

CHAIN OF CUSTODY

[illegible]

B10 - TRH/BTEX/PAH/OC/OPP/As,Cd,Cr,Cu,Ni,Pb,Zn,Hg
J82/JBL - TRH/BTEX/PAH/OC/PCB/As,Cd,Cr,Cu,Ni,Pb,Zn,Hg/TCLP(PAH & 6 Metals)
J83/JBL - TRH/BTEX/PAH/OC/OPP/PCB/As,Cd,Cr,Cu,Ni,Pb,Zn,Hg/TCLP(PAH & 6 Metals)/Asbestos
J84 - TRH/BTEX/VOC
JBL - TCLP(PAH & 6 Metals)

Appendix L Decontamination Documentation

CALIBRATION SUMMARY	
EQUIPMENT:	_____
CALIBRATION STANDARD:	_____

[illegible]

DECONTAMINATION SUMMARY			
EQUIPMENT: <u>Shovel.</u>			
1. Was the equipment decontaminated appropriately prior to sampling at each location?	<u>Y</u>	N	NA
2. Was excess soil removed by scraping, brushing or wiping with disposable towels?	<u>Y</u>	N	NA
3. Was the equipment contaminated with grease, tar or similar material? If so, was the equipment steam cleaned or rinsed with pesticide-grade acetone:hexane?	Y Y	N N	<u>NA</u>
4. Was phosphate-free detergent used to wash the equipment?	<u>Y</u>	N	NA
5. Was the equipment rinsed with clean water?	<u>Y</u>	N	NA
6. Was the equipment then rinsed with deionised water?	<u>Y</u>	N	NA
7. Were all sample containers cleaned and acid or solvent washed prior to sample collection?	Y	N	<u>NA</u>
WERE ANY ADDITIONAL DECONTAMINATION MEASURES REQUIRED? PROVIDE DETAILS.			
<u>New disposable nitrile gloves changed prior to collection of each sample.</u>			

Appendix M QA/QC Data

ESDAT QA Checker

Project:51707

Filter: ALL

Overview Summary

[Count of Samples](#)

[Count of Results](#)

Holding Times

[Holding Time Errors \(37\)](#)

Blanks

[Field Blanks](#)

Detects in Lab Blanks (0)

SDG's without Storage Blanks (0)

SDG's without Method Blanks (0)

Duplicates

[Field and Interlab Duplicates](#)

Lab Duplicates with high RPDs (0)

Duplicate Samples with incorrect or missing Parent Samples (0)

Samples at the same Location/Depth/Time not specified as duplicates (0)

Surrogates

[Surrogate Variation > 25% or outside lab LCL or UCL \(7\)](#)

Lab Control Samples

SDG's without a Laboratory Control Sample (0)

[Laboratory Control Samples, Error > 25% \(16\)](#)

Certified and Standard Reference Materials

Certified Reference Materials - Error > 25% (0)

Matrix Spikes

SDG's without a Matrix Spike (0)

Trip Spikes with invalid Control Sample (0)

[Less than 1 matrix spike in 20 samples, or less than 1 matrix duplicate in 20 samples \(2\)](#)

Matrix Spike Recoveries less than 30% or greater than 150% or outside lab LCL or UCL (0)

[Trip Spike Recoveries \(30% - 150% is acceptable\) \(6\)](#)

Inorganic

Na + CL > TDS (0)

BOD > COD (0)

BOD > COD (0)

Other

Unit Conversion Problems (0)

OriginalChemNames Requiring Validation (0)

Samples with no Results (0)

Samples associated with Wells which are not specified in the Well Table (0)

Aborted Analysis (0)

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Count of Samples

Matrix Type	SOIL	WATER
First Sample Date	31/05/2016	31/05/2016
Last Sample Date	31/05/2016	31/05/2016
Sampling Period (days)	1	1
Number of Samples Submitted	13	2
Number of Non QA Samples Submitted	11	0
Number of Field Blanks	0	0
Number of Trip Blanks	0	1
Number of Rinsates	0	1
Number of Field Duplicates	1	0
Number of Trip Spikes	0	1
Number of Lab Duplicates	3	0
Number of LCSs	11	10
Number of CRMs	0	0
Number of Method Blanks	10	6
Number of Storage Blanks	0	0
Number of Matrix Spikes	8	9
Number of Matrix Spike Dupes	0	0

