ST Consult
Environmental & Geotechnical

Factual Site Investigation Report

Desk Studies | Risk Assessments | Site Investigations | Geotechnical | Contamination Investigations | Remediation Design and Validation

Site: No39 Priory Road, London

Client: Alfredo Michelucci

Report Date: 6th January 2020

Project Reference: JN1512

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Company Registration No: 02183217 VAT No: 367 4740 26

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A INTRODUCTION

1 Authority

Our authority for carrying out this work was given by way of a completed project order form from Alfredo Michelucci, dated 19th November 2020.

2 Location

The site is located at No39 Priory Road in Central London. The approximate National Grid Reference for the centre of the site is TQ 25596 83939.

3 Background Information

We understand that it is currently an occupied house. Development proposals are not known at this stage, although thought to include the construction of a new basement.

4 Object

This is a factual ground investigation report only, with no interpretation of the data.

The object of the investigation was to carry out a geotechnical investigation only to confirm ground conditions.

5 Scope

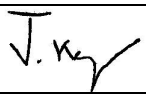
This report presents our exploratory hole log and limited geotechnical test results only. No interpretation is given.

A formal desk study, wider geotechnical and contamination assessment were outside the requested scope of works. Soil waste characterisation also did not form part of our brief for this investigation.

As with any site there may be differences in soil conditions between exploratory hole positions.

This factual ground investigation report is not an engineering design and the figures and calculations contained within should be used by the Engineer, taking note that variations will apply, according to variations in design loading, in techniques used, and in site conditions. Our figures therefore should not supersede the Engineer's design.

The site investigation was conducted and this report has been prepared for the sole internal use and reliance of Alfredo Michelucci and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorization of Southern Testing Laboratories Limited. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

	
J. Kelly PhD	C. Ward BSc FGS
(Countersigned)	(Signed)

For and on behalf of Southern Testing Laboratories Limited

B SETTING

6 The Site

The site forms a detached house in Camden, London. The site and surrounding area itself is generally flat.

7 Geology

The British Geological Survey Map indicates that the site geology consists of London Clay Formation.

London Clay is a well-known stiff (high strength) blue-grey, fissured clay, which weathers to a brown colour near the surface. It contains thin layers of nodular calcareous mudstone - "claystone" - from place to place, and crystals of water clear calcium sulphate (selenite) are common.

C GROUND INVESTIGATION

8 Investigation Method

The fieldwork was undertaken on the 8th December 2020. In general accordance with the original enquiry, the strategy for the work comprised the following:-

- Two No. window sampler boreholes using hand-held equipment to a maximum depth of 4.20m bgl (WS's 1 and 2).
- The window sampler borehole positons were started with a 1.0m deep hand-dug services inspection pit.
- Small disturbed samples were taken from the boreholes, at regular depths.

D ENCOUNTERED GROUND CONDITIONS

The soils encountered are described in detail on the attached exploratory hole log (Appendix B).

9 Soils as Found

The soils encountered are summarised in the table below.

Depth	Soil Type	Description
-0.70/0.90m	Made Ground	Slab over light grey sand and concrete Over Black dark brown silty slightly sandy gravelly CLAY with concrete, glass and brick fragments
-4.20m+	CLAY	Firm to stiff orange-brown mottled grey silty CLAY

10 Groundwater Strikes

Groundwater was not encountered during the site investigation, to a maximum depth of 4.00m.

E IN-SITU FIELD TESTING

The following in-situ test and sampling methods were employed where possible. Descriptions are given in Appendix B.

