Appendix 10-13: daa Cargo Relocation Ground Investigation Report

CAUSEWAY GEOTECH







25-0509

DAA CARGO RELOCATION GROUND INVESTIGATION REPORT

Client:
ROWLANDS CIVIL

Date:
SEPTEMBER 2025

Status:
FINAL

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DOCUMENT CONTROL SHEET

REPORT NO:		**25-0509**			
PROJECT TITLE:		**DAA CARGO RELOCATION**			
CLIENT:		**ROWLANDS CIVIL**			
REVISION:	**A00**	**STATUS**	**FINAL**	**ISSUE DATE**	**12/09/2025**
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This report presents a factual account of the ground investigation in accordance with the Specification and Related Documents for Ground Investigation in Ireland 2nd Edition, published by Engineers Ireland (2016), along with a preliminary geotechnical assessment.

METHODS OF DESCRIBING SOILS AND ROCKS

Soil and rock descriptions are based on the guidance in BS5930:2015+A1:2020, The Code of Practice for Ground Investigation.

Abbreviations used on exploratory hole logs	
U	Nominal 100mm diameter undisturbed open tube sample (thick walled sampler).
UT	Nominal 100mm diameter undisturbed open tube sample (thin walled sampler).
P	Nominal 100mm diameter undisturbed piston sample.
B	Bulk disturbed sample.
LB	Large bulk disturbed sample.
SB	Sonic bulk disturbed sample.
D	Small disturbed sample.
C	Core sub-sample (displayed in the Field Records column on the logs).
L	Liner sample from dynamic sampled borehole.
W	Water sample.
ES / EW	Soil sample for environmental testing / Water sample for environmental testing.
SPT (s)	Standard penetration test using a split spoon sampler (small disturbed sample obtained).
SPT (c)	Standard penetration test using 60 degree solid cone.
(x,x/x,x,x,x)	Blows per increment during the standard penetration test. The initial two values relate to the seating drive (150mm) and the remaining four to the 75mm increments of the test length.
(Y for Z/ Y for Z)	Incomplete standard penetration test where the full test length was not achieved. The blows 'X' represent the total blows for the given seating or test length 'Z' (mm).
N=X	SPT blow count 'N' given by the summation of the blows 'X' required to drive the full test length (300mm).
HVP / HVR	Uncorrected in situ hand vane peak (HVP) and residual (HVR) result presented in kPa. Vane calibration factor has been applied, but no correction made for soil type.
V VR	Shear vane test (borehole). Shear strength stated in kPa. V: undisturbed vane shear strength VR: remoulded vane shear strength
Soil consistency description	In cohesive soils, where samples are disturbed and there are no suitable laboratory tests, N values may be used to indicate consistency on borehole logs – a median relationship of Nx5=Cu is used (as set out in Stroud & Butler 1975).
dd-mm-yyyy	Date at the end and start of shifts, shown at the relevant borehole depth. Corresponding casing and water depths shown in the adjacent columns.
▽	Water strike: initial depth of strike.
▼	Water strike: depth water rose to.
Abbreviations relating to rock core – reference Clause 36.4.4 of BS 5930: 2015+A1:2020	
TCR (%)	Total Core Recovery: Ratio of rock/soil core recovered (both solid and non-intact) to the total length of core run.
SCR (%)	Solid Core Recovery: Ratio of solid core to the total length of core run. Solid core has a full diameter, uninterrupted by natural discontinuities, but not necessarily a full circumference and is measured along the core axis between natural fractures.
RQD (%)	Rock Quality Designation: Ratio of total length of solid core pieces greater than 100mm to the total length of core run.
FI	Fracture Index: Number of natural discontinuities per metre over an indicated length of core of similar intensity of fracturing.
NI	Non Intact: Used where the rock material was recovered fragmented, for example as fine to coarse gravel size particles.
AZCL	Assessed zone of core loss: The estimated depth range where core was not recovered.
DIF	Drilling induced fracture: A fracture of non-geological origin brought about by the rock coring.
(xxx/xxx/xxx)	Spacing between discontinuities (minimum/average/maximum) measured in millimetres.

1 AUTHORITY

On the instructions of Rowlands Civil (the "Client"), a ground investigation was undertaken at the site to provide geotechnical and environmental information for input to the design and construction of a proposed industrial development relating to Dublin Airport.

This report details the work carried out both on site and in the geotechnical and chemical testing laboratories; it contains a description of the site and the works undertaken, the exploratory hole logs and the laboratory test results.

All information given in this report is based upon the ground conditions encountered during the ground investigation works, and on the results of the laboratory and field tests performed. However, there may be conditions at the site that have not been taken into account, such as unpredictable soil strata, contaminant concentrations, and water conditions between or below exploratory holes. It should be noted that groundwater levels usually vary due to seasonal and/or other effects and may at times differ to those recorded during the investigation. No responsibility can be taken for conditions not encountered through the scope of work commissioned, for example between exploratory hole points, or beneath the termination depths achieved.

This report was prepared by Causeway Geotech Ltd for the use of the Client in response to a particular set of instructions. Any other parties using the information contained in this report do so at their own risk and any duty of care to those parties is excluded.

2 PURPOSE, RATIONALE & SCOPE OF THE INVESTIGATION

The purpose of this investigation is to assess the ground conditions and to allow an evaluation of the geotechnical and/or environmental issues with the current site and proposed development.

The rationale has been determined by the Client, with the extent of the investigation including boreholes, trial pits, soil sampling, environmental sampling, groundwater monitoring, in-situ and laboratory testing, and the preparation of a factual account of the ground investigation findings.

3 DESCRIPTION OF SITE

The site is located at Irish Transverse Mercator Grid Reference 717406 742344 on the site of playing fields to the south east of Dublin Airport. The site location is presented in Appendix A and a summary of the surrounding land uses is provided in Table 1.

Table 1: Summary of surrounding land uses

Location	Description
North	ALSAA Sports Club, DAA Red Car Park
East	M1 Motorway
South	Dardistown Cemetery
West	R132

4 SITE OPERATIONS

4.1 SUMMARY OF SITE WORKS

Site operations, which were conducted between 30th June and 3rd September 2025, comprised:

- five light cable percussion boreholes
- three boreholes by light cable percussive extended by rotary follow-on drilling
- five rotary drilled boreholes
- a standpipe installation in two boreholes
- twenty machine-dug trial pits
- in-situ testing, including:
    - Standard Penetration Tests
    - Photoionization Detection (PID) testing
    - two infiltration tests
    - eighteen plate load tests
    - indirect CBR (DCP) tests at eighteen locations
- GPS survey of all completed locations
- groundwater monitoring

The exploratory holes and in-situ tests were located as instructed by the Client, and as shown on the exploratory hole location plan in Appendix A.

4.2 BOREHOLES

A total of thirteen boreholes were put down in a minimum diameter of 150mm through soils strata to their completion depths by a combination of methods including light cable percussion boring by a Dando 2000 rig and rotary drilling by Comacchio 405, 602 and T7 rotary drilling rigs.

The borehole logs state the methodology and plant used for each location, as well as the appropriate depth ranges.

A summary of the boreholes, subdivided by category in accordance with the methods employed for their completion, is presented in the following sub-sections.

4.2.1 LIGHT CABLE PERCUSSION BOREHOLES

Five boreholes, as listed below in Table 2, were put down to completion in minimum 200mm diameter using a Dando 2000 light cable percussion boring rig. All boreholes were terminated on encountering virtual refusal in very stiff clay.

Table 2: Summary of cable percussion boreholes

BH ID	Depth (mbgl)
BH-CV01	4.50
BH-CV03	4.70
BH-CV04	5.00
BH-CV06	4.00
BH-CV07	4.00

Hand dug inspection pits were carried out between ground level and 1.20m depth to ensure boreholes were put down at locations clear of services or subsurface obstructions.

Disturbed (bulk and small tub) samples were taken within the encountered strata. Undisturbed (U100) were taken where appropriate and as directed within fine soils. Environmental samples were taken at standard intervals, as directed by the Client.

Any water strikes encountered during boring were recorded along with any changes in their levels as the borehole proceeded.

Where water was added to assist with boring, a note has been added to the log to account for same.

Appendix B presents the borehole logs.

4.2.2 BOREHOLES BY PERCUSSION BORING AND ROTARY FOLLOW-ON DRILLING

Three boreholes, as listed below in Table 3, were put down by a combination of light cable percussion boring and rotary follow-on drilling techniques with core recovery in overburden.

Table 3: Summary of cable percussion and rotary follow-on boreholes

BH ID	Depth (mbgl)
BH-CV01	4.50
BH-CV03	4.70
BH-CV04	5.00
BH-CV06	4.00
BH-CV07	4.00

Boreholes were initially put down to refusal in minimum 200mm diameter using a Dando 2000 cable percussion boring rig.

Hand dug inspection pits were carried out between ground level and 1.20m depth to ensure boreholes were put down at locations clear of services or subsurface obstructions.

Disturbed (bulk and small tub) samples were taken within the encountered strata. Undisturbed (U100) samples were taken, where appropriate and as directed, within fine soils. Environmental samples were taken at standard intervals, as directed by the Client.

Any water strikes encountered during boring were recorded along with any changes in their levels as

the borehole proceeded.

Where water was added to assist with boring, a note has been added to the log to account for same.

Where the cable percussion borehole had not been advanced to scheduled depth, rotary coring methods were employed to advance the borehole to completion.

Where coring was carried out, Geobor S Coring was used. The core was extracted in up to 1.50m lengths using an SK6L core barrel, which produced core of nominal 102mm diameter, and was placed in single channel wooden core boxes.

The core was subsequently photographed and examined by a qualified and experienced Engineering Geologist, thus enabling the production of an engineering log in accordance with BS 5930: 2015+A1:2020: Code of practice for ground investigations.

Appendix B presents the borehole logs, with core photographs presented in Appendix C.

4.2.3 ROTARY DRILLED BOREHOLES

Five boreholes, as listed below in Table 4, were put to their completion by rotary drilling techniques only. The boreholes were completed using a Comacchio 405, 602 or T7 rotary drilling rig.

Table 4: Summary of rotary boreholes

BH ID	Depth (mbgl)
BH-CV01	4.50
BH-CV03	4.70
BH-CV04	5.00
BH-CV06	4.00
BH-CV07	4.00

Hand dug inspection pits were carried out between ground level and 1.20m depth to ensure boreholes were put down at locations clear of services or subsurface obstructions.

Symmetrix-cased full hole rotary percussive drilling techniques were employed to advance the lead length of drilling casing, after which rotary coring was employed to recover core samples of the overburden. SPTs were carried out at standard intervals throughout the overburden, with small and bulk disturbed samples obtained where possible through the soil strata.

Where coring was carried out, Geobor S Coring was used. The core was extracted in up to 1.50m lengths using an SK6L core barrel, which produced core of nominal 102mm diameter, and was placed in single channel wooden core boxes.

The core was subsequently photographed and examined by a qualified and experienced Engineering Geologist, thus enabling the production of an engineering log in accordance with BS 5930: 2015+A1:2020: Code of practice for ground investigations.

Appendix B presents the borehole logs, with core photographs presented in Appendix C.

4.3 STANDARD PENETRATION TESTS

Standard penetration tests were carried out in accordance with BS EN 22476-3:2005+A1:2011 (BSI, 2011) at standard depth intervals using the split spoon sampler ($SPT_{(s)}$) or solid cone attachment ($SPT_{(c)}$). The penetrations are stated for those tests for which the full 150mm seating drive or 300mm test drive was not possible.

The N-values provided on the borehole logs are uncorrected and no allowance has been made for energy ratio corrections. The SPT hammer energy measurement report is provided in Appendix L.

4.4 STANDPIPE INSTALLATIONS

A groundwater monitoring standpipe was installed in boreholes as shown in Table 5 below.

Table 5: Summary of standpipe installations

BH ID	Type	Response Zone (mbgl)
RC-CV02	50mm	2.00-6.00
RC-CV02	50mm	1.00-4.00

Details of the installations, including the depth range of the response zone, are also provided in Appendix B on the individual borehole logs.

4.5 TRIAL PITS

Twenty trial pits, as listed below in Table 6, were excavated using an 13t tracked excavator fitted with a 300 or 600mm wide bucket, to depths of up to 4.50m. Trial pits, TP1-IF14 and TP1-IF15 were excavated to allow completion of infiltration test.

Table 6: Summary of trial pits

BH ID	Depth (mbgl)	BH ID	Depth (mbgl)
TP1-CV01	3.30	TP1-CV11	2.90
TP1-CV02	3.00	TP1-CV12	3.00
TP1-CV03	2.80	TP1-CV13	3.00
TP1-CV04	2.90	TP1-CV16	4.50
TP1-CV05	4.50	TP1-CV17	3.20
TP1-CV06	2.90	TP1-CV18	4.50
TP1-CV07	2.80	TP1-CV19	3.80
TP1-CV08	3.00	TP1-CV20	4.00
TP1-CV09	3.20	TP1-IF14	1.50
TP1-CV10	4.50	TP1-IF15	1.60

Environmental samples were taken at standard intervals in each trial pit. Disturbed (small jar and bulk bag) samples were taken at standard depth intervals and at change of strata.

Any water strikes encountered during excavation were recorded and the stability of the trial pit walls was noted on completion.

Appendix D presents the trial pit logs with photographs of the pits and arisings provided in Appendix E.

4.6 INFILTRATION TESTS

Two infiltration/soakaway tests (TP1-IF14 and TP1-IF15) were carried out in accordance with DG 365 Soakaway Design (BRE, 2016). The absence of the outflow from the pits precluded calculation of infiltration coefficients.

Appendix F presents the results and analysis of the infiltration tests.

4.7 INDIRECT CBR TESTS (DCP)

An indirect CBR test was conducted at all trial pit locations in similarly numbered trial pits, except TP1-IF14 and TP1-IF15 using a Dynamic Cone Penetrometer (DCP). The equipment was developed in conjunction with the UK Transport Research Laboratory, and is discussed in CS229 (Highways England, 2020) which follows the methodology described in TRL Overseas Road Note 18 (TRL, 1999).

The test results are presented in Appendix G as plots showing the variation of penetration per blow with depth. Straight lines have been fitted to the plots, and the CBR for each depth range has been estimated using the following relationship, taken from TRRL Overseas Road Note 8 (TRRL, 1990).

Log CBR = 2.48-1.057 Log (mm/blow)

Dynamic Cone Penetrometer tests frequently yield elevated CBR values at certain depths. It should be noted that these may be due to the coarse-grained component of the penetrated soils, rather than the properties of the finer soil matrix.

4.8 PLATE LOAD TESTS

Plate load tests were carried out at all trial pit locations in similarly numbered trial pits, except TP1-IF14 and TP1-IF15.

The plate load tests were conducted as incremental loading tests in accordance with Clause 4.1 of BS1377: Part 9: 1990 (BSI, 1990). A 450mm diameter bearing plate was used with five equal loadings to a maximum pressure of approximately 300kPa or 500kPa, followed by unloading. The testing was conducted using a wireless plate load testing system, PLATEMAN, which utilises Bluetooth technology with a remotely-operated rugged PDA system.

Plate movements were measured using three strain gauges fitted to a remotely fixed tripod frame. Each loading increment was maintained until the plate movement had essentially stopped.

The test results provided in Appendix H are as follows:

- plots of the plate settlements, average of the three gauges, against pressure.
- plots of average settlement against time during the loading increments/decrement.

The Modulus of Subgrade Reaction, *k*, is estimated by applying a "best fit" to the settlement-pressure plots, and is reported in MPa/m. The numerical value represents the pressure, in kPa, on the bearing plate that induces 1.25mm of settlement.

An approximate CBR value was estimated using the guidance provided in the Interim Advice Note 73/06 (Highways England, 2009) (now withdrawn). The document provides methods to convert the measured k value to the equivalent for a 762mm diameter plate and the consequent relationship with CBR. This method of estimating an equivalent CBR value is relatively conservative.

4.9 SURVEYING

The as-built exploratory hole positions were surveyed following completion of site operations by a Site Engineer from Causeway Geotech. Surveying was carried out using a Trimble R10 GPS system employing VRS and real time kinetic (RTK) techniques.

The plan coordinates (Irish Transverse Mercator) and ground elevation (mOD Malin) at each location are recorded on the individual exploratory hole logs. The exploratory hole location plan presented in Appendix A shows these as-built positions.

4.10 GROUNDWATER MONITORING

Following completion of site works, three rounds of groundwater monitoring were conducted. Groundwater monitoring was carried out using a water interface probe.

The monitoring records are presented in Appendix I.

5 LABORATORY WORK

5.1 GEOTECHNICAL LABORATORY TESTING OF SOILS

Laboratory testing of soils comprised:

- **soil classification:** moisture content measurement, Atterberg Limit tests and particle size distribution analysis.
- **compressibility:** one dimensional consolidation (oedometer)
- **shear strength (total stress):** unconsolidated undrained triaxial tests
- **compaction related:** dry density/moisture content relationship, California bearing ratio tests

Laboratory testing of soils samples was carried out in accordance with BS 1377, Methods of test for soils for civil engineering purposes; Part 1 (BSI, 2016), and Part 2 (BSI, 2022).

The test results are presented in Appendix J.

5.2 ENVIRONMENTAL LABORATORY TESTING OF SOIL & WATER

Environmental testing, as specified by the Client, was conducted on selected environmental soil and water samples by Normec DETS in Consett, Durham.

Testing was completed according to the Suites listed below as per the Client's instruction:

- Suite E1
- Suite E2
- Suite J – Leachate
- Rialta Suite S/S WAC
- Rialta Suite – Leachate WAC

Results of environmental laboratory testing are presented in Appendix K.

6 GROUND CONDITIONS

6.1 GENERAL GEOLOGY OF THE AREA

Published geological mapping from the online Geological Survey Ireland spatial resources database indicate the superficial deposits underlying the site comprise Glacial Till. These deposits are shown to be underlain by limestones and shales of the Lucan Formation.

6.2 GROUND TYPES ENCOUNTERED DURING INVESTIGATION OF THE SITE

A summary of the ground types encountered in the exploratory holes is listed below, in approximate stratigraphic order:

- **Topsoil:** encountered across the site 100-300mm thick.
- **Made Ground (fill):** reworked sandy gravelly clay fill encountered in TP1-CV01, TP-CV02, TP1-CV04 up to 1.50m deep containing varying amounts of anthropogenic material including red brick, concrete, plastic and conder blocks.
- **Glacial Till:** sandy gravelly clay, encountered across the site, frequently with low cobble content, typically firm or stiff in upper horizons, becoming very stiff with increasing depth.
- **Fluvioglacial deposits:** all rotary drilled boreholes, beneath glacial till encountered medium dese to dense in medium dense sands and gravel encountered at varying depths of 3.20m to 8.10m to the base of each hole. Note: recovery of this material using rotary coring methods was very low.

Further details of these ground types, including their specific depths and descriptions, can be found on the individual exploratory hole logs accompanying this report.

6.3 GROUNDWATER

Details of the individual groundwater strikes, along with any relative changes in levels as works proceeded, are presented on the exploratory hole logs for each location.

Groundwater was encountered as groundwater strikes at depths of 1.80-10.50m in boreholes and trial pits, however it should be noted that in the boreholes where no groundwater strikes were noted, groundwater strikes may have been masked by the fluid used as the drilling flush medium.

It should be further noted that the casing used in supporting the borehole walls during drilling may also have sealed out additional groundwater strikes and the possibility of encountering groundwater during excavation works at these locations should not be ruled out.

A groundwater monitoring standpipe was installed in RC-CV02 and RC-CV04. The results of subsequent groundwater monitoring, are presented in Appendix I.

Continued monitoring of the two installed standpipes will give an indication of the seasonal variation in groundwater level which should be factored into design considerations.

7 REFERENCES

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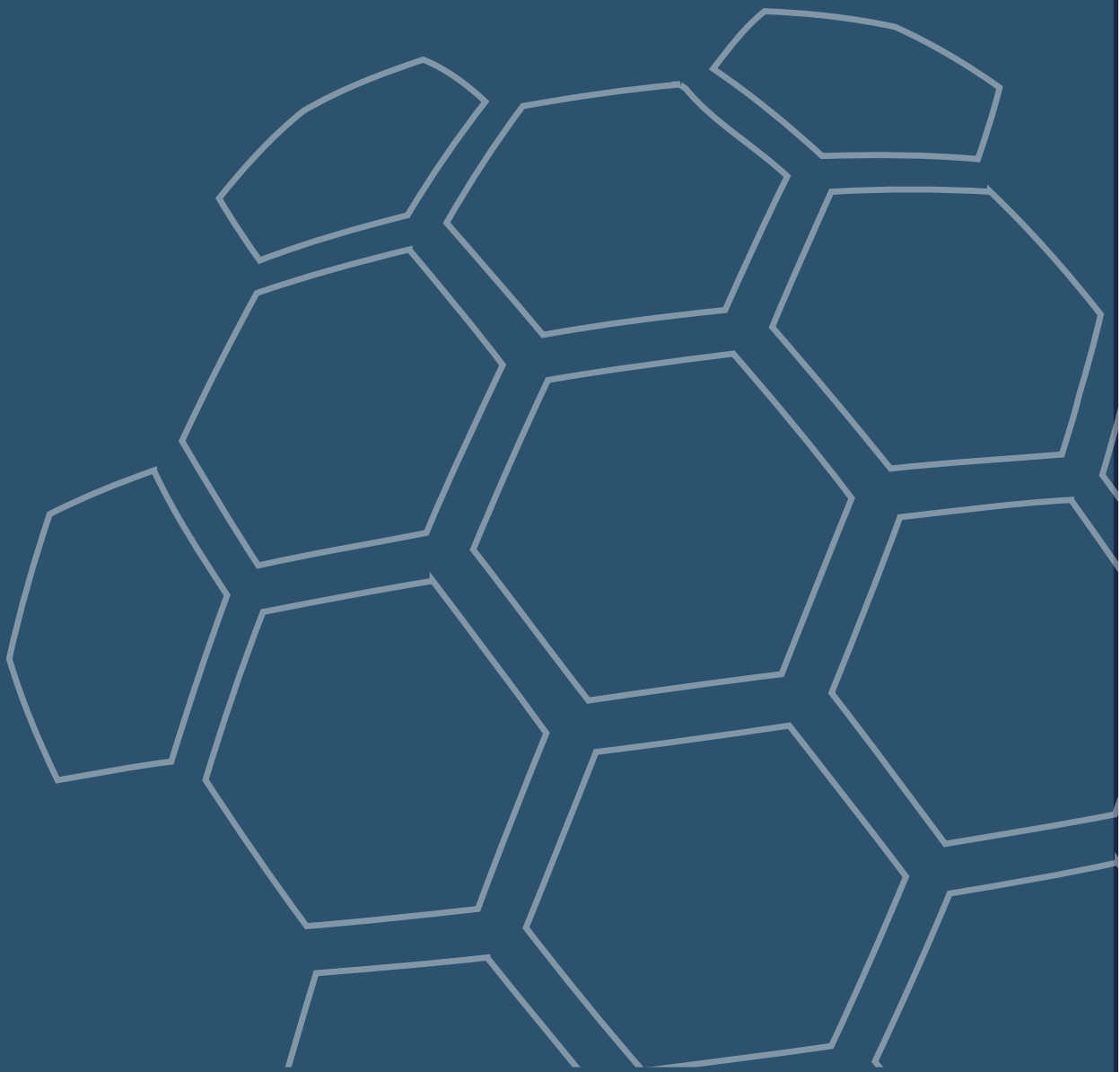
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APPENDIX A – SITE AND EXPLORATORY HOLE LOCATION PLANS





Legend Key

Project No.	25-0509
Client	Rowlands Civil
Client's Rep	Rowlands Civil

Site Location Plan

DAA Cargo Relocation

CAUSEWAY GEOTECH

Last Revision	11/09/2025
Scale	1:25000



Legend Key

- Locations By Type - CP
- Locations By Type - CP+RC
- Locations By Type - RC
- Locations By Type - TP

Project No.	25-0509
Client	Rowlands Civil
Client's Rep	Rowlands Civil

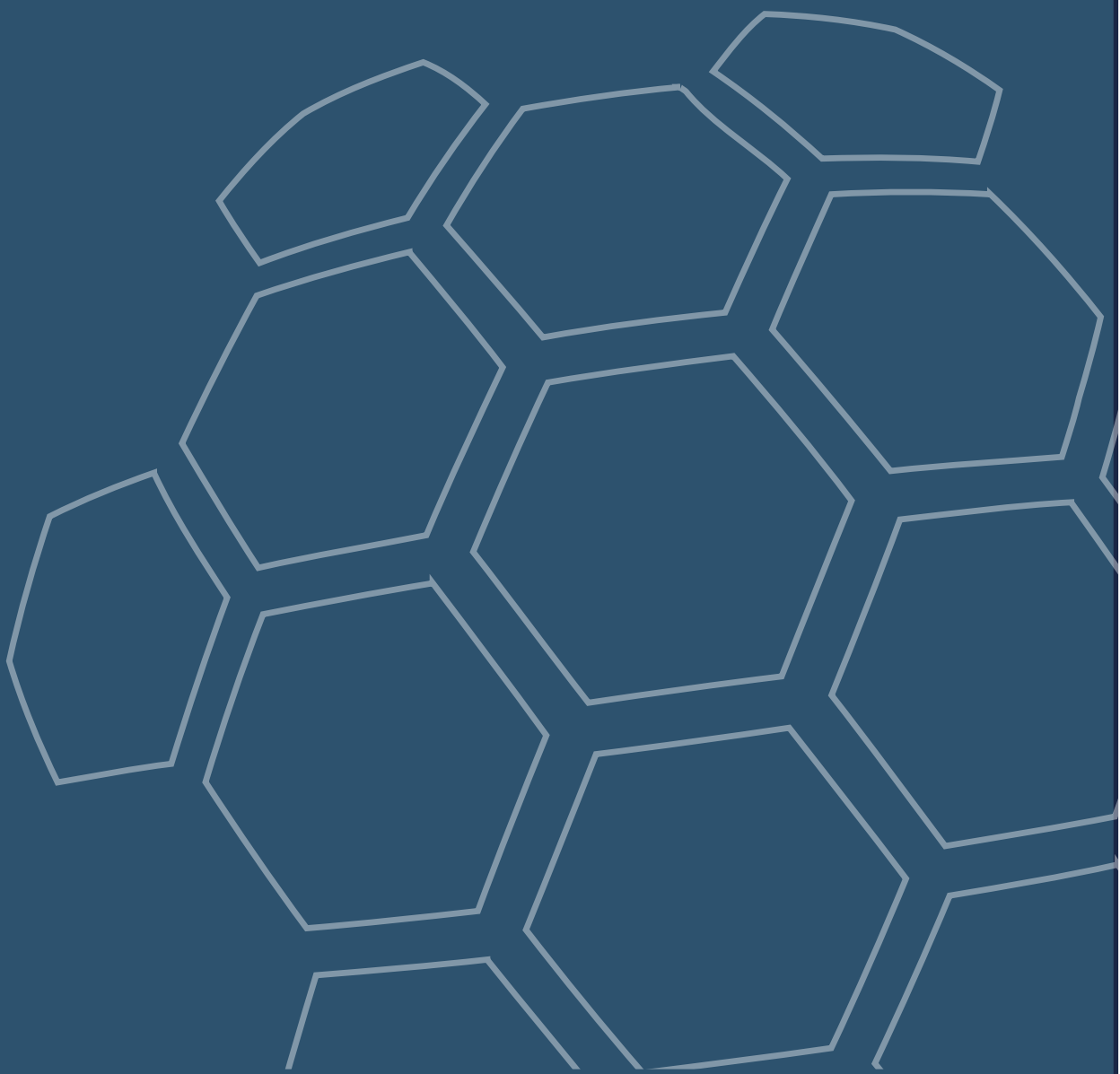
Exploratory Hole Location Plan

DAA Cargo Relocation

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Last Revision	11/09/2025
Scale	1:4000

APPENDIX B – BOREHOLE LOGS



CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BH-CV01
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Cable Percussion	Dando 2000	0.00	4.50	717333.21 E 742365.90 N

Final Depth:	4.50 m	Start Date:	08/07/2025	Driller:	CB	Sheet 1 of 1 Scale: 1:40
Elevation:	54.90 mOD	End Date:	08/07/2025	Logger:	EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B5							Firm becoming stiff light and dark brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
0.50	ES1									
1.00	D6									
1.00	ES2									
1.20 - 1.65	D4									
1.20 - 2.00	B12									
1.20 - 1.65	SPT (S)	N=20 (2,4/5,5,5,5) Hammer SN = 1411	1.20	Dry						
1.50	ES3									
2.00	D8				52.90	2.00				
2.00 - 2.45	U7	Ublow=100 90% Recovery	2.00	Dry				Very stiff greyish black slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
2.00 - 3.00	B13									
3.00	D10									
3.00 - 4.00	B14									
3.00 - 3.00	SPT (C)	50 (25 for 0mm/50 for 0mm) Hammer SN = 1411	3.00	Dry						
4.00	D11									
4.00 - 4.45	D9									
4.00 - 4.50	B15									
4.00 - 4.03	SPT (S)	50 (25 for 11mm/50 for 20mm) Hammer SN = 1411	4.00	Dry						
					50.40	4.50		End of Borehole at 4.50m		
4.50 - 4.52	SPT (C)	50 (25 for 6mm/50 for 10mm) Hammer SN = 1411	4.50	Dry						

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diameter
4.50	200

Water Added

From (m)	To (m)
1.20	4.50

Chiselling Details

From (m)	To (m)	Time (hh:mm)
2.80	3.20	01:25
4.20	4.50	01:00

Remarks

Inspection pit hand dug to 1.20m.
No groundwater encountered.

Termination Reason

Terminated on refusal.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV02
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 10.00 m	Start Date: 02/07/2025	Driller: CB+SW	Sheet 1 of 2 Scale: 1:50
Cable Percussion	Dando 2000	0.00	4.00	717323.02 E				
Rotary Coring	Comacchio 602	4.00	10.00	742274.28 N	Elevation: 54.52 mOD	End Date: 09/07/2025	Logger: EGA+BA	FINAL

Depth (m)	Sample / Tests	Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B5								54.32	0.20		TOPSOIL: with very fine roots (<0.5mm).		
0.50	ES1											Firm becoming stiff light brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	D4													
1.00	ES2						0.00	Dry						
1.20 - 1.65	D6													
1.20 - 2.00	B8													
1.20 - 1.65	SPT (S)	N=17 (1,2/3,4,5,5) Hammer SN = 1411												
1.50	ES3													
2.00	D7						2.00	Dry	52.52	2.00				
2.00 - 2.45	U9	Ublow=95 100% Recovery										Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
2.00 - 3.00	B13													
3.00	D11						3.00	Dry						
3.00 - 3.45	D10													
3.00 - 4.00	B14													
3.00 - 3.40	SPT (S)	50 (12,12/50 for 251mm) Hammer SN = 1411												
4.00	D12						4.00	Dry	50.52	4.00				
4.00 - 4.12	SPT (C)	50 (25 for 65mm/50 for 50mm) Hammer SN = 1411	40	0	0	AZCL						Low Recovery: Very stiff brownish grey sandy gravelly CLAY with high cobble and boulder content. *Driller notes: very stiff brownish grey gravelly CLAY with high cobble and boulder content at 4.00-10.00m*		
						N/A								
5.50							5.50							
5.50 - 5.69	SPT(C)	50 (25 for 55mm/50 for 135mm) Hammer SN = 1411	20	0	0	AZCL								
5.50 - 7.00	B15													
						N/A								
7.00							7.00							
7.00 - 7.18	SPT(C)	50 (25 for 60mm/50 for 120mm) Hammer SN = 1411	47	0	0	AZCL								
						N/A								
8.50							8.50							
8.50 - 8.59	SPT(C)	50 (25 for 40mm/50 for 45mm) Hammer SN = 1411	37	0	0	AZCL								
8.50 - 10.00	B16													

Water Strikes				Chiselling Details			Remarks
Struck at (m)	Casing to (m)	Time (min)	Rose to (m)	From (m)	To (m)	Time (hh:mm)	Inspection pit hand dug to 1.20m. No noticeable groundwater encountered - water added during coring process.

Casing Details		Water Added	
To (m)	Diam (mm)	From (m)	To (m)
4.00	200		
10.00	146		

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV02
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 10.00 m	Start Date: 02/07/2025	Driller: CB+SW	Sheet 2 of 2
Cable Percussion	Dando 2000	0.00	4.00	717323.02 E				Scale: 1:50
Rotary Coring	Comacchio 602	4.00	10.00	742274.28 N	Elevation: 54.52 mOD	End Date: 09/07/2025	Logger: EGA+BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
					N/A								
10.00								44.52	10.00		End of Borehole at 10.00m		
		TCR	SCR	RQD	FI								

9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
4.00	200
10.00	146

Water Added

From (m)	To (m)

Chiselling Details

From (m)	To (m)	Time (hh:mm)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV03
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Cable Percussion	Dando 2000	0.00	4.70	717378.68 E 742221.67 N

Final Depth:	4.70 m	Start Date:	02/07/2025	Driller:	CB	Sheet 1 of 1 Scale: 1:40
Elevation:	54.41 mOD	End Date:	02/07/2025	Logger:	EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B5				54.21	0.20		TOPSOIL: with very fine roots (<0.5mm).		
0.50	ES1							Soft becoming firm light greyish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	D4									
1.00	ES2									
1.20 - 2.00	B14									
1.20 - 1.65	SPT (S)	N=11 (1,2/3,3,2,3)	1.20	Dry						
1.50	ES3									
2.00	D8				52.41	2.00		Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
2.00 - 2.45	D12									
2.00 - 2.45	U7	Ublow=52 100% Recovery	1.20	Dry						
2.00 - 3.00	B15									
2.45 - 2.60	D6									
3.00	D9									
3.00 - 3.45	D13									
3.00 - 4.00	B16									
3.00 - 3.15	SPT (S)	50 (25 for 73mm/50 for 75mm) Hammer SN = 1411	3.00	Dry						
4.00	D10									
4.00 - 4.70	B17									
4.00 - 4.29	SPT (S)	50 (10,15/50 for 143mm) Hammer SN = 1411	4.00	Dry						
4.50	D11									
4.70 - 4.74	SPT (S)	50 (25 for 20mm/50 for 25mm)	4.70	Dry	49.71	4.70		End of Borehole at 4.70m		

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diameter
4.70	200

Water Added

From (m)	To (m)

Chiselling Details

From (m)	To (m)	Time (hh:mm)
4.50	4.70	01:00

Remarks

Inspection pit hand dug to 1.20m.
No groundwater encountered.

Termination Reason

Terminated on refusal.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BH-CV04
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Cable Percussion	Dando 2000	0.00	5.00	717505.59 E 742198.89 N

Final Depth:	5.00 m	Start Date:	03/07/2025	Driller:	CB	Sheet 1 of 1 Scale: 1:40
Elevation:	53.57 mOD	End Date:	03/07/2025	Logger:	EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
								TOPSOIL: with very fine roots (<0.5mm).		
0.20 - 1.20	B15				53.37	0.20		Soft becoming firm light brownish grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
0.50	ES1									
1.00	D5									
1.00	ES2									
1.20 - 1.65	D4									
1.20 - 2.00	B7									
1.20 - 1.65	SPT (S)	N=11 (1,2/2,2,3,4) Hammer SN = 1411	1.20	Dry						
1.50	ES3									
2.00	D6									
2.00 - 2.45	U8	Ublow=87 100% Recovery	2.00	Dry						
2.00 - 3.00	B16				51.37	2.20		Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
3.00	D9									
3.00 - 3.45	D11									
3.00 - 4.00	B10									
3.00 - 3.45	SPT (S)	N=49 (5,8/11,12,11,15) Hammer SN = 1411	3.00	Dry						
4.00	D13									
4.00 - 4.45	D12									
4.00 - 5.00	B17									
4.00 - 4.10	SPT (S)	50 (25 for 31mm/50 for 65mm) Hammer SN = 1411	4.00	Dry						
5.00	D14				48.57	5.00		End of Borehole at 5.00m		
5.00 - 5.04	SPT (S)	50 (25 for 10mm/50 for 35mm)	5.00	Dry						

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diameter
5.00	200

Water Added

From (m)	To (m)
1.20	5.00

Chiselling Details

From (m)	To (m)	Time (hh:mm)
4.90	5.00	01:00

Remarks

Inspection pit hand dug to 1.20m.
No groundwater encountered.

Termination Reason

Terminated on refusal.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV05
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 10.00 m	Start Date: 01/07/2025	Driller: SW+CB	Sheet 1 of 2 Scale: 1:50
Cable Percussion	Dando 2000	0.00	4.00	717574.06 E				
Rotary Coring	Comacchio 602	4.00	10.00	742344.15 N	Elevation: 53.28 mOD	End Date: 08/07/2025	Logger: BA+EGA	FINAL

Depth (m)	Sample / Tests	Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B4								53.08	0.20		TOPSOIL: with very fine roots (<0.5mm).		
0.50	ES1											Soft becoming firm light brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	D6													
1.00	ES2						1.20	Dry						
1.20 - 1.65	D5													
1.20 - 2.00	D10													
1.20 - 1.65	SPT (S)	N=10 (2,2/3,3,2,2) Hammer SN = 1411												
1.50	ES3													
2.00	D9						2.00	Dry						
2.00 - 2.45	U8	Ublow=50 100% Recovery							51.08	2.20		Stiff becoming very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
2.20 - 3.00	B11													
2.45 - 2.60	D7													
3.00	D12						3.00	Dry						
3.00 - 3.45	D14													
3.00 - 4.00	B13													
3.00 - 3.17	SPT (S)	50 (25 for 127mm/50 for 42mm) Hammer SN = 1411												
4.00	D16						4.00	Dry	49.28	4.00		LOW RECOVERY: Very stiff dark grey slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are of limestone. *Driller notes: very stiff brown gravelly CLAY with high cobble and boulder content at 4.00-10.00m*		
4.00 - 4.45	D15													
4.00 - 4.03	SPT (S)	50 (25 for 11mm/50 for 17mm) Hammer SN = 1411				AZCL								
			67	0	0	N/A								
5.50							5.50							
5.50 - 5.68	SPT(C)	50 (25 for 50mm/50 for 130mm) Hammer SN = 1411				AZCL								
5.50 - 7.00	B17		27	0	0									
						N/A								
7.00							7.00							
7.00 - 7.15	SPT(C)	50 (25 for 40mm/50 for 110mm) Hammer SN = 1411				AZCL								
			27	0	0	N/A								
8.50							8.50							
8.50 - 8.64	SPT(C)	50 (25 for 35mm/50 for 100mm) Hammer SN = 1411	20	0	0	AZCL								
8.50 - 10.00	B18													

Water Strikes			
Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details	
To (m)	Diam (mm)
4.00	200
10.00	146

Water Added	
From (m)	To (m)

Chiselling Details		
From (m)	To (m)	Time (hh:mm)
3.70	4.00	01:00

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BH-CV05
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth:	Start Date:	Driller:	Sheet 2 of 2
Cable Percussion	Dando 2000	0.00	4.00					Scale: 1:50
Rotary Coring	Comacchio 602	4.00	10.00	717574.06 E	10.00 m	01/07/2025	SW+CB	
				742344.15 N	Elevation: 53.28 mOD	End Date: 08/07/2025	Logger: BA+EGA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
					N/A								
10.00								43.28	10.00		End of Borehole at 10.00m		
		TCR	SCR	RQD	FI								

9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5 15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
4.00	200
10.00	146

Water Added

From (m)	To (m)

Chiselling Details

From (m)	To (m)	Time (hh:mm)
3.70	4.00	01:00

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV06
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Cable Percussion	Dando 2000	0.00	4.00	717634.78 E 742175.18 N

Final Depth:	4.00 m	Start Date:	07/07/2025	Driller:	CB	Sheet 1 of 1 Scale: 1:40
Elevation:	53.09 mOD	End Date:	07/07/2025	Logger:	EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B1				52.89	0.20		TOPSOIL: with very fine roots (<0.5mm).		
0.50	ES2							Firm light and dark greyish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	D11									
1.00	ES3									
1.20 - 1.65	D6									
1.20 - 2.00	B7									
1.20 - 1.65	SPT (S)	N=10 (2,2/1,3,3,3) Hammer SN = 1411	1.20	Dry						
1.50	ES4									
2.00	D12				51.09	2.00		Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
2.00 - 2.45	U6	Ublow=100 20% Recovery	2.00	Dry						
2.00 - 3.00	B8									
3.00	D13									
3.00 - 3.45	D9									
3.00 - 3.70	B11									
3.00 - 3.45	SPT (S)	N=43 (4,6/10,12,10,11) Hammer SN = 1411	3.00	Dry						
4.00 - 4.00	SPT (C)	50 (25 for 0mm/50 for 0mm) Hammer SN = 1411	4.00	Dry	49.09	4.00		End of Borehole at 4.00m		

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diameter
4.00	200

Water Added

From (m)	To (m)
1.20	4.00

Chiselling Details

From (m)	To (m)	Time (hh:mm)
3.70	4.00	01:00

Remarks

Inspection pit hand dug to 1.20m.
No groundwater encountered.

Termination Reason

Terminated on refusal.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BH-CV07
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Cable Percussion	Dando 2000	0.00	4.00	717844.41 E 742212.79 N

Final Depth:	4.00 m	Start Date:	01/07/2025	Driller:	CB	Sheet 1 of 1 Scale: 1:40
Elevation:	52.30 mOD	End Date:	01/07/2025	Logger:	EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.20 - 1.20	B4				52.10	0.20		TOPSOIL: with very fine roots (<0.5mm).		
0.50	ES1							Stiff dark brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	D8									
1.00	ES2									
1.20 - 1.70	B5									
1.20 - 1.65	SPT (S)	N=16 (2,3/4,4,4,4) Hammer SN = 1411	1.20	Dry						
1.50	ES3									
1.70 - 2.00	B6	Strike at 1.50m.			50.60	1.70		Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.	▼	
2.00	D9									
2.00 - 2.45	D7									
2.00 - 3.00	B12									
2.00 - 2.40	SPT (S)	50 (4,6/50 for 252mm) Hammer SN = 1411	2.00	1.80						
3.00	D10									
3.00 - 3.45	D14									
3.00 - 4.00	B13									
3.00 - 3.35	SPT (S)	50 (5,9/50 for 203mm) Hammer SN = 1411	3.00	2.40						
4.00	D11				48.30	4.00		End of Borehole at 4.00m		
4.00 - 4.09	SPT (S)	50 (25 for 34mm/50 for 52mm) Hammer SN = 1411	4.00	3.50						

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)
1.80	1.50		

Chiselling Details

From (m)	To (m)	Time (hh:mm)

Casing Details

To (m)	Diameter
4.00	200

Water Added

From (m)	To (m)
1.20	4.00

Remarks

Inspection pit hand dug to 1.20m.

Termination Reason

Terminated on refusal.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV08
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 10.00 m	Start Date: 03/07/2025	Driller: GT+CB	Sheet 1 of 2
Cable Percussion	Dando 2000	0.00	5.00	717190.92 E				Scale: 1:50
Rotary Coring	Comacchio T7	5.00	10.00	742316.29 N	Elevation: 56.00 mOD	End Date: 08/07/2025	Logger: BA+EGA	FINAL

Depth (m)	Sample / Tests	Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
												TOPSOIL: with fine roots (0.5-2.0mm).		
0.20 - 1.00	B4								55.80	0.20		Soft light brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
0.50	ES1													
1.00	D5								55.00	1.00		Firm becoming stiff dark brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
1.00	ES2						1.20	Dry						
1.20 - 1.65	D6													
1.20 - 2.00	B7													
1.20 - 1.65	SPT (S)	N=13 (1,2/4,4,3,2) Hammer SN = 1411												
1.50	ES3													
2.00	D8						2.00	Dry						
2.00 - 2.45	U9	Ublow=42 100% Recovery												
2.00 - 3.00	B10													
3.00	D13						3.00	Dry	53.00	3.00		Very stiff greyish black slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
3.00 - 3.45	D16													
3.00 - 4.00	B11													
3.00 - 3.29	SPT (S)	50 (10,12/50 for 143mm) Hammer SN = 1411												
4.00	D14						4.00	Dry						
4.00 - 5.00	B12													
4.00 - 4.14	SPT (C)	50 (25 for 62mm/50 for 75mm) Hammer SN = 1411												
5.00	D15						5.00	Dry						
5.00 - 5.08	SPT (C)	50 (25 for 26mm/50 for 57mm) Hammer SN = 1411	100	0	0	N/A			51.00	5.00		Very stiff dark grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
6.50							6.50	0.00	49.50	6.50		Very stiff dark grey very sandy CLAY. Sand is fine to coarse.		
6.50 - 6.59	SPT(C) 50 (25 for 38mm/50 for 48mm) Hammer SN = 1530		90	0	0	N/A								
6.50 - 6.60	D17													
6.60 - 7.10	B18													
						N/A			48.40	7.60		Dark grey slightly sandy clayey subangular fine to coarse GRAVEL. Sand is fine to coarse.		
8.00							8.00	0.00	48.00	8.00		Very stiff dark grey very sandy CLAY. Sand is fine to coarse.		
8.00 - 8.45	SPT(C) N=46 (20,18/14,11,11,10) Hammer SN = 1530		90	0	0	N/A								
						N/A			47.20	8.80		Dark grey slightly sandy slightly clayey subangular fine to coarse GRAVEL of limestone. Sand is fine to coarse.		

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
5.00	200
10.00	104

Water Added

From (m)	To (m)
1.20	5.00

Chiselling Details

From (m)	To (m)	Time (hh:mm)
4.60	5.00	01:00

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV08
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 10.00 m	Start Date: 03/07/2025	Driller: GT+CB	Sheet 2 of 2
Cable Percussion	Dando 2000	0.00	5.00	717190.92 E				Scale: 1:50
Rotary Coring	Comacchio T7	5.00	10.00	742316.29 N	Elevation: 56.00 mOD	End Date: 08/07/2025	Logger: BA+EGA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
9.50						9.50	0.00	46.50	9.50				
9.50 - 9.95	SPT(C) N=50 (18,12/14,13,11,12) Hammer SN = 1530	100	0	0	N/A						Dark grey slightly gravelly clayey fine to coarse SAND. Gravel is subangular fine.		
9.50 - 9.60	D19					10.0	0.00	46.00	10.00		End of Borehole at 10.00m		
9.60 - 10.00	B20												
10.00													
10.00 - 10.18	SPT(C) 50 (47 for 110mm/50 for 69mm) Hammer SN = 1530												
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Chiselling Details

From (m)	To (m)	Time (hh:mm)
4.60	5.00	01:00

Casing Details

To (m)	Diam (mm)
5.00	200
10.00	104

Water Added

From (m)	To (m)
1.20	5.00

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Core Barrel	Flush Type	Termination Reason	Last Updated
SK6L	Water	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV09
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 15.00 m	Start Date: 02/09/2025	Driller: DD	Sheet 1 of 3
Rotary Percussion	Comacchio 405	0.00	2.50					Scale: 1:40
Rotary Coring	Comacchio 405	2.50	15.00	717345.59 E	Elevation: 54.89 mOD	End Date: 03/09/2025	Logger: MM	FINAL
				742557.58 N				

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
								54.79	0.10		TOPSOIL.		
											Firm brown sandy gravelly CLAY. (Drillers description)		
0.50 - 1.50	B1												
1.50 - 1.95	SPT(S) N=19 (3,4/3,5,6,5)					1.50							
								52.39	2.50		Stiff becoming very stiff dark greyish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
3.00 - 3.45	SPT(S) N=31 (5,5/6,6,9,10)	27	0	0		3.00							
4.00													
4.50 - 4.89	SPT(S) 50 (10,12/50 for 245mm)	80	0	0		4.50							
5.50								49.39	5.50		Firm dark greyish brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
								49.09	5.80		NO RECOVERY: Driller describes grey sandy subangular fine to coarse GRAVEL with medium cobble content.		
6.00 - 6.20	SPT(S) 50 (12,13/50 for 55mm)	33	0	0		6.00							
7.00													
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
2.50	200
15.00	146

Core Barrel

SK6L

Flush Type

Air/Water

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV09
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 15.00 m	Start Date: 02/09/2025	Driller: DD	Sheet 2 of 3
Rotary Percussion	Comacchio 405	0.00	2.50	717345.59 E				Scale: 1:40
Rotary Coring	Comacchio 405	2.50	15.00	742557.58 N	Elevation: 54.89 mOD	End Date: 03/09/2025	Logger: MM	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
7.50 - 7.56	SPT(S) 50 (25 for 35mm/50 for 20mm)	13	0	0		7.50							
8.50													
9.00 - 9.44	SPT(C) N=48 (27 for 135mm/11,12,12,13)	17	0	0		9.00							
10.00											NO RECOVERY		
10.50 - 10.65	SPT(C) 50 (25 for 105mm/50 for 45mm)	0	0	0	NA	10.5							
11.50													
12.00 - 12.08	SPT(C) 50 (25 for 80mm/50 for 0mm)	7	0	0		12.0							
13.00											NO RECOVERY		
13.50 - 13.76	SPT(C) 50 (25 for 130mm/50 for 130mm)	0	0	0		13.5							
14.50													
		TCR	SCR	RQD	FI								

7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
2.50	200
15.00	146

Core Barrel

SK6L

Flush Type

Air/Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BH-CV09
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 15.00 m	Start Date: 02/09/2025	Driller: DD	Sheet 3 of 3
Rotary Percussion	Comacchio 405	0.00	2.50					Scale: 1:40
Rotary Coring	Comacchio 405	2.50	15.00	717345.59 E				
				742557.58 N	Elevation: 54.89 mOD	End Date: 03/09/2025	Logger: MM	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
		0	0	0									
15.00 - 15.04	SPT(C) 50 (25 for 25mm/50 for 10mm)					15.0	0.00	39.89	15.00		End of Borehole at 15.00m		
15.00						2.50							
15.00	04-09-2025												
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
2.50	200
15.00	146

Core Barrel

SK6L

Flush Type

Air/Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	BHRC-HV01
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 15.00 m	Start Date: 15/07/2025	Driller: GT	Sheet 1 of 3
Rotary Percussion	Comacchio T7	0.00	3.00					Scale: 1:40
Rotary Coring	Comacchio T7	3.00	15.00	717373.95 E				
				742524.47 N	Elevation: 54.80 mOD	End Date: 16/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.00 - 0.50	ES1										Brown sandy CLAY. Sand is fine to coarse. (Driller`s description)		
0.50 - 1.00	ES2												
1.00 - 1.50	ES3												
								53.60	1.20		Firm becoming stiff brown slightly gravelly sandy CLAY with occasional cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse.		
1.50 - 3.00	B4					1.50	0.00						
1.50 - 1.95	SPT(C) N=10 (2,2/3,2,2,3) Hammer SN = 1530												
								52.80	2.00		Stiff becoming very stiff grey and black slightly sandy gravelly CLAY with occasional boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse.		
3.00 - 3.45	SPT(C) N=46 (9,10/11,12,12,11) Hammer SN = 1530				N/A	3.00	0.00				Very dark brownish grey slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
		100	0	0	N/A			51.20	3.60		Very stiff dark brown slightly sandy slightly gravelly CLAY with occasional fine to medium, subangular gravel lenses (100mm thick). Sand is fine to coarse. Gravel is subangular fine to coarse.		
4.50 - 4.60	D5					4.50	0.00	50.30	4.50		Very stiff dark brownish grey very sandy CLAY. Sand is fine to coarse.		
4.50 - 4.64	SPT(C) 50 (25 for 60mm/50 for 75mm) Hammer SN = 1530				N/A								
4.50 - 5.20	B6	100	0	0									
					N/A			49.30	5.50		Dense dark grey slightly sandy clayey subrounded fine to coarse GRAVEL of limestone with low cobble content. Sand is fine to coarse. Cobbles are of limestone.		
6.00 - 6.44	SPT(C) 50 (8,10/50 for 288mm) Hammer SN = 1530					6.00	0.00	48.80	6.00		Very stiff dark brownish grey very sandy CLAY. Sand is fine to coarse.		
6.00		100	0	0	N/A								
								47.70	7.10		Very stiff dark brownish grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BHRC-HV01
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Rotary Percussion	Comacchio T7	0.00	3.00	
Rotary Coring	Comacchio T7	3.00	15.00	717373.95 E
				742524.47 N

Final Depth:	15.00 m	Start Date:	15/07/2025	Driller:	GT	Sheet 2 of 3
						Scale: 1:40
Elevation:	54.80 mOD	End Date:	16/07/2025	Logger:	BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
					N/A								
7.50 - 7.60	D7					7.50	0.00	47.30	7.50				
7.50 - 7.65	SPT(C) 50 (25 for 67mm/50 for 79mm) Hammer SN = 1530										Dense dark brownish grey silty fine to medium SAND.		
7.50													
7.60 - 8.20	B8	100	0	0	N/A								
								46.00	8.80				
					N/A						Dense dark grey sandy slightly silty subangular fine to medium GRAVEL. Sand is fine to coarse.		
9.00 - 9.22	SPT(C) 50 (25 for 75mm/50 for 150mm) Hammer SN = 1530					9.00	0.00	45.80	9.00				
9.00								45.80	9.00		Dense dark brownish grey slightly clayey fine to coarse SAND.		
		87	0	0	N/A								
								44.80	10.00		Dense dark grey slightly sandy subangular fine to coarse GRAVEL. Sand is fine to coarse.		
10.50 - 10.95	SPT(C) N=50 (8,10/12,12,14,12) Hammer SN = 1530					9.50	0.00	44.30	10.50				
10.50					AZCL						LOW RECOVERY: Dark brownish grey slightly gravelly slightly silty fine to coarse SAND. Gravel is subangular fine to medium. *Driller notes: Grey subangular fine to coarse GRAVEL with occasional cobble and boulder content at 10.00-12.00m.*		
11.30 - 11.90	B9	48	0	0									
					N/A								
11.90 - 12.00	D10												
12.00 - 12.26	SPT(C) 50 (10,15/50 for 112mm) Hammer SN = 1530					12.0	0.00	42.80	12.00				
12.00					AZCL						LOW RECOVERY: Dense dark brownish grey slightly silty fine to coarse SAND. *Driller notes: Stiff grey and black CLAY with occasional boulder content.*		
		60	0	0									
					N/A								
								41.50	13.30		Very stiff dark brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is angular to subangular fine to coarse. Cobbles are of limestone.		
13.50 - 13.60	D11					13.5	0.00						
13.50 - 13.95	SPT(C) N=49 (9,11/12,14,12,11) Hammer SN = 1530												
13.50													
13.60 - 14.20	B12	100	0	0	N/A								
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	BHRC-HV01
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth:	Start Date:	Driller:	Sheet 3 of 3
Rotary Percussion	Comacchio T7	0.00	3.00					Scale: 1:40
Rotary Coring	Comacchio T7	3.00	15.00	717373.95 E	15.00 m	15/07/2025	GT	
				742524.47 N	Elevation: 54.80 mOD	End Date: 16/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
15.00 - 15.43 15.00	SPT(C) 50 (8,11/50 for 283mm) Hammer SN = 1530					15.0	0.00	39.80	15.00		End of Borehole at 15.00m		
		TCR	SCR	RQD	FI								

15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0 20.5 21.0 21.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	RC-CV02
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth:	Start Date:	Driller:	Sheet 1 of 3
Rotary Percussion	Comacchio T7	0.00	3.00					Scale: 1:40
Rotary Coring	Comacchio T7	3.00	15.00	717279.52 E	15.00 m	08/07/2025	GT	
				742316.00 N	Elevation: 54.84 mOD	End Date: 09/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description
0.00 - 0.50	ES2										TOPSOIL: with very fine roots (<0.5mm).
								54.58	0.25		
0.50 - 1.00	ES3										Light greyish brown sandy CLAY. Sand is fine to coarse. (Driller`s description)
1.00 - 1.50	ES4							53.84	1.00		Firm becoming stiff dark grey sandy gravelly CLAY with low cobble and boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse.
1.50 - 3.00	B1					1.50	0.00				
1.50 - 1.95	SPT(C) N=14 (2,1/3,4,4,3) Hammer SN = 1530										
3.00 - 3.26	SPT(C) 50 (10,15/50 for 115mm) Hammer SN = 1530	100	0	0	N/A	3.00	0.00	51.84	3.00		Very stiff dark greyish brown slightly sandy gravelly CLAY with occasional fine to medium, subangular gravel lenses (100mm thick) and low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are of limestone.
4.50 - 4.95	SPT(C) N=46 (8,10/9,12,11,14) Hammer SN = 1530	90	0	0		4.50	0.00				
4.50											
4.70 - 4.80	D5										
4.70 - 5.40	B9										
6.00 - 6.16	SPT(C) 50 (25 for 66mm/50 for 90mm) Hammer SN = 1530	100	0	0		6.00	0.00				
6.00											
		TCR	SCR	RQD	FI						

Water | Backfill

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	RC-CV02
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 15.00 m	Start Date: 08/07/2025	Driller: GT	Sheet 2 of 3
Rotary Percussion	Comacchio T7	0.00	3.00					Scale: 1:40
Rotary Coring	Comacchio T7	3.00	15.00	717279.52 E	Elevation: 54.84 mOD	End Date: 09/07/2025	Logger: BA	FINAL
				742316.00 N				

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
7.50 - 7.60	D6					7.50	0.00						
7.50 - 7.62	SPT(C) 50 (25 for 48mm/50 for 75mm) Hammer SN = 1530												
7.50													
7.60 - 8.40	B10	90	0	0	N/A			46.74	8.10		Dark grey slightly sandy clayey subangular fine to coarse GRAVEL. Sand is fine to coarse.		
9.00 - 9.14	SPT(C) 50 (25 for 66mm/50 for 70mm) Hammer SN = 1530					9.00	0.00	45.84	9.00		Very stiff dark brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular fine to medium.		
9.00		80	0	0	N/A								
								44.94	9.90		Dark grey slightly sandy slightly clayey subangular fine to coarse GRAVEL. Sand is fine to coarse.		
					N/A								
10.50 - 10.60	D7					10.5	0.00	44.34	10.50		Very dense dark brown slightly gravelly slightly silty fine to coarse SAND. Gravel is subangular fine to coarse of limestone.		
10.50 - 10.74	SPT(C) 50 (12,13/50 for 85mm) Hammer SN = 1530												
10.50													
10.60 - 11.30	B11	100	0	0									
12.00 - 12.45	SPT(C) N=49 (8,12/14,13,12,10) Hammer SN = 1530					12.0	0.00						
12.00		90	0	0	N/A								
13.50 - 13.60	D8					13.5	0.00						
13.50 - 13.74	SPT(C) 50 (9,16/50 for 95mm) Hammer SN = 1530												
13.50													
13.60 - 14.30	B12	90	0	0									
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	RC-CV02
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth:	Start Date:	Driller:	Sheet 3 of 3
Rotary Percussion	Comacchio T7	0.00	3.00					Scale: 1:40
Rotary Coring	Comacchio T7	3.00	15.00	717279.52 E	15.00 m	08/07/2025	GT	
				742316.00 N	Elevation: 54.84 mOD	End Date: 09/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
15.00 - 15.08 15.00	SPT(C) 50 (25 for 32mm/50 for 51mm) Hammer SN = 1530					15.0	0.00	39.84	15.00		End of Borehole at 15.00m		
		TCR	SCR	RQD	FI								

15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0 20.5 21.0 21.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
3.00	200
15.00	104

Core Barrel

SK6L

Flush Type

Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	RC-CV03
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)
Rotary Percussion	Comacchio 602	0.00	3.40
Rotary Coring	Comacchio 602	3.40	7.60
Rotary Percussion	Comacchio 602	7.60	15.10

Coordinates: 717424.55 E, 742338.09 N

Final Depth: 15.10 m | Start Date: 03/07/2025 | Driller: CT | Elevation: 55.00 mOD | End Date: 03/07/2025 | Logger: BA

Sheet 1 of 3 | Scale: 1:40 | FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description
0.00	03-07-2025					0.00	0.00				Soft becoming firm brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller's description)
								54.30	0.70		Soft becoming firm light brown sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller's description)
								53.00	2.00		Firm becoming stiff dark greyish brown sandy gravelly CLAY with occasional boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller's description)
								51.60	3.40		LOW RECOVERY: Very stiff dark grey slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.
		50	0	0	AZCL						
					N/A						
4.60 - 6.00	B7										
4.60					N/A						
		33	0	0	AZCL						
6.00 - 6.10	D6										
6.10								48.90	6.10		LOW RECOVERY: Dark grey slightly sandy slightly clayey subangular fine to coarse GRAVEL of limestone. Sand is fine to coarse.
		40	0	0	AZCL						
		TCR	SCR	RQD	FI						

Water | Backfill

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0 5.5 6.0 6.5 7.0

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)
10.50	10.50	20	7.10

Casing Details

To (m)	Diam (mm)
200.00	146

Core Barrel: SK6L

Flush Type: Water

Remarks

Inspection pit hand dug to 1.20m.
Core recovery significantly affected by the presence of coarse gravel, cobbles, and boulders, combined with flash water inflow during drilling. Material likely displaced or washed out. TCR <75%, assigned AZCL for unconfirmed zones
.

Termination Reason: Terminated at scheduled depth.

Last Updated: 11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	RC-CV03
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)
Rotary Percussion	Comacchio 602	0.00	3.40
Rotary Coring	Comacchio 602	3.40	7.60
Rotary Percussion	Comacchio 602	7.60	15.10

Coordinates: 717424.55 E, 742338.09 N

Final Depth: 15.10 m | Start Date: 03/07/2025 | Driller: CT | Elevation: 55.00 mOD | End Date: 03/07/2025 | Logger: BA

Sheet 2 of 3 | Scale: 1:40 | FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
					N/A								
7.60 - 9.10	B1							47.40	7.60				
7.60		0	0	0							LOW RECOVERY: Dark brownish grey slightly sandy clayey subangular fine to coarse GRAVEL. Sand is fine to coarse.		
9.10 - 10.60	B2												
9.10		0	0	0	AZCL								
								44.80	10.20		LOW RECOVERY: Orangish brown SAND and GRAVEL. Sand is fine to coarse. Gravel is subangular fine to coarse.		
10.60 - 12.10	B3												
10.60		0	0	0									
12.10 - 13.60	B4												
12.10		0	0	0	AZCL								
13.60 - 15.10	B5												
13.60		0	0	0									
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)
10.50	10.50	20	7.10

Casing Details

To (m)	Diam (mm)
200.00	146

Core Barrel: SK6L

Flush Type: Water

Remarks

Inspection pit hand dug to 1.20m.
Core recovery significantly affected by the presence of coarse gravel, cobbles, and boulders, combined with flash water inflow during drilling. Material likely displaced or washed out. TCR <75%, assigned AZCL for unconfirmed zones
.

Termination Reason: Terminated at scheduled depth.

Last Updated: 11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	RC-CV03
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)
Rotary Percussion	Comacchio 602	0.00	3.40
Rotary Coring	Comacchio 602	3.40	7.60
Rotary Percussion	Comacchio 602	7.60	15.10

Coordinates: 717424.55 E, 742338.09 N

Final Depth: 15.10 m | Start Date: 03/07/2025 | Driller: CT

Elevation: 55.00 mOD | End Date: 03/07/2025 | Logger: BA

Sheet 3 of 3 | Scale: 1:40 | FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
15.10						0.00	0.00	39.90	15.10				
15.10	03-07-2025										End of Borehole at 15.10m		

15.0 15.5 16.0 16.5 17.0 17.5 18.0 18.5 19.0 19.5 20.0 20.5 21.0 21.5

TCR SCR RQD FI

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)
10.50	10.50	20	7.10

Casing Details

To (m)	Diam (mm)
200.00	146

Core Barrel

SK6L

Flush Type

Water

Remarks

Inspection pit hand dug to 1.20m.
Core recovery significantly affected by the presence of coarse gravel, cobbles, and boulders, combined with flash water inflow during drilling. Material likely displaced or washed out. TCR <75%, assigned AZCL for unconfirmed zones
.

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	RC-CV04
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 14.90 m	Start Date: 01/07/2025	Driller: CT	Sheet 1 of 3
Rotary Percussion	Comacchio 602	0.00	3.20					Scale: 1:40
Rotary Coring	Comacchio 602	3.20	14.90	717817.26 E				
				742296.96 N	Elevation: 51.96 mOD	End Date: 01/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
0.00	01-07-2025					0.00					Soft brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller`s description)		
								51.56	0.40				
0.50	ES1										Soft becoming firm yellowish brown sandy CLAY. Sand is fine to coarse. (Driller`s description)		
								51.16	0.80				
1.00	ES2										Firm becoming stiff dark greyish brown slightly sandy slightly gravelly CLAY with occasional boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller`s description)		
1.20	01-07-2025					0.00	0.00						
1.20	02-07-2025					0.00	0.00						
1.50	ES3												
								49.16	2.80		Firm becoming stiff dark greyish brown slightly sandy slightly gravelly CLAY with occasional boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. (Driller `s description)		
								48.76	3.20		LOW RECOVERY: Dark grey slightly sandy clayey subangular fine to coarse GRAVEL of limestone. Sand is fine to coarse.		
		40	0	0	AZCL						*Driller notes: Firm becoming stiff greyish brown CLAY with occasional boulder content.*		
4.40 - 4.50	D4												
4.40													
4.50 - 5.90	B11				N/A								
		47	0	0									
					AZCL								
5.90								46.06	5.90		Very stiff dark brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
		90	0	0	N/A								
		TCR	SCR	RQD	FI								

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
3.20	200
14.90	146

Core Barrel

SK6L

Flush Type

Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name: DAA Cargo Relocation	Borehole ID
25-0509	Client: Rowlands Civil	RC-CV04
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates	Final Depth: 14.90 m	Start Date: 01/07/2025	Driller: CT	Sheet 2 of 3
Rotary Percussion	Comacchio 602	0.00	3.20					Scale: 1:40
Rotary Coring	Comacchio 602	3.20	14.90	717817.26 E 742296.96 N	Elevation: 51.96 mOD	End Date: 01/07/2025	Logger: BA	FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
7.40								44.56	7.40				
		53	0	0	AZCL						LOW RECOVERY: Very stiff brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
8.40 - 8.50	D5												
8.50 - 8.90	B10				N/A								
8.90								43.06	8.90				
		53	0	0	N/A						LOW RECOVERY: Very stiff dark brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
					AZCL								
10.40 - 10.50	D6							41.56	10.40				
10.40													
10.50 - 11.20	B9	100	0	0	N/A						Very stiff dark brown slightly gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are of limestone.		
11.90								40.06	11.90				
		100	0	0	N/A						Very stiff brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.		
13.40 - 13.50	D7							38.56	13.40				
13.40		100	0	0	N/A						Very stiff brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine.		
14.40 - 14.90	B8												
		TCR	SCR	RQD	FI								

7.5 8.0 8.5 9.0 9.5 10.0 10.5 11.0 11.5 12.0 12.5 13.0 13.5 14.0 14.5

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Casing Details

To (m)	Diam (mm)
3.20	200
14.90	146

Core Barrel

SK6L

Flush Type

Water

Termination Reason

Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Borehole ID
25-0509	DAA Cargo Relocation	RC-CV04
	Client: Rowlands Civil	
	Client's Rep: Rowlands Civil	

Method	Plant Used	Top (m)	Base (m)	Coordinates
Rotary Percussion	Comacchio 602	0.00	3.20	
Rotary Coring	Comacchio 602	3.20	14.90	717817.26 E
				742296.96 N

Final Depth:	14.90 m	Start Date:	01/07/2025	Driller:	CT	Sheet 3 of 3
Elevation:	51.96 mOD	End Date:	01/07/2025	Logger:	BA	Scale: 1:40
						FINAL

Depth (m)	Samples / Field Records	TCR	SCR	RQD	FI	Casing Depth (m)	Water Depth (m)	Level mOD	Depth (m)	Legend	Description	Water	Backfill
14.90						3.20	0.00	37.06	14.90				
14.90	02-07-2025										End of Borehole at 14.90m		

TCR	SCR	RQD	FI

Water Strikes

Struck at (m)	Casing to (m)	Time (min)	Rose to (m)

Casing Details

To (m)	Diam (mm)
3.20	200
14.90	146

Core Barrel

SK6L

Flush Type

Water

Remarks

Inspection pit hand dug to 1.20m.
No noticeable groundwater encountered - water added during coring process.

Termination Reason

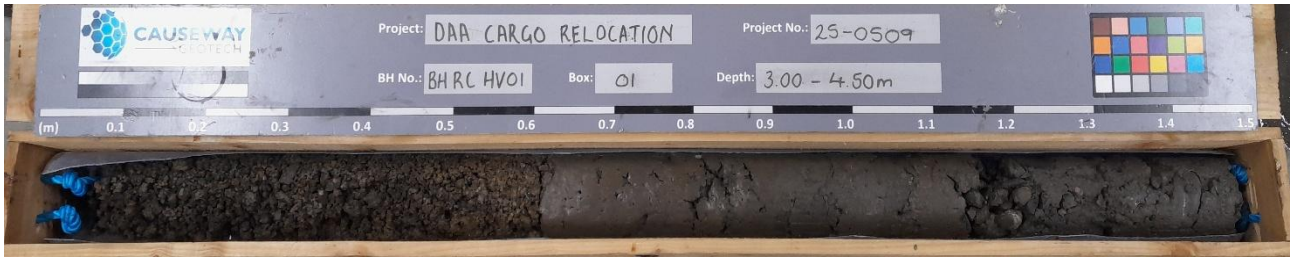
Terminated at scheduled depth.

Last Updated

11/09/2025

AGS

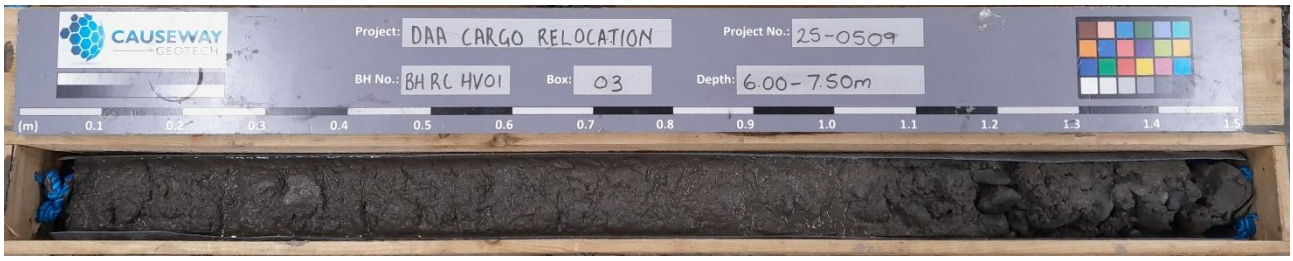
APPENDIX C – CORE PHOTOGRAPHS



RC-HV01: 3.00 – 4.50m



RC-HV01: 4.50 – 6.00m



RC-HV01: 6.00 – 7.50m



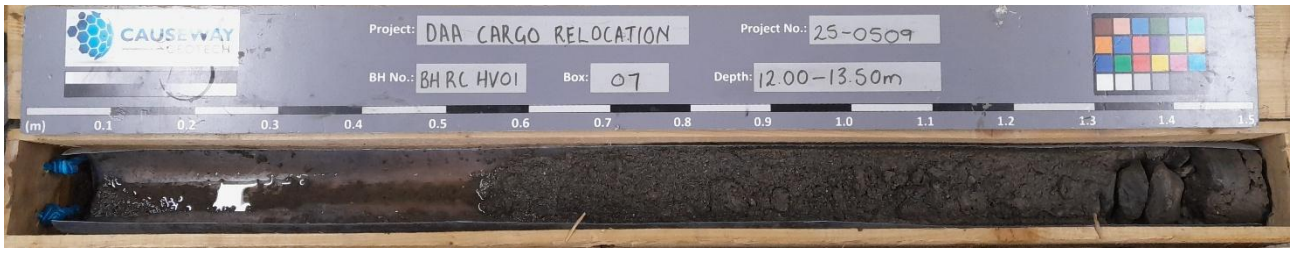
RC-HV01: 7.50 – 9.00m



RC-HV01: 9.00 – 10.50m



RC-HV01: 10.50 – 12.00m



RC-HV01: 12.00 – 13.50m



RC-HV01: 13.50 – 15.00m



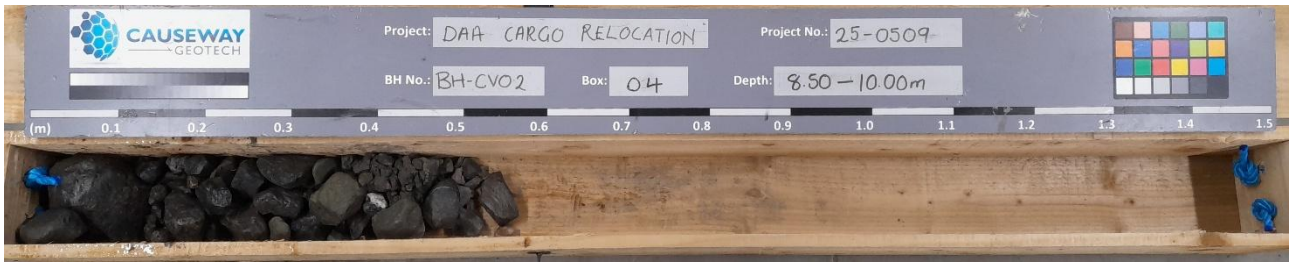
BH-CV02 4.00-5.50m



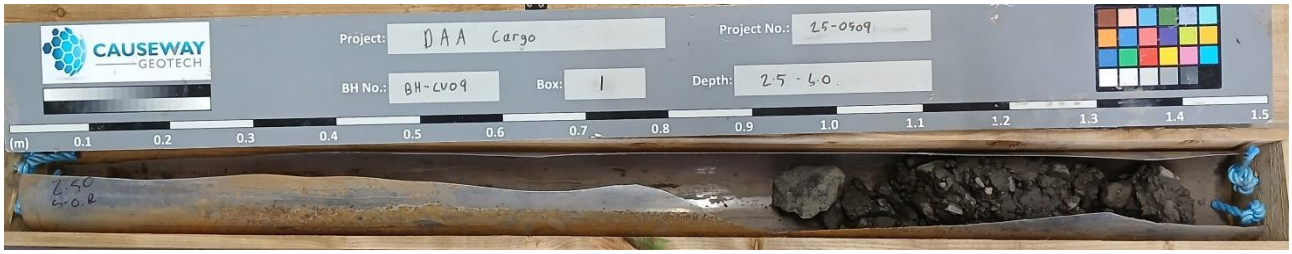
BH-CV02 5.50-7.00m



BH-CV02 7.00-8.50m



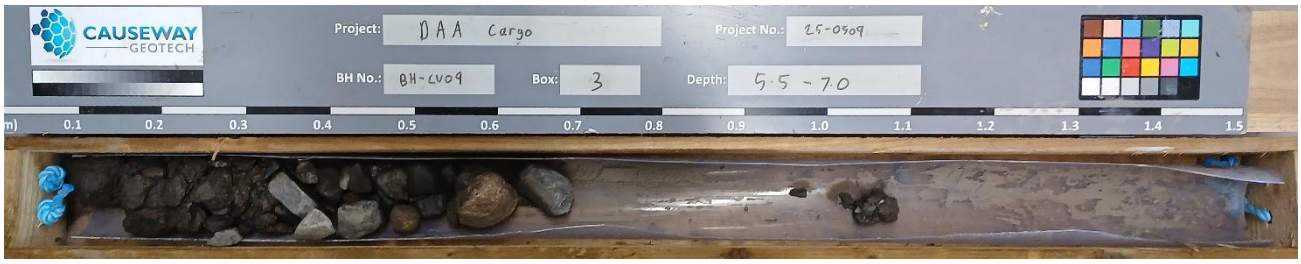
BH-CV02 8.50-10.00m



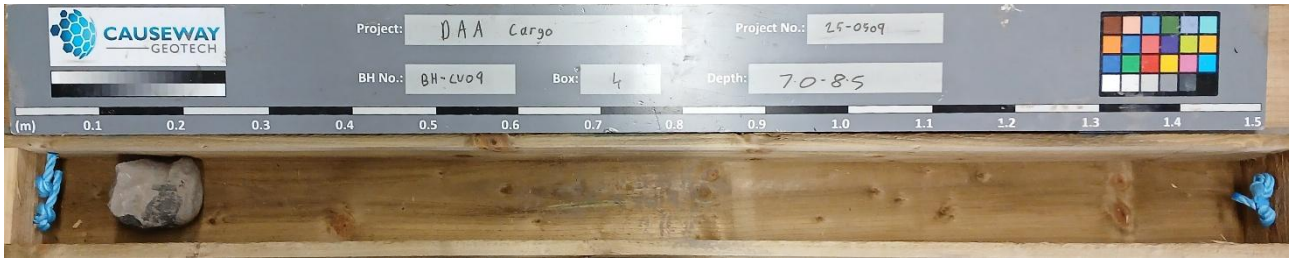
BH-CV09 2.50-4.00m



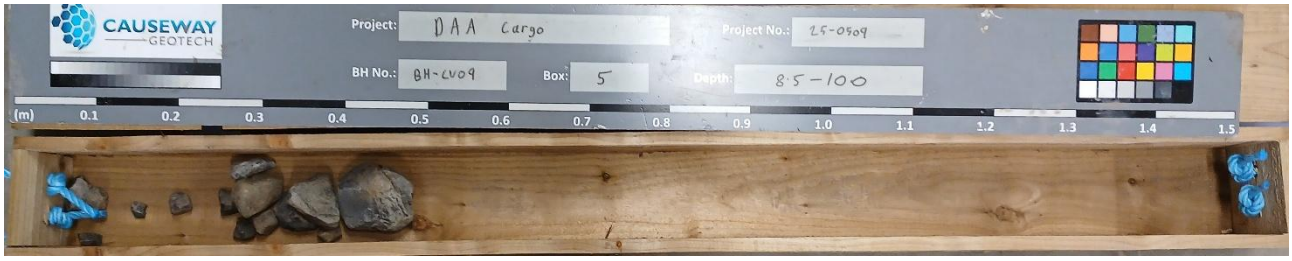
BH-CV09 4.00-5.50m



BH-CV09 5.50-7.00m



BH-CV09 7.00-8.50m



BH-CV09 8.50-10.00m



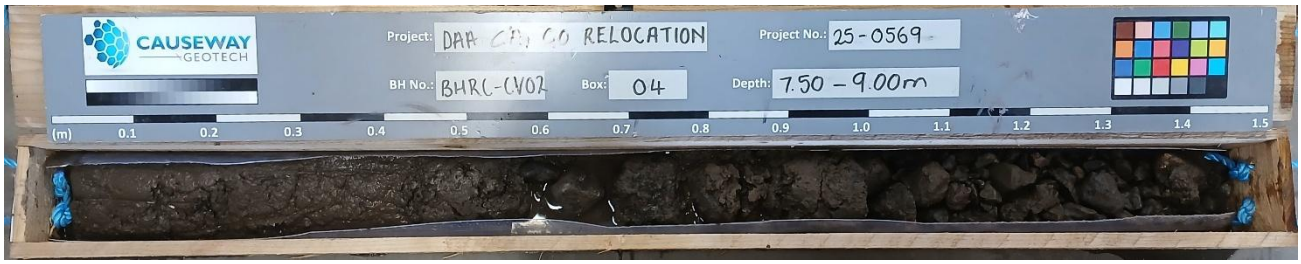
RC-CV02 3.00-4.50m



RC-CV02 4.50-6.00m



RC-CV02 6.00-7.50m



RC-CV02 7.50-9.00m



RC-CV02 9.00-10.50m

NOTE: Driller recorded no core recovery from 10.50-15.00m

CAUSEWAY GEOTECH



RC-CV02 9.50-10.00m



RC-CV02 9.50-10.00m



RC-CV02 9.50-10.00m



RC-CV03 3.40-4.60m



RC-CV03 4.60-6.10m



RC-CV03 6.10-7.60m



RC-CV04 3.20-4.40m



RC-CV04 4.40-5.90m



RC-CV04 5.90-7.40m



RC-CV04 7.40-8.90m



RC-CV04 8.90-10.40m



RC-CV04 10.40-11.90m



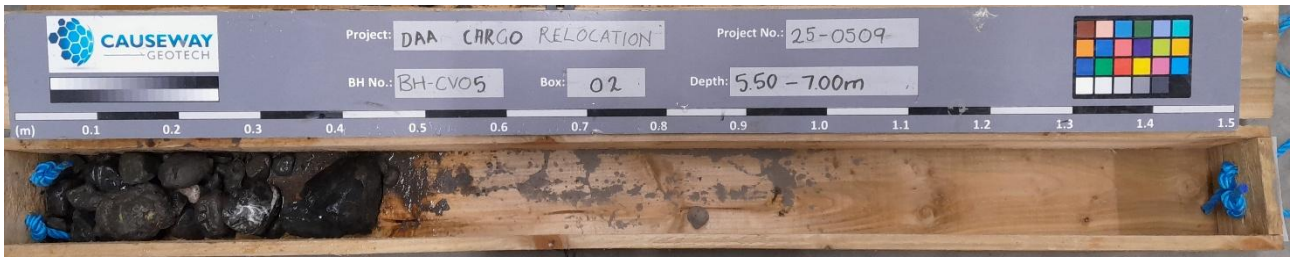
RC-CV04 11.90-13.40m



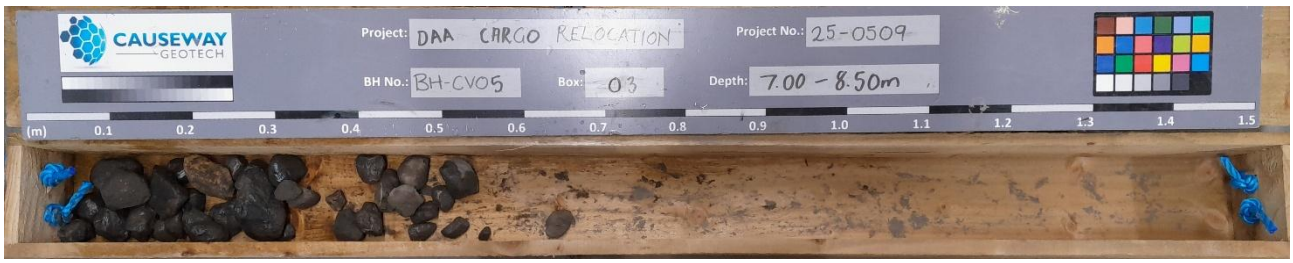
RC-CV04 13.40-14.90m



BH-CV05 4.00-5.50m



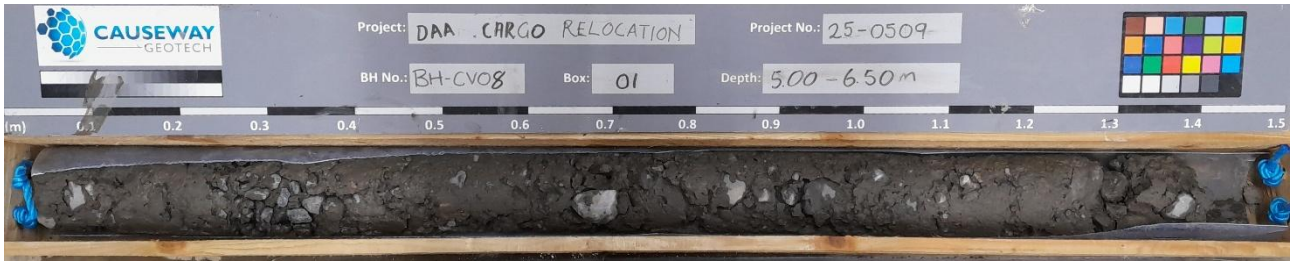
BH-CV05 5.50-7.00m



BH-CV05 7.00-8.50m



BH-CV05 8.50-10.00m



BH-CV08 5.00-6.50m



BH-CV08 6.50-8.00m

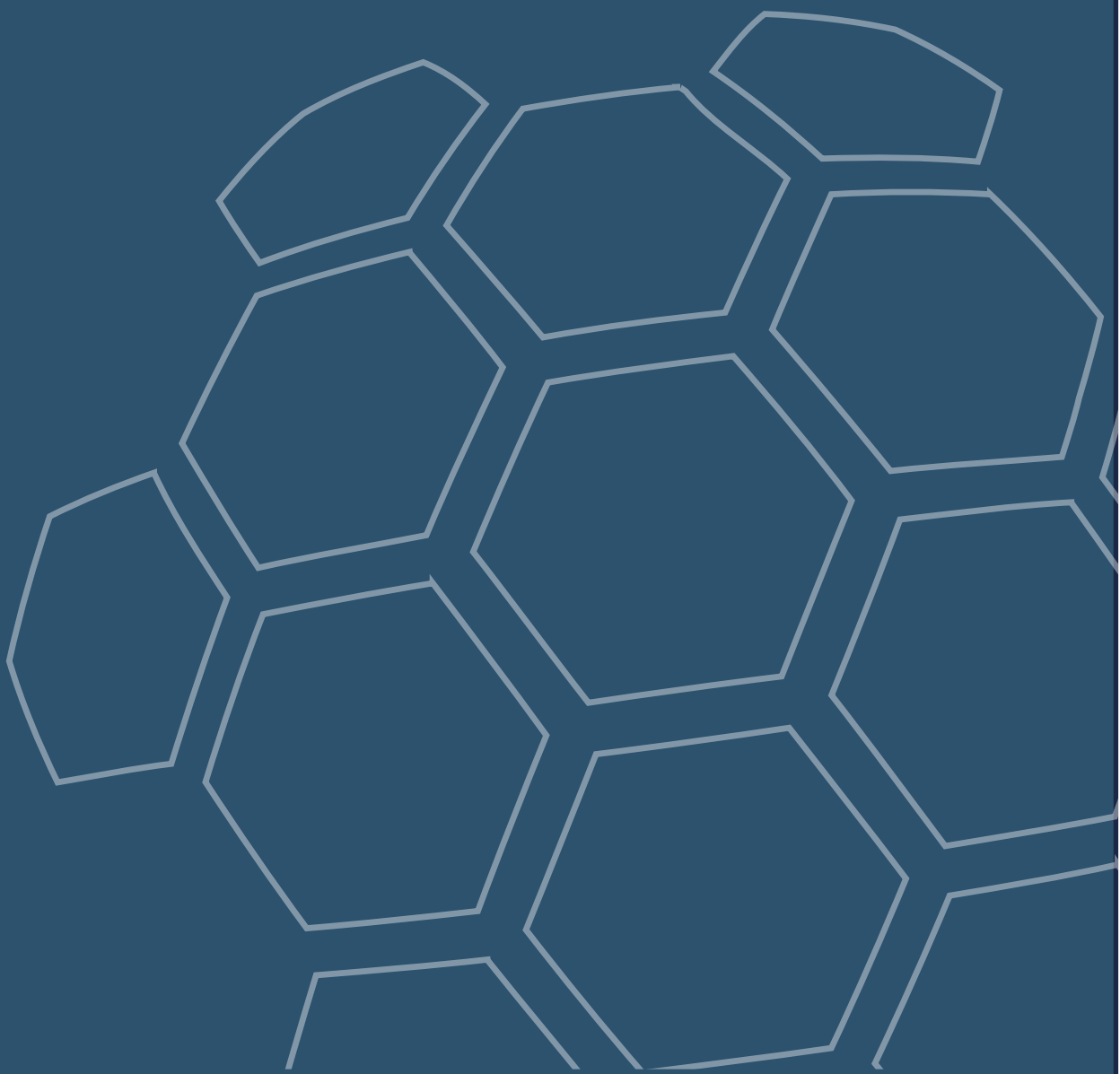


BH-CV08 8.00-9.50m



BH-CV08 9.50-10.00m

APPENDIX D – TRIAL PIT LOGS



CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV01
Coordinates 717379.07 E 742482.38 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.70 mOD	**Date:** 10/07/2025 **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Grey slightly sandy slightly clayey subrounded to subangular fine to coarse GRAVEL with fragments of red brick. Sand is fine to coarse.	
			54.40	0.30		MADE GROUND: Brown to greyish brown slightly gravelly clayey fine to coarse SAND with fragments of red brick. Sand is fine to coarse.	
0.50	ES1		54.20	0.50		Possible MADE GROUND: Firm dark grey to greyish brown slightly gravelly silty CLAY. Gravel is subangular fine to coarse.	
0.50 - 1.50	B4						
1.00	D5						
1.00	ES2						
1.50	ES3		53.20	1.50		Firm to stiff brownish grey slightly sandy gravelly CLAY with low boulder and medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles an boulders are subangular to subrounded.	
1.50 - 2.50	B6						
2.00	D7						
2.60 - 3.30	B8		52.10	2.60		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble and boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles and boulders are subrounded to subangular.	
3.00	D9						
			51.40	3.30		End of trial pit at 3.30m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.30
Width: 1.25
Length: 3.50

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV02
Coordinates 717333.50 E 742443.55 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 55.24 mOD / **Date:** 09/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Stiff light brown slightly sandy gravelly CLAY with low cobble content, fragments of red brick, concrete and plastic. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
0.50	ES1		54.74	0.50			
0.50 - 1.10	B4					Possible MADE GROUND: Stiff light brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
1.00	ES2						
1.10 - 2.00	B5		54.14	1.10		Stiff greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
1.50	D6						
1.50	ES3						
2.00 - 3.00	B7		53.24	2.00		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble and low boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles and boulders are subangular.	
2.50	D8						
			52.24	3.00		End of trial pit at 3.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.00
Width: 1.30
Length: 3.60

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV03
Coordinates	**Client:**	
717287.34 E	Rowlands Civil	
742413.89 N	**Client's Representative:**	Sheet 1 of 1
	Rowlands Civil	Scale: 1:25
Elevation	**Date:** / **Logger:**	FINAL
55.21 mOD	10/07/2025 / EGA	

Method: Trial Pitting

Plant: 14T Tracked Excavator

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						MADE GROUND: Stiff brown slightly sandy slightly gravelly CLAY with fragments of red brick and fine to coarse roots. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50 0.50 0.50 - 1.50	D5 ES1 B4		54.70	0.50		Stiff brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
1.00	ES2						
1.50 1.50 1.50 - 2.10	D6 ES3 B7		53.70	1.50		Firm greyish brown slightly sandy gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
2.10 - 2.80	B8		53.10	2.10		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble and boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
2.50	D9						
			52.40	2.80		End of trial pit at 2.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes

Struck at (m)	Remarks

Depth: 2.80
Width: 1.30
Length: 3.40

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability: Stable

Termination Reason: Terminated on refusal.

