



Final Report

Report No.:	21-30440-1		
Initial Date of Issue:	09-Sep-2021		
Client	E3P		
Client Address:	Taylor Road Trafford Park Urmston Manchester M41 7JQ		
Contact(s):	Alex Smith		
Project	14-944 Vine Street		
Quotation No.:		Date Received:	02-Sep-2021
Order No.:	14-944-GC-G	Date Instructed:	02-Sep-2021
No. of Samples:	11		
Turnaround (Wkdays):	6	Results Due:	09-Sep-2021
Date Approved:	09-Sep-2021		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Leachate

Project: 14-944 Vine Street

Client: E3P	Chemtest Job No.:					21-30440	21-30440	21-30440
Quotation No.:	Chemtest Sample ID.:					1271652	1271657	1271659
Order No.: 14-944-GC-G	Client Sample Ref.:					TP102	TP106	WS105
	Client Sample ID.:					TP102	TP107	WS105
	Sample Location:					TP102	TP107	WS105
	Sample Type:					SOIL	SOIL	SOIL
	Top Depth (m):					0.50	0.60	0.70
	Date Sampled:					31-Aug-2021	31-Aug-2021	31-Aug-2021
Determinand	Accred.	SOP	Type	Units	LOD			
pH	U	1010	2:1		N/A	10.5	8.7	9.2
Cyanide (Total) Low-Level	N	1300	2:1	mg/l	0.0050	< 0.0050	< 0.0050	< 0.0050
Arsenic (Dissolved)	U	1455	2:1	µg/l	0.20	7.4	2.7	6.7
Cadmium (Dissolved)	U	1455	2:1	µg/l	0.11	< 0.11	< 0.11	< 0.11
Chromium (Dissolved)	U	1455	2:1	µg/l	0.50	160	160	150
Copper (Dissolved)	U	1455	2:1	µg/l	0.50	360	11	33
Mercury (Dissolved)	U	1455	2:1	µg/l	0.05	< 0.05	< 0.05	< 0.05
Nickel (Dissolved)	U	1455	2:1	µg/l	0.50	90	75	67
Lead (Dissolved)	U	1455	2:1	µg/l	0.50	1.6	< 0.50	0.89
Selenium (Dissolved)	U	1455	2:1	µg/l	0.50	2.6	1.3	1.6
Zinc (Dissolved)	U	1455	2:1	µg/l	2.5	< 2.5	11	< 2.5
Chromium (Hexavalent)	U	1490	2:1	µg/l	20	< 20	< 20	< 20
C2 Aliphatic TPH >C5-C6	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C6-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aliphatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
Total Aliphatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] < 5.0	[C] < 5.0	[C] < 5.0
C2 Aromatic TPH >C5-C7	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C7-C8	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C8-C10	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C10-C12	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C12-C16	N	1675	2:1	µg/l	0.10	[C] 610	[C] 510	[C] 530
C2 Aromatic TPH >C16-C21	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C21-C35	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Aromatic TPH >C35-C44	N	1675	2:1	µg/l	0.10	[C] < 0.10	[C] < 0.10	[C] < 0.10
C2 Total Aromatic Hydrocarbons	N	1675	2:1	µg/l	5.0	[C] 610	[C] 510	[C] 530
Total Petroleum Hydrocarbons	N	1675	2:1	µg/l	10	[C] 610	[C] 510	[C] 530
Benzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Toluene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Ethylbenzene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
m & p-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
o-Xylene	U	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Methyl Tert-Butyl Ether	N	1760	2:1	µg/l	1.0	[C] < 1.0	[C] < 1.0	[C] < 1.0
Naphthalene	N	1800	2:1	µg/l	0.010	84	0.66	4.9

