

TEST REPORT

Client Earth Environmental & Geotechnical Ltd

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

Contract A4701 -
Northern Moor

Job Number MRN 4288/41
Date of Issue 28 April 2022
Pages 1 of 15

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 1377: PART 2: Clause 9.2: 1990

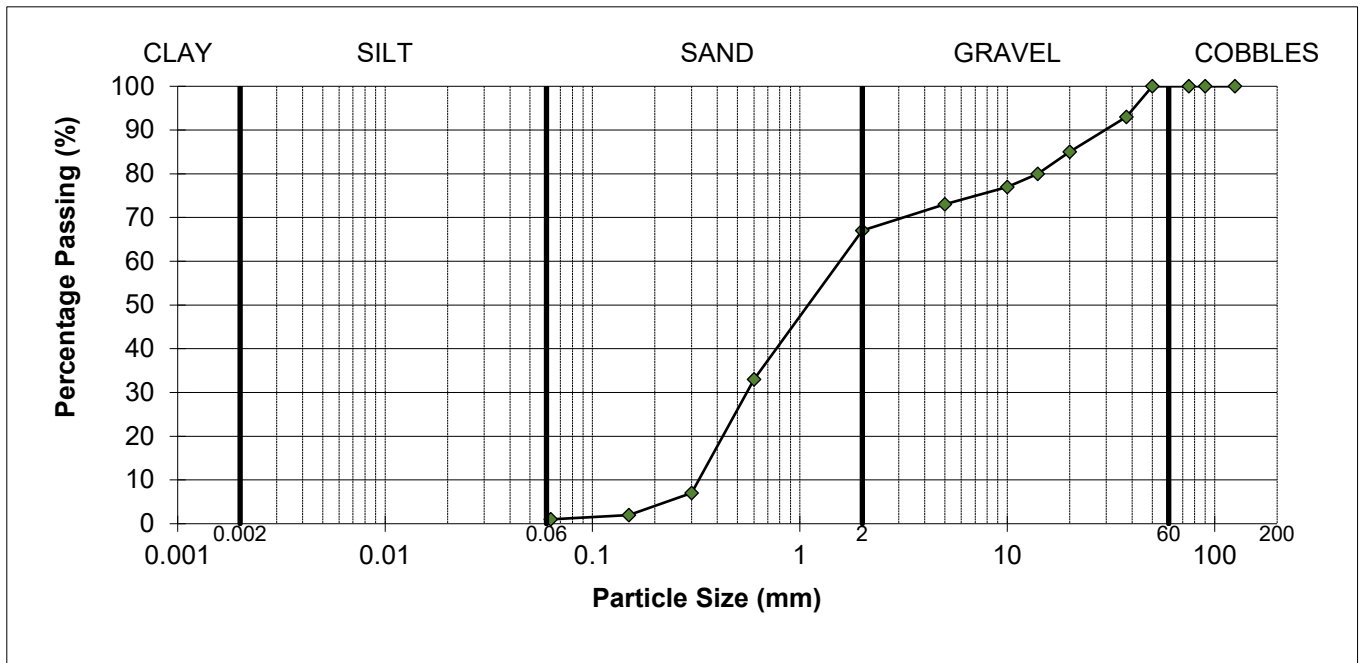
Determination of Moisture Content in accordance with BS 1377: PART 2: Clause 3: 1990 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS1 D 1.80	DATE SAMPLED	06-Apr-22
LAB SAMPLE No	111030	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Brown slightly silty SAND & GRAVEL
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		10	77	
90	100		5	73	
75	100		2	67	
50	100		0.6	33	
37.5	93		0.3	7	
20	85		0.15	2	
14	80		0.063	1	



REMARKS

As received moisture content = 4.8%

SIGNED



NAME

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

DATE

28-Apr-22

MURRAY RIX

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

TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS1 D 1.80	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111030	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.5	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.21	

REMARKS

SIGNED



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

DATE 28 April 2022

MURRAY RIX

ANDREW HOUSE, HADFIELD STREET,
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TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

