

## LABORATORY TEST CERTIFICATE

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**Certificate No :** 23/627 - 01-1  
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### LABORATORY TESTING OF SOIL

#### Introduction

We refer to samples taken from Outhead, St Andrews and delivered to our laboratory on 26th May 2023.

#### Material & Source

Sample Reference : See Report Plates  
Sampled By : Client  
Sampling Certificate : Not Supplied  
Location : See Report Plates  
Description : See Page 2  
Date Sampled : Not Supplied  
Date Tested : 26th May 2023 Onwards  
Source : 63163 - Outhead, St Andrews

#### Test Results

As Detailed On Page 2 to Page 8 inclusive

#### Comments

The results contained in this report relate to the sample(s) as received  
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation  
This report should not be reproduced except in full without the written approval of the laboratory  
All remaining samples for this project will be disposed of 28 days after issue of this test certificate

#### Remarks

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[Redacted]

Date 21/06/2023

TRIAL PIT	SAMPLE	DEPTH (m)	SAMPLE DESCRIPTION
HP01	B/T	-	Brown slightly gravelly fine to coarse SAND with shell fragments. Gravel is fine.
HP06	B/T	-	Brown fine to coarse SAND with shell fragments.
HP09	B/T	-	Brown fine to medium SAND with shell fragments.

**SUMMARY OF SAMPLE DESCRIPTIONS**

TRIAL PIT	SAMPLE	DEPTH (m)	WATER CONTENT (%)
HP01	B/T	-	24.8
HP06	B/T	-	28.6
HP09	B/T	-	28.4

Tested in accordance with BS 1377 - 2 : 2022 : Clause 4.1

### SUMMARY OF WATER CONTENT TEST RESULTS

TRIAL PIT	SAMPLE	DEPTH (m)	WATER CONTENT (%)	BULK DENSITY (Mg/m <sup>3</sup> )	DRY DENSITY (Mg/m <sup>3</sup> )
HP01	B/T	-	21.5	1.87	1.54
HP06	B/T	-	24.5	1.95	1.56
HP09	B/T	-	24.0	1.86	1.50

Tested in accordance with BS 1377 - 2 : 2022 : Clause 8  
Bulk Density : Linear Measurement

