IN SITU SOAKAWAY TEST RESULT

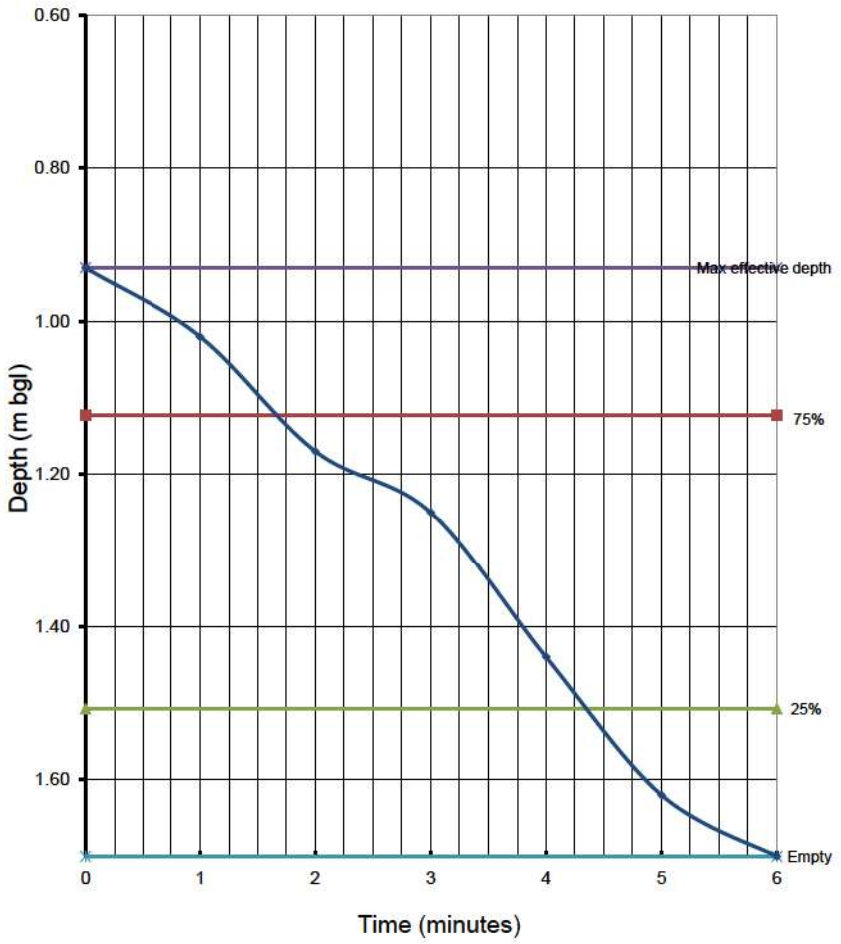
Trial Pit No.	TP121A

Filling	1 of 1

Date	02/06/2021
Operator	MM
Test Strata	White Limestone Formation
Stability of pit	Stable
Backfill used	None

Trial Pit Length (m)	2.65
Trial Pit Width (m)	0.85
Trial Pit Depth (m)	1.70
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Time (Minutes)	Water level (m.bgl)
0	0.93
1	1.02
2	1.17
3	1.25
4	1.44
5	1.62
6	1.70



Initial Water Level (m)	0.93	Total internal surface area of pit (m^2)	14.15
Final Water Level (m)	1.70	Internal surface area of trial pit within effective depth range (m^2)	4.95
Change in Water Level (m)	0.77	Volume outflowing between 75% and 25% effective depth (m^3)	0.87
Effective Depth at 25% (tp25) (m)	1.51	Time at 25% (tp25) (minutes)	4.3
Effective Depth at 75% (tp75) (m)	1.12	Time at 75% (tp75) (minutes)	1.7

Soil Infiltration Rate (m/s)	1.12E-03

Notes: 1. Undertaken in general accordance with BRE DG 365 method
2. Based on extrapolated data NO

Client:	Albion Land Ltd
Project:	Land adjacent to Junction 10, M40, Ardley
Project No.	AG3268-21

APPLiED GEOLOGY

IN SITU SOAKAWAY TEST RESULT

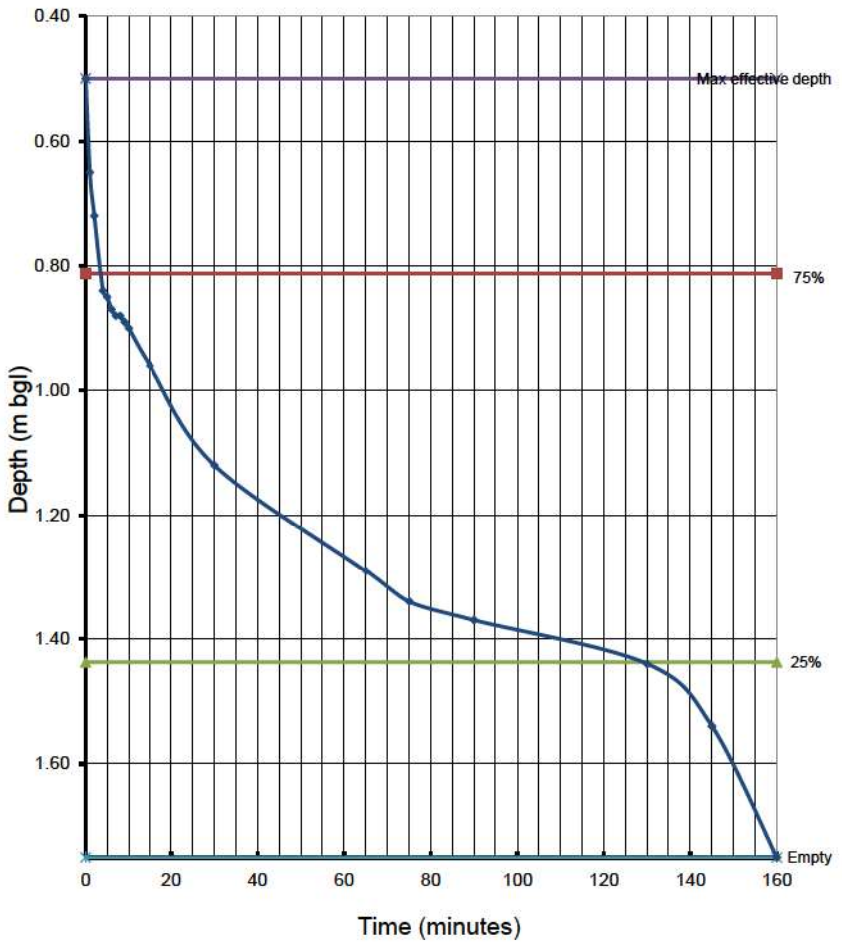
Trial Pit No.	TP136

Filling	1 of 1

Date	02/06/2021
Operator	MM
Test Strata	White Limestone Formation
Stability of pit	Stable
Backfill used	None

Trial Pit Length (m)	2.50
Trial Pit Width (m)	0.75
Trial Pit Depth (m)	1.75
Amount of Backfill placed (m)	0
Assumed Backfill Void Ratio	N/A

Time (Minutes)	Water level (m.bgl)
0	0.50
1	0.65
2	0.72
4	0.84
5	0.85
6	0.87
7	0.88
8	0.88
9	0.89
10	0.90
15	0.96
30	1.12
65	1.29
75	1.34
90	1.37
130	1.44
145	1.54
160	1.75



Initial Water Level (m)	0.50	Total internal surface area of pit (m^2)	13.25
Final Water Level (m)	1.75	Internal surface area of trial pit within effective depth range (m^2)	5.94
Change in Water Level (m)	1.25	Volume outflowing between 75% and 25% effective depth (m^3)	1.17
Effective Depth at 25% (tp25) (m)	1.44	Time at 25% (tp25) (minutes)	130
Effective Depth at 75% (tp75) (m)	0.81	Time at 75% (tp75) (minutes)	3.3

Soil Infiltration Rate (m/s)	2.60E-05

Notes: 1. Undertaken in general accordance with BRE DG 365 method
2. Based on extrapolated data NO

Client:	Albion Land Ltd
Project:	Land adjacent to Junction 10, M40, Ardley
Project No.	AG3268-21

APPLiED GEOLOGY

APPENDIX E

SOIL CHEMICAL RESULTS COMPARED AGAINST SCREENING VALUES FOR HUMAN HEALTH

Site: Land adjacent to Junction 10, M40, Ardley
Job No: AG3268-21

Land Use: Commercial / Industrial
Dataset: All data
Soil Organic Matter (%) 2.6 %

Exploratory Hole Reference	Units	TP7	TP11	TP20	TP51	TP62	TP64	TP66	TP60	TP61	TP70
Depth (m)		0.20	0.10	0.10	0.20	0.30	0.10	0.40	0.30	0.10	0.10
Strata		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Organic Matter (%)	%	3.6	3.6	3.6	3.5	4.1	2.9	1.5		3.1	3.6
pH		6.2	6.3	6.3	6.5	6.4	6.4	6.8		6.3	6.3
Arsenic	mg/kg	30	18	33	30	33	24	16		31	16
Beryllium	mg/kg	1.9	1.3	1.5	1.3	1.1	1.1	1.4		1.1	1.3
Boron	mg/kg	14	12	11	17	11	10	9.4		11	20
Cadmium	mg/kg	0.69	0.42	0.46	0.54	0.42	0.28	0.28		0.48	0.42
Chromium	mg/kg	18	36	38	35	32	32	33	29	27	39
Chromium (Hexavalent)	mg/kg	-	-	-	-	-	-	-	0.8	-	-
Copper	mg/kg	20	16	16	16	16	16	16		17	16
Lead	mg/kg	38	22	24	25	24	20	14		36	22
Mercury	mg/kg	0.11	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Nickel	mg/kg	46	30	31	31	28	29	29		27	28
Selenium	mg/kg	0.18	0.2	0.23	0.2	0.2	0.2	0.47		0.2	0.2
Vanadium	mg/kg	88	72	64	64	52	58	58		48	48
Zinc	mg/kg	110	69	63	70	65	56	50		36	61
Naphthalene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Acenaphthylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Acenaphthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Fluorene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Phenanthrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Chrysene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Benzo(b)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Benzo(g,h,i)perylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Total of 16 PAHs	mg/kg	2	2	2	2	2	2	2		2	2
Phenols (Total)	mg/kg	-	-	-	-	-	-	-	0.1	-	-
Benzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Toluene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ethylbenzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
m/p Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
o-Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Methyl Tert-Butyl Ether	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Aliphatic TPH >C5-C6	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C6-C8	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1
Total Aliphatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	6	6	6
Aromatic TPH >C5-C7	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C7-C8	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1
Total Aromatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	6	6	6
Total Petroleum Hydrocarbons	mg/kg	10	10	10	10	10	10	10	10	10	10
Pesticides	mg/kg						*				*
Asbestos Identification		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected

Exploratory Hole Reference	Units	TP74	TP76	TP69	TP91	TP92	TP94	TP131	TP6	TP28	TP79	TP68	TP40	TP110	TP67
Depth (m)		0.4	0.1	0.1	0.1	0.3	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.5
Strata		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Organic Matter (%)	%	1.9	2.8	2.4	4	2.9	2.1	2.4	2.9	2.9	4.1	3.1	3.5	1.6	1.2
pH		6.5	6.4	6.4	6.4	6.4	6.6	9	6.6	6.2	6.5	6.2	6.2	6.6	6.6
Arsenic	mg/kg	24	29	31	26	32	31	30	17	15	32	16	26	21	16
Beryllium	mg/kg	1.2	1.2	1.1	1.5	1.6	1	1	1.2	1.3	1.5	1.1	1.6	1	1.3
Boron	mg/kg	18	15	13	18	17	12	11	7.6	8.2	9.8	8.9	10	4.7	6.4
Cadmium	mg/kg	0.28	0.37	0.42	0.18	0.56	0.34	0.4	0.37	0.37	0.53	0.34	0.48	0.27	0.26
Chromium	mg/kg	34	35	31	37	41	23	20	32	32	40	26	46	15	30
Chromium (Hexavalent)	mg/kg	-	-	-	0.8	0.8	0.8	0.8	0.8	-	0.8	-	-	-	0.8
Copper	mg/kg	12	15	15	19	19	13	13	15	14	21	13	21	7.6	12
Lead	mg/kg	17	22	24	38	37	25	19	19	22	33	17	26	12	14
Mercury	mg/kg	0.1	0.1	0.1	0.12	0.1	0.1	0.1	0.1	0.1	0.12	0.1	0.1	0.1	0.1
Nickel	mg/kg	30	31	27	35	38	24	20	29	31	38	26	36	13	29
Selenium	mg/kg	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.36	0.39	0.2	0.27	0.2	0.2
Vanadium	mg/kg	60	58	72	62	66	42	37	48	46	81	41	58	26	41
Zinc	mg/kg	50	59	56	62	62	49	55	56	62	78	46	77	26	45
Naphthalene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Acenaphthylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Acenaphthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fluorene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Phenanthrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Chrysene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzo(b)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Benzo(g,h,i)perylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total of 16 PAHs	mg/kg	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Phenols (Total)	mg/kg	-	-	-	0.1	0.1	0.1	0.1	0.1	-	0.1	-	-	-	0.1
Benzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Toluene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ethylbenzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
m/p Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
o-Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Methyl Tert-Butyl Ether	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
									1						
Aliphatic TPH >C5-C6	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C6-C8	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aliphatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	60	1	41	1	1	1	1
Aliphatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Aliphatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	66	6	6	6	6	6	6
Aromatic TPH >C5-C7	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C7-C8	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aromatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	35	1	10	1	1	1	1
Aromatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Aromatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	35	6	10	6	6	6	6
Total Petroleum Hydrocarbons	mg/kg	10	10	10	10	10	10	10	100	10	23	10	10	10	10
Pesticides	mg/kg					*		*	*	*			*		
Asbestos Identification		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected

Exploratory Hole Reference	Units	TP12	TP124	TP1	TP106	TP108	TP128	TP126	TP136	TP138	TP148	TP149	TP160	No. of samples (n)	Commercial / Industrial	Source/Justification
Depth (m)		0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2			
Strata		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Organic Matter (%)	%	2.6	2.6	2.8	1.6	1.3	2.4	1.6	2.1	2.9	1.9	1	1.4	35		
pH		6.1	6.3	6.2	6.4	6.4	6	6.4	6.3	6.3	6.5	6.4	6.5	35		
Arsenic	mg/kg	6.4	17	26	19	26	26	29	25	17	31	21	10	35	640	LQM/CIEH S4UL (2015)
Beryllium	mg/kg	1.6	1.3	1.3	1	1.4	1	1.2	1.9	1.4	1.8	1.2	1	35	12	LQM/CIEH S4UL (2015)
Boron	mg/kg	9	10	8.8	5.9	8.7	11	15	20	18	19	12	6.6	35	240000	LQM/CIEH S4UL (2015)
Cadmium	mg/kg	0.33	0.32	0.47	0.33	0.67	0.34	0.46	0.46	0.49	0.6	0.3	0.3	35	190	LQM/CIEH S4UL (2015)
Chromium	mg/kg	27	26	42	22	41	26	30	39	36	42	35	27	36	8600	LQM/CIEH S4UL (2015)
Chromium (Hexavalent)	mg/kg	-	-	-	0.8	-	-	-	-	-	-	-	-	10	33	LQM/CIEH S4UL (2015)
Copper	mg/kg	12	12	39	21	33	26	30	36	32	39	37	15	35	68000	LQM/CIEH S4UL (2015)
Lead	mg/kg	20	22	31	15	28	26	26	32	29	28	16	15	35	2330	C4SL (2014)
Mercury	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.1	0.1	0.1	0.1	35	1100	LQM/CIEH S4UL (2015)
Nickel	mg/kg	26	22	40	19	36	26	26	31	30	36	27	25	35	980	LQM/CIEH S4UL (2015)
Selenium	mg/kg	0.32	0.2	0.29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	35	12000	LQM/CIEH S4UL (2015)
Vanadium	mg/kg	36	32	61	27	62	36	38	39	38	58	42	33	35	9000	LQM/CIEH S4UL (2015)
Zinc	mg/kg	54	46	66	41	76	58	67	62	66	94	64	60	35	730000	LQM/CIEH S4UL (2015)
Naphthalene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	460	LQM/CIEH S4UL (2015)
Acenaphthylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	97000	LQM/CIEH S4UL (2015)
Acenaphthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	97000	LQM/CIEH S4UL (2015)
Fluorene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	68000	LQM/CIEH S4UL (2015)
Phenanthrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	22000	LQM/CIEH S4UL (2015)
Anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	540000	LQM/CIEH S4UL (2015)
Fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	23000	LQM/CIEH S4UL (2015)
Pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	54000	LQM/CIEH S4UL (2015)
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	170	LQM/CIEH S4UL (2015)
Chrysene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	350	LQM/CIEH S4UL (2015)
Benzo(b)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	44	LQM/CIEH S4UL (2015)
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	1200	LQM/CIEH S4UL (2015)
Benzo(a)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	35	LQM/CIEH S4UL (2015)
Dibenzo(a,h)anthracene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	3.6	LQM/CIEH S4UL (2015)
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	510	LQM/CIEH S4UL (2015)
Benzo(g,h,i)perylene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	35	4000	LQM/CIEH S4UL (2015)
Total of 16 PAHs	mg/kg	2	2	2	2	2	2	2	2	2	2	2	2	35	-	-
Phenols (Total)	mg/kg	-	-	-	0.1	-	-	-	-	-	0.1	-	-	10	690	LQM/CIEH S4UL (2015)
Benzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	47	LQM/CIEH S4UL (2015)
Toluene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	110000	LQM/CIEH S4UL (2015)
Ethylbenzene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	13000	LQM/CIEH S4UL (2015)
m/p Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	14000	LQM/CIEH S4UL (2015)
o-Xylene	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	15000	LQM/CIEH S4UL (2015)
Methyl Tert-Butyl Ether	mg/kg	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	36	0.001	Detection Limit
Aliphatic TPH >C5-C6	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	5900	LQM/CIEH S4UL (2015)
Aliphatic TPH >C6-C8	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	17000	LQM/CIEH S4UL (2015)
Aliphatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	4800	LQM/CIEH S4UL (2015)
Aliphatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	23000	LQM/CIEH S4UL (2015)
Aliphatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	82000	LQM/CIEH S4UL (2015)
Aliphatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	-	-
Aliphatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	No Risk	LQM/CIEH S4UL (2015)
Aliphatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	No Risk	LQM/CIEH S4UL (2015)
Total Aliphatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	6	6	6	6	6	36	-	-
Aromatic TPH >C5-C7	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	46000	LQM/CIEH S4UL (2015)
Aromatic TPH >C7-C8	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	100000	LQM/CIEH S4UL (2015)
Aromatic TPH >C8-C10	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	8100	LQM/CIEH S4UL (2015)
Aromatic TPH >C10-C12	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	28000	LQM/CIEH S4UL (2015)
Aromatic TPH >C12-C16	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	37000	LQM/CIEH S4UL (2015)
Aromatic TPH >C16-C21	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	28000	LQM/CIEH S4UL (2015)
Aromatic TPH >C21-C35	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	28000	LQM/CIEH S4UL (2015)
Aromatic TPH >C35-C44	mg/kg	1	1	1	1	1	1	1	1	1	1	1	1	36	28000	LQM/CIEH S4UL (2015)
Total Aromatic Hydrocarbons	mg/kg	6	6	6	6	6	6	6	6	6	6	6	6	36	-	-
Total Petroleum Hydrocarbons	mg/kg	10	10	10	10	10	10	10	10	10	10	10	10	36	-	-
Pesticides	mg/kg					*	*					*		10		
Asbestos Identification		No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	36	Detected	Detection Limit

