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Analytical Report Number : 20-31267

Project / Site name:	Clarendon Road P3	Samples received on:	22/09/2020
Your job number:	6075	Samples instructed on/ Analysis started on:	22/09/2020
Your order number:	S-RE6075/00005	Analysis completed by:	25/09/2020
Report Issue Number:	1	Report issued on:	25/09/2020
Samples Analysed:	9 leachate samples - 9 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: 20-31267
Project / Site name: Clarendon Road P3

Your Order No: S-RE6075/00005

Lab Sample Number				1626950	1626951	1626952	1626953
Sample Reference				VS-L7	VS-L8	VS-J8-B	VS-K8
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/09/2020	21/09/2020	21/09/2020	21/09/2020
Time Taken				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	20.5	38.9	106	33.1
Ammonium as NH ₄	µg/l	15	NONE	76	590	16000	4000

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



Analytical Report Number: 20-31267
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Your Order No: S-RE6075/00005

Lab Sample Number				1626954	1626955	1626956	1626957
Sample Reference				VS-J9-E	VS-J8-W	VS-J9-B	VS-J9-W
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/09/2020	21/09/2020	21/09/2020	21/09/2020
Time Taken				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	98.7	109	75.3	133
Ammonium as NH ₄	µg/l	15	NONE	31000	1600	1400	3200

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Analytical Report Number: 20-31267
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Lab Sample Number				1626958
Sample Reference				VS-J8-E
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/09/2020
Time Taken				None Supplied
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status	

General Inorganics

Sulphate as SO ₄	mg/l	0.1	ISO 17025	108
Ammonium as NH ₄	µg/l	15	NONE	18000

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Analytical Report Number: 20-31267
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 Your Order No: S-RE6075/00005

Lab Sample Number	1626941	1626942	1626943	1626944
Sample Reference	VS-L7	VS-L8	VS-J8-B	VS-K8
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled	21/09/2020	21/09/2020	21/09/2020	21/09/2020
Time Taken	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
Moisture Content	%	N/A	NONE	2.2	2.6	17	18
Total mass of sample received	kg	0.001	NONE	2	1.8	1.4	1.6

Asbestos in Soil	Type	N/A	ISO 17025	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	0.79	0.58	0.85	0.54
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1600	1200	1700	1100
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	789	582	851	538
Ammonium as NH4	mg/kg	0.5	MCERTS	2.7	5.1	180	54

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



Analytical Report Number: 20-31267
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 Your Order No: S-RE6075/00005

Lab Sample Number				1626945	1626946	1626947	1626948
Sample Reference				VS-J9-E	VS-J8-W	VS-J9-B	VS-J9-W
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied	None Supplied	None Supplied
Date Sampled				21/09/2020	21/09/2020	21/09/2020	21/09/2020
Time Taken				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
Moisture Content	%	N/A	NONE	16	15	15	16
Total mass of sample received	kg	0.001	NONE	1	1.5	1.1	1

Asbestos in Soil	Type	N/A	ISO 17025	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	1.1	0.93	0.9	0.88
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	2200	1900	1800	1800
Water Soluble SO4 (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	1090	928	899	880
Ammonium as NH4	mg/kg	0.5	MCERTS	370	30	170	34

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

Analytical Report Number: 20-31267
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 Your Order No: S-RE6075/00005

Lab Sample Number				1626949
Sample Reference				VS-J8-E
Sample Number				None Supplied
Depth (m)				None Supplied
Date Sampled				21/09/2020
Time Taken				None Supplied
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	N/A	NONE	13
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 SO ₄ (2:1 Leach. Equiv.) 1hr extraction	g/l	0.00125	MCERTS	0.92
Water Soluble SO ₄ (2:1 Leach. Equiv.) 1hr extraction	mg/kg	2.5	MCERTS	1800
Water Soluble SO ₄ (2:1 Leach. Equiv.) 1hr extraction	mg/l	1.25	MCERTS	918
Ammonium as NH ₄	mg/kg	0.5	MCERTS	300

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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 *
1626941	VS-L7	None Supplied	None Supplied	Brown sand with gravel.
1626942	VS-L8	None Supplied	None Supplied	Brown sand with gravel.
1626943	VS-J8-B	None Supplied	None Supplied	Light brown clay and sand.
1626944	VS-K8	None Supplied	None Supplied	Brown clay and sand.
1626945	VS-J9-E	None Supplied	None Supplied	Brown clay and sand.
1626946	VS-J8-W	None Supplied	None Supplied	Brown clay and sand.
1626947	VS-J9-B	None Supplied	None Supplied	Brown clay and sand.
1626948	VS-J9-W	None Supplied	None Supplied	Brown clay and sand.
1626949	VS-J8-E	None Supplied	None Supplied	Brown clay and sand.



Analytical Report Number : 20-31267
Project / Site name: Clarendon Road P3

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
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
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.