

APPENDIX E

SOIL CHEMICAL RESULTS COMPARED AGAINST SCREENING VALUES FOR HUMAN HEALTH

Site: 40916; Location: Junction 1 (LMA, A&E)
 A03308-21
 Comments: Industrial
 Method: MMS
 Date: 11/11/2021

Element	Unit	Screening Values (mg/kg)										Concentration (mg/kg)	Risk Category	Remarks		
		1	2	3	4	5	6	7	8	9	10					
As	mg/kg	0.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	0.5	Low	ASBESTOS
Ba	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	BARIUM
B	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	BORON
Be	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	BERYLLIUM
Bk	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	BISMUTH
Br	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	BROMINE
Ca	mg/kg	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	1000	Low	CALCIUM
Cd	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	CADMIUM
Co	mg/kg	1	2	3	4	5	6	7	8	9	10	11	12	1	Low	COBALT
Cr	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	CHROMIUM
Cu	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	COPPER
Fe	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	IRON
F	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	FLUORINE
Ga	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	GALLIUM
Ge	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	GERMANIUM
Hg	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	MERCURY
Mn	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	MANGANESE
Mg	mg/kg	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	1000	Low	MAGNESIUM
Mo	mg/kg	1	2	3	4	5	6	7	8	9	10	11	12	1	Low	MOLYBDENUM
Ni	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	NICKEL
P	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	PHOSPHORUS
Pb	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	LEAD
S	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	SULFUR
Se	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	SELENIUM
Si	mg/kg	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	1000	Low	SILICON
Sr	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	STRONTIUM
Ta	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	TANTALUM
Tb	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	TERBIUM
Ti	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	TITANIUM
Tl	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	THALLIUM
U	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	URANIUM
V	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	Vanadium
W	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	WOLFRAM
Xe	mg/kg	10	20	30	40	50	60	70	80	90	100	110	120	10	Low	XENON
Y	mg/kg	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	0.1	Low	YTIUM
Zn	mg/kg	100	200	300	400	500	600	700	800	900	1000	1100	1200	100	Low	ZINC

Notes: All values are in mg/kg unless otherwise specified. Screening values are based on EPA/USEPA guidelines. Risk categories are defined as follows: Low (0.1-1.0), Moderate (1.0-10.0), High (10.0-100.0), Very High (>100.0).

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 ^A	Sample Identity Depth	Sample Date	TP128	TP150	TP5	TP25	TP79	TP48	TP110	TP97	TP124	Waters Screening Value	Source & Justification
					0.10 03/06/2021	0.20 03/06/2021	0.2 25/05/2021	0.2 28/05/2021	0.1 25/05/2021	0.1 25/05/2021	0.1 28/05/2021	0.1 28/05/2021	0.1 28/05/2021		
pH					8.4	8.4	8.5	8.2	8.2	8.2	8.5	8.5	8.5	-	-
Arsenic	0.2	Haz	µg l ⁻¹		0.66	0.42	0.66	0.77	1.2	0.81	0.54	0.57	0.66	10	UK Drinking Water Standards (2010)
Chromium	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	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	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	2000	UK Drinking Water Standards (2010)
Lead	0.5	Non Haz	µg l ⁻¹		0.5	0.5	0.5	0.5	0.54	0.5	0.5	0.5	0.5	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	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	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	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	5000	UK Drinking Water Standards (2010)
Boron	10	Non Haz	µg l ⁻¹		10	11	10	10	10	10	10	10	10	1000	UK Drinking Water Standards (2010)
Beryllium	1	Non Haz	µg l ⁻¹		1	1	1	1	1	1	1	1	1	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	20	EQS
Sulphate	1	Non Haz	mg l ⁻¹		1	2.7	2.8	1	1	1	1	1	1	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	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	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	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	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	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	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	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	0.1	Detection limit
Benzo[<i>a</i>]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	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	0.1	Detection limit
Benzo[<i>b</i>]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	0.1	Detection limit
Benzo[<i>k</i>]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	0.1	Detection limit
Benzo[<i>a</i>]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	0.1	Detection limit
Dibenz[<i>a,h</i>]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	0.1	Detection limit
Indeno[1,2,3- <i>c,d</i>]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	0.1	Detection limit
Benzo[<i>ghi</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	0.1	Detection limit

^A Note: Hazardous and non-hazardous substances determined by JAGDAG (Jan 2017) and published at <http://www.wfd.uk.org/sites/default/files/Media/170116%20SI%20Determinations.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.

