coffey environments

Groundwater Sampling Form (A) - General

PROJECT NAME: GL252 83AD ⇔ **PROJECT NUMBER:** 4570

FIELD PERSONNEL: AR **DATE:** 22/11/11.

PROJECT MANAGER: SL

WELL ID: BH9 **METER ID:** 90FLmuSF **TOTAL WELL DEPTH:** 4.530 **SCREEN INTERVAL:** —

EQUIPMENT USED: **BAILER** ☒ **WATERRA** ☐ **OTHER** _____ **WELL DIAMETER:** 50mm **WELL STICK-UP:** —

WELL GAUGING AND PURGE VOLUME CALCULATIONS

(TOTAL WELL DEPTH) – (DEPTH TO WATER) = (WATER COLUMN)

4.530 m - 3.575 = 1 m

Use water column calculation together with the procedures in 'SOP- Groundwater Sampling - Bailers' to determine the correct volume to be purged from the well (enter this value in the field to the right)

LITRES PER 1 WELL VOLUME ÷ 3.6 L

WELL HEADSPACE PID READING

PID READING —

PPM: _____

TIME OF DAY	CYCLE/ PUMP RATE (ml/min)	VOLUME (L)	DEPTH TO WATER (m)	DISSOLVED OXYGEN (mg/l)		ELECTRICAL CONDUCTIVITY (mS or µS/cm)		pH (pH units)		REDOX POTENTIAL (mV)		TEMPERATURE (°C)		CLARITY – tick one					COMMENTS
				READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE	Clear	Slightly Cloudy	Cloudy	Very Cloudy	Turbid	ODOUR, COLOUR, SEDIMENTS, PSH COLLECTED, etc
0905	NA	1		5.10		812		5.64		129		21.2		✓					no colour, no odour.
		3		5.16		769		5.75		120		20.2			✓				lt brown, no odour.
						Dry @ 3L.													
						waited for recharge - then sampled.													

STABILISATION CRITERIA (3 readings within following ranges)		± 10%	± 3%	± 0.1 unit	± 10mV	± 0.2°C						

DUPLICATE COLLECTED: Y ☐ N ☒ DUPLICATE ID: _____ **TRIPLICATE COLLECTED:** Y ☐ N ☒ TRIPLICATE ID: _____

WERE METALS FIELD FILTERED? Y ☒ N ☐ UNFILTERED SAMPLES MUST NOT BE PUT INTO A PRESERVED CONTAINER (IE. 'METALS' BOTTLE)

coffey environments

Groundwater Sampling Form (A) - General

PROJECT NAME: USTD **PROJECT NUMBER:** GEOTLCOU25283AD

FIELD PERSONNEL: AM **DATE:** 22/11/16

PROJECT MANAGER: SK

WELL ID: BH12 **METER ID:** _____ **TOTAL WELL DEPTH:** 4.895 **SCREEN INTERVAL:** _____

EQUIPMENT USED: BAILER ☒ WATERRA ☐ OTHER _____ **WELL DIAMETER:** _____ **WELL STICK-UP:** /

WELL GAUGING AND PURGE VOLUME CALCULATIONS

(TOTAL WELL DEPTH) – (DEPTH TO WATER) = (WATER COLUMN)

4.895 m - 1.421 ≈ 3 m

Use water column calculation together with the procedures in 'SOP- Groundwater Sampling - Bailers' to determine the correct volume to be purged from the well (enter this value in the field to the right)

LITRES PER 1 WELL VOLUME

x3.6 ≈ 9 L

WELL HEADSPACE PID READING

PID READING

PPM: /

TIME OF DAY	CYCLE/ PUMP RATE (ml/min)	VOLUME (L)	DEPTH TO WATER (m)	DISSOLVED OXYGEN (mg/l)		ELECTRICAL CONDUCTIVITY (mS or µS/cm)		pH (pH units)		REDOX POTENTIAL (mV)		TEMPERATURE (°C)		CLARITY – tick one					COMMENTS
				READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE*	READING	CHANGE	Clear	Slightly Cloudy	Cloudy	Very Cloudy	Turbid	ODOUR, COLOUR, SEDIMENTS, PSH COLLECTED, etc
9[illegible]0	NA	1		3.89		1339		6.23		114		24.0		✓					No odour, no colour
		5		3.20		1876		6.13		116		23.4				✓			brown, no odour
		9		2.60		1675		6.00		113		22.4					✓	✓	" " + sediment
						dry @ 15L													
						Sampled upon recharge													
				4.30		1686		6.04		102		22.5				✓			brown, no odour.
STABILISATION CRITERIA (3 readings within following ranges)				± 10%		± 3%		± 0.1 unit		± 10mV		± 0.2°C							

DUPLICATE COLLECTED: Y ☒ N ☐ DUPLICATE ID: DUP01 **TRIPLICATE COLLECTED:** Y ☒ N ☐ TRIPLICATE ID: _____

WERE METALS FIELD FILTERED? Y ☒ N ☐ UNFILTERED SAMPLES MUST NOT BE PUT INTO A PRESERVED CONTAINER (IE. 'METALS' BOTTLE)

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Appendix D – Laboratory Certificates and Chain of Custody Records

eurofins | mgt

Certificate of Analysis

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **486087-S**
Project name GEOTLCOV25283AD
Received Date Jan 20, 2016

Client Sample ID			**BH1 0.2-0.3**	**BH1 0.5-0.6**	**BH5 0.2-0.3**	**BH5 0.5-0.6**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S16-Ja09053**	**S16-Ja09054**	**S16-Ja09055**	**S16-Ja09056**
Date Sampled			**Jan 18, 2016**	**Jan 18, 2016**	**Jan 18, 2016**	**Jan 18, 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	52	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	170	130
TRH C10-36 (Total)	50	mg/kg	< 50	< 50	220	130
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	%	113	104	112	108
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Propanone (Acetone)	5	mg/kg	< 5	-	< 5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-

Client Sample ID			BH1 0.2-0.3	BH1 0.5-0.6	BH5 0.2-0.3	BH5 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09053	S16-Ja09054	S16-Ja09055	S16-Ja09056
Date Sampled			Jan 18, 2016	Jan 18, 2016	Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit				
Volatile Organics						
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	87	-	89	-
4-Bromofluorobenzene (surr.)	1	%	113	-	112	-
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	< 0.5	< 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

Client Sample ID			BH1 0.2-0.3	BH1 0.5-0.6	BH5 0.2-0.3	BH5 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09053	S16-Ja09054	S16-Ja09055	S16-Ja09056
Date Sampled			Jan 18, 2016	Jan 18, 2016	Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	0.6	< 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	0.6	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	1.2	< 0.5
2-Fluorobiphenyl (surr.)	1	%	90	92	92	83
p-Terphenyl-d14 (surr.)	1	%	73	103	69	80
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	0.06	-	< 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	-	0.06	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	93	-	89	-
Tetrachloro-m-xylene (surr.)	1	%	102	-	97	-
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	%	93	-	89	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	160	110
TRH >C34-C40	100	mg/kg	< 100	< 100	110	< 100

Client Sample ID			BH1 0.2-0.3	BH1 0.5-0.6	BH5 0.2-0.3	BH5 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09053	S16-Ja09054	S16-Ja09055	S16-Ja09056
Date Sampled			Jan 18, 2016	Jan 18, 2016	Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	90	-	92	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-	< 1	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3-Nitroaniline	1	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbazole	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorpyrifos	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
Coumaphos	0.5	mg/kg	< 0.5	-	< 0.5	-
d-BHC	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-O	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-S	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diazinon	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorvos	0.5	mg/kg	< 0.5	-	< 0.5	-
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethoate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH1 0.2-0.3 Soil S16-Ja09053 Jan 18, 2016	BH1 0.5-0.6 Soil S16-Ja09054 Jan 18, 2016	BH5 0.2-0.3 Soil S16-Ja09055 Jan 18, 2016	BH5 0.5-0.6 Soil S16-Ja09056 Jan 18, 2016
Semivolatile Organic Compounds (SVOC)						
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Disulfoton	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethoprop	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenitrothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fensulfothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenthion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	0.6	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Malathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl azinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Mevinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Monocrotophos	10	mg/kg	< 10	-	< 10	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene-d5 (surr.)	1	%	71	-	75	-
p-Terphenyl-d14 (surr.)	1	%	73	-	69	-
Parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol-d6 (surr.)	1	%	74	-	75	-
Phorate	0.5	mg/kg	< 0.5	-	< 0.5	-
Profenofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Prothiofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	0.6	-
Ronnel	0.5	mg/kg	< 0.5	-	< 0.5	-
Stirophos	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloronate	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH1 0.2-0.3	BH1 0.5-0.6	BH5 0.2-0.3	BH5 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09053	S16-Ja09054	S16-Ja09055	S16-Ja09056
Date Sampled			Jan 18, 2016	Jan 18, 2016	Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	12	3.2	3.8	3.0
Cadmium	0.4	mg/kg	1.1	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	33	8.5	18	18
Copper	5	mg/kg	92	15	41	75
Lead	5	mg/kg	99	22	98	34
Mercury	0.05	mg/kg	0.44	< 0.05	0.09	0.08
Nickel	5	mg/kg	17	< 5	11	14
Zinc	5	mg/kg	160	21	74	76
% Moisture	0.1	%	22	21	12	13

Client Sample ID			BH9 0.2-0.3	BH9 0.5-0.6
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09057	S16-Ja09058
Date Sampled			Jan 18, 2016	Jan 18, 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	100	160
TRH C29-C36	50	mg/kg	79	140
TRH C10-36 (Total)	50	mg/kg	180	300
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	%	109	97
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-

Client Sample ID			BH9 0.2-0.3	BH9 0.5-0.6
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09057	S16-Ja09058
Date Sampled			Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit		
Volatile Organics				
2-Propanone (Acetone)	5	mg/kg	< 5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-
Allyl chloride	0.05	mg/kg	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-
Bromobenzene	0.5	mg/kg	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-
Xylenes - Total	0.3	mg/kg	< 0.3	-
Fluorobenzene (surr.)	1	%	90	-
4-Bromofluorobenzene (surr.)	1	%	109	-
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	2.6	6.3
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.8	6.3
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	3.1	6.3
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			BH9 0.2-0.3	BH9 0.5-0.6
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09057	S16-Ja09058
Date Sampled			Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Anthracene	0.5	mg/kg	< 0.5	0.8
Benz(a)anthracene	0.5	mg/kg	2.0	2.5
Benzo(a)pyrene	0.5	mg/kg	1.9	4.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	1.9	2.8
Benzo(g.h.i)perylene	0.5	mg/kg	1.8	2.6
Benzo(k)fluoranthene	0.5	mg/kg	1.3	2.5
Chrysene	0.5	mg/kg	1.6	3.1
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	0.8
Fluoranthene	0.5	mg/kg	3.8	5.4
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	1.2	2.0
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	1.3	2.3
Pyrene	0.5	mg/kg	3.9	5.5
Total PAH*	0.5	mg/kg	21	35
2-Fluorobiphenyl (surr.)	1	%	96	83
p-Terphenyl-d14 (surr.)	1	%	73	83
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-
Toxaphene	1	mg/kg	< 1	-
Dibutylchlorendate (surr.)	1	%	93	-
Tetrachloro-m-xylene (surr.)	1	%	96	-
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	%	93	-

Client Sample ID			BH9 0.2-0.3	BH9 0.5-0.6
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09057	S16-Ja09058
Date Sampled			Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	140	280
TRH >C34-C40	100	mg/kg	< 100	< 100
Semivolatile Organic Compounds (SVOC)				
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	96	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-
3-Nitroaniline	1	mg/kg	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-
Acenaphthene	0.5	mg/kg	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-
Acetophenone	0.5	mg/kg	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	2.0	-
Benzo(a)pyrene	0.5	mg/kg	1.9	-
Benzo(g.h.i)perylene	0.5	mg/kg	1.8	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-
Carbazole	0.5	mg/kg	< 0.5	-
Chlorpyrifos	0.5	mg/kg	< 0.5	-
Chrysene	0.5	mg/kg	1.6	-
Coumaphos	0.5	mg/kg	< 0.5	-
d-BHC	0.5	mg/kg	< 0.5	-
Demeton-O	0.5	mg/kg	< 0.5	-
Demeton-S	0.5	mg/kg	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-
Diazinon	0.5	mg/kg	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-
Dichlorvos	0.5	mg/kg	< 0.5	-

Client Sample ID			BH9 0.2-0.3	BH9 0.5-0.6
Sample Matrix			Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09057	S16-Ja09058
Date Sampled			Jan 18, 2016	Jan 18, 2016
Test/Reference	LOR	Unit		
Semivolatile Organic Compounds (SVOC)				
Dieldrin	0.5	mg/kg	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-
Dimethoate	0.5	mg/kg	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-
Diphenylamine	0.5	mg/kg	< 0.5	-
Disulfoton	0.5	mg/kg	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-
Endrin ketone	0.5	mg/kg	< 0.5	-
Ethoprop	0.5	mg/kg	< 0.5	-
Fenitrothion	0.5	mg/kg	< 0.5	-
Fensulfothion	0.5	mg/kg	< 0.5	-
Fenthion	0.5	mg/kg	< 0.5	-
Fluoranthene	0.5	mg/kg	3.8	-
Fluorene	0.5	mg/kg	< 0.5	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	1.2	-
Malathion	0.5	mg/kg	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-
Methyl azinphos	0.5	mg/kg	< 0.5	-
Methyl parathion	0.5	mg/kg	< 0.5	-
Mevinphos	0.5	mg/kg	< 0.5	-
Monocrotophos	10	mg/kg	< 10	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-
Nitrobenzene-d5 (surr.)	1	%	81	-
p-Terphenyl-d14 (surr.)	1	%	73	-
Parathion	0.5	mg/kg	< 0.5	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-
Phenanthrene	0.5	mg/kg	1.3	-
Phenol	0.5	mg/kg	< 0.5	-
Phenol-d6 (surr.)	1	%	83	-
Phorate	0.5	mg/kg	< 0.5	-
Profenofos	0.5	mg/kg	< 0.5	-
Prothiofos	0.5	mg/kg	< 0.5	-
Pyrene	0.5	mg/kg	3.9	-
Ronnel	0.5	mg/kg	< 0.5	-

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH9 0.2-0.3 Soil S16-Ja09057 Jan 18, 2016	BH9 0.5-0.6 Soil S16-Ja09058 Jan 18, 2016
Semivolatile Organic Compounds (SVOC)				
Stirophos	0.5	mg/kg	< 0.5	-
Trichloronate	0.5	mg/kg	< 0.5	-
Heavy Metals				
Arsenic	2	mg/kg	9.9	18
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	33	20
Copper	5	mg/kg	34	28
Lead	5	mg/kg	72	150
Mercury	0.05	mg/kg	0.29	0.35
Nickel	5	mg/kg	5.2	< 5
Zinc	5	mg/kg	39	88
% Moisture	0.1	%	13	8.8

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	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 20, 2016	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Jan 20, 2016	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
Volatile Organics	Sydney	Jan 20, 2016	7 Day
- Method: E016 Volatile Organic Compounds (VOC)			
Semivolatile Organic Compounds (SVOC)	Sydney	Jan 20, 2016	14 Day
- Method: E017 Semivolatile Organic Compounds (SVOC)			
Eurofins | mgt Suite B13			
Organochlorine Pesticides	Sydney	Jan 20, 2016	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Polychlorinated Biphenyls (PCB)	Sydney	Jan 20, 2016	28 Day
- Method: E013 Polychlorinated Biphenyls (PCB)			
% Moisture	Sydney	Jan 20, 2016	14 Day
- Method: LTM-GEN-7080 Moisture			

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 20, 2016 10:07 AM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486087	**Due:**	Jan 21, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09053	X			X	X	X	X	X
BH1 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09054							X	X
BH5 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09055	X			X	X	X	X	X
BH5 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09056							X	X
BH9 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09057	X			X	X	X	X	X
BH9 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09058							X	X
BH1 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09059		X						
BH2 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09060		X						
BH2 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09061		X						
BH2 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09062		X						

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

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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**	
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:** **Phone:** **Fax:**	486087 +61 2 9406 1000 +61 2 9406 1002
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Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH4 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09063		X						
BH4 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09064		X						
BH4 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09065		X						
BH5 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09066		X						
BH8 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09067		X						
BH8 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09068		X						
BH8 1.0-1.1	Jan 18, 2016		Soil	S16-Ja09069		X						
BH9 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09070		X						
BH9 2-2.1	Jan 18, 2016		Soil	S16-Ja09071		X						
TRIP 1	Jan 18, 2016		Soil	S16-Ja09072		X						
DUP 1	Jan 18, 2016		Soil	S16-Ja09073		X						

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Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH8 0.05-0.1	Jan 18, 2016		Soil	S16-Ja09201		X						
TB	Jan 18, 2016		Water	S16-Ja09224			X					
TS	Jan 18, 2016		Water	S16-Ja09225			X					

