

APPENDIX D - GEOTECHNICAL IN SITU FIELDWORK AND LABORATORY RESULTS

TEST REPORT

Client Tier Environmental Ltd

Address Suite 513
Chadwick House
Warrington Road
Birchwood
WA3 6AE

Contract TE1885 -
Bury Interchange

Job Number MRN 25010/29

Date of Issue 02 May 2025

Page 1 of 21

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.



Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

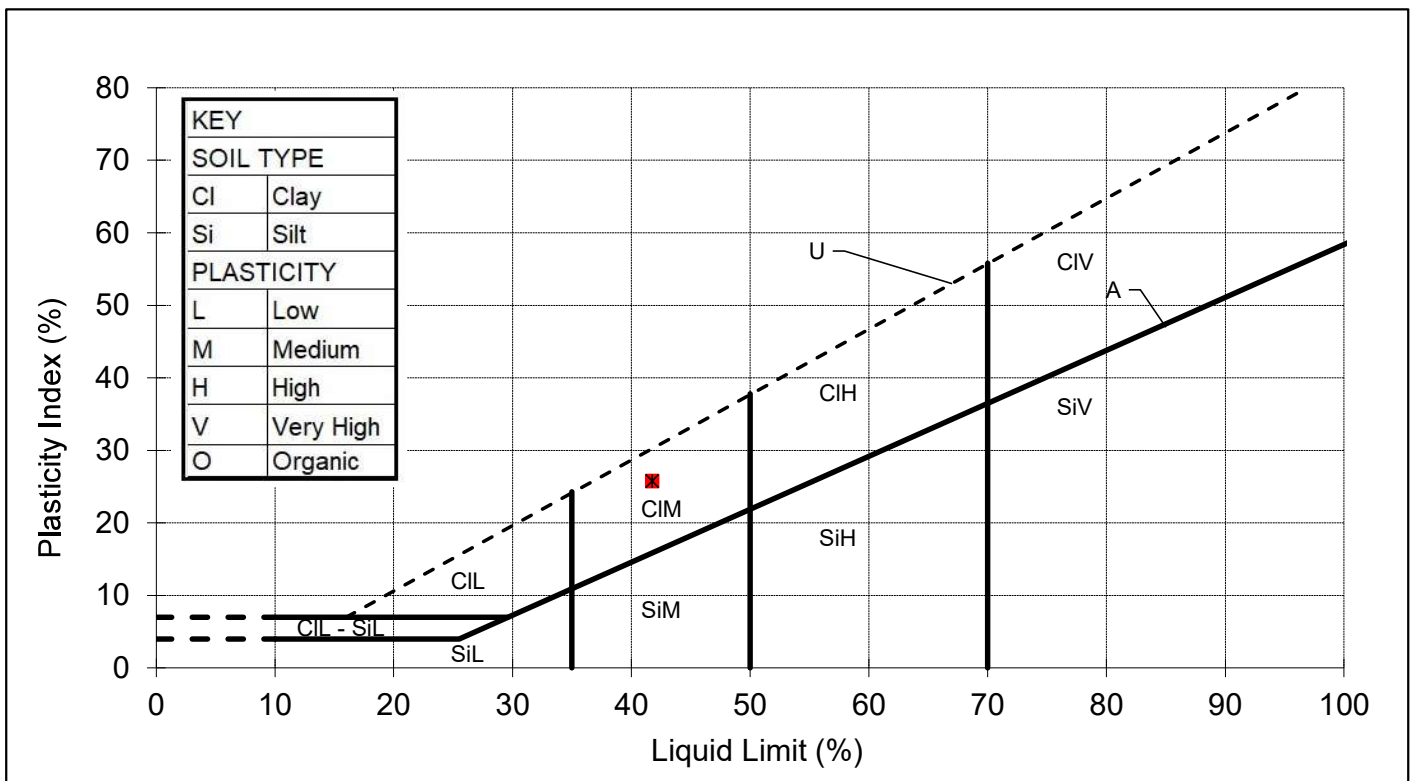
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 2.3m D	DATE SAMPLED	Not advised
SAMPLE No.	5052151	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	41.8	1.000	
Determination 2 (avg)	20.0	41.7		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
34.8	42	16	26	77



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

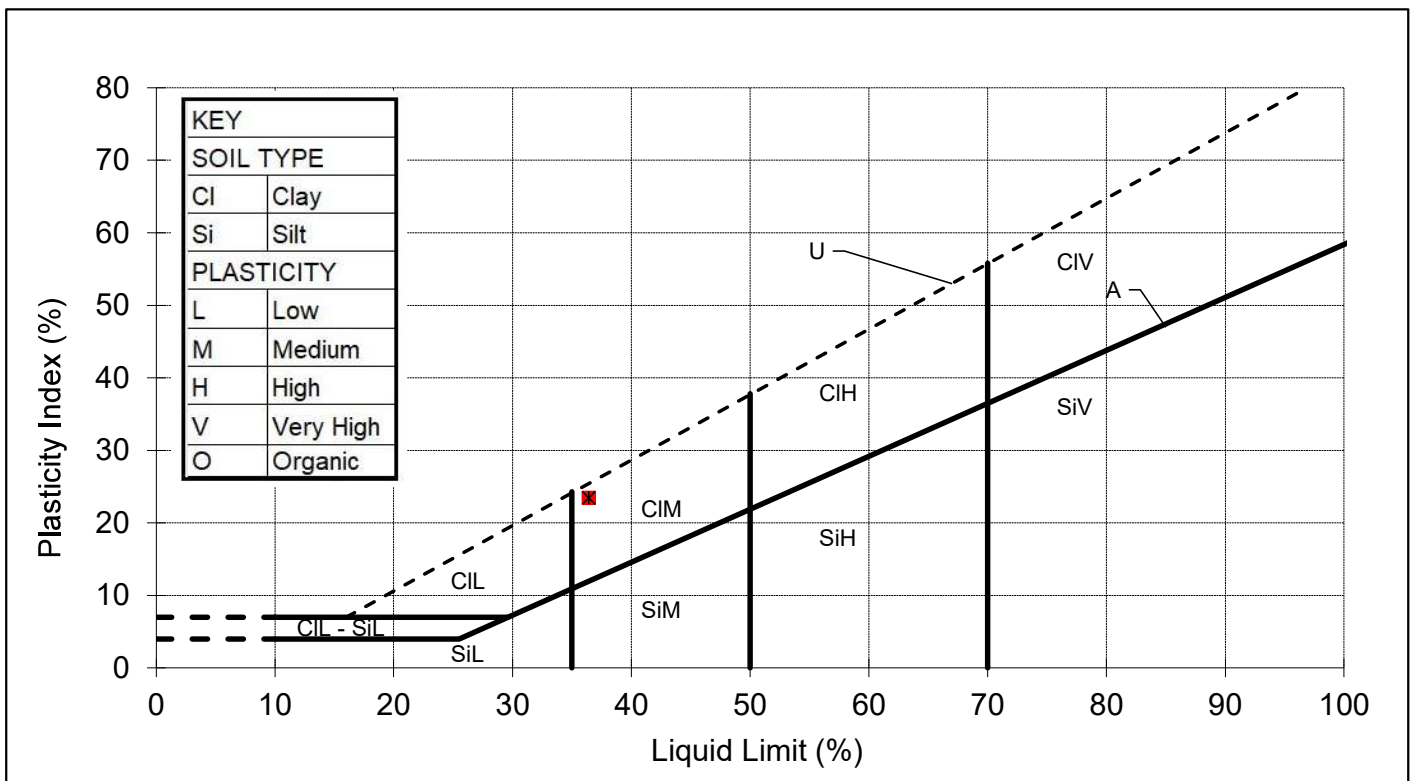
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 4.5-4.95m D	DATE SAMPLED	Not advised
SAMPLE No.	5052130	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)	Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.6	1.026	
Determination 2 (avg)	18.5		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
14.7	36	13	23	82



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

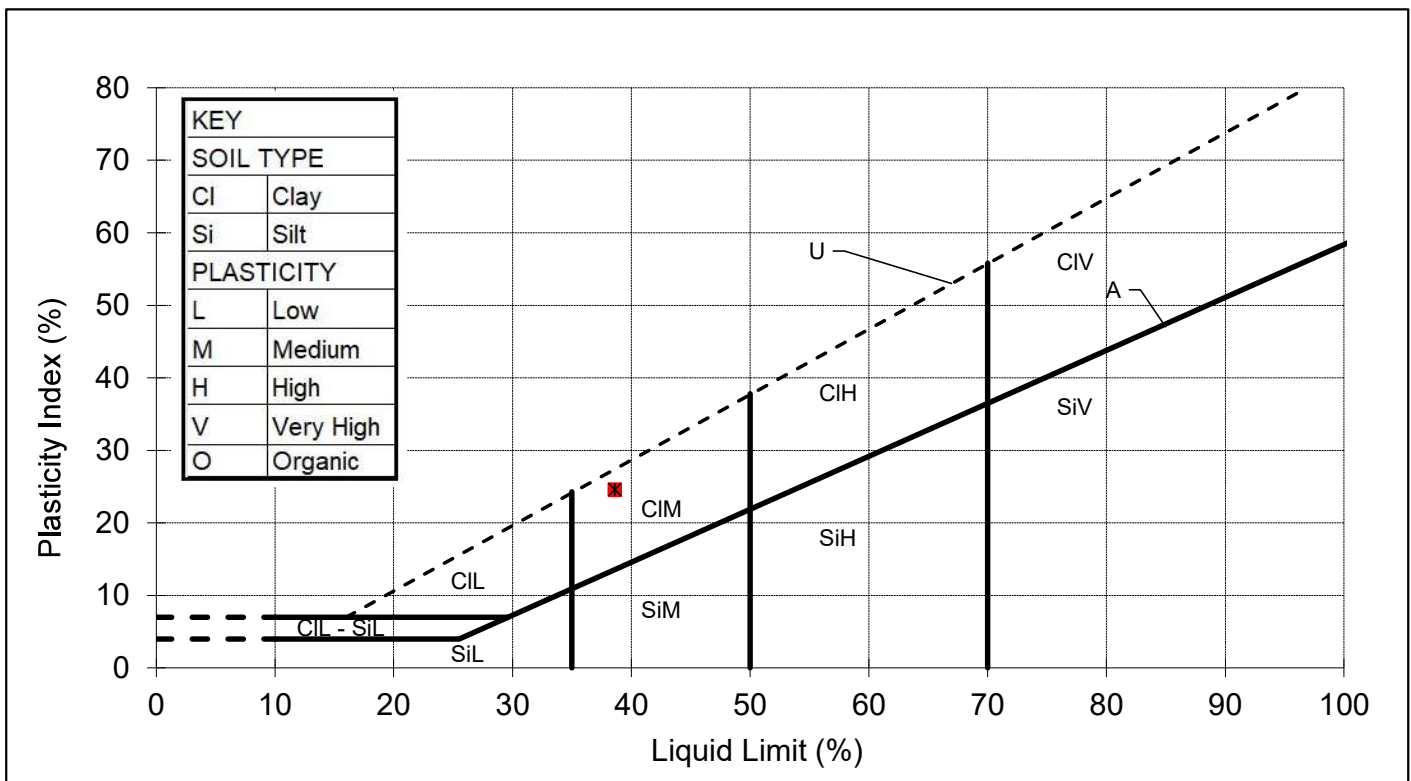
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH105 1.2m D	DATE SAMPLED	Not advised
SAMPLE No.	5052139	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	38.6	0.996	
Determination 2 (avg)	20.5	38.9		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
15.9	39	14	25	68



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

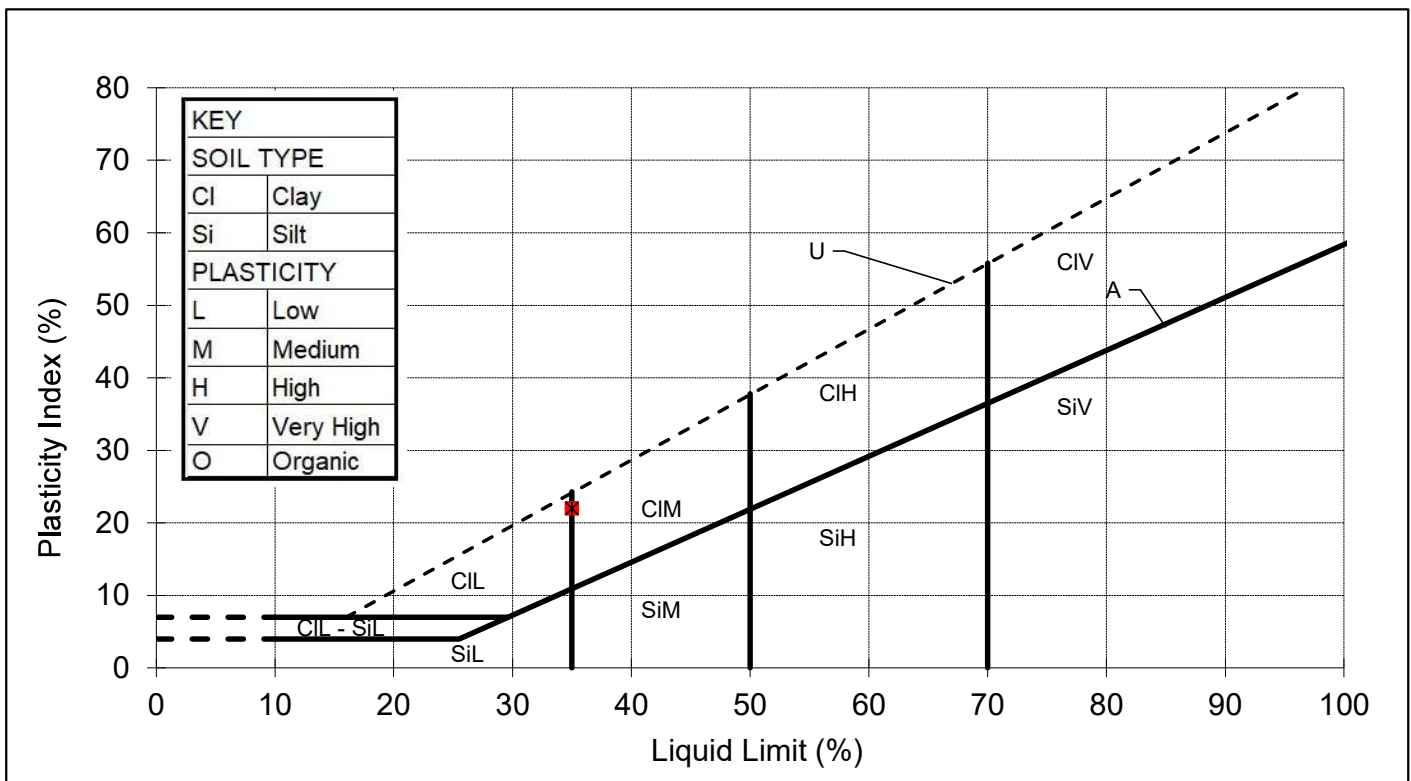
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH105 9.8m D	DATE SAMPLED	Not advised
SAMPLE No.	5052146	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.6	34.8	1.005	
Determination 2 (avg)	19.8	34.9		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
13.3	35	13	22	75