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



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:

Details: Glynn Harvey, Technical Manager

Results - Soil

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

Client: Applied Geology	Chemtest Job No.:		Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	21-17697																
	Quotation No.:	Chemtest Sample ID.:							TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60	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	4.1	2.9	1.5													
Arsenic	M	2450	mg/kg	0.50	30	18	23	30	23	23	24	18													
Cadmium	M	2450	mg/kg	0.10	0.69	0.42	0.46	0.54	0.42	0.42	0.35	0.25													
Chromium	M	2450	mg/kg	1.0	55	36	36	35	32	32	32	33													
Chromium (Hexavalent)	N	2490	mg/kg	0.50																					
Chromium (Trivalent)	N	2490	mg/kg	1.0																					
Copper	M	2450	mg/kg	0.50	25	15	18	18	16	16	15	15													
Lead	M	2450	mg/kg	0.50	39	22	24	25	24	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	< 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	< 0.10													
Nickel	M	2450	mg/kg	0.50	49	30	31	31	28	28	29	33													
Selenium	M	2450	mg/kg	0.20	0.58	0.32	0.29	< 0.20	< 0.20	< 0.20	< 0.20	0.47													
Vanadium	U	2450	mg/kg	5.0	86	53	64	64	52	52	52	54													
Zinc	M	2450	mg/kg	0.50	110	64	62	70	65	65	56	50													
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10							
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10							
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10							
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10							
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 2.0	< 2.0	< 2.0	< 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																					

Results - Soil

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

Determinand	Accred.	SOP	Units	LOD	21-17697		21-17697		21-17697		21-17697		21-17697		21-17697	
					Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	1208517	1208518	1208519	1208520
					TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60				
					SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL				
					0.2	0.15	0.1	0.2	0.2	0.1	0.4	0.3				
					0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4				
					17-May-2021	18-May-2021	17-May-2021	18-May-2021	20-May-2021	18-May-2021	18-May-2021	21-May-2021				
					DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM				
Benzene	M	2760	µg/kg	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
Toluene	M	2760	µg/kg	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
Ethylbenzene	M	2760	µg/kg	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
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	< 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	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C8	N	2680	mg/kg	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
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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	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	20	18	18	20	17	18	17	17	27	17	27
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 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	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	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	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.2	8.3	8.5	8.5	8.4	8.4	8.6	8.6	8.6	8.6	8.6	8.6
Boron	N	2450	mg/kg	0.40	14	11	12	9.7	11	10	10	11	10	9.4	10	9.4

Results - Soil

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

Determinand	Accred.	SOP	Units	LOD	21-17697		21-17697		21-17697		21-17697		21-17697				
					Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	TP7	TP11	TP20	TP31	TP42
Beryllium	U	2450	mg/kg	1.0	1.9	1.3	1.5	1.3	1.1	1.1	1.1	1.4	< 1.0	< 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	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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													
Fenitrothion	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													
Terbutylazine	N	2830	mg/kg	0.20													
Sebumeton	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													
Terbutyn	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													

Results - Soil

Project: AG3268-21 L and 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	21-17697
Quotation No.:	Chemtest Sample ID.:	1208517	1208518	1208519	1208520	1208521	1208522	1208523	1208524	1208524
	Sample Location:	TP7	TP11	TP20	TP31	TP42	TP54	TP56	TP60	TP60
	Sample Type:	SOIL	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	0.3
	Bottom Depth (m):	0.3	0.25	0.2	0.3	0.3	0.2	0.45	0.4	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	21-May-2021
	Asbestos Lab:	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	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.:		Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	21-17697		21-17697		21-17697		21-17697		21-17697	
	Quotation No.:	Chemtest Sample ID.:							TP70	TP74	TP76	TP89	TP91	TP92	TP94	DURHAM	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD														
Organic Matter	M	2625	%	0.40	3.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Arsenic	M	2450	mg/kg	1.0	33	0.43	0.2	0.5	31	29	31	29	31	31	32	32	31	31
Cadmium	M	2450	mg/kg	0.10	0.43	0.2	0.2	0.2	0.28	0.37	0.42	0.37	0.42	0.56	0.56	0.56	0.34	0.34
Chromium	M	2450	mg/kg	1.0	27	0.27	0.2	0.2	34	35	31	35	31	37	41	41	23	23
Chromium (Hexavalent)	N	2490	mg/kg	0.50										< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0										37	41	41	23	23
Copper	M	2450	mg/kg	0.50	17	0.17	0.1	0.1	12	15	15	15	15	19	19	19	13	13
Lead	M	2450	mg/kg	0.50	28	0.28	0.1	0.1	17	22	24	22	24	36	37	37	25	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	< 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	< 0.10	< 0.10	< 0.10	< 0.10	0.12	0.10	0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	27	0.27	0.2	0.2	30	31	27	31	27	35	38	38	24	24
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 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	0.48	0.2	0.2	60	56	53	56	53	62	68	68	42	42
Zinc	M	2450	mg/kg	0.50	76	0.76	0.1	0.1	50	59	56	59	56	82	82	82	49	49
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 0.020	< 0.020
Resorcinol	M	2920	mg/kg	0.020										< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Cresols	M	2920	mg/kg	0.020										< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
1-Naphthol	N	2920	mg/kg	0.020										< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Trimethylphenols	M	2920	mg/kg	0.020										< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Total Phenols	M	2920	mg/kg	0.10										< 0.10	< 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					
	Quotation No.:	Chemtest Sample ID.:	1208525	1208526	1208527	1208528	1208529	1208530	1208531	1208532	TP61	TP70	TP74	TP76	TP89	TP91	TP92	TP94
Sample Location:	Sample Type:		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Top Depth (m):	Bottom Depth (m):		0.1		0.2		0.4		0.5		0.1		0.2		0.1		0.3	
Date Sampled:	Asbestos Lab:		20-May-2021		17-May-2021		21-May-2021		19-May-2021		21-May-2021		17-May-2021		20-May-2021		21-May-2021	
Determinand	Accred.	SOP	Units	LOD	DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM	
Benzene	M	2760	µg/kg	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	< 1.0	< 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	< 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	< 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	< 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	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C5-C8	N	2680	mg/kg	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	< 1.0	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	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	15	15	15	15	15	15	15	15	15	15
Stones and Removed Materials	N	2030	%	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 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	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	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	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	8.4	8.4	8.4	8.4	8.4	8.4	8.6
Boron	N	2450	mg/kg	0.40	11	20	16	15	15	15	15	15	15	15	15	15	15	12

