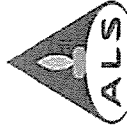
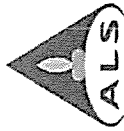


Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		A1-COMP-SURF		A5-COMP-SURF		STOCK.1		STOCK.2		STOCK.3	
Compound	CAS Number	Client sampling date / time		22-Aug-2017 11:30	22-Aug-2017 03:30	22-Aug-2017 14:35	22-Aug-2017 14:50	22-Aug-2017 14:55					
		LOR	Unit						Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued													
Fenamphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	-----	-----	-----					
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	-----	-----	-----					
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	-----	-----	-----					
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	-----	-----	-----					
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	-----	-----	-----					
EP075(SIM)A: Phenolic Compounds													
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	-----	-----	-----					
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	-----	-----	-----					
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons													
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	-----	-----	-----					



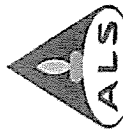
Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID				STOCK.1		STOCK.2		STOCK.3	
		Client sampling date / time				22-Aug-2017 14:35		22-Aug-2017 14:50		22-Aug-2017 14:55	
Compound	CAS Number	LOR	Unit	A1-COMP-SURF	A5-COMP-SURF	Result	Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued											
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
^ Total Chlordane (sum)	---	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
4,4'-DDE	72-55-9	0.05	mg/kg	0.08	0.41	---	---	---	---	---	---
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	---	---	---	---	---	---
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	---	---	---	---	---	---
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5	0.05	mg/kg	0.08	0.41	---	---	---	---	---	---
		0-2									
EP068B: Organophosphorus Pesticides (OP)											
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	---	---	---	---	---	---
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	---	---	---	---	---	---
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	---	---	---	---	---	---
Primphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	---	---	---	---	---	---



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		Client sampling data / time		A1-COMP-SURF		A5-COMP-SURF		STOCK.1		STOCK.2		STOCK.3	
Compound	CAS Number	LOR	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
EA0855: Moisture Content (Dried @ 105-110°C)															
Moisture Content	---	1.0	%	---	12.5	---	13.6	---	---	---	---	---	---	---	---
EA200: AS 4984 - 2004 Identification of Asbestos in Soils															
Asbestos Detected	1332-21-4	0.1	g/kg	---	---	---	---	---	---	No	Yes	Yes	Yes	Yes	Yes
Asbestos Type	1332-21-4	-	-	---	---	---	---	---	---	-	Ch + Cr	Ch + Cr	Ch + Cr	Ch + Cr	Ch + Cr
Sample weight (dry)	---	0.01	g	---	---	---	---	---	---	200	226	279	279	279	279
APPROVED IDENTIFIER:	---	-	-	---	---	---	---	---	---	S.SPOONER	S.SPOONER	S.SPOONER	S.SPOONER	S.SPOONER	S.SPOONER
EA200N: Asbestos Quantification (non-NATA)															
ø Free Fibres	---	5	Fibres	---	---	---	---	---	---	No	No	No	No	No	No
ø Friable Asbestos	1332-21-4	0.0004	g	---	---	---	---	---	---	<0.0004	<0.0004	<0.0004	<0.0004	0.0616	0.0616
ø Friable Asbestos (as Asbestos in Soil)	1332-21-4	0.001	% (w/w)	---	---	---	---	---	---	<0.001	<0.001	<0.001	<0.001	0.022	0.022
ø Asbestos Containing Material	1332-21-4	0.1	g	---	---	---	---	---	---	<0.1	<0.1	6.6	<0.1	<0.1	<0.1
ø Asbestos Containing Material (as 15% Asbestos in ACM >7mm)	1332-21-4	0.01	% (w/w)	---	---	---	---	---	---	<0.01	<0.01	0.44	<0.01	<0.01	<0.01
ø Weight Used for % Calculation	---	0.0001	kg	---	---	---	---	---	---	0.200	0.200	0.226	0.226	0.279	0.279
EG005T: Total Metals by ICP-AES															
Arsenic	7440-38-2	5	mg/kg	13	---	---	7	---	---	---	---	---	---	---	---
Cadmium	7440-43-9	1	mg/kg	<1	---	---	<1	---	---	---	---	---	---	---	---
Chromium	7440-47-3	2	mg/kg	23	---	---	22	---	---	---	---	---	---	---	---
Copper	7440-50-8	5	mg/kg	29	---	---	34	---	---	---	---	---	---	---	---
Lead	7439-92-1	5	mg/kg	22	---	---	35	---	---	---	---	---	---	---	---
Nickel	7440-02-0	2	mg/kg	10	---	---	18	---	---	---	---	---	---	---	---
Zinc	7440-66-6	5	mg/kg	64	---	---	83	---	---	---	---	---	---	---	---
EG085T: Total Recoverable Mercury by FIMS															
Mercury	7439-97-6	0.1	mg/kg	<0.1	---	---	<0.1	---	---	---	---	---	---	---	---
EP066: Polychlorinated Biphenyls (PCB)															
Total Polychlorinated biphenyls	---	0.1	mg/kg	<0.1	---	---	<0.1	---	---	---	---	---	---	---	---
EP088A: Organochlorine Pesticides (OC)															
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---
beta-BHC	319-85-7	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---
delta-BHC	319-86-8	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---
Heptachlor	76-14-8	0.05	mg/kg	<0.05	---	---	<0.05	---	---	---	---	---	---	---	---



