

SOIL ANALYSIS

for Subsidence Management Services

The Gables, Carlton Road, Carlton, Barnsley, S71 3JD

Client: Subsidence Management Services
Client Contact: Kevin Dean
Claim Number: IFS-RBS-SUB-11-0031530
Policy Holder: Dr John Harban
Report Date: 1 October 2015
Our Ref: C7803S4973

Compiled By:



Checked By:



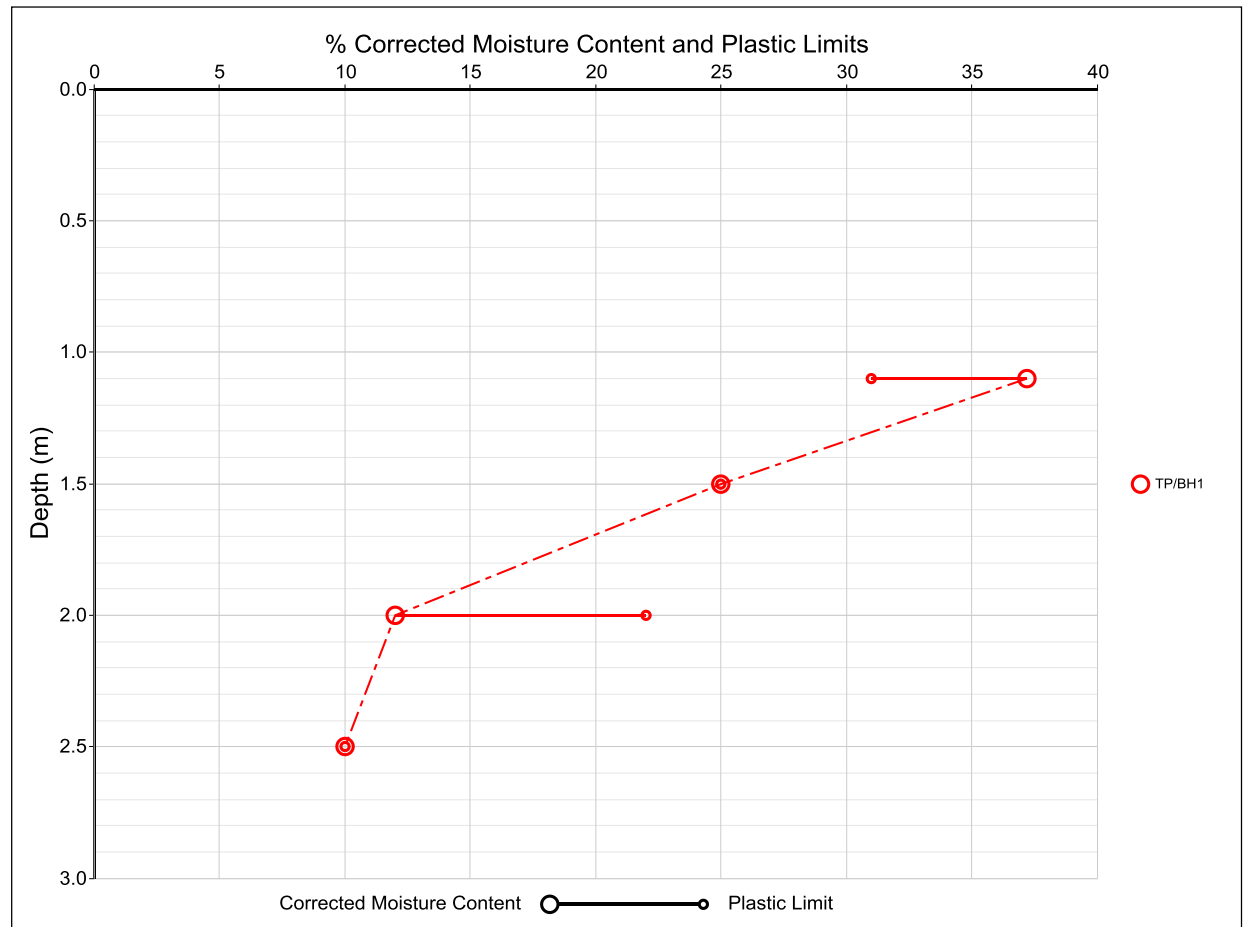
Test Commenced: 22 September 2015
Test Completed: 29 September 2015
Days in Contact: 7

Note

Where appropriate moisture contents have been corrected to demonstrate the equivalent moisture content following the sample being passed through a .425 mm sieve for comparison with the Liquid & Plastic Limit. Where this is not available, uncorrected moisture contents have been used in the graph on the following page.

