Client ame	RPS	**Report Solid**	
Re erence	JER9132		
Location	233-236 Nestles Avenue	**Solids**	V=60g VOC jar, J=250g glass jar, T=plastic tub
Contact	Matthew Hemus		
M ob o	21/10418		

M Sample o	6-9	10-13	14-17	22-25	26-29	38-41					LOD/LOR	Units	Method No.
Sample ID	TP102	TP103	TP104	TP105	WS106	WS105							
Depth	0.40	0.50	0.50	0.50	0.20	0.50							
COC o / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/07/2021	08/07/2021	08/07/2021	08/07/2021	08/07/2021	08/07/2021							
Sample ype	Soil	Soil	Soil	Soil	Soil	Soil							
Batch umber	1	1	1	1	1	1							
Date o Receipt	09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021							
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL)	-	<0.2	<0.2	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL)	-	<4	<4	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL)	-	10	11	-	<7	13					<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL)	-	40	36	-	33	54					<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	-	50	47	-	33	67					<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 (HS_1D_AR)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR)	-	<0.1[SV]	<0.1	-	<0.1	<0.1					<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR)	-	<0.2	2.5	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR)	-	<4	<4	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR)	-	20	56	-	18	31					<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR)	-	78	201	-	86	122					<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 (EH+HS_CU_1D_AR)	-	98	260	-	104	153					<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	-	148	307	-	137	220					<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE	-	<5[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
Benzene	-	<5[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
Toluene	-	10[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
Ethylbenzene	-	<5[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
m/p-Xylene	-	9[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
o-Xylene	-	<5[SV]	<5	-	<5	<5					<5	ug/kg	TM36/PM12
PCB 77	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 81	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 105	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 114	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 118	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 123	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 126	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 156	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 157	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 167	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 169	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
PCB 189	-	-	<5	-	<5	-					<5	ug/kg	TM17/PM8
Total 12 PCBs	-	-	<60	-	<60	-					<60	ug/kg	TM17/PM8
Total Phenols HPLC	-	-	<0.15	-	<0.15	-					<0.15	mg/kg	TM26/PM21B

Please see attached notes for all abbreviations and acronyms

Client ame	RPS	**Report Solid**	
Re erence	JER9132		
Location	233-236 Nestles Avenue	**Solids**	V=60g VOC jar, J=250g glass jar, T=plastic tub
Contact	Matthew Hemus		
M ob o	21/10418		

M Sample o	6-9	10-13	14-17	22-25	26-29	38-41					LOD/LOR	Units	Method No.
Sample ID	TP102	TP103	TP104	TP105	WS106	WS105							
Depth	0.40	0.50	0.50	0.50	0.20	0.50							
COC o / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/07/2021	08/07/2021	08/07/2021	08/07/2021	08/07/2021	08/07/2021							
Sample ype	Soil	Soil	Soil	Soil	Soil	Soil							
Batch umber	1	1	1	1	1	1							
Date o Receipt	09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021	09/07/2021							
Natural Moisture Content	-	22.2	21.3	-	18.0	20.7					<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	-	<0.6	<0.6	-	<0.6	<0.6					<0.6	mg/kg	TM38/PM20
Hexavalent Chromium	-	<0.3	<0.3	-	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Nitrate as NO3	-	98.8	13.3	-	11.5	53.1					<2.5	mg/kg	TM38/PM20
Nitrite as NO2	-	0.53	<0.05	-	<0.05	3.61					<0.05	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext)	-	0.1000	0.1521	-	0.0298	0.0795					<0.0015	g/l	TM38/PM20
Chromium III	-	51.0	69.1	-	57.7	62.4					<0.5	mg/kg	NONE/NONE
Free Cyanide	-	<0.5	<0.5	-	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Cyanide	-	<0.5	<0.5	-	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon	2.77	5.03	2.45	3.16	2.56	0.75					<0.02	%	TM21/PM24
Fraction Organic Carbon	0.028	0.050	0.025	0.032	0.026	0.008					<0.001	None	TM21/PM24
Organic Matter	4.8	8.7	4.2	5.4	4.4	1.3					<0.2	%	TM21/PM24
Nitrocellulose Colour*	-	-ve	-ve	-	-ve	-ve						None	Subcontracted
Nitrocellulose Colourimetric*	-	<5000	<5000	-	<5000	<5000						mg/kg	Subcontracted
Cyclotetramethylene Tetranitramine (HMX)*	-	<2	<2	-	<2	<2						mg/kg	Subcontracted
Cyclo-1,3,5-Trimethylene-2,4,6-Trinitramine (RDX)*	-	<2	<2	-	<2	<2						mg/kg	Subcontracted
Ethylene Glycol Dinitrate (EGDN)*	-	<1	<1	-	<1	<1						mg/kg	Subcontracted
2,4,6-Trinitro-Phenylmethyl Nitramine (Tetryl)*	-	<1	<1	-	<1	<1						mg/kg	Subcontracted
Glycerol Trinitrate (NG)*	-	<1	<1	-	<1	<1						mg/kg	Subcontracted
2,4,6-Trinitrotoluene (TNT)*	-	0.1	<1	-	<1	<1						mg/kg	Subcontracted
2,6-Dinitrotoluene*	-	<1	<1	-	<1	<1						mg/kg	Subcontracted
2,4-Dinitrotoluene*	-	<1	<1	-	<1	<1						mg/kg	Subcontracted
Hexanitro-Stilbene (HNS)*	-	<0.5	<0.5	-	<0.5	<0.5						mg/kg	Subcontracted
Pentaeryhritol Tetranitrate (PETN)*	-	<5	<5	-	<5	<5						mg/kg	Subcontracted
Nitroguanidine (Picrite)*	-	<0.25	<0.25	-	<0.25	<0.25						mg/kg	Subcontracted
2,4,6-Trinitro Phenol (Picric Acid)*	-	<0.1	<0.1	-	<0.1	<0.1						mg/kg	Subcontracted
pH	-	10.80	8.94	-	8.40	10.41					<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Client ame RPS
Re erence JER9132
Location 233-236 Nestles Avenue
Contact Matthew Hemus
M ob o 21/10418