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Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported result is less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When no sampling time is provided, the sampling time will default 00:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory and displayed in brackets without a time component.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

Λ = This result is computed from individual analyte detections at or above the level of reporting

σ = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

• EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.

Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)

The Friable Asbestos weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos

Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.

All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.

• EA200 'Am' Amosite (brown asbestos)

• EA200 'Cr' Crocidolite (blue asbestos)

• EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres

• EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.

• EA200 Legend

• EA200 'CH' Chrysotile (white asbestos)

• EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.

• EA200: Negative results for vinyl tiles should be confirmed by an independent analytical technique.

• EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination

• Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benzo(a)anthracene (0.1), Chrysene (0.01), Benzo(b)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1,2,3-cd)pyrene (0.1), Dibenzo(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR.

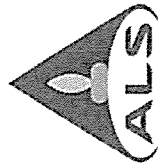
Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.

• EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2

• EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.

• EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.

• EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.



Environmental

CERTIFICATE OF ANALYSIS

Work Order	: ES1720905	Page	: 1 of 13
Client	: BENBOW ENVIRONMENTAL	Laboratory	: Environmental Division Sydney
Contact	: Jessica Roy	Contact	: Customer Services ES
Address	: 13 DAKING STREET NORTH PARRAMATTA NSW, AUSTRALIA 2151	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 9890 5099	Telephone	: +61-2-8784 8555
Project	: 171144	Date Samples Received	: 22-Aug-2017 16:30
Order number	: 171144	Date Analysis Commenced	: 23-Aug-2017
C-O-C number	: ---	Issue Date	: 29-Aug-2017 15:44
Sampler	: Jessica Roy, LAUREN O'BRIEN		
Site	: ---		
Quote number	: SYBQ/261/16		
No. of samples received	: 15		
No. of samples analysed	: 15		



Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

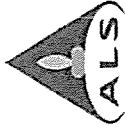
Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Raymond Commodore	Instrument Chemist	Sydney Inorganics, Smithfield, NSW
Shaun Spooner	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW

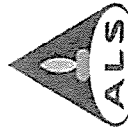
Attachment 6: Analytical Results



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Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

