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Analytical Report Number : 20-26156

Project / Site name:	Clarendon Road P3	Samples received on:	21/08/2020
Your job number:	6075	Samples instructed on/ Analysis started on:	21/08/2020
Your order number:	S-RE6075/00005	Analysis completed by:	26/08/2020
Report Issue Number:	1	Report issued on:	26/08/2020
Samples Analysed:	6 leachate samples - 6 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.



Analytical Report Number: 20-26156
Project / Site name: Clarendon Road P3

Your Order No: S-RE6075/00005

Lab Sample Number				1600275	1600276	1600277	1600278	1600279
Sample Reference				J10	J9	J10	J9	J10
Sample Number				West	Base	Base	West	East
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/08/2020	21/08/2020	21/08/2020	21/08/2020	21/08/2020
Time Taken				1200	1200	1200	1200	1200
Analytical Parameter (Leachate Analysis)				Units	Limit of detection	Accreditation Status		

General Inorganics

Sulphate as SO ₄	mg/l	0.1	ISO 17025	212	157	176	173	194
Ammonium as NH ₄	µg/l	15	NONE	28000	9200	1500	51000	23000

U/S = Unsuitable Sample I/S = Insufficient Sample



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Your Order No: S-RE6075/00005

Lab Sample Number				1600280
Sample Reference				J9
Sample Number				East
Depth (m)				None Supplied
Date Sampled				21/08/2020
Time Taken				1200
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status	

General Inorganics

Sulphate as SO ₄	mg/l	0.1	ISO 17025	151
Ammonium as NH ₄	µg/l	15	NONE	1600

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 20-26156
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 Your Order No: S-RE6075/00005

Lab Sample Number				1600269	1600270	1600271	1600272	1600273
Sample Reference				J10	J9	J10	J9	J10
Sample Number				West	Base	Base	West	East
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/08/2020	21/08/2020	21/08/2020	21/08/2020	21/08/2020
Time Taken				1200	1200	1200	1200	1200
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	16	11	19	19	15
Total mass of sample received	kg	0.001	NONE	1.3	1.6	1.5	1.5	1.5

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 SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.2	0.98	1.1	1.6	1.7
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	2300	2000	2200	3200	3400
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1160	977	1110	1620	1720
Ammonium as NH4	mg/kg	0.5	MCERTS	360	89	19	670	240

U/S = Unsuitable Sample I/S = Insufficient Sample



Analytical Report Number: 20-26156
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 Your Order No: S-RE6075/00005

Lab Sample Number				1600274
Sample Reference				J9
Sample Number				East
Depth (m)				None Supplied
Date Sampled				21/08/2020
Time Taken				1200
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	N/A	NONE	18
Total mass of sample received	kg	0.001	NONE	1.4

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

Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	1.5
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	3000
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1500
Ammonium as NH4	mg/kg	0.5	MCERTS	18

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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 *
1600269	J10	West	None Supplied	Brown clay.
1600270	J9	Base	None Supplied	Brown clay and loam with gravel.
1600271	J10	Base	None Supplied	Brown clay.
1600272	J9	West	None Supplied	Brown clay.
1600273	J10	East	None Supplied	Brown clay and sand.
1600274	J9	East	None Supplied	Brown clay.



Analytical Report Number : 20-26156
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Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
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
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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Ammonium as NH4 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 NH4 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
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
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
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.