Results - Soil

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

Determinand	Accred.	SOP	Units	LOD	21-17697		21-17697		21-17697		21-17697		21-17697		
					Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:
Beryllium	U	2450	mg/kg	1.0	1.1	1.3	1.2	1.2	1.2	1.1	1.5	1.6	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	< 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	
Fenithion	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	
Terbutylazine	N	2830	mg/kg	0.20		< 0.20								< 0.20	
Sebumeton	N	2830	mg/kg	0.20		< 0.20								< 0.20	
Simetyn	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	
Terbutyn	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 L and 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

Deteriminand	Accred.	SOP	Units	LOD	Chemtest Job No.:	
					21-17697	1208533
Organic Matter	M	2625	%	0.40	2.4	Chemtest Sample ID.:
Arsenic	M	2450	mg/kg	1.0	30	Sample Location:
Cadmium	M	2450	mg/kg	0.10	0.40	TP131
Chromium	M	2450	mg/kg	1.0	20	Sample Type:
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	SOIL
Chromium (Trivalent)	N	2490	mg/kg	1.0	20	Top Depth (m):
Copper	M	2450	mg/kg	0.50	13	0.2
Lead	M	2450	mg/kg	0.50	19	Bottom Depth (m):
Magnesium (Water Soluble)	N	2120	g/l	0.010	< 0.010	0.3
Mercury	M	2450	mg/kg	0.10	< 0.10	Date Sampled:
Nickel	M	2450	mg/kg	0.50	20	19-May-2021
Selenium	M	2450	mg/kg	0.20	< 0.20	Asbestos Lab:
Vanadium	U	2450	mg/kg	5.0	37	DURHAM
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	
Benzoflanthracene	M	2700	mg/kg	0.10	< 0.10	
Chrysene	M	2700	mg/kg	0.10	< 0.10	
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	
Benzokfluoranthene	M	2700	mg/kg	0.10	< 0.10	
Benzofluoranthene	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	
Benzofluoranthene	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-C8	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 L and Adjacent to Junction 10, M40, Ardley

Determindand	Accred.	SOP	Units	LOD	Chemtest Job No.:
					21-17697
					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
Determindand	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
Terbutylazine	N	2830	mg/kg	0.20	< 0.20
Secbumeton	N	2830	mg/kg	0.20	< 0.20
Simetyn	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
Terbutyn	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 L and 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



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

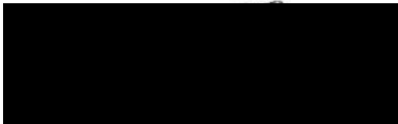
Order No.: 16906 **Date Instructed:** 04-Jun-2021

No. of Samples: 9

Turnaround (Wkdays): 5 **Results Due:** 10-Jun-2021

Date Approved: 11-Jun-2021

Approved By:



Details: Glynn Harvey, Technical Manager

Results - Leachate

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

Determinand	Accred.	SOP	Type	Units	LOD	21-18908		21-18908		21-18908		21-18908		21-18908	
						Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	TP5	TP25	TP79
pH	U	1010	10:1			N/A									
Sulphate	U	1220	10:1	mg/l	1.0	2.8	< 1.0	< 1.0	< 1.0	< 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	0.89	1.0	0.76	0.60	0.77	0.60	0.77	0.66
Arsenic (Dissolved)	U	1455	10:1	µg/l	0.20	0.66	0.77	1.2	0.91	0.54	0.57	0.66	0.57	0.66	0.66
Boron (Dissolved)	U	1455	10:1	µg/l	10.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Beryllium (Dissolved)	U	1455	10:1	µg/l	1.00	< 1.0	< 1.0	< 1.0	< 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	< 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	1.9	3.5	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	< 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	0.79	1.0	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	< 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	< 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	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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 0.10	< 0.10	< 0.10
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	< 0.10	< 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	< 0.10	< 0.10	< 0.10
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	< 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	U	1700	10:1	µg/l	0.10	< 0.10	< 0.10	< 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	< 0.10	< 0.10	< 0.10
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	< 0.10	< 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	< 2.0	< 2.0	< 2.0

