

MURRAY RIX

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



TEST CERTIFICATE

LIQUID AND PLASTIC LIMIT

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

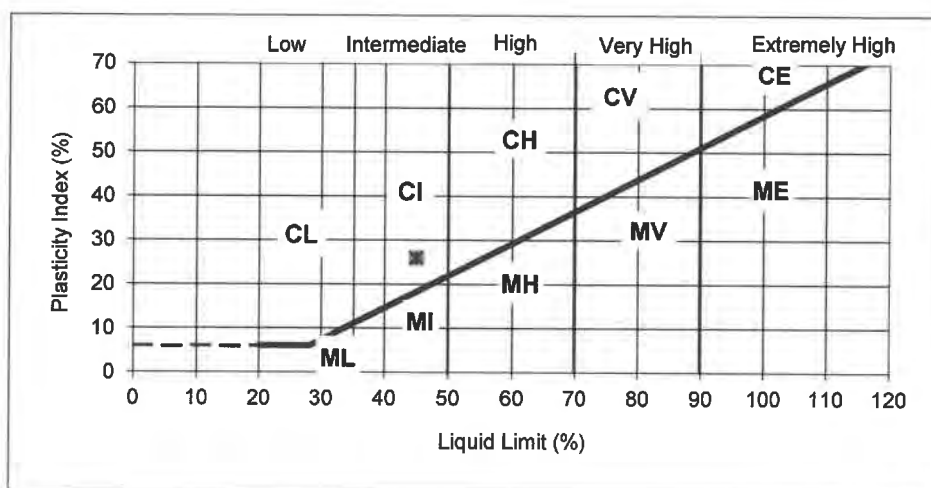
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net world Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	WS3 SPT 1.2	DATE SAMPLED	Not advised
SAMPLE No.	97924	DATE RECEIVED	14-Apr-21
DATE TESTED	16-Apr-21	SAMPLED BY	Client

MATERIAL	Stiff brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Moisture Content (Natural) (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
18	45	19	26	100



REMARKS

Sample tested after wet sieving

SIGNED

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

DATE 28-Apr-21

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LIQUID AND PLASTIC LIMIT

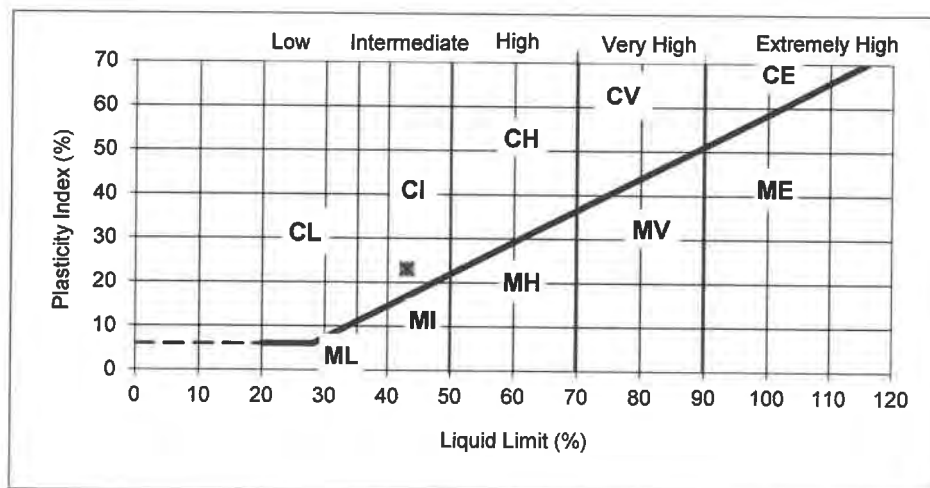
BS 1377: PART 2: 1990 Clause 4.4 ONE POINT METHOD & Clause 5.3
MOISTURE CONTENT METHOD BS 1377: PART 2: 1990 Clause 3.2

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net world Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	CP2 D 1.5	DATE SAMPLED	Not advised
SAMPLE No.	97900	DATE RECEIVED	14-Apr-21
DATE TESTED	16-Apr-21	SAMPLED BY	Client

MATERIAL	Stiff brown silty sandy CLAY
ADVISED SOURCE	Site Investigation Sample

Moisture Content (Natural) (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Passing 425 micron (%)
20	43	20	23	100



REMARKS

Sample tested after wet sieving

SIGNED

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

DATE 28-Apr-21

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TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

