

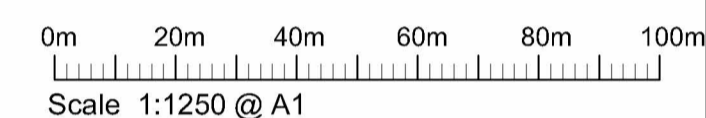
Appendix 7

LQS Site Investigation Borehole Location Plan



DO NOT SCALE.

Note
 Use figured dimensions only.
 All dimensions are to be checked on site prior to construction or fabrication and any discrepancies reported to the author.
 Copyright : This drawing is not to be re-issued loaned or copied without the prior consent of the author.
 All building materials, components and workmanship to comply with current construction legislation, Building Regulations, Codes of Practice and where appropriate manufacturers recommendations.
 This drawing is to be read in conjunction with all related drawing issues.



Revisions			
Rev	Description	Dm	Date
-	First Issue	RJB	05.07.19
A	Updated with proposed site layout	RJB	14.08.19

Project
Yalding

Drawing Title
**Site Plan
 S.I. Locations**

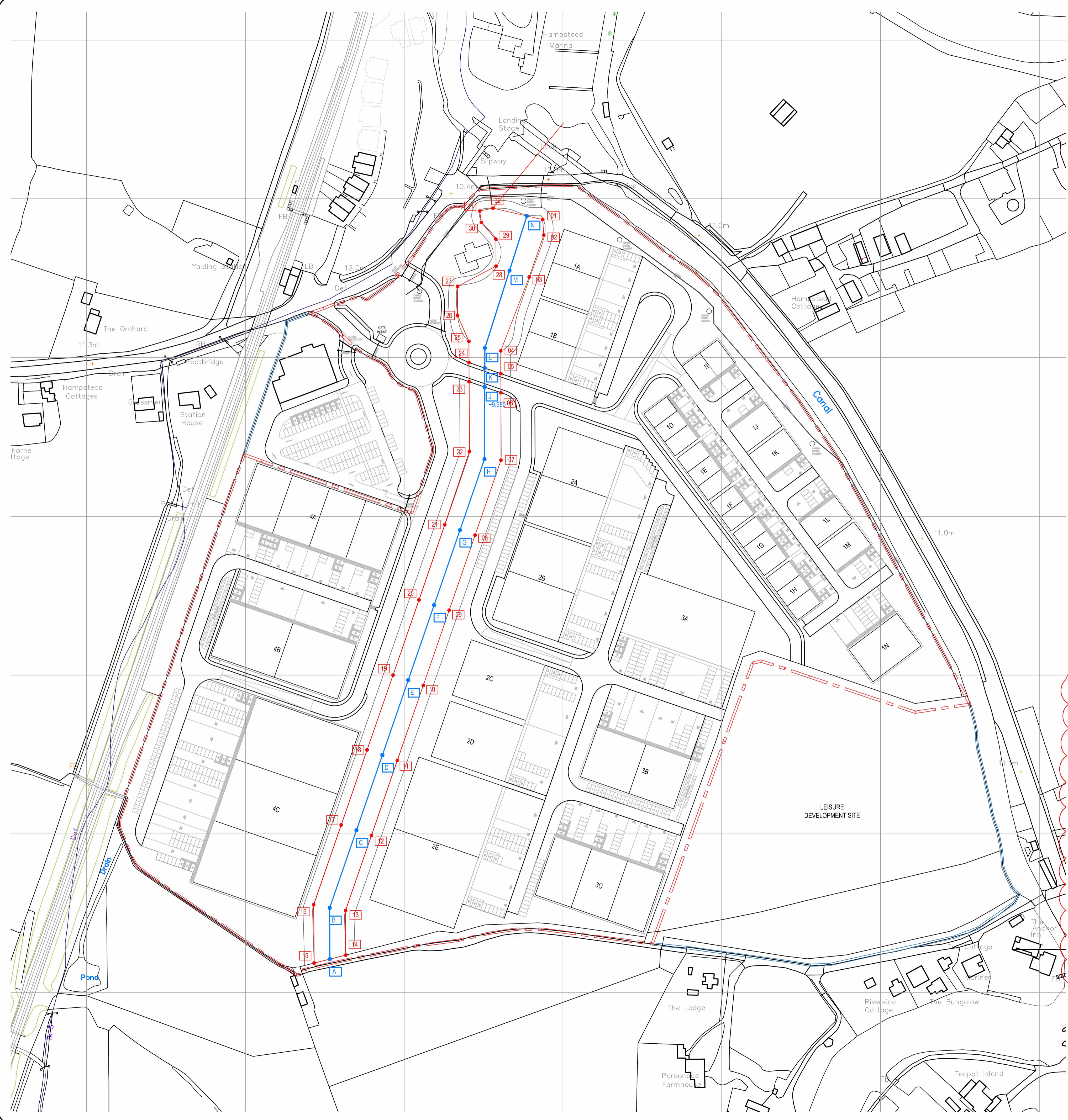


Scale: 1:1250 @ A1 Date: July 2019

Drawing No: **2210 - 31** Rev: **A**

Appendix 8

Drawing No. 2210-32 RevA 'Flood Water Course Setting Out Coordinates'

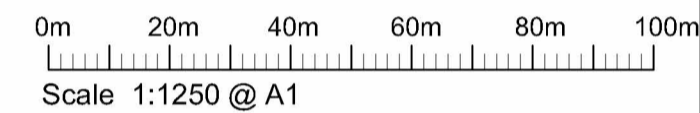


ORDNANCE SURVEY SETTING OUT CO-ORDINATES

REF.	NORTHING	EASTING
01	150 286.953 N	568 687.300 E
02	150 277.219 N	568 687.973 E
03	150 250.759 N	568 678.779 E
04	150 204.272 N	568 660.868 E
05	150 189.929 N	568 660.935 E
06	150 177.946 N	568 660.991 E
07	150 135.414 N	568 660.988 E
08	150 088.148 N	568 644.693 E
09	150 040.881 N	568 628.387 E
10	149 993.614 N	568 612.082 E
11	149 946.348 N	568 595.777 E
12	149 899.081 N	568 579.471 E
13	149 851.815 N	568 563.166 E