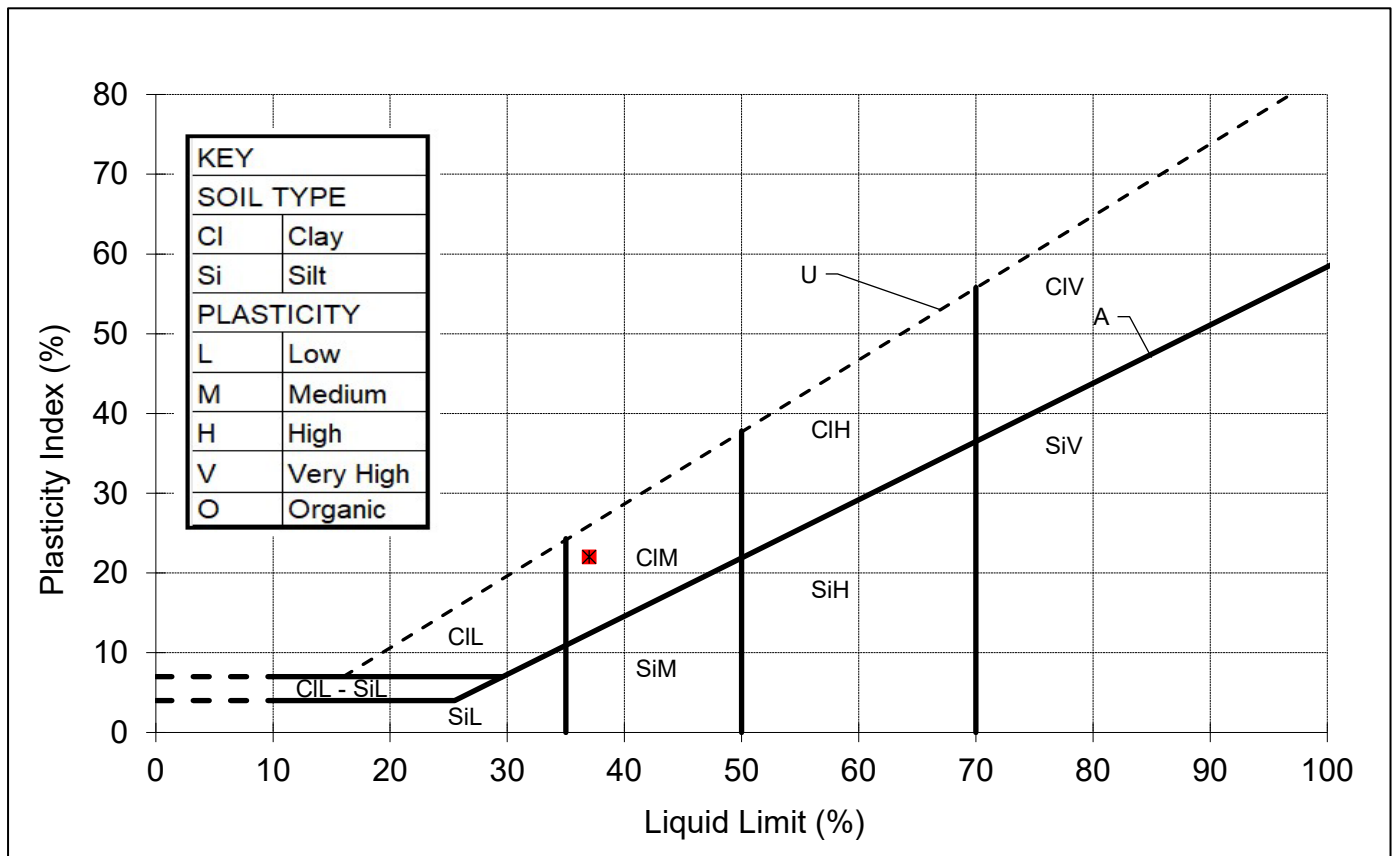
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS1 D 3.90	DATE SAMPLED	06-Apr-22
SAMPLE No.	111031	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Firm brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
24	37	15	22	91



REMARKS

Sample tested in natural condition

SIGNED

NAME

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

DATE

28-Apr-22

MURRAY RIX

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TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS2 D 2.50	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111032	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.3	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.28	

REMARKS

SIGNED



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

DATE 28 April 2022

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TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

