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Englobe
Columbus House
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United Kingdom
CF15 7NE

Attention :	Ian Wright
Date :	25th April, 2023
Your reference :	-
Our reference :	Test Report 22/19197 Batch 1
Location :	Quakers Yard
Date samples received :	21st November, 2022
Status :	Final report
Issue :	1

Thirty six samples were received for analysis on 21st November, 2022 of which thirty 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:

Phil Sommerton BSc
Senior Project Manager

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Solid

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

EMT Sample No.	1	3									LOD/LOR	Units	Method No.
Sample ID	SAMPLE 1	SAMPLE 3											
Depth													
COC No / misc	25 KG BARREL	25 KG BARREL											
Containers	T	T											
Sample Date	<>	<>											
Sample Type	Solid	Solid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
Arsenic	33.1	26.4									<0.5	mg/kg	TM30/PM15
Cadmium	0.6	0.2									<0.1	mg/kg	TM30/PM15
Chromium	43.2	18.8									<0.5	mg/kg	TM30/PM15
Copper	84	32									<1	mg/kg	TM30/PM15
Iron	49790	12640									<20	mg/kg	TM30/PM15
Lead	72	44									<5	mg/kg	TM30/PM15
Mercury	1.9	2.3									<0.1	mg/kg	TM30/PM15
Nickel	45.2	12.6									<0.7	mg/kg	TM30/PM15
Selenium	4	2									<1	mg/kg	TM30/PM15
Zinc	176	78									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene	>>1798.28$_{AE}$	>>908.69$_{AE}$									<0.04	mg/kg	TM4/PM8
Acenaphthylene	399.88$_{AE}$	163.92$_{AE}$									<0.03	mg/kg	TM4/PM8
Acenaphthene	135.67$_{AE}$	106.77$_{AE}$									<0.05	mg/kg	TM4/PM8
Fluorene	486.85$_{AE}$	288.21$_{AE}$									<0.04	mg/kg	TM4/PM8
Phenanthrene	>>1490.72$_{AE}$	>>948.50$_{AE}$									<0.03	mg/kg	TM4/PM8
Anthracene	500.15$_{AE}$	310.75$_{AE}$									<0.04	mg/kg	TM4/PM8
Fluoranthene	>>1043.47$_{AE}$	>>705.37$_{AE}$									<0.03	mg/kg	TM4/PM8
Pyrene	>>641.44$_{AE}$	454.64$_{AE}$									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene	411.07$_{AE}$	260.06$_{AE}$									<0.06	mg/kg	TM4/PM8
Chrysene	219.62$_{AE}$	246.39$_{AE}$									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene	538.03$_{AE}$	373.75$_{AE}$									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene	293.81$_{AE}$	205.76$_{AE}$									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	206.65$_{AE}$	140.96$_{AE}$									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene	46.49$_{AE}$	33.78$_{AE}$									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene	150.09$_{AE}$	112.77$_{AE}$									<0.04	mg/kg	TM4/PM8
PAH 16 Total	8362.2$_{AE}$	5260.3$_{AE}$									<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	387.38$_{AE}$	269.10$_{AE}$									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	150.65$_{AE}$	104.65$_{AE}$									<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	73$_{AE}$	83$_{AE}$									<0	%	TM4/PM8
TPH CWG													
Aliphatics													
>C5-C6	<0.1	<0.1^{SV}									<0.1	mg/kg	TM36/PM12
>C6-C8	7.9	6.9^{SV}									<0.1	mg/kg	TM36/PM12
>C8-C10	37.3	22.2^{SV}									<0.1	mg/kg	TM36/PM12
>C10-C12	310.3	87.1									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16	1158	564									<4	mg/kg	TM5/PM8/PM16
>C16-C21	811	675									<7	mg/kg	TM5/PM8/PM16
>C21-C35	158	222									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	2483	1577									<19	mg/kg	TM5/TM36/PM8/PM12/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Solid

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

EMT Sample No.	1	3									LOD/LOR	Units	Method No.
Sample ID	SAMPLE 1	SAMPLE 3											
Depth													
COC No / misc	25 KG BARREL	25 KG BARREL											
Containers	T	T											
Sample Date	<>	<>											
Sample Type	Solid	Solid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
TPH CWG													
Aromatics													
>C5-EC7	11.5	12.1 SV									<0.1	mg/kg	TM36/PM12
>EC7-EC8	10.1	8.9 SV									<0.1	mg/kg	TM36/PM12
>EC8-EC10	16.7	12.6 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC12	>>2196.4	544.6									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16	>>3454	1185									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21	>>10500	3697									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35	>>11255	3664									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35	27444	9124									<19	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	29927	10701									<38	mg/kg	TM5/TM36/PM8/PM12/PM16
MTBE	11	12 SV									<5	ug/kg	TM36/PM12
Benzene	11544	12162 SV									<5	ug/kg	TM36/PM12
Toluene	10021	8871 SV									<5	ug/kg	TM36/PM12
Ethylbenzene	1344	1109 SV									<5	ug/kg	TM36/PM12
m/p-Xylene	11491	8624 SV									<5	ug/kg	TM36/PM12
o-Xylene	3772	2802 SV									<5	ug/kg	TM36/PM12
Resorcinol	0.08 AB	<0.05 AB									<0.01	mg/kg	TM26/PM21B
Catechol	<0.05 AB	<0.05 AB									<0.01	mg/kg	TM26/PM21B
Phenol	2.99 AB	15.74 AF									<0.01	mg/kg	TM26/PM21B
m/p-cresol	4.46 AB	23.01 AF									<0.02	mg/kg	TM26/PM21B
o-cresol	4.17 AD	15.04 AF									<0.01	mg/kg	TM26/PM21B
Total cresols	8.63 AB	38.05 AB									<0.03	mg/kg	TM26/PM21B
Xylenols	9.11 AB	33.48 AF									<0.06	mg/kg	TM26/PM21B
1-naphthol	0.52 AB	1.31 AB									<0.01	mg/kg	TM26/PM21B
2,3,5-trimethyl phenol	0.22 AB	0.89 AB									<0.01	mg/kg	TM26/PM21B
2-isopropylphenol	<0.05 AB	<0.05 AB									<0.01	mg/kg	TM26/PM21B
Total Speciated Phenols HPLC	21.55 AB	89.47 AB									<0.15	mg/kg	TM26/PM21B
Natural Moisture Content	19.9	47.7									<0.1	%	PM4/PM0
Sulphate as SO4 (2:1 Ext)	0.0093	0.0227									<0.0015	g/l	TM38/PM20
Free Cyanide	6.5	4.3									<0.5	mg/kg	TM89/PM45
Total Cyanide	1065.7 AF	174.1 AD									<0.5	mg/kg	TM89/PM45
Complex Cyanide	1059.2	169.8									<0.5	mg/kg	TM89/PM45
pH	8.07	12.79									<0.01	pH units	TM73/PM11