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

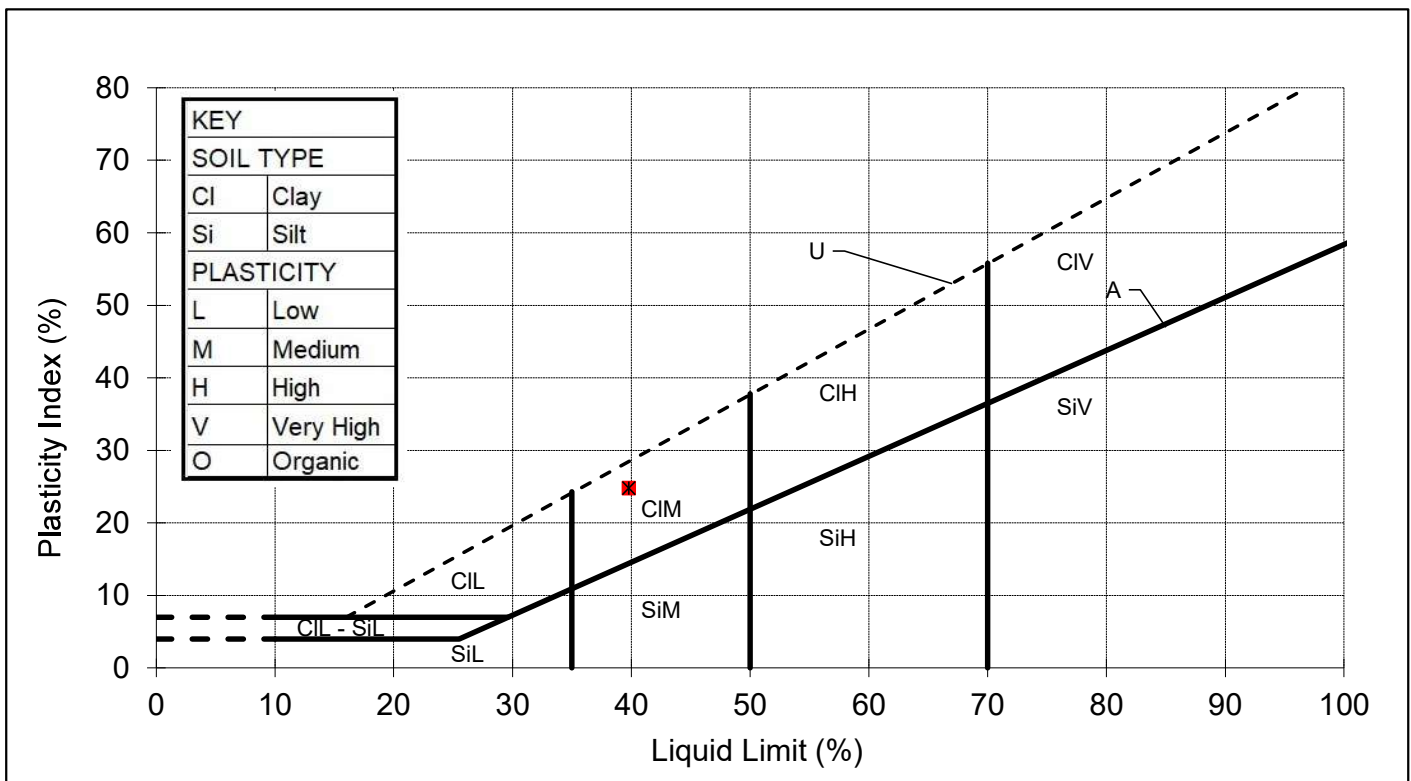
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	WS-P2-106 1.2m D	DATE SAMPLED	Not advised
SAMPLE No.	5052154	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	21.2	40.5	0.985	
Determination 2 (avg)	20.7	40.3		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
20.5	40	15	25	86



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

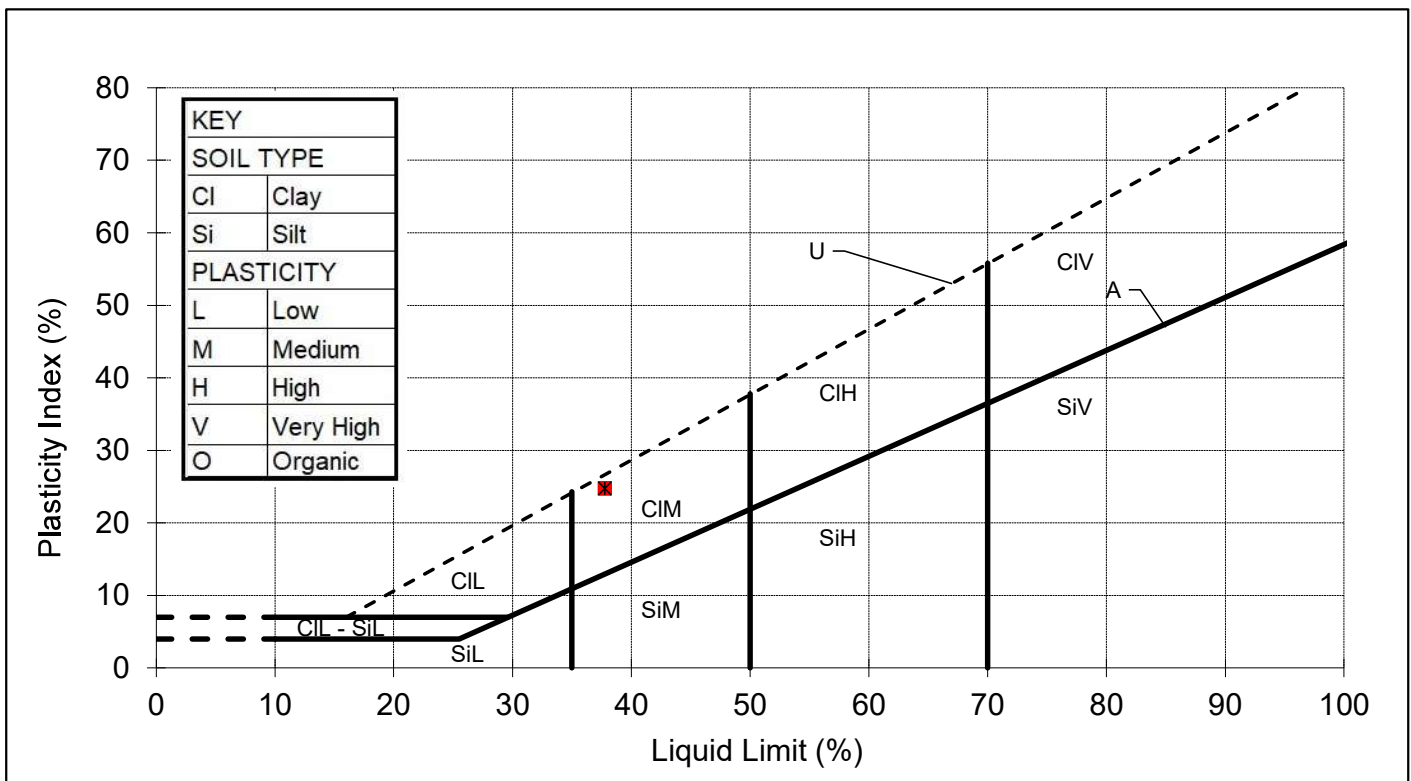
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	WS-P2-107 2.0m D	DATE SAMPLED	Not advised
SAMPLE No.	5052158	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	37.7	1.003	
Determination 2 (avg)	19.7	37.6		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
12.8	38	13	25	80



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

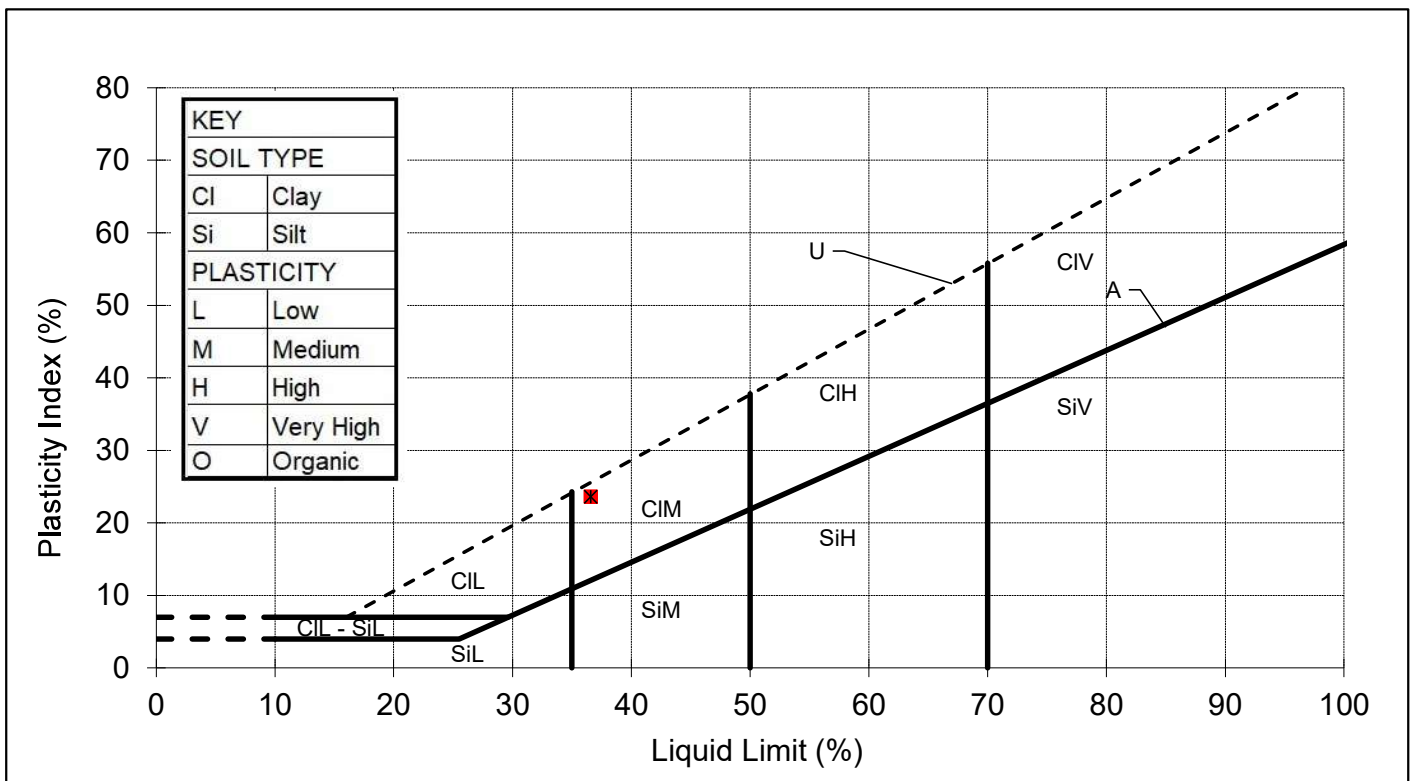
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	WS-P2-110 1.2m D	DATE SAMPLED	Not advised
SAMPLE No.	5052168	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.9	35.9	1.016	
Determination 2 (avg)	19.0	36.1		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
14.8	37	13	24	84