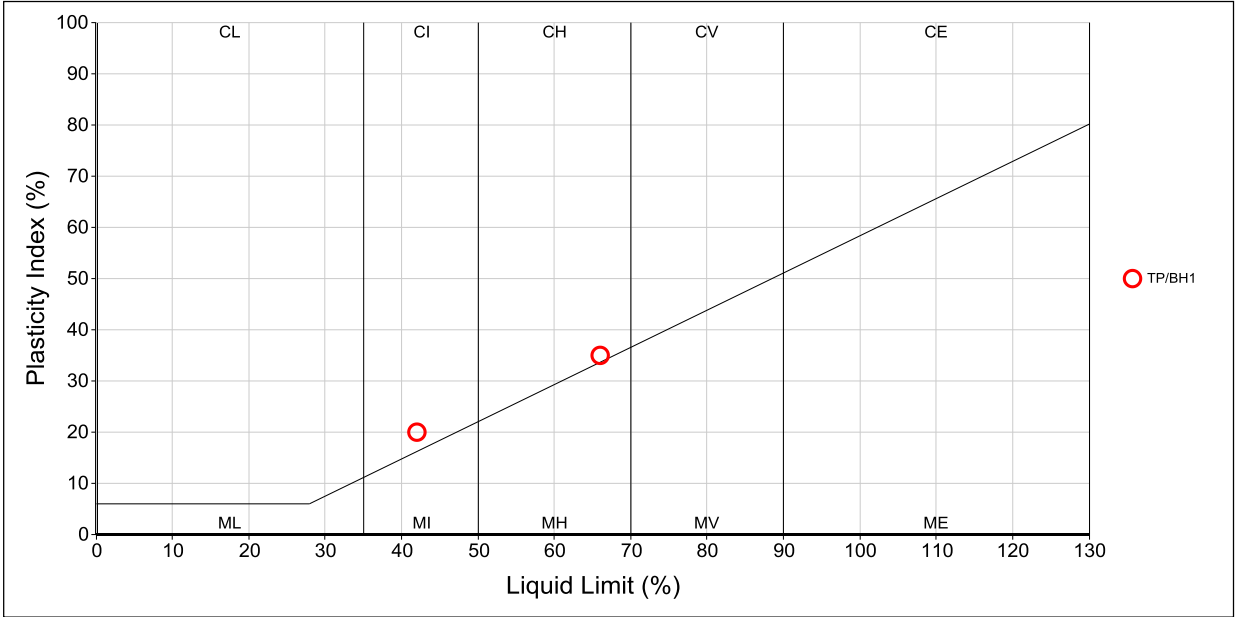
Lab Ref	Depth (m)	MC (%)	Corr MC (%)	LL (%)	PL (%)	PI (%)	% Passing .425mm
Samples from TP/BH1							
001	1.10	32	37	66	31	35	86
002	1.50	25					
003	2.00	12	12	42	22	20	100
004	2.50	10					