Key:-
Value within sample at exceeds screening value

*Samples tested for pesticides all recorded below laboratory risk
LQM/CIEH S4UL Reference No. S4UL3159 (2015)
Values in bold are reported at the laboratory limit of detection

SUMMARY OF LEACHATE TEST RESULTS

Site Land adjacent to Junction 10, M40, Ardley
Job Number AG3268-21
Type of Water Leachate

Determinand	Limit of Detection	Hazardous or Non-Hazardous^	Sample Identity	TP128	TP150	TP5	TP25	TP79	TP48	TP110	TP97	TP124	No. of samples (n)	Waters Screening Value	Source & Justification
			Depth	0.10	0.20	0.2	0.2	0.1	0.1	0.1	0.3	0.1			
			Sampled Date	03/06/2021	03/06/2021	25/05/2021	26/05/2021	25/05/2021	25/05/2021	28/05/2021	28/05/2021	28/05/2021			
pH		-	-	8.4	8.4	8.5	8.2	8.2	8.2	8.5	8.5	8.5	9	-	-
Arsenic	0.2	**Haz**	µg l-1	0.66	0.42	0.66	0.77	1.2	0.91	0.54	0.57	0.66	9	10	UK Drinking Water Standards (2010)
Cadmium	0.11	**Non Haz**	µg l-1	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	9	5	UK Drinking Water Standards (2010)
Chromium (Total)	0.5	*Non Haz*	µg l-1	**0.5**	**0.5**	**0.5**	**0.5**	0.65	0.57	**0.5**	**0.5**	**0.5**	9	50	UK Drinking Water Standards (2010)
Copper	0.5	**Non Haz**	µg l-1	3.4	2.7	1.5	1.5	5.3	3.2	2.7	1.9	3.5	9	2000	UK Drinking Water Standards (2010)
Lead	0.5	**Haz**	µg l-1	**0.5**	**0.5**	**0.5**	**0.5**	0.54	**0.5**	**0.5**	**0.5**	**0.5**	9	10	UK Drinking Water Standards (2010)
Mercury	0.05	**Haz**	µg l-1	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	9	1	UK Drinking Water Standards (2010)
Nickel	0.5	**Non Haz**	µg l-1	1.2	**0.5**	**0.5**	1	3.3	1.2	0.93	0.79	1	9	20	UK Drinking Water Standards (2010)
Selenium	0.5	**Non Haz**	µg l-1	**0.5**	**0.5**	**0.5**	**0.5**	0.72	**0.5**	**0.5**	**0.5**	**0.5**	9	10	UK Drinking Water Standards (2010)
Zinc	2.5	**Non Haz**	µg l-1	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	9	5000	UK Drinking Water Standards (2010)
Boron	10	*Non Haz*	µg l-1	**10**	11	**10**	**10**	**10**	**10**	**10**	**10**	**10**	9	1000	UK Drinking Water Standards (2010)
Beryllium	1	*Non Haz*	µg l-1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	9	12	UK Drinking Water Standards (2010)
Vanadium	0.5	*Non Haz*	µg l-1	1.2	0.73	1.3	1.4	2.3	2.3	0.84	1.2	1.2	9	20	EQS
Sulphate	1	*Non Haz*	mg l-1	**1**	2.7	2.8	**1**	**1**	**1**	**1**	**1**	**1**	9	250	UK Drinking Water Standards (2010)
Naphthalene	0.1	**Non Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Acenaphthylene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Acenaphthene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Fluorene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Phenanthrene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Anthracene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Fluoranthene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Pyrene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Benzo[a]anthracene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Chrysene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Benzo[b]fluoranthene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Benzo[k]fluoranthene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Benzo[a]pyrene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Dibenz(a,h)Anthracene	0.1	*Haz*	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Indeno(1,2,3-c,d)Pyrene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit
Benzo[g,h,i]perylene	0.1	**Haz**	µg l-1	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	9	0.1	Detection limit

Key-
Result exceeds test Detection Limit (for Haz determinands)
Result exceeds Screening Value (for Non Haz determinands)
Values in bold at the limit of detection

^ Note: Hazardous and non-hazardous substances determined by JAGDAG (Jan 2017) and published at http://www.wfduk.org/sites/default/files/Media/170116%20Substance%20Determinationsfinal.pdf. These are marked in bold.
For substances not assessed by JAGDAG, Applied Geology has assumed a determination based on our understanding of the behaviour of the chemical. These determinations are highlighted in yellow.

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Final Report

Report No.:	21-17697-1
Initial Date of Issue:	02-Jun-2021
Client	Applied Geology
Client Address:	Unit 23, Abbey Park Stareton Kenilworth Warwickshire CV8 2LY
Contact(s):	Andrew Smith Kayleigh Mcgeoch Lab Results
Project	AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Quotation No.:		**Date Received:**	26-May-2021
Order No.:	16857	**Date Instructed:**	26-May-2021
No. of Samples:	17		
Turnaround (Wkdays):	5	**Results Due:**	02-Jun-2021
Date Approved:	02-Jun-2021		

Approved By:

[redacted]

Details: Glynn Harvey, Technical Manager

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208517	1208518	1208519	1208520	1208521	1208522	1208523	1208524
			Sample Location:		TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.15	0.1	0.2	0.2	0.1	0.4	0.3
			Bottom Depth (m):		0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4
			Date Sampled:		17-May-2021	18-May-2021	17-May-2021	18-May-2021	20-May-2021	18-May-2021	18-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Organic Matter	M	2625	%	0.40	3.8	3.6	3.6	3.5	4.1	2.9	1.5	
Arsenic	M	2450	mg/kg	1.0	30	18	23	30	23	24	18	
Cadmium	M	2450	mg/kg	0.10	0.69	0.42	0.46	0.54	0.42	0.35	0.25	
Chromium	M	2450	mg/kg	1.0	55	36	36	35	32	32	33	
Chromium (Hexavalent)	N	2490	mg/kg	0.50								< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0								29
Copper	M	2450	mg/kg	0.50	25	15	18	18	16	15	15	
Lead	M	2450	mg/kg	0.50	39	22	24	25	24	20	14	
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Mercury	M	2450	mg/kg	0.10	0.11	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Nickel	M	2450	mg/kg	0.50	49	30	31	31	28	29	33	
Selenium	M	2450	mg/kg	0.20	0.58	0.32	0.29	< 0.20	< 0.20	< 0.20	0.47	
Vanadium	U	2450	mg/kg	5.0	86	53	64	64	52	52	54	
Zinc	M	2450	mg/kg	0.50	110	64	62	70	65	56	50	
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	
Phenol	M	2920	mg/kg	0.020								< 0.020
Resorcinol	M	2920	mg/kg	0.020								< 0.020
Cresols	M	2920	mg/kg	0.020								< 0.020
1-Naphthol	N	2920	mg/kg	0.020								< 0.020
Trimethylphenols	M	2920	mg/kg	0.020								< 0.020
Total Phenols	M	2920	mg/kg	0.10								< 0.10

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208517	1208518	1208519	1208520	1208521	1208522	1208523	1208524
			Sample Location:		TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.15	0.1	0.2	0.2	0.1	0.4	0.3
			Bottom Depth (m):		0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4
			Date Sampled:		17-May-2021	18-May-2021	17-May-2021	18-May-2021	20-May-2021	18-May-2021	18-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	18	18	20	18	20	18	17	27
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Roots	Stones and Roots
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Clay	Sand
pH	M	2010		4.0	8.2	8.3	8.3	8.5	8.4	8.4	8.6	
Boron	N	2450	mg/kg	0.40	14	12	11	9.7	11	10	9.4	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208517	1208518	1208519	1208520	1208521	1208522	1208523	1208524
			Sample Location:		TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.15	0.1	0.2	0.2	0.1	0.4	0.3
			Bottom Depth (m):		0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4
			Date Sampled:		17-May-2021	18-May-2021	17-May-2021	18-May-2021	20-May-2021	18-May-2021	18-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Beryllium	U	2450	mg/kg	1.0	1.9	1.3	1.5	1.3	1.1	1.1	1.4	
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Demeton-O	N	2820	mg/kg	0.20						< 0.20		
Phorate	N	2820	mg/kg	0.20						< 0.20		
Demeton-S	N	2820	mg/kg	0.20						< 0.20		
Disulfoton	N	2820	mg/kg	0.20						< 0.20		
Fenthion	N	2820	mg/kg	0.20						< 0.20		
Trichloronate	N	2820	mg/kg	0.20						< 0.20		
Prothiofos	N	2820	mg/kg	0.20						< 0.20		
Fensulphothion	N	2820	mg/kg	0.20						< 0.20		
Sulprofos	N	2820	mg/kg	0.20						< 0.20		
Azinphos-Methyl	N	2820	mg/kg	0.20						< 0.20		
Coumaphos	N	2820	mg/kg	0.20						< 0.20		
Atraton	N	2830	mg/kg	0.20						< 0.20		
Prometon	N	2830	mg/kg	0.20						< 0.20		
Simazine	N	2830	mg/kg	0.20						< 0.20		
Atrazine	N	2830	mg/kg	0.20						< 0.20		
Propazine	N	2830	mg/kg	0.20						< 0.20		
Terbuthylazine	N	2830	mg/kg	0.20						< 0.20		
Secbumeton	N	2830	mg/kg	0.20						< 0.20		
Simetryn	N	2830	mg/kg	0.20						< 0.20		
Ametryn	N	2830	mg/kg	0.20						< 0.20		
Prometryn	N	2830	mg/kg	0.20						< 0.20		
Terbutryn	N	2830	mg/kg	0.20						< 0.20		
Alpha-HCH	N	2840	mg/kg	0.20						< 0.20		
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20						< 0.20		
Beta-HCH	N	2840	mg/kg	0.20						< 0.20		
Delta-HCH	N	2840	mg/kg	0.20						< 0.20		
Heptachlor	N	2840	mg/kg	0.20						< 0.20		
Aldrin	N	2840	mg/kg	0.20						< 0.20		
Heptachlor Epoxide	N	2840	mg/kg	0.20						< 0.20		
Gamma-Chlordane	N	2840	mg/kg	0.20						< 0.20		
Alpha-Chlordane	N	2840	mg/kg	0.20						< 0.20		
Endosulfan I	N	2840	mg/kg	0.20						< 0.20		
4,4-DDE	N	2840	mg/kg	0.20						< 0.20		
Dieldrin	N	2840	mg/kg	0.20						< 0.20		
Endrin	N	2840	mg/kg	0.20						< 0.20		

