

# SOIL ANALYSIS

## for Subsidence Management Services

**54 Patshull Road, London, NW5 2LD**

Client: Subsidence Management Services  
Client Contact: Peter Hughes  
Claim Number: [REDACTED]  
Policy Holder: [REDACTED]  
Report Date: 26 March 2019  
Our Ref: [REDACTED]  
Laboratory Ref: [REDACTED]

Compiled By: [REDACTED]  
Checked By: [REDACTED]

Date samples received: 31 January 2019  
Moisture Content Test Date: 13 February 2019  
Atterberg Limits Test Date: 14 March 2019  
Suction Test Commenced: 13 February 2019  
Suction Test Completed: 27 February 2019  
Days in Contact: 7

#### Notes relating to soils testing

Unless otherwise stated, all soils testing was undertaken at Environmental Services' soils laboratory at unit 10H Maybrook Business Park, B76 1AL.

Soil samples have been prepared in accordance with BS1377:Part 1: 2016 Section 7

Descriptions of soil samples within the laboratory have been undertaken generally in accordance with BS5930:2015

Following the issue of this soil analysis report, samples will be retained for 1 month should additional testing, or referencing, be required. It should be noted that any tests undertaken on soils retained subsequent to the issue of this report may not give an accurate indication of the in-situ conditions of the sample.

Natural Moisture Content Tests are undertaken in accordance with ISO 17892:Part 1:2014

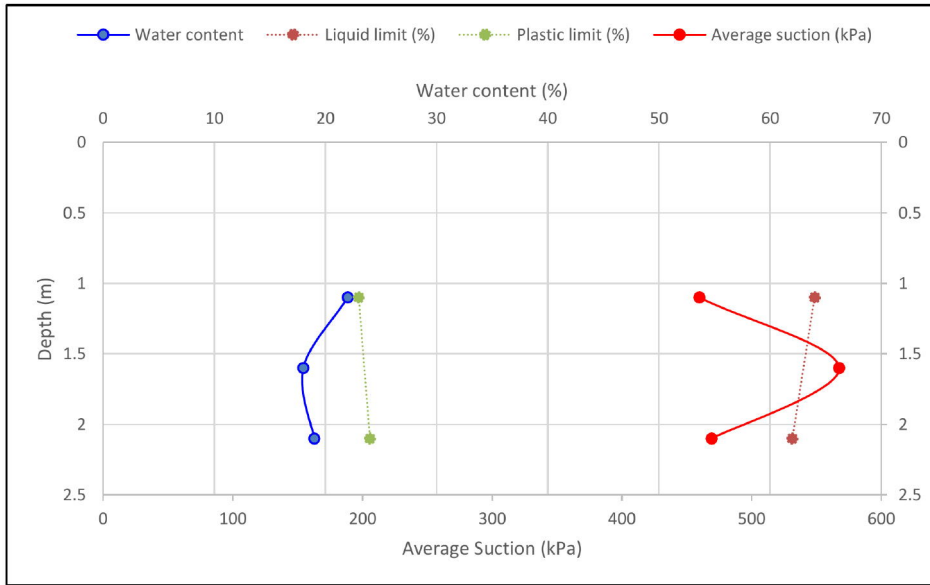
The Liquid Limit test is undertaken in accordance with BS1377:Part 2:1990 Section 4.4

The Plastic Limit test and the determination of the Plasticity Index is undertaken in accordance with BS1377:Part 2:1990 Section 5

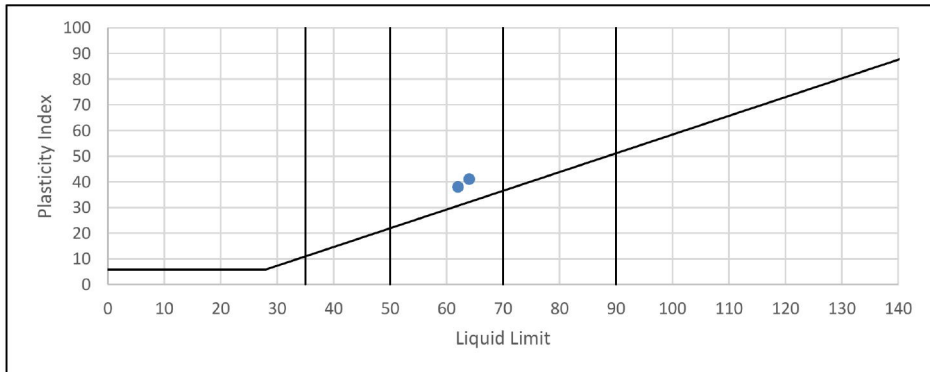
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Samples from BH1

Lab Ref	Depth (m)	MC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
001	1.1	22	64	23	41	100	41	459.738	Stiff brown CLAY with rare gravel, organic material and charcoal. Gravel is fine
002	1.6	18						567.588	Stiff brown CLAY with rare gravel, sand, organic material and charcoal. Gravel is fine
003	2.1	19	62	24	38	100	38	469.134	Stiff brown CLAY with rare gravel, sand, organic material and charcoal. Gravel is fine and medium.



Plasticity Chart for Casagrande Classification



**References and Interpretation**

The following provides a brief interpretation of the test results by comparison of the results to published classifications. The Atterberg Limit test may be used to classify the plasticity of soils; the plasticity classes defined in BS5930:1999 "Code of Practice for Site Investigations" are as follows.

CL (ML)	CLAY and CLAY/SILT of Low plasticity
CI (MI)	CLAY and CLAY/SILT of Intermediate plasticity
CH (MH)	CLAY and CLAY/SILT of High plasticity
CV (MV)	CLAY and CLAY/SILT of Very High plasticity
CE (ME)	CLAY and CLAY/SILT of Extremely High plasticity
O	The letter O is added to prefixes to symbolise a significant proportion of organic matter.
NP	Non-plastic

The Plasticity Index (PI) Result obtained from the Atterberg Limit tests may also be used to classify the potential for volume change of fine soils, in accordance with the National House Building Council's standards - Chapter 4.2 (2003) "Building Near Trees", as summarised below.

Modified PI < 10	Non Classified.
Modified PI = 10 to <20	Low volume change potential.
Modified PI = 20 to <40	Medium volume change potential.
Modified PI = 40 or greater	High volume change potential.

The 2003 edition of Chapter 4.2 also permits use of the Plasticity Index without modification. The classifications for this are grouped by soil type (soils with similar visual soils description and using unmodified Plasticity Indices.