

Certificate of Analysis

Certificate Number : 18-09563-Issue 1-Page: 1

Report Fao: GEO RESULTS
Site Address: Poole Park Minature Railway
Client Order No: 18-97284
Date of Sampling: 01/10/2018
Date Received: 15/10/2018
Report Date: 26/10/2018

Please find your certificates of test attached for your samples received in the laboratory on 15/10/2018 under our laboratory reference 18-09563.

Remarks:

None

Results reviewed by:



Eoin Byrne Technical Supervisor

Test Certificates approved by:



David Redfern Technical Supervisor

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The results included within the report are representative of the samples submitted for analysis.
Excel copies of reports are valid only when accompanied by this PDF certificate.
Client's Sample Description / ACS Material Description are noted for reference only.*

Head Office

Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 628680
Fax 01202 628642

Registered Office

Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Environmental Testing Limited
Registered in England and
Wales No. 6000065

**Quality Testing & Materials Consultancy
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Construction Industry**

ACSE Sample Number Sample ID	38167 426801 - 18-97284	38168 426802 - 18-97284	38169 426803 - 18-97284
Clients Sample Ref.	TP01	TP01	TP02
Location / Sample Depth (m)	0.23-0.42m	0.65-1.00m	0.21-0.63m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes	ef	ef	ef
Client's Sample Description			
ACS Testing Material Description	Brown sandy GRAVEL	Grey silty SAND	Brown sandy GRAVEL
ACSE Material Description (Principal Matrix - As Received)	GRAVEL	SAND	GRAVEL

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions									
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	----		166	*f	----	
BTEX									
Benzene	mg/kg	MT/ACSE/101	AR	0.12	*ef	----		0.13	*ef
Ethylbenzene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----		< 0.10	*ef
m+p-xylene	mg/kg	MT/ACSE/101	AR	< 0.19	*ef	----		< 0.19	*ef
o-xylene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----		< 0.10	*ef
Toluene	mg/kg	MT/ACSE/101	AR	0.12	*ef	----		0.11	*ef
Total BTEX	mg/kg	MT/ACSE/101	AR	< 0.60	*ef	----		< 0.60	*ef
Carbon									
Soil Organic Matter	%	MT/ACSE/102	AR	2.70		----		3.17	
FOC	%	MT/ACSE/102	AR	0.0156		----		0.0184	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	1.55	*	----		1.82	*
Loss on Ignition									
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	2.1	*f	----		2.7	*f
Metals (Soil)									
Arsenic	mg/kg	MT/ACSE/201	AD	11.9	*	----		17.7	
Cadmium	mg/kg	MT/ACSE/201	AD	< 1.00	*	----		< 1.00	
Chromium	mg/kg	MT/ACSE/201	AD	40.8	*	----		51.6	
Copper	mg/kg	MT/ACSE/201	AD	23.1	*	----		18.4	
Mercury	mg/kg	MT/ACSE/202	AD	0.07	*	----		0.10	
Nickel	mg/kg	MT/ACSE/201	AD	12.1	*	----		11.4	
Lead	mg/kg	MT/ACSE/201	AD	89.6	*	----		73.9	
Selenium	mg/kg	MT/ACSE/201	AD	< 6.00	*	----		< 6.00	
Zinc	mg/kg	MT/ACSE/201	AD	289	*	----		70.4	
Chromium III	mg/kg	NAM/ACSE/X11	AD	40.8		----		51.6	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	< 1.00	f	----		< 1.00	f
Petroleum Hydrocarbons									
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	363	*	----		1000	*
pH and Conductivity									
pH (@ 20 °C)	units	MT/ACSE/301	AD	10.6	*ef	8.2	*ef	10.6	*ef
Poly Aromatic Hydrocarbons									
Naphthalene	mg/kg	MT/ACSE/106	AD	0.14	*f	----		0.22	*f
Acenaphthylene	mg/kg	MT/ACSE/106	AD	0.75	*f	----		1.43	*f
Acenaphthene	mg/kg	MT/ACSE/106	AD	0.11	*f	----		0.34	*f
Fluorene	mg/kg	MT/ACSE/106	AD	0.19	*f	----		0.43	*f
Phenanthrene	mg/kg	MT/ACSE/106	AD	0.71	*f	----		2.36	*f
Anthracene	mg/kg	MT/ACSE/106	AD	0.85	*f	----		2.22	*f
Fluoranthene	mg/kg	MT/ACSE/106	AD	2.69	*f	----		7.78	*f
Pyrene	mg/kg	MT/ACSE/106	AD	3.16	*f	----		7.90	*f
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	2.63	*f	----		4.93	*f
Chrysene	mg/kg	MT/ACSE/106	AD	2.71	*f	----		4.55	*f
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	5.19	*f	----		7.63	*f
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	1.64	*f	----		2.17	*f

