

**ANNEX D**  
**Soil Chemical Test Results**



# Final Report

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**Report No.:** 19-13444-1

**Initial Date of Issue:** 29-Apr-2019

**Client** Terra Firma (Wales) Ltd

**Client Address:** 5 Deryn Court  
Wharfedale Road  
Pentwyn  
Cardiff  
CF23 7HA

**Contact(s):** Dave Emanuel

**Project** 15264 CELSA A.P

**Quotation No.:** **Date Received:** 18-Apr-2019

**Order No.:** **Date Instructed:** 18-Apr-2019

**No. of Samples:** 3

**Turnaround (Wkdays):** 5 **Results Due:** 26-Apr-2019

**Date Approved:** 29-Apr-2019

**Approved By:**



**Details:** Martin Dyer, Laboratory Manager

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**Project: 15264 CELSA A.P**

Client: Terra Firma (Wales) Ltd	Chemtest Job No.:				19-13444	19-13444	19-13444
Quotation No.:	Chemtest Sample ID.:				813478	813479	813480
	Sample Location:				BH01	BH02	BH03
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):				0.50	0.50	0.50
	Bottom Depth (m):				1.50	1.50	1.50
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY
Determinand	Accred.	SOP	Units	LOD			
ACM Type	U	2192		N/A	-	-	-
Asbestos Identification	U	2192	%	0.001	No Asbestos Detected	No Asbestos Detected	No Asbestos Detected
ACM Detection Stage	U	2192		N/A	-	-	-
Moisture	N	2030	%	0.020	7.9	7.8	7.2
Soil Colour	N	2040		N/A	Brown	Brown	Brown
Other Material	N	2040		N/A	Stones	Stones	Stones
Soil Texture	N	2040		N/A	Sand	Sand	Sand
pH	M	2010		N/A	9.8	11.6	10.1
Cyanide (Total)	M	2300	mg/kg	0.50	0.8	< 0.50	< 0.50
Sulphate (Acid Soluble)	M	2430	%	0.010	0.42	0.54	0.36
Arsenic	M	2450	mg/kg	1.0	29	24	28
Cadmium	M	2450	mg/kg	0.10	0.70	0.78	0.39
Chromium	M	2450	mg/kg	1.0	99	96	99
Mercury Low Level	M	2450	mg/kg	0.05	0.15	0.51	0.10
Copper	M	2450	mg/kg	0.50	68	61	37
Nickel	M	2450	mg/kg	0.50	40	34	37
Lead	M	2450	mg/kg	0.50	60	64	37
Selenium	M	2450	mg/kg	0.20	3.1	3.3	2.8
Zinc	M	2450	mg/kg	0.50	270	260	140
Chromium (Trivalent)	N	2490	mg/kg	1.0	99	96	99
Chromium (Hexavalent)	N	2490	mg/kg	0.50	< 0.50	< 0.50	< 0.50
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	< 1.0	< 1.0	< 1.0
Aliphatic TPH >C12-C16	M	2680	mg/kg	1.0	9.4	< 1.0	9.3
Aliphatic TPH >C16-C21	M	2680	mg/kg	1.0	170	56	130
Aliphatic TPH >C21-C35	M	2680	mg/kg	1.0	1400	230	1100
Aliphatic TPH >C35-C44	N	2680	mg/kg	1.0	23	< 1.0	37
Total Aliphatic Hydrocarbons	N	2680	mg/kg	5.0	1600	290	1300
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	< 1.0	< 1.0	< 1.0
Aromatic TPH >C10-C12	M	2680	mg/kg	1.0	< 1.0	< 1.0	< 1.0
Aromatic TPH >C12-C16	M	2680	mg/kg	1.0	1.9	< 1.0	< 1.0
Aromatic TPH >C16-C21	U	2680	mg/kg	1.0	8.3	16	< 1.0
Aromatic TPH >C21-C35	M	2680	mg/kg	1.0	230	390	160
Aromatic TPH >C35-C44	N	2680	mg/kg	1.0	94	< 1.0	< 1.0
Total Aromatic Hydrocarbons	N	2680	mg/kg	5.0	330	400	160
Total Petroleum Hydrocarbons	N	2680	mg/kg	10.0	2000	690	1400
Naphthalene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthylene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Acenaphthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluorene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Phenanthrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Anthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Pyrene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzoanthracene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Chrysene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[b]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzo[k]fluoranthene	M	2700	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Benzopyrene	M	2700	mg/kg	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
Dibenz(a,h)Anthracene	M	2700	mg/kg	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
Total Of 16 PAH's	M	2700	mg/kg	2.0	< 2.0	< 2.0	< 2.0
PCB 28	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 52	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 90+101	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 118	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010