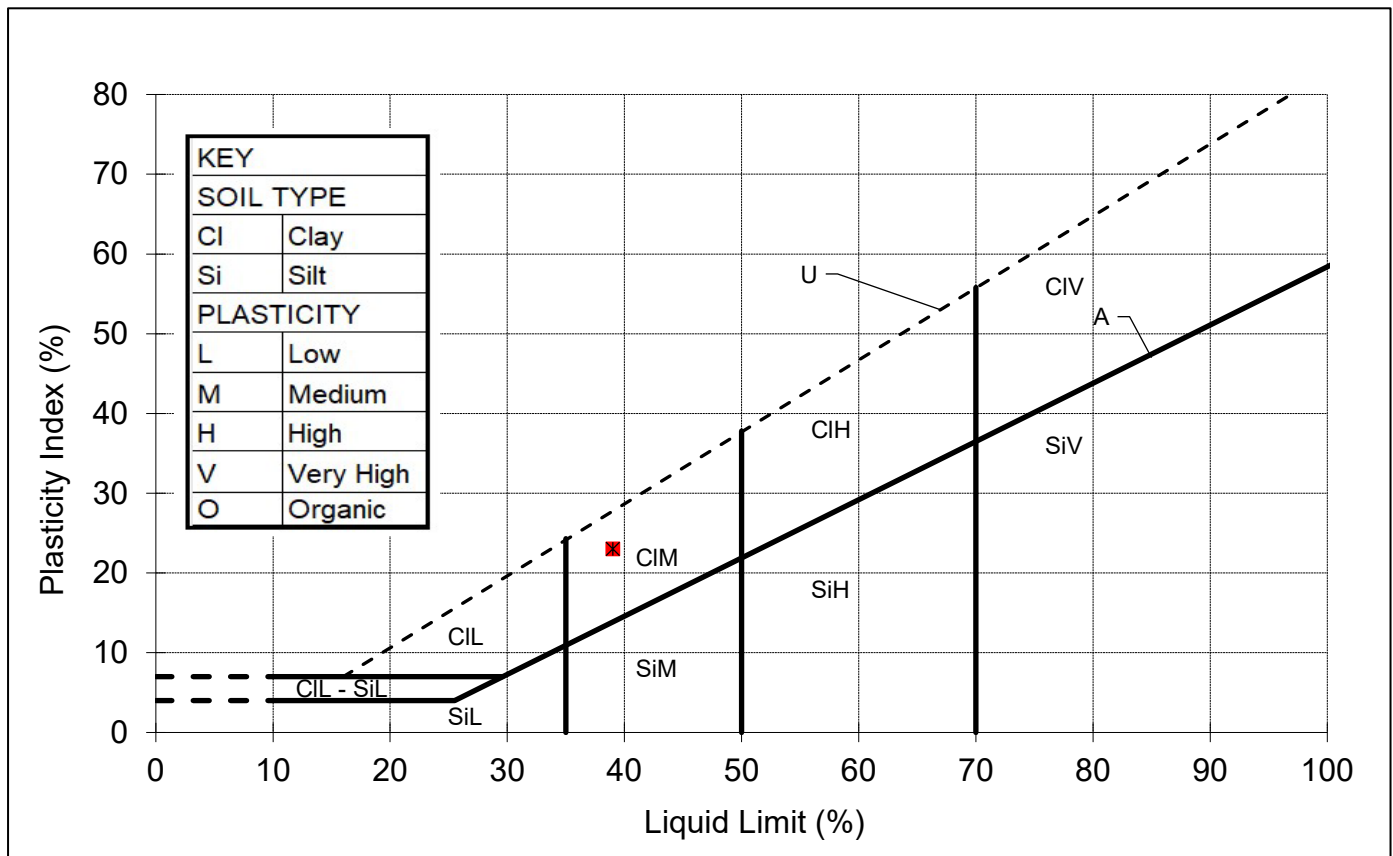
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS2 D 4.90	DATE SAMPLED	06-Apr-22
SAMPLE No.	111033	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Soft to firm brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
25	39	16	23	95



REMARKS

Sample tested in natural condition

SIGNED

NAME

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

DATE

28-Apr-22

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TEL 0161 475 0870

TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS2 D 4.90	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111033	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.1	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.22	