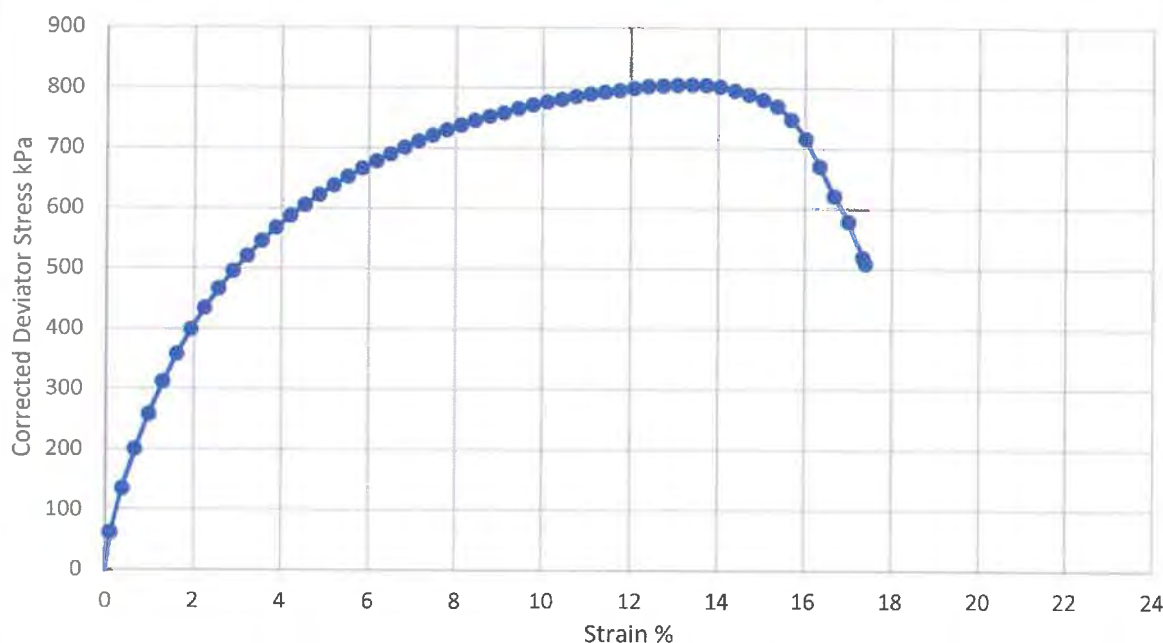
BS 1377 : PART 7: Clause 8 Single Stage

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	WS01 2	DATE SAMPLED	Not advised
LAB SAMPLE No.	97919	DATE RECEIVED	14-Apr-21
DATE TESTED	27-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

INITIAL CONDITIONS

Specimen Location		Sample Length (mm)	70	Specimen depth from top of Sample (mm)	5
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	61	Specimen Moisture Content (%)	18
		Specimen Diameter (mm)	34	Specimen Bulk Density (Mg/m3)	2.17
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.83
		Membrane Correction	4.03		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN

TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength Cu (kPa)
40	13	2	806	403

Remarks/Abnormalities

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

Signed 

Date 28 April 2021

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TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

BS 1377 : PART 7: Clause 8 Single Stage

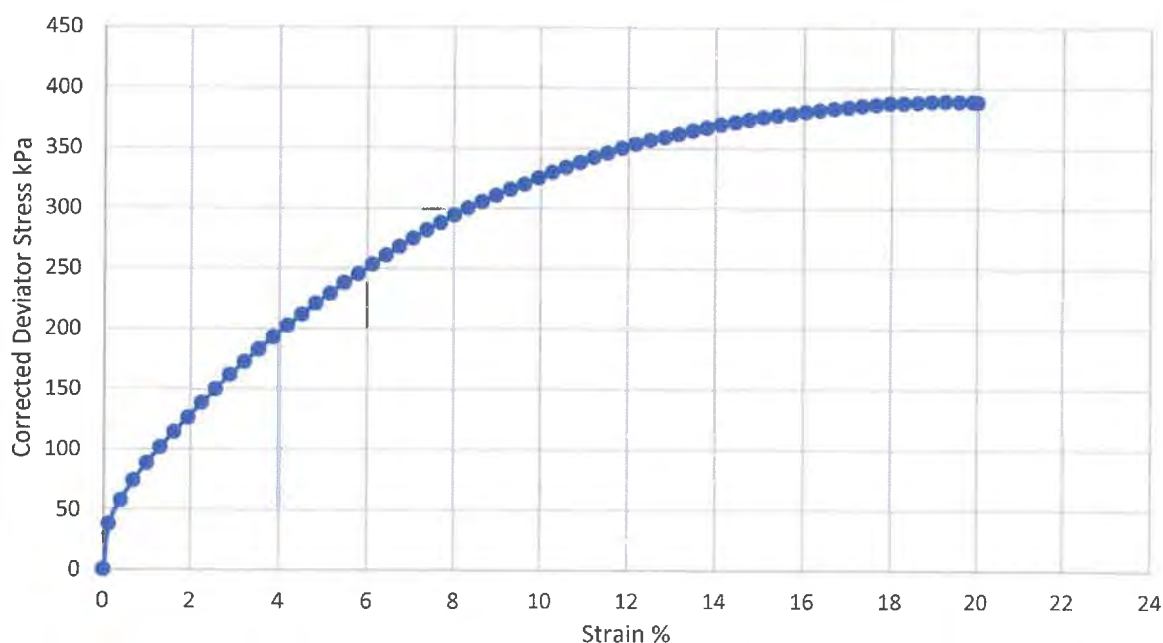
CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	CP2 1.5	DATE SAMPLED	Not advised
LAB SAMPLE No.	97900	DATE RECEIVED	14-Apr-21
DATE TESTED	27-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

INITIAL CONDITIONS

Specimen Location		Sample Length (mm)	75	Specimen depth from top of Sample (mm)	5
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	62	Specimen Moisture Content (%)	20
		Specimen Diameter (mm)	34	Specimen Bulk Density (Mg/m3)	2.22
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.85
		Membrane Correction	4.52		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN



TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength C_u (kPa)
30	20	2	389	195

Remarks/Abnormalities

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

Signed 

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TEST CERTIFICATE

UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION
BS 1377 : PART 7: Clause 8 Single Stage

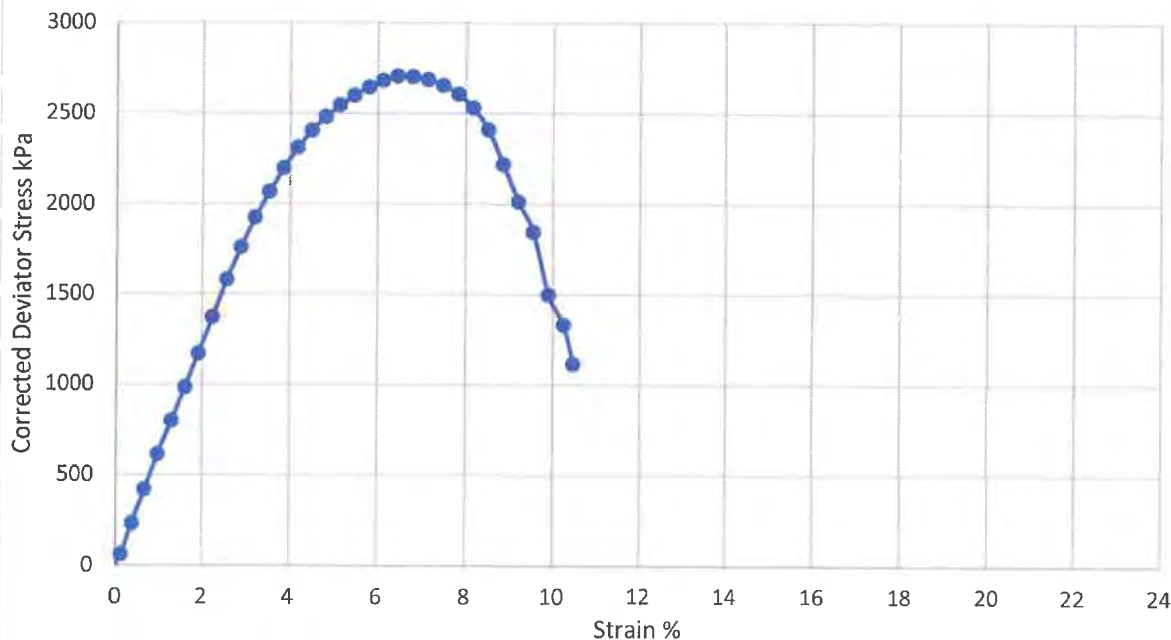
CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	WS2 SPT 2	DATE SAMPLED	Not advised
LAB SAMPLE No.	97922	DATE RECEIVED	14-Apr-21
DATE TESTED	26-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

INITIAL CONDITIONS

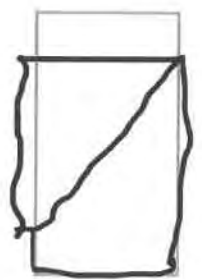
Specimen Location		Sample Length (mm)	70	Specimen depth from top of Sample (mm)	5
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	62	Specimen Moisture Content (%)	14
		Specimen Diameter (mm)	33	Specimen Bulk Density (Mg/m3)	2.23
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.96
		Membrane Correction	2.85		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN



TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength c_u (kPa)
40	6	2	2706	1353

Remarks/Abnormalities

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

Signed 

Date 28 April 2021

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TEST CERTIFICATE

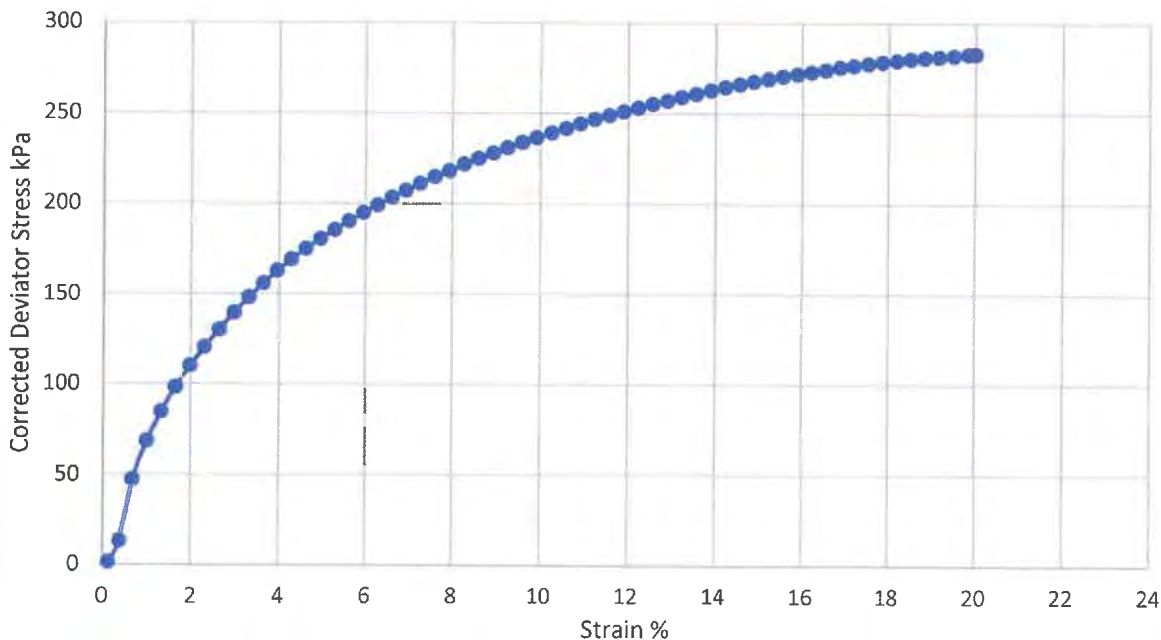
UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION
BS 1377 : PART 7: Clause 8 Single Stage

