

TEST REPORT

Client Earth Environmental & Geotechnical Ltd

Address Houldsworth Mill Business & Arts Centre
Houldsworth Mill
Reddish
Stockport
SK5 6DA

Contract A4932 -
Old Market Street, Blackley

Job Number MRN 4288/76
Date of Issue 07 September 2022
Page 1 of 12

Approved Signatories

S J Hutchings, O P Davies

Notes

- 1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.
- 2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.
- 3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.
- 4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted.
- 5 The results included within the report are representative of the samples submitted for analysis.
- 6 This certificate should not be reproduced, except in full, without the express permission of the laboratory.

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

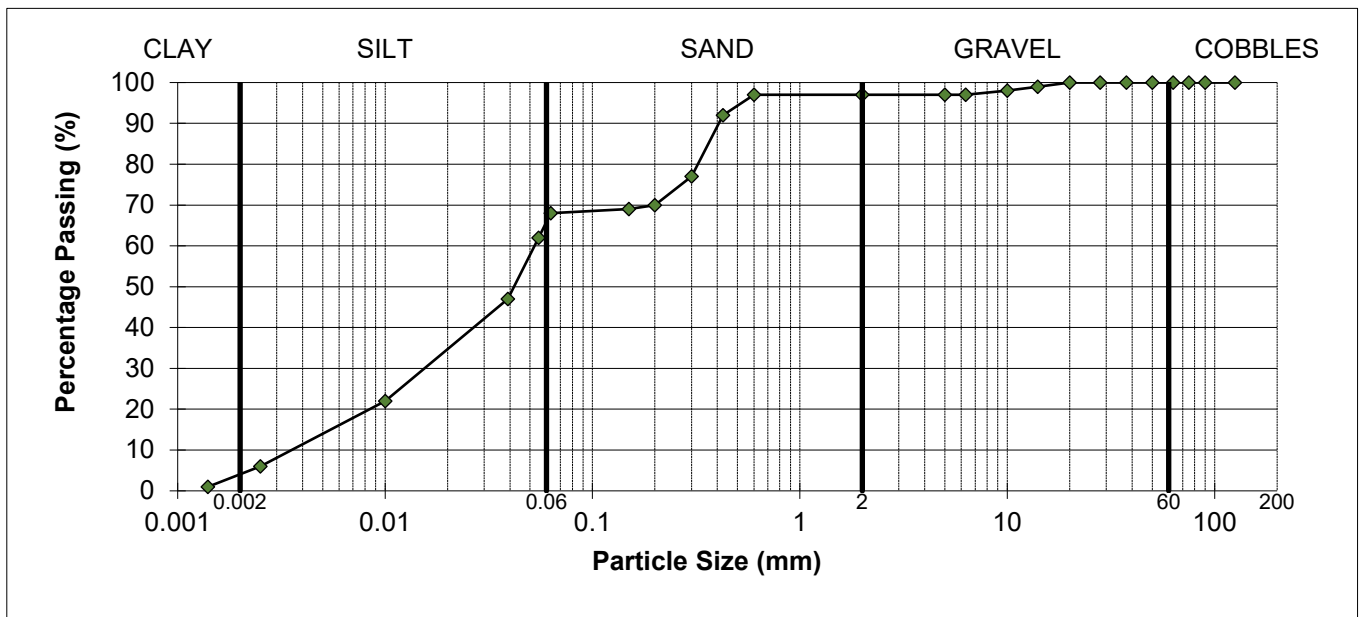
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 4.50-4.95m	DATE SAMPLED	12-Aug-22
LAB SAMPLE No	115571	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange slightly clayey very silty SAND with rare gravel
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	97	
90	100		0.6	97	
75	100		0.425	92	
63	100		0.3	77	
50	100		0.2	70	
37.5	100		0.15	69	
28	100		0.063	68	
20	100		0.055	62	
14	99		0.039	47	
10	98		0.01	22	
6.3	97		0.0025	6	
5	97		0.0014	1	



REMARKS

SIGNED



NAME

O.P. Davies BA (Hons)
(Laboratory Manager)