Please see attached notes for all abbreviations and acronyms

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	5-6	7-12	13-14	15-20	21-22	23-28	29-30	31-36	37-38	39-44	LOD/LOR	Units	Method No.
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	6 hour	6 hour	6 hour	6 hour	24 hour	24 hour	24 hour	24 hour	2.25 Day	2.25 Day			
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
Dissolved Arsenic	-	5.3	-	2.8	-	6.7	-	7.2	-	7.9	<2.5	ug/l	TM30/PM14
Dissolved Barium	-	9	-	11	-	17	-	16	-	21	<3	ug/l	TM30/PM14
Dissolved Beryllium	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Boron	-	18	-	26	-	38	-	48	-	31	<12	ug/l	TM30/PM14
Dissolved Cadmium	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Calcium	5.9	-	7.4	-	12.8	-	12.3	-	23.7	-	<0.2	mg/l	TM30/PM14
Total Dissolved Chromium	-	2.9	-	1.9	-	<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	-	4	-	4	-	3	-	3	-	3	<2	ug/l	TM30/PM14
Dissolved Selenium	-	<3	-	<3	-	<3	-	<3	-	<3	<3	ug/l	TM30/PM14
Dissolved Vanadium	-	6.3	-	6.5	-	16.0	-	19.6	-	17.4	<1.5	ug/l	TM30/PM14
Dissolved Zinc	-	<3	-	<3	-	<3	-	<3	-	<3	<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	-	>>123.0	-	>>91.3	-	>>141.9	-	>>120.6	-	945.0$_{AG}$	<0.1	ug/l	TM4/PM30
Acenaphthylene	-	>>17.098	-	>>13.404	-	>>28.755	-	>>24.747	-	13.908^{SV}	<0.005	ug/l	TM4/PM30
Acenaphthene	-	>>6.898	-	6.081	-	>>14.986	-	>>17.013	-	20.535^{SV}	<0.005	ug/l	TM4/PM30
Fluorene	-	>>10.679	-	>>7.929	-	>>24.004	-	>>25.111	-	32.183^{SV}	<0.005	ug/l	TM4/PM30
Phenanthrene	-	>>7.480	-	>>8.085	-	>>21.781	-	>>21.373	-	32.325^{SV}	<0.005	ug/l	TM4/PM30
Anthracene	-	1.908	-	2.204	-	>>6.699	-	5.067	-	9.431^{SV}	<0.005	ug/l	TM4/PM30
Fluoranthene	-	1.077	-	1.052	-	2.951	-	2.328	-	4.492^{SV}	<0.005	ug/l	TM4/PM30
Pyrene	-	0.525	-	0.546	-	1.365	-	1.202	-	2.092^{SV}	<0.005	ug/l	TM4/PM30
Benzo(a)anthracene	-	0.181	-	0.065	-	0.285	-	0.117	-	0.146^{SV}	<0.005	ug/l	TM4/PM30
Chrysene	-	0.117	-	0.072	-	0.218	-	0.081	-	0.151^{SV}	<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene	-	0.170	-	0.054	-	0.278	-	0.054	-	0.092^{SV}	<0.008	ug/l	TM4/PM30
Benzo(a)pyrene	-	0.044	-	0.021	-	0.068	-	0.013	-	0.032^{SV}	<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene	-	0.043	-	<0.005	-	0.077	-	0.011	-	<0.005^{SV}	<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene	-	0.008	-	<0.005	-	0.013	-	<0.005	-	<0.005^{SV}	<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene	-	0.020	-	<0.005	-	0.029	-	0.007	-	<0.005^{SV}	<0.005	ug/l	TM4/PM30
PAH 16 Total	-	169.248	-	130.813	-	243.409	-	217.724	-	1060.387	<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	-	0.122	-	0.039	-	0.200	-	0.039	-	0.066	<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	-	0.048	-	0.015	-	0.078	-	0.015	-	0.026	<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	-	99	-	90	-	85	-	88	-	32^{SV}	<0	%	TM4/PM30
MTBE	-	<5	-	<5	-	<5	-	<5	-	<5	<5	ug/l	TM36/PM12
Benzene	-	<5	-	<5	-	9	-	<5	-	14	<5	ug/l	TM36/PM12
Toluene	-	5	-	<5	-	13	-	8	-	19	<5	ug/l	TM36/PM12
Ethylbenzene	-	<5	-	<5	-	<5	-	<5	-	<5	<5	ug/l	TM36/PM12
m/p-Xylene	-	9	-	6	-	21	-	15	-	30	<5	ug/l	TM36/PM12
o-Xylene	-	<5	-	<5	-	10	-	7	-	15	<5	ug/l	TM36/PM12

Please see attached notes for all abbreviations and acronyms

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	5-6	7-12	13-14	15-20	21-22	23-28	29-30	31-36	37-38	39-44	LOD/LOR	Units	Method No.
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	6 hour	6 hour	6 hour	6 hour	24 hour	24 hour	24 hour	24 hour	2.25 Day	2.25 Day			
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
TPH CWG													
Aliphatics													
>C5-C6	-	<10	-	<10	-	<10	-	<10	-	<10	<10	ug/l	TM36/PM12
>C6-C8	-	<10	-	<10	-	<10	-	<10	-	11	<10	ug/l	TM36/PM12
>C8-C10	-	<10	-	<10	-	15	-	23	-	16	<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	-	15	-	23	-	27	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7	-	<10	-	<10	-	<10	-	<10	-	14	<10	ug/l	TM36/PM12
>EC7-EC8	-	<10	-	<10	-	13	-	<10	-	19	<10	ug/l	TM36/PM12
>EC8-EC10	-	14	-	<10	-	33	-	23	-	48	<10	ug/l	TM36/PM12
>EC10-EC12	-	271	-	239	-	495	-	564	-	933	<5	ug/l	TM5/PM16/PM30
>EC12-EC16	-	170	-	140	-	200	-	300	-	430	<10	ug/l	TM5/PM16/PM30
>EC16-EC21	-	<10	-	50	-	100	-	160	-	350	<10	ug/l	TM5/PM16/PM30
>EC21-EC35	-	<10	-	<10	-	<10	-	<10	-	<10	<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	-	455	-	429	-	841	-	1047	-	1794	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35)	-	455	-	429	-	856	-	1070	-	1821	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Resorcinol	-	6.5	-	7.3	-	8.4	-	5.0	-	10.5	<0.5	ug/l	TM26/PM0
Catechol	-	6.0	-	5.8	-	4.9	-	4.1	-	5.3	<0.5	ug/l	TM26/PM0
Phenol	-	81.7	-	85.4	-	171.8	-	117.8	-	185.7	<0.5	ug/l	TM26/PM0
m/p-cresol	-	124.4	-	130.5	-	274.5	-	156.5	-	246.3	<0.5	ug/l	TM26/PM0
o-cresol	-	72.1	-	77.7	-	182.9	-	105.8	-	170.4	<0.5	ug/l	TM26/PM0
Total cresols	-	196.5	-	208.2	-	457.4	-	262.3	-	416.7	<0.5	ug/l	TM26/PM0
Xylenols	-	154.0	-	148.8	-	464.6	-	232.9	-	388.5	<0.5	ug/l	TM26/PM0
1-naphthol	-	7.8	-	4.8	-	26.8	-	14.0	-	23.9	<0.5	ug/l	TM26/PM0
2,3,5-trimethyl phenol	-	<0.5	-	<0.5	-	11.6	-	<0.5	-	12.3	<0.5	ug/l	TM26/PM0
2-isopropylphenol	-	<0.5	-	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM26/PM0
Total Speciated Phenols HPLC	-	453	-	460	-	1146	-	636	-	1043	<5	ug/l	TM26/PM0
Sulphate as SO4	-	14.9	-	13.2	-	13.4	-	13.5	-	6.8	<0.5	mg/l	TM38/PM0
Chloride	3.9	-	2.5	-	3.9	-	3.0	-	3.6	-	<0.3	mg/l	TM38/PM0
Free Cyanide	-	0.04	-	0.03	-	0.02	-	0.02	-	$<0.02_{AA}$	<0.01	mg/l	TM89/PM0
Total Cyanide	-	1.52_{AD}	-	1.22_{AD}	-	1.33_{AD}	-	1.35_{AD}	-	1.58_{AA}	<0.01	mg/l	TM89/PM0
Complex Cyanide	-	1.48	-	1.19	-	1.31	-	1.33	-	1.58_{AA}	<0.01	mg/l	TM89/PM0
Hexavalent Chromium	-	<6	-	<6	-	<6	-	<6	-	<6	<6	ug/l	TM38/PM0
Total Dissolved Chromium III	-	<6	-	<6	-	<6	-	<6	-	<6	<6	ug/l	TM0/PM0
Electrical Conductivity @25C	78	-	74	-	131	-	117	-	193	-	<2	uS/cm	TM76/PM0