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	CP3 B 5.1	DATE SAMPLED	Not advised
LAB SAMPLE No.	97938	DATE RECEIVED	14-Apr-21
DATE TESTED	27-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

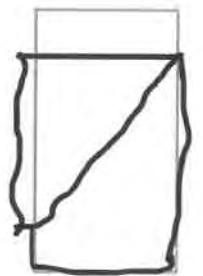
INITIAL CONDITIONS

Specimen Location		Sample Length (mm)	245	Specimen depth from top of Sample (mm)	20
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	191	Specimen Moisture Content (%)	19
		Specimen Diameter (mm)	101	Specimen Bulk Density (Mg/m3)	2.12
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.79
		Membrane Correction	1.49		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN

TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength Cu (kPa)
100	20	2	283	141

Remarks/Abnormalities

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

Signed 

Date 28 April 2021

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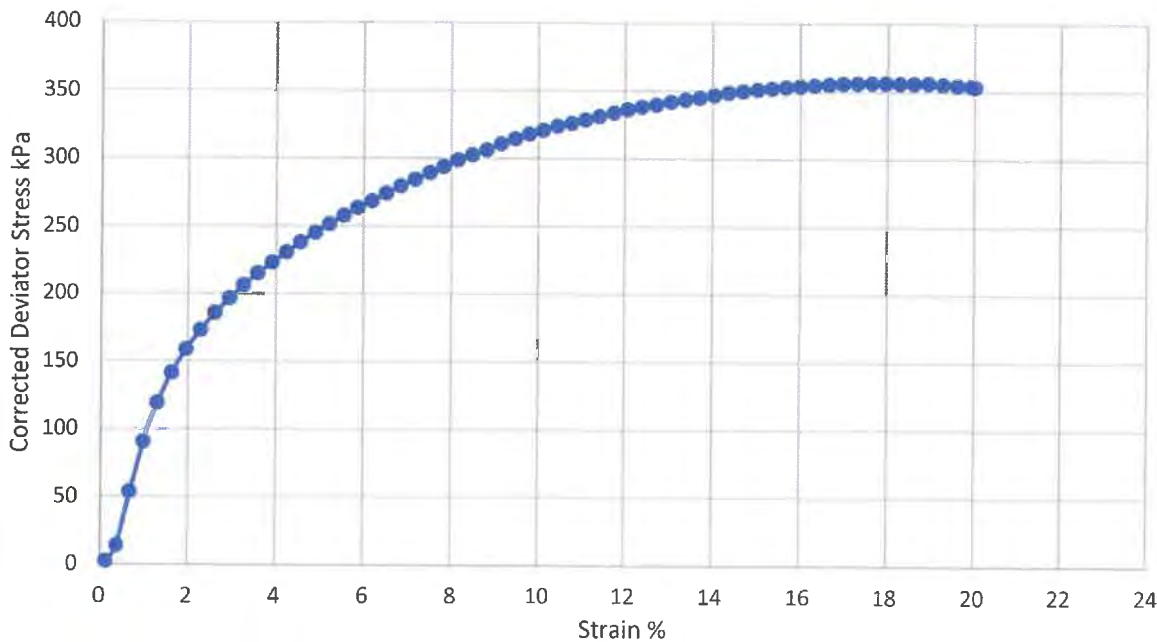
UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION
BS 1377 : PART 7: Clause 8 Single Stage

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	CP1 B 1.7	DATE SAMPLED	Not advised
LAB SAMPLE No.	97933	DATE RECEIVED	14-Apr-21
DATE TESTED	26-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

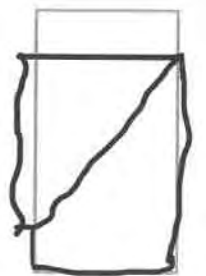
INITIAL CONDITIONS

Specimen Location		Sample Length (mm)	240	Specimen depth from top of Sample (mm)	10
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	204	Specimen Moisture Content (%)	18
		Specimen Diameter (mm)	99	Specimen Bulk Density (Mg/m3)	2.07
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.75
		Membrane Correction	1.53		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN

TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength c_u (kPa)
40	18	2	356	178

Remarks/Abnormalities

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

Signed 

Date 28 April 2021

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UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