REMARKS

SIGNED



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

DATE 28 April 2022

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS 1377: PART 2: Clause 9.2: 1990

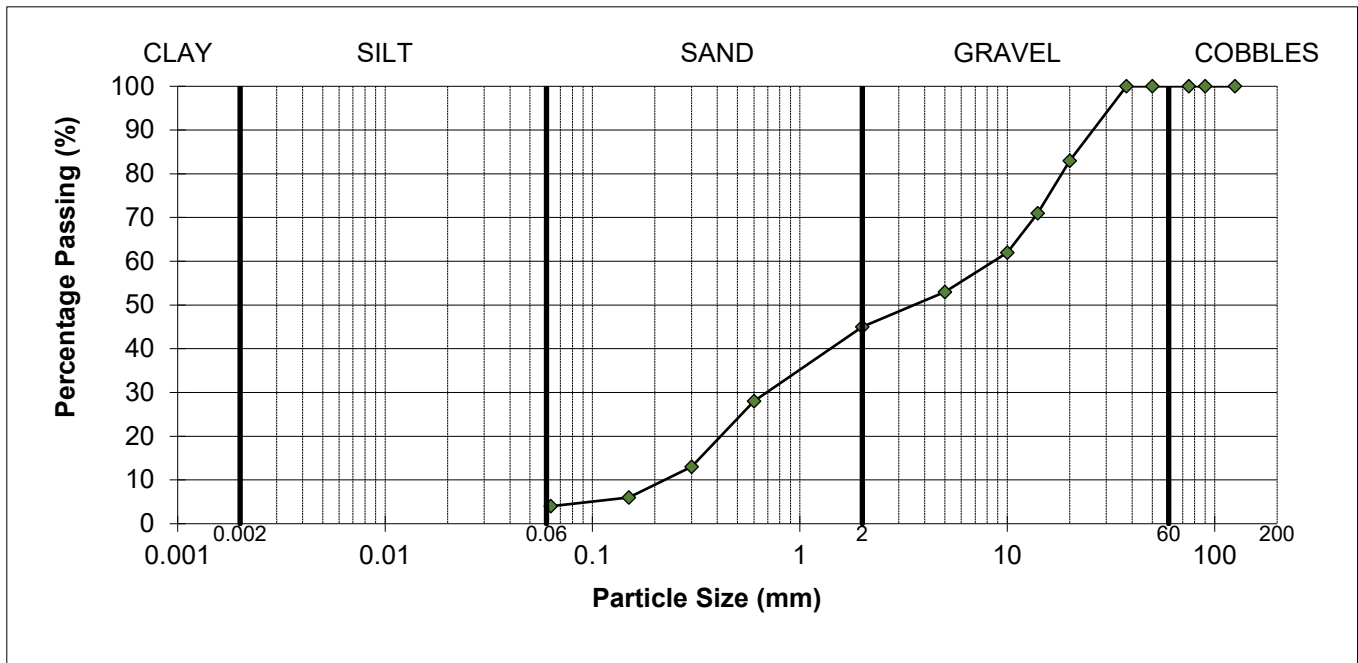
Determination of Moisture Content in accordance with BS 1377: PART 2: Clause 3: 1990 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS3 D 3.5	DATE SAMPLED	06-Apr-22
LAB SAMPLE No	111034	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Brown slightly silty SAND & GRAVEL
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		10	62	
90	100		5	53	
75	100		2	45	
50	100		0.6	28	
37.5	100		0.3	13	
20	83		0.15	6	
14	71		0.063	4	



REMARKS

As received moisture content = 11%

SIGNED



NAME

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

DATE

28-Apr-22

MURRAY RIX

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TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS3 D 3.5	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111034	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.0	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.16	

REMARKS

SIGNED



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

DATE 28 April 2022

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TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

