

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 24-27602

Client Ref 5088

Contract Title Royal Victoria Court

Sample Id TP02 2T 0.20

Sample Numbers 2442299 2442314

Date Analysed 03/01/2025

Test Results On Waste			WAC Limit Values		
Determinand and Method Reference	Units	Result	Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	3.2	3	5	6
DETSC 2003# Loss On Ignition	%	4.3	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETSC 3311* Mineral Oil (C10 - C40)	mg/kg	240.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	2.5	100	n/a	n/a
DETSC 2008# pH	pH Units	11.4	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	< 1.0	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate			WAC Limit Values		
Determinand and Method Reference	Conc in Eluate ug/l	Amount Leached* mg/kg	Limit values for LS10 Leachate		
	10:1	LS10	Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	2.9	0.03	0.5	2	25
DETSC 2306 Barium as Ba	17	0.2	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	1.6	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	3.8	0.04	2	50	100
DETSC 2306 Mercury as Hg	0.011	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	2.1	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	0.65	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	6.7	0.07	0.5	10	50
DETSC 2306 Antimony as Sb	1.7	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.68	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	8.4	0.08	4	50	200
DETSC 2055 Chloride as Cl	1300	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETSC 2055 Sulphate as SO4	15000	150	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	57000	570	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

Additional Information	
DETSC 2008 pH	8.0
DETSC 2009 Conductivity uS/cm	80.9
* Temperature*	18.0
Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.097
Stage 1	
Volume of Leachant L2*	0.956
Volume of Eluate VE1*	0.906

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive
Hazardous Waste

Disclaimer: The WAC limit values are provided for guidance only. DETS does not accept responsibility for errors or omissions. Values are correct at time of issue.

* DETS are accredited for the testing of leachates and not the leachate preparation stage which is unaccredited.

WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 24-27602

Client Ref 5088

Contract Title Royal Victoria Court

Sample Id TP02 5T 1.90

Sample Numbers 2442301 2442315

Date Analysed 02/01/2025

Test Results On Waste			WAC Limit Values		
Determinand and Method Reference	Units	Result	Inert Waste	SNRHW	Hazardous Waste
DETS 2084# Total Organic Carbon	%	4.0	3	5	6
DETS 2003# Loss On Ignition	%	4.3	n/a	n/a	10
DETS 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETS 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETS 3311* Mineral Oil (C10 - C40)	mg/kg	< 10	500	n/a	n/a
DETS 3301 PAHs	mg/kg	2.2	100	n/a	n/a
DETS 2008# pH	pH Units	11.1	n/a	>6	n/a
DETS 2073* Acid Neutralisation Capacity (pH4)	mol/kg	2.2	n/a	TBE	TBE
DETS 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate			WAC Limit Values		
Determinand and Method Reference	Conc in Eluate ug/l	Amount Leached* mg/kg	Limit values for LS10 Leachate		
	10:1	LS10	Inert Waste	SNRHW	Hazardous Waste
DETS 2306 Arsenic as As	7.2	0.07	0.5	2	25
DETS 2306 Barium as Ba	18	0.2	20	100	300
DETS 2306 Cadmium as Cd	0.037	< 0.02	0.04	1	5
DETS 2306 Chromium as Cr	1.3	< 0.1	0.5	10	70
DETS 2306 Copper as Cu	3.2	0.03	2	50	100
DETS 2306 Mercury as Hg	0.048	< 0.002	0.01	0.2	2
DETS 2306 Molybdenum as Mo	5.4	< 0.1	0.5	10	30
DETS 2306 Nickel as Ni	0.71	< 0.1	0.4	10	40
DETS 2306 Lead as Pb	6.7	0.07	0.5	10	50
DETS 2306 Antimony as Sb	1.9	< 0.05	0.06	0.7	5
DETS 2306 Selenium as Se	0.47	< 0.03	0.1	0.5	7
DETS 2306 Zinc as Zn	7.9	0.08	4	50	200
DETS 2055 Chloride as Cl	1700	< 100	800	15,000	25,000
DETS 2055* Fluoride as F	< 100	< 0.1	10	150	500
DETS 2055 Sulphate as SO4	8200	< 100	1000	20,000	50,000
DETS 2009* Total Dissolved Solids	120000	1200	4000	60,000	100,000
DETS 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETS 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

Additional Information	
DETS 2008 pH	7.7
DETS 2009 Conductivity uS/cm	176.0
* Temperature*	18.0
Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.095
Stage 1	
Volume of Leachant L2*	0.937
Volume of Eluate VE1*	0.881

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive
Hazardous Waste

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WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 24-27602

Client Ref 5088

Contract Title Royal Victoria Court

Sample Id TP04 2T 0.60

Sample Numbers 2442303 2442316

Date Analysed 02/01/2025

Test Results On Waste			WAC Limit Values		
Determinand and Method Reference	Units	Result	Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	6.2	3	5	6
DETSC 2003# Loss On Ignition	%	6.0	n/a	n/a	10
DETSC 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETSC 3401# PCBs (7 congeners)	mg/kg	0.17	1	n/a	n/a
DETSC 3311* Mineral Oil (C10 - C40)	mg/kg	1500.0	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	47.0	100	n/a	n/a
DETSC 2008# pH	pH Units	11.2	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	1.8	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate			WAC Limit Values		
Determinand and Method Reference	Conc in Eluate ug/l	Amount Leached* mg/kg	Limit values for LS10 Leachate		
	10:1	LS10	Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	7.8	0.08	0.5	2	25
DETSC 2306 Barium as Ba	18	0.2	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	3.9	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	22	0.22	2	50	100
DETSC 2306 Mercury as Hg	0.11	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	3.8	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	3.6	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	25	0.25	0.5	10	50
DETSC 2306 Antimony as Sb	7.5	0.08	0.06	0.7	5
DETSC 2306 Selenium as Se	1.5	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	110	1.1	4	50	200
DETSC 2055 Chloride as Cl	4000	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	110	1.1	10	150	500
DETSC 2055 Sulphate as SO4	23000	230	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	150000	1500	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	< 2000	< 50	500	800	1000

Additional Information	
DETSC 2008 pH	9.2
DETSC 2009 Conductivity uS/cm	216.0
* Temperature*	18.0
Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.099
Stage 1	
Volume of Leachant L2*	0.984
Volume of Eluate VE1*	0.93

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive
Hazardous Waste

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WASTE ACCEPTANCE CRITERIA TESTING ANALYTICAL REPORT

Our Ref 24-27602

Client Ref 5088

Contract Title Royal Victoria Court

Sample Id TP06 2T 1.00

Sample Numbers 2442306 2442317

Date Analysed 02/01/2025

Test Results On Waste			WAC Limit Values		
Determinand and Method Reference	Units	Result	Inert Waste	SNRHW	Hazardous Waste
DETS 2084# Total Organic Carbon	%	6.1	3	5	6
DETS 2003# Loss On Ignition	%	6.6	n/a	n/a	10
DETS 3321# BTEX	mg/kg	< 0.04	6	n/a	n/a
DETS 3401# PCBs (7 congeners)	mg/kg	< 0.01	1	n/a	n/a
DETS 3311* Mineral Oil (C10 - C40)	mg/kg	650.0	500	n/a	n/a
DETS 3301 PAHs	mg/kg	36.0	100	n/a	n/a
DETS 2008# pH	pH Units	10.7	n/a	>6	n/a
DETS 2073* Acid Neutralisation Capacity (pH4)	mol/kg	1.4	n/a	TBE	TBE
DETS 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate			WAC Limit Values		
Determinand and Method Reference	Conc in Eluate ug/l	Amount Leached* mg/kg	Limit values for LS10 Leachate		
	10:1	LS10	Inert Waste	SNRHW	Hazardous Waste
DETS 2306 Arsenic as As	10	0.1	0.5	2	25
DETS 2306 Barium as Ba	17	0.2	20	100	300
DETS 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETS 2306 Chromium as Cr	2.6	< 0.1	0.5	10	70
DETS 2306 Copper as Cu	13	0.13	2	50	100
DETS 2306 Mercury as Hg	0.091	< 0.002	0.01	0.2	2
DETS 2306 Molybdenum as Mo	8.7	< 0.1	0.5	10	30
DETS 2306 Nickel as Ni	3.2	< 0.1	0.4	10	40
DETS 2306 Lead as Pb	9.5	0.1	0.5	10	50
DETS 2306 Antimony as Sb	9.6	0.1	0.06	0.7	5
DETS 2306 Selenium as Se	1.6	< 0.03	0.1	0.5	7
DETS 2306 Zinc as Zn	30	0.3	4	50	200
DETS 2055 Chloride as Cl	3000	< 100	800	15,000	25,000
DETS 2055* Fluoride as F	160	1.6	10	150	500
DETS 2055 Sulphate as SO4	32000	320	1000	20,000	50,000
DETS 2009* Total Dissolved Solids	71000	710	4000	60,000	100,000
DETS 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETS 2085 Dissolved Organic Carbon	4100	< 50	500	800	1000

Additional Information	
DETS 2008 pH	8.7
DETS 2009 Conductivity uS/cm	102.0
* Temperature*	18.0
Mass of Sample Kg*	0.110
Mass of dry Sample Kg*	0.094
Stage 1	
Volume of Leachant L2*	0.922
Volume of Eluate VE1*	0.879

TBE - To Be Evaluated
SNRHW - Stable Non-Reactive
Hazardous Waste

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Summary of Asbestos Analysis

Soil Samples

Our Ref 24-27602

Client Ref ~ 5088

Contract Title ~ Royal Victoria Court

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2442285	TP01 2T 0.25	SOIL	NAD	none	Ben Rose
2442286	TP07 1T 0.30	SOIL	Chrysotile	Chrysotile present as fibre bundles	Ben Rose
2442287	TP01 1T 0.10	SOIL	Chrysotile	Chrysotile present as fibre bundles	Ben Rose
2442288	TP02 2T 0.60	SOIL	NAD	none	Ben Rose
2442289	TP03 1T 0.20	SOIL	NAD	none	Ben Rose
2442290	TP04 1T 0.20	SOIL	NAD	none	Ben Rose
2442291	TP05 1T 0.30	SOIL	NAD	none	Ben Rose
2442292	TP08 1T 0.20	SOIL	NAD	none	Ben Rose
2442293	BH02 1T 2.40	SOIL	NAD	none	Ben Rose
2442295	BH03 1T 2.60	SOIL	NAD	none	Ben Rose
2442297	TP01 3T 0.50	SOIL	Amosite	Amosite present as fibre bundles and in microscopic insulation debris	Ben Rose
2442298	TP02 1T 0.20	SOIL	NAD	none	Ben Rose
2442300	TP02 4T 1.90	SOIL	NAD	none	Ben Rose
2442302	TP03 2T 0.80	SOIL	Chrysotile	Chrysotile present as fibre bundles	Ben Rose
2442304	TP04 3T 0.60	SOIL	NAD	Chrysotile present as fibre bundles	Ben Rose
2442305	TP05 2T 0.80	SOIL	NAD	none	Ben Rose
2442307	TP06 3T 1.00	SOIL	NAD	none	Ben Rose
2442308	TP07 2T 1.40	SOIL	Chrysotile	Chrysotile present as fibre bundles	Ben Rose
2442309	TP08 2T 0.80	SOIL	Chrysotile	Chrysotile present as fibre bundles	Ben Rose
2442310	TP09 1T 1.00	SOIL	Amosite	Amosite present as fibre bundles	Ben Rose

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.

Information in Support of the Analytical Results

Our Ref 24-27602
 Client Ref ~ 5088
 Contract ~ Royal Victoria Court

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
2442285	TP01 0.25 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442286	TP07 0.30 SOIL	10/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442287	TP01 0.10 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442288	TP02 0.60 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442289	TP03 0.20 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442290	TP04 0.20 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442291	TP05 0.30 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442292	TP08 0.20 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442293	BH02 2.40 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442294	BH02 2.40 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442295	BH03 2.60 SOIL	12/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442296	BH03 2.60 SOIL	12/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442297	TP01 0.50 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442298	TP02 0.20 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442299	TP02 0.20 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442300	TP02 1.90 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442301	TP02 1.90 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442302	TP03 0.80 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442303	TP04 0.60 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442304	TP04 0.60 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442305	TP05 0.80 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442306	TP06 1.00 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442307	TP06 1.00 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442308	TP07 1.40 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442309	TP08 0.80 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442310	TP09 1.00 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442311	TP06 0.05 SOIL	11/12/24	PT 1L		Naphthalene, PAH FID
2442312	BH02 2.40 LEACHATE	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442313	BH03 2.60 LEACHATE	12/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442314	TP02 0.20 LEACHATE	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442315	TP02 1.90 LEACHATE	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442316	TP04 0.60 LEACHATE	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2442317	TP06 1.00 LEACHATE	11/12/24	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

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.

Information in Support of the Analytical Results

Our Ref 24-27602
Client Ref ~ 5088
Contract ~ Royal Victoria Court

Soil Analysis Notes

Inorganic soil analysis was carried out on a dried sample, crushed to pass a 425µm sieve, in accordance with BS1377.
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

Information in Support of the Analytical Results

Our Ref ~ 24-27602

Client Ref ~ 5088

Contract ~ Royal Victoria Court

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



Certificate of Analysis

Certificate Number 25-00383

Issued: 15-Jan-25

Client Lithos Consulting Ltd
Parkhill
Walton Rd
Wetherby
LS22 5DZ

Our Reference 25-00383

Client Reference ~ 5088

Order No ~ PO23501

Contract Title ~ Royal Victoria Court

Description 8 Soil samples.

Date Received 17-Dec-24

Date Started 09-Jan-25

Date Completed 15-Jan-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

Kirk Bridgewood
General Manager



Normec DETS Limited

Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY

Symbol key at end of report Tel: 01207 582333 • email: info@dets.co.uk • www.dets.co.uk

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Summary of Asbestos Analysis Samples

Our Ref 25-00383

Client Ref ~ 5088

Contract Title ~ Royal Victoria Court

Lab No	Sample ID	Sample Location	Material Type	Result	Comment*	Analyst
Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.						

