev (MVUE) UCL					137	
65	99% Chebyshev (MVUE) UCL				181.1							
66												
67	Nonparametric Distribution Free UCL Statistics											
68	Data appear to follow a Discernible Distribution at 5% Significance Level											
69												
70	Nonparametric Distribution Free UCLs											
71	95% CLT UCL				64.56	95% Jackknife UCL					64.77	
72	95% Standard Bootstrap UCL				64.56	95% Bootstrap-t UCL					64.97	
73	95% Hall's Bootstrap UCL				65.08	95% Percentile Bootstrap UCL					64.6	
74	95% BCA Bootstrap UCL				64.88							
75	90% Chebyshev(Mean, Sd) UCL				72.63	95% Chebyshev(Mean, Sd) UCL					80.72	
76	97.5% Chebyshev(Mean, Sd) UCL				91.95	99% Chebyshev(Mean, Sd) UCL					114	
77												
78	Suggested UCL to Use											
79	95% Student's-t UCL				64.77							
80												
81	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
82	These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)											
83	and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.											
84	For additional insight the user may want to consult a statistician.											
85												

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		Name	Name	Signature	Date
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1	Mitch Hodgins	Joanne Rosner	Joanne Rosner		12 July 2016

