

ests	Lab	
train at	Vane	
ailure %	kPa	

National Materials Testing Laboratory Ltd.

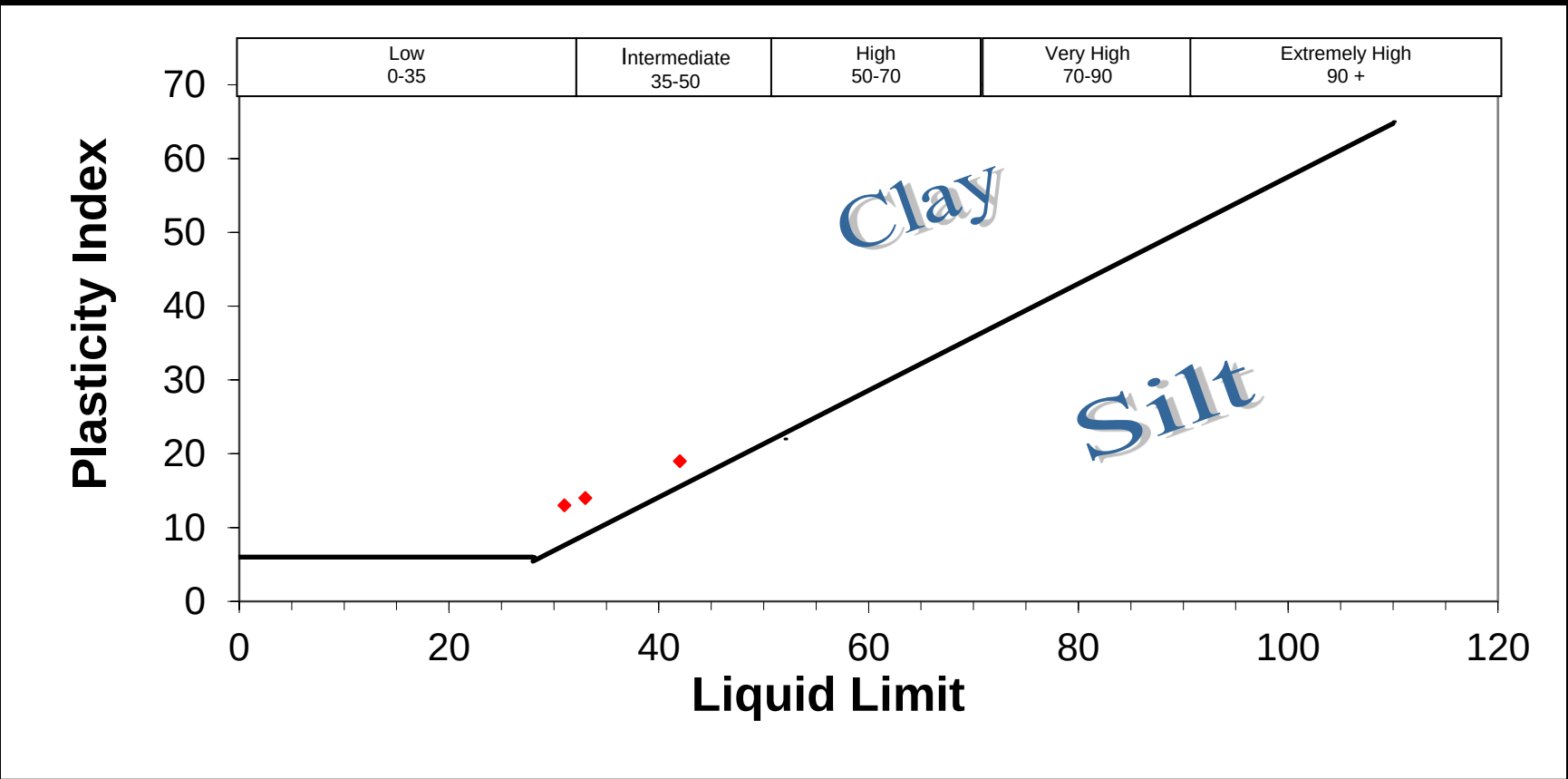
SUMMARY OF TEST RESULTS

[illegible]

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NMTL LTD
Unit 18c, Tullow Industrial Estate
Tullow
County Carlow
Tel: 00353 59 9180822
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billa@nmtl.ie