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

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 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

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ACSE Sample Number Sample ID	38167 426801 - 18-97284	38168 426802 - 18-97284	38169 426803 - 18-97284
Clients Sample Ref.	TP01	TP01	TP02
Location / Sample Depth (m)	0.23-0.42m	0.65-1.00m	0.21-0.63m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes Client's Sample Description	ef	ef	ef
ACS Testing Material Description	Brown sandy GRAVEL	Grey silty SAND	Brown sandy GRAVEL
ACSE Material Description (Principal Matrix - As Received)	GRAVEL	SAND	GRAVEL

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	4.04	*f	----		6.20	*f
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	3.60	*f	----		4.38	*f
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	0.98	*f	----		1.94	*f
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	3.88	*f	----		4.57	*f
Total PAH	mg/kg	MT/ACSE/106	AD	33.3	*f	----		59.0	*f

Polychlorinated Biphenyls (PCBs)

PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	----		----		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	< 1.00	*	----		< 1.00	*

Speciated BTEX

MTBE	mg/kg	NAM/ACSE/X12	AR	< 0.05		----		< 0.05	
Hexane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Heptane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Octane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Benzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Toluene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
o-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	

Speciated Petroleum Hydrocarbons

C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	35.2		----		150	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		12.0	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	90.8		----		395	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	126		----		557	

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

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 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

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ACSE Sample Number Sample ID	38170 426804 - 18-97284	38171 426805 - 18-97284	38172 426806 - 18-97284
Clients Sample Ref.	TP03	WS05	WS05
Location / Sample Depth (m)	0.42-0.87m	0.00-0.66m	0.66-1.00m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes Client's Sample Description	ef	ef	ef
ACS Testing Material Description	Brown gravelly silty SAND SILT	Brown gravelly silty SAND SILT	Grey mottled orange clayey SAND SILT
ACSE Material Description (Principal Matrix - As Received)			

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions									
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	133	*f	----		13.5	*f
BTEX									
Benzene	mg/kg	MT/ACSE/101	AR	----		0.10	*ef	----	
Ethylbenzene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
m+p-xylene	mg/kg	MT/ACSE/101	AR	----		< 0.19	*ef	----	
o-xylene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
Toluene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
Total BTEX	mg/kg	MT/ACSE/101	AR	----		< 0.60	*ef	----	
Carbon									
Soil Organic Matter	%	MT/ACSE/102	AR	----		2.59		----	
FOC	%	MT/ACSE/102	AR	----		0.0150		----	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	----		1.49	*	----	
Loss on Ignition									
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	----		3.2	*f	----	
Metals (Soil)									
Arsenic	mg/kg	MT/ACSE/201	AD	----		17.8	*#	----	
Cadmium	mg/kg	MT/ACSE/201	AD	----		< 1.00	*#	----	
Chromium	mg/kg	MT/ACSE/201	AD	----		38.8	*#	----	
Copper	mg/kg	MT/ACSE/201	AD	----		143	*#	----	
Mercury	mg/kg	MT/ACSE/202	AD	----		0.40	*	----	
Nickel	mg/kg	MT/ACSE/201	AD	----		18.8	*#	----	
Lead	mg/kg	MT/ACSE/201	AD	----		92.8	*#	----	
Selenium	mg/kg	MT/ACSE/201	AD	----		< 6.00	*#	----	
Zinc	mg/kg	MT/ACSE/201	AD	----		125	*#	----	
Chromium III	mg/kg	NAM/ACSE/X11	AD	----		38.8		----	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	----		< 1.00	f	----	
Petroleum Hydrocarbons									
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	----		256	*#	----	
pH and Conductivity									
pH (@ 20 °C)	units	MT/ACSE/301	AD	7.5	*ef	7.3	*ef	5.7	*ef
Poly Aromatic Hydrocarbons									
Naphthalene	mg/kg	MT/ACSE/106	AD	----		0.74	*#f	----	
Acenaphthylene	mg/kg	MT/ACSE/106	AD	----		3.87	*#f	----	
Acenaphthene	mg/kg	MT/ACSE/106	AD	----		0.28	*#f	----	
Fluorene	mg/kg	MT/ACSE/106	AD	----		0.65	*#f	----	
Phenanthrene	mg/kg	MT/ACSE/106	AD	----		3.02	*#f	----	
Anthracene	mg/kg	MT/ACSE/106	AD	----		3.70	*#f	----	
Fluoranthene	mg/kg	MT/ACSE/106	AD	----		12.3	*#f	----	
Pyrene	mg/kg	MT/ACSE/106	AD	----		13.1	*#f	----	
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	----		8.32	*#f	----	
Chrysene	mg/kg	MT/ACSE/106	AD	----		10.9	*#f	----	
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	----		20.0	*#f	----	