Results - Soil

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

Determinand	Accred.	SOP	Units	LOD	21-18908		21-18908		21-18908		21-18908		21-18908		21-18908	
					Chemtest Job No.:	Chemtest Sample ID.:	Sample Location:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	TP5	TP25	TP79	TP58
Organic Matter	M	2625	%	0.40	2.9	2.9	4.1	4.1	3.1	3.1	3.5	3.5	3.5	1.6	1.2	2.6
Arsenic	M	2450	mg/kg	1.0	17	15	22	22	19	19	24	24	24	21	16	8.4
Cadmium	M	2450	mg/kg	0.10	0.37	0.37	0.53	0.53	0.34	0.34	0.49	0.49	0.27	0.26	0.33	0.33
Chromium	M	2450	mg/kg	1.0	32	32	40	40	26	26	43	43	15	30	27	27
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50							< 0.50	
Chromium (Trivalent)	N	2490	mg/kg	1.0	32	32	40	40							30	
Copper	M	2450	mg/kg	0.50	15	14	21	21	13	13	21	21	7.8	12	12	12
Lead	M	2450	mg/kg	0.50	19	22	33	33	17	17	28	28	12	14	20	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	< 0.010	< 0.010	< 0.010	< 0.010
Mercury	M	2450	mg/kg	0.10	< 0.10	< 0.10	0.12	0.12	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	29	31	36	36	25	25	38	38	13	29	26	26
Selenium	M	2450	mg/kg	0.20	0.28	0.38	0.39	0.39	< 0.20	< 0.20	0.27	0.27	< 0.20	< 0.20	0.32	0.32
Vanadium	U	2450	mg/kg	5.0	48	46	61	61	41	41	69	69	24	41	38	38
Zinc	M	2450	mg/kg	0.50	56	62	76	76	42	42	77	77	28	45	54	54
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 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	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 0.10	< 0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 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	< 2.0	< 2.0	< 2.0	< 2.0
Phenol	M	2920	mg/kg	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Resorcinol	M	2920	mg/kg	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Cresols	M	2920	mg/kg	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
1-Naphthol	N	2920	mg/kg	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Trimethylphenols	M	2920	mg/kg	0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020	< 0.020
Total Phenols	M	2920	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

Results - Soil

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

Client: Applied Geology Quotation No.: Q17-09497	Chemtest Job No.:		21-18908		21-18908		21-18908		21-18908		21-18908		21-18908	
	Chemtest Sample ID.:		1214823		1214824		1214825		1214826		1214827		1214828	
Sample Location:		TP5		TP25		TP79		TP58		TP48		TP110		
Sample Type:		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		
Top Depth (m):		0.2		0.2		0.1		0.2		0.1		0.1		
Bottom Depth (m):		03		0.3		0.2		0.3		0.2		0.2		
Date Sampled:		25-May-2021		26-May-2021		25-May-2021		24-May-2021		25-May-2021		28-May-2021		
Asbestos Lab:		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		
Determinand	Accred.	SOP	Units	LOD	21-18908		21-18908		21-18908		21-18908		21-18908	
					No Asbestos Detected	Asbestos Detected	No Asbestos Detected	Asbestos Detected	No Asbestos Detected	Asbestos Detected	No Asbestos Detected	Asbestos Detected		
Benzene	M	2760	µg/kg	1.0	< 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	< 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	< 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	< 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	< 1.0	
Aliphatic TPH >C5-C8	N	2680	mg/kg	1.0	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 5.0	
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	100	< 10	23	< 10	< 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	0.044	0.038	0.038	0.041	0.038	
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-	-	
Asbestos Identification	U	2192		N/A	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	19	20	14	25	25	
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Stones and Roots	Brown	Brown	Brown	
Other Material	N	2040		N/A	Stones	Roots	Stones	None	Stones	Stones and Roots	Stones	Stones	Stones	
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Clay	
pH	M	2010		4.0	8.6	8.2	8.5	8.2	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	6.9	10	6.4	6.4	9.0	
Beryllium	U	2450	mg/kg	1.0	1.2	1.3	1.5	1.1	1.1	1.8	1.3	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	< 1.0	

Results - Soil

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

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

Results - Soil

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

Deteriminand	Accred.	SOP	Units	LOD	Chemtest Job No.:	
					21-18908	1214831
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	
Benzoflanthracene	M	2700	mg/kg	0.10	< 0.10	
Chrysene	M	2700	mg/kg	0.10	< 0.10	
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	
Benzokfluoranthene	M	2700	mg/kg	0.10	< 0.10	
Benzofluoranthene	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	
Benzofluoranthene	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

Determindand	Accred.	SOP	Units	LOD	Chemtest Job No.:
					21-18908
					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
Determindand	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-C8	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 L and Adjacent to Junction 10, M40, Ardley

Determiand	Accred.	SOP	Units	LOD	Chemtest Job No.:
					21-18908
					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
Determiand	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	
Terbutylazine	N	2830	mg/kg	0.20	
Secbumeton	N	2830	mg/kg	0.20	
Simetyn	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 L and 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 Trimethylphenols Note: 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	Compliance Test 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



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

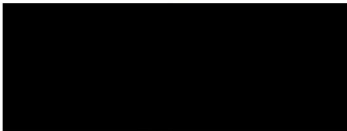
Order No.: 16944 **Date Instructed:** 11-Jun-2021

No. of Samples: 6

Turnaround (Wkdays): 7 **Results Due:** 21-Jun-2021

Date Approved: 21-Jun-2021

Approved By:



Details: Glynn Harvey, Technical Manager

Results - 2 Stage WAC

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

Chemtest Job No: 21-19774

Chemtest Sample ID: 1218792

Sample Ref:

Sample ID: TP17

Sample Location: 0.70

Top Depth(m): 0.80

Bottom Depth(m):

Sampling Date: 26-May-2021

Determinand	SOP	Accred.	Units	Landfill Waste Acceptance Criteria Limits		
				Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Total Organic Carbon	2625	M	%	0.31	5	6
Loss On Ignition	2610	M	%	3.4	--	10
Total BTEX	2760	M	mg/kg	[B] < 0.010	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	< 0.10	--	--
TPH Total WAC	2670	M	mg/kg	[B] < 10	--	--
Total (Of 17) PAH's	2700	N	mg/kg	< 2.0	--	--
pH	2010	M		8.7	--	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.0020	To evaluate	To evaluate
Eluate Analysis			2:1 mg/l	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	8:1 mg/l	2:1 mg/kg	0.5
Barium	1455	U	0.007	< 0.0002	< 0.0002	20
Cadmium	1455	U	< 0.00011	< 0.005	0.014	0.04
Chromium	1455	U	< 0.0005	< 0.00011	< 0.0005	0.5
Copper	1455	U	0.0018	< 0.0005	0.0036	2
Mercury	1455	U	< 0.00005	< 0.00005	< 0.00005	0.01
Molybdenum	1455	U	< 0.0002	< 0.0002	< 0.0002	0.5
Nickel	1455	U	< 0.0005	< 0.0005	< 0.0005	0.4
Lead	1455	U	< 0.0005	< 0.0005	< 0.0005	0.5
Antimony	1455	U	< 0.0005	< 0.0005	< 0.0005	0.06
Selenium	1455	U	0.0007	< 0.0005	0.0014	0.1
Zinc	1455	U	< 0.003	< 0.003	< 0.003	4
Chloride	1220	U	1.4	< 1.0	< 10	800
Fluoride	1220	U	0.23	0.16	< 1.0	10
Sulphate	1220	U	9.4	2.6	19	1000
Total Dissolved Solids	1020	N	110	78	220	4000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	1
Dissolved Organic Carbon	1610	U	8.1	3.5	< 50	500

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

Chemtest Sample ID: 1218793

Sample Ref:

TP58

Sample Location:

1.90

Top Depth(m):

2.00

Bottom Depth(m):

24-May-2021

Sampling Date:

Determinand	SOP	Accred.	Units	Landfill Waste Acceptance Criteria Limits		
				Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Total Organic Carbon	2625	M	%	1.9	5	6
Loss On Ignition	2610	M	%	1.5	--	10
Total BTEX	2760	M	mg/kg	[B] < 0.010	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	< 0.10	--	--
TPH Total WAC	2670	M	mg/kg	[B] < 10	--	--
Total (Of 17) PAH's	2700	N	mg/kg	< 2.0	--	--
pH	2010	M		8.9	--	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.032	To evaluate	To evaluate
Eluate Analysis			2:1 mg/l	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	0.0036	0.5	25
Barium	1455	U	0.006	0.0054	20	100
Cadmium	1455	U	< 0.00011	< 0.00011	0.04	5
Chromium	1455	U	< 0.0005	< 0.0005	0.5	70
Copper	1455	U	0.0010	0.0008	2	50
Mercury	1455	U	< 0.00005	< 0.00005	0.01	0.2
Molybdenum	1455	U	0.0006	0.0005	0.5	10
Nickel	1455	U	< 0.0005	< 0.0005	0.4	10
Lead	1455	U	< 0.0005	< 0.0005	0.5	10
Antimony	1455	U	< 0.0005	< 0.0005	0.06	0.7
Selenium	1455	U	< 0.0005	< 0.0005	0.1	0.5
Zinc	1455	U	< 0.003	< 0.003	4	50
Chloride	1220	U	2.1	40	800	15000
Fluoride	1220	U	0.19	1.6	10	150
Sulphate	1220	U	9.5	58	1000	20000
Total Dissolved Solids	1020	N	98	740	4000	60000
Phenol Index	1920	U	< 0.030	< 0.50	1	--
Dissolved Organic Carbon	1610	U	5.5	< 50	500	800

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

Chemtest Sample ID: 1218794

Sample Ref:

Sample ID: TP43

Sample Location: 1.50

Top Depth(m): 1.60

Bottom Depth(m):