Please see attached notes for all abbreviations and acronyms

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	5-6	7-12	13-14	15-20	21-22	23-28	29-30	31-36	37-38	39-44			
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	6 hour	6 hour	6 hour	6 hour	24 hour	24 hour	24 hour	24 hour	2.25 Day	2.25 Day	Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	LOD/LOR	Units	Method No.
pH	-	9.43	-	9.34	-	10.11	-	10.25	-	10.27	<0.01	pH units	TM73/PM0

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	45-46	47-52	53-58	59-64	65-70	71-76	77-78	79-84	85-86	87-92	LOD/LOR	Units	Method No.
Sample ID	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b			
Depth	2.25 Day	2.25 Day	4 Day	4 Day	4 Day	4 Day	9 Day	9 Day	9 Day	9 Day			
COC No / misc													
Containers	HN P	V HN N P G	V HN N P G	V HN N P G	V HN N P G	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
Dissolved Arsenic	-	6.1	3.0	5.5	<2.5	6.0	-	4.4	-	3.8	<2.5	ug/l	TM30/PM14
Dissolved Barium	-	22	40	32	38	30	-	38	-	43	<3	ug/l	TM30/PM14
Dissolved Beryllium	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Boron	-	37	21	23	23	26	-	32	-	29	<12	ug/l	TM30/PM14
Dissolved Cadmium	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Calcium	20.3	-	26.2	-	25.1	-	23.6	-	21.9	-	<0.2	mg/l	TM30/PM14
Total Dissolved Chromium	-	<1.5	<1.5	<1.5	<1.5	<1.5	-	<1.5	-	<1.5	<1.5	ug/l	TM30/PM14
Dissolved Copper	-	<7	<7	<7	<7	<7	-	7	-	8	<7	ug/l	TM30/PM14
Dissolved Lead	-	<5	<5	<5	<5	<5	-	<5	-	<5	<5	ug/l	TM30/PM14
Dissolved Mercury	-	<1	<1	<1	<1	<1	-	<1	-	<1	<1	ug/l	TM30/PM14
Dissolved Nickel	-	3	3	3	3	2	-	7	-	8	<2	ug/l	TM30/PM14
Dissolved Selenium	-	<3	<3	<3	<3	<3	-	5	-	5	<3	ug/l	TM30/PM14
Dissolved Vanadium	-	19.1	11.5	14.1	11.3	13.3	-	17.0	-	15.7	<1.5	ug/l	TM30/PM14
Dissolved Zinc	-	<3	<3	<3	<3	<3	-	<3	-	<3	<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	-	711.7$_{AF}$	>>1003.7$_{AG}$	>>1065.4$_{AG}$	>>811.9$_{AG}$	>>731.1$_{AG}$	-	1176.0$_{AG}$	-	907.8$_{AG}$	<0.1	ug/l	TM4/PM30
Acenaphthylene	-	41.062^{SV}	47.876$_{AG}$	54.758$_{AG}$	41.820$_{AG}$	37.487$_{AG}$	-	62.778	-	47.551	<0.005	ug/l	TM4/PM30
Acenaphthene	-	20.221^{SV}	25.252$_{AG}$	27.715$_{AG}$	25.488$_{AG}$	24.289$_{AG}$	-	28.985	-	27.187	<0.005	ug/l	TM4/PM30
Fluorene	-	31.211^{SV}	47.779$_{AG}$	48.113$_{AG}$	41.404$_{AG}$	40.447$_{AG}$	-	50.870	-	44.772	<0.005	ug/l	TM4/PM30
Phenanthrene	-	28.287^{SV}	53.303$_{AG}$	60.296$_{AG}$	49.447$_{AG}$	50.442$_{AG}$	-	88.632	-	74.114	<0.005	ug/l	TM4/PM30
Anthracene	-	8.726^{SV}	6.343$_{AG}$	5.376$_{AG}$	5.939	2.851$_{AG}$	-	9.799	-	7.279	<0.005	ug/l	TM4/PM30
Fluoranthene	-	3.468	6.043	6.355	6.402	6.341	-	9.780	-	7.322	<0.005	ug/l	TM4/PM30
Pyrene	-	1.557	2.832	3.055	3.025	2.948	-	4.858	-	3.567	<0.005	ug/l	TM4/PM30
Benzo(a)anthracene	-	0.067	0.216	0.218	0.299	0.203	-	0.314	-	0.211	<0.005	ug/l	TM4/PM30
Chrysene	-	0.080	0.119	0.114	0.171	0.109	-	0.191	-	0.136	<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene	-	0.040	0.086	0.062	0.132	0.082	-	0.134	-	0.074	<0.008	ug/l	TM4/PM30
Benzo(a)pyrene	-	0.012	0.036	0.022	0.069	0.035	-	0.053	-	0.029	<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene	-	<0.005	0.017	0.014	0.036	0.018	-	0.024	-	<0.005	<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene	-	<0.005	<0.005	<0.005	0.005	<0.005	-	<0.005	-	<0.005	<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene	-	<0.005	0.013	0.009	0.021	0.011	-	0.016	-	<0.005	<0.005	ug/l	TM4/PM30
PAH 16 Total	-	846.431	1193.615	1271.507	986.158	896.363	-	1432.434	-	1120.042	<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	-	0.029	0.062	0.045	0.095	0.059	-	0.096	-	0.053	<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	-	0.011	0.024	0.017	0.037	0.023	-	0.038	-	0.021	<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	-	96	77$_{AG}$	121	111	119	-	92	-	85	<0	%	TM4/PM30
MTBE	-	<5	<5	<5	<5	<5	-	<5	-	<5	<5	ug/l	TM36/PM12
Benzene	-	7	13	17	13	10	-	21	-	11	<5	ug/l	TM36/PM12
Toluene	-	12	19	23	17	15	-	29	-	14	<5	ug/l	TM36/PM12
Ethylbenzene	-	<5	<5	<5	<5	<5	-	<5	-	<5	<5	ug/l	TM36/PM12
m/p-Xylene	-	23	35	38	31	30	-	51	-	28	<5	ug/l	TM36/PM12
o-Xylene	-	11	16	18	15	14	-	24	-	13	<5	ug/l	TM36/PM12