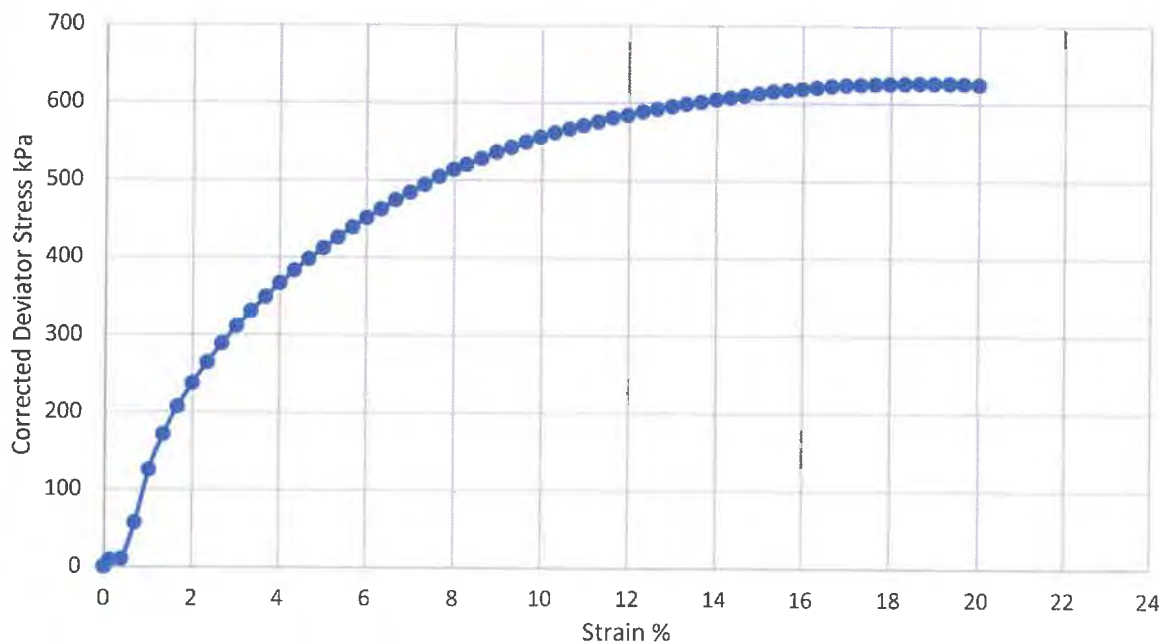
BS 1377 : PART 7: Clause 8 Single Stage

CLIENT	Tier Environmental Ltd
SITE	TE1456 - Net World Sports, Wrexham
JOB NUMBER	MRN 4144/19

SAMPLE LABEL	CP2 SPT 2.1	DATE SAMPLED	Not advised
LAB SAMPLE No.	97901	DATE RECEIVED	14-Apr-21
DATE TESTED	26-Apr-21	SAMPLED BY	Client
MATERIAL	Stiff brown silty sandy CLAY		
ADVISED SOURCE	Site Investigation Sample		

INITIAL CONDITIONS

Specimen Location		Sample Length (mm)	80	Specimen depth from top of Sample (mm)	5
		Sample Orientation	Vertical	Specimen Condition	Undisturbed
		Specimen Length (mm)	60	Specimen Moisture Content (%)	19
		Specimen Diameter (mm)	34	Specimen Bulk Density (Mg/m3)	2.17
		Membrane Thickness (mm)	0.4	Specimen Dry Density (Mg/m3)	1.83
		Membrane Correction	4.43		

CORRECTED DEVIATOR STRESS vs AXIAL STRAIN

TEST TYPE
SINGLE STAGE

SKETCH OF SPECIMEN AT FAILURE



SIMPLE_SHEAR

Cell Pressure (kPa)	Failure Strain (%)	Rate of Strain (%/min)	Corrected Deviator Stress (kPa)	Shear Strength Cu (kPa)
45	19	2	627	313

Remarks/Abnormalities

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

Signed 

Date 28 April 2021

APPENDIX E - GROUNDWATER AND GAS MONITORING RESULTS

GAS MONITORING ACROSS BOREHOLE LOCATIONS



JOB DETAILS:		Job No:	
Client:	Tier Consult LTD	Visit No:	1 of 6
Site:	New World Sports, Wrexham Industrial Estate	Operator:	LH
Date:	13.04.2021	Project Manager:	ER

Monitoring Point	GAS CONCENTRATIONS												FLOW DATA		WELL AND WATER DATA					Comments
	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppm)		Hydrogen sulphide (ppm)		Oxygen (%v/v)		Flow rate (l/hr)		Water Depth (mbgl)	Depth of Well (mbgl)	Ground Level (mAOD)	Water Level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Lowest	Steady	Peak	Steady						
CP01	ND	ND	ND	ND	0.6	0.6	ND	ND	ND	ND	18.1	18.1	ND	ND	DRY	9.83				
CP02	0.1	0.1	2.0	2.0	0.4	0.4	ND	ND	ND	ND	18.4	18.5	0.2	0.2	DRY	9.70				
CP03	ND	ND	ND	ND	0.3	0.3	ND	ND	ND	ND	18.4	18.4	ND	ND	DRY	9.68				
WS01																				
WS03	0.1	0.1	2.0	2.0	0.8	0.8	ND	ND	ND	ND	18.0	18.0	ND	ND	DRY	2.85				
WS06	ND	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	17.5	17.5	ND	ND	DRY	4.00				
Max	0.1	0.1	2.0	2.0	1.0	1.0	ND	ND	ND	ND	18.4	18.5	0.2	0.2	9.83	9.83				
Min	0.1	0.1	2.0	2.0	0.3	0.3	ND	ND	ND	ND	17.5	17.5	0.1	0.1	0.00	2.85				