Filter: ALL

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Count of Results

Matrix_Type	Sample_Type	Reg	Leached	Spike_Compounds	Surrogate
SOIL	Normal	621	20	0	33
SOIL	MB	154	0	0	5
SOIL	LCS	113	0	0	5
SOIL	Field_D	95	0	0	5
SOIL	Interlab_D	78	0	0	5
SOIL	MS	0	0	73	0
SOIL	LAB_D	43	0	0	0
WATER	Rinsate	72	0	0	5
WATER	MB	68	0	0	0
WATER	MS	0	0	50	0
WATER	LCS	50	0	0	0
WATER	Trip_S	6	0	0	1
WATER	Trip_B	6	0	0	1

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Holding Time Errors

SDG	Matrix_Type	SampleCode	Field_ID	Depth	Sampled_Date-Time	Volatility	ChemName	Result	Sampled_to_Extraction_Days	Sampled_to_Analysis_Days	Major_Exceedance
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	VOC	Naphthalene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	VOC	Naphthalene	0.002 MG/L	10	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Chrysene	1.1 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Dibenz(a,h)anthracene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Fluorene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Phenanthrene	1.6 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Pyrene	2.6 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	PAHs (Total)	12.1 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(k)fluoranthene	0.9 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Fluoranthene	2.4 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Anthracene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Indeno(1,2,3-c,d)pyrene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(g,h,i)perylene	0.7 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Acenaphthene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Acenaphthylene	0.5 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(a)anthracene	0.9 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(a)pyrene	1.1 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(a)pyrene TEQ (lower bound)*	1.4 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(a)pyrene TEQ (medium bound)*	1.7 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(a)pyrene TEQ (upper bound)*	1.9 MG/KG	8	16	N
503683	SOIL	S16-Jn07502	BH03 0.9-1.0	BH030.9 - 1	31/05/2016	SVOC	Benzo(b,j)fluoranthene	0.8 MG/KG	8	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Fluoranthene	0.002 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Benzo(g,h,i)perylene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Indeno(1,2,3-c,d)pyrene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Fluorene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Dibenz(a,h)anthracene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Phenanthrene	0.005 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Benzo(k)fluoranthene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Pyrene	0.002 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Benzo(b,j)fluoranthene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Benzo(a)pyrene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Benzo(a)anthracene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Anthracene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Acenaphthylene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Acenaphthene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	Chrysene	0.001 MG/L	10	16	N
503683	SOIL	S16-Jn07503	BH03 0.4-0.5	BH030.4 - 0.5	31/05/2016	SVOC	PAHs (Total)	0.012 MG/L	8	16	N