Last Updated: 11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV04
Coordinates 717361.66 E 742427.21 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.74 mOD / **Date:** 09/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			54.44	0.30		TOPSOIL with fine to coarse roots	
0.50 0.50 0.50 - 1.20	D5 ES1 B4					MADE GROUND: Stiff to very stiff light brown slightly sandy gravelly CLAY with fragments of red brick and rootlets. Sand is fine to coarse. Gravel is subangular fine to coarse.	
			53.94	0.80		Possible MADE GROUND: Stiff light brown slightly sandy gravelly CLAY with low cobble content and occasional rootlets. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobble are subangular to subrounded.	
1.00	ES2						
1.20 - 1.90	B6		53.54	1.20		Stiff greyish brown slightly sandy gravelly CLAY with medium cobble and low boulder content. Sand is fine to coarse. Gravel is subangular to subrounded fine to coarse. Cobbles and boulders are subangular to subrounded.	
1.50 1.50	D7 ES3						
1.90 - 2.90	B8		52.84	1.90		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble and boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles and boulders are subangular to subrounded.	
2.50	D9						
			51.84	2.90		End of trial pit at 2.90m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.90
Width: 1.05
Length: 3.40

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV05
Coordinates 717291.71 E 742363.83 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 55.26 mOD / **Date:** 02/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine to coarse roots	
			55.06	0.20		Stiff brown slightly sandy slightly gravelly CLAY with occasional roots. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50	B3		54.76	0.50		Stiff greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
0.50	D4						
0.50	ES1						
1.00	ES2						
1.50	B5						
1.50	D6		53.66	1.60		Stiff to very stiff dark grey slightly sandy gravelly CLAY with medium cobble and low boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles and boulders are subrounded.	
2.50	B7						
2.50	D8						
3.50	B9						
3.50	D10						
			50.76	4.50		End of trial pit at 4.50m	

Water Strikes	
Struck at (m)	Remarks

Depth: 4.50
Width: 1.10
Length: 5.50

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV06
Coordinates 717278.62 E 742289.27 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.79 mOD	**Date:** 03/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			54.59	0.20		TOPSOIL:	
0.50	ES1					Firm light brown slightly gravelly sandy CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subrounded.	
0.60 - 0.70	D4						
0.60 - 1.60	B7						
1.00	ES2						
1.50	ES3						
1.60 - 1.80	B8						
1.80 - 1.90	D5		52.99	1.80		Stiff dark grey slightly sandy slightly gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
1.80 - 2.80	B9						
2.60 - 2.70	D6						
			51.89	2.90		End of trial pit at 2.90m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.90
Width: 1.00
Length: 2.90

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV07
Coordinates 717271.64 E 742249.57 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.91 mOD	**Date:** 03/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			54.71	0.20		TOPSOIL:	
0.50	ES1					Firm light brown slightly gravelly sandy CLAYY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to medium. Cobbles are subangular.	
0.60 - 1.60	B4						
0.60 - 1.60	D5						
1.00	ES2						
1.50	ES3						
1.60 - 2.20	B6						
1.60 - 2.20	D7						
2.20 - 2.80	B8		52.71	2.20		Stiff dark grey slightly sandy slightly gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is angular fine to coarse. Cobbles are angular.	
2.20 - 2.80	D9						
			52.11	2.80		End of trial pit at 2.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.80
Width: 1.20
Length: 3.90

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Moderately stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV08
Coordinates 717324.44 E 742228.17 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.71 mOD / **Date:** 07/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine to medium roots	
			54.46	0.25		Stiff brown slightly sandy slightly gravelly CLAY with rootlets. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50	D5		54.20	0.50		Firm to stiff brown to greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
0.50	ES1						
0.50 - 1.50	B4						
1.00	ES2						
1.50	D6						
1.50	ES3						
1.50 - 2.00	B7						
2.00 - 3.00	B8		52.70	2.00		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
2.50	D9						
			51.70	3.00		End of trial pit at 3.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.00
Width: 0.85
Length: 3.20

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV09
Coordinates 717353.25 E 742309.56 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.51 mOD / **Date:** 07/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine to medium roots	
			54.31	0.20		Stiff brown slightly sandy slightly gravelly CLAY with rootlets. Sand is fine to coarse. Gravel is subangular fine to medium.	
0.50	D5		54.01	0.50		Firm to stiff brown to greyish brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
0.50	ES1						
0.50 - 1.50	B4						
1.00	ES2						
1.50	D7						
1.50	ES3						
1.50 - 2.00	B6						
2.00 - 3.00	B8		52.51	2.00		Stiff to very stiff dark grey slightly sandy gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
2.50	D9						
			51.31	3.20		End of trial pit at 3.20m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.20
Width: 0.85
Length: 3.20

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Unstable	Terminated on refusal.	11/09/2025

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CAUSEWAY GEOTECH	**Project No.** 25-0509	**Project Name:** DAA Cargo Relocation	**Trial Pit ID** **TP1-CV10**
	Coordinates 717388.62 E 742369.07 N	**Client:** Rowlands Civil	
Method: Trial Pitting		**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 55.37 mOD	**Date:** 01/07/2025	**Logger:** EGA FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL	
			55.16	0.20		MADE GROUND: Firm to stiff brown slightly sandy slightly gravelly CLAY with low cobble content and fragments of red brick. Sand is fine to coarse. Cobbles are subangular.	
0.50 0.50 - 1.00	ES1 B4		54.86	0.50		MADE GROUND: Stiff greyish brown slightly sandy gravelly CLAY with medium cobble content and fragments of red brick and blocks. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
1.00 1.00 - 2.00	ES2 B5		54.36	1.00		Firm to stiff greyish brown sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular to fine to coarse. Cobbles are subangular.	
1.50	ES3						
2.30 - 3.30	B6		53.06	2.30		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
2.50	D7						
3.30 - 4.30	B8		52.06	3.30		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with low cobble and boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles and boulders are subangular.	
3.50	D9						
			50.86	4.50		End of trial pit at 4.50m	

Water Strikes	
Struck at (m)	Remarks

Depth: 4.50
Width: 1.10
Length: 5.50

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV11
Coordinates 717443.31 E 742198.75 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 54.05 mOD	**Date:** 08/07/2025	**Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine to coarse roots	
			53.80	0.25		Stiff brown slightly sandy slightly gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50	D6		53.54	0.50		Firm to stiff greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
0.50	ES1						
0.50 - 1.50	B4						
1.00	ES2						
1.50	D7						
1.50	ES3						
1.50 - 2.00	B5						
2.00 - 2.90	B8		52.04	2.00		Stiff to very stiff very dark grey slightly sandy gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
2.50	D9						
			51.14	2.90		End of trial pit at 2.90m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 2.90
Width: 1.10
Length: 3.40

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV12
Coordinates 717483.19 E 742362.26 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 53.74 mOD / **Date:** 08/07/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			53.49	0.25		TOPSOIL fine to medium roots	
0.50	ES1		53.29	0.45		Stiff brown slightly sandy slightly gravelly CLAY with rare rootlets. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
0.60 - 1.60	B4					Firm to stiff greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
1.00	ES2						
1.50	ES3						
			52.14	1.60		Stiff to very stiff dark grey slightly sandy gravelly CLAY with medium cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular to subrounded.	
2.50	D6						
2.60 - 3.00	B5						
			50.74	3.00		End of trial pit at 3.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.00
Width: 1.10
Length: 3.50

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated on refusal.	11/09/2025

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CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV13
Coordinates	**Client:**	
717568.20 E	Rowlands Civil	
742168.09 N	**Client's Representative:**	Sheet 1 of 1
	Rowlands Civil	Scale: 1:25
Elevation	**Date:** / **Logger:**	FINAL
53.32 mOD	08/07/2025 / EGA	

Method: Trial Pitting

Plant: 14T Tracked Excavator

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			53.07	0.25		TOPSOIL with fine to medium roots	
0.50	D5		52.82	0.50		Stiff brown slightly sandy slightly gravelly CLAY with occasional rootlets. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50	ES1						
0.50 - 1.50	B4					Firm greyish brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
1.00	ES2						
1.50	D7						
1.50	D8						
1.50	ES3						
1.50 - 1.80	B6						
1.80 - 2.80	B9		51.52	1.80		Stiff to very stiff dark grey slightly sandy gravelly CLAY with medium cobble and low boulder content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobles and boulders are subangular to subrounded.	
2.50	D10						
			50.32	3.00		End of trial pit at 3.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.00
Width: 1.10
Length: 3.30

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability: Stable

Termination Reason: Terminated on refusal.

Last Updated: 11/09/2025

AGS

CAUSEWAY GEOTECH

Project No.	Project Name:	Trial Pit ID
25-0509	DAA Cargo Relocation	TP1-CV16
Coordinates 717858.13 E 742285.08 N	**Client:** Rowlands Civil	
Method: Trial Pitting	**Client's Representative:** Rowlands Civil	Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 52.09 mOD / **Date:** 30/06/2025 / **Logger:** EGA	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
						TOPSOIL with fine roots	
			51.79	0.30			
0.40	D5					Stiff brown slightly sandy slightly gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
0.50	B4						
0.50	ES1						
1.00	ES2						
1.20	B6		50.89	1.20		Firm to stiff brown slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
1.50	D7						
1.50	ES3						
			50.19	1.90			
2.00	B8					Stiff very dark grey slightly sandy gravelly CLAY with low cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
2.50	D9						
3.00	B10						
3.50	D11						
			47.59	4.50		End of trial pit at 4.50m	

Water Strikes	
Struck at (m)	Remarks

Depth: 4.50
Width: 1.70
Length: 4.20

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Stable	Terminated at scheduled depth.	11/09/2025

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CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV17
Coordinates 717821.91 E 742104.62 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 52.11 mOD	**Date:** 04/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			51.91	0.20		TOPSOIL:	
0.50	B4					Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.50	D8						
0.50	ES1						
1.00	B5						
1.00	ES2						
1.50	D7						
1.50	ES3						
1.80	B6		50.31	1.80		Stiff dark grey slightly sandy gravelly CLAY with high cobble content. Sand is fine to coarse. Gravel is subangular fine to coarse. Cobbles are subangular.	
		slow seepage					▼
2.50	D10						
3.00	B9						
			48.91	3.20		End of trial pit at 3.20m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks
2.20	slow seepage

Depth: 3.20
Width: 1.10
Length: 3.00

Remarks:
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability: Moderately stable

Termination Reason: Terminated on refusal.

Last Updated: 11/09/2025

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CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV18
Coordinates 717219.51 E 742264.79 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 55.38 mOD	**Date:** 02/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			55.18	0.20		TOPSOIL: with medium roots (2.0-5.0mm).	
0.50 - 0.00 0.50 - 0.60 0.50 - 1.50	ES1 D8 B4					Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse	
1.00	ES2						
1.50 1.50 - 1.60	ES3 D9						
1.80 - 2.80	B5		53.58	1.80		Firm to stiff very dark grey sandy gravelly CLAY with high cobble content and low boulder content. Sand is fine to coarse. Gravel is angular fine to coarse. Cobbles and boulders are angular	
2.50 - 2.60	D10						
3.00 - 4.00	B6		52.38	3.00		Stiff to very stiff very dark grey sandy gravelly CLAY with high cobble content and low boulder content. Sand is fine to coarse. Gravel is angular fine to coarse. Cobbles and boulders are angular	
3.50 - 3.60	D11						
			50.88	4.50		End of trial pit at 4.50m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 4.50
Width: 1.00
Length: 3.90

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Moderately stable	Terminated at scheduled depth.	11/09/2025

AGS

CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV19
Coordinates 717156.92 E 742285.93 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 56.44 mOD	**Date:** 03/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			56.24	0.20		TOPSOIL	
0.50	ES1					Soft light brown slightly sandy gravelly CLAY. Sand is fine to coarse. Gravel is subangular fine to coarse.	
0.60 - 1.60	B4						
0.60 - 1.60	D7						
1.00	ES3						
1.50	ES2						
1.60 - 2.20	B5						
1.60 - 2.20	D8						
			54.24	2.20		Firm to Stiff dark grey slightly sandy gravelly CLAY with high cobble content. Sand is fine to coarse. Gravel is angular fine to coarse. Cobbles are subangular	
2.60 - 3.80	B6						
2.60 - 3.80	D9						
			52.64	3.80		End of trial pit at 3.80m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 3.80
Width: 1.20
Length: 3.90

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability:	Termination Reason	Last Updated
Moderately stable	Terminated on refusal.	11/09/2025

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CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-CV20
Coordinates 717225.71 E 742356.12 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 55.73 mOD	**Date:** 02/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			55.53	0.20		TOPSOIL: with fine roots (0.5-2.0mm).	
0.50	ES1					Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular fine to coarse.	
0.60 - 0.70	D8						
0.60 - 1.60	B4						
1.00	ES3						
1.50	ES2						
1.60 - 1.70	D9		54.13	1.60		Firm to stiff very dark grey slightly sandy gravelly CLAY with high cobble content and low boulder content. Sand is fine to coarse. Gravel is angular fine to coarse. Cobbles and boulders are angular.	
1.60 - 2.60	B5						
2.60 - 2.70	D10						
2.60 - 3.60	B6						
3.60 - 3.70	D11						
3.60 - 4.00	B7						
			51.73	4.00		End of trial pit at 4.00m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 4.00
Width: 1.20
Length: 3.90

Remarks:
No groundwater encountered.
Plate load test completed at 1.00m.
DCP completed adjacent to pit.

Stability: unstable below 3.5m

Termination Reason: Terminated on refusal.

Last Updated: 11/09/2025

AGS

APPENDIX E – TRIAL PIT PHOTOGRAPHS

TP1-CV01



CAUSEWAY GEOTECH

TP1-CV01



TP1-CV01



TP1-CV01



TP1-CV01



TP1-CV01



TP1-CV02



CAUSEWAY GEOTECH

TP1-CV02



TP1-CV02



TP1-CV02



TP1-CV02



TP1-CV03


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
10.07.2025
EH Number
TP-CV03
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV03



TP1-CV03



TP1-CV03



TP1-CV03


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
10-07-2025
EH Number
TP-CV03
(m)
0.1
0.2
0.3
0.4
0

TP1-CV03



TP1-CV04


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
09.07.2025
EH Number
TP-CV04
(m)
0.1
0.2
0.3
0.4
0.5

TP1-CV04



TP1-CV04



TP1-CV04



TP1-CV04


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
09.07.2025
EH Number
TP-CV04
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV04



TP1-CV05


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
02.07.2025
EH Number
TP-CV05
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV05



TP1-CV05



TP1-CV05



TP1-CV05


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
02.07.2025
EH Number
TP-CV05
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV05



TP1-CV06



CAUSEWAY GEOTECH

TP1-CV06



TP1-CV06



TP1-CV06


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
03-07-2025
EH Number
TP-CV06
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV06



TP1-CV06



TP1-CV07


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
03.07.2025
EH Number
TP-CV07
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV07



CAUSEWAY GEOTECH

TP1-CV07



TP1-CV07



TP1-CV07



TP1-CV07



TP1-CV08


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
7/7/25
EH Number
TP-CV 8
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV08



TP1-CV08



TP1-CV08



TP1-CV08



CAUSEWAY GEOTECH

TP1-CV08



TP1-CV09



CAUSEWAY GEOTECH

TP1-CV09



TP1-CV09



TP1-CV09



TP1-CV09



CAUSEWAY GEOTECH

TP1-CV09



TP1-CV10



CAUSEWAY GEOTECH

TP1-CV10



TP1-CV10



TP1-CV10



TP1-CV10



TP1-CV10



CAUSEWAY GEOTECH

TP1-CV11



CAUSEWAY GEOTECH

TP1-CV11



TP1-CV11



TP1-CV11



TP1-CV11


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
08-07-2025
EH Number
TP-CV11
(m)
0.1
0.2
0.3
0.4
0.5

TP1-CV11



TP1-CV12


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
08.07.2025
EH Number
TP-CV12
(m) 0.1 0.2 0.3 0.4 0.5

TP1-CV12



TP1-CV12



TP1-CV12


CAUSEWAY
GEOTECH
Project Name
DAA CARGO
Project Number
25-0509
Date
08-07-2025
EH Number
TP-CV12
(m)
0.1
0.2
0.3
0.4
0.5

TP1-CV12

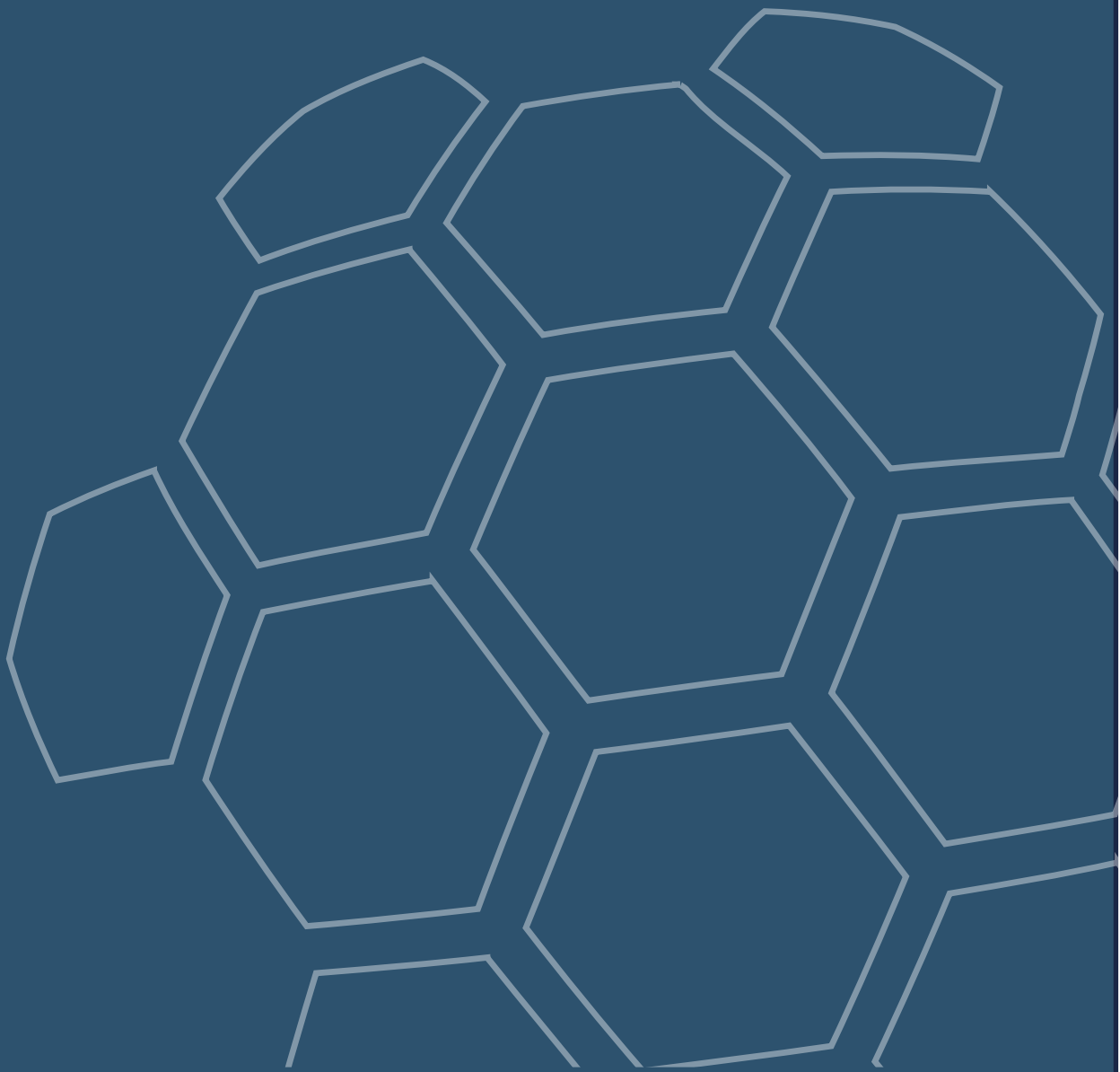


TP1-CV12



TP1-CV13

APPENDIX F – INFILTRATION TEST RESULTS



CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-IF14
Coordinates 717692.94 E 742149.54 N	**Client:** Rowlands Civil		
Method: Trial Pitting	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 52.81 mOD	**Date:** 04/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			52.61	0.20		TOPSOIL:	
						Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular fine.	
			51.31	1.50		End of trial pit at 1.50m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.50
Width: 1.10
Length: 2.80

Remarks:
Infiltration test completed at 1.5mbgl.

Stability: Moderately stable

Termination Reason: Terminated at scheduled depth.

Last Updated: 11/09/2025

AGS

Soakaway Infiltration Test

Project No.: 25-0509
Site: DAA Cargo Relocation Project
Test Location: TP1-IP14
Test Date: 04 July 2025

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.10	2.80
test pit base dimensions	1.00	2.80
test pit depth (m)	1.50	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.64	0.86
1	0.63	0.87
1	0.63	0.87
2	0.63	0.87
3	0.63	0.87
4	0.63	0.87
5	0.63	0.87
10	0.63	0.87
20	0.63	0.87
30	0.63	0.87
40	0.63	0.87
50	0.63	0.87
60	0.63	0.87

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.65 m
depth to water surface (target) 0.86 m
time to reach target depth not reached

Test end

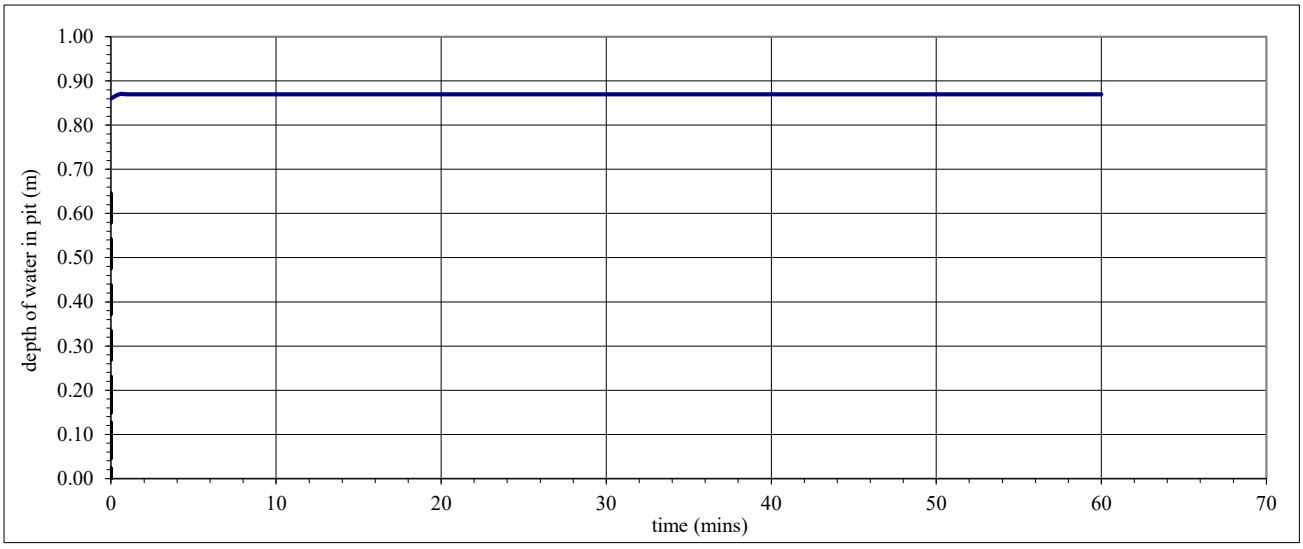
25% head of water at 0.22 m
depth to water surface (target) 1.29 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, f (m/min)	Soil infiltration rate, f (m/h)
	0.86	0.65	N/A				
	1.29	0.22					



CAUSEWAY GEOTECH

Project No. 25-0509	**Project Name:** DAA Cargo Relocation		**Trial Pit ID** TP1-IF15
Coordinates 717699.43 E 742320.79 N	**Client:** Rowlands Civil		
Method: Soakaway Pit	**Client's Representative:** Rowlands Civil		Sheet 1 of 1 Scale: 1:25
Plant: 14T Tracked Excavator	**Elevation** 53.15 mOD	**Date:** 04/07/2025	**Logger:** MM	FINAL

Depth (m)	Sample / Tests	Field Records	Level (mOD)	Depth (m)	Legend	Description	Water
			52.95	0.20		TOPSOIL:	
						Firm light brown slightly gravelly sandy CLAY. Sand is fine to coarse. Gravel is angular fine.	
			51.55	1.60		End of trial pit at 1.60m	

0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Water Strikes	
Struck at (m)	Remarks

Depth: 1.60
Width: 1.00
Length: 3.00

Remarks:
Infiltration test completed at 1.6mbgl.

Stability:	Termination Reason	Last Updated
Moderately stable	Terminated at scheduled depth.	11/09/2025

AGS

Soakaway Infiltration Test

Project No.: 25-0509
Site: DAA Cargo Relocation Project
Test Location: TP1-IP15
Test Date: 04 July 2025

Analysis using method as described in BRE DG 365 (2016) and CIRIA Report C753-The SUDS Manual (2015)

	width (m)	length (m)
test pit top dimensions	1.00	3.00
test pit base dimensions	0.80	2.80
test pit depth (m)	1.60	

depth to groundwater before adding water (m) = Dry

Time (mins)	Depth to water surface (m)	Head of water in pit (m)
0	0.65	0.95
1	0.65	0.95
1	0.65	0.95
2	0.65	0.95
3	0.65	0.95
4	0.65	0.95
5	0.65	0.95
10	0.65	0.95
20	0.65	0.95
30	0.65	0.95
40	0.65	0.95
50	0.65	0.95
60	0.65	0.95

RESULTS (FROM GRAPH BELOW)

Test start

75% head of water at 0.71 m
depth to water surface (target) 0.89 m
time to reach target depth not reached

Test end

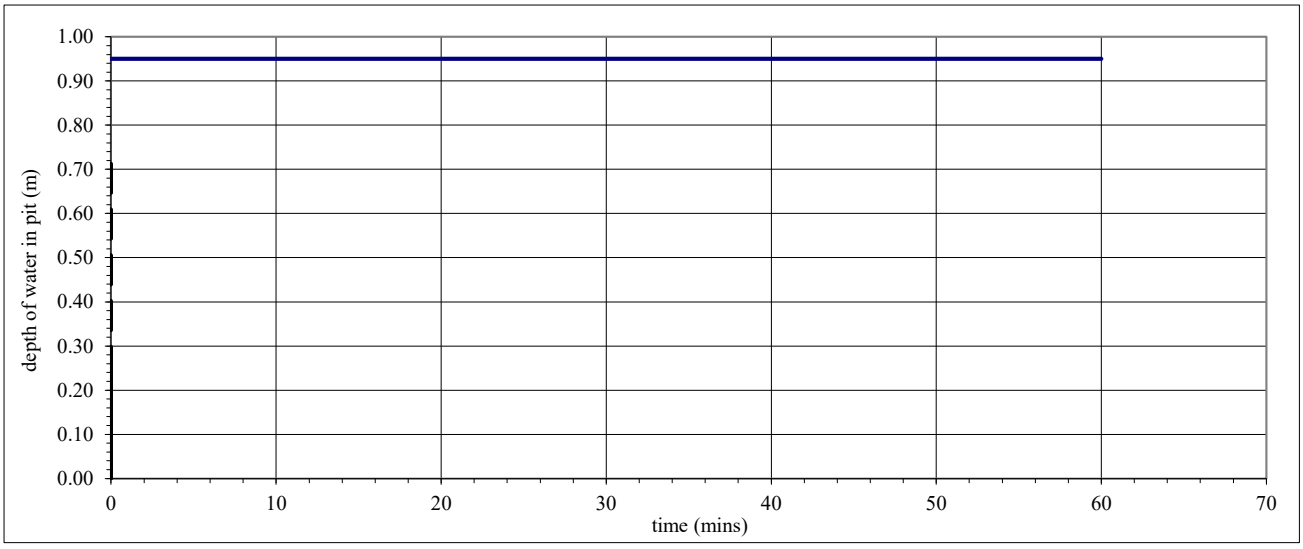
25% head of water at 0.24 m
depth to water surface (target) 1.36 m
time to reach target depth not reached

soil infiltration rate $f = \frac{V_{p75-25}}{a_{s50} \times t_{p75-25}}$

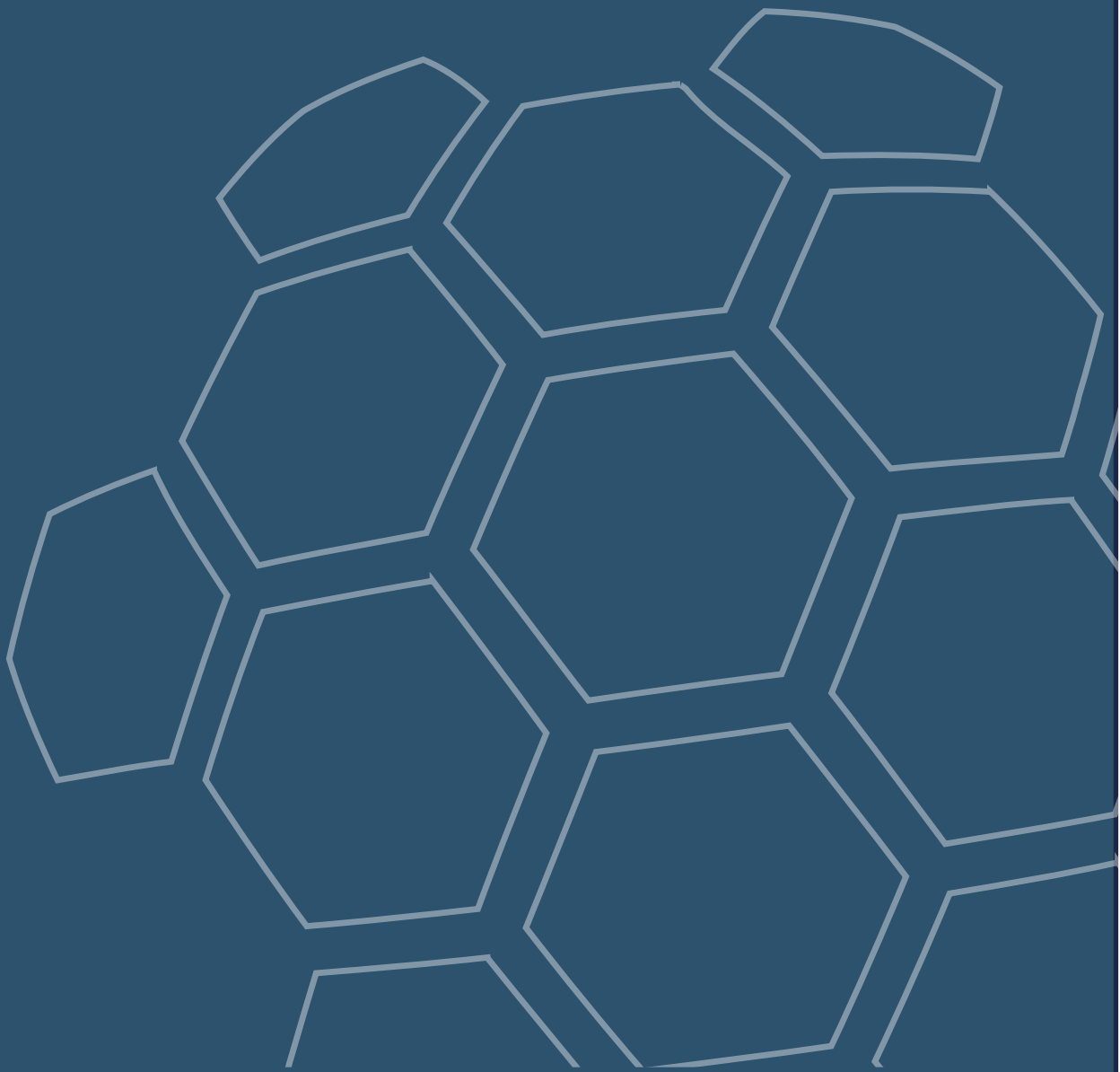
Infiltration rate (f) is very low

TARGET DEPTHS AND CALCULATED VALUES

Time (mins)	Depth to water surface (m)	Head of water in pit (m)	Time elapsed, t_{p75-25} (mins)	Volume of water lost, V_{p75-25} (m^3)	Area of walls and base at 50% drop, a_{s50} (m^2)	Soil infiltration rate, f (m/min)	Soil infiltration rate, f (m/h)
	0.89	0.71	N/A				
	1.36	0.24					



APPENDIX G – INDIRECT IN-SITU CBR TEST RESULTS



Dynamic Cone Penetrometer (DCP) test results and estimated CBR

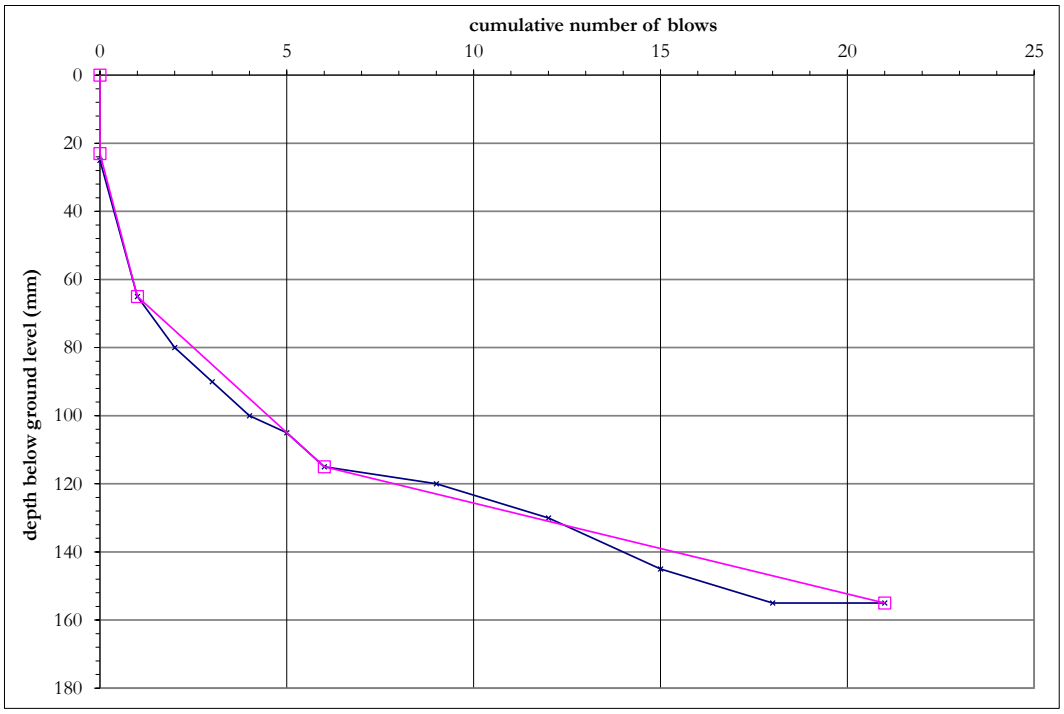
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV01

Test Number	1
Depth bgl (m)	0.00

Date Tested	14/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Imported Gravel



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
23		
23	42	5.8
65		
65	10	26
115		
115	2.7	>100
155		

CBR Range	Min: 26 Max: >100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

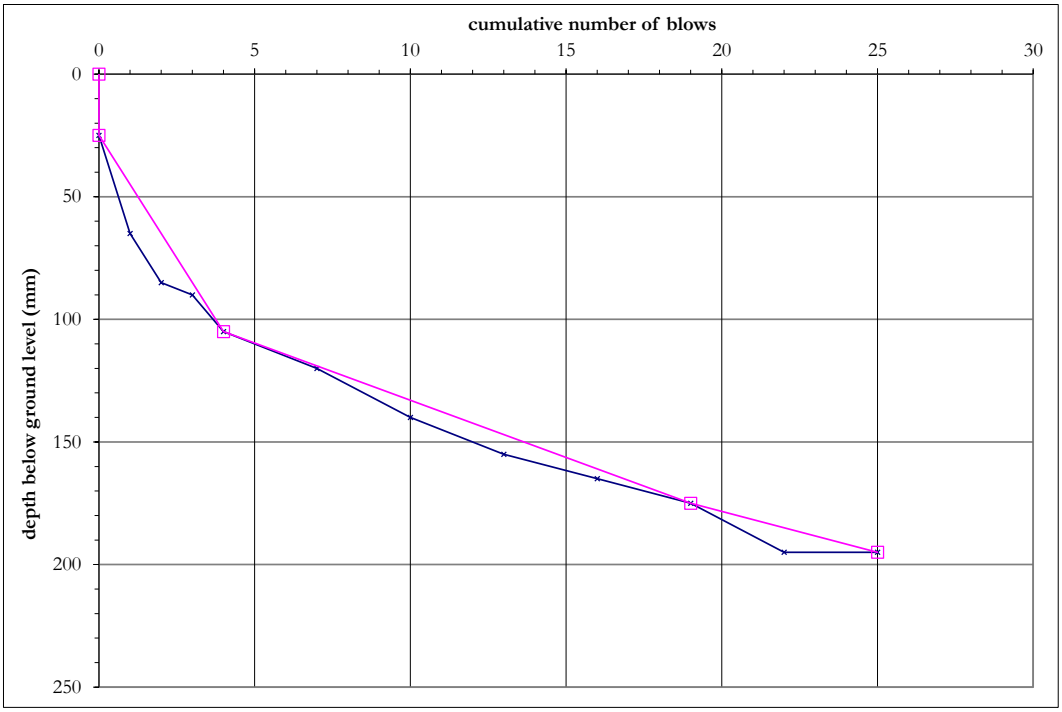
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV01

Test Number	2
Depth bgl (m)	0.00

Date Tested	14/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Imported Gravel



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
25		
25	20	13
105		
105	4.7	59
175		
175	3.3	85
195		

CBR Range	Min: 13 Max: 85	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

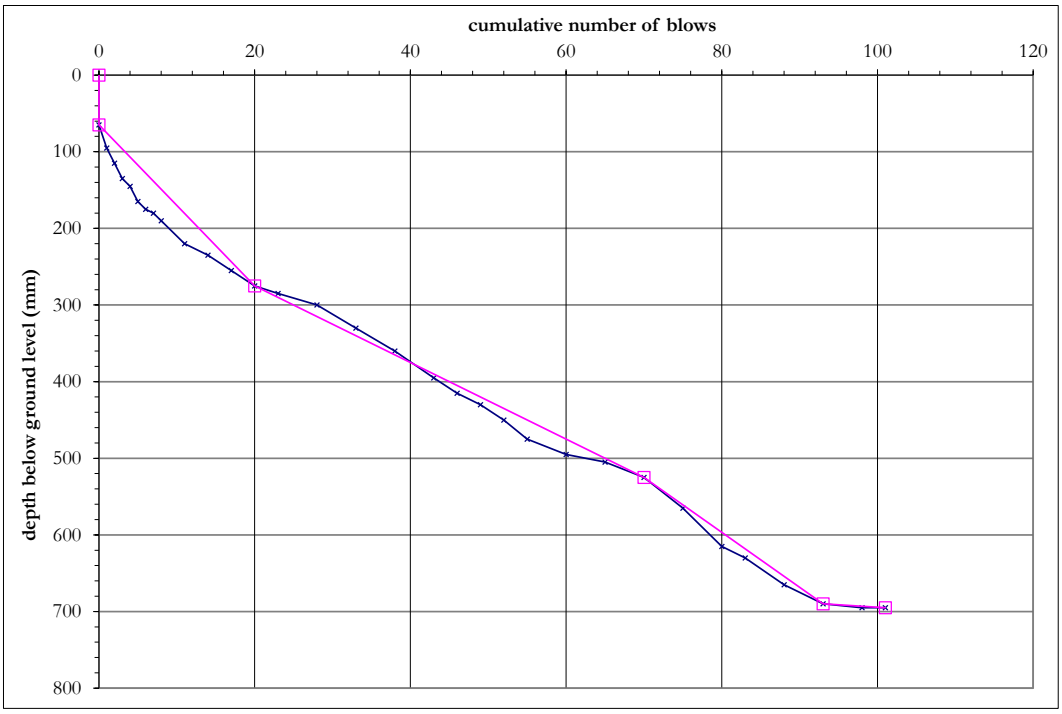
Dynamic Cone Penetrometer (DCP) test results and estimated CBR

Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV01

Test Number	3	**Date Tested**	14/07/2025
Depth bgl (m)	0.00	**Weather**	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Imported Gravel



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
65		
65	11	25
275		
275	5	55
525		
525	7.2	38
690		
690	0.6	>100
695		

CBR Range	Min: 25 Max: >100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

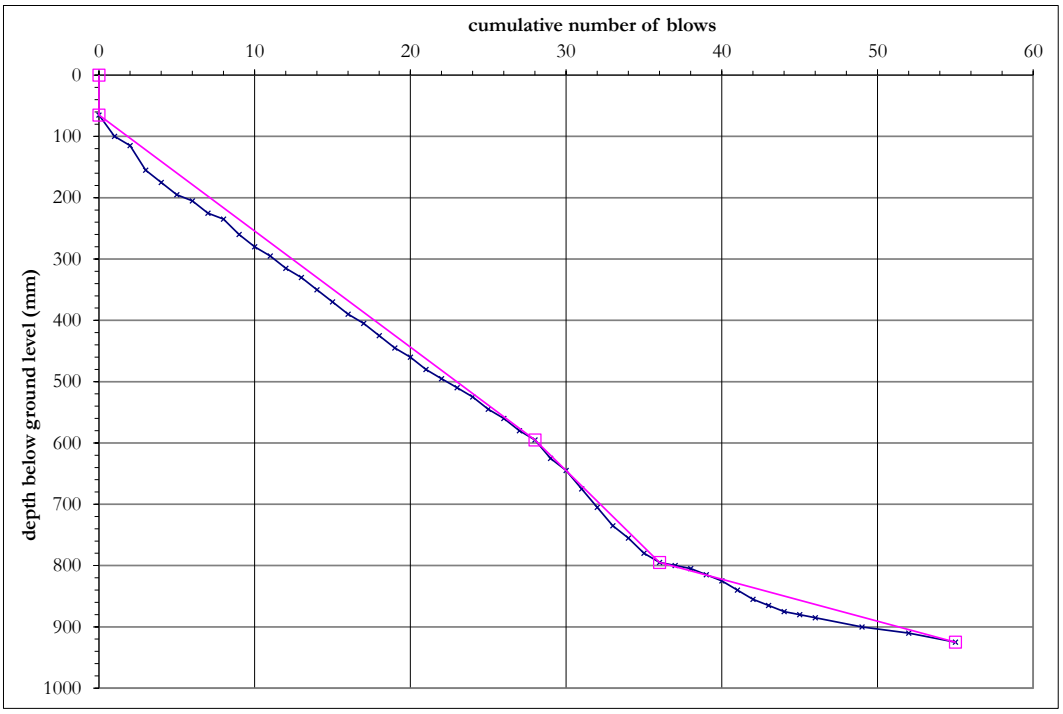
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV02

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Made Ground: Clay



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
65		
65	19	13
595		
595	25	10
795		
795	6.8	40
925		

CBR Range	Min: 10 Max: 40	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

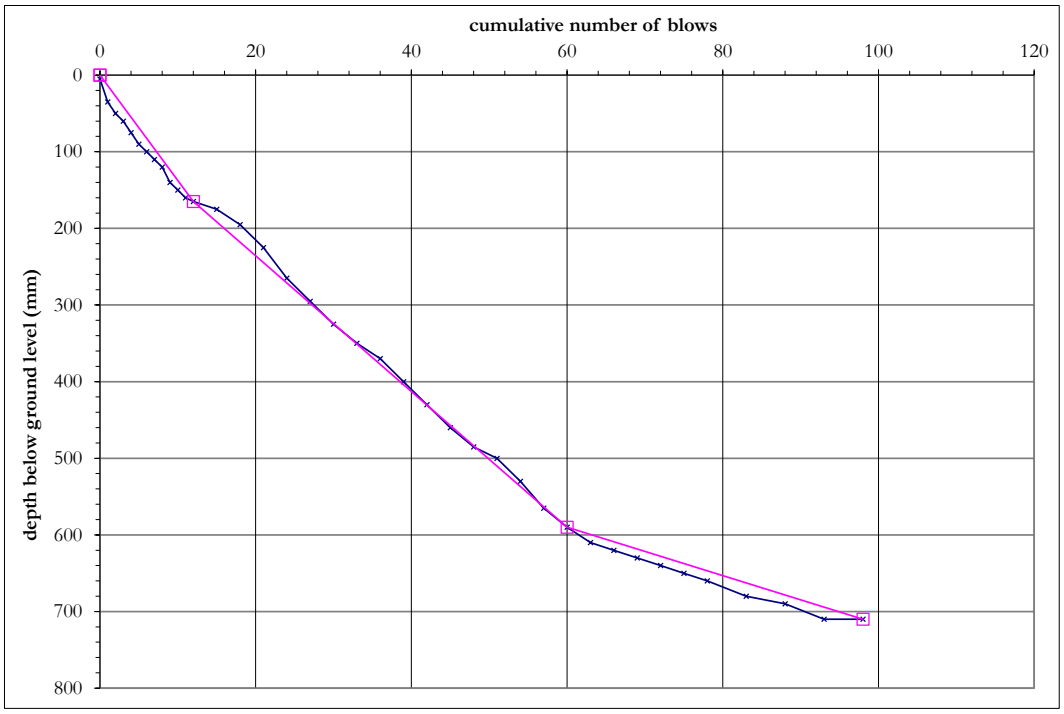
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV03

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Made Ground: Clay



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
0		
0	14	19
165		
165	8.9	30
590		
590	3.2	90
710		

CBR Range	Min: 19 Max: 90	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

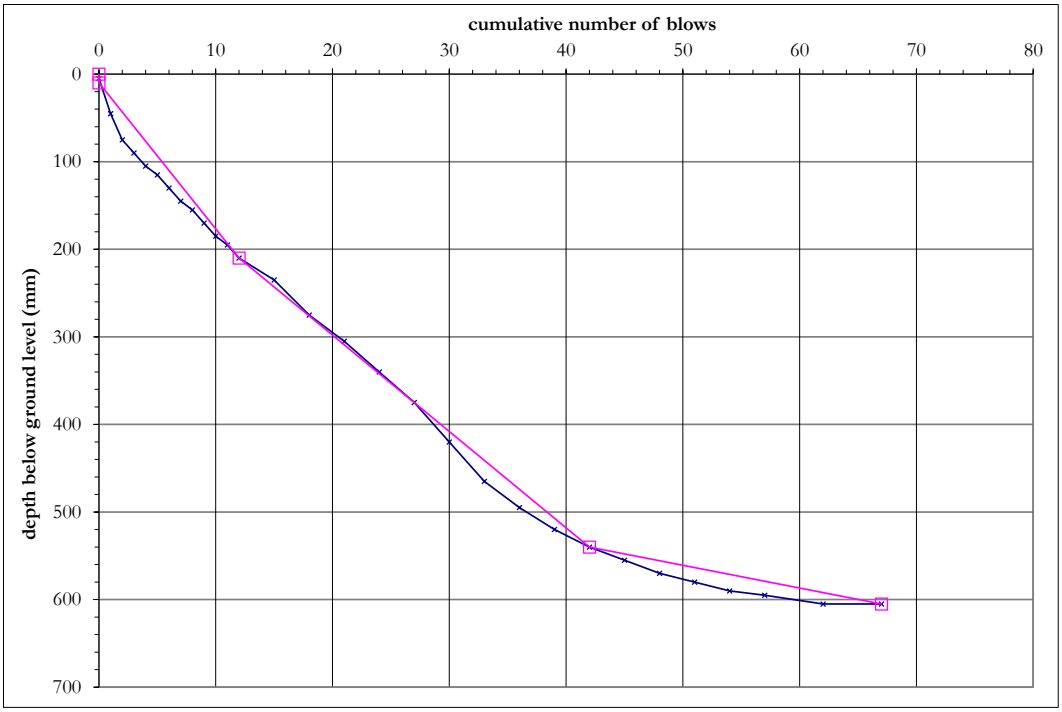
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV04

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
10		
10	17	15
210		
210	11	24
540		
540	2.6	>100
605		

CBR Range	Min: 15 Max: >100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

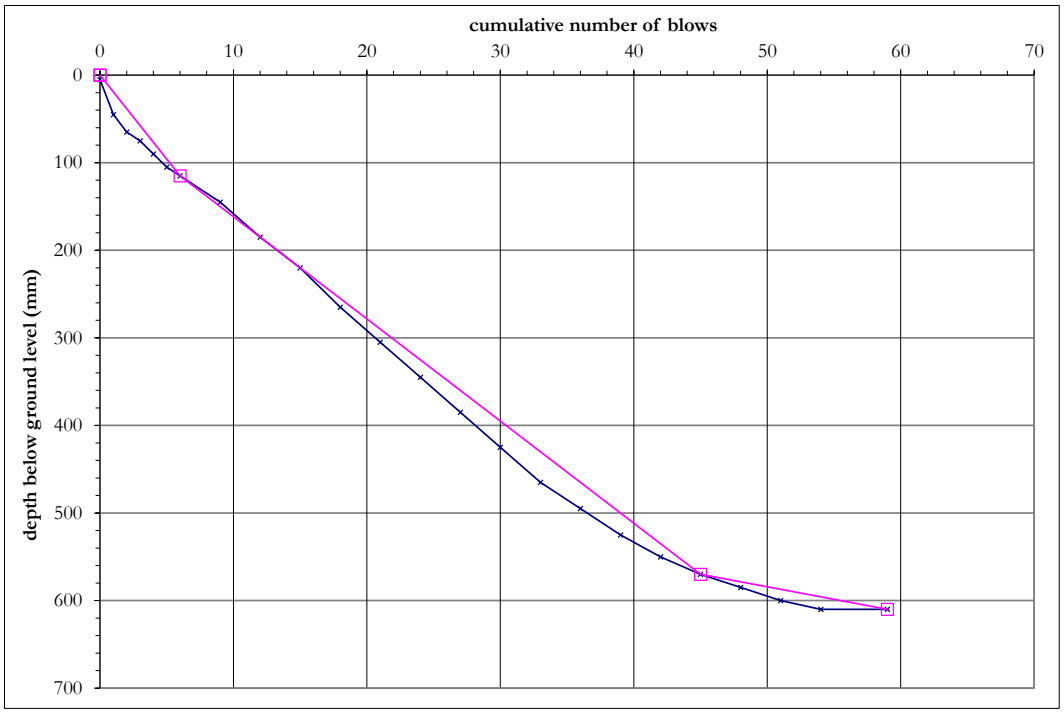
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV04

Test Number	2
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
0		
0	19	13
115		
115	12	23
570		
570	2.9	100
610		

CBR Range	Min: 13 Max: 100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

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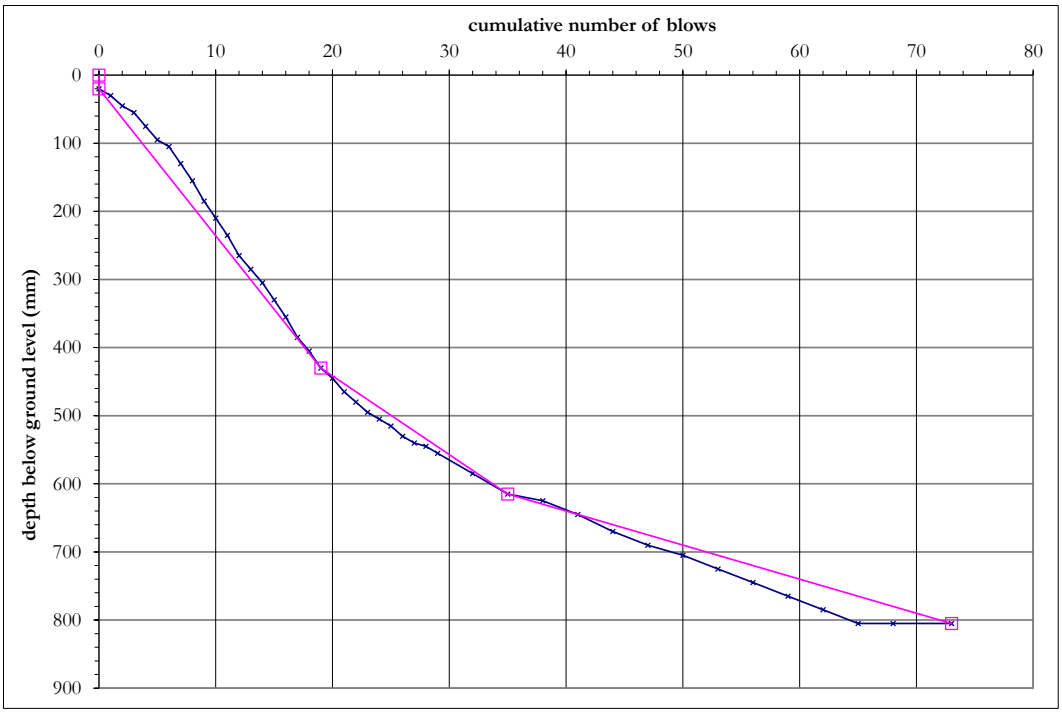
Dynamic Cone Penetrometer (DCP) test results and estimated CBR

Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV05

Test Number	1	**Date Tested**	11/07/2025
Depth bgl (m)	0.00	**Weather**	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
20		
20	22	12
430		
430	12	23
615		
615	5	55
805		

CBR Range	Min: 12 Max: 55	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

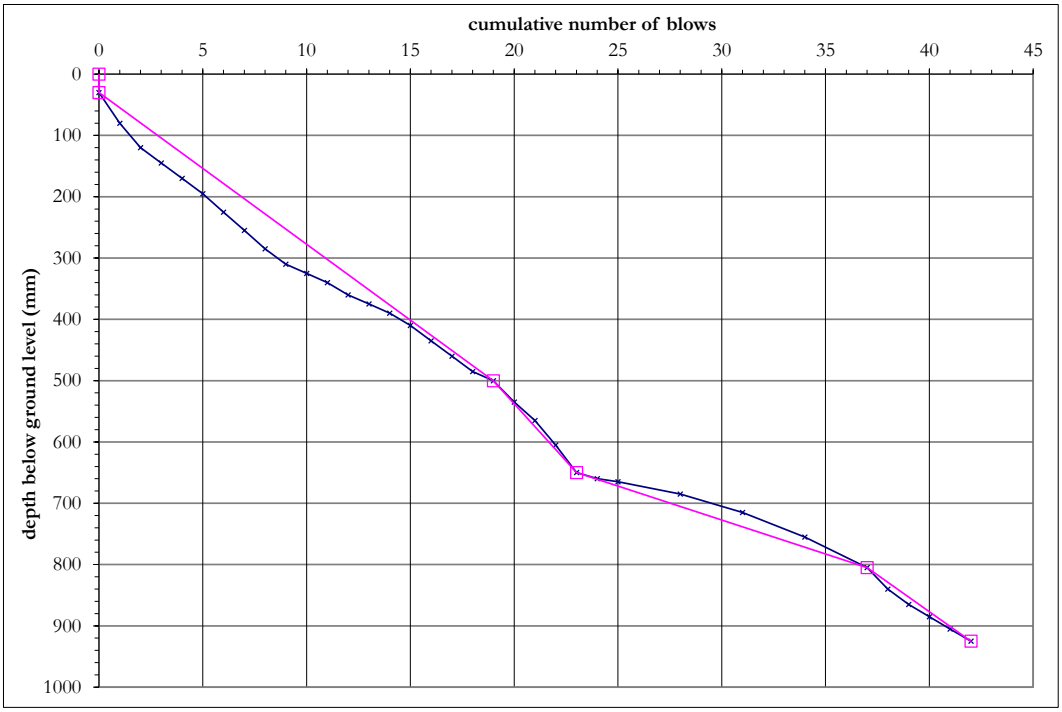
Dynamic Cone Penetrometer (DCP) test results and estimated CBR

Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV06

Test Number	1	**Date Tested**	11/07/2025
Depth bgl (m)	0.00	**Weather**	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
30		
30	25	10
500		
500	38	6.6
650		
650	11	24
805		
805	24	10
925		

CBR Range	Min: 6.6 Max: 24	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

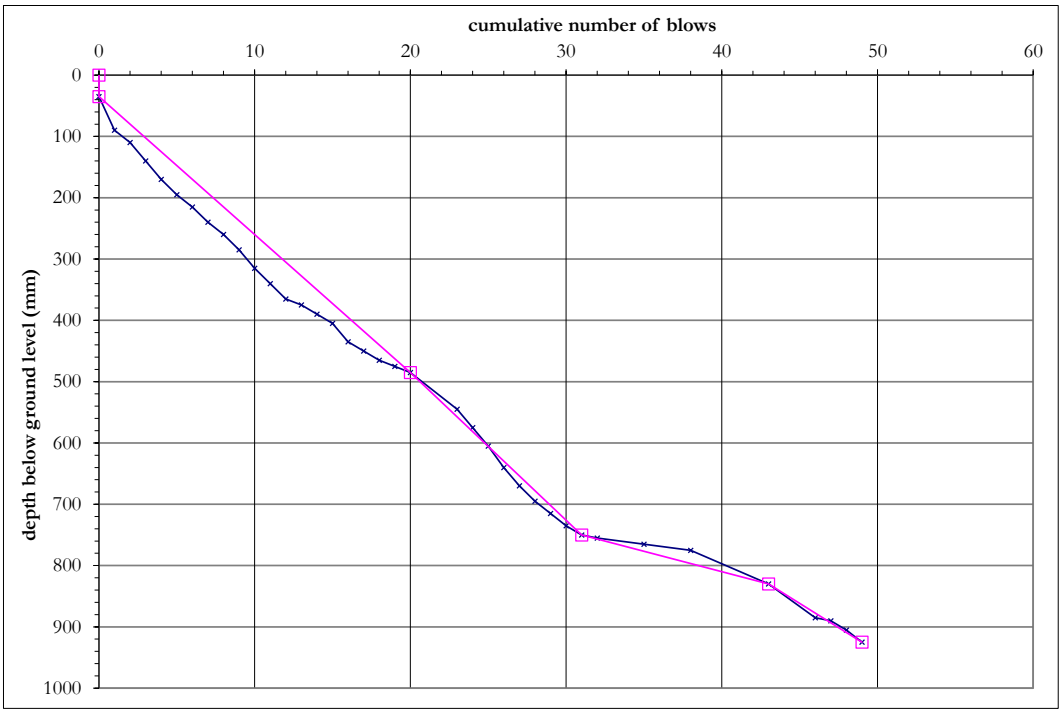
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV07

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
35		
35	23	11
485		
485	24	10
750		
750	6.7	41
830		
830	16	16
925		

CBR Range	Min: 10 Max: 41	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate	M. Gilbert	July 2025

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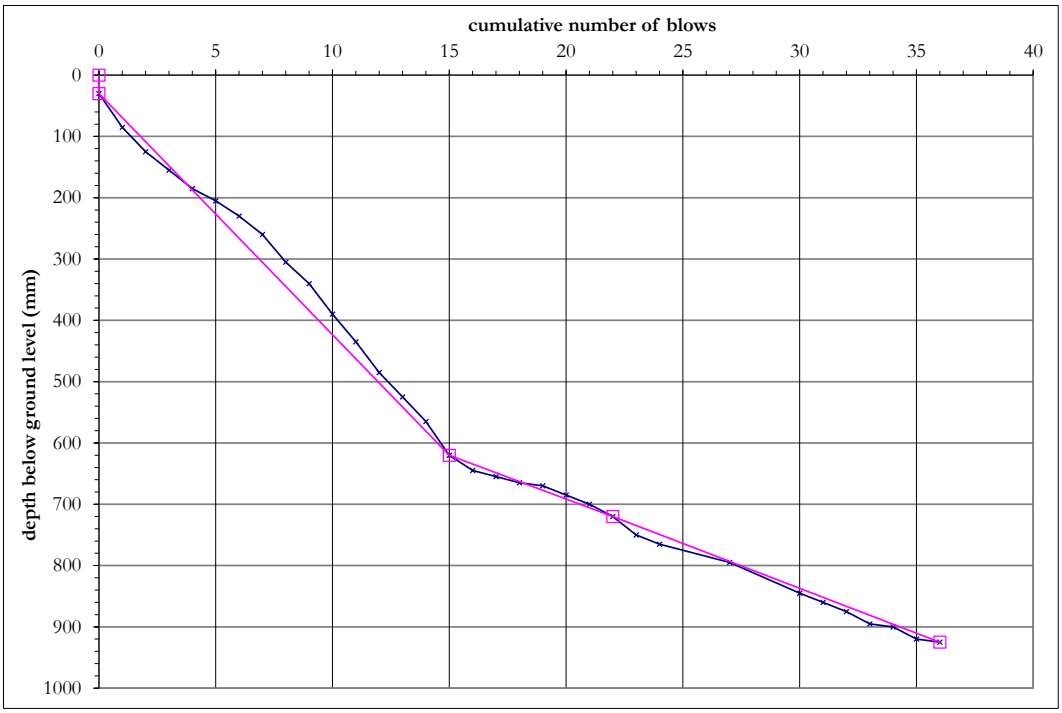
Dynamic Cone Penetrometer (DCP) test results and estimated CBR

Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV08

Test Number	1	**Date Tested**	11/07/2025
Depth bgl (m)	0.00	**Weather**	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
30		
30	39	6.2
620		
620	14	18
720		
720	15	18
925		

CBR Range	Min: 6.2 Max: 18	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

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Dynamic Cone Penetrometer (DCP) test results and estimated CBR

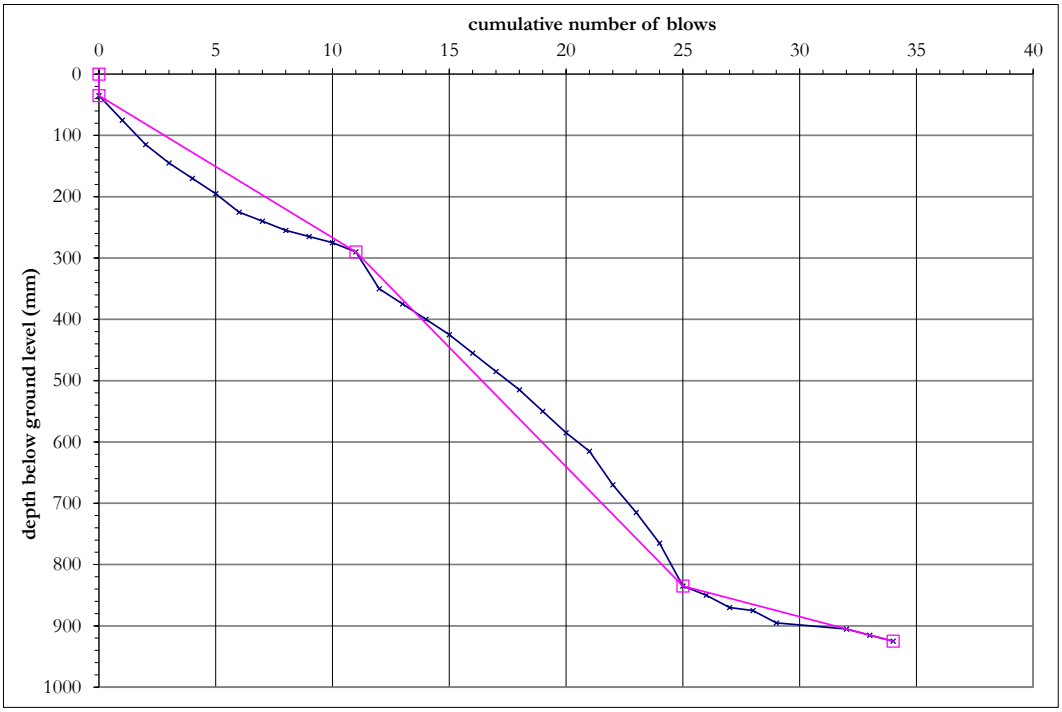
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV09

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
35		
35	23	11
290		
290	39	6.3
835		
835	10	26
925		

CBR Range	Min: 6.3 Max: 26	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

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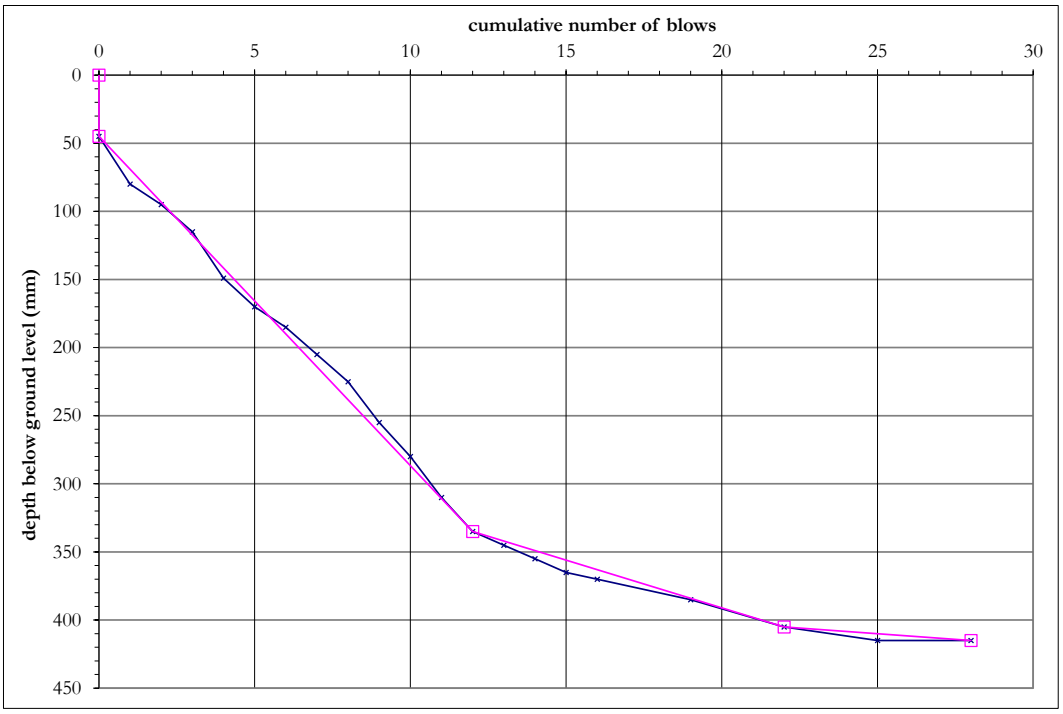
Dynamic Cone Penetrometer (DCP) test results and estimated CBR

Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV10

Test Number	1	**Date Tested**	11/07/2025
Depth bgl (m)	0.00	**Weather**	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
45		
45	24	10
335		
335	7	39
405		
405	1.7	>100
415		

CBR Range	Min: 10 Max: >100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate	M. Gilbert	July 2025

UKAS TESTING 10122

Dynamic Cone Penetrometer (DCP) test results and estimated CBR

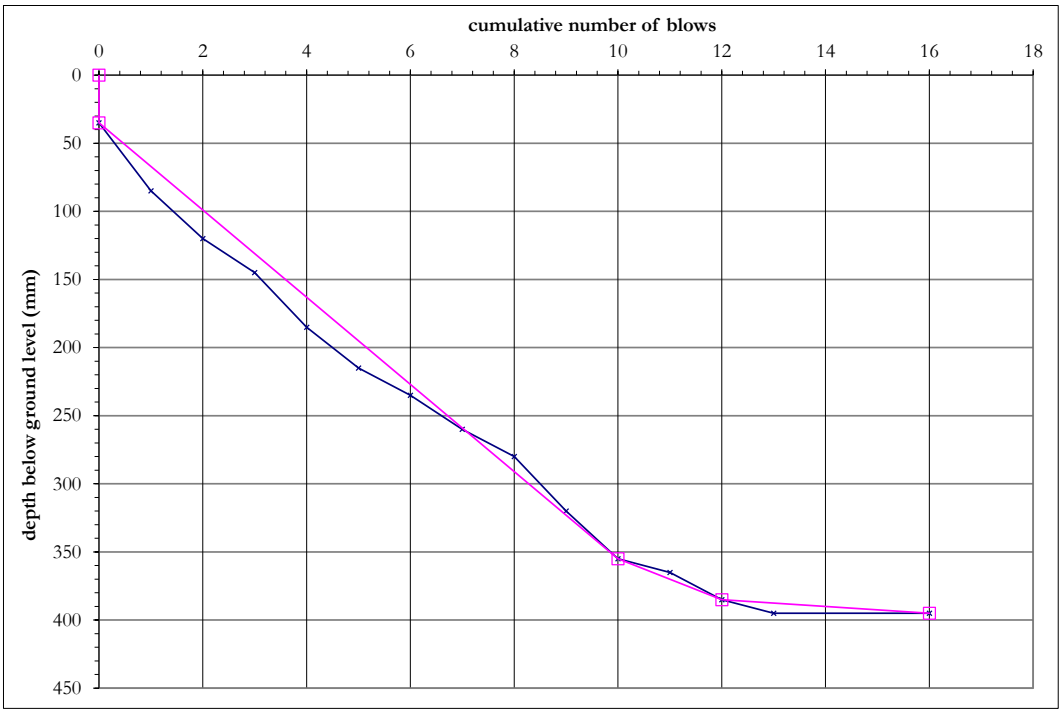
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV10

Test Number	2
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0 35	N/A	N/A
35 355	32	7.7
355 385	15	17
385 395	2.5	>100

CBR Range	Min: 7.7 Max: >100	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

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Dynamic Cone Penetrometer (DCP) test results and estimated CBR

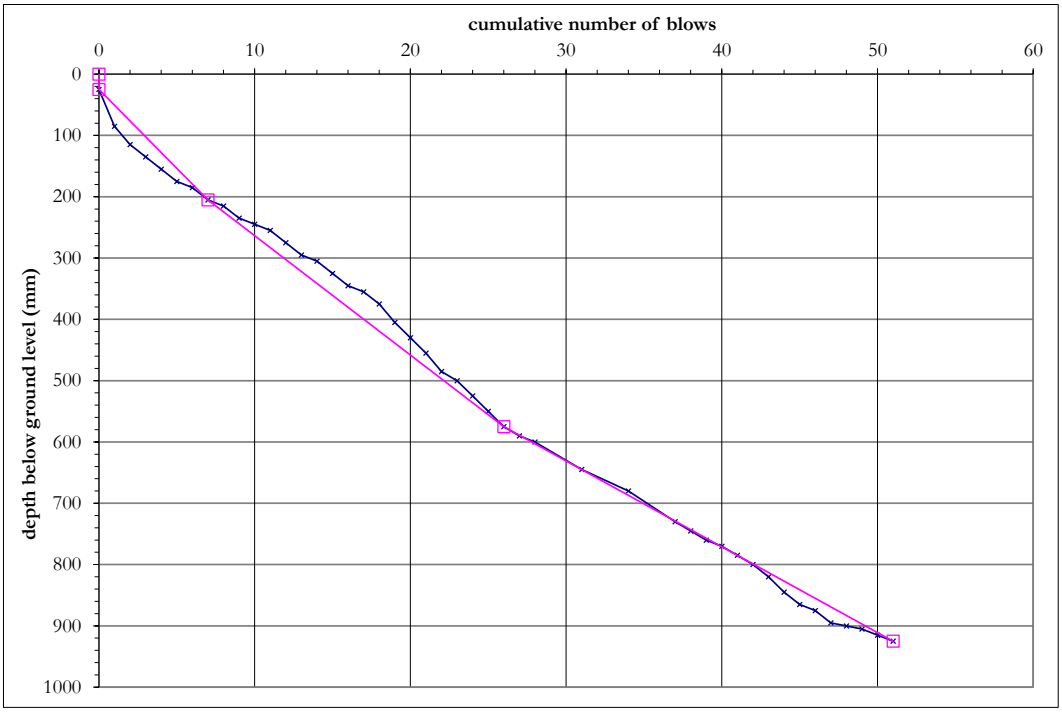
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV11

Test Number	1
Depth bgl (m)	0.00

Date Tested	14/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
25		
25	26	9.8
205		
205	19	13
575		
575	14	19
925		

CBR Range	Min: 9.8 Max: 19	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

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Dynamic Cone Penetrometer (DCP) test results and estimated CBR

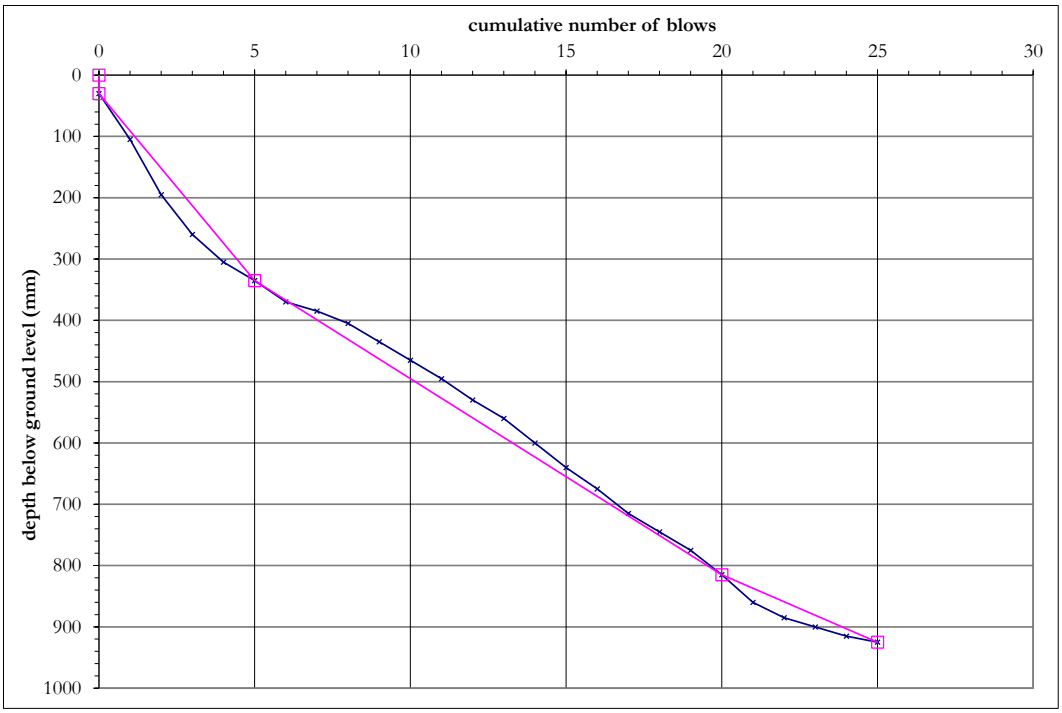
Project Number	25-0509
Project Name	DAA Cargo Relocation
Site Location	TP1-CV20

Test Number	1
Depth bgl (m)	0.00

Date Tested	11/07/2025
Weather	Dry

Test conducted in accordance with Documented In-House Technical Procedure IMS TP7-4 and DMRB CS 229 Rev 0
CBR calculated using the TRRL CBR DCP relationship: log10(CBR) = 2.48 - 1.057 x log10(mm/blow) in accordance with DMRB CS 229 Rev 0

Surface preparation	Description of surface material at test depth
N/A	Topsoil



top / base of layer (mm)	mm/ blow	CBR (%)
0	N/A	N/A
30		
30	61	3.9
335		
335	32	7.7
815		
815	22	12
925		

CBR Range	Min: 3.9 Max: 12	The self-weight penetration at the start of the test (shown above) has not been included in the minimum and maximum values shown to the left. The selection of layers is based on visual interpretation of the data. The insitu DCP reading (mm/blow) and CBR values are valid at the time of testing; variation in moisture content or other factors may affect the insitu value. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

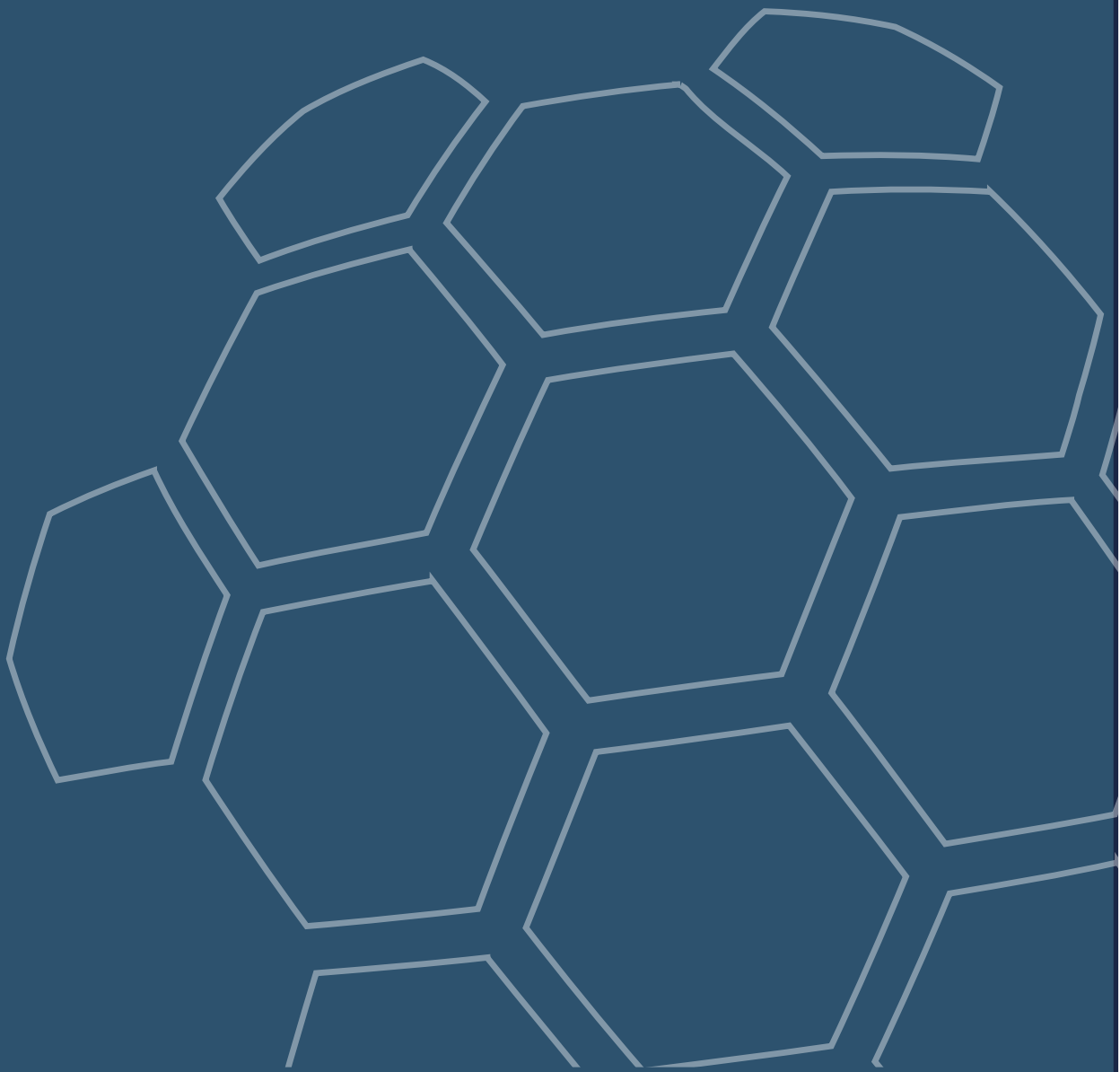
Deviation(s) from standard procedure	None

Observations and comments	

Approved Name and Appointment		
Matthew Gilbert Associate		July 2025

UKAS TESTING 10122

APPENDIX H – PLATE LOAD TEST RESULTS



CAUSEWAY GEOTECH

PLATE LOADING TEST REPORT

in accordance with BS 1377 : Part 9 Cl. 4.1 : 1990

Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV01
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	20

Date Tested	10.07.25	**Plate Dia (mm)**	455
Location	TP1-CV01		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	79

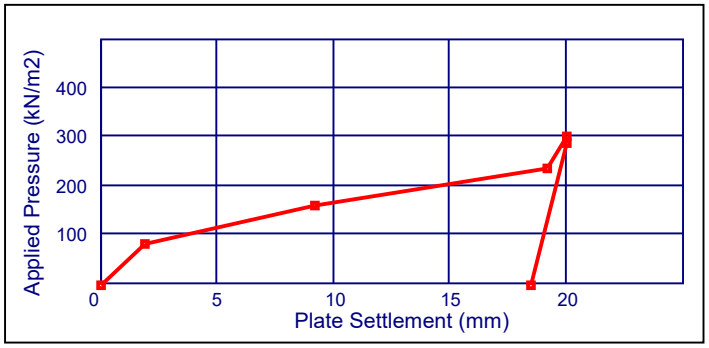
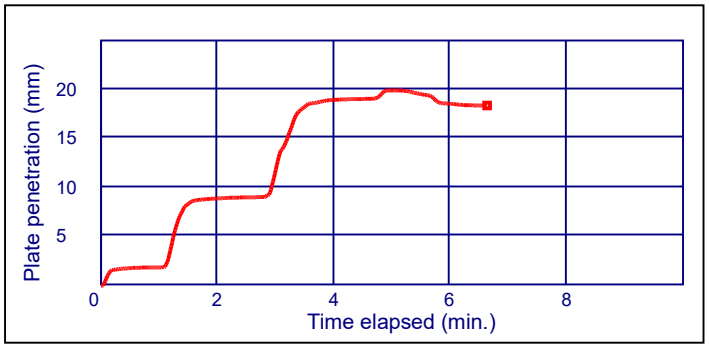


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
1.88	84.5
9.19	163.2
19.16	239.3
20.01	305.3
20.01	291.7
18.46	0.4



	Cycle 1
Maximum Applied Pressure (kPa):	**305**
Maximum deformation (mm):	**20.01**
Modulus of subgrade reaction K (MN/m3):	**45.0**
K762 (MN/m3):	**28.3**
Estimated CBR (%):	**3.2**

Comments: Plate settlement too high to complete test to a maximum applied pressure of 450kN/m2.