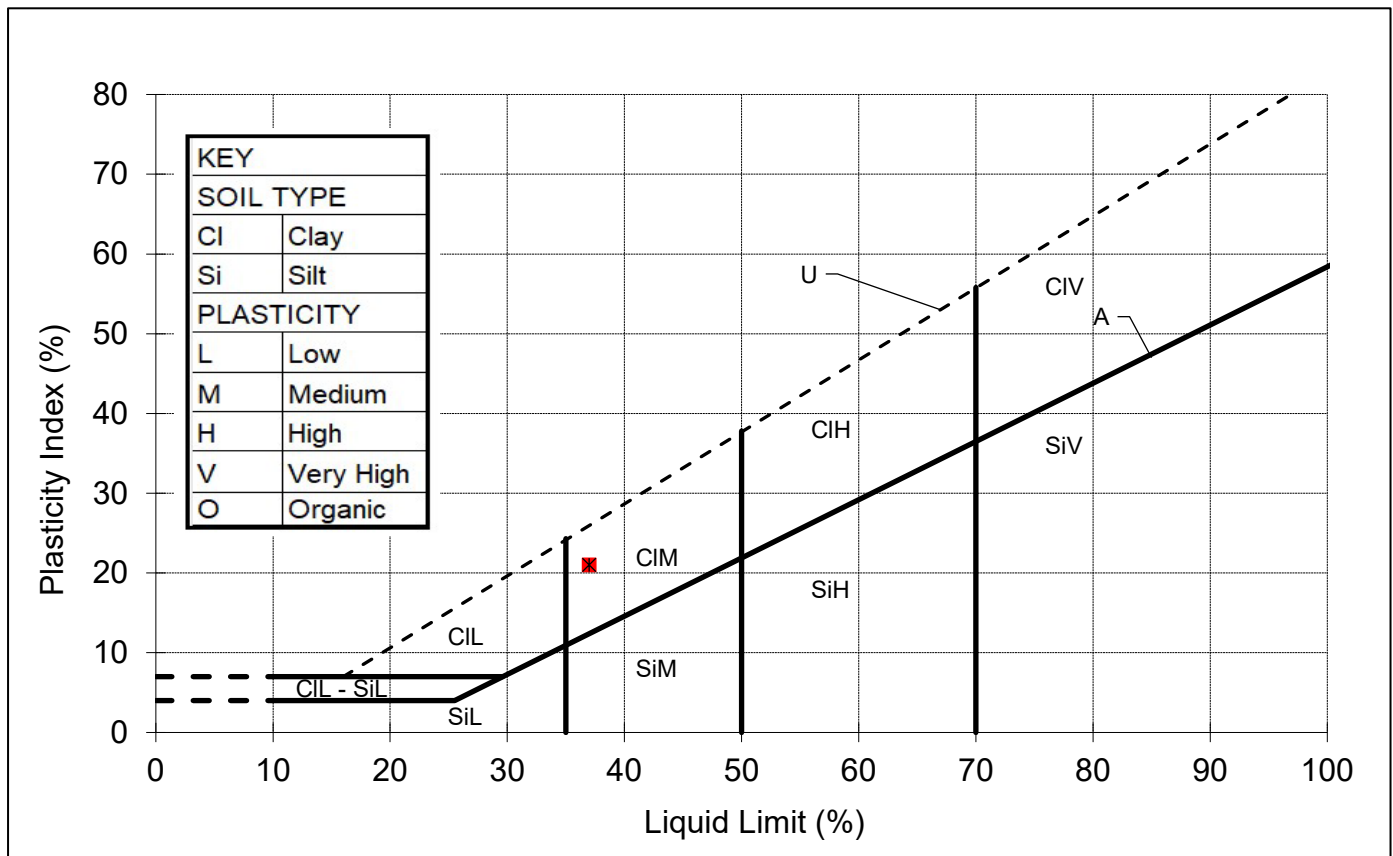
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS4 D 3.70	DATE SAMPLED	06-Apr-22
SAMPLE No.	111035	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Firm brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
25	37	16	21	92



REMARKS

Sample tested in natural condition

SIGNED

NAME

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

DATE

28-Apr-22

MURRAY RIX

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TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