Field Blanks (WATER)
Filter: ALL

			SDG Field ID Sampled_Date/Time Sample Type	502667 RB 31/05/2016 Rinsate	502667 TB 31/05/2016 Trip_B
Chem_Group	ChemName	Units	EQL		
BTEX	Benzene	mg/l	0.001	<0.001	<0.001
	Ethylbenzene	mg/l	0.001	<0.001	<0.001
	Toluene	mg/l	0.001	<0.001	<0.001
	Xylene (m & p)	mg/l	0.002	<0.002	<0.002
	Xylene (o)	mg/l	0.001	<0.001	<0.001
	Xylene (Total)	mg/l	0.003	<0.003	<0.003
Chlorinated Benzenes	Hexachlorobenzene	mg/l	0.0001	<0.0001	
Metals & Metalloids	Arsenic (Total) (Filtered)	mg/l	0.001	<0.001	
	Cadmium (Filtered)	mg/l	0.0002	<0.0002	
	Chromium (Total) (Filtered)	mg/l	0.001	<0.001	
	Copper (Filtered)	mg/l	0.001	0.002	
	Lead (Filtered)	mg/l	0.001	<0.001	
	Mercury (Inorganic) (Filtered)	mg/l	0.0001	<0.0001	
	Nickel (Filtered)	mg/l	0.001	<0.001	
	Zinc (Filtered)	mg/l	0.001	0.004	
Organochlorine Pesticides	Aldrin	mg/l	0.0001	<0.0001	
	4,4-DDE	µg/l	0.1	<0.1	
	Dieldrin	mg/l	0.0001	<0.0001	
	DDD	mg/l	0.0001	<0.0001	
	alpha-BHC	mg/l	0.0001	<0.0001	
	DDT	mg/l	0.0001	<0.0001	
	beta-BHC	mg/l	0.0001	<0.0001	
	Chlordane	mg/l	0.001	<0.001	
	delta-BHC	mg/l	0.0001	<0.0001	
	Endosulfan alpha	mg/l	0.0001	<0.0001	
	Endosulfan beta	mg/l	0.0001	<0.0001	
	Endosulfan sulphate	mg/l	0.0001	<0.0001	
	Endrin	mg/l	0.0001	<0.0001	
	Endrin aldehyde	mg/l	0.0001	<0.0001	
	Endrin ketone	mg/l	0.0001	<0.0001	
	Heptachlor	mg/l	0.0001	<0.0001	
	Heptachlor Epoxide	mg/l	0.0001	<0.0001	
	Lindane	mg/l	0.0001	<0.0001	
	Methoxychlor	mg/l	0.0001	<0.0001	
	Toxaphene	mg/l	0.01	<0.01	
Polychlorinated Biphenyls	Aroclor 1016	mg/l	0.001	<0.001	
	Aroclor 1221	mg/l	0.001	<0.001	
	Aroclor 1232	mg/l	0.001	<0.001	
	Aroclor 1242	mg/l	0.001	<0.001	
	Aroclor 1248	mg/l	0.001	<0.001	
	Aroclor 1254	mg/l	0.001	<0.001	
	Aroclor 1260	mg/l	0.001	<0.001	
	PCBs (Total)	mg/l	0.001	<0.001	
Polycyclic Aromatic Hydrocarbons	Acenaphthene	mg/l	0.001	<0.001	
	Acenaphthylene	mg/l	0.001	<0.001	
	Anthracene	mg/l	0.001	<0.001	
	Benz(a)anthracene	mg/l	0.001	<0.001	
	Benzo(a)pyrene	mg/l	0.001	<0.001	
	Benzo(b,j)fluoranthene	mg/l	0.001	<0.001	
	Benzo(g,h,i)perylene	mg/l	0.001	<0.001	
	Benzo(k)fluoranthene	mg/l	0.001	<0.001	
	Chrysene	mg/l	0.001	<0.001	
	Dibenz(a,h)anthracene	mg/l	0.001	<0.001	
	Fluoranthene	mg/l	0.001	<0.001	
	Fluorene	mg/l	0.001	<0.001	
	Indeno(1,2,3-c,d)pyrene	mg/l	0.001	<0.001	
	Naphthalene	mg/l	0.001	<0.01	
	Phenanthrene	mg/l	0.001	<0.001	
	Pyrene	mg/l	0.001	<0.001	
	PAHs (Total)	mg/l	0.001	<0.001	
TPHs (NEPC 1999)	C6-C9 Fraction	mg/l	0.02	<0.02	
	C10-C14 Fraction	mg/l	0.05	<0.05	
	C15-C28 Fraction	mg/l	0.1	<0.1	
	C29-C36 Fraction	mg/l	0.1	<0.1	
	C10-C36 Fraction (Total)	mg/l	0.1	<0.1	
TRHs (NEPC 2013)	>C10-C16 Fraction	mg/l	0.05	<0.05	
	>C16-C34 Fraction	mg/l	0.1	<0.1	
	>C34-C40 Fraction	mg/l	0.1	<0.1	
	C6-C10 Fraction	mg/l	0.02	<0.02	
	C6 - C10 less BTEX (F1)	mg/l	0.02	<0.02	
	>C10 - C16 less Naphthalene (F2)	mg/l	0.05	<0.05	