Results - Leachate

Project: 14-944 Vine Street

Client: E3P	Chemtest Job No.:					21-30440	21-30440	21-30440
Quotation No.:	Chemtest Sample ID.:					1271652	1271657	1271659
Order No.: 14-944-GC-G	Client Sample Ref.:					TP102	TP106	WS105
	Client Sample ID.:					TP102	TP107	WS105
	Sample Location:					TP102	TP107	WS105
	Sample Type:					SOIL	SOIL	SOIL
	Top Depth (m):					0.50	0.60	0.70
	Date Sampled:					31-Aug-2021	31-Aug-2021	31-Aug-2021
Determinand	Accred.	SOP	Type	Units	LOD			
Acenaphthylene	N	1800	2:1	µg/l	0.010	0.58	0.61	0.41
Acenaphthene	N	1800	2:1	µg/l	0.010	31	13	9.4
Fluorene	N	1800	2:1	µg/l	0.010	13	8.2	5.5
Phenanthrene	N	1800	2:1	µg/l	0.010	23	17	29
Anthracene	N	1800	2:1	µg/l	0.010	5.2	7.3	5.6
Fluoranthene	N	1800	2:1	µg/l	0.010	9.4	30	30
Pyrene	N	1800	2:1	µg/l	0.010	7.9	23	24
Benzo[a]anthracene	N	1800	2:1	µg/l	0.010	2.7	9.3	9.8
Chrysene	N	1800	2:1	µg/l	0.010	2.7	9.0	9.3
Benzo[b]fluoranthene	N	1800	2:1	µg/l	0.010	2.4	11	12
Benzo[k]fluoranthene	N	1800	2:1	µg/l	0.010	0.64	3.3	4.3
Benzo[a]pyrene	N	1800	2:1	µg/l	0.010	2.6	6.0	9.2
Indeno(1,2,3-c,d)Pyrene	N	1800	2:1	µg/l	0.010	< 0.010	2.7	8.4
Dibenz(a,h)Anthracene	N	1800	2:1	µg/l	0.010	< 0.010	0.24	0.89
Benzo[g,h,i]perylene	N	1800	2:1	µg/l	0.010	< 0.010	3.7	6.0
Total Of 16 PAH's	N	1800	2:1	µg/l	0.20	180	140	170
Total Phenols	U	1920	2:1	mg/l	0.030	< 0.030	< 0.030	< 0.030

Results - Soil

Project: 14-944 Vine Street

Client: E3P	Chemtest Job No.:				21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440
Quotation No.:	Chemtest Sample ID.:				1271651	1271653	1271654	1271655	1271656	1271658	1271667	1271668
Order No.: 14-944-GC-G	Client Sample Ref.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Client Sample ID.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Location:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				2.10	2.00	1.30	1.60	1.50	0.40	0.30	2.60
	Date Sampled:				31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
ACM Type	U	2192		N/A	-	-	-	-	-	-	-	-
Asbestos Identification	U	2192		N/A	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
Moisture	N	2030	%	0.020	10	12	12	11	12	9.7	7.7	14
Soil Colour	N	2040		N/A	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones	Stones	Stones	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
pH	M	2010		4.0	8.3	8.4	8.4	8.9	8.7	8.8	8.6	9.2
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.010	0.13	0.11	0.081	0.19	0.023	0.044	< 0.010	0.11
Total Sulphur	M	2175	%	0.010	0.20	0.20	0.10	0.20	0.10	0.10	0.088	0.41
Cyanide (Total)	M	2300	mg/kg	0.50	< 0.50	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50
Sulphide (Easily Liberatable)	N	2325	mg/kg	0.50	13	6.2	11	14	2.7	21	19	180
Sulphate (Total)	M	2430	%	0.010	0.25	0.33	0.30	0.26	0.16	0.26	0.037	0.050
Arsenic	M	2450	mg/kg	1.0	590	600	810	13	220	23	9.8	4.3
Cadmium	M	2450	mg/kg	0.10	1.9	2.6	5.1	0.58	1.3	0.52	0.31	< 0.10
Chromium	M	2450	mg/kg	1.0	650	650	820	31	270	26	19	9.7
Copper	M	2450	mg/kg	0.50	5.6	1.8	140	51	1.5	130	34	56
Mercury	M	2450	mg/kg	0.10	0.75	0.85	0.50	0.20	0.54	4.7	< 0.10	< 0.10
Nickel	M	2450	mg/kg	0.50	16	0.68	200	33	5.0	470	16	5.8
Lead	M	2450	mg/kg	0.50	21	20	68	130	9.0	700	31	66
Selenium	M	2450	mg/kg	0.20	< 0.20	< 0.20	< 0.20	0.24	4.4	< 0.20	< 0.20	< 0.20
Zinc	M	2450	mg/kg	0.50	21	15	150	110	2.8	440	120	68
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TPH >C6-C8	N	2670	mg/kg	1.0		< 1.0	< 1.0			< 1.0	< 1.0	< 1.0
TPH >C8-C10	N	2670	mg/kg	1.0		< 1.0	< 1.0			8.7	< 1.0	< 1.0
TPH >C10-C12	N	2670	mg/kg	1.0		6.1	< 1.0			32	< 1.0	9.5
TPH >C12-C16	N	2670	mg/kg	1.0		59	20			110	1.5	20
TPH >C16-C21	N	2670	mg/kg	1.0		250	96			430	35	28
TPH >C21-C25	N	2670	mg/kg	1.0		230	230			400	36	31
TPH >C25-C35	N	2670	mg/kg	1.0		560	700			1900	140	49
TPH >C35-C40	N	2670	mg/kg	1.0		170	290			840	110	5.2
Total TPH >C6-C40	M	2670	mg/kg	10		1300	1300			3800	320	140
Aliphatic TPH >C5-C6	N	2680	mg/kg	1.0	< 1.0			< 1.0	< 1.0			
Aliphatic TPH >C6-C8	N	2680	mg/kg	1.0	< 1.0			< 1.0	< 1.0			
Aliphatic TPH >C8-C10	M	2680	mg/kg	1.0	< 1.0			< 1.0	< 1.0			
Aliphatic TPH >C10-C12	M	2680	mg/kg	1.0	3.2			8.4	2.5			
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	62			76	< 1.0			