Sub-Matrix: SOIL

Sub-Matrix: SOIL				Matrix Spike (MS) Report			
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Spike	MS	Recovery Limits (%)	
				Concentration		Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1069173) - continued							
ES1720820-001	Anonymous	EP068: Bromophos-ethyl	4824-78-5	0.5 mg/kg	104	70	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	98.3	70	130
EP075(SIM)A: Phenolic Compounds (QCLot: 1069172)							
ES1720820-001	Anonymous	EP075(SIM): Phenol	108-95-2	10 mg/kg	92.4	70	130
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	93.4	70	130
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	80.0	60	130
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	90.0	70	130
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	62.9	20	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1069172)							
ES1720820-001	Anonymous	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	93.2	70	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	94.0	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1069171)							
ES1720820-001	Anonymous	EP071: C10 - C14 Fraction	---	523 mg/kg	99.7	73	137
		EP071: C15 - C28 Fraction	---	2319 mg/kg	104	53	131
		EP071: C29 - C36 Fraction	---	1714 mg/kg	124	52	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 1071544)							
ES1720891-024	Anonymous	EP080: C6 - C9 Fraction	---	32.5 mg/kg	82.2	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1069171)							
ES1720820-001	Anonymous	EP071: >C10 - C16 Fraction	---	860 mg/kg	100	73	137
		EP071: >C16 - C34 Fraction	---	3223 mg/kg	114	53	131
		EP071: >C34 - C40 Fraction	---	1058 mg/kg	117	52	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1071544)							
ES1720891-024	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	81.9	70	130
EP080: BTEXN (QCLot: 1071544)							
ES1720891-024	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	78.4	70	130
		EP080: Toluene	108-88-3	2.5 mg/kg	83.0	70	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	88.4	70	130
		EP080: meta- & para-Xylene	108-38-3	2.5 mg/kg	86.8	70	130
		EP080: ortho-Xylene	106-42-3	2.5 mg/kg	86.0	70	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	89.3	70	130

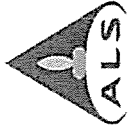


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Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: SOIL

Laboratory sample ID		Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report			
					Spike Concentration	SpikeRecovery(%) MS	Recovery Limits (%)	
							Low	High
EG005T: Total Metals by ICP-AES (QC Lot: 1075216)								
ES1720905-001	A1-COMP-SURF	EG005T: Arsenic	7440-38-2	50 mg/kg	96.6	70	130	
		EG005T: Cadmium	7440-43-9	50 mg/kg	102	70	130	
		EG005T: Chromium	7440-47-3	50 mg/kg	98.2	70	130	
		EG005T: Copper	7440-50-8	250 mg/kg	102	70	130	
		EG005T: Lead	7439-92-1	250 mg/kg	101	70	130	
		EG005T: Nickel	7440-02-0	50 mg/kg	99.0	70	130	
		EG005T: Zinc	7440-66-6	250 mg/kg	101	70	130	
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 1075217)								
ES1720905-001	A1-COMP-SURF	EG035T: Mercury	7439-97-6	5 mg/kg	95.8	70	130	
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 1069174)								
ES1720820-001	Anonymous	EP066: Total Polychlorinated biphenyls	—	1 mg/kg	96.0	70	130	
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1069147)								
ES1720905-006	A4-DISC1-SURF	EP068: gamma-BHC	58-89-9	0.5 mg/kg	96.6	70	130	
		EP068: Heptachlor	76-44-8	0.5 mg/kg	94.5	70	130	
		EP068: Aldrin	309-00-2	0.5 mg/kg	82.9	70	130	
		EP068: Dieldrin	60-57-1	0.5 mg/kg	83.5	70	130	
		EP068: Endrin	72-20-8	2 mg/kg	86.0	70	130	
		EP068: 4,4'-DDT	50-29-3	2 mg/kg	88.8	70	130	
EP068A: Organochlorine Pesticides (OC) (QC Lot: 1069173)								
ES1720820-001	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	103	70	130	
		EP068: Heptachlor	76-44-8	0.5 mg/kg	83.8	70	130	
		EP068: Aldrin	309-00-2	0.5 mg/kg	108	70	130	
		EP068: Dieldrin	60-57-1	0.5 mg/kg	105	70	130	
		EP068: Endrin	72-20-8	2 mg/kg	102	70	130	
		EP068: 4,4'-DDT	50-29-3	2 mg/kg	103	70	130	
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1069147)								
ES1720905-006	A4-DISC1-SURF	EP068: Diazinon	333-41-5	0.5 mg/kg	87.0	70	130	
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	79.4	70	130	
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	74.6	70	130	
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	76.0	70	130	
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	74.7	70	130	
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 1069173)								
ES1720820-001	Anonymous	EP068: Diazinon	333-41-5	0.5 mg/kg	91.9	70	130	
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	76.6	70	130	
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	74.9	70	130	

