

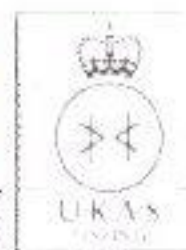


Our Ref: 17-05807

ENVIROCHEM

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Analysis Report

Client: Recycle Southern Ltd
Elbridge Farm Recycling Center
Chichester Road
Bognor Regis
West Sussex
PO21 5EF



Sample Details: 1 soil sample for Top Soil Analysis

Date report issued: 7 April 2017

Number of pages (including this one): 5

Accreditation

All analytes marked **M** have been analysed under the scope of our MCERTS accreditation

All analytes marked **U** have been analysed under the scope of our UKAS accreditation

All analytes marked **m** have been subcontracted and analysed under the scope of their MCERTS accreditation

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All results labelled with an asterisk (*) are non-conforming due to incorrect sample storage or handling. The result may be invalid.

All comments are beyond the scope of our accreditation.

Signed on behalf of Envirochem by an authorised signatory



Amy Hicks

Operations Co-ordinator



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HAVANT BOROUGH
COUNCIL

24 JUL 2017

RECEIVED

Soil Analysis Report

(Analysed in accordance with BS 3882:2015)

Client: Recycle Southern Ltd
Sample Lab Reference: Job: 17-05807-Samp. 15547-1
Site Details: Elbridge
Sample Point: 10mm Screened Soil
Date Sampled: Not Supplied
Date Analysis Started: 5 April 2017
Sample Description: Soil - Silt loam

Sampled By:

Client:

Date Received: 5 April 2017

Date Completed: 7 April 2017

Table 1 : Soil Texture (% m/m)

Texture	Method	Sample Result	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low Fert. Acidic	Low Fert. Calc.
Clay Content (%)	5.05	10			5 - 35			
Silt Content (%)	5.05	60			0 - 65			
Sand Content (%)	5.05	30			30 - 85			
Soil Texture Class	5.05	Silt loam	Note: see soil texture triangle in BS3882:2015 for allowed soils					

Table 2 : Soil Organic Matter Content (%)

Clay percentage	Method	Sample Result	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low Fert. Acidic	Low Fert. Calc.
Clay (5 - 20 %)	6.07	5.6	3 - 20	3 - 30	3 - 30	2 - 20	2 - 20	2 - 20
Clay (20 - 35 %)	6.07		5 - 20	5 - 30	5 - 30	2 - 20	2 - 20	2 - 20

Table 3 : Maximum Coarse Fragment Content (% (m/m))

Particle size	Sample Result	Multipurpose Topsoil Range	Specific Purpose Range				
			Acidic	Calcareous	Low Fertility	Low Fert. Acidic	Low Fert. Calc.
> 2 mm	26			0 - 30			
> 20 mm	0			0 - 10			
> 50 mm	0			0			

Table 4 : Chemical Analysis (air-dried, sieved (<2 mm) soil)

Analyte	Method	Sample Result	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low Fert. Acidic	Low Fert. Calc.
soil pH Value ^M	5.03	7.10	5.5 - 8.5	3.5 - 5.5	7.5 - 9.0	3.5 - 9.0	3.5 - 5.5	7.5 - 9.0
Calcium Carbonate (%)	6.07	2.4		-	> 1	-	-	> 1



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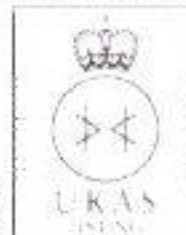


Table 5 : Available Plant Nutrient Content

Analyte	Method	Sample Result	Multipurpose Topsoil Range	Specific Purpose Range				
				Acidic	Calcareous	Low Fertility	Low Fert. Acidic	Low Fert. Calc.
Nitrogen (% m/m)		0.25	> 0.15	> 0.15	> 0.15	-	-	-
Extractable Phosphate (mg/l)	6.08	< 3.0	16 - 140	16 - 140	16 - 140	< 20	< 20	< 20
Extractable Potassium (mg/l)	6.08	828	121 - 1500	121 - 1500	121 - 1500	-	-	-
Extractable Magnesium (mg/l)	6.08	208	51 - 600	51 - 600	51 - 600	-	-	-
Carbon:Nitrogen Ratio		13.1	< 20:1	< 20:1	< 20:1	< 35:1	< 35:1	< 35:1
Soil Electrical Conductivity		1911.0	< 3300					
Exchangeable Sodium (%) 1)	6.08	---	< 15					

1) Need be measured only if the electrical conductivity is greater than 2800 us/cm

Table 6 : Phytotoxic Contaminants (by soil pH) (mg/kg) analyses carried out on air dried samples

	Method	Sample	Multipurpose and Specific purpose Topsoils		
			< 6.0	6.0 - 7.0	> 7.0
Soil pH Range			< 6.0	6.0 - 7.0	> 7.0
Zinc M	6.08	61.7	< 200	< 200	< 300
Copper M	6.08	16.9	< 100	< 135	< 200
Nickel M	6.08	17.6	< 60	< 75	< 110

Table 7 : Additional Physical characteristics

	Method	Sample
Water Content	6.01	16.9
Total Organic Carbon	6.07	3.3
Visible Contaminants		None

Comments: (including details of weeds and other visible contaminants - all comments are beyond the scope of our accreditation)

Results marked with an asterisk (*) are non conforming due to sampling handling time or conditions. Therefore the result may be invalid.