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208517	1208518	1208519	1208520	1208521	1208522	1208523	1208524
			Sample Location:		TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.15	0.1	0.2	0.2	0.1	0.4	0.3
			Bottom Depth (m):		0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4
			Date Sampled:		17-May-2021	18-May-2021	17-May-2021	18-May-2021	20-May-2021	18-May-2021	18-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
4,4-DDD	N	2840	mg/kg	0.20						< 0.20		
Endosulfan II	N	2840	mg/kg	0.20						< 0.20		
Endrin Aldehyde	N	2840	mg/kg	0.20						< 0.20		
4,4-DDT	N	2840	mg/kg	0.20						< 0.20		
Endosulfan Sulphate	N	2840	mg/kg	0.20						< 0.20		
Methoxychlor	N	2840	mg/kg	0.20						< 0.20		
Endrin Ketone	N	2840	mg/kg	0.20						< 0.20		

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208525	1208526	1208527	1208528	1208529	1208530	1208531	1208532
			Sample Location:		TP61	TP70	TP74	TP76	TP89	TP91	TP92	TP94
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.1	0.1	0.4	0.1	0.1	0.1	0.3	0.1
			Bottom Depth (m):		0.2	0.2	0.5	0.2	0.2	0.2	0.4	0.2
			Date Sampled:		20-May-2021	17-May-2021	21-May-2021	19-May-2021	21-May-2021	17-May-2021	20-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Organic Matter	M	2625	%	0.40	3.1	3.8	1.9	2.8	2.4	4.0	2.9	2.1
Arsenic	M	2450	mg/kg	1.0	33	16	31	29	31	34	32	31
Cadmium	M	2450	mg/kg	0.10	0.43	0.42	0.28	0.37	0.42	0.56	0.56	0.34
Chromium	M	2450	mg/kg	1.0	27	29	34	35	31	37	41	23
Chromium (Hexavalent)	N	2490	mg/kg	0.50						< 0.50	< 0.50	< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0						37	41	23
Copper	M	2450	mg/kg	0.50	17	15	12	15	15	19	19	13
Lead	M	2450	mg/kg	0.50	28	22	17	22	24	36	37	25
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.12	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	27	26	30	31	27	35	38	24
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	48	44	60	56	53	62	68	42
Zinc	M	2450	mg/kg	0.50	76	61	50	59	56	82	82	49
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Phenol	M	2920	mg/kg	0.020						< 0.020	< 0.020	< 0.020
Resorcinol	M	2920	mg/kg	0.020						< 0.020	< 0.020	< 0.020
Cresols	M	2920	mg/kg	0.020						< 0.020	< 0.020	< 0.020
1-Naphthol	N	2920	mg/kg	0.020						< 0.020	< 0.020	< 0.020
Trimethylphenols	M	2920	mg/kg	0.020						< 0.020	< 0.020	< 0.020
Total Phenols	M	2920	mg/kg	0.10						< 0.10	< 0.10	< 0.10

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology		Chemtest Job No.:			21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:		Chemtest Sample ID.:			1208525	1208526	1208527	1208528	1208529	1208530	1208531	1208532
		Sample Location:			TP61	TP70	TP74	TP76	TP89	TP91	TP92	TP94
		Sample Type:			SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Top Depth (m):			0.1	0.1	0.4	0.1	0.1	0.1	0.3	0.1
		Bottom Depth (m):			0.2	0.2	0.5	0.2	0.2	0.2	0.4	0.2
		Date Sampled:			20-May-2021	17-May-2021	21-May-2021	19-May-2021	21-May-2021	17-May-2021	20-May-2021	21-May-2021
		Asbestos Lab:			DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-	-	-	-	-	-
Moisture	N	2030	%	0.020	16	21	15	15	13	16	14	14
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020			
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.3	8.3	8.5	8.4	8.4	8.4	8.4	8.6
Boron	N	2450	mg/kg	0.40	11	20	16	15	13	19	17	12

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208525	1208526	1208527	1208528	1208529	1208530	1208531	1208532
			Sample Location:		TP61	TP70	TP74	TP76	TP89	TP91	TP92	TP94
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.1	0.1	0.4	0.1	0.1	0.1	0.3	0.1
			Bottom Depth (m):		0.2	0.2	0.5	0.2	0.2	0.2	0.4	0.2
			Date Sampled:		20-May-2021	17-May-2021	21-May-2021	19-May-2021	21-May-2021	17-May-2021	20-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Beryllium	U	2450	mg/kg	1.0	1.1	1.3	1.2	1.2	1.1	1.5	1.6	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Demeton-O	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Phorate	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Demeton-S	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Disulfoton	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Fenthion	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Trichloronate	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Prothiofos	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Fensulphothion	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Sulprofos	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Azinphos-Methyl	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Coumaphos	N	2820	mg/kg	0.20		< 0.20					< 0.20	
Atraton	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Prometon	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Simazine	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Atrazine	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Propazine	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Terbuthylazine	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Secbumeton	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Simetryn	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Ametryn	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Prometryn	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Terbutryn	N	2830	mg/kg	0.20		< 0.20					< 0.20	
Alpha-HCH	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Beta-HCH	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Delta-HCH	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Heptachlor	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Aldrin	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Heptachlor Epoxide	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Gamma-Chlordane	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Alpha-Chlordane	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endosulfan I	N	2840	mg/kg	0.20		< 0.20					< 0.20	
4,4-DDE	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Dieldrin	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endrin	N	2840	mg/kg	0.20		< 0.20					< 0.20	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697	21-17697
Quotation No.:			Chemtest Sample ID.:		1208525	1208526	1208527	1208528	1208529	1208530	1208531	1208532
			Sample Location:		TP61	TP70	TP74	TP76	TP89	TP91	TP92	TP94
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.1	0.1	0.4	0.1	0.1	0.1	0.3	0.1
			Bottom Depth (m):		0.2	0.2	0.5	0.2	0.2	0.2	0.4	0.2
			Date Sampled:		20-May-2021	17-May-2021	21-May-2021	19-May-2021	21-May-2021	17-May-2021	20-May-2021	21-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
4,4-DDD	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endosulfan II	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endrin Aldehyde	N	2840	mg/kg	0.20		< 0.20					< 0.20	
4,4-DDT	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endosulfan Sulphate	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Methoxychlor	N	2840	mg/kg	0.20		< 0.20					< 0.20	
Endrin Ketone	N	2840	mg/kg	0.20		< 0.20					< 0.20	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697
Quotation No.:			Chemtest Sample ID.:		1208533
			Sample Location:		TP131
			Sample Type:		SOIL
			Top Depth (m):		0.2
			Bottom Depth (m):		0.3
			Date Sampled:		19-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Organic Matter	M	2625	%	0.40	2.4
Arsenic	M	2450	mg/kg	1.0	30
Cadmium	M	2450	mg/kg	0.10	0.40
Chromium	M	2450	mg/kg	1.0	20
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0	20
Copper	M	2450	mg/kg	0.50	13
Lead	M	2450	mg/kg	0.50	19
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	20
Selenium	M	2450	mg/kg	0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	37
Zinc	M	2450	mg/kg	0.50	55
Naphthalene	M	2700	mg/kg	0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0
Phenol	M	2920	mg/kg	0.020	< 0.020
Resorcinol	M	2920	mg/kg	0.020	< 0.020
Cresols	M	2920	mg/kg	0.020	< 0.020
1-Naphthol	N	2920	mg/kg	0.020	< 0.020
Trimethylphenols	M	2920	mg/kg	0.020	< 0.020
Total Phenols	M	2920	mg/kg	0.10	< 0.10

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697
Quotation No.:			Chemtest Sample ID.:		1208533
			Sample Location:		TP131
			Sample Type:		SOIL
			Top Depth (m):		0.2
			Bottom Depth (m):		0.3
			Date Sampled:		19-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Benzene	M	2760	µg/kg	1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-
Moisture	N	2030	%	0.020	13
Stones and Removed Materials	N	2030	%	0.020	
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones and Roots
Soil Texture	N	2040		N/A	Sand
pH	M	2010		4.0	9.0
Boron	N	2450	mg/kg	0.40	11