Contract: P1657 Brisalagh WF
Client: Hydro-Environmental Services
Engineer: Michael Gill
GII Project ID P1657
Date: 08/03/2024
Tested By: Js **Checked:** Bc
Job ref No. NMTL 3721



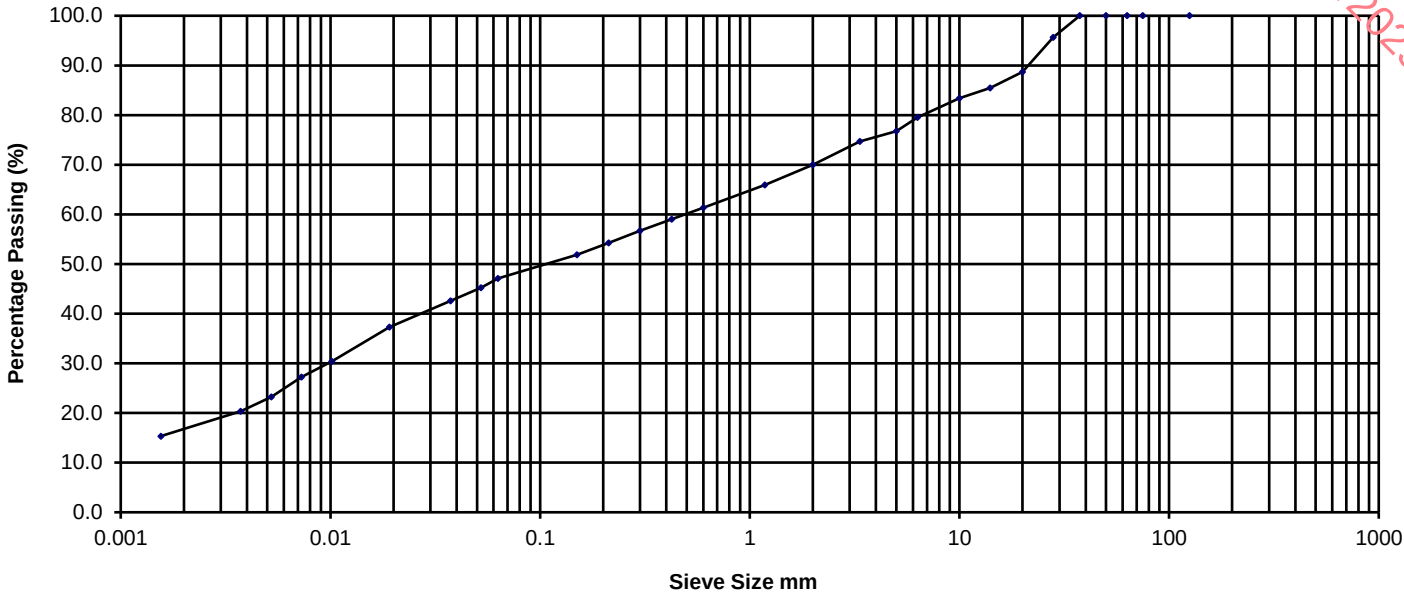
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Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	100.0
28.000	95.6
20.000	88.7
14.000	85.4
10.000	83.4
6.300	79.5
5.000	76.8
3.350	74.7
2.000	70.0
1.180	65.9
0.600	61.3
0.425	59.0
0.300	56.7
0.212	54.3
0.150	51.9
0.063	47.1
0.052	45.2
0.037	42.6
0.019	37.3
0.010	30.4
0.007	27.2
0.005	23.3
0.004	20.4
0.002	15.3

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size											
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
	Silt			Sand			Gravel				
	15.3	31.7		22.9		30.0					

Sample Description Brown slightly sandy slightly gravelly silty CLAY.