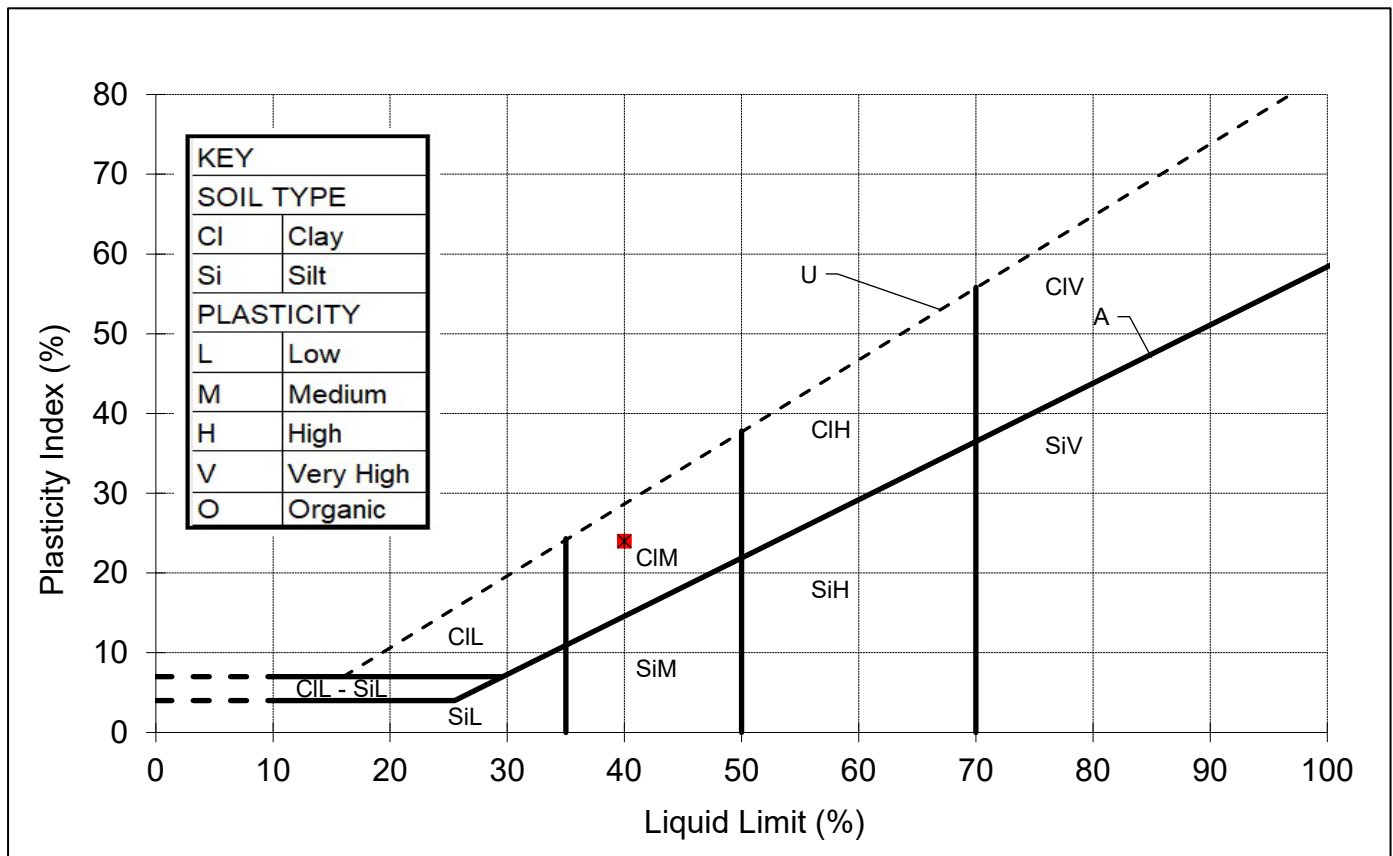
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS4 D 4.70	DATE SAMPLED	06-Apr-22
SAMPLE No.	111036	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Soft brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
29	40	16	24	97



REMARKS

Sample tested in natural condition

SIGNED

NAME

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

DATE

28-Apr-22

MURRAY RIX

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TEL 0161 475 0870

TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS4 D 4.70	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111036	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.2	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.12	