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	45-46	47-52	53-58	59-64	65-70	71-76	77-78	79-84	85-86	87-92	LOD/LOR	Units	Method No.
Sample ID	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b			
Depth	2.25 Day	2.25 Day	4 Day	4 Day	4 Day	4 Day	9 Day	9 Day	9 Day	9 Day			
COC No / misc													
Containers	HN P	V HN N P G	V HN N P G	V HN N P G	V HN N P G	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
TPH CWG													
Aliphatics													
>C5-C6	-	<10	<10	<10	<10	<10	-	<10	-	<10	<10	ug/l	TM36/PM12
>C6-C8	-	<10	<10	12	11	<10	-	15	-	<10	<10	ug/l	TM36/PM12
>C8-C10	-	20	39	39	40	36	-	56	-	34	<10	ug/l	TM36/PM12
>C10-C12	-	<5	<5	<5	<5	<5	-	<5	-	<5	<5	ug/l	TM5/PM16/PM30
>C12-C16	-	<10	<10	<10	<10	<10	-	<10	-	<10	<10	ug/l	TM5/PM16/PM30
>C16-C21	-	<10	<10	<10	<10	<10	-	<10	-	<10	<10	ug/l	TM5/PM16/PM30
>C21-C35	-	<10	<10	<10	<10	<10	-	<10	-	<10	<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35	-	20	39	51	51	36	-	71	-	34	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7	-	<10	13	17	13	10	-	21	-	11	<10	ug/l	TM36/PM12
>EC7-EC8	-	12	19	23	17	15	-	29	-	14	<10	ug/l	TM36/PM12
>EC8-EC10	-	36	53	59	49	46	-	79	-	43	<10	ug/l	TM36/PM12
>EC10-EC12	-	709	1149	1136	915	868	-	926	-	743	<5	ug/l	TM5/PM16/PM30
>EC12-EC16	-	390	580	590	520	540	-	520	-	470	<10	ug/l	TM5/PM16/PM30
>EC16-EC21	-	310	570	590	470	540	-	680	-	570	<10	ug/l	TM5/PM16/PM30
>EC21-EC35	-	<10	<10	<10	<10	<10	-	<10	-	<10	<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	-	1457	2384	2415	1984	2019	-	2255	-	1851	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35)	-	1477	2423	2466	2035	2055	-	2326	-	1885	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Resorcinol	-	6.2	11.3	10.2	7.8	6.8	-	<0.5	-	<0.5	<0.5	ug/l	TM26/PM0
Catechol	-	5.1	7.0	7.1	6.4	5.2	-	8.6	-	14.5	<0.5	ug/l	TM26/PM0
Phenol	-	135.1	200.0	200.4	179.5	158.6	-	341.7	-	279.1	<0.5	ug/l	TM26/PM0
m/p-cresol	-	148.5	225.3	244.8	189.4	160.4	-	381.3	-	262.7	<0.5	ug/l	TM26/PM0
o-cresol	-	100.0	153.9	164.9	125.7	93.5	-	243.3	-	145.6	<0.5	ug/l	TM26/PM0
Total cresols	-	248.5	379.2	409.7	315.1	253.9	-	624.6	-	408.3	<0.5	ug/l	TM26/PM0
Xylenols	-	183.1	163.9	207.5	130.0	108.4	-	454.0	-	245.7	<0.5	ug/l	TM26/PM0
1-naphthol	-	11.6	8.6	16.3	10.9	8.9	-	18.2	-	6.5	<0.5	ug/l	TM26/PM0
2,3,5-trimethyl phenol	-	<0.5	4.3	5.0	1.2	0.7	-	0.7	-	<0.5	<0.5	ug/l	TM26/PM0
2-isopropylphenol	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	ug/l	TM26/PM0
Total Speciated Phenols HPLC	-	590	774	856	651	543	-	1448	-	954	<5	ug/l	TM26/PM0
Sulphate as SO4	-	6.4	4.3	5.4	3.7	5.0	-	8.7	-	6.4	<0.5	mg/l	TM38/PM0
Chloride	3.2	-	4.0	-	3.5	-	9.1	-	7.9	-	<0.3	mg/l	TM38/PM0
Free Cyanide	-	$<0.02_{AA}$	0.01	0.01	<0.01	0.01	-	0.13	-	0.02	<0.01	mg/l	TM89/PM0
Total Cyanide	-	1.40_{AA}	0.42	0.51	0.31	0.42	-	1.17_{AB}	-	0.83	<0.01	mg/l	TM89/PM0
Complex Cyanide	-	1.40_{AA}	0.41	0.50	0.31	0.41	-	1.04	-	0.81	<0.01	mg/l	TM89/PM0
Hexavalent Chromium	-	<6	<6	<6	<6	<6	-	<6	-	<6	<6	ug/l	TM38/PM0
Total Dissolved Chromium III	-	<6	<6	<6	<6	<6	-	<6	-	<6	<6	ug/l	TM0/PM0
Electrical Conductivity @25C	174	-	140	-	125	-	148	-	171	-	<2	uS/cm	TM76/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	45-46	47-52	53-58	59-64	65-70	71-76	77-78	79-84	85-86	87-92			
Sample ID	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b			
Depth	2.25 Day	2.25 Day	4 Day	4 Day	4 Day	4 Day	9 Day	9 Day	9 Day	9 Day	Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	HN P	V HN N P G	V HN N P G	V HN N P G	V HN N P G	V HN N P G	HN P	V HN N P G	HN P	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	LOD/LOR	Units	Method No.
pH	-	10.56	10.38	10.32	10.40	10.33	-	10.17	-	10.31	<0.01	pH units	TM73/PM0