METEOROLOGICAL AND SITE INFORMATION:	
State of ground:	
Wind:	
Cloud cover:	
Precipitation:	
Barometric pressure (mbar):	
Pressure trend:	
Ground gas meter:	GA2000
Ambient Gas concentration:	

X Dry		Moist		Wet		Snow		Frozen
X Calm		Light		Moderate		Strong		
		X Slight		Cloudy		Overcast		
X None				Moderate		Heavy		
		1027 Before				1027 After		
		Falling		Steady		Rising		
CH ₄	ND	CO ₂	ND	O ₂	18.7%			

GAS MONITORING ACROSS BOREHOLE LOCATIONS



JOB DETAILS:		Job No:			
Client:	Tier Consult LTD	Visit No:	2	of	6
Site:	New World Sports, Wrexham Industrial Estate	Operator:	LH		
Date:	26.04.2021	Project Manager:	ER		

Monitoring Point	GAS CONCENTRATIONS												FLOW DATA		WELL AND WATER DATA					Comments
	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppm)		Hydrogen sulphide (ppm)		Oxygen (%v/v)		Flow rate (l/hr)		Water Depth (mbgl)	Depth of Well (mbgl)	Ground Level (mAOD)	Water Level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Lowest	Steady	Peak	Steady						
CP01	0.1	0.1	2.0	2.0	1.2	1.2	ND	ND	ND	ND	18.9	18.9	ND	ND	8.60	9.80				
CP02	ND	ND	ND	ND	1.3	1.3	ND	ND	ND	ND	18.1	18.0	ND	ND	1.10	9.80				
CP03	ND	ND	ND	ND	0.7	0.7	ND	ND	ND	ND	18.0	18.0	0.1	ND	9.00	9.70				
WS01																				
WS03	ND	ND	ND	ND	0.8	0.8	ND	ND	ND	ND	18.6	17.5	0.3	ND	DRY	2.70				
WS06	ND	ND	ND	ND	1.2	1.2	ND	ND	ND	ND	18.4	18.4	ND	ND	DRY	4.00				
Max	0.1	0.1	2.0	2.0	1.3	1.3	ND	ND	ND	ND	18.9	18.9	0.3	0.1	9.00	9.80				
Min	0.1	0.1	2.0	2.0	0.7	0.7	ND	ND	ND	ND	18.0	17.5	0.1	0.1	1.10	2.70				

METEOROLOGICAL AND SITE INFORMATION:	
State of ground:	
Wind:	
Cloud cover:	
Precipitation:	
Barometric pressure (mbar):	
Pressure trend:	
Ground gas meter:	GA2000
Ambient Gas concentration:	

☐	Dry	☒	Moist	☐	Wet	☐	Snow	☐	Frozen
☒	Calm	☐	Light	☐	Moderate	☐	Strong		
☒	None	☐	Slight	☐	Cloudy	☐	Overcast		
☒	None	☐	Slight	☐	Moderate	☐	Heavy		
		1020	Before			1020	After		
			Falling	☐	Steady		Rising		
CH₄	ND	CO₂	ND	O₂	19.3%				

GAS MONITORING ACROSS BOREHOLE LOCATIONS



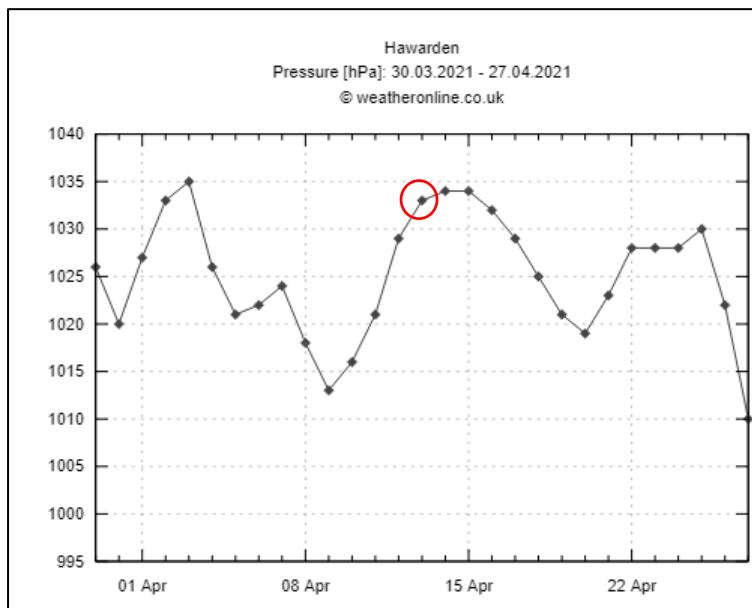
JOB DETAILS:		Job No:			
Client:	Tier Consult LTD	Visit No:	3	of	6
Site:	New World Sports, Wrexham Industrial Estate	Operator:	LH		
Date:	17.05.2021	Project Manager:	ER		