Project No. NMTL 3721
BH/TP No. TP01
Sample No. B
Depth 1.40m

Project Briskalagh WF ES PROJECT ID:P1657

Operator Js Checked Nc Approved Bc Date sample tested 23/02/2024

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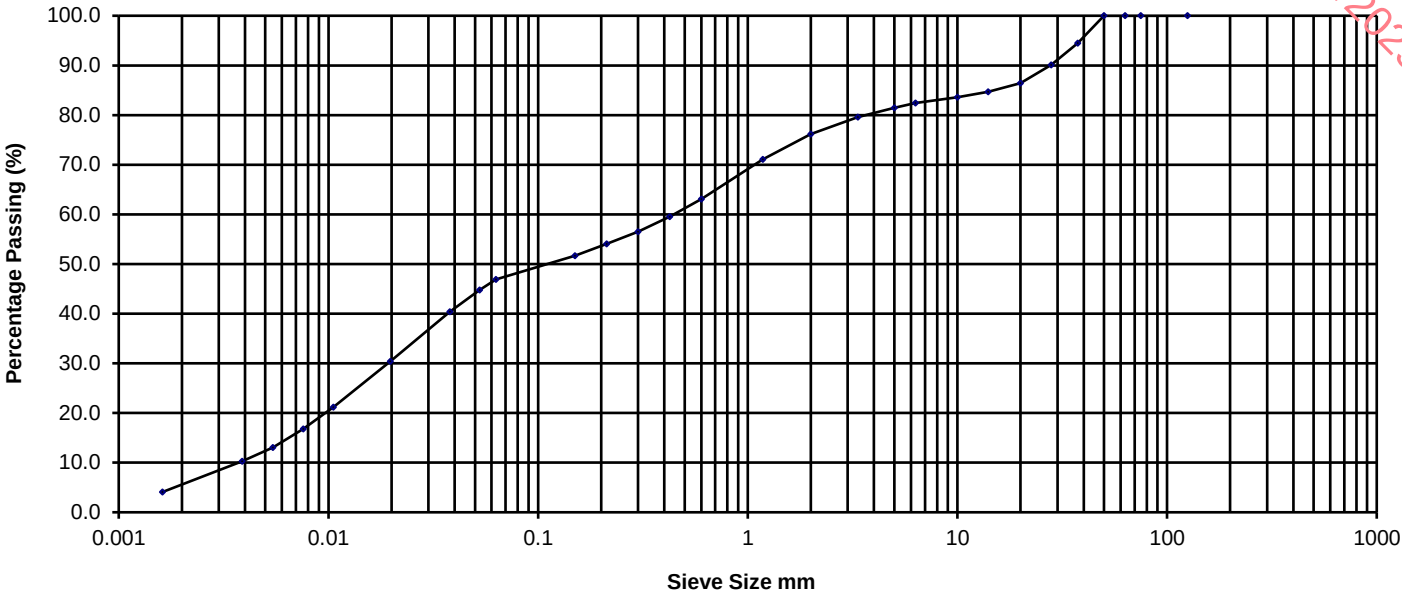
Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	94.5
28.000	90.1
20.000	86.4
14.000	84.7
10.000	83.6
6.300	82.4
5.000	81.5
3.350	79.6
2.000	76.2
1.180	71.1
0.600	63.1
0.425	59.5
0.300	56.5
0.212	54.0
0.150	51.7
0.063	46.9
0.053	44.7
0.038	40.4
0.020	30.4
0.011	21.2
0.008	16.8
0.005	13.0
0.004	10.3
0.002	4.1

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
4.1	42.8			29.3			23.8			0.0	0.0

Sample Description					Brown slightly gravelly slightly sandy CLAY/SILT.					Project No.		NMTL 3721		
										BH/TP No.		TP04		
Project					Briskalagh WF					ES PROJECT ID:P1657				
										Sample No.		B		
Js		Checked		Nc		Approved		Bc		Date sample tested		23/02/2024		
										Depth		1.20m		