**Project: 15264 CELSA A.P**

<b>Client: Terra Firma (Wales) Ltd</b>	<b>Chemtest Job No.:</b>				19-13444	19-13444	19-13444
Quotation No.:	<b>Chemtest Sample ID.:</b>				813478	813479	813480
	Sample Location:				BH01	BH02	BH03
	Sample Type:				SOIL	SOIL	SOIL
	Top Depth (m):				0.50	0.50	0.50
	Bottom Depth (m):				1.50	1.50	1.50
	Asbestos Lab:				COVENTRY	COVENTRY	COVENTRY
<b>Determinand</b>	<b>Accred.</b>	<b>SOP</b>	<b>Units</b>	<b>LOD</b>			
PCB 153	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 138	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
PCB 180	M	2815	mg/kg	0.010	< 0.010	< 0.010	< 0.010
Total PCBs (7 Congeners)	N	2815	mg/kg	0.10	< 0.10	< 0.10	< 0.10
Total Phenols	M	2920	mg/kg	0.30	< 0.30	< 0.30	< 0.30
Organic Matter BS1377	N	2930	%	0.10	1.3	0.6	1.9

## Results - 2 Stage WAC

Project: 15264 CELSA A.P

<b>Chemtest Job No:</b> 19-13444 <b>Chemtest Sample ID:</b> 813478 <b>Sample Ref:</b> <b>Sample ID:</b> <b>Sample Location:</b> BH01 <b>Top Depth(m):</b> 0.50 <b>Bottom Depth(m):</b> 1.50 <b>Sampling Date:</b>							<b>Landfill Waste Acceptance Criteria Limits</b>		
							<b>Inert Waste Landfill</b>	<b>Stable, Non-reactive hazardous waste in non-hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Determinand</b>	<b>SOP</b>	<b>Accred.</b>	<b>Units</b>						
Total Organic Carbon	2625	M	%				[A] 1.7	3	5
Loss On Ignition	2610	M	%				4.5	--	10
Total BTEX	2760	M	mg/kg				[A] < 0.010	6	--
Total PCBs (7 Congeners)	2815	M	mg/kg				< 0.10	1	--
TPH Total WAC (Mineral Oil)	2670	M	mg/kg				[A] 2000	500	--
Total (Of 17) PAH's	2700	N	mg/kg				< 2.0	100	--
pH	2010	M					9.8	--	>6
Acid Neutralisation Capacity	2015	N	mol/kg				0.052	--	To evaluate
<b>Eluate Analysis</b>			<b>2:1 mg/l</b>	<b>8:1 mg/l</b>	<b>2:1 mg/kg</b>	<b>Cumulative mg/kg 10:1</b>	<b>Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg</b>		
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.031	0.041	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	2	50	100
Mercury	1450	U	0.00067	< 0.00050	0.0013	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.027	0.0064	0.054	0.11	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	0.0012	< 0.010	< 0.010	0.06	0.7	5
Selenium	1450	U	0.0070	0.0042	0.014	0.048	0.1	0.5	7
Zinc	1450	U	0.013	0.0045	< 0.50	< 0.50	4	50	200
Chloride	1220	U	100	27	210	430	800	15000	25000
Fluoride	1220	U	2.3	1.6	4.6	18	10	150	500
Sulphate	1220	U	800	150	1600	2800	1000	20000	50000
Total Dissolved Solids	1020	N	1000	310	2100	4600	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	21	15	< 50	160	500	800	1000

### Solid Information

Dry mass of test portion/kg	0.175
Moisture (%)	7.9

### Leachate Test Information

Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.366

### 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: 15264 CELSA A.P

<b>Chemtest Job No:</b> 19-13444 <b>Chemtest Sample ID:</b> 813479 <b>Sample Ref:</b> <b>Sample ID:</b> <b>Sample Location:</b> BH02 <b>Top Depth(m):</b> 0.50 <b>Bottom Depth(m):</b> 1.50 <b>Sampling Date:</b>							<b>Landfill Waste Acceptance Criteria</b>		
							<b>Inert Waste Landfill</b>	<b>Stable, Non-reactive hazardous waste in non-hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>
<b>Determinand</b>	<b>SOP</b>	<b>Accred.</b>	<b>Units</b>						
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 (Mineral Oil)	2670	M	mg/kg						
Total (Of 17) PAH's	2700	N	mg/kg						
pH	2010	M							
Acid Neutralisation Capacity	2015	N	mol/kg						
<b>Eluate Analysis</b>			<b>2:1 mg/l</b>	<b>8:1 mg/l</b>	<b>2:1 mg/kg</b>	<b>Cumulative mg/kg 10:1</b>	<b>Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg</b>		
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.050	0.074	< 0.50	0.70	20	100	300
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.0028	0.0011	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2
Molybdenum	1450	U	0.024	0.0073	< 0.050	0.10	0.5	10	30
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50
Antimony	1450	U	< 0.0010	0.0013	< 0.010	0.011	0.06	0.7	5
Selenium	1450	U	0.0074	0.0038	0.015	0.045	0.1	0.5	7
Zinc	1450	U	0.014	0.0098	< 0.50	< 0.50	4	50	200
Chloride	1220	U	130	42	250	570	800	15000	25000
Fluoride	1220	U	1.9	0.80	3.8	10	10	150	500
Sulphate	1220	U	440	96	880	1600	1000	20000	50000
Total Dissolved Solids	1020	N	1200	600	2300	7000	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	U	26	18	51	190	500	800	1000