Monitoring Point	GAS CONCENTRATIONS												FLOW DATA		WELL AND WATER DATA					Comments
	Methane (%v/v)		%LEL		Carbon dioxide (%v/v)		Carbon monoxide (ppm)		Hydrogen sulphide (ppm)		Oxygen (%v/v)		Flow rate (l/hr)		Water Depth (mbgl)	Depth of Well (mbgl)	Ground Level (mAOD)	Water Level (mAOD)	Response Zone	
	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	Lowest	Steady	Peak	Steady						
CP01	0.1	0.1	2.0	2.0	0.8	0.8	ND	ND	ND	ND	15.9	15.8	15.6	ND	3.70	9.80				
CP02																				WELL FLOODED
CP03																				WELL FLOODED
WS01																				
WS03	ND	ND	ND	ND	0.4	ND	ND	ND	ND	ND	18.6	ND	12.0	ND	0.00	2.70				WATER IN PIPE
WS06	0.1	0.1	2.0	2.0	0.9	0.9	ND	ND	ND	ND	18.3	18.3	17.9	ND	0.30	4.00				
Max	0.1	0.1	2.0	2.0	0.9	0.9	ND	ND	ND	ND	18.6	18.3	17.9	0.1	3.70	9.80				
Min	0.1	0.1	2.0	2.0	0.4	0.1	ND	ND	ND	ND	15.9	0.1	12.0	0.1	0.00	2.70				

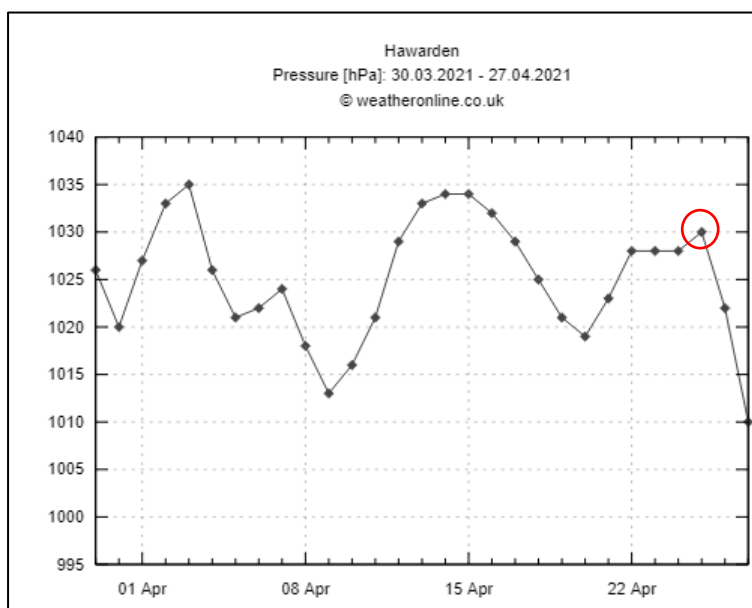
METEOROLOGICAL AND SITE INFORMATION:	
State of ground:	
Wind:	
Cloud cover:	
Precipitation:	
Barometric pressure (mbar):	
Pressure trend:	
Ground gas meter:	GA2000
Ambient Gas concentration:	

☐	Dry	☐	Moist	☒	Wet	☐	Snow	☐	Frozen
☐	Calm	☒	Light	☐	Moderate	☐	Strong		
☐	None	☐	Slight	☒	Cloudy	☐	Overcast		
☒	None	☐	Slight	☐	Moderate	☐	Heavy		
		1001	Before	☐	Steady	1001	After		
		☐	Falling			☐	Rising		
CH ₄	ND	CO ₂	ND	O ₂	19.3%				

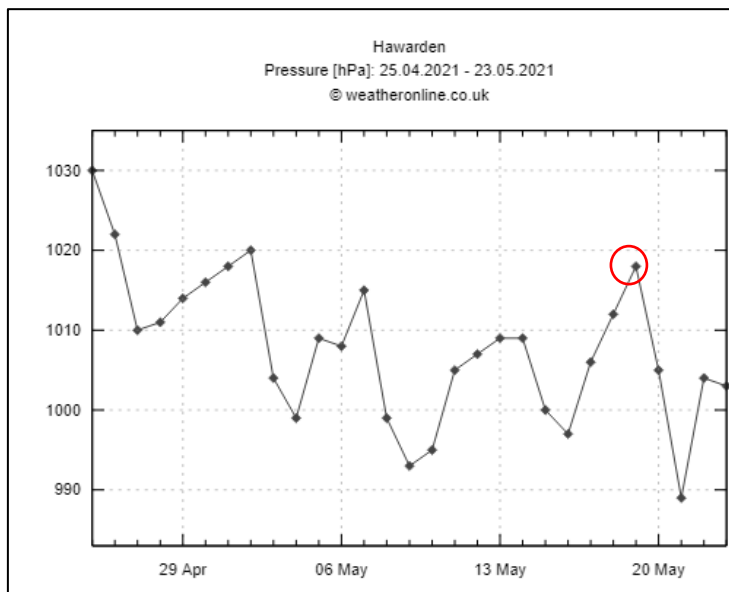
Visit 1 – 13.04.21: Rising atmospheric pressure