14	149 823.676 N	568 563.322 E
15	149 818.650 N	568 543.369 E
16	149 855.394 N	568 543.048 E
17	149 905.663 N	568 560.391 E
18	149 529.930 N	568 576.697 E
19	150 000.000 N	568 593.033 E
20	150 047.423 N	568 609.425 E
21	150 094.730 N	568 625.613 E
22	150 140.972 N	568 641.164 E
23	150 184.856 N	568 640.959 E
24	150 196.888 N	568 640.902 E
25	150 210.260 N	568 640.840 E
26	150 226.646 N	568 633.602 E
27	150 244.894 N	568 633.683 E
28	150 257.607 N	568 657.905 E
29	150 274.600 N	568 657.817 E
30	150 285.147 N	568 648.642 E
31	150 292.203 N	568 647.654 E
32	150 294.129 N	568 655.966 E

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Revisions

Rev	Description	Drm	Date
-	First Issue	RJB	22.07.19
A	Proposed Levels (& co-ordinates) of Flood Conveyance Route added	RJB	25.07.19

REF.	NORTHING	EASTING	EXISTING LEVEL	PROPOSED LEVEL
A	149 821.146 N	568 553.227 E	+ 11 . 500 m	+ 10 . 650 m
B	149 843.481 N	568 553.163 E	+ 11 . 860 m	+ 10 . 590 m
C	149 902.342 N	568 570.018 E	+ 11 . 770 m	+ 10 . 550 m
D	149 949.609 N	568 586.323 E	+ 11 . 800 m	+ 10 . 410 m
E	149 996.876 N	568 602.629 E	+ 11 . 700 m	+ 10 . 320 m
F	150 044.142 N	568 618.934 E	+ 11 . 570 m	+ 10 . 230 m
G	150 091.409 N	568 635.239 E	+ 11 . 440 m	+ 10 . 140 m
H	150 136.051 N	568 650.639 E	+ 11 . 385 m	+ 10 . 060 m
J	150 181.464 N	568 650.792 E	+ 11 . 440 m	+ 9 . 980 m
K	150 193.404 N	568 650.832 E	+ 11 . 500 m	+ 9 . 960 m
L	150 206.086 N	568 650.874 E	+ 11 . 000 m	+ 9 . 940 m
M	150 254.086 N	568 666.391 E	+ 10 . 530 m	+ 9 . 860 m
N	150 289.233 N	568 6770.347 E	+ 9 . 900 m	+ 9 . 800 m