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

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 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

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ACSE Sample Number Sample ID	38170 426804 - 18-97284	38171 426805 - 18-97284	38172 426806 - 18-97284
Clients Sample Ref.	TP03	WS05	WS05
Location / Sample Depth (m)	0.42-0.87m	0.00-0.66m	0.66-1.00m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes Client's Sample Description	ef	ef	ef
ACS Testing Material Description	Brown gravelly silty SAND SILT	Brown gravelly silty SAND SILT	Grey mottled orange clayey SAND SILT
ACSE Material Description (Principal Matrix - As Received)			

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	----		5.99	*#f	----	
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	----		14.2	*#f	----	
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	----		13.5	*#f	----	
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	----		4.69	*#f	----	
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	----		19.0	*#f	----	
Total PAH	mg/kg	MT/ACSE/106	AD	----		134	*#f	----	

Polychlorinated Biphenyls (PCBs)

PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	----		----		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	----		< 1.00	*	----	

Speciated BTEX

MTBE	mg/kg	NAM/ACSE/X12	AR	----		< 0.05		----	
Hexane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Heptane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Octane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Benzene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Toluene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
o-xylene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	

Speciated Petroleum Hydrocarbons

C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		73.1		----	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		105		----	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	----		178		----	

ACSE Sample Number Sample ID	38173 426807 - 18-97284	38174 426808 - 18-97284	38175 426809 - 18-97284
Clients Sample Ref.	WS07	WS07	TP08
Location / Sample Depth (m)	0.08-0.32m	0.47-0.74m	0.29-0.58m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes	ef	ef	ef
Client's Sample Description			
ACS Testing Material Description	Brown gravelly SAND	Dark brown mottled dark grey sandy PEAT	Brown gravelly silty SAND
ACSE Material Description (Principal Matrix - As Received)	SAND	PEAT	

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions									
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	----		----		135	*f
BTEX									
Benzene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	0.29	*ef	----	
Ethylbenzene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	< 0.10	*ef	----	
m+p-xylene	mg/kg	MT/ACSE/101	AR	< 0.19	*ef	< 0.19	*ef	----	
o-xylene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	< 0.10	*ef	----	
Toluene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	< 0.10	*ef	----	
Total BTEX	mg/kg	MT/ACSE/101	AR	< 0.60	*ef	< 0.60	*ef	----	
Carbon									
Soil Organic Matter	%	MT/ACSE/102	AR	1.65		7.55		----	
FOC	%	MT/ACSE/102	AR	< 0.0100		0.0438		----	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	0.95	*	4.34	*	----	
Loss on Ignition									
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	2.2	*f	22	*f	----	
Metals (Soil)									
Arsenic	mg/kg	MT/ACSE/201	AD	10.7	*#	21.5	*	----	
Cadmium	mg/kg	MT/ACSE/201	AD	< 1.00	*#	< 1.00	*	----	
Chromium	mg/kg	MT/ACSE/201	AD	28.9	*#	40.1	*	----	
Copper	mg/kg	MT/ACSE/201	AD	10.7	*#	9.98	*	----	
Mercury	mg/kg	MT/ACSE/202	AD	0.09	*#	0.09	*	----	
Nickel	mg/kg	MT/ACSE/201	AD	5.57	*#	9.34	*	----	
Lead	mg/kg	MT/ACSE/201	AD	59.8	*#	79.1	*	----	
Selenium	mg/kg	MT/ACSE/201	AD	< 6.00	*#	< 6.00	*	----	
Zinc	mg/kg	MT/ACSE/201	AD	23.0	*#	28.5	*	----	
Chromium III	mg/kg	NAM/ACSE/X11	AD	28.9		40.1		----	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	< 1.00	f	< 1.00	f	----	
Petroleum Hydrocarbons									
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	384	*#	114	*	----	
pH and Conductivity									
pH (@ 20 °C)	units	MT/ACSE/301	AD	6.7	*ef	5.7	*ef	6.7	*ef
Poly Aromatic Hydrocarbons									
Naphthalene	mg/kg	MT/ACSE/106	AD	0.11	*#f	0.48	*f	----	
Acenaphthylene	mg/kg	MT/ACSE/106	AD	0.70	*#f	< 0.10	*f	----	
Acenaphthene	mg/kg	MT/ACSE/106	AD	< 0.10	*#f	0.66	*f	----	
Fluorene	mg/kg	MT/ACSE/106	AD	0.14	*#f	0.60	*f	----	
Phenanthrene	mg/kg	MT/ACSE/106	AD	0.30	*#f	0.90	*f	----	
Anthracene	mg/kg	MT/ACSE/106	AD	0.51	*#f	0.20	*f	----	
Fluoranthene	mg/kg	MT/ACSE/106	AD	1.34	*#f	0.39	*f	----	
Pyrene	mg/kg	MT/ACSE/106	AD	1.56	*#f	0.36	*f	----	
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	1.51	*#f	0.30	*f	----	
Chrysene	mg/kg	MT/ACSE/106	AD	1.50	*#f	0.23	*f	----	
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	3.54	*#f	0.40	*f	----	