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

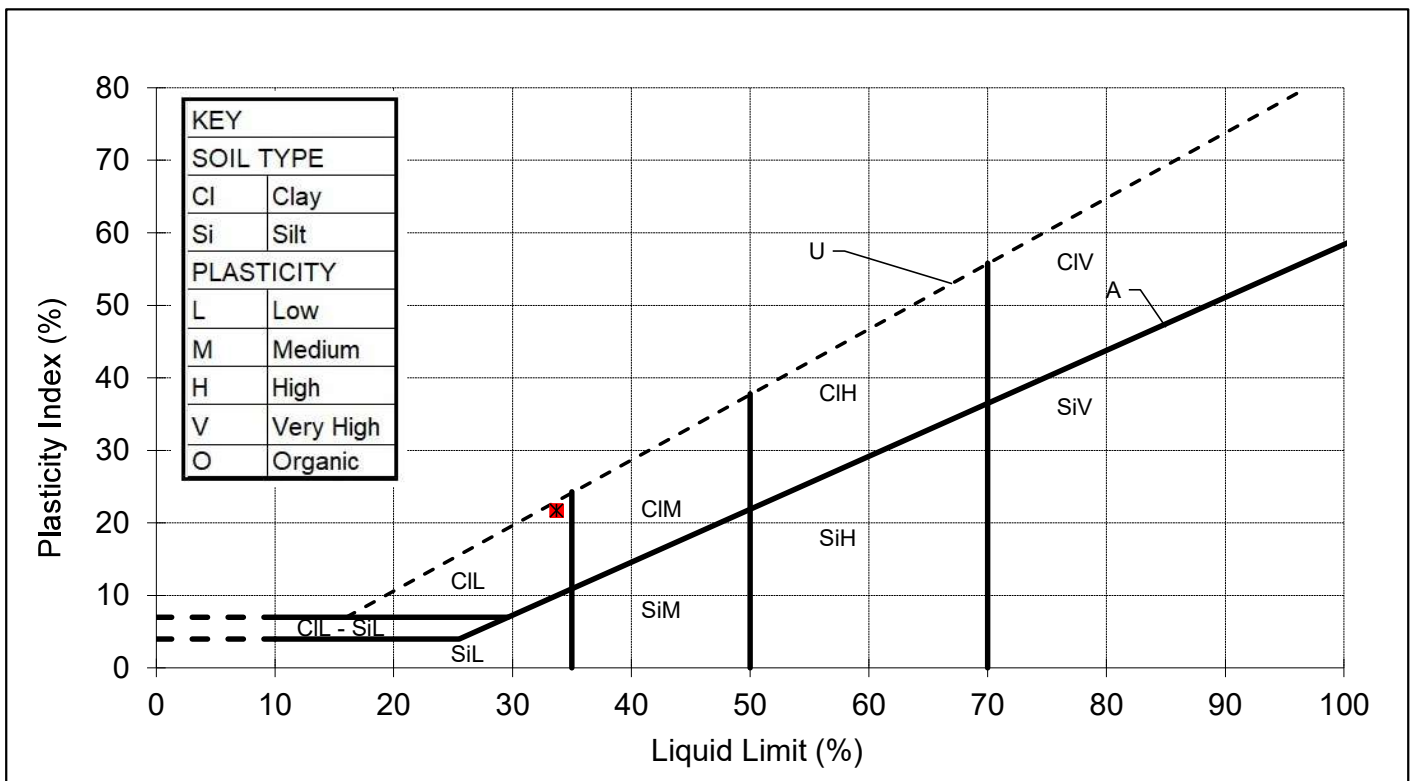
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	WS-P2-110 3.0m D	DATE SAMPLED	Not advised
SAMPLE No.	5052162	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	33.8	1.002	
Determination 2 (avg)	19.8	33.5		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
11.0	34	12	22	69



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

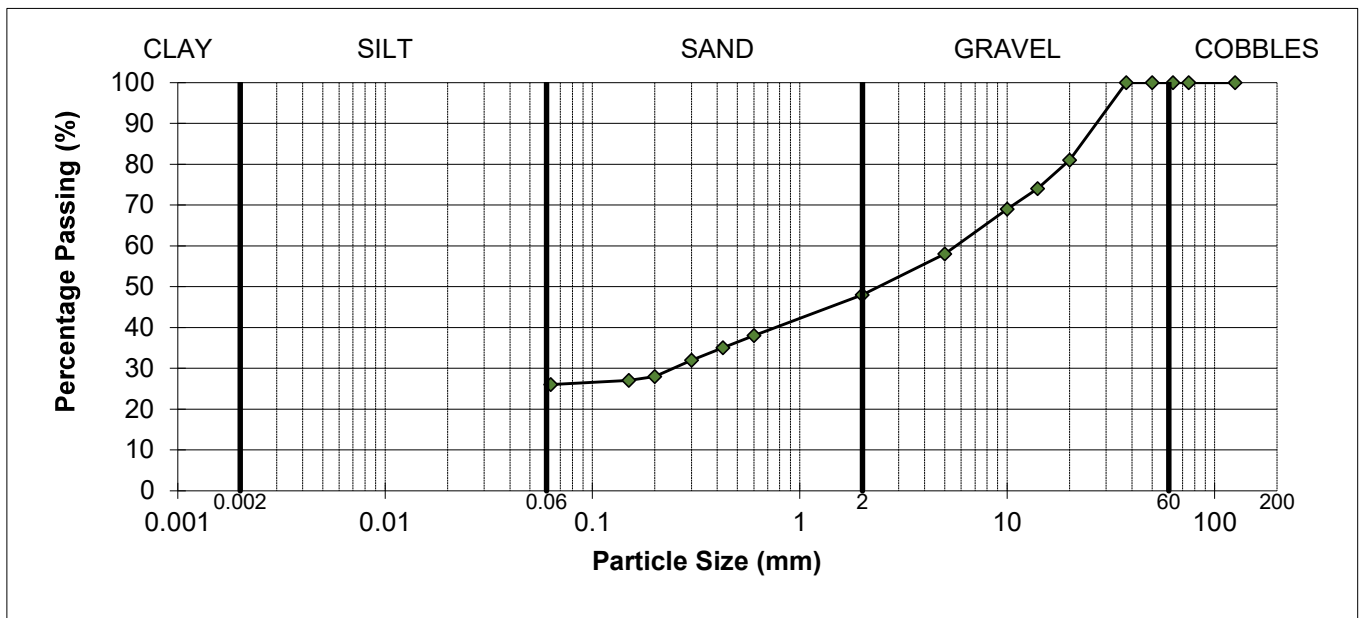
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 2.3-2.6m B	DATE SAMPLED	Not advised
LAB SAMPLE No	5052111	DATE RECEIVED	02-Apr-25
DATE TESTED	08-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty SAND & GRAVEL
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	58	
75	100		2	48	
63	100		0.6	38	
50	100		0.425	35	
37.5	100		0.3	32	
20	81		0.2	28	
14	74		0.15	27	
10	69		0.063	26	



REMARKS

As received water content = 16.4%

SIGNED



NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

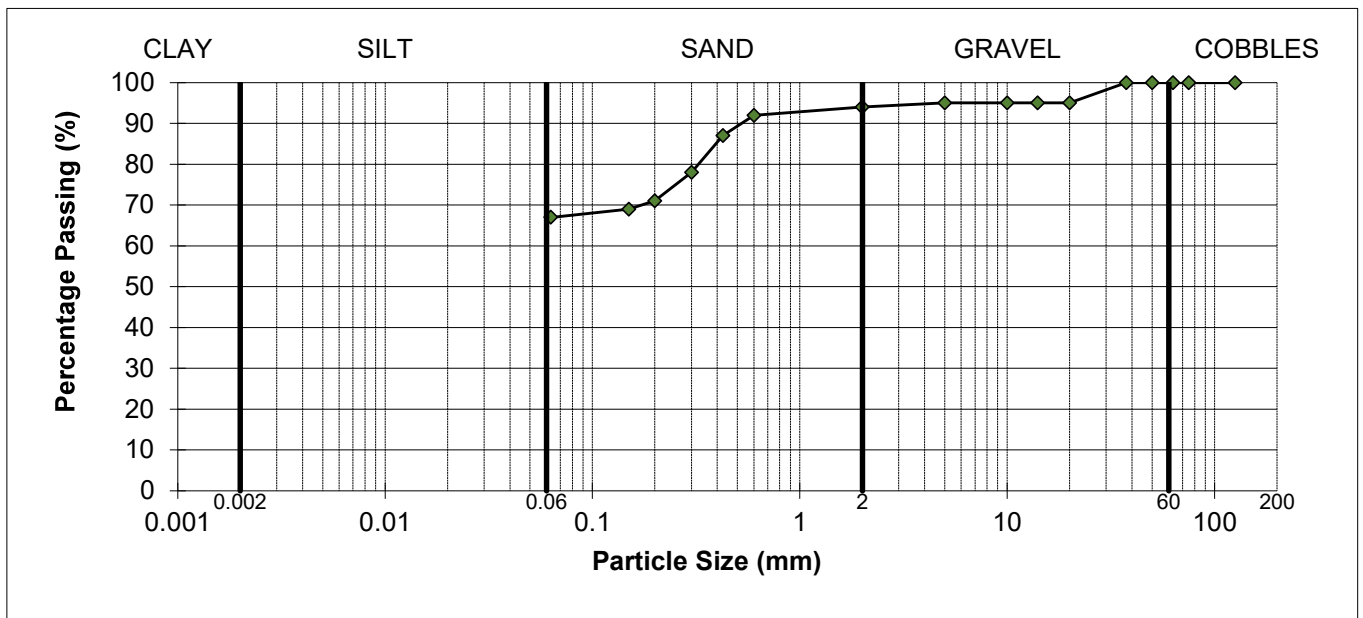
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 11.5-11.8m B	DATE SAMPLED	Not advised
LAB SAMPLE No	5052113	DATE RECEIVED	02-Apr-25
DATE TESTED	08-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty sandy slightly gravelly CLAY
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	95	
75	100		2	94	
63	100		0.6	92	
50	100		0.425	87	
37.5	100		0.3	78	
20	95		0.2	71	
14	95		0.15	69	
10	95		0.063	67	



REMARKS

As received water content = 19.7%

SIGNED



NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

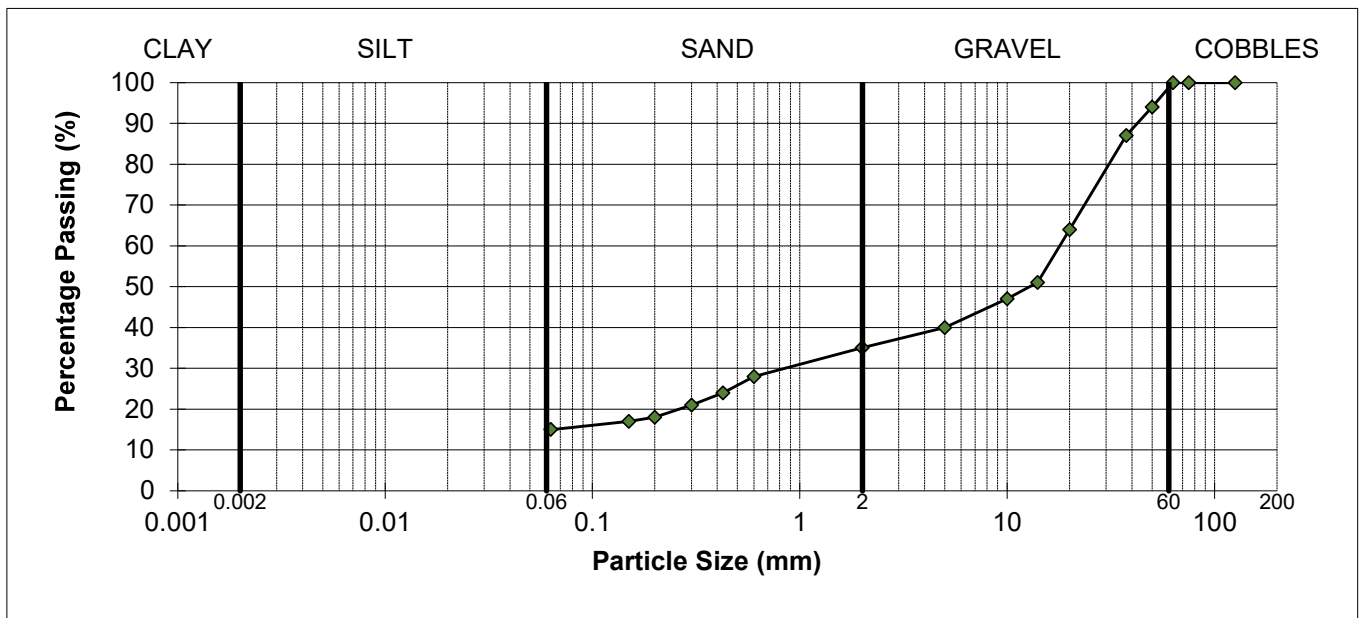
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	TP-P2-101 0.4-1.0m B	DATE SAMPLED	Not advised
LAB SAMPLE No	5052119	DATE RECEIVED	02-Apr-25
DATE TESTED	08-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty sandy GRAVEL
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	40	
75	100		2	35	
63	100		0.6	28	
50	94		0.425	24	
37.5	87		0.3	21	
20	64		0.2	18	
14	51		0.15	17	
10	47		0.063	15	