- Disturbed Sampling

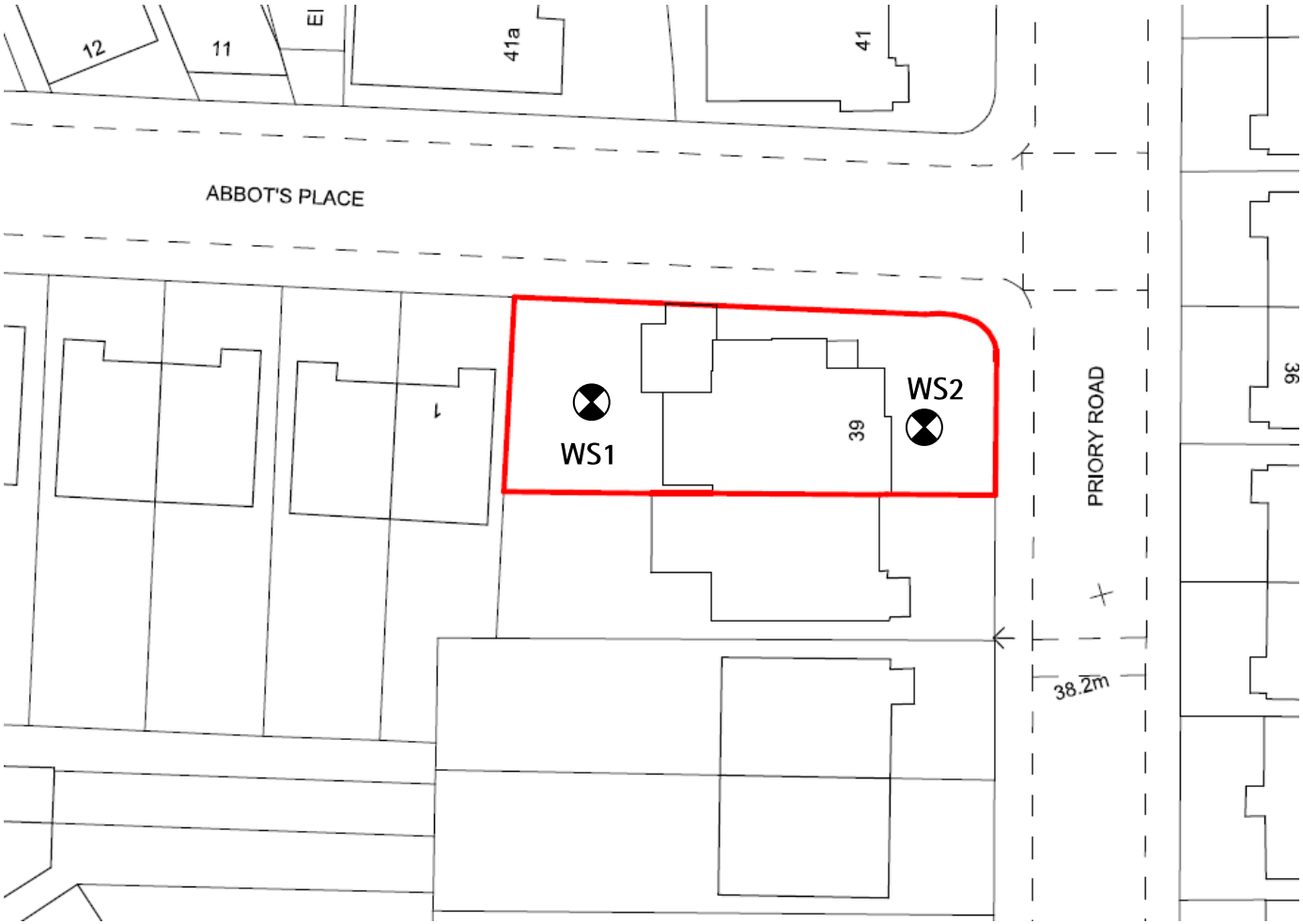
F GEOTECHNICAL LABORATORY TESTS

The following tests were carried out on selected samples, as specified by the client's representative LBHGEO. Test method references and results are given in Appendix C. The laboratory testing was completed by our internal laboratory.