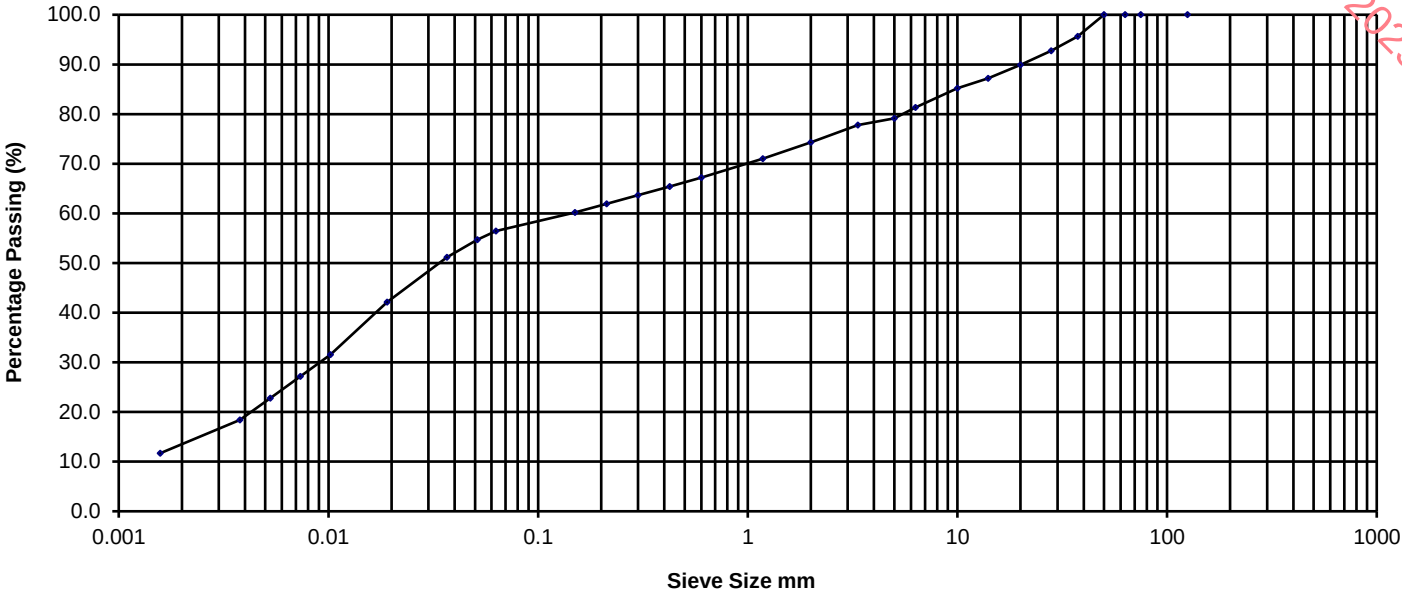
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Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	95.6
28.000	92.8
20.000	89.9
14.000	87.2
10.000	85.2
6.300	81.4
5.000	79.1
3.350	77.8
2.000	74.3
1.180	71.0
0.600	67.2
0.425	65.4
0.300	63.7
0.212	61.9
0.150	60.2
0.063	56.4
0.051	54.7
0.037	51.2
0.019	42.1
0.010	31.6
0.007	27.2
0.005	22.8
0.004	18.4
0.002	11.7

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
11.7	44.7			17.9			25.7			0.0	0.0

Sample Description Brown/grey slightly sandy slightly gravelly silty CLAY.

Project No. NMTL 3721
BH/TP No. TP08
Sample No. B
Depth 1.10m

Project Briskalagh WF ES PROJECT ID:P1657

Operator Js Checked Nc Approved Bc Date sample tested 23/02/2024

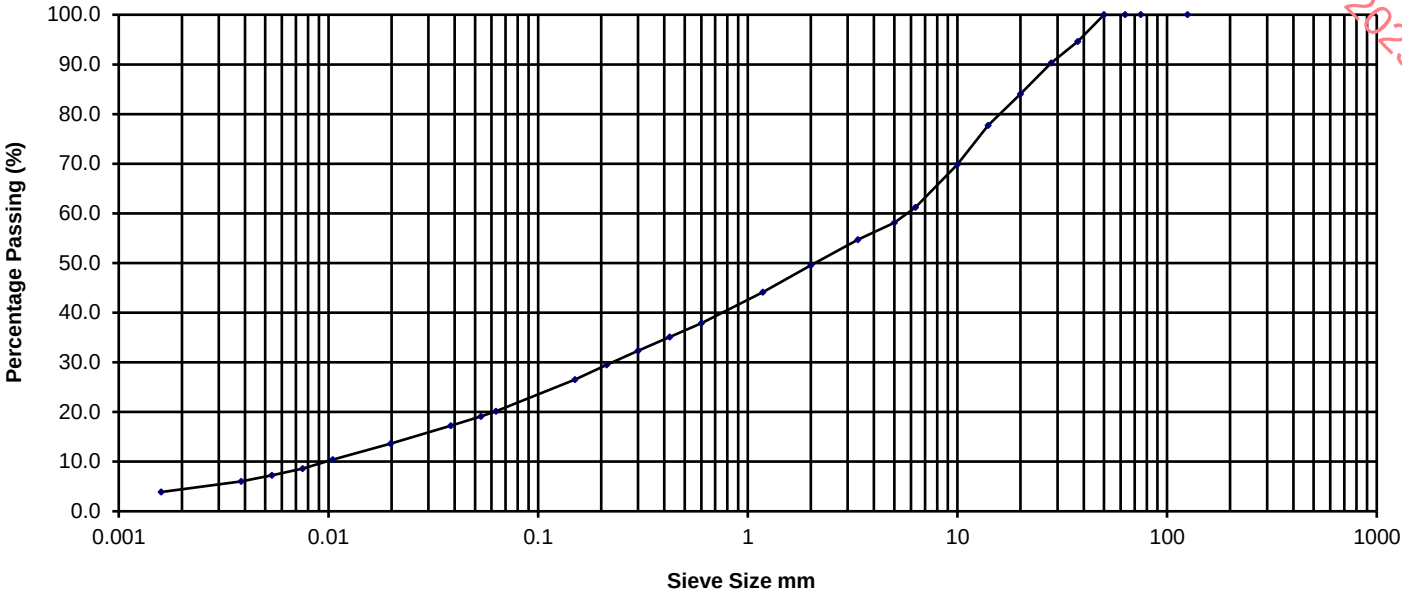
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Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	94.6
28.000	90.3
20.000	84.0
14.000	77.7
10.000	69.9
6.300	61.2
5.000	58.1
3.350	54.7
2.000	49.6
1.180	44.1
0.600	37.9
0.425	35.1
0.300	32.3
0.212	29.5
0.150	26.5
0.063	20.1
0.053	19.1
0.038	17.3
0.020	13.6
0.010	10.4
0.008	8.6
0.005	7.3
0.004	6.0
0.002	3.9

