APPENDIX I

Geotechnical Laboratory Results

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Analytical Report Number : 21-21038

Project / Site name:	22 Lawn Road	**Samples received on:**	05/11/2021
Your job number:	CG 39038	**Samples instructed on/ Analysis started on:**	05/11/2021
Your order number:	8336	**Analysis completed by:**	15/11/2021
Report Issue Number:	1	**Report issued on:**	15/11/2021
Samples Analysed:	4 soil samples		

Signed:

Joanna Wawrzeczko
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

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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.

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Project / Site name: 22 Lawn Road
Your Order No: 8336

Lab Sample Number				2072954	2072955	2072956	2072957
Sample Reference				TP01	TP01	TP03	TP05
Sample Number				2	3	2	1
Depth (m)				0.30	1.10	0.30	0.30
Date Sampled				07/10/2021	07/10/2021	07/10/2021	07/10/2021
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	%	0.01	NONE	18	16	20	19
Total mass of sample received	kg	0.001	NONE	2.0	2.0	2.0	2.0
General Inorganics							
pH - Automated	pH Units	N/A	MCERTS	7.8	8.1	8.0	8.1
Total Sulphate as SO4	mg/kg	50	MCERTS	1300	390	750	260
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.73	0.086	0.060	0.096
Total Sulphur	mg/kg	50	MCERTS	590	220	500	150

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

Sample Deviation Report

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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 *
2072954	TP01	2	0.3	Brown clay and sand with gravel.
2072955	TP01	3	1.1	Brown clay and sand with gravel.
2072956	TP03	2	0.3	Brown clay and sand with gravel.
2072957	TP05	1	0.3	Brown clay and sand.

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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
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Total sulphate (as SO4 in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS
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
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES.	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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Sample Deviation Report

Analytical Report Number : 21-21038
Project / Site name: 22 Lawn Road

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
TP01	2	S	2072954	c	pH in soil (automated)	L099-PL	c
TP01	3	S	2072955	c	pH in soil (automated)	L099-PL	c
TP03	2	S	2072956	c	pH in soil (automated)	L099-PL	c
TP05	1	S	2072957	c	pH in soil (automated)	L099-PL	c

Key: **a** - No sampling date **b** - Incorrect container
c - Holding time **d** - Headspace **e** - Temperature

BS EN ISO 17892-12 : 2018

SUMMARY OF LIQUID AND PLASTIC LIMIT TESTS

Location	Depth m	Sample Ref	Sample Type	Description	Water Content BS EN ISO 17892-1 : 2014 %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Percentage Passing 425µm %	Atterberg Classification	Test Type	Sample Condition
TP01	0.30	2	D	Orangish brown mottled pink and grey gravelly silty CLAY. Gravel is fine to medium.	27.8	52	22	30	89	CH	2	3
TP01	1.10	3	D	Greyish brown mottled orangish brown gravelly sandy silty CLAY. Sand is fine. Gravel include brick fragments.	19.0	40	19	21	61	CI	2	3
TP03	0.30	2	D	Dark grey gravelly silty CLAY. Gravel is fine to medium, include brick fragments.	29.7	45	26	19	62	CI	2	3
TP05	0.30	1	D	Orangish brown mottled pink and grey gravelly sandy silty CLAY. Gravel is fine to medium and includes brick fragments.	30.5	53	21	32	85	CH	2	3

Test Type:
1 - 1 point 80g / 30° fall cone method.
2 - 4 point 80g / 30° fall cone method.
3 - Non plastic determination.

Sample condition:
1 - As Received
2 - Air Dried
3 - Washed & Air Dried

Checked and Approved by:

S Burke - Senior Technician
04/11/2021

Project Number:

GEO / 34119

Project Name:

22 LAWN ROAD
CG/39038

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