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

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 Unit 14B
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 Holton Heath Trading Park
 Poole
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ACSE Sample Number	38173	38174	38175
Sample ID	426807 - 18-97284	426808 - 18-97284	426809 - 18-97284
Clients Sample Ref.	WS07	WS07	TP08
Location / Sample Depth (m)	0.08-0.32m	0.47-0.74m	0.29-0.58m
Date Sampled	01/10/2018	01/10/2018	01/10/2018
Time Sampled			
Sample deviating codes	ef	ef	ef
Client's Sample Description			
ACS Testing Material Description	Brown gravelly SAND	Dark brown mottled dark grey sandy PEAT	Brown gravelly silty SAND
ACSE Material Description (Principal Matrix - As Received)	SAND	PEAT	

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	1.02	*#f	0.14	*f	----	
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	2.48	*#f	0.27	*f	----	
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	2.20	*#f	0.27	*f	----	
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	0.61	*#f	0.19	*f	----	
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	2.07	*#f	0.23	*f	----	
Total PAH	mg/kg	MT/ACSE/106	AD	19.6	*#f	5.63	*f	----	
Polychlorinated Biphenyls (PCBs)									
PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	< 1.00		< 1.00		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	----		----		----	
Speciated BTEX									
MTBE	mg/kg	NAM/ACSE/X12	AR	< 0.05		< 0.05		----	
Hexane	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Heptane	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Octane	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Benzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Toluene	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
o-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	< 0.05		< 0.05		----	
Speciated Petroleum Hydrocarbons									
C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		----	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		----	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	29.5		38.7		----	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		----	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		< 0.10		----	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		< 10.0		----	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	137		39.5		----	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	166		78.2		----	

ACSE Sample Number Sample ID	38176 426810 - 18-97284	38177 426811 - 18-97284	38178 426812 - 18-97284
Clients Sample Ref.	TP09	TP09	TP11
Location / Sample Depth (m)	0.00-0.39m	0.73-1.00m	0.00-0.21m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes Client's Sample Description	ef	ef	ef
ACS Testing Material Description	Brown gravelly silty SAND	Grey very sandy PEAT	Brown sandy gravelly
ACSE Material Description (Principal Matrix - As Received)	SILT	SAND	SILT