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's 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							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 5			5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.05			0.05	Pass	
Benzene	mg/kg	< 0.1			0.1	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
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							
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	
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							
Semivolatile Organic Compounds (SVOC)							
2-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2-Methylnaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.5			0.5	Pass	
2-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
2-Nitroaniline	mg/kg	< 1			1	Pass	
2-Nitrophenol	mg/kg	< 0.5			0.5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 1			1	Pass	
3-Methylcholanthrene	mg/kg	< 0.5			0.5	Pass	
4-Aminobiphenyl	mg/kg	< 0.5			0.5	Pass	
4-Bromophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 0.5			0.5	Pass	
4-Chlorophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Nitrophenol	mg/kg	< 0.5			0.5	Pass	
4.4'-DDD	mg/kg	< 0.5			0.5	Pass	
4.4'-DDE	mg/kg	< 0.5			0.5	Pass	
4.4'-DDT	mg/kg	< 1			1	Pass	
Acetophenone	mg/kg	< 0.5			0.5	Pass	
Aldrin	mg/kg	< 0.5			0.5	Pass	
Aniline	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroethoxy)methane	mg/kg	< 0.5			0.5	Pass	
Bis(2-ethylhexyl)phthalate	mg/kg	< 5			5	Pass	
Butyl benzyl phthalate	mg/kg	< 0.5			0.5	Pass	
Chlorpyrifos	mg/kg	< 0.5			0.5	Pass	
Coumaphos	mg/kg	< 0.5			0.5	Pass	
d-BHC	mg/kg	< 0.5			0.5	Pass	
Demeton-O	mg/kg	< 0.5			0.5	Pass	
Demeton-S	mg/kg	< 0.5			0.5	Pass	
Di-n-butyl phthalate	mg/kg	< 0.5			0.5	Pass	
Di-n-octyl phthalate	mg/kg	< 0.5			0.5	Pass	
Diazinon	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenzofuran	mg/kg	< 0.5			0.5	Pass	
Dichlorvos	mg/kg	< 0.5			0.5	Pass	
Dieldrin	mg/kg	< 0.5			0.5	Pass	
Diethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethoate	mg/kg	< 0.5			0.5	Pass	
Dimethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Diphenylamine	mg/kg	< 0.5			0.5	Pass	
Disulfoton	mg/kg	< 0.5			0.5	Pass	
Endosulfan sulphate	mg/kg	< 0.5			0.5	Pass	
Endrin	mg/kg	< 0.5			0.5	Pass	
Endrin aldehyde	mg/kg	< 0.5			0.5	Pass	
Endrin ketone	mg/kg	< 0.5			0.5	Pass	
Ethoprop	mg/kg	< 0.5			0.5	Pass	
Fenitrothion	mg/kg	< 0.5			0.5	Pass	
Fensulfothion	mg/kg	< 0.5			0.5	Pass	
Fenthion	mg/kg	< 0.5			0.5	Pass	
g-BHC (Lindane)	mg/kg	< 0.5			0.5	Pass	
Heptachlor	mg/kg	< 0.5			0.5	Pass	
Heptachlor epoxide	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 1			1	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Malathion	mg/kg	< 0.5			0.5	Pass	
Methoxychlor	mg/kg	< 0.5			0.5	Pass	
Methyl azinphos	mg/kg	< 0.5			0.5	Pass	
Methyl parathion	mg/kg	< 0.5			0.5	Pass	
Mevinphos	mg/kg	< 0.5			0.5	Pass	
Monocrotophos	mg/kg	< 10			10	Pass	
N-Nitrosodibutylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodipropylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosopiperidine	mg/kg	< 0.5			0.5	Pass	
Nitrobenzene	mg/kg	< 0.5			0.5	Pass	
Parathion	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachloronitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Phorate	mg/kg	< 0.5			0.5	Pass	
Profenofos	mg/kg	< 0.5			0.5	Pass	
Prothiofos	mg/kg	< 0.5			0.5	Pass	
Ronnel	mg/kg	< 0.5			0.5	Pass	
Trichloronate	mg/kg	< 0.5			0.5	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							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	93			70-130	Pass	
TRH C10-C14	%	93			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	88			70-130	Pass	
Toluene	%	109			70-130	Pass	
Ethylbenzene	%	87			70-130	Pass	
m&p-Xylenes	%	90			70-130	Pass	
o-Xylene	%	91			70-130	Pass	
Xylenes - Total	%	96			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethane	%	108			70-130	Pass	
1.1.1-Trichloroethane	%	104			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	92			70-130	Pass	
1.1.2-Trichloroethane	%	95			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	109			70-130	Pass	
1.2-Dibromoethane	%	98			70-130	Pass	
1.2-Dichlorobenzene	%	91			70-130	Pass	
1.2-Dichloroethane	%	91			70-130	Pass	
1.2-Dichloropropane	%	92			70-130	Pass	
1.2.3-Trichloropropane	%	106			70-130	Pass	
1.2.4-Trimethylbenzene	%	85			70-130	Pass	
1.3-Dichlorobenzene	%	91			70-130	Pass	
1.3-Dichloropropane	%	119			70-130	Pass	
1.3.5-Trimethylbenzene	%	86			70-130	Pass	
1.4-Dichlorobenzene	%	90			70-130	Pass	
2-Butanone (MEK)	%	117			70-130	Pass	
2-Propanone (Acetone)	%	107			70-130	Pass	
4-Chlorotoluene	%	88			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	%	119			70-130	Pass	
Allyl chloride	%	89			75-125	Pass	
Benzene	%	105			70-130	Pass	
Bromobenzene	%	92			70-130	Pass	
Bromochloromethane	%	98			70-130	Pass	
Bromodichloromethane	%	91			70-130	Pass	
Bromoform	%	101			70-130	Pass	
Bromomethane	%	112			70-130	Pass	
Carbon disulfide	%	92			70-130	Pass	
Carbon Tetrachloride	%	115			70-130	Pass	
Chlorobenzene	%	90			70-130	Pass	
Chloroethane	%	116			70-130	Pass	
Chloroform	%	94			70-130	Pass	
Chloromethane	%	128			70-130	Pass	
cis-1.2-Dichloroethene	%	124			70-130	Pass	
cis-1.3-Dichloropropene	%	108			70-130	Pass	
Dibromochloromethane	%	92			70-130	Pass	
Dibromomethane	%	96			70-130	Pass	
Dichlorodifluoromethane	%	123			70-130	Pass	
Ethylbenzene	%	94			70-130	Pass	
Iodomethane	%	75			70-130	Pass	
Isopropyl benzene (Cumene)	%	89			70-130	Pass	
m&p-Xylenes	%	96			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methylene Chloride	%	85			70-130	Pass	
o-Xylene	%	95			70-130	Pass	
Styrene	%	82			70-130	Pass	
Tetrachloroethene	%	105			70-130	Pass	
Toluene	%	99			70-130	Pass	
trans-1.2-Dichloroethene	%	125			70-130	Pass	
trans-1.3-Dichloropropene	%	108			70-130	Pass	
Trichloroethene	%	85			70-130	Pass	
Trichlorofluoromethane	%	84			70-130	Pass	
Vinyl chloride	%	129			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	112			70-130	Pass	
TRH C6-C10	%	89			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	102			70-130	Pass	
Acenaphthylene	%	86			70-130	Pass	
Anthracene	%	121			70-130	Pass	
Benz(a)anthracene	%	122			70-130	Pass	
Benzo(a)pyrene	%	102			70-130	Pass	
Benzo(b&j)fluoranthene	%	81			70-130	Pass	
Benzo(g.h.i)perylene	%	74			70-130	Pass	
Benzo(k)fluoranthene	%	117			70-130	Pass	
Chrysene	%	119			70-130	Pass	
Dibenz(a.h)anthracene	%	73			70-130	Pass	
Fluoranthene	%	96			70-130	Pass	
Fluorene	%	90			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	83			70-130	Pass	
Naphthalene	%	97			70-130	Pass	
Phenanthrene	%	76			70-130	Pass	
Pyrene	%	108			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	101			70-130	Pass	
4.4'-DDD	%	91			70-130	Pass	
4.4'-DDE	%	100			70-130	Pass	
4.4'-DDT	%	86			70-130	Pass	
a-BHC	%	101			70-130	Pass	
Aldrin	%	107			70-130	Pass	
b-BHC	%	100			70-130	Pass	
d-BHC	%	109			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	100			70-130	Pass	
Endosulfan II	%	97			70-130	Pass	
Endosulfan sulphate	%	95			70-130	Pass	
Endrin	%	99			70-130	Pass	
Endrin aldehyde	%	100			70-130	Pass	
Endrin ketone	%	87			70-130	Pass	
g-BHC (Lindane)	%	99			70-130	Pass	
Heptachlor	%	83			70-130	Pass	
Heptachlor epoxide	%	99			70-130	Pass	
Hexachlorobenzene	%	101			70-130	Pass	
Methoxychlor	%	84			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Polychlorinated Biphenyls (PCB)							
Aroclor-1248	%	71			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	94			70-130	Pass	
LCS - % Recovery							
Semivolatile Organic Compounds (SVOC)							
2-Chlorophenol	%	98			30-130	Pass	
4-Chloro-3-methylphenol	%	79			30-130	Pass	
4-Nitrophenol	%	71			30-130	Pass	
Chlorpyrifos	%	112			70-130	Pass	
Dimethoate	%	128			70-130	Pass	
Disulfoton	%	128			70-130	Pass	
Methyl azinphos	%	96			70-130	Pass	
Methyl parathion	%	121			70-130	Pass	
N-Nitrosodipropylamine	%	89			70-130	Pass	
Parathion	%	123			70-130	Pass	
Phenol	%	102			30-130	Pass	
Phorate	%	122			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	94			70-130	Pass	
Cadmium	%	97			70-130	Pass	
Chromium	%	103			70-130	Pass	
Copper	%	105			70-130	Pass	
Lead	%	99			70-130	Pass	
Mercury	%	106			70-130	Pass	
Nickel	%	103			70-130	Pass	
Zinc	%	102			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S16-Ja05708	NCP	%	90			70-130	Pass	
TRH C10-C14	S16-Ja07433	NCP	%	94			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Ja05708	NCP	%	100			70-130	Pass	
Toluene	S16-Ja05708	NCP	%	97			70-130	Pass	
Ethylbenzene	S16-Ja05708	NCP	%	92			70-130	Pass	
m&p-Xylenes	S16-Ja05708	NCP	%	94			70-130	Pass	
o-Xylene	S16-Ja05708	NCP	%	92			70-130	Pass	
Xylenes - Total	S16-Ja05708	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethane	S16-Ja03595	NCP	%	117			70-130	Pass	
1.1-Dichloroethene	S16-Ja03595	NCP	%	83			70-130	Pass	
1.1.1-Trichloroethane	S16-Ja03595	NCP	%	101			70-130	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja03595	NCP	%	100			70-130	Pass	
1.1.2-Trichloroethane	S16-Ja03595	NCP	%	97			70-130	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja03595	NCP	%	94			70-130	Pass	
1.2-Dibromoethane	S16-Ja03595	NCP	%	95			70-130	Pass	
1.2-Dichlorobenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
1.2-Dichloroethane	S16-Ja03595	NCP	%	94			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.2-Dichloropropane	S16-Ja03595	NCP	%	97			70-130	Pass	
1.2.3-Trichloropropane	S16-Ja03595	NCP	%	95			70-130	Pass	
1.2.4-Trimethylbenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
1.3-Dichlorobenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
1.3-Dichloropropane	S16-Ja03595	NCP	%	94			70-130	Pass	
1.3.5-Trimethylbenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
1.4-Dichlorobenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
2-Butanone (MEK)	S16-Ja03595	NCP	%	124			70-130	Pass	
4-Chlorotoluene	S16-Ja03595	NCP	%	92			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	S16-Ja03595	NCP	%	90			70-130	Pass	
Allyl chloride	S16-Ja03595	NCP	%	93			75-125	Pass	
Bromobenzene	S16-Ja03595	NCP	%	96			70-130	Pass	
Bromochloromethane	S16-Ja03595	NCP	%	94			70-130	Pass	
Bromodichloromethane	S16-Ja03595	NCP	%	98			70-130	Pass	
Bromoform	S16-Ja03595	NCP	%	98			70-130	Pass	
Bromomethane	S16-Ja03595	NCP	%	89			70-130	Pass	
Carbon disulfide	S16-Ja03595	NCP	%	100			70-130	Pass	
Carbon Tetrachloride	S16-Ja03595	NCP	%	98			70-130	Pass	
Chlorobenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
Chloroethane	S16-Ja03595	NCP	%	75			70-130	Pass	
Chloroform	S16-Ja03595	NCP	%	95			70-130	Pass	
Chloromethane	S16-Ja03595	NCP	%	110			70-130	Pass	
cis-1.2-Dichloroethene	S16-Ja03277	NCP	%	130			70-130	Pass	
cis-1.3-Dichloropropene	S16-Ja03595	NCP	%	96			70-130	Pass	
Dibromochloromethane	S16-Ja03595	NCP	%	97			70-130	Pass	
Dibromomethane	S16-Ja03595	NCP	%	94			70-130	Pass	
Dichlorodifluoromethane	S16-Ja03595	NCP	%	118			70-130	Pass	
Iodomethane	S16-Ja03595	NCP	%	86			70-130	Pass	
Isopropyl benzene (Cumene)	S16-Ja03595	NCP	%	93			70-130	Pass	
Methylene Chloride	S16-Ja03595	NCP	%	107			70-130	Pass	
Styrene	S16-Ja03595	NCP	%	88			70-130	Pass	
Tetrachloroethene	S16-Ja03595	NCP	%	98			70-130	Pass	
trans-1.2-Dichloroethene	S16-Ja03595	NCP	%	114			70-130	Pass	
trans-1.3-Dichloropropene	S16-Ja03595	NCP	%	96			70-130	Pass	
Trichloroethene	S16-Ja03595	NCP	%	128			70-130	Pass	
Vinyl chloride	S16-Ja03595	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Ja05708	NCP	%	96			70-130	Pass	
TRH C6-C10	S16-Ja05708	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S16-Ja09129	NCP	%	94			70-130	Pass	
4.4'-DDD	S16-Ja09129	NCP	%	101			70-130	Pass	
4.4'-DDE	S16-Ja09129	NCP	%	98			70-130	Pass	
4.4'-DDT	S16-Ja09129	NCP	%	83			70-130	Pass	
a-BHC	S16-Ja09129	NCP	%	92			70-130	Pass	
Aldrin	S16-Ja09129	NCP	%	97			70-130	Pass	
b-BHC	S16-Ja09129	NCP	%	91			70-130	Pass	
d-BHC	S16-Ja09129	NCP	%	99			70-130	Pass	
Dieldrin	S16-Ja09129	NCP	%	94			70-130	Pass	
Endosulfan I	S16-Ja09129	NCP	%	95			70-130	Pass	
Endosulfan II	S16-Ja09129	NCP	%	97			70-130	Pass	
Endosulfan sulphate	S16-Ja09129	NCP	%	100			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin	S16-Ja09129	NCP	%	96			70-130	Pass	
Endrin aldehyde	S16-Ja09129	NCP	%	109			70-130	Pass	
Endrin ketone	S16-Ja09129	NCP	%	107			70-130	Pass	
g-BHC (Lindane)	S16-Ja09129	NCP	%	94			70-130	Pass	
Heptachlor	S16-Ja09129	NCP	%	86			70-130	Pass	
Heptachlor epoxide	S16-Ja09129	NCP	%	94			70-130	Pass	
Hexachlorobenzene	S16-Ja09129	NCP	%	88			70-130	Pass	
Methoxychlor	S16-Ja09129	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls (PCB)				Result 1					
Aroclor-1248	S16-Ja09086	NCP	%	76			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Ja07433	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Semivolatile Organic Compounds (SVOC)				Result 1					
Chlorpyrifos	S16-Ja04419	NCP	%	117			70-130	Pass	
Dimethoate	S16-Ja04419	NCP	%	129			70-130	Pass	
Disulfoton	S16-Ja04419	NCP	%	124			70-130	Pass	
Methyl azinphos	S16-Ja04419	NCP	%	114			70-130	Pass	
Methyl parathion	S16-Ja03312	NCP	%	109			70-130	Pass	
Parathion	S16-Ja04419	NCP	%	128			70-130	Pass	
Phorate	S16-Ja04419	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Ja09080	NCP	%	91			70-130	Pass	
Cadmium	S16-Ja09080	NCP	%	90			70-130	Pass	
Chromium	S16-Ja09080	NCP	%	91			70-130	Pass	
Copper	S16-Ja09130	NCP	%	100			70-130	Pass	
Lead	S16-Ja09130	NCP	%	112			70-130	Pass	
Mercury	S16-Ja09080	NCP	%	110			70-130	Pass	
Nickel	S16-Ja09080	NCP	%	79			70-130	Pass	
Zinc	S16-Ja09130	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Ja07433	NCP	%	101			70-130	Pass	
Acenaphthylene	S16-Ja07433	NCP	%	74			70-130	Pass	
Anthracene	S16-Ja07433	NCP	%	126			70-130	Pass	
Benz(a)anthracene	S16-Ja07433	NCP	%	76			70-130	Pass	
Benzo(a)pyrene	S16-Ja07433	NCP	%	109			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Ja07433	NCP	%	87			70-130	Pass	
Benzo(g.h.i)perylene	S16-Ja07433	NCP	%	89			70-130	Pass	
Benzo(k)fluoranthene	S16-Ja07433	NCP	%	125			70-130	Pass	
Chrysene	S16-Ja07433	NCP	%	128			70-130	Pass	
Dibenz(a.h)anthracene	S16-Ja07433	NCP	%	81			70-130	Pass	
Fluoranthene	S16-Ja07433	NCP	%	106			70-130	Pass	
Fluorene	S16-Ja07433	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S16-Ja07433	NCP	%	90			70-130	Pass	
Naphthalene	S16-Ja07433	NCP	%	107			70-130	Pass	
Phenanthrene	S16-Ja07433	NCP	%	90			70-130	Pass	
Pyrene	S16-Ja07433	NCP	%	107			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-Ja09053	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S16-Ja07415	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S16-Ja07415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S16-Ja07415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Ja09053	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S16-Ja09053	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S16-Ja09053	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S16-Ja09053	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S16-Ja09053	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S16-Ja09053	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S16-Ja09053	CP	mg/kg	< 5	< 5	<1	30%	Pass	
4-Chlorotoluene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S16-Ja09053	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromobenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Isopropyl benzene (Cumene)	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S16-Ja09053	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S16-Ja09053	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S16-Ja09083	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S16-Ja09083	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S16-Ja09083	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S16-Ja09083	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD			
Aroclor-1016	S16-Ja09083	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1232	S16-Ja09083	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S16-Ja09083	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S16-Ja09083	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S16-Ja09083	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S16-Ja09083	NCP	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-Ja07415	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S16-Ja07415	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S16-Ja07415	NCP	mg/kg	< 100	< 100	<1	30%	Pass	

Duplicate									
Semivolatile Organic Compounds (SVOC)				Result 1	Result 2	RPD			
Chlorpyrifos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Coumaphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Demeton-O	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Demeton-S	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Diazinon	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorvos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dimethoate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Disulfoton	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethoprop	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fenitrothion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fensulfothion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fenthion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Malathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl azinphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl parathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Mevinphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Monocrotophos	S16-Ja04415	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Parathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phorate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Profenofos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Prothiofos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ronnel	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloronate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S16-Ja09058	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S16-Ja09058	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S16-Ja09058	CP	mg/kg	0.8	0.6	19	30%	Pass	
Benz(a)anthracene	S16-Ja09058	CP	mg/kg	2.5	2.2	12	30%	Pass	
Benzo(a)pyrene	S16-Ja09058	CP	mg/kg	4.5	3.7	17	30%	Pass	
Benzo(b&j)fluoranthene	S16-Ja09058	CP	mg/kg	2.8	3.0	7.0	30%	Pass	
Benzo(g.h.i)perylene	S16-Ja09058	CP	mg/kg	2.6	2.3	11	30%	Pass	
Benzo(k)fluoranthene	S16-Ja09058	CP	mg/kg	2.5	2.4	1.0	30%	Pass	
Chrysene	S16-Ja09058	CP	mg/kg	3.1	2.6	18	30%	Pass	
Dibenz(a.h)anthracene	S16-Ja09058	CP	mg/kg	0.8	0.7	16	30%	Pass	
Fluoranthene	S16-Ja09058	CP	mg/kg	5.4	4.3	21	30%	Pass	
Fluorene	S16-Ja09058	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S16-Ja09058	CP	mg/kg	2.0	1.7	16	30%	Pass	
Naphthalene	S16-Ja09058	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S16-Ja09058	CP	mg/kg	2.3	1.9	20	30%	Pass	
Pyrene	S16-Ja09058	CP	mg/kg	5.5	4.3	25	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S16-Ja09058	CP	mg/kg	18	17	2.0	30%	Pass	
Cadmium	S16-Ja09058	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S16-Ja09058	CP	mg/kg	20	18	10	30%	Pass	
Copper	S16-Ja09058	CP	mg/kg	28	25	10	30%	Pass	
Lead	S16-Ja09058	CP	mg/kg	150	130	11	30%	Pass	
Mercury	S16-Ja09058	CP	mg/kg	0.35	0.29	18	30%	Pass	
Nickel	S16-Ja09058	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S16-Ja09058	CP	mg/kg	88	80	9.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S16-Ja09058	CP	%	8.8	10	14	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

Charl Du Preez	Analytical Services Manager
Bob Symons	Senior Analyst-Inorganic (NSW)
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

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.

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Attention:	Sally King
Report	486087-AID
Project Name	GEOTLCOV25283AD
Received Date	Jan 20, 2016
Date Reported	Jan 21, 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 GEOTLCOV25283AD
Project ID
Date Sampled Jan 18, 2016
Report 486087-AID

Client Sample ID	Eurofins | mgt Sample No.	Date Sampled	Sample Description	Result
BH1 0.2-0.3	16-Ja09053	Jan 18, 2016	Approximate Sample 114g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH5 0.2-0.3	16-Ja09055	Jan 18, 2016	Approximate Sample 75g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH9 0.2-0.3	16-Ja09057	Jan 18, 2016	Approximate Sample 108g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 21, 2016	Indefinite

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NATA # 1261
Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486087
Phone: +61 2 9406 1000
Fax: +61 2 9406 1002

Received: Jan 20, 2016 10:07 AM
Due: Jan 21, 2016
Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09053	X			X	X	X	X	X
BH1 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09054							X	X
BH5 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09055	X			X	X	X	X	X
BH5 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09056							X	X
BH9 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09057	X			X	X	X	X	X
BH9 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09058							X	X
BH1 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09059		X						
BH2 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09060		X						
BH2 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09061		X						
BH2 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09062		X						

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Received: Jan 20, 2016 10:07 AM
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Contact Name: Sally King

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Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH4 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09063		X						
BH4 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09064		X						
BH4 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09065		X						
BH5 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09066		X						
BH8 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09067		X						
BH8 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09068		X						
BH8 1.0-1.1	Jan 18, 2016		Soil	S16-Ja09069		X						
BH9 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09070		X						
BH9 2-2.1	Jan 18, 2016		Soil	S16-Ja09071		X						
TRIP 1	Jan 18, 2016		Soil	S16-Ja09072		X						
DUP 1	Jan 18, 2016		Soil	S16-Ja09073		X						

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Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH8 0.05-0.1	Jan 18, 2016		Soil	S16-Ja09201		X						
TB	Jan 18, 2016		Water	S16-Ja09224			X					
TS	Jan 18, 2016		Water	S16-Ja09225			X					

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

Units

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

Terms

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

Comments

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Authorised by:

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

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **486087-W**
Project name GEOTLCOV25283AD
Received Date Jan 20, 2016

Client Sample ID			**TB**	**TS**
Sample Matrix			**Water**	**Water**
Eurofins | mgt Sample No.			**S16-Ja09224**	**S16-Ja09225**
Date Sampled			**Jan 18, 2016**	**Jan 18, 2016**
Test/Reference	LOR	Unit		
BTEX				
Benzene	0.001	mg/L	< 0.001	86%
Toluene	0.001	mg/L	< 0.001	120%
Ethylbenzene	0.001	mg/L	< 0.001	120%
m&p-Xylenes	0.002	mg/L	< 0.002	120%
o-Xylene	0.001	mg/L	< 0.001	121%
Xylenes - Total	0.003	mg/L	< 0.003	121%
4-Bromofluorobenzene (surr.)	1	%	96	120

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
BTEX	Sydney	Jan 21, 2016	14 Day

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

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

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

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

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 20, 2016 10:07 AM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486087	**Due:**	Jan 21, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09053	X			X	X	X	X	X
BH1 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09054							X	X
BH5 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09055	X			X	X	X	X	X
BH5 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09056							X	X
BH9 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09057	X			X	X	X	X	X
BH9 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09058							X	X
BH1 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09059		X						
BH2 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09060		X						
BH2 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09061		X						
BH2 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09062		X						

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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**	
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:** **Phone:** **Fax:**	486087 +61 2 9406 1000 +61 2 9406 1002
Project Name:	GEOTLCOV25283AD		

Received:	Jan 20, 2016 10:07 AM
Due:	Jan 21, 2016
Priority:	1 Day
Contact Name:	Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH4 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09063		X						
BH4 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09064		X						
BH4 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09065		X						
BH5 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09066		X						
BH8 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09067		X						
BH8 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09068		X						
BH8 1.0-1.1	Jan 18, 2016		Soil	S16-Ja09069		X						
BH9 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09070		X						
BH9 2-2.1	Jan 18, 2016		Soil	S16-Ja09071		X						
TRIP 1	Jan 18, 2016		Soil	S16-Ja09072		X						
DUP 1	Jan 18, 2016		Soil	S16-Ja09073		X						

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Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**	
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:** **Phone:** **Fax:**	486087 +61 2 9406 1000 +61 2 9406 1002
Project Name:	GEOTLCOV25283AD		

Received:	Jan 20, 2016 10:07 AM
Due:	Jan 21, 2016
Priority:	1 Day
Contact Name:	Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH8 0.05-0.1	Jan 18, 2016		Soil	S16-Ja09201		X						
TB	Jan 18, 2016		Water	S16-Ja09224			X					
TS	Jan 18, 2016		Water	S16-Ja09225			X					

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's 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	%	85			70-130	Pass	
Toluene	%	99			70-130	Pass	
Ethylbenzene	%	101			70-130	Pass	
m&p-Xylenes	%	106			70-130	Pass	
o-Xylene	%	106			70-130	Pass	
Xylenes - Total	%	106			70-130	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

Charl Du Preez	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

486087

coffey

Chain of Custody

No: 06514

Laboratory Quotation / Order No:

Job No: GEOTLCOV25283AD Sheet 1 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer: Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service: Consignment Note No.