DATE

07-Sep-22

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

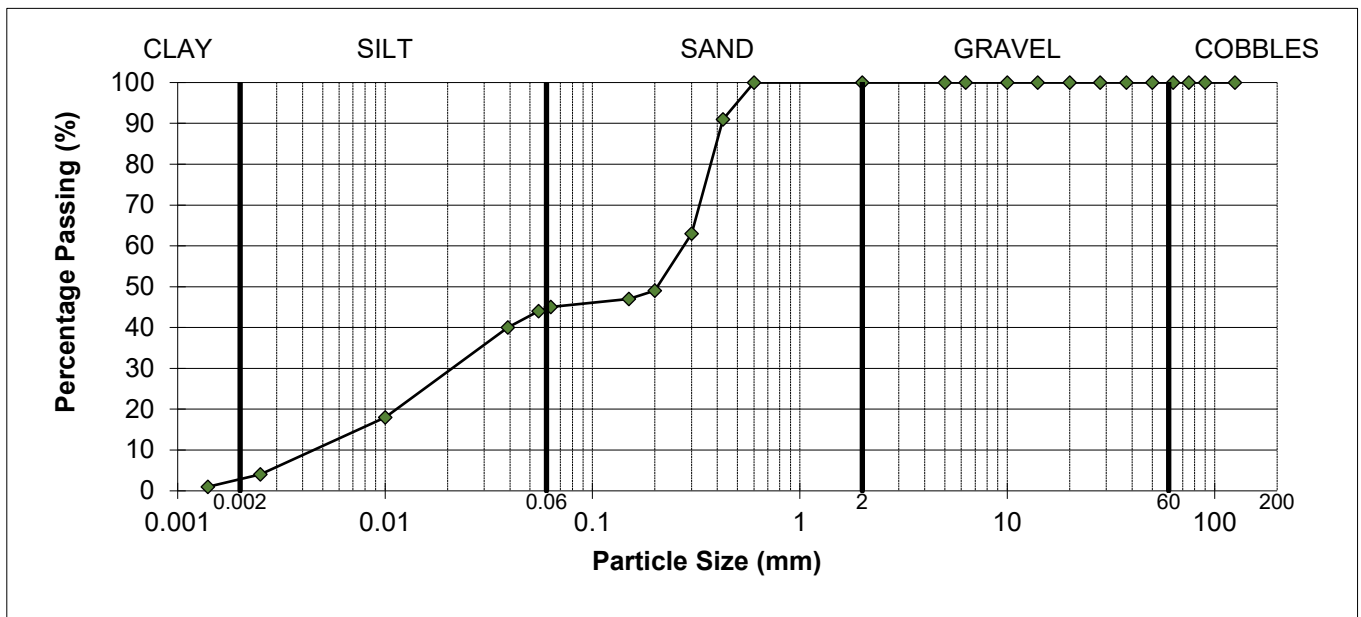
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 6.00-6.50m	DATE SAMPLED	12-Aug-22
LAB SAMPLE No	115572	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange slightly clayey silty SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	100	
90	100		0.6	100	
75	100		0.425	91	
63	100		0.3	63	
50	100		0.2	49	
37.5	100		0.15	47	
28	100		0.063	45	
20	100		0.055	44	
14	100		0.039	40	
10	100		0.01	18	
6.3	100		0.0025	4	
5	100		0.0014	1	



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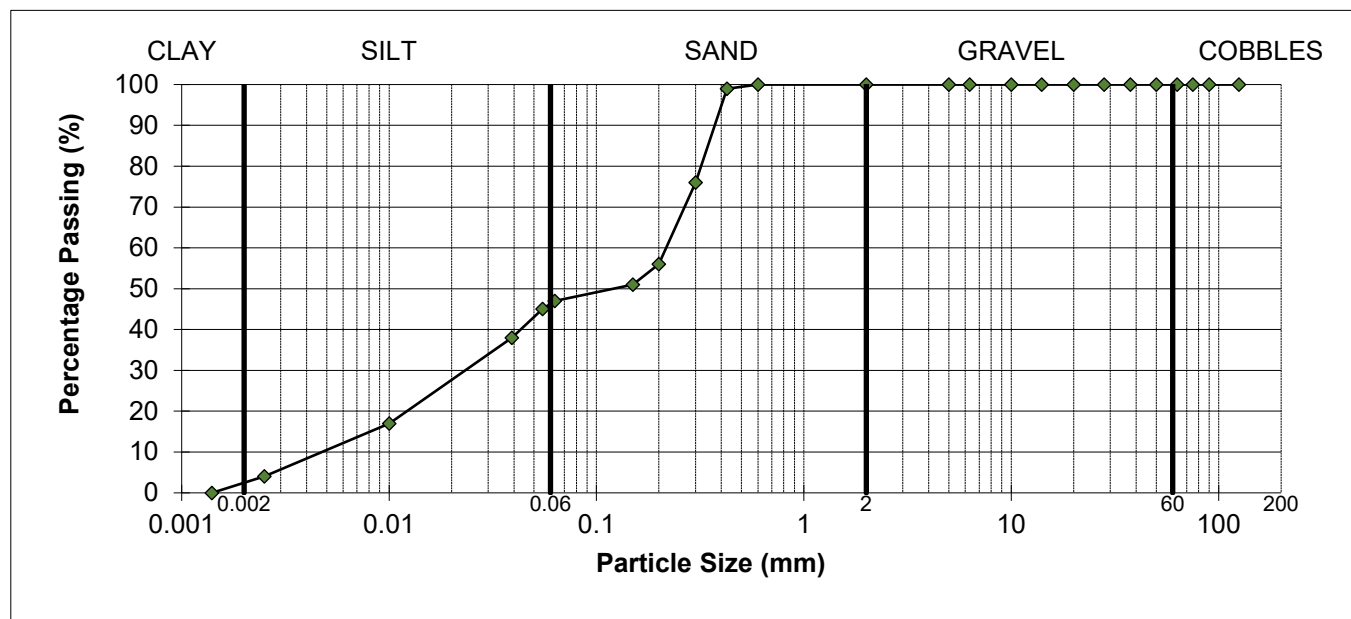
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 9.00-9.50m	DATE SAMPLED	12-Aug-22
LAB SAMPLE No	115574	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange slightly clayey silty SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	100	
90	100		0.6	100	
75	100		0.425	99	
63	100		0.3	76	
50	100		0.2	56	
37.5	100		0.15	51	
28	100		0.063	47	
20	100		0.055	45	
14	100		0.039	38	
10	100		0.01	17	
6.3	100		0.0025	4	
5	100		0.0014	0	