Field Duplicates (SOIL)
Filter: ALL

			SDG Field ID Sampled Date/Time	502667 HA02 0.00-0.10 31/05/2016	502667 QC01 31/05/2016	RPD
Chem_Group	ChemName	Units	EQL			
Metals & Metalloids	Arsenic (Total)	mg/kg	2 (Primary): 4 (Interlab)	3.5	3.5	0
	Cadmium	mg/kg	0.4	<0.4	<0.4	0
	Chromium (Total)	mg/kg	5 (Primary): 1 (Interlab)	<5.0	<5.0	0
	Copper	mg/kg	5 (Primary): 1 (Interlab)	15.0	21.0	33
	Lead	mg/kg	5 (Primary): 1 (Interlab)	89.0	86.0	3
	Mercury (Inorganic)	mg/kg	0.05 (Primary): 0.1 (Interlab)	0.09	0.09	0
	Nickel	mg/kg	5 (Primary): 1 (Interlab)	<5.0	<5.0	0
	Zinc	mg/kg	5 (Primary): 1 (Interlab)	110.0	99.0	11
TPHs (NEPC 1999)	C6-C9 Fraction	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<20.0	0
	C10-C14 Fraction	mg/kg	20 (Primary): 50 (Interlab)	<20.0	<20.0	0
	C15-C28 Fraction	mg/kg	50 (Primary): 100 (Interlab)	<50.0	<50.0	0
	C29-C36 Fraction	mg/kg	50 (Primary): 100 (Interlab)	<50.0	<50.0	0
	C10-C36 Fraction (Total)	mg/kg	50	<50.0	<50.0	0
TRHs (NEPC 2013)	>C10-C16 Fraction	mg/kg	50	<50.0	<50.0	0
	>C16-C34 Fraction	mg/kg	100	<100.0	<100.0	0
	>C34-C40 Fraction	mg/kg	100	<100.0	<100.0	0
	C6-C10 Fraction	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<20.0	0
	C6 - C10 less BTEX (F1)	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<20.0	0
	>C10 - C16 less Naphthalene (F2)	mg/kg	50	<50.0	<50.0	0
BTEX	Benzene	mg/kg	0.1 (Primary): 0.2 (Interlab)	<0.1	<0.1	0
	Ethylbenzene	mg/kg	0.1 (Primary): 1 (Interlab)	<0.1	<0.1	0
	Toluene	mg/kg	0.1 (Primary): 0.5 (Interlab)	<0.1	<0.1	0
	Xylene (m & p)	mg/kg	0.2 (Primary): 2 (Interlab)	<0.2	<0.2	0
	Xylene (o)	mg/kg	0.1 (Primary): 1 (Interlab)	<0.1	<0.1	0
	Xylene (Total)	mg/kg	0.3	<0.3	<0.3	0
Polycyclic Aromatic Hydrocarbons	Acenaphthene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Acenaphthylene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Benz(a)anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Benzo(a)pyrene	mg/kg	0.5 (Primary): 0.05 (Interlab)	<0.5	<0.5	0
	Benzo(b,j)fluoranthene	mg/kg	0.5	<0.5	<0.5	0
	Benzo(g,h,i)perylene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0
	Chrysene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Dibenz(a,h)anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Fluoranthene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Fluorene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Naphthalene	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Naphthalene	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	PAHs (Total)	mg/kg	0.5	<0.5	<0.5	0
Chlorinated Benzenes	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
Polychlorinated Biphenyls	Aroclor 1016	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Aroclor 1221	mg/kg	0.1	<0.1	<0.1	0
	Aroclor 1232	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Aroclor 1242	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Aroclor 1248	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Aroclor 1254	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	Aroclor 1260	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.5	0
	PCBs (Total)	mg/kg	0.5	<0.5	<0.5	0
Organochlorine Pesticides	Aldrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	4,4-DDE	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Dieldrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	DDD	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	alpha-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	DDT	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	beta-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Chlordane	mg/kg	0.1	<0.1	<0.1	0
	delta-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endosulfan alpha	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endosulfan beta	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Endrin ketone	mg/kg	0.05	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Heptachlor Epoxide	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Lindane	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.05	0
	Methoxychlor	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.2	0
	Toxaphene	mg/kg	1	<1.0	<1.0	0
Asbestos	Approx. Sample Mass	G		534.0	568.0	6
	Asbestos from ACM in Soil	%w/w		0.0657	0.0	200
	Mass ACM	G		2.3385	0.0	200
	Mass Asbestos in ACM	G		0.3508	0.0	200
	Mass FA	G		0.0	0.0	0
	Asbestos from FA & AF in Soil	%w/w		0.0	0.0	0
	Mass Asbestos in FA	G		0.0	0.0	0
	Mass AF	G		0.0	0.0	0
	Mass Asbestos in AF	G		0.0	0.0	0
	Mass Asbestos in FA & AF	G		0.0	0.0	0
Asbestos	Synthetic Fibres - Comment	COMMENT		1.0	1.0	0
Asbestos - Trace Analysis	ACM - Comment	COMMENT		1.0	1.0	0
	AF - Comment	COMMENT		1.0	1.0	0