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Eleni WR Elliot	19/01/16	1730
			Sam	20/1	16:02

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC/SVOC	B13	Asbestos ⊗	Sample Condition on Receipt
BH1 0.2-0.3m	SOIL	JAR		18/1					X	X	X		
BH1 0.2-0.3	SOIL	ZIP BAG		↓								X	
BH1 0.5-0.6	"	JAR							X				
BH1 0.5-0.6	"	ZIP BAG											
BH1 0.9-1	"	JAR											
" "	"	ZIP BAG											
BH2 0.2-0.3	"	JAR											
BH2 0.2-0.3	"	ZIP BAG											
BH2 0.5-0.6	"	JAR											
" "	"	ZIP BAG											
BH2 0.9-1	"	JAR											
" "	"	ZIP BAG											
BH4 0.2-0.3	"	JAR											
BH4 0.2-0.3	"	ZIP BAG											
BH4 0.5-0.6	"	JAR											
BH4 "	"	ZIP BAG											

Special Laboratory Instructions: 24 HR TURN AROUND PLEASE EMAIL SALLY_KING@COFFEY.COM

Detection Limits: ⊗ presence/absence

Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

Copies: WHITE: Sign on release. YELLOW: If dispatched to interstate Lab, Lab to sign on receipt and fax back to Coffey. BLUE: To be returned with results.

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Chain of Custody

No: 06515

Laboratory Quotation / Order No:

Job No: GEOTLCOV 25283AD Sheet 2 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer:
		Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service:
		Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Ellen Ly Eurofins	13/01/16	1730
			Soa	20/1	10:07

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC SVOC	B13	Asbestos ⊗	Sample Condition on Receipt
BH4 0.9-1	SOIL	JAR		18/1									
-- --	--	ZIP BAG											
BH5 0.2-0.3	--	JAR							X	X	X		
-- --	--	ZIP BAG										X	
BH5 0.5-0.6	--	JAR							X				
-- --	--	ZIP BAG											
BH5 0.9-1	--	JAR											
-- --	--	ZIP BAG											
BH8 0.2-0.3	--	JAR											
-- --	--	ZIP BAG											
BH8 0.5-0.6	--	JAR											
-- --	--	ZIP BAG											
BH8 1-1.1	--	JAR											
~~-- --~~	~~--~~	~~ZIP BAG~~											
BH9 0.2-0.3	--	JAR							X	X	X		
-- --	--	ZIP BAG		↓								X	
									*				

Special Laboratory Instructions: 24 HOUR TURNAROUND PLEASE EMAIL SALLY.KING@COFFEY.COM

Detection Limits: Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

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⊗ presence/absence.

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Chain of Custody

No: 06516

Laboratory Quotation / Order No:

Job No: GEOTLCOV25283AA0 Sheet 3 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer: Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service: Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Elvin Elfrizt	19/01/16	1730
			Soon	20/1	10:07

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC / SVOC	B13	Asbestos ⊗							Sample Condition on Receipt
BH9 0.5-0.6	SOIL	JAR		18/1					X										
~ ~	~	ZIP BAG		↓															
BH9 0.9-1	~	JAR																	
~ ~	~	ZIP BAG																	
BH9 2-2.1	~	JAR																	
BH9 ~	~	ZIP BAG																	
TRIP 1																			
DUP 1																			

Special Laboratory Instructions: 24 HOUR TURNAROUND PLEASE EMAIL SALLYKING@COFFEY.COM

Detection Limits: Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

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⊗ asbestos presence/absence

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Chain of Custody

No: 06515

Laboratory Quotation / Order No:

Job No: GEOTLCOV 25283AD

Sheet 2 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer: / Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service: / Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Ellen Wh. Ellmgt.	190116	173

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	Analyses Required: PAHs	TPHs	MAHs = BTEX	Metals:	Sample Condition
BH4 0.9-1	SOIL	JAR							
" "	"	ZIP BAG							
BH5 0.2-0.3	"	JAR							
" "	"	ZIP BAG							
BH5 0.5-0.6	"	JAR							
" "	"	ZIP BAG							
BH5 0.9-1	"	JAR							
" "	"	ZIP BAG							
BH8 0.2-0.3	"	JAR							
" "	"	ZIP BAG							
BH8 0.5-0.6	"	JAR							
" "	"	ZIP BAG							
BH8 1-1.1	"	JAR							
[redacted]									
BH9 0.2-0.3	"	JAR							
" "	"	ZIP BAG							

Special Laboratory Instructions: 24 HOUR TURNAROUND PLEASE EMAIL SALLY.KING@COFFEY.C

JOB NUMBER MUST REFERENCED ON SUBSEQUENT PAG

Detection Limits:

Turnaround Required:

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Chain of Custody

No: 06516

Laboratory Quotation / Order No:

Job No: GEOTLCOV25283AO Sheet 3 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer: Date Dispatched:
Attention:	Project Manager: (report results to) SALLY ICING & CHARLIE LEE	Courier Service: Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Elen Nh Eflngt	130116	173

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:											Sample Condition
BH9 0.5-0.6	SOIL	JAR																	
~ ~	~	ZIP BAG																	
BH9 0.9-1	~	JAR																	
~ ~	~	ZIP BAG																	
BH9 2-2.1	~	JAR																	
BH 2 ~	~	ZIP BAG																	
TRIP 1																			
DUP 1																			

Special Laboratory Instructions: 24 HOUR TURNAROUND PLEASE EMAIL SALLYICING@COFFEY.C[illegible]

Detection Limits:

Turnaround Required:

JOB NUMBER MUST [BE] REFERENCED ON [ALL] SUBSEQUENT PA[GES]

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Chain of Custody

No: 06514

Laboratory Quotation / Order No:

Job No: GEOTLOW25283AD Sheet 1 of 3

Dispatch to: (Address & Phone No.) EUROFINS MGT	Sampled by: CHARLIE LEE	Consigning Officer:
		Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service:
		Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Ellen Ng Ellengt.	190116	173

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	Analyses Required: PAHs	TPHs	MAHs = BTEX	Metals:											Sample Condition
BH1 0.2-0.3m	SOIL	JAR																	
BH1 0.2-0.3	SOIL	ZIP BAG																	
BH1 0.5-0.6	"	JAR																	
BH1 0.5-0.6	"	ZIP BAG																	
BH1 0.9-1	"	JAR																	
" "	"	ZIP BAG																	
BH2 0.2-0.3	"	JAR																	
BH2 0.2-0.3	"	ZIP BAG																	
BH2 0.5-0.6	"	JAR																	
" "	"	ZIP BAG																	
BH2 0.9-1	"	JAR																	
" "	"	ZIP BAG																	
BH4 0.2-0.3	"	JAR																	
BH4 0.2-0.3	"	ZIP BAG																	
BH4 0.5-0.6	"	JAR																	
BH4 "	"	ZIP BAG																	

Special Laboratory Instructions: 24 HR TURN AROUND PLEASE EMAIL SALLY-KING@COFFEY.COM

Detection Limits:

Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON A SUBSEQUENT PAG

Copies: WHITE: Sign on release. YELLOW: If dispatched to interstate Lab, Lab to sign on receipt and fax back to Coffey. BLUE: To be returned with results.

From: Sally King [mailto:Sally.King@coffey.com]
Sent: Wednesday, 20 January 2016 12:27 PM
To: Admin Syd; Charlie Lee
Cc: EnviroSampleNSW
Subject: RE: GEOTLCOV25283AD

Hi Sean

Please relabel the left hand jar as BH1 0.9-1.0.

The samples for BH8 are not being analysed at the moment so the discrepancies are not relevant at this stage.

Thanks

Sally King
Associate Environmental Scientist

t: +61 7 3608 2664
m: +61 404 465 419

From: Admin Syd [mailto:AdminSyd@eurofins.com.au]
Sent: Wednesday, 20 January 2016 11:13 AM
To: Charlie Lee
Cc: EnviroSampleNSW; Sally King
Subject: GEOTLCOV25283AD

Hi Charlie,

Just advising of some labelling discrepancies:

Missing: BH1 0.9-1.0
2x jars received for BH2 0.9-1.0

Bags missing fir BH8 0.2-0.3. Extra sample received, BH8 0.05-0.1 has been placed on hold.

Please advise on how to proceed

Kind regards,

Sample Receipt 1 Syd

From: Sally King <Sally.King@coffey.com>
Sent: Thursday, 21 January 2016 1:11 PM
To: Admin Syd
Cc: EnviroSampleNSW
Subject: RE: GEOTLCOV25283AD

Are you able to have these analysed for BTEX?

Thanks

Sally King
Associate Environmental Scientist

t: +61 7 3608 2664
m: +61 404 465 419

From: Admin Syd [mailto:AdminSyd@eurofins.com.au]
Sent: Thursday, 21 January 2016 12:10 PM
To: Sally King
Cc: EnviroSampleNSW
Subject: RE: GEOTLCOV25283AD

Hi Sally,

Yes a Trip Blank and Spike was received in report 486087 and have been placed on hold.

Kind regards,

Sean

Admin Syd
Phone : +61 2 9900 8400
Email : AdminSyd@eurofins.com.au

From: Sally King [mailto:Sally.King@coffey.com]
Sent: Thursday, 21 January 2016 12:03 PM
To: Admin Syd; Charlie Lee
Cc: EnviroSampleNSW
Subject: RE: GEOTLCOV25283AD

JOB # 486087

Hi Sean

Were there any TB / TS samples in the esky for this job?

Regards

eurofins | mgt

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

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NATA # 1261
Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Sample Receipt Advice

Company name:	**Coffey Geotechnics Pty Ltd Chatswood**
Contact name:	Sally King
Project name:	GEOTLCOV25283AD
COC number:	Not provided
Turn around time:	1 Day
Date/Time received:	Jan 20, 2016 10:07 AM
Eurofins | mgt reference:	**486087**

Sample information

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

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 12.6 degrees Celsius.

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

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

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

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

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

Charl Du Preez on Phone : +61 (2) 9900 8400 or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Sally King - sally_king@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Geotechnics Pty Ltd Chatswood email address.

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 20, 2016 10:07 AM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486087	**Due:**	Jan 21, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH1 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09053	X			X	X	X	X	X
BH1 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09054							X	X
BH5 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09055	X			X	X	X	X	X
BH5 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09056							X	X
BH9 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09057	X			X	X	X	X	X
BH9 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09058							X	X
BH1 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09059		X						
BH2 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09060		X						
BH2 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09061		X						
BH2 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09062		X						

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Murarrie QLD 4172
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NATA # 1261 Site # 20794

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486087
Phone: +61 2 9406 1000
Fax: +61 2 9406 1002

Received: Jan 20, 2016 10:07 AM
Due: Jan 21, 2016
Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH4 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09063		X						
BH4 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09064		X						
BH4 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09065		X						
BH5 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09066		X						
BH8 0.2-0.3	Jan 18, 2016		Soil	S16-Ja09067		X						
BH8 0.5-0.6	Jan 18, 2016		Soil	S16-Ja09068		X						
BH8 1.0-1.1	Jan 18, 2016		Soil	S16-Ja09069		X						
BH9 0.9-1.0	Jan 18, 2016		Soil	S16-Ja09070		X						
BH9 2-2.1	Jan 18, 2016		Soil	S16-Ja09071		X						
TRIP 1	Jan 18, 2016		Soil	S16-Ja09072		X						
DUP 1	Jan 18, 2016		Soil	S16-Ja09073		X						

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Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**	
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:** **Phone:** **Fax:**	486087 +61 2 9406 1000 +61 2 9406 1002
Project Name:	GEOTLCOV25283AD		

Received:	Jan 20, 2016 10:07 AM
Due:	Jan 21, 2016
Priority:	1 Day
Contact Name:	Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	HOLD	BTEX	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH8 0.05-0.1	Jan 18, 2016		Soil	S16-Ja09201		X						
TB	Jan 18, 2016		Water	S16-Ja09224			X					
TS	Jan 18, 2016		Water	S16-Ja09225			X					

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Certificate of Analysis

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **486089-S**
Project name GEOTLCOV25283AD
Received Date Jan 20, 2016

Client Sample ID			**BH7 0.2-0.3**	**BH7 0.5-0.6**	**BH10 0.2-0.3**	**BH10 0.5-0.6**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins | mgt Sample No.			**S16-Ja09080**	**S16-Ja09081**	**S16-Ja09083**	**S16-Ja09084**
Date Sampled			**Jan 19, 2016**	**Jan 19, 2016**	**Jan 19, 2016**	**Jan 19, 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	120	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	120	< 50	< 50	< 50
TRH C10-36 (Total)	50	mg/kg	240	< 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	%	100	94	99	105
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Propanone (Acetone)	5	mg/kg	< 5	-	< 5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-

Client Sample ID			BH7 0.2-0.3	BH7 0.5-0.6	BH10 0.2-0.3	BH10 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09080	S16-Ja09081	S16-Ja09083	S16-Ja09084
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Volatile Organics						
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	90	-	91	-
4-Bromofluorobenzene (surr.)	1	%	100	-	99	-
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	2.4	1.7	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.6	2.0	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	2.9	2.2	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	1.7	1.0	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	1.8	1.3	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	1.7	1.2	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	1.6	0.6	< 0.5	< 0.5

Client Sample ID			BH7 0.2-0.3	BH7 0.5-0.6	BH10 0.2-0.3	BH10 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09080	S16-Ja09081	S16-Ja09083	S16-Ja09084
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(k)fluoranthene	0.5	mg/kg	1.0	1.3	< 0.5	< 0.5
Chrysene	0.5	mg/kg	1.4	1.2	< 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	3.5	2.0	< 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	1.2	0.6	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	1.4	0.8	< 0.5	< 0.5
Pyrene	0.5	mg/kg	3.5	2.0	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	19	12	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	127	105	91	106
p-Terphenyl-d14 (surr.)	1	%	95	100	74	103
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	0.06	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	0.06	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	78	-	56	-
Tetrachloro-m-xylene (surr.)	1	%	56	-	53	-
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	%	78	-	56	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	200	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	100	< 100	< 100	< 100

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH7 0.2-0.3 Soil S16-Ja09080 Jan 19, 2016	BH7 0.5-0.6 Soil S16-Ja09081 Jan 19, 2016	BH10 0.2-0.3 Soil S16-Ja09083 Jan 19, 2016	BH10 0.5-0.6 Soil S16-Ja09084 Jan 19, 2016
Semivolatile Organic Compounds (SVOC)						
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	127	-	91	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-	< 1	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3-Nitroaniline	1	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	1.7	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	1.8	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	1.6	-	< 0.5	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbazole	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorpyrifos	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	1.4	-	< 0.5	-
Coumaphos	0.5	mg/kg	< 0.5	-	< 0.5	-
d-BHC	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-O	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-S	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diazinon	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorvos	0.5	mg/kg	< 0.5	-	< 0.5	-
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethoate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH7 0.2-0.3 Soil S16-Ja09080 Jan 19, 2016	BH7 0.5-0.6 Soil S16-Ja09081 Jan 19, 2016	BH10 0.2-0.3 Soil S16-Ja09083 Jan 19, 2016	BH10 0.5-0.6 Soil S16-Ja09084 Jan 19, 2016
Semivolatile Organic Compounds (SVOC)						
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Disulfoton	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethoprop	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenitrothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fensulfothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenthion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	3.5	-	< 0.5	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	1.2	-	< 0.5	-
Malathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl azinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Mevinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Monocrotophos	10	mg/kg	< 10	-	< 10	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene-d5 (surr.)	1	%	109	-	81	-
p-Terphenyl-d14 (surr.)	1	%	95	-	74	-
Parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	1.4	-	< 0.5	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol-d6 (surr.)	1	%	110	-	81	-
Phorate	0.5	mg/kg	< 0.5	-	< 0.5	-
Profenofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Prothiofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	3.5	-	< 0.5	-
Ronnel	0.5	mg/kg	< 0.5	-	< 0.5	-
Stirophos	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloronate	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH7 0.2-0.3	BH7 0.5-0.6	BH10 0.2-0.3	BH10 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09080	S16-Ja09081	S16-Ja09083	S16-Ja09084
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Heavy Metals						
Arsenic	2	mg/kg	5.6	6.0	5.3	4.4
Cadmium	0.4	mg/kg	0.5	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	23	19	20	11
Copper	5	mg/kg	68	46	29	14
Lead	5	mg/kg	440	270	9.9	16
Mercury	0.05	mg/kg	0.66	0.54	< 0.05	< 0.05
Nickel	5	mg/kg	15	15	37	14
Zinc	5	mg/kg	180	100	24	12
% Moisture	0.1	%	17	14	16	16

Client Sample ID			BH6 0.2-0.3	BH6 0.5-0.6	BH3 0.2-0.3	BH3 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09086	S16-Ja09087	S16-Ja09088	S16-Ja09089
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 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	%	101	95	100	97
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH6 0.2-0.3	BH6 0.5-0.6	BH3 0.2-0.3	BH3 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09086	S16-Ja09087	S16-Ja09088	S16-Ja09089
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Volatile Organics						
2-Propanone (Acetone)	5	mg/kg	< 5	-	< 5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	90	-	88	-
4-Bromofluorobenzene (surr.)	1	%	101	-	100	-
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	0.7	0.6
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	1.0	1.0
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.3	1.3
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

Client Sample ID			BH6 0.2-0.3	BH6 0.5-0.6	BH3 0.2-0.3	BH3 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09086	S16-Ja09087	S16-Ja09088	S16-Ja09089
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	0.7	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	0.6	0.6
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	0.6	< 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	0.6	< 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	1.5	0.9
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	0.8	0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	1.5	0.9
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	6.9	2.9
2-Fluorobiphenyl (surr.)	1	%	82	96	88	106
p-Terphenyl-d14 (surr.)	1	%	66	91	71	103
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	100	-	99	-
Tetrachloro-m-xylene (surr.)	1	%	95	-	111	-
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	%	100	-	99	-

Client Sample ID			BH6 0.2-0.3	BH6 0.5-0.6	BH3 0.2-0.3	BH3 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09086	S16-Ja09087	S16-Ja09088	S16-Ja09089
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
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
Semivolatile Organic Compounds (SVOC)						
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	82	-	88	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-	< 1	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3-Nitroaniline	1	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	0.7	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	0.6	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	0.6	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbazole	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorpyrifos	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	0.6	-
Coumaphos	0.5	mg/kg	< 0.5	-	< 0.5	-
d-BHC	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-O	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-S	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diazinon	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorvos	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH6 0.2-0.3 Soil S16-Ja09086 Jan 19, 2016	BH6 0.5-0.6 Soil S16-Ja09087 Jan 19, 2016	BH3 0.2-0.3 Soil S16-Ja09088 Jan 19, 2016	BH3 0.5-0.6 Soil S16-Ja09089 Jan 19, 2016
Semivolatile Organic Compounds (SVOC)						
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethoate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Disulfoton	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethoprop	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenitrothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fensulfothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenthion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	1.5	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Malathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl azinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Mevinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Monocrotophos	10	mg/kg	< 10	-	< 10	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene-d5 (surr.)	1	%	72	-	78	-
p-Terphenyl-d14 (surr.)	1	%	66	-	71	-
Parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	< 0.5	-	0.8	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol-d6 (surr.)	1	%	72	-	77	-
Phorate	0.5	mg/kg	< 0.5	-	< 0.5	-
Profenofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Prothiofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	1.5	-
Ronnel	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH6 0.2-0.3	BH6 0.5-0.6	BH3 0.2-0.3	BH3 0.5-0.6
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09086	S16-Ja09087	S16-Ja09088	S16-Ja09089
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
Stirophos	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloronate	0.5	mg/kg	< 0.5	-	< 0.5	-
Heavy Metals						
Arsenic	2	mg/kg	4.3	2.1	4.5	4.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	7.8	< 0.4
Chromium	5	mg/kg	11	5.2	11	13
Copper	5	mg/kg	47	28	18	24
Lead	5	mg/kg	100	26	370	60
Mercury	0.05	mg/kg	0.62	0.10	0.30	0.18
Nickel	5	mg/kg	< 5	< 5	< 5	5.2
Zinc	5	mg/kg	80	19	14000	59
% Moisture	0.1	%	16	16	7.2	16

