GSTL	Geotechnical Testing Analysis Report	auger environmental + claims mgmt + subsidence + drainage +
[redacted]		[redacted]

Summary Of Claim Details

Policy Holder	Unknown
Risk Address	Unknown
SI Date	15/10/2019
Issue Date	15/10/2019
Report Date	31/10/2019
Auger Reference	[redacted]
Insurance Company	UK Insurance Partners
LA Claim Reference	[redacted]
LA Co. Reference	Sedgwick International UK

	Checked	31/10/2019	Wayne Honey	[redacted]
	Approved	31/10/2019	Paul Evans	

UKAS TESTING 2788

GSTL

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377 : Part 2 : 1990 Method 5)
DESCRIPTIONS

auger environmental + claims mgmt + subsidence + drainage +

GSTL Contract Number	[redacted]	
Risk Address		
Auger Reference		

TH Trial Hole	Sample Type	Depth (m)	Sample Description
TH1	D	1.80	Brown fine to medium gravelly silty CLAY
TH1	D	2.30	Brown fine to medium gravelly silty CLAY
TH1	D	2.80	Brown fine to medium gravelly silty CLAY

Test Operator	Checked	31/10/2019	Wayne Honey	[redacted]
Luke Williams	Approved	31/10/2019	Paul Evans	

UKAS TESTING 2788

GSTL

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377 : Part 2 : 1990 Method 5)

auger environmental + claims mgmt + subsidence + drainage +

GSTL Contract Number	[redacted]	
Risk Address		
Auger Reference		
Remarks	NP - (Non-Plastic), # - (Liquid Limit and Plastic Limit Wet Sieved)	

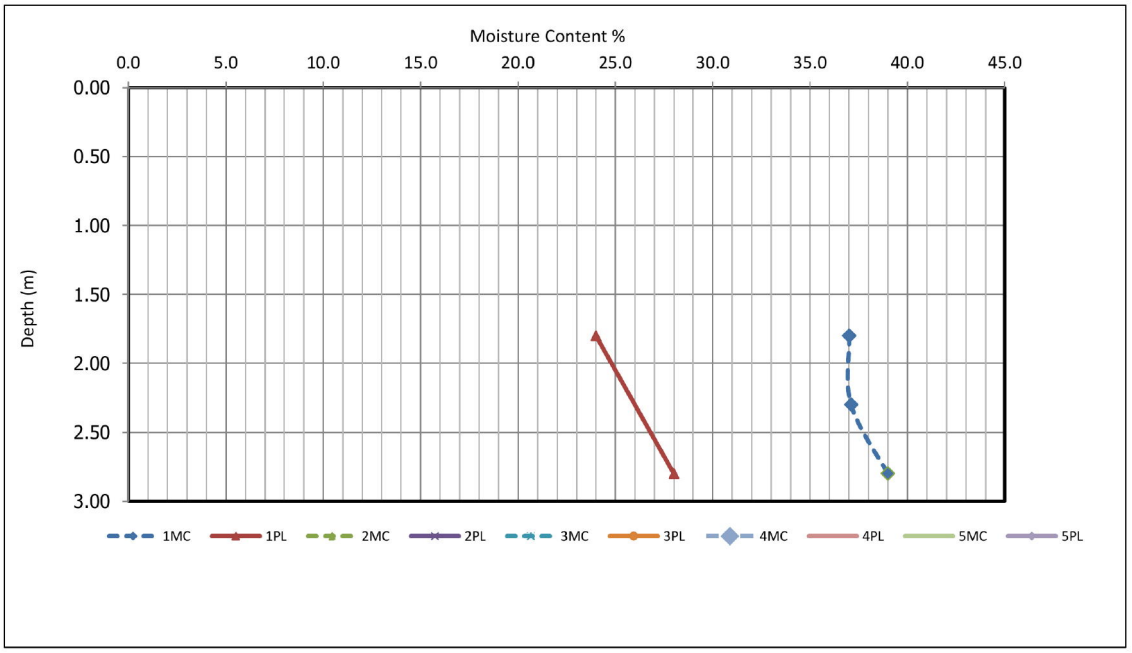
TH Trial Hole	Sample Type	Depth (m)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing .425mm %	NHBC Chapter 4.2	Remarks
TH1	D	1.80	37	86	24	62	88	HIGH VCP	CV Very High Plasticity
TH1	D	2.30	37						
TH1	D	2.80	39	85	28	57	93	HIGH VCP	CV Very High Plasticity

Modified Plasticity Index (PI) <10	: Non Classified
Modified PI = 10 to <20	: Low volume change potential (LOW VCP)
Modified PI = 20 to <40	: Medium volume change potential (Med VCP)
Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