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697
Quotation No.:			Chemtest Sample ID.:		1208533
			Sample Location:		TP131
			Sample Type:		SOIL
			Top Depth (m):		0.2
			Bottom Depth (m):		0.3
			Date Sampled:		19-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Beryllium	U	2450	mg/kg	1.0	< 1.0
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0
Demeton-O	N	2820	mg/kg	0.20	< 0.20
Phorate	N	2820	mg/kg	0.20	< 0.20
Demeton-S	N	2820	mg/kg	0.20	< 0.20
Disulfoton	N	2820	mg/kg	0.20	< 0.20
Fenthion	N	2820	mg/kg	0.20	< 0.20
Trichloronate	N	2820	mg/kg	0.20	< 0.20
Prothiofos	N	2820	mg/kg	0.20	< 0.20
Fensulphothion	N	2820	mg/kg	0.20	< 0.20
Sulprofos	N	2820	mg/kg	0.20	< 0.20
Azinphos-Methyl	N	2820	mg/kg	0.20	< 0.20
Coumaphos	N	2820	mg/kg	0.20	< 0.20
Atraton	N	2830	mg/kg	0.20	< 0.20
Prometon	N	2830	mg/kg	0.20	< 0.20
Simazine	N	2830	mg/kg	0.20	< 0.20
Atrazine	N	2830	mg/kg	0.20	< 0.20
Propazine	N	2830	mg/kg	0.20	< 0.20
Terbuthylazine	N	2830	mg/kg	0.20	< 0.20
Secbumeton	N	2830	mg/kg	0.20	< 0.20
Simetryn	N	2830	mg/kg	0.20	< 0.20
Ametryn	N	2830	mg/kg	0.20	< 0.20
Prometryn	N	2830	mg/kg	0.20	< 0.20
Terbutryn	N	2830	mg/kg	0.20	< 0.20
Alpha-HCH	N	2840	mg/kg	0.20	< 0.20
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	< 0.20
Beta-HCH	N	2840	mg/kg	0.20	< 0.20
Delta-HCH	N	2840	mg/kg	0.20	< 0.20
Heptachlor	N	2840	mg/kg	0.20	< 0.20
Aldrin	N	2840	mg/kg	0.20	< 0.20
Heptachlor Epoxide	N	2840	mg/kg	0.20	< 0.20
Gamma-Chlordane	N	2840	mg/kg	0.20	< 0.20
Alpha-Chlordane	N	2840	mg/kg	0.20	< 0.20
Endosulfan I	N	2840	mg/kg	0.20	< 0.20
4,4-DDE	N	2840	mg/kg	0.20	< 0.20
Dieldrin	N	2840	mg/kg	0.20	< 0.20
Endrin	N	2840	mg/kg	0.20	< 0.20

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-17697
Quotation No.:			Chemtest Sample ID.:		1208533
			Sample Location:		TP131
			Sample Type:		SOIL
			Top Depth (m):		0.2
			Bottom Depth (m):		0.3
			Date Sampled:		19-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
4,4-DDD	N	2840	mg/kg	0.20	< 0.20
Endosulfan II	N	2840	mg/kg	0.20	< 0.20
Endrin Aldehyde	N	2840	mg/kg	0.20	< 0.20
4,4-DDT	N	2840	mg/kg	0.20	< 0.20
Endosulfan Sulphate	N	2840	mg/kg	0.20	< 0.20
Methoxychlor	N	2840	mg/kg	0.20	< 0.20
Endrin Ketone	N	2840	mg/kg	0.20	< 0.20

Test Methods

SOP	Title	Parameters included	Method summary
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2175	Total Sulphur in Soils	Total Sulphur	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. **Chromium [VI] is determined by 'Aquakem 600'** Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	**Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44**	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2820	Organophosphorus (O-P) Pesticides in Soils by GC-MS	Organophosphorus pesticide representative suite including Parathion, Malathion etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2830	Organonitrogen (O-N) Pesticides in Soils by GC-MS	Organonitrogen pesticide representative suite including Triazines etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2840	Organochlorine (O-Cl) Pesticides in Soils by GC-MS	Organochlorine pesticide representative suite **including DDT and its metabolites, 'drins' and** HCH etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	21-18908-1
Initial Date of Issue:	11-Jun-2021
Client	Applied Geology
Client Address:	Unit 23, Abbey Park Stareton Kenilworth Warwickshire CV8 2LY
Contact(s):	Andrew Smith Kayleigh Mcgeoch Lab Results
Project	AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Quotation No.:	Q17-09497	**Date Received:**	04-Jun-2021
Order No.:	16906	**Date Instructed:**	04-Jun-2021
No. of Samples:	9		
Turnaround (Wkdays):	5	**Results Due:**	10-Jun-2021
Date Approved:	11-Jun-2021		

Approved By:

[redacted]

Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology						Chemtest Job No.:	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908
Quotation No.: Q17-09497						Chemtest Sample ID.:	1214823	1214824	1214825	1214827	1214828	1214829	1214831
						Sample Location:	TP5	TP25	TP79	TP48	TP110	TP97	TP124
						Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
						Top Depth (m):	0.2	0.2	0.1	0.1	0.1	0.3	0.1
						Bottom Depth (m):	03	0.3	0.2	0.2	0.2	0.4	0.2
						Date Sampled:	25-May-2021	26-May-2021	25-May-2021	25-May-2021	28-May-2021	28-May-2021	28-May-2021
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**								
pH	U	1010	10:1		N/A		8.5	8.2	8.2	8.2	8.5	8.5	8.5
Sulphate	U	1220	10:1	mg/l	1.0		2.8	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Magnesium	U	1455	10:1	mg/l	0.20		0.81	0.85	0.69	1.0	0.76	0.60	0.77
Arsenic (Dissolved)	U	1455	10:1	µg/l	0.20		0.66	0.77	1.2	0.91	0.54	0.57	0.66
Boron (Dissolved)	U	1455	10:1	µg/l	10.0		< 10	< 10	< 10	< 10	< 10	< 10	< 10
Beryllium (Dissolved)	U	1455	10:1	µg/l	1.00		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cadmium (Dissolved)	U	1455	10:1	µg/l	0.11		< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11	< 0.11
Copper (Dissolved)	U	1455	10:1	µg/l	0.50		1.5	1.5	5.3	3.2	2.7	1.9	3.5
Mercury (Dissolved)	U	1455	10:1	µg/l	0.05		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)	U	1455	10:1	µg/l	0.50		< 0.50	1.0	3.3	1.2	0.93	0.79	1.0
Lead (Dissolved)	U	1455	10:1	µg/l	0.50		< 0.50	< 0.50	0.54	< 0.50	< 0.50	< 0.50	< 0.50
Selenium (Dissolved)	U	1455	10:1	µg/l	0.50		< 0.50	< 0.50	0.72	< 0.50	< 0.50	< 0.50	< 0.50
Vanadium (Dissolved)	U	1455	10:1	µg/l	0.50		1.3	1.4	2.3	2.3	0.84	1.2	1.2
Zinc (Dissolved)	U	1455	10:1	µg/l	2.5		< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Chromium (Total)	N	1455	10:1	µg/l	0.50		< 0.50	0.50	0.65	0.57	< 0.50	< 0.50	< 0.50
Naphthalene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	N	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	N	1700	10:1	µg/l	2.0		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214823	1214824	1214825	1214826	1214827	1214828	1214829	1214830
			Sample Location:		TP5	TP25	TP79	TP58	TP48	TP110	TP97	TP112
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2
			Bottom Depth (m):		03	0.3	0.2	0.3	0.2	0.2	0.4	0.3
			Date Sampled:		25-May-2021	26-May-2021	25-May-2021	24-May-2021	25-May-2021	28-May-2021	28-May-2021	27-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Organic Matter	M	2625	%	0.40	2.9	2.9	4.1	3.1	3.5	1.6	1.2	2.6
Arsenic	M	2450	mg/kg	1.0	17	15	22	19	24	21	16	8.4
Cadmium	M	2450	mg/kg	0.10	0.37	0.37	0.53	0.34	0.49	0.27	0.26	0.33
Chromium	M	2450	mg/kg	1.0	32	32	40	26	43	15	30	27
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50		< 0.50				< 0.50	
Chromium (Trivalent)	N	2490	mg/kg	1.0	32		40				30	
Copper	M	2450	mg/kg	0.50	15	14	21	13	21	7.8	12	12
Lead	M	2450	mg/kg	0.50	19	22	33	17	28	12	14	20
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	29	31	36	25	38	13	29	26
Selenium	M	2450	mg/kg	0.20	0.28	0.38	0.39	< 0.20	0.27	< 0.20	< 0.20	0.32
Vanadium	U	2450	mg/kg	5.0	48	46	61	41	69	24	41	38
Zinc	M	2450	mg/kg	0.50	56	62	76	42	77	28	45	54
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Phenol	M	2920	mg/kg	0.020	< 0.020		< 0.020				< 0.020	
Resorcinol	M	2920	mg/kg	0.020	< 0.020		< 0.020				< 0.020	
Cresols	M	2920	mg/kg	0.020	< 0.020		< 0.020				< 0.020	
1-Naphthol	N	2920	mg/kg	0.020	< 0.020		< 0.020				< 0.020	
Trimethylphenols	M	2920	mg/kg	0.020	< 0.020		< 0.020				< 0.020	
Total Phenols	M	2920	mg/kg	0.10	< 0.10		< 0.10				< 0.10	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214823	1214824	1214825	1214826	1214827	1214828	1214829	1214830
			Sample Location:		TP5	TP25	TP79	TP58	TP48	TP110	TP97	TP112
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2
			Bottom Depth (m):		03	0.3	0.2	0.3	0.2	0.2	0.4	0.3
			Date Sampled:		25-May-2021	26-May-2021	25-May-2021	24-May-2021	25-May-2021	28-May-2021	28-May-2021	27-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	66	< 1.0	4.1	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	66	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	35	< 1.0	19	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	35	< 5.0	19	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	100	< 10	23	< 10	< 10	< 10	< 10	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.051	0.048	0.042	0.044	0.038	0.048	0.041	0.038
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	21	23	22	19	20	9.0	14	25
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Roots	Stones	None	Stones and Roots	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Clay
pH	M	2010		4.0	8.6	8.2	8.5	8.2	8.2	8.6	8.6	8.1
Boron	N	2450	mg/kg	0.40	7.8	6.2	9.9	6.9	10	4.7	6.4	9.0
Beryllium	U	2450	mg/kg	1.0	1.2	1.3	1.5	1.1	1.8	< 1.0	1.3	1.6
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214823	1214824	1214825	1214826	1214827	1214828	1214829	1214830
			Sample Location:		TP5	TP25	TP79	TP58	TP48	TP110	TP97	TP112
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2
			Bottom Depth (m):		03	0.3	0.2	0.3	0.2	0.2	0.4	0.3
			Date Sampled:		25-May-2021	26-May-2021	25-May-2021	24-May-2021	25-May-2021	28-May-2021	28-May-2021	27-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Demeton-O	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Phorate	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Demeton-S	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Disulfoton	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Fenthion	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Trichloronate	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Prothiofos	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Fensulphothion	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Sulprofos	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Azinphos-Methyl	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Coumaphos	N	2820	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Atraton	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Prometon	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Simazine	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Atrazine	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Propazine	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Terbuthylazine	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Secbumeton	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Simetryn	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Ametryn	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Prometryn	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Terbutryn	N	2830	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Alpha-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Beta-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Delta-HCH	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Heptachlor	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Aldrin	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Heptachlor Epoxide	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Gamma-Chlordane	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Alpha-Chlordane	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Endosulfan I	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
4,4-DDE	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Dieldrin	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Endrin	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
4,4-DDD	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Endosulfan II	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908	21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214823	1214824	1214825	1214826	1214827	1214828	1214829	1214830
			Sample Location:		TP5	TP25	TP79	TP58	TP48	TP110	TP97	TP112
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.2	0.2	0.1	0.2	0.1	0.1	0.3	0.2
			Bottom Depth (m):		03	0.3	0.2	0.3	0.2	0.2	0.4	0.3
			Date Sampled:		25-May-2021	26-May-2021	25-May-2021	24-May-2021	25-May-2021	28-May-2021	28-May-2021	27-May-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Endrin Aldehyde	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
4,4-DDT	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Endosulfan Sulphate	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Methoxychlor	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			
Endrin Ketone	N	2840	mg/kg	0.20	< 0.20	< 0.20			< 0.20			