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 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	%	99	92	99	91
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Volatile Organics						
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Propanone (Acetone)	5	mg/kg	< 5	-	< 5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.05	mg/kg	< 0.05	-	< 0.05	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	< 0.3	-
Fluorobenzene (surr.)	1	%	89	-	91	-
4-Bromofluorobenzene (surr.)	1	%	99	-	99	-
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

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
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	0.8	< 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	0.8	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	1.6	< 0.5
2-Fluorobiphenyl (surr.)	1	%	94	99	104	92
p-Terphenyl-d14 (surr.)	1	%	91	100	104	89
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	-	< 0.1	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	< 0.05	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	< 0.05	-
a-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Aldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
b-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
d-BHC	0.05	mg/kg	< 0.05	-	< 0.05	-
Dieldrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan I	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan II	0.05	mg/kg	< 0.05	-	< 0.05	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	< 0.05	-
Endrin ketone	0.05	mg/kg	< 0.05	-	< 0.05	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor	0.05	mg/kg	< 0.05	-	< 0.05	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	< 0.05	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	< 0.05	-
Methoxychlor	0.2	mg/kg	< 0.2	-	< 0.2	-
Toxaphene	1	mg/kg	< 1	-	< 1	-
Dibutylchlorendate (surr.)	1	%	100	-	104	-
Tetrachloro-m-xylene (surr.)	1	%	112	-	109	-

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
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	%	100	-	104	-
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
Semivolatile Organic Compounds (SVOC)						
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	94	-	104	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-	< 1	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3-Nitroaniline	1	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbazole	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorpyrifos	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
Coumaphos	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
d-BHC	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-O	0.5	mg/kg	< 0.5	-	< 0.5	-
Demeton-S	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diazinon	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorvos	0.5	mg/kg	< 0.5	-	< 0.5	-
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethoate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Disulfoton	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethoprop	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenitrothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fensulfothion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fenthion	0.5	mg/kg	< 0.5	-	< 0.5	-
Fluoranthene	0.5	mg/kg	< 0.5	-	0.8	-
Fluorene	0.5	mg/kg	< 0.5	-	< 0.5	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Malathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl azinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Methyl parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Mevinphos	0.5	mg/kg	< 0.5	-	< 0.5	-
Monocrotophos	10	mg/kg	< 10	-	< 10	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene-d5 (surr.)	1	%	83	-	90	-
p-Terphenyl-d14 (surr.)	1	%	91	-	104	-
Parathion	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			BH11 0.2-0.3	BH11 0.5-0.6	BH12 0.2-0.3	BH12 0.9-1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09091	S16-Ja09092	S16-Ja09094	S16-Ja09096
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol	0.5	mg/kg	< 0.5	-	1.1	-
Phenol-d6 (surr.)	1	%	85	-	87	-
Phorate	0.5	mg/kg	< 0.5	-	< 0.5	-
Profenofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Prothiofos	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	0.8	-
Ronnel	0.5	mg/kg	< 0.5	-	< 0.5	-
Stirophos	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloronate	0.5	mg/kg	< 0.5	-	< 0.5	-
Heavy Metals						
Arsenic	2	mg/kg	4.7	3.1	4.6	5.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	11	5.6	11	18
Copper	5	mg/kg	21	17	39	27
Lead	5	mg/kg	26	19	55	65
Mercury	0.05	mg/kg	0.08	< 0.05	0.55	0.31
Nickel	5	mg/kg	< 5	< 5	9.4	7.2
Zinc	5	mg/kg	8.9	< 5	66	65
% Moisture	0.1	%	17	18	12	15

Client Sample ID			BH13 0.2-0.3	BH13 0.5-0.6	TRIP 2
Sample Matrix			Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09098	S16-Ja09099	S16-Ja09102
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 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	150	93	< 50
TRH C10-36 (Total)	50	mg/kg	150	93	< 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	%	98	96	94
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	-

Client Sample ID			BH13 0.2-0.3	BH13 0.5-0.6	TRIP 2
Sample Matrix			Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09098	S16-Ja09099	S16-Ja09102
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit			
Volatile Organics					
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	-
2-Propanone (Acetone)	5	mg/kg	< 5	-	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	-
Allyl chloride	0.05	mg/kg	< 0.05	-	-
Benzene	0.1	mg/kg	< 0.1	-	-
Bromobenzene	0.5	mg/kg	< 0.5	-	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	-
Bromoform	0.5	mg/kg	< 0.5	-	-
Bromomethane	0.5	mg/kg	< 0.5	-	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	-
Chloroethane	0.5	mg/kg	< 0.5	-	-
Chloroform	0.5	mg/kg	< 0.5	-	-
Chloromethane	0.5	mg/kg	< 0.5	-	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	-
Dibromomethane	0.5	mg/kg	< 0.5	-	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	-
Iodomethane	0.5	mg/kg	< 0.5	-	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	-
o-Xylene	0.1	mg/kg	< 0.1	-	-
Styrene	0.5	mg/kg	< 0.5	-	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	-
Toluene	0.1	mg/kg	< 0.1	-	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	-
Trichloroethene	0.5	mg/kg	< 0.5	-	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	-
Xylenes - Total	0.3	mg/kg	< 0.3	-	-
Fluorobenzene (surr.)	1	%	87	-	-
4-Bromofluorobenzene (surr.)	1	%	98	-	-

Client Sample ID			BH13 0.2-0.3	BH13 0.5-0.6	TRIP 2
Sample Matrix			Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09098	S16-Ja09099	S16-Ja09102
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 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	0.6	< 0.5
Total PAH*	0.5	mg/kg	0.5	1.1	< 0.5
2-Fluorobiphenyl (surr.)	1	%	101	116	73
p-Terphenyl-d14 (surr.)	1	%	102	114	71
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	-	-
4.4'-DDD	0.05	mg/kg	< 0.05	-	-
4.4'-DDE	0.05	mg/kg	< 0.05	-	-
4.4'-DDT	0.05	mg/kg	< 0.05	-	-
a-BHC	0.05	mg/kg	< 0.05	-	-
Aldrin	0.05	mg/kg	< 0.05	-	-
b-BHC	0.05	mg/kg	< 0.05	-	-
d-BHC	0.05	mg/kg	< 0.05	-	-
Dieldrin	0.05	mg/kg	< 0.05	-	-
Endosulfan I	0.05	mg/kg	< 0.05	-	-
Endosulfan II	0.05	mg/kg	< 0.05	-	-
Endosulfan sulphate	0.05	mg/kg	< 0.05	-	-
Endrin	0.05	mg/kg	< 0.05	-	-
Endrin aldehyde	0.05	mg/kg	< 0.05	-	-
Endrin ketone	0.05	mg/kg	< 0.05	-	-
g-BHC (Lindane)	0.05	mg/kg	< 0.05	-	-
Heptachlor	0.05	mg/kg	< 0.05	-	-
Heptachlor epoxide	0.05	mg/kg	< 0.05	-	-
Hexachlorobenzene	0.05	mg/kg	< 0.05	-	-
Methoxychlor	0.2	mg/kg	< 0.2	-	-
Toxaphene	1	mg/kg	< 1	-	-

Client Sample ID			BH13 0.2-0.3	BH13 0.5-0.6	TRIP 2
Sample Matrix			Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09098	S16-Ja09099	S16-Ja09102
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit			
Organochlorine Pesticides					
Dibutylchlorendate (surr.)	1	%	93	-	-
Tetrachloro-m-xylene (surr.)	1	%	98	-	-
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	%	93	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	120	< 100
TRH >C34-C40	100	mg/kg	240	140	< 100
Semivolatile Organic Compounds (SVOC)					
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	101	-	-
2-Methylnaphthalene	0.5	mg/kg	< 0.5	-	-
2-Methylphenol (o-Cresol)	0.5	mg/kg	< 0.5	-	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	-
2-Nitroaniline	1	mg/kg	< 1	-	-
2-Nitrophenol	0.5	mg/kg	< 0.5	-	-
3&4-Methylphenol (m&p-Cresol)	1	mg/kg	< 1	-	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	-
3-Nitroaniline	1	mg/kg	< 0.5	-	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	-
4-Chloro-3-methylphenol	0.5	mg/kg	< 0.5	-	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	-
4-Nitrophenol	0.5	mg/kg	< 0.5	-	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	-
4.4'-DDT	1	mg/kg	< 1	-	-
Acenaphthene	0.5	mg/kg	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	-
Acetophenone	0.5	mg/kg	< 0.5	-	-
Aldrin	0.5	mg/kg	< 0.5	-	-
Aniline	0.5	mg/kg	< 0.5	-	-
Anthracene	0.5	mg/kg	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	-	-
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	-	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	-
Bis(2-chloroethyl)ether	0.5	mg/kg	< 0.5	-	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	-
Carbazole	0.5	mg/kg	< 0.5	-	-

Client Sample ID			BH13 0.2-0.3	BH13 0.5-0.6	TRIP 2
Sample Matrix			Soil	Soil	Soil
Eurofins | mgt Sample No.			S16-Ja09098	S16-Ja09099	S16-Ja09102
Date Sampled			Jan 19, 2016	Jan 19, 2016	Jan 19, 2016
Test/Reference	LOR	Unit			
Semivolatile Organic Compounds (SVOC)					
Chlorpyrifos	0.5	mg/kg	< 0.5	-	-
Chrysene	0.5	mg/kg	< 0.5	-	-
Coumaphos	0.5	mg/kg	< 0.5	-	-
d-BHC	0.5	mg/kg	< 0.5	-	-
Demeton-O	0.5	mg/kg	< 0.5	-	-
Demeton-S	0.5	mg/kg	< 0.5	-	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	-
Diazinon	0.5	mg/kg	< 0.5	-	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	-
Dichlorvos	0.5	mg/kg	< 0.5	-	-
Dieldrin	0.5	mg/kg	< 0.5	-	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	-
Dimethoate	0.5	mg/kg	< 0.5	-	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	-
Diphenylamine	0.5	mg/kg	< 0.5	-	-
Disulfoton	0.5	mg/kg	< 0.5	-	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	-
Endrin	0.5	mg/kg	< 0.5	-	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	-
Endrin ketone	0.5	mg/kg	< 0.5	-	-
Ethoprop	0.5	mg/kg	< 0.5	-	-
Fenitrothion	0.5	mg/kg	< 0.5	-	-
Fensulfothion	0.5	mg/kg	< 0.5	-	-
Fenthion	0.5	mg/kg	< 0.5	-	-
Fluoranthene	0.5	mg/kg	< 0.5	-	-
Fluorene	0.5	mg/kg	< 0.5	-	-
g-BHC (Lindane)	0.5	mg/kg	< 0.5	-	-
Heptachlor	0.5	mg/kg	< 0.5	-	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	-
Malathion	0.5	mg/kg	< 0.5	-	-
Methoxychlor	0.5	mg/kg	< 0.5	-	-
Methyl azinphos	0.5	mg/kg	< 0.5	-	-
Methyl parathion	0.5	mg/kg	< 0.5	-	-
Mevinphos	0.5	mg/kg	< 0.5	-	-
Monocrotophos	10	mg/kg	< 10	-	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	-
Naphthalene	0.5	mg/kg	< 0.5	-	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	-
Nitrobenzene-d5 (surr.)	1	%	86	-	-
p-Terphenyl-d14 (surr.)	1	%	102	-	-

Client Sample ID Sample Matrix Eurofins | mgt Sample No. Date Sampled Test/Reference	LOR	Unit	BH13 0.2-0.3 Soil S16-Ja09098 Jan 19, 2016	BH13 0.5-0.6 Soil S16-Ja09099 Jan 19, 2016	TRIP 2 Soil S16-Ja09102 Jan 19, 2016
Semivolatile Organic Compounds (SVOC)					
Parathion	0.5	mg/kg	< 0.5	-	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	-
Pentachlorophenol	1	mg/kg	< 1	-	-
Phenanthrene	0.5	mg/kg	< 0.5	-	-
Phenol	0.5	mg/kg	< 0.5	-	-
Phenol-d6 (surr.)	1	%	84	-	-
Phorate	0.5	mg/kg	< 0.5	-	-
Profenofos	0.5	mg/kg	< 0.5	-	-
Prothiofos	0.5	mg/kg	< 0.5	-	-
Pyrene	0.5	mg/kg	0.5	-	-
Ronnel	0.5	mg/kg	< 0.5	-	-
Stirophos	0.5	mg/kg	< 0.5	-	-
Trichloronate	0.5	mg/kg	< 0.5	-	-
Heavy Metals					
Arsenic	2	mg/kg	3.8	4.2	5.4
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	41	14	20
Copper	5	mg/kg	36	25	31
Lead	5	mg/kg	42	42	62
Mercury	0.05	mg/kg	0.17	0.22	0.34
Nickel	5	mg/kg	43	16	7.1
Zinc	5	mg/kg	83	92	60
% Moisture	0.1	%	8.0	9.0	19

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	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 20, 2016	14 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 20, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Metals M8	Sydney	Jan 20, 2016	28 Day
- Method: LTM-MET-3040_R0 TOTAL AND DISSOLVED METALS AND MERCURY IN WATERS BY ICP-MS			
Volatile Organics	Sydney	Jan 20, 2016	7 Day
- Method: E016 Volatile Organic Compounds (VOC)			
Semivolatile Organic Compounds (SVOC)	Sydney	Jan 20, 2016	14 Day
- Method: E017 Semivolatile Organic Compounds (SVOC)			
Eurofins | mgt Suite B13			
Organochlorine Pesticides	Sydney	Jan 20, 2016	14 Day
- Method: E013 Organochlorine Pesticides (OC)			
Polychlorinated Biphenyls (PCB)	Sydney	Jan 20, 2016	28 Day
- Method: E013 Polychlorinated Biphenyls (PCB)			
% Moisture	Sydney	Jan 20, 2016	14 Day
- Method: LTM-GEN-7080 Moisture			

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 20, 2016 10:07 AM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486089	**Due:**	Jan 21, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH7 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09080	X			X	X	X	X	X
BH7 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09081							X	X
BH7 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09082			X					
BH10 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09083	X			X	X	X	X	X
BH10 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09084							X	X
BH10 1.0-1.1	Jan 19, 2016		Soil	S16-Ja09085			X					
BH6 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09086	X			X	X	X	X	X
BH6 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09087							X	X
BH3 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09088	X			X	X	X	X	X
BH3 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09089							X	X

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

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Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH3 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09090		X						
BH11 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09091	X			X	X	X	X	X
BH11 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09092							X	X
BH11 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09093			X					
BH12 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09094	X			X	X	X	X	X
BH12 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09095			X					
BH12 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09096							X	X
BH12 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09097			X					
BH13 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09098	X			X	X	X	X	X
BH13 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09099							X	X
BH13 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09100			X					

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Received:	Jan 20, 2016 10:07 AM
Due:	Jan 21, 2016
Priority:	1 Day
Contact Name:	Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH13 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09101			X					
TRIP 2	Jan 19, 2016		Soil	S16-Ja09102							X	X