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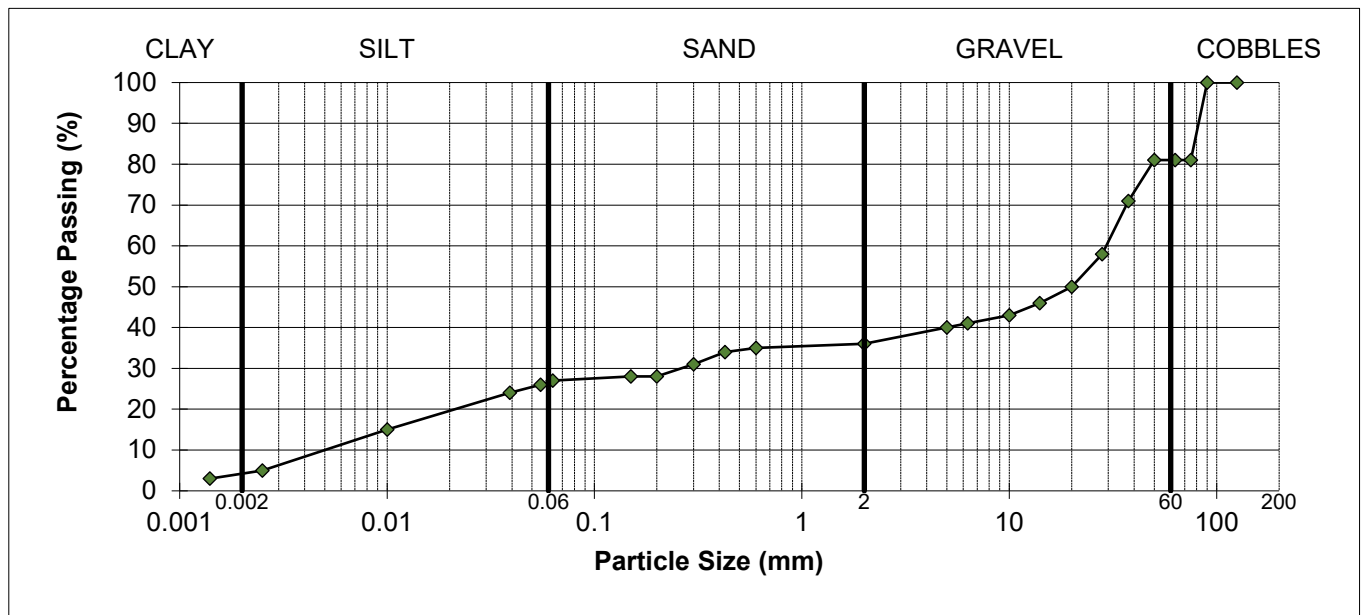
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 10.50-10.95m	DATE SAMPLED	12-Aug-22
LAB SAMPLE No	115575	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange clayey silty sandy GRAVEL
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	36	
90	100		0.6	35	
75	81		0.425	34	
63	81		0.3	31	
50	81		0.2	28	
37.5	71		0.15	28	
28	58		0.063	27	
20	50		0.055	26	
14	46		0.039	24	
10	43		0.01	15	
6.3	41		0.0025	5	
5	40		0.0014	3	