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Approved Signature
Causeway Geotech
Matthew Gilbert
Associate Geologist

UKAS TESTING
10122

CAUSEWAY GEOTECH

PLATE LOADING TEST REPORT

in accordance with BS 1377 : Part 9 Cl. 4.1 : 1990

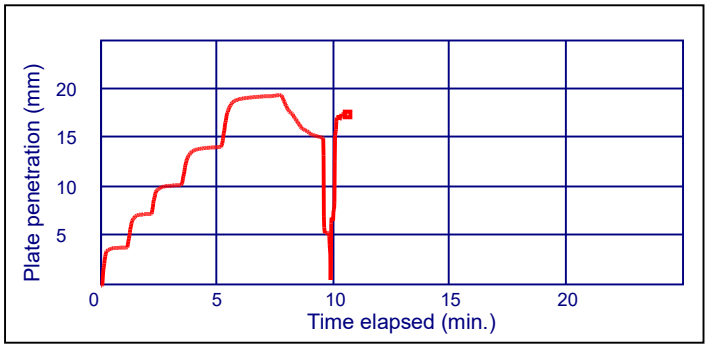
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV01 Test2
Client	Rowlands Civils	**Lab Ref No:**	24-0509
		Date Reported	
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	20

Date Tested	10.07.25	**Plate Dia (mm)**	455
Location	TP1-CV01 Test2		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	79



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
3.90	44.7
7.34	98.1
10.28	139.7
14.19	182.1
19.49	224.9
17.55	-2.8



	Cycle 1
Maximum Applied Pressure (kPa):	**225**
Maximum deformation (mm):	**19.49**
Modulus of subgrade reaction K (MN/m3):	**11.5**
K762 (MN/m3):	**7.2**
Estimated CBR (%):	**0.3**

Comments: Second CBR attempt at location. Maximum applied pressure reduced to 250kpa.

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Approved Signature
Causeway Geotech
Matthew Gilbert
Associate Geologist

UKAS TESTING
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PLATE LOADING TEST REPORT

in accordance with BS 1377 : Part 9 Cl. 4.1 : 1990

Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV02
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	18

Date Tested	09.07.25	**Plate Dia (mm)**	455
Location	TP1-CV02		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay (Possible Made Ground)	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	69

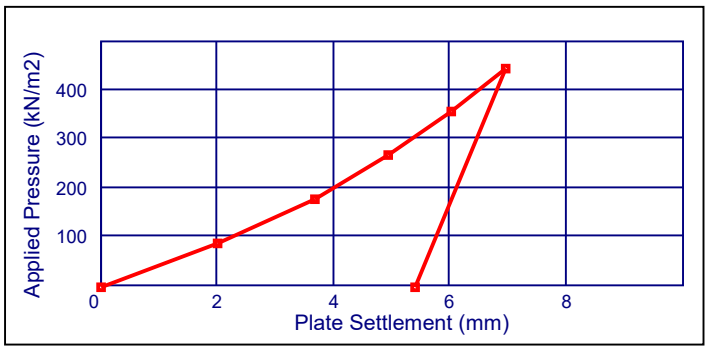
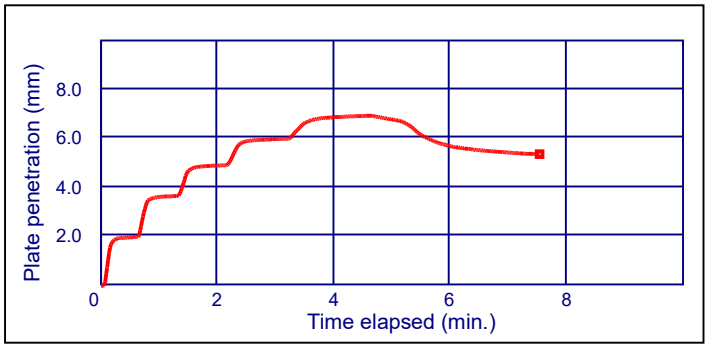


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.00	89.9
3.67	180.4
4.93	271.0
6.02	360.4
6.95	448.4
5.39	0.2



	Cycle 1
Maximum Applied Pressure (kPa):	**448**
Maximum deformation (mm):	**6.95**
Modulus of subgrade reaction K (MN/m3):	**44.9**
K762 (MN/m3):	**28.2**
Estimated CBR (%):	**3.2**

Comments:

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Approved Signature
Causeway Geotech
Matthew Gilbert
Associate Geologist

UKAS TESTING
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CAUSEWAY GEOTECH

PLATE LOADING TEST REPORT

in accordance with BS 1377 : Part 9 Cl. 4.1 : 1990

Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV03
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	21

Date Tested	09.07.25	**Plate Dia (mm)**	455
Location	TP1-CV03		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	69

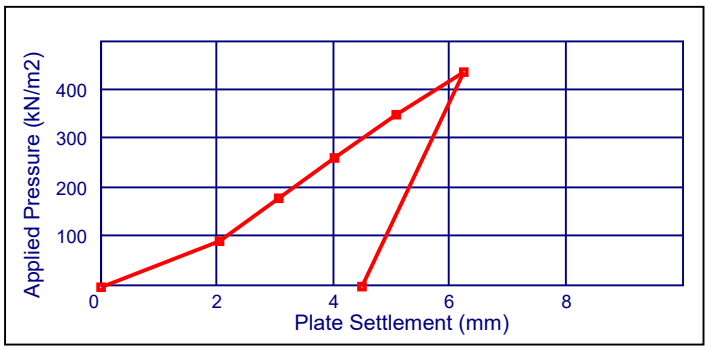


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.03	94.7
3.05	182.4
4.01	265.5
5.07	354.0
6.23	441.0
4.48	1.1



	Cycle 1
Maximum Applied Pressure (kPa):	**441**
Maximum deformation (mm):	**6.23**
Modulus of subgrade reaction K (MN/m3):	**46.6**
K762 (MN/m3):	**29.3**
Estimated CBR (%):	**3.4**

Comments:

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

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PLATE LOADING TEST REPORT

in accordance with BS 1377 : Part 9 Cl. 4.1 : 1990

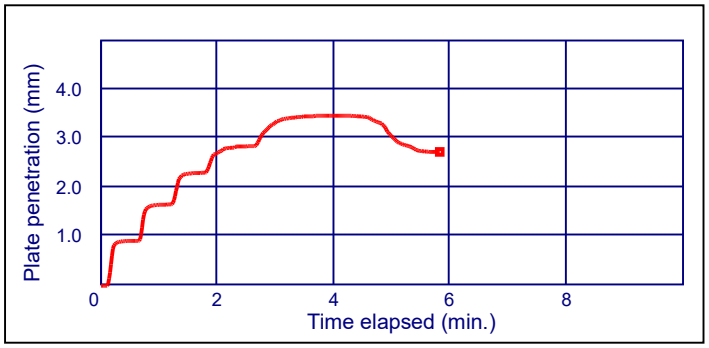
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV04
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	21

Date Tested	09.07.25	**Plate Dia (mm)**	455
Location	TP1-CV04		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	66



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
0.92	88.3
1.66	181.0
2.31	273.6
2.86	353.7
3.47	451.3
2.74	0.4



	Cycle 1
Maximum Applied Pressure (kPa):	**451**
Maximum deformation (mm):	**3.47**
Modulus of subgrade reaction K (MN/m3):	**103.7**
K762 (MN/m3):	**65.2**
Estimated CBR (%):	**13**

Comments:

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

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Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV05
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	08.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	16

Date Tested	02.07.25	**Plate Dia (mm)**	455
Location	TP1-CV05		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	75

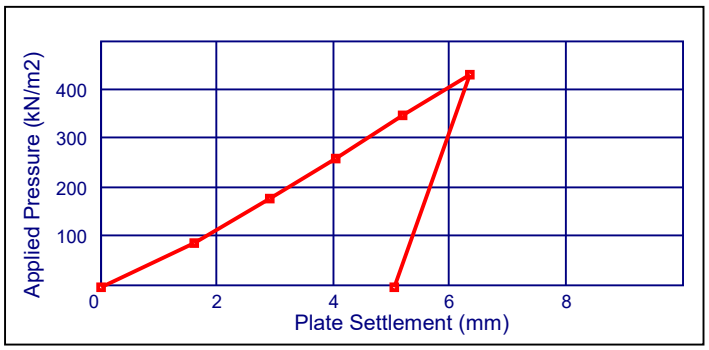


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
1.60	90.9
2.90	181.7
4.03	263.7
5.18	352.7
6.34	435.7
5.04	0.0



	Cycle 1
Maximum Applied Pressure (kPa):	**440**
Maximum deformation (mm):	**6.34**
Modulus of subgrade reaction K (MN/m3):	**56.9**
K762 (MN/m3):	**35.8**
Estimated CBR (%):	**4.8**

Comments:

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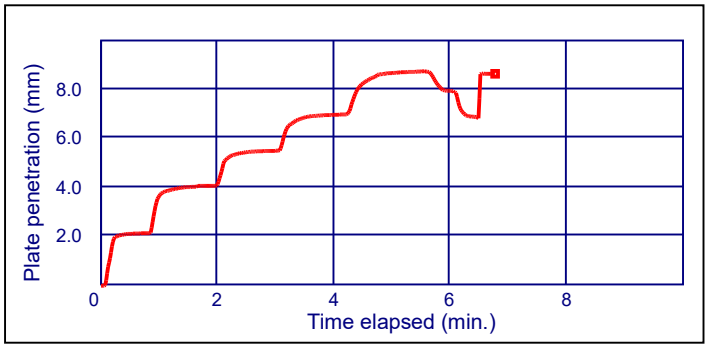
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Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV06 (Test 1)
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	08.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	17
Date Tested	03.07.25	**Plate Dia (mm)**	455
Location	TP1-CV06		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	66



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.15	90.6
4.09	186.8
5.53	267.9
7.02	349.7
8.78	431.0
8.68	0.2



	Cycle 1
Maximum Applied Pressure (kPa):	**435**
Maximum deformation (mm):	**8.78**
Modulus of subgrade reaction K (MN/m3):	**42.2**
K762 (MN/m3):	**26.5**
Estimated CBR (%):	**2.8**

Comments:

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

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PLATE LOADING TEST REPORT

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Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV06 Test2
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	17
Date Tested	03.07.25	**Plate Dia (mm)**	455
Location	TP1-CV06 Test2		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	66

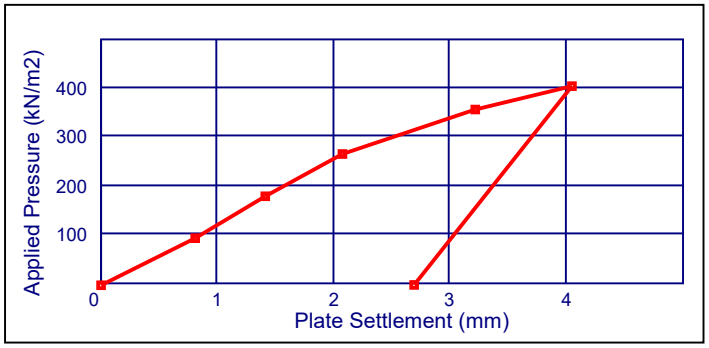
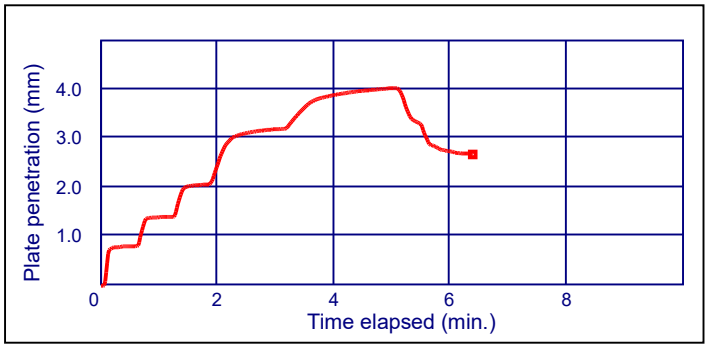


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
0.81	96.6
1.41	182.4
2.07	268.8
3.21	360.3
4.04	408.0
2.69	0.5



	Cycle 1
Maximum Applied Pressure (kPa):	**412**
Maximum deformation (mm):	**4.04**
Modulus of subgrade reaction K (MN/m3):	**127.7**
K762 (MN/m3):	**80.3**
Estimated CBR (%):	**19**

Comments:

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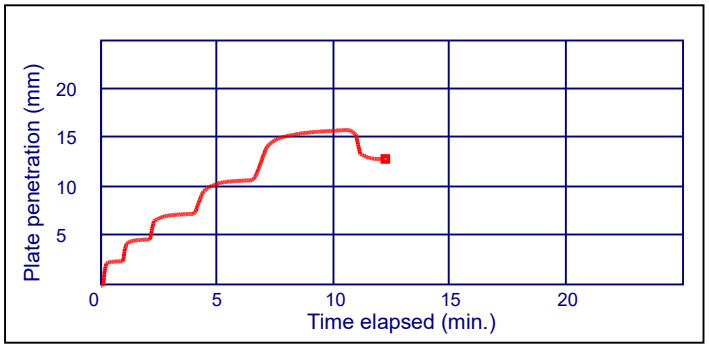
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV07
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	08.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	17

Date Tested	03.07.25	**Plate Dia (mm)**	455
Location	TP1-CV07		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	71



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.49	85.8
4.72	173.7
7.35	255.1
10.80	334.3
15.94	418.8
12.97	0.0



	Cycle 1
Maximum Applied Pressure (kPa):	**423**
Maximum deformation (mm):	**15.94**
Modulus of subgrade reaction K (MN/m3):	**34.4**
K762 (MN/m3):	**21.7**
Estimated CBR (%):	**2.0**

Comments:

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PLATE LOADING TEST REPORT

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Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV08
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	20

Date Tested	07.07.25	**Plate Dia (mm)**	455
Location	TP1-CV08		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	65

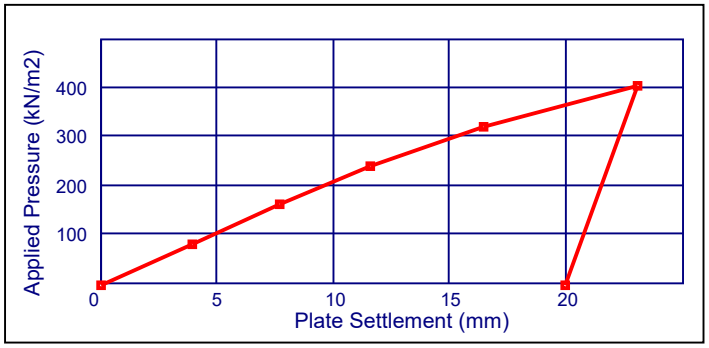
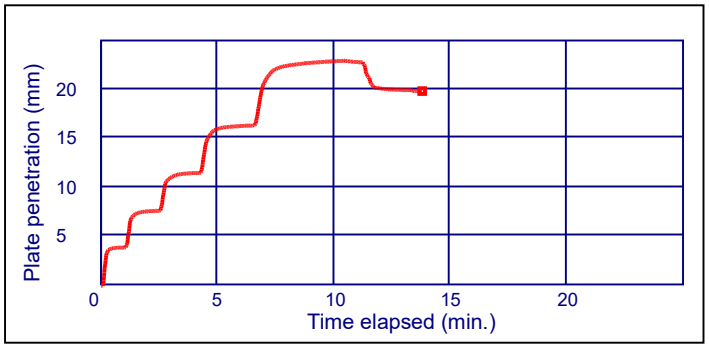


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
3.91	83.8
7.66	165.8
11.55	244.0
16.42	324.6
23.04	408.8
19.93	0.2



	Cycle 1
Maximum Applied Pressure (kPa):	**409**
Maximum deformation (mm):	**23.04**
Modulus of subgrade reaction K (MN/m3):	**21.4**
K762 (MN/m3):	**13.5**
Estimated CBR (%):	**0.9**

Comments:

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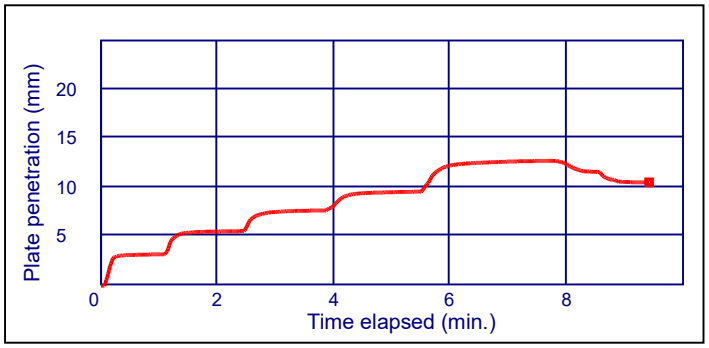
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV09
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	19

Date Tested	07.07.25	**Plate Dia (mm)**	455
Location	TP1-CV09		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	70



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
3.21	83.3
5.59	173.1
7.71	266.3
9.63	338.4
12.79	420.9
10.59	0.9



	Cycle 1
Maximum Applied Pressure (kPa):	**421**
Maximum deformation (mm):	**12.79**
Modulus of subgrade reaction K (MN/m3):	**26.0**
K762 (MN/m3):	**16.3**
Estimated CBR (%):	**1.2**

Comments:

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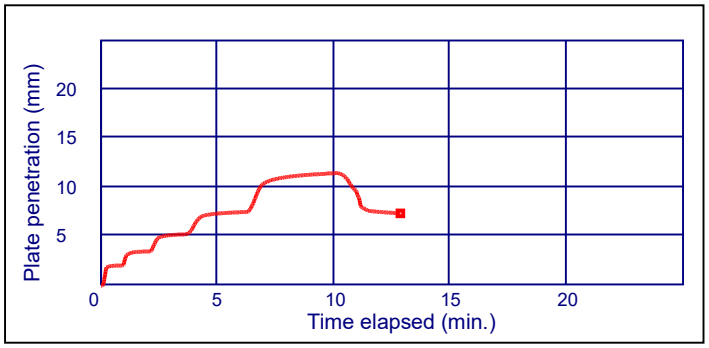
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV10
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	17

Date Tested	01.07.25	**Plate Dia (mm)**	455
Location	TP1-CV10		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	MG Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	75



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.07	92.7
3.52	176.9
5.27	259.8
7.55	331.9
11.52	406.2
7.42	1.0



	Cycle 1
Maximum Applied Pressure (kPa):	**411**
Maximum deformation (mm):	**11.52**
Modulus of subgrade reaction K (MN/m3):	**44.7**
K762 (MN/m3):	**28.1**
Estimated CBR (%):	**3.1**

Comments:

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Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV11
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	16

Date Tested	08.07.25	**Plate Dia (mm)**	455
Location	TP1-CV11		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	65

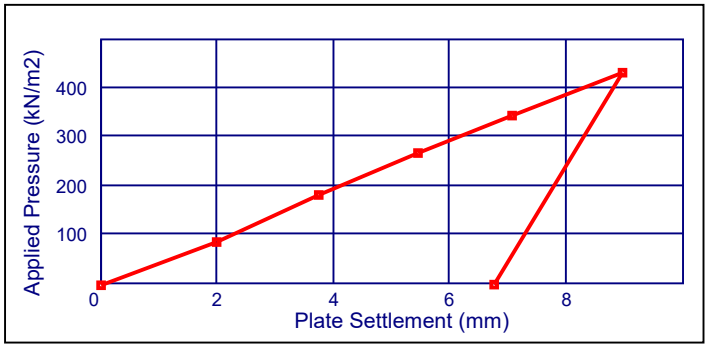
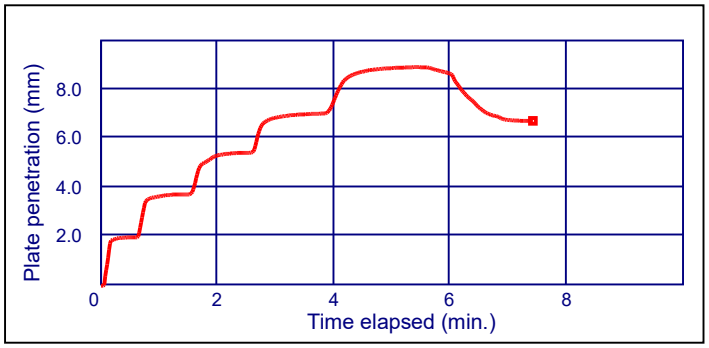


Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
1.98	88.8
3.74	185.3
5.44	271.1
7.06	348.1
8.96	436.0
6.75	1.1



	Cycle 1
Maximum Applied Pressure (kPa):	**436**
Maximum deformation (mm):	**8.96**
Modulus of subgrade reaction K (MN/m3):	**44.8**
K762 (MN/m3):	**28.2**
Estimated CBR (%):	**3.1**

Comments:

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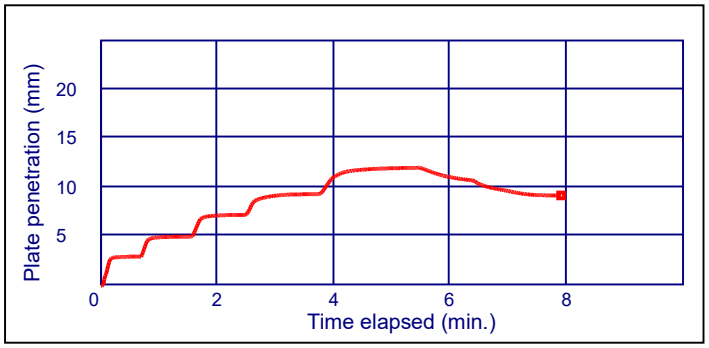
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV12
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	18

Date Tested	08.07.25	**Plate Dia (mm)**	455
Location	TP1-CV12		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	65



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.97	88.4
5.03	175.4
7.25	266.0
9.39	344.9
12.07	428.9
9.24	0.5



	Cycle 1
Maximum Applied Pressure (kPa):	**429**
Maximum deformation (mm):	**12.07**
Modulus of subgrade reaction K (MN/m3):	**29.8**
K762 (MN/m3):	**18.7**
Estimated CBR (%):	**1.5**

Comments:

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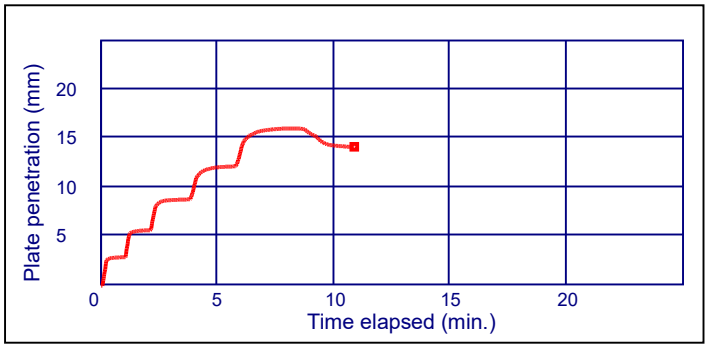
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV13
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	16.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	15

Date Tested	08.07.25	**Plate Dia (mm)**	455
Location	TP1-CV13		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	62



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
2.91	87.2
5.67	171.3
8.84	251.0
12.22	335.5
16.11	423.7
14.22	1.0



	Cycle 1
Maximum Applied Pressure (kPa):	**424**
Maximum deformation (mm):	**16.11**
Modulus of subgrade reaction K (MN/m3):	**30.0**
K762 (MN/m3):	**18.9**
Estimated CBR (%):	**1.6**

Comments:

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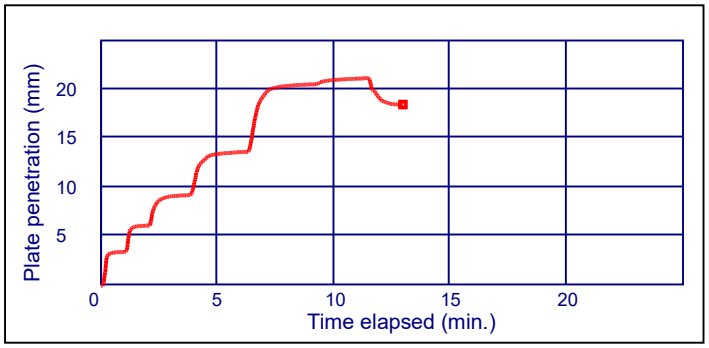
Incremental loading test

Project	DAA Cargo Relocation	**Test No:**	TP1-CV20
Client	Rowlands Civils	**Lab Ref No:**	25-0509
		Date Reported	08.07.25
		Weather Conditions	Dry
Technician	EGA	**Air Temperature °C**	17

Date Tested	02.07.25	**Plate Dia (mm)**	455
Location	TP1-CV20		
GPS Coord's	N/A	**Depth (m)**	1.0
Material Type	Clay	**Reaction Type**	14T Tracked Excavator
No Cycles	1	**App Weight (kg)**	75



Plate Settlement (mm)	Applied Pressure (kN/m2)
0.00	0.0
3.45	84.5
6.16	169.1
9.27	250.5
13.71	324.5
21.26	409.6
18.55	0.1



	Cycle 1
Maximum Applied Pressure (kPa):	**414**
Maximum deformation (mm):	**21.26**
Modulus of subgrade reaction K (MN/m3):	**24.5**
K762 (MN/m3):	**15.4**
Estimated CBR (%):	**1.1**

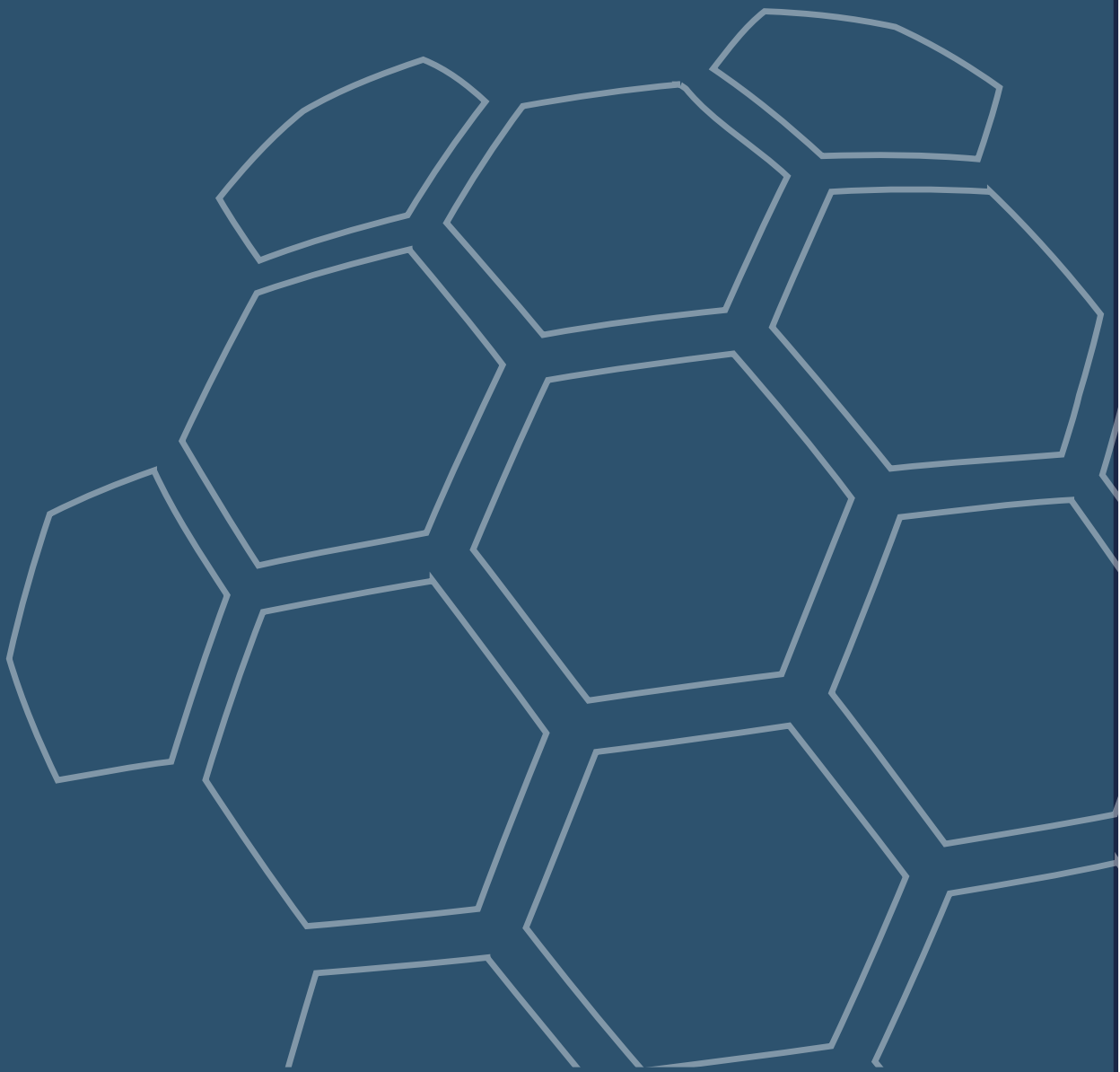
Comments:

Test Remarks: Calculation of Equivalent CBR Value from Plate Bearing Test taken from Design Manual for Roads and Bridges Volume 7 Section 2 Chapter 4 Incorporating IAN 73/06 (now withdrawn). The results contained in this report relate to the sample(s) tested at source. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report should not be reproduced except in full without the written approval of the laboratory.

Approved Signature
Causeway Geotech
Matthew Gilbert
Associate Geologist

UKAS TESTING
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APPENDIX I – GROUNDWATER MONITORING RECORDS



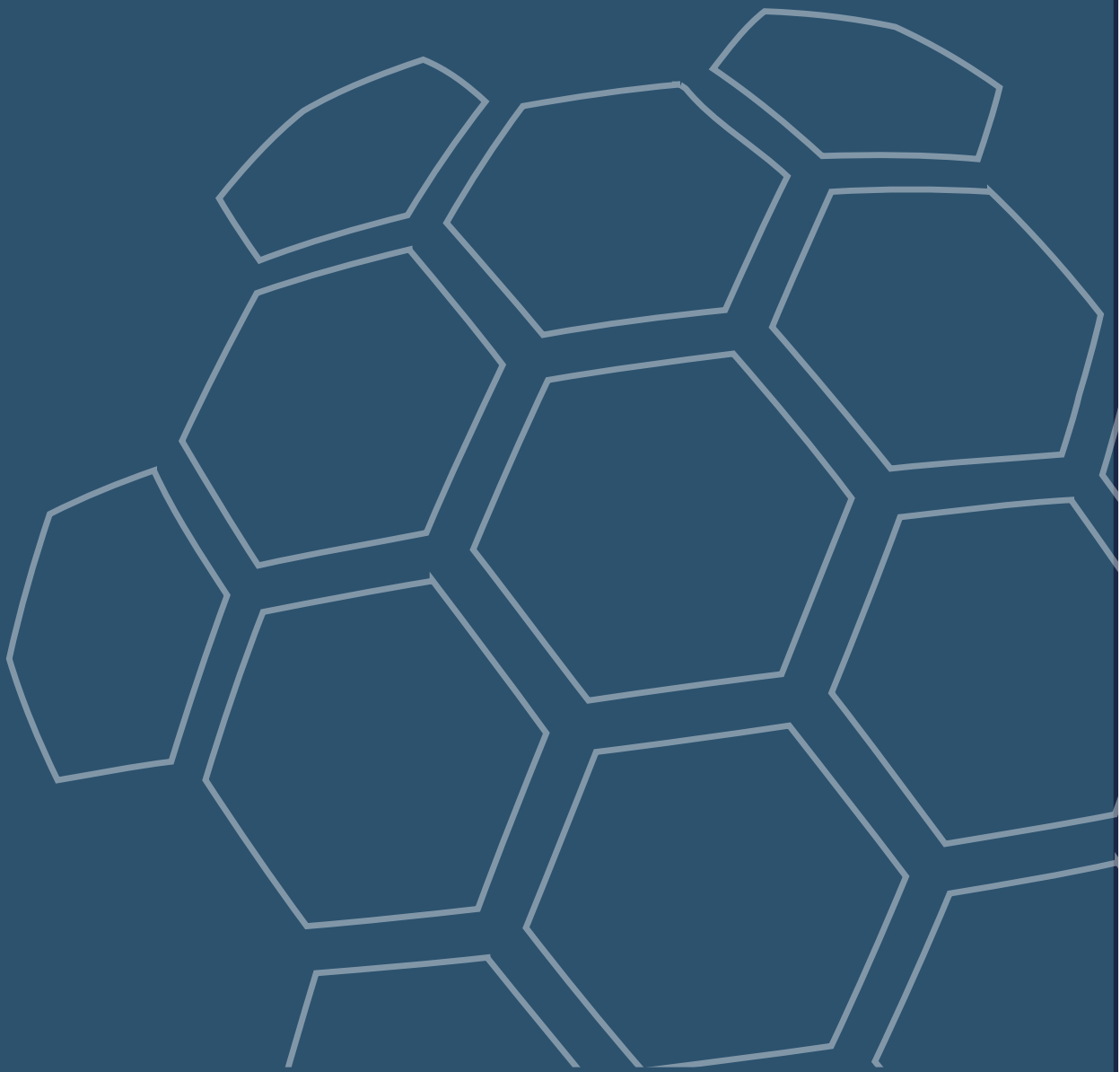
GROUNDWATER MONITORING RECORDS

Project Number: 25-0509

Project Name: DAA Cargo Relocation

Borehole Number	Type	Date Installed	Installation Depth (m)	Depth to water level (mbgl)								
				17/07/2025	11/08/2025	10/09/2025						
RC-CV02	50mm	09/07/2025	6.00	3.16	3.09	3.01						
RC-CV04	50mm	03/07/2025	4.00	2.15	2.19	1.06						

APPENDIX J – GEOTECHNICAL LABORATORY TEST RESULTS



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SOIL AND ROCK SAMPLE ANALYSIS
LABORATORY TEST REPORT

21 August 2025

PROJECT NAME	DAA Cargo Relocation
PROJECT NUMBER	25-0509
CLIENT	Rowlands Civils
ENGINEER	N/A

We are pleased to attach the results of laboratory testing carried out for the above project. This memo and its attachments constitute a report of the results of tests as detailed in the Contents page(s). This testing was performed between 25/07/2025 and 21/08/2025.

The attached results complete the testing requested and we would therefore wish to confirm that samples will be retained without charge for a period of 28 days from the above date after which they will be appropriately disposed of unless we receive written instructions to the contrary prior to that date.

We trust our report meets with your approval but if you have any queries or require additional information, please do not hesitate to contact the undersigned.

Stephen Watson

Laboratory Manager

Signed for and on behalf of Causeway Geotech Ltd

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PROJECT NAME: DAA Cargo Relocation

REPORT REFERENCE: Schedule 1

The table below details the tests carried out, the specifications used, and the number of tests included in this report. Tests marked with* in this report are not United Kingdom Accreditation Service (UKAS) accredited and are not included in Causeway Geotech Limited's scope of UKAS Accreditation Schedule of Tests.

The results contained in this report relate to the sample(s) as received. Opinions and interpretations expressed herein are outside the scope of UKAS accreditation. This report shall not be reproduced other than in full, without the prior written approval of the laboratory.

Material tested	Type of test/Properties measured/Range of measurement	Standard specifications	No. of results included in the report
SOIL	Water Content of Soil	*BS 1377-2: 2022: Cl 4 in accordance with ISO 17892-1:2014 + A1:2022*	64
SOIL	Liquid and Plastic Limits of soil-1 point cone penetrometer method	*BS 1377-2: 2022: Cl 5.3 in accordance with ISO 17892-12:2018 + A2:2022*	62
SOIL	Particle size distribution - wet sieving	*BS 1377-2: 2022: Cl 10 in accordance with ISO 17892-4:2016, Cl 5.2*	64
SOIL	Particle size distribution - sedimentation hydrometer method	*BS 1377-2: 2022: Cl 10 in accordance with ISO 17892-4:2016, Cl 5.3*	62
SOIL	Dry density/moisture content relationship (2.5 kg rammer)	*BS 1377-2: 2022: Cl 11.3*	5
SOIL	California Bearing Ratio (CBR)	*BS 1377-2: 2022: Cl 15*	18
SOIL	Consolidation properties in oedometer	*BS 1377-2: 2022: Cl 16 in accordance with ISO 17892-5: 2017*	6
SOIL	Undrained shear strength – triaxial compression without measurement of pore pressure (loads from 0.12 to 24 kN)	*BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018*	6

Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk / dry Mg/m3		w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
BH-CV01	12	1.20	2.00	B	Brown sandy slightly gravelly silty CLAY.			14.3	64	37 -1pt	20	17		CI
BH-CV01	13	2.00	3.00	B	Greyish black sandy slightly gravelly silty CLAY.			11.9	62	29 -1pt	17	12		CL
BH-CV02	8	1.20	2.00	B	Brown sandy slightly gravelly silty CLAY.			12.5	65	35 -1pt	18	17		CL/CI
BH-CV02	13	2.00	3.00	B	Greyish black sandy slightly gravelly silty CLAY.			10.9	66	28 -1pt	18	10		CL
BH-CV02	14	3.00	4.00	B	Greyish black sandy slightly gravelly silty CLAY.			9.3	66	29 -1pt	18	11		CL
BH-CV02	15	5.50	7.00	B	Brownish grey slightly sandy subangular fine to coarse GRAVEL.			1.1						
BH-CV02	16	8.50	10.00	B	Brownish grey slightly sandy subangular fine to coarse GRAVEL with cobbles			1						
BH-CV03	14	1.20	2.00	B	Greyish brown sandy slightly gravelly silty CLAY.			13	64	37 -1pt	20	17		CI
BH-CV03	15	2.00	3.00	B	Greyish brown sandy slightly gravelly silty CLAY.			9.4	66	34 -1pt	18	16		CL
BH-CV03	16	3.00	4.00	B	Greyish black sandy slightly gravelly silty CLAY.			11.4	65	27 -1pt	17	10		CL
BH-CV04	7	1.20	2.00	B	Brownish grey sandy slightly gravelly silty CLAY.			25.2	87	45 -1pt	27	18		MI/CI
BH-CV04	16	2.00	3.00	B	Brownish grey sandy slightly gravelly silty CLAY.			13.3	62	31 -1pt	17	14		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

Date Printed

21/08/2025

Approved By

Stephen Watson

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CAUSEWAY GEOTECH

Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk Mg/m3	Density dry Mg/m3	w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
BH-CV04	10	3.00	4.00	B	Greyish black sandy slightly gravelly silty CLAY.			10.6	64	27 -1pt	17	10		CL
BH-CV05	4	0.20	1.20	B	Brown sandy slightly gravelly silty CLAY.			15.5	68	35 -1pt	19	16		CL/CI
BH-CV05	11	2.20	3.00	B	Greyish brown sandy slightly gravelly silty CLAY.			11.5	60	31 -1pt	18	13		CL
BH-CV05	13	3.00	4.00	B	Greyish brown sandy slightly gravelly silty CLAY.			12.9	66	40 -1pt	17	23		CI
BH-CV06	7	1.20	2.00	B	Greyish brown sandy slightly gravelly clayey SILT.			14.8	46	35 -1pt	23	12		CL/CI
BH-CV06	8	2.00	3.00	B	Greyish brown sandy slightly gravelly CLAY.			10.9	69	27 -1pt	17	10		CL
BH-CV06	11	3.00	3.70	B	Greyish brown sandy slightly gravelly CLAY.			9	70	30 -1pt	16	14		CL
BH-CV07	6	1.70	2.00	B	Greyish brown sandy slightly gravelly CLAY.			13.2	62	32 -1pt	18	14		CL
BH-CV07	12	2.00	3.00	B	Greyish brown sandy slightly gravelly CLAY.			14.5	60	32 -1pt	18	14		CL
BH-CV08	7	1.20	2.00	B	Dark brown sandy slightly gravelly CLAY.			12	59	29 -1pt	17	12		CL
BH-CV08	10	2.00	3.00	B	Greyish black sandy slightly gravelly silty CLAY.			11.1	62	31 -1pt	16	15		CL
RC-CV02	9	4.70	5.40	B	Greyish brown sandy slightly gravelly silty CLAY.			17	67	31 -1pt	18	13		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

Date Printed

21/08/2025

Approved By

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Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk / dry Mg/m3		w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
RC-CV02	10	7.60	8.40	B	Greyish brown slightly gravelly clayey fine to caorse SAND.			23.2	55	31 -1pt	15	16		CL
RC-CV02	11	10.60	11.30	B	Brown slightly gravelly clayey fine to coarse SAND.			26.1	58	25 -1pt	16	9		CL
RC-CV04	10	8.50	8.90	B	Grey sandy slightly gravelly silty CLAY.			13	74	28 -1pt	16	12		CL
RC-CV04	9	10.50	11.20	B	Dark grey sandy slightly gravelly silty CLAY.			11.2	66	38 -1pt	19	19		CI
TP1-CV01	4	0.50	1.50	B	Greyish brown sandy slightly gravelly silty CLAY.			25.2	86	46 -1pt	24	22		CI
TP1-CV01	6	1.50	2.50	B	Greyish brown sandy slightly gravelly silty CLAY.			15.4	67	38 -1pt	20	18		CI
TP1-CV02	4	0.50		B	Brown sandy slightly gravelly silty CLAY.			19.5	68	37 -1pt	21	16		CI
TP1-CV02	5	1.10	2.00	B	Brown sandy slightly gravelly silty CLAY.			11.7	70	45 -1pt	23	22		CI
TP1-CV03	7	0.50	1.50	B	Brown sandy slightly gravelly silty CLAY.			11.4	66	36 -1pt	20	16		CI
TP1-CV03	7	1.50	2.10	B	Brown sandy slightly gravelly silty CLAY.			11.6	62	30 -1pt	20	10		CL
TP1-CV04	6	1.20	1.90	B	Brown sandy slightly gravelly silty CLAY.			10.3	65	29 -1pt	19	10		CL
TP1-CV04	8	1.90	2.90	B	Grey sandy gravelly silty CLAY with cobbles.			5.4	51	32 -1pt	16	16		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

Date Printed

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Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk / dry Mg/m3		w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
TP1-CV05	3	0.50		B	Greyish brown sandy slightly gravelly silty CLAY.			12.5	67	37 -1pt	20	17		CI
TP1-CV05	5	1.50		B	Greyish brown sandy slightly gravelly silty CLAY.			8.2	61	27 -1pt	17	10		CL
TP1-CV06	8	1.60		B	Brown sandy slightly gravelly silty CLAY.			13.1	67	36 -1pt	19	17		CI
TP1-CV06	9	1.80	2.80	B	Grey sandy slightly gravelly silty CLAY.			10.9	66	31 -1pt	18	13		CL
TP1-CV07	4	0.60	1.60	B	Brown sandy slightly gravelly silty CLAY.			12.5	60	36 -1pt	20	16		CI
TP1-CV07	6	1.60	2.20	B	Brown sandy slightly gravelly silty CLAY.			14.3	69	38 -1pt	21	17		CI
TP1-CV08	7	1.50	2.00	B	Greyish brown sandy slightly gravelly silty CLAY.			11.7	74	36 -1pt	20	16		CI
TP1-CV08	8	2.00	3.00	B	Greyish brown sandy slightly gravelly silty CLAY.			8.9	66	34 -1pt	18	16		CL
TP1-CV09	6	1.50	2.00	B	Brownish grey sandy slightly gravelly silty CLAY.			12	66	37 -1pt	18	19		CI
TP1-CV09	8	2.00	3.00	B	Brownish grey sandy slightly gravelly silty CLAY.			8.8	69	32 -1pt	18	14		CL
TP1-CV10	5	1.00	2.00	B	Brownish grey sandy slightly gravelly silty CLAY.			18.5	71	44 -1pt	22	22		CI
TP1-CV10	6	2.30	3.30	B	Brownish grey sandy slightly gravelly silty CLAY.			8.3	64	32 -1pt	16	16		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

Date Printed

21/08/2025

Approved By

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CAUSEWAY GEOTECH

Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk / dry Mg/m3		w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
TP1-CV11	4	0.50	1.50	B	Brownish grey sandy slightly gravelly silty CLAY.			12.5	65	32 -1pt	21	11		CL
TP1-CV11	5	1.50	2.00	B	Brownish grey sandy slightly gravelly silty CLAY.			11	72	35 -1pt	18	17		CL/CI
TP1-CV12	4	0.60	1.60	B	Brownish grey sandy slightly gravelly silty CLAY.			9.2	69	33 -1pt	20	13		CL
TP1-CV12	5	2.60	3.00	B	Brownish grey sandy slightly gravelly silty CLAY.			10.2	60	31 -1pt	17	14		CL
TP1-CV13	4	0.50	1.50	B	Brownish grey sandy slightly gravelly silty CLAY.			15	69	35 -1pt	18	17		CL/CI
TP1-CV13	9	1.80	2.80	B	Brownish grey sandy slightly gravelly silty CLAY.			8.2	65	27 -1pt	17	10		CL
TP1-CV16	4	0.50		B	Brownish grey sandy slightly gravelly silty CLAY.			26.1	91	51 -1pt	25	26		CH
TP1-CV16	6	1.20		B	Brownish grey sandy slightly gravelly silty CLAY.			13.4	64	31 -1pt	20	11		CL
TP1-CV17	4	0.50		B	Brownish grey sandy slightly gravelly silty CLAY.			21.4	83	45 -1pt	24	21		CI
TP1-CV17	6	1.80		B	Brownish grey sandy slightly gravelly silty CLAY.			9.1	64	29 -1pt	19	10		CL
TP1-CV18	4	0.50	1.50	B	Brownish grey slightly sandy slightly gravelly silty CLAY.			24.7	93	48 -1pt	27	21		CI
TP1-CV18	5	1.80	2.80	B	Brownish grey sandy slightly gravelly silty CLAY.			11.6	64	31 -1pt	20	11		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

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21/08/2025

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CAUSEWAY GEOTECH

Summary of Classification Test Results

Project No.	Project Name
25-0509	DAA Cargo Relocation

Hole No.	Sample				Specimen Description	Density bulk / dry Mg/m3		w %	Passing 425µm %	LL %	PL %	PI %	Particle density Mg/m3	Casagrande Classification
	Ref	Top	Base	Type										
TP1-CV19	4	0.60	1.60	B	Brownish grey sandy slightly gravelly silty CLAY.			24	84	43 -1pt	26	17		MI/CI
TP1-CV19	5	1.60	2.20	B	Brownish grey sandy slightly gravelly silty CLAY.			17.7	68	36 -1pt	19	17		CI
TP1-CV20	4	0.60	1.60	B	Brownish grey sandy slightly gravelly silty CLAY.			16.5	68	35 -1pt	21	14		CL/CI
TP1-CV20	5	1.60	2.60	B	Brownish grey sandy slightly gravelly silty CLAY.			10.9	59	29 -1pt	19	10		CL

All tests performed in accordance with BS1377-2:2022 unless specified otherwise

LAB 26R - Version 2

Key

Density test	Liquid Limit	Particle density
Linear measurement unless :	4pt cone unless :	sp - small pyknometer
wd - water displacement	cas - Casagrande method	gj - gas jar
wi - immersion in water	1pt - single point test	

Date Printed

21/08/2025

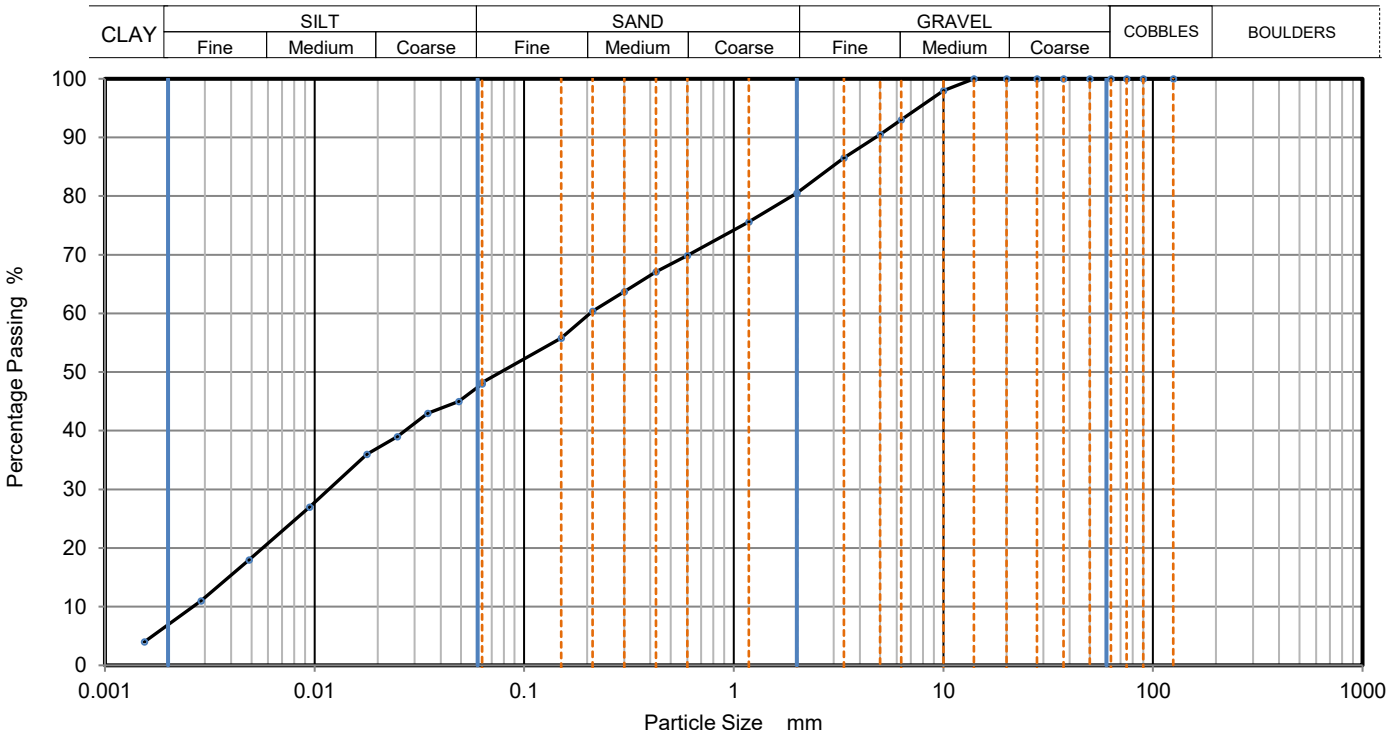
Approved By

Stephen Watson

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CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV01
Site Name	DAA Cargo Relocation			Sample No.	12
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071515



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04869	45
75	100	0.03465	43
63	100	0.02482	39
50	100	0.01778	36
37.5	100	0.00946	27
28	100	0.00487	18
20	100	0.00287	11
14	100	0.00154	4
10	98		
6.3	93		
5	91		
3.35	87		
2	81		
1.18	76		
0.6	70	Particle density	(assumed)
0.425	67	2.65	Mg/m3
0.3	64		
0.212	60		
0.15	56		
0.063	48		

Dry Mass of sample, g: 219

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.5
Sand	32.2
Silt	41.7
Clay	6.6

Grading Analysis		
D100	mm	
D60	mm	0.206
D30	mm	0.0119
D10	mm	0.0027
Uniformity Coefficient		76
Curvature Coefficient		0.25

Remarks

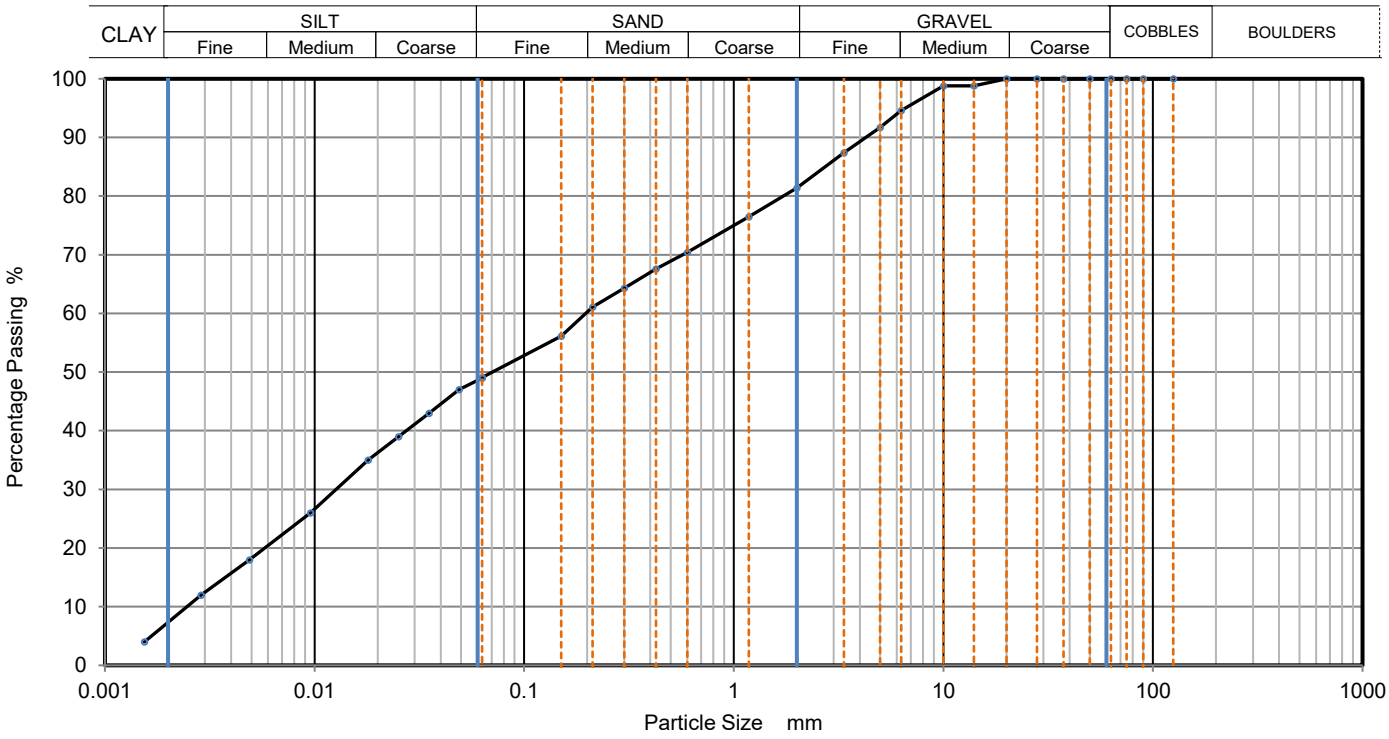
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

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CAUSEWAY GEOTECH	PARTICLE SIZE DISTRIBUTION				Job Ref		25-0509
					Borehole/Pit No.		BH-CV01
Site Name	DAA Cargo Relocation				Sample No.		13
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	2.00
						Base	3.00
Specimen Reference	6	Specimen Depth	2	m	Sample Type		B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016				KeyLAB ID		Caus2025071516



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	49
90	100	0.04901	47
75	100	0.03510	43
63	100	0.02514	39
50	100	0.01800	35
37.5	100	0.00957	26
28	100	0.00489	18
20	100	0.00287	12
14	99	0.00154	4
10	99		
6.3	95		
5	92		
3.35	87		
2	81		
1.18	77		
0.6	70	Particle density	(assumed)
0.425	68	2.65	Mg/m3
0.3	64		
0.212	61		
0.15	56		
0.063	49		

Dry Mass of sample, g	355

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	18.6
Sand	32.3
Silt	41.9
Clay	7.2

Grading Analysis		
D100	mm	
D60	mm	0.196
D30	mm	0.0128
D10	mm	0.00249
Uniformity Coefficient		79
Curvature Coefficient		0.33

Remarks

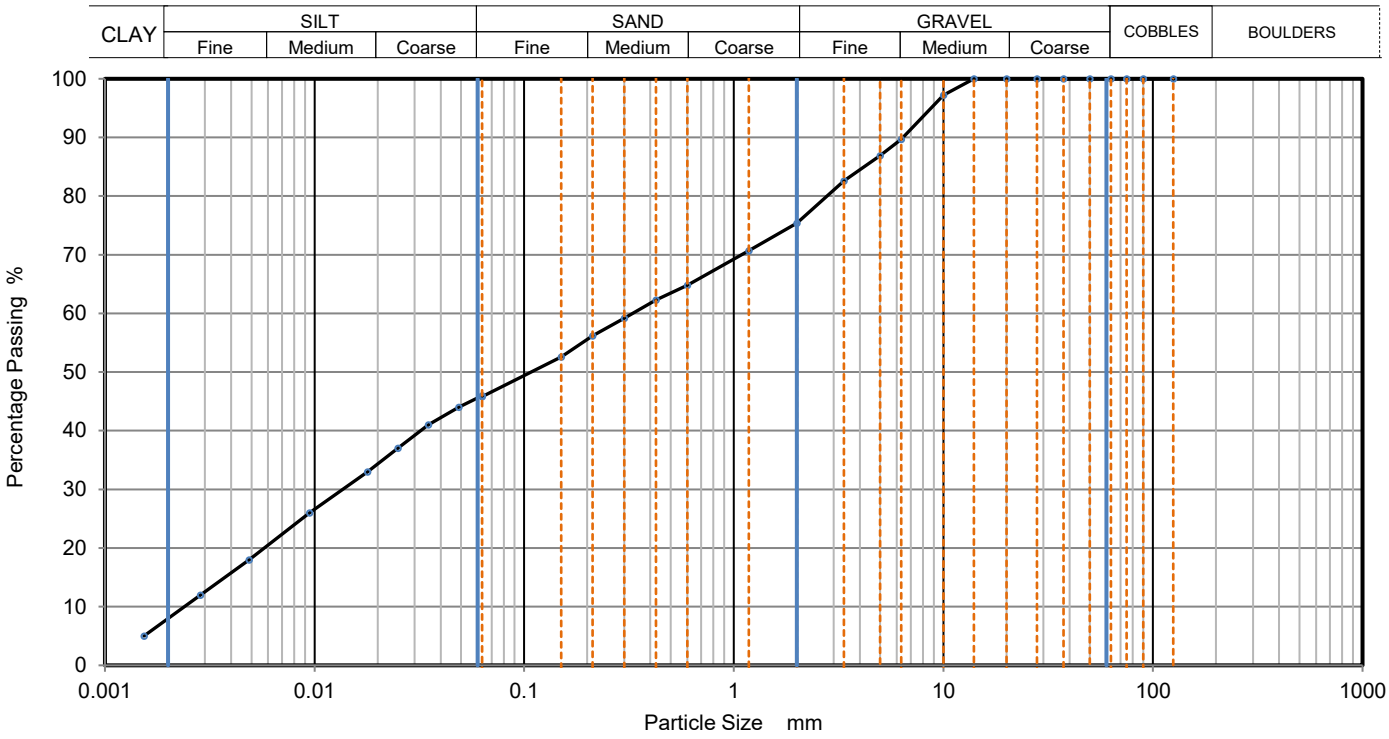
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

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CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV02
Site Name	DAA Cargo Relocation			Sample No.	8
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071518



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	46
90	100	0.04869	44
75	100	0.03488	41
63	100	0.02498	37
50	100	0.01789	33
37.5	100	0.00946	26
28	100	0.00487	18
20	100	0.00286	12
14	100	0.00153	5
10	97		
6.3	90		
5	87		
3.35	83		
2	75		
1.18	71		
0.6	65	Particle density	(assumed)
0.425	62	2.65	Mg/m3
0.3	59		
0.212	56		
0.15	53		
0.063	46		

Dry Mass of sample, g: 210

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.6
Sand	29.6
Silt	37.5
Clay	8.3

Grading Analysis		
D100	mm	
D60	mm	0.328
D30	mm	0.0131
D10	mm	0.00233
Uniformity Coefficient		140
Curvature Coefficient		0.22

Remarks

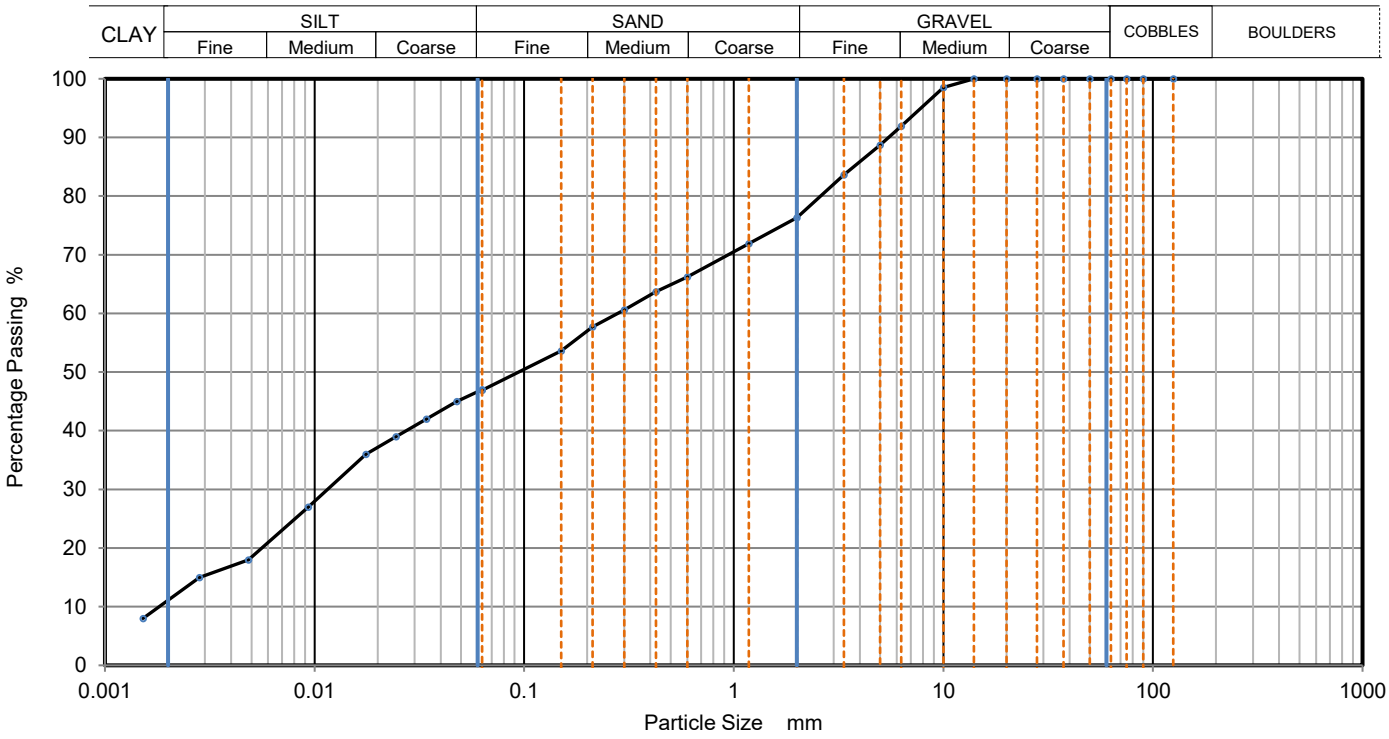
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

UKAS TESTING

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV02
Site Name	DAA Cargo Relocation			Sample No.	13
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071519



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.04771	45
75	100	0.03420	42
63	100	0.02450	39
50	100	0.01755	36
37.5	100	0.00935	27
28	100	0.00484	18
20	100	0.00283	15
14	100	0.00152	8
10	99		
6.3	92		
5	89		
3.35	84		
2	76		
1.18	72		
0.6	66	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	58		
0.15	54		
0.063	47		

Dry Mass of sample, g: 213

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.7
Sand	29.5
Silt	35.8
Clay	11.0

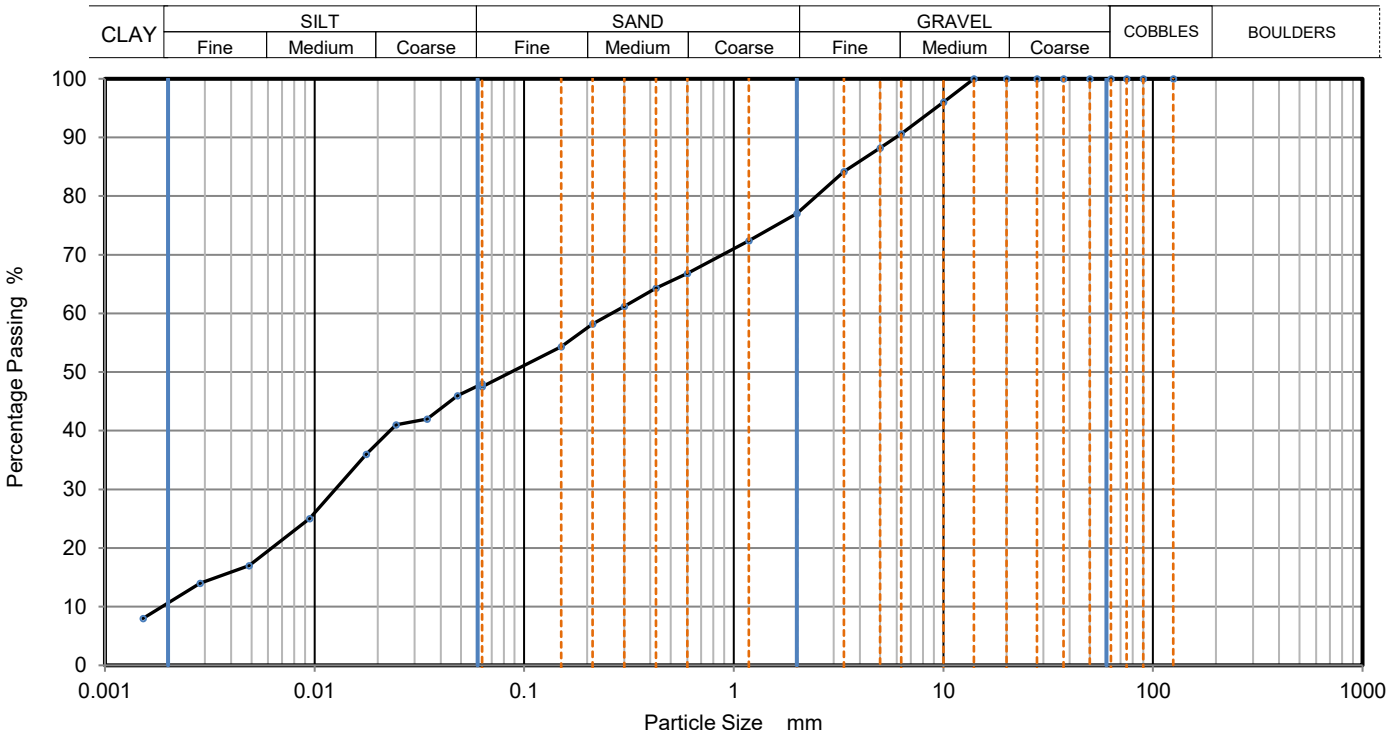
Grading Analysis		
D100	mm	
D60	mm	0.279
D30	mm	0.0114
D10	mm	0.00183
Uniformity Coefficient		150
Curvature Coefficient		0.25

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

CAUSEWAY GEOTECH	PARTICLE SIZE DISTRIBUTION				Job Ref		25-0509
					Borehole/Pit No.		BH-CV02
Site Name	DAA Cargo Relocation				Sample No.		14
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	3.00
						Base	4.00
Specimen Reference	6	Specimen Depth	3	m	Sample Type		B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016				KeyLAB ID		Caus2025071521



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04803	46
75	100	0.03443	42
63	100	0.02450	41
50	100	0.01766	36
37.5	100	0.00946	25
28	100	0.00487	17
20	100	0.00284	14
14	100	0.00152	8
10	96		
6.3	91		
5	88		
3.35	84		
2	77		
1.18	72		
0.6	67	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	58		
0.15	54		
0.063	48		

Dry Mass of sample, g: 213

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.0
Sand	29.4
Silt	36.9
Clay	10.7

Grading Analysis		
D100	mm	
D60	mm	0.262
D30	mm	0.0125
D10	mm	0.00183
Uniformity Coefficient		140
Curvature Coefficient		0.33

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

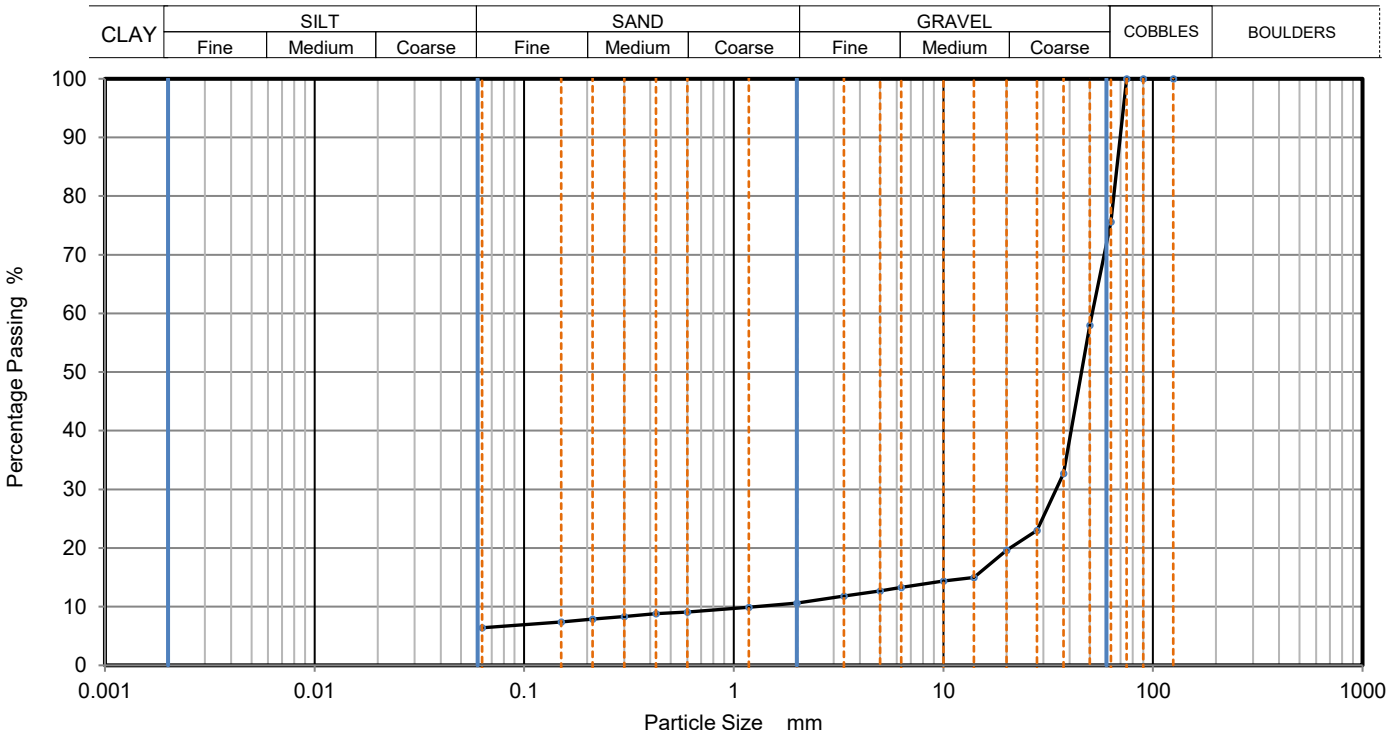
Approved
Stephen Watson

UKAS TESTING

10122

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV02
Site Name	DAA Cargo Relocation			Sample No.	15
Specimen Description	Brownish grey slightly sandy subangular fine to coarse GRAVEL.			Sample Depth (m) Top	5.50
				Base	7.00
Specimen Reference	6	Specimen Depth	5.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071522