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's 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							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 5			5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.05			0.05	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	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	
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							
Semivolatile Organic Compounds (SVOC)							
2-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2-Methylnaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.5			0.5	Pass	
2-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
2-Nitroaniline	mg/kg	< 1			1	Pass	
2-Nitrophenol	mg/kg	< 0.5			0.5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 1			1	Pass	
3-Methylcholanthrene	mg/kg	< 0.5			0.5	Pass	
4-Aminobiphenyl	mg/kg	< 0.5			0.5	Pass	
4-Bromophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 0.5			0.5	Pass	
4-Chlorophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Nitrophenol	mg/kg	< 0.5			0.5	Pass	
4.4'-DDD	mg/kg	< 0.5			0.5	Pass	
4.4'-DDE	mg/kg	< 0.5			0.5	Pass	
4.4'-DDT	mg/kg	< 1			1	Pass	
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Acetophenone	mg/kg	< 0.5			0.5	Pass	
Aldrin	mg/kg	< 0.5			0.5	Pass	
Aniline	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(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroethoxy)methane	mg/kg	< 0.5			0.5	Pass	
Bis(2-ethylhexyl)phthalate	mg/kg	< 5			5	Pass	
Butyl benzyl phthalate	mg/kg	< 0.5			0.5	Pass	
Chlorpyrifos	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Coumaphos	mg/kg	< 0.5			0.5	Pass	
d-BHC	mg/kg	< 0.5			0.5	Pass	
Demeton-O	mg/kg	< 0.5			0.5	Pass	
Demeton-S	mg/kg	< 0.5			0.5	Pass	
Di-n-butyl phthalate	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Di-n-octyl phthalate	mg/kg	< 0.5			0.5	Pass	
Diazinon	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Dibenzofuran	mg/kg	< 0.5			0.5	Pass	
Dichlorvos	mg/kg	< 0.5			0.5	Pass	
Dieldrin	mg/kg	< 0.5			0.5	Pass	
Diethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethoate	mg/kg	< 0.5			0.5	Pass	
Dimethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Diphenylamine	mg/kg	< 0.5			0.5	Pass	
Disulfoton	mg/kg	< 0.5			0.5	Pass	
Endosulfan sulphate	mg/kg	< 0.5			0.5	Pass	
Endrin	mg/kg	< 0.5			0.5	Pass	
Endrin aldehyde	mg/kg	< 0.5			0.5	Pass	
Endrin ketone	mg/kg	< 0.5			0.5	Pass	
Ethoprop	mg/kg	< 0.5			0.5	Pass	
Fenitrothion	mg/kg	< 0.5			0.5	Pass	
Fensulfothion	mg/kg	< 0.5			0.5	Pass	
Fenthion	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
g-BHC (Lindane)	mg/kg	< 0.5			0.5	Pass	
Heptachlor	mg/kg	< 0.5			0.5	Pass	
Heptachlor epoxide	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 1			1	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Malathion	mg/kg	< 0.5			0.5	Pass	
Methoxychlor	mg/kg	< 0.5			0.5	Pass	
Methyl azinphos	mg/kg	< 0.5			0.5	Pass	
Methyl parathion	mg/kg	< 0.5			0.5	Pass	
Mevinphos	mg/kg	< 0.5			0.5	Pass	
Monocrotophos	mg/kg	< 10			10	Pass	
N-Nitrosodibutylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodipropylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosopiperidine	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Nitrobenzene	mg/kg	< 0.5			0.5	Pass	
Parathion	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachloronitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Phorate	mg/kg	< 0.5			0.5	Pass	
Profenofos	mg/kg	< 0.5			0.5	Pass	
Prothiofos	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Ronnel	mg/kg	< 0.5			0.5	Pass	
Trichloronate	mg/kg	< 0.5			0.5	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	%	93			70-130	Pass	
TRH C10-C14	%	92			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	88			70-130	Pass	
Toluene	%	109			70-130	Pass	
Ethylbenzene	%	87			70-130	Pass	
m&p-Xylenes	%	90			70-130	Pass	
o-Xylene	%	91			70-130	Pass	
Xylenes - Total	%	96			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethane	%	108			70-130	Pass	
1.1.1-Trichloroethane	%	104			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	92			70-130	Pass	
1.1.2-Trichloroethane	%	95			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	109			70-130	Pass	
1.2-Dibromoethane	%	98			70-130	Pass	
1.2-Dichlorobenzene	%	91			70-130	Pass	
1.2-Dichloroethane	%	91			70-130	Pass	
1.2-Dichloropropane	%	92			70-130	Pass	
1.2.3-Trichloropropane	%	106			70-130	Pass	
1.2.4-Trimethylbenzene	%	85			70-130	Pass	
1.3-Dichlorobenzene	%	91			70-130	Pass	
1.3-Dichloropropane	%	119			70-130	Pass	
1.3.5-Trimethylbenzene	%	86			70-130	Pass	
1.4-Dichlorobenzene	%	90			70-130	Pass	
2-Butanone (MEK)	%	117			70-130	Pass	
2-Propanone (Acetone)	%	107			70-130	Pass	
4-Chlorotoluene	%	88			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	%	119			70-130	Pass	
Allyl chloride	%	89			75-125	Pass	
Bromobenzene	%	92			70-130	Pass	
Bromochloromethane	%	98			70-130	Pass	
Bromodichloromethane	%	91			70-130	Pass	
Bromoform	%	101			70-130	Pass	
Bromomethane	%	112			70-130	Pass	
Carbon disulfide	%	92			70-130	Pass	
Carbon Tetrachloride	%	115			70-130	Pass	
Chlorobenzene	%	90			70-130	Pass	
Chloroethane	%	116			70-130	Pass	
Chloroform	%	94			70-130	Pass	
Chloromethane	%	128			70-130	Pass	
cis-1.2-Dichloroethene	%	124			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
cis-1.3-Dichloropropene	%	108			70-130	Pass	
Dibromochloromethane	%	92			70-130	Pass	
Dibromomethane	%	96			70-130	Pass	
Dichlorodifluoromethane	%	123			70-130	Pass	
Iodomethane	%	75			70-130	Pass	
Isopropyl benzene (Cumene)	%	89			70-130	Pass	
Methylene Chloride	%	85			70-130	Pass	
Styrene	%	82			70-130	Pass	
Tetrachloroethene	%	105			70-130	Pass	
trans-1.2-Dichloroethene	%	125			70-130	Pass	
trans-1.3-Dichloropropene	%	108			70-130	Pass	
Trichloroethene	%	85			70-130	Pass	
Trichlorofluoromethane	%	84			70-130	Pass	
Vinyl chloride	%	129			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	112			70-130	Pass	
TRH C6-C10	%	89			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	111			70-130	Pass	
Acenaphthylene	%	103			70-130	Pass	
Anthracene	%	104			70-130	Pass	
Benz(a)anthracene	%	101			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	103			70-130	Pass	
Benzo(g.h.i)perylene	%	71			70-130	Pass	
Benzo(k)fluoranthene	%	114			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	104			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	76			70-130	Pass	
Naphthalene	%	108			70-130	Pass	
Phenanthrene	%	114			70-130	Pass	
Pyrene	%	110			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	101			70-130	Pass	
4.4'-DDD	%	91			70-130	Pass	
4.4'-DDE	%	100			70-130	Pass	
4.4'-DDT	%	86			70-130	Pass	
a-BHC	%	101			70-130	Pass	
Aldrin	%	107			70-130	Pass	
b-BHC	%	100			70-130	Pass	
d-BHC	%	109			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	100			70-130	Pass	
Endosulfan II	%	97			70-130	Pass	
Endosulfan sulphate	%	95			70-130	Pass	
Endrin	%	99			70-130	Pass	
Endrin aldehyde	%	100			70-130	Pass	
Endrin ketone	%	87			70-130	Pass	
g-BHC (Lindane)	%	99			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	%	83			70-130	Pass	
Heptachlor epoxide	%	99			70-130	Pass	
Hexachlorobenzene	%	101			70-130	Pass	
Methoxychlor	%	84			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls (PCB)							
Aroclor-1248	%	71			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	97			70-130	Pass	
LCS - % Recovery							
Semivolatile Organic Compounds (SVOC)							
2-Chlorophenol	%	98			30-130	Pass	
4-Chloro-3-methylphenol	%	79			30-130	Pass	
4-Nitrophenol	%	71			30-130	Pass	
Acenaphthene	%	116			70-130	Pass	
Acenaphthylene	%	104			70-130	Pass	
Anthracene	%	116			70-130	Pass	
Benz(a)anthracene	%	97			70-130	Pass	
Benzo(a)pyrene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	82			70-130	Pass	
Chlorpyrifos	%	112			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a.h)anthracene	%	98			70-130	Pass	
Dimethoate	%	130			70-130	Pass	
Disulfoton	%	128			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	106			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	95			70-130	Pass	
Methyl azinphos	%	96			70-130	Pass	
Methyl parathion	%	121			70-130	Pass	
N-Nitrosodipropylamine	%	89			70-130	Pass	
Naphthalene	%	114			70-130	Pass	
Parathion	%	121			70-130	Pass	
Phenanthrene	%	112			70-130	Pass	
Phenol	%	102			30-130	Pass	
Phorate	%	122			70-130	Pass	
Pyrene	%	107			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	95			70-130	Pass	
Cadmium	%	99			70-130	Pass	
Chromium	%	105			70-130	Pass	
Copper	%	105			70-130	Pass	
Lead	%	100			70-130	Pass	
Mercury	%	104			70-130	Pass	
Nickel	%	105			70-130	Pass	
Zinc	%	105			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-Ja05708	NCP	%	90			70-130	Pass	
TRH C10-C14	S16-Ja09080	CP	%	91			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
BTEX				Result 1					
Benzene	S16-Ja05708	NCP	%	100			70-130	Pass	
Toluene	S16-Ja05708	NCP	%	97			70-130	Pass	
Ethylbenzene	S16-Ja05708	NCP	%	92			70-130	Pass	
m&p-Xylenes	S16-Ja05708	NCP	%	94			70-130	Pass	
o-Xylene	S16-Ja05708	NCP	%	92			70-130	Pass	
Xylenes - Total	S16-Ja05708	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethane	S16-Ja03595	NCP	%	117			70-130	Pass	
1.1-Dichloroethene	S16-Ja03595	NCP	%	83			70-130	Pass	
1.1.1-Trichloroethane	S16-Ja03595	NCP	%	101			70-130	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja03595	NCP	%	100			70-130	Pass	
1.1.2-Trichloroethane	S16-Ja03595	NCP	%	97			70-130	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja03595	NCP	%	94			70-130	Pass	
1.2-Dibromoethane	S16-Ja03595	NCP	%	95			70-130	Pass	
1.2-Dichlorobenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
1.2-Dichloroethane	S16-Ja03595	NCP	%	94			70-130	Pass	
1.2-Dichloropropane	S16-Ja03595	NCP	%	97			70-130	Pass	
1.2.3-Trichloropropane	S16-Ja03595	NCP	%	95			70-130	Pass	
1.2.4-Trimethylbenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
1.3-Dichlorobenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
1.3-Dichloropropane	S16-Ja03595	NCP	%	94			70-130	Pass	
1.3.5-Trimethylbenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
1.4-Dichlorobenzene	S16-Ja03595	NCP	%	94			70-130	Pass	
2-Butanone (MEK)	S16-Ja03595	NCP	%	124			70-130	Pass	
4-Chlorotoluene	S16-Ja03595	NCP	%	92			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	S16-Ja03595	NCP	%	90			70-130	Pass	
Allyl chloride	S16-Ja03595	NCP	%	93			75-125	Pass	
Bromobenzene	S16-Ja03595	NCP	%	96			70-130	Pass	
Bromochloromethane	S16-Ja03595	NCP	%	94			70-130	Pass	
Bromodichloromethane	S16-Ja03595	NCP	%	98			70-130	Pass	
Bromoform	S16-Ja03595	NCP	%	98			70-130	Pass	
Bromomethane	S16-Ja03595	NCP	%	89			70-130	Pass	
Carbon disulfide	S16-Ja03595	NCP	%	100			70-130	Pass	
Carbon Tetrachloride	S16-Ja03595	NCP	%	98			70-130	Pass	
Chlorobenzene	S16-Ja03595	NCP	%	95			70-130	Pass	
Chloroethane	S16-Ja03595	NCP	%	75			70-130	Pass	
Chloroform	S16-Ja03595	NCP	%	95			70-130	Pass	
Chloromethane	S16-Ja03595	NCP	%	110			70-130	Pass	
cis-1.2-Dichloroethene	S16-Ja03277	NCP	%	130			70-130	Pass	
cis-1.3-Dichloropropene	S16-Ja03595	NCP	%	96			70-130	Pass	
Dibromochloromethane	S16-Ja03595	NCP	%	97			70-130	Pass	
Dibromomethane	S16-Ja03595	NCP	%	94			70-130	Pass	
Dichlorodifluoromethane	S16-Ja03595	NCP	%	118			70-130	Pass	
Iodomethane	S16-Ja03595	NCP	%	86			70-130	Pass	
Isopropyl benzene (Cumene)	S16-Ja03595	NCP	%	93			70-130	Pass	
Methylene Chloride	S16-Ja03595	NCP	%	107			70-130	Pass	
Styrene	S16-Ja03595	NCP	%	88			70-130	Pass	
Tetrachloroethene	S16-Ja03595	NCP	%	98			70-130	Pass	
trans-1.2-Dichloroethene	S16-Ja03595	NCP	%	114			70-130	Pass	
trans-1.3-Dichloropropene	S16-Ja03595	NCP	%	96			70-130	Pass	
Trichloroethene	S16-Ja03595	NCP	%	128			70-130	Pass	
Vinyl chloride	S16-Ja03595	NCP	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S16-Ja05708	NCP	%	96			70-130	Pass	
TRH C6-C10	S16-Ja05708	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S16-Ja09129	NCP	%	94			70-130	Pass	
4.4'-DDD	S16-Ja09129	NCP	%	101			70-130	Pass	
4.4'-DDE	S16-Ja09129	NCP	%	98			70-130	Pass	
4.4'-DDT	S16-Ja09129	NCP	%	83			70-130	Pass	
a-BHC	S16-Ja09129	NCP	%	92			70-130	Pass	
Aldrin	S16-Ja09129	NCP	%	97			70-130	Pass	
b-BHC	S16-Ja09129	NCP	%	91			70-130	Pass	
d-BHC	S16-Ja09129	NCP	%	99			70-130	Pass	
Dieldrin	S16-Ja09129	NCP	%	94			70-130	Pass	
Endosulfan I	S16-Ja09129	NCP	%	95			70-130	Pass	
Endosulfan II	S16-Ja09129	NCP	%	97			70-130	Pass	
Endosulfan sulphate	S16-Ja09129	NCP	%	100			70-130	Pass	
Endrin	S16-Ja09129	NCP	%	96			70-130	Pass	
Endrin aldehyde	S16-Ja09129	NCP	%	109			70-130	Pass	
Endrin ketone	S16-Ja09129	NCP	%	107			70-130	Pass	
g-BHC (Lindane)	S16-Ja09129	NCP	%	94			70-130	Pass	
Heptachlor	S16-Ja09129	NCP	%	86			70-130	Pass	
Heptachlor epoxide	S16-Ja09129	NCP	%	94			70-130	Pass	
Hexachlorobenzene	S16-Ja09129	NCP	%	88			70-130	Pass	
Methoxychlor	S16-Ja09129	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S16-Ja09080	CP	%	106			70-130	Pass	
Spike - % Recovery									
Semivolatile Organic Compounds (SVOC)				Result 1					
Chlorpyrifos	S16-Ja04419	NCP	%	117			70-130	Pass	
Dimethoate	S16-Ja04419	NCP	%	129			70-130	Pass	
Disulfoton	S16-Ja04419	NCP	%	124			70-130	Pass	
Methyl azinphos	S16-Ja04419	NCP	%	114			70-130	Pass	
Methyl parathion	S16-Ja03312	NCP	%	109			70-130	Pass	
Parathion	S16-Ja04419	NCP	%	128			70-130	Pass	
Phorate	S16-Ja04419	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Ja09080	CP	%	91			70-130	Pass	
Cadmium	S16-Ja09080	CP	%	90			70-130	Pass	
Chromium	S16-Ja09080	CP	%	91			70-130	Pass	
Mercury	S16-Ja09130	NCP	%	114			70-130	Pass	
Nickel	S16-Ja09080	CP	%	79			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Ja09118	NCP	%	113			70-130	Pass	
Acenaphthylene	S16-Ja09118	NCP	%	108			70-130	Pass	
Anthracene	S16-Ja09118	NCP	%	110			70-130	Pass	
Benz(a)anthracene	S16-Ja09118	NCP	%	101			70-130	Pass	
Benzo(a)pyrene	S16-Ja09118	NCP	%	112			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Ja09118	NCP	%	109			70-130	Pass	
Benzo(g.h.i)perylene	S16-Ja09118	NCP	%	88			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(k)fluoranthene	S16-Ja09118	NCP	%	119			70-130	Pass	
Chrysene	S16-Ja09118	NCP	%	117			70-130	Pass	
Dibenz(a.h)anthracene	S16-Ja09118	NCP	%	99			70-130	Pass	
Fluoranthene	S16-Ja09118	NCP	%	110			70-130	Pass	
Fluorene	S16-Ja09118	NCP	%	107			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S16-Ja09118	NCP	%	97			70-130	Pass	
Naphthalene	S16-Ja09118	NCP	%	115			70-130	Pass	
Phenanthrene	S16-Ja09118	NCP	%	115			70-130	Pass	
Pyrene	S16-Ja09118	NCP	%	113			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls (PCB)				Result 1					
Aroclor-1248	S16-Ja09086	CP	%	76			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S16-Ja09094	CP	%	88			70-130	Pass	
Cadmium	S16-Ja09094	CP	%	86			70-130	Pass	
Chromium	S16-Ja09094	CP	%	97			70-130	Pass	
Copper	S16-Ja09094	CP	%	105			70-130	Pass	
Lead	S16-Ja09094	CP	%	113			70-130	Pass	
Nickel	S16-Ja09094	CP	%	95			70-130	Pass	
Zinc	S16-Ja09094	CP	%	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-Ja09053	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Ja09053	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S16-Ja09053	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S16-Ja09053	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S16-Ja09053	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S16-Ja09053	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S16-Ja09053	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S16-Ja09053	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
4-Chlorotoluene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
4-Methyl-2-pentanone (MIBK)	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S16-Ja09053	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Bromobenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S16-Ja09053	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S16-Ja09053	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Semivolatile Organic Compounds (SVOC)				Result 1	Result 2	RPD			
Chlorpyrifos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Coumaphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Demeton-O	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Demeton-S	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Diazinon	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorvos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dimethoate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Disulfoton	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethoprop	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fenitrothion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fensulfothion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fenthion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Malathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl azinphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl parathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Mevinphos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Monocrotophos	S16-Ja04415	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Parathion	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phorate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Profenofos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Semivolatile Organic Compounds (SVOC)				Result 1	Result 2	RPD			
Prothiofos	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ronnel	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloronate	S16-Ja04415	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S16-Ja09083	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S16-Ja09083	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S16-Ja09083	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S16-Ja09083	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls (PCB)				Result 1	Result 2	RPD			
Aroclor-1016	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1232	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S16-Ja09083	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S16-Ja09092	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S16-Ja09092	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S16-Ja09092	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Naphthalene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S16-Ja09092	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S16-Ja09092	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-Ja09092	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S16-Ja09092	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S16-Ja09092	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S16-Ja09092	CP	mg/kg	3.1	2.5	23	30%	Pass	
Cadmium	S16-Ja09092	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S16-Ja09092	CP	mg/kg	5.6	5.0	12	30%	Pass	
Copper	S16-Ja09092	CP	mg/kg	17	15	12	30%	Pass	
Lead	S16-Ja09092	CP	mg/kg	19	15	20	30%	Pass	
Mercury	S16-Ja09092	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Nickel	S16-Ja09092	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S16-Ja09092	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S16-Ja09092	CP	%	18	18	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

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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

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.

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Attention:	Sally King
Report	486089-AID
Project Name	GEOTLCOV25283AD
Received Date	Jan 20, 2016
Date Reported	Jan 21, 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 GEOTLCOV25283AD
Project ID
Date Sampled Jan 19, 2016
Report 486089-AID

Client Sample ID	Eurofins | mgt Sample No.	Date Sampled	Sample Description	Result
BH7 0.2-0.3	16-Ja09080	Jan 19, 2016	Approximate Sample 127g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH10 0.2-0.3	16-Ja09083	Jan 19, 2016	Approximate Sample 81g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH6 0.2-0.3	16-Ja09086	Jan 19, 2016	Approximate Sample 152g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH3 0.2-0.3	16-Ja09088	Jan 19, 2016	Approximate Sample 97g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH11 0.2-0.3	16-Ja09091	Jan 19, 2016	Approximate Sample 71g Sample consisted of: Brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH12 0.2-0.3	16-Ja09094	Jan 19, 2016	Approximate Sample 53g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.
BH13 0.2-0.3	16-Ja09098	Jan 19, 2016	Approximate Sample 121g Sample consisted of: Grey-brown coarse grain soil and rocks	No asbestos detected. Organic fibre detected. No respirable fibres detected.

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jan 21, 2016	Indefinite

eurofins | mgt

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

Melbourne
3-5 Kingston Town Close
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NATA # 1261
Site # 1254 & 14271

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

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

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486089
Phone: +61 2 9406 1000
Fax: +61 2 9406 1002

Received: Jan 20, 2016 10:07 AM
Due: Jan 21, 2016
Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH7 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09080	X			X	X	X	X	X
BH7 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09081							X	X
BH7 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09082			X					
BH10 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09083	X			X	X	X	X	X
BH10 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09084							X	X
BH10 1.0-1.1	Jan 19, 2016		Soil	S16-Ja09085			X					
BH6 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09086	X			X	X	X	X	X
BH6 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09087							X	X
BH3 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09088	X			X	X	X	X	X
BH3 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09089							X	X

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NATA # 1261 Site # 20794

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486089
Phone: +61 2 9406 1000
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Received: Jan 20, 2016 10:07 AM
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Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH3 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09090		X						
BH11 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09091	X			X	X	X	X	X
BH11 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09092							X	X
BH11 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09093			X					
BH12 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09094	X			X	X	X	X	X
BH12 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09095			X					
BH12 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09096							X	X
BH12 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09097			X					
BH13 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09098	X			X	X	X	X	X
BH13 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09099							X	X
BH13 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09100			X					

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NATA # 1261 Site # 20794

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**	
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:** **Phone:** **Fax:**	486089 +61 2 9406 1000 +61 2 9406 1002
Project Name:	GEOTLCOV25283AD		

Received:	Jan 20, 2016 10:07 AM
Due:	Jan 21, 2016
Priority:	1 Day
Contact Name:	Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH13 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09101			X					
TRIP 2	Jan 19, 2016		Soil	S16-Ja09102							X	X

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

Units

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

Terms

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

Comments

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Authorised by:

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

coffey

Chain of Custody

486089

No: 06517

Laboratory Quotation / Order No:

Job No: GEORGE (?) 2528 [illegible] Sheet 1 of 3

Dispatch to: (Address & Phone No.)	Sampled by: CHARLIE LEE	Consigning Officer:
		Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service:
		Consignment Note No.

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Elen Wh. Envirolab (?)	19.01.16	1730
			Sean (?)	20/1	10:07

	Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC SVOC	B13	Asbestos ⊛	Sample Condition on Receipt
1	BH7 0.2-0.3	SOIL	JAR		19/1					X	X	X		
	" "	"	ZIP BAG		↓								X	
2	BH7 0.5-0.6	"	JAR							X				
	" "	"	ZIP											
3	BH7 0.9-1	"	JAR											
	" "	"	ZIP											
	BH10 0.2-0.3	"	JAR							X	X	X		
	BH10 "	"	ZIP										X	
	BH10 0.5-0.6	"	JAR							X				
	BH10 "	"	ZIP											
	BH10 1-1.1	"	JAR											
	" "	"	ZIP											
	BH16 0.2-0.3	"	JAR							X	X	X		
	" "	"	ZIP										X	
	BH16 0.5-0.6	"	JAR							X				
	" "	"	ZIP		↓									

Special Laboratory Instructions: 24 HOUR TURNAROUND ON ALL. PLEASE SALLY.KING @ COFFEY.COM (?)

Detection Limits:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

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⊛ presence/absence.