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	93-94	95-100	101-102	103-108	109-110	111-116	117-118	119-124	125-130	131-136	LOD/LOR	Units	Method No.
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	16 Day	16 Day	16 Day	16 Day	36 Day	36 Day	36 Day	36 Day	64 Day	64 Day			
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	V HN N P G	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
Dissolved Arsenic	-	5.6	-	5.2	-	7.0	-	8.4	9.3	8.8	<2.5	ug/l	TM30/PM14
Dissolved Barium	-	36	-	38	-	41	-	43	53	49	<3	ug/l	TM30/PM14
Dissolved Beryllium	-	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Boron	-	22	-	19	-	37	-	33	58	62	<12	ug/l	TM30/PM14
Dissolved Cadmium	-	<0.5	-	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	ug/l	TM30/PM14
Dissolved Calcium	20.1	-	18.6	-	19.0	-	16.1	-	26.9	-	<0.2	mg/l	TM30/PM14
Total Dissolved Chromium	-	<1.5	-	1.8	-	<1.5	-	<1.5	<1.5	<1.5	<1.5	ug/l	TM30/PM14
Dissolved Copper	-	<7	-	<7	-	9	-	9	8	9	<7	ug/l	TM30/PM14
Dissolved Lead	-	<5	-	<5	-	<5	-	<5	<5	<5	<5	ug/l	TM30/PM14
Dissolved Mercury	-	<1	-	<1	-	<1	-	<1	<1	<1	<1	ug/l	TM30/PM14
Dissolved Nickel	-	7	-	7	-	10	-	10	6	6	<2	ug/l	TM30/PM14
Dissolved Selenium	-	<3	-	<3	-	<3	-	6	7	<3	<3	ug/l	TM30/PM14
Dissolved Vanadium	-	13.5	-	12.8	-	17.0	-	17.5	19.5	19.6	<1.5	ug/l	TM30/PM14
Dissolved Zinc	-	<3	-	<3	-	<3	-	<3	<3	<3	<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	-	1032.1$_{AH}$	-	842.4$_{AH}$	-	780.8$_{AH}$	-	603.1$_{AH}$	10.1^{SV}	>>35.1	<0.1	ug/l	TM4/PM30
Acenaphthylene	-	62.364$_{AE}$	-	57.929$_{AE}$	-	41.573$_{AH}$	-	34.082$_{AH}$	5.073^{SV}	>>9.656	<0.005	ug/l	TM4/PM30
Acenaphthene	-	>>24.340	-	>>26.025	-	21.657$_{AH}$	-	23.182$_{AH}$	5.548^{SV}	>>8.991	<0.005	ug/l	TM4/PM30
Fluorene	-	>>41.950	-	>>43.139	-	37.615$_{AH}$	-	38.594$_{AH}$	7.517^{SV}	>>11.317	<0.005	ug/l	TM4/PM30
Phenanthrene	-	>>64.976	-	>>64.170	-	76.895$_{AH}$	-	81.646$_{AH}$	8.468^{SV}	>>12.003	<0.005	ug/l	TM4/PM30
Anthracene	-	5.944	-	5.759	-	6.436	-	7.224	<0.005^{SV}	<0.005	<0.005	ug/l	TM4/PM30
Fluoranthene	-	>>11.062	-	>>10.843	-	10.087$_{AH}$	-	10.602$_{AH}$	10.370^{SV}	>>14.417	<0.005	ug/l	TM4/PM30
Pyrene	-	5.284	-	5.257	-	5.450	-	5.645	6.034^{SV}	>>8.591	<0.005	ug/l	TM4/PM30
Benzo(a)anthracene	-	0.199	-	0.168	-	0.289	-	0.161	0.404^{SV}	0.675	<0.005	ug/l	TM4/PM30
Chrysene	-	0.161	-	0.133	-	0.209	-	0.191	0.245^{SV}	0.353	<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene	-	0.081	-	0.058	-	0.070	-	0.055	0.108^{SV}	0.153	<0.008	ug/l	TM4/PM30
Benzo(a)pyrene	-	0.022	-	0.016	-	0.019	-	0.013	0.033^{SV}	0.052	<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene	-	0.012	-	0.009	-	0.008	-	0.005	0.025^{SV}	0.030	<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene	-	<0.005	-	<0.005	-	<0.005	-	<0.005	<0.005^{SV}	<0.005	<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene	-	0.007	-	0.005	-	<0.005	-	<0.005	0.012^{SV}	0.014	<0.005	ug/l	TM4/PM30
PAH 16 Total	-	1248.502	-	1055.911	-	DR	-	DR	53.937^{SV}	101.352	<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	-	0.058	-	0.042	-	0.050	-	0.040	0.078^{SV}	0.110	<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	-	0.023	-	0.016	-	0.020	-	0.015	0.030^{SV}	0.043	<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	-	91$_{AE}$	-	98$_{AE}$	-	89	-	100	62^{SV}	85	<0	%	TM4/PM30
MTBE	-	<5	-	<5	-	<5	-	<5	<5	<5	<5	ug/l	TM36/PM12
Benzene	-	14	-	8	-	12	-	6	7	10	<5	ug/l	TM36/PM12
Toluene	-	21	-	12	-	18	-	10	7	10	<5	ug/l	TM36/PM12
Ethylbenzene	-	<5	-	<5	-	<5	-	<5	<5	<5	<5	ug/l	TM36/PM12
m/p-Xylene	-	39	-	25	-	34	-	21	7	10	<5	ug/l	TM36/PM12
o-Xylene	-	17	-	11	-	7	-	9	<5	<5	<5	ug/l	TM36/PM12