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	100		
75	100		
63	76		
50	58		
37.5	33		
28	23		
20	20		
14	15		
10	14		
6.3	13		
5	13		
3.35	12		
2	11		
1.18	10		
0.6	9		
0.425	9		
0.3	8		
0.212	8		
0.15	7		
0.063	6		

Dry Mass of sample, g	2735

Sample Proportions	% dry mass
Cobbles	24.4
Gravel	65.0
Sand	4.2
Fines <0.063mm	6.0

Grading Analysis		
D100	mm	
D60	mm	51.3
D30	mm	34.6
D10	mm	1.24
Uniformity Coefficient		41
Curvature Coefficient		19

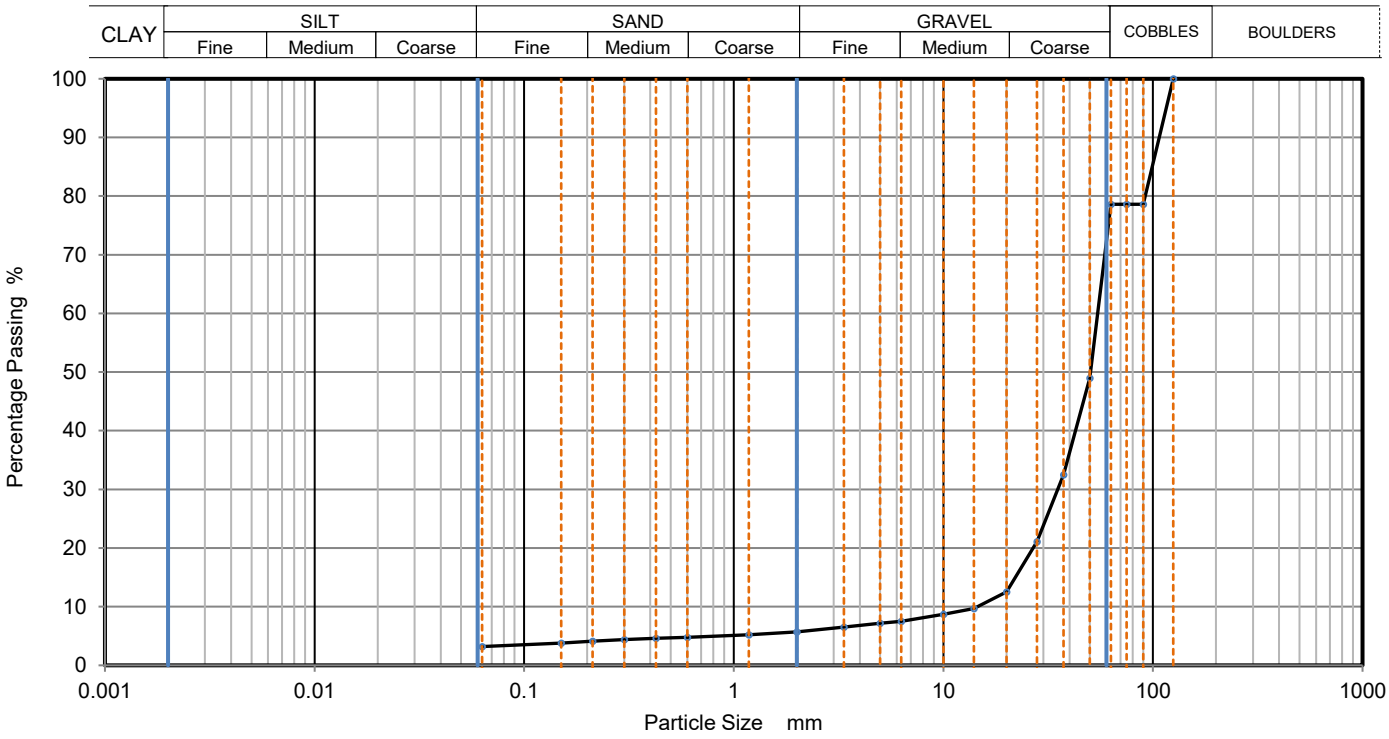
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV02
Site Name	DAA Cargo Relocation			Sample No.	16
Specimen Description	Brownish grey slightly sandy subangular fine to coarse GRAVEL with cobbles			Sample Depth (m) Top	8.50
				Base	10.00
Specimen Reference	6	Specimen Depth	8.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071523



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100		
90	79		
75	79		
63	79		
50	49		
37.5	33		
28	21		
20	13		
14	10		
10	9		
6.3	8		
5	7		
3.35	7		
2	6		
1.18	5		
0.6	5		
0.425	5		
0.3	4		
0.212	4		
0.15	4		
0.063	3		

Dry Mass of sample, g	6060

Sample Proportions	% dry mass
Cobbles	21.4
Gravel	72.9
Sand	2.4
Fines <0.063mm	3.0

Grading Analysis		
D100	mm	125
D60	mm	54.5
D30	mm	35.2
D10	mm	14.6
Uniformity Coefficient		3.7
Curvature Coefficient		1.6

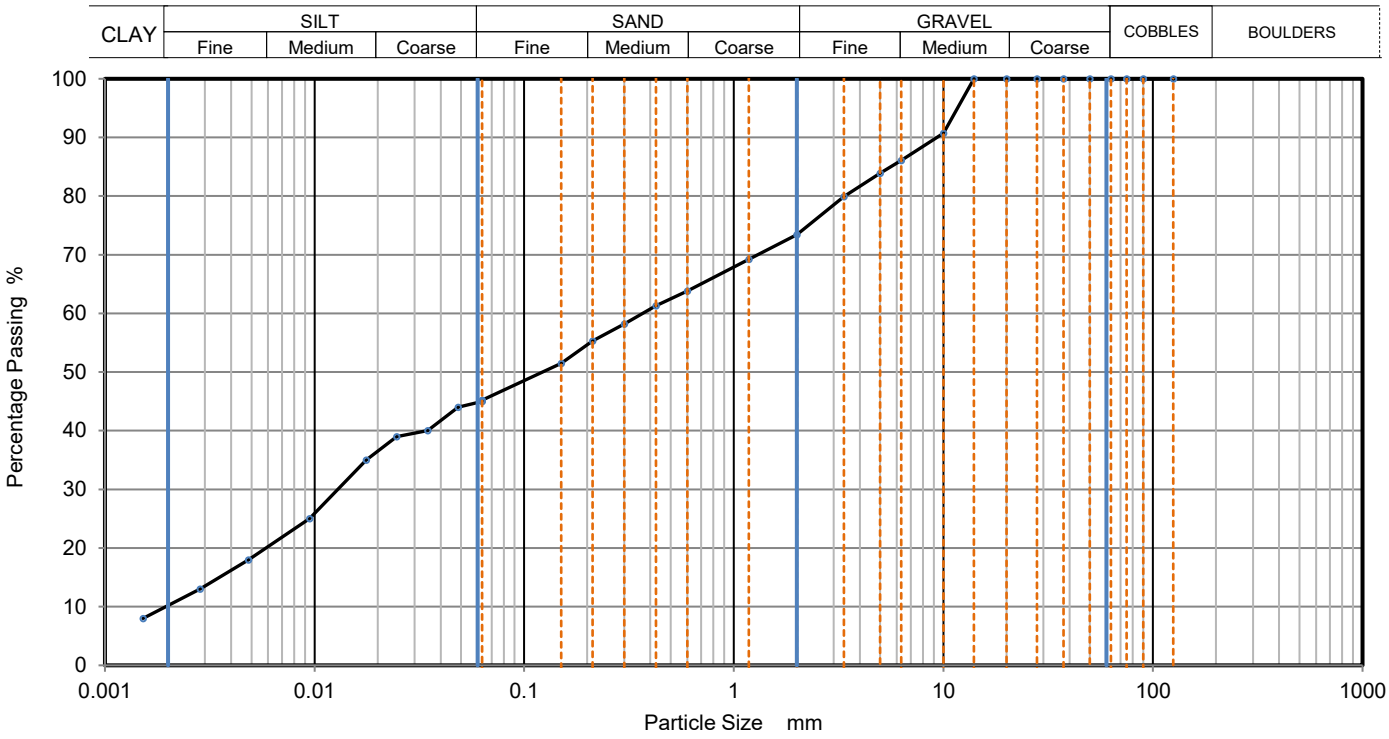
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV03
Site Name	DAA Cargo Relocation			Sample No.	14
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Sample Depth (m) Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071524



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	45
90	100	0.04836	44
75	100	0.03465	40
63	100	0.02466	39
50	100	0.01766	35
37.5	100	0.00946	25
28	100	0.00484	18
20	100	0.00284	13
14	100	0.00152	8
10	91		
6.3	86		
5	84		
3.35	80		
2	73		
1.18	69		
0.6	64	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	58		
0.212	55		
0.15	52		
0.063	45		

Dry Mass of sample, g: 206

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	26.6
Sand	28.2
Silt	34.6
Clay	10.6

Grading Analysis		
D100	mm	
D60	mm	0.368
D30	mm	0.0128
D10	mm	0.00186
Uniformity Coefficient		200
Curvature Coefficient		0.24

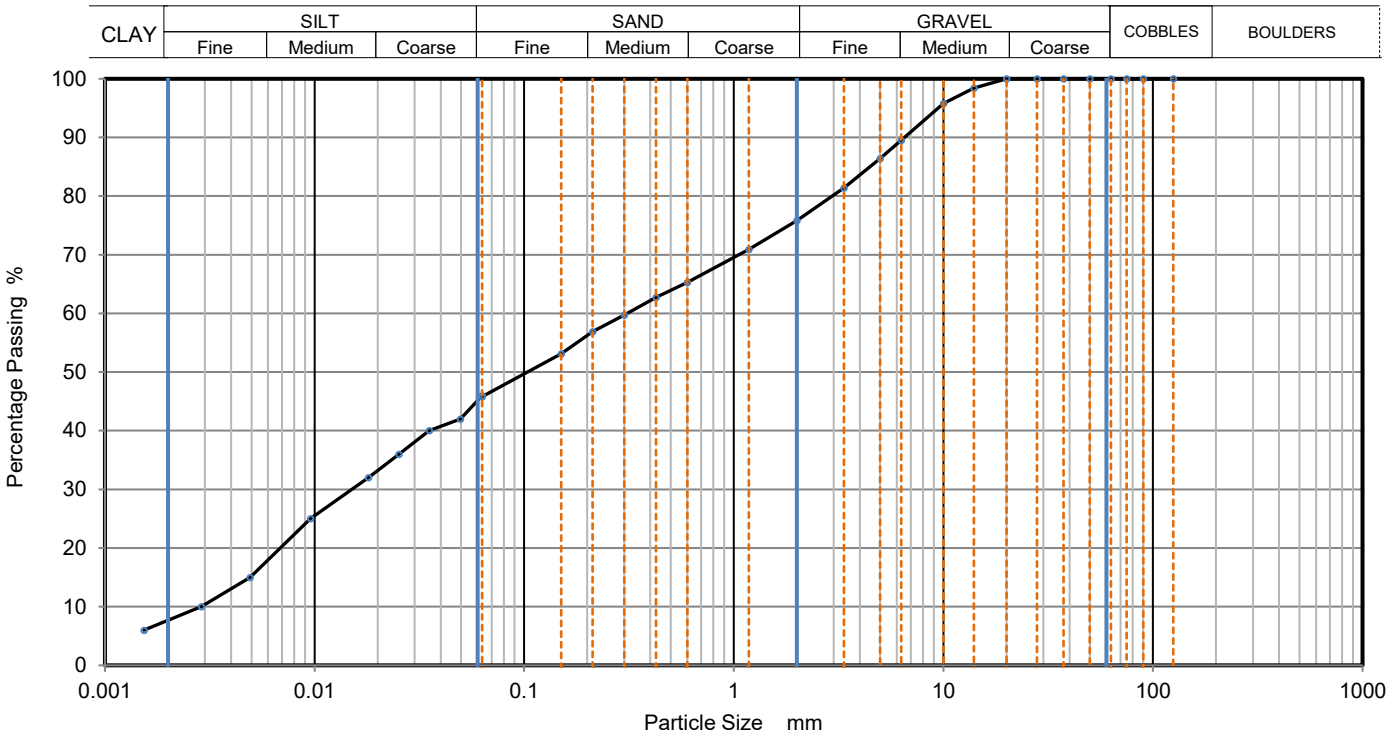
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV03
Site Name	DAA Cargo Relocation			Sample No.	15
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071525



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	46
90	100	0.04965	42
75	100	0.03533	40
63	100	0.02529	36
50	100	0.01810	32
37.5	100	0.00957	25
28	100	0.00492	15
20	100	0.00289	10
14	98	0.00153	6
10	96		
6.3	90		
5	86		
3.35	81		
2	76		
1.18	71		
0.6	65	Particle density	(assumed)
0.425	63	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	53		
0.063	46		

Dry Mass of sample, g: 398

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.2
Sand	30.1
Silt	38.4
Clay	7.3

Grading Analysis		
D100	mm	
D60	mm	0.311
D30	mm	0.0148
D10	mm	0.00301
Uniformity Coefficient		100
Curvature Coefficient		0.23

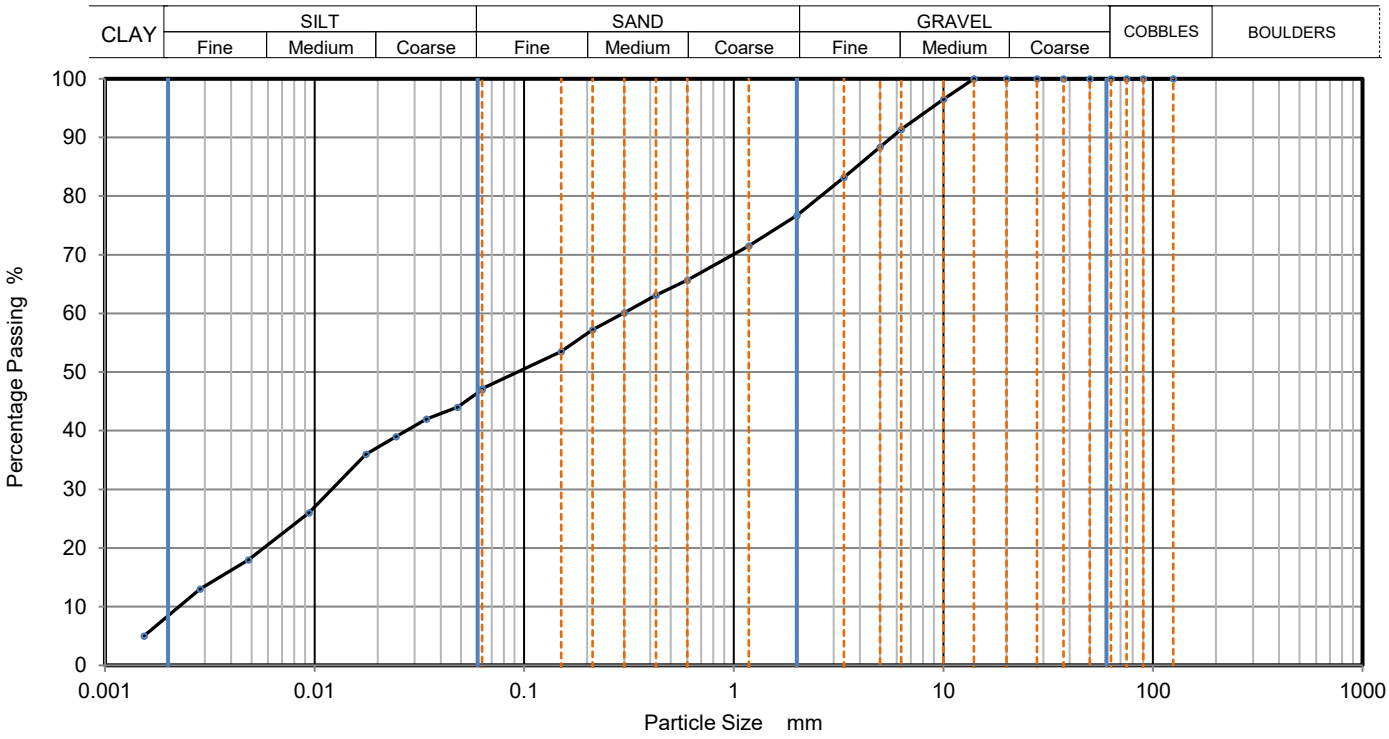
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					BH-CV03
Site Name	DAA Cargo Relocation			Sample No.	16
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	3.00
				Base	4.00
Specimen Reference	6	Specimen Depth	3 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071527



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.04803	44
75	100	0.03420	42
63	100	0.02450	39
50	100	0.01755	36
37.5	100	0.00940	26
28	100	0.00484	18
20	100	0.00284	13
14	100	0.00153	5
10	97		
6.3	91		
5	88		
3.35	83		
2	77		
1.18	72		
0.6	66	Particle density	(assumed)
0.425	63	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	54		
0.063	47		

Dry Mass of sample, g: 220

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.3
Sand	29.5
Silt	38.8
Clay	8.4

Grading Analysis		
D100	mm	
D60	mm	0.296
D30	mm	0.0121
D10	mm	0.00226
Uniformity Coefficient		130
Curvature Coefficient		0.22

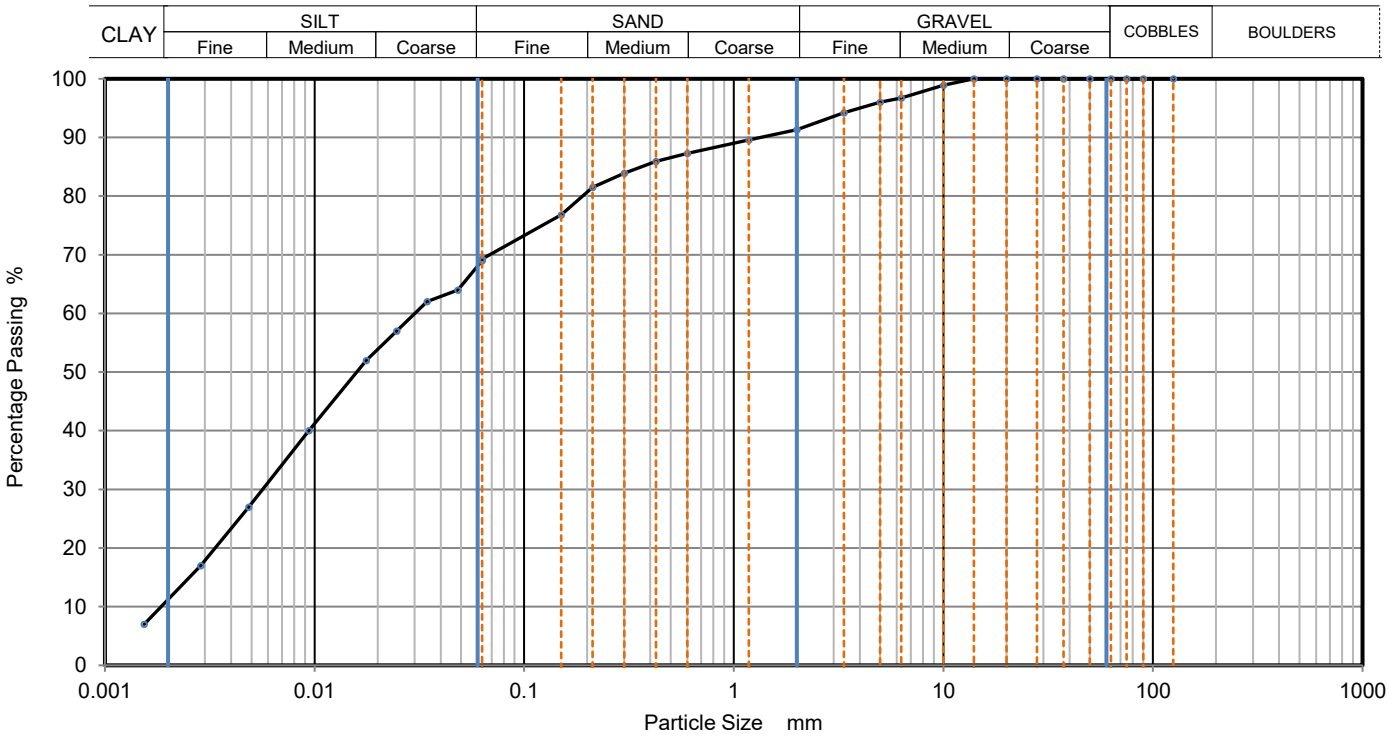
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV04
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071528



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	69
90	100	0.04829	64
75	100	0.03438	62
63	100	0.02464	57
50	100	0.01766	52
37.5	100	0.00941	40
28	100	0.00484	27
20	100	0.00286	17
14	100	0.00154	7
10	99		
6.3	97		
5	96		
3.35	94		
2	91		
1.18	90		
0.6	87	Particle density	(assumed)
0.425	86	2.65	Mg/m3
0.3	84		
0.212	82		
0.15	77		
0.063	69		

Dry Mass of sample, g: 378

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	8.7
Sand	22.0
Silt	57.7
Clay	11.6

Grading Analysis		
D100	mm	
D60	mm	0.0303
D30	mm	0.00562
D10	mm	0.00181
Uniformity Coefficient		17
Curvature Coefficient		0.58

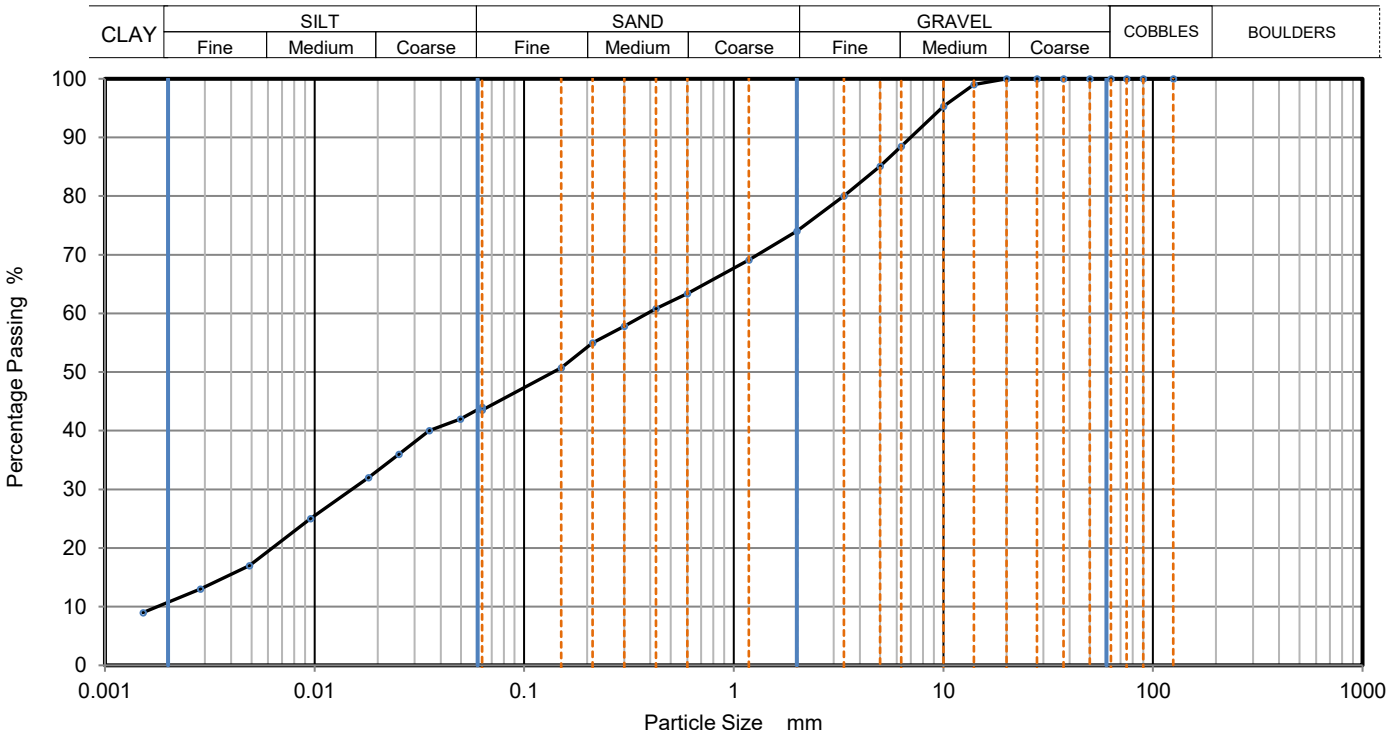
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV04
Site Name	DAA Cargo Relocation			Sample No.	16
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071529



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	44
90	100	0.04965	42
75	100	0.03533	40
63	100	0.02529	36
50	100	0.01810	32
37.5	100	0.00957	25
28	100	0.00489	17
20	100	0.00286	13
14	99	0.00152	9
10	95		
6.3	89		
5	85		
3.35	80		
2	74		
1.18	69		
0.6	63	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	58		
0.212	55		
0.15	51		
0.063	44		

Dry Mass of sample, g: 349

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	26.0
Sand	30.5
Silt	32.4
Clay	11.1

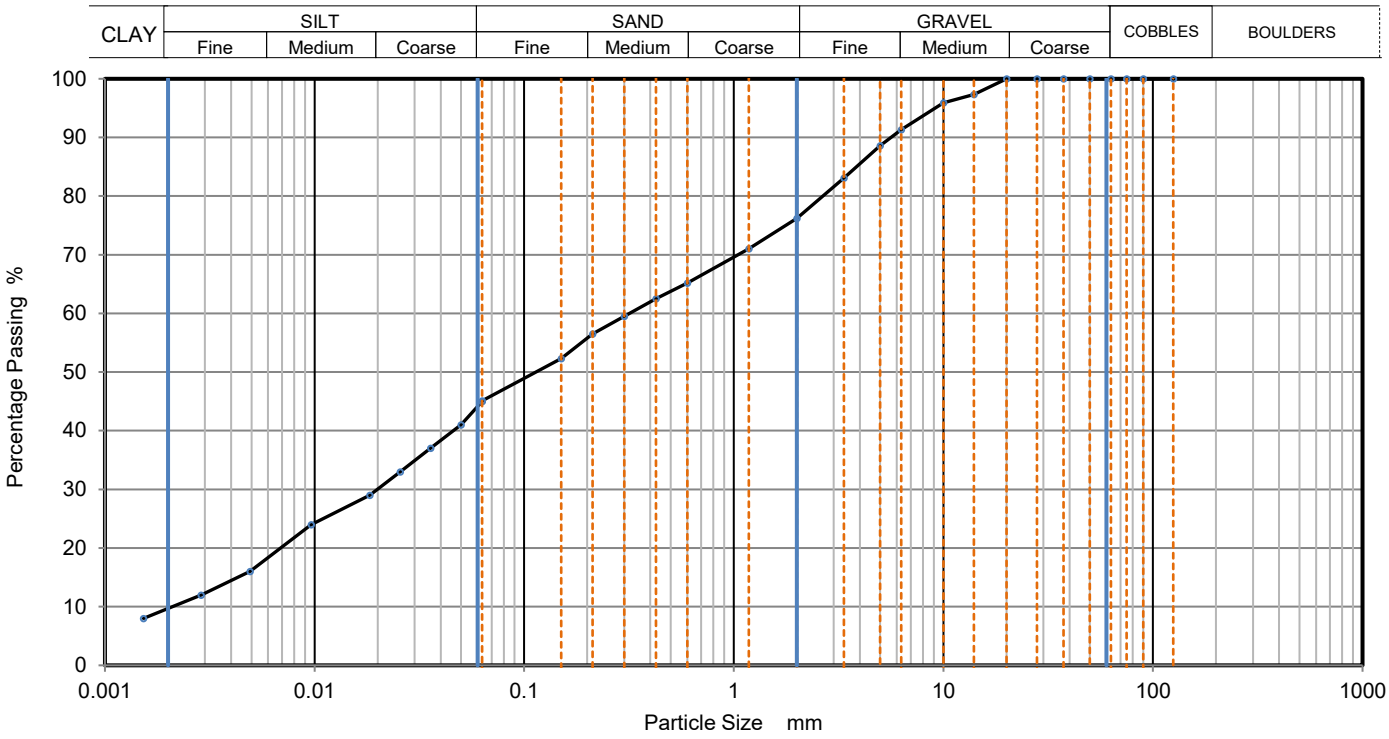
Grading Analysis		
D100	mm	
D60	mm	0.387
D30	mm	0.0151
D10	mm	0.00166
Uniformity Coefficient		230
Curvature Coefficient		0.35

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV04
Site Name	DAA Cargo Relocation			Sample No.	10
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	3.00
				Base	4.00
Specimen Reference	6	Specimen Depth	3 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071531



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	45
90	100	0.04996	41
75	100	0.03577	37
63	100	0.02560	33
50	100	0.01832	29
37.5	100	0.00963	24
28	100	0.00492	16
20	100	0.00287	12
14	97	0.00153	8
10	96		
6.3	91		
5	89		
3.35	83		
2	76		
1.18	71		
0.6	65	Particle density	(assumed)
0.425	63	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	52		
0.063	45		

Dry Mass of sample, g: 344

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.8
Sand	31.2
Silt	35.5
Clay	9.5

Grading Analysis		
D100	mm	
D60	mm	0.319
D30	mm	0.0193
D10	mm	0.00216
Uniformity Coefficient		150
Curvature Coefficient		0.54

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

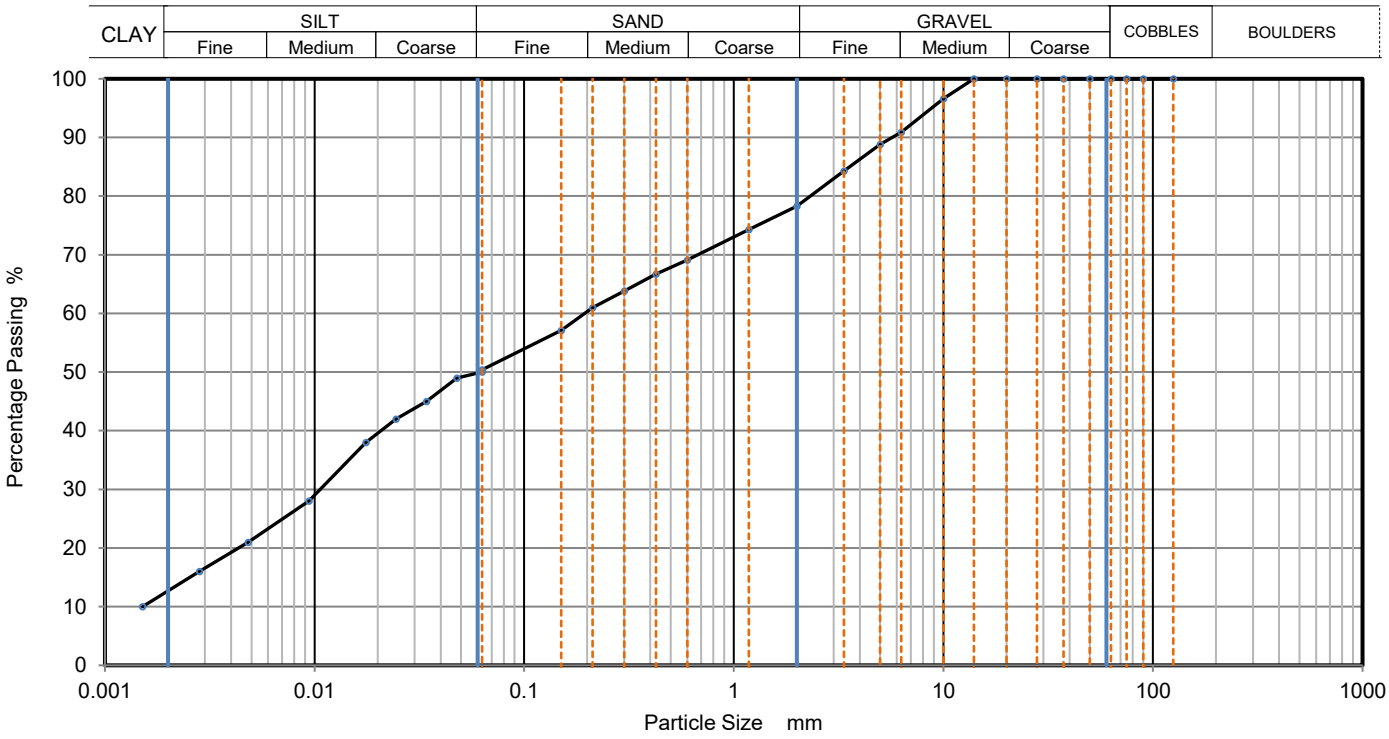
Approved
Stephen Watson

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PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV05
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.20
				Base	1.20
Specimen Reference	6	Specimen Depth	0.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071532



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04771	49
75	100	0.03420	45
63	100	0.02450	42
50	100	0.01755	38
37.5	100	0.00940	28
28	100	0.00481	21
20	100	0.00283	16
14	100	0.00151	10
10	97		
6.3	91		
5	89		
3.35	84		
2	78		
1.18	74		
0.6	69	Particle density	(assumed)
0.425	67	2.65	Mg/m3
0.3	64		
0.212	61		
0.15	57		
0.063	50		

Dry Mass of sample, g: 197

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	21.7
Sand	27.9
Silt	37.6
Clay	12.8

Grading Analysis		
D100	mm	
D60	mm	0.194
D30	mm	0.0107
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

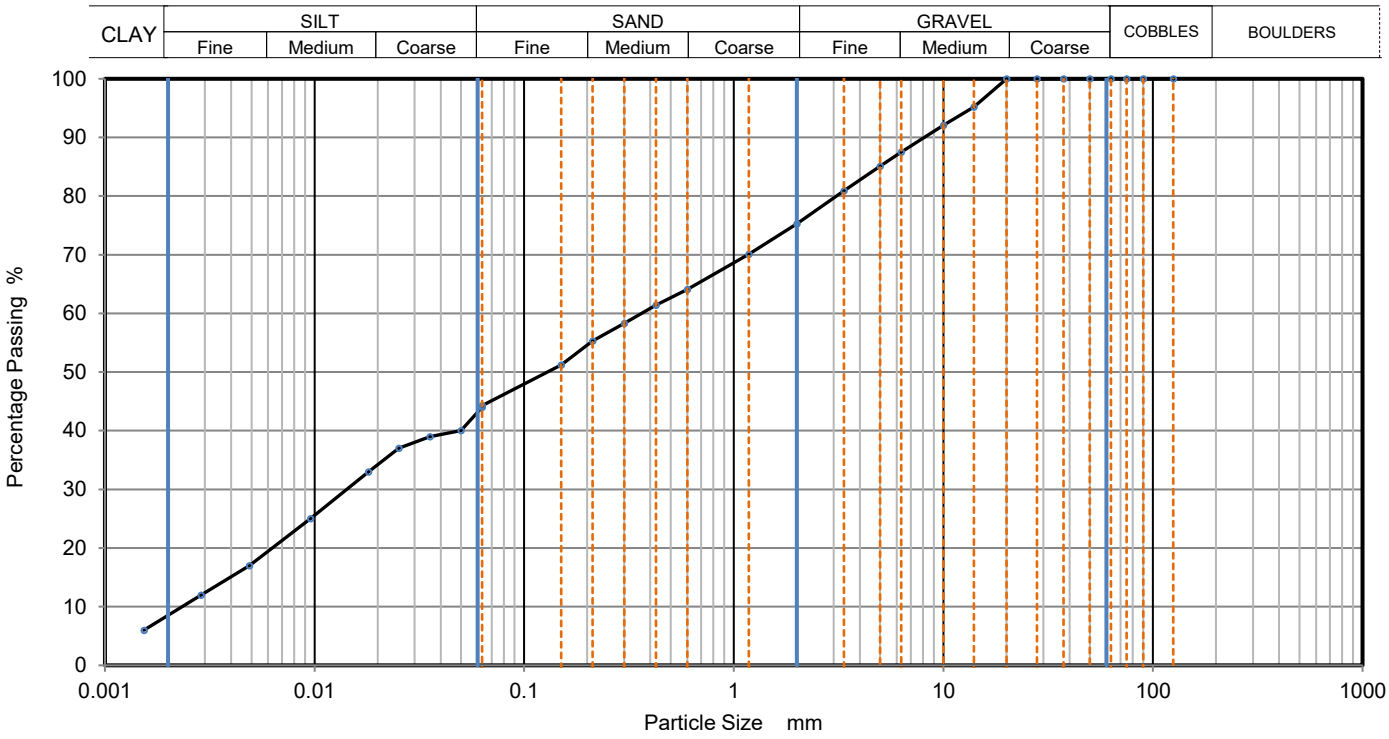
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					BH-CV05
Site Name	DAA Cargo Relocation			Sample No.	11
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.20
				Base	3.00
Specimen Reference	6	Specimen Depth	2.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071534



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	44
90	100	0.04996	40
75	100	0.03555	39
63	100	0.02529	37
50	100	0.01810	33
37.5	100	0.00957	25
28	100	0.00489	17
20	100	0.00287	12
14	95	0.00153	6
10	92		
6.3	88		
5	85		
3.35	81		
2	75		
1.18	70		
0.6	64	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	58		
0.212	55		
0.15	51		
0.063	44		

Dry Mass of sample, g: 406

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.7
Sand	31.0
Silt	36.1
Clay	8.2

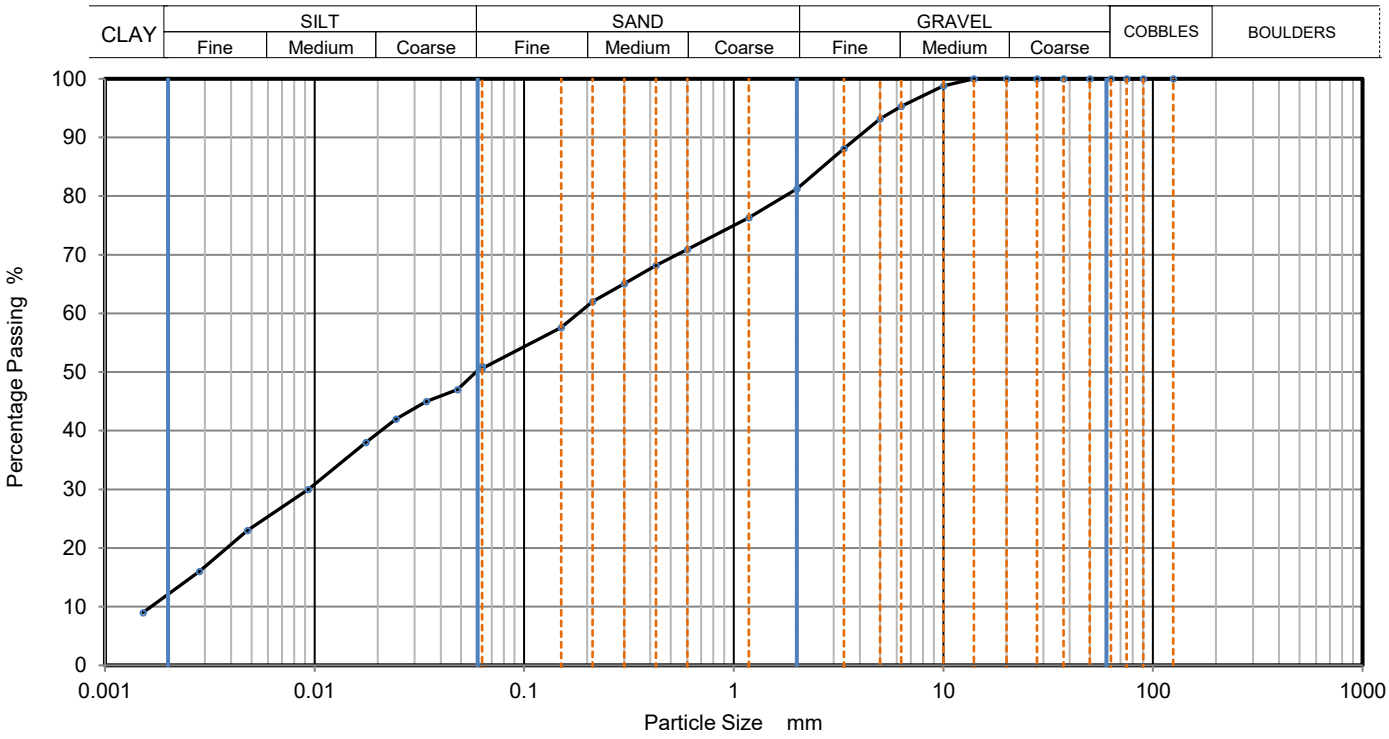
Grading Analysis		
D100	mm	
D60	mm	0.363
D30	mm	0.0144
D10	mm	0.00243
Uniformity Coefficient		150
Curvature Coefficient		0.24

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV05
Site Name	DAA Cargo Relocation			Sample No.	13
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	3.00
				Base	4.00
Specimen Reference	6	Specimen Depth	3 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071535



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	51
90	100	0.04803	47
75	100	0.03420	45
63	100	0.02450	42
50	100	0.01755	38
37.5	100	0.00935	30
28	100	0.00479	23
20	100	0.00283	16
14	100	0.00152	9
10	99		
6.3	95		
5	93		
3.35	88		
2	81		
1.18	76		
0.6	71	Particle density	(assumed)
0.425	68	2.65	Mg/m3
0.3	65		
0.212	62		
0.15	58		
0.063	51		

Dry Mass of sample, g: 211

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	18.8
Sand	30.6
Silt	38.8
Clay	11.8

Grading Analysis		
D100	mm	
D60	mm	0.181
D30	mm	0.00958
D10	mm	0.0017
Uniformity Coefficient		110
Curvature Coefficient		0.3

Remarks

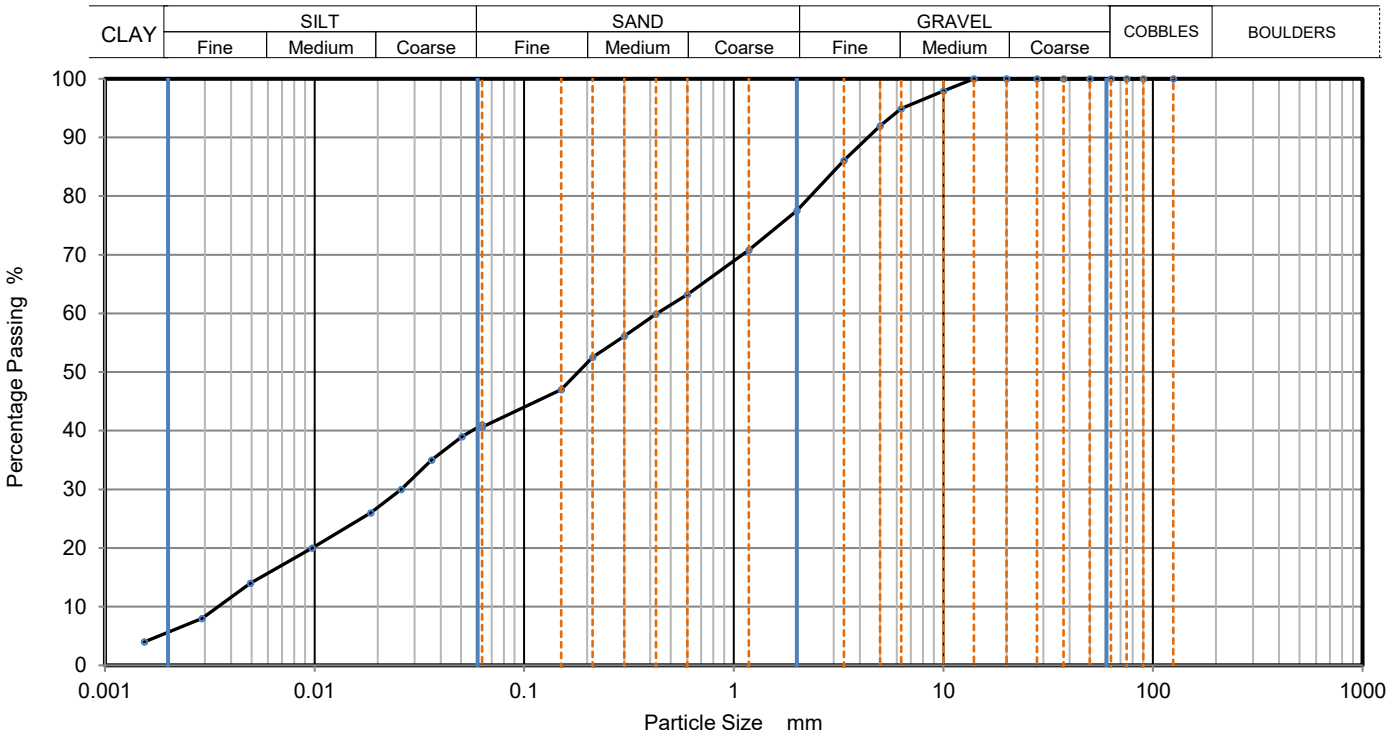
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

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PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV06
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Greyish brown sandy slightly gravelly clayey SILT.			Sample Depth (m) Top	1.20
				Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071536



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	41
90	100	0.05059	39
75	100	0.03621	35
63	100	0.02591	30
50	100	0.01853	26
37.5	100	0.00973	20
28	100	0.00495	14
20	100	0.00290	8
14	100	0.00154	4
10	98		
6.3	95		
5	92		
3.35	86		
2	78		
1.18	71		
0.6	63	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	56		
0.212	53		
0.15	47		
0.063	41		

Dry Mass of sample, g: 207

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	22.5
Sand	36.9
Silt	34.9
Clay	5.7

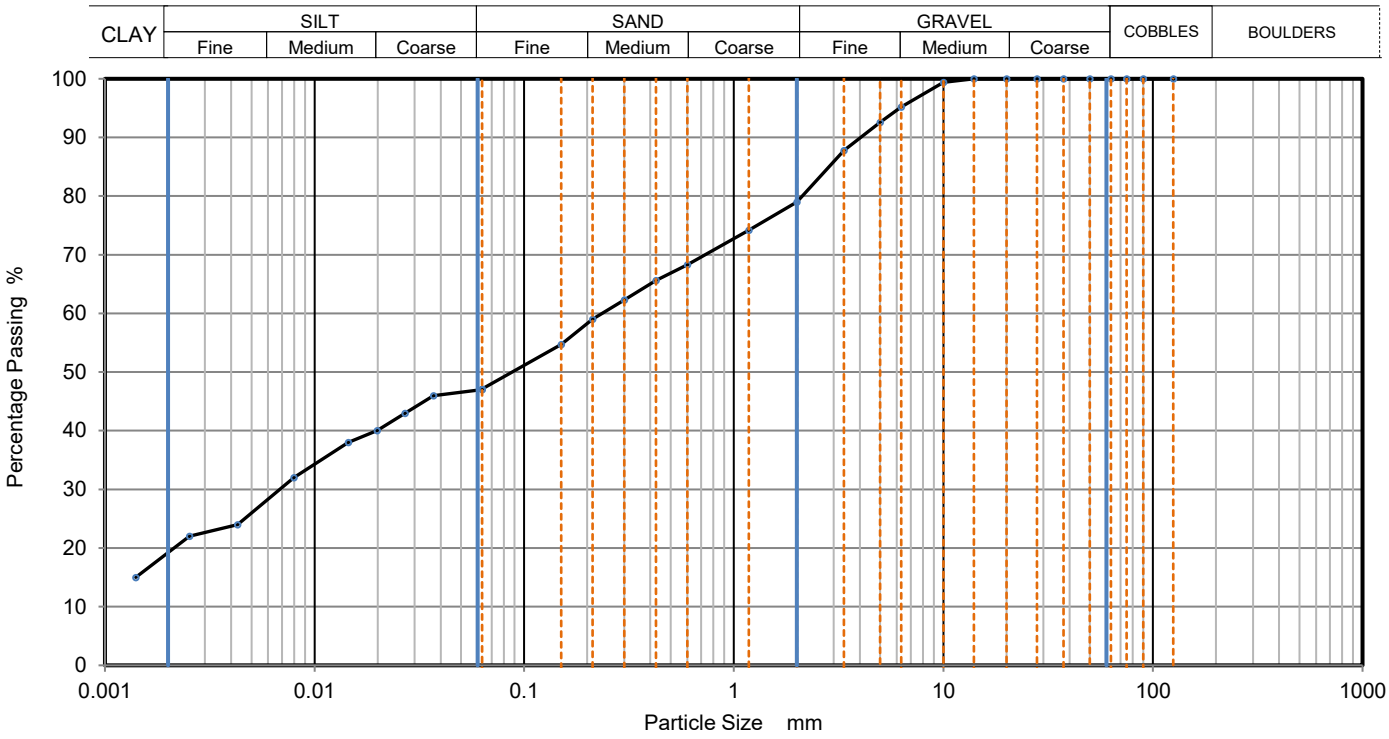
Grading Analysis		
D100	mm	
D60	mm	0.43
D30	mm	0.025
D10	mm	0.00342
Uniformity Coefficient		130
Curvature Coefficient		0.42

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV06
Site Name	DAA Cargo Relocation			Sample No.	8
Specimen Description	Greyish brown sandy slightly gravelly CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071538



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.03692	46
75	100	0.02700	43
63	100	0.01990	40
50	100	0.01448	38
37.5	100	0.00795	32
28	100	0.00429	24
20	100	0.00253	22
14	100	0.00140	15
10	99		
6.3	95		
5	93		
3.35	88		
2	79		
1.18	74		
0.6	68	Particle density	(assumed)
0.425	66	2.65	Mg/m3
0.3	62		
0.212	59		
0.15	55		
0.063	47		

Dry Mass of sample, g: 221

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	21.0
Sand	31.9
Silt	28.1
Clay	19.0

Grading Analysis		
D100	mm	
D60	mm	0.235
D30	mm	0.00685
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

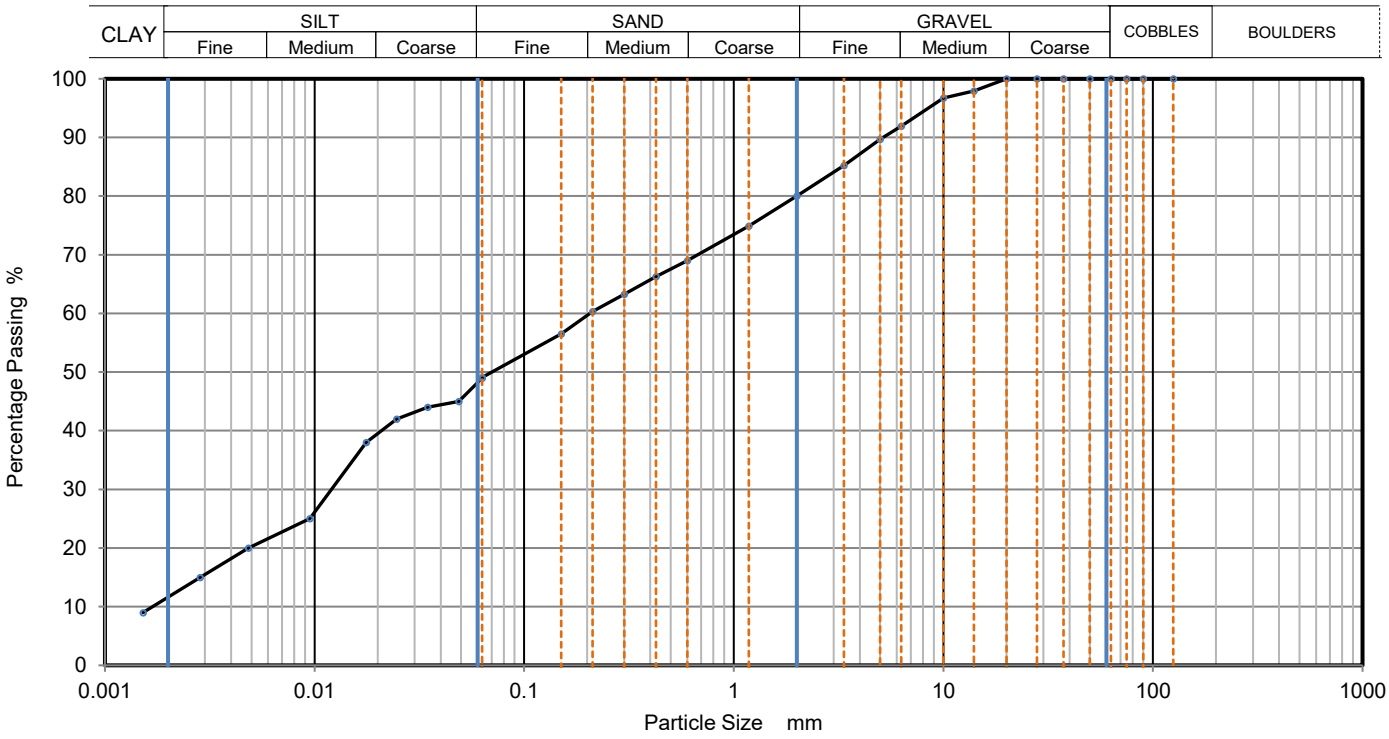
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

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CAUSEWAY GEOTECH	PARTICLE SIZE DISTRIBUTION				Job Ref		25-0509
					Borehole/Pit No.		BH-CV06
Site Name	DAA Cargo Relocation				Sample No.		11
Specimen Description	Greyish brown sandy slightly gravelly CLAY.				Sample Depth (m)	Top	3.00
						Base	3.70
Specimen Reference	6	Specimen Depth	3	m	Sample Type		B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016				KeyLAB ID		Caus2025071539



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	49
90	100	0.04869	45
75	100	0.03465	44
63	100	0.02466	42
50	100	0.01766	38
37.5	100	0.00952	25
28	100	0.00484	20
20	100	0.00284	15
14	98	0.00152	9
10	97		
6.3	92		
5	90		
3.35	85		
2	80		
1.18	75		
0.6	69	Particle density	(assumed)
0.425	66	2.65	Mg/m3
0.3	63		
0.212	60		
0.15	57		
0.063	49		

Dry Mass of sample, g: 393

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	20.0
Sand	31.0
Silt	37.5
Clay	11.5

Grading Analysis		
D100	mm	
D60	mm	0.206
D30	mm	0.0119
D10	mm	0.00169
Uniformity Coefficient		120
Curvature Coefficient		0.41

Remarks

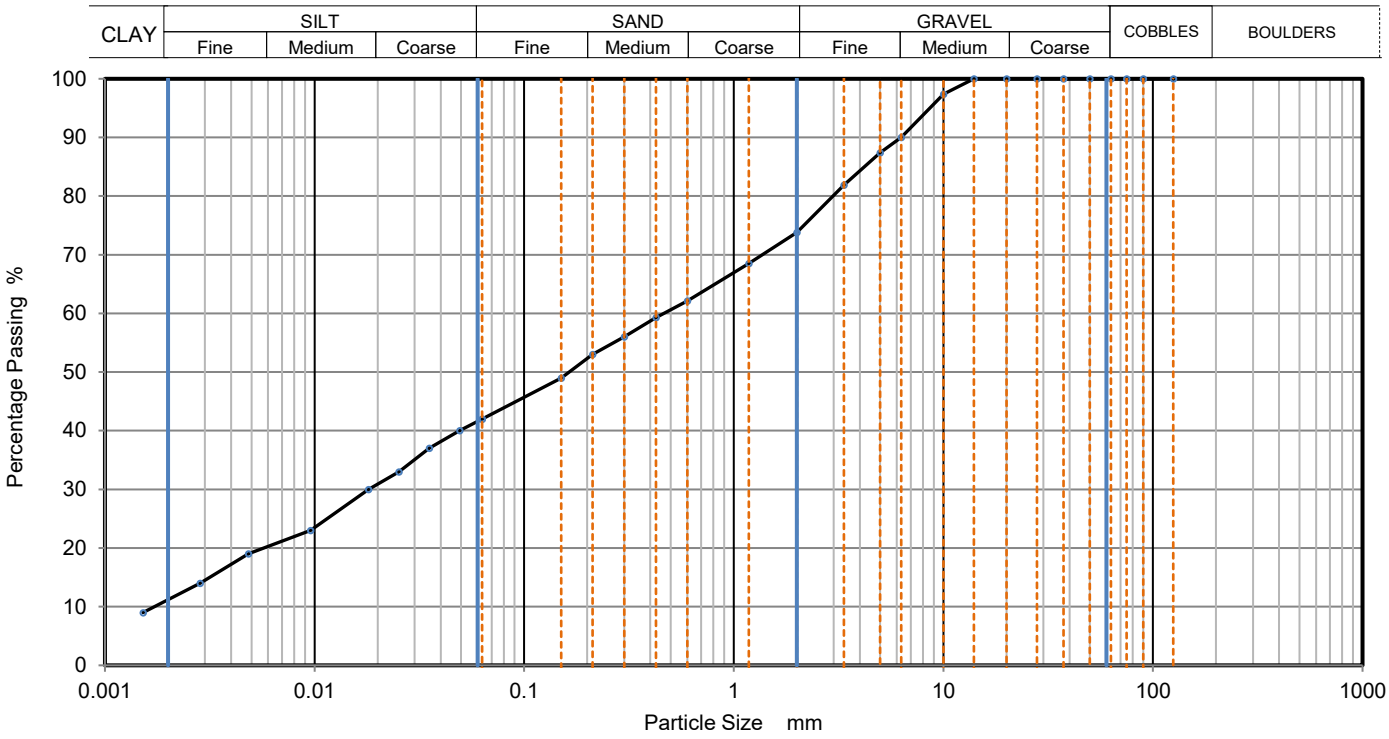
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

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PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV07
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Greyish brown sandy slightly gravelly CLAY.			Sample Depth (m) Top	1.70
				Sample Depth (m) Base	2.00
Specimen Reference	6	Specimen Depth	1.7 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071540



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	42
90	100	0.04933	40
75	100	0.03533	37
63	100	0.02529	33
50	100	0.01810	30
37.5	100	0.00957	23
28	100	0.00484	19
20	100	0.00284	14
14	100	0.00152	9
10	97		
6.3	90		
5	87		
3.35	82		
2	74		
1.18	69		
0.6	62	Particle density	(assumed)
0.425	59	2.65	Mg/m3
0.3	56		
0.212	53		
0.15	49		
0.063	42		

Dry Mass of sample, g: 249

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	26.2
Sand	31.8
Silt	30.9
Clay	11.1

Grading Analysis		
D100	mm	
D60	mm	0.463
D30	mm	0.0185
D10	mm	0.00176
Uniformity Coefficient		260
Curvature Coefficient		0.42

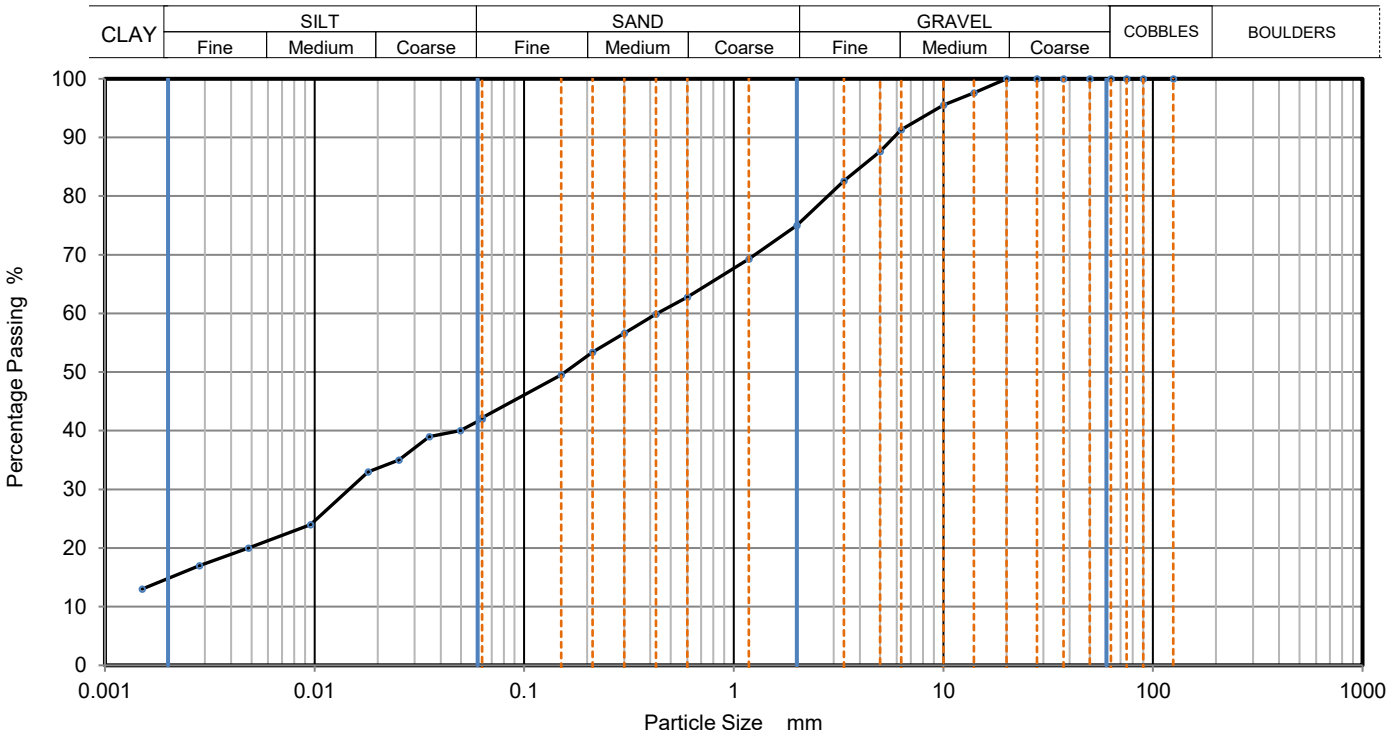
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					BH-CV07
Site Name	DAA Cargo Relocation			Sample No.	12
Specimen Description	Greyish brown sandy slightly gravelly CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071541



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	42
90	100	0.04965	40
75	100	0.03533	39
63	100	0.02529	35
50	100	0.01800	33
37.5	100	0.00957	24
28	100	0.00484	20
20	100	0.00283	17
14	98	0.00150	13
10	96		
6.3	91		
5	88		
3.35	83		
2	75		
1.18	69		
0.6	63	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	57		
0.212	53		
0.15	50		
0.063	42		

Dry Mass of sample, g: 215

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	25.0
Sand	32.8
Silt	27.7
Clay	14.5

Grading Analysis		
D100	mm	
D60	mm	0.43
D30	mm	0.0146
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

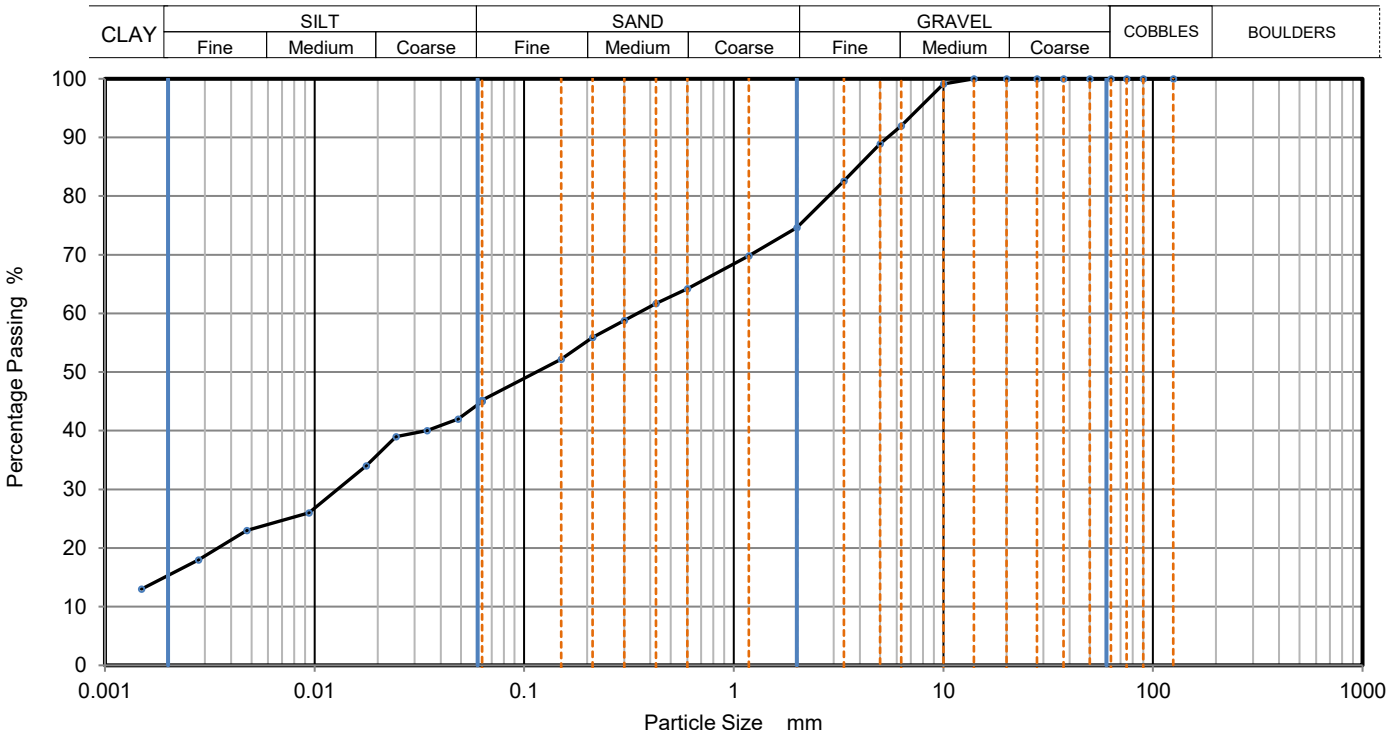
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Stephen Watson

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PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	BH-CV08
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Dark brown sandy slightly gravelly CLAY.			Sample Depth (m) Top	1.20
				Base	2.00
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071542



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	45
90	100	0.04836	42
75	100	0.03443	40
63	100	0.02450	39
50	100	0.01766	34
37.5	100	0.00940	26
28	100	0.00476	23
20	100	0.00279	18
14	100	0.00149	13
10	99		
6.3	92		
5	89		
3.35	83		
2	75		
1.18	70		
0.6	64	Particle density	(assumed)
0.425	62	2.65	Mg/m3
0.3	59		
0.212	56		
0.15	52		
0.063	45		

Dry Mass of sample, g: 222

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	25.4
Sand	29.4
Silt	30.0
Clay	15.2

Grading Analysis		
D100	mm	
D60	mm	0.346
D30	mm	0.013
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

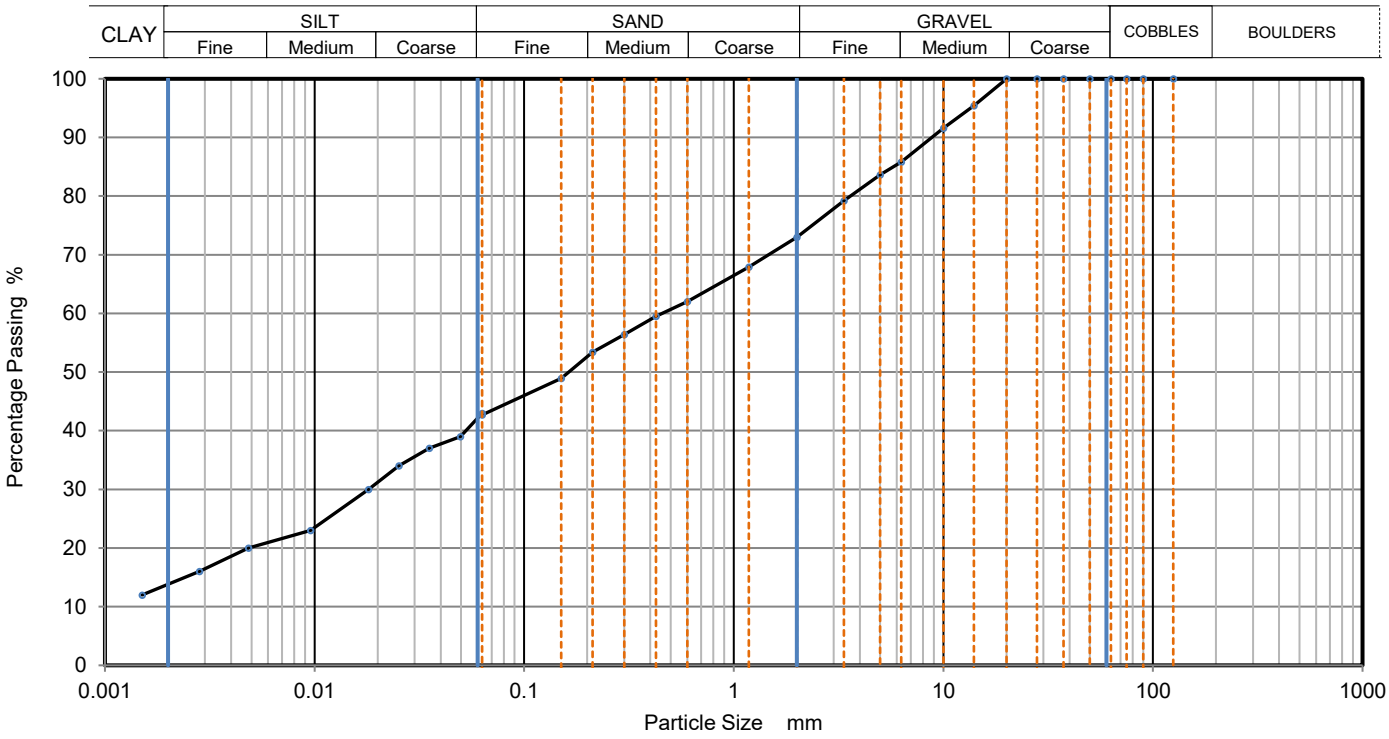
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					BH-CV08
Site Name	DAA Cargo Relocation			Sample No.	10
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071543



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	43
90	100	0.04965	39
75	100	0.03533	37
63	100	0.02529	34
50	100	0.01810	30
37.5	100	0.00957	23
28	100	0.00484	20
20	100	0.00283	16
14	95	0.00150	12
10	92		
6.3	86		
5	84		
3.35	79		
2	73		
1.18	68		
0.6	62	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	56		
0.212	53		
0.15	49		
0.063	43		

Dry Mass of sample, g: 430

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	27.0
Sand	30.3
Silt	28.6
Clay	14.1

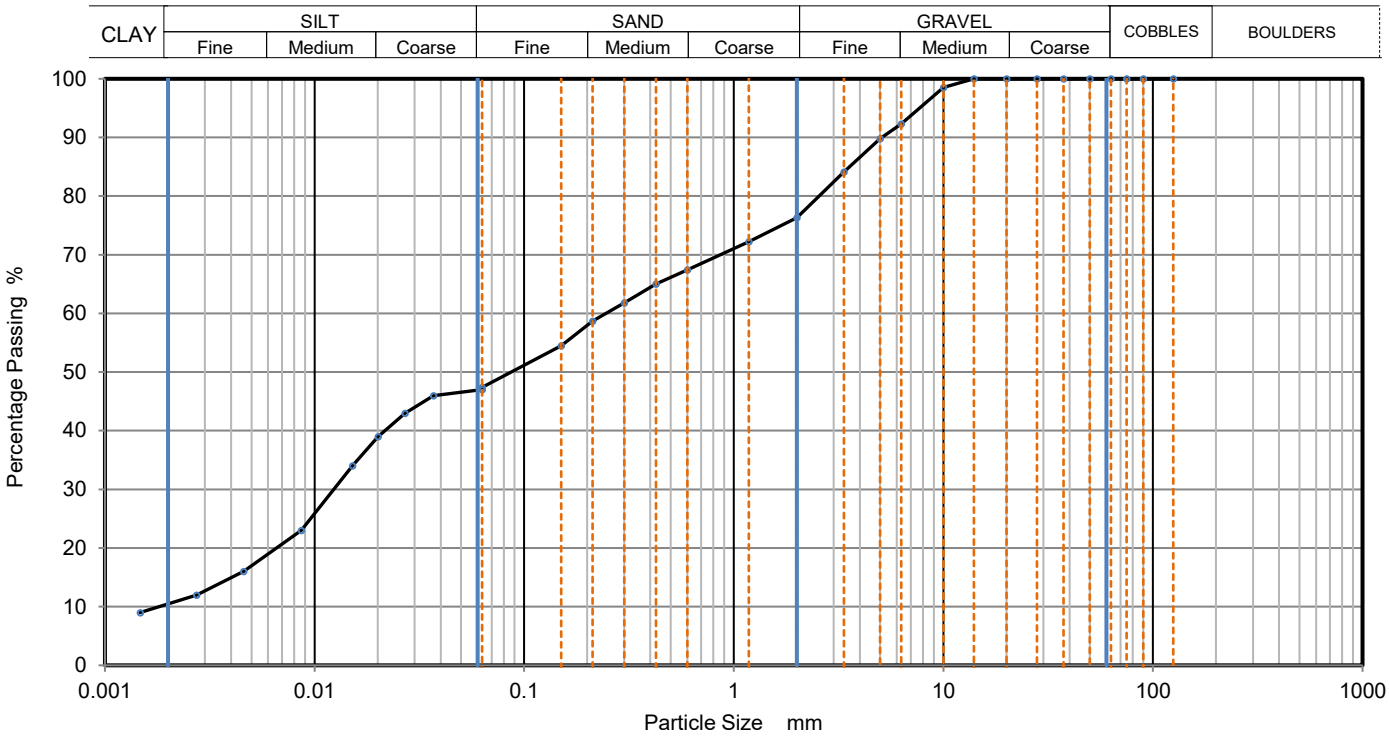
Grading Analysis		
D100	mm	
D60	mm	0.455
D30	mm	0.0177
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	RC-CV02
Site Name	DAA Cargo Relocation			Sample No.	9
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	4.70
				Base	5.40
Specimen Reference	6	Specimen Depth	4.7 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071545



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.03692	46
75	100	0.02700	43
63	100	0.02009	39
50	100	0.01515	34
37.5	100	0.00865	23
28	100	0.00459	16
20	100	0.00273	12
14	100	0.00147	9
10	99		
6.3	92		
5	90		
3.35	84		
2	76		
1.18	72		
0.6	67	Particle density	(assumed)
0.425	65	2.65	Mg/m3
0.3	62		
0.212	59		
0.15	55		
0.063	47		

Dry Mass of sample, g: 230

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.7
Sand	28.9
Silt	37.0
Clay	10.4

Grading Analysis		
D100	mm	
D60	mm	0.244
D30	mm	0.0124
D10	mm	0.00184
Uniformity Coefficient		130
Curvature Coefficient		0.34

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

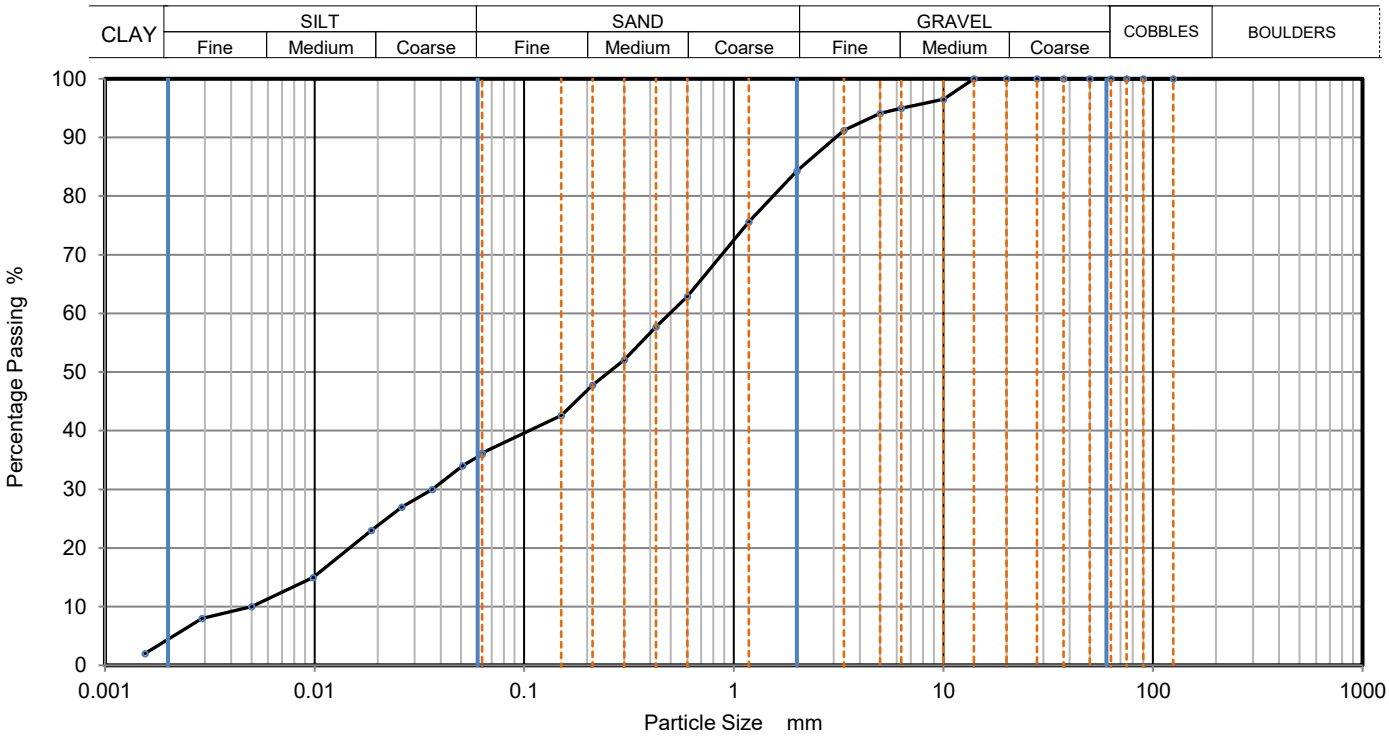
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Stephen Watson

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PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	RC-CV02
Site Name	DAA Cargo Relocation			Sample No.	10
Specimen Description	Greyish brown slightly gravelly clayey fine to caorse SAND.			Sample Depth (m) Top	7.60
				Sample Depth (m) Base	8.40
Specimen Reference	6	Specimen Depth	7.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071546



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	36
90	100	0.05090	34
75	100	0.03642	30
63	100	0.02606	27
50	100	0.01864	23
37.5	100	0.00984	15
28	100	0.00500	10
20	100	0.00290	8
14	100	0.00155	2
10	97		
6.3	95		
5	94		
3.35	91		
2	84		
1.18	76		
0.6	63	Particle density	(assumed)
0.425	58	2.65	Mg/m3
0.3	52		
0.212	48		
0.15	43		
0.063	36		

Dry Mass of sample, g: 199

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	15.7
Sand	48.1
Silt	32.0
Clay	4.2

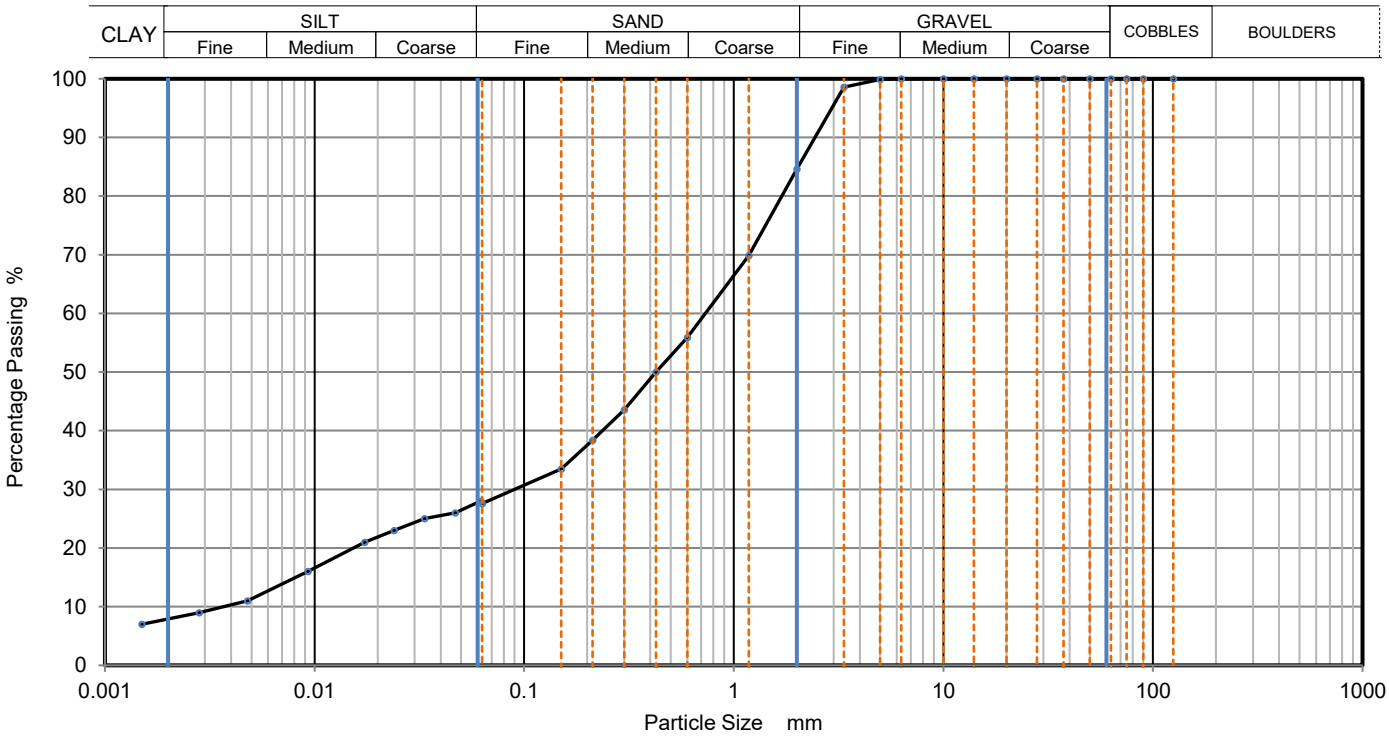
Grading Analysis		
D100	mm	
D60	mm	0.496
D30	mm	0.0349
D10	mm	0.00529
Uniformity Coefficient		94
Curvature Coefficient		0.46