REMARKS

As received water content = 8.9%

SIGNED



NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

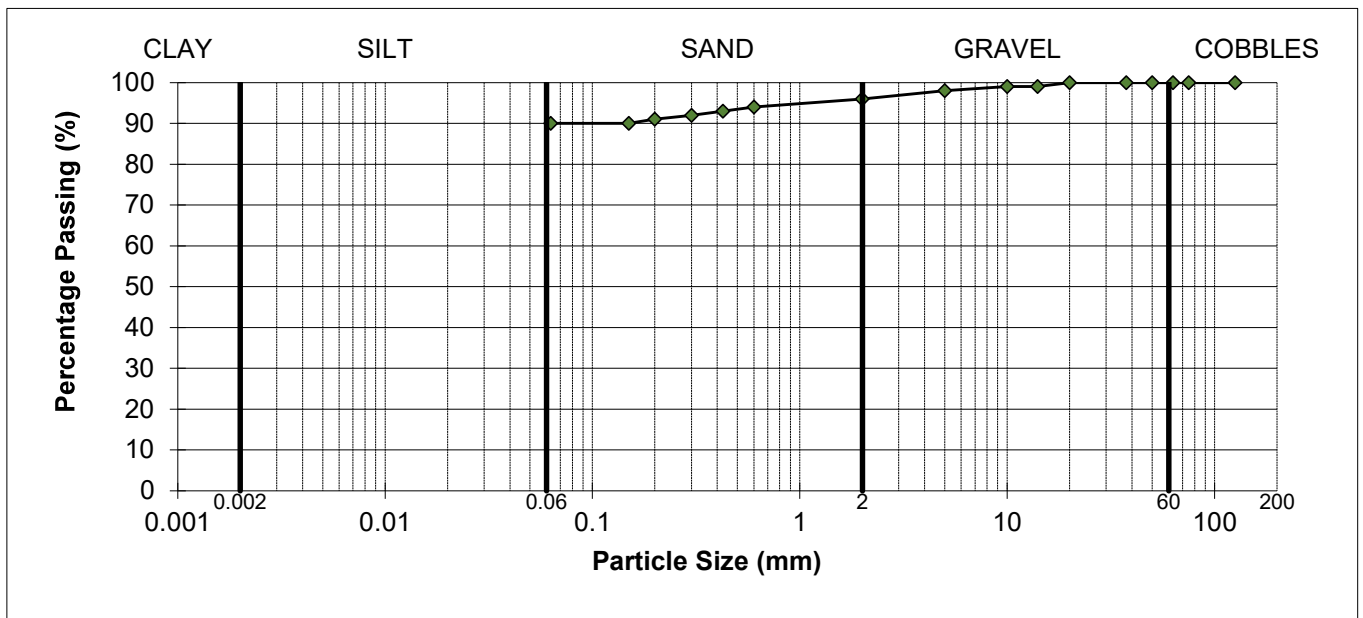
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	TP-P2-106 0.7m B	DATE SAMPLED	Not advised
LAB SAMPLE No	5052124	DATE RECEIVED	02-Apr-25
DATE TESTED	08-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		5	98	
75	100		2	96	
63	100		0.6	94	
50	100		0.425	93	
37.5	100		0.3	92	
20	100		0.2	91	
14	99		0.15	90	
10	99		0.063	90	



REMARKS

As received water content = 23.2%

SIGNED



NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

TEST CERTIFICATE
PARTICLE SIZE DISTRIBUTION

BS EN ISO 17892-4:2016

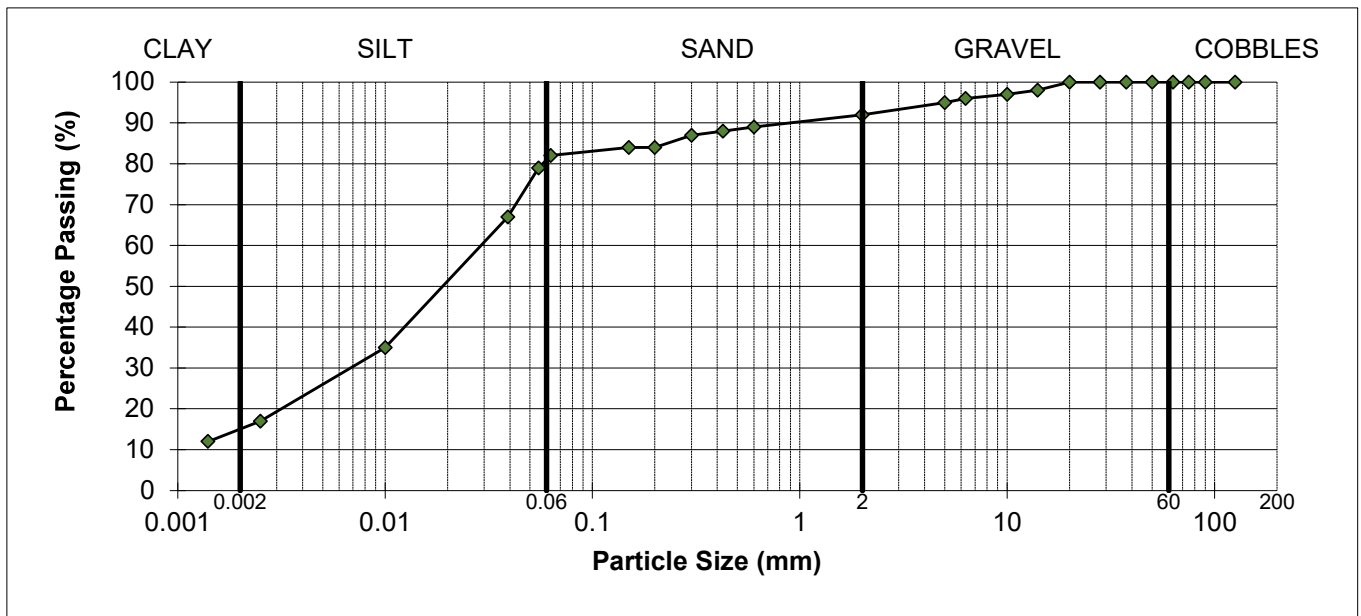
Determination of Water Content in accordance with BS EN ISO 17892-1:2014+A1:2022 (Oven Dry)

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH105 8.5-8.7m B	DATE SAMPLED	Not advised
LAB SAMPLE No	5052118	DATE RECEIVED	02-Apr-25
DATE TESTED	08-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY
ADVISED SOURCE	Site Investigation Sample

Sieve Size (mm)	% Passing (%)	Specification (%)	Sieve Size (mm)	% Passing (%)	Specification (%)
125	100		2	92	
90	100		0.6	89	
75	100		0.425	88	
63	100		0.3	87	
50	100		0.2	84	
37.5	100		0.15	84	
28	100		0.063	82	
20	100		0.055	79	
14	98		0.039	67	
10	97		0.01	35	
6.3	96		0.0025	17	
5	95		0.0014	12	



REMARKS

As received water content = 12.7%

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

02-May-25

MURRAY RIX

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



TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 2.5kg RAMMER

BS 1377-2:2022 Cl.11

PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

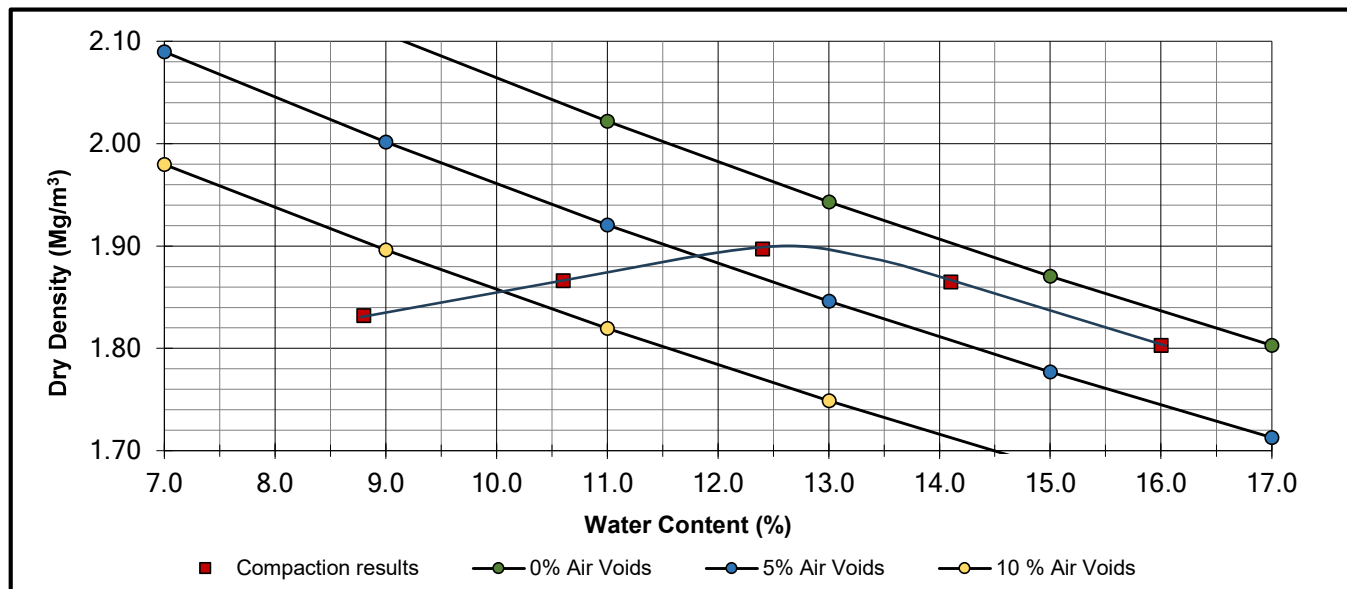
CLIENT	Tier Environmental Ltd		
SITE	TE1885 - Bury Interchange		
JOB NUMBER	MRN 25010/29		

SAMPLE LABEL	TP-P2-101 0.4-1.0m B	DATE SAMPLED	Not advised
SAMPLE NUMBER	5052119	DATE RECEIVED	02-Apr-25
DATE TESTED	17-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty sandy GRAVEL		
ADVISED SOURCE	Site Investigation Sample		
PRE TREATMENT	Air Dried / Single Sample		

RETAINED 37.5mm	13 %	GRADING ZONE	Zone X
RETAINED 20mm	36 %	PARTICLE DENSITY	2.60 Mg/m3 (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m ³)
1	8.8	1.832
2	10.6	1.866
3	12.4	1.897
4	14.1	1.865
5	16.0	1.803



OPTIMUM WATER CONTENT	13 (%)
MAXIMUM DRY DENSITY	1.90 (Mg/m ³)

REMARKS

NAME O.P. Davies BA (Hons)
(Director / Head of Laboratory)

SIGNED

DATE 02-May-25

MURRAY RIX

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



TEST CERTIFICATE

DRY DENSITY/WATER CONTENT RELATIONSHIP 2.5kg RAMMER

BS 1377-2:2022 Cl.11

PARTICLE DENSITY METHOD BS 1377-2:2022 Cl.9.2

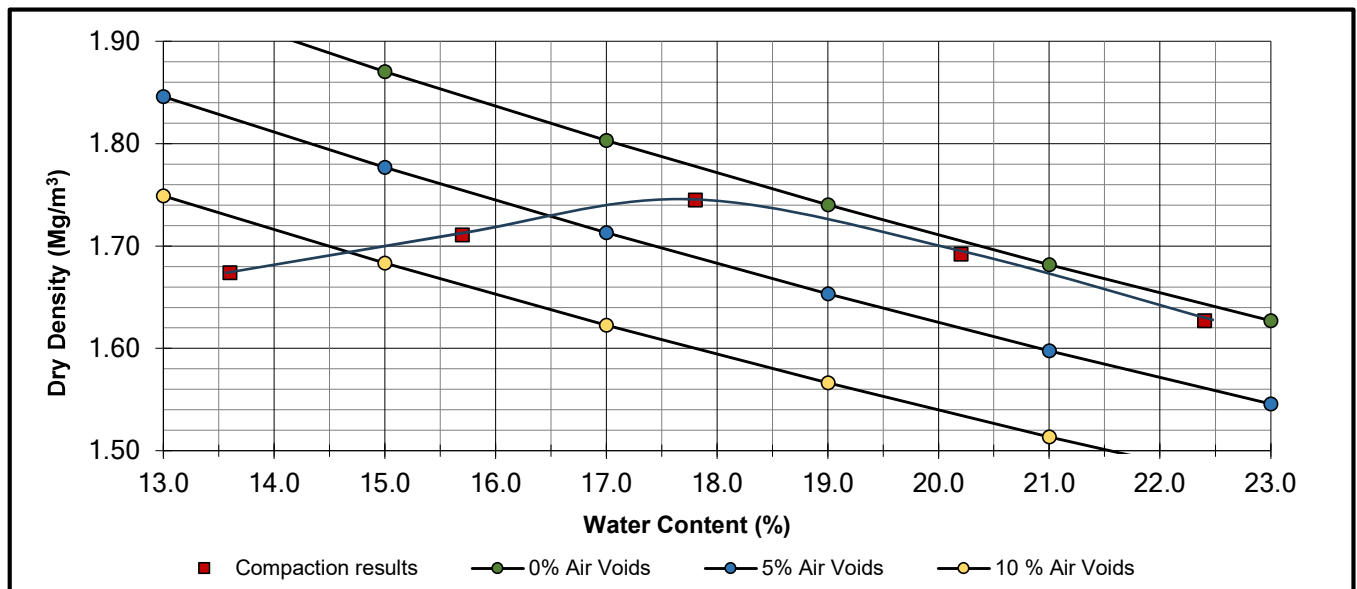
CLIENT	Tier Environmental Ltd		
SITE	TE1885 - Bury Interchange		
JOB NUMBER	MRN 25010/29		