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214831
			Sample Location:		TP124
			Sample Type:		SOIL
			Top Depth (m):		0.1
			Bottom Depth (m):		0.2
			Date Sampled:		28-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Organic Matter	M	2625	%	0.40	2.6
Arsenic	M	2450	mg/kg	1.0	17
Cadmium	M	2450	mg/kg	0.10	0.32
Chromium	M	2450	mg/kg	1.0	26
Chromium (Hexavalent)	N	2490	mg/kg	0.50	
Chromium (Trivalent)	N	2490	mg/kg	1.0	
Copper	M	2450	mg/kg	0.50	12
Lead	M	2450	mg/kg	0.50	23
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	22
Selenium	M	2450	mg/kg	0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	39
Zinc	M	2450	mg/kg	0.50	44
Naphthalene	M	2700	mg/kg	0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0
Phenol	M	2920	mg/kg	0.020	
Resorcinol	M	2920	mg/kg	0.020	
Cresols	M	2920	mg/kg	0.020	
1-Naphthol	N	2920	mg/kg	0.020	
Trimethylphenols	M	2920	mg/kg	0.020	
Total Phenols	M	2920	mg/kg	0.10	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214831
			Sample Location:		TP124
			Sample Type:		SOIL
			Top Depth (m):		0.1
			Bottom Depth (m):		0.2
			Date Sampled:		28-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Benzene	M	2760	µg/kg	1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.041
ACM Type	U	2192		N/A	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected
Moisture	N	2030	%	0.020	18
Soil Colour	N	2040		N/A	Brown
Other Material	N	2040		N/A	Stones and Roots
Soil Texture	N	2040		N/A	Clay
pH	M	2010		4.0	8.3
Boron	N	2450	mg/kg	0.40	10
Beryllium	U	2450	mg/kg	1.0	1.3
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214831
			Sample Location:		TP124
			Sample Type:		SOIL
			Top Depth (m):		0.1
			Bottom Depth (m):		0.2
			Date Sampled:		28-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Demeton-O	N	2820	mg/kg	0.20	
Phorate	N	2820	mg/kg	0.20	
Demeton-S	N	2820	mg/kg	0.20	
Disulfoton	N	2820	mg/kg	0.20	
Fenthion	N	2820	mg/kg	0.20	
Trichloronate	N	2820	mg/kg	0.20	
Prothiofos	N	2820	mg/kg	0.20	
Fensulphothion	N	2820	mg/kg	0.20	
Sulprofos	N	2820	mg/kg	0.20	
Azinphos-Methyl	N	2820	mg/kg	0.20	
Coumaphos	N	2820	mg/kg	0.20	
Atraton	N	2830	mg/kg	0.20	
Prometon	N	2830	mg/kg	0.20	
Simazine	N	2830	mg/kg	0.20	
Atrazine	N	2830	mg/kg	0.20	
Propazine	N	2830	mg/kg	0.20	
Terbuthylazine	N	2830	mg/kg	0.20	
Secbumeton	N	2830	mg/kg	0.20	
Simetryn	N	2830	mg/kg	0.20	
Ametryn	N	2830	mg/kg	0.20	
Prometryn	N	2830	mg/kg	0.20	
Terbutryn	N	2830	mg/kg	0.20	
Alpha-HCH	N	2840	mg/kg	0.20	
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20	
Beta-HCH	N	2840	mg/kg	0.20	
Delta-HCH	N	2840	mg/kg	0.20	
Heptachlor	N	2840	mg/kg	0.20	
Aldrin	N	2840	mg/kg	0.20	
Heptachlor Epoxide	N	2840	mg/kg	0.20	
Gamma-Chlordane	N	2840	mg/kg	0.20	
Alpha-Chlordane	N	2840	mg/kg	0.20	
Endosulfan I	N	2840	mg/kg	0.20	
4,4-DDE	N	2840	mg/kg	0.20	
Dieldrin	N	2840	mg/kg	0.20	
Endrin	N	2840	mg/kg	0.20	
4,4-DDD	N	2840	mg/kg	0.20	
Endosulfan II	N	2840	mg/kg	0.20	

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-18908
Quotation No.: Q17-09497			Chemtest Sample ID.:		1214831
			Sample Location:		TP124
			Sample Type:		SOIL
			Top Depth (m):		0.1
			Bottom Depth (m):		0.2
			Date Sampled:		28-May-2021
			Asbestos Lab:		DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Endrin Aldehyde	N	2840	mg/kg	0.20	
4,4-DDT	N	2840	mg/kg	0.20	
Endosulfan Sulphate	N	2840	mg/kg	0.20	
Methoxychlor	N	2840	mg/kg	0.20	
Endrin Ketone	N	2840	mg/kg	0.20	

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using 'Aquakem 600' Discrete Analyser.
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2010	pH Value of Soils	pH	pH Meter
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry
2450	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8,>C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35– C44Aromatics: >C5–C7, >C7–C8, >C8– C10, >C10–C12, >C12–C16, >C16– C21, >C21– C35, >C35– C44	Dichloromethane extraction / GCxGC FID detection
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2820	Organophosphorus (O-P) Pesticides in Soils by GC-MS	Organophosphorus pesticide representative suite including Parathion, Malathion etc, plus client specific determinands	Dichloromethane extraction / GC-MS

Test Methods

SOP	Title	Parameters included	Method summary
2830	Organonitrogen (O-N) Pesticides in Soils by GC-MS	Organonitrogen pesticide representative suite including Triazines etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2840	Organochlorine (O-Cl) Pesticides in Soils by GC-MS	Organochlorine pesticide representative suite including DDT and its metabolites, 'drins' and HCH etc, plus client specific determinands	Dichloromethane extraction / GC-MS
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	21-19774-1
Initial Date of Issue:	21-Jun-2021
Client	Applied Geology
Client Address:	Unit 23, Abbey Park Stareton Kenilworth Warwickshire CV8 2LY
Contact(s):	Andrew Smith Kayleigh Mcgeoch Lab Results
Project	AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Quotation No.:	Q17-09497	**Date Received:**	11-Jun-2021
Order No.:	16944	**Date Instructed:**	11-Jun-2021
No. of Samples:	6		
Turnaround (Wkdays):	7	**Results Due:**	21-Jun-2021
Date Approved:	21-Jun-2021		

Approved By:

[redacted]

Details: Glynn Harvey, Technical Manager

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Chemtest Job No:	21-19774						Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1218792								
Sample Ref:									
Sample ID:									
Sample Location:	TP17								
Top Depth(m):	0.70								
Bottom Depth(m):	0.80								
Sampling Date:	26-May-2021						Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			0.31	3	5	6
Loss On Ignition	2610	M	%			3.4	--	--	10
Total BTEX	2760	M	mg/kg			[B] < 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			[B] < 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.7	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.0020	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.007	< 0.005	0.014	0.0034	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0018	< 0.0005	0.0036	0.0009	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	0.0007	< 0.0005	0.0014	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.4	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.23	0.16	< 1.0	1.6	10	150	500
Sulphate	1220	U	9.4	2.6	19	29	1000	20000	50000
Total Dissolved Solids	1020	N	110	78	220	790	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	8.1	3.5	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	15

Leachate Test Information	
Leachant volume 1st extract/l	0.320
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.085