Report C 2

Solids V=60g VOC jar, J=250g glass jar, T=plastic tub

M Sample o	10-13	14-17	26-29	38-41							LOD/LOR	Units	Method No.
Sample ID	TP103	TP104	WS106	WS105									
Depth	0.50	0.50	0.20	0.50									
COC o / misc													
Containers	V J T	V J T	V J T	V J T									
Sample Date	08/07/2021	08/07/2021	08/07/2021	08/07/2021									
Sample ype	Soil	Soil	Soil	Soil									
Batch umber	1	1	1	1									
Date o Receipt	09/07/2021	09/07/2021	09/07/2021	09/07/2021									
Dissolved Arsenic	16.7	19.4	4.0	13.1							<2.5	ug/l	TM30/PM14
Dissolved Barium	7	25	39	8							<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Dissolved Boron	130	112	57	123							<12	ug/l	TM30/PM14
Dissolved Cadmium	<0.5	<0.5	<0.5	<0.5							<0.5	ug/l	TM30/PM14
Dissolved Chromium	42.1	5.6	<1.5	<1.5							<1.5	ug/l	TM30/PM14
Dissolved Copper	109	<7	<7	14							<7	ug/l	TM30/PM14
Dissolved Lead	<5	<5	<5	<5							<5	ug/l	TM30/PM14
Dissolved Mercury	<1	<1	<1	<1							<1	ug/l	TM30/PM14
Dissolved Molybdenum	118	34	44	40							<2	ug/l	TM30/PM14
Dissolved Nickel	7	<2	<2	<2							<2	ug/l	TM30/PM14
Dissolved Selenium	3	3	<3	10							<3	ug/l	TM30/PM14
Dissolved Silver	<5	<5	<5	<5							<5	ug/l	TM30/PM14
Dissolved Vanadium	67.6	21.8	3.5	9.9							<1.5	ug/l	TM30/PM14
Dissolved Zinc	<3	<3	4	<3							<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	<0.1	<0.1	<0.1	<0.1							<0.1	ug/l	TM4/PM30
Acenaphthylene	0.014	<0.013	<0.013	0.021							<0.013	ug/l	TM4/PM30
Acenaphthene	<0.013	<0.013	<0.013	0.170							<0.013	ug/l	TM4/PM30
Fluorene	<0.014	<0.014	<0.014	0.071							<0.014	ug/l	TM4/PM30
Phenanthrene	0.104	0.062	<0.011	1.088							<0.011	ug/l	TM4/PM30
Anthracene	0.035	<0.013	<0.013	0.278							<0.013	ug/l	TM4/PM30
Fluoranthene	0.235	0.124	<0.012	2.153							<0.012	ug/l	TM4/PM30
Pyrene	0.214	0.147	<0.013	1.949							<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.150	0.059	<0.015	1.419							<0.015	ug/l	TM4/PM30
Chrysene	0.169	0.082	<0.011	1.409							<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.397	0.130	0.024	2.350							<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.189	0.066	<0.016	1.155							<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.145	0.043	<0.011	0.448							<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	0.03	<0.01	<0.01	0.09							<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.151	0.048	<0.011	0.417							<0.011	ug/l	TM4/PM30
PAH 16 Total	1.833	0.761	<0.195	13.018							<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.29	0.09	0.02	1.69							<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.11	0.04	<0.01	0.66							<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	83	83	83	91							<0	%	TM4/PM30
Dissolved Chromium III	<0.006	<0.006	<0.006	<0.006							<0.006	mg/l	NONE/NONE
Hexavalent Chromium	0.037	<0.006	<0.006	<0.006							<0.006	mg/l	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client ame	RPS	**SVOC Report**	**Solid**
Re erence	JER9132		
Location	233-236 Nestles Avenue		
Contact	Matthew Hemus		
M ob o	21/10418		

M Sample o	14-17	26-29									LOD/LOR	Units	Method No.
Sample ID	TP104	WS106											
Depth	0.50	0.20											
COC o / misc													
Containers	V J T	V J T											
Sample Date	08/07/2021	08/07/2021											
Sample ype	Soil	Soil											
Batch umber	1	1											
Date o Receipt	09/07/2021	09/07/2021											
SVOC MS													
Phenols													
2-Chlorophenol	<10	<10									<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10									<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4-Dichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10									<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10									<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10									<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10									<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10									<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10									<10	ug/kg	TM16/PM8
Phenol	<10	<10									<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene	<10	<10									<10	ug/kg	TM16/PM8
2-Methylnaphthalene	23	42									<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	<100									<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100									<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100									<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100									<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100									<100	ug/kg	TM16/PM8
Dimethyl phthalate	<100	<100									<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10									<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene	<10	<10									<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10									<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10									<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10									<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10									<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10									<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10									<10	ug/kg	TM16/PM8
4-Bromophenylphenylether	<10	<10									<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10									<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10									<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10									<10	ug/kg	TM16/PM8
Azobenzene	<10	<10									<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10									<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10									<10	ug/kg	TM16/PM8
Carbazole	27	59									<10	ug/kg	TM16/PM8
Dibenzofuran	16	44									<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10									<10	ug/kg	TM16/PM8
Hexachlorobutadiene	<10	<10									<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10									<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10									<10	ug/kg	TM16/PM8
Isophorone	<10	<10									<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine	<10	<10									<10	ug/kg	TM16/PM8
Nitrobenzene	<10	<10									<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	109	113									<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	111	120									<0	%	TM16/PM8

Please see attached notes for all abbreviations and acronyms

Client ame RPS
Re erence JER9132
Location 233-236 Nestles Avenue
Contact Matthew Hemus

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Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
21/10418	1	TP103	0.50	12	23/07/2021	**General Description (Bulk Analysis)**	Soil/Stones
					23/07/2021	**Asbestos Fibres**	NAD
					23/07/2021	**Asbestos ACM**	NAD
					23/07/2021	**Asbestos ype**	NAD
					23/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	TP104	0.50	16	26/07/2021	**General Description (Bulk Analysis)**	soil
					26/07/2021	**Asbestos Fibres**	NAD
					26/07/2021	**Asbestos ACM**	NAD
					26/07/2021	**Asbestos ype**	NAD
					26/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	WS106	0.20	28	23/07/2021	**General Description (Bulk Analysis)**	Soil/Stones
					23/07/2021	**Asbestos Fibres**	NAD
					23/07/2021	**Asbestos ACM**	NAD
					23/07/2021	**Asbestos ype**	NAD
					23/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	WS105	0.50	40	23/07/2021	**General Description (Bulk Analysis)**	Soil/Stones
					23/07/2021	**Asbestos Fibres**	NAD
					23/07/2021	**Asbestos ACM**	NAD
					23/07/2021	**Asbestos ype**	NAD
					23/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	ACM S1		42	14/07/2021	**General Description (Bulk Analysis)**	insulation
					14/07/2021	**Asbestos Fibres**	NAD
					14/07/2021	**Asbestos ACM**	NAD
					14/07/2021	**Asbestos ype**	NAD
					14/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	ACM S2		43	14/07/2021	**General Description (Bulk Analysis)**	insulation
					14/07/2021	**Asbestos Fibres**	NAD
					14/07/2021	**Asbestos ACM**	NAD
					14/07/2021	**Asbestos ype**	NAD
					14/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	ACM S3		44	14/07/2021	**General Description (Bulk Analysis)**	Insulation
					14/07/2021	**Asbestos Fibres**	NAD
					14/07/2021	**Asbestos ACM**	NAD