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
3.9	16.3			29.4			50.4			0.0	0.0

Sample Description Brown slightly grey clayey silty very sandy GRAVEL.

Project No. NMTL 3721
BH/TP No. TP09
Sample No. B
Depth 1.10m

Project Briskalagh WF ES PROJECT ID:P1657

Operator Js Checked Nc Approved Bc Date sample tested 23/02/2024

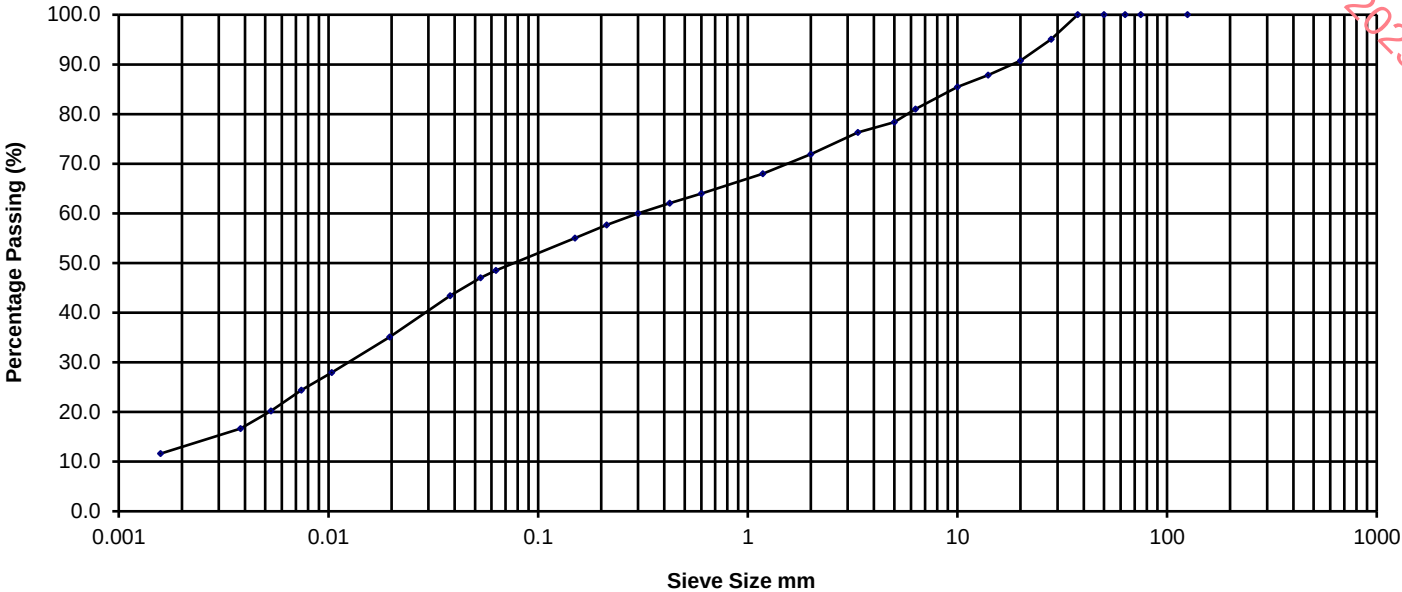
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Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	100.0
28.000	95.1
20.000	90.7
14.000	87.8
10.000	85.5
6.300	81.0
5.000	78.4
3.350	76.3
2.000	71.9
1.180	68.0
0.600	64.0
0.425	62.1
0.300	60.0
0.212	57.7
0.150	55.0
0.063	48.5
0.053	47.0
0.038	43.4
0.020	35.1
0.010	28.0
0.007	24.4
0.005	20.2
0.004	16.7
0.002	11.6