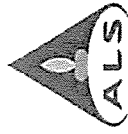


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Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

Sub-Matrix: SOIL

Sub-Matrix: SOIL			Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method: Compound			Result	Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
CAS Number	LOR	Unit			LCS	Low	High	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1069172) - continued								
EP075(SIM): Acenaphthene	83-32-9	mg/kg	<0.5	6 mg/kg	83.6	73	127	
EP075(SIM): Fluorene	86-73-7	mg/kg	<0.5	6 mg/kg	93.5	72	126	
EP075(SIM): Phenanthrene	85-01-8	mg/kg	<0.5	6 mg/kg	90.2	75	127	
EP075(SIM): Anthracene	120-12-7	mg/kg	<0.5	6 mg/kg	89.8	77	127	
EP075(SIM): Fluoranthene	206-44-0	mg/kg	<0.5	6 mg/kg	97.8	73	127	
EP075(SIM): Pyrene	129-00-0	mg/kg	<0.5	6 mg/kg	92.6	74	128	
EP075(SIM): Benz(a)anthracene	56-55-3	mg/kg	<0.5	6 mg/kg	89.6	69	123	
EP075(SIM): Chrysene	218-01-9	mg/kg	<0.5	6 mg/kg	90.0	75	127	
EP075(SIM): Benzo(b+h)fluoranthene	205-99-2	mg/kg	<0.5	6 mg/kg	90.3	68	116	
EP075(SIM): Benzo(k)fluoranthene	207-08-9	mg/kg	<0.5	6 mg/kg	92.4	74	126	
EP075(SIM): Benzo(a)pyrene	50-32-8	mg/kg	<0.5	6 mg/kg	88.6	70	126	
EP075(SIM): Indeno(1,2,3,cd)pyrene	193-39-5	mg/kg	<0.5	6 mg/kg	81.9	61	121	
EP075(SIM): Dibenzo(a,h)anthracene	53-70-3	mg/kg	<0.5	6 mg/kg	83.2	62	118	
EP075(SIM): Benzo(g,h,i)perylene	191-24-2	mg/kg	<0.5	6 mg/kg	88.7	63	121	
EP080/074: Total Petroleum Hydrocarbons (QCLot: 1069171)								
EP071: C10 - C14 Fraction	—	mg/kg	<50	200 mg/kg	102	75	129	
EP071: C15 - C28 Fraction	—	mg/kg	<100	300 mg/kg	105	77	131	
EP071: C29 - C36 Fraction	—	mg/kg	<100	200 mg/kg	105	71	129	
EP080/074: Total Petroleum Hydrocarbons (QCLot: 1071544)								
EP080: C6 - C9 Fraction	—	mg/kg	<10	26 mg/kg	88.9	68	128	
EP080/074: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1069171)								
EP071: >C10 - C16 Fraction	—	mg/kg	<50	250 mg/kg	104	77	125	
EP071: >C16 - C34 Fraction	—	mg/kg	<100	350 mg/kg	108	74	138	
EP071: >C34 - C40 Fraction	—	mg/kg	<100	150 mg/kg	98.7	63	131	
EP080/074: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 1071544)								
EP080: C6 - C10 Fraction	C6_C10	mg/kg	<10	31 mg/kg	82.1	68	128	
EP080: BTEXN (QCLot: 1071544)								
EP080: Benzene	71-43-2	mg/kg	<0.2	1 mg/kg	84.6	62	116	
EP080: Toluene	108-88-3	mg/kg	<0.5	1 mg/kg	95.7	67	121	
EP080: Ethylbenzene	100-41-4	mg/kg	<0.5	1 mg/kg	97.7	65	117	
EP080: meta- & para-Xylene	108-38-3	mg/kg	<0.5	2 mg/kg	99.1	66	118	
	106-42-3							
EP080: ortho-Xylene	95-47-6	mg/kg	<0.5	1 mg/kg	97.9	68	120	
EP080: Naphthalene	91-20-3	mg/kg	<1	1 mg/kg	97.4	63	119	