Client ame RPS
Re erence JER9132
Location 233-236 Nestles Avenue
Contact Matthew Hemus

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
21/10418	1	ACM S3		44	14/07/2021	**Asbestos ype**	NAD
					14/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	ACM S4		45	14/07/2021	**General Description (Bulk Analysis)**	Insulation
					14/07/2021	**Asbestos Fibres**	NAD
					14/07/2021	**Asbestos ACM**	NAD
					14/07/2021	**Asbestos ype**	NAD
					14/07/2021	**Asbestos Level Screen**	NAD
21/10418	1	ACM S5		46	14/07/2021	**General Description (Bulk Analysis)**	Insulation
					14/07/2021	**Asbestos Fibres**	NAD
					14/07/2021	**Asbestos ACM**	NAD
					14/07/2021	**Asbestos ype**	NAD
					14/07/2021	**Asbestos Level Screen**	NAD

Client ame RPS
Re erence JER9132
Location 233-236 Nestles Avenue
Contact Matthew Hemus

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/10418						

Please note that only samples that are deviating are mentioned in this report l no samples are listed it is because none were deviating
Only analyses which are accredited are recorded as deviating i set criteria are not met

EMT Job No.: 21/10418

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WA RS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

D VIA I G SAMPL S

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

S RROGA S

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DIL IO S

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLA S

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

O

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

R POR S FROM H SO H AFRICA LABORA OR

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement ncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBR VIA IO S and ACRO MS S D

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes

M ob o 21/10418

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM0	No preparation is required.			AR	Yes

M ob o 21/10418

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013l	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes

M ob o 21/10418

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	
Subcontracted	See attached subcontractor report for accreditation status and provider.					AD	Yes

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RPS
6th Floor
20 Farringdon Street
London
EC4A 4AB

Attention :	Matthew Hemus
Date :	29th September, 2021
Your reference :	JER9132
Our reference :	Test Report 21/14509 Batch 1 Schedule A 21/14509 Batch 1 Schedule C 21/14509 Bat
Location :	233-236 Nestles Ave
Date samples received :	17th September, 2021
Status :	Final Report
Issue :	1

Seven samples were received for analysis on 17th September, 2021 of which four were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Hayley Prowse
Project Manager

Element Materials Technology Environmental UK Limited
Registered in England and Wales
Registered Office: 10 Lower Grosvenor Place, London, SW1W 0EN
Company Registration No: 11371415