Project
Yalding

Drawing Title
Flood Water Course Setting Out Co-Ordinates



Scale
 1:1250 @ A1

Date
 July 2019

Drawing No
2210 - 32

Rev
A

Appendix 9

Results of Analysis from Additional Trial Pits

Fortitude Environmental
38B Loughbrickland Road
Rathriland
Co Down
Ireland
BT34 5AF



Attention : Elizabeth Newbold
Date : 22nd February, 2022
Your reference : YEP Yalding Enterprise Park
Our reference : Test Report 22/1262 Batch 1
Location : Yalding Enterprise Park
Date samples received : 27th January, 2022
Status : Final Report
Issue : 1

Twelve samples were received for analysis on 27th January, 2022 of which ten 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:



Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP Yalding Enterprise Park
 Location: Yalding Enterprise Park
 Contact: Elizabeth Newbold
 EMT Job No: 22/1262

Report : Solid

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

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / mlsc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
Arsenic [⚠]	7.5	14.8	21.7	21.2	7.9	22.4	16.5	17.3	18.7	7.2	<0.5	mg/kg	TM30/PM15
Cadmium [⚠]	0.1	0.2	0.8	0.3	<0.1	0.1	0.5	0.3	0.2	0.2	<0.1	mg/kg	TM30/PM15
Chromium [⚠]	89.3	65.5	63.0	69.8	57.5	67.8	69.0	76.5	60.3	50.4	<0.5	mg/kg	TM30/PM15
Copper [⚠]	20	15	16	15	16	18	17	16	78	24	<1	mg/kg	TM30/PM15
Lead [⚠]	29	16	15	15	13	17	17	13	62	28	<5	mg/kg	TM30/PM15
Mercury [⚠]	0.2	0.2	<0.1	0.1	<0.1	0.1	0.1	0.1	0.7	0.1	<0.1	mg/kg	TM30/PM15
Nickel [⚠]	27.8	26.0	37.5	37.3	25.1	36.9	42.6	39.6	24.0	27.0	<0.7	mg/kg	TM30/PM15
Selenium [⚠]	<1	<1	2	<1	<1	<1	1	<1	<1	<1	<1	mg/kg	TM30/PM15
Zinc [⚠]	86	46	82	82	43	84	84	70	156	91	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene [⚠]	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene [⚠]	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene [⚠]	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene [⚠]	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.15	0.08	<0.03	mg/kg	TM4/PM8
Anthracene [⚠]	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	0.06	<0.04	mg/kg	TM4/PM8
Fluoranthene [⚠]	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.10	<0.03	0.09	0.22	<0.03	mg/kg	TM4/PM8
Pyrene [⚠]	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.09	<0.03	0.05	0.20	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene [⚠]	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.15	<0.06	mg/kg	TM4/PM8
Chrysene [⚠]	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.02	0.15	<0.02	mg/kg	TM4/PM8
Benzo(b)fluoranthene [⚠]	0.13	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.33	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene [⚠]	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene [⚠]	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.15	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene [⚠]	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene [⚠]	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	<0.04	mg/kg	TM4/PM8
PAH 16 Total	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	1.6	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	97	94	96	97	96	90	95	101	89	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether [⚠]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Benzene [⚠]	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Toluene [⚠]	<3	<3	<3	<3	<3	<3	<3	<3	13	<3	<3	ug/kg	TM15/PM10
Ethylbenzene [⚠]	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
m/p-Xylene [⚠]	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene [⚠]	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	102	103	100	99	99	105	97	101	89	94	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	92	99	96	99	97	98	92	97	61	88	<0	%	TM15/PM10
SVOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM16/PM8

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP Yalding Enterprise Park
 Location: Yalding Enterprise Park
 Contact: Elizabeth Newbold
 EMT Job No: 22/1262