SAMPLE LABEL	TP-P2-106 0.7m B	DATE SAMPLED	Not advised
SAMPLE NUMBER	5052124	DATE RECEIVED	02-Apr-25
DATE TESTED	17-Apr-25	SAMPLED BY	Client

MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample		
PRE TREATMENT	Air Dried / Single Sample		

RETAINED 37.5mm	0 %	GRADING ZONE	Zone 1
RETAINED 20mm	0 %	PARTICLE DENSITY	2.60 Mg/m ³ (Assumed)

POINT NUMBER	WATER CONTENT (%)	DRY DENSITY (Mg/m ³)
1	13.6	1.674
2	15.7	1.711
3	17.8	1.745
4	20.2	1.692
5	22.4	1.627



OPTIMUM WATER CONTENT	18 (%)
MAXIMUM DRY DENSITY	1.74 (Mg/m ³)

REMARKS

NAME O.P. Davies BA (Hons)
(Director / Head of Laboratory)

SIGNED

DATE 02-May-25

MURRAY RIX

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



TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION
BS EN ISO 17892-8:2018

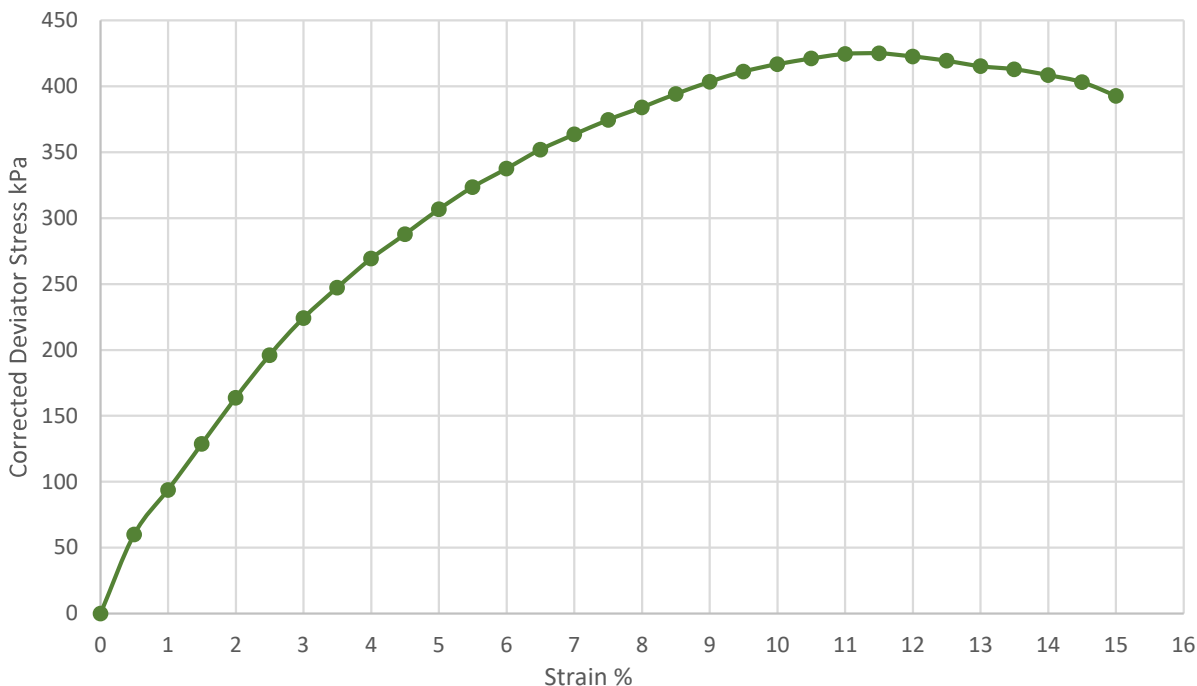
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH105 3.0-3.45m U	DATE SAMPLED	Not advised
LAB SAMPLE No.	5052166	DATE RECEIVED	02-Apr-25
DATE TESTED	21-Apr-25	SAMPLED BY	Client
MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample		

INITIAL CONDITIONS

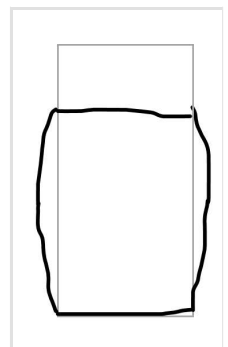
Specimen Location	Sample Length (mm)	400	Specimen depth from top of Sample (mm)	60
	Sample Orientation	Vertical	Specimen Condition	Undisturbed
	Specimen Length (mm)	203	Specimen Water Content (%)	13.2
	Specimen Diameter (mm)	102	Specimen Bulk Density (Mg/m ³)	2.18
	Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m ³)	1.93
	Membrane Correction	3.39		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN



TEST TYPE
SINGLE STAGE

SKETCH OF
SPECIMEN AT
FAILURE



PLASTIC

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength c_u (kPa)
60	11.5	2.0	425	213

Remarks/Abnormalities

Name O.P. Davies BA (Hons)
(Director / Head of Laboratory)

Signed

Date 02 May 2025

MURRAY RIX

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



TEST CERTIFICATE

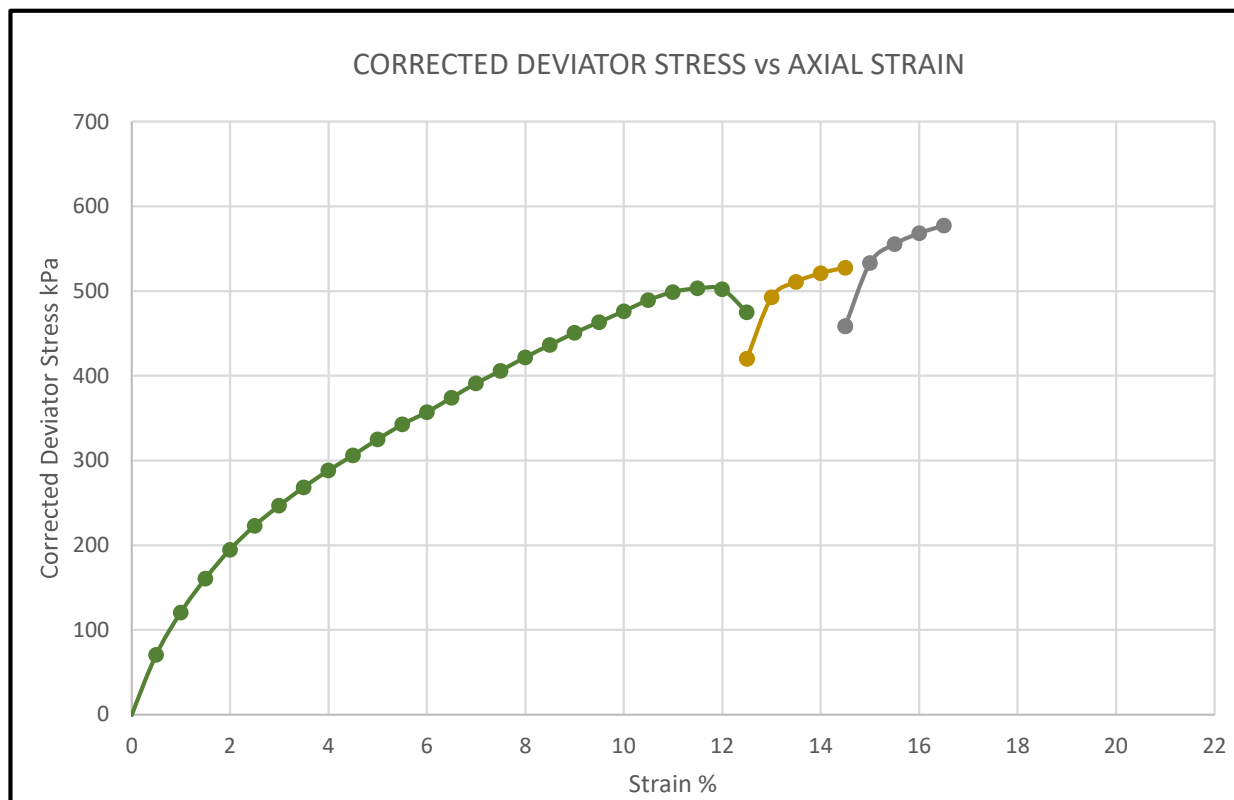
UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION
BS 1377 : PART 7: Clause 9 Multi Stage

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 8.4-8.85m U	DATE SAMPLED	Not advised
LAB SAMPLE No.	5052165	DATE RECEIVED	02-Apr-25
DATE TESTED	21-Apr-25	SAMPLED BY	Client
MATERIAL	Brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample		

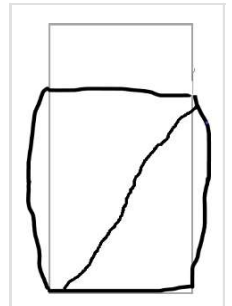
INITIAL CONDITIONS

Specimen Location	Sample Length (mm)	420	Specimen depth from top of Sample (mm)	20
	Sample Orientation	Vertical	Specimen Condition	Undisturbed
	Specimen Length (mm)	194	Specimen Moisture Content (%)	15.2
	Specimen Diameter (mm)	103	Specimen Bulk Density (Mg/m3)	2.11
	Membrane Thickness (mm)	0.40	Specimen Dry Density (Mg/m3)	1.83
	Membrane Correction	1.10	1.36	1.47



TEST TYPE
MULTI STAGE

SKETCH OF
SPECIMEN AT
FAILURE



COMBINED

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength c_u (kPa)
94	12	2	503.1	252
188	15	2	527.7	264
376	17	2	577.3	289

Remarks/Abnormalities

Name O.P. Davies BA (Hons)
(Director / Head of Laboratory)

Signed

Date 02 May 2025

MURRAY RIX

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



TEST CERTIFICATE

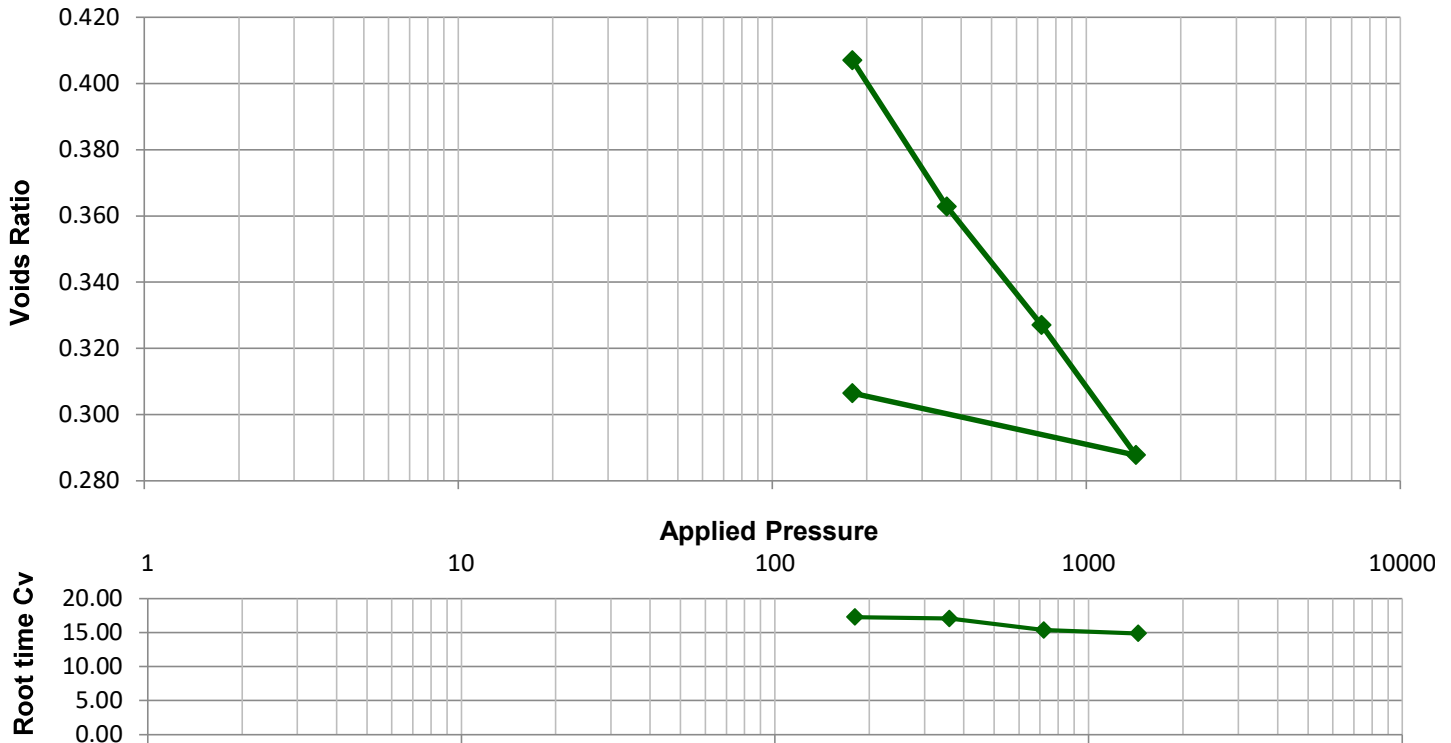
INCREMENTAL LOADING OEDOMETER TEST
BS EN ISO 17892-5:2017

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

SAMPLE LABEL	BH104 8.4-8.85m U	DATE SAMPLED	Not advised
LAB SAMPLE No.	5052165	DATE RECEIVED	02-Apr-25
DATE TESTED	16-Apr-25	SAMPLED BY	
MATERIAL	Brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample		