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions									
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	----		504	*f	----	
BTEX									
Benzene	mg/kg	MT/ACSE/101	AR	0.10	*ef	----		0.30	*ef
Ethylbenzene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----		< 0.10	*ef
m+p-xylene	mg/kg	MT/ACSE/101	AR	< 0.19	*ef	----		< 0.19	*ef
o-xylene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----		< 0.10	*ef
Toluene	mg/kg	MT/ACSE/101	AR	0.13	*ef	----		0.14	*ef
Total BTEX	mg/kg	MT/ACSE/101	AR	< 0.60	*ef	----		< 0.60	*ef
Carbon									
Soil Organic Matter	%	MT/ACSE/102	AR	3.53		----		11.4	
FOC	%	MT/ACSE/102	AR	0.0205		----		0.0661	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	2.03	*	----		6.55	*
Loss on Ignition									
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	7.2	*f	----		8.9	*f
Metals (Soil)									
Arsenic	mg/kg	MT/ACSE/201	AD	9.83	*#	----		16.3	*#
Cadmium	mg/kg	MT/ACSE/201	AD	< 1.00	*#	----		< 1.00	*#
Chromium	mg/kg	MT/ACSE/201	AD	14.1	*#	----		21.4	*#
Copper	mg/kg	MT/ACSE/201	AD	78.2	*#	----		67.4	*#
Mercury	mg/kg	MT/ACSE/202	AD	0.17	*	----		0.21	*
Nickel	mg/kg	MT/ACSE/201	AD	6.33	*#	----		12.1	*#
Lead	mg/kg	MT/ACSE/201	AD	144	*#	----		60.8	*#
Selenium	mg/kg	MT/ACSE/201	AD	< 6.00	*#	----		< 6.00	*#
Zinc	mg/kg	MT/ACSE/201	AD	28.6	*#	----		223	*#
Chromium III	mg/kg	NAM/ACSE/X11	AD	14.1		----		21.4	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	< 1.00	f	----		< 1.00	f
Petroleum Hydrocarbons									
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	< 50.0	*#	----		410	*#
pH and Conductivity									
pH (@ 20 °C)	units	MT/ACSE/301	AD	6.6	*ef	3.9	*ef	6.9	*ef
Poly Aromatic Hydrocarbons									
Naphthalene	mg/kg	MT/ACSE/106	AD	0.10	*#f	----		0.20	*#f
Acenaphthylene	mg/kg	MT/ACSE/106	AD	0.40	*#f	----		0.77	*#f
Acenaphthene	mg/kg	MT/ACSE/106	AD	< 0.10	*#f	----		0.12	*#f
Fluorene	mg/kg	MT/ACSE/106	AD	0.10	*#f	----		0.17	*#f
Phenanthrene	mg/kg	MT/ACSE/106	AD	0.39	*#f	----		0.67	*#f
Anthracene	mg/kg	MT/ACSE/106	AD	0.28	*#f	----		0.61	*#f
Fluoranthene	mg/kg	MT/ACSE/106	AD	1.23	*#f	----		1.79	*#f
Pyrene	mg/kg	MT/ACSE/106	AD	1.07	*#f	----		1.83	*#f
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	1.05	*#f	----		1.47	*#f
Chrysene	mg/kg	MT/ACSE/106	AD	0.98	*#f	----		1.46	*#f
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	1.72	*#f	----		2.67	*#f

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

Registered Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

Quality Testing & Materials Consultancy
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ACSE Sample Number	38176	38177	38178
Sample ID	426810 - 18-97284	426811 - 18-97284	426812 - 18-97284
Clients Sample Ref.	TP09	TP09	TP11
Location / Sample Depth (m)	0.00-0.39m	0.73-1.00m	0.00-0.21m
Date Sampled	01/10/2018	01/10/2018	01/10/2018
Time Sampled			
Sample deviating codes	ef	ef	ef
Client's Sample Description			
ACS Testing Material Description	Brown gravelly silty SAND	Grey very sandy PEAT	Brown sandy gravelly
ACSE Material Description (Principal Matrix - As Received)	SILT	SAND	SILT

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	0.74	*#f	----		1.06	*#f
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	1.28	*#f	----		1.98	*#f
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	0.93	*#f	----		1.53	*#f
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	0.31	*#f	----		0.43	*#f
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	0.85	*#f	----		1.43	*#f
Total PAH	mg/kg	MT/ACSE/106	AD	11.4	*#f	----		18.2	*#f

Polychlorinated Biphenyls (PCBs)

PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	----		----		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	< 1.00	*	----		< 1.00	*

Speciated BTEX

MTBE	mg/kg	NAM/ACSE/X12	AR	< 0.05		----		< 0.05	
Hexane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Heptane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Octane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Benzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Toluene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
o-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	< 0.05		----		< 0.05	

Speciated Petroleum Hydrocarbons

C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	29.5		----		59.4	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----		< 0.10	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		< 10.0	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----		87.5	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	29.5		----		147	

Head Office

Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE

Tel 01202 628680
Fax 01202 628680

Registered Office

Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Environmental Testing Limited
Registered in England and
Wales No. 6000065

**Quality Testing & Materials Consultancy
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ACSE Sample Number Sample ID	38179 426813 - 18-97284	38180 426814 - 18-97284	38181 426815 - 18-97284
Clients Sample Ref.	TP11	TP13	TP13
Location / Sample Depth (m)	0.47-1.00m	0.00-0.64m	0.64-1.00m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes	ef	ef	ef
Client's Sample Description			
ACS Testing Material Description	Brown gravelly SAND	Multicoloured gravelly SAND	Brown mottled sark grey silty SAND
ACSE Material Description (Principal Matrix - As Received)	SAND	SAND	SAND