642209-06

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Chain of Custody

No: 06518

Laboratory Quotation / Order No:

Job No: GEOTLCOV25280AD Sheet 2 of 3

Dispatch to: (Address & Phone No.)	Sampled by:	Consigning Officer: Date Dispatched:
Attention: SEE	Project Manager: (report results to) PAGE 1	Courier Service: Consignment Note No:

Relinquished by:	Date:	Time	Received by:	Date:	Time:
			Elkins Effingt	19/01/16	1730
			Sean	20/1	10:07

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC / SVOC	B13	Asbestos ⊛	Sample Condition on Receipt
BH3 0.2-0.3	Soil	JAR		19/1					X	X	X		
~ ~	~	ZIP		↓								X	
BH3 0.5-0.6	~	JAR							X				
~ ~	"	ZIP											
BH3 0.9-1	~	JAR											
BH11 0.2-0.3	"	JAR							X	X	X		
BH11 "	~	ZIP										X	
BH11 0.5-0.6	"	JAR							X				
BH11 "	"	ZIP											
BH11 0.9-1	"	JAR											
~ ~	"	ZIP											
BH12 0.2-0.3	~	JAR							X	X	X		
BH12 "	"	ZIP										X	
BH12 0.5-0.6	"	JAR											
~ ~	~	ZIP											
BH12 0.9-1	"	JAR							X				
~ ~	"	ZIP		↓									

Special Laboratory Instructions:
⊛ presence/absence

Detection Limits: SEE PAGE

Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

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Chain of Custody

No: 06519

Laboratory Quotation / Order No:

Job No: Geotcon 25283AD Sheet 3 of 3

Dispatch to: (Address & Phone No.)	Sampled by:	Consigning Officer:
		Date Dispatched:
Attention: See	Project Manager: (report results to) PAGE 1	Courier Service:
		Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Elen Wu Estonyl	19/01/6	1730
			SQu	20/1	16:07

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC/SVOC	B13	Asbestos	Sample Condition on Receipt
BH12 1.9-2	Soil	JAR		19/1									
" "	"	ZIP											
BH13 0.2-0.3	"	JAR							X	X	X		
" "	"	ZIP										X	
BH13 0.5-0.6	"	JAR							X				
BH13 "	"	ZIP											
BH13 0.9-1	"	JAR											
" "	"	ZIP											
BH13 1.9-2	"	JAR											
" "	"	ZIP											
DUP 2	"								X				
TRIP 2	"								X				

forward to Envirolab

Special Laboratory Instructions: (*)presence/absence

Detection Limits:

Turnaround Required: See PAGE 1

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

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Chain of Custody

No: 06517

Laboratory Quotation / Order No:

Job No: GEOTECH 25203AD

Sheet 1 of 3

Dispatch to: (Address & Phone No.)	Sampled by: CHARLIE LEE	Consigning Officer: / Date Dispatched:
Attention:	Project Manager: (report results to) SALLY KING & CHARLIE LEE	Courier Service: / Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Ellen Mh. Ellmyt	190116	1730

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	Analyses Required: PAHs	TPHs	MAHs + BTEX	Metals:											Sample Condition on Receipt
BH7 0.2-0.3	SOIL	JAR																	
" "	"	ZIP BAG																	
BH7 0.5-0.6	"	JAR																	
" "	"	ZIP																	
BH7 0.9-1	"	JAR																	
" "	"	ZIP																	
BH10 0.2-0.3	"	JAR																	
BH10 "	"	ZIP																	
BH10 0.5-0.6	"	JAR																	
BH10 "	"	ZIP																	
BH10 1-1.1	"	JAR																	
" "	"	ZIP																	
BH6 0.2-0.3	"	JAR																	
" "	"	ZIP																	
BH6 0.5-0.6	"	JAR																	
" "	"	ZIP																	

Special Laboratory Instructions: 24 HOUR TURNAROUND ON ALL. PLEASE SALLY.KING@COFFEY.COM

Detection Limits:

Turnaround Required:

JOB NUMBER **MUST** BE REFERENCED ON ALL SUBSEQUENT PAGES

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Chain of Custody

No: 06518

Laboratory Quotation / Order No:

Job No: GBONCOV25280 Sheet 2 of 3

Dispatch to: (Address & Phone No.)	Sampled by:	Consigning Officer: Date Dispatched:
Attention: SEE PAGE 1	Project Manager: (report results to)	Courier Service: Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Elkington Eff mgt	190116	1730

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	Analyses Required: PAHs	TPHs	MAHs = BTEX	Metals:											Sample Condition on Receipt
BH3 0.2-0.3	Soil	JAR																	
" "	"	RID																	
BH3 0.5-0.6	"	JAR																	
" "	"	RIP																	
BH3 0.9-1	"	JAR																	
BH11 0.2-0.3	"	JAR																	
BH11 " "	"	RIP																	
BH11 0.5-0.6	"	JAR																	
BH11 " "	"	RIP																	
BH22 0.9-1	"	JAR																	
" "	"	RIP																	
BH12 0.2-0.3	"	JAR																	
BH12 " "	"	RIP																	
BH12 0.5-0.6	"	JAR																	
" "	"	RIP																	
BH12 0.9-1	"	JAR																	
" "	"	RIP																	

Special Laboratory Instructions:

Detection Limits: SEE PAGE 1 Turnaround Required:

JOB NUMBER **MUST** BE REFERENCED ON ALL SUBSEQUENT PAGES

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Chain of Custody

No: 06519

Laboratory Quotation / Order No:

Job No: GEOTLOW 25283AD

Sheet 3 of 3

Dispatch to: (Address & Phone No.)	Sampled by:	Consigning Officer:
		Date Dispatched:
Attention: SEE	Project Manager: (report results to) PAGE 1	Courier Service:
		Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Elkn Wy Esdaile	190116	1730

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	Analyses Required: PAHs	TPHs	MAHs = BTEX	Metals:											Sample Condition on Receipt
BH12 1.9-2	Soil	JAR																	
" "	"	ZIP																	
BH13 0.2-0.3	"	JAR																	
" "	"	ZIP																	
BH13 0.5-0.6	"	JAR																	
BH13 -1	"	ZIP																	
BH13 0.9-1	"	JAR																	
" "	"	ZIP																	
BH13 1.9-2	"	JAR																	
" "	"	ZIP																	
DUP 2	"																		
TRIP 2	"																		

Special Laboratory Instructions: SEE PAGE 1

Detection Limits:

Turnaround Required:

JOB NUMBER **MUST** BE REFERENCED ON SUBSEQUEN

Copies: **WHITE:** Sign on release. **YELLOW:** If dispatched to interstate Lab, Lab to sign on receipt and fax back to Coffey. **BLUE:** To be returned with results.

486089

From: Charlie Lee [mailto:Charlie.Lee@coffey.com]

Sent: Wednesday, 20 January 2016 2:11 PM

To: Admin Syd

Cc: Sally King; EnviroSampleNSW

Subject: RE: GEOTLCOV25283AD

Hi Sean,

By the looks of it, the one on the left is 0.5 to 0.6m while the one on the right is 0.9 to 1m.

Regards,

Charlie Lee

Geotechnical Engineer

Level 19, Tower B, Cidatel Tower

799 Pacific Highway, Chatswood, 2067

t: +61 2 9406 1068

f: +61 2 9406 1002

m: +61 419 274 754

From: Admin Syd [mailto:AdminSyd@eurofins.com.au]

Sent: Wednesday, 20 January 2016 1:31 PM

To: Charlie Lee

Cc: Sally King; EnviroSampleNSW

Subject: GEOTLCOV25283AD

Hi Charlie,

Just advising of labelling discrepancies:

Missing BH3 0.9-1.0 (Bag and jar)

2x samples received for BH11 0.5-0.6

Kind regards,

Sean

Admin Syd

Sample Receipt

eurofins | mgt

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

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

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

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

Sample Receipt Advice

Company name:	**Coffey Geotechnics Pty Ltd Chatswood**
Contact name:	Sally King
Project name:	GEOTLCOV25283AD
COC number:	Not provided
Turn around time:	1 Day
Date/Time received:	Jan 20, 2016 10:07 AM
Eurofins | mgt reference:	**486089**

Sample information

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

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 19.6 degrees Celsius.

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

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

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

☑ Appropriate sample containers have been used.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

Dup 2 forwarded to Envirolab| 2x jars received for BH11 0.5-0.6.

Contact notes

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

Charl Du Preez on Phone : +61 (2) 9900 8400 or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Sally King - sally_king@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Geotechnics Pty Ltd Chatswood email address.

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NATA # 1261 Site # 20794

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486089
Phone: +61 2 9406 1000
Fax: +61 2 9406 1002

Received: Jan 20, 2016 10:07 AM
Due: Jan 21, 2016
Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
BH7 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09080	X			X	X	X	X	X
BH7 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09081							X	X
BH7 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09082			X					
BH10 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09083	X			X	X	X	X	X
BH10 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09084							X	X
BH10 1.0-1.1	Jan 19, 2016		Soil	S16-Ja09085			X					
BH6 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09086	X			X	X	X	X	X
BH6 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09087							X	X
BH3 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09088	X			X	X	X	X	X
BH3 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09089							X	X

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NATA # 1261 Site # 20794

Company Name: Coffey Geotechnics Pty Ltd Chatswood
Address: Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

Project Name: GEOTLCOV25283AD

Order No.:
Report #: 486089
Phone: +61 2 9406 1000
Fax: +61 2 9406 1002

Received: Jan 20, 2016 10:07 AM
Due: Jan 21, 2016
Priority: 1 Day
Contact Name: Sally King

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH3 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09090		X						
BH11 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09091	X			X	X	X	X	X
BH11 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09092							X	X
BH11 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09093			X					
BH12 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09094	X			X	X	X	X	X
BH12 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09095			X					
BH12 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09096							X	X
BH12 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09097			X					
BH13 0.2-0.3	Jan 19, 2016		Soil	S16-Ja09098	X			X	X	X	X	X
BH13 0.5-0.6	Jan 19, 2016		Soil	S16-Ja09099							X	X
BH13 0.9-1.0	Jan 19, 2016		Soil	S16-Ja09100			X					

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NATA # 1261 Site # 20794

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 20, 2016 10:07 AM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486089	**Due:**	Jan 21, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Asbestos Absence /Presence	CANCELLED	HOLD	Semivolatile Organic Compounds (SVOC)	Eurofins | mgt Suite B13	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Laboratory where analysis is conducted												
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
External Laboratory												
BH13 1.9-2.0	Jan 19, 2016		Soil	S16-Ja09101			X					
TRIP 2	Jan 19, 2016		Soil	S16-Ja09102							X	X

12 Ashley Street, Chatswood, NSW 2067
tel: +61 2 9910 6200

email: sydney@envirolab.com.au
envirolab.com.au

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

CERTIFICATE OF ANALYSIS 140514

Client:

Coffey Environment
Level 19, Tower B, Citadel Tower
799 Pacific Hwy
Chatswood
NSW 2067

Attention: Sally King

Sample log in details:

Your Reference:	**GEOTLCOV25283AD**
No. of samples:	1 soil
Date samples received / completed instructions received	22/01/16 / 22/01/16

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:	25/01/16 / 25/01/16
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

vTRH(C6-C10)/BTEXN in Soil		
Our Reference:	UNITS	140514-1
Your Reference	----------	DUP2
	-	
Type of sample	----------	soil
Date extracted	-	22/01/2016
Date analysed	-	23/01/2016
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
naphthalene	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	94

svTRH (C10-C40) in Soil		
Our Reference:	UNITS	140514-1
Your Reference	----------	DUP2
Type of sample	- ----------	soil
Date extracted	-	22/01/2016
Date analysed	-	23/01/2016
TRHC$_{10}$ - C$_{14}$	mg/kg	<50
TRHC$_{15}$ - C$_{28}$	mg/kg	<100
TRHC$_{29}$ - C$_{36}$	mg/kg	<100
TRH>C$_{10}$-C$_{16}$	mg/kg	<50
TRH>C$_{10}$ - C$_{16}$ less Naphthalene (F2)	mg/kg	<50
TRH>C$_{16}$-C$_{34}$	mg/kg	<100
TRH>C$_{34}$-C$_{40}$	mg/kg	<100
Surrogate o-Terphenyl	%	85

PAHs in Soil Our Reference: Your Reference Type of sample	UNITS ---------- - ----------	140514-1 DUP2 soil
Date extracted	-	22/01/2016
Date analysed	-	23/01/2016
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	0.2
Pyrene	mg/kg	0.2
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	0.09
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Total Positive PAHs	mg/kg	0.62
Surrogate p-Terphenyl-d14	%	118

Acid Extractable metals in soil		
Our Reference:	UNITS	140514-1
Your Reference	----------	DUP2
	-	
Type of sample	----------	soil
Date prepared	-	22/01/2016
Date analysed	-	22/01/2016
Arsenic	mg/kg	5
Cadmium	mg/kg	0.8
Chromium	mg/kg	17
Copper	mg/kg	23
Lead	mg/kg	38
Mercury	mg/kg	0.3
Nickel	mg/kg	5
Zinc	mg/kg	39

Moisture		
Our Reference:	UNITS	140514-1
Your Reference	----------	DUP2
	-	
Type of sample	----------	soil
Date prepared	-	22/01/2016
Date analysed	-	25/01/2016
Moisture	%	7.7

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.
Metals-020 ICP-AES	Determination of various metals by ICP-AES.
Metals-021 CV-AAS	Determination of Mercury by Cold Vapour AAS.
Inorg-008	Moisture content determined by heating at 105+/-5 deg C for a minimum of 12 hours.

QUALITY CONTROL vTRH(C6-C10)/BTEXN in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			22/01/2016	[NT]	[NT]	LCS-9	22/01/2016
Date analysed	-			23/01/2016	[NT]	[NT]	LCS-9	23/01/2016
TRH C_6 - C_9	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-9	116%
TRH C_6 - C_{10}	mg/kg	25	Org-016	<25	[NT]	[NT]	LCS-9	116%
Benzene	mg/kg	0.2	Org-016	<0.2	[NT]	[NT]	LCS-9	108%
Toluene	mg/kg	0.5	Org-016	<0.5	[NT]	[NT]	LCS-9	116%
Ethylbenzene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-9	116%
m+p-xylene	mg/kg	2	Org-016	<2	[NT]	[NT]	LCS-9	119%
o-Xylene	mg/kg	1	Org-016	<1	[NT]	[NT]	LCS-9	116%
naphthalene	mg/kg	1	Org-014	<1	[NT]	[NT]	[NR]	[NR]
Surrogate aaa-Trifluorotoluene	%		Org-016	95	[NT]	[NT]	LCS-9	94%

QUALITY CONTROL svTRH (C10-C40) in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			22/01/2016	[NT]	[NT]	LCS-13	22/01/2016
Date analysed	-			23/01/2016	[NT]	[NT]	LCS-13	23/01/2016
TRH C_{10} - C_{14}	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-13	113%
TRH C_{15} - C_{28}	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-13	127%
TRH C_{29} - C_{36}	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-13	111%
TRH >C_{10}-C_{16}	mg/kg	50	Org-003	<50	[NT]	[NT]	LCS-13	113%
TRH >C_{16}-C_{34}	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-13	127%
TRH >C_{34}-C_{40}	mg/kg	100	Org-003	<100	[NT]	[NT]	LCS-13	111%
Surrogate o-Terphenyl	%		Org-003	90	[NT]	[NT]	LCS-13	98%

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date extracted	-			22/01/2016	[NT]	[NT]	LCS-13	22/01/2016
Date analysed	-			23/01/2016	[NT]	[NT]	LCS-13	23/01/2016
Naphthalene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	130%
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluorene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	117%
Phenanthrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	96%
Anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	93%
Pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	97%
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Chrysene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	LCS-13	135%
Benzo(b,j+k) fluoranthene	mg/kg	0.2	Org-012	<0.2	[NT]	[NT]	[NR]	[NR]

QUALITY CONTROL PAHs in Soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	[NT]	[NT]	LCS-13	121%
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	[NT]	[NT]	[NR]	[NR]
Surrogate p-Terphenyl-d14	%		Org-012	122	[NT]	[NT]	LCS-13	125%
QUALITY CONTROL Acid Extractable metals in soil	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			22/01/2016	[NT]	[NT]	LCS-6	22/01/2016
Date analysed	-			22/01/2016	[NT]	[NT]	LCS-6	22/01/2016
Arsenic	mg/kg	4	Metals-020 ICP-AES	<4	[NT]	[NT]	LCS-6	107%
Cadmium	mg/kg	0.4	Metals-020 ICP-AES	<0.4	[NT]	[NT]	LCS-6	101%
Chromium	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-6	104%
Copper	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-6	101%
Lead	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-6	99%
Mercury	mg/kg	0.1	Metals-021 CV-AAS	<0.1	[NT]	[NT]	LCS-6	94%
Nickel	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-6	99%
Zinc	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-6	102%

Report Comments:

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.

coffey

Chain of Custody

No: 06519

Laboratory Quotation / Order No:

Job No: GEOTLCOV 25283AO Sheet 3 of 3

Dispatch to: (Address & Phone No.)	Sampled by:	Consigning Officer: Date Dispatched:
Attention: SEE	Project Manager: (report results to) PAGE 1	Courier Service: Consignment Note No:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Sean	22/1	10:00	Ellen lwl Estonge	19/01/16	1230
			Sean	20/1	10:07
			DF (ELS)	22/1/16	10:45

Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC/SVOC	B13	Asbestos (*)	Sample Condition on Receipt
BH12 1.9-2	Soil	JAR		19/1									
" "	"	ZIP											
BH13 0.2-0.3	"	JAR							X	X	X		
" "	"	ZIP										X	
BH13 0.5-0.6	"	JAR							X				
BH13 -"	"	ZIP											
BH13 0.9-1	"	JAR											
" ~"	"	ZIP											
BH13 1.9-2	"	JAR											
~ ~	"	ZIP											
1- DUP 2	"			↓					X				
N.R. TRIP 2	"								X				forward to Envirolab

ENVIROLAB Envirolab Services 12 Ashley St Chatswood NSW 2067 Ph: (02) 9910 6200
Job No: 140514
Date Received: 22/01/16
Time Received: 12:00
Received by: D.F.
Temp: Cool/Ambient
Cooling: Ice/Icepack
Security: Intact/Broken/None

Special Laboratory Instructions: (*) presence / absence.
Detection Limits:
See PAGE 1
Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL SUBSEQUENT PAGES

642059-06

Copies: WHITE: Sign on release. YELLOW: If dispatched to interstate Lab, Lab to sign on receipt and fax back to Coffey BLUE: To be returned with results.

coffey

Chain of Custody

Laboratory Quotation / Order No: 486089

No: 06517

Job No: GEORGV 2528…D Sheet 1 of 3

Dispatch to: (Address & Phone No.)	
Sampled by:	CHARLIE LEE
Consigning Officer:	
Date Dispatched:	
Attention:	
Project Manager: (report results to)	SALLY KING & CHARLIE LEE
Courier Service:	
Consignment Note No.	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
CHARLIE LEE			Elen wh. Eltmgt	190116	1730
Sean	22/1	10:00	Sean	20/1	10:07

	Comments	Sample Matrix	Container Type and Preservative	Sample No.	Date Sampled	PAHs	TPHs	MAHs = BTEX	Metals:	B7	VOC/SVOC	B13	Asbestos ⊗	Sample Condition on Receipt
1	BH7 0.2-0.3	SOIL	JAR		19/1					X	X	X		
	" "	"	ZIP BAG		↓								X	
2	BH7 0.5-0.6	"	JAR							X				
	" "	"	ZIP											
3	BH7 0.9-1	"	JAR											
	" "	"	ZIP											
	BH10 0.2-0.3	"	JAR							X	X	X		
	BH10 "	"	ZIP										X	
	BH10 0.5-0.6	"	JAR							X				
	BH10 "	"	ZIP											
	BH10 1-1.1	"	JAR											
	" "	"	ZIP											
	BH16 0.2-0.3	"	JAR							X	X	X		
	" "	"	ZIP										X	
	BH16 0.5-0.6	"	JAR							X				
	" "	"	ZIP											

Special Laboratory Instructions: 24 HOUR TURNAROUND ON ALL. PLEASE SALLY.KING @ COFFEY…

Detection Limits: Turnaround Required:

JOB NUMBER MUST BE REFERENCED ON ALL CORRESPONDENCE / PAGES

Copies: WHITE: Sign on release. YELLOW: If dispatched to interstate Lab, Lab to sign on receipt and fax back to Coffey BLUE: To be returned with results

⊗ presence / absence.

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

SAMPLE RECEIPT ADVICE

Client Details	
Client	Coffey Environment
Attention	Sally King

Sample Login Details	
Your Reference	GEOTLCOV25283AD
Envirolab Reference	**140514**
Date Sample Received	22/01/2016
Date Instructions Received	22/01/2016
Date Results Expected to be Reported	**25/01/2016**

Sample Condition	
Samples received in appropriate condition for analysis	YES
No. of Samples Provided	1 soil
Turnaround Time Requested	24hr
Temperature on receipt (°C)	9.6
Cooling Method	Ice
Sampling Date Provided	Not Provided on the COC

Comments
Samples will be held for 1 month for water samples and 2 months for soil samples from date of receipt of samples

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolabservices.com.au	Email: jhurst@envirolabservices.com.au

Sample and Testing Details on following page

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

Sample Id	*vTRH(C6-C10)/BTEXN in Soil*	*svTRH (C10-C40) in Soil*	*PAHs in Soil*	*Acid Extractable metals in soil*
DUP2	✓	✓	✓	✓

eurofins | mgt

Certificate of Analysis

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **487743-L**
Project name FASS VOS
Project ID GEOTLCOV25283AD
Received Date Feb 03, 2016

Client Sample ID			**BH9_0.2-0.3**	**BH9_0.5-0.6**
Sample Matrix			**TCLP**	**TCLP**
Eurofins | mgt Sample No.			**S16-Fe03173**	**S16-Fe03174**
Date Sampled			**Jan 18, 2016**	**Jan 18, 2016**
Test/Reference	LOR	Unit		
Benzo[a]pyrene				
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001
p-Terphenyl-d14 (surr.)	1	%	128	77
2-Fluorobiphenyl (surr.)	1	%	111	120
Heavy Metals				
Lead	0.01	mg/L	-	0.03
USA Leaching Procedure				
Leachate Fluid[C01]		comment	1.0	1.0
pH (initial)	0.1	pH Units	6.9	7.1
pH (off)	0.1	pH Units	4.5	4.5
pH (USA HCl addition)	0.1	pH Units	2.1	2.1

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
Benzo[a]pyrene	Sydney	Feb 05, 2016	7 Day
- Method: E007 Benzo[a]pyrene			
Heavy Metals	Sydney	Feb 04, 2016	180 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
USA Leaching Procedure	Sydney	Feb 04, 2016	14 Day
- Method: E019 TCLP Preparation			

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

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

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Feb 3, 2016 2:55 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	487743	**Due:**	Feb 8, 2016
		Phone:	+61 2 9406 1000	**Priority:**	3 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	FASS VOS				
Project ID:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Lead	USA Leaching Procedure	Benzo[a]pyrene
Laboratory where analysis is conducted							
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217					X	X	X
Brisbane Laboratory - NATA Site # 20794							
External Laboratory							
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
BH9_0.2-0.3	Jan 18, 2016		TCLP	S16-Fe03173		X	X
BH9_0.5-0.6	Jan 18, 2016		TCLP	S16-Fe03174	X	X	X

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank									
Benzo[a]pyrene									
Benzo(a)pyrene			mg/L	< 0.001			0.001	Pass	
Method Blank									
Heavy Metals									
Lead			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					
Lead	S16-Fe03175	NCP	%	85			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			
Lead	S16-Fe03174	CP	mg/L	0.03	0.03	<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	No
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

Authorised By

Charl Du Preez	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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1 — 3699

coffey

Consigning Office: CHATSWOOD.