Summary of Asbestos Quantification Analysis

Soil Samples

Our Ref 25-00383

Client Ref ~ 5088

Contract Title ~ Royal Victoria Court

Lab No	2446713	2446714	2446715
Sample ID ~	TP07	TP01	TP01
Depth ~	0.30	0.10	0.50
Other ID ~	1T	1T	3T
Sample Type ~			
Sampling Date ~	10/12/2024	11/12/2024	11/12/2024
Sampling Time ~			

Test	Method	Units				
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %		0.001	0.005	0.010
Gravimetric Quantification (a)	DETSC 1102	Mass %		na	na	0.006
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %		0.001	0.005	0.004
Quantification by PCOM (c)	DETSC 1102	Mass %		na	na	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g		na	na	na
Breakdown of Gravimetric Analysis (a)						
Mass of Sample		g		635.67	582.40	645.05
ACMs present*		type				Insulation
Mass of ACM in sample		g				0.0419
% ACM by mass		%				0.006
% asbestos in ACM		%				85
% asbestos in sample		%				0.006
Breakdown of Detailed Gravimetric Analysis (b)						
% Amphibole bundles in sample		Mass %		na	na	0.004
% Chrysotile bundles in sample		Mass %		0.001	0.005	na
Breakdown of PCOM Analysis (c)						
% Amphibole fibres in sample		Mass %		na	na	na
% Chrysotile fibres in sample		Mass %		na	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)						
Amphibole fibres		Fibres/g		na	na	na
Chrysotile fibres		Fibres/g		na	na	na

* Denotes test or material description outside of UKAS accreditation.
 % asbestos in Asbestos Containing Materials (ACMs) is determined by
 by reference to HSG 264.
 Recommended sample size for quantification is approximately 1kg
 # denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

Our Ref 25-00383

Client Ref ~ 5088

Contract Title ~ Royal Victoria Court

Lab No	2446716	2446717	2446718	2446719
Sample ID ~	TP03	TP04	TP07	TP08
Depth ~	0.80	0.60	1.40	0.80
Other ID ~	2T	3T	2T	2T
Sample Type ~				
Sampling Date ~	11/12/2024	11/12/2024	11/12/2024	11/12/2024
Sampling Time ~				

Test	Method	Units				
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.003	0.006	0.001	0.001
Gravimetric Quantification (a)	DETSC 1102	Mass %	na	na	na	na
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.003	0.006	0.001	0.001
Quantification by PCOM (c)	DETSC 1102	Mass %	na	na	na	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na	na	na	na
Breakdown of Gravimetric Analysis (a)						
Mass of Sample		g	764.21	917.10	858.65	783.46
ACMs present*		type				
Mass of ACM in sample		g				
% ACM by mass		%				
% asbestos in ACM		%				
% asbestos in sample		%				
Breakdown of Detailed Gravimetric Analysis (b)						
% Amphibole bundles in sample		Mass %	na	na	na	na
% Chrysotile bundles in sample		Mass %	0.003	0.006	0.001	0.001
Breakdown of PCOM Analysis (c)						
% Amphibole fibres in sample		Mass %	na	na	na	na
% Chrysotile fibres in sample		Mass %	na	na	na	na
Breakdown of Potentially Respirable Fibre Analysis (d)						
Amphibole fibres		Fibres/g	na	na	na	na
Chrysotile fibres		Fibres/g	na	na	na	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Summary of Asbestos Quantification Analysis Soil Samples

Our Ref 25-00383

Client Ref ~ 5088

Contract Title ~ Royal Victoria Court

Lab No	2446720
Sample ID ~	TP09
Depth ~	1.00
Other ID ~	1T
Sample Type ~	
Sampling Date ~	11/12/2024
Sampling Time ~	

Test	Method	Units	
Total Mass% Asbestos (a+b+c)	DETSC 1102	Mass %	0.007
Gravimetric Quantification (a)	DETSC 1102	Mass %	na
Detailed Gravimetric Quantification (b)	DETSC 1102	Mass %	0.007
Quantification by PCOM (c)	DETSC 1102	Mass %	na
Potentially Respirable Fibres (d)	DETSC 1102	Fibres/g	na

Breakdown of Gravimetric Analysis (a)

Mass of Sample		g	809.56
ACMs present*		type	
Mass of ACM in sample		g	
% ACM by mass		%	
% asbestos in ACM		%	
% asbestos in sample		%	

Breakdown of Detailed Gravimetric Analysis (b)

% Amphibole bundles in sample		Mass %	0.007
% Chrysotile bundles in sample		Mass %	na

Breakdown of PCOM Analysis (c)

% Amphibole fibres in sample		Mass %	na
% Chrysotile fibres in sample		Mass %	na

Breakdown of Potentially Respirable Fibre Analysis (d)

Amphibole fibres		Fibres/g	na
Chrysotile fibres		Fibres/g	na

* Denotes test or material description outside of UKAS accreditation.
% asbestos in Asbestos Containing Materials (ACMs) is determined by
by reference to HSG 264.
Recommended sample size for quantification is approximately 1kg
denotes deviating sample

Information in Support of the Analytical Results

Our Ref 25-00383
 Client Ref ~ 5088
 Contract ~ Royal Victoria Court

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Inappropriate container for tests
2446713	TP07 0.30 SOIL	10/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446714	TP01 0.10 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446715	TP01 0.50 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446716	TP03 0.80 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446717	TP04 0.60 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446718	TP07 1.40 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446719	TP08 0.80 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		
2446720	TP09 1.00 SOIL	11/12/24	GJ 250ml, GJ 60ml, PT 1L		

Key: G-Glass P-Plastic J-Jar T-Tub

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.

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

Appendix I
Geotechnical Test Results



LABORATORY REPORT



Contract Number: PSL24/9370

Report Date: 15 January 2025

Client's Reference: 5088

Client Name: Lithos Consulting
Parkhill
Walton Road
Wetherby
North Yorkshire
LS22 5DZ

For the attention of: Charlotte Copley

Contract Title: Royal Victoria Court

Date Received: 18/12/2024

Date Commenced: 18/12/2024

Date Completed: 15/1/2025

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. 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 other than in full, without the prior written approval of the laboratory.

Checked and Approved Signatories:

A Watkins
(Managing Director)

R Berriman
(Associate Director)

S Royle
(Laboratory Manager)

L Knight
(Assistant Laboratory Manager)

S Eyre
(Senior Technician)

T Watkins
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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
BH01	3	D	4.00		Brown mottled grey slightly sandy slightly gravelly CLAY.
BH01	6	D	6.50		Reddish brown slightly sandy slightly gravelly CLAY.
BH01	7	U	8.00		Firm reddish brown sandy slightly gravelly CLAY.
BH01	9	D	9.50		Reddish brown slightly clayey SAND.
BH02	12	U	8.00		Soft brown sandy slightly gravelly CLAY.
BH02	13	D	8.60		Reddish brown sandy slightly gravelly CLAY.
BH02	3	U	3.00		Soft brown slightly sandy slightly gravelly CLAY.
BH02	4	D	3.60		Brown mottled grey slightly sandy slightly gravelly CLAY.
BH02	5	B	3.00		Brown slightly sandy slightly gravelly CLAY.
BH02	7	B	4.30		Brown slightly sandy slightly gravelly CLAY.
BH02	8	D	5.00		Brown organic CLAY.
BH02	9	U	5.00		Soft brown organic CLAY.
BH03	4	D	3.50		Brown slightly sandy slightly gravelly CLAY with some organic material.
BH03	5	B	3.40		Brown slightly sandy slightly gravelly CLAY.
BH03	6	U	5.00		Soft reddish brown slightly sandy slightly gravelly CLAY.
BH03	7	D	5.50		Reddish brown slightly sandy slightly gravelly CLAY.
BH03	9	U	8.00		Firm reddish brown sandy silty CLAY.
TP01	4	D	2.70		Brown slightly sandy slightly gravelly CLAY.
TP04	4	D	2.80		Brown mottled grey slightly sandy slightly gravelly CLAY.



Royal Victoria Court

Contract No:

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Client Ref:

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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

[illegible]

Royal Victoria Court

Contract No:

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Client Ref:

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SUMMARY OF SOIL CLASSIFICATION TESTS

BS 1377 - Part 2 : 2022 in accordance with BS EN ISO 17892 (as below)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Water Content %	Linear Shrinkage	Particle Density Mg/m ³	Liquid Limit %	Plastic Limit %	Plasticity Index %	Passing 0.425mm %	Remarks
BH01	3	D	4.00		27.8			45	22	23	96	Medium Plasticity CIM
BH01	6	D	6.50		19.1			37	19	18	98	Medium Plasticity CIM
BH01	9	D	9.50		14.7				NP			
BH02	13	D	8.60		17.1			29	15	14	95	Low Plasticity CIL
BH02	4	D	3.60		29.1			57	25	32	97	High Plasticity CIH
BH02	8	D	5.00		69.6			126	47	79	100	Organic Plasticity CIHO
BH03	4	D	3.50		56.0			77	32	45	98	Very High Plasticity CIV
BH03	7	D	5.50		18.1			33	16	17	93	Low Plasticity CIL
BH03	9	U	8.00		20.5			31	15	16	100	Low Plasticity CIL
TP01	4	D	2.70		25.2			43	20	23	97	Medium Plasticity CIM
TP04	4	D	2.80		33.1			61	26	35	98	High Plasticity CIH
TP05	3	D	2.50		31.9			51	24	27	95	High Plasticity CIH
TP06	4	D	2.70		25.7			55	24	31	98	High Plasticity CIH
TP08	3	D	2.40		24.2			40	21	19	100	Medium Plasticity CIM
BH03	11	D	9.50		21.5				NP			

Water Content - BS 1377 - Part 2 : 2022 : Clause 4 in accordance with BS EN ISO 17892 - 1 : 2014 + A1 : 2022

Linear Shrinkage - BS 1377 - Part 2 : 2022 : Clause 7

Particle Density (Gas Jar method) - BS 1377 - Part 2 : 2022 : Clause 9

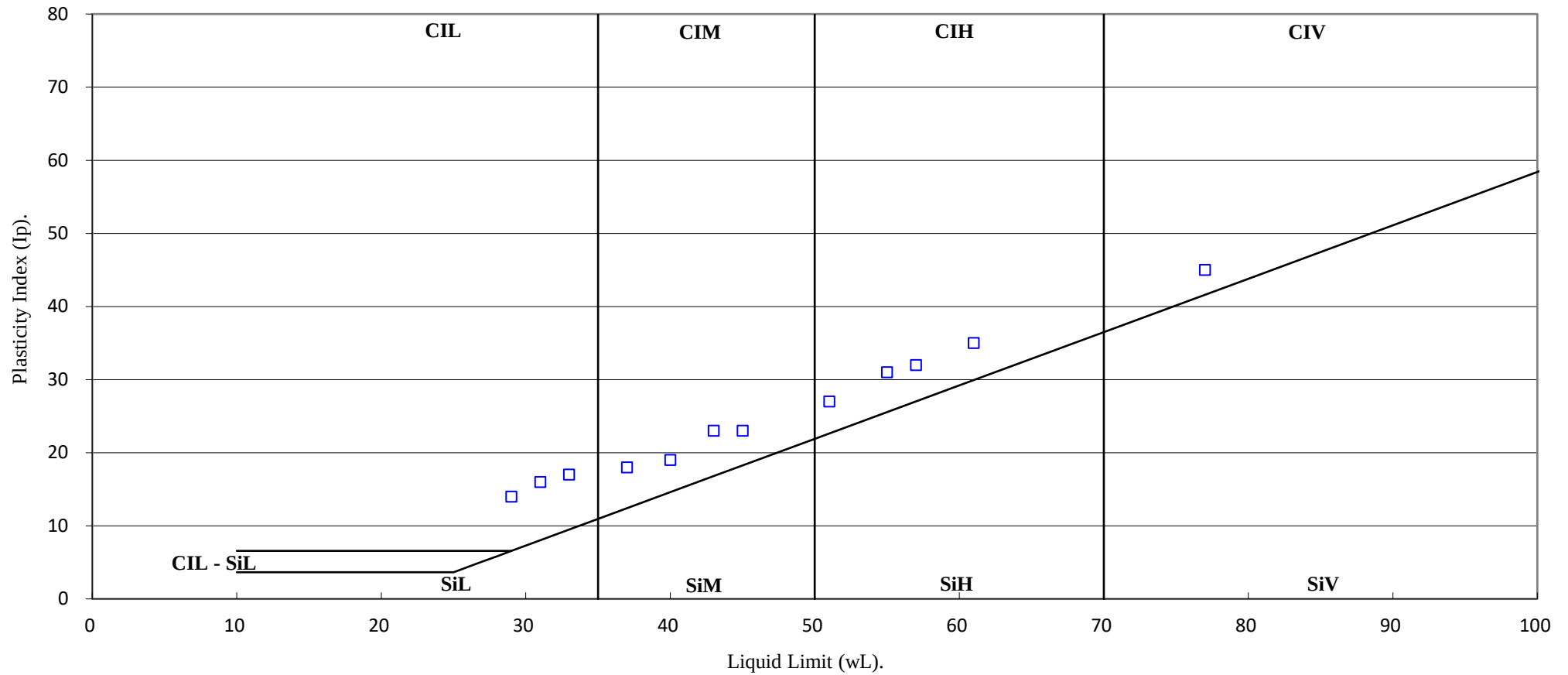
Liquid, Plastic Limit & Plasticity Index - BS 1377 - Part 2 : 2022 : Clause 5 & 6 in accordance with BS EN ISO 17892 - 12 : 2018 + A2 : 2022

SYMBOLS : NP = Non Plastic

 	Royal Victoria Court	Contract No:
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		Client Ref:
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PLASTICITY CHART

BS EN ISO 14688-2:2017 Clause 4.4



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PARTICLE SIZE DISTRIBUTION TEST