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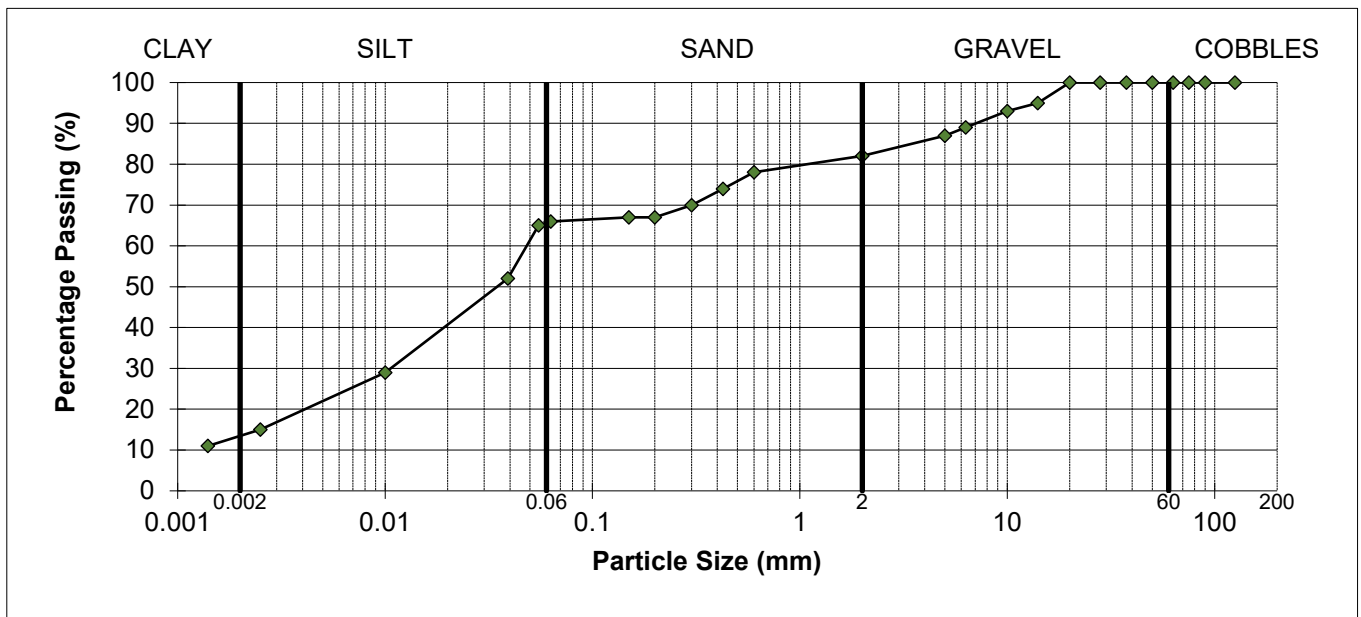
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 14.50-15.00m	DATE SAMPLED	12-Aug-22
LAB SAMPLE No	115576	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Firm to stiff brown silty sandy CLAY with occasional gravel
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	82	
90	100		0.6	78	
75	100		0.425	74	
63	100		0.3	70	
50	100		0.2	67	
37.5	100		0.15	67	
28	100		0.063	66	
20	100		0.055	65	
14	95		0.039	52	
10	93		0.01	29	
6.3	89		0.0025	15	
5	87		0.0014	11	



REMARKS

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NAME

O.P. Davies BA (Hons)
(Laboratory Manager)

