

# SOIL ANALYSIS

## for Subsidence Management Services

### 2 Honeybourne Road, London, NW6 1JJ

Client: Subsidence Management Services  
Client Contact: Cyril Nazareth  
Claim Number: [REDACTED]  
Policy Holder: Mrs Maria Templeton  
Report Date: 5 August 2019  
Our Ref: [REDACTED]  
Laboratory Ref: [REDACTED]

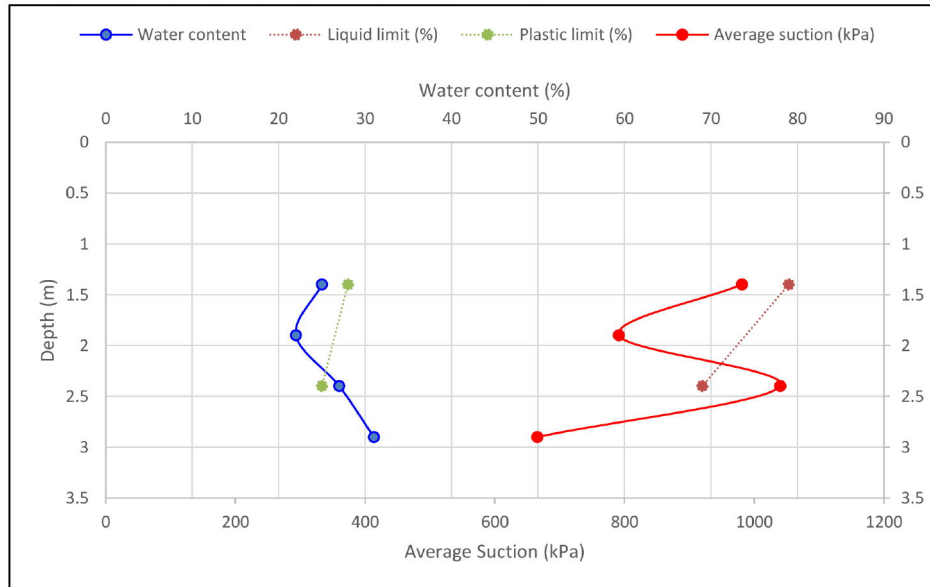
Compiled By: Signed: [REDACTED]  
Name: Saira Dougan  
Position: Laboratory Technician

Checked By: Signed: [REDACTED]  
Name: Bob Walker  
Position: Laboratory Manager

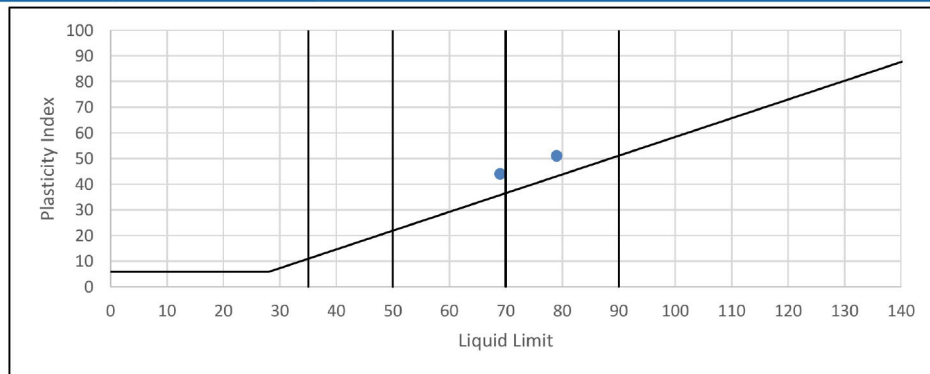
Date samples received: 27<sup>th</sup> June 2019  
Moisture Content Test Date: 5<sup>th</sup> July 2019  
Atterberg Limits Test Date: 9<sup>th</sup> July 2019  
Suction Test Commenced: 26<sup>th</sup> July 2019  
Suction Test Completed: 2<sup>nd</sup> August 2019  
Days in Contact: 7

Samples from BH1

Lab Ref	Depth (m)	MC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
001	1.4	25	79	28	51	100	51	980.897	Stiff brown mottled slightly sandy CLAY with rare gravel. Gravel is fine
002	1.9	22						791.347	Stiff brown mottled sandy CLAY with rare gravel. Gravel is fine
003	2.4	27	69	25	44	100	44	1040.24	Firm brown/orange-brown mottled sandy CLAY with rare gravel. Gravel is fine
004	2.9	31						665.488	Soft to firm brown mottled sandy CLAY with rare gravel. Gravel is fine