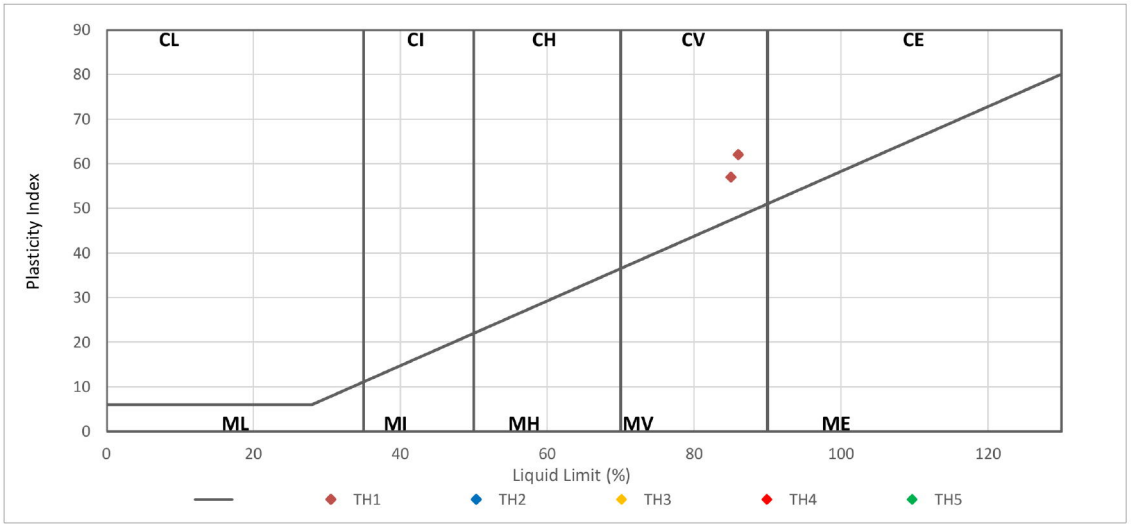
The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

Test Operator	Checked	31/10/2019	Wayne Honey	[redacted]
Luke Williams	Approved	31/10/2019	Paul Evans	

UKAS TESTING 2788



PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:1999+A2:2010



Modified Plasticity Index (PI) <10	: Non Classified
Modified PI = 10 to <20	: Low volume change potential (LOW VCP)
Modified PI = 20 to <40	: Medium volume change potential (Med VCP)
Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

Test Operator	Checked	31/10/2019	Wayne Honey	[redacted]
Luke Williams	Approved	31/10/2019	Paul Evans	

UKAS TESTING
2788

GSTL	SUMMARY OF SOIL CLASSIFICATION TESTS, BRE Information Paper IP 4/93 February 1993 (CI/SfB p1), BRE Information Paper Digest 412 ci/sFb (A3s) February 1996	auger environmental + claims mgmt + subsidence + drainage +
GSTL Contract Number	[redacted]	
Risk Address		
Auger Reference		
Remarks	D - Disturbed (Recompacted 2.5kg Rammer), U - Undisturbed Sample	

TH Trial Hole	Depth (m)	Filter Paper Location	Filter Paper	Sample Prep Method	Test Duration (Days)	Water Content (%)	Soil Suction Pk (kPa)	Average Soil Suction Pk (kPa)	Cumalative Heave Potential (mm) from bottom of the hole
TH1	1.80	Top	I	D	5	63.5	38	38.7	0
TH1	1.80	Middle	II	D	5	61.0	42		
TH1	1.80	Bottom	III	D	5	64.6	36		
TH1	2.30								
TH1	2.30								
TH1	2.30								
TH1	2.80	Top	I	D	5	36.0	396	315	7
TH1	2.80	Middle	II	D	5	39.2	253		
TH1	2.80	Bottom	III	D	5	38.1	294		

Heave potential is calculated from the bottom of the hole and heaves above the bottom of the hole are reported as a cumalative value.

The values reported for heave above only apply to the strata the suction and plasticity have been performed on. The shallowest depth reported is assumed to be a strata thickness to GL and Heave is calculated based on that layer thickness, if the next sample is in 0.5m increments the heave is calculated based on the layer thickness of 0.5m and depths 1m from the sample above will include heave over 1m.

Consideration should be made for other stratas where values are not reported and when working out the heave potential over the entire trial hole.

Test Operator	Checked	31/10/2019	Wayne Honey	[redacted]
Luke Williams	Approved	31/10/2019	Paul Evans	

UKAS TESTING 2788