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
11.6	36.9			23.4			28.1			0.0	0.0

Sample Description Grey/brown slightly sandy slightly gravelly silty CLAY.						Project No.	NMTL 3721
						BH/TP No.	TP11
Project Briskalagh WF						Sample No.	B
ES PROJECT ID:P1657						Depth	1.50m
Operator	Js	Checked	Nc	Approved	Bc	Date sample tested	23/02/2024

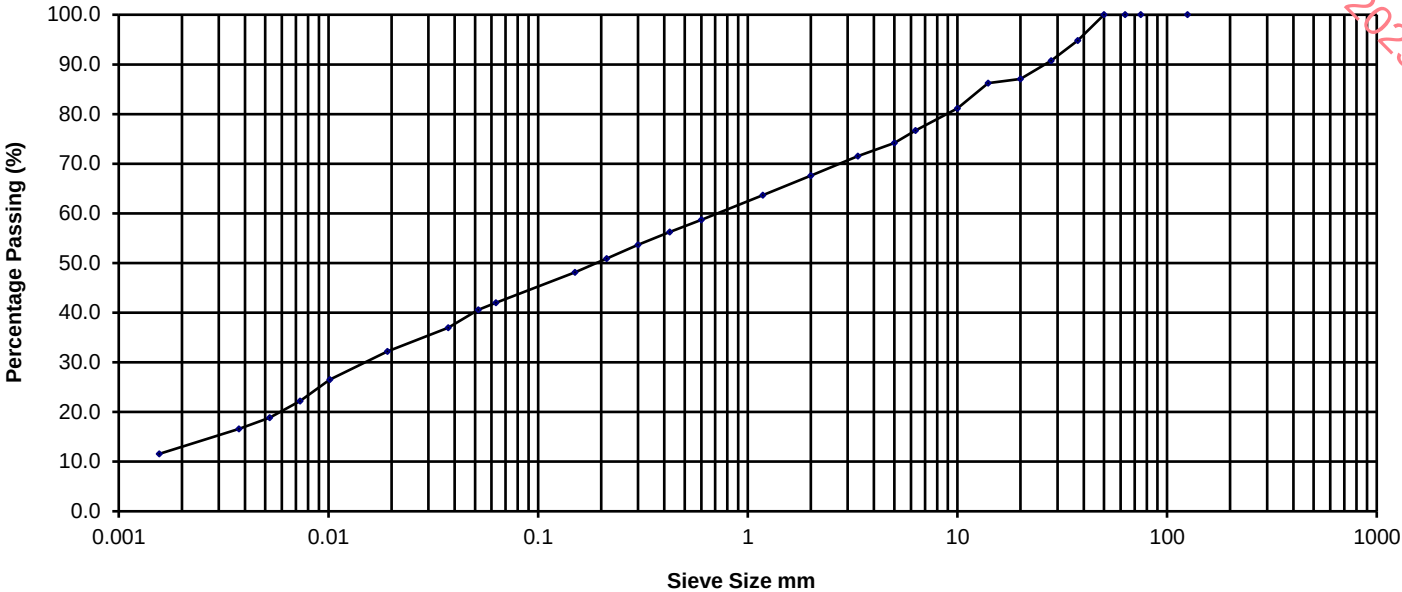
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Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	94.8
28.000	90.7
20.000	87.1
14.000	86.2
10.000	81.2
6.300	76.7
5.000	74.2
3.350	71.6
2.000	67.6
1.180	63.6
0.600	58.7
0.425	56.2
0.300	53.6
0.212	50.9
0.150	48.1
0.063	42.0
0.052	40.6
0.037	37.0
0.019	32.2
0.010	26.5
0.007	22.2
0.005	18.8
0.004	16.6
0.002	11.6