Specimen Location	Sample Length (mm)	420	Specimen depth from top of Sample (mm)	330
	Sample Orientation	Vertical	Specimen Condition	Undisturbed

INITIAL CONDITIONS					Load No.	Applied Pressure	Sample Height	Void Ratio	Mv	Temp	Cv t90 root	Cv t50 log	
						kPa	mm		m²/MN	°C	m²/yr	m²/yr	
Height	20.0	mm	Particle density	2.65	Ass	1	180	19.47	0.407	0.14	20	17.28	18.07
Diameter	69.3	mm	Initial void ratio	0.44		2	360	18.86	0.363	0.17	20	17.09	16.43
Weight wet	158.9	g	Deg. of sat.	89	%	3	720	18.37	0.327	0.07	20	15.39	15.64
Water cont.*	14.9	%	Swell. press.	2	kN/m²	4	1440	17.82	0.288	0.04	20	14.89	13.96
Bulk Density	2.11	Mg/m³	Dry density	1.84	Mg/m³	5	180	18.08	0.306	0.01	20		
*determined from specimen trimmings						6							
						7							



REMARKS

NAME O.P. Davies BA (Hons)
(Director / Head of Laboratory)

SIGNED

DATE 02-May-25

MURRAY RIX

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

TEST CERTIFICATE

DETERMINATION OF POINT LOAD STRENGTH INDEX OF ROCK
METHOD IN ACCORDANCE WITH ASTM STANDARD D 5731

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

DATE RECEIVED	02-Apr-25 & 04-Apr-25	DATE SAMPLED	Not advised
DATE TESTED	18-Apr-25	SAMPLED BY	Client

MATERIAL	Rock Core
ADVISED SOURCE	Site Investigation Sample

Sample Number	B/H No.	Depth (m)	Test Type*	D (mm)	W** (mm)	Load (P) (kN)	D _e ² (mm ²)	D _e (mm)	I _s (MPa)	F	I _{s(50)} (MPa)
5056901	#####	15.5m	D	84.9		0.2	7208.01	84.90	0.03	1.27	0.04
5056902	#####	18.7-18.8m	A	85.1	55.0	1.3	5959.40	77.20	0.22	1.22	0.27
5056903	#####	25.2-25.3m	A	85.1	60.2	1.1	6522.83	80.76	0.17	1.24	0.21
5052101	#####	10.7-10.8m	A	89.9	54.8	1.0	6272.64	79.20	0.16	1.23	0.20
5052104	#####	12.1-12.2m	D	90.1		1.1	8118.01	90.10	0.14	1.30	0.18
5052106	#####	14.2-14.3m	A	89.9	39.8	0.8	4555.68	67.50	0.18	1.14	0.20
5052108	#####	17.5-17.8m	D	89.9		1.4	8082.01	89.90	0.17	1.30	0.23
5052110	#####	19.4-19.5m	D	89.8		0.9	8064.04	89.80	0.11	1.30	0.15
Test Type *								**W	Entry required if test type is not Diametral		
A		Axial Test		D	Diametral Test						
B		Block Test		I	Irregular Lump Test						

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE 02-May-25

MURRAY RIX

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

TEST CERTIFICATE

DETERMINATION OF THE COMPRESSIVE STRENGTH OF INTACT ROCK CORE SPECIMENS

ASTM D7012 - 14 Method C

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange
JOB NUMBER	MRN 25010/29

DATE RECEIVED	02-Apr-25	DATE SAMPLED	Not advised
DATE TESTED	18-Apr-25	SAMPLED BY	Client
MATERIAL TESTED	Rock Core		

Sample Number	B/H No.	Sample Depth	Tested By	Diameter (mm)	Length* (mm)	L/D Ratio	Method of Preparation	Load at Failure (kN)	Compressive Strength (N/mm ²)	Description after Test
5052103	BH P2-105	11.1-11.8m	M.R.	90	180	2.00	Saw / Grinding	5.7	0.9	Split vertically top to bottom with no visible end defects
5052107	BH P2-105	15.5-15.75m	M.R.	90	180	2.00	Saw / Grinding	5.4	0.8	Split vertically top to bottom with no visible end defects
5052109	BH P2-105	17.9-18.1m	M.R.	90	180	2.00	Saw / Grinding	6.9	1.1	Split vertically top to bottom with no visible end defects

Comments / Deviation from standard method / Abnormalities noted during visual inspection.

*Length after sample preparation

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

SIGNED



DATE 02-May-25

TEST REPORT

Client Tier Environmental Ltd

Address Suite 513
Chadwick House
Warrington Road
Birchwood
WA3 6AE

Contract TE1885 -
Bury Interchange (Trackside)

Job Number MRN 25010/56

Date of Issue 27 November 2025

Page 1 of 10

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.



Andrew House, Hadfield Street, Dukinfield, Cheshire SK16 4QX Tel: 0161 475 0870
Email: enquiries@murrayrix.com Website: www.murrayrix.com

Also at: London: 020 8523 1999

Murray Rix is the trading name of Murray Rix (Northern) Limited. Registered in England 2878361

UKAS
TESTING
1580

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

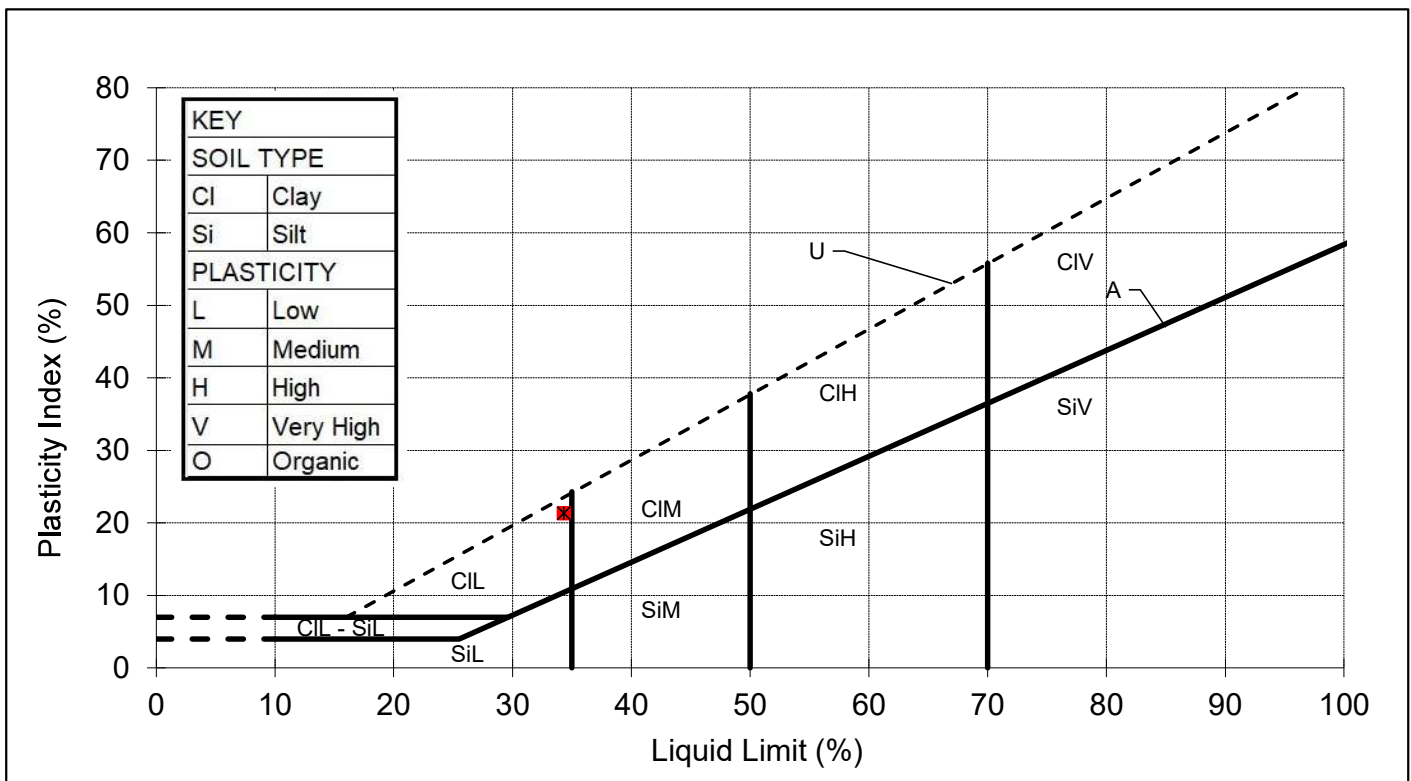
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 1.0-1.45	DATE SAMPLED	Not advised
SAMPLE No.	5213201	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Grey brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	16.5	32.8	1.045	
Determination 2 (avg)	16.9	32.9		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
9.8	34	13	21	58



REMARKS

SIGNED

NAME


O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE _____

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

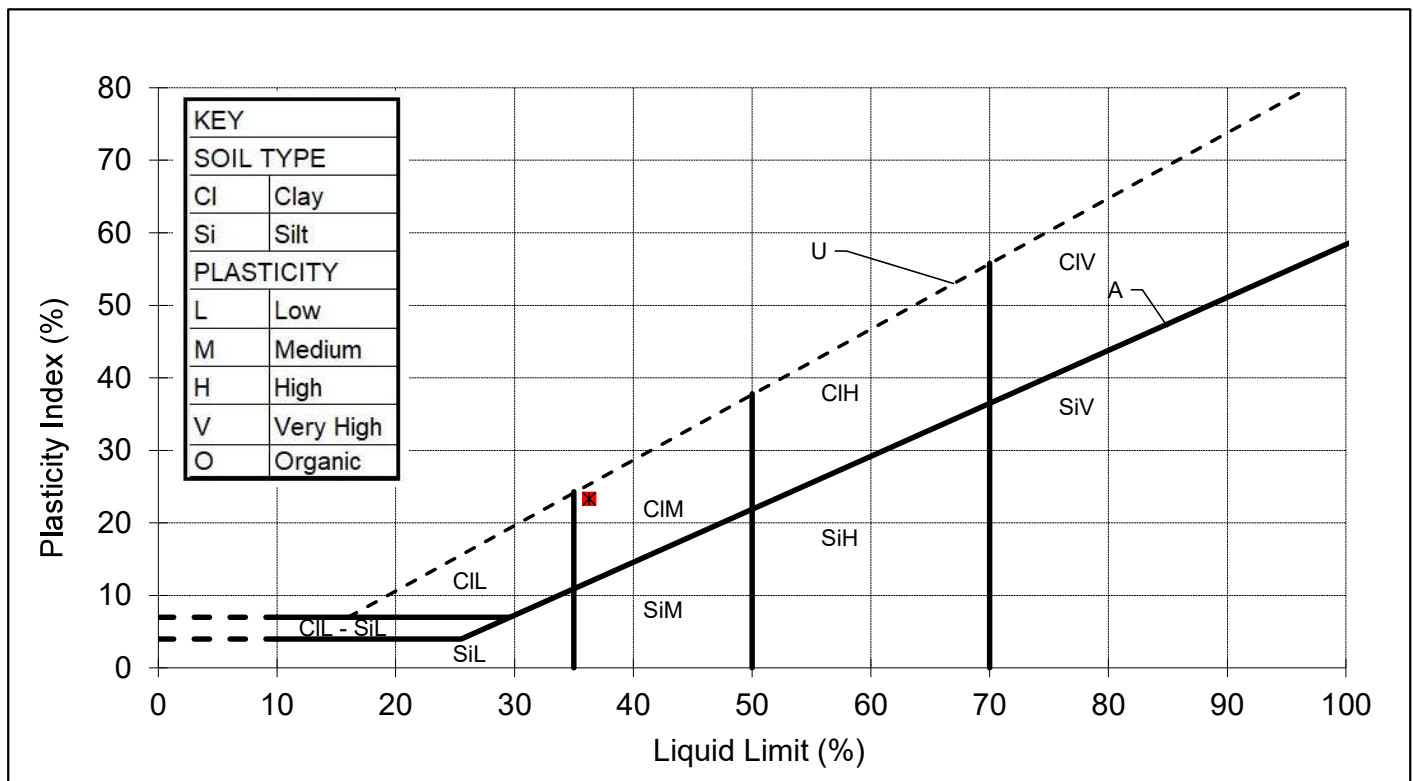
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 3.0-3.45	DATE SAMPLED	Not advised
SAMPLE No.	5213202	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Orange brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	19.6	35.9	1.007	
Determination 2 (avg)	19.7	36.2		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
16.3	36	13	23	77