- Moisture Content and Plasticity Index
- pH and water soluble sulphate

APPENDIX A

Site & Fieldwork Location Plans



NB: Positions of Boreholes and/or Trial Pits are only indicative unless dimensioned

Site: 39 Priory Road, Camden	STL: JN1512	Fig No: 1
Date: 08 December 2020		

Southern Testing

Southern Testing: Keeble House, Stuart Way, East Grinstead, West Sussex RH19 4QA
ST Consult: Twigden Barns, Brixworth Road, Creaton, Northampton NN6 8NN

ST Consult

RIBA Chartered Practice

Revision History:

Date	Description	Rev
04/06/2019		01
24/10/2019	Planning Amendments	02
12/02/2020	Planning Ammendments	03
Work in Progress	Client Changes	04 - WIP

Work in Progress

2PM Architects
124 Boundary Road, London, NW8 0RH
020 7604 4339
www.2pm-architects.co.uk

Project:
39 Priory Road
NW6 4NN

Scale at A3: 1:500

Date: 02/06/2020

Name: Existing Block Plan

PROJ. orig. zone level type role number

227 - 2PM - XX - XX - DR - A - 00102

Stage: Planning

Revision: 04 - WIP

APPENDIX B

Engineers Logs

Key to Exploratory Hole Logs

General

All soil & rock descriptions in general accordance with BS5930:2015 + A2:2010, BS EN ISO 14688 & BS EN ISO 14689
The Geology Code only entered where positive identification of the sampled strata has been made

Sampling

ES	Environmental Sample (taken in appropriate sampling container)
D	Disturbed Sample
B	Bulk Sample
LB	Large Bulk for Earthworks testing
C	Core Sample
U	Undisturbed Sample (number of blows indicated in results column)
SPTLS	SPT Liner Sampler
P	Piston Sample
W	Water Sample

Insitu Tests

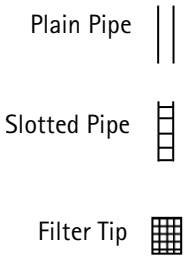
SPT	Standard Penetration Test in accordance with BS EN ISO 22476-3:2005+A1:2011
SPT (C)	Cone Penetration Test in accordance with BS EN ISO 22476-3:2005+A1:2011
PT	Penetration Test - STL documented equivalent SPT N Value
PPT	Perth Penetration Test - STL in house documented method (N Value)
UCS (⊥)	Unconfined Compressive Strength measure by hand penetrometer (kN/m^2)
IVN	Hand Vane (kPa)
PID	Photo Ionisation Detector Results (ppm)
MEXE	Mexecone CBR Result

Drilling Records

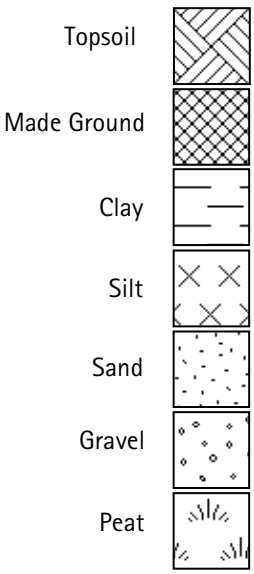
Depth to standing water level	▼
Depth to water strike	▽
TCR	Total Core Recovery (%)
SCR	Solid Core Recovery (%)
RQD	Rock Quality Index (%)
FI	Fracture Index

Backfill Symbols

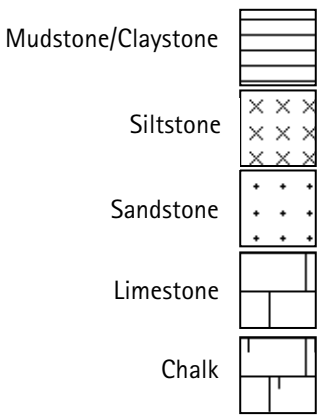
Pipe Symbols



Principal Soil Types



Principal Rock Types



Southern Testing ST Consult

www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020

Start - End Date	Project ID:	Hole Type:	WS1
08/12/2020	JN1512	WS	Sheet 1 of 1

Project Name:	39 Priory Road	Remarks:	Co-ordinates:	Level:	Logger:
					Callum Ward
Location:	Camden				
Client:	Alfredo Michelucci				