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

CAUSEWAY GEOTECH	PARTICLE SIZE DISTRIBUTION				Job Ref		25-0509
					Borehole/Pit No.		RC-CV02
Site Name	DAA Cargo Relocation				Sample No.		11
Specimen Description	Brown slightly gravelly clayey fine to coarse SAND.				Sample Depth (m)	Top	10.60
						Base	11.30
Specimen Reference	6	Specimen Depth	10.6	m	Sample Type		B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016				KeyLAB ID		Caus2025071547



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06219	28
90	100	0.04694	26
75	100	0.03343	25
63	100	0.02398	23
50	100	0.01731	21
37.5	100	0.00929	16
28	100	0.00479	11
20	100	0.00281	9
14	100	0.00150	7
10	100		
6.3	100		
5	100		
3.35	99		
2	85		
1.18	70		
0.6	56	Particle density	(assumed)
0.425	50	2.65	Mg/m3
0.3	44		
0.212	38		
0.15	34		
0.063	28		

Dry Mass of sample, g	201

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	15.4
Sand	57.0
Silt	19.9
Clay	7.7

Grading Analysis		
D100	mm	
D60	mm	0.73
D30	mm	0.0892
D10	mm	0.00373
Uniformity Coefficient		200
Curvature Coefficient		2.9

Remarks

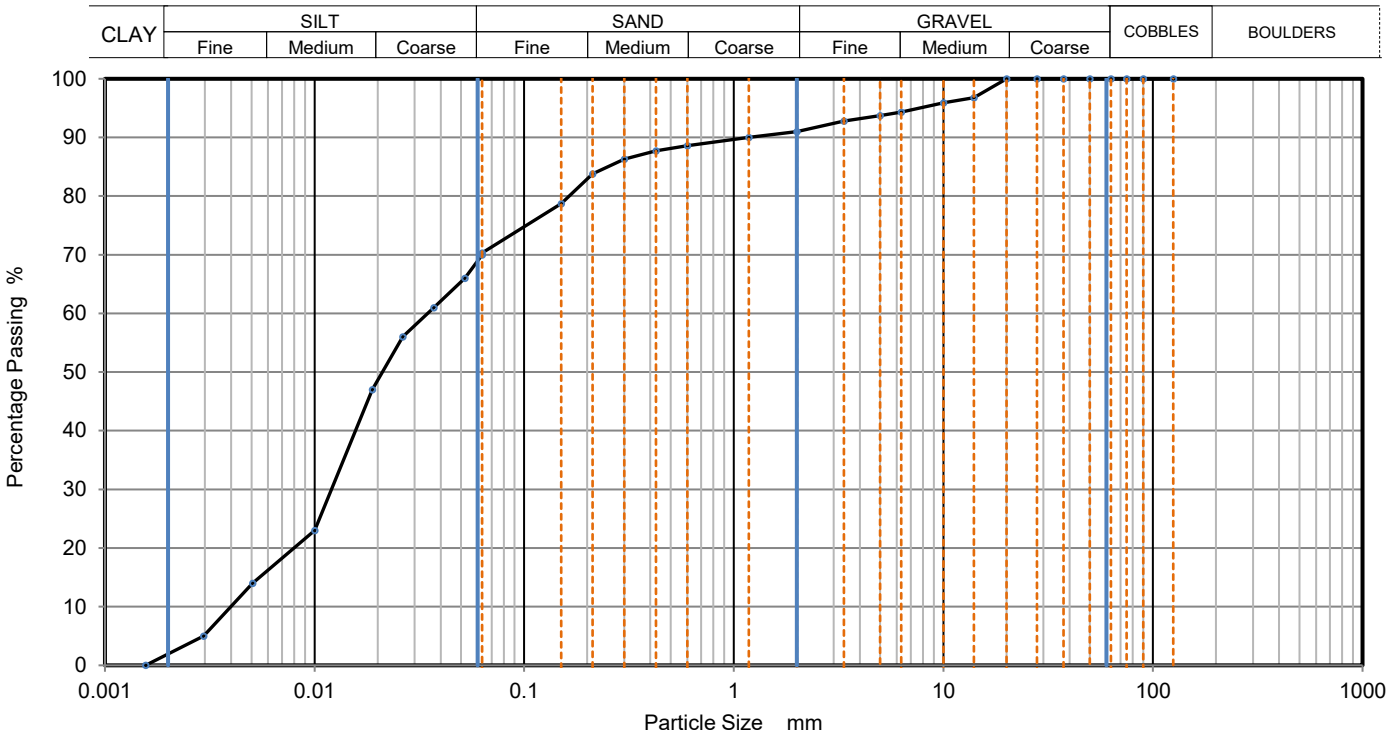
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Stephen Watson

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CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	RC-CV04
Site Name	DAA Cargo Relocation			Sample No.	10
Specimen Description	Grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	8.50
				Base	8.90
Specimen Reference	6	Specimen Depth	8.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071548



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	70
90	100	0.05215	66
75	100	0.03710	61
63	100	0.02638	56
50	100	0.01887	47
37.5	100	0.01002	23
28	100	0.00506	14
20	100	0.00295	5
14	97	0.00156	0
10	96		
6.3	94		
5	94		
3.35	93		
2	91		
1.18	90		
0.6	89	Particle density	(assumed)
0.425	88	2.65	Mg/m3
0.3	86		
0.212	84		
0.15	79		
0.063	70		

Dry Mass of sample, g: 212

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	9.0
Sand	20.7
Silt	68.5
Clay	1.8

Grading Analysis		
D100	mm	
D60	mm	0.0347
D30	mm	0.012
D10	mm	0.00401
Uniformity Coefficient		8.7
Curvature Coefficient		1

Remarks

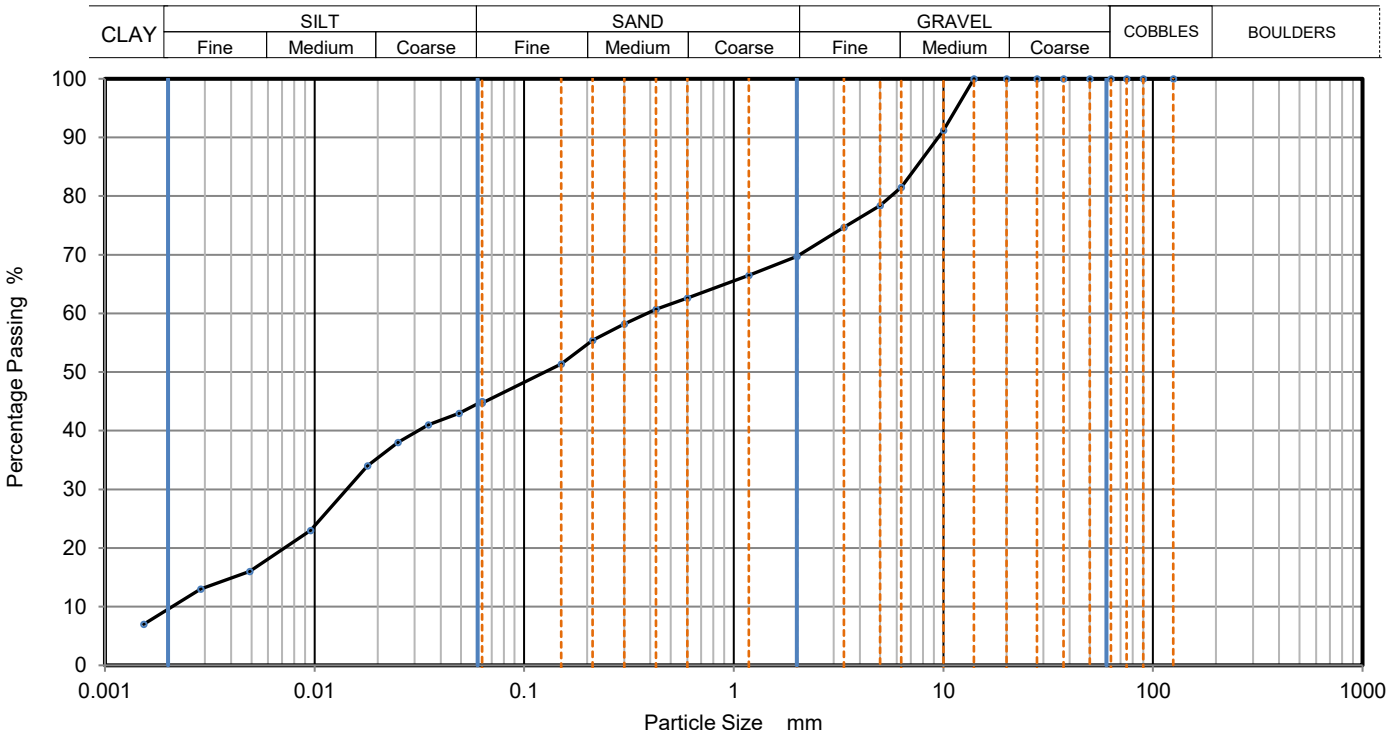
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

UKAS TESTING

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					RC-CV04
Site Name	DAA Cargo Relocation			Sample No.	9
Specimen Description	Dark grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	10.50
				Base	11.20
Specimen Reference	6	Specimen Depth	10.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071549



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	45
90	100	0.04896	43
75	100	0.03485	41
63	100	0.02497	38
50	100	0.01788	34
37.5	100	0.00958	23
28	100	0.00490	16
20	100	0.00286	13
14	100	0.00153	7
10	91		
6.3	82		
5	78		
3.35	75		
2	70		
1.18	67		
0.6	63	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	58		
0.212	55		
0.15	51		
0.063	45		

Dry Mass of sample, g: 225

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	30.3
Sand	25.0
Silt	35.3
Clay	9.4

Grading Analysis		
D100	mm	
D60	mm	0.384
D30	mm	0.0142
D10	mm	0.00213
Uniformity Coefficient		180
Curvature Coefficient		0.25

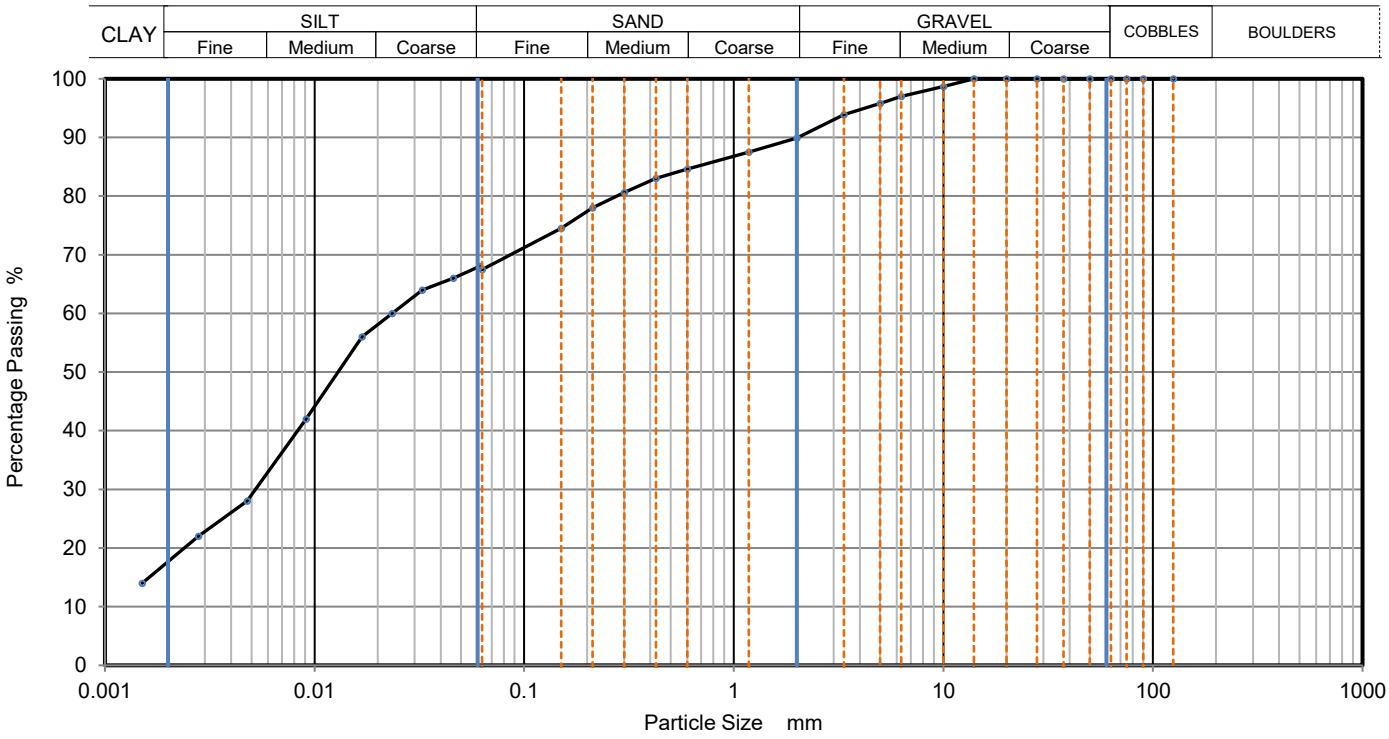
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV01
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Base	1.50
Specimen Reference	7	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071550



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06124	68
90	100	0.04589	66
75	100	0.03270	64
63	100	0.02347	60
50	100	0.01684	56
37.5	100	0.00912	42
28	100	0.00476	28
20	100	0.00280	22
14	100	0.00151	14
10	99		
6.3	97		
5	96		
3.35	94		
2	90		
1.18	88		
0.6	85	Particle density	(assumed)
0.425	83	2.65	Mg/m3
0.3	81		
0.212	78		
0.15	75		
0.063	68		

Dry Mass of sample, g: 202

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	10.1
Sand	22.4
Silt	50.0
Clay	17.5

Grading Analysis		
D100	mm	
D60	mm	0.0243
D30	mm	0.00528
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

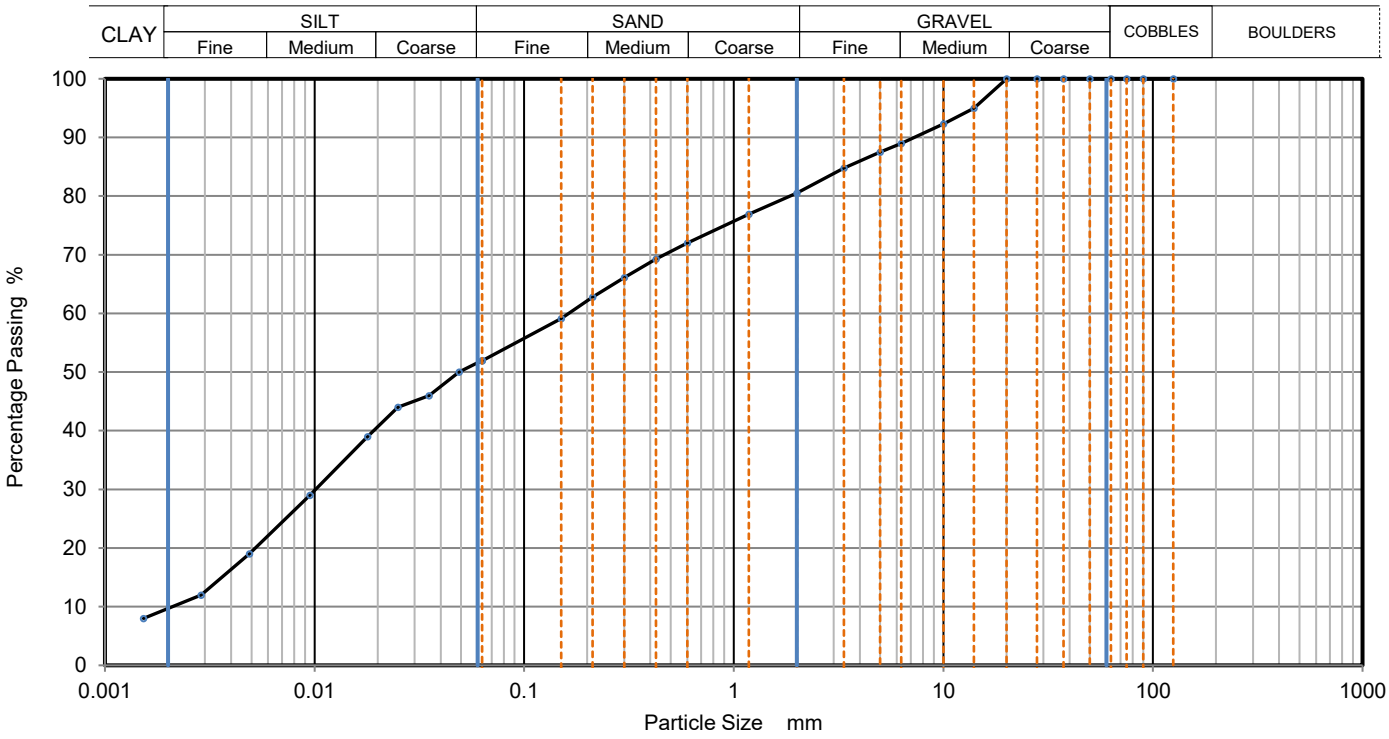
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV01
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Base	2.50
Specimen Reference	6	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071551



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	52
90	100	0.04901	50
75	100	0.03510	46
63	100	0.02498	44
50	100	0.01789	39
37.5	100	0.00952	29
28	100	0.00489	19
20	100	0.00287	12
14	95	0.00153	8
10	92		
6.3	89		
5	88		
3.35	85		
2	81		
1.18	77		
0.6	72	Particle density	(assumed)
0.425	69	2.65	Mg/m3
0.3	66		
0.212	63		
0.15	59		
0.063	52		

Dry Mass of sample, g: 364

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.5
Sand	28.6
Silt	41.8
Clay	10.1

Grading Analysis		
D100	mm	
D60	mm	0.163
D30	mm	0.0101
D10	mm	0.00198
Uniformity Coefficient		82
Curvature Coefficient		0.32

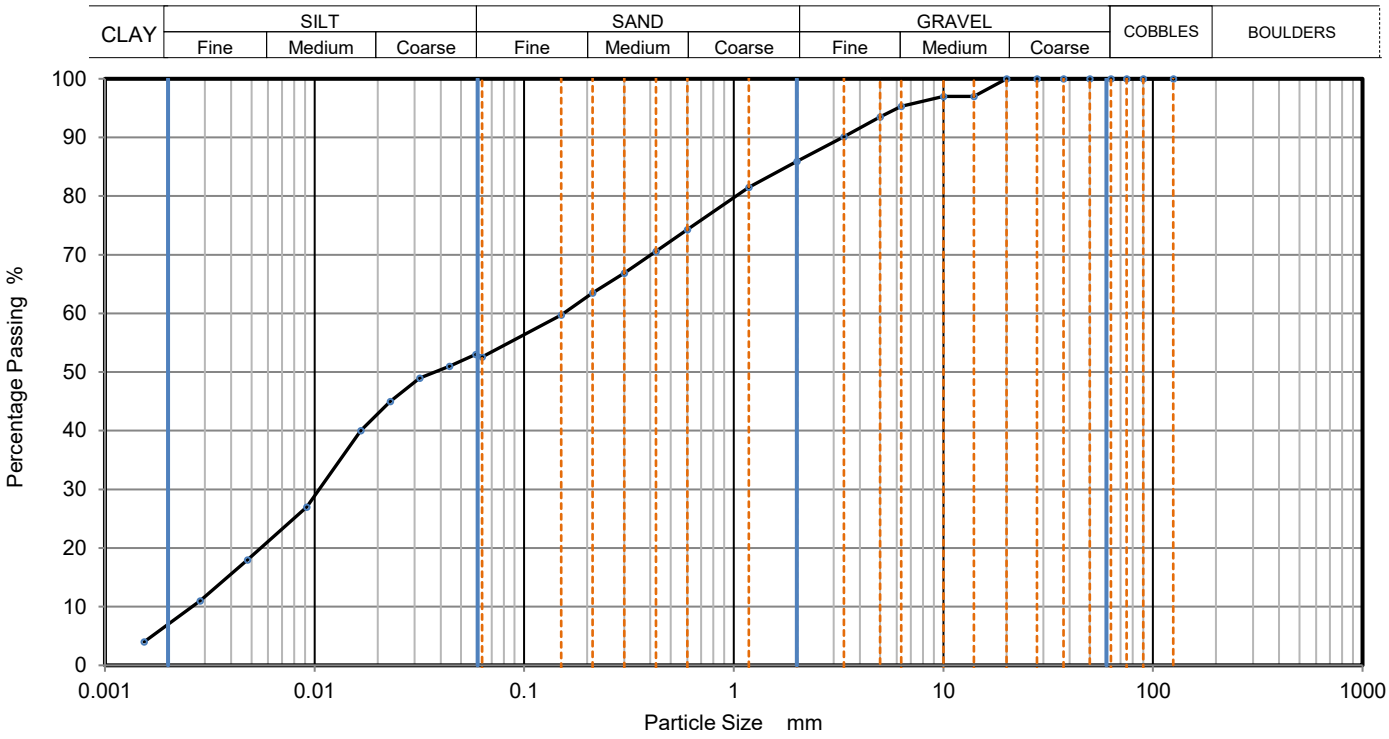
Remarks

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Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV02
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	
Specimen Reference	3	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025072413



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.05881	53
90	100	0.04410	51
75	100	0.03170	49
63	100	0.02295	45
50	100	0.01659	40
37.5	100	0.00918	27
28	100	0.00479	18
20	100	0.00284	11
14	97	0.00154	4
10	97		
6.3	95		
5	94		
3.35	90		
2	86		
1.18	82		
0.6	74	Particle density	(assumed)
0.425	71	2.65	Mg/m3
0.3	67		
0.212	64		
0.15	60		
0.063	53		

Dry Mass of sample, g: 200

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	14.1
Sand	33.3
Silt	45.7
Clay	6.9

Grading Analysis		
D100	mm	
D60	mm	0.154
D30	mm	0.0105
D10	mm	0.00265
Uniformity Coefficient		58
Curvature Coefficient		0.27

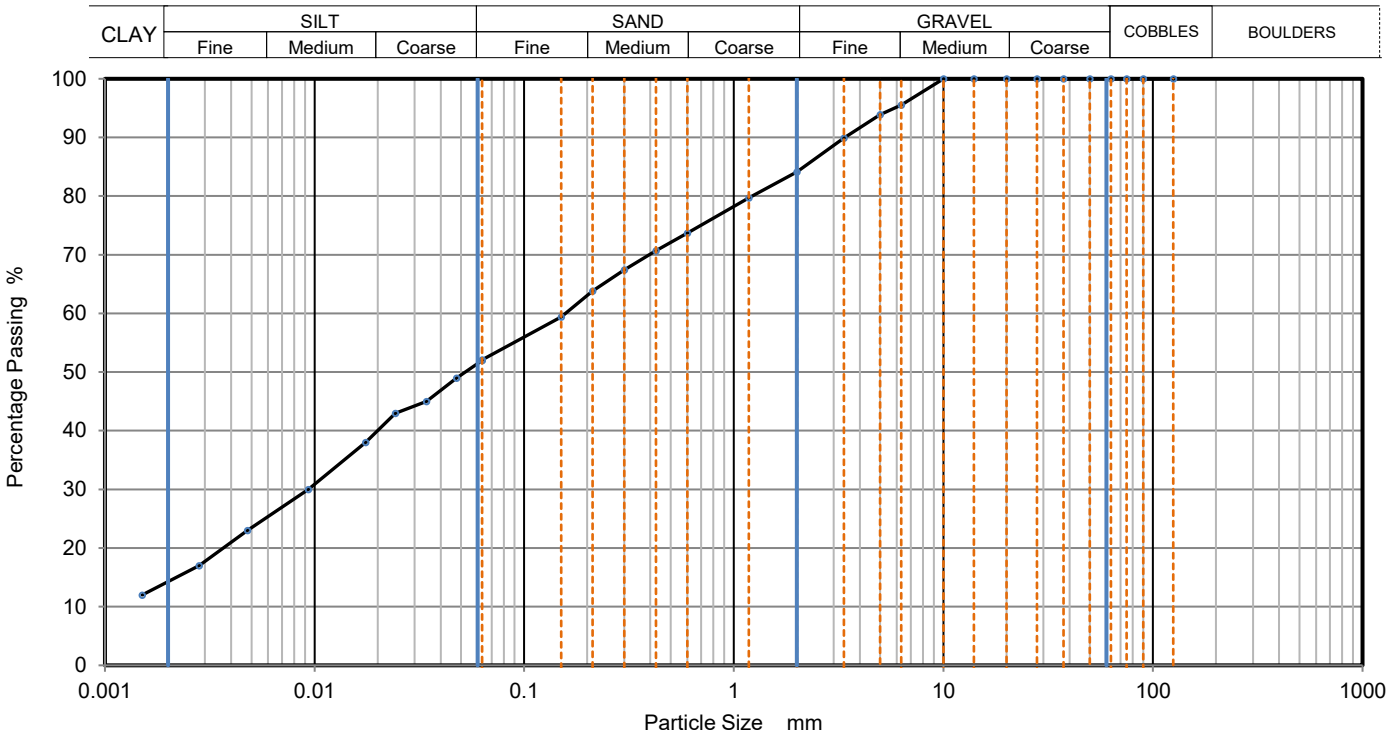
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV02
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.10
				Base	2.00
Specimen Reference	6	Specimen Depth	1.1 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071553



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	52
90	100	0.04762	49
75	100	0.03415	45
63	100	0.02431	43
50	100	0.01754	38
37.5	100	0.00935	30
28	100	0.00479	23
20	100	0.00281	17
14	100	0.00151	12
10	100		
6.3	96		
5	94		
3.35	90		
2	84		
1.18	80		
0.6	74	Particle density	(assumed)
0.425	71	2.65	Mg/m3
0.3	67		
0.212	64		
0.15	59		
0.063	52		

Dry Mass of sample, g: 238

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	15.9
Sand	32.0
Silt	37.6
Clay	14.5

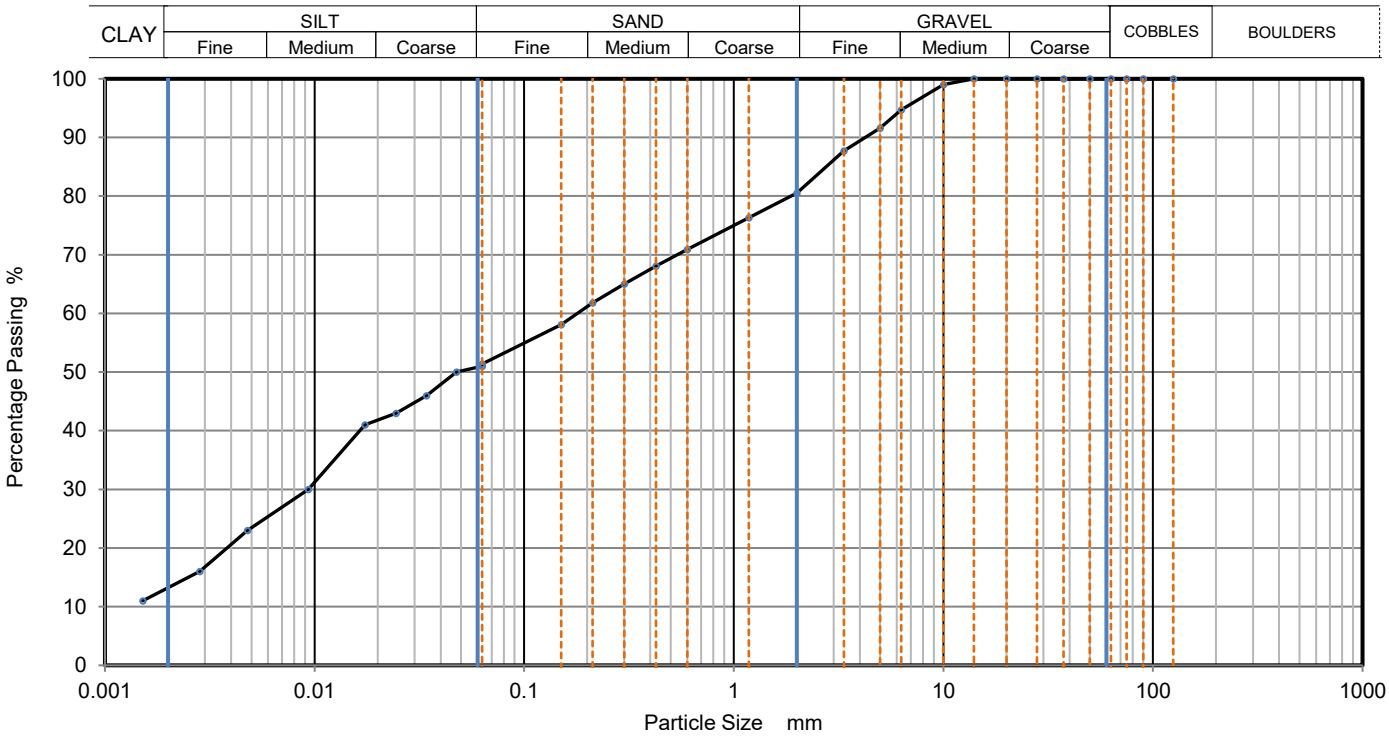
Grading Analysis		
D100	mm	
D60	mm	0.157
D30	mm	0.00968
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV03
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Base	1.50
Specimen Reference	7	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071554



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	51
90	100	0.04762	50
75	100	0.03415	46
63	100	0.02448	43
50	100	0.01743	41
37.5	100	0.00935	30
28	100	0.00479	23
20	100	0.00283	16
14	100	0.00151	11
10	99		
6.3	95		
5	92		
3.35	88		
2	81		
1.18	76		
0.6	71	Particle density	(assumed)
0.425	68	2.65	Mg/m3
0.3	65		
0.212	62		
0.15	58		
0.063	51		

Dry Mass of sample, g: 211

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.5
Sand	29.0
Silt	38.5
Clay	13.0

Grading Analysis		
D100	mm	
D60	mm	0.179
D30	mm	0.00924
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

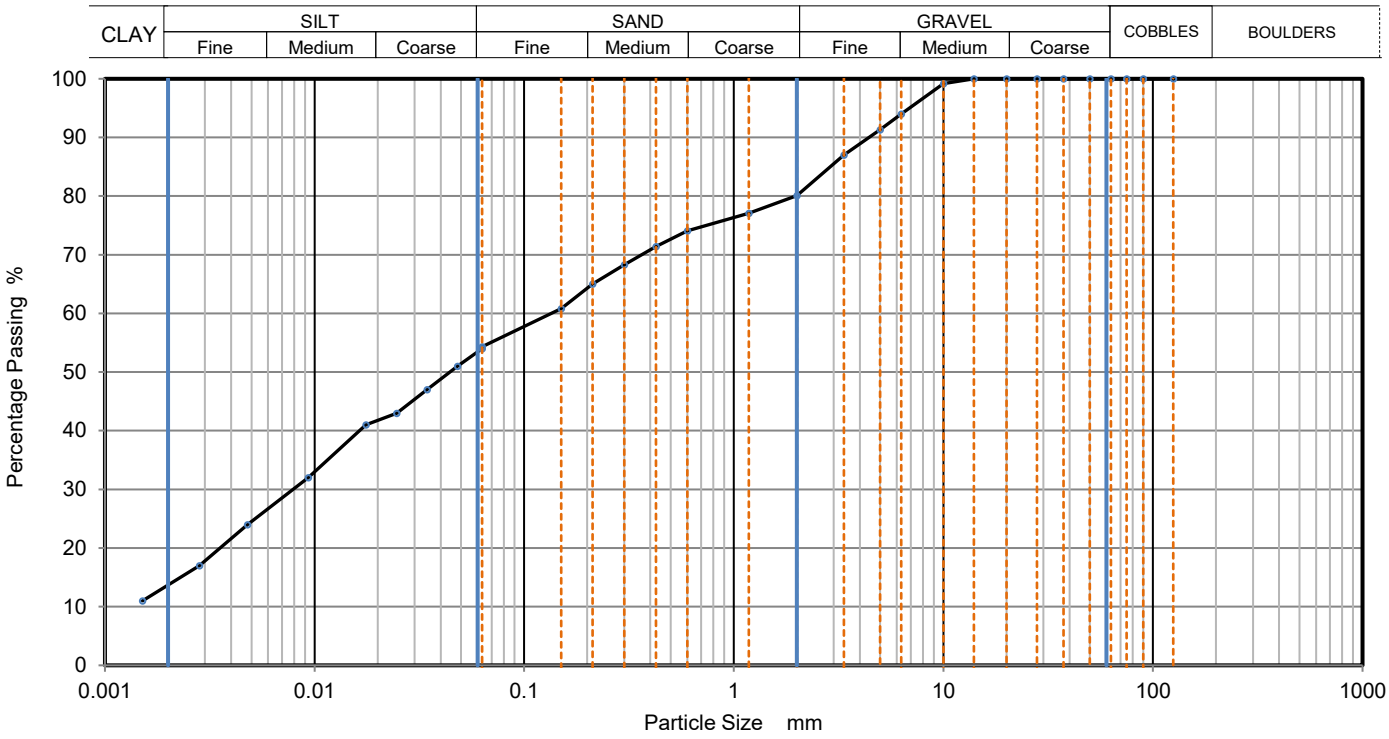
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Approved
Stephen Watson

UKAS TESTING

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV03
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Base	2.10
Specimen Reference	6	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071555



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	54
90	100	0.04803	51
75	100	0.03443	47
63	100	0.02466	43
50	100	0.01755	41
37.5	100	0.00935	32
28	100	0.00479	24
20	100	0.00283	17
14	100	0.00151	11
10	99		
6.3	94		
5	91		
3.35	87		
2	80		
1.18	77		
0.6	74	Particle density	(assumed)
0.425	71	2.65	Mg/m3
0.3	68		
0.212	65		
0.15	61		
0.063	54		

Dry Mass of sample, g: 206

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.9
Sand	25.8
Silt	40.5
Clay	13.8

Grading Analysis		
D100	mm	
D60	mm	0.135
D30	mm	0.00794
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

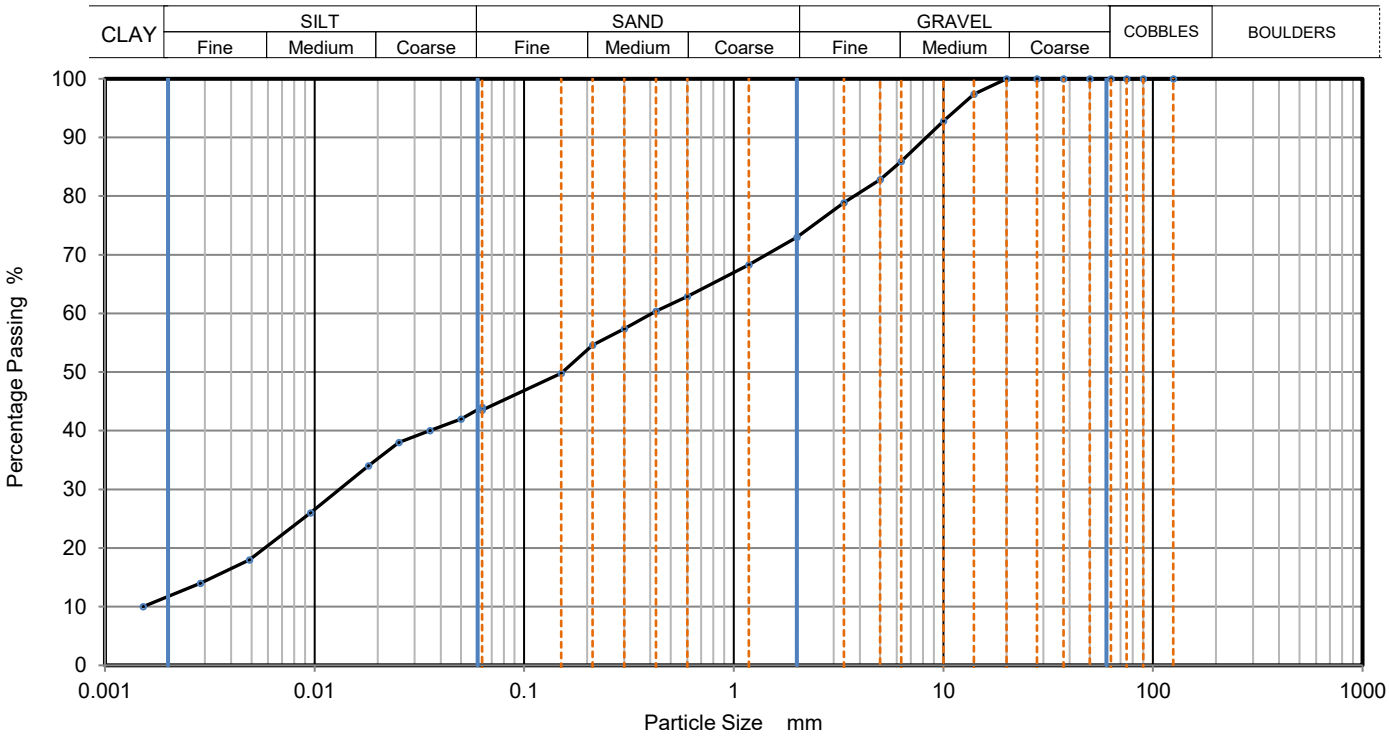
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV04
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Sample Depth (m) Base	1.90
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071557



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	44
90	100	0.04996	42
75	100	0.03555	40
63	100	0.02529	38
50	100	0.01810	34
37.5	100	0.00957	26
28	100	0.00489	18
20	100	0.00286	14
14	97	0.00152	10
10	93		
6.3	86		
5	83		
3.35	79		
2	73		
1.18	68		
0.6	63	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	57		
0.212	55		
0.15	50		
0.063	44		

Dry Mass of sample, g: 363

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	27.0
Sand	29.5
Silt	31.9
Clay	11.6

Grading Analysis		
D100	mm	
D60	mm	0.404
D30	mm	0.0135
D10	mm	0.00155
Uniformity Coefficient		260
Curvature Coefficient		0.29

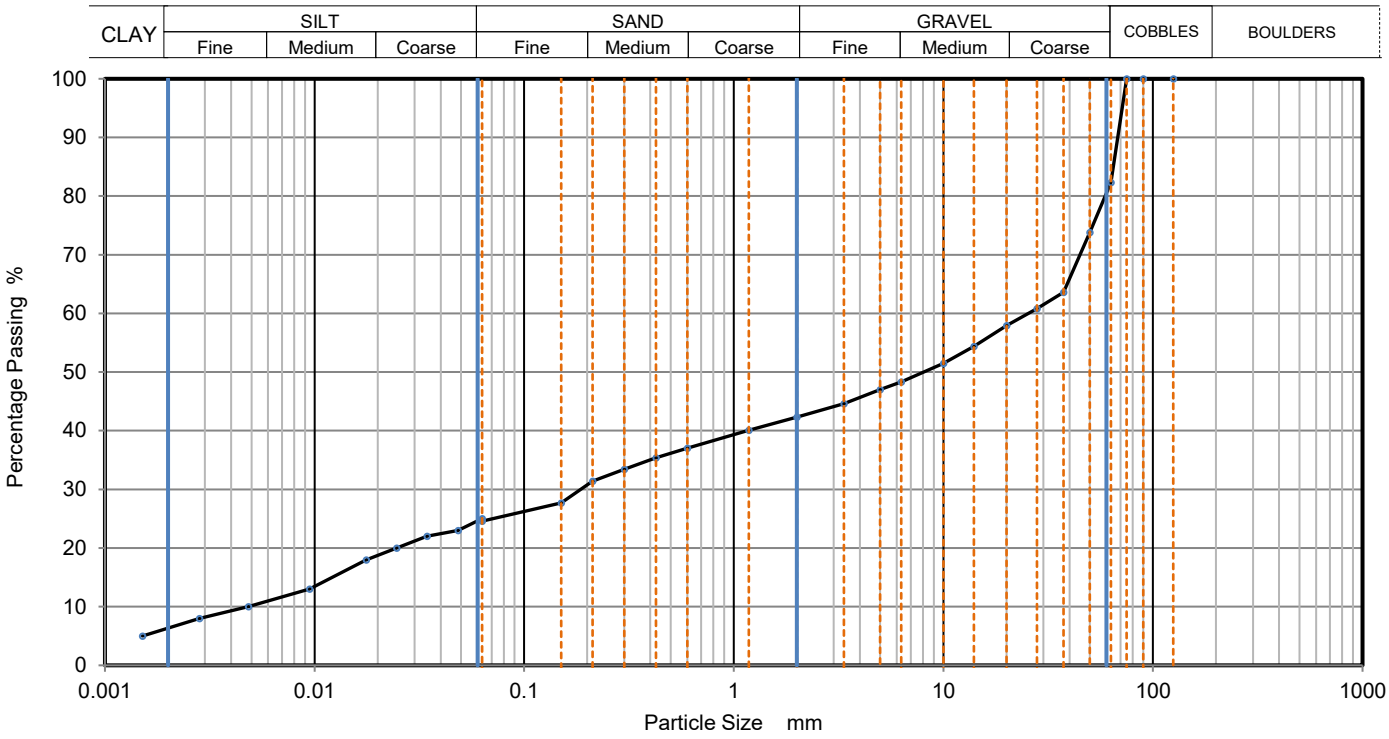
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV04
Site Name	DAA Cargo Relocation			Sample No.	8
Specimen Description	Grey sandy gravelly silty CLAY with cobbles.			Sample Depth (m) Top	1.90
				Sample Depth (m) Base	2.90
Specimen Reference	6	Specimen Depth	1.9 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071558



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	25
90	100	0.04836	23
75	100	0.03443	22
63	82	0.02466	20
50	74	0.01766	18
37.5	64	0.00946	13
28	61	0.00484	10
20	58	0.00283	8
14	54	0.00151	5
10	52		
6.3	48		
5	47		
3.35	45		
2	42		
1.18	40		
0.6	37	Particle density	(assumed)
0.425	35	2.65	Mg/m3
0.3	33		
0.212	31		
0.15	28		
0.063	25		

Dry Mass of sample, g: 3242

Sample Proportions	% dry mass
Cobbles	17.7
Gravel	40.0
Sand	17.7
Silt	18.1
Clay	6.5

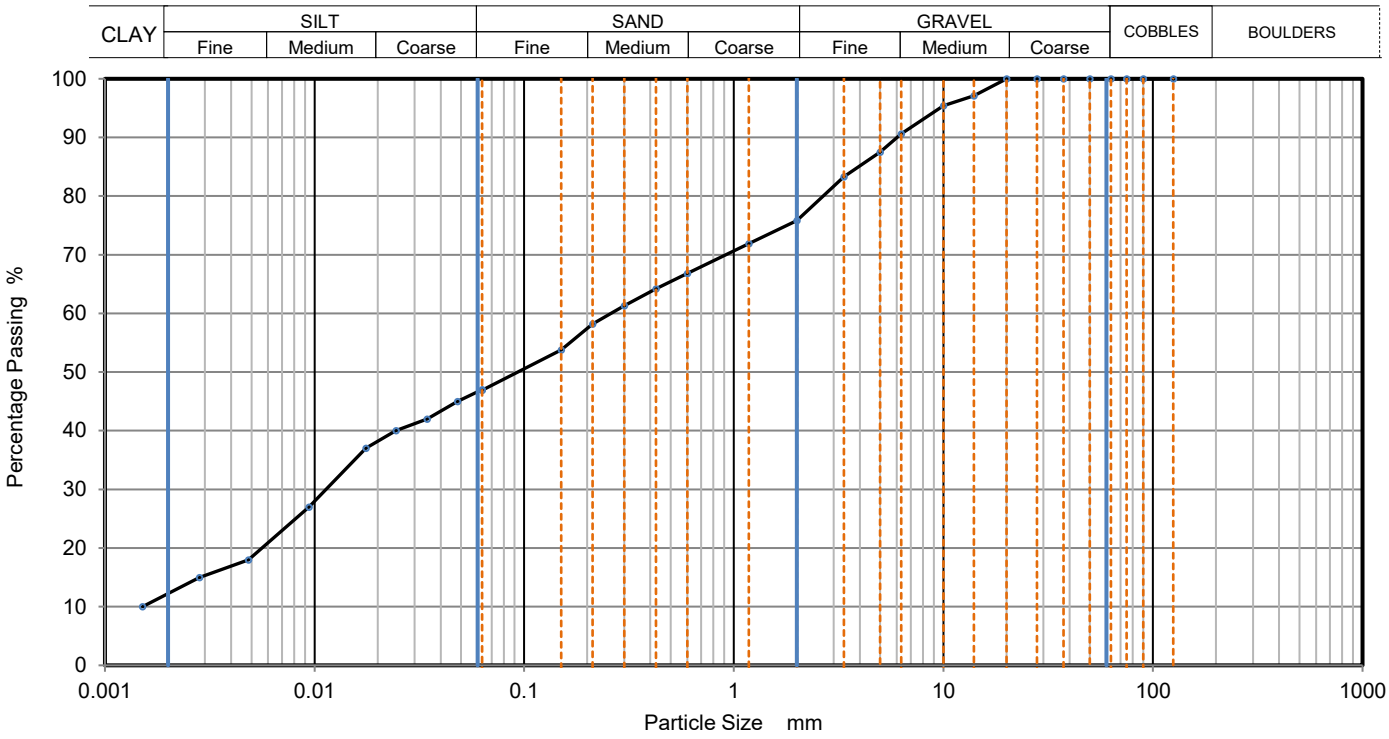
Grading Analysis		
D100	mm	
D60	mm	25.6
D30	mm	0.186
D10	mm	0.00516
Uniformity Coefficient		5000
Curvature Coefficient		0.26

Remarks

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Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV05
Site Name	DAA Cargo Relocation			Sample No.	3
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	
Specimen Reference	8	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071559



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.04803	45
75	100	0.03443	42
63	100	0.02450	40
50	100	0.01755	37
37.5	100	0.00940	27
28	100	0.00484	18
20	100	0.00283	15
14	97	0.00151	10
10	95		
6.3	91		
5	88		
3.35	83		
2	76		
1.18	72		
0.6	67	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	58		
0.15	54		
0.063	47		

Dry Mass of sample, g: 227

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.2
Sand	28.9
Silt	34.6
Clay	12.3

Grading Analysis		
D100	mm	
D60	mm	0.26
D30	mm	0.0115
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

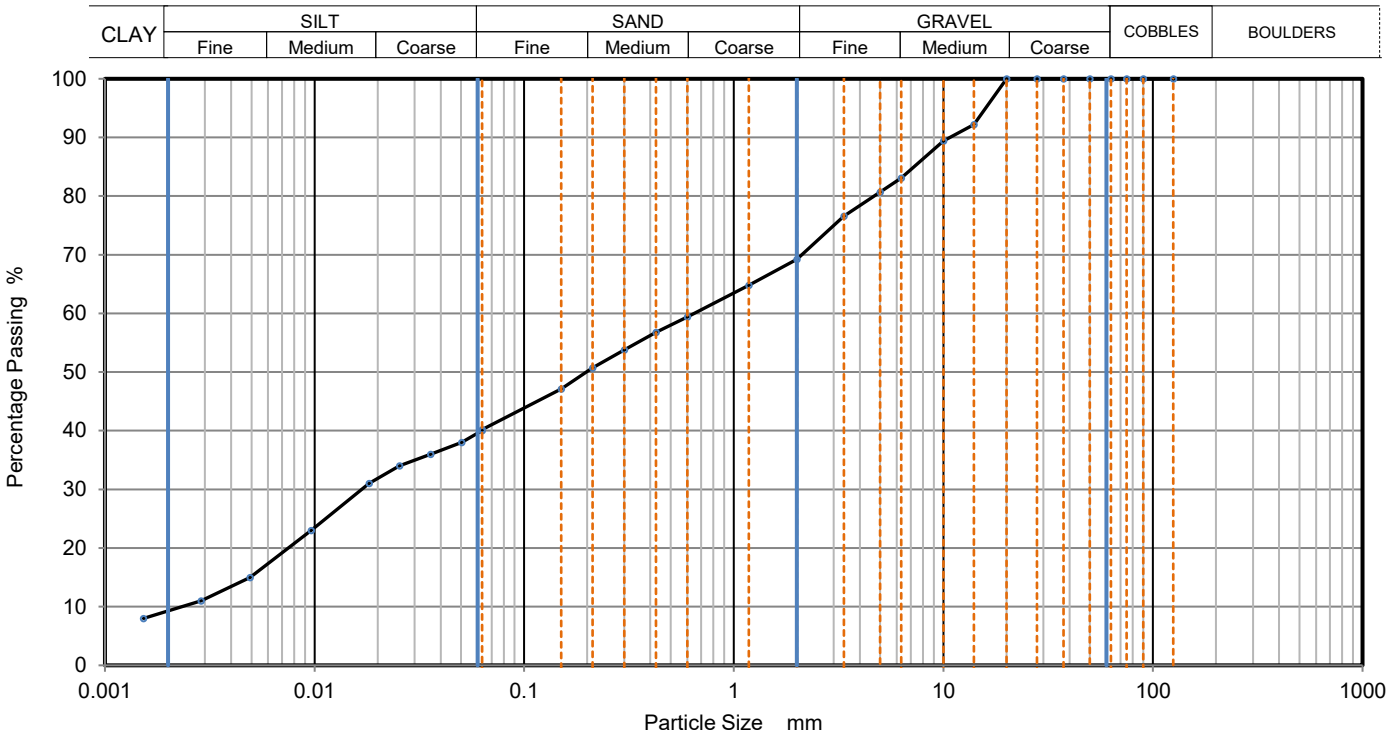
Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

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PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV05
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Base	
Specimen Reference	6	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071560



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	40
90	100	0.05028	38
75	100	0.03577	36
63	100	0.02545	34
50	100	0.01821	31
37.5	100	0.00963	23
28	100	0.00492	15
20	100	0.00287	11
14	92	0.00153	8
10	89		
6.3	83		
5	81		
3.35	77		
2	69		
1.18	65		
0.6	59	Particle density	(assumed)
0.425	57	2.65	Mg/m3
0.3	54		
0.212	51		
0.15	47		
0.063	40		

Dry Mass of sample, g: 416

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	30.8
Sand	29.0
Silt	30.9
Clay	9.3

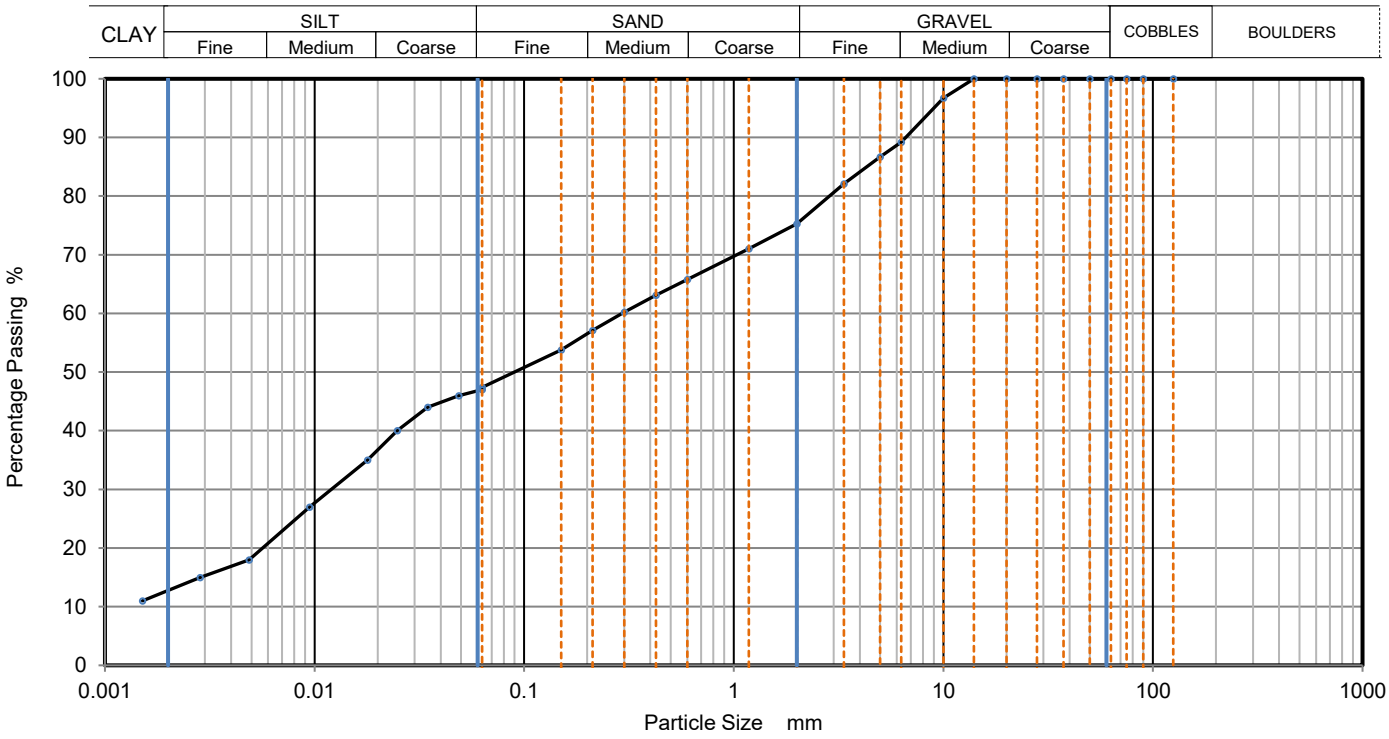
Grading Analysis		
D100	mm	
D60	mm	0.646
D30	mm	0.0173
D10	mm	0.00225
Uniformity Coefficient		290
Curvature Coefficient		0.21

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	PARTICLE SIZE DISTRIBUTION				Job Ref		25-0509
					Borehole/Pit No.		TP1-CV06
Site Name	DAA Cargo Relocation				Sample No.		8
Specimen Description	Brown sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	1.60
						Base	
Specimen Reference	3	Specimen Depth	1.6	m	Sample Type		B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016				KeyLAB ID		Caus2025072414



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.04869	46
75	100	0.03465	44
63	100	0.02482	40
50	100	0.01789	35
37.5	100	0.00946	27
28	100	0.00487	18
20	100	0.00284	15
14	100	0.00151	11
10	97		
6.3	89		
5	87		
3.35	82		
2	75		
1.18	71		
0.6	66	Particle density	(assumed)
0.425	63	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	54		
0.063	47		

Dry Mass of sample, g: 208

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.7
Sand	27.9
Silt	34.8
Clay	12.6

Grading Analysis		
D100	mm	
D60	mm	0.295
D30	mm	0.0119
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

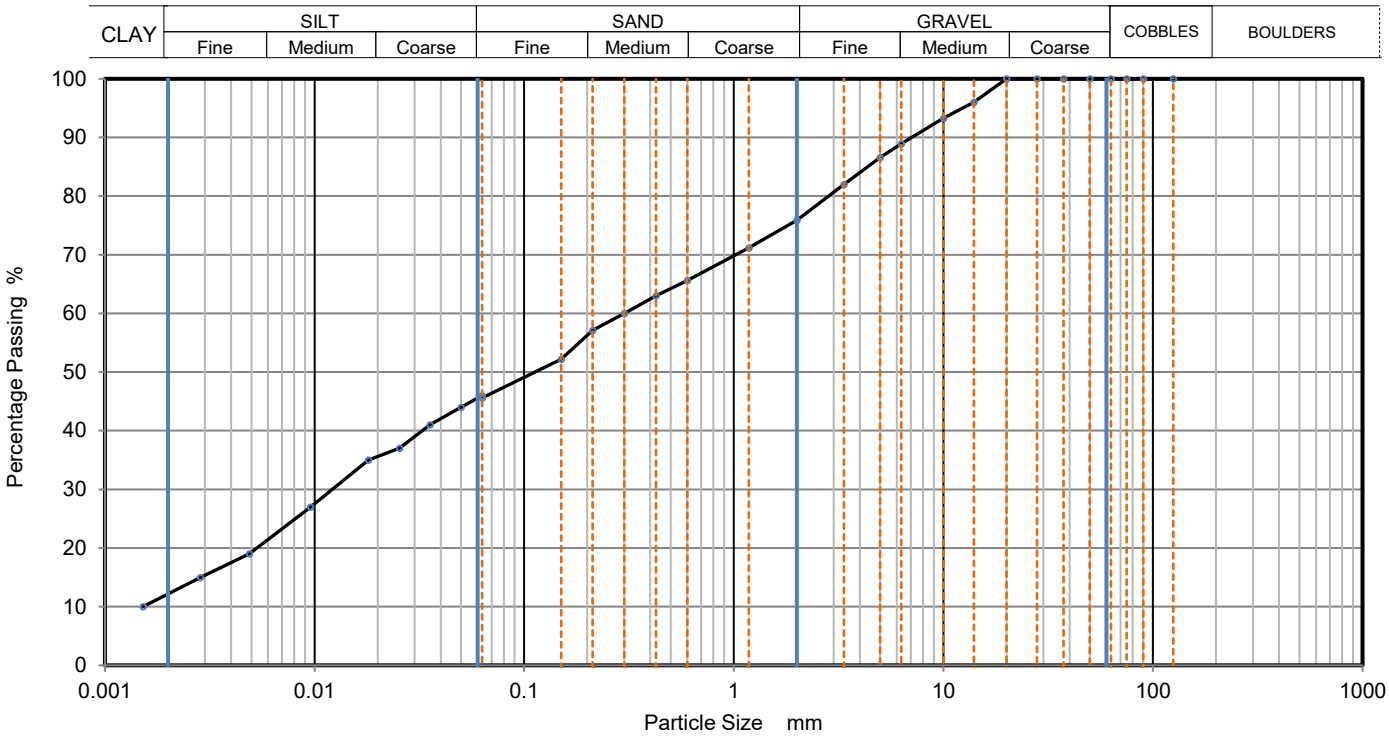
Approved
Stephen Watson

UKAS TESTING

10122

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV06
Site Name	DAA Cargo Relocation			Sample No.	9
Specimen Description	Grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.80
				Base	2.80
Specimen Reference	6	Specimen Depth	1.8 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071562



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	46
90	100	0.04996	44
75	100	0.03555	41
63	100	0.02545	37
50	100	0.01810	35
37.5	100	0.00957	27
28	100	0.00489	19
20	100	0.00286	15
14	96	0.00152	10
10	93		
6.3	89		
5	87		
3.35	82		
2	76		
1.18	71		
0.6	66	Particle density	(assumed)
0.425	63	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	52		
0.063	46		

Dry Mass of sample, g: 409

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.1
Sand	30.3
Silt	33.4
Clay	12.2

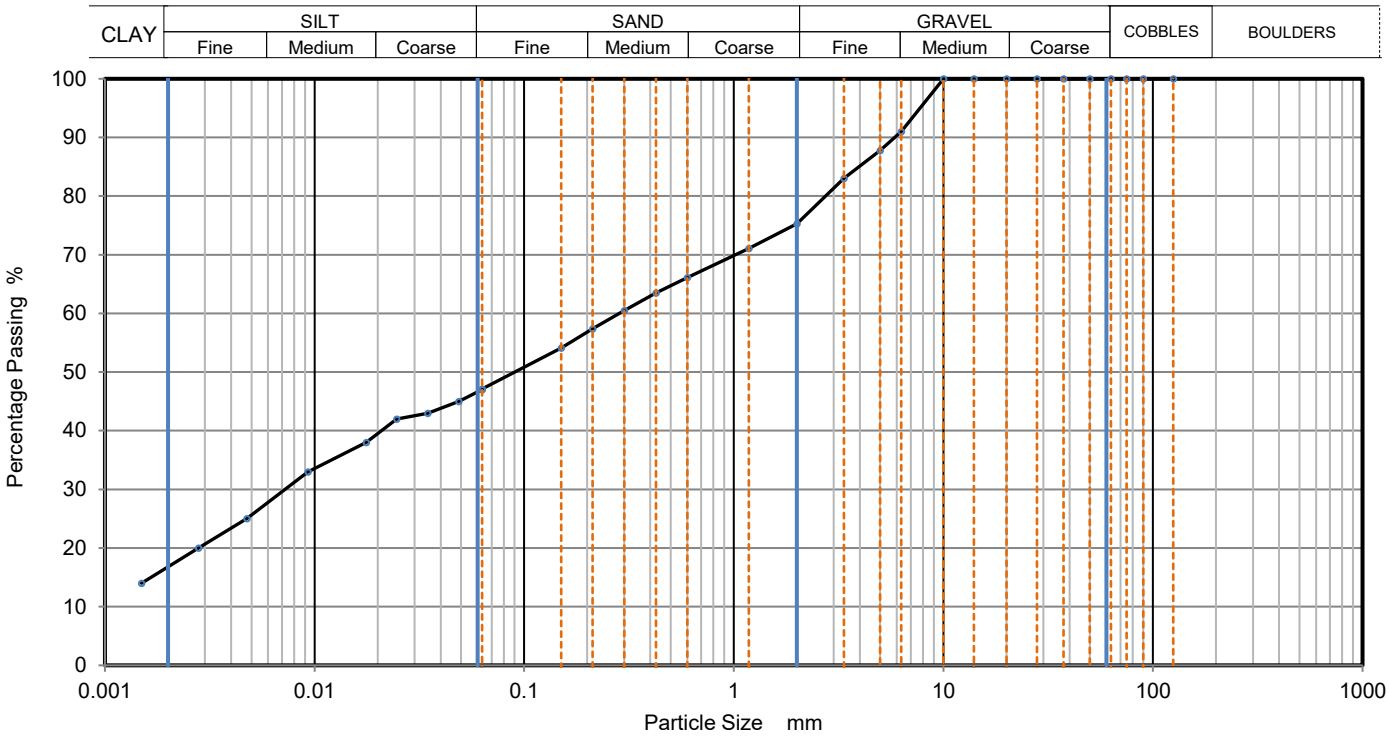
Grading Analysis		
D100	mm	
D60	mm	0.299
D30	mm	0.0121
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV07
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.60
				Base	1.60
Specimen Reference	8	Specimen Depth	0.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071563



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	47
90	100	0.04869	45
75	100	0.03465	43
63	100	0.02466	42
50	100	0.01766	38
37.5	100	0.00929	33
28	100	0.00476	25
20	100	0.00279	20
14	100	0.00149	14
10	100		
6.3	91		
5	88		
3.35	83		
2	75		
1.18	71		
0.6	66	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	57		
0.15	54		
0.063	47		

Dry Mass of sample, g: 207

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.7
Sand	28.3
Silt	30.0
Clay	17.0

Grading Analysis		
D100	mm	
D60	mm	0.283
D30	mm	0.0073
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

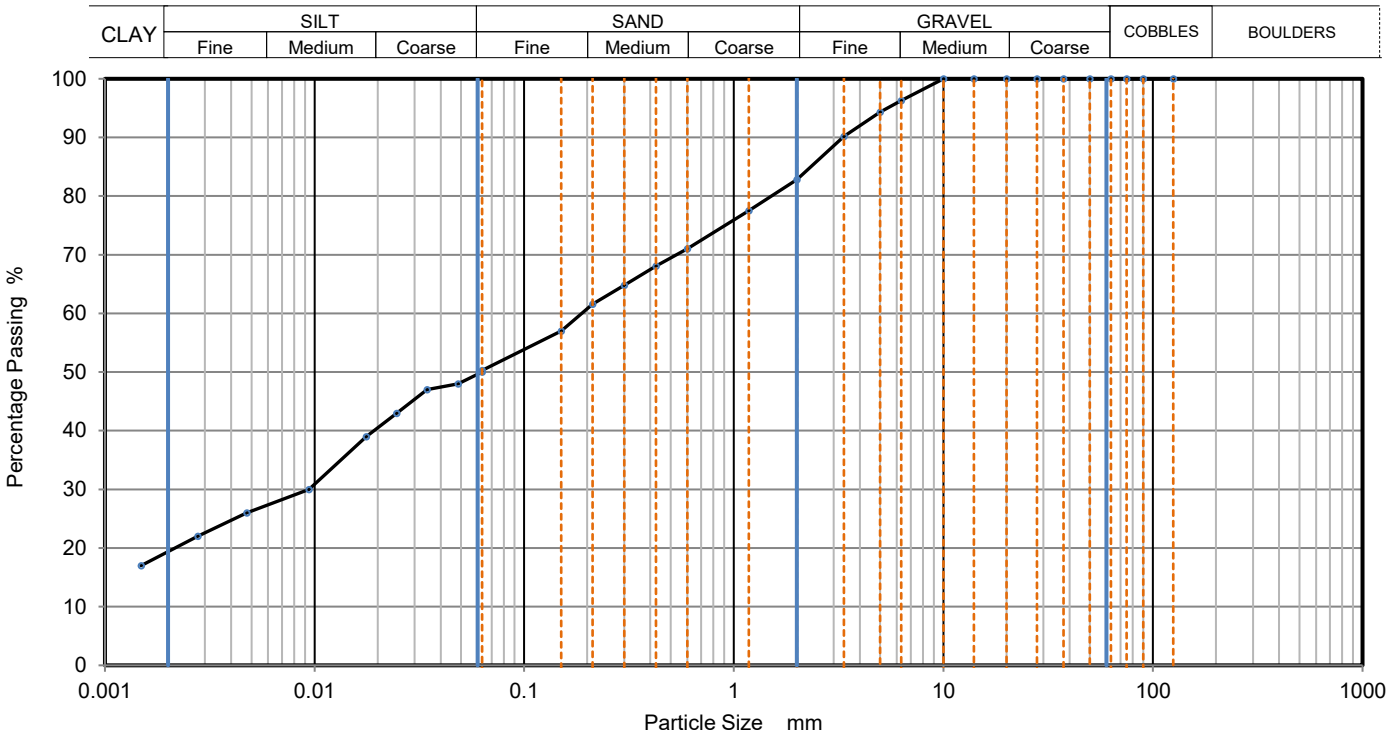
Approved
Stephen Watson

UKAS TESTING

10122

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV07
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.60
				Base	2.20
Specimen Reference	6	Specimen Depth	1.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071564



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04836	48
75	100	0.03443	47
63	100	0.02466	43
50	100	0.01766	39
37.5	100	0.00940	30
28	100	0.00476	26
20	100	0.00278	22
14	100	0.00149	17
10	100		
6.3	96		
5	94		
3.35	90		
2	83		
1.18	78		
0.6	71	Particle density	(assumed)
0.425	68	2.65	Mg/m3
0.3	65		
0.212	62		
0.15	57		
0.063	50		

Dry Mass of sample, g: 219

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	17.2
Sand	32.6
Silt	30.8
Clay	19.4

Grading Analysis		
D100	mm	
D60	mm	0.188
D30	mm	0.00953
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

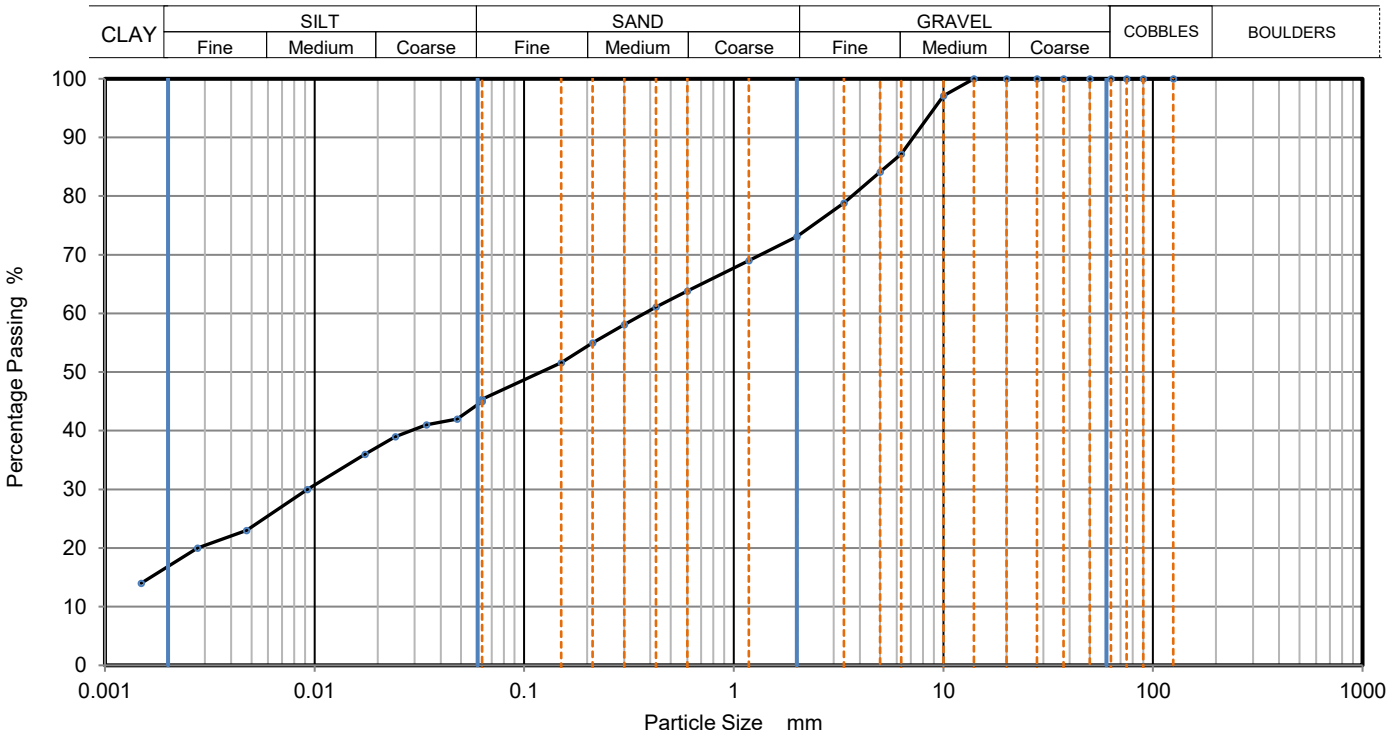
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV08
Site Name	DAA Cargo Relocation			Sample No.	7
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Sample Depth (m) Base	2.00
Specimen Reference	6	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071566



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	45
90	100	0.04796	42
75	100	0.03415	41
63	100	0.02431	39
50	100	0.01743	36
37.5	100	0.00923	30
28	100	0.00473	23
20	100	0.00276	20
14	100	0.00149	14
10	97		
6.3	87		
5	84		
3.35	79		
2	73		
1.18	69		
0.6	64	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	58		
0.212	55		
0.15	52		
0.063	45		

Dry Mass of sample, g: 206

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	26.9
Sand	27.7
Silt	28.3
Clay	17.1

Grading Analysis		
D100	mm	
D60	mm	0.374
D30	mm	0.00948
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

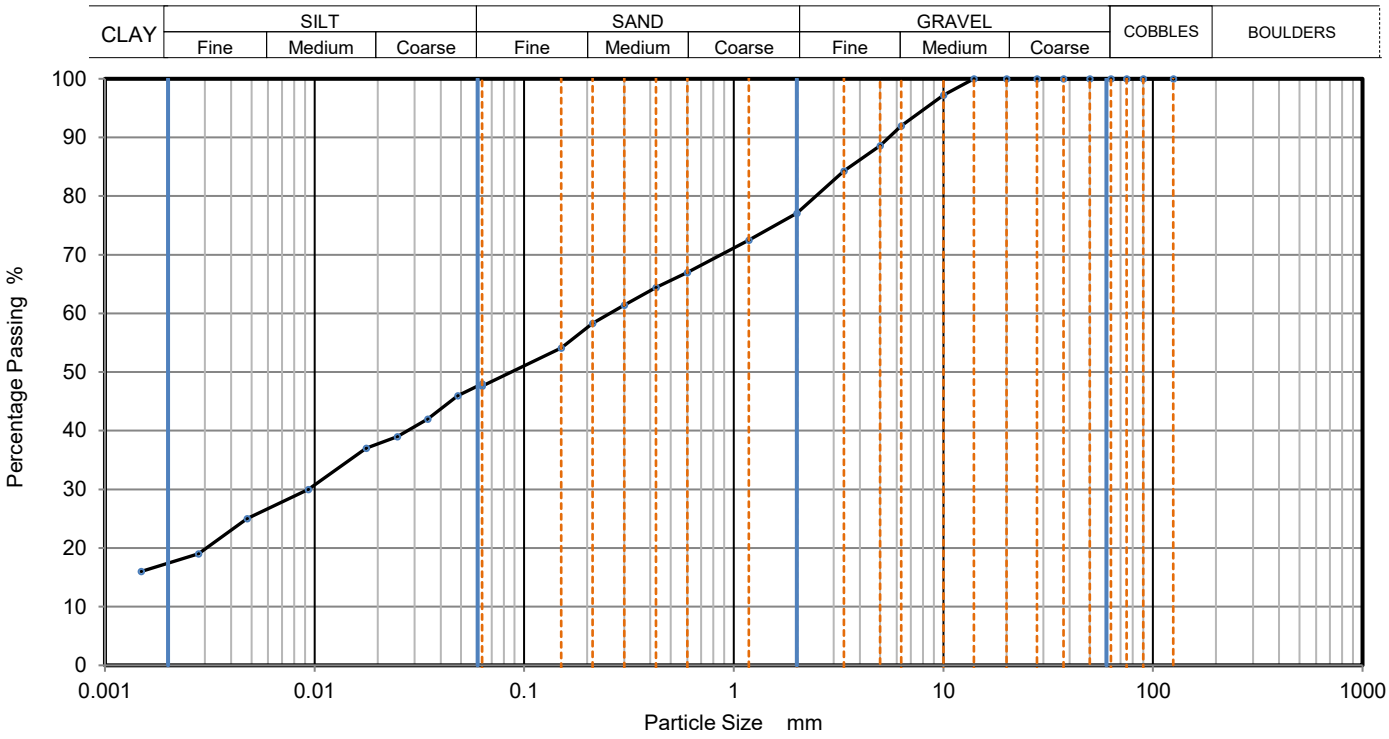
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV08
Site Name	DAA Cargo Relocation			Sample No.	8
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071567



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04829	46
75	100	0.03462	42
63	100	0.02481	39
50	100	0.01766	37
37.5	100	0.00935	30
28	100	0.00476	25
20	100	0.00280	19
14	100	0.00149	16
10	97		
6.3	92		
5	89		
3.35	84		
2	77		
1.18	73		
0.6	67	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	58		
0.15	54		
0.063	48		

Dry Mass of sample, g: 203

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	22.9
Sand	29.5
Silt	30.1
Clay	17.5

Grading Analysis		
D100	mm	
D60	mm	0.257
D30	mm	0.00938
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

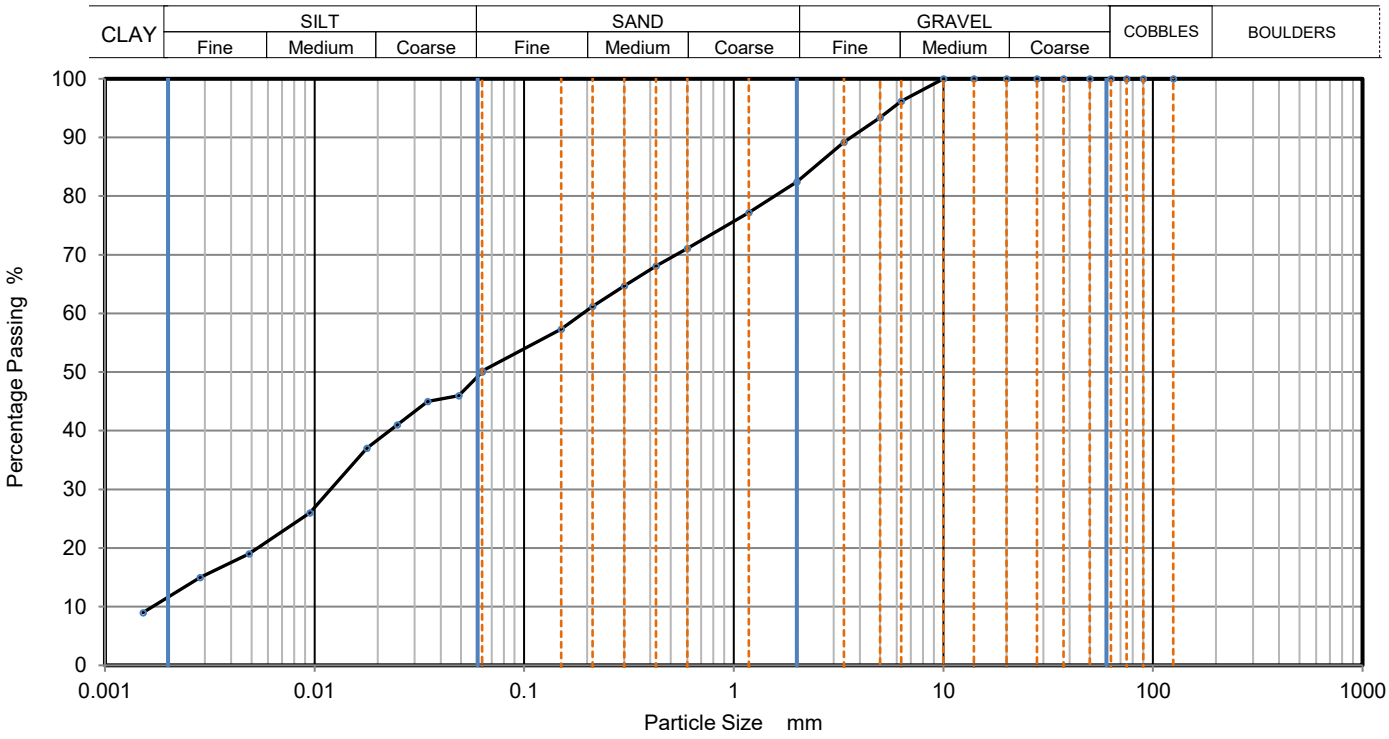
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV09
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Base	2.00
Specimen Reference	7	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071568



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04869	46
75	100	0.03465	45
63	100	0.02482	41
50	100	0.01778	37
37.5	100	0.00952	26
28	100	0.00487	19
20	100	0.00284	15
14	100	0.00152	9
10	100		
6.3	96		
5	93		
3.35	89		
2	82		
1.18	77		
0.6	71	Particle density	(assumed)
0.425	68	2.65	Mg/m3
0.3	65		
0.212	61		
0.15	57		
0.063	50		

Dry Mass of sample, g: 227

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	17.6
Sand	32.3
Silt	38.4
Clay	11.7

Grading Analysis		
D100	mm	
D60	mm	0.191
D30	mm	0.0119
D10	mm	0.00164
Uniformity Coefficient		120
Curvature Coefficient		0.45

