GSTL	Geotechnical Testing Analysis Report	environmental + claims mgmt + subsidence + drainage +
Unit 3 & 4, Heol Aur, Dafen Ind Estate, Dafen Llanelli, Carmarthenshire, SA14 8QN		Auger House, Cross Lane, Wallasey, Wirral, CH45 8RH

Summary Of Claim Details							
Policy Holder	Unknown						
Risk Address	Unknown						
SI Date	21/08/2020						
Issue Date	24/08/2020						
Report Date	08/09/2020						
Auger Reference							
Insurance Company	Fairmead Insurance Limited						
LA Claim Reference							
LA Co. Reference	Sedgwick International UK						

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

	Checked	08/09/2020	Wayne Honey	
	Approved	08/09/2020	Paul Evans	



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	50003		
Risk Address	Unknown		
Auger Reference			

TH Trial Hole	Sample Type	Depth (m)	Sample Description
TH1	D	0.80	Brown fine to coarse gravelly silty CLAY
TH1	D	1.30	Brown fine gravelly silty CLAY
TH1	D	1.80	Brown fine to medium gravelly silty CLAY
TH1	D	2.30	Brown fine gravelly silty CLAY
TH1	D	2.80	Brown fine to medium gravelly silty CLAY
-			

Test Operator	Checked	08/09/2020	Wayne Honey	
Luke Williams	Approved	08/09/2020	Paul Evans	



GSTL	LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX (BS 1377 : Part 2 : 1990 Method 5)	@auger	environmental + claims mgmt + subsidence + drainage +
GSTL Contract Number			
Risk Address	Unknown		
Auger Reference			
Remarks	NP - (Non-Plastic), # - (Liquid Limit and Plastic Limit Wet Sieved)		

				l lande	Disation	Disatist		,	
TH Trial Hole	Sample Type	Depth (m)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing .425mm %	NHBC Chapter 4.2	Remarks
TH1	D	0.80	21	66	27	39	81	MEDIUM VCP	CH High Plasticity
TH1	D	1.30	28	- 00	21	33	01	WEDIOW VOI	Offingiffiasticity
TH1	D	1.80	23	56	27	29	77	MEDIUM VCP	CH High Plasticity
TH1	D	2.30	23					WEDIOW VOI	Off Flight Tubusity
TH1	D	2.80	24	59	29	30	81	MEDIUM VCP	CH High Plasticity
		2.00					- 01	WEDIOW VOI	Of Fright Tuotions
		7							

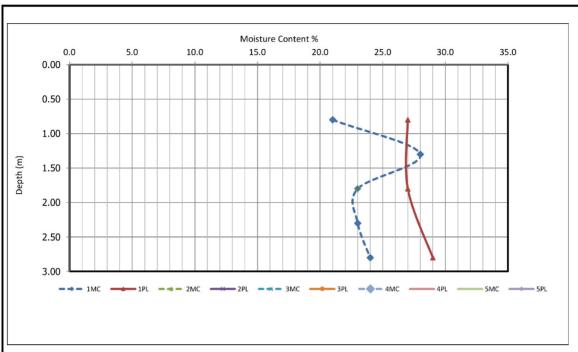
: Non Classified

Modified Plasticity Index (PI) <10 Modified PI = 10 to <20 Modified PI = 20 to <40 Modified PI = 40 or greater

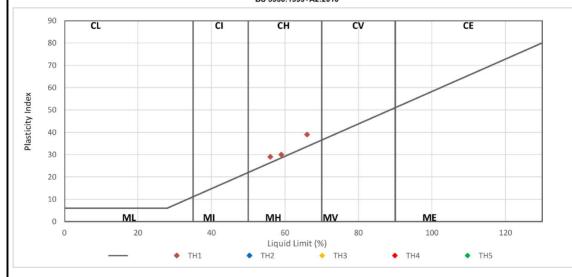
: Low volume change potential (LOW VCP) : Medium volume change potential (Med VCP) : High volume change potential (HIGH VCP) The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2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

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Luke Williams	Approved	08/09/2020	Paul Evans	





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



Modified Plasticity Index (PI) <10 Modified PI = 10 to <20

: Non Classified

: Low volume change potential (LOW VCP)
: Medium volume change potential (Med VCP)

Modified PI = 20 to <40 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"

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Luke Williams	Approved	08/09/2020	Paul Evans	



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			
Risk Address	Unknown		
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		Тор	I	D	5	28.8	1120		11010
TH1	0.80	Middle	П	D	5	29.7	988	1070	43
TH1	1	Bottom	III	D	5	29.0	1090		
TH1									
TH1	1.30								
TH1									
TH1		Тор	I	D	5	23.4	2410		
TH1	1.80	Middle	II	D	5	24.2	2150	2440	19
TH1		Bottom	III	D	5	22.5	2760		
TH1									
TH1	2.30								
TH1									
TH1		Тор	I	D	5	24.4	2100		
TH1	2.80	Middle	П	D	5	24.7	2020	2520	10
TH1		Bottom	III	D	5	20.9	3440		

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.



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