Field Duplicates (SOIL)
Filter: ALL

			SDG	502667	502667	
			Field ID	HA02 0.00-0.10	QC01	RPD
			Sampled Date/Time	31/05/2016	31/05/2016	
	FA - Comment	COMMENT		1.0	1.0	0
	Organic Fibres - Comment	COMMENT		1.0	1.0	0
	Respirable Fibres - Comment	COMMENT		1.0	1.0	0
Other	% Moisture 103oC	%	1	8.5	13.0	42

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 80 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories.
Any methods in the row header relate to those used in the primary laboratory

Field Duplicates (SOIL)
Filter: ALL

			SDG Field ID Sampled Date/Time	502667 HA02 0.00-0.10 31/05/2016	Interlab_D QC01/A 31/05/2016	RPD
Chem_Group	ChemName	Units	EQL			
Metals & Metalloids	Arsenic (Total)	mg/kg	2 (Primary): 4 (Interlab)	3.5	<4.0	0
	Cadmium	mg/kg	0.4	<0.4	<0.4	0
	Chromium (Total)	mg/kg	5 (Primary): 1 (Interlab)	<5.0	6.0	18
	Copper	mg/kg	5 (Primary): 1 (Interlab)	15.0	17.0	13
	Lead	mg/kg	5 (Primary): 1 (Interlab)	89.0	73.0	20
	Mercury (Inorganic)	mg/kg	0.05 (Primary): 0.1 (Interlab)	0.09	<0.1	0
	Nickel	mg/kg	5 (Primary): 1 (Interlab)	<5.0	2.0	0
	Zinc	mg/kg	5 (Primary): 1 (Interlab)	110.0	99.0	11
TPHs (NEPC 1999)	C6-C9 Fraction	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<25.0	0
	C10-C14 Fraction	mg/kg	20 (Primary): 50 (Interlab)	<20.0	<50.0	0
	C15-C28 Fraction	mg/kg	50 (Primary): 100 (Interlab)	<50.0	<100.0	0
	C29-C36 Fraction	mg/kg	50 (Primary): 100 (Interlab)	<50.0	<100.0	0
	C10-C36 Fraction (Total)	mg/kg	50	<50.0		
TRHs (NEPC 2013)	>C10-C16 Fraction	mg/kg	50	<50.0	<50.0	0
	>C16-C34 Fraction	mg/kg	100	<100.0	<100.0	0
	>C34-C40 Fraction	mg/kg	100	<100.0	<100.0	0
	C6-C10 Fraction	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<25.0	0
	C6 - C10 less BTEX (F1)	mg/kg	20 (Primary): 25 (Interlab)	<20.0	<25.0	0
	>C10 - C16 less Naphthalene (F2)	mg/kg	50	<50.0	<50.0	0
BTEX	Benzene	mg/kg	0.1 (Primary): 0.2 (Interlab)	<0.1	<0.2	0
	Ethylbenzene	mg/kg	0.1 (Primary): 1 (Interlab)	<0.1	<1.0	0
	Toluene	mg/kg	0.1 (Primary): 0.5 (Interlab)	<0.1	<0.5	0
	Xylene (m & p)	mg/kg	0.2 (Primary): 2 (Interlab)	<0.2	<2.0	0
	Xylene (o)	mg/kg	0.1 (Primary): 1 (Interlab)	<0.1	<1.0	0
	Xylene (Total)	mg/kg	0.3	<0.3		
Polycyclic Aromatic Hydrocarbons	Acenaphthene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Acenaphthylene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.1	0
	Anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Benz(a)anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.3	0
	Benzo(a)pyrene	mg/kg	0.5 (Primary): 0.05 (Interlab)	<0.5	0.3	0
	Benzo(b,j)fluoranthene	mg/kg	0.5	<0.5		
	Benzo(g,h,i)perylene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.2	0
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5		
	Chrysene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.3	0
	Dibenz(a,h)anthracene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Fluoranthene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.5	0
	Fluorene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Indeno(1,2,3-c,d)pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.2	0