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Anions									
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	89.5	*f	----		3.56	*f
BTEX									
Benzene	mg/kg	MT/ACSE/101	AR	----		0.10	*ef	----	
Ethylbenzene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
m+p-xylene	mg/kg	MT/ACSE/101	AR	----		< 0.19	*ef	----	
o-xylene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
Toluene	mg/kg	MT/ACSE/101	AR	----		< 0.10	*ef	----	
Total BTEX	mg/kg	MT/ACSE/101	AR	----		< 0.60	*ef	----	
Carbon									
Soil Organic Matter	%	MT/ACSE/102	AR	----		4.44		----	
FOC	%	MT/ACSE/102	AR	----		0.0257		----	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	----		2.55	*	----	
Loss on Ignition									
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	----		2.1	*f	----	
Metals (Soil)									
Arsenic	mg/kg	MT/ACSE/201	AD	----		12.0	*#	----	
Cadmium	mg/kg	MT/ACSE/201	AD	----		< 1.00	*#	----	
Chromium	mg/kg	MT/ACSE/201	AD	----		15.6	*#	----	
Copper	mg/kg	MT/ACSE/201	AD	----		121	*#	----	
Mercury	mg/kg	MT/ACSE/202	AD	----		0.72	*#	----	
Nickel	mg/kg	MT/ACSE/201	AD	----		10.2	*#	----	
Lead	mg/kg	MT/ACSE/201	AD	----		204	*#	----	
Selenium	mg/kg	MT/ACSE/201	AD	----		< 6.00	*#	----	
Zinc	mg/kg	MT/ACSE/201	AD	----		95.2	*#	----	
Chromium III	mg/kg	NAM/ACSE/X11	AD	----		15.6		----	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	----		< 1.00	f	----	
Petroleum Hydrocarbons									
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	----		423	*#	----	
pH and Conductivity									
pH (@ 20 °C)	units	MT/ACSE/301	AD	6.5	*ef	7.0	*ef	7.1	*ef
Poly Aromatic Hydrocarbons									
Naphthalene	mg/kg	MT/ACSE/106	AD	----		0.24	*#f	----	
Acenaphthylene	mg/kg	MT/ACSE/106	AD	----		0.45	*#f	----	
Acenaphthene	mg/kg	MT/ACSE/106	AD	----		0.11	*#f	----	
Fluorene	mg/kg	MT/ACSE/106	AD	----		0.14	*#f	----	
Phenanthrene	mg/kg	MT/ACSE/106	AD	----		0.75	*#f	----	
Anthracene	mg/kg	MT/ACSE/106	AD	----		0.46	*#f	----	
Fluoranthene	mg/kg	MT/ACSE/106	AD	----		2.37	*#f	----	
Pyrene	mg/kg	MT/ACSE/106	AD	----		2.15	*#f	----	
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	----		1.93	*#f	----	
Chrysene	mg/kg	MT/ACSE/106	AD	----		1.66	*#f	----	
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	----		3.01	*#f	----	

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

Registered Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

Quality Testing & Materials Consultancy
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ACSE Sample Number Sample ID	38179 426813 - 18-97284	38180 426814 - 18-97284	38181 426815 - 18-97284
Clients Sample Ref.	TP11	TP13	TP13
Location / Sample Depth (m)	0.47-1.00m	0.00-0.64m	0.64-1.00m
Date Sampled Time Sampled	01/10/2018	01/10/2018	01/10/2018
Sample deviating codes Client's Sample Description	ef	ef	ef
ACS Testing Material Description	Brown gravelly SAND	Multicoloured gravelly SAND	Brown mottled sark grey silty SAND
ACSE Material Description (Principal Matrix - As Received)	SAND	SAND	SAND

Determination	Units	Method	Prepared As	Result	AS	Result	AS	Result	AS
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	----		0.93	*#f	----	
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	----		2.13	*#f	----	
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	----		1.46	*#f	----	
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	----		0.51	*#f	----	
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	----		1.56	*#f	----	
Total PAH	mg/kg	MT/ACSE/106	AD	----		19.8	*#f	----	

Polychlorinated Biphenyls (PCBs)

PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	----		----		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	----		< 1.00	*	----	

Speciated BTEX

MTBE	mg/kg	NAM/ACSE/X12	AR	----		< 0.05		----	
Hexane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Heptane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Octane	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Benzene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Toluene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
o-xylene	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	----		< 0.05		----	