Well	Water Strikes	Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
		Depth (m bgl)	Type	Results					
						(0.05)		0.05	MADE GROUND (. Slab.).
						(0.15)			MADE GROUND (Light grey SAND with concrete).
								0.20	MADE GROUND (Black dark brown silty slightly sandy gravelly CLAY with concrete and brick fragments).
		0.50	ES			(0.50)			
								0.70	Firm to stiff orange brown mottled grey silty CLAY with occasional rootlets.
		0.90	D						
		1.50	D						
						(3.30)			
		2.50	D						
		3.50	D						
								4.00	End of Borehole at 4.00m

1 2 3 4 5

Hole Details		Casing Details		Waterstrike (m bgl)						Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth Strike	Depth Casing	Depth Sealed	Rose to:	Time (mins)	From	To	Time	Remarks

Southern Testing ST Consult

www.southerntesting.co.uk tel:01342 333100 www.stconsult.co.uk tel:01604 500020

Start - End Date	Project ID:	Hole Type:	WS2
08/12/2020	JN1512	WS	Sheet 1 of 1

Project Name:	39 Priory Road	Remarks:	Co-ordinates:	Level:	Logger:
					Callum Ward
Location:	Camden				
Client:	Alfredo Michelucci				

Well	Water Strikes	Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
		Depth (m bgl)	Type	Results					
						(0.05)		0.05	MADE GROUND (. Slab.).
						(0.05)		0.10	MADE GROUND (Light grey SAND with concrete).
						(0.80)			MADE GROUND (Black dark brown silty sandy gravelly CLAY with concrete, brick fragments and glass).
		0.80	ES					0.90	Stiff orange brown mottled grey silty slightly sandy CLAY.
		1.20	D						
		2.20	D						
						(3.30)			
		3.20	D						
								4.20	End of Borehole at 4.20m

1 2 3 4 5

Hole Details		Casing Details		Waterstrike (m bgl)						Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth Strike	Depth Casing	Depth Sealed	Rose to:	Time (mins)	From	To	Time	Remarks

APPENDIX C

Geotechnical Test Results

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client:	Southern Testing Laboratories Ltd	Client Reference:	JN1512
Client Address:	Keeble House, Stuart Way, East Grinstead, West Sussex, RH19 4QA	Job Number:	20-46757
		Date Sampled:	Not Given
		Date Received:	09/12/2020
Contact:	Chris Nolan	Date Tested:	14/12/2020
Site Address:	39 Priory Road, Camden	Sampled By:	Client