DATE

07-Sep-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014

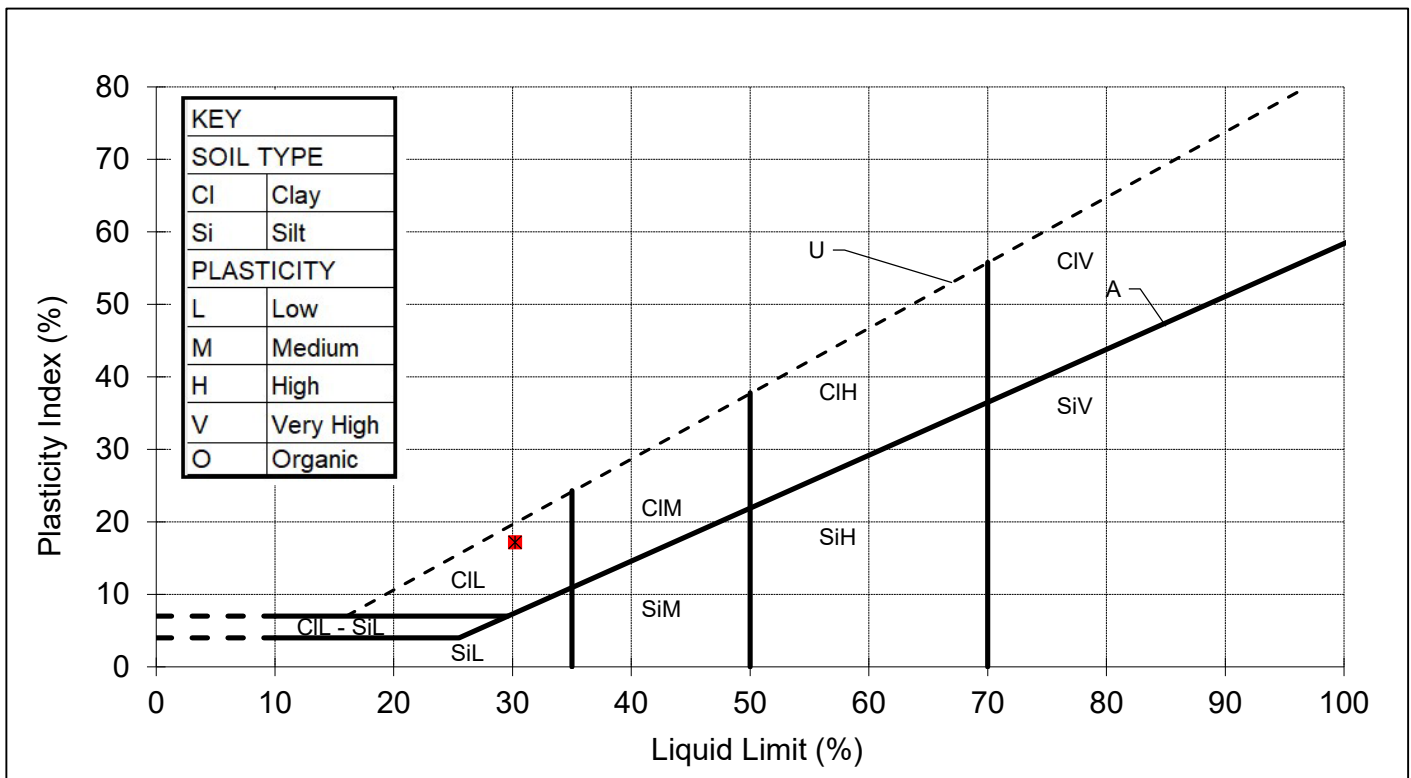
CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH2 14.50-15.00m	DATE SAMPLED	12-Aug-22
SAMPLE No.	115576	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Firm to stiff brown silty sandy CLAY with occasional gravel		
ADVISED SOURCE	Site Investigation sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)	Moisture Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.8	29.6	
Determination 2 (avg)	18.9	29.8	

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
14.2	30	13	17	74



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BS EN ISO 17892-4:2016

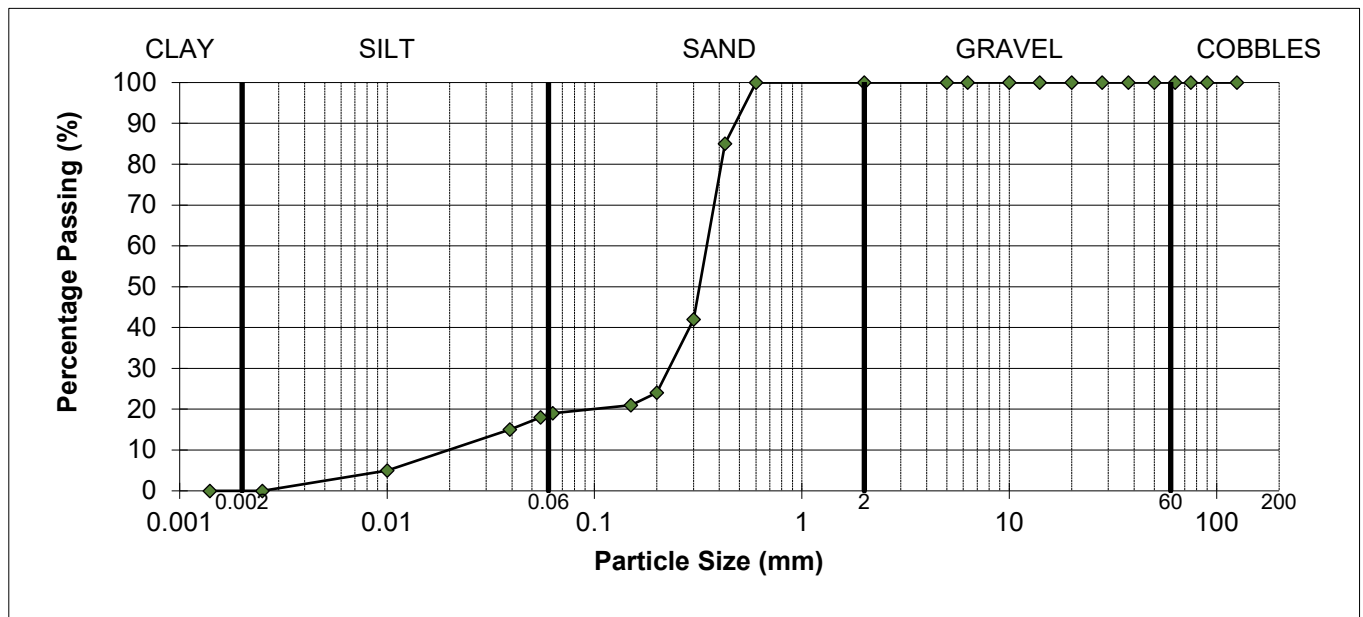
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH1 6.00-6.45m	DATE SAMPLED	15-Aug-22
LAB SAMPLE No	115578	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange silty SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	100	
90	100		0.6	100	
75	100		0.425	85	
63	100		0.3	42	
50	100		0.2	24	
37.5	100		0.15	21	
28	100		0.063	19	
20	100		0.055	18	
14	100		0.039	15	
10	100		0.01	5	
6.3	100		0.0025	0	
5	100		0.0014	0	