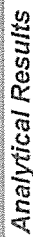
Matrix Spike (MS) Report



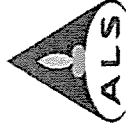
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Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

Sub-Matrix: SOIL

Sub-Matrix: SOIL			Method Blank (MB) Report		Laboratory Control Spike (LCS) Report			
Method/Compound	CAS Number	LOR	Unit	Result	Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1069147) - continued								
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.8	65	
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	99.9	41	
EP068B: Organophosphorus Pesticides (OP) (QCLot: 1069173)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	59	
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	62	
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	74.6	54	
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.6	67	
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.7	70	
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	72	
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	80.9	68	
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.1	68	
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	69	
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	101	76	
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	96.1	64	
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	70	
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	69	
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	66	
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	89.6	68	
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	62	
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	81.8	68	
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	101	65	
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	73.8	41	
EP075(SIM)A: Phenolic Compounds (QCLot: 1069172)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	6 mg/kg	90.8	71	
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	6 mg/kg	87.4	72	
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	6 mg/kg	94.8	71	
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	12 mg/kg	87.8	67	
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	6 mg/kg	81.9	54	
EP075(SIM): 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	6 mg/kg	78.9	68	
EP075(SIM): 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	6 mg/kg	87.7	66	
EP075(SIM): 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	6 mg/kg	89.9	70	
EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	6 mg/kg	89.3	70	
EP075(SIM): 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	6 mg/kg	75.3	54	
EP075(SIM): 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	6 mg/kg	81.6	60	
EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	12 mg/kg	18.6	10	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 1069172)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	90.4	77	
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	92.8	72	

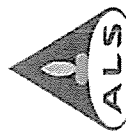


Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		Client sampling date / time		Client sample ID		Client sampling date / time		Client sample ID		Client sampling date / time	
Compound	CAS Number	LOR	Unit	A1-COMP-SURF	A5-COMP-SURF	STOCK.1	STOCK.2	STOCK.3					
				22-Aug-2017 11:30	22-Aug-2017 03:30	22-Aug-2017 14:35	22-Aug-2017 14:50	22-Aug-2017 14:55					
				ES1720905-001	ES1720905-002	ES1720905-003	ES1720905-004	ES1720905-005					
				Result	Result	Result	Result	Result					
EP075(SIM)E: Polynuclear/Aromatic Hydrocarbons - Continued													
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----					
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----					
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----					
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	----	----	----					
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	----	----	----					
EP080/071: Total Petroleum Hydrocarbons													
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----					
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----					
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----					
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----					
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----					
EP080/071: Total Recoverable Hydrocarbons - NERM 2013 Fractions													
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	----	----	----					
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	----	----	----					
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	----	----	----					
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	----	----	----					
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	----	----	----					
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----					
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	----	----	----					
EP080: BTEXN													
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	----	----	----					
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	----	----	----					
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	----	----	----					
meta- & para-Xylene	108-38-3	106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5					
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5					
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2					
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5					
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1					
EP066S: PCB Surrogate													
Decachlorobiphenyl	2051-24-3	0.1	%	103	108	----	----	----					
EP066S: Organochlorine Pesticide Surrogate													
Dibromo-DDE	21655-73-2	0.05	%	87.0	106	----	----	----					