Results - Soil

Project: 14-944 Vine Street

Client: E3P	Chemtest Job No.:				21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440
Quotation No.:	Chemtest Sample ID.:				1271651	1271653	1271654	1271655	1271656	1271658	1271667	1271668
Order No.: 14-944-GC-G	Client Sample Ref.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Client Sample ID.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Location:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				2.10	2.00	1.30	1.60	1.50	0.40	0.30	2.60
	Date Sampled:				31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	120			120	7.9			
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	77			340	9.5			
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	33			46	< 1.0			
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	300			590	20			
Aromatic TPH >C5-C7	N	2680	mg/kg	1.0	< 1.0			< 1.0	< 1.0			
Aromatic TPH >C7-C8	N	2680	mg/kg	1.0	< 1.0			< 1.0	< 1.0			
Aromatic TPH >C8-C10	M	2680	mg/kg	1.0	4.4			< 1.0	< 1.0			
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	16			7.7	< 1.0			
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	180			58	4.0			
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	460			100	16			
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	4200			950	180			
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	240			42	27			
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	5100			1200	220			
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	5400			1800	240			
Naphthalene	M	2700	mg/kg	0.10	4.7			0.94	1.5			
Acenaphthylene	M	2700	mg/kg	0.10	2.3			0.23	1.2			
Acenaphthene	M	2700	mg/kg	0.10	11			0.92	5.4			
Fluorene	M	2700	mg/kg	0.10	11			0.89	6.1			
Phenanthrene	M	2700	mg/kg	0.10	55			2.8	32			
Anthracene	M	2700	mg/kg	0.10	18			0.77	6.5			
Fluoranthene	M	2700	mg/kg	0.10	74			3.2	37			
Pyrene	M	2700	mg/kg	0.10	75			3.3	35			
Benzo[a]anthracene	M	2700	mg/kg	0.10	31			1.5	14			
Chrysene	M	2700	mg/kg	0.10	31			1.7	15			
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	33			1.9	16			
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	15			1.1	7.5			
Benzo[a]pyrene	M	2700	mg/kg	0.10	26			1.4	13			
Indeno(1,2,3-c,d)Pyrene	M	2700	mg/kg	0.10	19			1.0	8.2			
Dibenz(a,h)Anthracene	M	2700	mg/kg	0.10	5.6			1.1	2.6			
Benzo[g,h,i]perylene	M	2700	mg/kg	0.10	16			1.2	7.3			
Total Of 16 PAH's	M	2700	mg/kg	2.0	430			24	210			
Naphthalene	M	2800	mg/kg	0.10		3.2	1.9		24	0.28	0.84	
Acenaphthylene	N	2800	mg/kg	0.10		0.52	0.42		0.60	0.81	0.58	
Acenaphthene	M	2800	mg/kg	0.10		6.0	2.0		22	0.88	2.3	
Fluorene	M	2800	mg/kg	0.10		4.2	2.3		18	1.6	2.2	
Phenanthrene	M	2800	mg/kg	0.10		28	8.2		130	3.3	13	
Anthracene	M	2800	mg/kg	0.10		8.1	2.0		25	1.7	4.4	