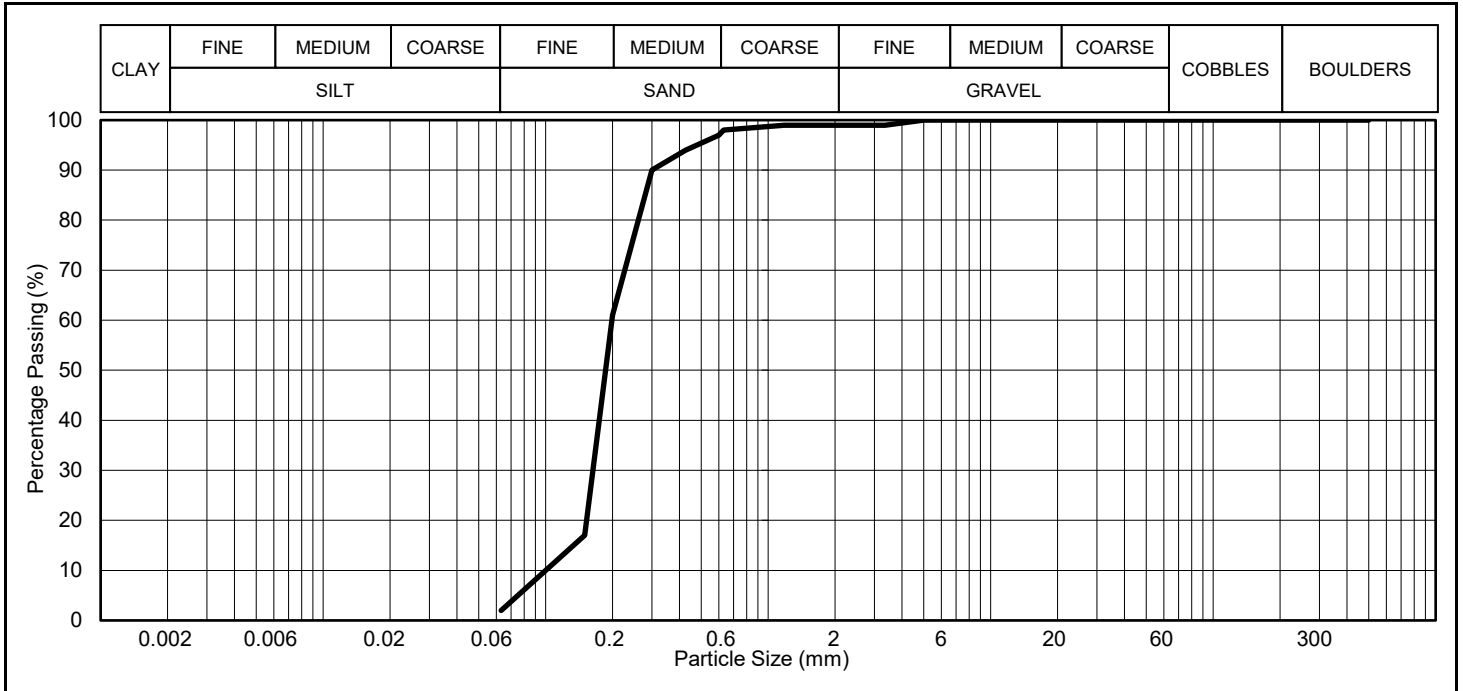
**SUMMARY OF WATER CONTENT  
AND BULK DENSITY TEST RESULTS**

TRIAL PIT	SAMPLE	DEPTH (m)	PARTICLE DENSITY (Mg/m <sup>3</sup> )
HP01	B/T	-	2.61
HP06	B/T	-	2.61
HP09	B/T	-	2.62

Tested in accordance with BS 1377 - 2 : 2022 : Clause 9.2  
(Gas jar method)

### SUMMARY OF PARTICLE DENSITY TEST RESULTS

Borehole	HP01
Sample	B/T
Depth (m)	-



SIEVING				SEDIMENTATION (Assumed ps of 2.65Mg/m³)	
Sieve Size (mm)	Percentage Passing (%)	Specification		Particle Size (mm)	Percentage Passing (%)
		Not Applicable			
		Lower %	Upper %		
500.0	100	-	-	0.0200	
300.0	100	-	-	0.0063	
125.0	100	-	-	0.0020	
90.0	100	-	-		
75.0	100	-	-		
63.0	100	-	-		
50.0	100	-	-		
37.5	100	-	-		
28.0	100	-	-		
20.0	100	-	-		
14.0	100	-	-		
10.0	100	-	-		
6.3	100	-	-		
5.0	100	-	-		
3.350	99	-	-		
2.000	99	-	-		
1.180	99	-	-		
0.630	98	-	-		
0.600	97	-	-		
0.425	94	-	-		
0.300	90	-	-		
0.200	61	-	-		
0.150	17	-	-		
0.063	2	-	-		

GRADING CLASSIFICATION (SHW TABLE 6/2)					
-					
Grading classification proves the material has met the relevant grading requirements only. Further testing may be required to assess compliance with SHW.					