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	4-6	7-9	13-15	16-18							LOD/LOR	Units	Method No.
Sample ID	BH101	BH101	WS103	WS104									
Depth	0.8	1.1	0.7	0.3									
COC No / misc													
Containers	V J B	V J B	V J B	V J B									
Sample Date	13/09/2021	13/09/2021	14/09/2021	14/09/2021									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	17/09/2021	17/09/2021	17/09/2021	17/09/2021									
Arsenic #	15.8	-	17.7	-							<0.5	mg/kg	TM30/PM15
Barium #	128	-	172	-							<1	mg/kg	TM30/PM15
Beryllium	1.8	-	1.5	-							<0.5	mg/kg	TM30/PM15
Cadmium #	0.2	-	0.2	-							<0.1	mg/kg	TM30/PM15
Chromium #	61.4	-	56.0	-							<0.5	mg/kg	TM30/PM15
Copper #	60	-	113	-							<1	mg/kg	TM30/PM15
Lead #	215	-	307	-							<5	mg/kg	TM30/PM15
Mercury #	1.0	-	1.4	-							<0.1	mg/kg	TM30/PM15
Molybdenum #	3.8	-	3.1	-							<0.1	mg/kg	TM30/PM15
Nickel #	29.2	-	26.6	-							<0.7	mg/kg	TM30/PM15
Selenium #	<1	-	<1	-							<1	mg/kg	TM30/PM15
Silver	<1	-	<1	-							<1	mg/kg	TM30/PM15
Sulphur as S	0.05	-	0.04	-							<0.01	%	TM30/PM15
Total Sulphate as SO4 #	787	-	765	-							<50	mg/kg	TM50/PM29
Vanadium	49	-	55	-							<1	mg/kg	TM30/PM15
Zinc #	116	-	124	-							<5	mg/kg	TM30/PM15
Arsenic	-	-	-	19.5							<0.5	mg/kg	TM30/PM62
Barium	-	-	-	457							<1	mg/kg	TM30/PM62
Beryllium	-	-	-	1.7							<0.5	mg/kg	TM30/PM62
Cadmium	-	-	-	0.4							<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	25.8							<0.5	mg/kg	TM30/PM62
Copper	-	-	-	85							<1	mg/kg	TM30/PM62
Lead	-	-	-	241							<5	mg/kg	TM30/PM62
Mercury	-	-	-	2.1							<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	2.5							<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	34.8							<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	<1							<1	mg/kg	TM30/PM62
Silver	-	-	-	<1							<1	mg/kg	TM30/PM62
Sulphur as S	-	-	-	0.10							<0.01	%	TM30/PM62
Total Sulphate as SO4	-	-	-	2336							<50	mg/kg	TM50/PM129
Vanadium	-	-	-	57							<1	mg/kg	TM30/PM62
Zinc	-	-	-	243							<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	4-6	7-9	13-15	16-18							LOD/LOR	Units	Method No.
Sample ID	BH101	BH101	WS103	WS104									
Depth	0.8	1.1	0.7	0.3									
COC No / misc													
Containers	V J B	V J B	V J B	V J B									
Sample Date	13/09/2021	13/09/2021	14/09/2021	14/09/2021									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	17/09/2021	17/09/2021	17/09/2021	17/09/2021									
PAH MS													
Naphthalene #	0.05	-	0.08	0.26							<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	-	0.06	0.11							<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	-	0.07	0.17							<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	-	0.06	0.17							<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.29	-	0.77	2.11							<0.03	mg/kg	TM4/PM8
Anthracene #	0.06	-	0.30	0.60							<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.60	-	2.33	3.69							<0.03	mg/kg	TM4/PM8
Pyrene #	0.54	-	2.14	3.05							<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.36	-	1.48	1.60							<0.06	mg/kg	TM4/PM8
Chrysene #	0.40	-	1.43	1.93							<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.79	-	2.71	3.48							<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.40	-	1.53	1.88							<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	0.27	-	0.92	1.08							<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.06	-	0.25	0.23							<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.28	-	0.99	1.19							<0.04	mg/kg	TM4/PM8
PAH 16 Total	4.1	-	15.1	21.6							<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.57	-	1.95	2.51							<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.22	-	0.76	0.97							<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	98	-	97	92							<0	%	TM4/PM8
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_CU_1D_AL) #	<0.2	-	<0.2	<0.2							<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_CU_1D_AL) #	<4	-	<4	<4							<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_CU_1D_AL) #	<7	-	<7	<7							<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_CU_1D_AL) #	<7	-	<7	<7							<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35 (EH+HS_CU_1D_AL)	<19	-	<19	<19							<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	-	<0.1 SV	<0.1							<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_CU_1D_AR) #	<0.2	-	<0.2	<0.2							<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_CU_1D_AR) #	<4	-	<4	<4							<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_CU_1D_AR) #	10	-	19	19							<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_CU_1D_AR) #	43	-	73	71							<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 (EH+HS_CU_1D_AR) #	53	-	92	90							<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35) (EH+HS_CU_1D_Total)	53	-	92	90							<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12
Benzene #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	4-6	7-9	13-15	16-18							LOD/LOR	Units	Method No.
Sample ID	BH101	BH101	WS103	WS104									
Depth	0.8	1.1	0.7	0.3									
COC No / misc													
Containers	V J B	V J B	V J B	V J B									
Sample Date	13/09/2021	13/09/2021	14/09/2021	14/09/2021									
Sample Type	Soil	Soil	Soil	Soil									
Batch Number	1	1	1	1									
Date of Receipt	17/09/2021	17/09/2021	17/09/2021	17/09/2021									
Toluene #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12
o-Xylene #	<5	-	<5 SV	<5							<5	ug/kg	TM36/PM12
PCB 77	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 81	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 105	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 114	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 118	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 123	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 126	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 156	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 157	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 167	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 169	<5	-	<5	<5							<5	ug/kg	TM17/PM8
PCB 189	<5	-	<5	<5							<5	ug/kg	TM17/PM8
Total 12 PCBs	<60	-	<60	<60							<60	ug/kg	TM17/PM8
Total Phenols HPLC	<0.15	-	<0.15	<0.15							<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	20.8	-	18.4	19.1							<0.1	%	PM4/PM0
Ammoniacal Nitrogen as N	<0.6	-	<0.6	<0.6							<0.6	mg/kg	TM38/PM20
Hexavalent Chromium #	<0.3	-	<0.3	<0.3							<0.3	mg/kg	TM38/PM20
Nitrate as NO3	118.3	-	678.5	NDP							<2.5	mg/kg	TM38/PM20
Nitrate as NO3	-	-	-	442.1							<2.5	mg/kg	TM38/PM60
Nitrite as NO2	<0.05	-	<0.05	NDP							<0.05	mg/kg	TM38/PM20
Nitrite as NO2	-	-	-	<0.05							<0.05	mg/kg	TM38/PM60
Sulphate as SO4 (2:1 Ext) #	0.2591	-	0.1555	-							<0.0015	g/l	TM38/PM20
Sulphate as SO4 (2:1 Ext)	-	-	-	0.3617							<0.0015	g/l	TM38/PM60
Chromium III	61.4	-	56.0	-							<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	25.8							<0.5	mg/kg	NONE/NONE
Free Cyanide	<0.5	-	<0.5	<0.5							<0.5	mg/kg	TM89/PM45
Total Cyanide #	<0.5	-	<0.5	<0.5							<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	3.10	-	2.63	NDP							<0.02	%	TM21/PM24
Fraction Organic Carbon	0.031	0.002	0.026	NDP							<0.001	None	TM21/PM24
Organic Matter	5.3	-	4.5	NDP							<0.2	%	TM21/PM24
pH #	8.05	-	7.91	8.57							<0.01	pH units	TM73/PM11

Element Materials Technology

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

Report : Solid (Duplicate results)

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	13-15												
Sample ID	WS103												
Depth	0.7												
COC No / misc													
Containers	V J B												
Sample Date	14/09/2021												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	17/09/2021												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Nitrate as NO3	678.5										<2.5	mg/kg	TM38/PM20
Nitrite as NO2	<0.05										<0.05	mg/kg	TM38/PM20

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

Report : CEN 2:1

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	4-6	13-15	16-18								LOD/LOR	Units	Method No.
Sample ID	BH101	WS103	WS104										
Depth	0.8	0.7	0.3										
COC No / misc													
Containers	V J B	V J B	V J B										
Sample Date	13/09/2021	14/09/2021	14/09/2021										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	17/09/2021	17/09/2021	17/09/2021										
Dissolved Arsenic	<2.5	5.0	9.1								<2.5	ug/l	TM30/PM14
Dissolved Barium	29	46	16								<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	<0.5	<0.5								<0.5	ug/l	TM30/PM14
Dissolved Boron	381	251	241								<12	ug/l	TM30/PM14
Dissolved Cadmium	<0.5	<0.5	<0.5								<0.5	ug/l	TM30/PM14
Dissolved Chromium	<1.5	<1.5	4.6								<1.5	ug/l	TM30/PM14
Dissolved Copper	<7	<7	19								<7	ug/l	TM30/PM14
Dissolved Lead	<5	<5	<5								<5	ug/l	TM30/PM14
Dissolved Mercury	<1	<1	<1								<1	ug/l	TM30/PM14
Dissolved Molybdenum	15	12	74								<2	ug/l	TM30/PM14
Dissolved Nickel	<2	3	<2								<2	ug/l	TM30/PM14
Dissolved Selenium	<3	<3	<3								<3	ug/l	TM30/PM14
Dissolved Silver	<5	<5	<5								<5	ug/l	TM30/PM14
Dissolved Vanadium	1.7	2.2	8.9								<1.5	ug/l	TM30/PM14
Dissolved Zinc	<3	7	11								<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	<0.1	<0.1	0.5								<0.1	ug/l	TM4/PM30
Acenaphthylene	<0.013	0.020	0.183								<0.013	ug/l	TM4/PM30
Acenaphthene	<0.013	<0.013	0.642								<0.013	ug/l	TM4/PM30
Fluorene	<0.014	<0.014	0.669								<0.014	ug/l	TM4/PM30
Phenanthrene	0.028	0.020	3.366								<0.011	ug/l	TM4/PM30
Anthracene	<0.013	<0.013	0.821								<0.013	ug/l	TM4/PM30
Fluoranthene	0.025	0.029	3.260								<0.012	ug/l	TM4/PM30
Pyrene	0.023	0.031	2.497								<0.013	ug/l	TM4/PM30
Benzo(a)anthracene	0.016	0.021	1.336								<0.015	ug/l	TM4/PM30
Chrysene	0.023	0.027	1.206								<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.040	0.067	1.984								<0.018	ug/l	TM4/PM30
Benzo(a)pyrene	0.022	0.032	1.104								<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.015	0.032	0.613								<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.01	<0.01	0.12								<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene	0.014	0.033	0.528								<0.011	ug/l	TM4/PM30
PAH 16 Total	0.206	0.312	18.829								<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.03	0.05	1.43								<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.01	0.02	0.56								<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	85	86	91								<0	%	TM4/PM30
Dissolved Chromium III	<0.006	<0.006	<0.006								<0.006	mg/l	NONE/NONE
Hexavalent Chromium	<0.006	<0.006	<0.006								<0.006	mg/l	TM38/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus
EMT Job No: 21/14509