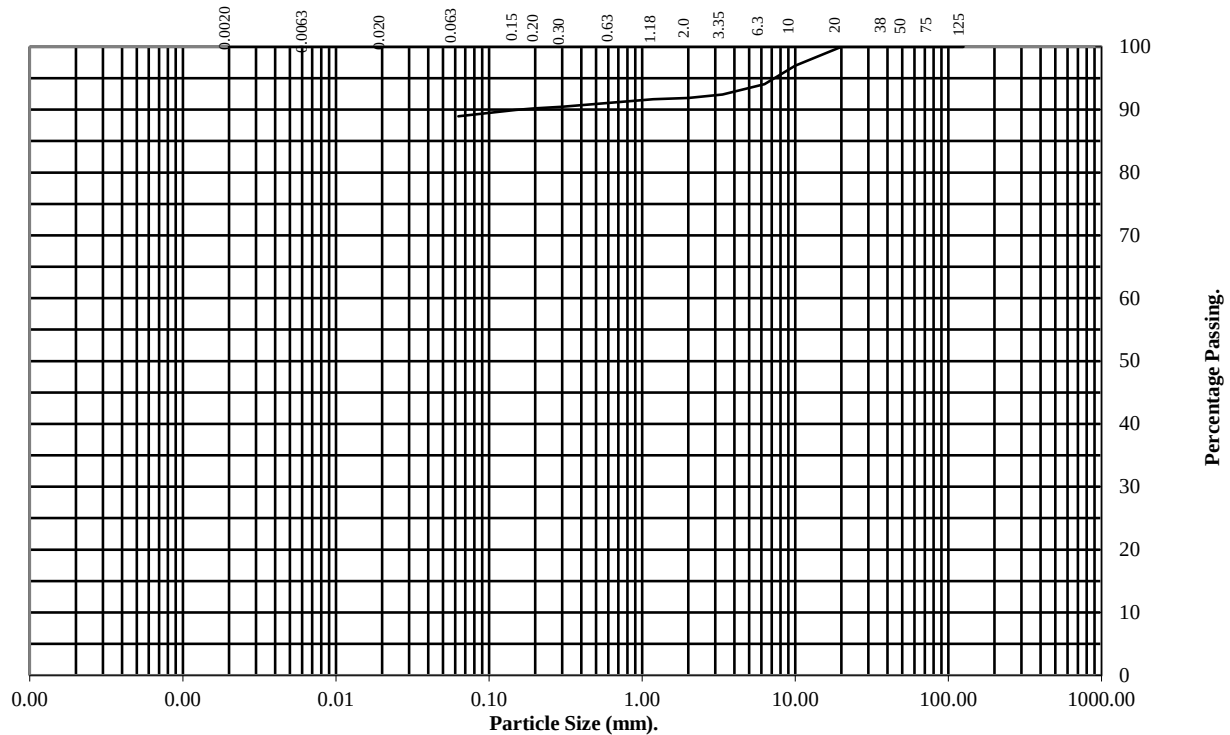
BS 1377 - Part 2 : 2022 : Clause 10 in accordance with BS EN ISO 17892 - 4 : 2016

Sieve Method, Clause 5.2

Hole Number: BH02 Top Depth (m): 3.00

Sample Number: 5 Base Depth (m):

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
50	100
37.5	100
20	100
10	97
6.3	94
3.35	92
2	92
1.18	92
0.63	91
0.3	90
0.2	90
0.15	90
0.063	89

Soil Fraction	Total Percentage
Cobbles	0
Gravel	8
Sand	3
Silt/Clay	89

Remarks:

See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

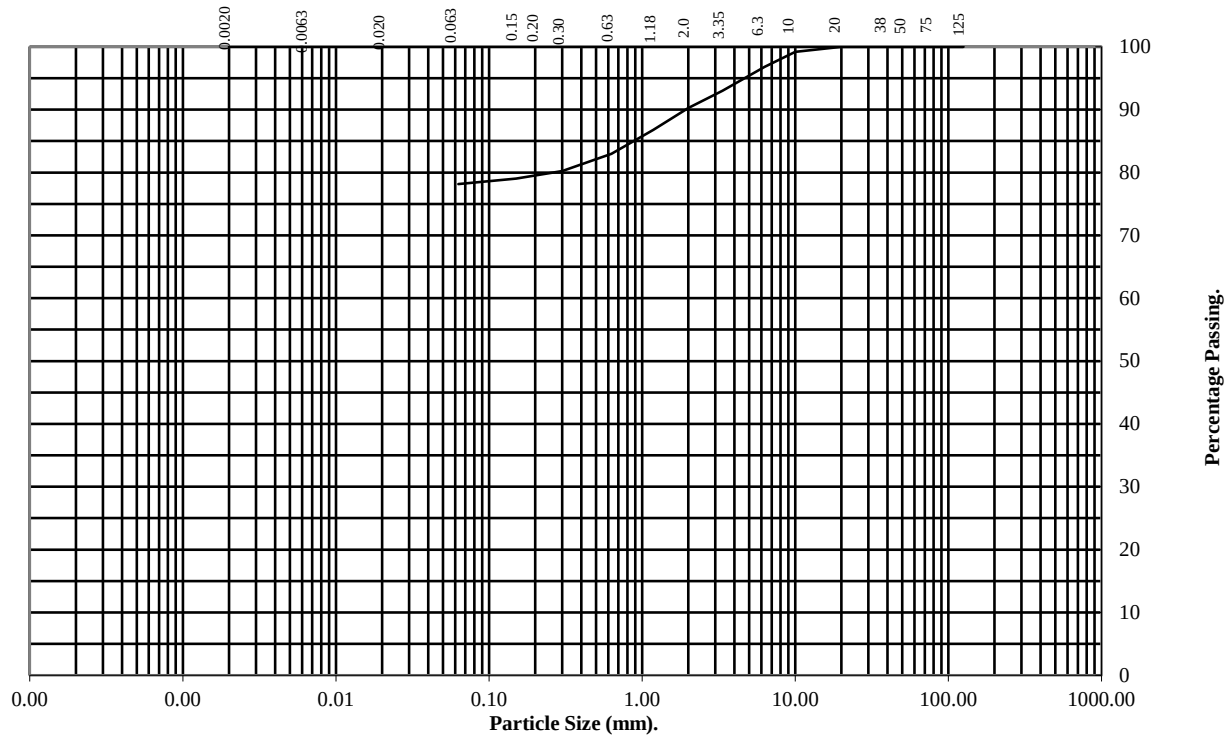
BS 1377 - Part 2 : 2022 : Clause 10 in accordance with BS EN ISO 17892 - 4 : 2016

Sieve Method, Clause 5.2

Hole Number: BH02 Top Depth (m): 4.30

Sample Number: 7 Base Depth (m):

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
50	100
37.5	100
20	100
10	99
6.3	97
3.35	93
2	90
1.18	87
0.63	83
0.3	80
0.2	80
0.15	79
0.063	78

Soil Fraction	Total Percentage
Cobbles	0
Gravel	10
Sand	12
Silt/Clay	78

Remarks:

See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

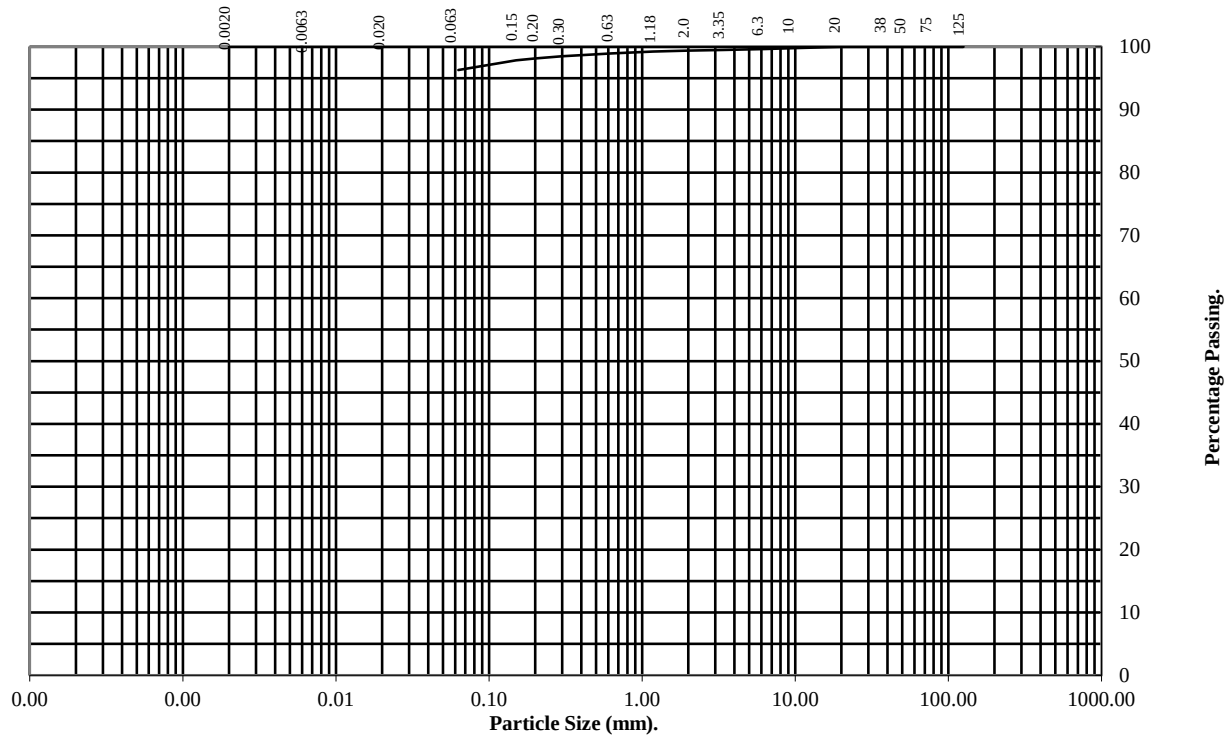
BS 1377 - Part 2 : 2022 : Clause 10 in accordance with BS EN ISO 17892 - 4 : 2016

Sieve Method, Clause 5.2

Hole Number: BH03 Top Depth (m): 3.40

Sample Number: 5 Base Depth (m):

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
50	100
37.5	100
20	100
10	100
6.3	100
3.35	99
2	99
1.18	99
0.63	99
0.3	99
0.2	98
0.15	98
0.063	96

Soil Fraction	Total Percentage
Cobbles	0
Gravel	1
Sand	3
Silt/Clay	96

Remarks:

See Summary of Soil Descriptions



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PARTICLE SIZE DISTRIBUTION TEST

BS 1377 - Part 2 : 2022 : Clause 10 in accordance with BS EN ISO 17892 - 4 : 2016

Sieve Method, Clause 5.2

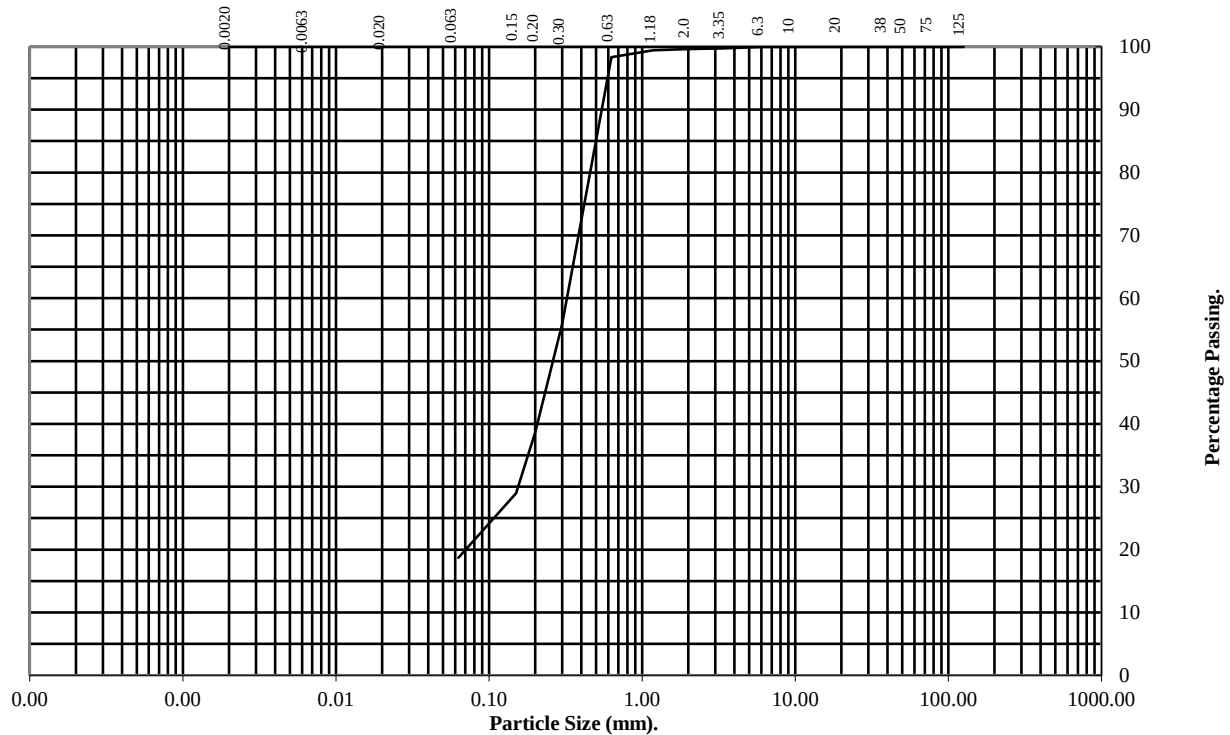
Hole Number: BH03

Top Depth (m): 10.00

Sample Number: 12

Base Depth (m):

Sample Type: B



BS Test Sieve (mm)	Percentage Passing
125	100
75	100
50	100
37.5	100
20	100
10	100
6.3	100
3.35	100
2	100
1.18	99
0.63	98
0.3	56
0.2	39
0.15	29
0.063	19

Soil Fraction	Total Percentage
Cobbles	0
Gravel	0
Sand	81
Silt/Clay	19

Remarks:

See Summary of Soil Descriptions



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

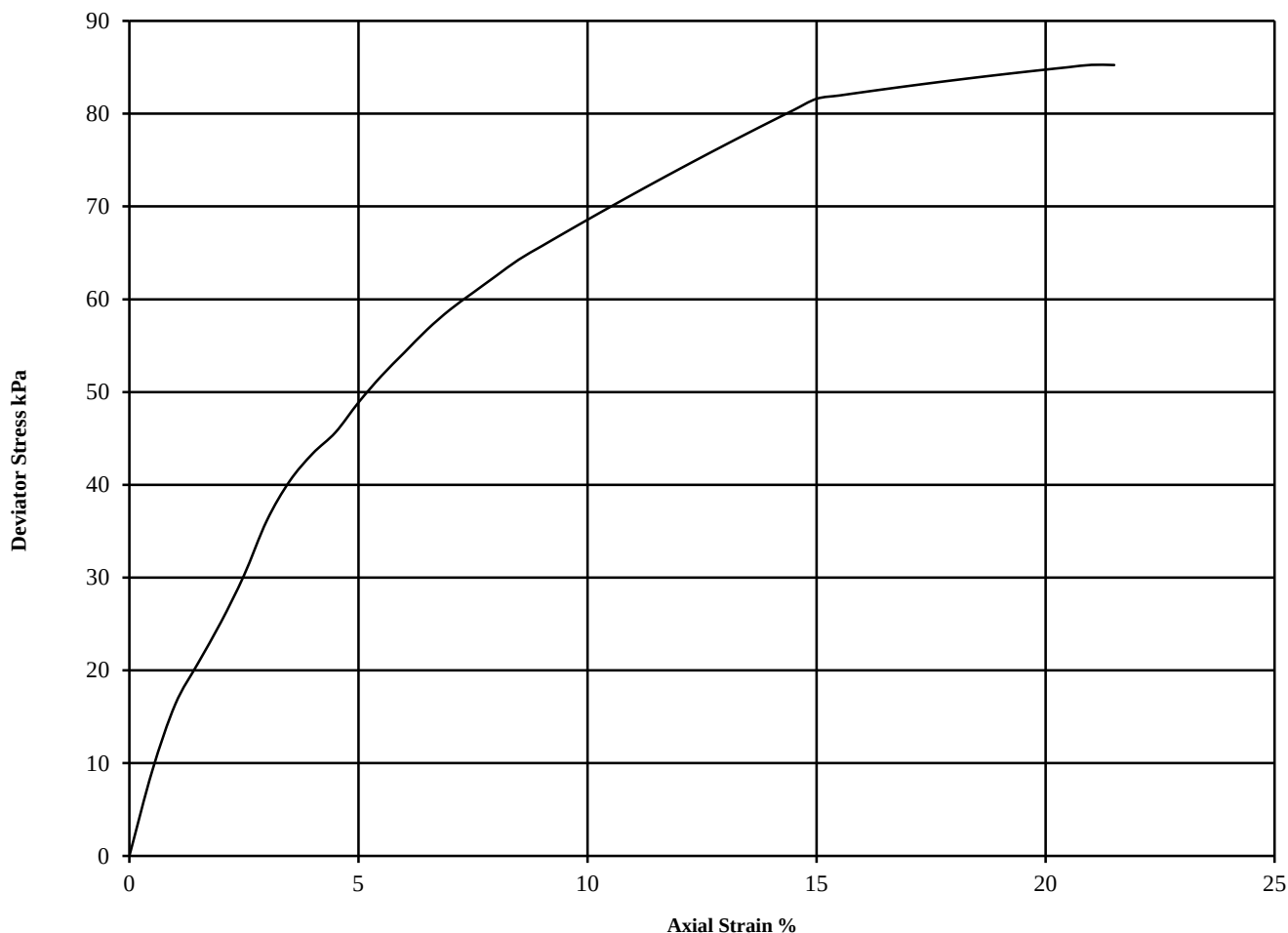
Hole Number: BH01

Top Depth (m): 8.00

Sample Number 7

Base Depth (m):

Sample Type U



Diameter (mm):		102		Height (mm):		204	Test:	UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)		Plastic	Undisturbed Sample Sample taken from top of tube Rate of strain = 0.9 %/min See summary of soil descriptions
1	19.8	2.10	1.76	160	85	43	20.5			



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

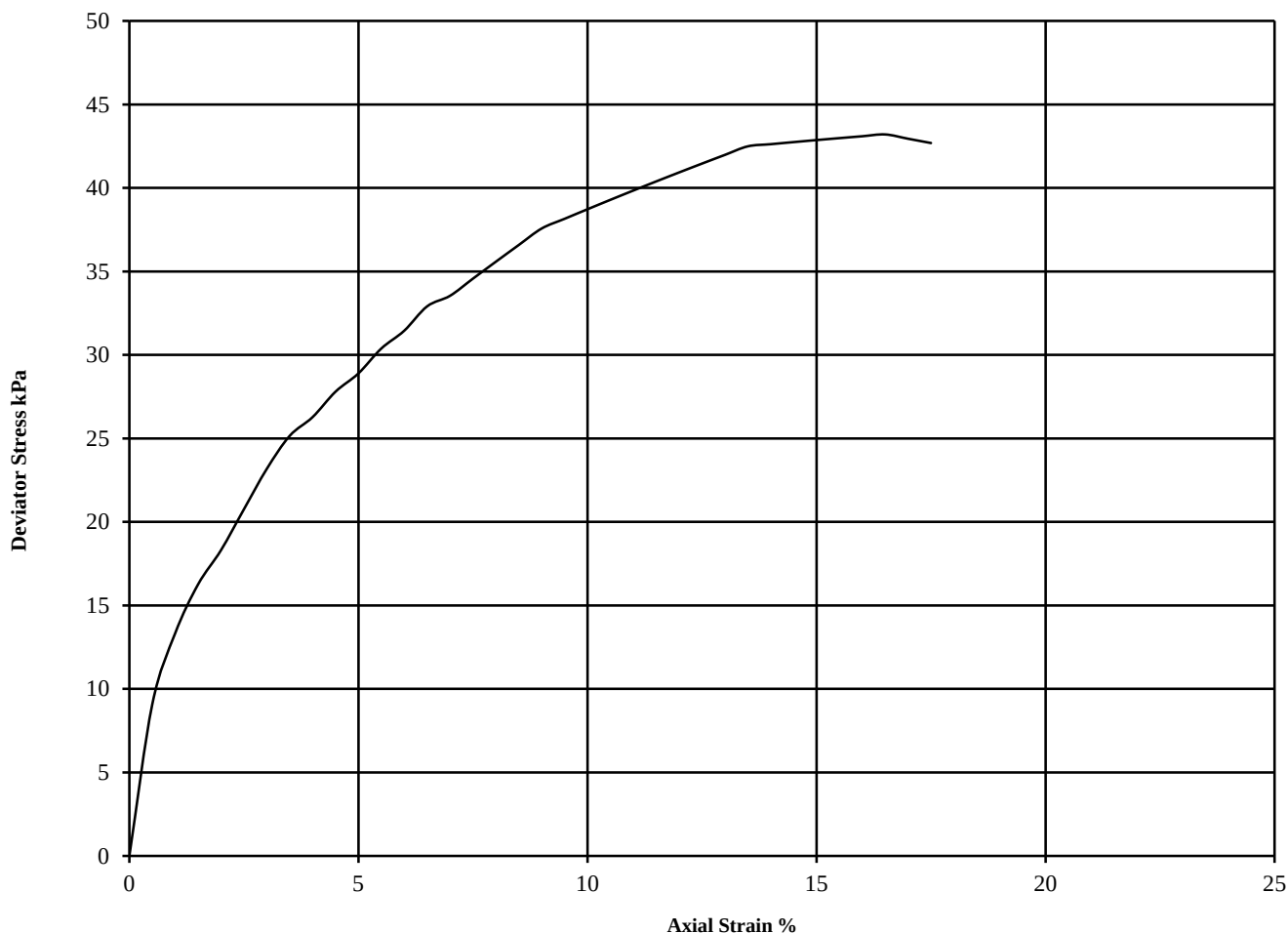
Hole Number: BH02

Top Depth (m): 8.00

Sample Number 12

Base Depth (m):

Sample Type U



Diameter (mm):		102	Height (mm):		204	Test:	UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)		Undisturbed Sample Sample taken from top of tube Rate of strain = 0.9 %/min See summary of soil descriptions
1	20.9	2.04	1.69	160	43	22	16.0	Plastic	



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

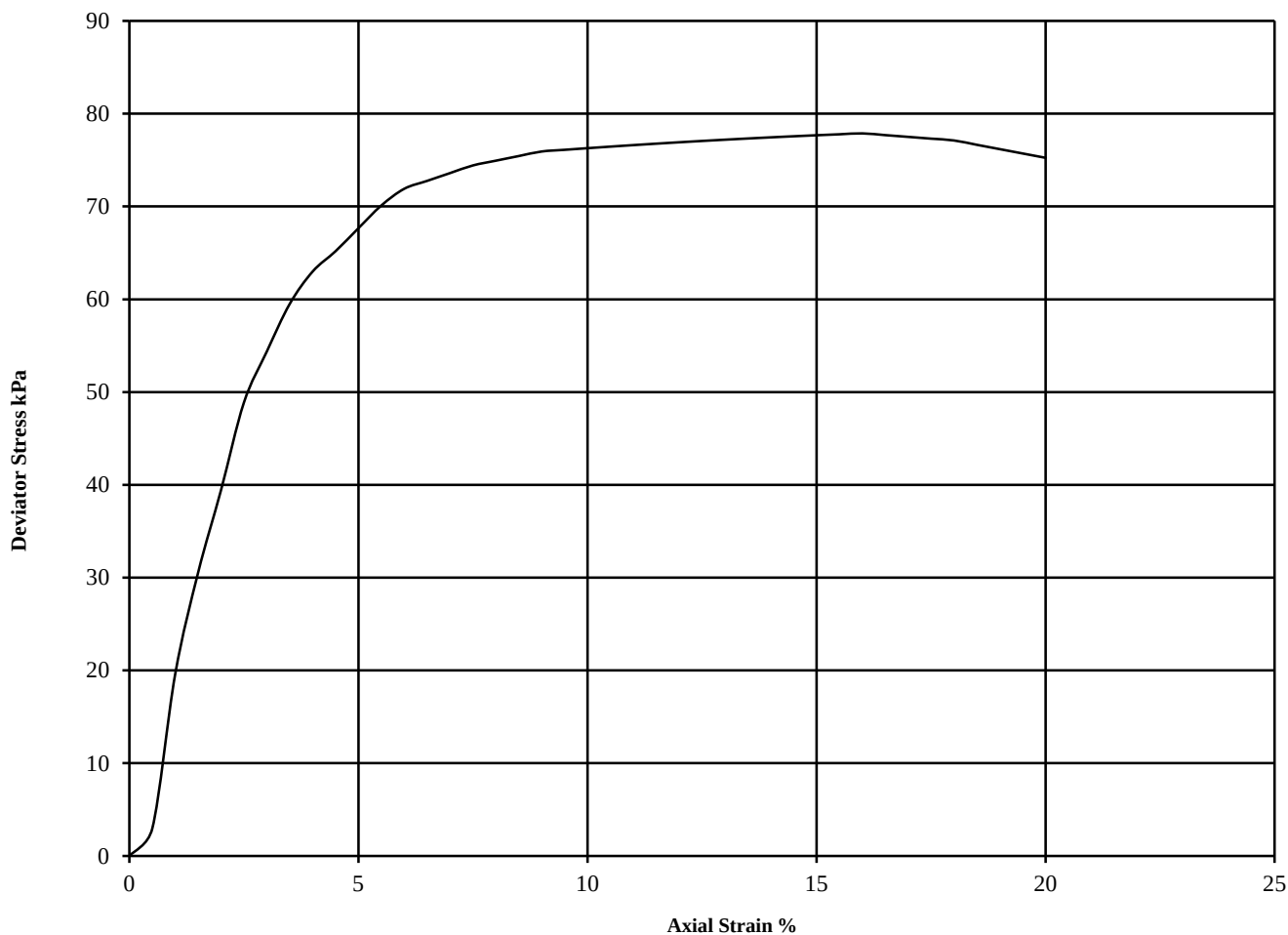
Hole Number: BH02

Top Depth (m): 3.00

Sample Number 3

Base Depth (m):

Sample Type U



Diameter (mm):		102		Height (mm):		204	Test:	UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)		Plastic	Undisturbed Sample Sample taken from top of tube Rate of strain = 0.9 %/min See summary of soil descriptions
1	34.2	1.92	1.43	60	78	39	15.5			



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

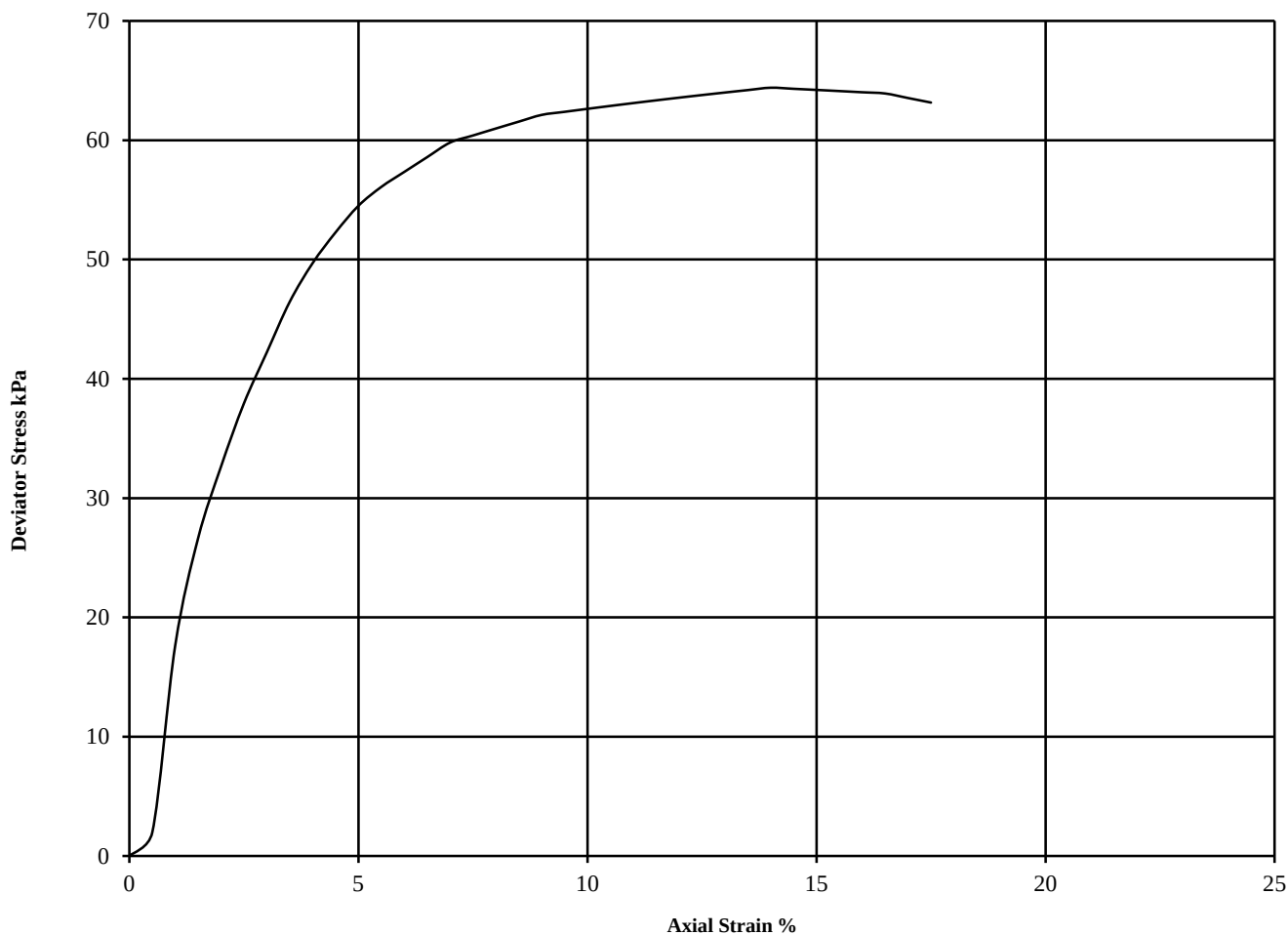
Hole Number: BH02

Top Depth (m): 5.00

Sample Number 9

Base Depth (m):