	Naphthalene	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.1	0
	Naphthalene	mg/kg	0.5 (Primary): 1 (Interlab)	<0.5	<0.1	0
	Phenanthrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.2	0
	Pyrene	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	0.5	0
	PAHs (Total)	mg/kg	0.5	<0.5		
Chlorinated Benzenes	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
Polychlorinated Biphenyls	Aroclor 1016	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 1221	mg/kg	0.1	<0.1	<0.1	0
	Aroclor 1232	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 1242	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 1248	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 1254	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	Aroclor 1260	mg/kg	0.5 (Primary): 0.1 (Interlab)	<0.5	<0.1	0
	PCBs (Total)	mg/kg	0.5	<0.5		
Organochlorine Pesticides	Aldrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	4,4-DDE	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Dieldrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	DDD	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	alpha-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	DDT	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	beta-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Chlordane	mg/kg	0.1	<0.1		
	delta-BHC	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endosulfan alpha	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endosulfan beta	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endrin	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Endrin ketone	mg/kg	0.05	<0.05		
	Heptachlor	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Heptachlor Epoxide	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Lindane	mg/kg	0.05 (Primary): 0.1 (Interlab)	<0.05	<0.1	0
	Methoxychlor	mg/kg	0.2 (Primary): 0.1 (Interlab)	<0.2	<0.1	0
	Toxaphene	mg/kg	1	<1.0		
Asbestos	Approx. Sample Mass	G		534.0		
	Asbestos from ACM in Soil	%w/w		0.0657		
	Mass ACM	G		2.3385		
	Mass Asbestos in ACM	G		0.3508		
	Mass FA	G		0.0		
	Asbestos from FA & AF in Soil	%w/w		0.0		
	Mass Asbestos in FA	G		0.0		
	Mass AF	G		0.0		
	Mass Asbestos in AF	G		0.0		
	Mass Asbestos in FA & AF	G		0.0		
Asbestos	Synthetic Fibres - Comment	COMMENT		1.0		
Asbestos - Trace Analysis	ACM - Comment	COMMENT		1.0		
	AF - Comment	COMMENT		1.0		

Field Duplicates (SOIL)
Filter: ALL

			SDG	502667	Interlab_D	
			Field ID	HA02 0.00-0.10	QC01/A	RPD
			Sampled Date/Time	31/05/2016	31/05/2016	
	FA - Comment	COMMENT		1.0		
	Organic Fibres - Comment	COMMENT		1.0		
	Respirable Fibres - Comment	COMMENT		1.0		
Other	% Moisture 103oC	%	1	8.5		

*RPDs have only been considered where a concentration is greater than 1 times the EQL.

**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 80 (1-10 x EQL); 50 (10-30 x EQL); 30 (> 30 x EQL))

***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories.

Any methods in the row header relate to those used in the primary laboratory

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Surrogate Variation > 25% or outside lab LCL or UCL