SVOC Report : **Solid**

EMT Sample No.	4-6	13-15	16-18									
Sample ID	BH101	WS103	WS104									
Depth	0.8	0.7	0.3							Please see attached notes for all abbreviations and acronyms		
COC No / misc												
Containers	V J B	V J B	V J B									
Sample Date	13/09/2021	14/09/2021	14/09/2021									
Sample Type	Soil	Soil	Soil									
Batch Number	1	1	1									
Date of Receipt	17/09/2021	17/09/2021	17/09/2021									
SVOC MS										LOD/LOR	Units	Method No.
Phenols												
2-Chlorophenol #	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10							<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10							<10	ug/kg	TM16/PM8
Phenol #	<10	<10	<10							<10	ug/kg	TM16/PM8
PAHs												
2-Chloronaphthalene #	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Methylnaphthalene #	59	54	167							<10	ug/kg	TM16/PM8
Phthalates												
Bis(2-ethylhexyl) phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100							<100	ug/kg	TM16/PM8
Dimethyl phthalate #	<100	<100	<100							<100	ug/kg	TM16/PM8
Other SVOCs												
1,2-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #	<10	<10	<10							<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10							<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10							<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10							<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10							<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10							<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10							<10	ug/kg	TM16/PM8
Carbazole	25	46	130							<10	ug/kg	TM16/PM8
Dibenzofuran #	33	41	292							<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorobutadiene #	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10							<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10							<10	ug/kg	TM16/PM8
Isophorone #	<10	<10	<10							<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #	<10	<10	<10							<10	ug/kg	TM16/PM8
Nitrobenzene #	<10	<10	<10							<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	124	114	113							<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	125	118	120							<0	%	TM16/PM8

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
21/14509	1	BH101	0.8	5	22/09/2021	**General Description (Bulk Analysis)**	soil
					22/09/2021	**Asbestos Fibres**	NAD
					22/09/2021	**Asbestos ACM**	NAD
					22/09/2021	**Asbestos Type**	NAD
					22/09/2021	**Asbestos Level Screen**	NAD
21/14509	1	WS103	0.7	14	22/09/2021	**General Description (Bulk Analysis)**	soil
					22/09/2021	**Asbestos Fibres**	NAD
					22/09/2021	**Asbestos ACM**	NAD
					22/09/2021	**Asbestos Type**	NAD
					22/09/2021	**Asbestos Level Screen**	NAD
21/14509	1	WS104	0.3	17	22/09/2021	**General Description (Bulk Analysis)**	soil
					22/09/2021	**Asbestos Fibres**	Fibre Bundles
					22/09/2021	**Asbestos ACM**	NAD
					22/09/2021	**Asbestos Type**	Chrysotile
					22/09/2021	**Asbestos Level Screen**	less than 0.1%
					28/09/2021	**Total ACM Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					28/09/2021	**Total Detailed Gravimetric Quantification (% Asb)**	<0.001 (mass %)
					28/09/2021	**Total Gravimetric Quantification (ACM + Detailed) (% Asb)**	<0.001 (mass %)
					29/09/2021	**Asbestos PCOM Quantification (Fibres)**	<0.001 (mass %)
					29/09/2021	**Asbestos Gravimetric & PCOM Total**	<0.001 (mass %)

Client Name: RPS

Reference: JER9132

Location: 233-236 Nestles Ave

Contact: Matthew Hemus

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
21/14509	1	WS104	0.3	16-18	TM21/PM24	Asbestos detected in sample
21/14509	1	WS104	0.3	16-18	TM38/PM20	Asbestos detected in sample

Client Name: RPS
Reference: JER9132
Location: 233-236 Nestles Ave
Contact: Matthew Hemus

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/14509						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/14509

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT Job No: 21/14509

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes

EMT Job No: 21/14509

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.			AD	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified			AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes

EMT Job No: 21/14509

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM0	No preparation is required.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AD	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.			AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM60	As received solid samples are extracted with deionised water in a 2:1 ratio of water to solid.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No

EMT Job No: 21/14509

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM131	Quantification of Asbestos Fibres and ACM based on HSG248 First edition:2006, HSG 264 Second edition:2012, HSE Contract Research Report No.83/1996, MDHS 87:1998, WM3 1st Edition v1.1:2018	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

Appendix D

Groundwater Laboratory Results

Element Materials Technology
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CH5 2UA

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RPS
6th Floor
20 Farringdon Street
London
EC4A 4AB

Attention :	Matthew Hemus
Date :	22nd October, 2021
Your reference :	JER 9132
Our reference :	Test Report 21/15891 Batch 1
Location :	233 - 236 Nestles Avenue
Date samples received :	9th October, 2021
Status :	Final Report
Issue :	1

Five samples were received for analysis on 9th October, 2021 of which five were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Client Name: RPS
Reference: JER 9132
Location: 233 - 236 Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/15891