Report Results to: SALLY KING — Mobile: 0404 465 419 — Email: sally.king @coffey.com

Invoices to: \" — Phone: — Email: @coffey.com

Project No: GEOTLCAV25283AD — Task No:

Project Name: FASS VOS — Laboratory: EUROFINS

Sampler's Name: — Project Manager: SALLY KING

Special Instructions: EUROFINS REPORT # 486087

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	TCLP LEAD	TCLP BaP	NOTES
-57	BH9_0.2-0.3			SOIL		3 DAY	X	X	
-58	BH9_0.5-0.6			↓			X	X	

RELINQUISHED BY

Name: SALLY KING — Date: 3.2.16 →

Coffey Environments — Time:

Name: — Date: →

Company: — Time:

RECEIVED BY

Name: Glenna — Date: 030216

Company: Eurofins — Time: 1455.

Name: — Date:

Company: — Time:

Sample Receipt Advice: (Lab Use Only)

All Samples Recieved in Good Condition ☑

All Documentation is in Proper Order ☑

Samples Received Properly Chilled ☑

Lab. Ref/Batch No. 487743

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

GOWANS PRINTING (02) 9755 3545

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

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

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

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

Sample Receipt Advice

Company name:	**Coffey Geotechnics Pty Ltd Chatswood**
Contact name:	Sally King
Project name:	FASS VOS
Project ID:	GEOTLCOV25283AD
COC number:	3699
Turn around time:	3 Day
Date/Time received:	Feb 3, 2016 2:55 PM
Eurofins | mgt reference:	**487743**

Sample information

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

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 12.6 degrees Celsius.

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

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

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

☑ Appropriate sample containers have been used.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

Additional from 486087 | B(a)P conducted outside of holding time

Contact notes

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

Charl Du Preez on Phone : +61 (2) 9900 8400 or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Sally King - sally_king@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Geotechnics Pty Ltd Chatswood email address.

eurofins | mgt

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

Melbourne
3-5 Kingston Town Close
Oakleigh VIC 3166
Phone : +61 3 8564 5000
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NATA # 1261 Site # 18217

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Feb 3, 2016 2:55 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	487743	**Due:**	Feb 8, 2016
		Phone:	+61 2 9406 1000	**Priority:**	3 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	FASS VOS				
Project ID:	GEOTLCOV25283AD				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Lead	USA Leaching Procedure	Benzo[a]pyrene
Laboratory where analysis is conducted							
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217					X	X	X
Brisbane Laboratory - NATA Site # 20794							
External Laboratory							
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
BH9_0.2-0.3	Jan 18, 2016		TCLP	S16-Fe03173		X	X
BH9_0.5-0.6	Jan 18, 2016		TCLP	S16-Fe03174	X	X	X

eurofins | mgt

Certificate of Analysis

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **487744-L**
Project name VOS FASS
Project ID GEOTLCOV25283AA
Received Date Feb 03, 2016

Client Sample ID **Sample Matrix** **Eurofins | mgt Sample No.** **Date Sampled** Test/Reference	LOR	Unit	**BH3_0.2-0.3** **TCLP** **S16-Fe03175** **Jan 19, 2016**	**BH7_0.2-0.3** **TCLP** **S16-Fe03176** **Jan 19, 2016**	**BH7_0.5-0.6** **TCLP** **S16-Fe03177** **Jan 19, 2016**	**BH13_0.2-0.3** **TCLP** **S16-Fe03178** **Jan 19, 2016**
Benzo[a]pyrene						
Benzo(a)pyrene	0.001	mg/L	-	< 0.001	< 0.001	-
p-Terphenyl-d14 (surr.)	1	%	-	77	74	-
2-Fluorobiphenyl (surr.)	1	%	-	104	104	-
Heavy Metals						
Lead	0.01	mg/L	0.17	0.39	0.14	-
Nickel	0.05	mg/L	-	-	-	< 0.05
USA Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.5	8.5	8.2	11
pH (off)	0.1	pH Units	4.5	4.5	4.5	5.7
pH (USA HCl addition)	0.1	pH Units	2.0	2.3	2.3	2.4

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
Benzo[a]pyrene	Sydney	Feb 05, 2016	7 Day
- Method: E007 Benzo[a]pyrene			
Heavy Metals	Sydney	Feb 04, 2016	180 Day
- Method: LTM-MET-3030 by ICP-OES (hydride ICP-OES for Mercury)			
USA Leaching Procedure	Sydney	Feb 04, 2016	14 Day
- Method: E019 TCLP Preparation			

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

Melbourne
3-5 Kingston Town Close
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NATA # 1261 Site # 18217

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Feb 3, 2016 2:55 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	487744	**Due:**	Feb 8, 2016
		Phone:	+61 2 9406 1000	**Priority:**	3 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	VOS FASS				
Project ID:	GEOTLCOV25283AA				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Lead	Nickel	USA Leaching Procedure	Benzo[a]pyrene
Laboratory where analysis is conducted								
Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydney Laboratory - NATA Site # 18217					X	X	X	X
Brisbane Laboratory - NATA Site # 20794								
External Laboratory								
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
BH3_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03175	X		X	
BH7_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03176	X		X	X
BH7_0.5-0.6	Jan 19, 2016		TCLP	S16-Fe03177	X		X	X
BH13_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03178		X	X	

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Method Blank									
Benzo[a]pyrene									
Benzo(a)pyrene			mg/L	< 0.001			0.001	Pass	
Method Blank									
Heavy Metals									
Lead			mg/L	< 0.01			0.01	Pass	
Nickel			mg/L	< 0.05			0.05	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Heavy Metals				Result 1					
Lead	S16-Fe03175	CP	%	85			70-130	Pass	
Nickel	S16-Fe03175	CP	%	87			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Nickel	S16-Fe00819	NCP	%	86			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Lead	S16-Fe03174	NCP	mg/L	0.03	0.03	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	S16-Fe03174	NCP	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

Authorised By

Charl Du Preez	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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3698

coffey

Consigning Office:	CHATSWOOD
Report Results to:	SALLY KING
Invoices to:	"

Mobile: 0404 465 419 Email: sally.king @coffey.com
Phone: Email: @coffey.com

Project No: GEOTLCOV25283AD Task No:
Project Name: UOS FASS Laboratory: EUROFINS
Sampler's Name: Project Manager: SALLY KING
Special Instructions: EUROFINS REPORT # 486493

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	TCLP LEAD	TCLP NICKEL	TCLP B(a)P	NOTES
88	BH3_0.2-0.3			SOIL		STANDARD	X			
80	BH7_0.2-0.3			↓			✓		X	
81	BH7_0.5-0.6			↓			X		X	
98	BH3_0.2-0.6			↓				X		

RELINQUISHED BY		RECEIVED BY	
Name: S.King	Date: 3/2/16.	Name: Elenka	Date: 030216
Coffey Environments	Time:	Company: Efflngt	Time: 14:55
Name:	Date:	Name:	Date:
Company:	Time:	Company:	Time:

Sample Receipt Advice: (Lab Use Only)
All Samples Recieved in Good Condition ☑
All Documentation is in Proper Order ☑
Samples Received Properly Chilled ☑
Lab. Ref/Batch No. 487744

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

eurofins | mgt

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

Melbourne
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Oakleigh Vic 3166
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

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

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

Sample Receipt Advice

Company name:	**Coffey Geotechnics Pty Ltd Chatswood**
Contact name:	Sally King
Project name:	VOS FASS
Project ID:	GEOTLCOV25283AA
COC number:	3698
Turn around time:	3 Day
Date/Time received:	Feb 3, 2016 2:55 PM
Eurofins | mgt reference:	**487744**

Sample information

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

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 12.5 degrees Celsius.

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

☒ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

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

☑ Appropriate sample containers have been used.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

Additional from 486489 | Correction upon COC BH13_0.2-0.3

Contact notes

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

Charl Du Preez on Phone : +61 (2) 9900 8400 or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Sally King - sally_king@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Geotechnics Pty Ltd Chatswood email address.

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

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Feb 3, 2016 2:55 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	487744	**Due:**	Feb 8, 2016
		Phone:	+61 2 9406 1000	**Priority:**	3 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	VOS FASS				
Project ID:	GEOTLCOV25283AA				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Lead	Nickel	USA Leaching Procedure	Benzo[a]pyrene
Laboratory where analysis is conducted								
Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydney Laboratory - NATA Site # 18217					X	X	X	X
Brisbane Laboratory - NATA Site # 20794								
External Laboratory								
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
BH3_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03175	X		X	
BH7_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03176	X		X	X
BH7_0.5-0.6	Jan 19, 2016		TCLP	S16-Fe03177	X		X	X
BH13_0.2-0.3	Jan 19, 2016		TCLP	S16-Fe03178		X	X	

eurofins | mgt

Certificate of Analysis

Coffey Geotechnics Pty Ltd Chatswood
Level 18, Tower B, Citadel Tower 799 Pacific Highway
Chatswood
NSW 2067

NATA Accredited
Accreditation Number 1261
Site Number 1254

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: **Sally King**

Report **486493-W**
Project name SYD UNI
Project ID GEOTLCOV25283AA
Received Date Jan 25, 2016

Client Sample ID			**BH2**	**BH9**	**BH12**	**DUP01**
Sample Matrix			**Water**	**Water**	**Water**	**Water**
Eurofins | mgt Sample No.			**S16-Ja12401**	**S16-Ja12402**	**S16-Ja12403**	**S16-Ja12404**
Date Sampled			**Jan 22, 2016**	**Jan 22, 2016**	**Jan 22, 2016**	**Jan 22, 2016**
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	0.06	< 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	%	95	95	88	85
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2.2-Tetrachloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Butanone (MEK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Propanone (Acetone)	0.001	mg/L	0.017	0.019	0.013	-
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-

Client Sample ID			BH2	BH9	BH12	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins | mgt Sample No.			S16-Ja12401	S16-Ja12402	S16-Ja12403	S16-Ja12404
Date Sampled			Jan 22, 2016	Jan 22, 2016	Jan 22, 2016	Jan 22, 2016
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Chloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromomethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dichlorodifluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Ethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Methylene Chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichlorofluoromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Vinyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Xylenes - Total	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
Fluorobenzene (surr.)	1	%	75	75	77	-
4-Bromofluorobenzene (surr.)	1	%	95	95	88	-
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	0.06	< 0.05	< 0.05
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

Client Sample ID			BH2	BH9	BH12	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins | mgt Sample No.			S16-Ja12401	S16-Ja12402	S16-Ja12403	S16-Ja12404
Date Sampled			Jan 22, 2016	Jan 22, 2016	Jan 22, 2016	Jan 22, 2016
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	53	52	52	77
p-Terphenyl-d14 (surr.)	1	%	76	70	82	129
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
TRH >C10-C16	0.05	mg/L	< 0.05	0.06	< 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
Semivolatile Organic Compounds (SVOC)						
2-Chloronaphthalene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
2-Chlorophenol	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
2-Fluorobiphenyl (surr.)	1	%	53	52	52	-
2-Methylnaphthalene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
2-Methylphenol (o-Cresol)	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
2-Naphthylamine	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
2-Nitroaniline	0.004	mg/L	< 0.004	< 0.004	< 0.004	-
2-Nitrophenol	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
3&4-Methylphenol (m&p-Cresol)	0.004	mg/L	< 0.004	< 0.004	< 0.004	-
3-Methylcholanthrene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
3-Nitroaniline	0.004	mg/L	< 0.002	< 0.002	< 0.004	-
4-Aminobiphenyl	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4-Bromophenyl phenyl ether	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4-Chloro-3-methylphenol	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4-Chlorophenyl phenyl ether	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4-Nitrophenol	0.002	mg/L	< 0.005	< 0.005	< 0.005	-
4.4'-DDD	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4.4'-DDE	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
4.4'-DDT	0.004	mg/L	< 0.004	< 0.004	< 0.004	-
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acetophenone	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Aldrin	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Aniline	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bis(2-chloroethoxy)methane	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Bis(2-chloroethyl)ether	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Bis(2-ethylhexyl)phthalate	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
Butyl benzyl phthalate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Carbazole	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Chlorpyrifos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-

Client Sample ID			BH2	BH9	BH12	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins | mgt Sample No.			S16-Ja12401	S16-Ja12402	S16-Ja12403	S16-Ja12404
Date Sampled			Jan 22, 2016	Jan 22, 2016	Jan 22, 2016	Jan 22, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Coumaphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
d-BHC	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Demeton-O	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Demeton-S	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Di-n-butyl phthalate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Di-n-octyl phthalate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Diazinon	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibenzofuran	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Dichlorvos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Dieldrin	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Diethyl phthalate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Dimethoate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Dimethyl phthalate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Diphenylamine	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Disulfoton	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Endosulfan sulphate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Endrin	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Endrin aldehyde	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Endrin ketone	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Ethoprop	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Fenitrothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Fensulfothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Fenthion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
g-BHC (Lindane)	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Heptachlor	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Heptachlor epoxide	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Hexachlorobenzene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Hexachlorobutadiene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Hexachlorocyclopentadiene	0.004	mg/L	< 0.004	< 0.004	< 0.004	-
Hexachloroethane	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Malathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Methoxychlor	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Methyl azinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Methyl parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Mevinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Monocrotophos	0.02	mg/L	< 0.02	< 0.02	< 0.02	-
N-Nitrosodibutylamine	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
N-Nitrosodipropylamine	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
N-Nitrosopiperidine	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Nitrobenzene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Nitrobenzene-d5 (surr.)	1	%	89	71	101	-
p-Terphenyl-d14 (surr.)	1	%	76	70	82	-
Parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	-

Client Sample ID			BH2	BH9	BH12	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins | mgt Sample No.			S16-Ja12401	S16-Ja12402	S16-Ja12403	S16-Ja12404
Date Sampled			Jan 22, 2016	Jan 22, 2016	Jan 22, 2016	Jan 22, 2016
Test/Reference	LOR	Unit				
Semivolatile Organic Compounds (SVOC)						
Pentachlorobenzene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Pentachloronitrobenzene	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Phenol	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Phenol-d6 (surr.)	1	%	38	26	38	-
Phorate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Profenofos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Prothiofos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Ronnel	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Stirophos	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Trichloronate	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Heavy Metals						
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Cadmium (filtered)	0.0001	mg/L	< 0.0001	0.0001	0.0001	0.0001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper (filtered)	0.001	mg/L	0.002	< 0.001	0.001	0.002
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	0.002	0.002	0.010	0.009
Zinc (filtered)	0.005	mg/L	0.058	0.040	0.027	0.024

Client Sample ID			TB	TS
Sample Matrix			Water	Water
Eurofins | mgt Sample No.			S16-Ja12405	S16-Ja12406
Date Sampled			Jan 22, 2016	Jan 22, 2016
Test/Reference	LOR	Unit		
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02	-
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	0.02	mg/L	< 0.02	77%
BTEX				
Benzene	0.001	mg/L	< 0.001	112%
Toluene	0.001	mg/L	< 0.001	91%
Ethylbenzene	0.001	mg/L	< 0.001	83%
m&p-Xylenes	0.002	mg/L	< 0.002	84%
o-Xylene	0.001	mg/L	< 0.001	85%
Xylenes - Total	0.003	mg/L	< 0.003	84%
4-Bromofluorobenzene (surr.)	1	%	87	98
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
TRH C6-C10	0.02	mg/L	< 0.02	96%
Volatile Organics				
Naphthalene[N02]	0.01	mg/L	< 0.01	93%

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
TRH C6-C10 less BTEX (F1)	Sydney	Jan 22, 2016	14 Day
- Method: LM-LTM-ORG-2010			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jan 25, 2016	7 Day
- Method: TRH C6-C36 - LTM-ORG-2010			
BTEX	Sydney	Jan 22, 2016	14 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 25, 2016	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Volatile Organics	Sydney	Jan 25, 2016	7 Day
- Method: E016 Volatile Organic Compounds (VOC)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 22, 2016	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Eurofins | mgt Suite B4			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 25, 2016	7 Day
- Method: E007 Polyaromatic Hydrocarbons (PAH)			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 25, 2016	7 Day
- Method: TRH C6-C40 - LTM-ORG-2010			
Semivolatile Organic Compounds (SVOC)	Sydney	Jan 25, 2016	14 Day
- Method: E017 Semivolatile Organic Compounds (SVOC)			
Metals M8 filtered	Sydney	Jan 22, 2016	28 Day
- Method: LTM-MET-3040 Metals in Waters by ICP-MS			

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 25, 2016 4:12 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486493	**Due:**	Jan 27, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	SYD UNI				
Project ID:	GEOTLCOV25283AA				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Metals M8 filtered	Semivolatile Organic Compounds (SVOC)	Volatile Organics	Eurofins | mgt Suite B4	BTEX and Volatile TRH
Laboratory where analysis is conducted									
Melbourne Laboratory - NATA Site # 1254 & 14271									
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794									
External Laboratory									
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
BH2	Jan 22, 2016		Water	S16-Ja12401	X	X	X	X	
BH9	Jan 22, 2016		Water	S16-Ja12402	X	X	X	X	
BH12	Jan 22, 2016		Water	S16-Ja12403	X	X	X	X	
DUP01	Jan 22, 2016		Water	S16-Ja12404	X			X	
TB	Jan 22, 2016		Water	S16-Ja12405					X
TS	Jan 22, 2016		Water	S16-Ja12406					X