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
11.6	30.4			25.7			32.4			0.0	0.0

Sample Description Brown grey slightly sandy slightly gravelly SILT/CLAY

Project No. NMTL 3721
BH/TP No. TP12
Sample No. B
Depth 1.00m

Project Briskalagh WF ES PROJECT ID:P1657

Operator Js Checked Nc Approved Bc Date sample tested 23/02/2024

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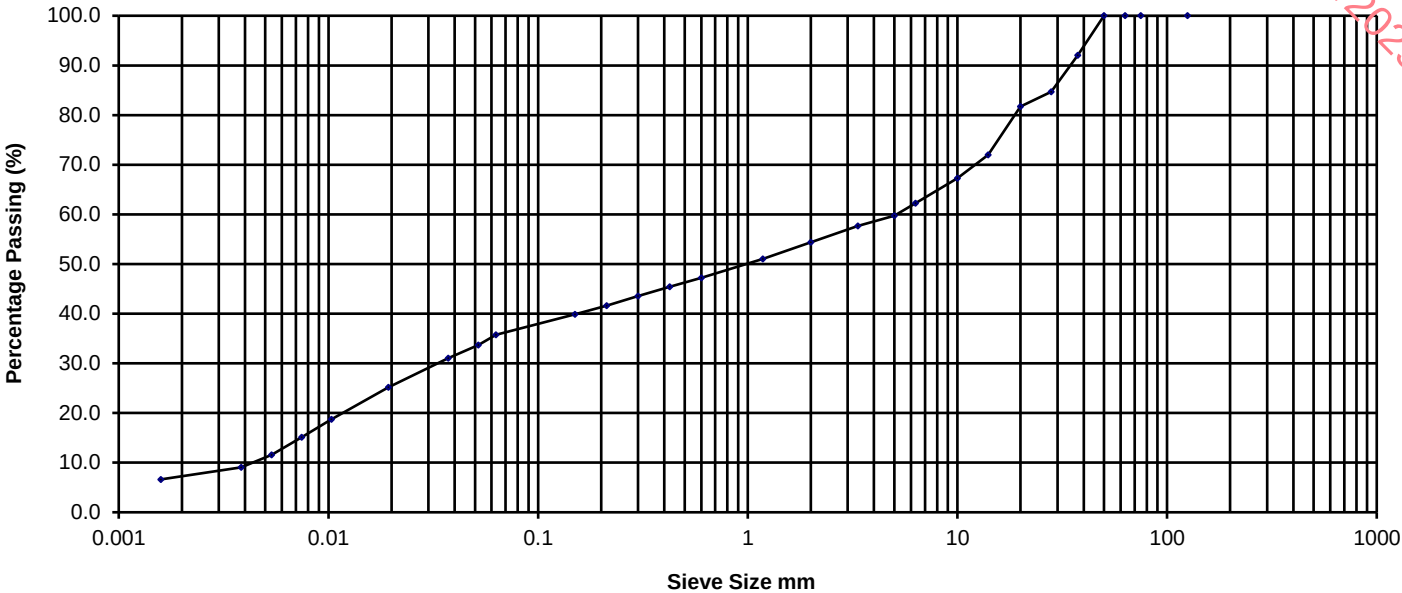
Sieve	%
Size mm	Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	92.0
28.000	84.7
20.000	81.7
14.000	72.0
10.000	67.3
6.300	62.3
5.000	59.7
3.350	57.7
2.000	54.4
1.180	51.0
0.600	47.2
0.425	45.4
0.300	43.5
0.212	41.6
0.150	39.9
0.063	35.7
0.052	33.7
0.037	31.0
0.019	25.2
0.010	18.7
0.007	15.1
0.005	11.5
0.004	9.1
0.002	6.6

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Determination of Particle Size Distribution
BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5



Percentage Particle Size										Cobbles	Boulder
Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse		
	Silt			Sand			Gravel				
6.6	29.1			18.6			45.6			0.0	0.0

Sample Description Brown slightly sandy gravelly clayey SILT.

Project No. NMTL 3721
BH/TP No. BP1-TP04
Sample No. B
Depth 0.65m

Project Briskalagh WF ES PROJECT ID:P1657

Operator Js Checked Nc Approved Bc Date sample tested 23/02/2024