Report : Solid

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

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / mlsc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
Pesticides													
Organochlorine Pesticides													
Aldrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Alpha-HCH (BHC)	<10	<10	<10	<10	<10	<10	25	<10	<10	41	<10	ug/kg	TM42/PM8
Beta-HCH (BHC)	33	<10	<10	<10	<10	<10	80	<10	<10	146	<10	ug/kg	TM42/PM8
Chlorothalonil	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
cis-Chlordane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Delta-HCH (BHC)	<10	<10	<10	<10	<10	<10	33	<10	<10	<10	<10	ug/kg	TM42/PM8
Dieldrin	<10	<10	<10	<10	<10	<10	14	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan I	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan II	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan sulphate	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Gamma-HCH (BHC)	<10	<10	<10	<10	<10	<10	17	<10	<10	33	<10	ug/kg	TM42/PM8
Heptachlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Heptachlor Epoxide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Isodrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-DDE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-DDT	111	<10	<10	<10	<10	<10	79	454	<10	47	<10	ug/kg	TM42/PM8
o,p'-Methoxychlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-TDE	41	<10	<10	<10	<10	<10	24	111	<10	14	<10	ug/kg	TM42/PM8
p,p'-DDE	254	<10	<10	<10	<10	<10	88	31	<10	136	<10	ug/kg	TM42/PM8
p,p'-DDT	119	<10	<10	<10	<10	<10	20	<10	<10	68	<10	ug/kg	TM42/PM8
p,p'-Methoxychlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
p,p'-TDE	112	<10	<10	<10	<10	<10	79	455	<10	47	<10	ug/kg	TM42/PM8
Pendimethalin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Permethrin I	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Permethrin II	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Quintozene (PCNB)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Tecnazene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Telodrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
trans-Chlordane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Triadimefon	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Triallate	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Trifluralin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP Yalding Enterprise Park
 Location: Yalding Enterprise Park
 Contact: Elizabeth Newbold
 EMT Job No: 22/1262

Report : Solid

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

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / mlsc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 [†]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 [†]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 [†]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/IPM8/IPM16
>C12-C16 [†]	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/IPM8/IPM16
>C16-C21 [†]	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/IPM8/IPM16
>C21-C35 [†]	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/IPM8/IPM16
Total aliphatics C5-35	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TM5/TP36/PM8/PM12/PM16
Aromatics													
>C5-EC7 [†]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 [†]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 [†]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 [†]	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/IPM8/IPM16
>EC12-EC16 [†]	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/IPM8/IPM16
>EC16-EC21 [†]	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/IPM8/IPM16
>EC21-EC35 [†]	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/IPM8/IPM16
Total aromatics C5-35 [†]	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TM5/TP36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-35)	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	mg/kg	TM5/TP36/PM8/PM12/PM16
Natural Moisture Content	16.4	17.4	12.0	13.5	19.1	14.7	13.8	15.2	21.6	18.0	<0.1	%	PM4/PM0

Client Name: Fortitude Environmental
 Reference: YEP Yalding Enterprise Park
 Location: Yalding Enterprise Park
 Contact: Elizabeth Newbold
 EMT Job No: 22/1262

SVOC Report : Solid

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate [Ⓢ]	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	62	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	28	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Dibenzofuran [Ⓢ]	<10	<10	<10	<10	<10	<10	44	<10	24	<10	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene [Ⓢ]	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	104	106	103	102	104	106	104	102	110	106	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	98	102	102	98	97	102	104	101	107	104	<0	%	TM16/PM8

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP Yalding Enterprise Park
 Location: Yalding Enterprise Park
 Contact: Elizabeth Newbold
 EMT Job No: 22/1262

VOC Report : Solid

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Recelpt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Chloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Trichlorofluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE)	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM)	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
trans-1,2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1,2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chloroform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Benzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Trichloroethene (TCE)	<3	<3	<3	<3	<3	<3	<3	<3	4	<3	<3	ug/kg	TM15/PM10
1,2-Dichloropropane	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dibromomethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromodichloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene	<3	<3	<3	<3	<3	<3	<3	<3	13	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	6	<3	ug/kg	TM15/PM10
1,3-Dichloropropane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Dibromochloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dibromoethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene	<3	<3	<3	<3	<3	<3	10	<3	18	<3	<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
m/p-Xylene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Isopropylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	19	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene	<4	<4	<4	<4	<4	<4	<4	<4	5	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene	<4	<4	<4	<4	<4	<4	16	<4	13	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene	<4	<4	<4	<4	<4	<4	<4	<4	5	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7	<7	22	<7	47	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	102	103	100	99	99	105	97	101	89	94	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	92	99	96	99	97	98	92	97	61	88	<0	%	TM15/PM10