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-5	6-10	11-15	16-20	21-25						LOD/LOR	Units	Method No.
Sample ID	BH01	BH02	BH03	BH05	BH101								
Depth													
COC No / misc													
Containers	V P G	V P G	V P G	V P G	V P G								
Sample Date	07/10/2021	07/10/2021	07/10/2021	07/10/2021	07/10/2021								
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water								
Batch Number	1	1	1	1	1								
Date of Receipt	09/10/2021	09/10/2021	09/10/2021	09/10/2021	09/10/2021								
Dissolved Arsenic #	<2.5	<2.5	<2.5	<2.5	<2.5						<2.5	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5	<0.5	<0.5	<0.5	<0.5						<0.5	ug/l	TM30/PM14
Total Dissolved Chromium #	<1.5	<1.5	<1.5	<1.5	<1.5						<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7	<7	<7	<7	<7						<7	ug/l	TM30/PM14
Dissolved Lead #	<5	<5	<5	<5	<5						<5	ug/l	TM30/PM14
Dissolved Mercury #	<1	<1	<1	<1	<1						<1	ug/l	TM30/PM14
Dissolved Nickel #	<2	<2	<2	<2	4						<2	ug/l	TM30/PM14
Dissolved Selenium #	<3	<3	<3	<3	<3						<3	ug/l	TM30/PM14
Dissolved Zinc #	4	<3	<3	<3	5						<3	ug/l	TM30/PM14
Total Hardness Dissolved (as CaCO3)	297	329	349	329	272						<1	mg/l	TM30/PM14
PAH MS													
Naphthalene #	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	ug/l	TM4/PM30
Acenaphthylene #	<0.013	<0.013	<0.013	<0.013	<0.013						<0.013	ug/l	TM4/PM30
Acenaphthene #	<0.013	<0.013	<0.013	<0.013	<0.013						<0.013	ug/l	TM4/PM30
Fluorene #	<0.014	<0.014	<0.014	<0.014	<0.014						<0.014	ug/l	TM4/PM30
Phenanthrene #	<0.011	<0.011	<0.011	<0.011	<0.011						<0.011	ug/l	TM4/PM30
Anthracene #	<0.013	<0.013	<0.013	<0.013	<0.013						<0.013	ug/l	TM4/PM30
Fluoranthene #	<0.012	<0.012	<0.012	<0.012	<0.012						<0.012	ug/l	TM4/PM30
Pyrene #	<0.013	<0.013	<0.013	<0.013	<0.013						<0.013	ug/l	TM4/PM30
Benzo(a)anthracene #	<0.015	<0.015	<0.015	<0.015	<0.015						<0.015	ug/l	TM4/PM30
Chrysene #	<0.011	<0.011	<0.011	<0.011	<0.011						<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene #	<0.018	<0.018	<0.018	<0.018	<0.018						<0.018	ug/l	TM4/PM30
Benzo(a)pyrene #	<0.016	<0.016	<0.016	<0.016	<0.016						<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene #	<0.011	<0.011	<0.011	<0.011	<0.011						<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene #	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene #	<0.011	<0.011	<0.011	<0.011	<0.011						<0.011	ug/l	TM4/PM30
PAH 16 Total #	<0.195	<0.195	<0.195	<0.195	<0.195						<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	75	80	83	82	83						<0	%	TM4/PM30
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	-						<0.1	ug/l	TM15/PM10
Benzene #	<0.5	<0.5	<0.5	<0.5	-						<0.5	ug/l	TM15/PM10
Toluene #	<5	<5	<5	<5	-						<5	ug/l	TM15/PM10
Ethylbenzene #	<1	<1	<1	<1	-						<1	ug/l	TM15/PM10
m/p-Xylene #	<2	<2	<2	<2	-						<2	ug/l	TM15/PM10
o-Xylene #	<1	<1	<1	<1	-						<1	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	76	111	111	110	-						<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	80	113	112	110	-						<0	%	TM15/PM10
MTBE #	-	-	-	-	<5						<5	ug/l	TM36/PM12
Benzene #	-	-	-	-	<5						<5	ug/l	TM36/PM12
Toluene #	-	-	-	-	<5						<5	ug/l	TM36/PM12

Element Materials Technology

Client Name: RPS
Reference: JER 9132
Location: 233 - 236 Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/15891

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

EMT Sample No.	1-5	6-10	11-15	16-20	21-25						LOD/LOR	Units	Method No.
Sample ID	BH01	BH02	BH03	BH05	BH101								
Depth													
COC No / misc													
Containers	V P G	V P G	V P G	V P G	V P G								
Sample Date	07/10/2021	07/10/2021	07/10/2021	07/10/2021	07/10/2021								
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water								
Batch Number	1	1	1	1	1								
Date of Receipt	09/10/2021	09/10/2021	09/10/2021	09/10/2021	09/10/2021								
Ethylbenzene #	-	-	-	-	<5						<5	ug/l	TM36/PM12
m/p-Xylene #	-	-	-	-	<5						<5	ug/l	TM36/PM12
o-Xylene #	-	-	-	-	<5						<5	ug/l	TM36/PM12
TPH CWG													
Aliphatics													
>C5-C6 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>C6-C8 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>C8-C10 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>C10-C12 #	<5	<5	<5	<5	<5						<5	ug/l	TM5/PM16/PM30
>C12-C16 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
>C16-C21 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
>C21-C35 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>EC7-EC8 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>EC8-EC10 #	<10	<10	<10	<10	<10						<10	ug/l	TM36/PM12
>EC10-EC12 #	<5	<5	<5	<5	<5						<5	ug/l	TM5/PM16/PM30
>EC12-EC16 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
>EC16-EC21 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
>EC21-EC35 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35 #	<10	<10	<10	<10	<10						<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35) #	<10	<10	<10	<10	<10						<10	ug/l	TM5/TM36/PM12/PM16/PM30
PCB 28	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 52	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 101	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 118	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 138	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 153	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
PCB 180	-	-	<0.1	-	-						<0.1	ug/l	TM17/PM30
Total 7 PCBs	-	-	<0.7	-	-						<0.7	ug/l	TM17/PM30
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM26/PM0
Sulphate as SO4 #	70.1	62.5	48.4	62.4	64.7						<0.5	mg/l	TM38/PM0
Total Cyanide #	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM89/PM0
Hexavalent Chromium	<0.006	<0.006	<0.006	<0.006	<0.006						<0.006	mg/l	TM38/PM0
Sulphide	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM107/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: RPS
Reference: JER 9132
Location: 233 - 236 Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/15891

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

EMT Sample No.	1-5	6-10	11-15	16-20	21-25						LOD/LOR	Units	Method No.
Sample ID	BH01	BH02	BH03	BH05	BH101								
Depth													
COC No / misc													
Containers	V P G	V P G	V P G	V P G	V P G								
Sample Date	07/10/2021	07/10/2021	07/10/2021	07/10/2021	07/10/2021								
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water	Ground Water								
Batch Number	1	1	1	1	1								
Date of Receipt	09/10/2021	09/10/2021	09/10/2021	09/10/2021	09/10/2021								
pH #	7.15	7.30	7.28	7.39	7.16						<0.01	pH units	TM73/PM0
Total Organic Carbon #	<2	<2	<2	<2	<2						<2	mg/l	TM60/PM0

Please see attached notes for all abbreviations and acronyms

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: RPS
Reference: JER 9132
Location: 233 - 236 Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/15891