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
ASLP	Australian Standard Leaching Procedure (AS4439.3)
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 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, Toxophene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxophene 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 Arochlor 1260 in Matrix Spikes and LCS's.
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 RPD's 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							
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
Method Blank							
Volatile Organics							
Naphthalene	mg/L	< 0.01			0.01	Pass	
1.1-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001			0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.005			0.005	Pass	
1.2-Dibromoethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001			0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001			0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001			0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001			0.001	Pass	
Allyl chloride	mg/L	< 0.001			0.001	Pass	
Benzene	mg/L	< 0.001			0.001	Pass	
Bromobenzene	mg/L	< 0.001			0.001	Pass	
Bromochloromethane	mg/L	< 0.001			0.001	Pass	
Bromodichloromethane	mg/L	< 0.001			0.001	Pass	
Bromoform	mg/L	< 0.001			0.001	Pass	
Bromomethane	mg/L	< 0.001			0.001	Pass	
Carbon disulfide	mg/L	< 0.001			0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001			0.001	Pass	
Chlorobenzene	mg/L	< 0.001			0.001	Pass	
Chloroethane	mg/L	< 0.001			0.001	Pass	
Chloroform	mg/L	< 0.005			0.005	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chloromethane	mg/L	< 0.001			0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Dibromochloromethane	mg/L	< 0.001			0.001	Pass	
Dibromomethane	mg/L	< 0.005			0.005	Pass	
Dichlorodifluoromethane	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
Iodomethane	mg/L	< 0.001			0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
Methylene Chloride	mg/L	< 0.001			0.001	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Styrene	mg/L	< 0.001			0.001	Pass	
Tetrachloroethene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Trichloroethene	mg/L	< 0.001			0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001			0.001	Pass	
Vinyl chloride	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
Semivolatile Organic Compounds (SVOC)							
2-Chloronaphthalene	mg/L	< 0.002			0.002	Pass	
2-Chlorophenol	mg/L	< 0.002			0.002	Pass	
2-Methylnaphthalene	mg/L	< 0.002			0.002	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.002			0.002	Pass	
2-Naphthylamine	mg/L	< 0.002			0.002	Pass	
2-Nitroaniline	mg/L	< 0.004			0.004	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Nitrophenol	mg/L	< 0.002			0.002	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.004			0.004	Pass	
3-Methylcholanthrene	mg/L	< 0.002			0.002	Pass	
4-Aminobiphenyl	mg/L	< 0.002			0.002	Pass	
4-Bromophenyl phenyl ether	mg/L	< 0.002			0.002	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.002			0.002	Pass	
4-Chlorophenyl phenyl ether	mg/L	< 0.002			0.002	Pass	
4-Nitrophenol	mg/L	< 0.002			0.002	Pass	
4.4'-DDD	mg/L	< 0.002			0.002	Pass	
4.4'-DDE	mg/L	< 0.002			0.002	Pass	
4.4'-DDT	mg/L	< 0.004			0.004	Pass	
Acetophenone	mg/L	< 0.002			0.002	Pass	
Aldrin	mg/L	< 0.002			0.002	Pass	
Aniline	mg/L	< 0.002			0.002	Pass	
Bis(2-chloroethoxy)methane	mg/L	< 0.002			0.002	Pass	
Bis(2-ethylhexyl)phthalate	mg/L	< 0.02			0.02	Pass	
Butyl benzyl phthalate	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.002			0.002	Pass	
d-BHC	mg/L	< 0.002			0.002	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Demeton-S	mg/L	< 0.002			0.002	Pass	
Di-n-butyl phthalate	mg/L	< 0.002			0.002	Pass	
Di-n-octyl phthalate	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dibenzofuran	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dieldrin	mg/L	< 0.002			0.002	Pass	
Diethyl phthalate	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Dimethyl phthalate	mg/L	< 0.002			0.002	Pass	
Diphenylamine	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
Endosulfan sulphate	mg/L	< 0.002			0.002	Pass	
Endrin	mg/L	< 0.002			0.002	Pass	
Endrin aldehyde	mg/L	< 0.002			0.002	Pass	
Endrin ketone	mg/L	< 0.002			0.002	Pass	
Ethoprop	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	
g-BHC (Lindane)	mg/L	< 0.002			0.002	Pass	
Heptachlor	mg/L	< 0.002			0.002	Pass	
Heptachlor epoxide	mg/L	< 0.002			0.002	Pass	
Hexachlorobenzene	mg/L	< 0.002			0.002	Pass	
Hexachlorobutadiene	mg/L	< 0.002			0.002	Pass	
Hexachlorocyclopentadiene	mg/L	< 0.004			0.004	Pass	
Hexachloroethane	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Methoxychlor	mg/L	< 0.001			0.001	Pass	
Methyl azinphos	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	< 0.02			0.02	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-Nitrosodibutylamine	mg/L	< 0.002			0.002	Pass	
N-Nitrosodipropylamine	mg/L	< 0.002			0.002	Pass	
N-Nitrosopiperidine	mg/L	< 0.002			0.002	Pass	
Nitrobenzene	mg/L	< 0.002			0.002	Pass	
Parathion	mg/L	< 0.002			0.002	Pass	
Pentachlorobenzene	mg/L	< 0.002			0.002	Pass	
Pentachloronitrobenzene	mg/L	< 0.002			0.002	Pass	
Pentachlorophenol	mg/L	< 0.01			0.01	Pass	
Phenol	mg/L	< 0.002			0.002	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Profenofos	mg/L	< 0.002			0.002	Pass	
Prothiofos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	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	%	86			70-130	Pass	
TRH C10-C14	%	77			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	87			70-130	Pass	
Toluene	%	90			70-130	Pass	
Ethylbenzene	%	87			70-130	Pass	
m&p-Xylenes	%	88			70-130	Pass	
o-Xylene	%	88			70-130	Pass	
Xylenes - Total	%	95			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH C6-C10	%	90			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
Naphthalene	%	93			70-130	Pass	
1.1-Dichloroethane	%	71			70-130	Pass	
1.1-Dichloroethene	%	73			70-130	Pass	
1.1.1-Trichloroethane	%	92			70-130	Pass	
1.1.1.2-Tetrachloroethane	%	95			70-130	Pass	
1.1.2-Trichloroethane	%	89			70-130	Pass	
1.1.2.2-Tetrachloroethane	%	83			70-130	Pass	
1.2-Dibromoethane	%	91			70-130	Pass	
1.2-Dichlorobenzene	%	88			70-130	Pass	
1.2-Dichloroethane	%	84			70-130	Pass	
1.2-Dichloropropane	%	84			70-130	Pass	
1.2.3-Trichloropropane	%	82			70-130	Pass	
1.2.4-Trimethylbenzene	%	84			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.3-Dichlorobenzene	%	88			70-130	Pass	
1.3-Dichloropropane	%	86			70-130	Pass	
1.3.5-Trimethylbenzene	%	83			70-130	Pass	
1.4-Dichlorobenzene	%	87			70-130	Pass	
2-Butanone (MEK)	%	75			70-130	Pass	
2-Propanone (Acetone)	%	85			70-130	Pass	
4-Chlorotoluene	%	87			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	%	72			70-130	Pass	
Allyl chloride	%	101			75-125	Pass	
Benzene	%	122			70-130	Pass	
Bromobenzene	%	80			70-130	Pass	
Bromochloromethane	%	79			70-130	Pass	
Bromodichloromethane	%	87			70-130	Pass	
Bromoform	%	98			70-130	Pass	
Bromomethane	%	114			70-130	Pass	
Carbon disulfide	%	114			70-130	Pass	
Carbon Tetrachloride	%	94			70-130	Pass	
Chlorobenzene	%	92			70-130	Pass	
Chloroethane	%	115			70-130	Pass	
Chloroform	%	93			70-130	Pass	
Chloromethane	%	70			70-130	Pass	
cis-1.2-Dichloroethene	%	99			70-130	Pass	
cis-1.3-Dichloropropene	%	88			70-130	Pass	
Dibromochloromethane	%	95			70-130	Pass	
Dibromomethane	%	88			70-130	Pass	
Dichlorodifluoromethane	%	96			70-130	Pass	
Ethylbenzene	%	93			70-130	Pass	
Iodomethane	%	101			70-130	Pass	
Isopropyl benzene (Cumene)	%	89			70-130	Pass	
m&p-Xylenes	%	95			70-130	Pass	
Methylene Chloride	%	88			70-130	Pass	
o-Xylene	%	95			70-130	Pass	
Styrene	%	88			70-130	Pass	
Tetrachloroethene	%	104			70-130	Pass	
Toluene	%	100			70-130	Pass	
trans-1.2-Dichloroethene	%	116			70-130	Pass	
trans-1.3-Dichloropropene	%	88			70-130	Pass	
Trichloroethene	%	97			70-130	Pass	
Trichlorofluoromethane	%	91			70-130	Pass	
Vinyl chloride	%	85			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	105			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	110			70-130	Pass	
Benz(a)anthracene	%	81			70-130	Pass	
Benzo(a)pyrene	%	88			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	120			70-130	Pass	
Benzo(k)fluoranthene	%	105			70-130	Pass	
Chrysene	%	106			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a.h)anthracene	%	110			70-130	Pass	
Fluoranthene	%	91			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	105			70-130	Pass	
Naphthalene	%	108			70-130	Pass	
Phenanthrene	%	79			70-130	Pass	
Pyrene	%	100			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
TRH >C10-C16	%	74			70-130	Pass	
LCS - % Recovery							
Semivolatile Organic Compounds (SVOC)							
2-Chlorophenol	%	88			30-130	Pass	
4-Chloro-3-methylphenol	%	88			30-130	Pass	
Chlorpyrifos	%	111			70-130	Pass	
Di-n-butyl phthalate	%	75			70-130	Pass	
Diethyl phthalate	%	75			70-130	Pass	
Dimethoate	%	112			70-130	Pass	
Dimethyl phthalate	%	75			70-130	Pass	
Disulfoton	%	88			70-130	Pass	
Methyl azinphos	%	75			70-130	Pass	
Methyl parathion	%	124			70-130	Pass	
N-Nitrosodipropylamine	%	100			70-130	Pass	
Parathion	%	127			70-130	Pass	
Pentachlorophenol	%	75			30-130	Pass	
Phenol	%	38			30-130	Pass	
Phorate	%	84			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic (filtered)	%	100			70-130	Pass	
Cadmium (filtered)	%	102			70-130	Pass	
Chromium (filtered)	%	100			70-130	Pass	
Copper (filtered)	%	101			70-130	Pass	
Lead (filtered)	%	104			70-130	Pass	
Mercury (filtered)	%	91			70-130	Pass	
Nickel (filtered)	%	102			70-130	Pass	
Zinc (filtered)	%	101			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-Ja13707	NCP	%	81			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S16-Ja12370	NCP	%	91			70-130	Pass	
Toluene	S16-Ja12370	NCP	%	96			70-130	Pass	
Ethylbenzene	S16-Ja12370	NCP	%	91			70-130	Pass	
m&p-Xylenes	S16-Ja12370	NCP	%	91			70-130	Pass	
o-Xylene	S16-Ja12370	NCP	%	92			70-130	Pass	
Xylenes - Total	S16-Ja13707	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH C6-C10	S16-Ja13707	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Naphthalene	S16-Ja12370	NCP	%	89			70-130	Pass	
1.1-Dichloroethane	S16-Ja12370	NCP	%	72			70-130	Pass	
1.1-Dichloroethene	S16-Ja12370	NCP	%	117			70-130	Pass	
1.1.1-Trichloroethane	S16-Ja12370	NCP	%	96			70-130	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja12370	NCP	%	100			70-130	Pass	
1.1.2-Trichloroethane	S16-Ja12370	NCP	%	96			70-130	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja12370	NCP	%	85			70-130	Pass	
1.2-Dibromoethane	S16-Ja12370	NCP	%	98			70-130	Pass	
1.2-Dichlorobenzene	S16-Ja12370	NCP	%	92			70-130	Pass	
1.2-Dichloroethane	S16-Ja12370	NCP	%	88			70-130	Pass	
1.2-Dichloropropane	S16-Ja12370	NCP	%	88			70-130	Pass	
1.2.3-Trichloropropane	S16-Ja12370	NCP	%	83			70-130	Pass	
1.2.4-Trimethylbenzene	S16-Ja12370	NCP	%	87			70-130	Pass	
1.3-Dichlorobenzene	S16-Ja12370	NCP	%	92			70-130	Pass	
1.3-Dichloropropane	S16-Ja12370	NCP	%	90			70-130	Pass	
1.3.5-Trimethylbenzene	S16-Ja12370	NCP	%	86			70-130	Pass	
1.4-Dichlorobenzene	S16-Ja12370	NCP	%	93			70-130	Pass	
2-Butanone (MEK)	S16-Ja12370	NCP	%	76			70-130	Pass	
2-Propanone (Acetone)	S16-Ja12370	NCP	%	92			70-130	Pass	
4-Chlorotoluene	S16-Ja12370	NCP	%	90			70-130	Pass	
4-Methyl-2-pentanone (MIBK)	S16-Ja12370	NCP	%	75			70-130	Pass	
Allyl chloride	S16-Ja12370	NCP	%	101			75-125	Pass	
Bromobenzene	S16-Ja12370	NCP	%	82			70-130	Pass	
Bromochloromethane	S16-Ja12370	NCP	%	82			70-130	Pass	
Bromodichloromethane	S16-Ja12370	NCP	%	94			70-130	Pass	
Bromoform	S16-Ja12370	NCP	%	105			70-130	Pass	
Bromomethane	S16-Ja12370	NCP	%	114			70-130	Pass	
Carbon disulfide	S16-Ja12370	NCP	%	105			70-130	Pass	
Carbon Tetrachloride	S16-Ja12370	NCP	%	99			70-130	Pass	
Chlorobenzene	S16-Ja12370	NCP	%	97			70-130	Pass	
Chloroethane	S16-Ja12370	NCP	%	103			70-130	Pass	
Chloroform	S16-Ja12370	NCP	%	99			70-130	Pass	
cis-1.2-Dichloroethene	S16-Ja12370	NCP	%	104			70-130	Pass	
cis-1.3-Dichloropropene	S16-Ja12370	NCP	%	93			70-130	Pass	
Dibromochloromethane	S16-Ja12370	NCP	%	103			70-130	Pass	
Dibromomethane	S16-Ja12370	NCP	%	93			70-130	Pass	
Iodomethane	S16-Ja12370	NCP	%	111			70-130	Pass	
Isopropyl benzene (Cumene)	S16-Ja12370	NCP	%	91			70-130	Pass	
Methylene Chloride	S16-Ja12370	NCP	%	86			70-130	Pass	
Styrene	S16-Ja12370	NCP	%	91			70-130	Pass	
Tetrachloroethene	S16-Ja12370	NCP	%	112			70-130	Pass	
trans-1.2-Dichloroethene	S16-Ja12370	NCP	%	71			70-130	Pass	
trans-1.3-Dichloropropene	S16-Ja12370	NCP	%	93			70-130	Pass	
Trichloroethene	S16-Ja12370	NCP	%	105			70-130	Pass	
Trichlorofluoromethane	S16-Ja12370	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S16-Ja01040	NCP	%	77			70-130	Pass	
Acenaphthylene	S16-Ja01040	NCP	%	71			70-130	Pass	
Anthracene	S16-Ja01040	NCP	%	91			70-130	Pass	
Benz(a)anthracene	S16-Ja01040	NCP	%	72			70-130	Pass	
Benzo(a)pyrene	S16-Ja01040	NCP	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	S16-Ja01040	NCP	%	85			70-130	Pass	
Benzo(g.h.i)perylene	S16-Ja01040	NCP	%	83			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(k)fluoranthene	S16-Ja01040	NCP	%	88			70-130	Pass	
Chrysene	S16-Ja01040	NCP	%	82			70-130	Pass	
Dibenz(a.h)anthracene	S16-Ja01040	NCP	%	81			70-130	Pass	
Fluoranthene	S16-Ja01040	NCP	%	82			70-130	Pass	
Fluorene	S16-Ja01040	NCP	%	75			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S16-Ja01040	NCP	%	81			70-130	Pass	
Naphthalene	S16-Ja01040	NCP	%	82			70-130	Pass	
Phenanthrene	S16-Ja01040	NCP	%	72			70-130	Pass	
Pyrene	S16-Ja01040	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic (filtered)	S16-Ja12404	CP	%	107			70-130	Pass	
Cadmium (filtered)	S16-Ja12404	CP	%	104			70-130	Pass	
Chromium (filtered)	S16-Ja12404	CP	%	98			70-130	Pass	
Copper (filtered)	S16-Ja12404	CP	%	94			70-130	Pass	
Lead (filtered)	S16-Ja12404	CP	%	89			70-130	Pass	
Nickel (filtered)	S16-Ja12404	CP	%	98			70-130	Pass	
Zinc (filtered)	S16-Ja12404	CP	%	101			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S16-Ja13706	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	S16-Ja12369	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total	S16-Ja13706	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C10	S16-Ja13706	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Naphthalene	S16-Ja12369	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
1.1-Dichloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1-Dichloroethene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1-Trichloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2-Trichloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S16-Ja12369	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass	
1.2-Dibromoethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichlorobenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2-Dichloropropane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.3-Trichloropropane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.2.4-Trimethylbenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichlorobenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3-Dichloropropane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.3.5-Trimethylbenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
1.4-Dichlorobenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Butanone (MEK)	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
2-Propanone (Acetone)	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
4-Chlorotoluene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Allyl chloride	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromobenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromochloromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromodichloromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromoform	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromomethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Carbon disulfide	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Carbon Tetrachloride	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chlorobenzene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chloroethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chloroform	S16-Ja12369	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Chloromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
cis-1.2-Dichloroethene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
cis-1.3-Dichloropropene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromochloromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromomethane	S16-Ja12369	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Dichlorodifluoromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Iodomethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Isopropyl benzene (Cumene)	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Methylene Chloride	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Styrene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Tetrachloroethene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.2-Dichloroethene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.3-Dichloropropene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Trichloroethene	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Trichlorofluoromethane	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Vinyl chloride	S16-Ja12369	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Acenaphthylene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Anthracene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benz(a)anthracene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(a)pyrene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(b&j)fluoranthene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(g.h.i)perylene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(k)fluoranthene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chrysene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibenz(a.h)anthracene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluoranthene	S16-Ja01040	NCP	mg/L	0.001	0.001	3.0	30%	Pass
Fluorene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Indeno(1.2.3-cd)pyrene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Naphthalene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Phenanthrene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Pyrene	S16-Ja01040	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic (filtered)	S16-Ja12403	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Cadmium (filtered)	S16-Ja12403	CP	mg/L	0.0001	0.0001	15	30%	Pass
Chromium (filtered)	S16-Ja12403	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper (filtered)	S16-Ja12403	CP	mg/L	0.001	0.002	4.0	30%	Pass
Lead (filtered)	S16-Ja12403	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury (filtered)	S16-Ja12403	CP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel (filtered)	S16-Ja12403	CP	mg/L	0.010	0.010	1.0	30%	Pass	
Zinc (filtered)	S16-Ja12403	CP	mg/L	0.027	0.027	<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
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

Charl Du Preez	Analytical Services Manager
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

Uncertainty data is available on request

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1 8031

coffey

Consigning Office: CHATSWOOD

Report Results to: SALLY KING. Mobile: Email: @coffey.com

Invoices to: " " Phone: Email: @coffey.com

Project No: GEOTLOU252834A Task No: ENV - FIELDWORK

Project Name: SYD UNI Laboratory: MGT

Sampler's Name: Alex. R. Project Manager: SK

Special Instructions:

Relevant agreements. Eurofins COF_ENAUABTF00952AA_MSA1 , ALS COF_ENAUABTF00952AA_MSA2 and SGS COF_ENAUABTF00952AA_MSA3

Analysis Request Section

Lab No.	Sample ID	Sample Date	Time	Matrix (Soil...etc)	Container Type & Preservative*	T-A-T (specify)	Suite B4	Metals 4A	VOC/SVOC C6-C9 BTEX			NOTES
	BH2	22/1/16		WATER	2v, 1G, 1P	5day	X	X	X			
	BH9						X	X	X			
	BH12						X	X	X			
	DUP01				2v		X	X				
	TB				2v				X	X		
	TS								X	X		

RELINQUISHED BY

Name: Alex Ruettiger Date: 22/01/2016 →

Coffey Environments Time: 1145.

Name: Date: →

Company: Time:

RECEIVED BY

Name: Ellen Ng Date: 22/1/16

Company: EPAust Time: 13 15

Name: Date:

Company: Time:

Sample Receipt Advice: (Lab Use Only)

All Samples Recieved in Good Condition ☑

All Documentation is in Proper Order ☑

Samples Received Properly Chilled ☑

Lab. Ref/Batch No. 486493

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

eurofins | mgt

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Site # 1254 & 14271

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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Sample Receipt Advice

Company name:	**Coffey Geotechnics Pty Ltd Chatswood**
Contact name:	Sally King
Project name:	SYD UNI
Project ID:	GEOTLCOV25283AA
COC number:	8031
Turn around time:	1 Day
Date/Time received:	Jan 25, 2016 4:12 PM
Eurofins | mgt reference:	**486493**

Sample information

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

☑ Sample Temperature of a random sample selected from the batch as recorded by Eurofins | mgt Sample Receipt : 12.5 degrees Celsius.

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

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

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

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

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

Charl Du Preez on Phone : +61 (2) 9900 8400 or by e.mail: charldupreez@eurofins.com.au

Results will be delivered electronically via e.mail to Sally King - sally_king@coffey.com.

Note: A copy of these results will also be delivered to the general Coffey Geotechnics Pty Ltd Chatswood email address.

eurofins | mgt

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

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NATA # 1261 Site # 18217

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

Company Name:	Coffey Geotechnics Pty Ltd Chatswood	**Order No.:**		**Received:**	Jan 25, 2016 4:12 PM
Address:	Level 18, Tower B, Citadel Tower 799 Pacific Highway Chatswood NSW 2067	**Report #:**	486493	**Due:**	Jan 27, 2016
		Phone:	+61 2 9406 1000	**Priority:**	1 Day
		Fax:	+61 2 9406 1002	**Contact Name:**	Sally King
Project Name:	SYD UNI				
Project ID:	GEOTLCOV25283AA				

Eurofins | mgt Client Manager: Charl Du Preez

Sample Detail					Metals M8 filtered	Semivolatile Organic Compounds (SVOC)	Volatile Organics	Eurofins | mgt Suite B4	BTEX and Volatile TRH
Laboratory where analysis is conducted									
Melbourne Laboratory - NATA Site # 1254 & 14271									
Sydney Laboratory - NATA Site # 18217					X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794									
External Laboratory									
Sample ID	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
BH2	Jan 22, 2016		Water	S16-Ja12401	X	X	X	X	
BH9	Jan 22, 2016		Water	S16-Ja12402	X	X	X	X	
BH12	Jan 22, 2016		Water	S16-Ja12403	X	X	X	X	
DUP01	Jan 22, 2016		Water	S16-Ja12404	X			X	
TB	Jan 22, 2016		Water	S16-Ja12405					X
TS	Jan 22, 2016		Water	S16-Ja12406					X

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