Corrected Moisture Content and Plastic Limits Graph



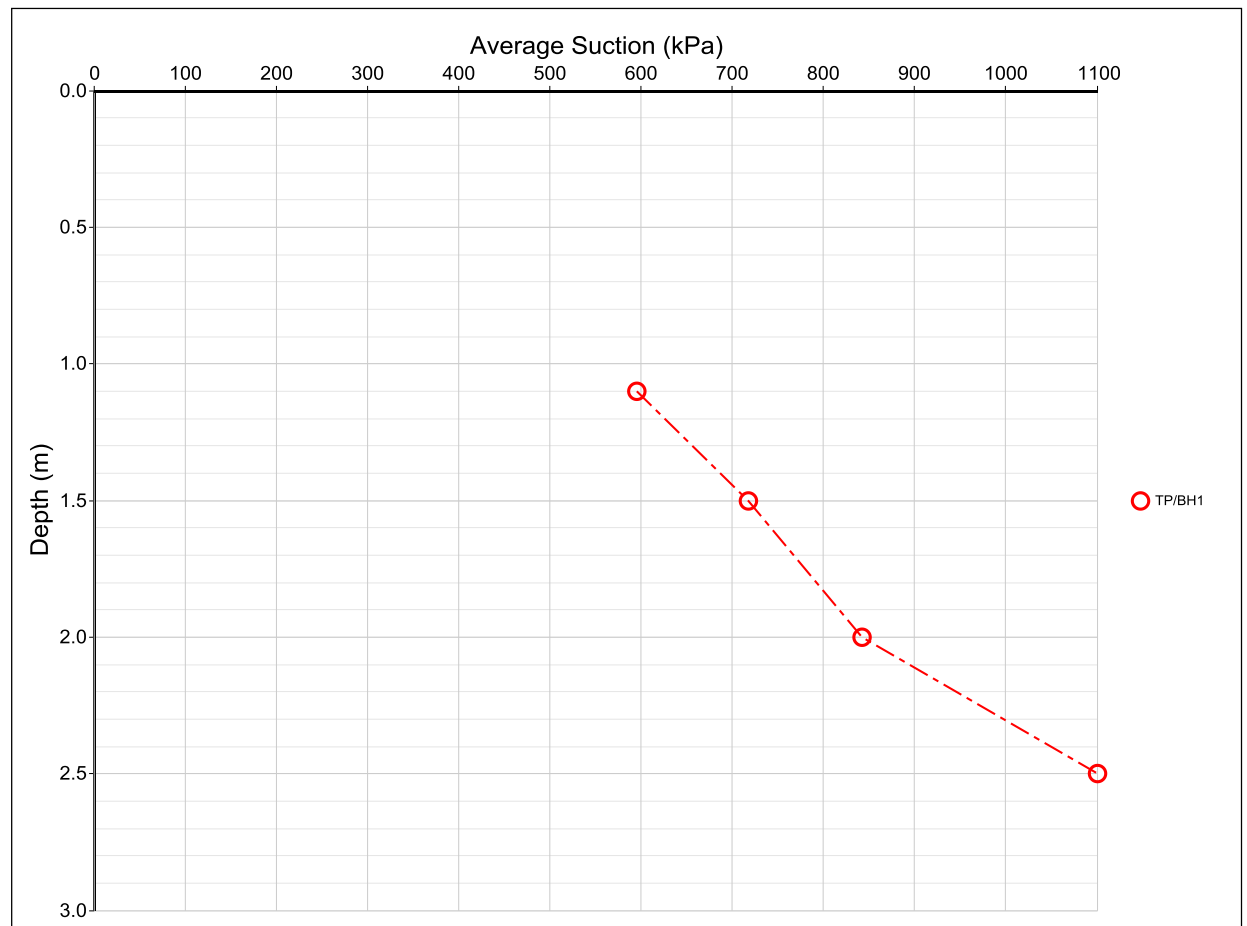
Lab Ref	Depth (m)	Description	BS:5930	NHBC Chapter 4.2
Samples from TP/BH1				
001	1.10	Mottled orange-brown/grey-brown CLAY with occasional fine gravel and cobbles	CH	Medium
002	1.50	Mottled orange-brown/brown/grey CLAY		
003	2.00	Grey CLAY	CI	Medium
004	2.50	Grey CLAY		