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

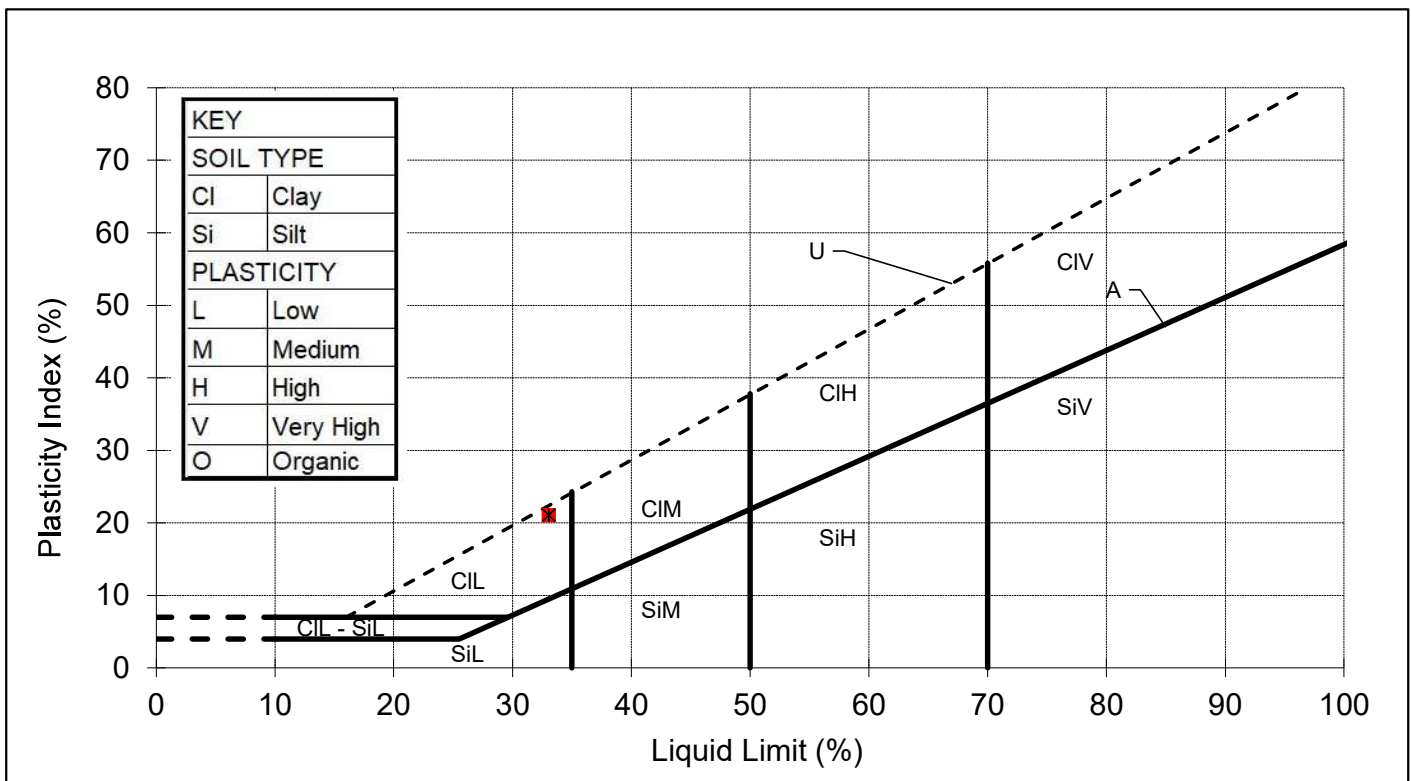
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 6.5-6.95	DATE SAMPLED	Not advised
SAMPLE No.	5213203	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Dark grey silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.5	33.3	0.994	
Determination 2 (avg)	20.2	33.2		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
15.6	33	12	21	83



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

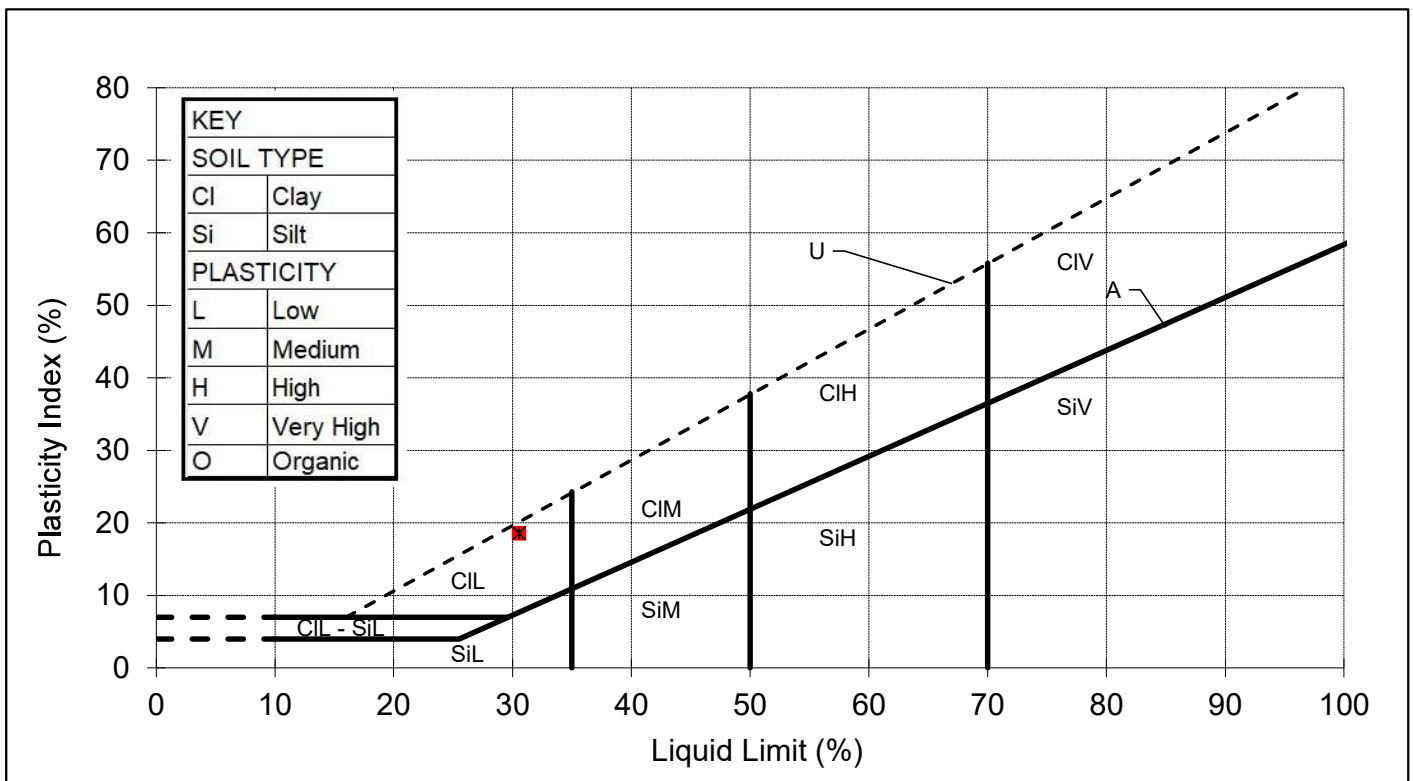
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 8.0-8.45	DATE SAMPLED	Not advised
SAMPLE No.	5213204	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Dark grey silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	21.2	31.1	0.981	
Determination 2 (avg)	21.3	31.2		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
12.7	31	12	19	90



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

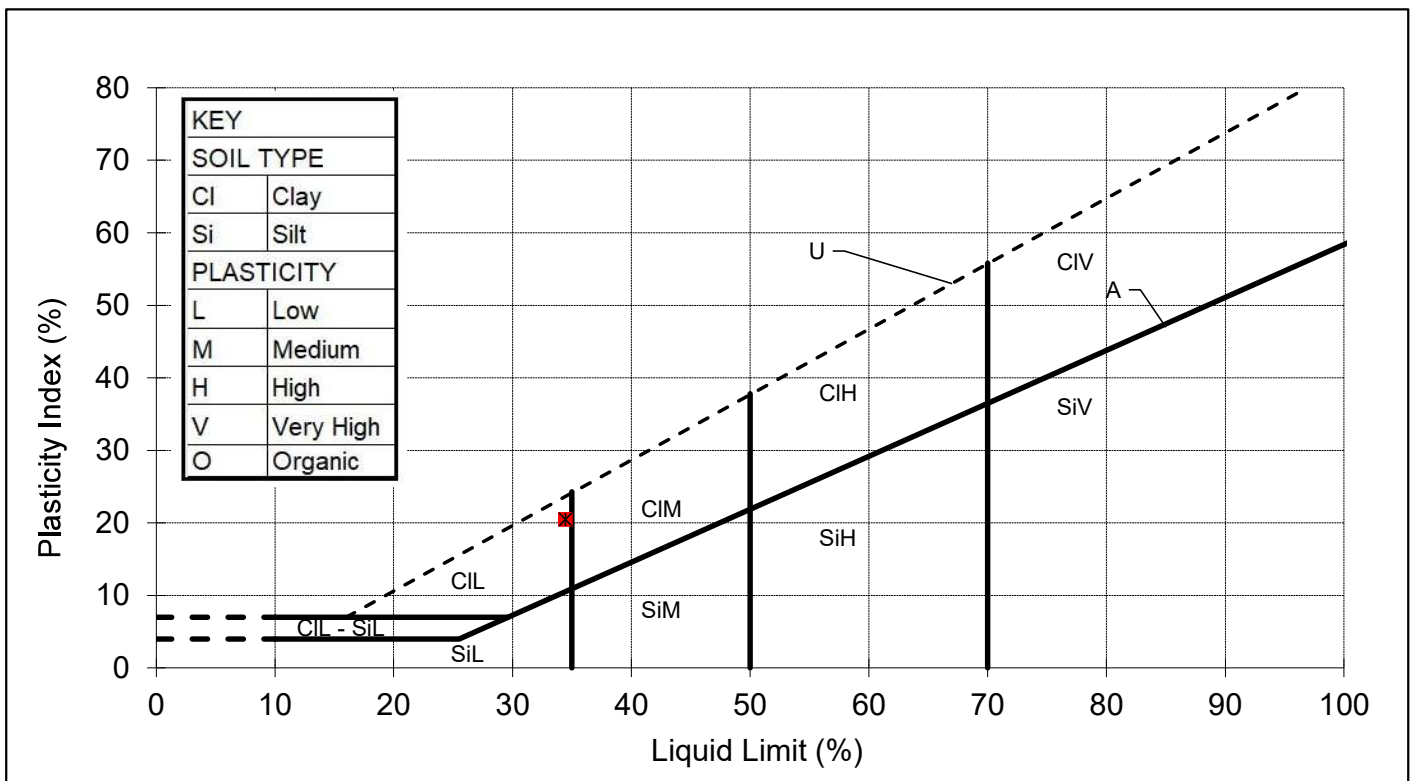
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 2.0-2.45	DATE SAMPLED	Not advised
SAMPLE No.	5213207	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Yellowey brown silty slightly sandy gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	20.0	34.5	0.996	
Determination 2 (avg)	20.5	34.7		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
12.8	34	14	20	53



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

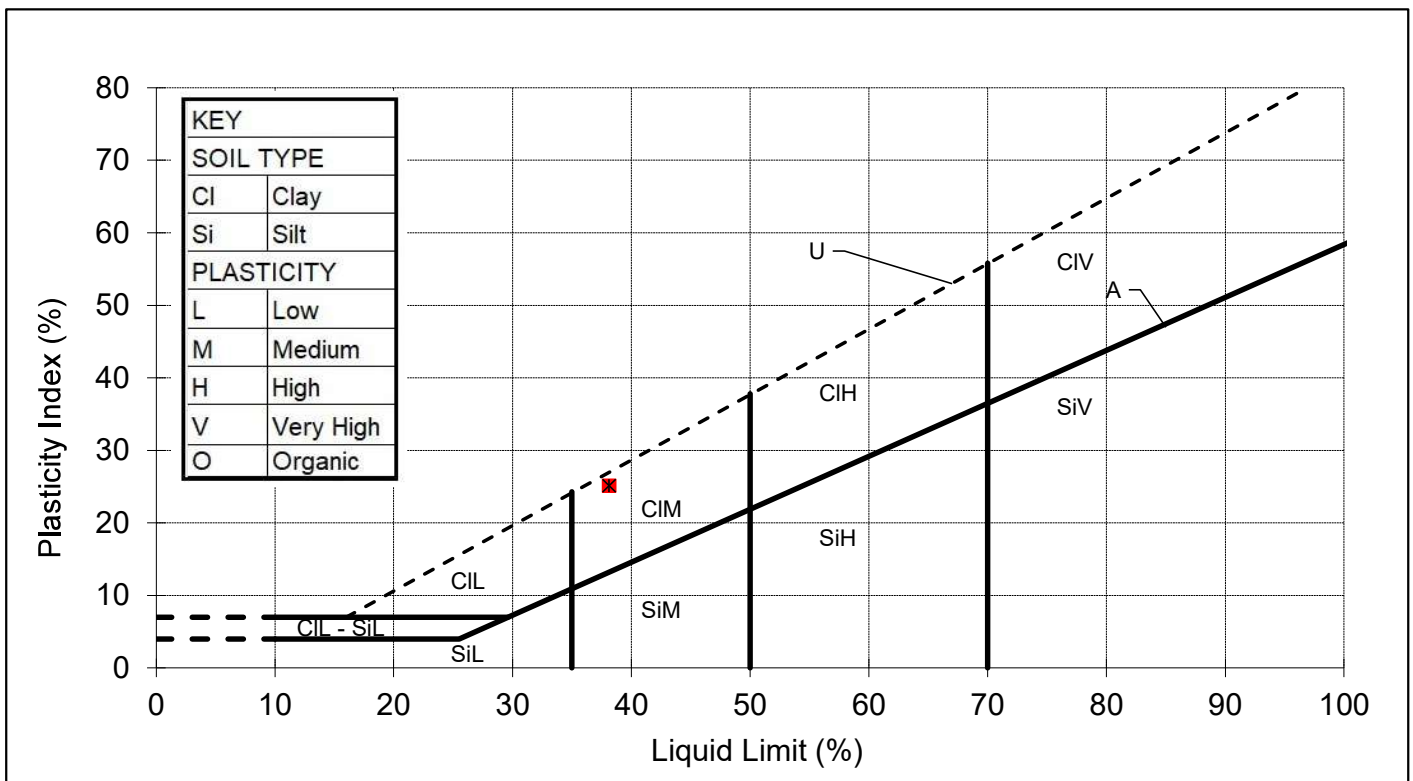
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 5.0-5.45	DATE SAMPLED	Not advised
SAMPLE No.	5213208	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Grey brown silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	18.5	37.1	1.029	
Determination 2 (avg)	18.3	37.0		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
13.9	38	13	25	84