Results - Soil

Project: 14-944 Vine Street

Client: E3P	Chemtest Job No.:				21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440	21-30440
Quotation No.:	Chemtest Sample ID.:				1271651	1271653	1271654	1271655	1271656	1271658	1271667	1271668
Order No.: 14-944-GC-G	Client Sample Ref.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Client Sample ID.:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Location:				TP101	TP103	TP104	TP105	TP106	WS101	WS106	WS102B
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Top Depth (m):				2.10	2.00	1.30	1.60	1.50	0.40	0.30	2.60
	Date Sampled:				31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021	31-Aug-2021
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	COVENTRY	DURHAM	DURHAM
Determinand	Accred.	SOP	Units	LOD								
Fluoranthene	M	2800	mg/kg	0.10		50	14			110	3.9	24
Pyrene	M	2800	mg/kg	0.10		44	12			87	4.7	20
Benzo[a]anthracene	M	2800	mg/kg	0.10		21	5.1			48	4.8	12
Chrysene	M	2800	mg/kg	0.10		20	5.0			43	6.3	10
Benzo[b]fluoranthene	M	2800	mg/kg	0.10		25	6.4			49	6.4	14
Benzo[k]fluoranthene	M	2800	mg/kg	0.10		8.8	2.2			16	4.0	4.6
Benzo[a]pyrene	M	2800	mg/kg	0.10		22	5.0			39	5.3	12
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.10		14	3.9			27	7.3	9.7
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.10		2.5	0.85			5.3	6.0	0.98
Benzo[g,h,i]perylene	M	2800	mg/kg	0.10		12	3.2			18	7.1	4.8
Total Of 16 PAH's	N	2800	mg/kg	2.0		270	75			660	64	140
Total Phenols	M	2920	mg/kg	0.10		< 0.10	0.17	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10

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:
1271652	TP102	TP102	TP102	31-Aug-2021	C	Plastic Tub 500g
1271657	TP106	TP107	TP107	31-Aug-2021	C	Plastic Tub 500g
1271659	WS105	WS105	WS105	31-Aug-2021	C	Plastic Tub 500g

Test Methods

SOP	Title	Parameters included	Method summary
1010	pH Value of Waters	pH	pH Meter
1300	Cyanides & Thiocyanate in Waters	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Continuous Flow Analysis.
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).
1490	Hexavalent Chromium in Waters	Chromium [VI]	Automated colorimetric analysis by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazide.
1675	TPH Aliphatic/Aromatic split in Waters by GC-FID(cf. Texas Method 1006 / TPH CWG)	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	Pentane extraction / GCxGC FID detection
1760	Volatile Organic Compounds (VOCs) in Waters by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics. (cf. USEPA Method 8260)	Automated headspace gas chromatographic (GC) analysis of water samples with mass spectrometric (MS) detection of volatile organic compounds.
1800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Waters by GC-MS	Acenaphthene; Acenaphthylene; Anthracene; Benzo[a]Anthracene; Benzo[a]Pyrene; Benzo[b]Fluoranthene; Benzo[ghi]Perylene; Benzo[k]Fluoranthene; Chrysene; Dibenzo[ah]Anthracene; Fluoranthene; Fluorene; Indeno[123cd]Pyrene; Naphthalene; Phenanthrene; Pyrene	Pentane extraction / GCMS detection
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
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
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.
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.

Test Methods

SOP	Title	Parameters included	Method summary
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.
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
2680	TPH A/A Split	Aliphatics: >C5–C6, >C6–C8, >C8–C10, >C10–C12, >C12–C16, >C16–C21, >C21–C35, >C35–C44 Aromatics: >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; Dibenzo[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)
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	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
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