Sampling Date: 02-Jun-2021

Determinand	SOP	Accred.	Units	Landfill Waste Acceptance Criteria Limits		
				Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Total Organic Carbon	2625	M	%	2.0	5	6
Loss On Ignition	2610	M	%	1.3	--	10
Total BTEX	2760	M	mg/kg	<0.010	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	<0.10	--	--
TPH Total WAC	2670	M	mg/kg	<10	--	--
Total (Of 17) PAH's	2700	N	mg/kg	<2.0	--	--
pH	2010	M		8.8	--	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.14	To evaluate	To evaluate
Eluate Analysis						
Arsenic	1455	U	mg/l	8:1 mg/l	2:1 mg/kg	Cumulative mg/kg 10:1
Barium	1455	U	<0.0002	<0.0002	<0.0002	<0.0002
Cadmium	1455	U	0.009	<0.005	0.018	0.0089
Chromium	1455	U	<0.00011	<0.00011	<0.00011	<0.00011
Copper	1455	U	<0.0005	<0.0005	<0.0005	<0.0005
Mercury	1455	U	0.0010	<0.0005	0.0020	0.0010
Molybdenum	1455	U	<0.00005	<0.00005	<0.00005	<0.00005
Nickel	1455	U	0.0004	<0.0002	0.0008	0.0004
Lead	1455	U	<0.0005	<0.0005	<0.0005	<0.0005
Antimony	1455	U	<0.0005	<0.0005	<0.0005	<0.0005
Selenium	1455	U	<0.0005	<0.0005	<0.0005	<0.0005
Zinc	1455	U	<0.003	<0.003	<0.003	<0.003
Chloride	1220	U	2.4	<1.0	<10	<10
Fluoride	1220	U	0.27	0.23	<1.0	2.3
Sulphate	1220	U	11	3.1	22	39
Total Dissolved Solids	1020	N	100	65	210	690
Phenol Index	1920	U	<0.030	<0.030	<0.30	<0.50
Dissolved Organic Carbon	1610	U	4.7	3.4	<50	<50
				Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	To evaluate	To evaluate
				0.5	2	25
				20	100	300
				0.04	1	5
				0.5	10	70
				2	50	100
				0.01	0.2	2
				0.5	10	30
				0.4	10	40
				0.5	10	50
				0.06	0.7	5
				0.1	0.5	7
				4	50	200
				800	15000	25000
				10	150	500
				1000	20000	50000
				4000	60000	100000
				1	--	--
				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

Chemtest Job No: 21-19774

Chemtest Sample ID: 1218795

Sample Ref:

Sample ID: TP90

Sample Location: 0.90

Top Depth(m): 1.00

Bottom Depth(m): 04-Jun-2021

Sampling Date: 04-Jun-2021

Determinand	SOP	Accred.	Units
Total Organic Carbon	2625	M	%
Loss On Ignition	2610	M	%
Total BTEX	2760	M	mg/kg
Total PCBs (7 Congeners)	2815	M	mg/kg
TPH Total WAC	2670	M	mg/kg
Total (Of 17) PAH's	2700	N	mg/kg
pH	2010	M	
Acid Neutralisation Capacity	2015	N	mol/kg

Eluate Analysis	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	To evaluate
Arsenic	<0.0002	<0.0002	<0.0002	0.5	2
Barium	0.007	0.013	0.0043	20	100
Cadmium	<0.00011	<0.00011	<0.00011	0.04	1
Chromium	<0.0005	<0.0005	<0.0005	0.5	10
Copper	0.0016	0.0031	0.0010	2	50
Mercury	<0.00005	<0.00005	<0.00005	0.01	0.2
Molybdenum	0.0007	0.0014	0.0005	0.5	10
Nickel	<0.0005	<0.0005	<0.0005	0.4	10
Lead	<0.0005	<0.0005	<0.0005	0.5	10
Antimony	<0.0005	<0.0005	<0.0005	0.06	0.7
Selenium	<0.0005	<0.0005	<0.0005	0.1	0.5
Zinc	0.009	0.019	0.006	4	50
Chloride	5.1	10	<10	800	15000
Fluoride	0.45	<1.0	3.7	10	150
Sulphate	13	26	27	1000	20000
Total Dissolved Solids	120	250	870	4000	60000
Phenol Index	<0.030	<0.30	<0.50	1	-
Dissolved Organic Carbon	6.7	<50	<50	500	800

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

Chemtest Job No: 21-19774

Chemtest Sample ID: 1218796

Sample Ref:

Sample ID: TP134

Sample Location:

Top Depth(m): 0.90

Bottom Depth(m): 1.00

Sampling Date: 03-Jun-2021

Determinand	SOP	Accred.	Units		Landfill Waste Acceptance Criteria Limits			
			M	%	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	Cumulative mg/kg 10:1	Limit values for compliance using BS EN 12457 at L/S 10 l/kg		
Arsenic	1455	U	<0.0002	mg/l	<0.0002	0.5	2	25
Barium	1455	U	0.006	mg/l	0.012	20	100	300
Cadmium	1455	U	<0.00011	mg/l	<0.00011	0.04	1	5
Chromium	1455	U	<0.0005	mg/l	<0.0005	0.5	10	70
Copper	1455	U	0.0012	mg/l	0.0023	2	50	100
Mercury	1455	U	<0.00005	mg/l	<0.00005	0.01	0.2	2
Molybdenum	1455	U	<0.0002	mg/l	<0.0002	0.5	10	30
Nickel	1455	U	<0.0005	mg/l	<0.0005	0.4	10	40
Lead	1455	U	<0.0005	mg/l	<0.0005	0.5	10	50
Antimony	1455	U	<0.0005	mg/l	<0.0005	0.06	0.7	5
Selenium	1455	U	<0.0005	mg/l	<0.0005	0.1	0.5	7
Zinc	1455	U	<0.003	mg/l	<0.003	4	50	200
Chloride	1220	U	1.3	mg/l	<10	800	15000	25000
Fluoride	1220	U	0.39	mg/l	<1.0	10	150	500
Sulphate	1220	U	11	mg/l	21	1000	20000	50000
Total Dissolved Solids	1020	N	140	mg/l	270	4000	60000	100000
Phenol Index	1920	U	<0.030	mg/l	<0.30	1	--	--
Dissolved Organic Carbon	1610	U	6.5	mg/l	<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