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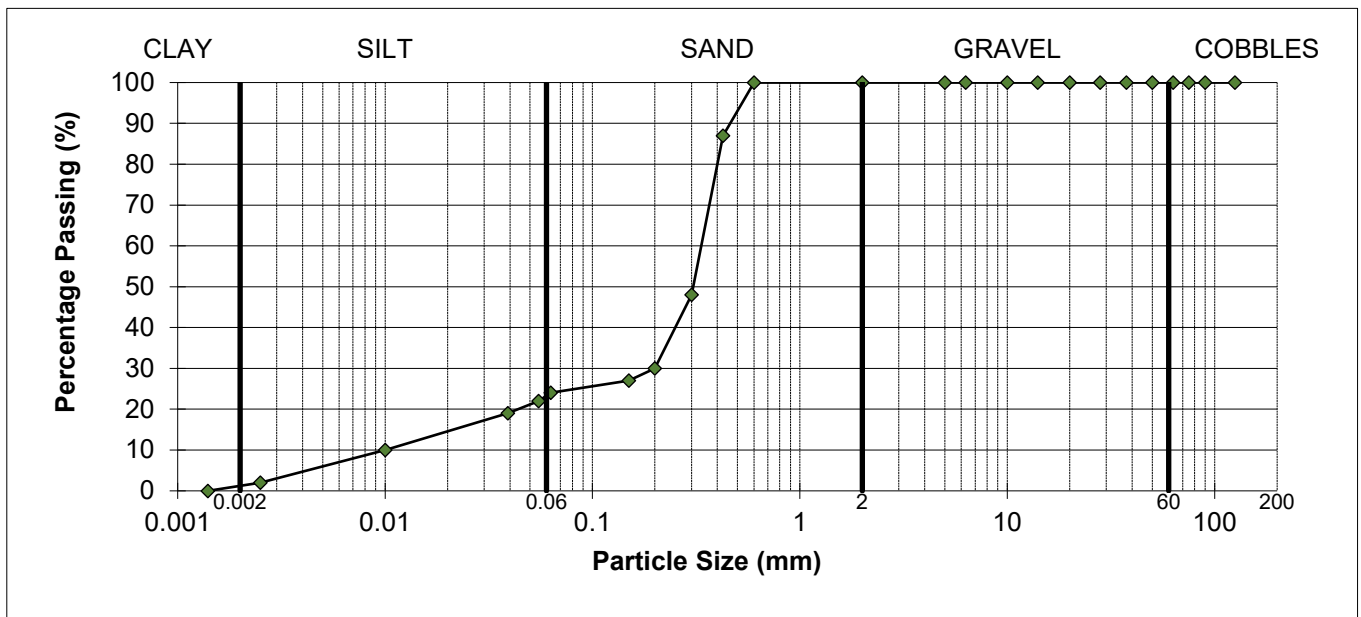
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH1 7.50-7.95m	DATE SAMPLED	15-Aug-22
LAB SAMPLE No	115579	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange silty SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	100	
90	100		0.6	100	
75	100		0.425	87	
63	100		0.3	48	
50	100		0.2	30	
37.5	100		0.15	27	
28	100		0.063	24	
20	100		0.055	22	
14	100		0.039	19	
10	100		0.01	10	
6.3	100		0.0025	2	
5	100		0.0014	0	