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Chemtest Job No:	21-19774						Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1218793								
Sample Ref:									
Sample ID:									
Sample Location:	TP58								
Top Depth(m):	1.90								
Bottom Depth(m):	2.00								
Sampling Date:	24-May-2021						Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			1.9	3	5	6
Loss On Ignition	2610	M	%			1.5	--	--	10
Total BTEX	2760	M	mg/kg			[B] < 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			[B] < 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.032	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	0.0004	< 0.0002	0.0036	0.5	2	25
Barium	1455	U	0.006	< 0.005	0.012	0.0054	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0010	< 0.0005	0.0019	0.0008	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0006	< 0.0002	0.0011	0.0005	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	2.1	4.2	< 10	40	800	15000	25000
Fluoride	1220	U	0.19	0.16	< 1.0	1.6	10	150	500
Sulphate	1220	U	9.5	5.4	19	58	1000	20000	50000
Total Dissolved Solids	1020	N	98	72	190	740	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	5.5	3.5	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	13

Leachate Test Information	
Leachant volume 1st extract/l	0.325
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.154

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Chemtest Job No:	21-19774						Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1218794								
Sample Ref:									
Sample ID:									
Sample Location:	TP43								
Top Depth(m):	1.50								
Bottom Depth(m):	1.60								
Sampling Date:	02-Jun-2021								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			2.0	3	5	6
Loss On Ignition	2610	M	%			1.3	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.14	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.009	< 0.005	0.018	0.0089	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0010	< 0.0005	0.0020	0.0010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0004	< 0.0002	0.0008	0.0004	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	2.4	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.27	0.23	< 1.0	2.3	10	150	500
Sulphate	1220	U	11	3.1	22	39	1000	20000	50000
Total Dissolved Solids	1020	N	100	65	210	690	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	4.7	3.4	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	10

Leachate Test Information	
Leachant volume 1st extract/l	0.330
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.169

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-19774								
Chemtest Sample ID:	1218795								
Sample Ref:									
Sample ID:									
Sample Location:	TP90								
Top Depth(m):	0.90								
Bottom Depth(m):	1.00								
Sampling Date:	04-Jun-2021								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			2.6	3	5	6
Loss On Ignition	2610	M	%			1.1	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.8	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.21	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.007	< 0.005	0.013	0.0043	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0016	< 0.0005	0.0031	0.0010	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0007	< 0.0002	0.0014	0.0005	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	0.009	< 0.003	0.019	0.006	4	50	200
Chloride	1220	U	5.1	< 1.0	10	< 10	800	15000	25000
Fluoride	1220	U	0.45	0.36	< 1.0	3.7	10	150	500
Sulphate	1220	U	13	2.0	26	27	1000	20000	50000
Total Dissolved Solids	1020	N	120	85	250	870	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	6.7	3.9	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	6.9

Leachate Test Information	
Leachant volume 1st extract/l	0.337
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.114

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

							Landfill Waste Acceptance Criteria Limits		
Chemtest Job No:	21-19774								
Chemtest Sample ID:	1218796								
Sample Ref:									
Sample ID:									
Sample Location:	TP134								
Top Depth(m):	0.90								
Bottom Depth(m):	1.00								
Sampling Date:	03-Jun-2021								
Determinand	**SOP**	**Accred.**	**Units**				**Inert Waste Landfill**	**Stable, Non-reactive hazardous waste in non-hazardous Landfill**	**Hazardous Waste Landfill**
Total Organic Carbon	2625	M	%			0.66	3	5	6
Loss On Ignition	2610	M	%			6.1	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.6	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.080	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	< 0.0002	< 0.0002	< 0.0002	< 0.0002	0.5	2	25
Barium	1455	U	0.006	< 0.005	0.012	0.0031	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	70
Copper	1455	U	0.0012	< 0.0005	0.0023	0.0006	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	< 0.0002	0.0006	< 0.0002	0.0058	0.5	10	30
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.4	10	40
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.5	10	50
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.06	0.7	5
Selenium	1455	U	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.3	< 1.0	< 10	< 10	800	15000	25000
Fluoride	1220	U	0.39	0.13	< 1.0	1.4	10	150	500
Sulphate	1220	U	11	2.0	21	24	1000	20000	50000
Total Dissolved Solids	1020	N	140	72	270	740	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	6.5	3.2	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	29

Leachate Test Information	
Leachant volume 1st extract/l	0.279
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.085

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Results - 2 Stage WAC

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Chemtest Job No:	21-19774						Landfill Waste Acceptance Criteria Limits		
Chemtest Sample ID:	1218797								
Sample Ref:									
Sample ID:									
Sample Location:	TP119								
Top Depth(m):	1.70								
Bottom Depth(m):	1.80								
Sampling Date:	01-Jun-2021						Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	M	%			1.2	3	5	6
Loss On Ignition	2610	M	%			1.4	--	--	10
Total BTEX	2760	M	mg/kg			< 0.010	6	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg			< 0.10	1	--	--
TPH Total WAC	2670	M	mg/kg			< 10	500	--	--
Total (Of 17) PAH's	2700	N	mg/kg			< 2.0	100	--	--
pH	2010	M				8.9	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.022	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative mg/kg 10:1**	**Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg**		
Arsenic	1455	U	0.0002	0.0028	0.0005	0.027	0.5	2	25
Barium	1455	U	< 0.005	0.013	< 0.0005	0.12	20	100	300
Cadmium	1455	U	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.04	1	5
Chromium	1455	U	< 0.0005	0.0034	< 0.0005	0.031	0.5	10	70
Copper	1455	U	0.0010	0.0059	0.0021	0.0008	2	50	100
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.01	0.2	2
Molybdenum	1455	U	0.0013	0.0051	0.0027	0.049	0.5	10	30
Nickel	1455	U	< 0.0005	0.0017	< 0.0005	0.016	0.4	10	40
Lead	1455	U	< 0.0005	0.0007	< 0.0005	0.0066	0.5	10	50
Antimony	1455	U	< 0.0005	0.0015	< 0.0005	0.014	0.06	0.7	5
Selenium	1455	U	< 0.0005	0.0010	< 0.0005	0.0092	0.1	0.5	7
Zinc	1455	U	< 0.003	< 0.003	< 0.003	< 0.003	4	50	200
Chloride	1220	U	1.8	8.2	< 10	77	800	15000	25000
Fluoride	1220	U	0.16	0.57	< 1.0	5.4	10	150	500
Sulphate	1220	U	5.7	38	11	360	1000	20000	50000
Total Dissolved Solids	1020	N	98	78	190	790	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	5.4	3.8	< 50	< 50	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	8.1

Leachate Test Information	
Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.131

Waste Acceptance Criteria

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes. This analysis is only applicable for hazardous waste landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request.The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1218792			TP17	26-May-2021	B	Amber Glass 250ml
1218792			TP17	26-May-2021	B	Amber Glass 60ml
1218792			TP17	26-May-2021	B	Plastic Tub 500g
1218793			TP58	24-May-2021	B	Amber Glass 250ml
1218793			TP58	24-May-2021	B	Amber Glass 60ml
1218793			TP58	24-May-2021	B	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1020	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Electrical Conductivity and Total Dissolved Solids (TDS) in Waters	Conductivity Meter
1220	Anions, Alkalinity & Ammonium in Waters	Fluoride; Chloride; Nitrite; Nitrate; Total; Oxidisable Nitrogen (TON); Sulfate; Phosphate; Alkalinity; Ammonium	Automated colorimetric analysis using **'Aquakem 600' Discrete Analyser.**
1455	Metals in Waters by ICP-MS	Metals, including: Antimony; Arsenic; Barium; Beryllium; Boron; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Tin; Vanadium; Zinc	Filtration of samples followed by direct determination by inductively coupled plasma mass spectrometry (ICP-MS).
1610	Total/Dissolved Organic Carbon in Waters	Organic Carbon	TOC Analyser using Catalytic Oxidation
1920	Phenols in Waters by HPLC	Phenolic compounds including: Phenol, Cresols, Xylenols, Trimethylphenols Note: Chlorophenols are excluded.	Determination by High Performance Liquid Chromatography (HPLC) using electrochemical detection.
2010	pH Value of Soils	pH	pH Meter
2015	Acid Neutralisation Capacity	Acid Reserve	Titration
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <37°C.
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930
2610	Loss on Ignition	loss on ignition (LOI)	Determination of the proportion by mass that is lost from a soil by ignition at 550°C.
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.
2670	Total Petroleum Hydrocarbons (TPH) in Soils by GC-FID	**TPH (C6–C40); optional carbon banding, e.g. 3-band – GRO, DRO & LRO*TPH C8–C40**	Dichloromethane extraction / GC-FID
2700	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-FID	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenz[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Dichloromethane extraction / GC-FID (GC-FID detection is non-selective and can be subject to interference from co-eluting compounds)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
640	Characterisation of Waste (Leaching C10)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

Report Information

Key	
U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at the indicated laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container
E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

eurofins | Chemtest
Eurofins Chemtest Ltd
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.com

Final Report

Report No.:	21-19819-1
Initial Date of Issue:	18-Jun-2021
Client	Applied Geology
Client Address:	Unit 23, Abbey Park Stareton Kenilworth Warwickshire CV8 2LY
Contact(s):	Andrew Smith Kayleigh Mcgeoch Lab Results
Project	AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Quotation No.:	Q17-09497	**Date Received:**	11-Jun-2021
Order No.:	16944	**Date Instructed:**	11-Jun-2021
No. of Samples:	10		
Turnaround (Wkdays):	5	**Results Due:**	17-Jun-2021
Date Approved:	18-Jun-2021		

Approved By:

[redacted]