PERCENTAGE SOIL TYPES					
CLAY	SILT ‡	SAND	GRAVEL	COBBLES	
/	2	97	1	0	

UNIFORMITY COEFFICIENT (SHW TABLE 6/1 NOTE 5)				
D10		D60		Specification
-		-		

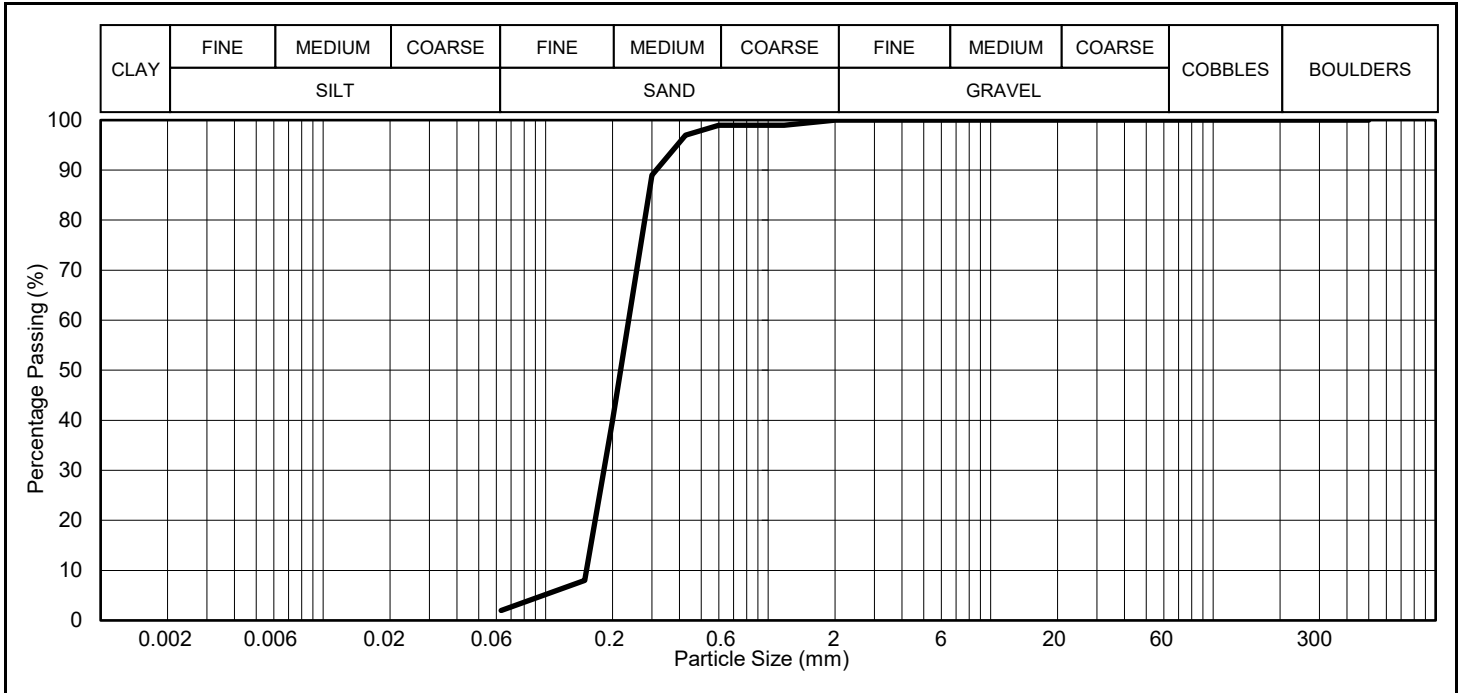
  

UNIFORMITY COEFFICIENT			
-		-	

**Remarks**

‡ Where a sedimentation test was not carried out, this figure represents total fines, i.e., particles of diameter less than 63 microns