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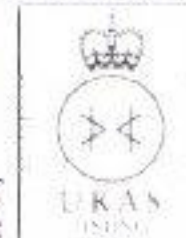


Table 8 : Additional metals (all results in mg/kg dry weight)

Analyte	Method	Sample	Soil Guideline Values		
			Residential	Allotment	Commercial
Arsenic M	5.03, 6.08	5.2	32 †	43 †	640 †
Antimony	5.03, 6.08	< 10.0	-	-	-
WS Boron	5.03, 6.08	4.0	-	3	-
Cadmium M	5.03, 6.08	1.7	10 †	1.8 †	230†
Chromium (total) M	5.03, 6.08	12.1	600 †††	600 †††	1000 †††
Cobalt	5.03, 6.08	8.4	-	-	-
Copper M	5.03, 6.08	16.9	2330 ††	524 ††	71700 ††
Mercury	5.03, 6.08	< 1.00	1.0 †	26 †	26 †
Molybdenum	5.03, 6.08	4.0	-	-	-
Nickel M	5.03, 6.08	17.6	130 †	230 †	1800 †
Lead M	5.03, 6.08	22.1	500 †††	500 †††	2000 †††
Selenium	5.03, 6.08	< 3.0	350 †	120 †	13000 †
Thallium	5.03, 6.08	< 5.0	-	-	-
Vanadium	5.03, 6.08	13.9	75 ††	18 ††	3160 ††
Zinc M	5.03, 6.08	61.7	3750 ††	618 ††	66500 ††

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Comments: (comments are beyond the scope of our accreditation)

Limits Notes:

†" are soil guideline values from Defra 2002 (information taken from: Using Soil Guideline Values: Science Report: SC050021/SGC introduction & www.environment-agency.gov.uk/clea)

'††' are LQM Soil Guideline Values

'†††' are ICRCL 59/83 trigger concentrations. These do not differentiate between domestic and allotments

For antimony values of less than 30mg/kg are typical of uncontaminated soil - as taken from 'Site investigation and materials problems', proc Conference on Reclamation of Contaminated Land, Eastbourne, Oct 79.





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Table 9: PAH in soil (all results in mg/kg dry weight)

Analyte	Method	Sample	Soil Guideline Values		
			Residential	Allotment	Commercial
PAH (total)	6.05	< 10.0	—	—	—
Naphthalene	6.05	< 1.0	8.7	23	1100
Acenaphthylene	6.05	< 1.0	850	160	100000
Acenaphthene	6.05	< 1.0	1000	200	100000
Fluorene	6.05	< 1.0	780	160	71000
Phenanthrene	6.05	< 1.0	380	90	23000
Anthracene	6.05	< 1.0	9200	2200	500000
Fluoranthene	6.05	< 1.0	670	290	23000
Pyrene	6.05	< 1.0	1600	620	54000
Benz(a)anthracene	6.05	< 1.0	5.9	10	97
Chrysene	6.05	< 1.0	9.3	12	140
Benzo(b)fluoranthene	6.05	< 1.0	7	13	100
Benzo(k)fluoranthene	6.05	< 1.0	7	13	100
Benzo(a)pyrene	6.05	< 0.1	1	2.1	14
Dibenz(a,h)anthracene	6.05	< 0.9	0.9	2.3	13
Benzo(g,h,i)perylene	6.05	< 1.0	47	160	660
Indeno(1,2,3-c,d)pyrene	6.05	< 1.0	4.2	7.1	62

Comments: (comments are beyond the scope of UKAS accreditation)

Limits are soil guideline values from Defra 2002 (information taken from: Using Soil Guideline Values: Science Report: SC050021/SGV introduction & www.environment-agency.gov.uk/clea)





Gen Ref: 17 05507
Your Ref: Allen

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Soil Analysis Report

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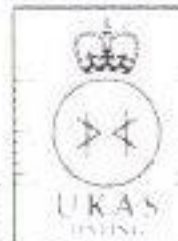


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Soil Analysis Report

Client: Recycle Southern Ltd

Site: Elbridge

Date Received: 5 April 2017

Date Completed: 7 April 2017

Sampled By: Client

Envirochem Job No. 17-05807

Date Issued: 7 April 2017

Sample				Results						
Lab Sample No.	Sampled Date + Time	Sample Details	Method Detection Limit Units Analysis	6.19	6.19	6.09	6.19	6.19	5.07, 6.02	
				1.0	2	1	0.1	0.02	1.0000	
				mg/kg phenol index	mg/kg chromate	% loss on ignition	mg/kg Sulphide	mg/kg Free Cyanide	mg/kg sulphate	
15547	/ /	10mm Screened Soil	Soil - Silt loam	2.5	< 2.0	5.2	0.10	0.030	981 M	