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		A1-COMP-SURF		A5-COMP-SURF		STOCK.1		STOCK.2		STOCK.3	
Compound	CAS Number	LOR	Unit	Client sampling date / time	Result	Result	Result	Result	Result	Result	Result	Result	Result
EP068T: Organophosphorus Pesticide Surrogate													
DEF	78-48-8	0.05	%		76.4	73.6							
EP075(SIM)S: Phenolic Compound Surrogates													
Phenol-d6	13127-86-3	0.5	%		103	100							
2-Chlorophenol-D4	93951-73-6	0.5	%		86.4	93.7							
2,4,6-Tribromophenol	118-78-6	0.5	%		87.2	82.7							
EP075(SIM)T: PAH Surrogates													
2-Fluorobiphenyl	321-60-8	0.5	%		95.3	98.4							
Anthracene-d10	1719-06-8	0.5	%		97.4	98.9							
4-Terphenyl-d14	1718-51-0	0.5	%		96.8	97.3							
EP080S: TPH(V)BTX Surrogates													
1,2-Dichloroethane-D4	17060-07-0	0.2	%		87.8	77.9							
Toluene-D8	2037-26-5	0.2	%		102	93.4							
4-Bromofluorobenzene	460-00-4	0.2	%		98.3	95.2							



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		Client sampling date / time		A4-DISC1-SURF										A4-DISC2-SURF										A4-DISC3-SURF										A4-DISC4-SURF										A4-DISC5-SURF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Compound	CAS Number	LOR	Unit	Client sampling date / time		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result</	

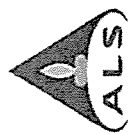
: BENBOW ENVIRONMENTAL

Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID				A4-DISC1-SURF 22-Aug-2017 12:20 ES1720905-006	A4-DISC2-SURF 22-Aug-2017 12:25 ES1720905-007	A4-DISC3-SURF 22-Aug-2017 12:35 ES1720905-008	A4-DISC4-SURF 22-Aug-2017 12:40 ES1720905-009	A4-DISC5-SURF 22-Aug-2017 12:43 ES1720905-010
	Client sampling date / time		Unit						
	CAS Number	LOR	Result	Result					
Compound					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - continued									
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	0.06	0.07
	0-2								
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	99.2	109	102	118	100	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	81.6	63.3	67.8	70.6	70.2	

Analytical Results

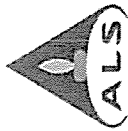
Sub-Matrix: SOIL
(Matrix: SOIL)

Sub-Matrix: SOIL (Matrix: SOIL)	Client sample ID				A4-DISC6-SURF 22-Aug-2017 12:55 ES1720905-011	A4-DISC7-SURF 22-Aug-2017 13:07 ES1720905-012	A4-DISC8-SURF 22-Aug-2017 13:15 ES1720905-013	A4-DISC9-SURF 22-Aug-2017 13:21 ES1720905-014	A4-DISC10-SURF 22-Aug-2017 13:30 ES1720905-015			
	Client sampling date / time		Result	Result						Result	Result	Result
	CAS Number	LOR										
Compound												
EA055: Moisture Content (Dried @ 105-110°C)												
Moisture Content				14.7	16.5	15.0	16.0	13.0				
EG005T: Total Metals by ICP-AES												
Arsenic	7440-38-2	5	mg/kg	8	12	11	9	9				
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1				
Chromium	7440-47-3	2	mg/kg	22	22	20	21	19				
Copper	7440-50-8	5	mg/kg	29	27	29	24	22				
Lead	7439-92-1	5	mg/kg	23	20	22	18	19				
Nickel	7440-02-0	2	mg/kg	10	7	8	10	11				
Zinc	7440-66-6	5	mg/kg	94	59	78	59	60				
EG035T: Total Recoverable Mercury by FIHS												
Mercury				<0.1	<0.1	<0.1	<0.1	<0.1				
EP068A: Organochlorine Pesticides (OC)												
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
^ Total Chlordane (sum)	—	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	0.09	<0.05				
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
4,4'-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				
4,4'-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2				
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05				