Sample Type U



Diameter (mm):		Height (mm):			Test:		UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)		
1	74.4	1.67	0.96	100	64	32	13.5	Plastic	



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

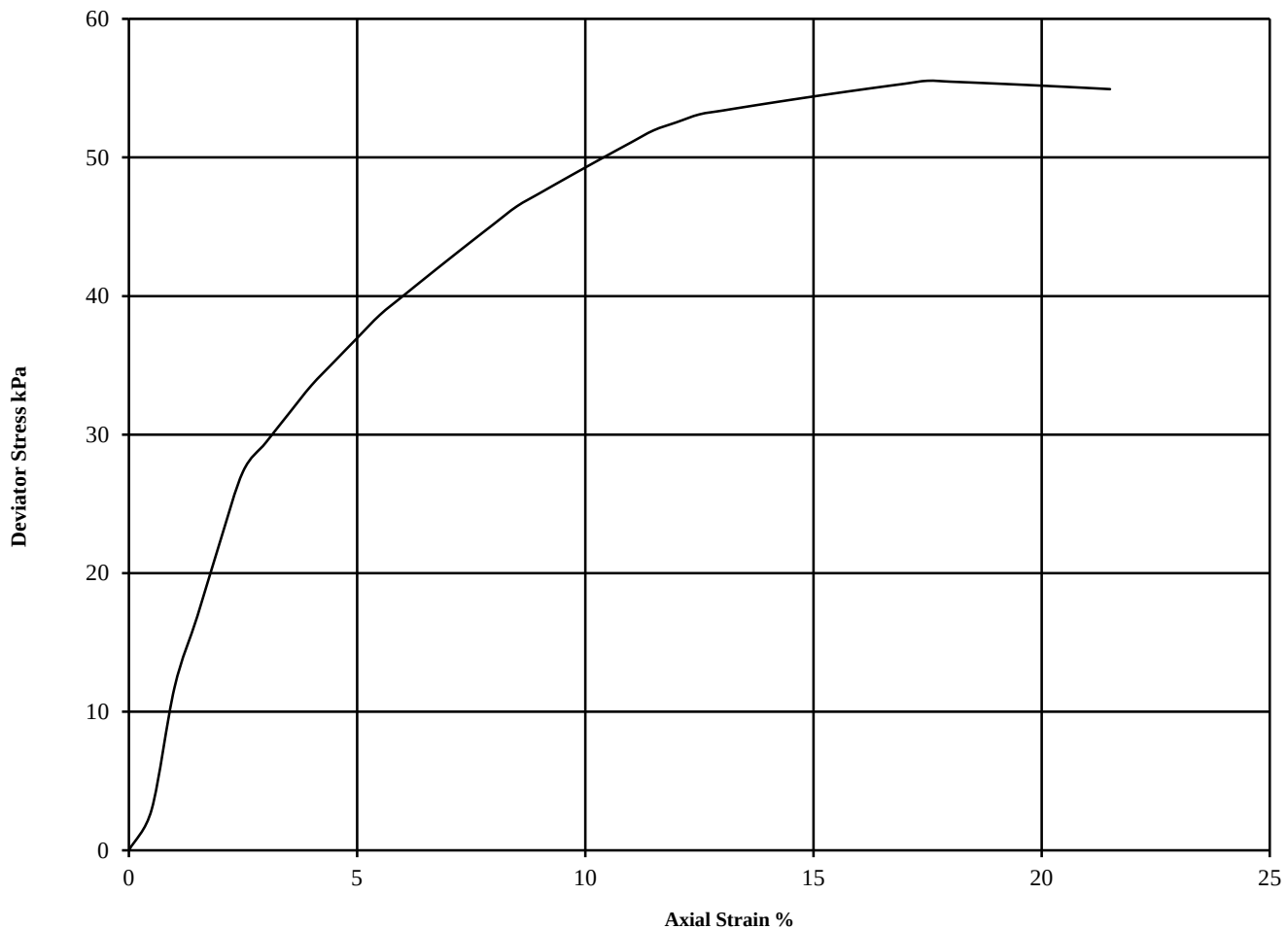
Hole Number: BH03

Top Depth (m): 5.00

Sample Number 6

Base Depth (m):

Sample Type U



Diameter (mm):		102		Height (mm):		204	Test:	UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)			Undisturbed Sample Sample taken from top of tube Rate of strain = 0.9 %/min See summary of soil descriptions
1	19.6	2.06	1.73	100	56	28	17.0			



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UNCONSOLIDATED UNDRAINED TRIAXIAL TEST

BS 1377 - Part 2 : 2022 : Clause 28 in accordance with BS EN ISO 17892 - 8 : 2018

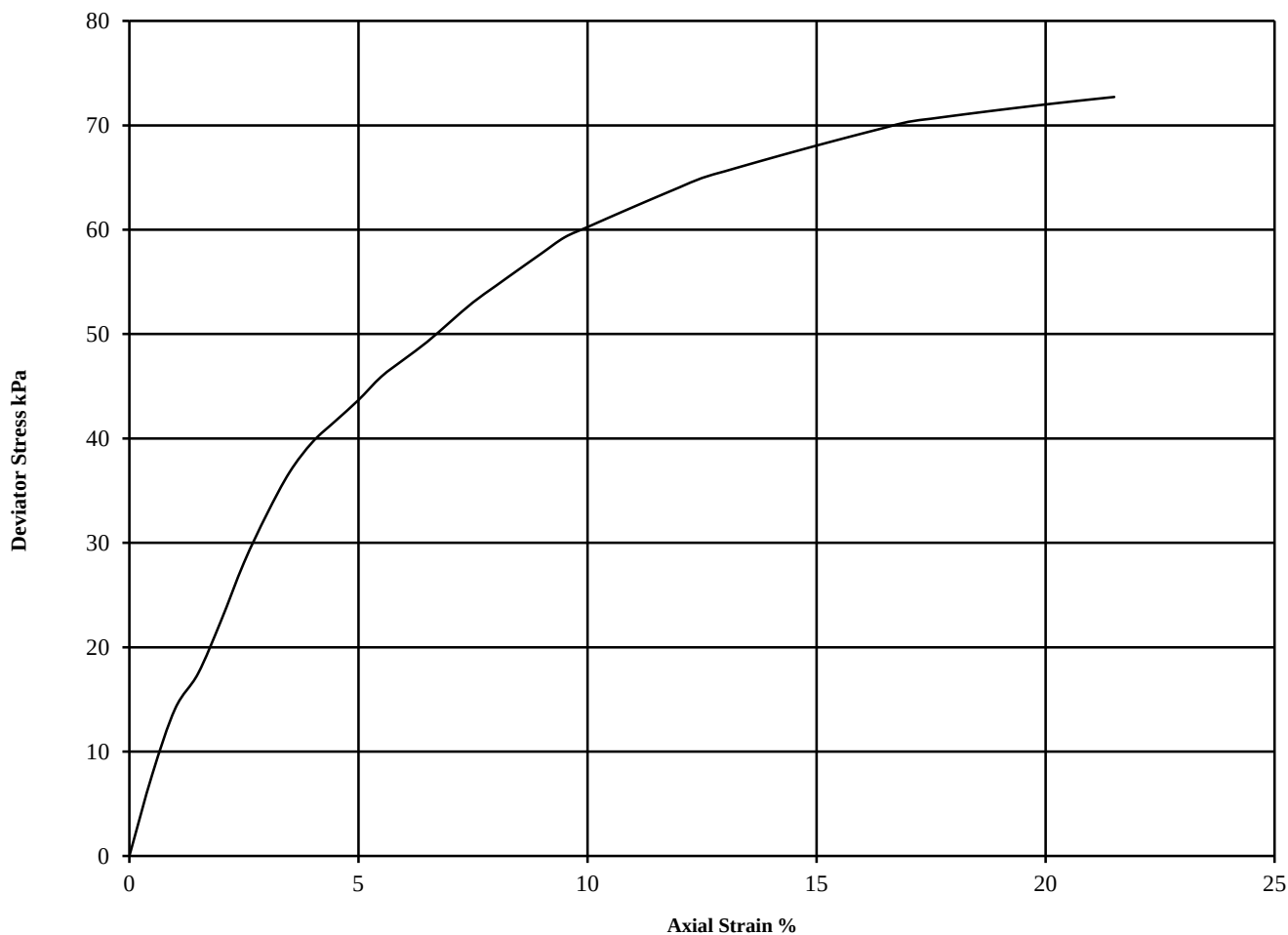
Hole Number: BH03

Top Depth (m): 8.00

Sample Number 9

Base Depth (m):

Sample Type U



Diameter (mm):		102		Height (mm):		204	Test:	UU Single Stage		Remarks:
Specimen	Water Content (%)	Bulk Density (Mg/m3)	Dry Density (Mg/m3)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)			Undisturbed Sample Sample taken from top of tube Rate of strain = 0.9 %/min See summary of soil descriptions
1	20.5	2.11	1.75	160	73	36	21.5			



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Contract No:

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Client Ref:

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INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH01

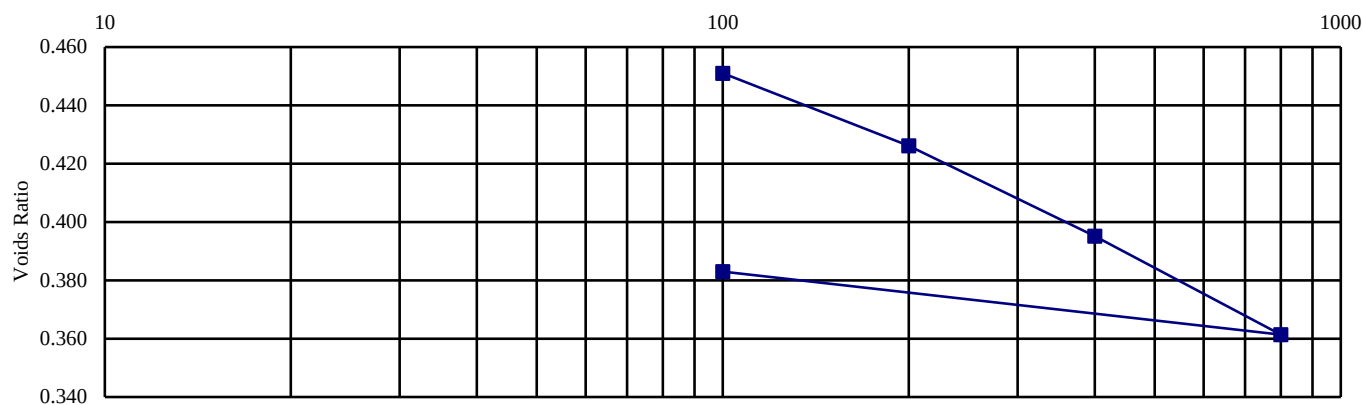
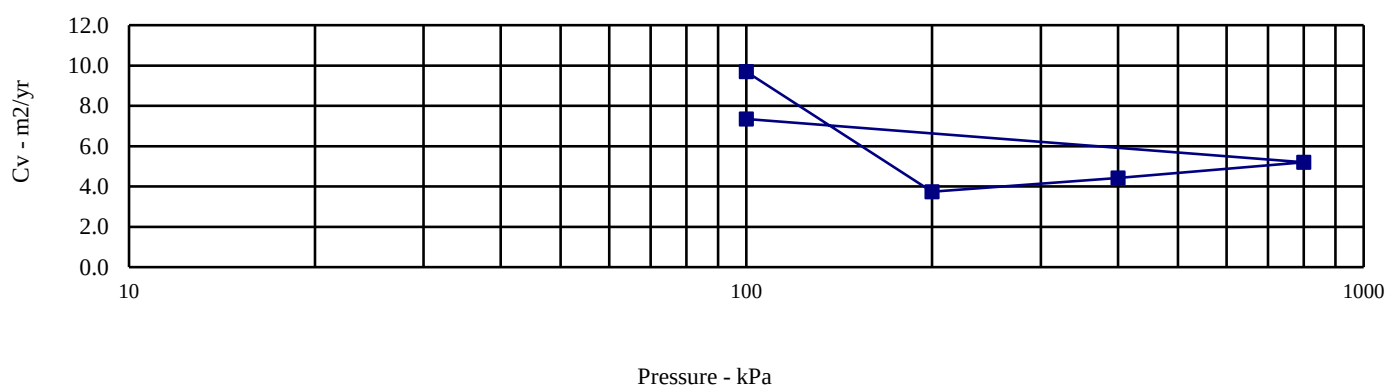
Top Depth (m): 8.00

Sample Number: 7

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range kPa		Mv m2/MN	Cv m2/yr	Specimen location within tube:	Top Vertical
Water Content (%):	21.0					Method of preparation:	Trimmed from extruded material
Bulk Density (Mg/m3):	2.08	0	100	0.608	9.691	Method used to determine CV:	T90
Dry Density (Mg/m3):	1.72	100	200	0.172	3.742		
Voids Ratio:	0.545	200	400	0.109	4.420	Nominal temperature during test ' C:	20
Degree of saturation:	102.2	400	800	0.060	5.198		
Height (mm):	20.008	800	100	0.023	7.351	Results correct against equipment deformation	Yes
Diameter (mm)	75.015						
Particle Density (Mg/m3): Assumed	2.65						