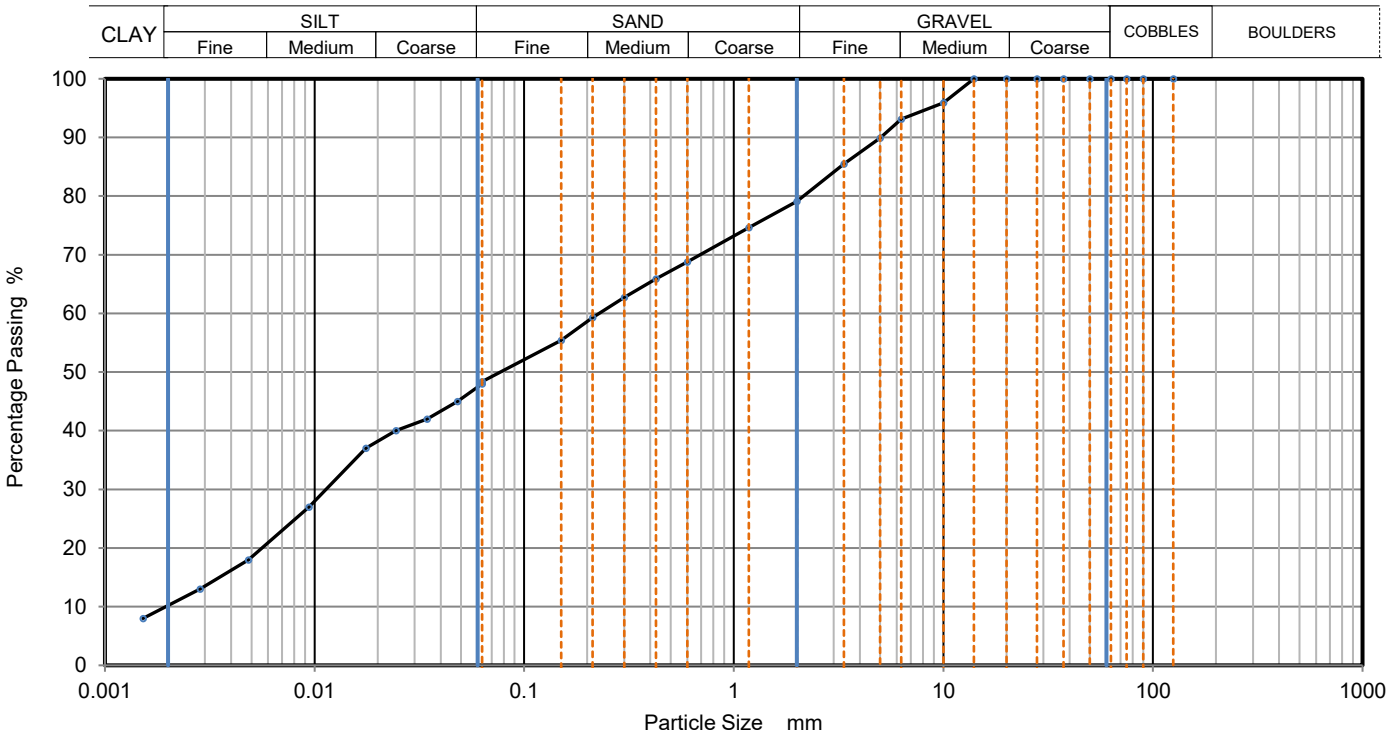
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV09
Site Name	DAA Cargo Relocation			Sample No.	8
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Base	3.00
Specimen Reference	6	Specimen Depth	2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071569



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04803	45
75	100	0.03443	42
63	100	0.02450	40
50	100	0.01755	37
37.5	100	0.00940	27
28	100	0.00484	18
20	100	0.00284	13
14	100	0.00152	8
10	96		
6.3	93		
5	90		
3.35	86		
2	79		
1.18	75		
0.6	69	Particle density	(assumed)
0.425	66	2.65	Mg/m3
0.3	63		
0.212	59		
0.15	55		
0.063	48		

Dry Mass of sample, g: 203

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	20.9
Sand	30.7
Silt	37.9
Clay	10.5

Grading Analysis		
D100	mm	
D60	mm	0.228
D30	mm	0.0115
D10	mm	0.00187
Uniformity Coefficient		120
Curvature Coefficient		0.31

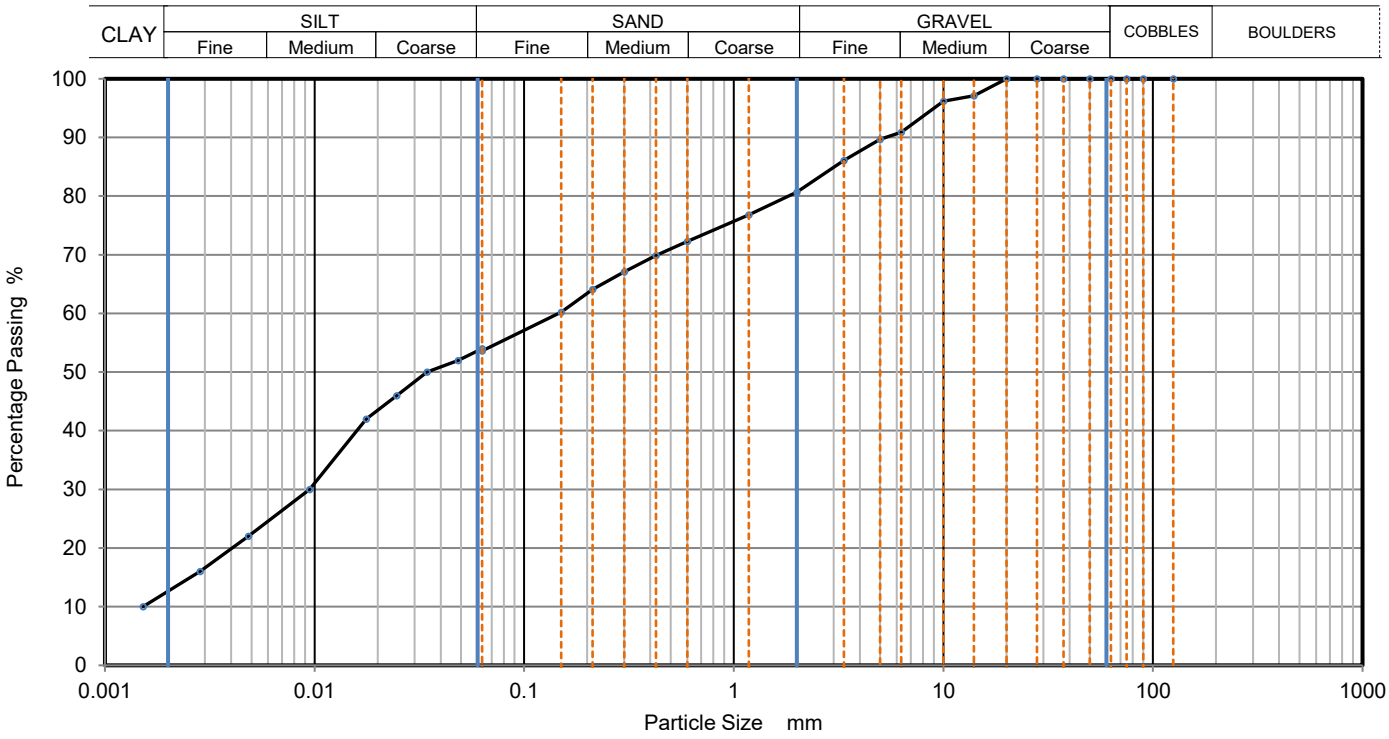
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV10
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.00
				Sample Depth (m) Base	2.00
Specimen Reference	6	Specimen Depth	1 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071571



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	54
90	100	0.04836	52
75	100	0.03443	50
63	100	0.02466	46
50	100	0.01766	42
37.5	100	0.00946	30
28	100	0.00484	22
20	100	0.00284	16
14	97	0.00152	10
10	96		
6.3	91		
5	90		
3.35	86		
2	81		
1.18	77		
0.6	72	Particle density	(assumed)
0.425	70	2.65	Mg/m3
0.3	67		
0.212	64		
0.15	60		
0.063	54		

Dry Mass of sample, g: 221

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.3
Sand	27.1
Silt	41.1
Clay	12.5

Grading Analysis		
D100	mm	
D60	mm	0.145
D30	mm	0.00957
D10	mm	0.00153
Uniformity Coefficient		95
Curvature Coefficient		0.41

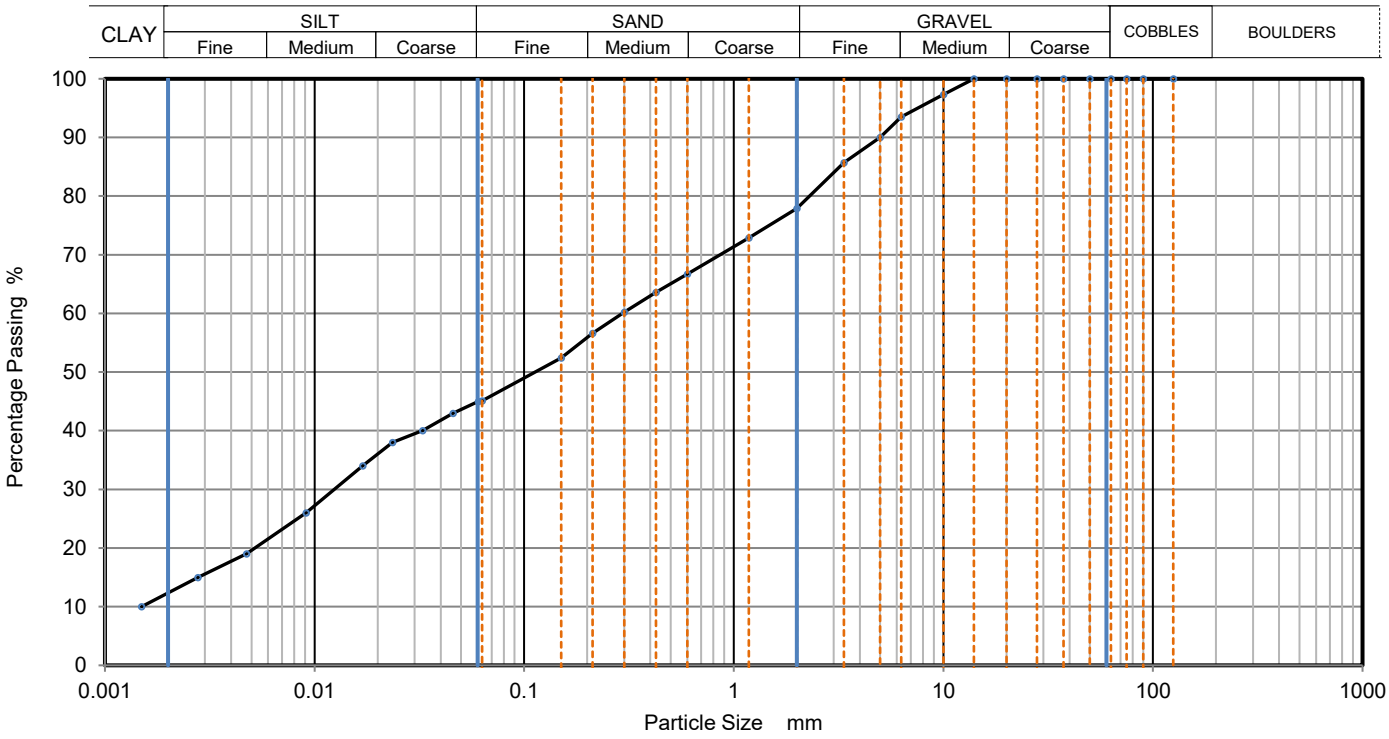
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV10
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.30
				Base	3.30
Specimen Reference	6	Specimen Depth	2.3 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071572



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06050	45
90	100	0.04568	43
75	100	0.03279	40
63	100	0.02352	38
50	100	0.01698	34
37.5	100	0.00912	26
28	100	0.00473	19
20	100	0.00278	15
14	100	0.00149	10
10	97		
6.3	94		
5	90		
3.35	86		
2	78		
1.18	73		
0.6	67	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	60		
0.212	57		
0.15	52		
0.063	45		

Dry Mass of sample, g: 203

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	22.1
Sand	32.8
Silt	32.7
Clay	12.4

Grading Analysis		
D100	mm	
D60	mm	0.293
D30	mm	0.0124
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

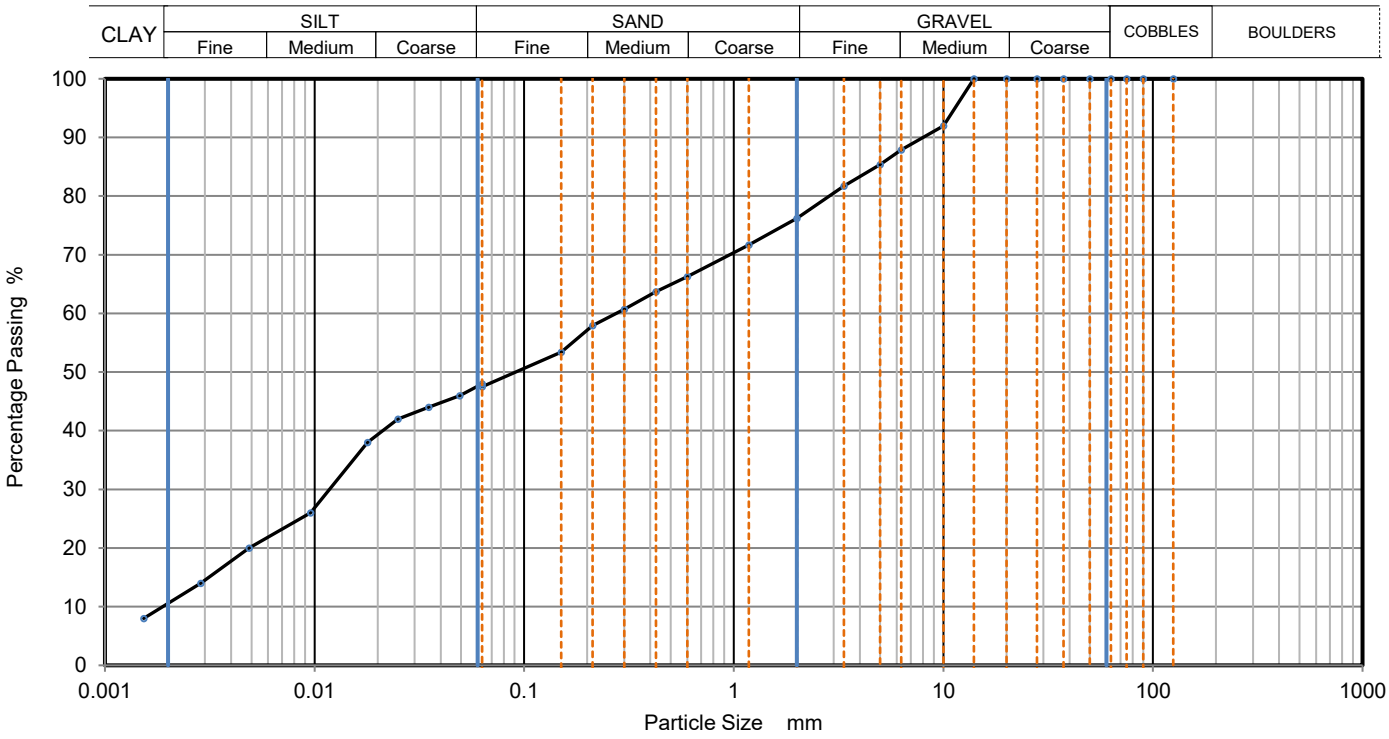
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV11
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	1.50
Specimen Reference	8	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071573



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04929	46
75	100	0.03508	44
63	100	0.02497	42
50	100	0.01788	38
37.5	100	0.00958	26
28	100	0.00487	20
20	100	0.00286	14
14	100	0.00153	8
10	92		
6.3	88		
5	85		
3.35	82		
2	76		
1.18	72		
0.6	66	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	58		
0.15	53		
0.063	48		

Dry Mass of sample, g: 381

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.8
Sand	28.6
Silt	37.1
Clay	10.5

Grading Analysis		
D100	mm	
D60	mm	0.274
D30	mm	0.012
D10	mm	0.00191
Uniformity Coefficient		140
Curvature Coefficient		0.27

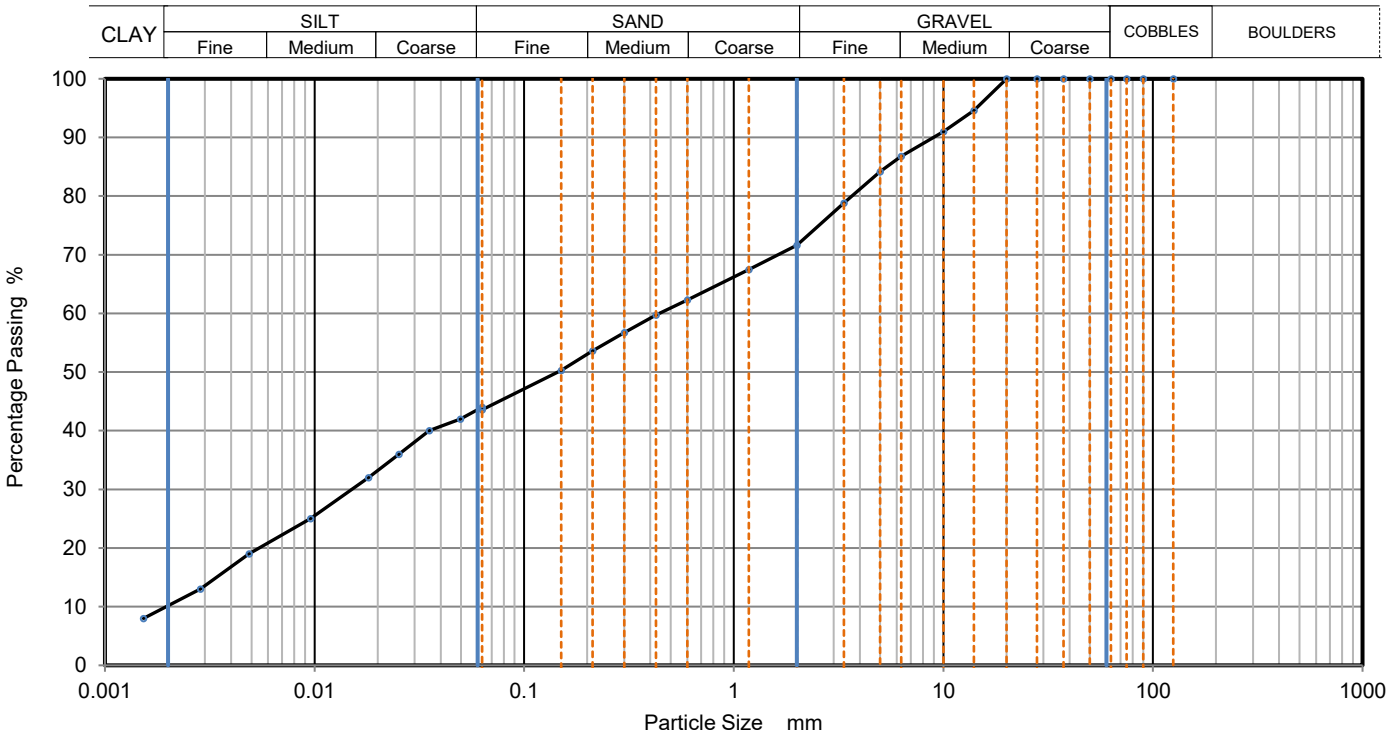
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV11
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.50
				Sample Depth (m) Base	2.00
Specimen Reference	6	Specimen Depth	1.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071574



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	44
90	100	0.04965	42
75	100	0.03533	40
63	100	0.02529	36
50	100	0.01810	32
37.5	100	0.00957	25
28	100	0.00487	19
20	100	0.00286	13
14	95	0.00153	8
10	91		
6.3	87		
5	84		
3.35	79		
2	72		
1.18	68		
0.6	62	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	57		
0.212	54		
0.15	50		
0.063	44		

Dry Mass of sample, g: 350

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	28.4
Sand	28.0
Silt	33.6
Clay	10.0

Grading Analysis		
D100	mm	
D60	mm	0.444
D30	mm	0.015
D10	mm	0.00199
Uniformity Coefficient		220
Curvature Coefficient		0.25

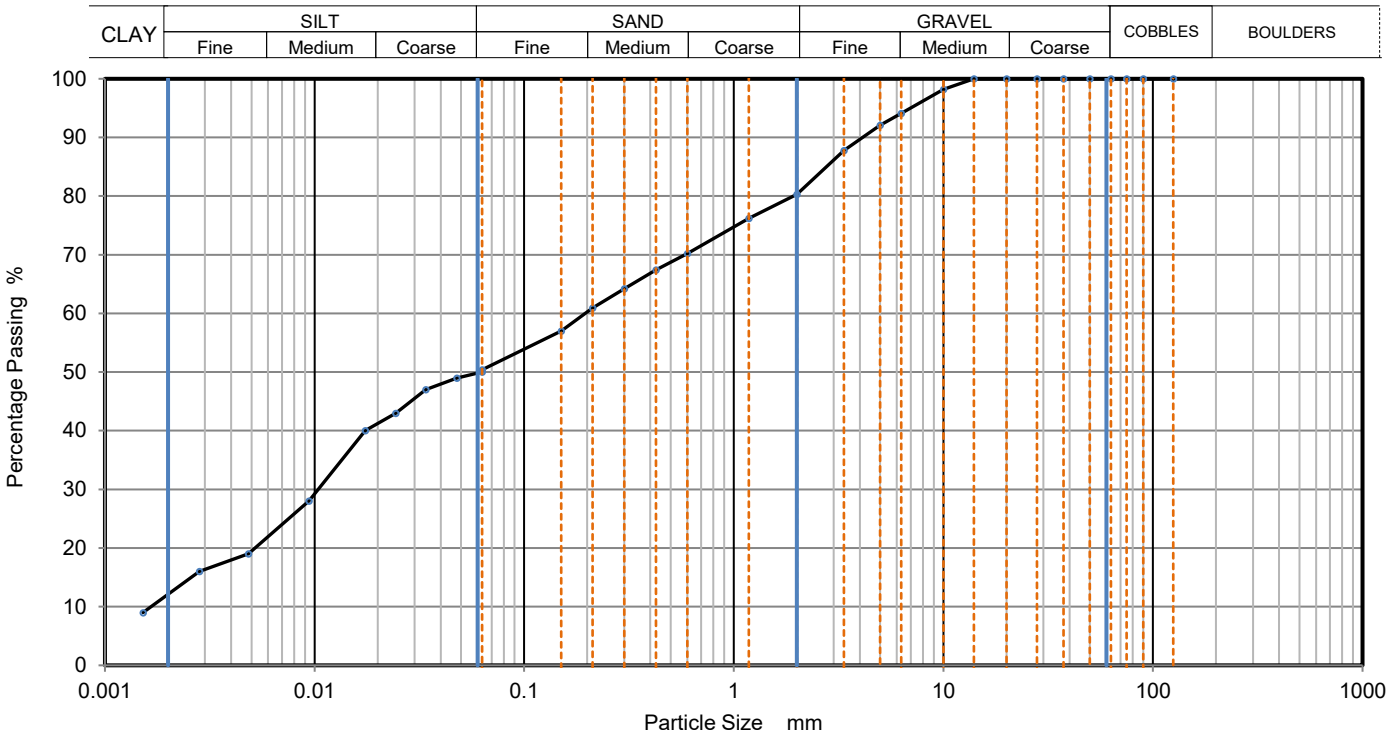
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV12
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.60
				Base	1.60
Specimen Reference	7	Specimen Depth	0.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071575



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04771	49
75	100	0.03397	47
63	100	0.02434	43
50	100	0.01744	40
37.5	100	0.00940	28
28	100	0.00484	19
20	100	0.00283	16
14	100	0.00152	9
10	98		
6.3	94		
5	92		
3.35	88		
2	80		
1.18	76		
0.6	70	Particle density	(assumed)
0.425	67	2.65	Mg/m3
0.3	64		
0.212	61		
0.15	57		
0.063	50		

Dry Mass of sample, g: 203

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	19.7
Sand	29.9
Silt	38.6
Clay	11.8

Grading Analysis		
D100	mm	
D60	mm	0.195
D30	mm	0.0105
D10	mm	0.00171
Uniformity Coefficient		110
Curvature Coefficient		0.33

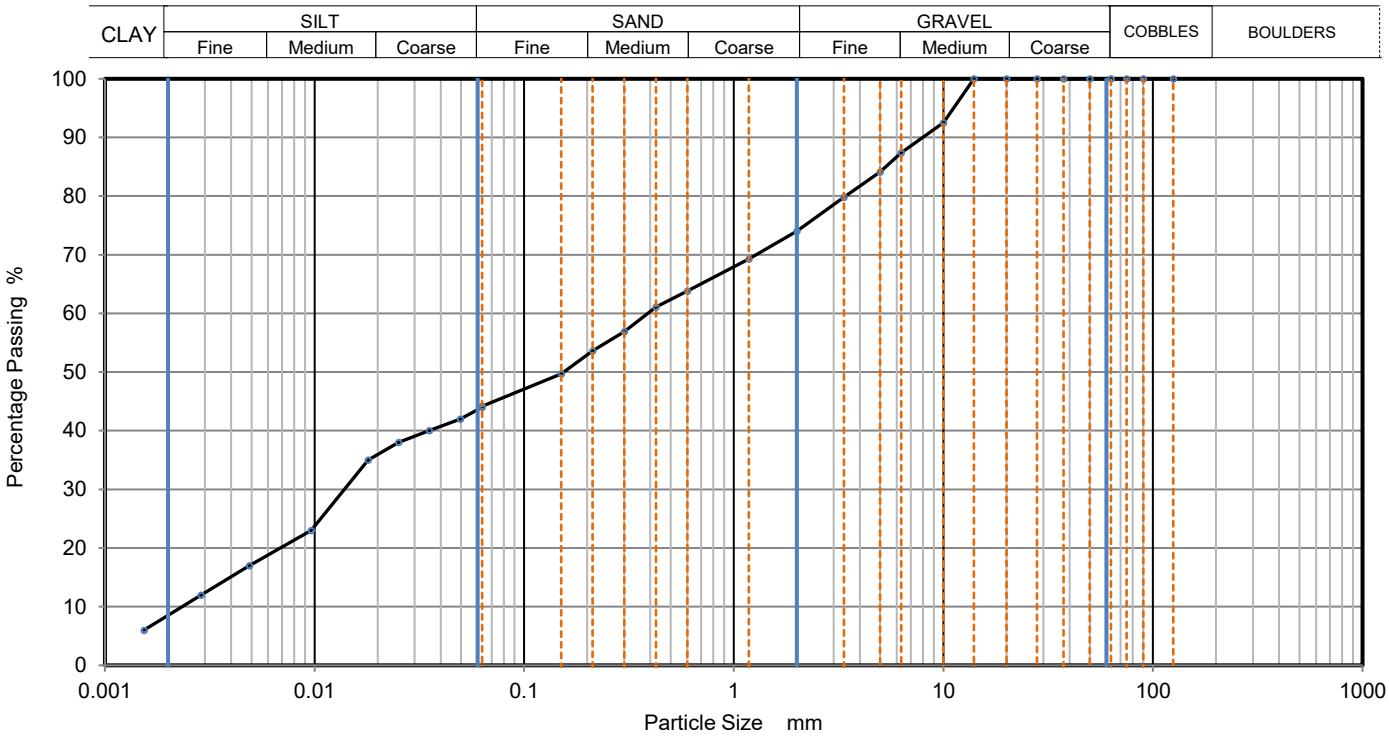
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV12
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.60
				Base	3.00
Specimen Reference	6	Specimen Depth	2.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071576



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	44
90	100	0.04965	42
75	100	0.03533	40
63	100	0.02514	38
50	100	0.01800	35
37.5	100	0.00963	23
28	100	0.00489	17
20	100	0.00287	12
14	100	0.00153	6
10	93		
6.3	87		
5	84		
3.35	80		
2	74		
1.18	69		
0.6	64	Particle density	(assumed)
0.425	61	2.65	Mg/m3
0.3	57		
0.212	54		
0.15	50		
0.063	44		

Dry Mass of sample, g: 385

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	26.0
Sand	29.8
Silt	36.0
Clay	8.2

Grading Analysis		
D100	mm	
D60	mm	0.388
D30	mm	0.014
D10	mm	0.00243
Uniformity Coefficient		160
Curvature Coefficient		0.21

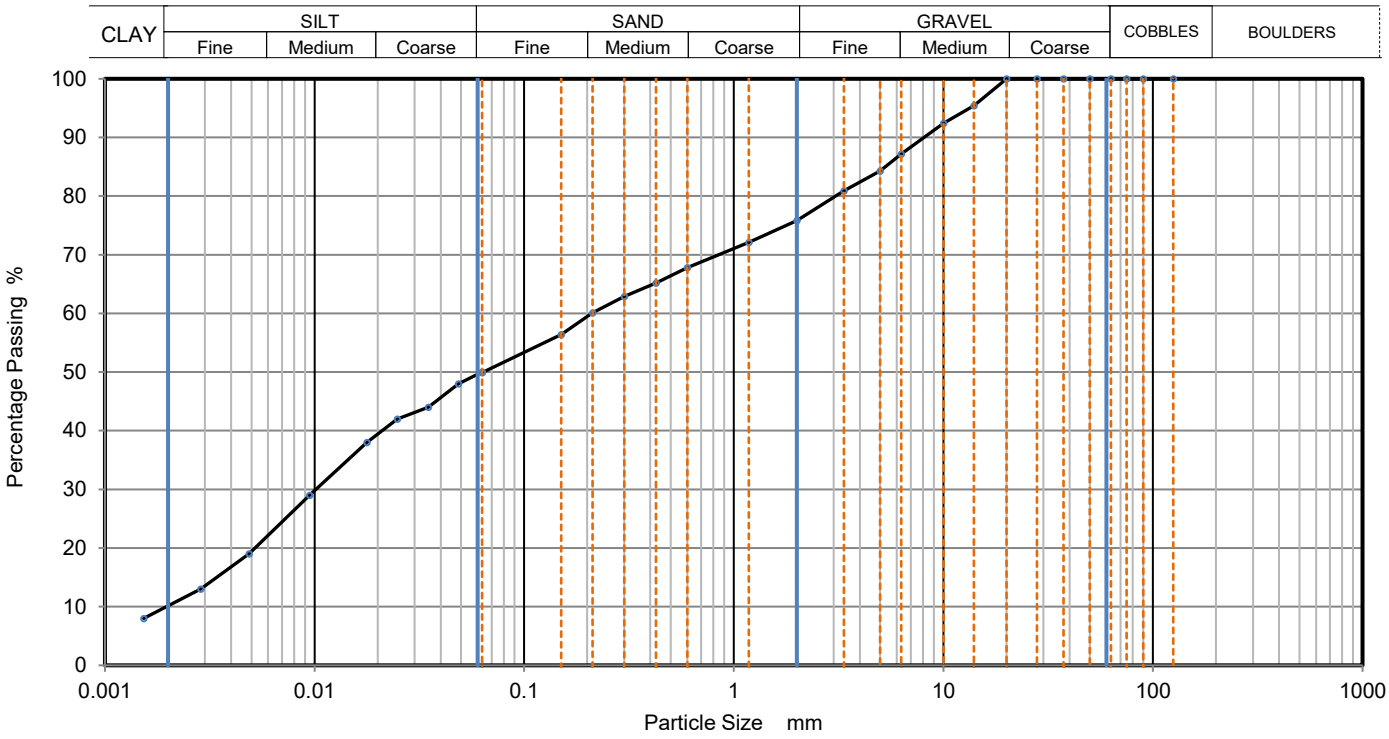
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV13
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Base	1.50
Specimen Reference	8	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071577



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04863	48
75	100	0.03485	44
63	100	0.02481	42
50	100	0.01777	38
37.5	100	0.00947	29
28	100	0.00487	19
20	100	0.00286	13
14	95	0.00153	8
10	92		
6.3	87		
5	84		
3.35	81		
2	76		
1.18	72		
0.6	68	Particle density	(assumed)
0.425	65	2.65	Mg/m3
0.3	63		
0.212	60		
0.15	56		
0.063	50		

Dry Mass of sample, g: 402

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	24.2
Sand	25.9
Silt	39.8
Clay	10.1

Grading Analysis		
D100	mm	
D60	mm	0.209
D30	mm	0.0102
D10	mm	0.00197
Uniformity Coefficient		110
Curvature Coefficient		0.25

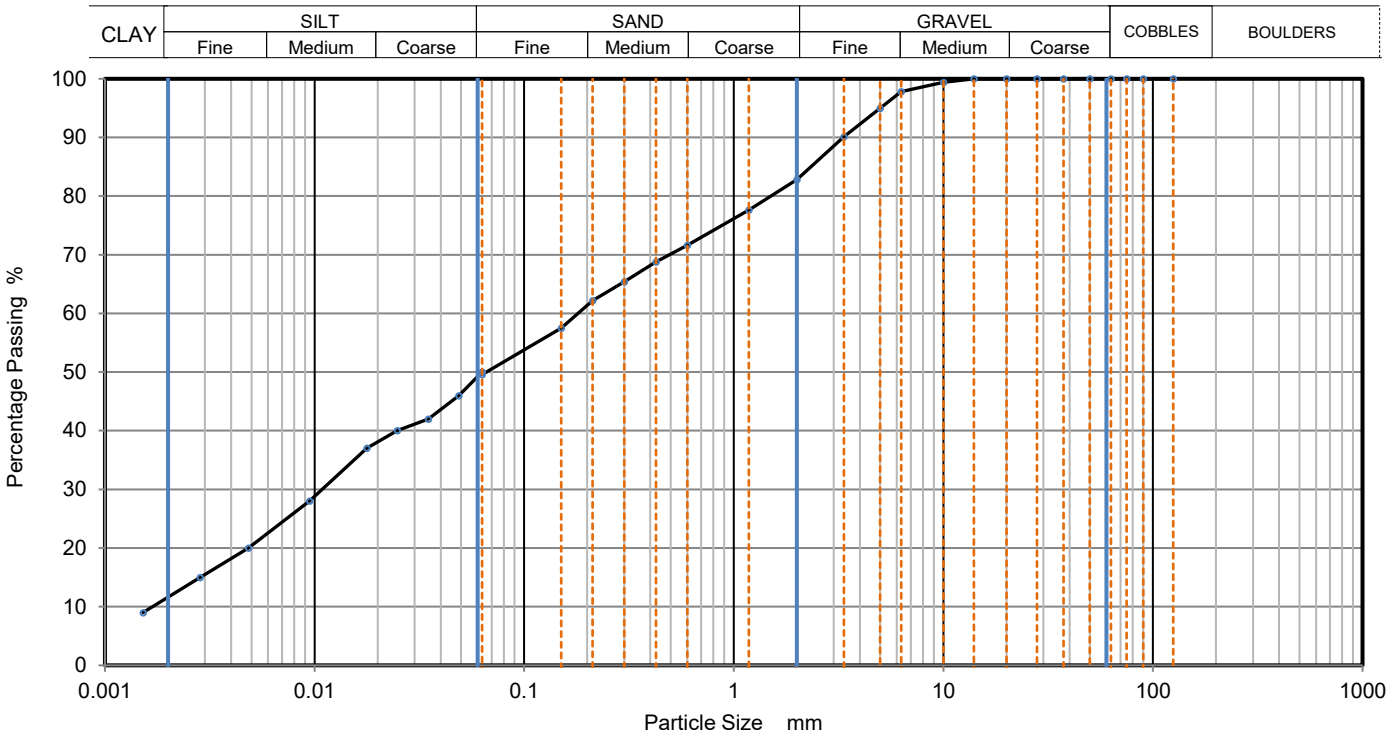
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV13
Site Name	DAA Cargo Relocation			Sample No.	9
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.80
				Sample Depth (m) Base	2.80
Specimen Reference	6	Specimen Depth	1.8 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071578



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	50
90	100	0.04869	46
75	100	0.03488	42
63	100	0.02482	40
50	100	0.01778	37
37.5	100	0.00946	28
28	100	0.00484	20
20	100	0.00284	15
14	100	0.00152	9
10	99		
6.3	98		
5	95		
3.35	90		
2	83		
1.18	78		
0.6	72	Particle density	(assumed)
0.425	69	2.65	Mg/m3
0.3	65		
0.212	62		
0.15	58		
0.063	50		

Dry Mass of sample, g: 200

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	17.2
Sand	33.1
Silt	38.1
Clay	11.6

Grading Analysis		
D100	mm	
D60	mm	0.18
D30	mm	0.0112
D10	mm	0.00167
Uniformity Coefficient		110
Curvature Coefficient		0.42

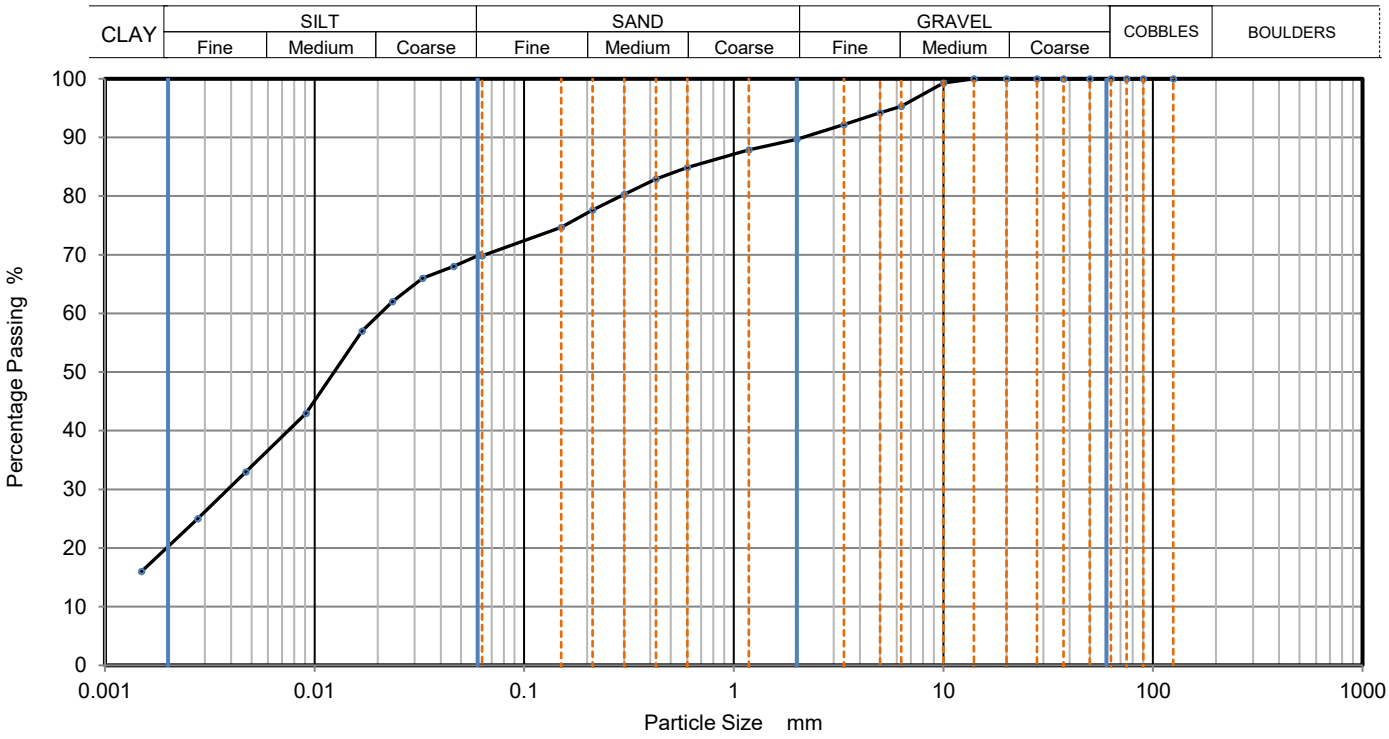
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV16
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	
Specimen Reference	7	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071579



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06144	70
90	100	0.04603	68
75	100	0.03279	66
63	100	0.02352	62
50	100	0.01687	57
37.5	100	0.00912	43
28	100	0.00470	33
20	100	0.00278	25
14	100	0.00149	16
10	99		
6.3	95		
5	94		
3.35	92		
2	90		
1.18	88		
0.6	85	Particle density	(assumed)
0.425	83	2.65	Mg/m3
0.3	80		
0.212	78		
0.15	75		
0.063	70		

Dry Mass of sample, g: 195

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	10.3
Sand	19.9
Silt	49.5
Clay	20.3

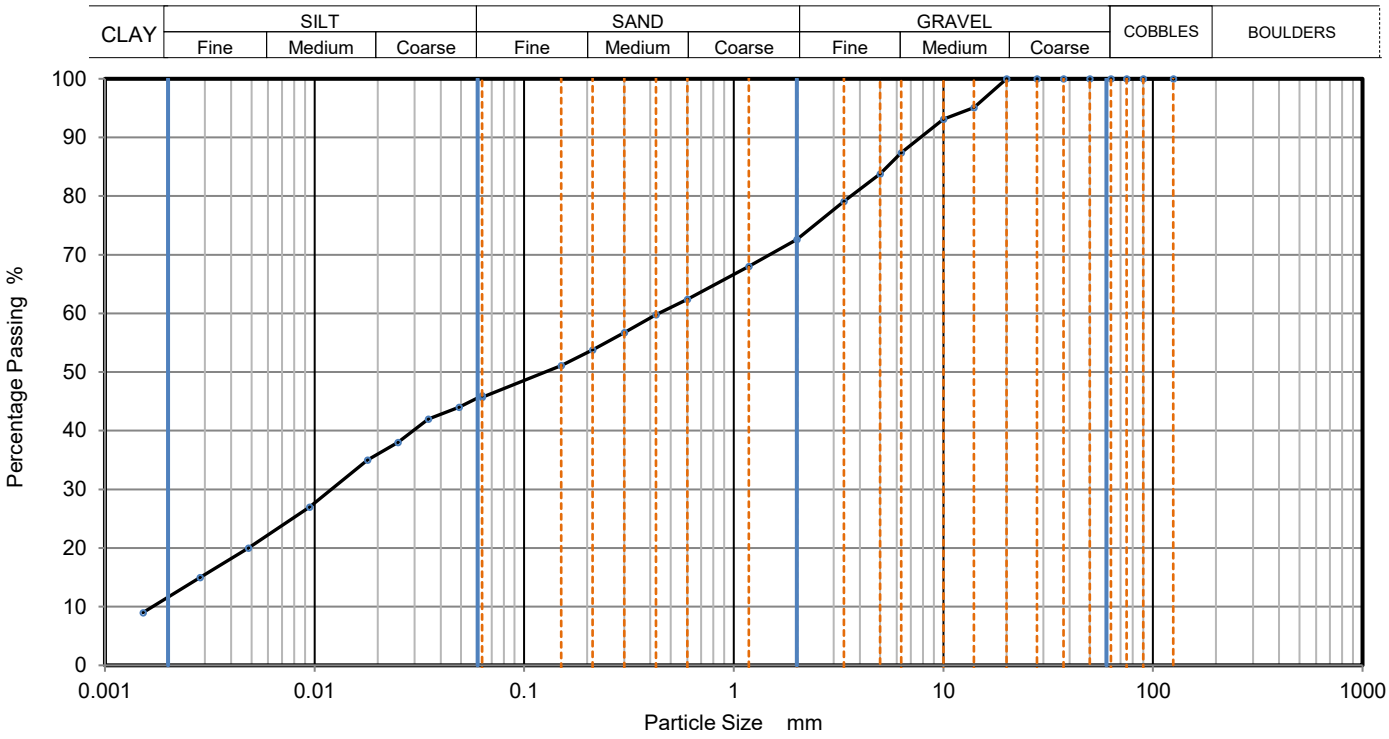
Grading Analysis		
D100	mm	
D60	mm	0.0207
D30	mm	0.00392
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

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Stephen Watson

CAUSEWAY GEOTECH	**PARTICLE SIZE DISTRIBUTION**			Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV16
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.20
				Sample Depth (m) Base	
Specimen Reference	6	Specimen Depth	1.2 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071580



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	46
90	100	0.04901	44
75	100	0.03488	42
63	100	0.02498	38
50	100	0.01789	35
37.5	100	0.00946	27
28	100	0.00484	20
20	100	0.00284	15
14	95	0.00152	9
10	93		
6.3	87		
5	84		
3.35	79		
2	73		
1.18	68		
0.6	62	Particle density	(assumed)
0.425	60	2.65	Mg/m3
0.3	57		
0.212	54		
0.15	51		
0.063	46		

Dry Mass of sample, g: 259

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	27.4
Sand	26.9
Silt	34.2
Clay	11.5

Grading Analysis		
D100	mm	
D60	mm	0.438
D30	mm	0.0118
D10	mm	0.00168
Uniformity Coefficient		260
Curvature Coefficient		0.19

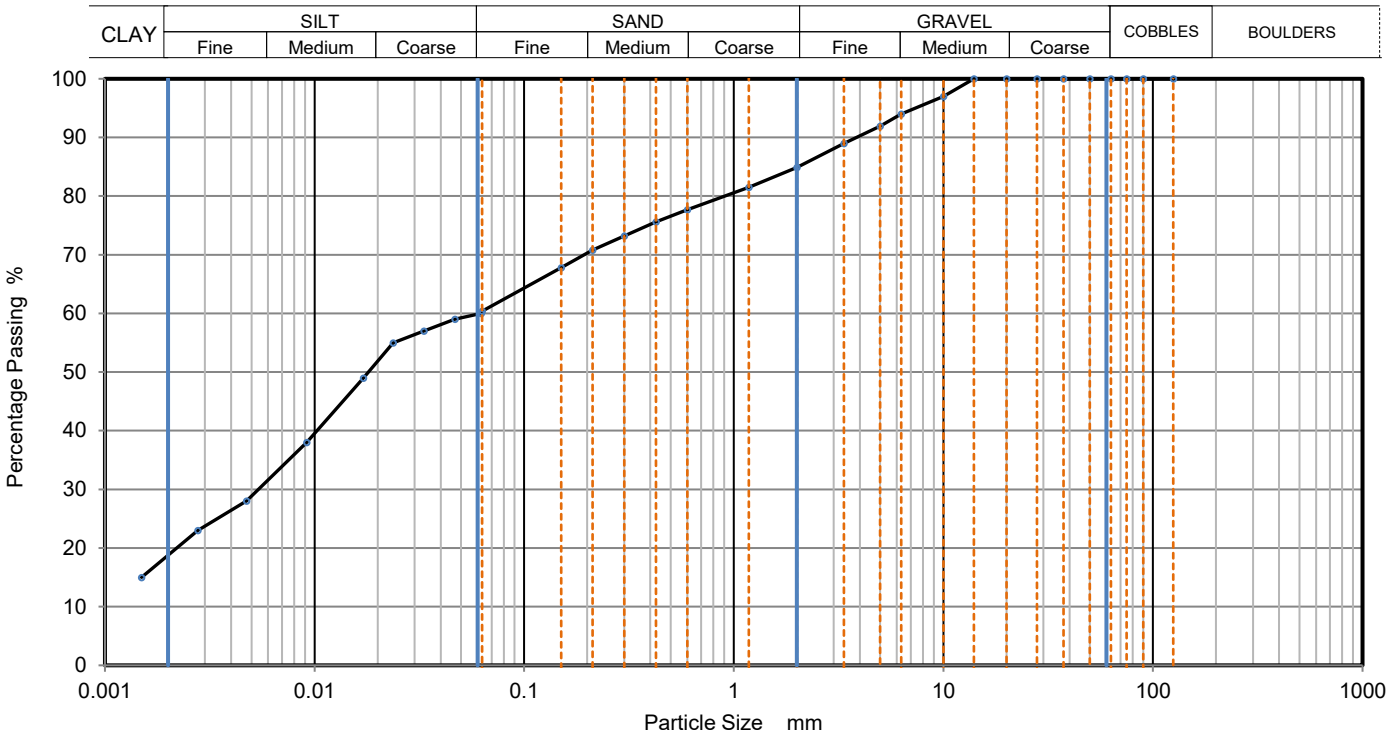
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV17
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	
Specimen Reference	7	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071581



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06236	60
90	100	0.04671	59
75	100	0.03326	57
63	100	0.02369	55
50	100	0.01710	49
37.5	100	0.00918	38
28	100	0.00473	28
20	100	0.00278	23
14	100	0.00149	15
10	97		
6.3	94		
5	92		
3.35	89		
2	85		
1.18	82		
0.6	78	Particle density	(assumed)
0.425	76	2.65	Mg/m3
0.3	73		
0.212	71		
0.15	68		
0.063	60		

Dry Mass of sample, g: 206

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	15.1
Sand	24.4
Silt	41.9
Clay	18.6

Grading Analysis		
D100	mm	
D60	mm	0.0587
D30	mm	0.00533
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

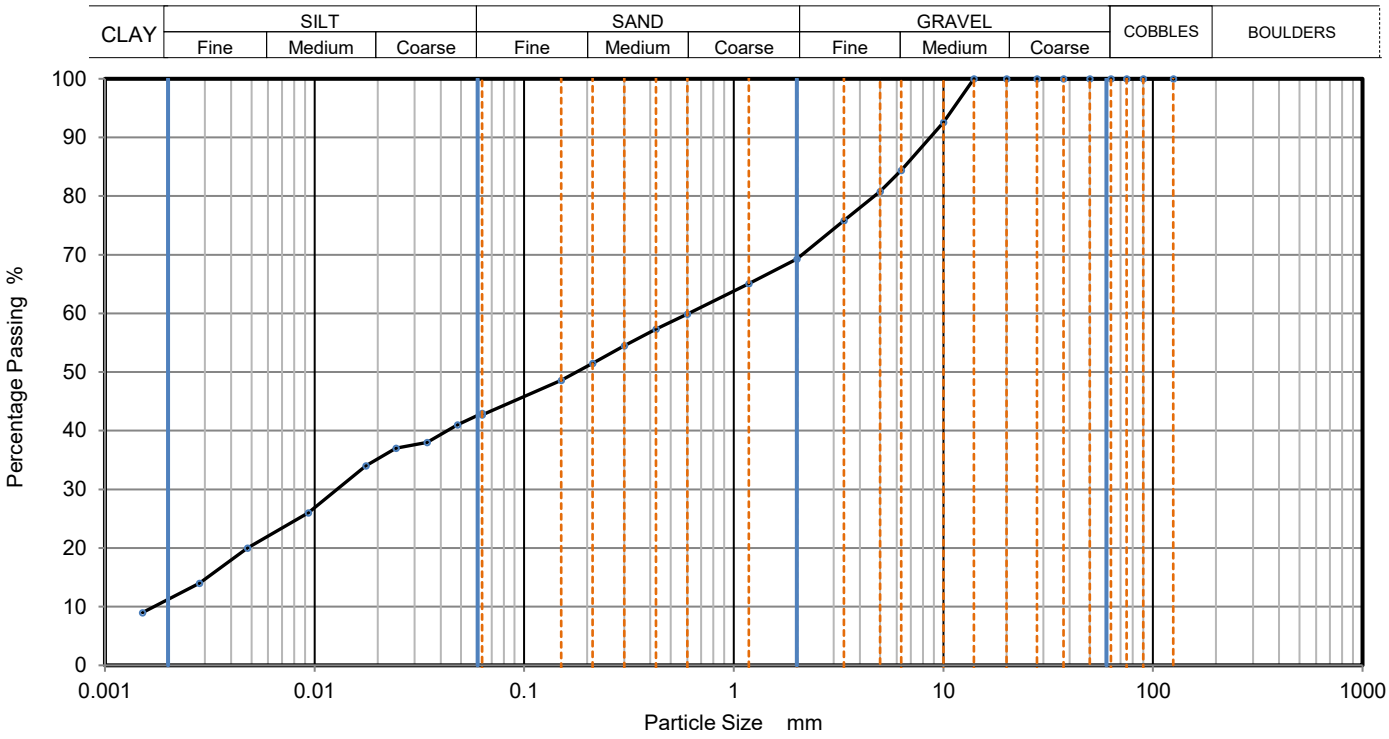
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV17
Site Name	DAA Cargo Relocation			Sample No.	6
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.80
				Sample Depth (m) Base	
Specimen Reference	6	Specimen Depth	1.8 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071582



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	43
90	100	0.04803	41
75	100	0.03443	38
63	100	0.02450	37
50	100	0.01755	34
37.5	100	0.00935	26
28	100	0.00479	20
20	100	0.00283	14
14	100	0.00151	9
10	93		
6.3	84		
5	81		
3.35	76		
2	69		
1.18	65		
0.6	60	Particle density	(assumed)
0.425	57	2.65	Mg/m3
0.3	55		
0.212	52		
0.15	49		
0.063	43		

Dry Mass of sample, g: 205

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	30.7
Sand	26.6
Silt	31.5
Clay	11.2

Grading Analysis		
D100	mm	
D60	mm	0.611
D30	mm	0.0131
D10	mm	0.0017
Uniformity Coefficient		360
Curvature Coefficient		0.17

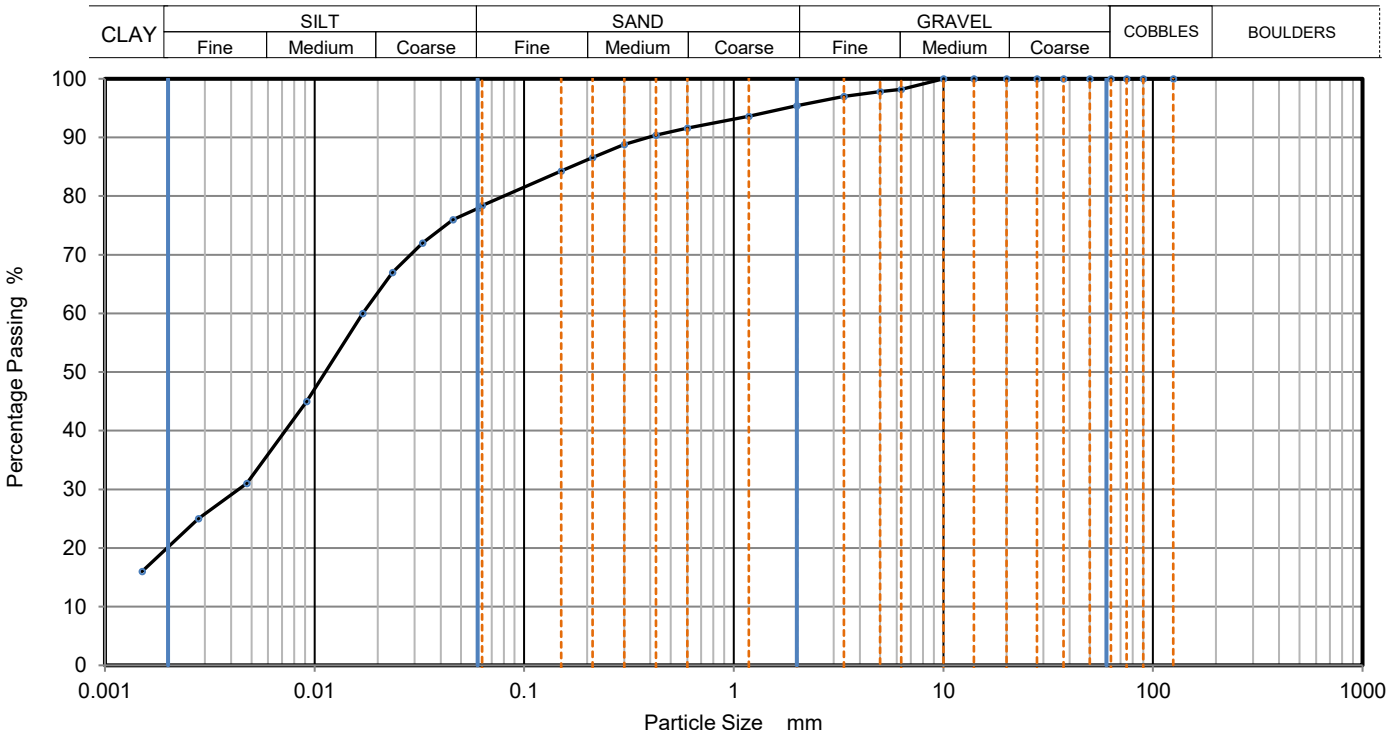
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV18
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey slightly sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Base	1.50
Specimen Reference	7	Specimen Depth	0.5 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071583



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06097	78
90	100	0.04568	76
75	100	0.03279	72
63	100	0.02352	67
50	100	0.01698	60
37.5	100	0.00918	45
28	100	0.00476	31
20	100	0.00279	25
14	100	0.00150	16
10	100		
6.3	98		
5	98		
3.35	97		
2	95		
1.18	94		
0.6	92	Particle density	(assumed)
0.425	90	2.65	Mg/m3
0.3	89		
0.212	87		
0.15	84		
0.063	78		

Dry Mass of sample, g: 217

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	4.6
Sand	17.0
Silt	58.6
Clay	19.8

Grading Analysis		
D100	mm	
D60	mm	0.0167
D30	mm	0.00427
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

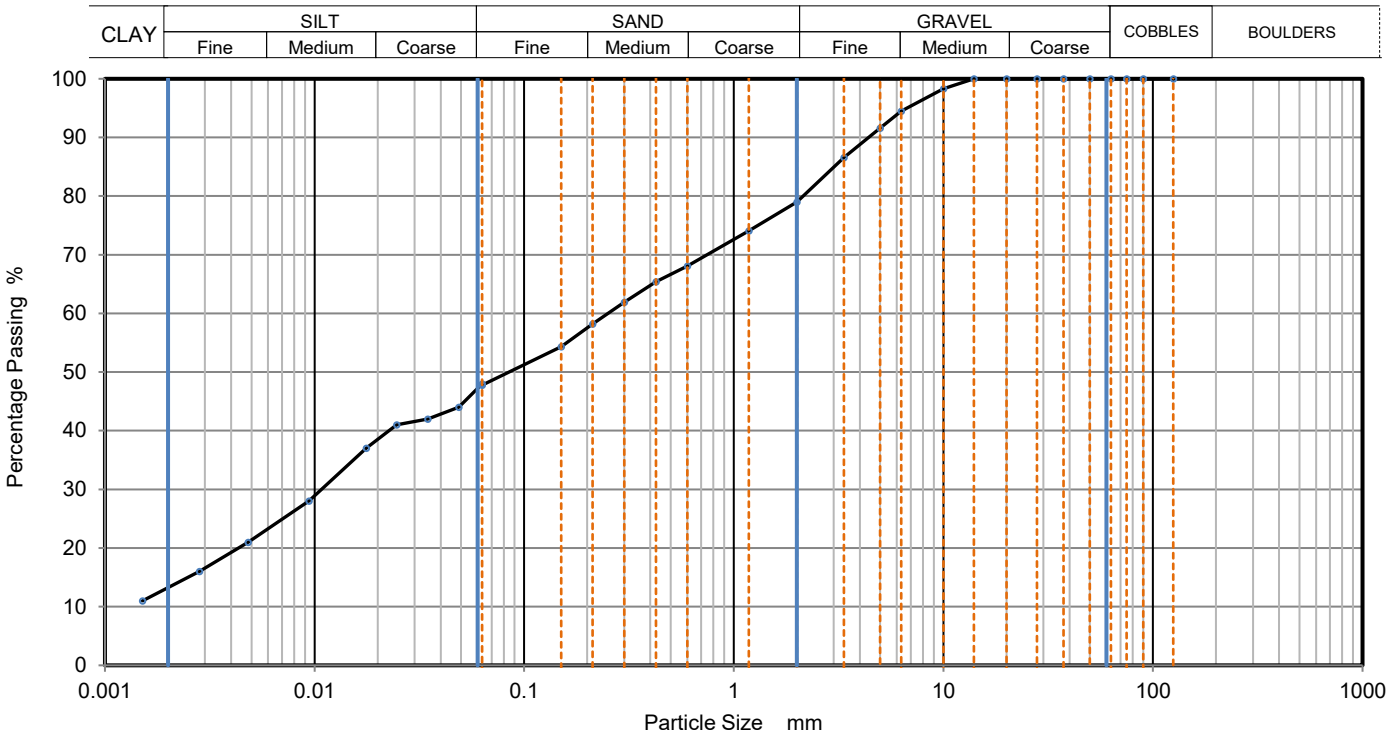
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV18
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.80
				Base	2.80
Specimen Reference	6	Specimen Depth	1.8 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071584



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	48
90	100	0.04869	44
75	100	0.03465	42
63	100	0.02466	41
50	100	0.01766	37
37.5	100	0.00940	28
28	100	0.00481	21
20	100	0.00283	16
14	100	0.00151	11
10	98		
6.3	95		
5	92		
3.35	87		
2	79		
1.18	74		
0.6	68	Particle density	(assumed)
0.425	65	2.65	Mg/m3
0.3	62		
0.212	58		
0.15	54		
0.063	48		

Dry Mass of sample, g: 202

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	21.0
Sand	31.3
Silt	34.7
Clay	13.0

Grading Analysis		
D100	mm	
D60	mm	0.251
D30	mm	0.0106
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

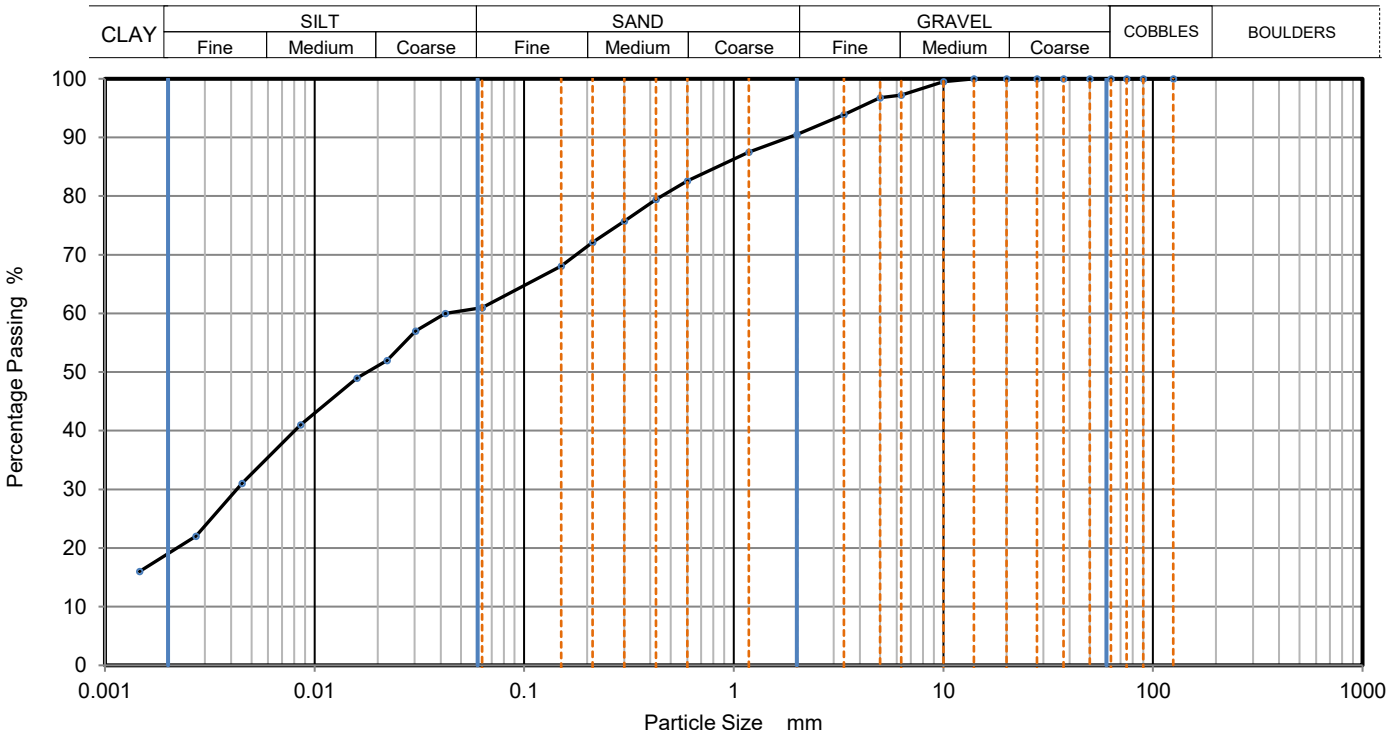
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV19
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.60
				Base	1.60
Specimen Reference	8	Specimen Depth	0.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071585



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	61
90	100	0.04210	60
75	100	0.03029	57
63	100	0.02214	52
50	100	0.01591	49
37.5	100	0.00859	41
28	100	0.00450	31
20	100	0.00271	22
14	100	0.00146	16
10	100		
6.3	97		
5	97		
3.35	94		
2	91		
1.18	88		
0.6	83	Particle density	(assumed)
0.425	79	2.65	Mg/m3
0.3	76		
0.212	72		
0.15	68		
0.063	61		

Dry Mass of sample, g: 201

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	9.5
Sand	29.5
Silt	42.0
Clay	19.0

Grading Analysis		
D100	mm	
D60	mm	0.0469
D30	mm	0.00423
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

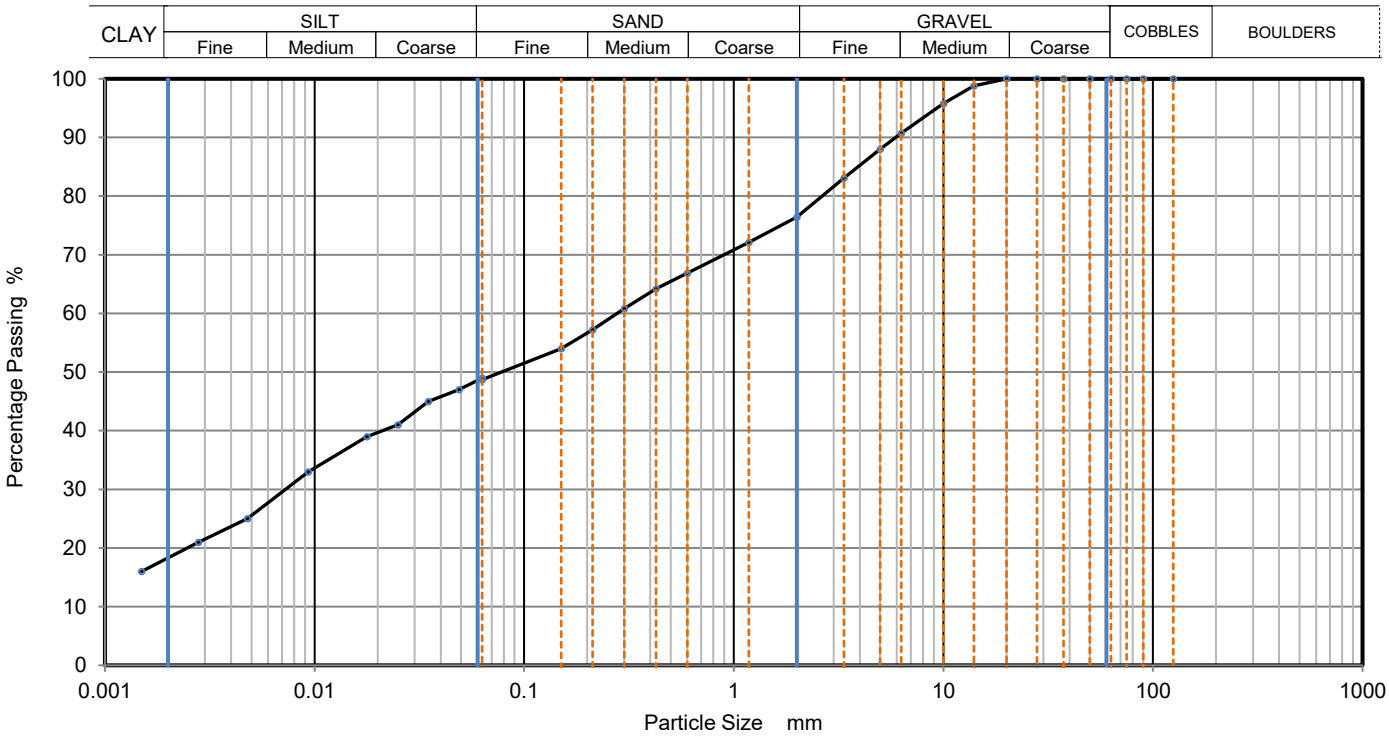
Remarks

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Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV19
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.60
				Base	2.20
Specimen Reference	6	Specimen Depth	1.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071586



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	49
90	100	0.04901	47
75	100	0.03488	45
63	100	0.02498	41
50	100	0.01778	39
37.5	100	0.00935	33
28	100	0.00479	25
20	100	0.00279	21
14	99	0.00149	16
10	96		
6.3	91		
5	88		
3.35	83		
2	76		
1.18	72		
0.6	67	Particle density	(assumed)
0.425	64	2.65	Mg/m3
0.3	61		
0.212	57		
0.15	54		
0.063	49		

Dry Mass of sample, g: 354

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	23.6
Sand	27.7
Silt	30.4
Clay	18.3

Grading Analysis		
D100	mm	
D60	mm	0.278
D30	mm	0.00715
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

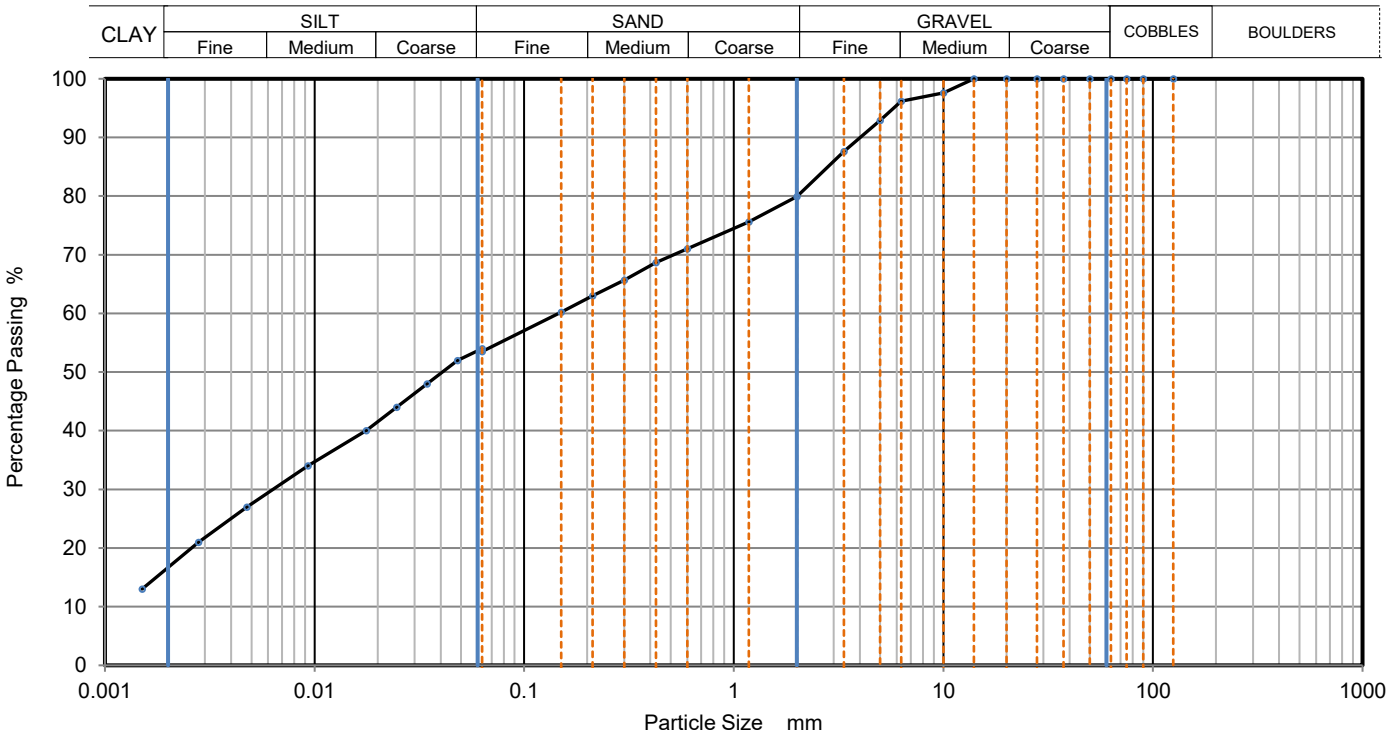
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

Job Ref					25-0509
Borehole/Pit No.					TP1-CV20
Site Name	DAA Cargo Relocation			Sample No.	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.60
				Base	1.60
Specimen Reference	7	Specimen Depth	0.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071587



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	54
90	100	0.04803	52
75	100	0.03443	48
63	100	0.02466	44
50	100	0.01766	40
37.5	100	0.00929	34
28	100	0.00476	27
20	100	0.00279	21
14	100	0.00150	13
10	98		
6.3	96		
5	93		
3.35	88		
2	80		
1.18	76		
0.6	71	Particle density	(assumed)
0.425	69	2.65	Mg/m3
0.3	66		
0.212	63		
0.15	60		
0.063	54		

Dry Mass of sample, g: 217

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	20.1
Sand	26.3
Silt	36.7
Clay	16.9

Grading Analysis		
D100	mm	
D60	mm	0.147
D30	mm	0.00632
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

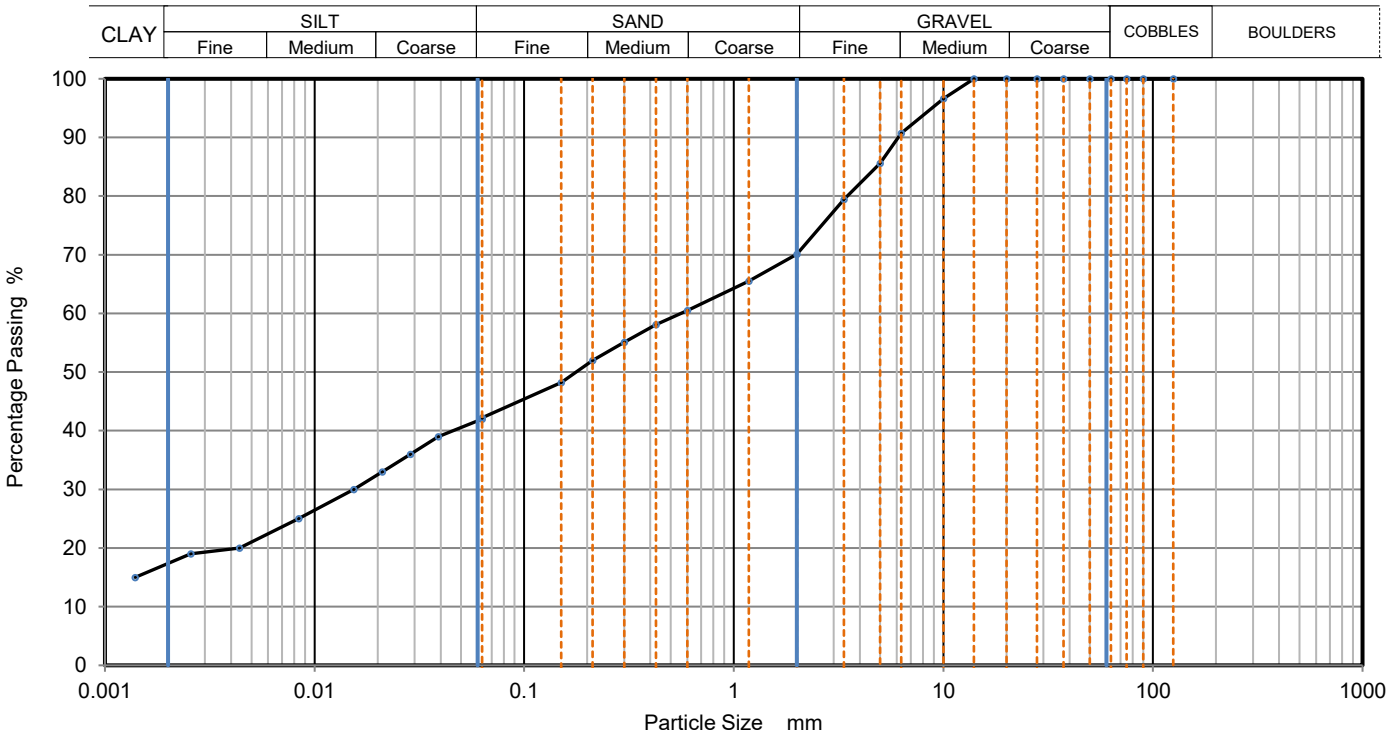
Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

PARTICLE SIZE DISTRIBUTION

				Job Ref	**25-0509**
				Borehole/Pit No.	TP1-CV20
Site Name	DAA Cargo Relocation			Sample No.	5
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	1.60
				Sample Depth (m) Base	2.60
Specimen Reference	6	Specimen Depth	1.6 m	Sample Type	B
Test Method	BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016			KeyLAB ID	Caus2025071588



Sieving		Sedimentation	
Particle Size mm	% Passing	Particle Size mm	% Passing
125	100	0.06300	42
90	100	0.03899	39
75	100	0.02869	36
63	100	0.02105	33
50	100	0.01540	30
37.5	100	0.00840	25
28	100	0.00438	20
20	100	0.00257	19
14	100	0.00139	15
10	97		
6.3	91		
5	86		
3.35	79		
2	70		
1.18	66		
0.6	61	Particle density	(assumed)
0.425	58	2.65	Mg/m3
0.3	55		
0.212	52		
0.15	48		
0.063	42		

Dry Mass of sample, g: 205

Sample Proportions	% dry mass
Cobbles	0.0
Gravel	29.9
Sand	27.9
Silt	24.9
Clay	17.3

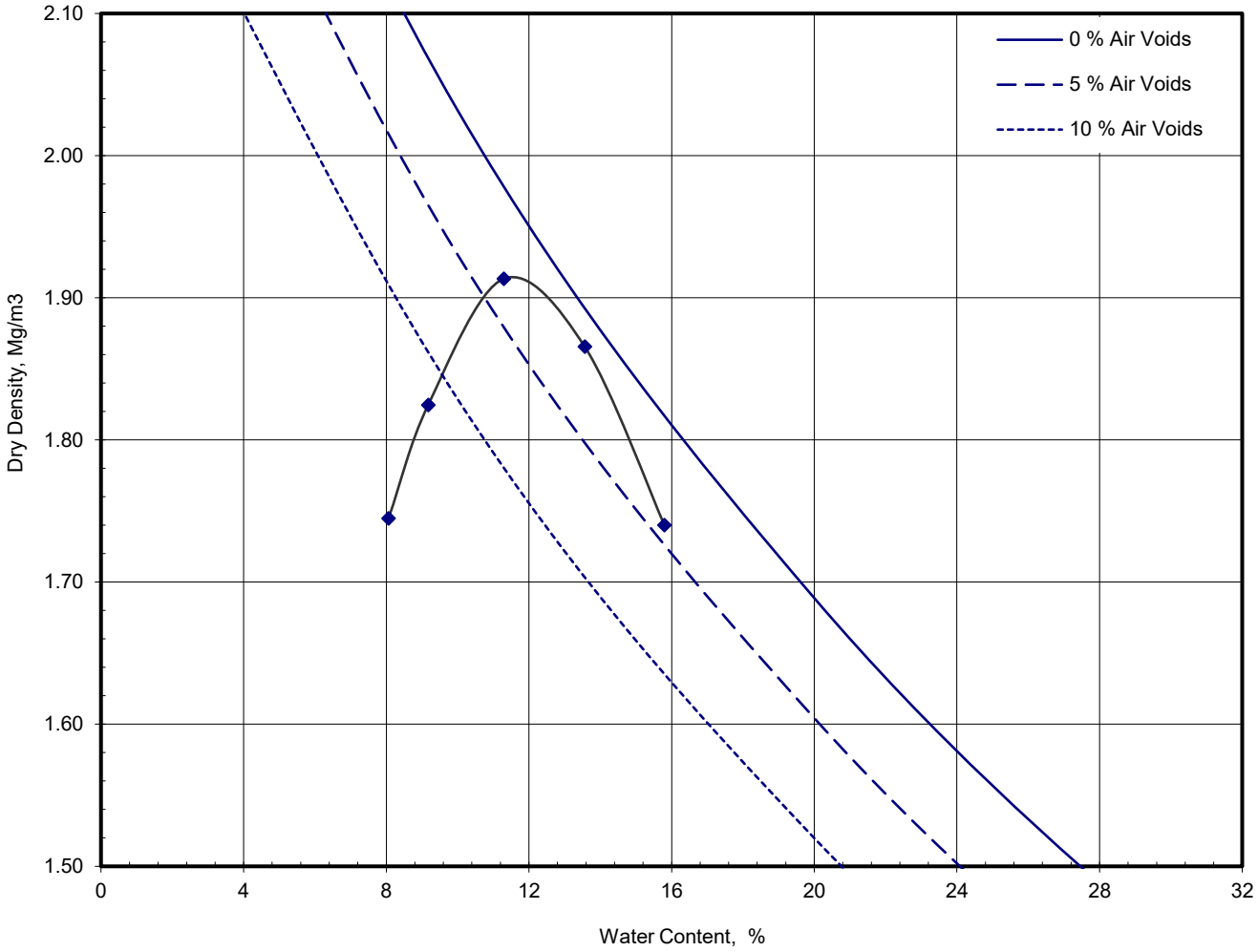
Grading Analysis		
D100	mm	
D60	mm	0.555
D30	mm	0.0152
D10	mm	
Uniformity Coefficient		
Curvature Coefficient		

Remarks

Preparation and testing to BS 1377-2 :2022 Cl 10 in accordance with ISO 17892-4:2016

Approved
Stephen Watson

CAUSEWAY GEOTECH	Dry Density / Moisture Content Relationship Light Compaction			Job Ref		25-0509
				Borehole / Pit No		TP1-CV05
Site Name	DAA Cargo Relocation			Sample No		3
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			Sample Depth (m)	Top	0.50
					Base	
Specimen Ref.	9	Specimen Depth	m	Sample Type		B
Test Method	BS1377-2: 2022, clause 11.3, 2.5kg rammer			Keylab ID		Caus2025071559