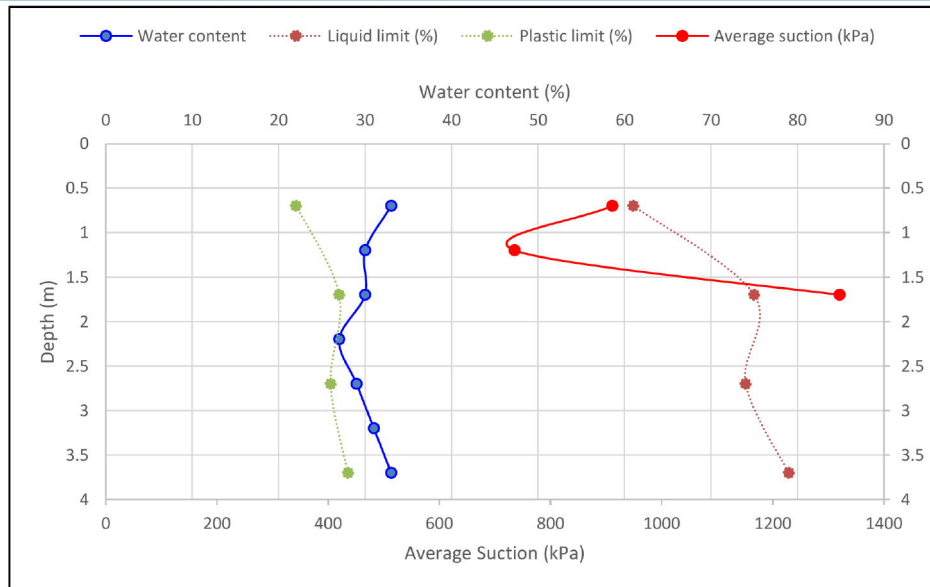


Plasticity Chart for Casagrande Classification

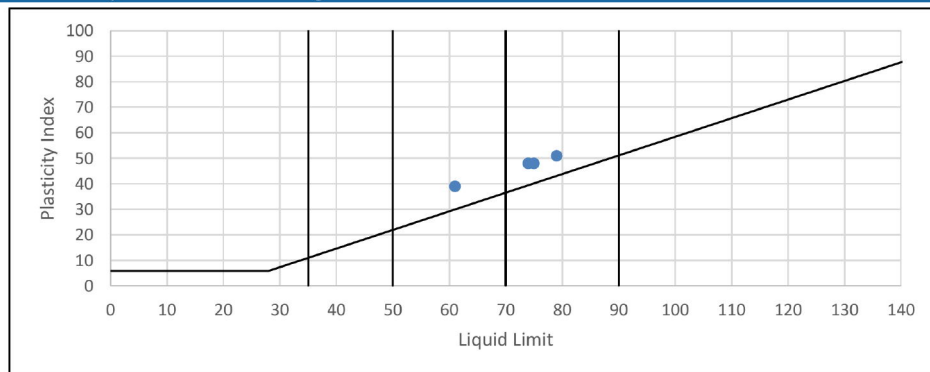


Samples from BH2

Lab Ref	Depth (m)	MC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
005	0.7	33	61	22	39	100	39	911.014	Firm brown CLAY with pockets of sand and rare gravel. Gravel is fine
006	1.2	30						735.649	Firm brown/grey veined CLAY with pockets of sand and rare gravel. Gravel is fine
007	1.7	30	75	27	48	100	48	1320.18	Firm brown/grey veined CLAY with pockets of sand and rare gravel. Gravel is fine
008	2.2	27							Soft to firm brown slightly sandy CLAY with rare gravel. Gravel is fine
009	2.7	29	74	26	48	100	48		Firm to stiff brown slightly sandy CLAY with rare gravel. Gravel is fine
010	3.2	31							Soft to firm brown/orange-brown mottled sandy CLAY with rare gravel. Gravel is fine
011	3.7	33	79	28	51	100	51		Soft to firm brown/orange-brown mottled sandy CLAY with rare gravel. Gravel is fine



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).