Borehole	HP06
Sample	B/T
Depth (m)	-

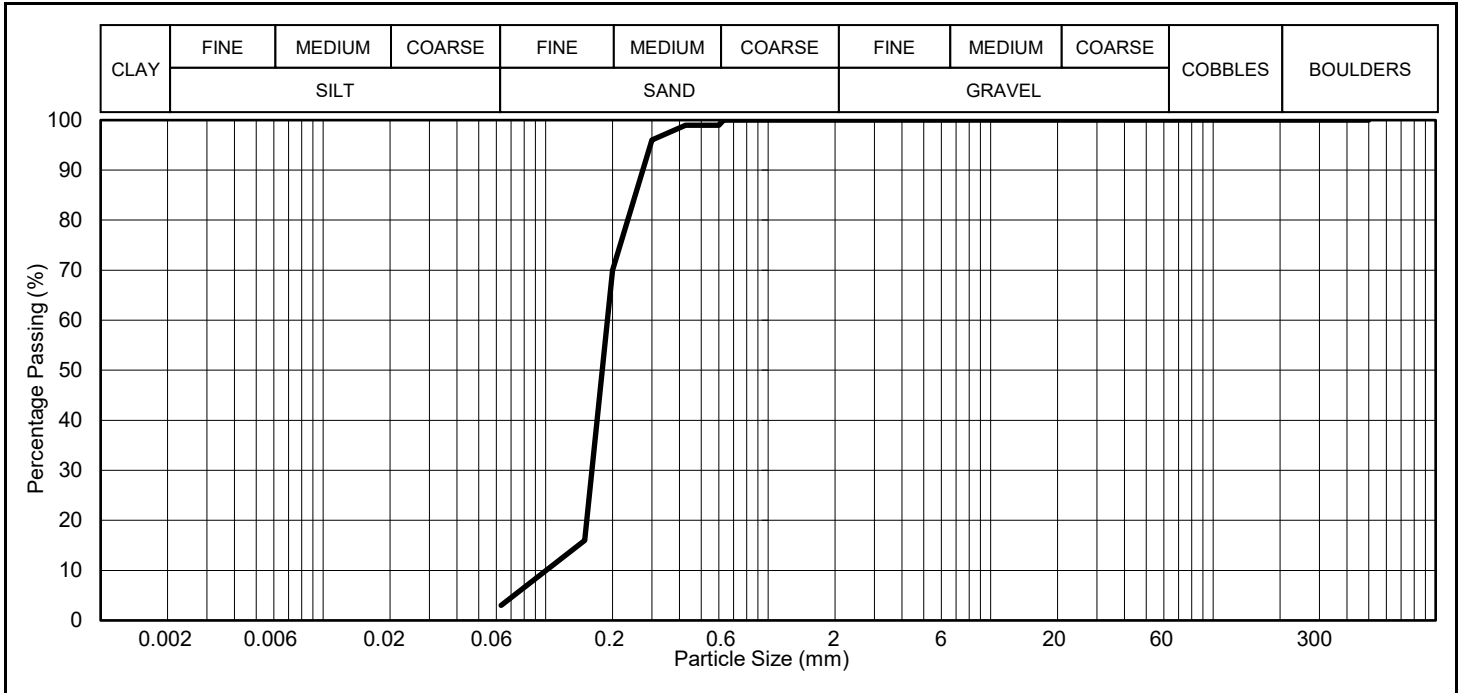


SIEVING				SEDIMENTATION (Assumed ps of 2.65Mg/m <sup>3</sup> )	
Sieve Size (mm)	Percentage Passing (%)	Specification		Particle Size (mm)	Percentage Passing (%)
		Not Applicable			
		Lower %	Upper %		
500.0	100	-	-	0.0200	
300.0	100	-	-	0.0063	
125.0	100	-	-	0.0020	
90.0	100	-	-		
75.0	100	-	-		
63.0	100	-	-		
50.0	100	-	-		
37.5	100	-	-		
28.0	100	-	-		
20.0	100	-	-		
14.0	100	-	-		
10.0	100	-	-		
6.3	100	-	-		
5.0	100	-	-		
3.350	100	-	-		
2.000	100	-	-		
1.180	99	-	-		
0.630	99	-	-		
0.600	99	-	-		
0.425	97	-	-		
0.300	89	-	-		
0.200	40	-	-		
0.150	8	-	-		
0.063	2	-	-		
<b>GRADING CLASSIFICATION (SHW TABLE 6/2)</b>					
-					
Grading classification proves the material has met the relevant grading requirements only. Further testing may be required to assess compliance with SHW.					
<b>PERCENTAGE SOIL TYPES</b>					
	<b>CLAY</b>	<b>SILT ‡</b>	<b>SAND</b>	<b>GRAVEL</b>	<b>COBBLES</b>
	/	2	98	0	0
<b>UNIFORMITY COEFFICIENT (SHW TABLE 6/1 NOTE 5)</b>					
	<b>D10</b>		<b>D60</b>		<b>Specification</b>
	-		-		
<b>UNIFORMITY COEFFICIENT</b>					
	-		-		

**Remarks**

‡ Where a sedimentation test was not carried out, this figure represents total fines, i.e., particles of diameter less than 63 microns

Borehole	HP09
Sample	B/T
Depth (m)	-



SIEVING				SEDIMENTATION (Assumed ps of 2.65Mg/m <sup>3</sup> )	
Sieve Size (mm)	Percentage Passing (%)	Specification		Particle Size (mm)	Percentage Passing (%)
		Not Applicable			
		Lower %	Upper %		
500.0	100	-	-	0.0200	
300.0	100	-	-	0.0063	
125.0	100	-	-	0.0020	
90.0	100	-	-		
75.0	100	-	-		
63.0	100	-	-		
50.0	100	-	-		
37.5	100	-	-		
28.0	100	-	-		
20.0	100	-	-		
14.0	100	-	-		
10.0	100	-	-		
6.3	100	-	-		
5.0	100	-	-		
3.350	100	-	-		
2.000	100	-	-		
1.180	100	-	-		
0.630	100	-	-		
0.600	99	-	-		
0.425	99	-	-		
0.300	96	-	-		
0.200	70	-	-		
0.150	16	-	-		
0.063	3	-	-		

GRADING CLASSIFICATION (SHW TABLE 6/2)					
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Grading classification proves the material has met the relevant grading requirements only. Further testing may be required to assess compliance with SHW.					

PERCENTAGE SOIL TYPES					
CLAY	SILT ‡	SAND	GRAVEL	COBBLES	
/	3	97	0	0	

UNIFORMITY COEFFICIENT (SHW TABLE 6/1 NOTE 5)				
D10		D60		Specification
-		-		
UNIFORMITY COEFFICIENT				

**Remarks**

‡ Where a sedimentation test was not carried out, this figure represents total fines, i.e., particles of diameter less than 63 microns