Preparation		Material used was air dried
Mould Type		1 LITRE
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.55

Maximum Dry Density	Mg/m³	**1.91**
Optimum Water Content	%	**11**

Approved

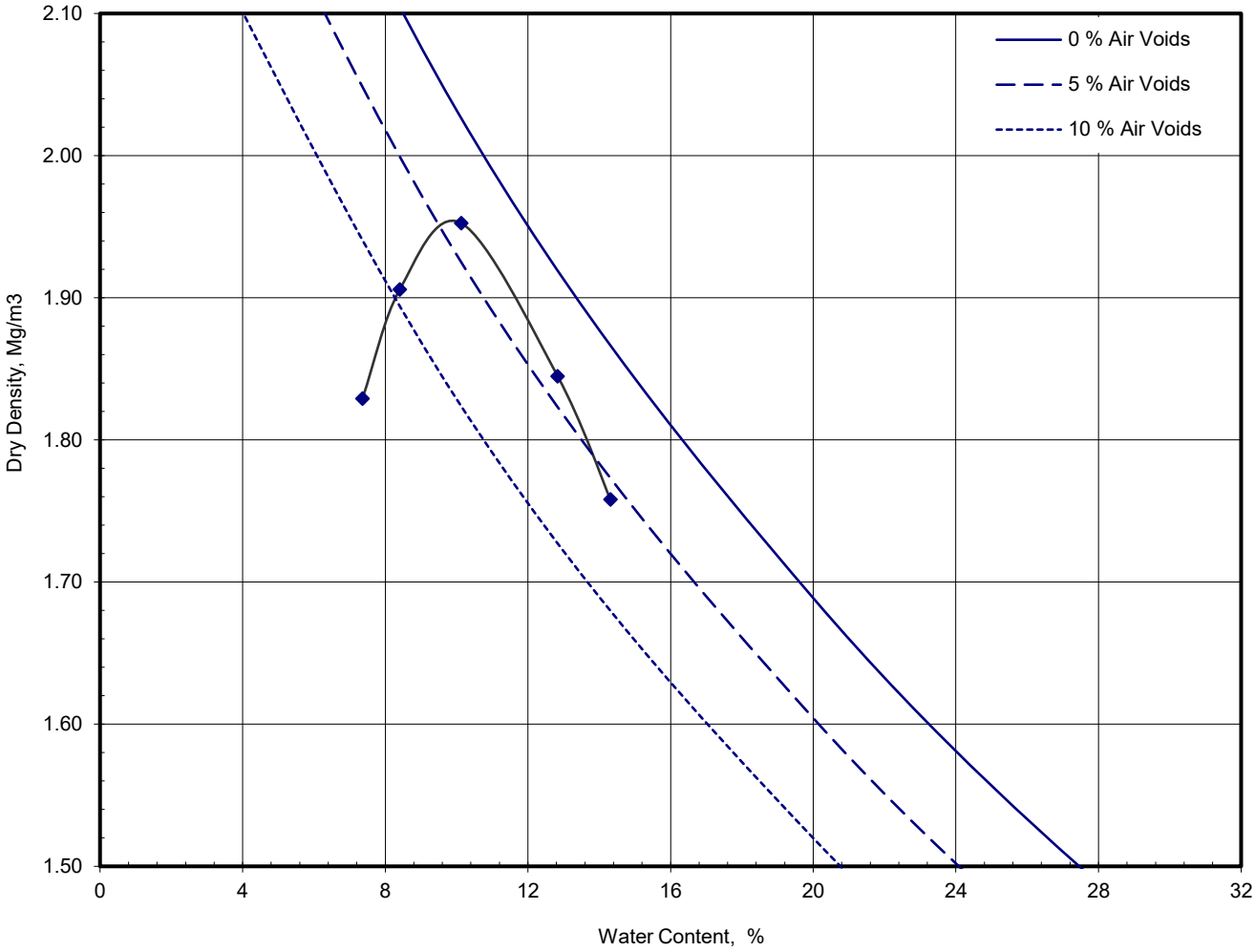
Stephen Watson

Remarks

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10122

CAUSEWAY GEOTECH	**Dry Density / Moisture Content Relationship Light Compaction**			Job Ref	**25-0509**
				Borehole / Pit No	TP1-CV07
Site Name	**DAA Cargo Relocation**			Sample No	4
Specimen Description	Brown sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.60
				Sample Depth (m) Base	1.60
Specimen Ref.	9	Specimen Depth	m	Sample Type	B
Test Method	BS1377-2: 2022 , clause 11.4 2.5kg rammer			Keylab ID	Caus2025071563

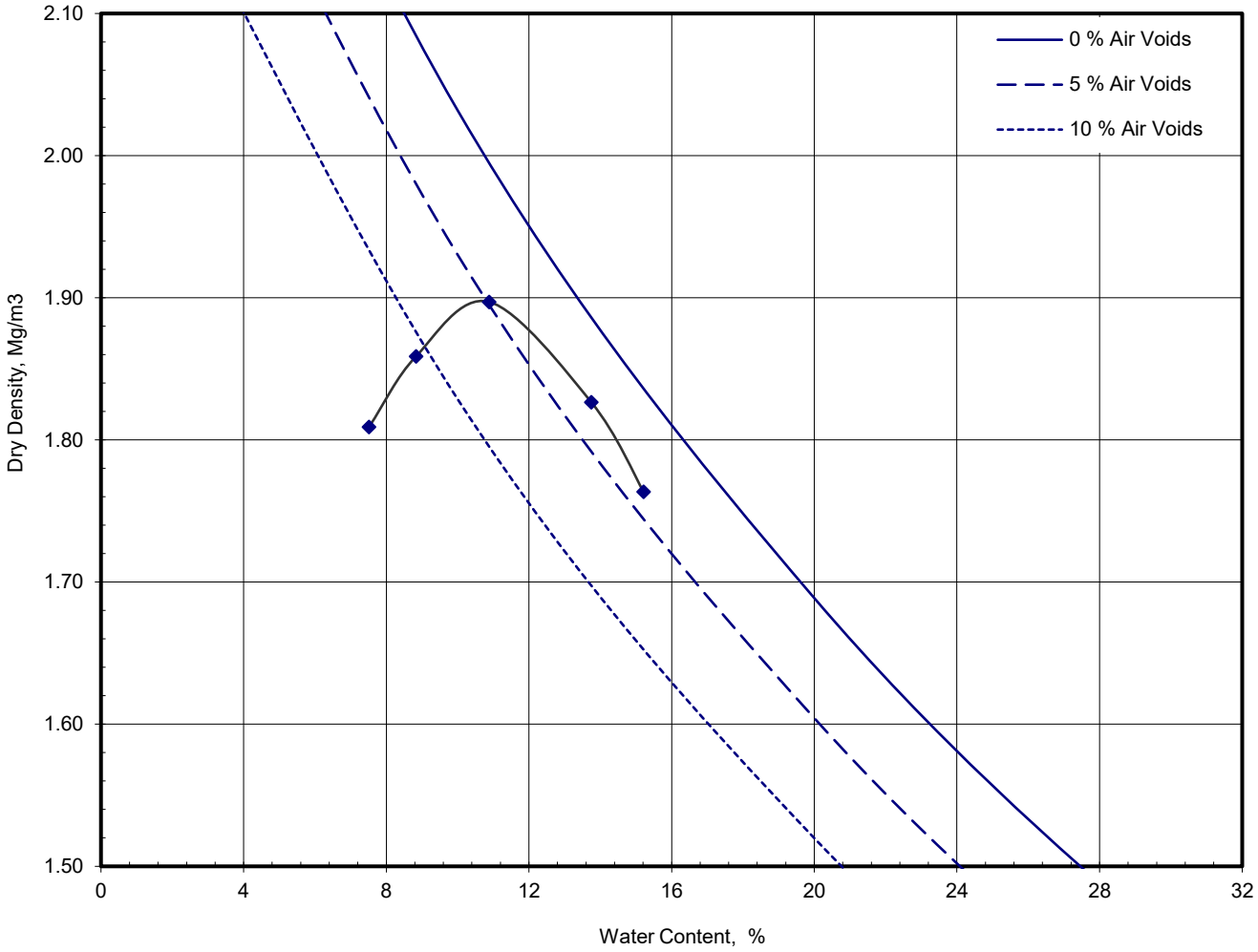


Preparation		Material used was air dried
Mould Type		CBR
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	13
Particle Density - Assumed	Mg/m³	2.55

Maximum Dry Density	Mg/m³	**1.95**
Optimum Water Content	%	**10**

Approved	Remarks	UKAS TESTING 10122
Stephen Watson	LAB 33R - Version 1	

CAUSEWAY GEOTECH	Dry Density / Moisture Content Relationship Light Compaction			Job Ref		25-0509
				Borehole / Pit No		TP1-CV11
Site Name	DAA Cargo Relocation			Sample No		4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m)	Top	0.50
					Base	1.50
Specimen Ref.	9	Specimen Depth	m	Sample Type		B
Test Method	BS1377-2: 2022 , clause 11.4 2.5kg rammer			Keylab ID		Caus2025071573

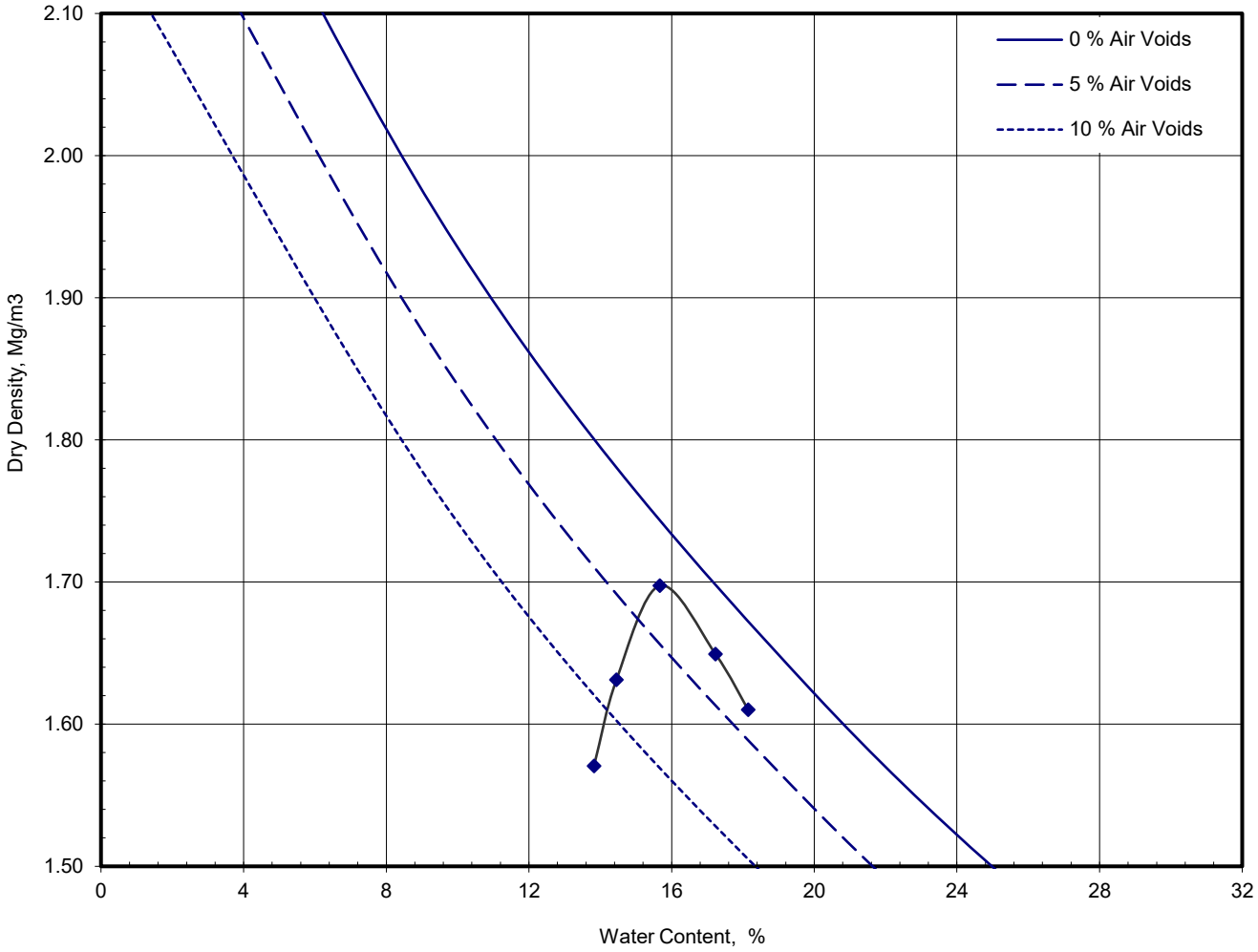


Preparation		Material used was air dried
Mould Type		CBR
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	5
Material Retained on 20.0 mm Sieve	%	12
Particle Density - Assumed	Mg/m³	2.55

Maximum Dry Density	Mg/m³	**1.90**
Optimum Water Content	%	**11**

Approved	Remarks	
Stephen Watson		UKAS TESTING 10122

CAUSEWAY GEOTECH	**Dry Density / Moisture Content Relationship Light Compaction**			Job Ref	**25-0509**
				Borehole / Pit No	TP1-CV13
Site Name	**DAA Cargo Relocation**			Sample No	4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	0.50
				Sample Depth (m) Base	1.50
Specimen Ref.	9	Specimen Depth	m	Sample Type	B
Test Method	BS1377-2: 2022, clause 11.3, 2.5kg rammer			Keylab ID	Caus2025071577

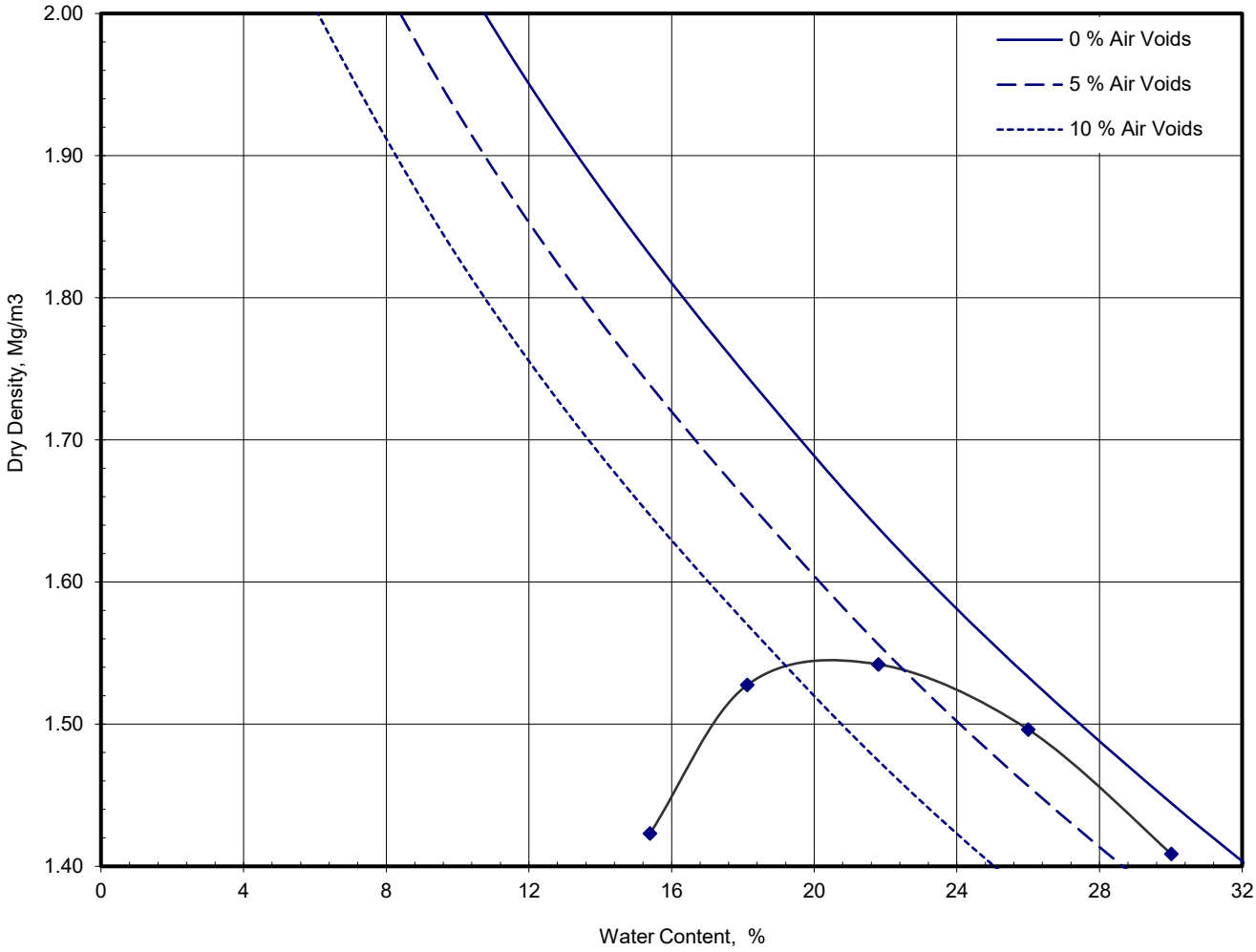


Preparation		Material used was air dried
Mould Type		1 LITRE
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	5
Particle Density - Assumed	Mg/m³	2.40

Maximum Dry Density	Mg/m³	**1.70**
Optimum Water Content	%	**16**

Approved	Remarks	UKAS TESTING 10122
Stephen Watson	LAB 33R - Version 1	

CAUSEWAY GEOTECH	Dry Density / Moisture Content Relationship Light Compaction			Job Ref		25-0509
				Borehole / Pit No		TP1-CV19
Site Name	DAA Cargo Relocation			Sample No		4
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m)	Top	0.60
					Base	1.60
Specimen Ref.	9	Specimen Depth	m	Sample Type		B
Test Method	BS1377-2: 2022, clause 11.3, 2.5kg rammer			Keylab ID		Caus2025071585



Preparation		Material used was air dried
Mould Type		1 LITRE
Samples Used		Single sample tested
Material Retained on 37.5 mm Sieve	%	0
Material Retained on 20.0 mm Sieve	%	1
Particle Density - Assumed	Mg/m³	2.55

Maximum Dry Density	Mg/m³	**1.54**
Optimum Water Content	%	**22**

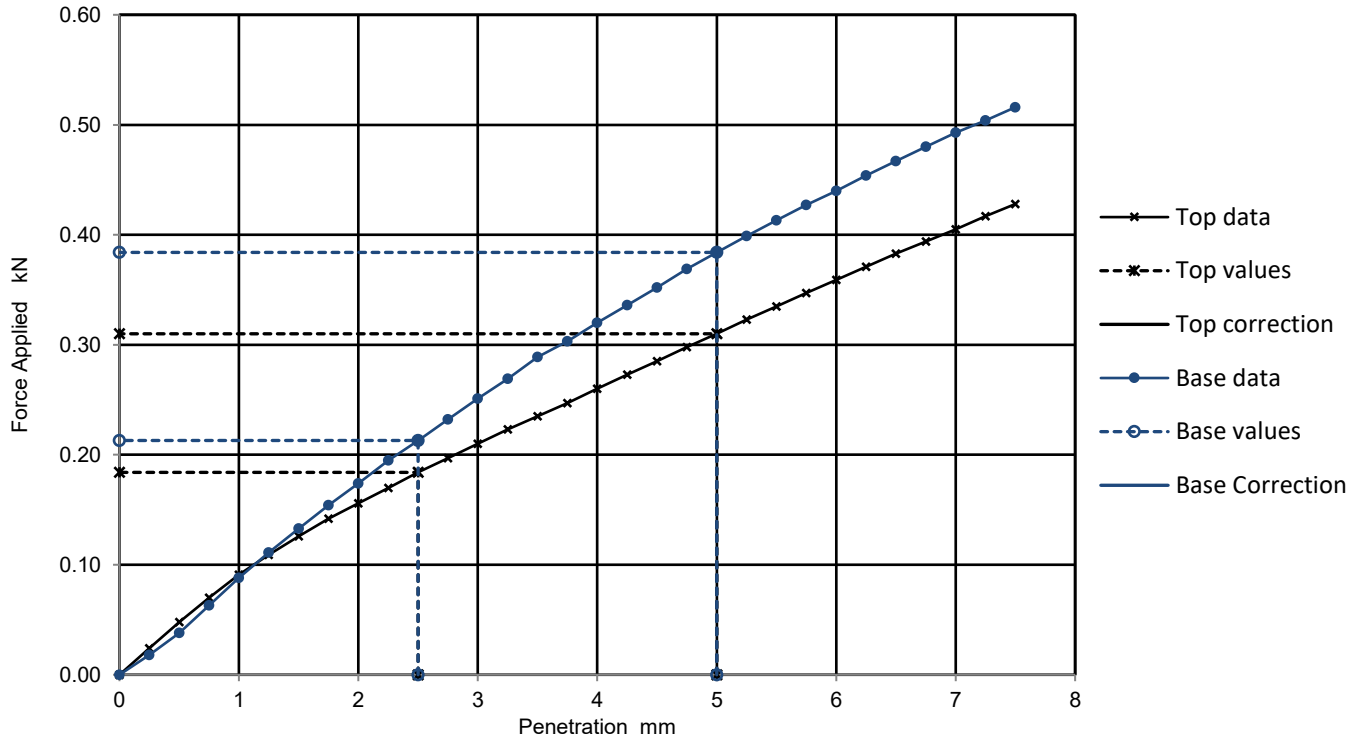
Approved	Remarks	UKAS TESTING 10122
Stephen Watson	LAB 33R - Version 1	

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV01
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071550
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		7	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	1.92	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.53	Mg/m3		3	kPa
	Water content	25.4	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	1.4	1.6	1.6		25.4
BASE	No	1.6	1.9	1.9		25.1

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

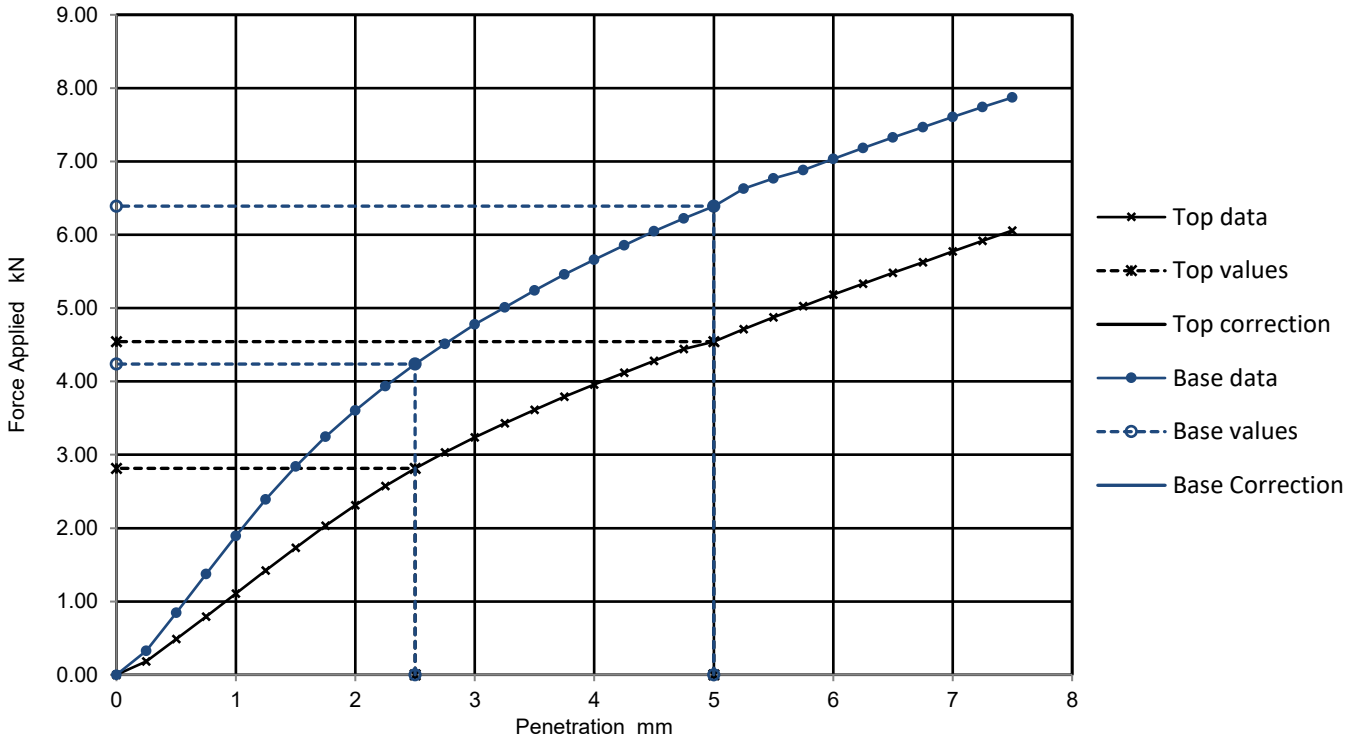
UKAS TESTING

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV02
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025072413
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		13	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.13	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.90	Mg/m3		3	kPa
	Water content	12	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	21.0	23.0	23.0		12
BASE	No	32.0	32.0	32.0		12.1

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

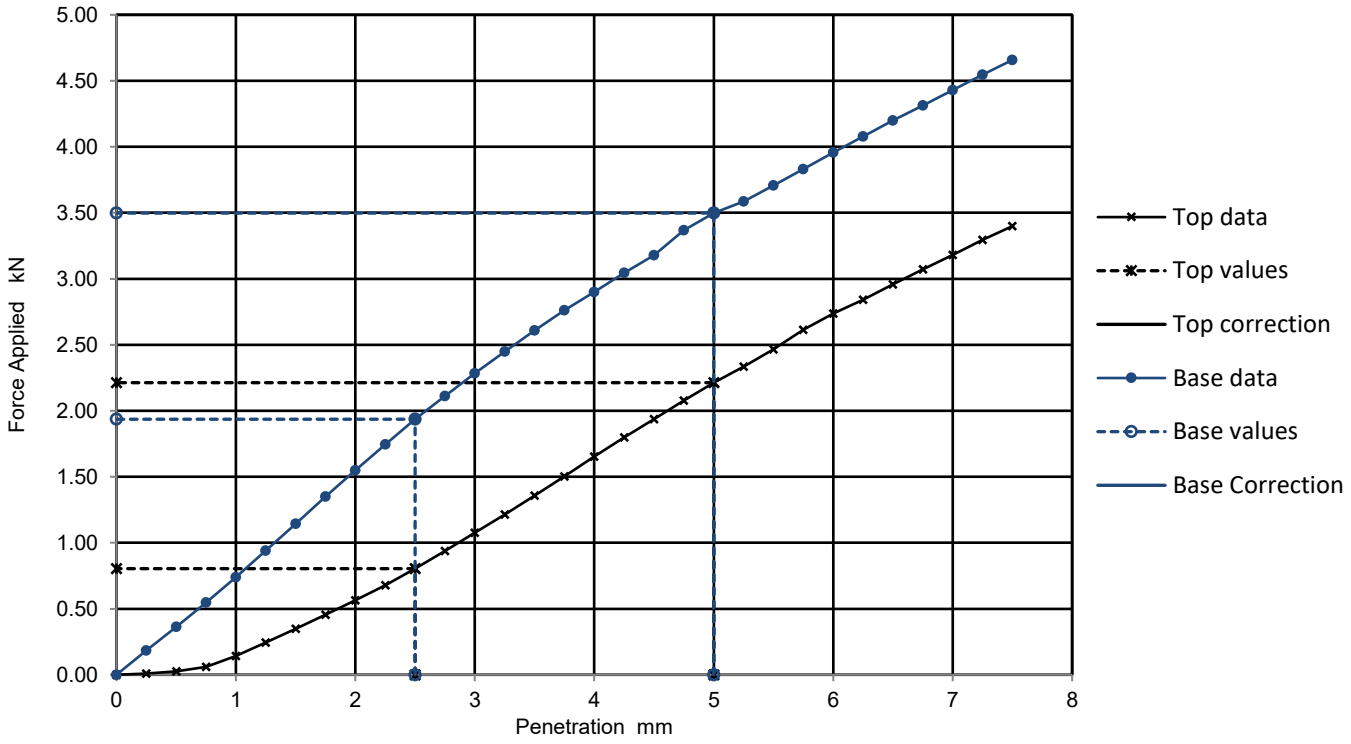
10122

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV03
Site Name	DAA Cargo Relocation			Sample No.	7
Soil Description	Brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071554
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		20	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.01	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.80	Mg/m3		3	kPa
	Water content	11.5	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	6.1	11.0	11.0		11.5
BASE	No	15.0	17.0	17.0		11.7

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

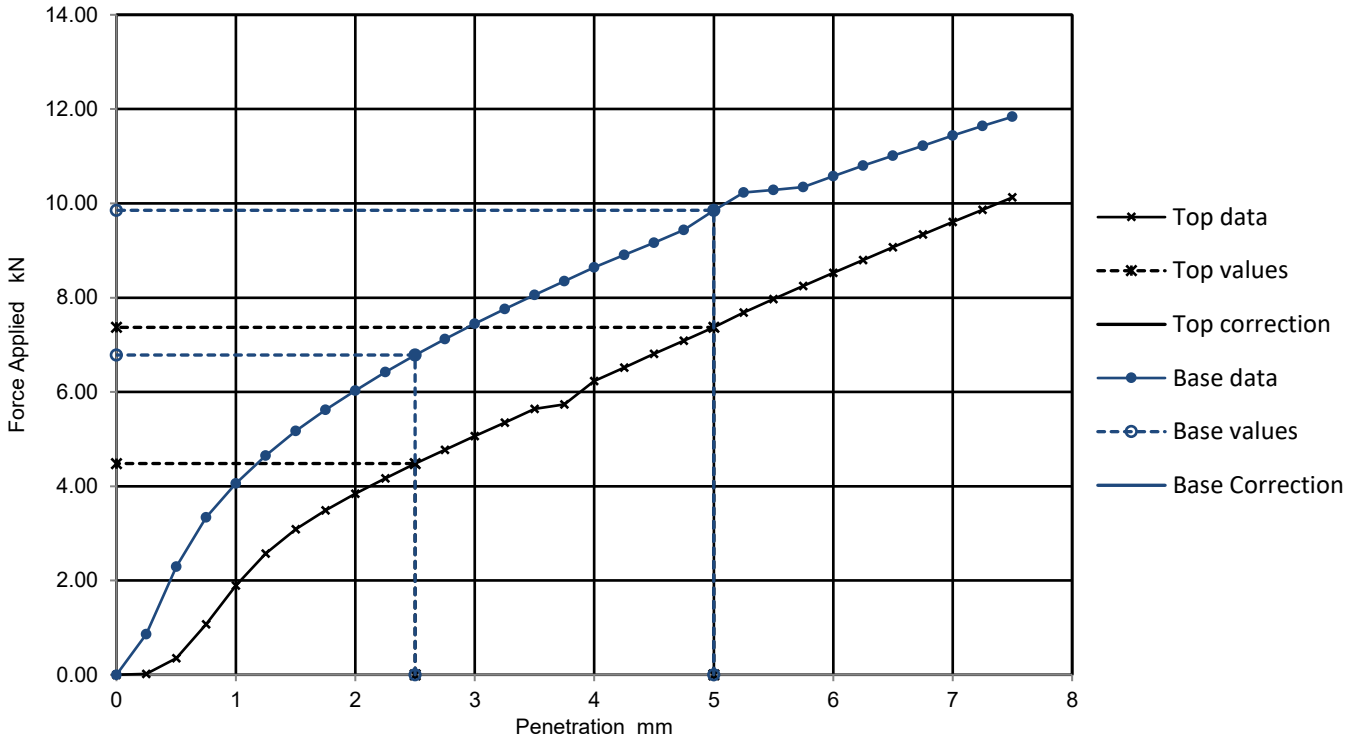
10122

CAUSEWAY GEOTECH	California Bearing Ratio (CBR)			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV04
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071556
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		13	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.06	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.90	Mg/m3		3	kPa
	Water content	8.6	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	34.0	37.0	37.0		8.6
BASE	No	51.0	49.0	51.0		8.8

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

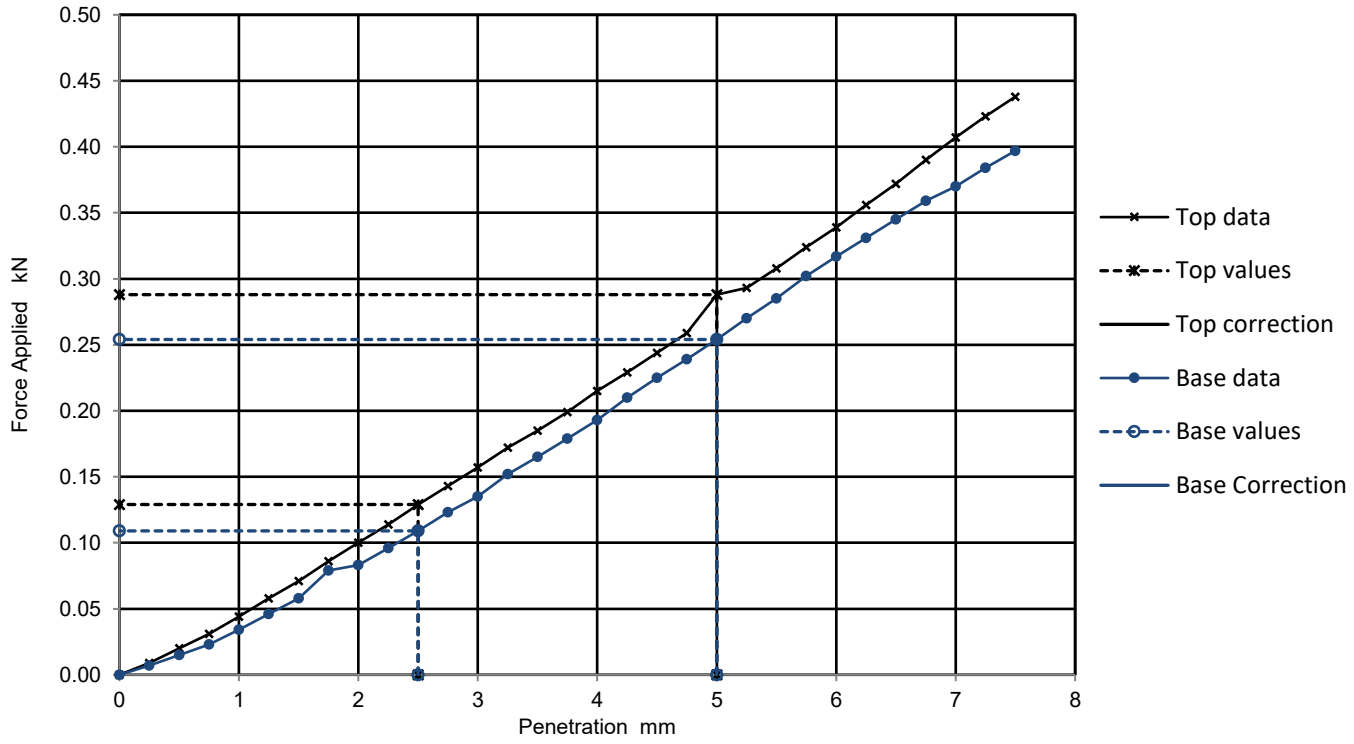
10122

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV05
Site Name	DAA Cargo Relocation			Sample No.	3
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071559
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		5	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.21	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.96	Mg/m3		3	kPa
	Water content	12.8	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.0	1.4	1.4	1.4	12.8
BASE	No	0.8	1.3	1.3		13.3

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

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10122

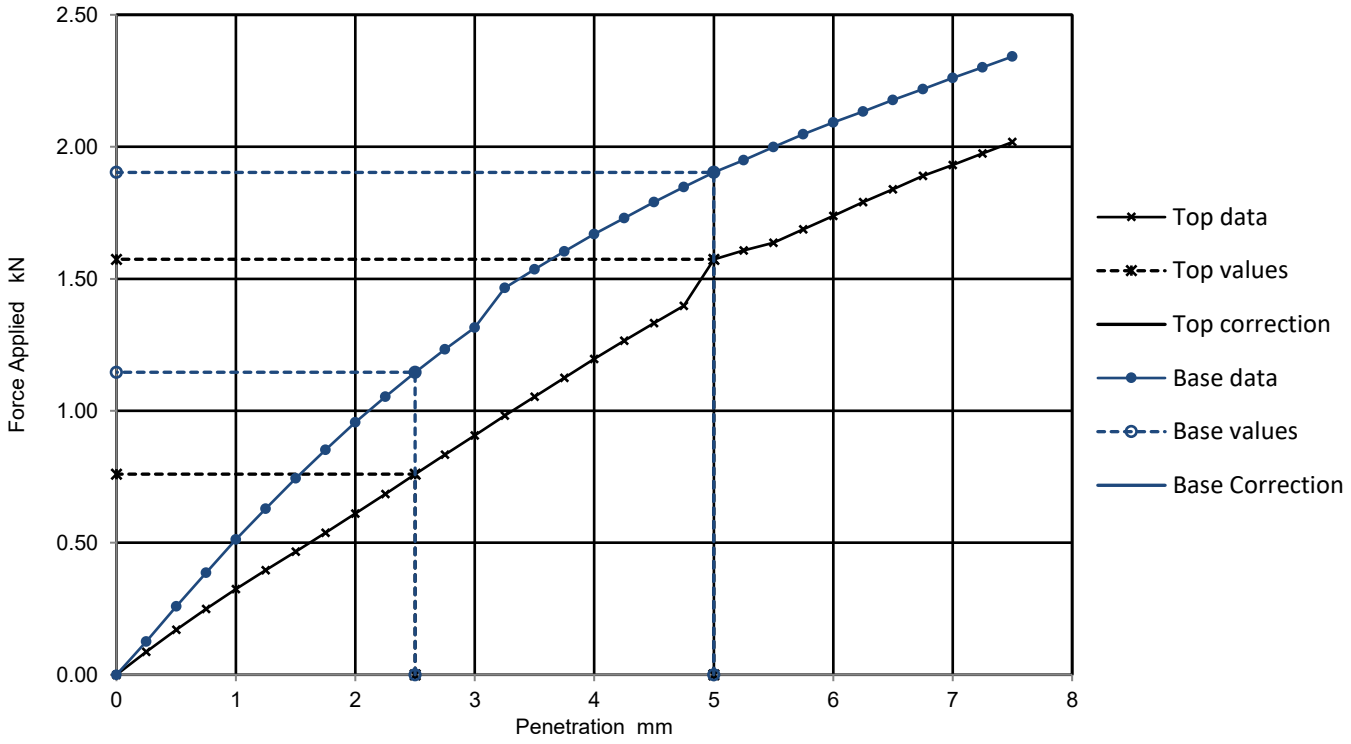
California Bearing Ratio (CBR)

				Job Ref	25-0509
				Borehole/Pit No.	TP1-CV06
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brown sandy slightly gravelly silty CLAY.			Depth m	0.60
Specimen Reference		Specimen Depth	m	Sample Type	D
Specimen Description	Brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071561
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		9	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.02	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.72	Mg/m3		3	kPa
	Water content	17.5	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	5.8	7.9	7.9	8.7	17.5
BASE	No	8.7	9.5	9.5		18.1

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

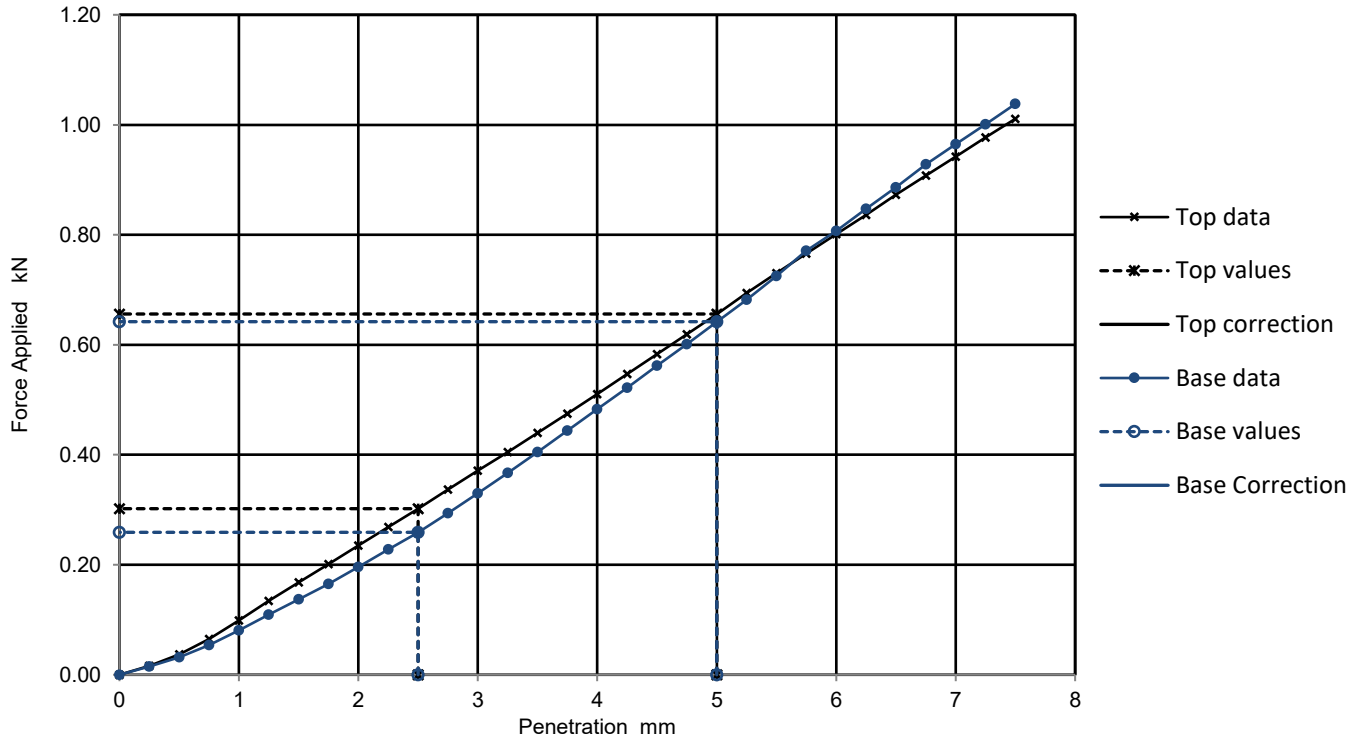
UKAS TESTING

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV07
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brown sandy slightly gravelly silty CLAY.			Depth m	0.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071563
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		13	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.20	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.95	Mg/m3		3	kPa
	Water content	13	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	2.3	3.3	3.3	3.2	13
BASE	No	2.0	3.2	3.2		11.4

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

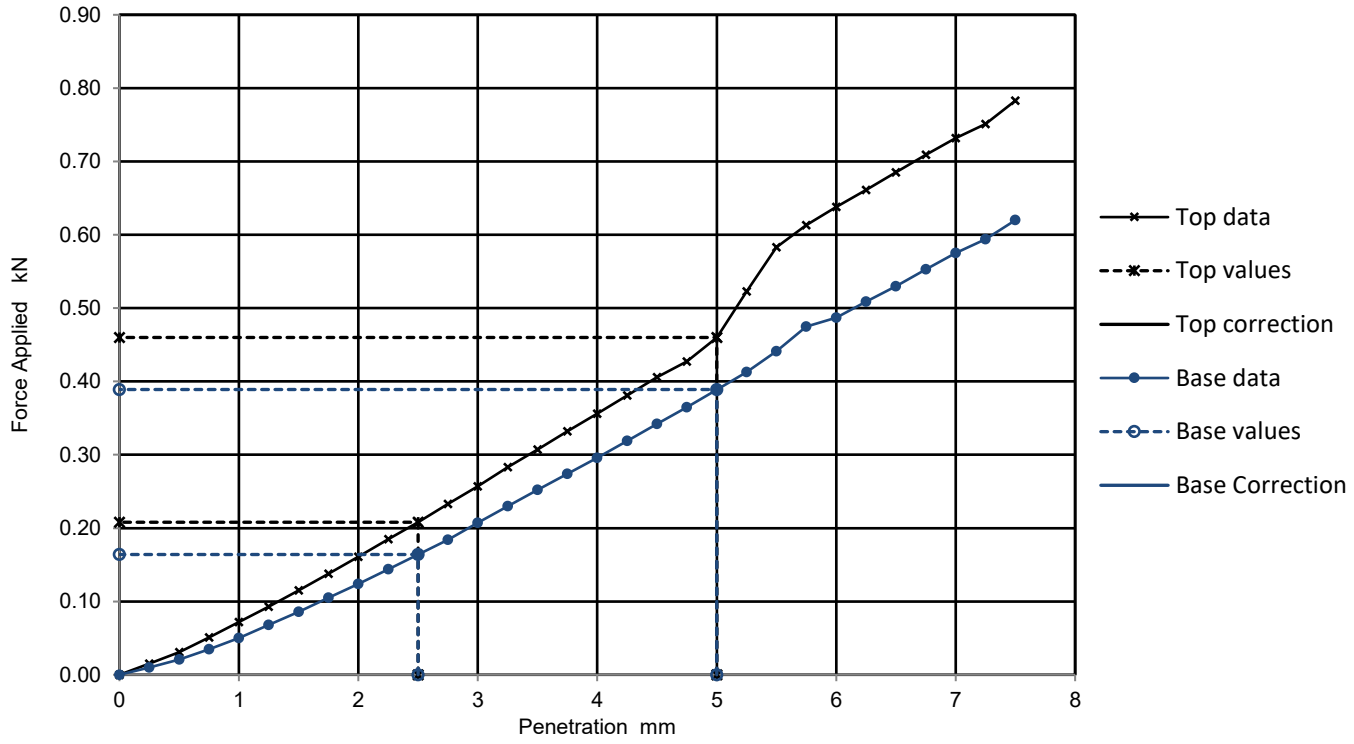
10122

CAUSEWAY GEOTECH	California Bearing Ratio (CBR)			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV08
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071565
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		16	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.21	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.95	Mg/m3		3	kPa
	Water content	13.2	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.6	2.3	2.3	2.1	13.2
BASE	No	1.2	1.9	1.9		13.5

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

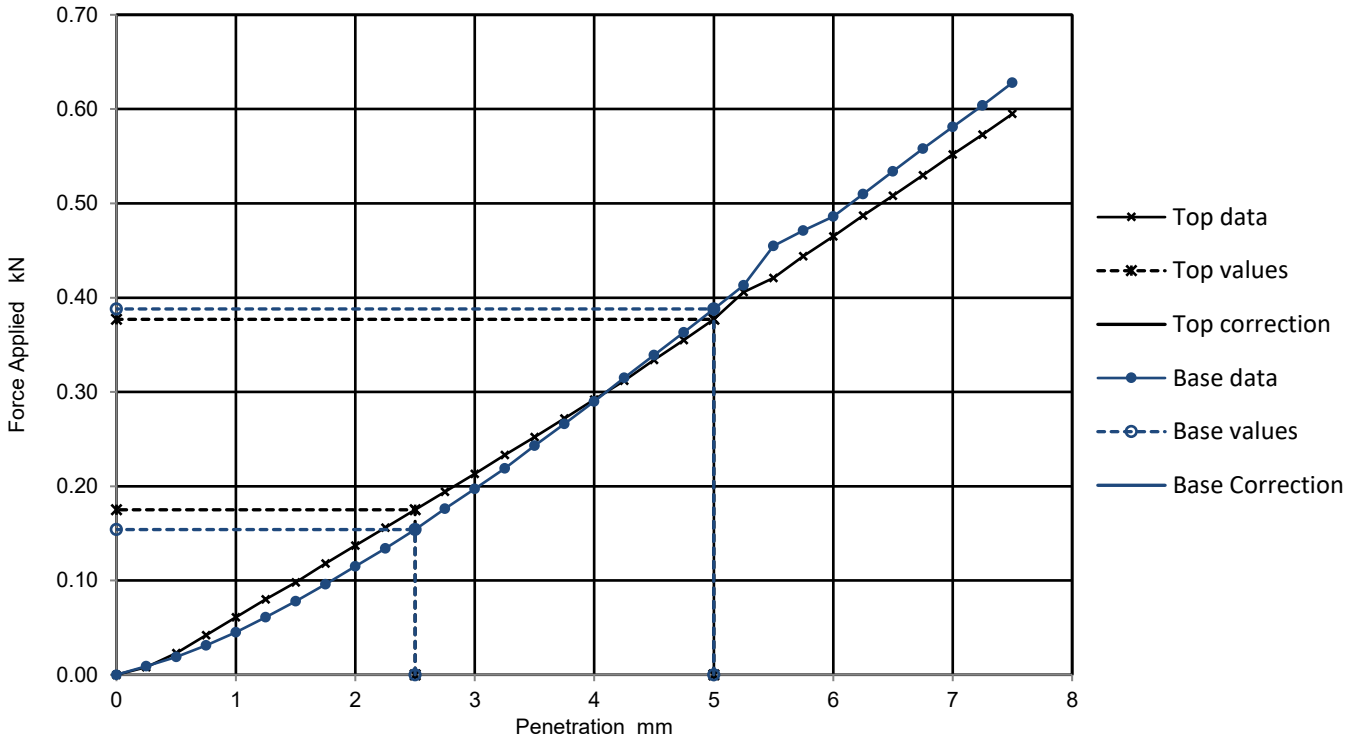
10122

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV09
Site Name	DAA Cargo Relocation			Sample No.	6
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	1.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071568
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		8	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.23	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.99	Mg/m3		3	kPa
	Water content	12.2	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.3	1.9	1.9	1.9	12.2
BASE	No	1.2	1.9	1.9		11.7

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

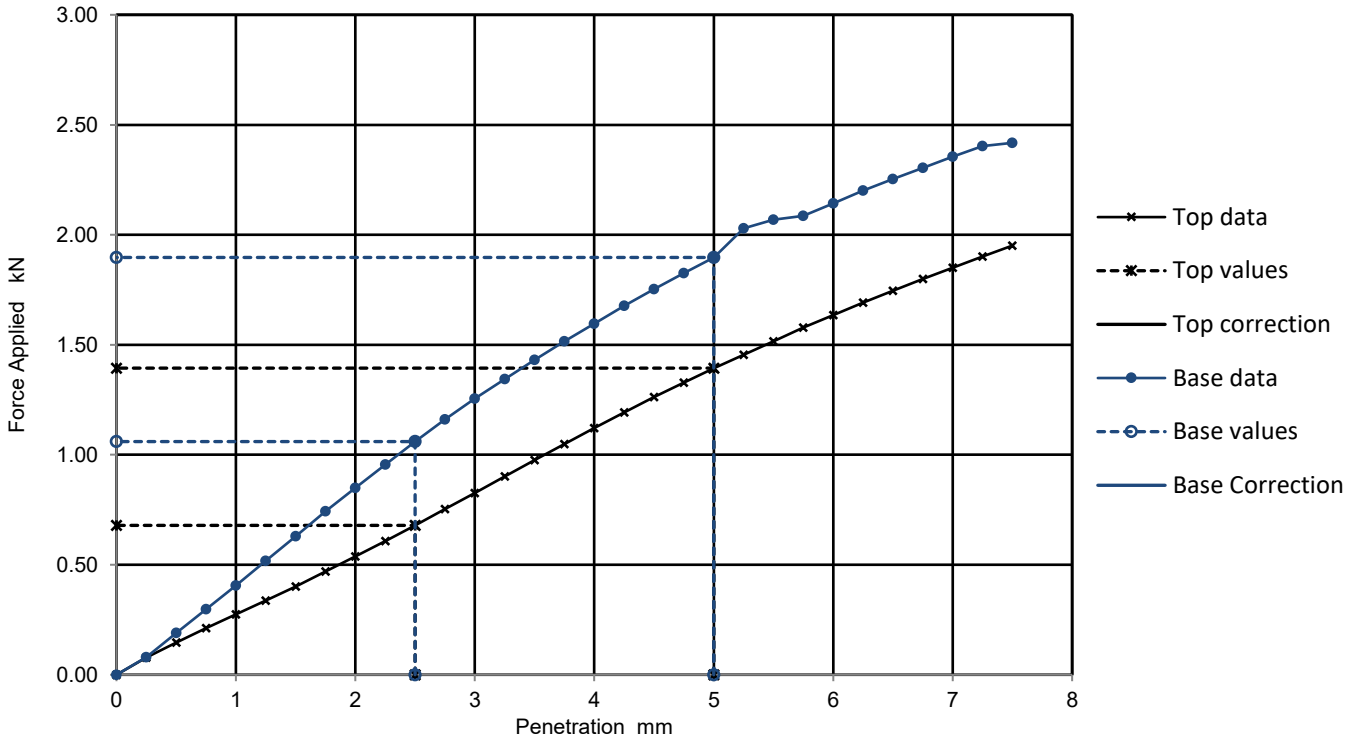
10122

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV10
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071570
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		7	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.06	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.81	Mg/m3		3	kPa
	Water content	14	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	5.1	7.0	7.0		14
BASE	No	8.0	9.5	9.5		14.2

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

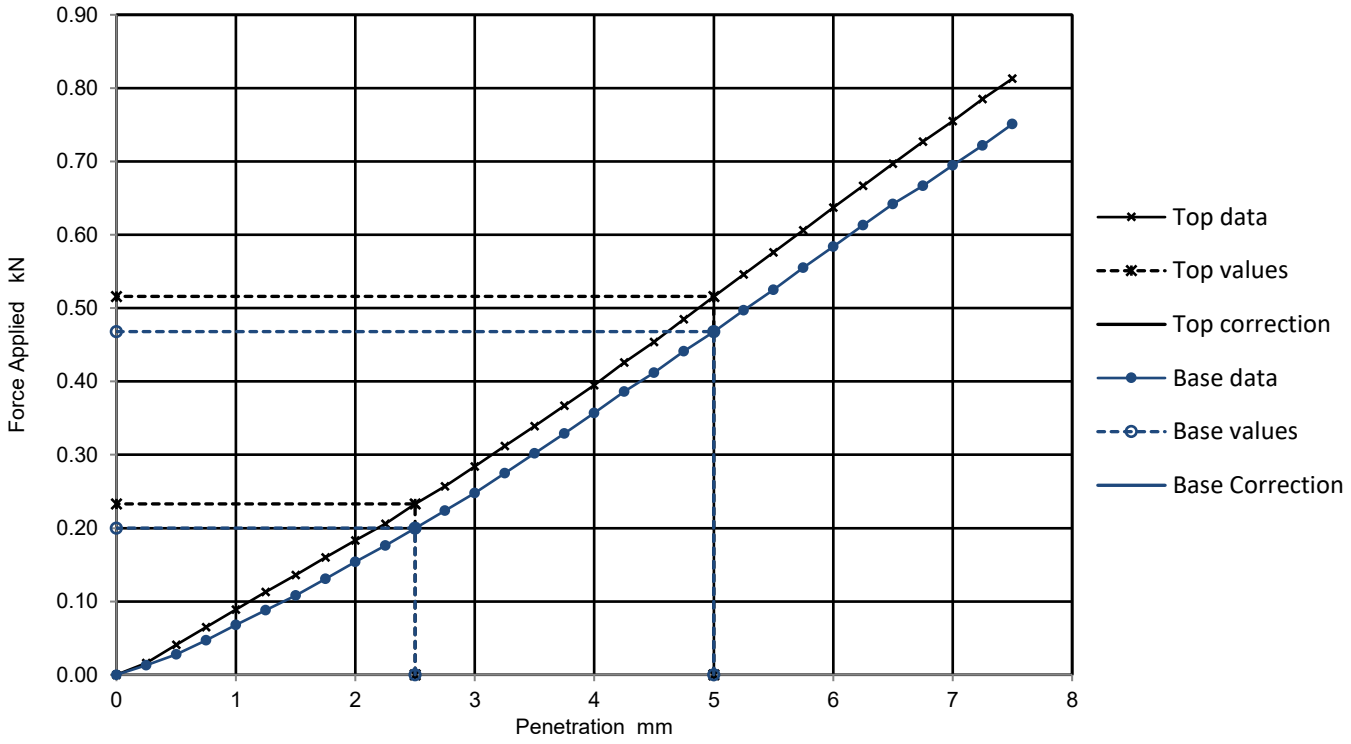
UKAS TESTING

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV11
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071573
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		12	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.26	Mg/m3	Surcharge applied	4.5	kg
	Dry density	2.00	Mg/m3		3	kPa
	Water content	12.9	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.8	2.6	2.6	2.5	12.9
BASE	No	1.5	2.3	2.3		13.2

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

10122

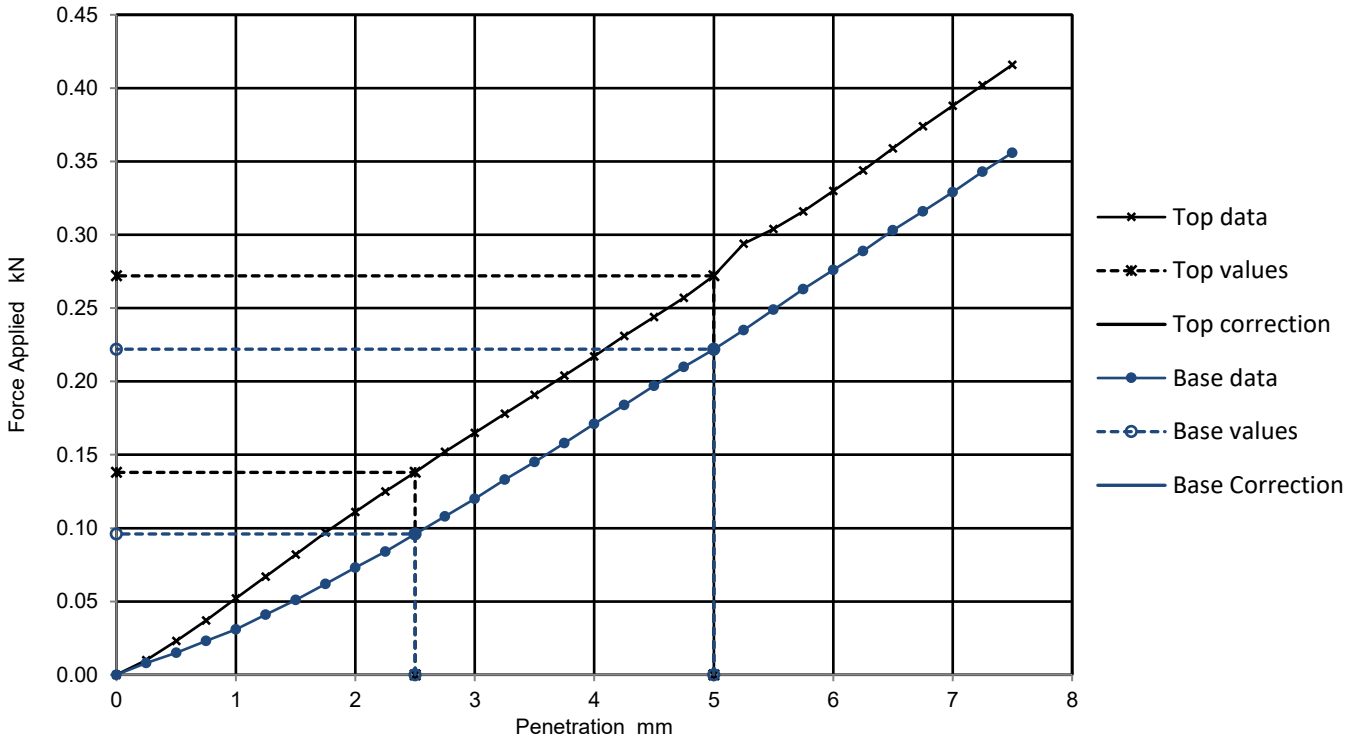
California Bearing Ratio (CBR)

CAUSEWAY GEOTECH				Job Ref	25-0509
				Borehole/Pit No.	TP1-CV12
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071575
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		9	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.18	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.92	Mg/m3		3	kPa
	Water content	13.7	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, % 2.5mm	5mm	Highest	Average	Water Content %
TOP	No	1.0	1.4	1.4		13.7
BASE	No	0.7	1.1	1.1		14.2

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

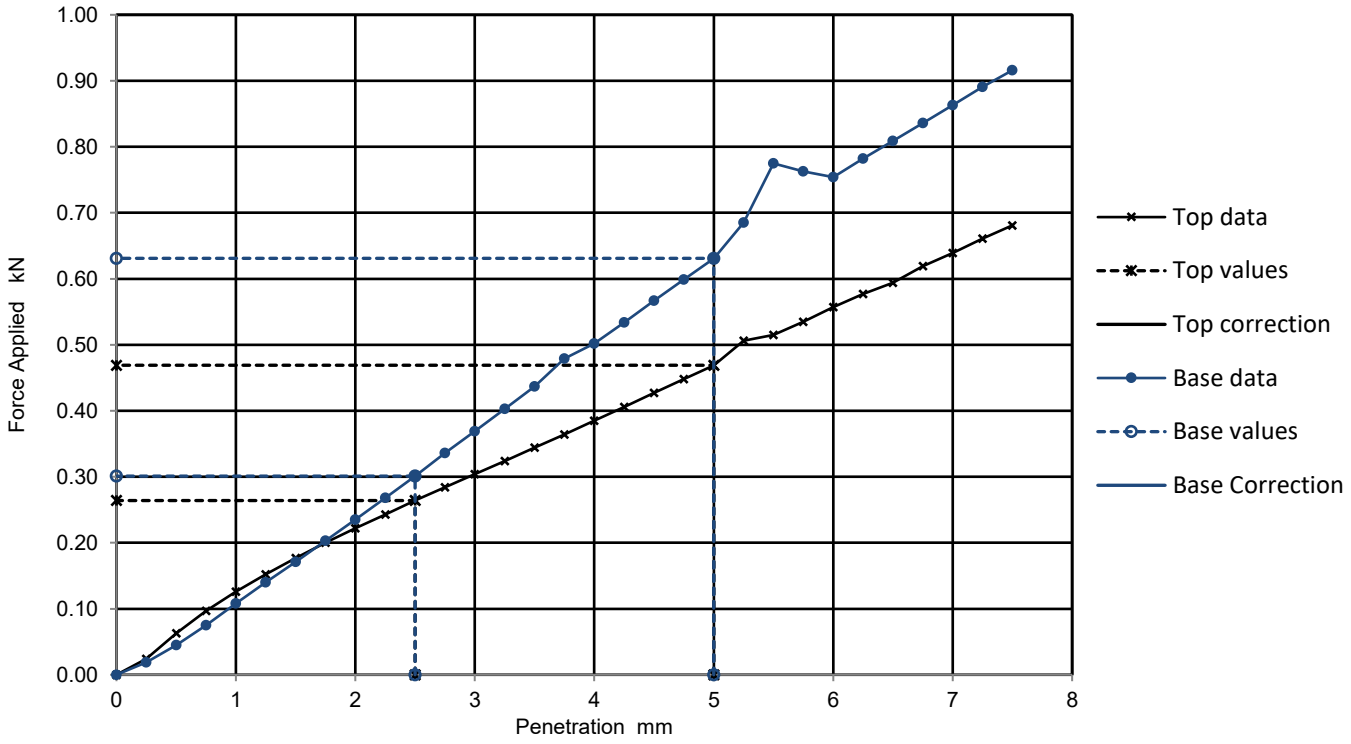
UKAS TESTING

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV13
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071577
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		5	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.03	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.70	Mg/m3		3	kPa
	Water content	19.2	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	2.0	2.3	2.3		19.2
BASE	No	2.3	3.2	3.2		19.1

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

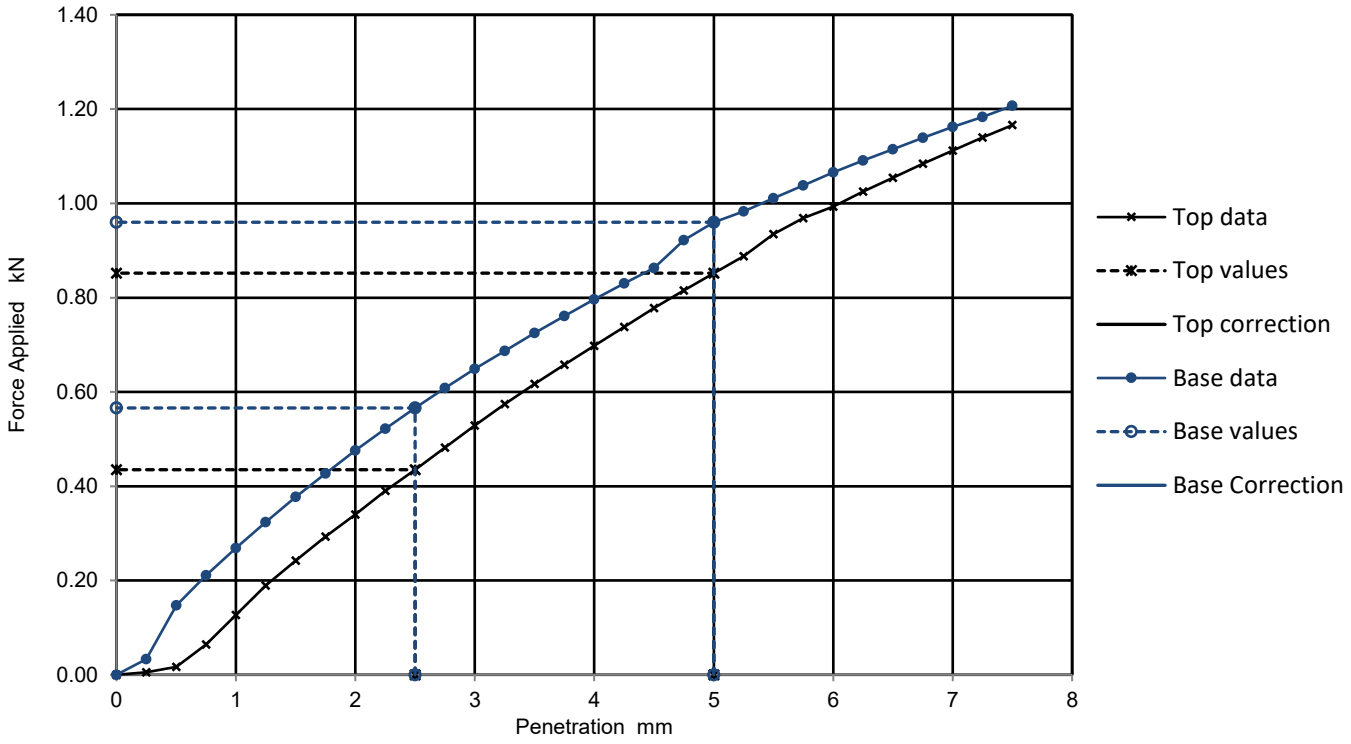
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CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV16
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071579
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		0	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	1.95	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.58	Mg/m3		3	kPa
	Water content	23.3	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	3.3	4.3	4.3	4.5	23.3
BASE	No	4.3	4.8	4.8		21.4

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

UKAS TESTING

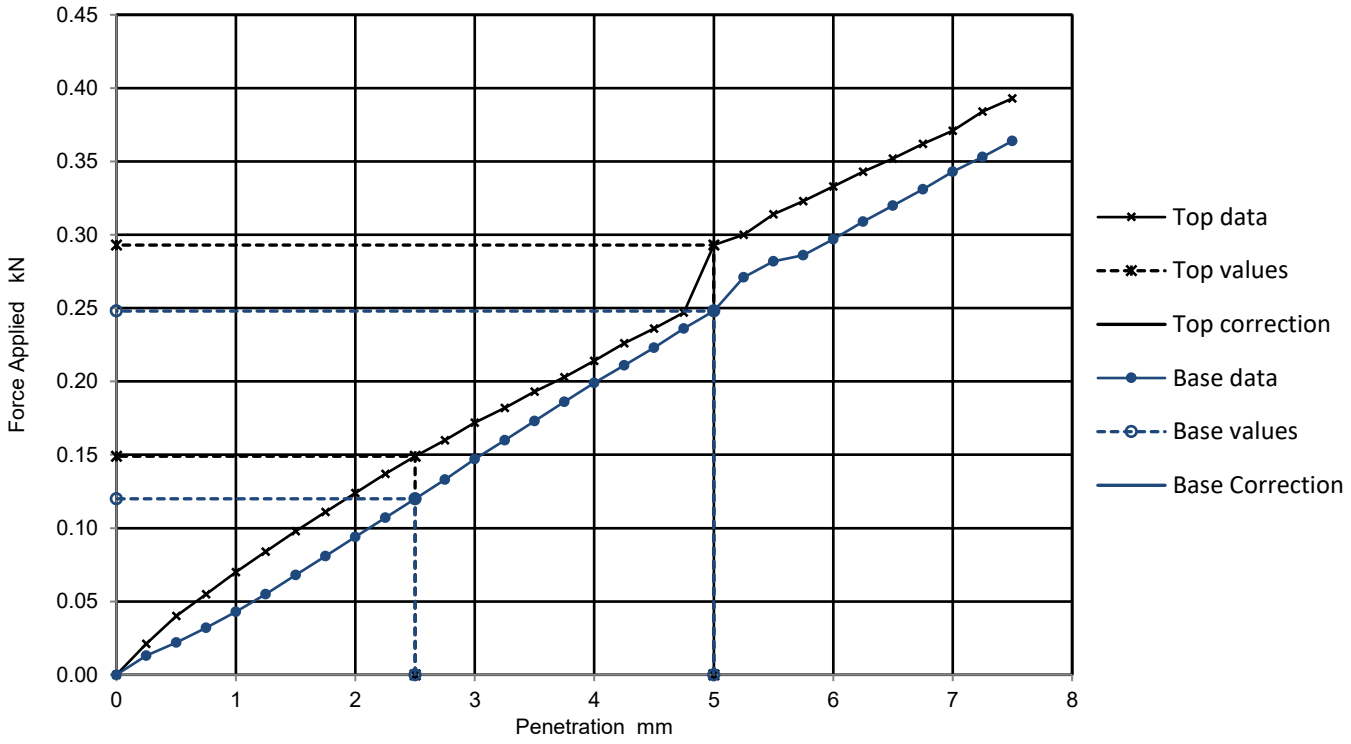
10122

CAUSEWAY GEOTECH	California Bearing Ratio (CBR)			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV17
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071581
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		2	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	1.99	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.64	Mg/m3		3	kPa
	Water content	21.6	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.1	1.5	1.5	1.4	21.6
BASE	No	0.9	1.2	1.2		22

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

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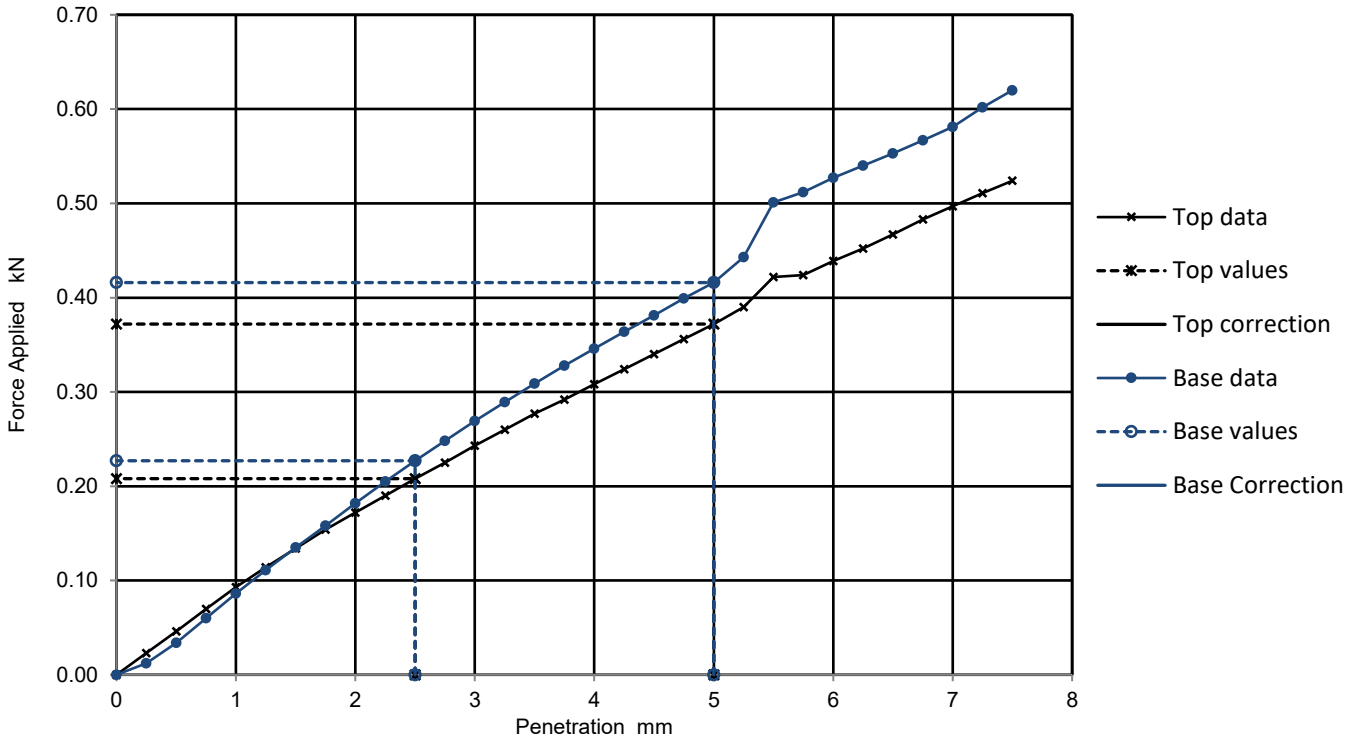
10122

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV18
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey slightly sandy slightly gravelly silty CLAY.			Depth m	0.50
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey slightly sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071583
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		2	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	1.93	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.53	Mg/m3		3	kPa
	Water content	25.9	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	1.6	1.9	1.9	2.0	25.9
BASE	No	1.7	2.1	2.1		25.8

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

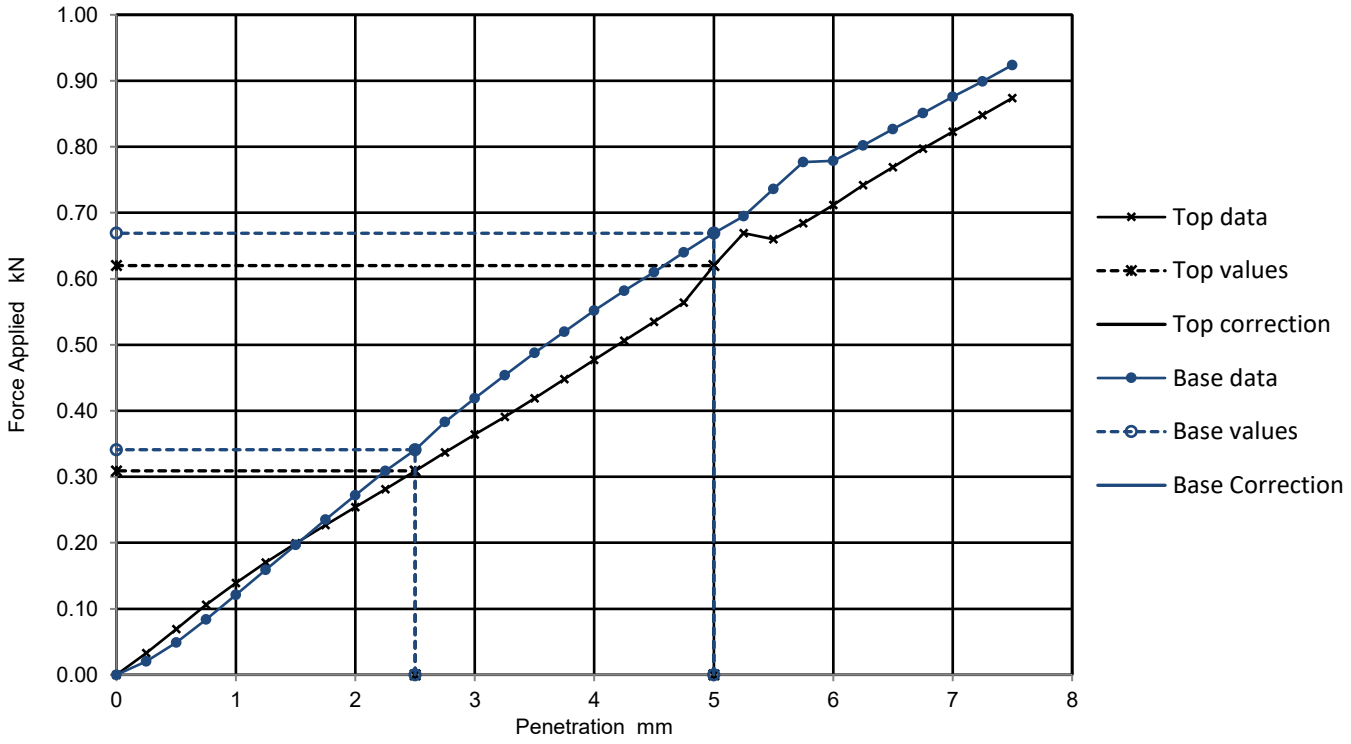
UKAS TESTING

CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV19
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071585
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		1	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	1.93	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.57	Mg/m3		3	kPa
	Water content	23.1	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	2.3	3.1	3.1	3.2	23.1
BASE	No	2.6	3.3	3.3		22.8

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

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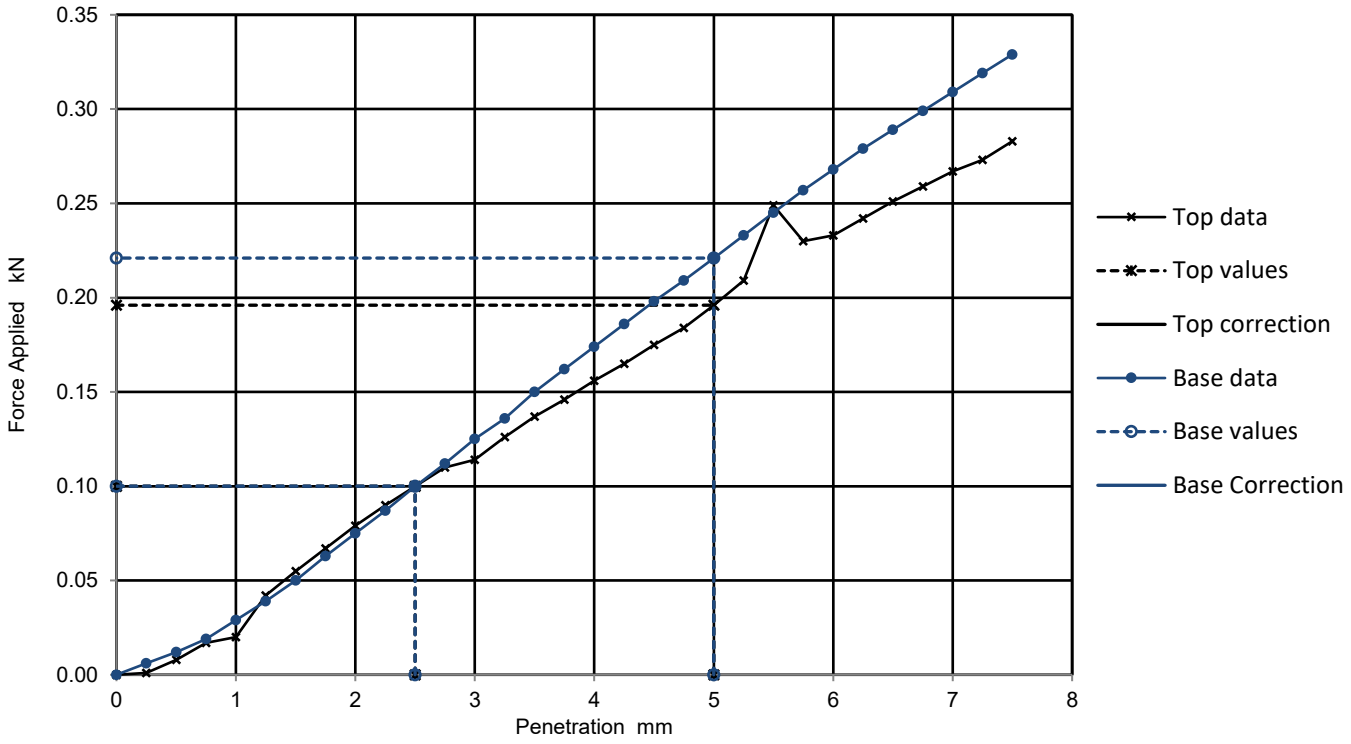
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CAUSEWAY GEOTECH	**California Bearing Ratio (CBR)**			Job Ref	25-0509
				Borehole/Pit No.	TP1-CV20
Site Name	DAA Cargo Relocation			Sample No.	4
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth m	0.60
Specimen Reference		Specimen Depth	m	Sample Type	B
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071587
Test Method	BS1377-2: 2022 Clause 15			CBR Test Number	1