Royal Victoria Court

Contract No:
PSL24/9370
Client Ref:
5088

INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH02

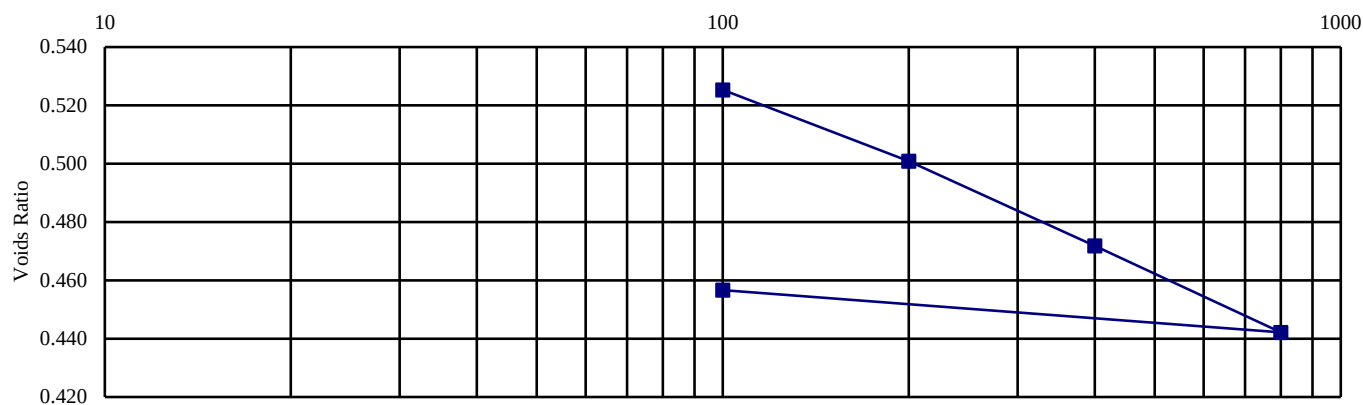
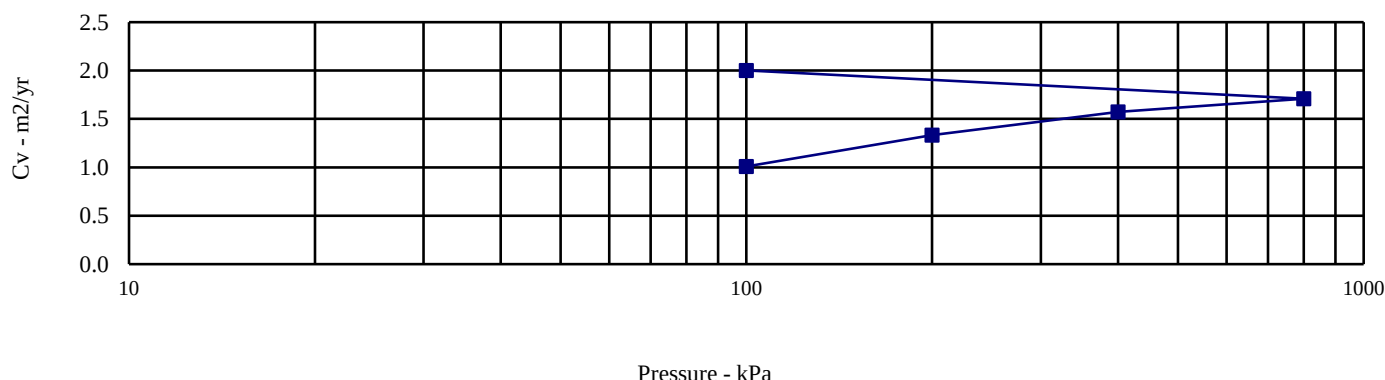
Top Depth (m): 8.00

Sample Number: 12

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range		Mv	Cv	Specimen location	Top
Water Content (%):	21.9	kPa		m2/MN	m2/yr	within tube:	Vertical
Bulk Density (Mg/m3):	2.02	0	100	0.460	1.009	Method of	Trimmed from
Dry Density (Mg/m3):	1.66	100	200	0.160	1.334	preparation:	extruded
Voids Ratio:	0.599	200	400	0.097	1.572	Method used to	T90
Degree of saturation:	96.9	400	800	0.050	1.708	determine CV:	
Height (mm):	20.014	800	100	0.014	2.002	Nominal temperature	20
Diameter (mm)	75.02					during test ' C:	
Particle Density (Mg/m3):	2.65					Results correct against	Yes
Assumed						equipment deformation	



Royal Victoria Court

Contract No:
PSL24/9370
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INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH02

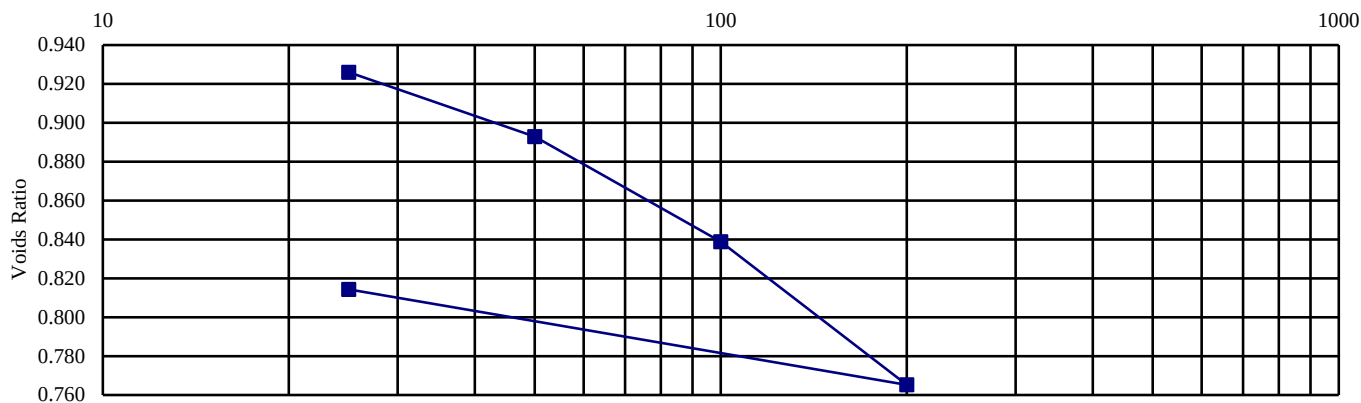
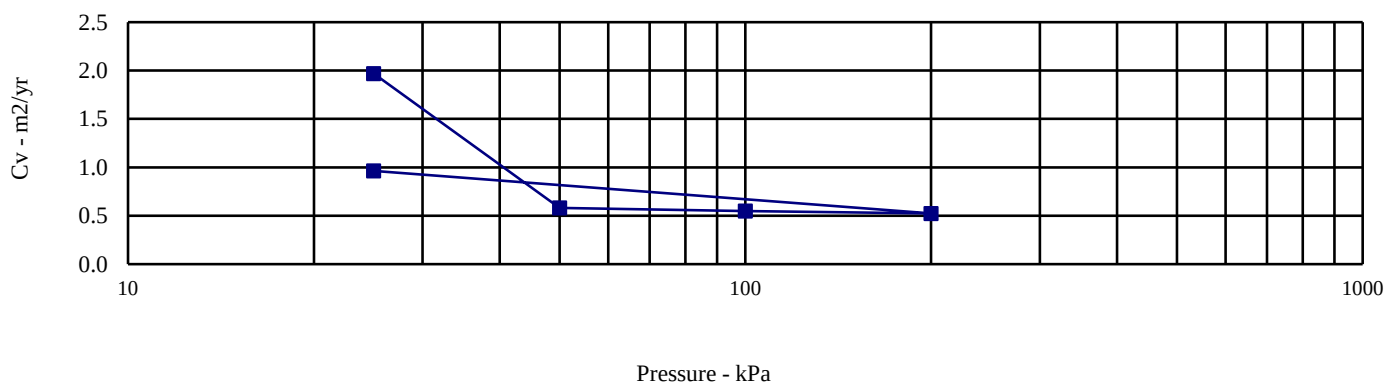
Top Depth (m): 3.00

Sample Number: 3

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range kPa		Mv m2/MN	Cv m2/yr	Specimen location within tube:	Top Vertical
Water Content (%):	35.4					Method of preparation:	Trimmed from extruded material
Bulk Density (Mg/m3):	1.84	0	25	0.482	1.969	Method used to determine CV:	T90
Dry Density (Mg/m3):	1.36	25	50	0.688	0.579		
Voids Ratio:	0.950	50	100	0.571	0.548	Nominal temperature during test ' C:	20
Degree of saturation:	98.8	100	200	0.400	0.524		
Height (mm):	20.014	200	25	0.159	0.963	Results correct against equipment deformation	Yes
Diameter (mm)	75.038						
Particle Density (Mg/m3): Assumed	2.65						



Royal Victoria Court

Contract No:
PSL24/9370
Client Ref:
5088

INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH02

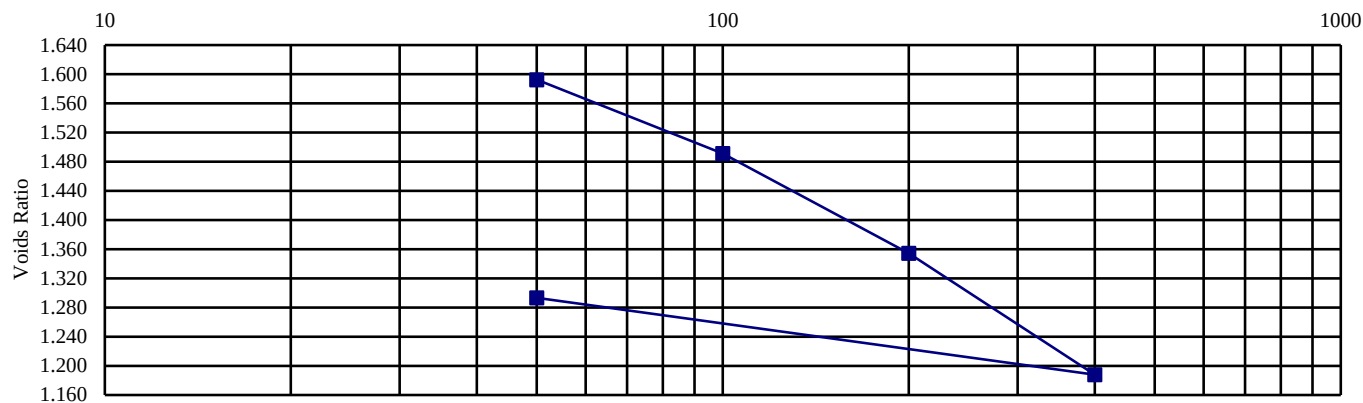
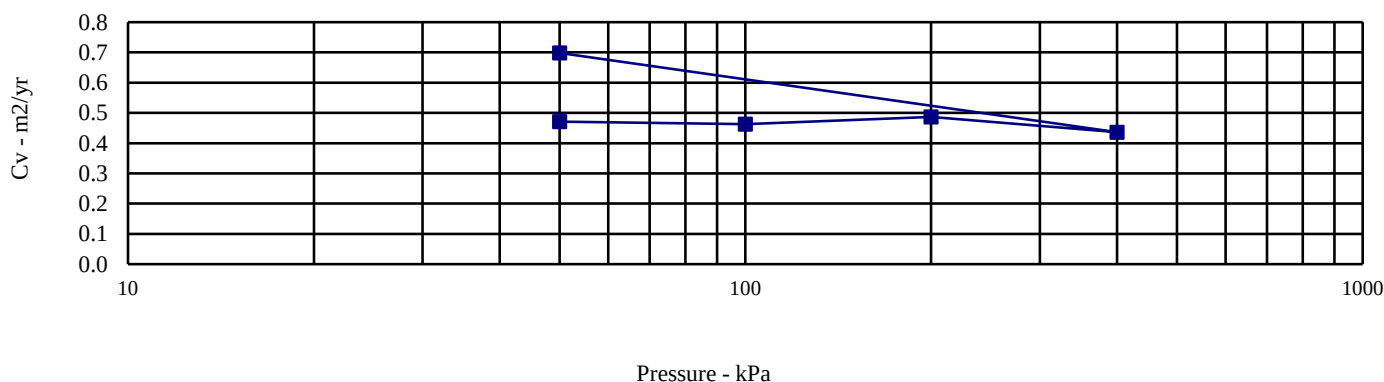
Top Depth (m): 5.00

Sample Number: 9

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range		Mv	Cv	Specimen location	Top
Water Content (%):	76.7	kPa		m2/MN	m2/yr	within tube:	Vertical
Bulk Density (Mg/m3):	1.53	0	50	1.367	0.471	Method of	Trimmed from extruded material
Dry Density (Mg/m3):	0.87	50	100	0.782	0.463	preparation:	
Voids Ratio:	1.783	100	200	0.549	0.487	Method used to	T90
Degree of saturation:	103.7	200	400	0.354	0.436	determine CV:	
Height (mm):	20.004	400	50	0.138	0.698	Nominal temperature	20
Diameter (mm)	75.035					during test ' C:	
Particle Density (Mg/m3):	2.41					Results correct against	Yes
Assumed						equipment deformation	



Royal Victoria Court

Contract No:
PSL24/9370
Client Ref:
5088

INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH03

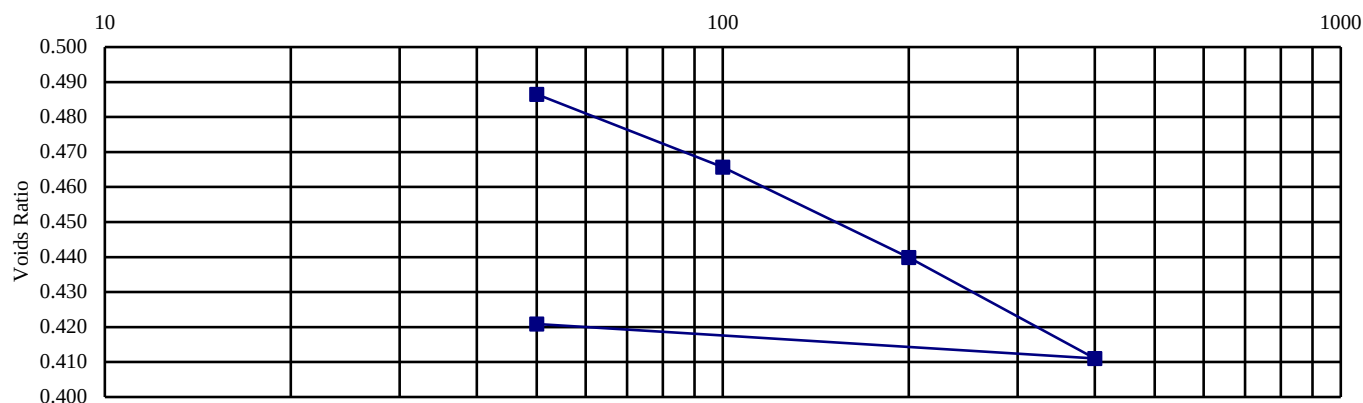
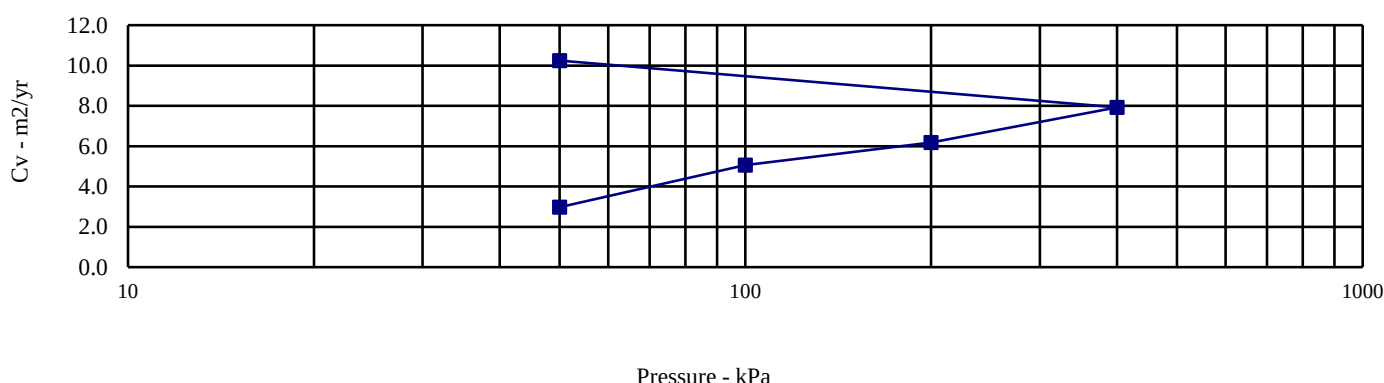
Top Depth (m): 5.00