Chemtest Sample ID: 1218797

Sample Ref:

Sample ID: TP119

Sample Location:

Top Depth(m): 1.70

Bottom Depth(m): 1.80

Sampling Date: 01-Jun-2021

Determinand	SOP	Accred.	Units	Landfill Waste Acceptance Criteria Limits		
				Inert Waste Landfill	Stable, Non-reactive hazardous waste in non-hazardous Landfill	Hazardous Waste Landfill
Total Organic Carbon	2625	M	%	1.2	5	6
Loss On Ignition	2610	M	%	1.4	--	10
Total BTEX	2760	M	mg/kg	<0.10	--	--
Total PCBs (7 Congeners)	2815	M	mg/kg	<0.10	--	--
TPH Total WAC	2670	M	mg/kg	<10	--	--
Total (Of 17) PAH's	2700	N	mg/kg	<2.0	--	--
pH	2010	M		8.9	--	--
Acid Neutralisation Capacity	2015	N	mol/kg	0.022	To evaluate	To evaluate
Eluate Analysis				Cumulative mg/kg 10:1	Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg	
Arsenic	1455	U	mg/l	8:1 mg/l	2:1 mg/kg	
Barium	1455	U	0.0002	0.0028	0.0005	0.5
Cadmium	1455	U	<0.0005	0.013	<0.0005	20
Chromium	1455	U	<0.00011	<0.00011	<0.00011	0.04
Copper	1455	U	<0.0005	0.0034	<0.0005	0.5
Mercury	1455	U	0.0010	0.0059	0.0021	2
Molybdenum	1455	U	<0.00005	<0.00005	<0.00005	0.01
Nickel	1455	U	<0.0005	0.0051	0.0027	0.5
Lead	1455	U	<0.0005	0.0017	<0.0005	0.4
Antimony	1455	U	<0.0005	0.0007	<0.0005	0.5
Selenium	1455	U	<0.0005	0.0015	<0.0005	0.06
Zinc	1455	U	<0.0003	<0.003	<0.0005	0.1
Chloride	1220	U	1.8	8.2	<10	4
Fluoride	1220	U	0.16	0.57	<1.0	800
Sulphate	1220	U	5.7	38	11	10
Total Dissolved Solids	1020	N	98	78	190	1000
Phenol Index	1920	U	<0.030	<0.030	<0.30	4000
Dissolved Organic Carbon	1610	U	5.4	3.8	<50	500

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) ICES7 Congeners 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	Compliance Test for Leaching of Granular Waste Material and Sludge
650	Characterisation of Waste (Leaching WAC)	Waste material including soil, sludges and granular waste	Compliance Test 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



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:

Details: Glynn Harvey, Technical Manager

Results - Leachate

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

Determinand	Accred.	SOP	Type	Units	LOD	Chemtest Job No.:	
						21-19819	21-19819
pH	U	1010	10:1		N/A	8.4	21-19819
Sulphate	U	1220	10:1	mg/l	1.0	< 1.0	1218949
Magnesium	U	1455	10:1	mg/l	0.20	0.75	1218954
Arsenic (Dissolved)	U	1455	10:1	µg/l	0.20	0.66	TP128
Boron (Dissolved)	U	1455	10:1	µg/l	10.0	< 10	TP150
Beryllium (Dissolved)	U	1455	10:1	µg/l	1.00	< 1.0	SOIL
Cadmium (Dissolved)	U	1455	10:1	µg/l	0.11	< 0.11	SOIL
Copper (Dissolved)	U	1455	10:1	µg/l	0.50	3.4	0.20
Mercury (Dissolved)	U	1455	10:1	µg/l	0.05	< 0.05	0.30
Nickel (Dissolved)	U	1455	10:1	µg/l	0.50	1.2	
Lead (Dissolved)	U	1455	10:1	µg/l	0.50	< 0.50	
Selenium (Dissolved)	U	1455	10:1	µg/l	0.50	< 0.50	
Vanadium (Dissolved)	U	1455	10:1	µg/l	0.50	1.2	
Zinc (Dissolved)	U	1455	10:1	µg/l	2.5	< 2.5	
Chromium (Total)	N	1455	10:1	µg/l	0.50	< 0.50	
Naphthalene	U	1700	10:1	µg/l	0.10	< 0.10	
Acenaphthylene	U	1700	10:1	µg/l	0.10	< 0.10	
Acenaphthene	U	1700	10:1	µg/l	0.10	< 0.10	
Fluorene	U	1700	10:1	µg/l	0.10	< 0.10	
Phenanthrene	U	1700	10:1	µg/l	0.10	< 0.10	
Anthracene	U	1700	10:1	µg/l	0.10	< 0.10	
Fluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Pyrene	U	1700	10:1	µg/l	0.10	< 0.10	
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Chrysene	N	1700	10:1	µg/l	0.10	< 0.10	
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Indeno(1,2,3-c,d)Pyrene	U	1700	10:1	µg/l	0.10	< 0.10	
Dibenz(a,h)Anthracene	U	1700	10:1	µg/l	0.10	< 0.10	
Benzofluoranthene	U	1700	10:1	µg/l	0.10	< 0.10	
Total Of 16 PAH's	N	1700	10:1	µg/l	2.0	< 2.0	