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	7.8

Leachate Test Information	
Leachant volume 1st extract/l	0.335
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.322

### 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: 15264 CELSA A.P

<b>Chemtest Job No:</b> 19-13444 <b>Chemtest Sample ID:</b> 813480 <b>Sample Ref:</b> <b>Sample ID:</b> <b>Sample Location:</b> BH03 <b>Top Depth(m):</b> 0.50 <b>Bottom Depth(m):</b> 1.50 <b>Sampling Date:</b>							<b>Landfill Waste Acceptance Criteria Limits</b>			
							<b>Inert Waste Landfill</b>	<b>Stable, Non-reactive hazardous waste in non-hazardous Landfill</b>	<b>Hazardous Waste Landfill</b>	
<b>Determinand</b>	<b>SOP</b>	<b>Accred.</b>	<b>Units</b>							
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 (Mineral Oil)	2670	M	mg/kg							
Total (Of 17) PAH's	2700	N	mg/kg							
pH	2010	M								
Acid Neutralisation Capacity	2015	N	mol/kg							
<b>Eluate Analysis</b>								<b>Limit values for compliance leaching test using BS EN 12457 at L/S 10 l/kg</b>		
			<b>2:1 mg/l</b>	<b>8:1 mg/l</b>	<b>2:1 mg/kg</b>	<b>Cumulative mg/kg 10:1</b>				
Arsenic	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	2	25	
Barium	1450	U	0.041	0.045	< 0.50	< 0.50	20	100	300	
Cadmium	1450	U	< 0.00010	< 0.00010	< 0.010	< 0.010	0.04	1	5	
Chromium	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.5	10	70	
Copper	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	2	50	100	
Mercury	1450	U	< 0.00050	< 0.00050	< 0.0010	< 0.0050	0.01	0.2	2	
Molybdenum	1450	U	0.028	0.0070	0.056	0.11	0.5	10	30	
Nickel	1450	U	< 0.0010	< 0.0010	< 0.050	< 0.050	0.4	10	40	
Lead	1450	U	< 0.0010	< 0.0010	< 0.010	< 0.010	0.5	10	50	
Antimony	1450	U	0.0010	0.0012	< 0.010	0.012	0.06	0.7	5	
Selenium	1450	U	0.0079	0.0041	0.016	0.049	0.1	0.5	7	
Zinc	1450	U	0.017	0.0051	< 0.50	< 0.50	4	50	200	
Chloride	1220	U	98	25	200	400	800	15000	25000	
Fluoride	1220	U	2.6	2.0	5.2	21	10	150	500	
Sulphate	1220	U	820	170	1600	3000	1000	20000	50000	
Total Dissolved Solids	1020	N	1100	190	2200	3800	4000	60000	100000	
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-	
Dissolved Organic Carbon	1610	U	23	19	< 50	190	500	800	1000	

Solid Information	
Dry mass of test portion/kg	0.175
Moisture (%)	7.2

Leachate Test Information	
Leachant volume 1st extract/l	0.336
Leachant volume 2nd extract/l	1.400
Eluant recovered from 1st extract/l	0.360

### 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:
813478			BH01		A	Amber Glass 250ml
813478			BH01		A	Plastic Tub 1000g
813479			BH02		A	Amber Glass 250ml
813479			BH02		A	Plastic Tub 1000g
813480			BH03		A	Amber Glass 250ml
813480			BH03		A	Plastic Tub 1000g



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.
1450	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
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES
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.
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.
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.
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
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

SOP	Title	Parameters included	Method summary
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)
2760	Volatile Organic Compounds (VOCs) in Soils by Headspace GC-MS	Volatile organic compounds, including BTEX and halogenated Aliphatic/Aromatics.(cf. USEPA Method 8260)*please refer to UKAS schedule	Automated headspace gas chromatographic (GC) analysis of a soil sample, as received, with mass spectrometric (MS) detection of volatile organic compounds.
2815	Polychlorinated Biphenyls (PCB) ICES7Congeners in Soils by GC-MS	ICES7 PCB congeners	Acetone/Hexane extraction / GC-MS
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.
2930	Organic Matter	Organic Matter	Acid Dichromate digestion/Titration
640	Characterisation of Waste (Leaching)	Waste material including soil, sludges and granular waste	ComplianceTest for Leaching of Granular Waste Material and Sludge

## **Report Information**

### **Key**

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- 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"

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**

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- 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**

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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](mailto:customerservices@chemtest.com)