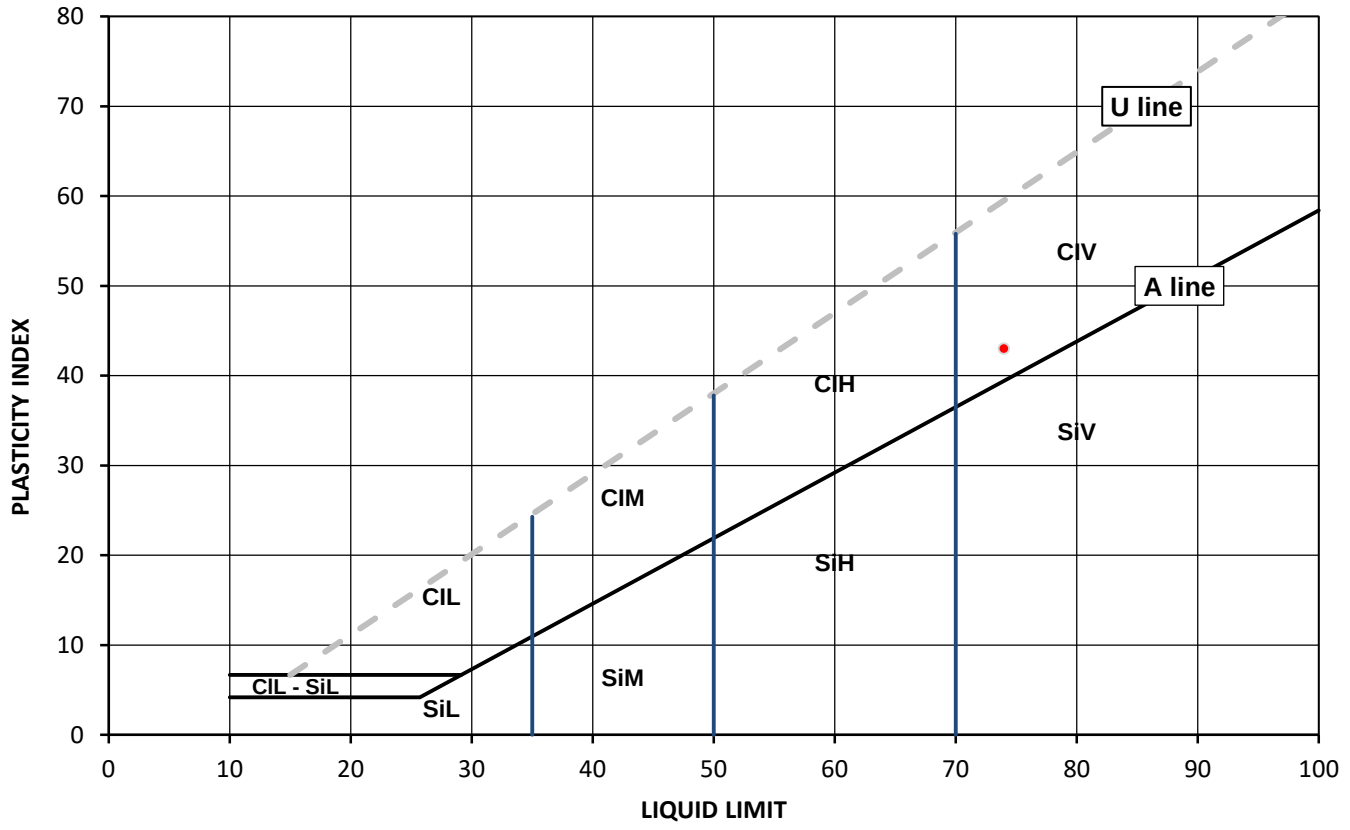
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1713682	Depth Top [m]:	1.50
Hole No.:	WS1	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown slightly gravelly CLAY		

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
30	74	31	43	95



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 23/12/2020

GF 236.10

TEST CERTIFICATE

Liquid and Plastic Limits

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Tested in Accordance with: BS 1377-2: 1990: Clause 4.3 and 5

Client:	Southern Testing Laboratories Ltd	Client Reference:	JN1512
Client Address:	Keeble House, Stuart Way, East Grinstead, West Sussex, RH19 4QA	Job Number:	20-46757
		Date Sampled:	Not Given
		Date Received:	09/12/2020
Contact:	Chris Nolan	Date Tested:	14/12/2020
Site Address:	39 Priory Road, Camden	Sampled By:	Client