REMARKS

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

DATE 28 April 2022

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PARTICLE SIZE DISTRIBUTION

BS 1377: PART 2: Clause 9.2: 1990

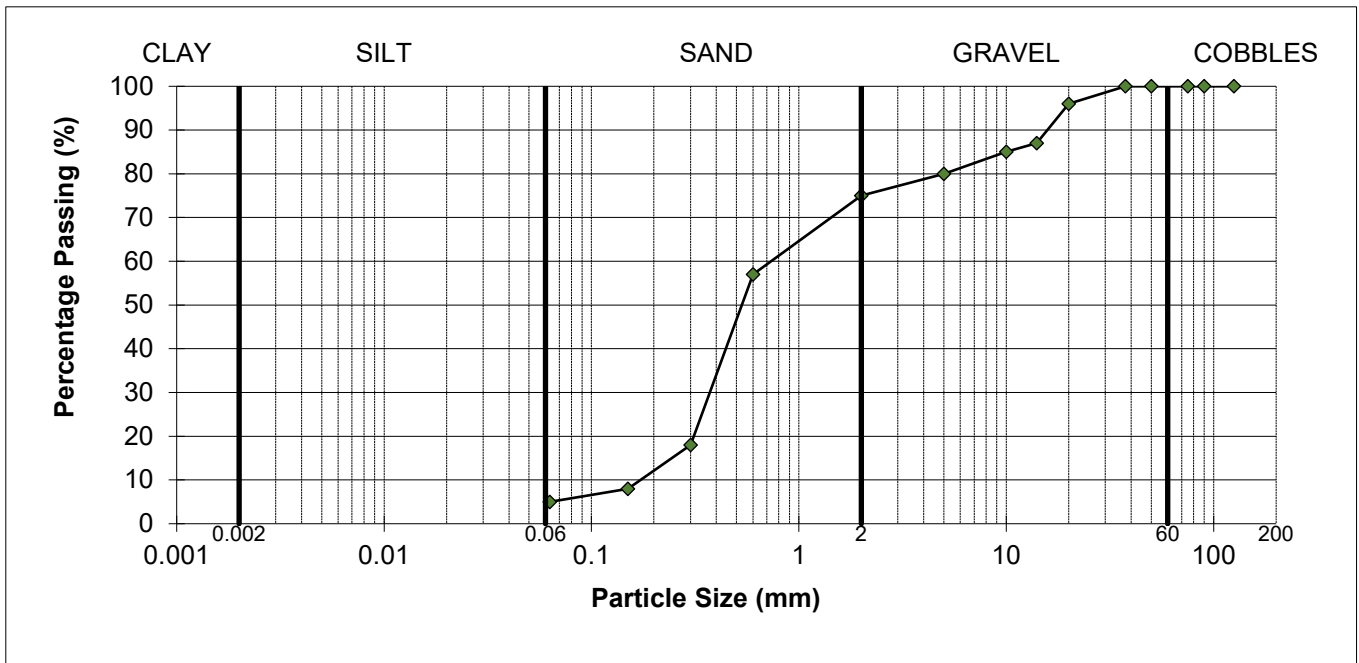
Determination of Moisture Content in accordance with BS 1377: PART 2: Clause 3: 1990 (Oven Dry)

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS5 D 3.1	DATE SAMPLED	06-Apr-22
LAB SAMPLE No	111037	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Brown silty SAND with frequent gravel
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		10	85	
90	100		5	80	
75	100		2	75	
50	100		0.6	57	
37.5	100		0.3	18	
20	96		0.15	8	
14	87		0.063	5	



REMARKS

As received moisture content = 16%

SIGNED



NAME

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

DATE

28-Apr-22

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TEST CERTIFICATE

pH and Sulphate as SO₄
BS 1377: PART 3: 1990

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS5 D 3.1	DATE SAMPLED	06 April 2022
LAB SAMPLE No	111037	DATE RECEIVED	06 April 2022
DATE TESTED	14 April 2022	SAMPLED BY	Client

ADVISED SOURCE	Site Investigation Sample
PRE TREATMENT	Air Dried

PH Value	7.0	g/l
Sulphate as SO ₄ (2:1 Water Extract)	0.19	

REMARKS

SIGNED



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

DATE 28 April 2022

MURRAY RIX

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TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

