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Analytical Report Number : 20-24088

Project / Site name:	Clarendon Road	Samples received on:	11/08/2020
Your job number:	6075	Sample instructed/ Analysis started on:	11/08/2020
Your order number:	S-RE6075-00005	Analysis completed by:	14/08/2020
Report Issue Number:	1	Report issued on:	14/08/2020
Samples Analysed:	5 leachate samples - 5 soil samples		

Signed: *A. Czerwińska*

Agnieszka Czerwińska

Technical Reviewer (Reporting Team)
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application of uncertainty of measurement would provide a range within which the true result lies. An estimate of measurement uncertainty can be provided on request.

Iss No 20-24088-1 Clarendon Road 6075

This certificate should not be reproduced, except in full, without the express permission of the laboratory.

The results included within the report relate only to the sample(s) submitted for testing.

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Your Order No: S-RE6075-00005

Lab Sample Number				1589198	1589199	1589200	1589201	1589202
Sample Reference				VS-K13	VS-K13-N	VS-L12	VS-L13	VS-L13-N
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2020	11/08/2020	11/08/2020	11/08/2020	11/08/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	N/A	NONE	5.1	0.14	0.66	0.13	0.21
Total mass of sample received	kg	0.001	NONE	1.9	1.4	1.4	1.4	1.3

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
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General Inorganics

Water Soluble SO ₄ (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.9	0.50	0.36	0.66	0.29
Water Soluble SO ₄ (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3800	1000	720	1300	570
Water Soluble SO ₄ (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1920	500	360	658	287
Ammonium as NH ₄	mg/kg	0.5	MCERTS	25	28	62	91	19



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Lab Sample Number				1589203	1589204	1589205	1589206	1589207
Sample Reference				VS-K13	VS-K13-N	VS-L12	VS-L13	VS-L13-N
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				11/08/2020	11/08/2020	11/08/2020	11/08/2020	11/08/2020
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Leachate Analysis)				Units	Limit of detection	Accreditation Status		

General Inorganics

Sulphate as SO ₄	mg/l	0.1	ISO 17025	375	5.2	128	162	28.0
Ammonium as NH ₄	µg/l	15	NONE	2300	470	5900	8000	820



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* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
1589198	VS-K13	None Supplied	None Supplied	Brown loam and sand with gravel and vegetation.
1589199	VS-K13-N	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.
1589200	VS-L12	None Supplied	None Supplied	Brown clay and sand.
1589201	VS-L13	None Supplied	None Supplied	Brown clay and sand.
1589202	VS-L13-N	None Supplied	None Supplied	Brown clay and sand with gravel and vegetation.

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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Water (PrW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Ammonium as NH ₄ in leachate	Determination of Ammonium/Ammonia/Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	NONE
Ammonium as NH ₄ in soil	Determination of Ammonium/Ammonia/Ammoniacal Nitrogen by the colorimetric salicylate/nitroprusside method, 10:1 water extraction.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L082-PL	W	MCERTS
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
D.O. for Gravimetric Quant if Screen/ID positive	Dependent option for Gravimetric Quant if Screen/ID positive scheduled.	In house asbestos methods A001 & A006.	A006-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
NRA Leachate Prep	10:1 extract with de-ionised water shaken for 24 hours then filtered.	In-house method based on National Rivers Authority	L020-PL	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate in leachates	Determination of sulphate in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS
Sulphate, water soluble, in soil (1hr extraction)	Sulphate, water soluble, in soil (1hr extraction)	In-house method	L038-PL	D	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.

For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.