Analytical Results

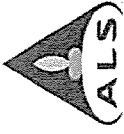
Sub-Matrix: SOIL (Mainx: SOIL)		Client sample ID		Client sampling date / time		A4-DISC6-SURF		A4-DISC7-SURF		A4-DISC8-SURF		A4-DISC9-SURF		A4-DISC10-SURF	
Compound	CAS Number	LOR	Unit			Result		Result		Result		Result		Result	
EP068A: Organochlorine Pesticides (OC) - Continued															
Methoxychlor	72-43-5	0.2	mg/kg			<0.2		<0.2		<0.2		<0.2		<0.2	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5	0.05	mg/kg			<0.05		<0.05		<0.05		0.09		<0.05	
	0-2														
EP068B: Organophosphorus Pesticides (OP)															
Dichlorvos	52-73-7	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Demeton-S-methyl	919-86-8	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Monocrotophos	6923-22-4	0.2	mg/kg			<0.2		<0.2		<0.2		<0.2		<0.2	
Dimethoate	60-51-5	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Diazinon	333-41-5	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Parathion-methyl	298-00-0	0.2	mg/kg			<0.2		<0.2		<0.2		<0.2		<0.2	
Malathion	121-75-5	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Fenthion	55-38-9	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Chlorpyrifos	2921-88-2	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Parathion	56-38-2	0.2	mg/kg			<0.2		<0.2		<0.2		<0.2		<0.2	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Chlorfenvinphos	470-90-6	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Fenamiphos	22224-92-6	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Prothiofos	34643-46-4	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Ethion	563-12-2	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Carbophenothion	786-19-6	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
Azinphos Methyl	86-50-0	0.05	mg/kg			<0.05		<0.05		<0.05		<0.05		<0.05	
EP068S: Organochlorine Pesticide Surrogate															
Dibromo-DDE	21655-73-2	0.05	%			98.9		115		130		108		127	
EP068T: Organophosphorus Pesticide Surrogate															
DEF	78-48-8	0.05	%			65.9		56.4		82.4		81.3		76.7	



Page : 12 of 13
Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

Analytical Results
Descriptive Results

Sub-Matrix: SOIL		
Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	STOCK.1 - 22-Aug-2017 14:35	Mid brown clay soil.
EA200: Description	STOCK.2 - 22-Aug-2017 14:50	Mid brown sandy soil plus one piece of bonded asbestos cement sheeting approx 40 x 40 x 5 mm.
EA200: Description	STOCK.3 - 22-Aug-2017 14:55	Mid brown sandy soil plus two fragments of bonded asbestos cement sheeting fines approx 15 x 6 x 3 mm.



Page : 13 of 13
Work Order : ES1720905
Client : BENBOW ENVIRONMENTAL
Project : 171144

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)		
Compound	CAS Number	Low	High	
EP066S: PCB Surrogate				
Decachlorobiphenyl	2051-24-3	39	149	
EP068S: Organochlorine Pesticide Surrogate				
Dibromo-DDE	21655-73-2	49	147	
EP068T: Organophosphorus Pesticide Surrogate				
DEF	78-48-8	35	143	
EP075(SIM)S: Phenolic Compound Surrogates				
Phenol-d6	13127-88-3	63	123	
2-Chlorophenol-D4	93951-73-6	66	122	
2,4,6-Tribromophenol	118-79-6	40	138	
EP075(SIM)T: PAH Surrogates				
2-Fluorobiphenyl	321-60-8	70	122	
Anthracene-d10	1719-06-8	66	128	
4-Terphenyl-d14	1718-51-0	65	129	
EP080S: TPH(V)/BTX Surrogates				
1,2-Dichloroethane-D4	17060-07-0	73	133	
Toluene-D8	2037-26-5	74	132	
4-Bromofluorobenzene	460-00-4	72	130	