VOC Report : **Liquid**

EMT Sample No.	1-5	6-10	11-15	16-20								
Sample ID	BH01	BH02	BH03	BH05								
Depth												
COC No / misc												
Containers	V P G	V P G	V P G	V P G								
Sample Date	07/10/2021	07/10/2021	07/10/2021	07/10/2021								
Sample Type	Ground Water	Ground Water	Ground Water	Ground Water								
Batch Number	1	1	1	1								
Date of Receipt	09/10/2021	09/10/2021	09/10/2021	09/10/2021								

Please see attached notes for all abbreviations and acronyms

					LOD/LOR	Units	Method No.
VOC MS							
Dichlorodifluoromethane	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether #	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Vinyl Chloride #	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Chloroethane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Trichlorofluoromethane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Dichloromethane (DCM) #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Bromochloromethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chloroform #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1-Trichloroethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Carbon tetrachloride #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dichloroethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Benzene #	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichloropropane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Bromodichloromethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Toluene #	<5	<5	<5	<5	<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,2-Trichloroethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichloropropane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromochloromethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dibromoethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chlorobenzene #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Ethylbenzene #	<1	<1	<1	<1	<1	ug/l	TM15/PM10
m/p-Xylene #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
o-Xylene #	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Styrene	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Bromoform #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	ug/l	TM15/PM10
Bromobenzene #	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichloropropane #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Propylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2-Chlorotoluene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Chlorotoluene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
tert-Butylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
sec-Butylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Isopropyltoluene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichlorobenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,4-Dichlorobenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
n-Butylbenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichlorobenzene #	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	76	111	111	110	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	80	113	112	110	<0	%	TM15/PM10

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: RPS
Reference: JER 9132
Location: 233 - 236 Nestles Avenue
Contact: Matthew Hemus

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/15891						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/15891

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

HWOL ACRONYMS AND OPERATORS USED

HS	Headspace Analysis.
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent.
CU	Clean-up - e.g. by florisil, silica gel.
1D	GC - Single coil gas chromatography.
Total	Aliphatics & Aromatics.
AL	Aliphatics only.
AR	Aromatics only.
2D	GC-GC - Double coil gas chromatography.
#1	EH_Total but with humics mathematically subtracted
#2	EU_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +).
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total
MS	Mass Spectrometry.

EMT Job No: 21/15891

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16/PM30	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE/Water samples are extracted with solvent using a magnetic stirrer to create a vortex.	Yes			
TM5/TM36	please refer to TM5 and TM36 for method details	PM12/PM16/PM30	please refer to PM16/PM30 and PM12 for method details	Yes			
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.				
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.	Yes			
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified				
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM14	Preparation of waters and leachates for metals by ICP OES/ICP MS. Samples are filtered for Dissolved metals, and remain unfiltered for Total metals then acidified	Yes			

EMT Job No: 21/15891

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes			
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM0	No preparation is required.				
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993) – All anions comparable to BS ISO 15923-1: 2013I	PM0	No preparation is required.	Yes			
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.	Yes			
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.	Yes			
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM0	No preparation is required.	Yes			
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM0	No preparation is required.				

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RPS
6th Floor
20 Farringdon Street
London
EC4A 4AB

Attention :	Matthew Hemus
Date :	4th November, 2021
Your reference :	
Our reference :	Test Report 21/16528 Batch 1
Location :	Nestles Avenue
Date samples received :	20th October, 2021
Status :	Final Report
Issue :	1

One sample was received for analysis on 20th October, 2021 and was scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Hayley Prowse
Project Manager

Element Materials Technology Environmental UK Limited
Registered in England and Wales
Registered Office: 10 Lower Grosvenor Place, London, SW1W 0EN
Company Registration No: 11371415

Client Name: RPS
Reference:
Location: Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/16528

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
H=H_2SO_4, Z=ZnAc, N=NaOH, HN=$HN0_3$

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-5												
Sample ID	BH06												
Depth													
COC No / misc													
Containers	V P G												
Sample Date	14/10/2021												
Sample Type	Ground Water												
Batch Number	1												
Date of Receipt	20/10/2021												
												LOD/LOR	Units	Method No.
Dissolved Arsenic #	<2.5											<2.5	ug/l	TM30/PM14
Dissolved Cadmium #	<0.5											<0.5	ug/l	TM30/PM14
Total Dissolved Chromium #	<1.5											<1.5	ug/l	TM30/PM14
Dissolved Copper #	<7											<7	ug/l	TM30/PM14
Dissolved Lead #	<5											<5	ug/l	TM30/PM14
Dissolved Mercury #	<1											<1	ug/l	TM30/PM14
Dissolved Nickel #	<2											<2	ug/l	TM30/PM14
Dissolved Selenium #	<3											<3	ug/l	TM30/PM14
Dissolved Zinc #	<3											<3	ug/l	TM30/PM14
Total Hardness Dissolved (as CaCO3)	255											<1	mg/l	TM30/PM14
PAH MS														
Naphthalene #	<0.1											<0.1	ug/l	TM4/PM30
Acenaphthylene #	<0.013											<0.013	ug/l	TM4/PM30
Acenaphthene #	<0.013											<0.013	ug/l	TM4/PM30
Fluorene #	<0.014											<0.014	ug/l	TM4/PM30
Phenanthrene #	<0.011											<0.011	ug/l	TM4/PM30
Anthracene #	<0.013											<0.013	ug/l	TM4/PM30
Fluoranthene #	<0.012											<0.012	ug/l	TM4/PM30
Pyrene #	<0.013											<0.013	ug/l	TM4/PM30
Benzo(a)anthracene #	<0.015											<0.015	ug/l	TM4/PM30
Chrysene #	<0.011											<0.011	ug/l	TM4/PM30
Benzo(bk)fluoranthene #	<0.018											<0.018	ug/l	TM4/PM30
Benzo(a)pyrene #	<0.016											<0.016	ug/l	TM4/PM30
Indeno(123cd)pyrene #	<0.011											<0.011	ug/l	TM4/PM30
Dibenzo(ah)anthracene #	<0.01											<0.01	ug/l	TM4/PM30
Benzo(ghi)perylene #	<0.011											<0.011	ug/l	TM4/PM30
PAH 16 Total #	<0.195											<0.195	ug/l	TM4/PM30
Benzo(b)fluoranthene	<0.01											<0.01	ug/l	TM4/PM30
Benzo(k)fluoranthene	<0.01											<0.01	ug/l	TM4/PM30
PAH Surrogate % Recovery	71											<0	%	TM4/PM30
Methyl Tertiary Butyl Ether #	<0.1											<0.1	ug/l	TM15/PM10
Benzene #	<0.5											<0.5	ug/l	TM15/PM10
Toluene #	<5											<5	ug/l	TM15/PM10
Ethylbenzene #	<1											<1	ug/l	TM15/PM10
m/p-Xylene #	<2											<2	ug/l	TM15/PM10
o-Xylene #	<1											<1	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	89											<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	98											<0	%	TM15/PM10