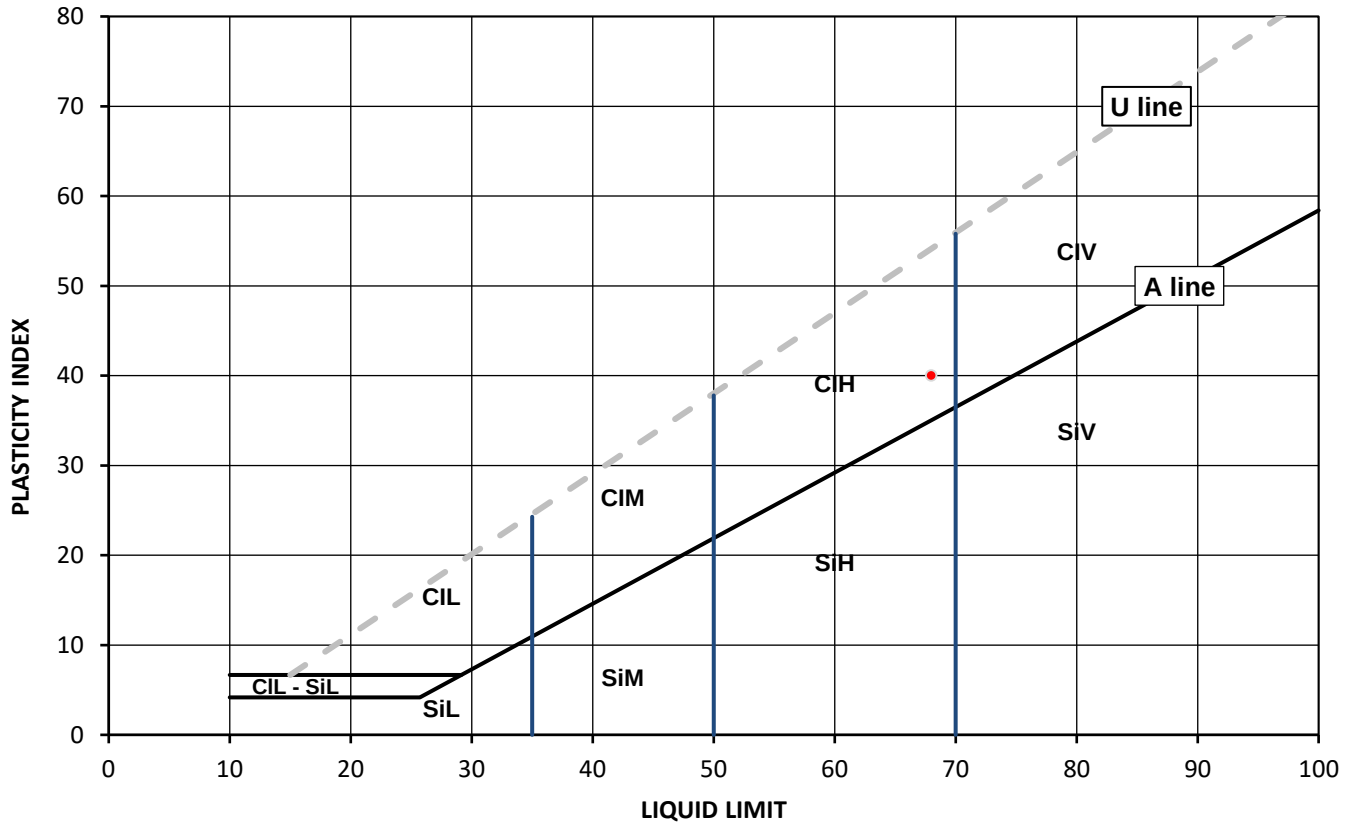
Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test Results:

Laboratory Reference:	1713683	Depth Top [m]:	3.20
Hole No.:	WS2	Depth Base [m]:	Not Given
Sample Reference:	Not Given	Sample Type:	D
Soil Description:	Brown slightly gravelly CLAY		

Sample Preparation: Tested after washing to remove >425um

As Received Moisture Content [W] %	Liquid Limit [WL] %	Plastic Limit [Wp] %	Plasticity Index [Ip] %	% Passing 425µm BS Test Sieve
27	68	28	40	95



Legend, based on BS EN ISO 14688 2:2018 Geotechnical investigation and testing – Identification and classification of soil

		Plasticity		Liquid Limit
Cl	Clay	L	Low	below 35
Si	Silt	M	Medium	35 to 50
		H	High	50 to 70
		V	Very high	exceeding 70
		O	Organic	append to classification for organic material (eg ClHO)