Please see attached notes for all abbreviations and acronyms

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

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	93-94	95-100	101-102	103-108	109-110	111-116	117-118	119-124	125-130	131-136	LOD/LOR	Units	Method No.
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	16 Day	16 Day	16 Day	16 Day	36 Day	36 Day	36 Day	36 Day	64 Day	64 Day			
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	V HN N P G	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
TPH CWG													
Aliphatics													
>C5-C6	-	<10	-	<10	-	<10	-	<10	<10	<10	<10	ug/l	TM36/PM12
>C6-C8	-	<10	-	<10	-	<10	-	<10	<10	<10	<10	ug/l	TM36/PM12
>C8-C10	-	<10	-	27	-	47	-	26	15	19	<10	ug/l	TM36/PM12
>C10-C12	-	<5	-	<5	-	$<35_{AC}$	-	<5	<5	<5	<5	ug/l	TM5/PM16/PM30
>C12-C16	-	<10	-	<10	-	$<70_{AC}$	-	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>C16-C21	-	<10	-	<10	-	$<70_{AC}$	-	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
>C21-C35	-	<10	-	<10	-	$<70_{AC}$	-	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35	-	<10	-	27	-	$<70_{AC}$	-	26	15	19	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7	-	14	-	<10	-	12	-	<10	<10	<10	<10	ug/l	TM36/PM12
>EC7-EC8	-	21	-	12	-	18	-	<10	<10	<10	<10	ug/l	TM36/PM12
>EC8-EC10	-	59	-	38	-	44	-	32	10	14	<10	ug/l	TM36/PM12
>EC10-EC12	-	978	-	675	-	748_{AC}	-	505	37	61	<5	ug/l	TM5/PM16/PM30
>EC12-EC16	-	520	-	470	-	570_{AC}	-	370	100	110	<10	ug/l	TM5/PM16/PM30
>EC16-EC21	-	660	-	550	-	710_{AC}	-	650	320	340	<10	ug/l	TM5/PM16/PM30
>EC21-EC35	-	<10	-	<10	-	$<70_{AC}$	-	<10	<10	<10	<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	-	2252	-	1745	-	2102_{AC}	-	1557	467	525	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35)	-	2252	-	1772	-	2102_{AC}	-	1583	482	544	<10	ug/l	TM5/TM36/PM12/PM16/PM30
Resorcinol	-	4.9	-	1.2	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0
Catechol	-	1.0	-	0.6	-	2.3	-	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0
Phenol	-	275.8	-	198.4	-	360.2	-	266.5	152.0	210.1	<0.5	ug/l	TM26/PM0
m/p-cresol	-	354.9	-	234.8	-	419.8	-	261.2	157.1	257.3	<0.5	ug/l	TM26/PM0
o-cresol	-	210.4	-	129.7	-	232.0	-	140.3	69.2	116.4	<0.5	ug/l	TM26/PM0
Total cresols	-	565.3	-	364.5	-	651.8	-	401.5	226.3	373.7	<0.5	ug/l	TM26/PM0
Xylenols	-	412.6	-	211.2	-	396.5	-	208.8	163.1	289.5	<0.5	ug/l	TM26/PM0
1-naphthol	-	3.6	-	5.0	-	12.7	-	5.7	11.0	14.4	<0.5	ug/l	TM26/PM0
2,3,5-trimethyl phenol	-	6.3	-	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	ug/l	TM26/PM0
2-isopropylphenol	-	<0.5	-	<0.5	-	<0.5	-	<0.5	156.4	180.6	<0.5	ug/l	TM26/PM0
Total Speciated Phenols HPLC	-	1270	-	781	-	1424	-	883	709	1068	<5	ug/l	TM26/PM0
Sulphate as SO4	-	9.0	-	7.9	-	20.3	-	17.9	34.8	42.9	<0.5	mg/l	TM38/PM0
Chloride	9.4	-	7.6	-	20.0	-	17.3	-	16.2	-	<0.3	mg/l	TM38/PM0
Free Cyanide	-	0.02	-	0.02	-	$<0.10_{AD}$	-	$<0.10_{AD}$	$<0.10_{AD}$	$<0.10_{AD}$	<0.01	mg/l	TM89/PM0
Total Cyanide	-	0.81	-	0.69	-	2.17_{AD}	-	1.87_{AD}	3.13_{AD}	2.77_{AD}	<0.01	mg/l	TM89/PM0
Complex Cyanide	-	0.79	-	0.67	-	2.17_{AD}	-	1.87_{AD}	3.13_{AD}	2.77_{AD}	<0.01	mg/l	TM89/PM0
Hexavalent Chromium	-	<6	-	<6	-	<6	-	<6	<6	<6	<6	ug/l	TM38/PM0
Total Dissolved Chromium III	-	<6	-	<6	-	<6	-	<6	<6	<6	<6	ug/l	TM0/PM0
Electrical Conductivity @25C	182	-	138	-	162	-	152	-	198	-	<2	uS/cm	TM76/PM0

Please see attached notes for all abbreviations and acronyms

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	93-94	95-100	101-102	103-108	109-110	111-116	117-118	119-124	125-130	131-136	LOD/LOR	Units	Method No.
Sample ID	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b	9%-a	9%-b	8%-a	8%-b			
Depth	16 Day	16 Day	16 Day	16 Day	36 Day	36 Day	36 Day	36 Day	64 Day	64 Day			
COC No / misc													
Containers	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	HN P	V HN N P G	V HN N P G	V HN N P G			
Sample Date	<>	<>	<>	<>	<>	<>	<>	<>	<>	<>			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022	21/11/2022			
pH	-	9.76	-	9.67	-	9.38	-	9.49	8.02	8.15	<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	137-142	143-148											
Sample ID	9%-a	9%-b											
Depth	64 Day	64 Day											
COC No / misc													
Containers	V HN N P G	V HN N P G											
Sample Date	<>	<>											
Sample Type	Liquid	Liquid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Dissolved Arsenic	9.1	7.7									<2.5	ug/l	TM30/PM14
Dissolved Barium	56	47									<3	ug/l	TM30/PM14
Dissolved Beryllium	<0.5	<0.5									<0.5	ug/l	TM30/PM14
Dissolved Boron	57	54									<12	ug/l	TM30/PM14
Dissolved Cadmium	<0.5	<0.5									<0.5	ug/l	TM30/PM14
Dissolved Calcium	22.9	-									<0.2	mg/l	TM30/PM14
Total Dissolved Chromium	1.8	<1.5									<1.5	ug/l	TM30/PM14
Dissolved Copper	8	<7									<7	ug/l	TM30/PM14
Dissolved Lead	<5	<5									<5	ug/l	TM30/PM14
Dissolved Mercury	<1	<1									<1	ug/l	TM30/PM14
Dissolved Nickel	6	6									<2	ug/l	TM30/PM14
Dissolved Selenium	<3	<3									<3	ug/l	TM30/PM14
Dissolved Vanadium	19.2	18.6									<1.5	ug/l	TM30/PM14
Dissolved Zinc	<3	<3									<3	ug/l	TM30/PM14
PAH MS													
Naphthalene	>>30.7	>>10.6									<0.1	ug/l	TM4/PM30
Acenaphthylene	>>6.929	4.070									<0.005	ug/l	TM4/PM30
Acenaphthene	>>6.827	5.745									<0.005	ug/l	TM4/PM30
Fluorene	>>8.000	>>7.465									<0.005	ug/l	TM4/PM30
Phenanthrene	>>10.395	>>7.327									<0.005	ug/l	TM4/PM30
Anthracene	<0.005	<0.005									<0.005	ug/l	TM4/PM30
Fluoranthene	>>10.312	>>12.291									<0.005	ug/l	TM4/PM30
Pyrene	6.551	>>7.802									<0.005	ug/l	TM4/PM30
Benzo(a)anthracene	0.397	0.604									<0.005	ug/l	TM4/PM30
Chrysene	0.197	0.313									<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene	0.070	0.185									<0.008	ug/l	TM4/PM30
Benzo(a)pyrene	0.023	0.068									<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene	0.014	0.040									<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene	<0.005	0.008									<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene	0.006	0.022									<0.005	ug/l	TM4/PM30
PAH 16 Total	80.421	56.540									<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	0.050	0.133									<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	0.020	0.052									<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	77	81									<0	%	TM4/PM30
MTBE	<5	<5									<5	ug/l	TM36/PM12
Benzene	6	6									<5	ug/l	TM36/PM12
Toluene	7	5									<5	ug/l	TM36/PM12
Ethylbenzene	<5	<5									<5	ug/l	TM36/PM12
m/p-Xylene	8	<5									<5	ug/l	TM36/PM12
o-Xylene	<5	<5									<5	ug/l	TM36/PM12