Element Materials Technology

Client Name: RPS
Reference:
Location: Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/16528

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
$H=H_2SO_4$, Z=ZnAc, N=NaOH, $HN=HN0_3$

EMT Sample No.	1-5										LOD/LOR	Units	Method No.
Sample ID	BH06												
Depth													
COC No / misc													
Containers	V P G												
Sample Date	14/10/2021												
Sample Type	Ground Water												
Batch Number	1												
Date of Receipt	20/10/2021												
TPH CWG													
Aliphatics													
>C5-C6 #	<10										<10	ug/l	TM36/PM12
>C6-C8 #	<10										<10	ug/l	TM36/PM12
>C8-C10 #	<10										<10	ug/l	TM36/PM12
>C10-C12 #	<5										<5	ug/l	TM5/PM16/PM30
>C12-C16 #	<10										<10	ug/l	TM5/PM16/PM30
>C16-C21 #	<10										<10	ug/l	TM5/PM16/PM30
>C21-C35 #	<10										<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35 #	<10										<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7 #	<10										<10	ug/l	TM36/PM12
>EC7-EC8 #	<10										<10	ug/l	TM36/PM12
>EC8-EC10 #	<10										<10	ug/l	TM36/PM12
>EC10-EC12 #	<5										<5	ug/l	TM5/PM16/PM30
>EC12-EC16 #	<10										<10	ug/l	TM5/PM16/PM30
>EC16-EC21 #	<10										<10	ug/l	TM5/PM16/PM30
>EC21-EC35 #	<10										<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35 #	<10										<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35) #	<10										<10	ug/l	TM5/TM36/PM12/PM16/PM30
Phenol #	<0.01										<0.01	mg/l	TM26/PM0
Sulphate as SO4 #	38.7										<0.5	mg/l	TM38/PM0
Total Cyanide #	<0.01										<0.01	mg/l	TM89/PM0
Hexavalent Chromium	<0.006										<0.006	mg/l	TM38/PM0
Sulphide	<0.01										<0.01	mg/l	TM107/PM0
pH #	7.31										<0.01	pH units	TM73/PM0
Total Organic Carbon #	<2										<2	mg/l	TM60/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: RPS
Reference:
Location: Nestles Avenue
Contact: Matthew Hemus
EMT Job No: 21/16528

VOC Report : **Liquid**

EMT Sample No.	1-5												
Sample ID	BH06												
Depth													
COC No / misc													
Containers	V P G												
Sample Date	14/10/2021												
Sample Type	Ground Water												
Batch Number	1												
Date of Receipt	20/10/2021												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2										<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether #	<0.1										<0.1	ug/l	TM15/PM10
Chloromethane #	<3										<3	ug/l	TM15/PM10
Vinyl Chloride #	<0.1										<0.1	ug/l	TM15/PM10
Bromomethane	<1										<1	ug/l	TM15/PM10
Chloroethane #	<3										<3	ug/l	TM15/PM10
Trichlorofluoromethane #	<3										<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<3										<3	ug/l	TM15/PM10
Dichloromethane (DCM) #	<3										<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene #	<3										<3	ug/l	TM15/PM10
1,1-Dichloroethane #	<3										<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene #	<3										<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1										<1	ug/l	TM15/PM10
Bromochloromethane #	<2										<2	ug/l	TM15/PM10
Chloroform #	<2										<2	ug/l	TM15/PM10
1,1,1-Trichloroethane #	<2										<2	ug/l	TM15/PM10
1,1-Dichloropropene #	<3										<3	ug/l	TM15/PM10
Carbon tetrachloride #	<2										<2	ug/l	TM15/PM10
1,2-Dichloroethane #	<2										<2	ug/l	TM15/PM10
Benzene #	<0.5										<0.5	ug/l	TM15/PM10
Trichloroethene (TCE) #	<3										<3	ug/l	TM15/PM10
1,2-Dichloropropane #	<2										<2	ug/l	TM15/PM10
Dibromomethane #	<3										<3	ug/l	TM15/PM10
Bromodichloromethane #	<2										<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2										<2	ug/l	TM15/PM10
Toluene #	<5										<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2										<2	ug/l	TM15/PM10
1,1,2-Trichloroethane #	<2										<2	ug/l	TM15/PM10
Tetrachloroethene (PCE) #	<3										<3	ug/l	TM15/PM10
1,3-Dichloropropane #	<2										<2	ug/l	TM15/PM10
Dibromochloromethane #	<2										<2	ug/l	TM15/PM10
1,2-Dibromoethane #	<2										<2	ug/l	TM15/PM10
Chlorobenzene #	<2										<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane #	<2										<2	ug/l	TM15/PM10
Ethylbenzene #	<1										<1	ug/l	TM15/PM10
m/p-Xylene #	<2										<2	ug/l	TM15/PM10
o-Xylene #	<1										<1	ug/l	TM15/PM10
Styrene	<2										<2	ug/l	TM15/PM10
Bromoform #	<2										<2	ug/l	TM15/PM10
Isopropylbenzene #	<3										<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4										<4	ug/l	TM15/PM10
Bromobenzene #	<2										<2	ug/l	TM15/PM10
1,2,3-Trichloropropane #	<3										<3	ug/l	TM15/PM10
Propylbenzene #	<3										<3	ug/l	TM15/PM10
2-Chlorotoluene #	<3										<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene #	<3										<3	ug/l	TM15/PM10
4-Chlorotoluene #	<3										<3	ug/l	TM15/PM10
tert-Butylbenzene #	<3										<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene #	<3										<3	ug/l	TM15/PM10
sec-Butylbenzene #	<3										<3	ug/l	TM15/PM10
4-Isopropyltoluene #	<3										<3	ug/l	TM15/PM10
1,3-Dichlorobenzene #	<3										<3	ug/l	TM15/PM10
1,4-Dichlorobenzene #	<3										<3	ug/l	TM15/PM10
n-Butylbenzene #	<3										<3	ug/l	TM15/PM10
1,2-Dichlorobenzene #	<3										<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2										<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3										<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3										<3	ug/l	TM15/PM10
Naphthalene	<2										<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3										<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	89										<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	98										<0	%	TM15/PM10

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: RPS
Reference:
Location: Nestles Avenue
Contact: Matthew Hemus

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/16528						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/16528

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range