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
22/1262	1	TPA	1.05	1-6	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPB	1.47	7-12	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPC	0.42	13-18	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPD	1.59	19-24	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPE	1.58	25-30	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPF	1.54	31-36	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPG	1.50	37-42	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPH	1.525	43-48	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPL	1.26	49-54	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded
22/1262	1	TPN	0.30	55-60	EPH, GRO, PAH, SVOC, VOC	Sample holding time exceeded

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.: 22/1262

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 overestimate 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 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

EMT Job No: 22/1262

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	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.	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
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.			AR	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.	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: 22/1262

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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
TM42	Modified US EPA method 8270D v5:2014. Pesticides and herbicides by GC-MS	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM15_A	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Appendix 10

EDSR 'Existing Structures' Drawing

Notes:

-  Manhole cover - Circular
-  Tree
-  Spot level
-  Survey station location
-  Sign post
-  Validation Point
-  Gully
-  Underground obstruction
-  Fences
-  Gate location
-  Stop valve
-  Stop valve - water
-  Walls
-  Telegraph pole
-  Vehicular safety barrier
-  Surface
-  Water
-  Public sewer
-  Sewer pipe
-  Block off point



Revision Date 3.10.08

Revision by

Site
Syngenta
Yalding

Project
Remediation

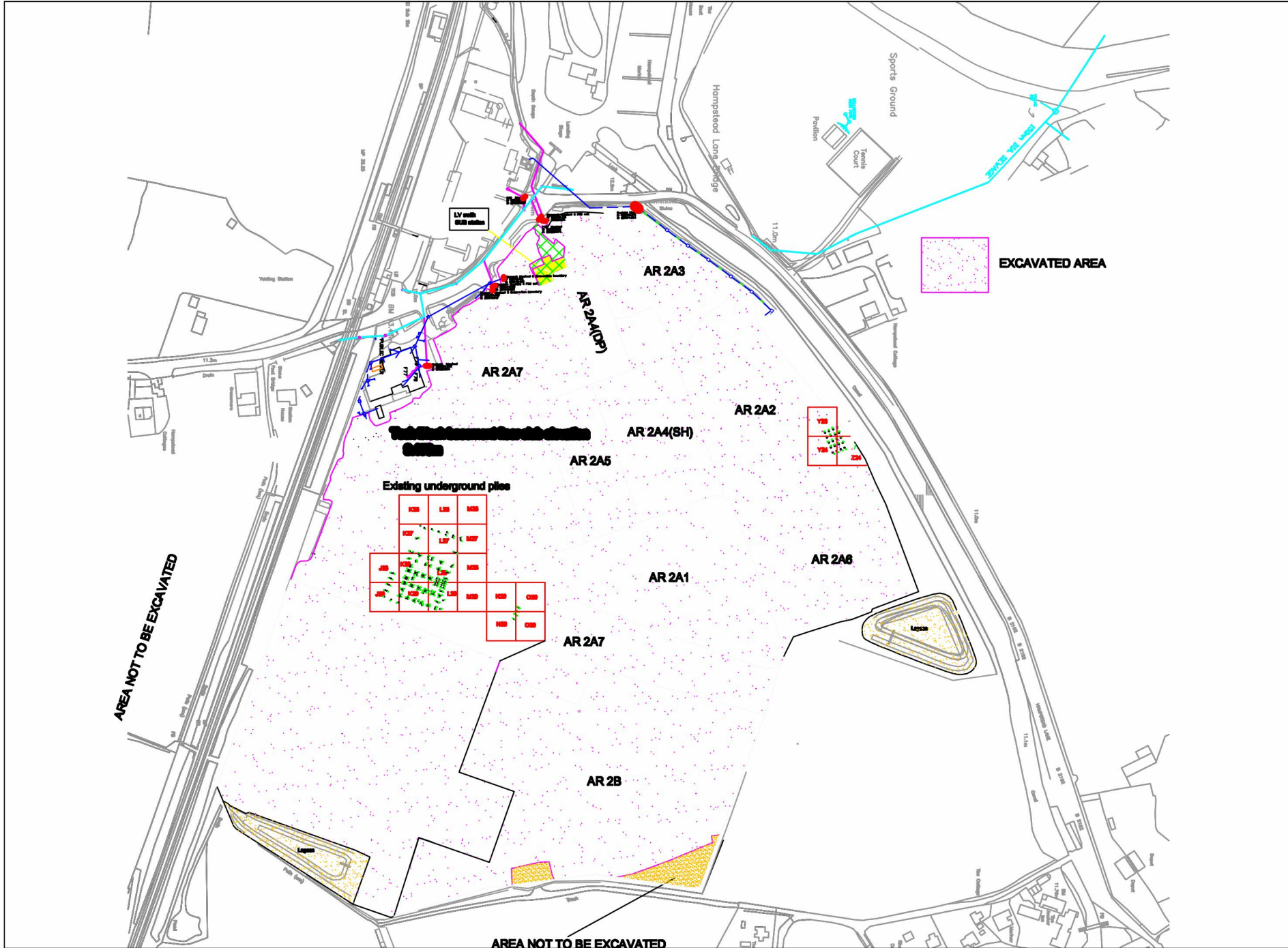
Date 3.10.08
Title AREA 2A
Existing structures