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	137-142	143-148									LOD/LOR	Units	Method No.
Sample ID	9%-a	9%-b											
Depth	64 Day	64 Day											
COC No / misc													
Containers	V HN N P G	V HN N P G											
Sample Date	<>	<>											
Sample Type	Liquid	Liquid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
TPH CWG													
Aliphatics													
>C5-C6	<10	<10									<10	ug/l	TM36/PM12
>C6-C8	<10	<10									<10	ug/l	TM36/PM12
>C8-C10	18	11									<10	ug/l	TM36/PM12
>C10-C12	<5	<5									<5	ug/l	TM5/PM16/PM30
>C12-C16	<10	<10									<10	ug/l	TM5/PM16/PM30
>C16-C21	<10	<10									<10	ug/l	TM5/PM16/PM30
>C21-C35	<10	<10									<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35	18	11									<10	ug/l	TM5/TM36/PM12/PM16/PM30
Aromatics													
>C5-EC7	<10	<10									<10	ug/l	TM36/PM12
>EC7-EC8	<10	<10									<10	ug/l	TM36/PM12
>EC8-EC10	11	<10									<10	ug/l	TM36/PM12
>EC10-EC12	60	20									<5	ug/l	TM5/PM16/PM30
>EC12-EC16	120	80									<10	ug/l	TM5/PM16/PM30
>EC16-EC21	310	310									<10	ug/l	TM5/PM16/PM30
>EC21-EC35	<10	<10									<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	501	410									<10	ug/l	TM5/TM36/PM12/PM16/PM30
Total aliphatics and aromatics(C5-35)	519	421									<10	ug/l	TM5/TM36/PM12/PM16/PM30
Resorcinol	<0.5	<0.5									<0.5	ug/l	TM26/PM0
Catechol	<0.5	<0.5									<0.5	ug/l	TM26/PM0
Phenol	161.2	23.8									<0.5	ug/l	TM26/PM0
m/p-cresol	170.5	15.8									<0.5	ug/l	TM26/PM0
o-cresol	67.8	<0.5									<0.5	ug/l	TM26/PM0
Total cresols	238.3	15.8									<0.5	ug/l	TM26/PM0
Xylenols	151.6	119.4									<0.5	ug/l	TM26/PM0
1-naphthol	7.6	8.7									<0.5	ug/l	TM26/PM0
2,3,5-trimethyl phenol	<0.5	<0.5									<0.5	ug/l	TM26/PM0
2-isopropylphenol	129.8	127.4									<0.5	ug/l	TM26/PM0
Total Speciated Phenols HPLC	689	295									<5	ug/l	TM26/PM0
Sulphate as SO4	28.0	25.7									<0.5	mg/l	TM38/PM0
Chloride	21.1	-									<0.3	mg/l	TM38/PM0
Free Cyanide	<0.10$_{AD}$	<0.10$_{AD}$									<0.01	mg/l	TM89/PM0
Total Cyanide	2.55$_{AD}$	2.61$_{AD}$									<0.01	mg/l	TM89/PM0
Complex Cyanide	2.55$_{AD}$	2.61$_{AD}$									<0.01	mg/l	TM89/PM0
Hexavalent Chromium	<6	<6									<6	ug/l	TM38/PM0
Total Dissolved Chromium III	<6	<6									<6	ug/l	TM0/PM0
Electrical Conductivity @25C	187	-									<2	uS/cm	TM76/PM0

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

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.	137-142	143-148									LOD/LOR	Units	Method No.
Sample ID	9%-a	9%-b											
Depth	64 Day	64 Day											
COC No / misc													
Containers	V HN N P G	V HN N P G											
Sample Date	<>	<>											
Sample Type	Liquid	Liquid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
pH	8.87	8.88									<0.01	pH units	TM73/PM0

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	39-44										Please see attached notes for all abbreviations and acronyms		
Sample ID	8%-b												
Depth	2.25 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	21/11/2022												
											LOD/LOR	Units	Method No.
PAH MS													
PAH Surrogate % Recovery	83 **AG**										<0	%	TM4/PM30

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	47-52												
Sample ID	9%-b												
Depth	2.25 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	21/11/2022												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
PAH MS													
PAH Surrogate % Recovery	76_{AF}										<0	%	TM4/PM30

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	79-84												
Sample ID	8%-b												
Depth	9 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	21/11/2022												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
PAH MS													
PAH Surrogate % Recovery	105_{AG}										<0	%	TM4/PM30

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	87-92										Please see attached notes for all abbreviations and acronyms		
Sample ID	9%-b												
Depth	9 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	21/11/2022												
											LOD/LOR	Units	Method No.
PAH MS													
PAH Surrogate % Recovery	98 **AG**										<0	%	TM4/PM30

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	111-116												
Sample ID	8%-b												
Depth	36 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1												
Date of Receipt	21/11/2022												

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
PAH MS													
PAH Surrogate % Recovery	68_{AH}										<0	%	TM4/PM30

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

Element Materials Technology

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : Liquid (Duplicate results)

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.	119-124										Please see attached notes for all abbreviations and acronyms		
Sample ID	9%-b												
Depth	36 Day												
COC No / misc													
Containers	V HN N P G												
Sample Date	<>												
Sample Type	Liquid												
Batch Number	1										LOD/LOR	Units	Method No.
Date of Receipt	21/11/2022												
PAH MS													
PAH Surrogate % Recovery	80_{AH}										<0	%	TM4/PM30

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 Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : CEN 10:1 1 Batch