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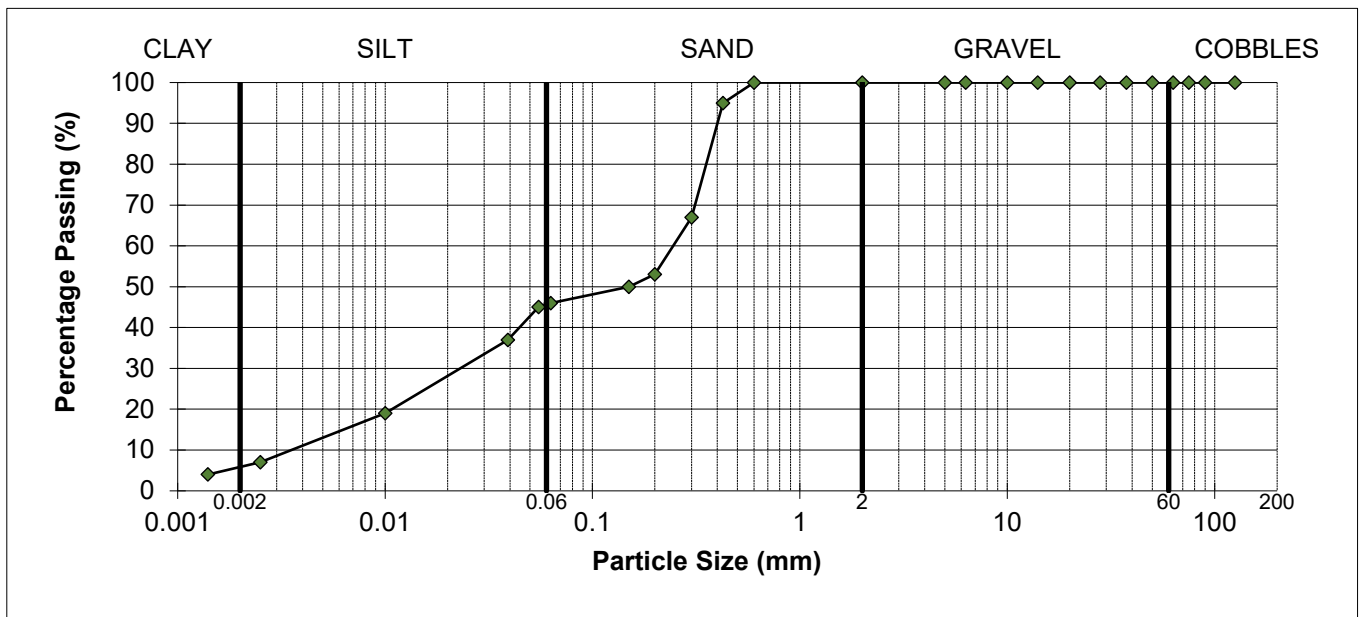
Determination of Water Content in accordance with BS EN ISO 17892-1:2014 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH1 9.00-9.45m	DATE SAMPLED	15-Aug-22
LAB SAMPLE No	115580	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange clayey silty SAND
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	100	
90	100		0.6	100	
75	100		0.425	95	
63	100		0.3	67	
50	100		0.2	53	
37.5	100		0.15	50	
28	100		0.063	46	
20	100		0.055	45	
14	100		0.039	37	
10	100		0.01	19	
6.3	100		0.0025	7	
5	100		0.0014	4	



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(Laboratory Manager)

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TEL 0161 475 0870



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A1:2021 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014