SDG	Expr1001	Lab_Report_Number	Sample_Type	Matrix_Type	SampleCode	Field_ID	Depth	Sampled_Date-Time	Compound	Recovery %	Unit	LCL	UCL
502667	502667	502667	Normal	SOIL	S16-Jn00245	HA01 0.00-0.10	HA010 - 1	31/05/2016	Dibutylchlorendate (surr.)	71	%	70	130
502667	502667	502667	Normal	SOIL	S16-Jn00246	HA02 0.00-0.10	HA020 - 1	31/05/2016	Dibutylchlorendate (surr.)	71	%	70	130
502667	502667	502667	Normal	SOIL	S16-Jn00248	HA03 0.0-0.10	HA030 - 0.1	31/05/2016	Dibutylchlorendate (surr.)	71	%	70	130
502667	502667	502667	Normal	SOIL	S16-Jn00249	HA04 0.20-0.30	HA040.2 - 0.3	31/05/2016	Dibutylchlorendate (surr.)	68	%	70	130
502667	502667	502667	Normal	SOIL	S16-Jn00249	HA04 0.20-0.30	HA040.2 - 0.3	31/05/2016	p-Terphenyl-d14 (surr.)	126	%	30	130
502667	502667	502667	Rinsate	WATER	S16-Jn00250	RB	RB	31/05/2016	2-Fluorobiphenyl (surr.)	69	%	50	150
502667	502667	502667	Rinsate	WATER	S16-Jn00250	RB	RB	31/05/2016	Dibutylchlorendate (surr.)	141	%	50	150

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Laboratory Control Samples, Error > 25%

SDG	Matrix_Type	SampleCode	Method_Name	OriginalChemName	Recovery %	Unit	Result_Type
502667	SOIL	LCS_6_502667	TRH C6-C36 - LTM-ORG-2010	TRH C6-C9	74	%	REG
502667	SOIL	LCS_8_502667	E013 Organochlorine Pesticides (OC)	Endrin aldehyde	126	%	REG
502667	WATER	LCS_10_502667	USEPA 8081 Organochlorine Pesticides	d-BHC	72	%	REG
502667	WATER	LCS_11_502667	USEPA 8270 Polycyclic Aromatic Hydrocarbons	Dibenz(a.h)anthracene	128	%	REG
502667	WATER	LCS_15_502667	USEPA 8081 Organochlorine Pesticides	Endrin	74	%	REG
502667	WATER	LCS_17_502667	USEPA 8081 Organochlorine Pesticides	Methoxychlor	73	%	REG
502667	WATER	LCS_18_502667	TRH C6-C40 - LTM-ORG-2010	TRH >C10-C16	70	%	REG
502667	WATER	LCS_18_502667	TRH C6-C36 - LTM-ORG-2010	TRH C10-C14	70	%	REG
503683	SOIL	LCS_1_503683	E007 Polyaromatic Hydrocarbons (PAH)	Dibenz(a.h)anthracene	73	%	REG
503683	SOIL	LCS_1_503683	E007 Polyaromatic Hydrocarbons (PAH)	Indeno(1.2.3-cd)pyrene	74	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-016 - BTEX and C6-C10 alkanes in soil & water	Benzene	73	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-016 - BTEX and C6-C10 alkanes in soil & water	Toluene	72	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-005 - OCP in water and soils	Aldrin	74	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-005 - OCP in water and soils	Heptachlor Epoxide	72	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-005 - OCP in water and soils	pp-DDD	70	%	REG
ENVIROLAB	SOIL	147764LCS-4	Org-005 - OCP in water and soils	Endosulfan Sulphate	70	%	REG

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Less than 1 matrix spike in 20 samples, or less than 1 matrix duplicate in 20 samples

Matrix_Type	Number_of_Samples	Number_of_Matrix_Spike_Samples	Number_of_Matrix_Spike_Dupe_Samples
SOIL	45	8	0
WATER	28	9	0

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Trip Spike Recoveries (30% - 150% is acceptable)

SDG	Lab_Report_Number	Matrix_Type	SampleCode	Field_ID	Method_Name	Compound	Trip_Spike_Result	Trip_Spike_Control	Result_Units	Spike_Recovery_%	Acceptable	Result_Type
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	Benzene	NA	NA	NA	94	Y	REG
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	Ethylbenzene	NA	NA	NA	101	Y	REG
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	m&p-Xylenes	NA	NA	NA	100	Y	REG
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	o-Xylene	NA	NA	NA	100	Y	REG
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	Toluene	NA	NA	NA	99	Y	REG
502667	502667	WATER	S16-Jn00251	TS	TRH C6-C40 - LTM-ORG-2010	Xylenes - Total	NA	NA	NA	100	Y	REG

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