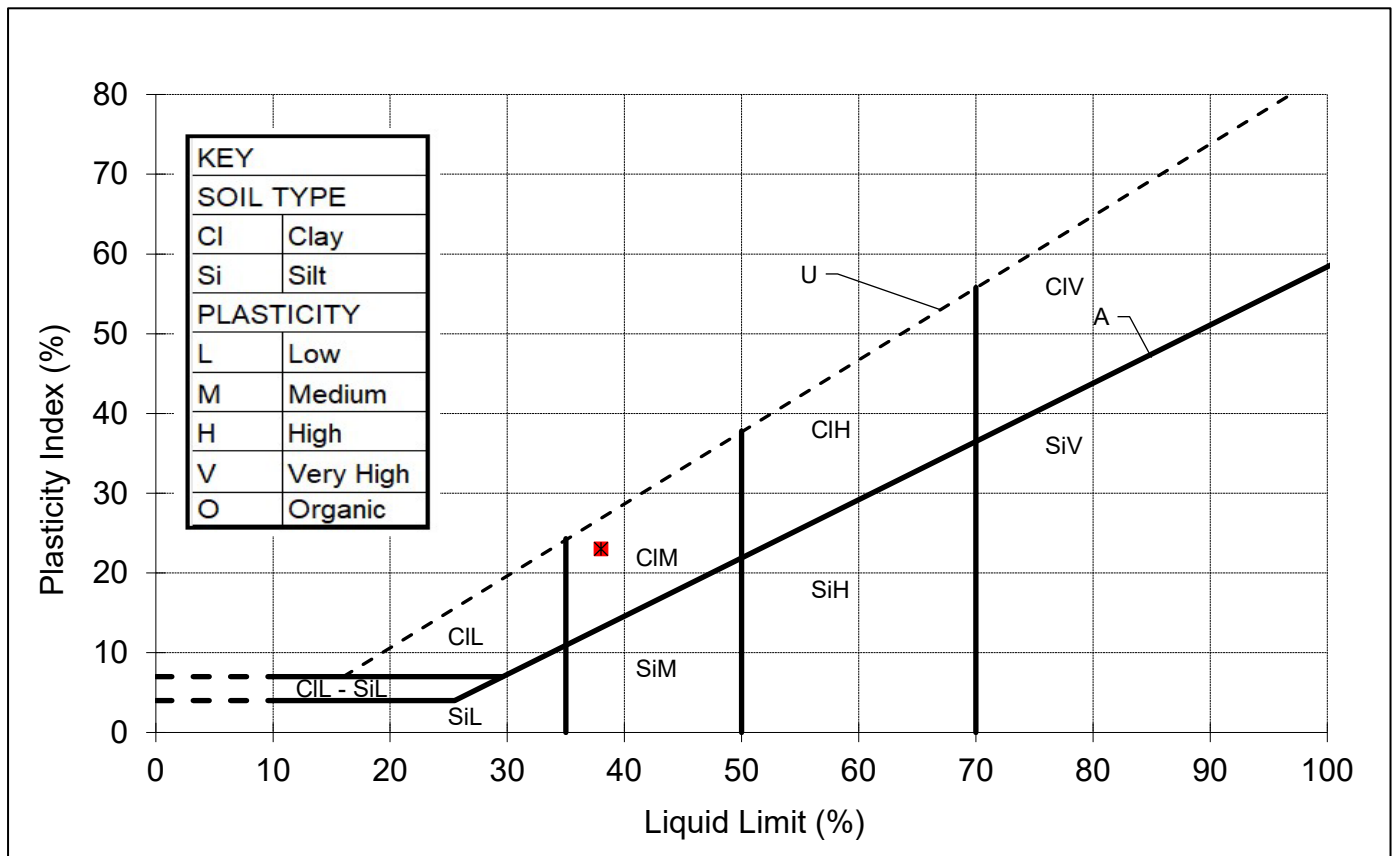
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Earth Environmental & Geotechnical Ltd
SITE	A4701 - Northern Moor
JOB NUMBER	MRN 4288/41

SAMPLE LABEL	WS5 D 3.90	DATE SAMPLED	06-Apr-22
SAMPLE No.	111038	DATE RECEIVED	06-Apr-22
DATE TESTED	14-Apr-22	SAMPLED BY	Client

MATERIAL	Soft brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Natural Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
29	38	15	23	94



REMARKS

Sample tested in natural condition

SIGNED

NAME

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

DATE

28-Apr-22