Results - Soil

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

Client: Applied Geology Quotation No.: Q17-09497	Chemtest Job No.:		Chemtest Sample ID.:		21-19819		21-19819		21-19819		21-19819		21-19819		21-19819		21-19819			
	Sample Location:	Sample Type:	Sample Location:	Sample Type:	TP105	TP108	TP126	TP128	TP136	TP138	TP136	TP138	TP136	TP138	TP136	TP138	TP136	TP138		
Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	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	2.1	2.9	1.9	2.9	1.9	2.9	1.9	1.9
Arsenic	M	2450	mg/kg	0.50	24	19	28	8.0	29	25	17	31	25	17	31	25	17	31	25	17
Cadmium	M	2450	mg/kg	0.10	0.47	0.33	0.87	0.34	0.46	0.46	0.49	0.60	0.46	0.49	0.60	0.46	0.49	0.60	0.46	0.49
Chromium	M	2450	mg/kg	1.0	42	22	41	25	30	39	38	42	39	38	42	39	38	42	39	38
Chromium (Hexavalent)	N	2490	mg/kg	0.50		< 0.50						< 0.50								< 0.50
Chromium (Trivalent)	N	2490	mg/kg	1.0		22						42								42
Copper	M	2450	mg/kg	0.50	29	21	33	24	50	35	32	29	35	32	29	35	32	29	35	32
Lead	M	2450	mg/kg	0.50	31	15	28	22	26	32	29	28	26	32	29	26	32	29	26	32
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	< 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	0.10	0.11	0.10	0.10	0.11	0.10	0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	40	19	36	22	26	31	30	38	31	30	38	31	30	38	31	30
Selenium	M	2450	mg/kg	0.20	0.29	< 0.20	< 0.20	0.22	< 0.20	< 0.20	< 0.20	< 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	61	27	62	33	41	53	48	59	41	48	59	41	48	59	41	48
Zinc	M	2450	mg/kg	0.50	64	41	76	51	67	82	86	94	67	86	94	67	86	94	67	86
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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	< 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.:		21-19819	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:	Sample Type:	Top Depth (m):	Bottom Depth (m):	Date Sampled:	Asbestos Lab:	Accred.	SOP	Units	LOD	21-19819	21-19819	21-19819
		0.10	0.20	04-Jun-2021	DURHAM	M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
						N	2680	mg/kg	5.0	< 5.0	< 5.0	< 5.0
						N	2680	mg/kg	10.0	< 10	< 10	< 10
						M	2120	g/l	0.010	< 0.010	< 0.010	< 0.010
						U	2192		N/A	-	-	-
						U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
						N	2030	%	0.020	12	10	16
						N	2040		N/A	Brown	Brown	Brown
						N	2040		N/A	Stones, Roots and Wood	Stones, Roots and Wood	Stones and Roots
						N	2040		N/A	Sand	Sand	Sand
						M	2010		4.0	8.4	8.4	8.3
						N	2450	mg/kg	0.40	6.9	15	20
						U	2450	mg/kg	1.0	< 1.0	1.2	1.6
						M	2760	µg/kg	1.0	< 1.0	< 1.0	< 1.0

Results - Soil

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

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

Results - Soil

Project: AG3268-21 L and 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	
	Chemtest Sample ID.:		1218945		1218946		1218947		1218948		1218949		1218950		1218951	
Sample Location:			TP1		TP105		TP108		TP126		TP128		TP136		TP138	
Sample Type:			SOIL		SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
Top Depth (m):			0.10		0.10		0.10		0.10		0.10		0.10		0.10	
Bottom Depth (m):			0.20		0.20		0.20		0.20		0.20		0.20		0.20	
Date Sampled:			04-Jun-2021		02-Jun-2021		03-Jun-2021		03-Jun-2021		03-Jun-2021		02-Jun-2021		04-Jun-2021	
Asbestos Lab:			DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM		DURHAM	
Determinand	Accred.	SOP	Units	LOD												
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

Determind	Accred.	SOP	Units	LOD	Chemtest Job No.:	
					21-19819	21-19819
Client: Applied Geology					Chemtest Sample ID.:	1218953
Quotation No.: Q17-09497					Sample Location:	TP149
					Sample Type:	SOIL
					Top Depth (m):	0.30
					Bottom Depth (m):	0.40
					Date Sampled:	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
Benzoflanthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzofluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzokfluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10
Benzofluoranthene	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
Benzofluoranthene	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		