Note: Moisture Content by BS 1377-2: 1990: Clause 3.2

Remarks:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 23/12/2020

GF 236.10

SUMMARY REPORT

Summary of Classification Test Results

i2 Analytical Ltd
Unit 8 Harrowden Road
Brackmills Industrial Estate
Northampton NN4 7EB

4041

Client: Southern Testing Laboratories Ltd

Client Address: Keeble House, Stuart Way,
East Grinstead, West Sussex,
RH19 4QA

Contact: Chris Nolan

Site Address: 39 Priory Road, Camden

Tested in Accordance with:

Moisture Content by BS 1377-2: 1990: Clause 3.2; Water Content by BS EN 17892-1: 2014; Atterberg by BS 1377-2: 1990: Clause 4.3 (4 Point Test), Clause 4.4 (1 Point Test) and 5; PD by BS 1377-2: 1990: Clause 8.2

Client Reference: JN1512
Job Number: 20-46757
Date Sampled: Not Given
Date Received: 09/12/2020
Date Tested: 14/12/2020
Sampled By: Client

Testing carried out at i2 Analytical Limited, ul. Pionierow 39, 41-711 Ruda Slaska, Poland

Test results

Laboratory Reference	Hole No.	Sample				Description	Remarks	Moisture Content [W]	Water Content [W]	Atterberg				Density			Total Porosity#		
		Reference	Depth Top m	Depth Base m	Type			%	%	% Passing 425um %	WL %	Wp %	Ip %	bulk Mg/m3	dry Mg/m3	PD Mg/m3	%		
1713682	WS1	Not Given	1.50	Not Given	D	Brown slightly gravelly CLAY	Atterberg 4 Point	30		95	74	31	43						
1713683	WS2	Not Given	3.20	Not Given	D	Brown slightly gravelly CLAY	Atterberg 4 Point	27		95	68	28	40						

Note: # Non accredited; NP - Non plastic

Comments:

Signed:

Szczepan Bielatowicz
PL Deputy of Head of Geotechnical Section
for and on behalf of i2 Analytical Ltd

Date Reported: 23/12/2020

GF 238.12

Chris Nolan
Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100
f: 01342 410321
e: contamresults@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 20-46767

Project / Site name:	39 Priory Road, Camden	**Samples received on:**	09/12/2020
Your job number:	JN1512	**Samples instructed on/ Analysis started on:**	09/12/2020
Your order number:		**Analysis completed by:**	18/12/2020
Report Issue Number:	1	**Report issued on:**	18/12/2020
Samples Analysed:	2 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

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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.

Analytical Report Number: 20-46767
Project / Site name: 39 Priory Road, Camden

Lab Sample Number				1713775	1713776
Sample Reference				WS1	WS2
Sample Number				None Supplied	None Supplied
Depth (m)				1.50	3.20
Date Sampled				Deviating	Deviating
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	19	18
Total mass of sample received	kg	0.001	NONE	0.3	0.5
General Inorganics					
pH - Automated	pH Units	N/A	MCERTS	8.5	8.1
Water Soluble SO4 16hr extraction (2:1 Leachate Equivale	g/l	0.00125	MCERTS	0.27	0.18

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

Analytical Report Number : 20-46767
Project / Site name: 39 Priory Road, Camden

* 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 *
1713775	WS1	None Supplied	1.5	Brown clay with gravel.
1713776	WS2	None Supplied	3.2	Brown clay and sand.

Analytical Report Number : 20-46767
Project / Site name: 39 Priory Road, Camden

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
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

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.

Sample Deviation Report

Analytical Report Number : 20-46767
Project / Site name: 39 Priory Road, Camden

Sample ID	Other ID	Sample Type	Lab Sample Number	Sample Deviation	Test Name	Test Ref	Test Deviation
WS1	None Supplied	S	1713775	a	None Supplied	None Supplied	None Supplied
WS2	None Supplied	S	1713776	a	None Supplied	None Supplied	None Supplied

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