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

EMT Sample No.	1	3									LOD/LOR	Units	Method No.
Sample ID	SAMPLE 1	SAMPLE 3											
Depth													
COC No / misc	25 KG BARREL	25 KG BARREL											
Containers	T	T											
Sample Date	<>	<>											
Sample Type	Solid	Solid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
Dissolved Arsenic	16.2	29.2									<0.9	ug/l	TM30/PM14
Dissolved Cadmium	<0.03	<0.03									<0.03	ug/l	TM30/PM14
Dissolved Chromium	0.6	0.2									<0.2	ug/l	TM30/PM14
Dissolved Copper	<3	3									<3	ug/l	TM30/PM14
Dissolved Iron	804.6	107.8									<4.7	ug/l	TM30/PM14
Dissolved Lead	<0.4	<0.4									<0.4	ug/l	TM30/PM14
Dissolved Nickel	1.3	4.4									<0.2	ug/l	TM30/PM14
Dissolved Selenium	<1.2	26.7									<1.2	ug/l	TM30/PM14
Dissolved Zinc	2.4	21.8									<1.5	ug/l	TM30/PM14
Mercury Dissolved by CVAF	<0.01	2.06									<0.01	ug/l	TM61/PM0
PAH MS													
Naphthalene	4555.6 AH	>>3445.7 AE									<0.1	ug/l	TM4/PM30
Acenaphthylene	>>328.276	>>387.025 AE									<0.005	ug/l	TM4/PM30
Acenaphthene	74.956	>>254.792 AE									<0.005	ug/l	TM4/PM30
Fluorene	91.207	>>476.130 AE									<0.005	ug/l	TM4/PM30
Phenanthrene	119.527	>>894.560 AE									<0.005	ug/l	TM4/PM30
Anthracene	18.047	>>144.515 AE									<0.005	ug/l	TM4/PM30
Fluoranthene	31.318	>>418.106 AE									<0.005	ug/l	TM4/PM30
Pyrene	19.176	>>276.742 AE									<0.005	ug/l	TM4/PM30
Benzo(a)anthracene	5.524	115.127 AE									<0.005	ug/l	TM4/PM30
Chrysene	3.380	52.016 AE									<0.005	ug/l	TM4/PM30
Benzo(bk)fluoranthene	5.517	111.939 AE									<0.008	ug/l	TM4/PM30
Benzo(a)pyrene	2.946	49.945 AE									<0.005	ug/l	TM4/PM30
Indeno(123cd)pyrene	1.154	31.113 AE									<0.005	ug/l	TM4/PM30
Dibenzo(ah)anthracene	0.216	6.622 AE									<0.005	ug/l	TM4/PM30
Benzo(ghi)perylene	0.632	16.516 AE									<0.005	ug/l	TM4/PM30
PAH 16 Total	5257.476	6680.848 AE									<0.173	ug/l	TM4/PM30
Benzo(b)fluoranthene	3.972	80.596 AE									<0.008	ug/l	TM4/PM30
Benzo(k)fluoranthene	1.545	31.343 AE									<0.008	ug/l	TM4/PM30
PAH Surrogate % Recovery	89 AH	106 AE									<0	%	TM4/PM30
TPH CWG													
Aliphatics													
>C5-C6	<10	<10									<10	ug/l	TM36/PM69
>C6-C8	268	148									<10	ug/l	TM36/PM69
>C8-C10	474	220									<10	ug/l	TM36/PM69
>C10-C12	<5	484 AC									<5	ug/l	TM5/PM16/PM30
>C12-C16	<10	2320 AC									<10	ug/l	TM5/PM16/PM30
>C16-C21	<10	1750 AC									<10	ug/l	TM5/PM16/PM30
>C21-C35	<10	<70 AC									<10	ug/l	TM5/PM16/PM30
Total aliphatics C5-35	742	4922 AC									<10	ug/l	TM5/TM36/PM16/PM30/PM69

Please see attached notes for all abbreviations and acronyms

Client Name: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright
EMT Job No: 22/19197

Report : CEN 10:1 1 Batch

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

EMT Sample No.	1	3									LOD/LOR	Units	Method No.
Sample ID	SAMPLE 1	SAMPLE 3											
Depth													
COC No / misc	25 KG BARREL	25 KG BARREL											
Containers	T	T											
Sample Date	<>	<>											
Sample Type	Solid	Solid											
Batch Number	1	1											
Date of Receipt	21/11/2022	21/11/2022											
TPH CWG													
Aromatics													
>C5-EC7	586	335									<10	ug/l	TM36/PM69
>EC7-EC8	546	294									<10	ug/l	TM36/PM69
>EC8-EC10	942	429									<10	ug/l	TM36/PM69
>EC10-EC12	5158[SV]	7597[AC]									<5	ug/l	TM5/PM16/PM30
>EC12-EC16	2040[SV]	4230[AC]									<10	ug/l	TM5/PM16/PM30
>EC16-EC21	2140[SV]	6370[AC]									<10	ug/l	TM5/PM16/PM30
>EC21-EC35	230[SV]	2350[AC]									<10	ug/l	TM5/PM16/PM30
Total aromatics C5-35	11642[SV]	21605[AC]									<10	ug/l	TM5/TM36/PM16/PM30/PM69
Total aliphatics and aromatics(C5-35)	12384[SV]	26527[AC]									<10	ug/l	TM5/TM36/PM16/PM30/PM69
MTBE	<5	<5									<5	ug/l	TM36/PM69
Benzene	586	335									<5	ug/l	TM36/PM69
Toluene	546	294									<5	ug/l	TM36/PM69
Ethylbenzene	64	33									<5	ug/l	TM36/PM69
m/p-Xylene	633	297									<5	ug/l	TM36/PM69
o-Xylene	244	99									<5	ug/l	TM36/PM69
Resorcinol	8.6	47.5[AB]									<0.5	ug/l	TM26/PM0
Catechol	<0.5	<2.5[AB]									<0.5	ug/l	TM26/PM0
Phenol	404.6	2831.7[AD]									<0.5	ug/l	TM26/PM0
m/p-cresol	144.4	4319.4[AB]									<0.5	ug/l	TM26/PM0
o-cresol	921.8[AB]	2444.4[AD]									<0.5	ug/l	TM26/PM0
Total cresols	1066.2	6763.8[AB]									<0.5	ug/l	TM26/PM0
Xylenols	2241.8	8498.6[AB]									<0.5	ug/l	TM26/PM0
1-naphthol	41.8	283.4[AB]									<0.5	ug/l	TM26/PM0
2,3,5-trimethyl phenol	177.5	<2.5[AB]									<0.5	ug/l	TM26/PM0
2-isopropylphenol	37.2	2511.5[AD]									<0.5	ug/l	TM26/PM0
Total Speciated Phenols HPLC	3978	20937[AB]									<5	ug/l	TM26/PM0
Sulphate as SO4	53.6	<0.5									<0.5	mg/l	TM38/PM0
Free Cyanide	<0.01	<0.01									<0.01	mg/l	TM89/PM0
Total Cyanide	2.17[AB]	0.28									<0.01	mg/l	TM89/PM0
Complex Cyanide	2.17	0.28									<0.01	mg/l	TM89/PM0
pH	8.17	12.71									<0.01	pH units	TM73/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: Englobe
Reference: -
Location: Quakers Yard
Contact: Ian Wright

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 22/19197						

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.: 22/19197

SOILS and ASH

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. Asbestos samples are retained for 6 months.

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. Ash samples are dried at 37°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.

STACK EMISSIONS

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 for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

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

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.
Laboratory records are kept for a period of no less than 6 years.

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.

Customer Provided Information

Sample ID and depth is information provided by the customer.

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 quantitative calibration range. The result should be considered the minimum value and is indicative only. 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
AA	x2 Dilution
AB	x5 Dilution
AC	x7 Dilution
AD	x10 Dilution
AE	x20 Dilution
AF	x50 Dilution

AG	x100 Dilution
AH	x200 Dilution

EMT Job No: 22/19197

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
TM0	Not available	PM0	No preparation is required.				
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.				
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.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			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.	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.				
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.			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.			AR	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				
TM5/TM36	please refer to TM5 and TM36 for method details	PM16/PM30/PM69	please refer to PM16/PM30 and PM69 for method details			AR	Yes

EMT Job No: 22/19197

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
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
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.				
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	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				
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
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.				
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.	PM69	One part soil is mixed with 10 parts water in a vial leaving no headspace. The mixture is shaken and then left to leach for 24 hours before VOC analysis.			AR	Yes

EMT Job No: 22/19197

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	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: 2013l	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: 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
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.			AR	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.				
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.			AR	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.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.			AR	No
TM76	Modified US EPA method 120.1 (1982). Determination of Specific Conductance by Metrohm automated probe analyser.	PM0	No preparation is required.				
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.				
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.			AR	Yes

EMT Job No: 22/19197

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
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	