Sample Number: 6

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range kPa		Mv m2/MN	Cv m2/yr	Specimen location within tube:	Top Vertical
Water Content (%):	20.5					Method of preparation:	Trimmed from extruded material
Bulk Density (Mg/m3):	2.06	0	50	0.779	2.972	Method used to determine CV:	T90
Dry Density (Mg/m3):	1.71	50	100	0.281	5.057		
Voids Ratio:	0.547	100	200	0.176	6.188	Nominal temperature during test ' C:	20
Degree of saturation:	99.3	200	400	0.100	7.924		
Height (mm):	20.02	400	50	0.020	10.245	Results correct against equipment deformation	Yes
Diameter (mm)	75.02						
Particle Density (Mg/m3): Assumed	2.65						



Royal Victoria Court

Contract No:
PSL24/9370
Client Ref:
5088

INCREMENTAL LOADING OEDOMETER TEST

BS 1377 - Part 2 : 2022 : Clause 16 in accordance with BS EN ISO 17892 - 5 : 2017

Hole Number: BH03

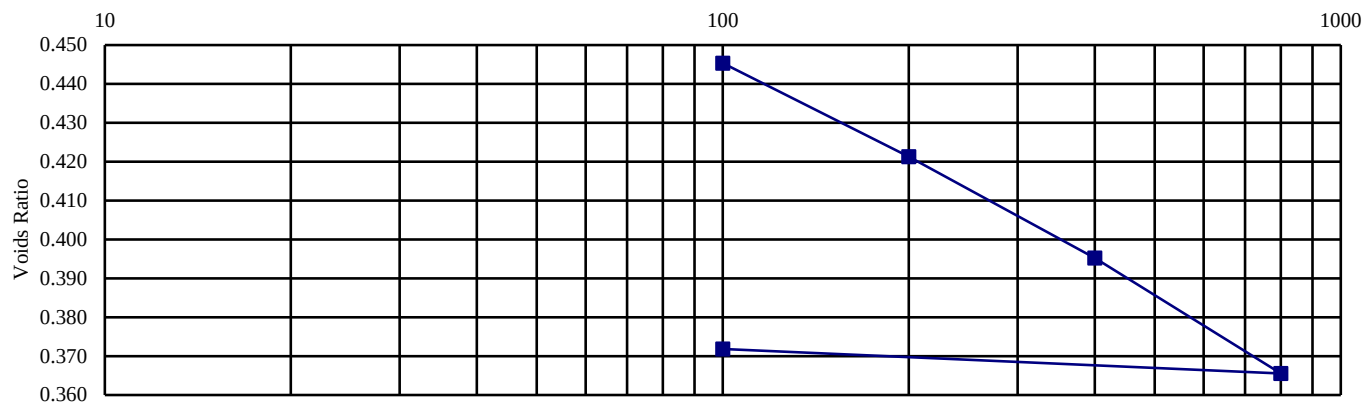
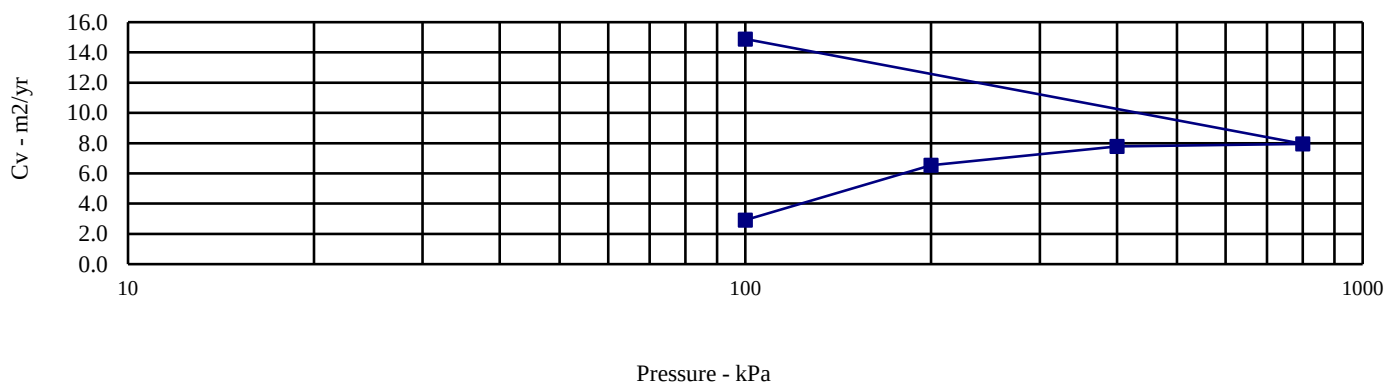
Top Depth (m): 8.00

Sample Number: 9

Base Depth (m) :

Sample Type: U

Initial Conditions		Pressure Range kPa		Mv m2/MN	Cv m2/yr	Specimen location within tube:	Top Vertical
Water Content (%):	21.2					Method of preparation:	Trimmed from extruded material
Bulk Density (Mg/m3):	2.07	0	100	0.702	2.915	Method used to determine CV:	T90
Dry Density (Mg/m3):	1.70	100	200	0.167	6.537		
Voids Ratio:	0.555	200	400	0.092	7.788	Nominal temperature during test ' C:	20
Degree of saturation:	101.5	400	800	0.053	7.960		
Height (mm):	20.022	800	100	0.007	14.888	Results correct against equipment deformation	Yes
Diameter (mm)	75.028						
Particle Density (Mg/m3): Assumed	2.65						



Royal Victoria Court

Contract No:
PSL24/9370
Client Ref:
5088



Professional Soils Laboratory
5/7 Hexthorpe Road
Hexthorpe
Doncaster
DN4 0AR

7 - 11 Harding Street
Leicester
LE1 4DH

Analytical Test Report: L25/00194/PSL - 25-54999

Your Project Reference:	PSL24/9370 Royal Victoria Court		
Your Order Number:	PSL24/9370	Samples Received / Instructed:	10/01/2025 / 10/01/2025
Report Issue Number:	1	Sample Tested:	10/01 to 16/01/2025
Samples Analysed:	19 sample(s)	Report issued:	16/01/2025

Signed

James Gane
Analytical Services Manager
CTS

Notes:

General

Please refer to Methodologies page for details pertaining to the analytical methods undertaken.

Samples will be retained for 14 days after issue of this report unless otherwise requested.

Moisture Content was determined in accordance with CTS method statement MS - CL - Sample Prep, oven dried at <30°C.

Moisture Content is reported as a percentage of the dry mass of soil, this calculation is in accordance with BS1377, Part 2, 1990, Clause 3.2

Where specification limits are included these are for guidance only. Where a measured value has been highlighted this is not implying acceptance or failure and certainty of measurement values have not been taken into account.

Uncertainty of measurement values are available on request.

Samples were supplied by customer, results apply to the samples as received.

Deviating Samples

On receipt samples are compared against our sample holding and handling protocols, where any deviations have been noted these are reported on our deviating sample page (if present)

Accreditation Key

This report shall not be reproduce except in full

UKAS = UKAS Accreditation, MCERTS = MCERTS Accreditation, u = Unaccredited, subUKAS - Subcontracted to a laboratory UKAS accredited for this test, subMCERTS - Subcontracted to a laboratory MCERTS accredited for this test

MCERTS Accreditation only covers the SAND, CLAY and LOAM matrices

UKAS accreditation on waters only covers the Ground water and Surface water matrices

Date of Issue: 08.01.2025

Issued by: J. Gane

Issue No: 4

Rev No: 22



L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

Analytical Test Results - Chemical Analysis

7 - 11 Harding Street
Leicester
LE1 4DH

Lab Reference			434887	434888	434889	434890	434891	434892
Client Sample ID			-	-	-	-	-	-
Client Sample Location			BH01	BH01	BH01	BH02	BH02	BH02
Client Sample Type			D	D	D	D	D	D
Client Sample Number			3	6	9	13	4	8
Depth - Top (m)			4.00	6.50	9.50	8.60	3.60	5.00
Depth - Bottom (m)			4.00	6.50	9.50	8.60	3.60	5.00
Date of Sampling			12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
Time of Sampling			-	-	-	-	-	-
Sample Matrix			Clay	Clay	Clay	Clay	Clay	Clay
Determinant	Units	Accreditation						
Water soluble sulphate (as SO ₄)	(mg/l)	u	160	54	13	44	730	1800
pH Value	pH Units	MCERTS	8.9	9.0	9.2	9.2	7.8	7.4



L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

Analytical Test Results - Chemical Analysis

7 - 11 Harding Street
Leicester
LE1 4DH

Lab Reference			434893	434894	434895	434896	434897	434898
Client Sample ID			-	-	-	-	-	-
Client Sample Location			BH03	BH03	BH03	TP01	TP04	TP05
Client Sample Type			D	D	U	D	D	D
Client Sample Number			4	7	9	4	4	3
Depth - Top (m)			3.50	5.50	8.00	2.70	2.80	2.50
Depth - Bottom (m)			3.50	5.50	8.00	2.70	2.80	2.50
Date of Sampling			12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
Time of Sampling			-	-	-	-	-	-
Sample Matrix			Clay	Clay	Clay	Clay	Clay	Clay
Determinant	Units	Accreditation						
Water soluble sulphate (as SO ₄)	(mg/l)	u	100	20	14	93	430	140
pH Value	pH Units	MCERTS	7.7	7.8	7.8	7.3	7.6	7.7



L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

Analytical Test Results - Chemical Analysis

7 - 11 Harding Street
Leicester
LE1 4DH

Lab Reference			434899	434900	434901	434902	434903	434904
Client Sample ID			-	-	-	-	-	-
Client Sample Location			TP06	TP08	TP09	BH01	BH01	BH03
Client Sample Type			D	D	D	D	D	D
Client Sample Number			4	3	2	12	13	14
Depth - Top (m)			2.70	2.40	2.10	13.50	14.00	12.50
Depth - Bottom (m)			2.70	2.40	2.10	13.50	14.00	12.50
Date of Sampling			12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024	12/12/2024
Time of Sampling			-	-	-	-	-	-
Sample Matrix			Clay	Clay	Clay	Clay	Clay	Clay
Determinant	Units	Accreditation						
Water soluble sulphate (as SO ₄)	(mg/l)	u	64	130	90	< 10	< 10	15
pH Value	pH Units	MCERTS	8.5	8.1	8.3	8.7	8.8	8.7



L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria
Court

Analytical Test Results - Chemical Analysis

7 - 11 Harding Street
Leicester
LE1 4DH

Lab Reference	434905
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Client Sample ID -

Client Sample Location BH03

Client Sample Type D

Client Sample Number 15

Depth - Top (m) 13.40

Depth - Bottom (m) 13.40

Date of Sampling 12/12/2024

Time of Sampling -

Sample Matrix Clay

Determinant	Units	Accreditation	
Water soluble sulphate (as SO ₄)	(mg/l)	u	32
pH Value	pH Units	MCERTS	8.7

L25/00194/PSL - 25-54999

7 - 11 Harding Street
Leicester
LE1 4DH

Project Reference - PSL24/9370 Royal Victoria Court

Sample Descriptions

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Description	Moisture Content (%)	Stone Content (%)	Passing 2mm test sieve (%)
434887	-	BH01	D	3	Grey silty clay	-	-	100
434888	-	BH01	D	6	Reddish brown silty clay	-	-	100
434889	-	BH01	D	9	Reddish brown silty clay	-	-	100
434890	-	BH02	D	13	Reddish brown silty clay	-	-	100
434891	-	BH02	D	4	Grey silty clay	-	-	100
434892	-	BH02	D	8	Dark grey silty clay	-	-	100
434893	-	BH03	D	4	Brown silty clay	-	-	100
434894	-	BH03	D	7	Reddish brown silty clay	-	-	100
434895	-	BH03	U	9	Brown silty clay	-	-	100
434896	-	TP01	D	4	Brown slightly gravelly silty clay	-	-	100
434897	-	TP04	D	4	Grey slightly gravelly silty clay	-	-	100
434898	-	TP05	D	3	Grey silty clay	-	-	100
434899	-	TP06	D	4	Grey silty clay	-	-	100
434900	-	TP08	D	3	Reddish brown silty clay	-	-	100
434901	-	TP09	D	2	Grey silty clay	-	-	100
434902	-	BH01	D	12	Reddish brown silty clay	-	-	100
434903	-	BH01	D	13	Reddish brown silty clay	-	-	100
434904	-	BH03	D	14	Reddish brown silty clay	-	-	100
434905	-	BH03	D	15	Reddish brown silty clay	-	-	100



L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

7 - 11 Harding Street
Leicester
LE1 4DH

Sample Comments

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Comments
434887	-	BH01	D	3	
434888	-	BH01	D	6	
434889	-	BH01	D	9	
434890	-	BH02	D	13	
434891	-	BH02	D	4	
434892	-	BH02	D	8	
434893	-	BH03	D	4	
434894	-	BH03	D	7	
434895	-	BH03	U	9	
434896	-	TP01	D	4	
434897	-	TP04	D	4	
434898	-	TP05	D	3	
434899	-	TP06	D	4	
434900	-	TP08	D	3	
434901	-	TP09	D	2	
434902	-	BH01	D	12	
434903	-	BH01	D	13	
434904	-	BH03	D	14	
434905	-	BH03	D	15	



7 - 11 Harding Street
Leicester
LE1 4DH

L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

Analysis Methodologies

Test Code	Test Name / Reference	Sample condition for analysis	Sample Preparation	Test Details
ANIONSS	MS - CL - Anions by Aquakem (2:1Extract)	Oven dried	Passing 2mm test sieve	Determination of Anions (inc Sulphate, chloride etc.) in soils by Aquakem. Analysis is based on a 2:1 water to soil extraction ratio
PHS	MS - CL - pH in Soils	As received	Passing 10mm test sieve	Determination of pH in soils using a pH probe (using a 1:3 soil to water extraction)
SAMPLEPREP	MS - CL - Sample Preparation	-	-	Preparation of samples (including determination of moisture content) to allow for subsequent analysis

L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

Sample Deviations

Deviations are listed below against each sample and associated test method, where deviation(s) are noted it means data may not be representative of the sample at the time of sampling and it is possible that results provided may be compromised.