Details: Glynn Harvey, Technical Manager

Results - Leachate

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology						Chemtest Job No.:	21-19819	21-19819
Quotation No.: Q17-09497						Chemtest Sample ID.:	1218949	1218954
						Sample Location:	TP128	TP150
						Sample Type:	SOIL	SOIL
						Top Depth (m):	0.10	0.20
						Bottom Depth (m):	0.20	0.30
						Date Sampled:	03-Jun-2021	03-Jun-2021
Determinand	**Accred.**	**SOP**	**Type**	**Units**	**LOD**			
pH	U	1010	10:1		N/A		8.4	8.4
Sulphate	U	1220	10:1	mg/l	1.0		< 1.0	2.7
Magnesium	U	1455	10:1	mg/l	0.20		0.75	0.61
Arsenic (Dissolved)	U	1455	10:1	µg/l	0.20		0.66	0.42
Boron (Dissolved)	U	1455	10:1	µg/l	10.0		< 10	11
Beryllium (Dissolved)	U	1455	10:1	µg/l	1.00		< 1.0	< 1.0
Cadmium (Dissolved)	U	1455	10:1	µg/l	0.11		< 0.11	< 0.11
Copper (Dissolved)	U	1455	10:1	µg/l	0.50		3.4	2.7
Mercury (Dissolved)	U	1455	10:1	µg/l	0.05		< 0.05	< 0.05
Nickel (Dissolved)	U	1455	10:1	µg/l	0.50		1.2	< 0.50
Lead (Dissolved)	U	1455	10:1	µg/l	0.50		< 0.50	< 0.50
Selenium (Dissolved)	U	1455	10:1	µg/l	0.50		< 0.50	< 0.50
Vanadium (Dissolved)	U	1455	10:1	µg/l	0.50		1.2	0.73
Zinc (Dissolved)	U	1455	10:1	µg/l	2.5		< 2.5	< 2.5
Chromium (Total)	N	1455	10:1	µg/l	0.50		< 0.50	< 0.50
Naphthalene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Acenaphthylene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Acenaphthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Fluorene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Phenanthrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Benzo[a]anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Chrysene	N	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Benzo[b]fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Benzo[k]fluoranthene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Benzo[a]pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Dibenz(a,h)Anthracene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Benzo[g,h,i]perylene	U	1700	10:1	µg/l	0.10		< 0.10	< 0.10
Total Of 16 PAH's	N	1700	10:1	µg/l	2.0		< 2.0	< 2.0

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819
Quotation No.: Q17-09497			Chemtest Sample ID.:		1218945	1218946	1218947	1218948	1218949	1218950	1218951	1218952
			Sample Location:		TP1	TP105	TP108	TP126	TP128	TP136	TP138	TP141
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20
			Bottom Depth (m):		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30
			Date Sampled:		04-Jun-2021	02-Jun-2021	03-Jun-2021	03-Jun-2021	03-Jun-2021	02-Jun-2021	04-Jun-2021	03-Jun-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Organic Matter	M	2625	%	0.40	2.8	1.6	1.3	2.4	1.6	2.1	2.9	1.9
Arsenic	M	2450	mg/kg	1.0	24	19	28	8.0	29	25	17	31
Cadmium	M	2450	mg/kg	0.10	0.47	0.33	0.87	0.34	0.46	0.46	0.49	0.60
Chromium	M	2450	mg/kg	1.0	42	22	41	25	30	39	38	42
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50						< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0		22						42
Copper	M	2450	mg/kg	0.50	29	21	33	24	50	35	32	29
Lead	M	2450	mg/kg	0.50	31	15	28	22	26	32	29	28
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.10	0.11	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	40	19	36	22	26	31	30	38
Selenium	M	2450	mg/kg	0.20	0.29	< 0.20	< 0.20	0.22	< 0.20	< 0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	61	27	62	33	41	53	48	59
Zinc	M	2450	mg/kg	0.50	64	41	76	51	67	82	86	94
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Phenol	M	2920	mg/kg	0.020		< 0.020						< 0.020
Resorcinol	M	2920	mg/kg	0.020		< 0.020						< 0.020
Cresols	M	2920	mg/kg	0.020		< 0.020						< 0.020
1-Naphthol	N	2920	mg/kg	0.020		< 0.020						< 0.020
Trimethylphenols	M	2920	mg/kg	0.020		< 0.020						< 0.020
Total Phenols	M	2920	mg/kg	0.10		< 0.10						< 0.10

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819
Quotation No.: Q17-09497			Chemtest Sample ID.:		1218945	1218946	1218947	1218948	1218949	1218950	1218951	1218952
			Sample Location:		TP1	TP105	TP108	TP126	TP128	TP136	TP138	TP141
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20
			Bottom Depth (m):		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30
			Date Sampled:		04-Jun-2021	02-Jun-2021	03-Jun-2021	03-Jun-2021	03-Jun-2021	02-Jun-2021	04-Jun-2021	03-Jun-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Benzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
m & p-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
o-Xylene	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	20	12	14	18	10	16	12	18
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones, Roots and Wood	Stones, Roots and Wood	Stones, Roots and Wood	Stones and Roots	Stones, Roots and Wood	Stones, Roots and Wood	Stones and Roots	Stones and Roots
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.2	8.4	8.4	8.0	8.4	8.3	8.3	8.3
Boron	N	2450	mg/kg	0.40	6.9	5.9	8.7	11	15	20	18	19
Beryllium	U	2450	mg/kg	1.0	1.3	< 1.0	1.4	1.0	1.2	1.6	1.4	1.6
Methyl Tert-Butyl Ether	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology												
Quotation No.: Q17-09497					Chemtest Job No.:	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819
					Chemtest Sample ID.:	1218945	1218946	1218947	1218948	1218949	1218950	1218951	1218952
					Sample Location:	TP1	TP105	TP108	TP126	TP128	TP136	TP138	TP141
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20
					Bottom Depth (m):	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30
					Date Sampled:	04-Jun-2021	02-Jun-2021	03-Jun-2021	03-Jun-2021	03-Jun-2021	02-Jun-2021	04-Jun-2021	03-Jun-2021
					Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Demeton-O	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Phorate	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Demeton-S	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Disulfoton	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Fenthion	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Trichloronate	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Prothiofos	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Fensulphothion	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Sulprofos	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Azinphos-Methyl	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Coumaphos	N	2820	mg/kg	0.20			< 0.20	< 0.20					
Atraton	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Prometon	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Simazine	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Atrazine	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Propazine	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Terbuthylazine	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Secbumeton	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Simetryn	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Ametryn	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Prometryn	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Terbutryn	N	2830	mg/kg	0.20			< 0.20	< 0.20					
Alpha-HCH	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Gamma-HCH (Lindane)	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Beta-HCH	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Delta-HCH	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Heptachlor	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Aldrin	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Heptachlor Epoxide	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Gamma-Chlordane	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Alpha-Chlordane	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Endosulfan I	N	2840	mg/kg	0.20			< 0.20	< 0.20					
4,4-DDE	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Dieldrin	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Endrin	N	2840	mg/kg	0.20			< 0.20	< 0.20					
4,4-DDD	N	2840	mg/kg	0.20			< 0.20	< 0.20					
Endosulfan II	N	2840	mg/kg	0.20			< 0.20	< 0.20					

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819	21-19819
Quotation No.: Q17-09497			Chemtest Sample ID.:		1218945	1218946	1218947	1218948	1218949	1218950	1218951	1218952
			Sample Location:		TP1	TP105	TP108	TP126	TP128	TP136	TP138	TP141
			Sample Type:		SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Top Depth (m):		0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20
			Bottom Depth (m):		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30
			Date Sampled:		04-Jun-2021	02-Jun-2021	03-Jun-2021	03-Jun-2021	03-Jun-2021	02-Jun-2021	04-Jun-2021	03-Jun-2021
			Asbestos Lab:		DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**								
Endrin Aldehyde	N	2840	mg/kg	0.20			< 0.20	< 0.20				
4,4-DDT	N	2840	mg/kg	0.20			< 0.20	< 0.20				
Endosulfan Sulphate	N	2840	mg/kg	0.20			< 0.20	< 0.20				
Methoxychlor	N	2840	mg/kg	0.20			< 0.20	< 0.20				
Endrin Ketone	N	2840	mg/kg	0.20			< 0.20	< 0.20				

Results - Soil

Project: AG3268-21 Land Adjacent to Junction 10, M40, Ardley

Client: Applied Geology			Chemtest Job No.:		21-19819	21-19819
Quotation No.: Q17-09497			Chemtest Sample ID.:		1218953	1218954
			Sample Location:		TP149	TP150
			Sample Type:		SOIL	SOIL
			Top Depth (m):		0.30	0.20
			Bottom Depth (m):		0.40	0.30
			Date Sampled:		03-Jun-2021	03-Jun-2021
			Asbestos Lab:		DURHAM	DURHAM
Determinand	**Accred.**	**SOP**	**Units**	**LOD**		
Organic Matter	M	2625	%	0.40	1.0	1.4
Arsenic	M	2450	mg/kg	1.0	21	12
Cadmium	M	2450	mg/kg	0.10	0.30	0.30
Chromium	M	2450	mg/kg	1.0	33	27
Chromium (Hexavalent)	N	2490	mg/kg	0.50		
Chromium (Trivalent)	N	2490	mg/kg	1.0		
Copper	M	2450	mg/kg	0.50	27	15
Lead	M	2450	mg/kg	0.50	19	15
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	27	23
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20
Vanadium	U	2450	mg/kg	5.0	45	34
Zinc	M	2450	mg/kg	0.50	61	60
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzo[a]anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzo[a]pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0
Phenol	M	2920	mg/kg	0.020		
Resorcinol	M	2920	mg/kg	0.020		
Cresols	M	2920	mg/kg	0.020		
1-Naphthol	N	2920	mg/kg	0.020		
Trimethylphenols	M	2920	mg/kg	0.020		
Total Phenols	M	2920	mg/kg	0.10		