Visit 2 – 26.04.21: Stable atmospheric pressure



Visit 3 – 19.05.21: Falling atmospheric pressure



APPENDIX F - PHOTOGRAPHS













APPENDIX G - PREVIOUS SITE INVESTIGATION REPORT (AVAILABLE AS A SEPARATE DOCUMENT)

P / 20 1 1 / 089 1

Report No. T0151 CM (ME1178)

GEO-ENVIRONMENTAL DESK STUDY

OF

PLOT 3A

BRYN LANE

WREXHAM INDUSTRIAL ESTATE

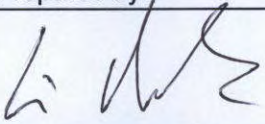
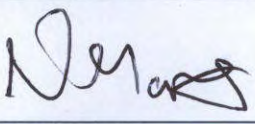
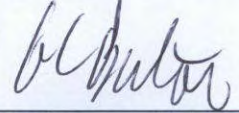
WREXHAM

**WREXHAM COUNTY
BOROUGH COUNCIL**

- 6 DEC 2011

PLANNING DEPARTMENT

Prepared for:
Kingmoor Park Properties Ltd
Unit D
Barron Way
Kingmoor Business Park
Carlisle
CA6 4SJ

Issue:		Prepared by:	Checked by:	Verified by:
Issue 1	October 2011			
		Caine Mawby	Niall Martin	Giles Burton
		Associate Director	Geo-environmental Engineer	Director
Shepherd Gilmour Environment Ltd, Castlefield House, 29 Ellesmere St, Manchester M15 4LZ Telephone: 0161 832 7802 Facsimile: 0161 832 1540				

EXECUTIVE SUMMARY

Instruction	Shepherd Gilmour Environment Ltd (SGE) has been commissioned by Kingmoor Park Properties Ltd (The Client) to undertake a Geo-environmental Desk Study on land described within the application as Plot 3a off Bryn Lane at Wrexham Industrial Estate, Wrexham. It is understood that the site is to be redeveloped with a large industrial unit with associated hardstand and landscaping and ponds. A proposed site layout plan supplied by the client is presented in Appendix B.
Site Location and Description	The site occupies an area of approximately 20.6 hectares and comprises open land (Fields) with a number of small ponds and an unnamed tertiary river forming the southern boundary to the main development area. The site forms an area of open land to the north and east of Wrexham Industrial Estate.
Site History	The historical plans show that the site has been undeveloped (open fields) since the earliest available mapping (1873).
Geology	The site is underlain by solid geology of Lower Mottled Sandstone and Sandstones/Mudstones/Conglomerate of the Salop Formation with drift geology comprising Glacial Till (likely Clay) deposits.
Hydrology and Hydrogeology	The nearest watercourse is an unnamed tertiary river forming the southern boundary of the main development area and there are a number of drainage ponds and ditches on site. There are potentially no potable water abstractions within 1km of the site. The site is located over both a Principal and secondary A Aquifers (bedrock formations). The Glacial Till deposits are not afforded an aquifer classification. The site is not within 250m of a Source Protection Zone.
Potential Contamination Sources	The following summaries potential contamination on site. • Unknown Made Ground or Made Ground within infilled ponds; • Impaction of site from trade effluent discharges into river adjacent to southern boundary of main development area; • Potential ground gases associated with unknown Made Ground on site.
Preliminary Risk Assessment	Following the assessment of available historical and anecdotal information of the site, the following outlines the potential contamination sources that exist across the site: • A wide range of contaminants associated with potential Made Ground present on-site; • There exists a potential for the generation of harmful ground gases; • Potential UXO presence due to close proximity to previous munitions factory; • Potential ecological impact.
Conclusion and recommendations	The preliminary risk assessment identified a number of possible pollutant linkages that require further investigation and assessment. Consequently, a generic quantitative risk assessment should be undertaken, incorporating a site investigation designed to address the potential pollutant linkages identified in the outline conceptual model and compare the chemical analysis results with generic assessment criteria. A geotechnical assessment including site investigation should be undertaken prior to development work commencing to assess foundation issues associated with developing a large commercial unit on the site. This can be secured by a suitably worded planning condition. A UXO desk study should be undertaken prior to any fieldworks. A Full ecology survey has been advised by the Local Authority and forms part of the planning application.
This sheet is intended to provide a summary only of the initial assessment study of the site in relation to contamination. It does not provide a definitive engineering analysis.	

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1.1 Instruction

The site has previously been the subject of a desk study undertaken on a wider area of land off Bryn Lane. The previous desk study was undertaken by SGE on behalf of Kingmoor Park Properties Ltd and the findings were presented in report ref: Q0812 DB (ME1054), dated August 2008. As the Local Authority search information used within the previous report covers the study area, this has been re-used to inform the desk study assessment specific to Plot3a. This has been supplemented with an up to date environmental database search report.

- To appraise the land use history of the site by the examination of available historical plans.
- To assess the environmental setting of the property with specific reference to geology, hydrogeology and hydrology.
- To gain an understanding of any concerns of the regulatory authorities (Local Authority Planning, Building Control and Environmental Health departments and the Environment Agency) regarding foundations, local landfilling, flooding, mining, quarrying and other concerns.

This report is written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in legislation may require a re-interpretation of the report in whole or in part after its original issue. We reserve the right to alter our conclusions and recommendations in the light of further information that may become available. This report is provided for a planning application submission.