Plasticity Chart for Casagrande Classification

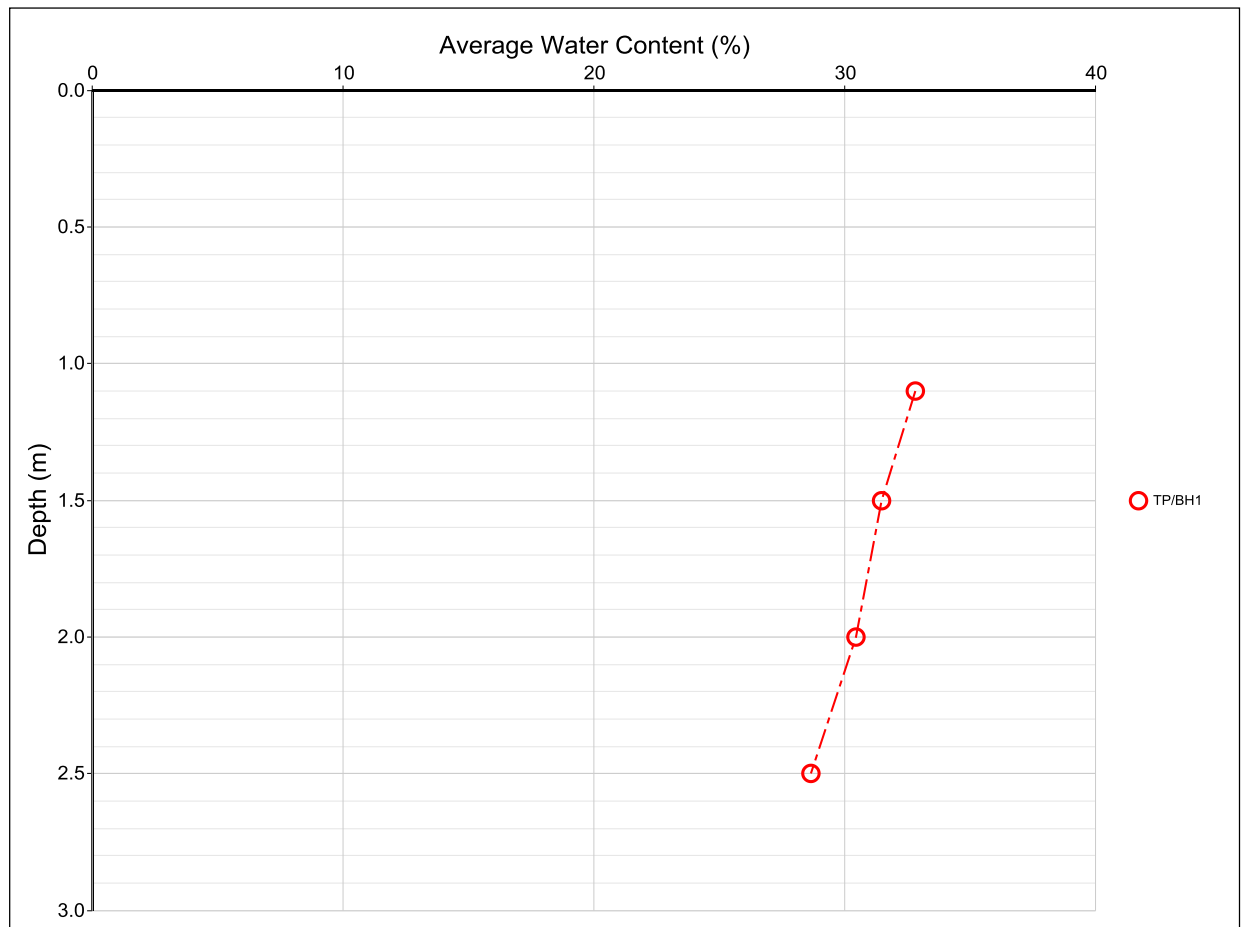


Lab Ref	Depth (m)	Filter Paper	Bag Weight (g)	Bag + Wet Filter (g)	Bag + Dry Filter (g)	Oven Dry Filter (g)	Water Content (%)	Suction (kPa)	Average (kPa)
Samples from TP/BH1									
001	1.10	Top	1.298	1.531	1.475	0.177	31.751	732.929	630.669
		Middle	1.317	1.433	1.404	0.086	33.449	574.735	
		Bottom	1.319	1.449	1.417	0.098	33.333	584.341	
002	1.50	Top	1.296	1.520	1.467	0.171	31.228	789.976	759.893
		Middle	1.296	1.407	1.380	0.084	31.667	741.879	
		Bottom	1.307	1.437	1.406	0.099	31.611	747.824	
003	2.00	Top	1.312	1.540	1.489	0.177	28.992	1088.161	892.315
		Middle	1.301	1.409	1.384	0.083	30.713	850.404	
		Bottom	1.293	1.420	1.389	0.096	31.700	738.379	
004	2.50	Top	1.301	1.527	1.478	0.177	28.111	1234.538	1164.617
		Middle	1.327	1.434	1.409	0.082	30.807	839.101	
		Bottom	1.324	1.448	1.421	0.097	27.133	1420.213	

Average Suction



Average Water Content



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.