Observations on receipt

A - No date of sampling provided

W - No time of sampling provided for water sample

C - Received in inappropriate container

H - Contains headspace

T - Temperature on receipt exceeds storage temperature

R - Sample(s) received with less than 96 hours for testing to commence/complete, any result formally classed as deviating will be marked with an X against the applicable test (i.e. RX)

Observations whilst in laboratory

X - Exceeds sampling to extraction or analysis timescales

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Test	Deviations
434887	-	BH01	D	3	MS - CL - Anions by Aquakem (2:1Extract)	RX
434887	-	BH01	D	3	MS - CL - pH in Soils	RX
434888	-	BH01	D	6	MS - CL - Anions by Aquakem (2:1Extract)	RX
434888	-	BH01	D	6	MS - CL - pH in Soils	RX
434889	-	BH01	D	9	MS - CL - Anions by Aquakem (2:1Extract)	RX
434889	-	BH01	D	9	MS - CL - pH in Soils	RX
434890	-	BH02	D	13	MS - CL - Anions by Aquakem (2:1Extract)	RX
434890	-	BH02	D	13	MS - CL - pH in Soils	RX
434891	-	BH02	D	4	MS - CL - Anions by Aquakem (2:1Extract)	RX
434891	-	BH02	D	4	MS - CL - pH in Soils	RX
434892	-	BH02	D	8	MS - CL - Anions by Aquakem (2:1Extract)	RX
434892	-	BH02	D	8	MS - CL - pH in Soils	RX
434893	-	BH03	D	4	MS - CL - Anions by Aquakem (2:1Extract)	RX
434893	-	BH03	D	4	MS - CL - pH in Soils	RX
434894	-	BH03	D	7	MS - CL - Anions by Aquakem (2:1Extract)	RX
434894	-	BH03	D	7	MS - CL - pH in Soils	RX
434895	-	BH03	U	9	MS - CL - Anions by Aquakem (2:1Extract)	RX
434895	-	BH03	U	9	MS - CL - pH in Soils	RX
434896	-	TP01	D	4	MS - CL - Anions by Aquakem (2:1Extract)	RX
434896	-	TP01	D	4	MS - CL - pH in Soils	RX
434897	-	TP04	D	4	MS - CL - Anions by Aquakem (2:1Extract)	RX
434897	-	TP04	D	4	MS - CL - pH in Soils	RX
434898	-	TP05	D	3	MS - CL - Anions by Aquakem (2:1Extract)	RX
434898	-	TP05	D	3	MS - CL - pH in Soils	RX
434899	-	TP06	D	4	MS - CL - Anions by Aquakem (2:1Extract)	RX
434899	-	TP06	D	4	MS - CL - pH in Soils	RX
434900	-	TP08	D	3	MS - CL - Anions by Aquakem (2:1Extract)	RX
434900	-	TP08	D	3	MS - CL - pH in Soils	RX
434901	-	TP09	D	2	MS - CL - Anions by Aquakem (2:1Extract)	RX
434901	-	TP09	D	2	MS - CL - pH in Soils	RX

L25/00194/PSL - 25-54999

Project Reference - PSL24/9370 Royal Victoria Court

7 - 11 Harding Street
Leicester
LE1 4DH

Sample Deviations

Deviations are listed below against each sample and associated test method, where deviation(s) are noted it means data may not be representative of the sample at the time of sampling and it is possible that results provided may be compromised.

Observations on receipt

A - No date of sampling provided

W - No time of sampling provided for water sample

C - Received in inappropriate container

H - Contains headspace

T - Temperature on receipt exceeds storage temperature

R - Sample(s) received with less than 96 hours for testing to commence/complete, any result formally classed as deviating will be marked with an X against the applicable test (i.e. RX)

Observations whilst in laboratory

X - Exceeds sampling to extraction or analysis timescales

Lab Reference	Client Sample ID	Client Sample Location	Client Sample Type	Client Sample Number	Test	Deviations
434902	-	BH01	D	12	MS - CL - Anions by Aquakem (2:1Extract)	RX
434902	-	BH01	D	12	MS - CL - pH in Soils	RX
434903	-	BH01	D	13	MS - CL - Anions by Aquakem (2:1Extract)	RX
434903	-	BH01	D	13	MS - CL - pH in Soils	RX
434904	-	BH03	D	14	MS - CL - Anions by Aquakem (2:1Extract)	RX
434904	-	BH03	D	14	MS - CL - pH in Soils	RX
434905	-	BH03	D	15	MS - CL - Anions by Aquakem (2:1Extract)	RX
434905	-	BH03	D	15	MS - CL - pH in Soils	RX

Appendix J
Gas Monitoring Results

GAS MONITORING RESULTS

Visit 1															
Job Title:										Job No:					
Royal Victoria Court										5088					
Client:										Sheet :					
LNT										1 of 4					
Date:			Arrival Time:			Depart Time:			Operator:						
21/12/2024			11:15			12:00			George						
Gas Monitoring Results:															
Ambient Concentration (% Volume):				CH ₄ :		ND		CO ₂ :		ND		O ₂ :	18.6		
Monitoring Point	Groundwater level	Concentrations					Gas Flow Rates			Bottom of well	Remarks				
		Initial / Highest		Steady concentrations		Lowest concn	Initial / Maximum	Steady	Time to fall from highest to steady						
		CH ₄	CO ₂	CH ₄	CO ₂	O ₂									
		% v/v	(%)	% v/v	(%)	(%)	litre/hr	litre/hr	secs						
BH01	(m) bgl	1.14	-	-	-	-	-	-	-	-	2.79	Bailed 8L 11:37 - 11:40			
BH02	1.33	-	-	-	-	-	-	-	-	-	5.91	Bailed 12L 11:28 - 11:33			
BH03	0.93	-	-	-	-	-	-	-	-	-	4.83	Bailed 12L 11:47 - 11:52			
Equipment Used:						Next Calibration Date				Key					
Gas Data GFM436 Infrared Gas Analyser						27/03/2025				ND			None Detected		
Geotechnical Instruments Dipmeter										NR			Not Recorded		
										1.0			Recorded value does not breach trigger levels		
										5.0			Recorded value breaches trigger level 1		
										10.0			Recorded value breaches trigger level 2		
	Site Data:			Weather Station Data (Firbank-weather Station)						CH ₄	CO ₂	O ₂			
	Temp (°C):		7.3 > 8.2	Barometric Pressure Trend:			Falling								
Time:	11:15		11:30	12:00	00:01	09:15	11:15	11:30	12:00	14:00	Trigger level 1	1.0	5.0	16.0	
Pressure (mb):	1017		1017	1017	1023	1020	1019	1018	1018	1016	Trigger level 2	5.0	10.0	10.0	
	Weather Conditions:			Raining, Cold, Overcast, Windy											
	Surface Ground Conditions:			Wet, Boggy											
Remarks:	Firbank weather station is located approximately 2 miles north-east from the site (Royal Victoria Court, Newport)														

GAS MONITORING RESULTS

Visit 1 Bailed													
Job Title:								Job No:					
Royal Victoria Court								5088					
Client:								Sheet :					
LNT								2 of 4					
Date:		Arrival Time:		Depart Time:		Operator:							
21/12/2024		11:15		12:00		George							
Gas Monitoring Results:													
Ambient Concentration (% Volume):				CH ₄ :		ND		CO ₂ :		ND			
								O ₂ :		18.6			
Monitoring Point	Groundwater level	Concentrations					Gas Flow Rates			Bottom of well	Remarks		
		Initial / Highest		Steady concentrations		Lowest concn	Initial / Maximum	Steady	Time to fall from highest to steady				
		CH ₄	CO ₂	CH ₄	CO ₂	O ₂							
		% v/v	(%)	% v/v	(%)	(%)	litre/hr	litre/hr	secs				
	(m) bgl	% v/v	(%)	% v/v	(%)	(%)	litre/hr	litre/hr	secs	m			
BH01	1.67	ND	ND	ND	ND	18.4	ND	ND	120.0	2.79	Bailed 8L 11:37 - 11:40		
BH02	3.65	ND	ND	ND	ND	18.4	8.0	1.5	120.0	5.91	Bailed 12L 11:28 - 11:33		
BH03	3.75	ND	ND	ND	ND	18.4	4.5	3.2	120.0	4.83	Bailed 12L 11:47 - 11:52		
Equipment Used:						Next Calibration Date			Key				
Gas Data GFM436 Infrared Gas Analyser						27/03/2025			ND None Detected				
Geotechnical Instruments Dipmeter									NR Not Recorded				
									1.0 Recorded value does not breach trigger levels				
									5.0 Recorded value breaches trigger level 1				
									10.0 Recorded value breaches trigger level 2				
	Site Data:			Weather Station Data (Firbank-weather Station)									
	Temp (°C):	7.3 > 8.2		Barometric Pressure Trend:			Falling						
Time:	11:15	11:30	12:00	00:01	09:15	11:15	11:30	12:00	14:00	Trigger level 1	1.0	5.0	16.0
Pressure (mb):	1017	1017	1017	1023	1020	1019	1018	1018	1016	Trigger level 2	5.0	10.0	10.0
	Weather Conditions:			Raining, Cold, Overcast, Windy									
	Surface Ground Conditions:			Wet, Boggy									
Remarks:	Firbank weather station is located approximately 2 miles north-east from the site (Royal Victoria Court, Newport)												

GAS MONITORING RESULTS

Visit 2

Job Title:										Job No:									
Royal Victoria Court										5088									
Client:										Sheet :									
LNT										3 of 4									
Date:		Arrival Time:		Depart Time:		Operator:													
22/01/2025		16:00		17:00		George Costley													
Gas Monitoring Results:																			
Ambient Concentration (% Volume):				CH ₄ :		ND		CO ₂ :		ND		O ₂ :		16.2					
Monitoring Point	Groundwater level	Concentrations					Gas Flow Rates			Bottom of well	Remarks								
		Initial / Highest		Steady concentrations		Lowest concn	Initial / Maximum	Steady	Time to fall from highest to steady										
		CH ₄	CO ₂	CH ₄	CO ₂	O ₂													
		(m) bgl	% v/v	(%)	% v/v	(%)	(%)	litre/hr	litre/hr			secs	m						
BH01	1.68	-	-	-	-	-	-	-	-	2.78	Bailed 6L 16:37 - 16:41, GW remonitored 16:53 = 2.11								
BH02	1.90	-	-	-	-	-	-	-	-	5.94	Bailed 12L 16:12 - 16:14, GW remonitored 16:22 = 3.70, 16:33 = 3.69								
BH03	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Couldn't locate well								
Equipment Used:						Next Calibration Date				Key									
Gas Data GFM436 Infrared Gas Analyser						27/03/2025				ND				None Detected					
Geotechnical Instruments Dipmeter										NR				Not Recorded					
										1.0				Recorded value does not breach trigger levels					
										5.0				Recorded value breaches trigger level 1					
										10.0				Recorded value breaches trigger level 2					
		Site Data:		Weather Station Data (Firbank-weather Station)								CH ₄		CO ₂		O ₂			
		Temp (°C):		5.7 > 5.2		Barometric Pressure Trend:			Falling										
Time:		16:00		16:30		17:00		00:00		14:00		16:00		16:30		17:00		19:00	
Pressure (mb):		1002		1001		1001		1008		1004		1004		1004		1004		1005	
		Weather Conditions:		Overcast, Cold															
		Surface Ground Conditions:		Wet, Boggy															
Remarks:		Firbank weather station is located approximately 2 miles north-east from the site (Royal Victoria Court, Newport)																	

GAS MONITORING RESULTS

Visit 2 Bailed

Job Title:										Job No:									
Royal Victoria Court										5088									
Client:										Sheet :									
LNT										4 of 4									
Date:		Arrival Time:		Depart Time:		Operator:													
22/01/2025		16:00		17:00		George Costley													
Gas Monitoring Results:																			
Ambient Concentration (% Volume):				CH ₄ :		ND		CO ₂ :		ND		O ₂ :		16.2					
Monitoring Point	Groundwater level	Concentrations					Gas Flow Rates				Bottom of well	Remarks							
		Initial / Highest		Steady concentrations		Lowest concn	Initial / Maximum	Steady	Time to fall from highest to steady										
		CH ₄	CO ₂	CH ₄	CO ₂	O ₂													
		% v/v	(%)	% v/v	(%)	(%)													
	(m) bgl	% v/v	(%)	% v/v	(%)	(%)	litre/hr	litre/hr	secs	m									
BH01	2.14	ND	0.2	ND	0.2	16.4	27.6	3.6	120.0	2.78	Bailed 6L 16:37 - 16:41, GW remonitored 16:53 = 2.11								
BH02	3.72	ND	ND	ND	ND	16.8	12.9	ND	120.0	5.94	Bailed 12L 16:12 - 16:14, GW remonitored 16:22 = 3.70, 16:33 = 3.69								
BH03	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Couldn't locate well								
Equipment Used:						Next Calibration Date				Key									
Gas Data GFM436 Infrared Gas Analyser						27/03/2025				ND				None Detected					
Geotechnical Instruments Dipmeter										NR				Not Recorded					
										1.0				Recorded value does not breach trigger levels					
										5.0				Recorded value breaches trigger level 1					
										10.0				Recorded value breaches trigger level 2					
		Site Data:		Weather Station Data (Firbank-weather Station)								CH ₄		CO ₂		O ₂			
		Temp (°C):		5.7 > 5.2		Barometric Pressure Trend:			Falling										
Time:		16:00		16:30		17:00		00:00		14:00		16:00		16:30		17:00		19:00	
Pressure (mb):		1002		1001		1001		1008		1004		1004		1004		1004		1005	
		Weather Conditions:		Overcast, Cold															
		Surface Ground Conditions:		Wet, Boggy															
Remarks:																			
		Firbank weather station is located approximately 2 miles north-east from the site (Royal Victoria Court, Newport)																	

Appendix K
Site Investigation Photos



Trial Pit TP01 – Pit and groundwater level



Trial Pit TP01 – Made Ground arising



Trial Pit TP03 - Excavation



Trial Pit TP06 – Natural Ground arisings



Trial Pit TP05 - Excavation



Trial Pit TP05 – Made Ground arisings



Trial Pit TP08 – Natural Ground arisings



Trial Pit TP09 – Excavation