Speciated Petroleum Hydrocarbons

C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	----		49.8		----	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 0.10		----	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		< 10.0		----	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		10.8		----	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	----		212		----	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	----		273		----	

Head Office
Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
Tel 01202 628680
Fax 01202 628680

Registered Office
Unit 14B
Blackhill Road West
Holton Heath Trading Park
Poole
Dorset BH16 6LE
ACS Environmental Testing Limited
Registered in England and
Wales No. 6000065

Quality Testing & Materials Consultancy
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ACSE Sample Number	38182	38183
Sample ID	426816 - 18-97284	426817 - 18-97284
Clients Sample Ref.	TP14	TP14
Location / Sample Depth (m)	0.15-0.60m	0.60-0.94m
Date Sampled	01/10/2018	01/10/2018
Time Sampled		
Sample deviating codes	ef	ef
Client's Sample Description		
ACS Testing Material Description	Grey sandy GRAVEL	Grey mottled brown sandy
ACSE Material Description (Principal Matrix - As Received)	SAND	PEAT

Determination	Units	Method	Prepared As	Result	AS	Result	AS
Anions							
Water Soluble Sulphate	mg/l	MT/ACSE/204	AD	----		46.0	*f
BTEX							
Benzene	mg/kg	MT/ACSE/101	AR	0.10	*ef	----	
Ethylbenzene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----	
m+p-xylene	mg/kg	MT/ACSE/101	AR	< 0.19	*ef	----	
o-xylene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----	
Toluene	mg/kg	MT/ACSE/101	AR	< 0.10	*ef	----	
Total BTEX	mg/kg	MT/ACSE/101	AR	< 0.60	*ef	----	
Carbon							
Soil Organic Matter	%	MT/ACSE/102	AR	26.8		----	
FOC	%	MT/ACSE/102	AR	0.156		----	
TOC (Total Organic Carbon)	%	MT/ACSE/102	AR	15.4	*	----	
Loss on Ignition							
Loss on Ignition (440 °C)	%	MT/ACSE/302	AD	2.9	*f	----	
Metals (Soil)							
Arsenic	mg/kg	MT/ACSE/201	AD	16.2	*#	----	
Cadmium	mg/kg	MT/ACSE/201	AD	< 1.00	*#	----	
Chromium	mg/kg	MT/ACSE/201	AD	46.6	*#	----	
Copper	mg/kg	MT/ACSE/201	AD	233	*#	----	
Mercury	mg/kg	MT/ACSE/202	AD	0.22	*#	----	
Nickel	mg/kg	MT/ACSE/201	AD	28.5	*#	----	
Lead	mg/kg	MT/ACSE/201	AD	193	*#	----	
Selenium	mg/kg	MT/ACSE/201	AD	< 6.00	*#	----	
Zinc	mg/kg	MT/ACSE/201	AD	73.7	*#	----	
Chromium III	mg/kg	NAM/ACSE/X11	AD	46.6		----	
Chromium Hexavalent	mg/kg	NAM/ACSE/X11	AD	< 1.00	f	----	
Petroleum Hydrocarbons							
Total TPH (C10-C40)	mg/kg	MT/ACSE/105	AR	152	*#	----	
pH and Conductivity							
pH (@ 20 °C)	units	MT/ACSE/301	AD	7.2	*ef	6.3	*ef
Poly Aromatic Hydrocarbons							
Naphthalene	mg/kg	MT/ACSE/106	AD	0.60	*#f	----	
Acenaphthylene	mg/kg	MT/ACSE/106	AD	0.45	*#f	----	
Acenaphthene	mg/kg	MT/ACSE/106	AD	0.14	*#f	----	
Fluorene	mg/kg	MT/ACSE/106	AD	0.28	*#f	----	
Phenanthrene	mg/kg	MT/ACSE/106	AD	2.17	*#f	----	
Anthracene	mg/kg	MT/ACSE/106	AD	0.77	*#f	----	
Fluoranthene	mg/kg	MT/ACSE/106	AD	4.71	*#f	----	
Pyrene	mg/kg	MT/ACSE/106	AD	3.96	*#f	----	
Benzo (a) anthracene	mg/kg	MT/ACSE/106	AD	2.82	*#f	----	
Chrysene	mg/kg	MT/ACSE/106	AD	3.12	*#f	----	
Benzo (b) fluoranthene	mg/kg	MT/ACSE/106	AD	4.76	*#f	----	

Head Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 Tel 01202 628680
 Fax 01202 628680