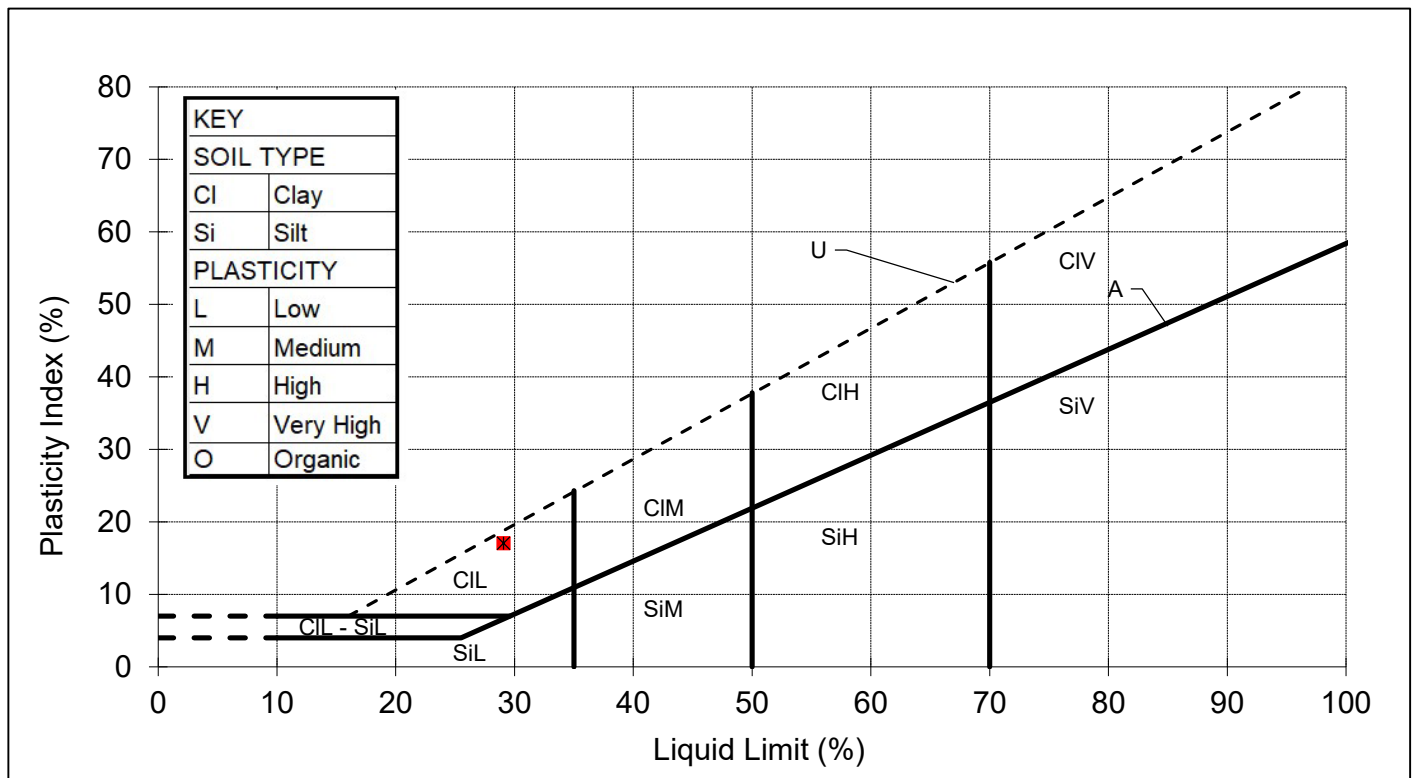
CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

SAMPLE LABEL	BH1 12.00-12.95	DATE SAMPLED	15-Aug-22
SAMPLE No.	115581	DATE RECEIVED	16-Aug-22
DATE TESTED	26-Aug-22	SAMPLED BY	Client

MATERIAL	Brown orange clay bound silty SAND		
ADVISED SOURCE	Site Investigation sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Moisture Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	22.7	30.2	0.964	
Determination 2 (avg)	22.7	30.1		

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
24.5	29	12	17	100



REMARKS

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(Laboratory Manager)

DATE

07-Sep-22

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
DUKINFIELD, CHESHIRE SK16 4QX
TEL 0161 475 0870

TEST CERTIFICATE

DETERMINATION OF WATER-SOLUBLE SULPHATE IN SOIL
& DETERMINATION OF THE pH VALUE
BS 1377-3:2018+A1:2021, Cl. 7.3 & Cl. 12

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4932 - Old Market Street, Blackley
JOB NUMBER	MRN 4288/76

DATE TESTED	26-Aug-22	DATE SAMPLED	12 + 15-Aug-22
SAMPLED BY	Client	DATE RECEIVED	16-Aug-22
PRE-TREATMENT	Air Dried	ADVISED SOURCE	Site Investigation Sample

Sample Number	Sample Reference	Material	% Ret. 2mm	pH Value	Water Soluble Sulphate as SO ₄ (mg/l)
115571	BH2 4.50-4.95m	Brown orange slightly clayey very silty SAND with rare gravel	3	7.0	100
115572	BH2 6.00-6.50m	Brown orange slightly clayey silty SAND	0	7.1	80
115573	BH2 9.00-9.50m	Brown orange slightly clayey silty SAND	0	7.1	80
115575	BH2 10.50-10.95m	Brown orange clayey silty sandy GRAVEL	64	7.6	190
115577	BH1 1.50-1.95m	Made Ground	70	8.0	330
115578	BH1 6.00-6.45m	Brown orange silty SAND	0	7.0	100
115579	BH1 7.50-7.95m	Brown orange silty SAND	0	7.0	110
115580	BH1 9.00-9.45m	Brown orange clayey silty SAND	0	7.2	90

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