Dwg No. R501_AREA2 ES_3.10.08

Scale NOT TO SCALE

Drawn by B.SMELA

Checked by L.DISBURY

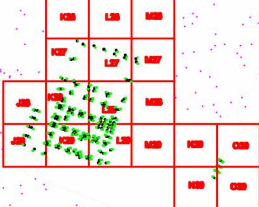


AREA NOT TO BE EXCAVATED

AREA NOT TO BE EXCAVATED

EXCAVATED AREA

Existing underground pipes



LV with substation

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Appendix 11

Results of Analysis: 2021 Annual PRB Gate Monitoring Round

Fortitude Environmental
38B Loughbrickland Road
Rathriland
Co Down
Ireland
BT34 5AF

Attention : Elizabeth Newbold
Date : 10th January, 2022
Your reference : YEP
Our reference : Test Report 21/20047 Batch 1
Location : YEP
Date samples received : 15th December, 2021
Status : Final Report
Issue : 1

Ten samples were received for analysis on 15th December, 2021 of which ten 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:



Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP
 Location: YEP
 Contact: Elizabeth Newbold
 EMT Job No: 21/20047

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc													
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
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	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM16/PM30
Pirimicarb	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/l	TM16/PM30
Pirimiphos-ethyl	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/l	TM16/PM30
Pesticides													
Organochlorine Pesticides													
Aldrin	0.07	0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	ug/l	TM149/PM30
Alpha-HCH (BHC)	0.15	0.02	0.06	<0.01	0.08	0.03	0.02	<0.01	0.07	<0.01	<0.01	ug/l	TM149/PM30
Beta-HCH (BHC)	6.66	0.03	4.97	0.03	1.23	0.11	0.54	<0.01	4.76	0.02	<0.01	ug/l	TM149/PM30
Chlorothalonil	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
cis-Chlordane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Delta-HCH (BHC)	0.14	0.05	<0.01	<0.01	0.40	0.05	0.21	<0.01	0.02	<0.01	<0.01	ug/l	TM149/PM30
Dieldrin	0.47	0.01	0.19	<0.01	0.20	<0.01	0.04	<0.01	0.23	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan I	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan II	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan sulphate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Gamma-HCH (BHC)	0.18	0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	ug/l	TM149/PM30
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	ug/l	TM149/PM30
Hexachlorobenzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Isodrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-DDE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-DDT	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-Methoxychlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-TDE	0.09	<0.01	0.09	<0.01	0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	ug/l	TM149/PM30
p,p'-DDE	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.01	<0.01	ug/l	TM149/PM30
p,p'-DDT	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.03	<0.01	ug/l	TM149/PM30
p,p'-Methoxychlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
p,p'-TDE	0.27	0.03	0.12	<0.01	0.04	<0.01	<0.01	<0.01	0.07	0.03	<0.01	ug/l	TM149/PM30
Pendimethalin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Permethrin I	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Permethrin II	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Quintozene (PCNB)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Tecnazene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.23	<0.01	<0.01	ug/l	TM149/PM30
Telodrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
trans-Chlordane	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triadimefon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triallate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Trifluralin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc													
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
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	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
Pesticides													
Organophosphorus Pesticides													
Azinphos ethyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Azinphos methyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Carbophenothion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorfenvinphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorpyrifos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorpyrifos-methyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Diazinon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Dichlorvos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Disulfoton	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Dimethoate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Ethion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Ethyl Parathion (Parathion)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Etrimphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Fenitrothion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Fenthion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Malathion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Methyl Parathion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Mevinphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Phosalone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Pirimiphos Methyl	0.02	<0.01	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	ug/l	TM149/PM30
Propetamphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triazophos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

SVOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc													
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
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	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Naphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Acenaphthylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Acenaphthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Fluorene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Phenanthrene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Fluoranthene	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Pyrene	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Chrysene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(bk)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Benzo(a)pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Indeno(123cd)pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Dibenzo(ah)anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(ghi)perylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

SVOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
	Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET			
Depth	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
COC No / misc Containers													
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
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	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	8	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	7	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Carbazole	1.2	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	144 ^{SV}	121	89	127	135 ^{SV}	137 ^{SV}	135 ^{SV}	131 ^{SV}	98	132 ^{SV}	<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	158 ^{SV}	129	101	139 ^{SV}	155 ^{SV}	149 ^{SV}	150 ^{SV}	133 ^{SV}	109	144 ^{SV}	<0	%	TM16/PM30

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

VOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms			
	Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET				PRB 5 OUTLET
Depth														
COC No / misc														
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
VOC MS														
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Methyl Tertiary Butyl Ether	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Chloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Vinyl Chloride	0.2	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Chloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Trichlorofluoromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Dichloromethane (DCM)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
trans-1-2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1-Dichloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
cis-1-2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Bromochloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chloroform	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1-Trichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Carbon tetrachloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM15/PM10
Trichloroethene (TCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromomethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Bromodichloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM15/PM10
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,2-Trichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Tetrachloroethene (PCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Dibromochloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2-Dibromoethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Chlorobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,1,1,2-Tetrachloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
m/p-Xylene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10
Styrene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Bromoform	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
Isopropylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/l	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichloropropane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Propylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3,5-Trimethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
tert-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2,4-Trimethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
sec-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
4-Isopropyltoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,3-Dichlorobenzene	<3	<3	11	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,4-Dichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
n-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dichlorobenzene	<3	<3	4	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,4-Trichlorobenzene	<3	<3	17	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Hexachlorobutadiene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Naphthalene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10
Surrogate Recovery Toluene D8	105	106	108	107	106	107	108	107	108	109	109	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	94	93	93	93	92	94	94	94	94	93	94	<0	%	TM15/PM10

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Client Name: Fortitude Environmental

Reference: YEP

Location: YEP

Contact: Elizabeth Newbold

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 21/20047						

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.: 21/20047

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 overestimate 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.

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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

EMT Job No: 21/20047

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
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.				
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				
TM149	Determination of Pesticides by Large Volume Injection on GC Triple Quad MS, based upon USEPA method 8270D v5:2014	PM30	Water samples are extracted with solvent using a magnetic stirrer to create a vortex.				

Appendix 12

Phase A and B Gate and Groundwater Monitoring Programme

YEP Phase A and B Gate and Groundwater Monitoring Programme

		<u>Phase A works, commencing with conveyance route excavation</u>	<u>Phase B works</u>
	Pre commence		
Jun-22	Week 1		
	Week 2		
	Week 3		
	Week 4		
Jul-22	Week 5		
	Week 6		
	Week 7		
	Week 8		
Aug-22	Week 9		
	Week 10		
	Week 11		
	Week 12		
Sep-22	Week 13		
	Week 14		
	Week 15		
	Week 16		
Oct-22	Week 17		
	Week 18		
	Week 19		
	Week 20		
Nov-22	Week 21		
	Week 22		
	Week 23		
	Week 24		
Dec-22	Week 25		
	Week 26		
	Week 27		
	Week 28		
Jan-23	Week 29		
	Week 30		
	Week 31		
	Week 32		
Feb-23	Week 33		
	Week 34		
	Week 35		
	Week 36		