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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



TEST CERTIFICATE

LIQUID LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.3 (30° FALL CONE) 1 POINT METHOD

PLASTIC LIMIT BS EN ISO 17892-12:2018+A2:2022 Clause 5.5

WATER CONTENT METHOD BS EN ISO 17892-1:2014+A1:2022

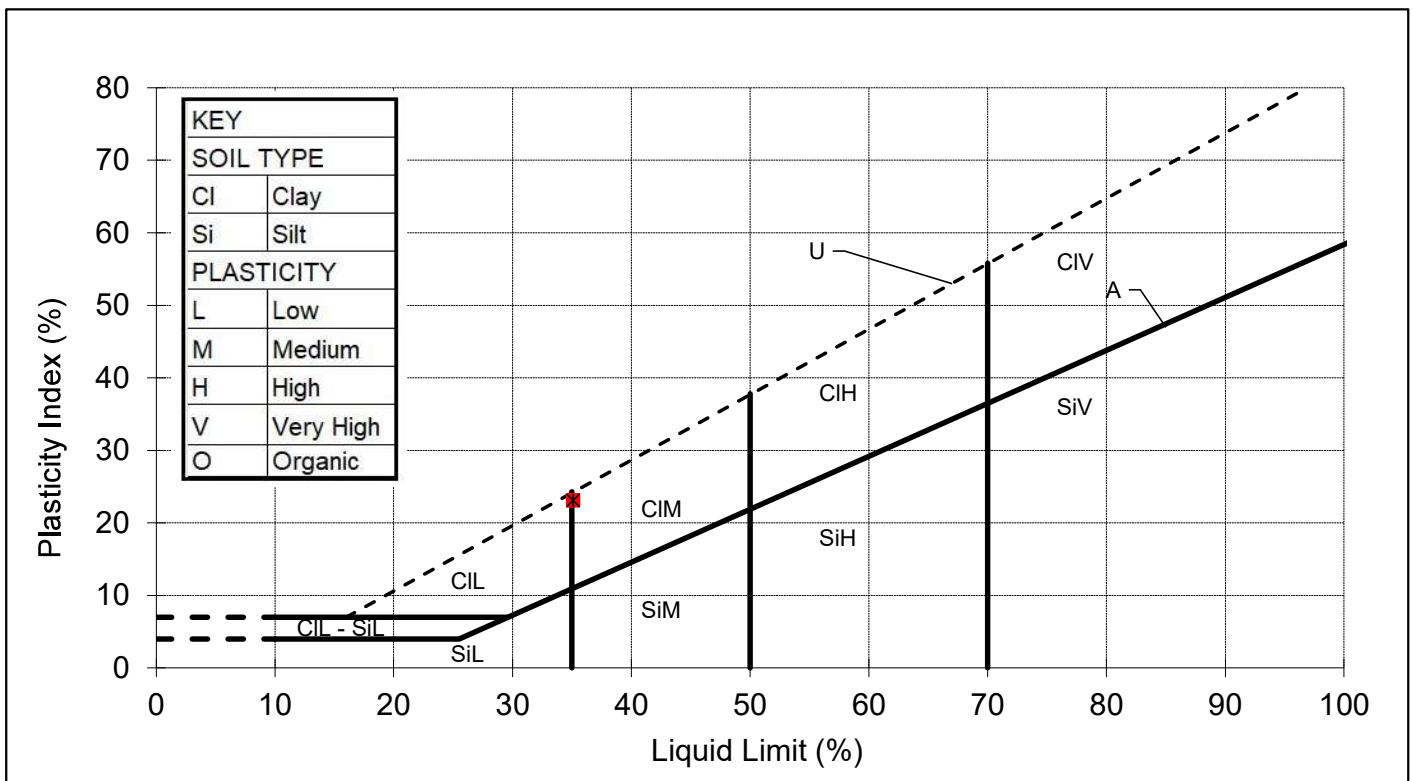
CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

SAMPLE LABEL	BHP2-106 6.25-6.5	DATE SAMPLED	Not advised
SAMPLE No.	5213209	DATE RECEIVED	30-Oct-25
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Dark grey silty slightly sandy slightly gravelly CLAY		
ADVISED SOURCE	Site Investigation Sample	WATER CONTENT	Increasing
SAMPLE HISTORY	Natural State	% RET. 425um BY	Wet Sieved

Test Readings mm (average)		Water Content %	Correction Factor	Correction factor from Clayton and Jukes 1978
Determination 1 (avg)	17.1	33.8	1.041	
Determination 2 (avg)	17.0	33.6		

Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
14.1	35	12	23	90



REMARKS

SIGNED

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE

27-Nov-25

MURRAY RIX

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

TEST CERTIFICATE

DETERMINATION OF THE COMPRESSIVE STRENGTH OF INTACT ROCK CORE SPECIMENS

ASTM D7012 - 14 Method C

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

DATE RECEIVED	30-Oct-25	DATE SAMPLED	Not advised
DATE TESTED	07-Nov-25	SAMPLED BY	Client
MATERIAL TESTED	Sandstone / Mudstone Core		

Sample Number	B/H No.	Sample Depth	Tested By	Diameter (mm)	Length* (mm)	L/D Ratio	Method of Preparation	Load at Failure (kN)	Compressive Strength (N/mm ²)	Description after Test
5213216	BHP2-106	12.67-12.92	M.R.	79	158	2.00	Saw / Grinding	11.2	2.3	Split vertically top to bottom with no visible end defects
5213218	BHP2-106	13.24-13.48	M.R.	79	158	2.00	Saw / Grinding	82.1	16.7	Split vertically top to bottom with no visible end defects
5213231	BHP2-106	24.0-24.27	M.R.	79	158	2.00	Saw / Grinding	26.7	5.4	Split vertically top to bottom with no visible end defects

Comments / Deviation from standard method / Abnormalities noted during visual inspection.

*Length after sample preparation

NAME

O.P. Davies BA (Hons)
(Director / Head of Laboratory)

SIGNED



DATE 27-Nov-25

MURRAY RIX

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

TEST CERTIFICATE

DETERMINATION OF POINT LOAD STRENGTH INDEX OF ROCK
METHOD IN ACCORDANCE WITH ASTM STANDARD D 5731

CLIENT	Tier Environmental Ltd
SITE	TE1885 - Bury Interchange (Trackside)
JOB NUMBER	MRN 25010/56

DATE RECEIVED	30-Oct-25	DATE SAMPLED	Not advised
DATE TESTED	07-Nov-25	SAMPLED BY	Client

MATERIAL	Rock Core
ADVISED SOURCE	Site Investigation Sample

Sample Number	B/H No.	Depth (m)	Test Type*	D (mm)	W** (mm)	Load (P) (kN)	D_e^2 (mm ²)	D_e (mm)	I_s (MPa)	F	$I_{s(50)}$ (MPa)
5213210	BHP2-106	8.7-8.92	D	80.6	78.4	0.2	6496.36	80.60	0.03	1.24	0.04
5213211	BHP2-106	9.0-9.25	D	80.7		0.2	6512.49	80.70	0.03	1.24	0.04
5213212	BHP2-106	10.0-10.19	D	76.1		0.5	5791.21	76.10	0.09	1.21	0.10
5213213	BHP2-106	10.6-10.73	D	80.6		0.4	6496.36	80.60	0.06	1.24	0.08
5213214	BHP2-106	11.12-11.2	A	31.4		0.4	3134.41	55.99	0.13	1.05	0.13
5213215	BHP2-106	12.2-12.33	D	78.5	78.8	0.8	6162.25	78.50	0.13	1.23	0.16
5213217	BHP2-106	13.16-13.24	D	79.2		1.9	6272.64	79.20	0.30	1.23	0.37
5213219	BHP2-106	14.16-14.33	D	79.0		1.2	6241.00	79.00	0.19	1.23	0.24
5213220	BHP2-106	15.42-15.5	D	80.0		0.3	6400.00	80.00	0.05	1.24	0.06
5213221	BHP2-106	15.75-16.0	A	74.3		0.3	7454.61	86.34	0.04	1.28	0.05
5213222	BHP2-106	16.9-17.0	D	78.9	78.0	0.4	6225.21	78.90	0.06	1.23	0.08
5213223	BHP2-106	17.16-17.23	A	53.9		1.4	5352.95	73.16	0.26	1.19	0.31
5213224	BHP2-106	18.0-18.19	A	60.5		1.5	5939.09	77.07	0.25	1.21	0.31
5213225	BHP2-106	18.68-18.77	A	58.3		0.9	5849.31	76.48	0.15	1.21	0.19
5213226	BHP2-106	19.67-19.74	A	72.7		0.4	7451.44	86.32	0.05	1.28	0.07
5213227	BHP2-106	20.73-20.89	D	76.9	77.3	1.3	5913.61	76.90	0.22	1.21	0.27
5213228	BHP2-106	21.7-21.81	D	76.2		0.2	5806.44	76.20	0.03	1.21	0.04
5213229	BHP2-106	22.32-22.38	D	76.6		0.5	5867.56	76.60	0.09	1.21	0.10
5213230	BHP2-106	23.57-23.72	D	79.6		1.1	6336.16	79.60	0.17	1.23	0.21
5213232	BHP2-106	24.86-24.96	D	79.1		0.7	6256.81	79.10	0.11	1.23	0.14
5213233	BHP2-106	25.6-25.66	A	68.5		0.4	6741.87	82.11	0.06	1.25	0.07
5213234	BHP2-106	26.16-26.36	D	77.2		1.6	5959.84	77.20	0.27	1.22	0.33
5213235	BHP2-106	27.0-27.14	D	78.8		2.0	6209.44	78.80	0.32	1.23	0.40
5213236	BHP2-106	28.4-28.5	D	77.3		0.3	5975.29	77.30	0.05	1.22	0.06

Test Type *				**W	Entry required if test type is not Diametral
A	Axial Test	D	Diametral Test		
B	Block Test	I	Irregular Lump Test		

REMARKS

SIGNED

NAME O.P. Davies BA (Hons)
(Director / Head of Laboratory)

DATE 27-Nov-25

Certificate of Analysis

Certificate Number 25-25412

Issued: 06-Nov-25

Client Envirolab Ltd
Housesteads
Off Stockport Road
Hattersley
SK14 3QU

Our Reference 25-25412

Client Reference ~ 25/12498/1

Order No ~ PO758416

Contract Title ~ (not supplied)

Description 1 Soil sample.

Date Received 04-Nov-25

Date Started 04-Nov-25

Date Completed 06-Nov-25

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. 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.

Approved By

A handwritten signature in black ink, appearing to read "R. Irfan".

Reyhan Irfan
Operations Manager



Summary of Chemical Analysis

Soil Samples

Our Ref 25-25412

Client Ref ~ 25/12498/1

Contract Title ~

Lab No	2593789
Sample ID ~	BH-P2-106
Depth ~	22.85-23.00
Other ID ~	5213206
Sample Type ~	SOIL
Sampling Date ~	28/10/2025
Sampling Time ~	n/s

Test	Method	LOD	Units
Inorganics			
Calorific Value	DETSC 5008	1	MJ/kg
			28.9

Information in Support of the Analytical Results

Our Ref 25-25412
 Client Ref ~ 25/12498/1
 Contract ~

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2593789	BH-P2-106 22.85-23.00 SOIL	28/10/25	PT 500ml		

Key: P-Plastic T-Tub
 Normec DETS cannot be held responsible for the integrity of samples received whereby the laboratory did not undertake the sampling. In this instance samples received may be deviating. Deviating Sample criteria are based on British and International standards and laboratory trials in conjunction with the UKAS note 'Guidance on Deviating Samples'. All samples received are listed above. However, those samples that have additional comments in relation to hold time, inappropriate containers etc are deviating due to the reasons stated. This means that the analysis is accredited where applicable, but results may be compromised due to sample deviations. If no sampled date (soils) or date+time (waters) has been supplied then samples are deviating. However, if you are able to supply a sampled date (and time for waters) this will prevent samples being reported as deviating where specific hold times are not exceeded and where the container supplied is suitable.

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 250µm sieve
 Organic soil analysis was carried out on an 'as received' sample. Organics results are corrected for moisture and expressed on a dry weight basis.
 The Loss on Drying, used to express organics analysis on an air dried basis, is carried out at a temperature of 28°C +/-2°C.

Disposal

From the issue date of this test certificate, samples will be held for the following times prior to disposal :-
 Soils - 1 month, Liquids - 2 weeks, Asbestos (test portion) - 6 months

Key:

- ~ Sample details are provided by the client and can affect the validity of the results
- * -not accredited.
- # -MCERTS (accreditation only applies if report carries the MCERTS logo).
- \$ -subcontracted.
- n/s -not supplied.
- I/S -insufficient sample.
- U/S -unsuitable sample.
- t/f -to follow.
- nd -not detected.

End of Report Ver 25.10.03