Registered Office
 Unit 14B
 Blackhill Road West
 Holton Heath Trading Park
 Poole
 Dorset BH16 6LE
 ACS Environmental Testing Limited
 Registered in England and
 Wales No. 6000065

**Quality Testing & Materials Consultancy
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ACSE Sample Number	38182	38183
Sample ID	426816 - 18-97284	426817 - 18-97284
Clients Sample Ref.	TP14	TP14
Location / Sample Depth (m)	0.15-0.60m	0.60-0.94m
Date Sampled	01/10/2018	01/10/2018
Time Sampled		
Sample deviating codes	ef	ef
Client's Sample Description		
ACS Testing Material Description	Grey sandy GRAVEL	Grey mottled brown sandy
ACSE Material Description (Principal Matrix - As Received)	SAND	PEAT

Determination	Units	Method	Prepared As	Result	AS	Result	AS
Benzo (k) fluoranthene	mg/kg	MT/ACSE/106	AD	2.23	*#f	----	
Benzo (a) pyrene	mg/kg	MT/ACSE/106	AD	3.30	*#f	----	
Indeno (1 2 3-CD) pyrene	mg/kg	MT/ACSE/106	AD	2.96	*#f	----	
Dibenzo(a h)anthracene	mg/kg	MT/ACSE/106	AD	0.97	*#f	----	
Benzo(g h i)perylene	mg/kg	MT/ACSE/106	AD	2.92	*#f	----	
Total PAH	mg/kg	MT/ACSE/106	AD	36.2	*#f	----	

Polychlorinated Biphenyls (PCBs)

PCB (7 Congeners)	mg/kg	IHP-GCMS	AD	----		----	
PCB (7 Congeners)	mg/kg	MT/ACSE/104	AD	< 1.00	*	----	

Speciated BTEX

MTBE	mg/kg	NAM/ACSE/X12	AR	< 0.05		----	
Hexane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Heptane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Octane	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Benzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Toluene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Ethylbenzene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
m+p-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
o-xylene	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	
Total BTEX	mg/kg	NAM/ACSE/X06	AR	< 0.05		----	

Speciated Petroleum Hydrocarbons

C5-C6 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----	
>C6-C8 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----	
>C8-C10 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C10-C12 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C12-C16 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C16-C21 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C21-C35 Aliphatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
C6-C7 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----	
C7-C8 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 0.10		----	
>C8-C10 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C10-C12 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C12-C16 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C16-C21 Aromatic	mg/kg	NAM/ACSE/X07	AR	< 10.0		----	
>C21-C35 Aromatic	mg/kg	NAM/ACSE/X07	AR	105		----	
Total Speciated TPH	mg/kg	NAM/ACSE/X07	AR	105		----	

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Technical Information for Analytical Results

Analysis

* - denotes analysis covered by our UKAS accreditation
- denotes analysis covered by our MCERTS certification
AD = Sample tested in air dried condition.
AR = Sample tested in as-received condition.
D = Sample tested in dry condition.
L = Laboratory prepared leachate
SC = sub contracted
All MCERTS certified test values reported on a dry weight basis.
UKAS uncertainty available on request.
Where results are less than the limit of detection, the value of 0 is used in calculations.

Deviating Codes

Deviating Samples

The use of any of the following symbols indicates that the sample was deviating and it is possible therefore that the results provided may not be representative of the sample taken.

- a – The date and /or time of sampling has not been provided, therefore it is not known if the time lapse between sampling and analysis has exceeded the acceptable holding time(s)*.
- b – The test item was received in a container which has not been recommended*.
- c – On receipt, the temperature of the sample received was found to fall outside the recommendations of BS ISO 18512:2007, Soil Quality. Guidance on long and short term storage of soil samples*.
- d – The sample was received in a container that had not been filled as recommended*.
- e – The delay between sampling and sample receipt is greater than the recommended holding time for the analyte of interest in this matrix*.
- f – The delay between sampling and analysis is greater than the recommended holding time for the analyte of interest in this matrix*.

*In accordance with the requirements of Technical Policy Statement TPS 63; UKAS Policy on Deviating Samples, all UKAS accredited testing laboratories are required to notify their clients that calibration or test results may be invalid where samples are found to be deviating. It is the opinion of ACSE that the term invalid should be interpreted as 'not fully representative of the sample taken at source'.

The following Additional Deviating Sample Codes may also be used.

- I/S – Insufficient sample mass/volume received for accurate quantification of this analyte.
- U/S – The sample received was deemed unsuitable for accurate determination of this analyte using the Test Methods available.

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