Specimen Preparation

Condition	REMOULDED			Soaking details	Not soaked	
Details	Recompacted with specified standard effort using 2.5kg rammer			Period of soaking		days
				Time to surface		days
				Amount of swell recorded		mm
Material retained on 20mm sieve removed		3	%	Dry density after soaking		Mg/m3
Initial Specimen details	Bulk density	2.11	Mg/m3	Surcharge applied	4.5	kg
	Dry density	1.81	Mg/m3		3	kPa
	Water content	16.5	%			

Force v Penetration Plots



Results

	Curve correction applied	CBR Values, %				Water Content %
		2.5mm	5mm	Highest	Average	
TOP	No	0.8	1.0	1.0	1.0	16.5
BASE	No	0.8	1.1	1.1		17.2

General remarks	Test specific remarks	Approved
	Tested at natural moisture content.	Stephen Watson

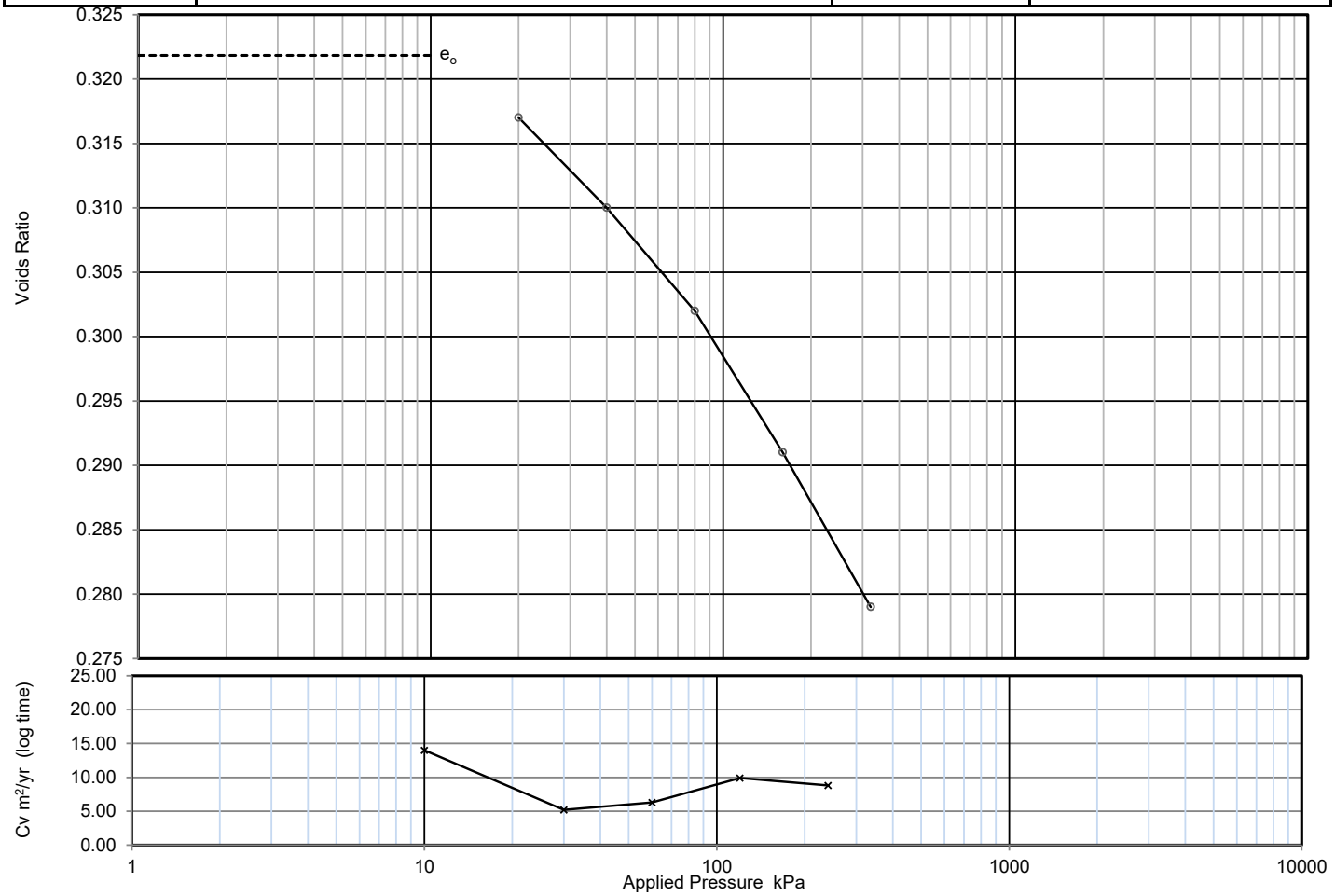
UKAS TESTING

10122

OEDOMETER CONSOLIDATION TEST
BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017

CAUSEWAY GEOTECH

Job Ref					25-0509
Borehole/Pit No.					BH-CV01
Site Name	DAA Cargo Relocation			Sample No.	7
Soil Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4 m	Sample Type	U
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071517
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017			Date started	27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.322	-	-	-	-
20	0.317	0.18	14	43	0.00033
40	0.310	0.27	5.2	44	0.00036
80	0.302	0.15	6.3	47	0.00045
160	0.291	0.1	9.9	40	0.00051
320	0.279	0.059	8.8	46	0.00059

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	19.36	mm
Water Content	12.0	13.0	%
Bulk density	2.24	2.34	Mg/m3
Dry density	2.00	2.07	Mg/m3
Voids Ratio	0.322	0.279	
Saturation	97	123	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%

Remarks

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

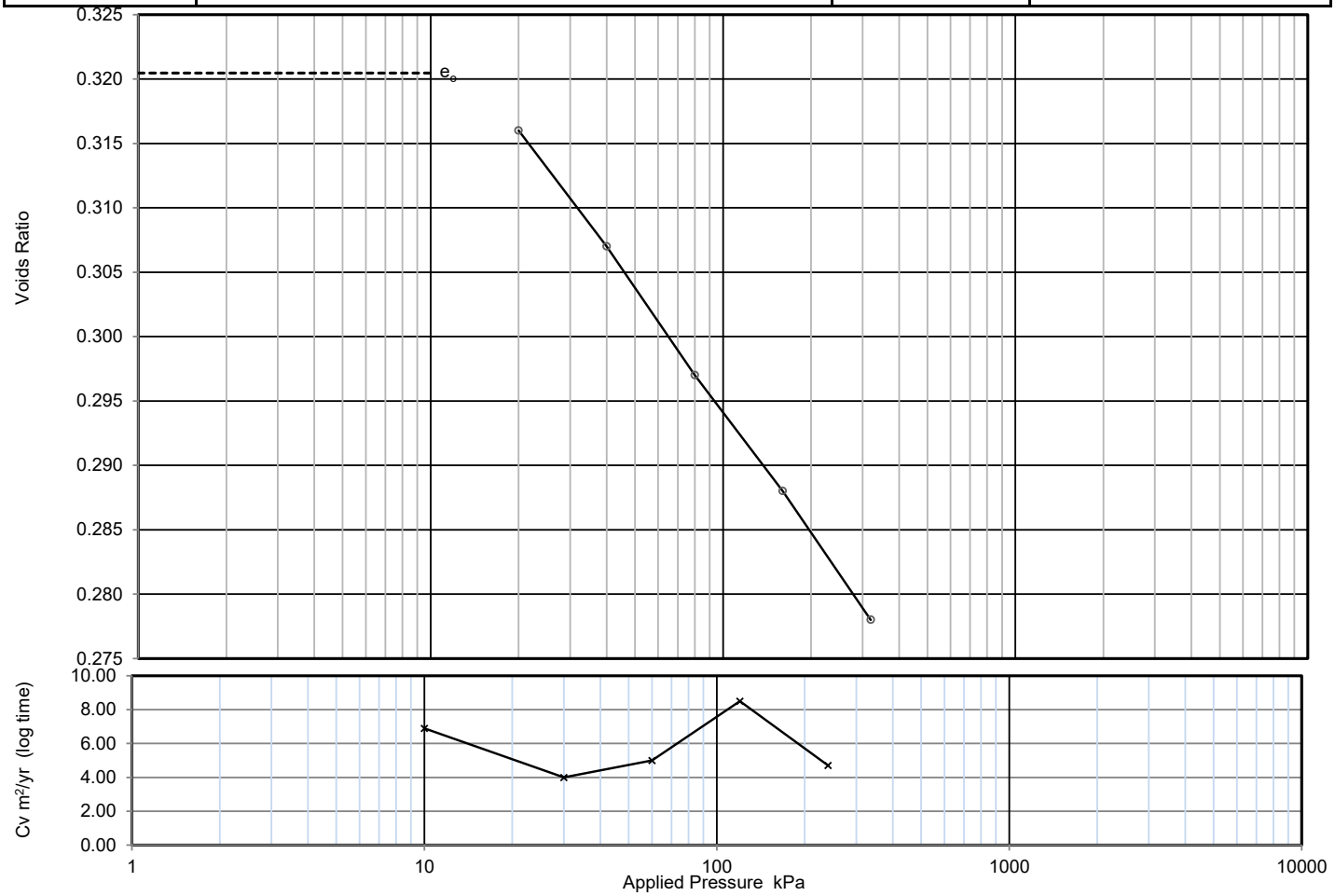
Approved: Stephen Watson

Printed : 21/08/2025 15:21

LAB 37R - Version 6

UKAS TESTING 10122

CAUSEWAY GEOTECH	OEDOMETER CONSOLIDATION TEST BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Job Ref		25-0509
					Borehole/Pit No.		BH-CV02
Site Name	DAA Cargo Relocation				Sample No.		9
Soil Description	Greyish black sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	2.00
						Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4	m	Sample Type		U
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.				KeyLAB ID		Caus2025071520
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Date started		27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.320	-	-	-	-
20	0.316	0.17	6.9	14	0.00065
40	0.307	0.33	4	40	0.00024
80	0.297	0.19	5	54	0.00037
160	0.288	0.084	8.5	56	0.00075
320	0.278	0.052	4.7	57	0.00051

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	19.35	mm
Water Content	12.0	11.0	%
Bulk density	2.24	2.30	Mg/m3
Dry density	2.01	2.07	Mg/m3
Voids Ratio	0.320	0.278	
Saturation	96	105	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%

Remarks

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

Approved

Stephen Watson

Printed :

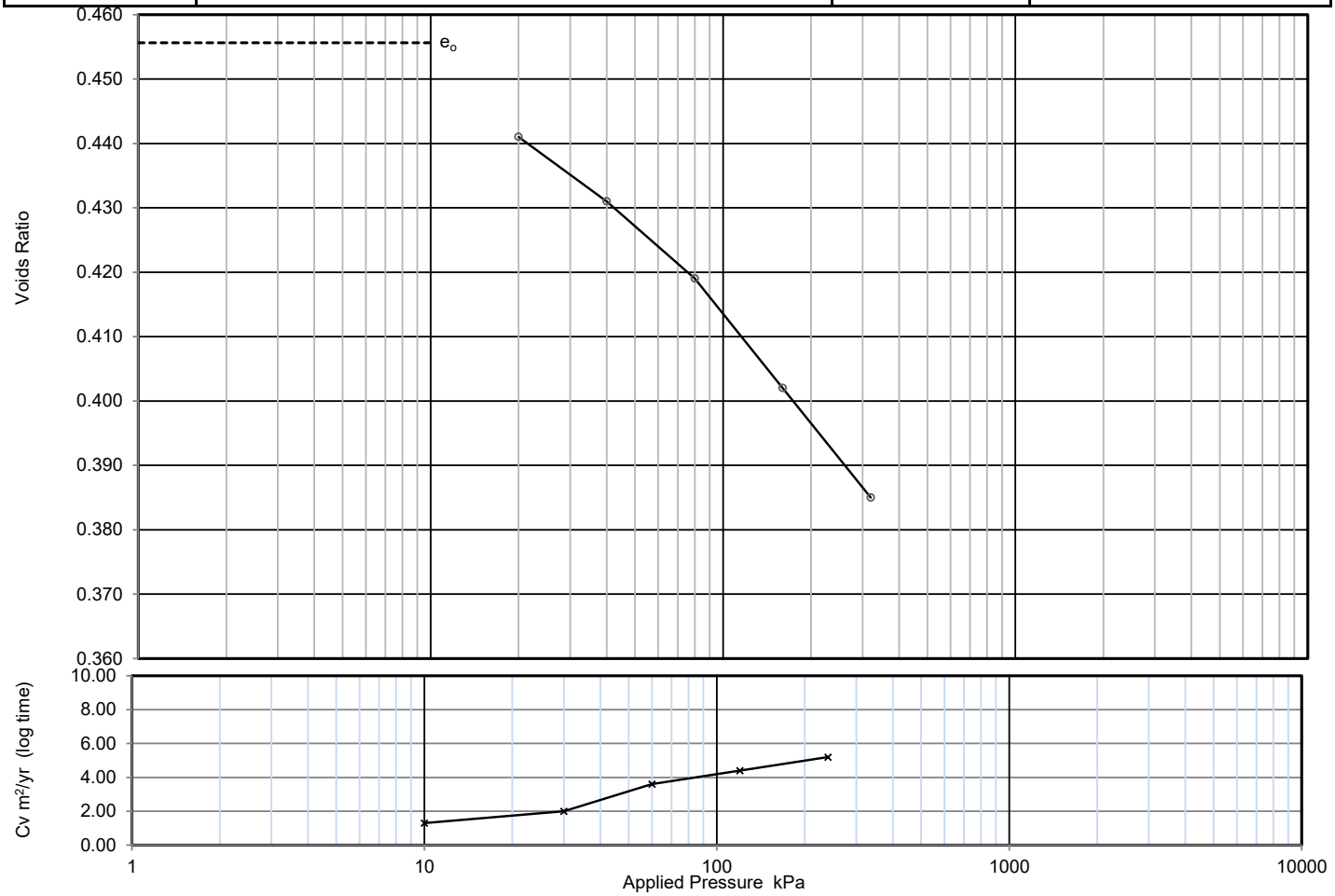
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LAB 37R - Version 6

UKAS TESTING

10122

CAUSEWAY GEOTECH	OEDOMETER CONSOLIDATION TEST BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Job Ref		25-0509
					Borehole/Pit No.		BH-CV03
Site Name	DAA Cargo Relocation				Sample No.		7
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	2.00
						Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4	m	Sample Type		U
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.				KeyLAB ID		Caus2025071526
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Date started		27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.456	-	-	-	-
20	0.441	0.49	1.3	1.5	0.00089
40	0.431	0.34	2	2.9	0.00063
80	0.419	0.21	3.6	6.5	0.00069
160	0.402	0.15	4.4	9.7	0.00071
320	0.385	0.078	5.2	14	0.00089

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	19.03	mm
Water Content	16.0	22.0	%
Bulk density	2.11	2.33	Mg/m3
Dry density	1.82	1.91	Mg/m3
Voids Ratio	0.456	0.385	
Saturation	92	151	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%
Remarks			

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

Approved

Stephen Watson

Printed :

21/08/2025 15:21

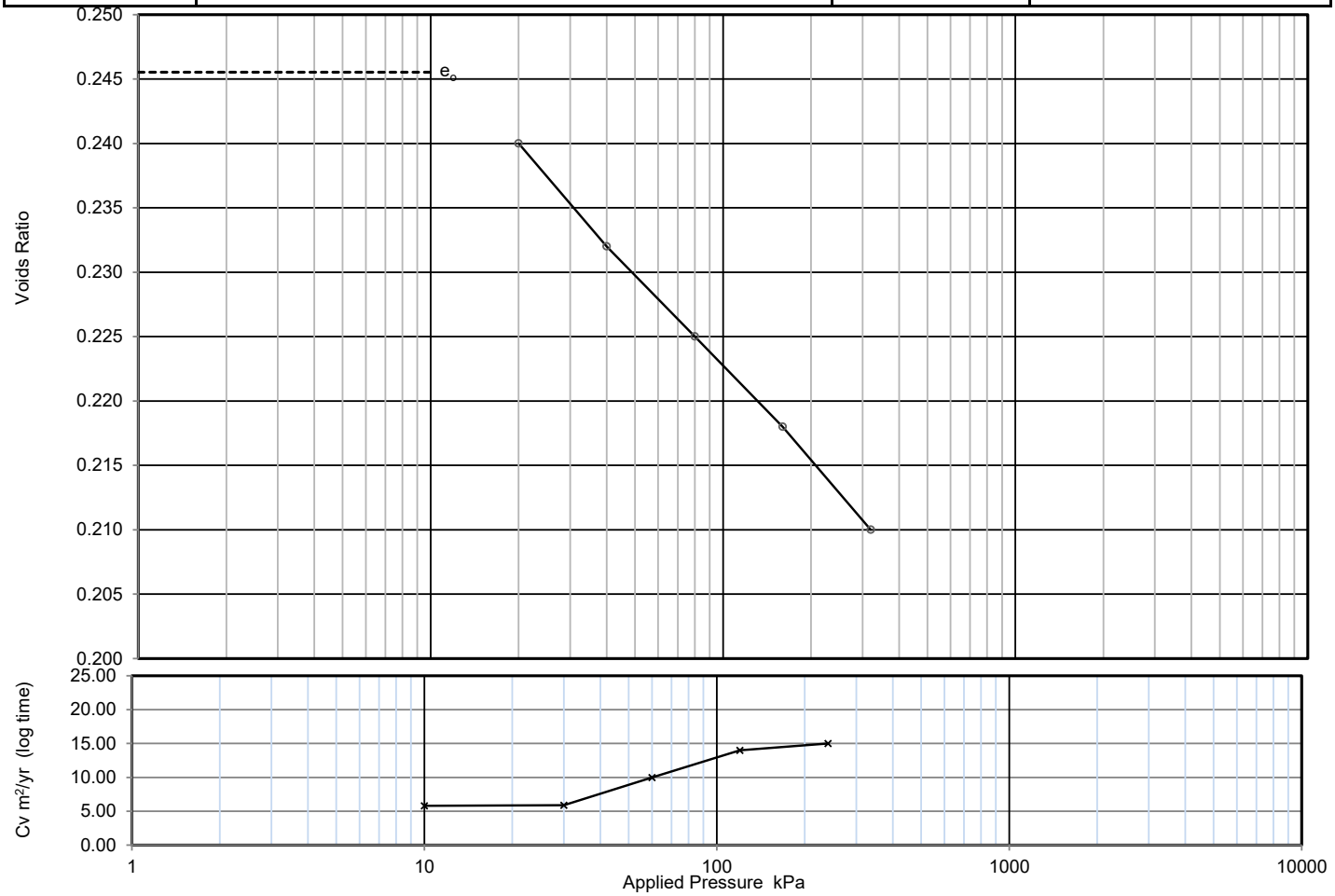
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UKAS TESTING

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OEDOMETER CONSOLIDATION TEST
BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017

Job Ref					25-0509
Borehole/Pit No.					BH-CV04
Site Name	DAA Cargo Relocation			Sample No.	8
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4 m	Sample Type	U
Specimen Description	Brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071530
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017			Date started	27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.246	-	-	-	-
20	0.240	0.22	5.8	19	0.00026
40	0.232	0.34	5.9	51	0.00031
80	0.225	0.14	10	45	0.0004
160	0.218	0.07	14	48	0.00037
320	0.210	0.039	15	49	0.00042

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	19.44	mm
Water Content	9.9	8.1	%
Bulk density	2.34	2.37	Mg/m3
Dry density	2.13	2.19	Mg/m3
Voids Ratio	0.246	0.210	
Saturation	107	102	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%

Remarks

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

Approved

Stephen Watson

Printed :

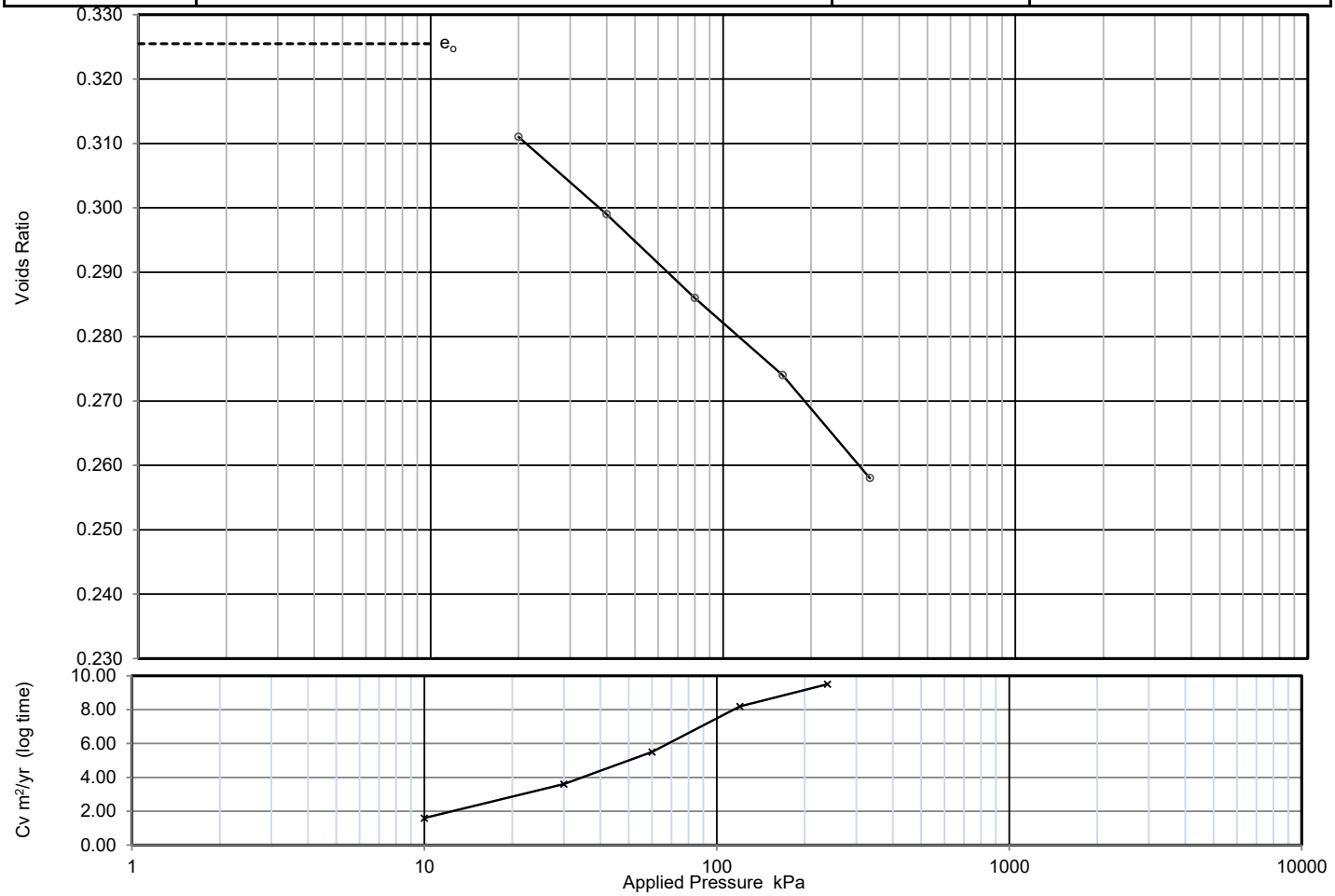
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CAUSEWAY GEOTECH	OEDOMETER CONSOLIDATION TEST BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Job Ref		25-0509
					Borehole/Pit No.		BH-CV05
Site Name	DAA Cargo Relocation				Sample No.		8
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.				Sample Depth (m)	Top	2.00
						Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4	m	Sample Type		U
Specimen Description	Greyish brown sandy slightly gravelly silty CLAY.				KeyLAB ID		Caus2025071533
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017				Date started		27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.325	-	-	-	-
20	0.311	0.54	1.6	1.7	0.00053
40	0.299	0.48	3.6	110	0.00031
80	0.286	0.25	5.5	290	0.00034
160	0.274	0.12	8.2	99	0.00047
318	0.258	0.08	9.5	170	0.00052

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	18.98	mm
Water Content	12.0	13.0	%
Bulk density	2.24	2.38	Mg/m3
Dry density	2.00	2.11	Mg/m3
Voids Ratio	0.325	0.258	
Saturation	97	134	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%

Remarks

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

Approved

Stephen Watson

Printed :

21/08/2025 15:21

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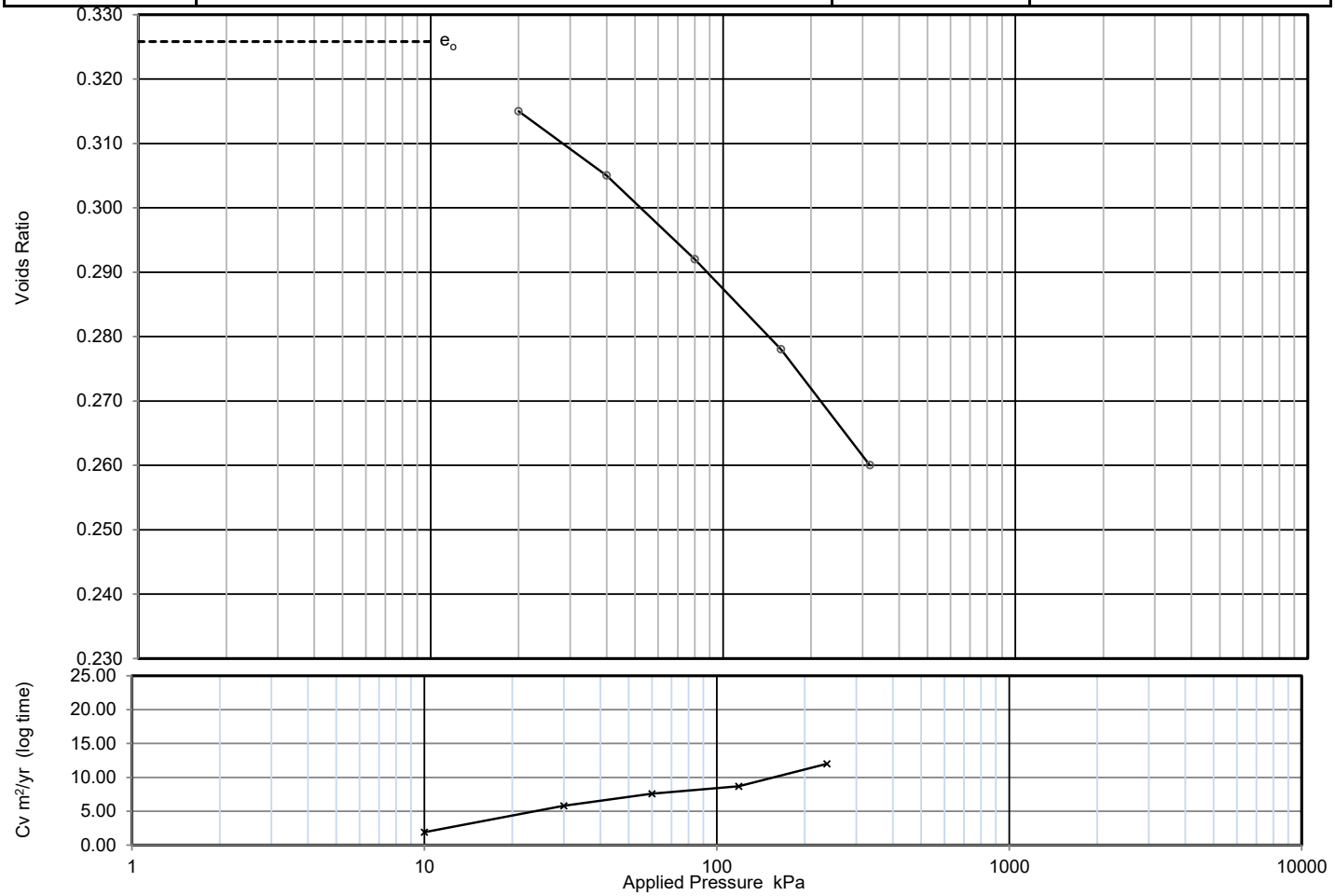
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OEDOMETER CONSOLIDATION TEST
BS1377-2:2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017

CAUSEWAY GEOTECH

Job Ref					25-0509
Borehole/Pit No.					BH-CV08
Site Name	DAA Cargo Relocation			Sample No.	9
Soil Description	Greyish black sandy slightly gravelly silty CLAY.			Sample Depth (m) Top	2.00
				Bottom	2.45
Specimen Reference	3	Specimen Depth	2.4 m	Sample Type	U
Specimen Description	Greyish black sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071544
Test Method	BS1377-2: 2022 Clause 16 in accordance with BS EN ISO 17892-5 : 2017			Date started	27/07/2025



Applied Pressure kPa	Voids ratio	Mv m2/MN	Cv (t50, log) m2/yr	Cv (t90, root) m2/yr	Csec
0.0	0.326	-	-	-	-
20	0.315	0.43	1.9	3.4	0.00053
40	0.305	0.36	5.8	170	0.00035
80	0.292	0.24	7.6	190	0.00039
158	0.278	0.14	8.7	190	0.00016
318	0.260	0.087	12	180	0.00045

Preparation

Particle density assumed 2.65 Mg/m3

Specimen details	Initial	Final	
Diameter	75.00	-	mm
Height	20.00	19.01	mm
Water Content	13.0	13.0	%
Bulk density	2.25	2.38	Mg/m3
Dry density	2.00	2.10	Mg/m3
Voids Ratio	0.326	0.260	
Saturation	104	132	%
Average temperature for test	20.0		oC
Swelling Pressure			kPa
Settlement on saturation			%

Remarks

Final values should be used with caution

Cv plotted at mid point of load increments

Cv corrected to 20oC

Approved

Stephen Watson

Printed :

21/08/2025 15:21

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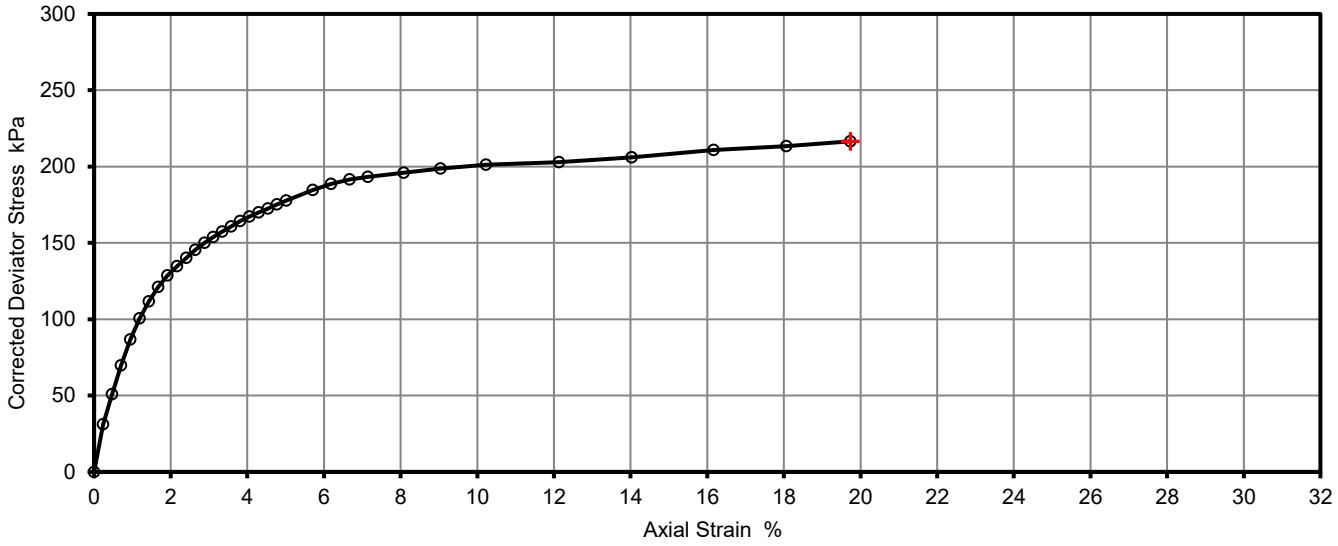
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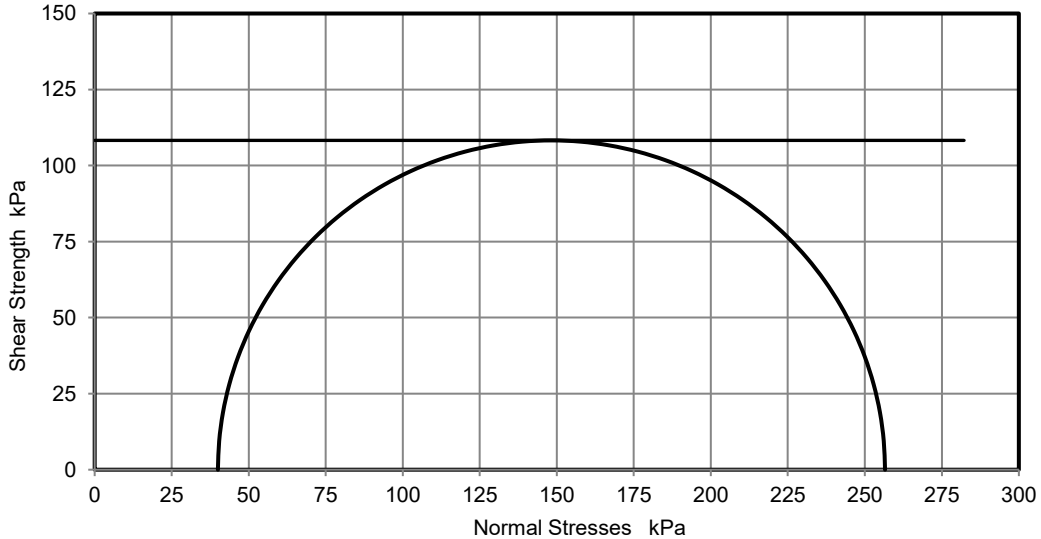
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV01
Site Name	DAA Cargo Relocation			Sample No.	7
Soil Description	Greyish black sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Stiff greyish black sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071517
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		210.1	mm
Diameter		105.2	mm
Bulk Density		2.14	Mg/m3
Water Content		11	%
Dry Density		1.93	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	19.7	%
	Deviator Stress, (σ1 - σ3)f	217	kPa
	Undrained Shear Strength, cu	108	kPa ½(σ1 - σ3)f
	Mode of Failure		

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

No failure defined testing terminated at 20% axial strain.

Approved: Stephen Watson

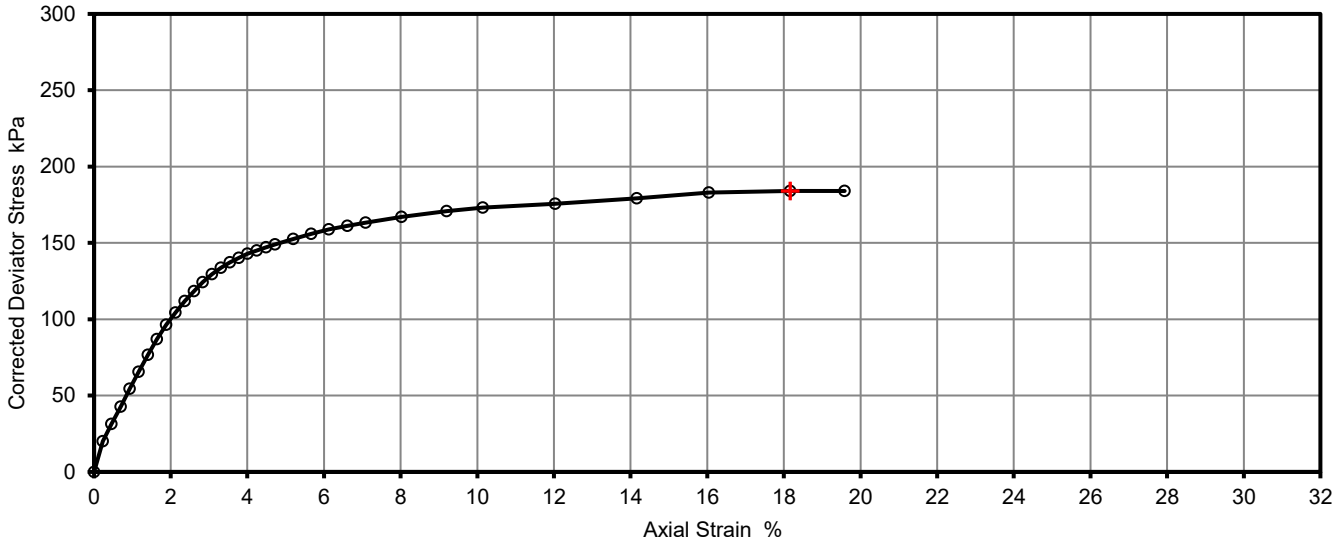
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UKAS TESTING
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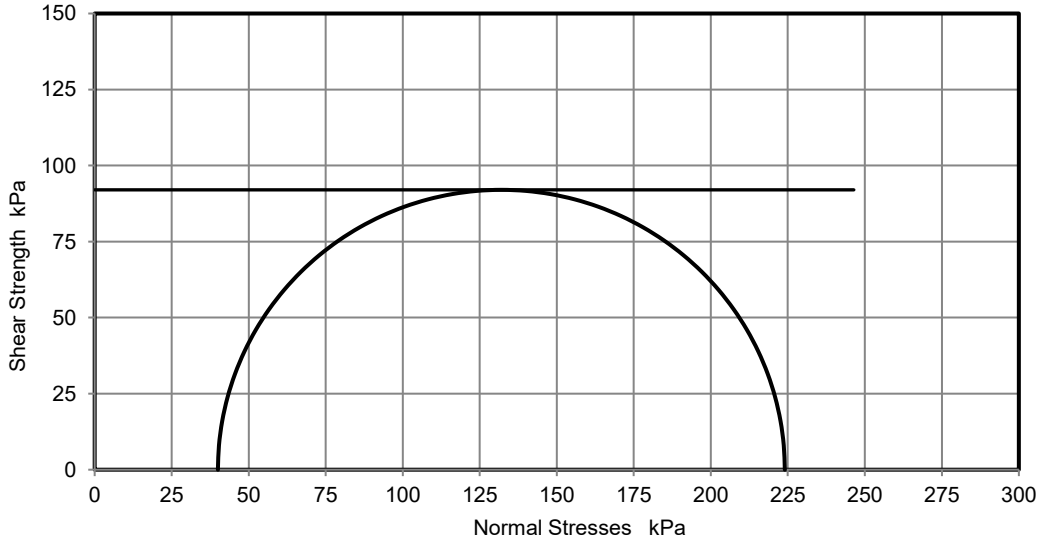
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV02
Site Name	DAA Cargo Relocation			Sample No.	9
Soil Description	Greyish black sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Stiff greyish black sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071520
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		211.7	mm
Diameter		102.9	mm
Bulk Density		2.26	Mg/m3
Water Content		11	%
Dry Density		2.03	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	18.2	%
	Deviator Stress, (σ1 - σ3)f	184	kPa
	Undrained Shear Strength, cu	92	kPa ½(σ1 - σ3)f
	Mode of Failure	Compound	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

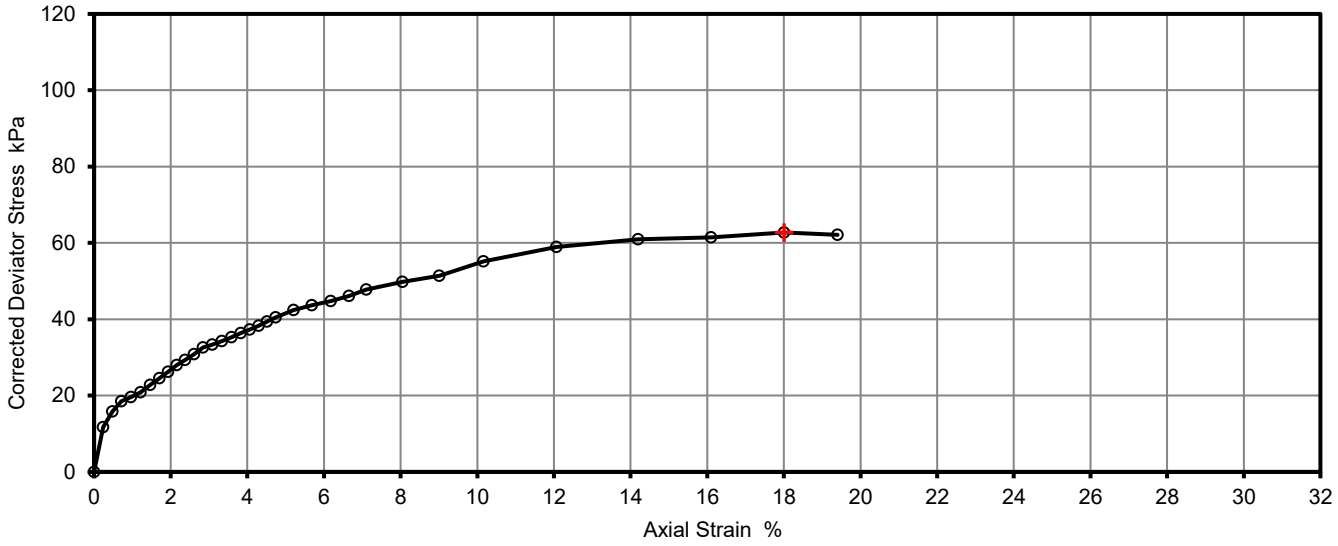
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Stephen Watson	21/08/2025 15:24

UKAS TESTING
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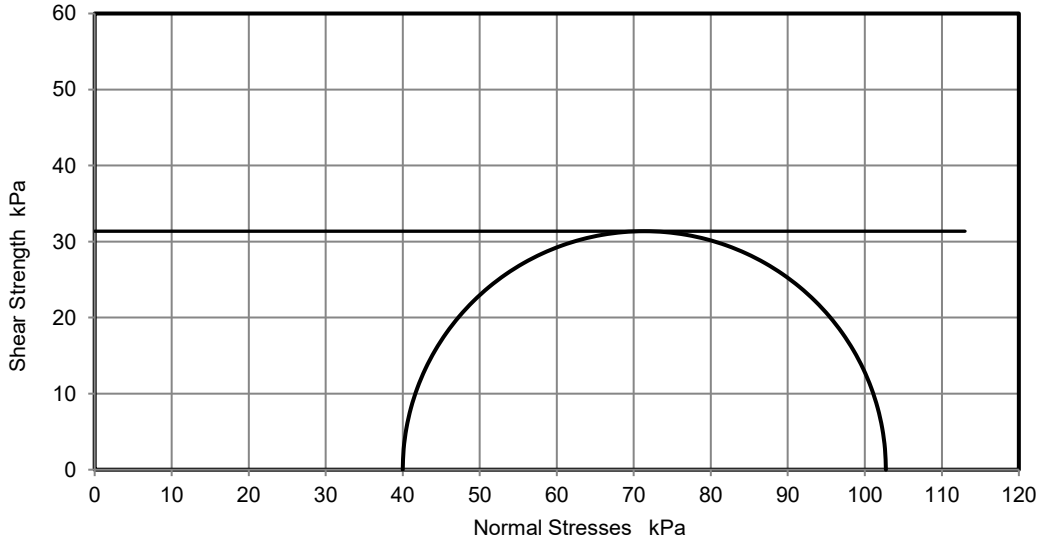
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV03
Site Name	DAA Cargo Relocation			Sample No.	7
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Soft greyish brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071526
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		210.2	mm
Diameter		105.4	mm
Bulk Density		2.14	Mg/m3
Water Content		15	%
Dry Density		1.87	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	18.0	%
	Deviator Stress, (σ1 - σ3)f	63	kPa
	Undrained Shear Strength, cu	31	kPa ½(σ1 - σ3)f
	Mode of Failure	Plastic	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

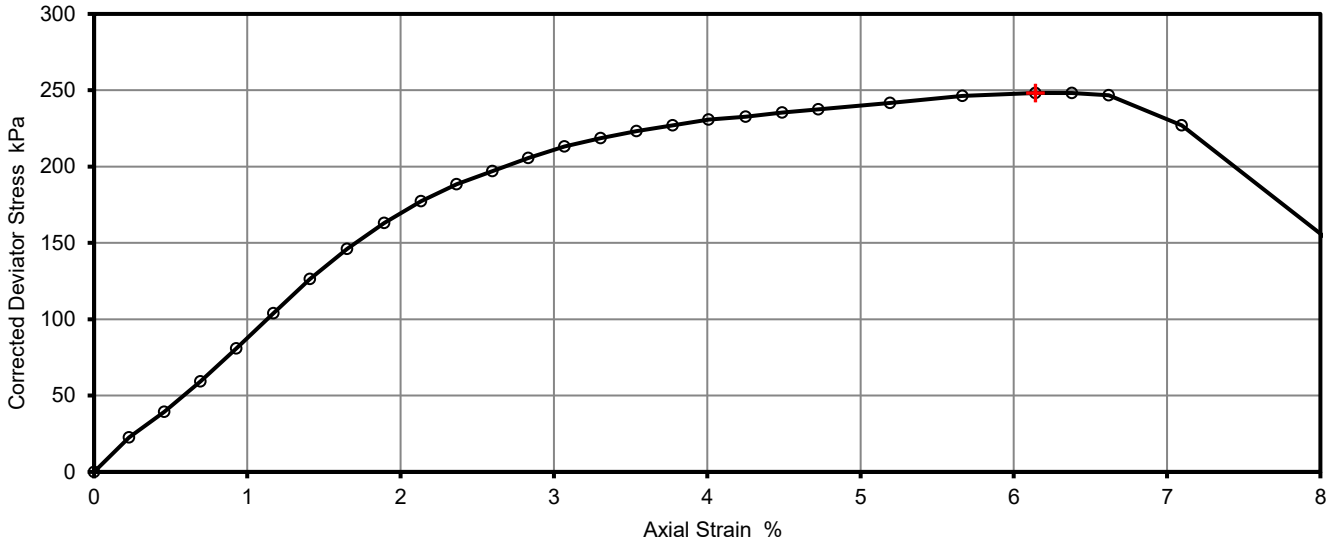
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Stephen Watson	21/08/2025 15:24

UKAS TESTING
10122

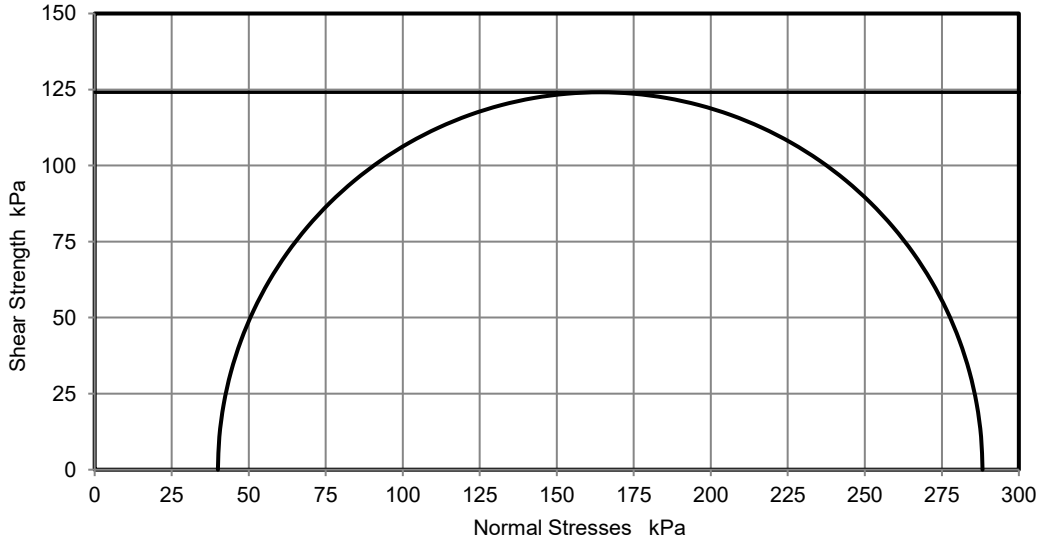
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV04
Site Name	DAA Cargo Relocation			Sample No.	8
Soil Description	Brownish grey sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Stiff brownish grey sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071530
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		210.0	mm
Diameter		104.4	mm
Bulk Density		2.21	Mg/m3
Water Content		9.7	%
Dry Density		2.02	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	6.1	%
	Deviator Stress, (σ1 - σ3)f	248	kPa
	Undrained Shear Strength, cu	124	kPa ½(σ1 - σ3)f
	Mode of Failure	Brittle	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

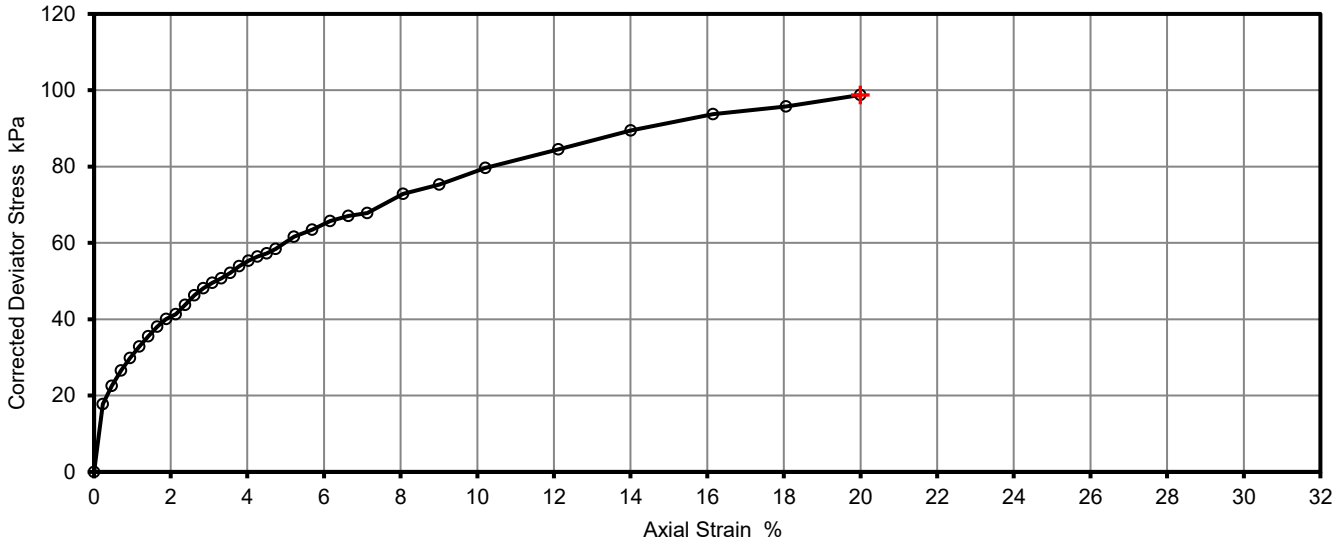
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Stephen Watson	21/08/2025 15:25

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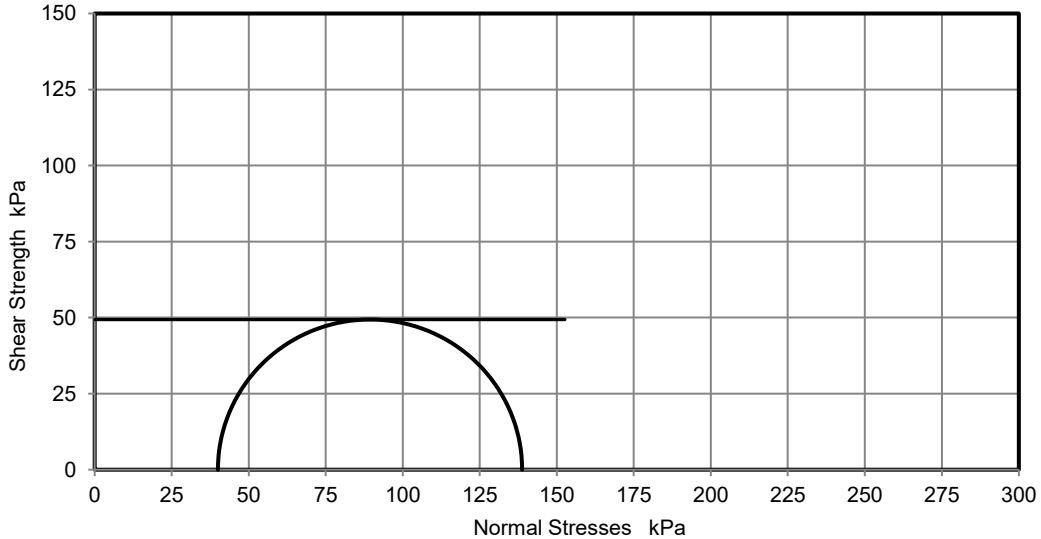
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV05
Site Name	DAA Cargo Relocation			Sample No.	8
Soil Description	Greyish brown sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Firm greyish brown sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071533
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		210.1	mm
Diameter		105.4	mm
Bulk Density		2.23	Mg/m3
Water Content		13	%
Dry Density		1.97	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	20.0	%
	Deviator Stress, (σ1 - σ3)f	99	kPa
	Undrained Shear Strength, cu	49	kPa ½(σ1 - σ3)f
	Mode of Failure		

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

No failure defined testing terminated at 20% axial strain.

Approved: Stephen Watson

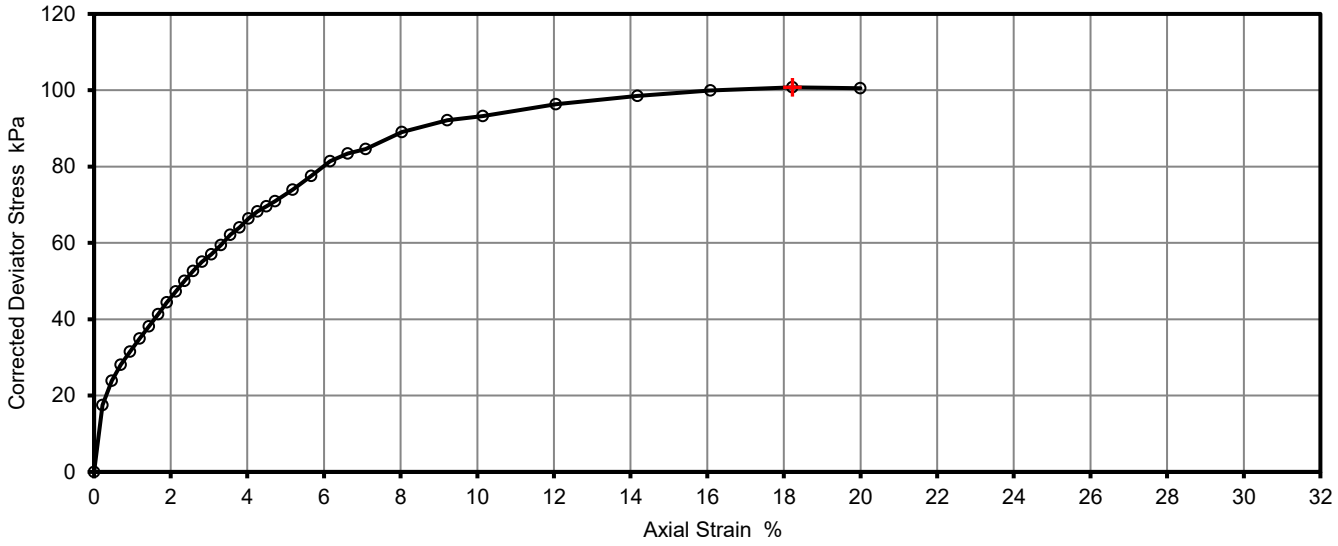
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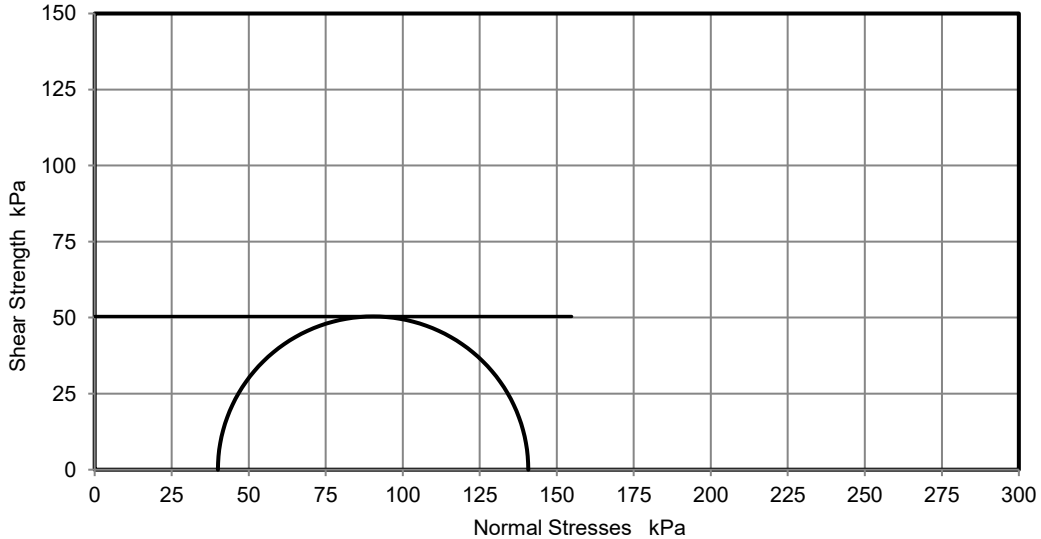
CAUSEWAY GEOTECH	**Unconsolidated Undrained Triaxial Compression Test without measurement of pore pressure - single specimen**			Job Ref	25-0509
				Borehole/Pit No.	BH-CV08
Site Name	DAA Cargo Relocation			Sample No.	9
Soil Description	Greyish black sandy slightly gravelly silty CLAY.			Depth	2.00
Specimen Reference	4	Specimen Depth	2.05 m	Sample Type	U
Specimen Description	Firm greyish black sandy slightly gravelly silty CLAY.			KeyLAB ID	Caus2025071544
Test Method	BS 1377-2: 2022: Cl 28 in accordance with ISO 17892-8:2018			Date of test	29/07/2025

Sample Condition		UNDISTURBED	
Test Number		1	
Length		210.2	mm
Diameter		105.6	mm
Bulk Density		2.22	Mg/m3
Water Content		12	%
Dry Density		1.98	Mg/m3
Rate of Strain		3.0	%/min
Cell Pressure		40	kPa
At failure	Axial Strain	18.2	%
	Deviator Stress, (σ1 - σ3)f	101	kPa
	Undrained Shear Strength, cu	50	kPa ½(σ1 - σ3)f
	Mode of Failure	Plastic	

Deviator Stress v Axial Strain



Mohr Circles



Deviator stress corrected for area change and membrane effects

Mohr circles and their interpretation is not covered by BS1377.
This is provided for information only.

Remarks

Approved	Printed
Stephen Watson	21/08/2025 15:25

UKAS TESTING
10122

LABORATORY RESTRICTION REPORT

Project Reference	25-0509	To	Sean Ross
Project Name	DAA Cargo Relocation	Position	Project Manager
TR reference	25-0509 /	From	Joseph Nicholl
		Position	Laboratory Quality Manager

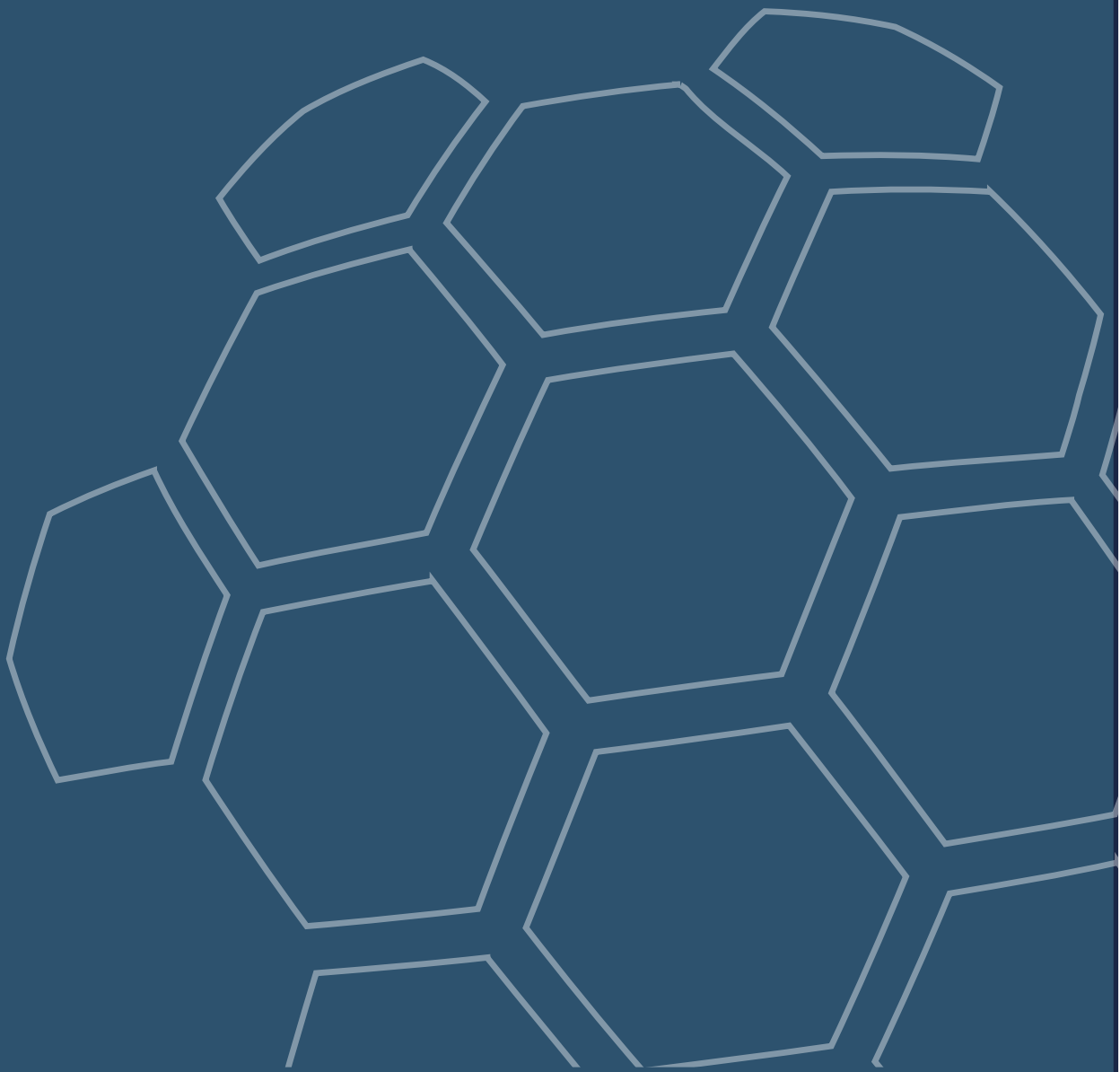
The following sample(s) and test(s) are restricted as detailed below. Could you please complete the "Required Action" column and return the completed form to the laboratory.

Hole Number	Sample			Test Type	Reason for Restriction	Required Action
	Number	Depth (m)	Type			
BH-CV02	15	5.50	B	Atterberg limits	Unsuitable material for test - GRAVEL	
BH-CV02	16	8.50	B	Atterberg limits	Unsuitable material for test - GRAVEL	
BH-CV06	6	2.00	U	UU Triaxial, Oedometer	Insufficient material to obtain test specimen - 20% recovery	

For electronic reporting a form of electronic signature or printed name is acceptable

Laboratory Signature Joseph Nicholl	Project Manager Signature Sean Ross
Date 22 July 2025	Date

APPENDIX K – ENVIRONMENTAL LABORATORY TEST RESULTS



Certificate of Analysis

Certificate Number	25-15598	*Issued:*	18-Jul-25

Client Causeway Geotech
Unit 1 Fingal House
Stephenstown Industrial Estate
Balbriggan
Co. Dublin
K32 VR66

Our Reference	25-15598
Client Reference ~	25-0509
Order No ~	(not supplied)
Contract Title ~	DAA Cargo Relocation
Description	19 Soil samples, 11 Leachate prepared by DETS samples.
Date Received	09-Jul-25
Date Started	09-Jul-25
Date Completed	18-Jul-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

Reyhan Irfan
Operations Manager

2139

Sample Deviations present. See Deviation Table Section for details.

Normec DETS Limited
Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY
Tel: 01207 582333 • email: info-dets@normecgroup.com • normecdets.com

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535903	2535904	2535905	2535906	2535907	2535908
			Sample ID ~	TP1-CV16	BH-CV07	TP1-CV10	BH-CV02	BH-CV03	RC-CV04
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	30/06/2025	01/07/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	15	13	18	8.6	13	10
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.5	0.3	0.3	< 0.2	0.3	0.4
Cadmium	DETSC 2301#	0.1	mg/kg	1.8	2.4	0.7	1.1	0.7	1.6
Chromium	DETSC 2301#	0.15	mg/kg	21	18	33	9.7	19	16
Copper	DETSC 2301#	0.2	mg/kg	24	29	32	18	27	22
Lead	DETSC 2301#	0.3	mg/kg	28	25	27	13	24	18
Mercury	DETSC 2325#	0.05	mg/kg	0.07	0.07	< 0.05	< 0.05	0.06	< 0.05
Nickel	DETSC 2301#	1	mg/kg	33	40	35	24	34	37
Selenium	DETSC 2301#	0.5	mg/kg	0.8	0.8	0.9	< 0.5	< 0.5	< 0.5
Zinc	DETSC 2301#	1	mg/kg	73	77	66	45	70	61
Inorganics									
pH	DETSC 2008#		pH	8.0	8.2	7.6	8.7	8.4	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	0.2	< 0.1	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	1.9	1.3	1.3	1.9	0.8	0.7
Sulphide	DETSC 2024*	10	mg/kg	< 10	28	< 10	32	24	< 10
Sulphur as S, Total	DETSC 2320	0.01	%	0.02	0.02	0.01	0.01	< 0.01	< 0.01
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	442	310	273	143	110	225
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60	< 0.60
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	< 1.40	< 1.40	< 1.40	< 1.40
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535903	2535904	2535905	2535906	2535907	2535908
	Sample ID ~	TP1-CV16	BH-CV07	TP1-CV10	BH-CV02	BH-CV03	RC-CV04
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	30/06/2025	01/07/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535903	2535904	2535905	2535906	2535907	2535908
	Sample ID ~	TP1-CV16	BH-CV07	TP1-CV10	BH-CV02	BH-CV03	RC-CV04
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	30/06/2025	01/07/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
VOCs							
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535903	2535904	2535905	2535906	2535907	2535908
	Sample ID ~	TP1-CV16	BH-CV07	TP1-CV10	BH-CV02	BH-CV03	RC-CV04
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	30/06/2025	01/07/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs									
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535903	2535904	2535905	2535906	2535907	2535908
			Sample ID ~	TP1-CV16	BH-CV07	TP1-CV10	BH-CV02	BH-CV03	RC-CV04
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	30/06/2025	01/07/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535909	2535910	2535911	2535912	2535913	2535914
			Sample ID ~	TP-CV05	TP-CV18	TP-CV20	BH-CV04	BH-CV08	RC-CV03
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025	03/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	15	10	8.9	12	13	5.5
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.2	0.8	0.5	0.2	0.4	1.1
Cadmium	DETSC 2301#	0.1	mg/kg	2.7	1.2	1.5	1.8	1.0	0.6
Chromium	DETSC 2301#	0.15	mg/kg	18	17	15	13	15	7.7
Copper	DETSC 2301#	0.2	mg/kg	33	22	16	27	21	13
Lead	DETSC 2301#	0.3	mg/kg	22	36	19	18	34	13
Mercury	DETSC 2325#	0.05	mg/kg	0.06	0.10	< 0.05	< 0.05	0.10	< 0.05
Nickel	DETSC 2301#	1	mg/kg	43	25	23	35	18	14
Selenium	DETSC 2301#	0.5	mg/kg	0.7	0.7	0.6	0.7	0.6	0.7
Zinc	DETSC 2301#	1	mg/kg	86	64	58	65	140	33
Inorganics									
pH	DETSC 2008#		pH	8.7	8.1	8.3	8.6	9.5	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	2.1	2.1	1.3	1.3	3.7	3.5
Sulphide	DETSC 2024*	10	mg/kg	28	< 10	< 10	28	76	36
Sulphur as S, Total	DETSC 2320	0.01	%	0.04	0.03	0.02	0.02	0.14	0.02
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	249	435	479	266	1280	447
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60	< 0.60	< 0.60	< 0.60	1.62	< 0.60
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	< 1.40	< 1.40	25.57	< 1.40
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	27.20	< 10.00
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	27.20	< 10.00
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535909	2535910	2535911	2535912	2535913	2535914
	Sample ID ~	TP-CV05	TP-CV18	TP-CV20	BH-CV04	BH-CV08	RC-CV03
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025	03/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.08	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.11	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.09	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.13	< 0.03	< 0.03	0.58	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.13	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.23	< 0.03	< 0.03	0.85	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.19	< 0.03	< 0.03	0.84	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	< 0.03	< 0.03	0.32	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.11	< 0.03	< 0.03	0.31	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.11	< 0.03	< 0.03	0.51	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	0.22	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	0.39	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	0.18	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.04	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	0.23	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	1.1	< 0.10	< 0.10	4.9	< 0.10
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.5	< 0.3	< 0.3	< 0.3	0.5

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535909	2535910	2535911	2535912	2535913	2535914
			Sample ID ~	TP-CV05	TP-CV18	TP-CV20	BH-CV04	BH-CV08	RC-CV03
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025	03/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
VOCs									
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535909	2535910	2535911	2535912	2535913	2535914
			Sample ID ~	TP-CV05	TP-CV18	TP-CV20	BH-CV04	BH-CV08	RC-CV03
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025	03/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs									
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535909	2535910	2535911	2535912	2535913	2535914
			Sample ID ~	TP-CV05	TP-CV18	TP-CV20	BH-CV04	BH-CV08	RC-CV03
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025	03/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 2.0	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535915	2535916	2535917	2535918	2535919	2535920
			Sample ID ~	TP1-CV06	TP1-CV07	TP1-CV19	TP1-CV17	BH-CV06	TP1-CV08
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	03/07/2025	03/07/2025	03/07/2025	04/07/2025	07/07/2025	07/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Metals									
Arsenic	DETSC 2301#	0.2	mg/kg	13	17	15	13	9.1	13
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.4	0.5	1.0	0.3	0.6	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	1.7	2.4	1.6	1.8	1.2	1.4
Chromium	DETSC 2301#	0.15	mg/kg	14	22	16	18	13	25
Copper	DETSC 2301#	0.2	mg/kg	30	42	37	25	21	36
Lead	DETSC 2301#	0.3	mg/kg	34	63	64	23	30	47
Mercury	DETSC 2325#	0.05	mg/kg	0.15	0.24	0.27	0.07	0.12	0.19
Nickel	DETSC 2301#	1	mg/kg	32	42	29	35	22	37
Selenium	DETSC 2301#	0.5	mg/kg	0.8	1.0	1.0	1.0	0.7	0.5
Zinc	DETSC 2301#	1	mg/kg	67	94	90	71	55	69
Inorganics									
pH	DETSC 2008#		pH	8.3	7.9	8.0	8.3	7.3	8.2
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	0.2	0.3	< 0.1	0.2	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	2.9	2.3	3.6	1.6	28	1.8
Sulphide	DETSC 2024*	10	mg/kg	28	24	20	< 10	16	< 10
Sulphur as S, Total	DETSC 2320	0.01	%	0.03	0.03	0.06	0.02	0.03	0.02
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	357	284	702	285	320	345
Petroleum Hydrocarbons									
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	3.36	< 1.50	1.75
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60	< 0.60	5.25	< 0.60	< 0.60	< 0.60
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	13.05	< 1.40	< 1.40	< 1.40
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	18.30	< 10.00	< 10.00	< 10.00
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	18.30	< 10.00	< 10.00	< 10.00
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535915	2535916	2535917	2535918	2535919	2535920
			Sample ID ~	TP1-CV06	TP1-CV07	TP1-CV19	TP1-CV17	BH-CV06	TP1-CV08
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	03/07/2025	03/07/2025	03/07/2025	04/07/2025	07/07/2025	07/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.06	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.04	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.05	0.06	0.43	< 0.03	< 0.03	0.18
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.16	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	0.07	3.1	< 0.03	< 0.03	0.21
Pyrene	DETSC 3303#	0.03	mg/kg	0.06	0.06	3.1	< 0.03	< 0.03	0.18
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.03	1.8	< 0.03	< 0.03	0.08
Chrysene	DETSC 3303	0.03	mg/kg	0.03	< 0.03	1.4	< 0.03	< 0.03	0.08
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04	0.03	2.2	< 0.03	< 0.03	0.09
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.83	< 0.03	< 0.03	0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	1.5	< 0.03	< 0.03	0.04
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.56	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.13	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.63	< 0.03	< 0.03	0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.21	0.18	16	< 0.10	< 0.10	0.86
PCBs									
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	0.4	< 0.3	< 0.3	0.5

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535915	2535916	2535917	2535918	2535919	2535920
			Sample ID ~	TP1-CV06	TP1-CV07	TP1-CV19	TP1-CV17	BH-CV06	TP1-CV08
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	03/07/2025	03/07/2025	03/07/2025	04/07/2025	07/07/2025	07/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
VOCs									
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535915	2535916	2535917	2535918	2535919	2535920
			Sample ID ~	TP1-CV06	TP1-CV07	TP1-CV19	TP1-CV17	BH-CV06	TP1-CV08
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	03/07/2025	03/07/2025	03/07/2025	04/07/2025	07/07/2025	07/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs									
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

				Lab No	2535915	2535916	2535917	2535918	2535919	2535920
				Sample ID ~	TP1-CV06	TP1-CV07	TP1-CV19	TP1-CV17	BH-CV06	TP1-CV08
				Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
				Other ID ~	1	1	1	1	1	1
				Sample Type ~	ES	ES	ES	ES	ES	ES
				Sampling Date ~	03/07/2025	03/07/2025	03/07/2025	04/07/2025	07/07/2025	07/07/2025
				Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**							
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	2535921
Sample ID ~	TP1-CV09
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	07/07/2025
Sampling Time ~	n/s

Test	Method	LOD	Units	
Metals				
Arsenic	DETSC 2301#	0.2	mg/kg	7.5
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.9
Chromium	DETSC 2301#	0.15	mg/kg	17
Copper	DETSC 2301#	0.2	mg/kg	20
Lead	DETSC 2301#	0.3	mg/kg	30
Mercury	DETSC 2325#	0.05	mg/kg	0.09
Nickel	DETSC 2301#	1	mg/kg	19
Selenium	DETSC 2301#	0.5	mg/kg	0.6
Zinc	DETSC 2301#	1	mg/kg	50
Inorganics				
pH	DETSC 2008#		pH	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	1.5
Sulphide	DETSC 2024*	10	mg/kg	< 10
Sulphur as S, Total	DETSC 2320	0.01	%	0.02
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	398
Petroleum Hydrocarbons				
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	2535921
Sample ID ~	TP1-CV09
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	07/07/2025
Sampling Time ~	n/s

Test	Method	LOD	Units	
PAHs				
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.09
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.13
Pyrene	DETSC 3303#	0.03	mg/kg	0.11
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.05
Chrysene	DETSC 3303	0.03	mg/kg	0.05
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.04
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.47
PCBs				
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01
Phenols				
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	2535921
Sample ID ~	TP1-CV09
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	07/07/2025
Sampling Time ~	n/s

Test	Method	LOD	Units	
VOCs				
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	2535921
Sample ID ~	TP1-CV09
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	07/07/2025
Sampling Time ~	n/s

Test	Method	LOD	Units	
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01
SVOCs				
Phenol	DETSC 3433	0.1	mg/kg	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	2535921
Sample ID ~	TP1-CV09
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	07/07/2025
Sampling Time ~	n/s

Test	Method	LOD	Units	
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535922	2535923	2535924	2535925	2535926	2535927	2535928
	Sample ID ~	TP1-CV16	TP1-CV10	TP-CV05	TP-CV18	TP-CV20	TP1-CV06	TP1-CV07
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES	ES
	Sampling Date ~	30/06/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**					
Preparation								
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y	Y	Y	Y	Y	Y	Y
Metals								
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	1.7	0.54	0.27	0.17	1.8	0.33	0.31
Boron, Dissolved	DETSC 2306*	12	ug/l	< 12.0	< 12.0	< 12.0	< 12.0	40.7	15.5	12.3
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	0.72	< 0.03	< 0.03
Chromium III, Dissolved	DETSC 2306*	0.001	mg/l	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0093	< 0.0010	< 0.0010
Chromium, Hexavalent	DETSC 2203	0.007	mg/l	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.6	1.2	0.9	1.0	9.2	1.4	1.9
Iron, Dissolved	DETSC 2306	5.5	ug/l	140	100	110	71	150	320	340
Lead, Dissolved	DETSC 2306	0.09	ug/l	1.1	0.46	0.27	0.10	11	0.34	0.96
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	0.08	0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	0.5	< 0.5	< 0.5	< 0.5	8.7	< 0.5	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.39	< 0.25	< 0.25	< 0.25	3.6	0.74	0.47
Zinc, Dissolved	DETSC 2306	1.3	ug/l	< 1.3	< 1.3	< 1.3	< 1.3	10	1.5	2.0
Inorganics								
pH	DETSC 2008		pH	7.3	7.1	7.4	7.1	6.9	6.9	6.9
Cyanide, Total Low Level	DETSC 2131	0.0001	mg/l	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Cyanide, Free Low Level	DETSC 2131	0.0001	mg/l	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Total Hardness as CaCO3	DETSC 2303	0.1	mg/l	35.8	13.4	30.1	44.5	28.4	27.2	25.6
Ammoniacal Nitrogen as NH4	DETSC 2207	0.0193	mg/l	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015
Nitrite as N	DETSC 2055	0.03	mg/l	< 0.03	< 0.03	0.08	0.05	0.03	0.04	0.04
Nitrate as N	DETSC 2055	0.0226	mg/l	0.25	0.09	0.09	0.13	0.09	0.12	0.16
Sulphate as SO4	DETSC 2055	0.1	mg/l	2.1	0.91	0.89	9.3	4.1	0.98	1.0
Total Organic Carbon	DETSC 2085	1	mg/l	1.7	1.4	1.6	2.0	1.1	2.0	2.4
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535922	2535923	2535924	2535925	2535926	2535927	2535928
			Sample ID ~	TP1-CV16	TP1-CV10	TP-CV05	TP-CV18	TP-CV20	TP1-CV06	TP1-CV07
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES	ES
			Sampling Date ~	30/06/2025	01/07/2025	02/07/2025	02/07/2025	02/07/2025	03/07/2025	03/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**							
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Lab No	2535929	2535930	2535931	2535932
	Sample ID ~	TP1-CV19	TP1-CV17	TP1-CV08	TP1-CV09
	Depth ~	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1
	Sample Type ~	ES	ES	ES	ES
	Sampling Date ~	03/07/2025	04/07/2025	07/07/2025	07/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Preparation					
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y	Y	Y	Y
Metals					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.55	< 0.16	0.33	< 0.16
Boron, Dissolved	DETSC 2306*	12	ug/l	18.2	< 12.0	16.3	< 12.0
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03
Chromium III, Dissolved	DETSC 2306*	0.001	mg/l	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Chromium, Hexavalent	DETSC 2203	0.007	mg/l	< 0.007	< 0.007	< 0.007	< 0.007
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.7	< 0.4	3.9	1.8
Iron, Dissolved	DETSC 2306	5.5	ug/l	130	86	220	270
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	< 0.09	0.13	< 0.09
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	< 0.5	< 0.5	< 0.5
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.50	0.45	< 0.25	< 0.25
Zinc, Dissolved	DETSC 2306	1.3	ug/l	< 1.3	< 1.3	4.4	1.4
Inorganics					
pH	DETSC 2008		pH	6.8	6.8	6.7	6.3
Cyanide, Total Low Level	DETSC 2131	0.0001	mg/l	< 0.0001	< 0.0001	0.0002	0.0001
Cyanide, Free Low Level	DETSC 2131	0.0001	mg/l	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Total Hardness as CaCO3	DETSC 2303	0.1	mg/l	50.6	25.9	13.3	17.4
Ammoniacal Nitrogen as NH4	DETSC 2207	0.0193	mg/l	< 0.02	< 0.02	< 0.02	< 0.02
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015	< 0.015	< 0.015	< 0.015
Nitrite as N	DETSC 2055	0.03	mg/l	0.08	0.05	< 0.03	< 0.03
Nitrate as N	DETSC 2055	0.0226	mg/l	0.53	0.14	0.15	0.11
Sulphate as SO4	DETSC 2055	0.1	mg/l	12	3.3	0.91	1.4
Total Organic Carbon	DETSC 2085	1	mg/l	2.0	1.6	2.0	2.6
PAHs					
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.01	< 0.01	0.01	< 0.01
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

			Lab No	2535929	2535930	2535931	2535932
			Sample ID ~	TP1-CV19	TP1-CV17	TP1-CV08	TP1-CV09
			Depth ~	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1
			Sample Type ~	ES	ES	ES	ES
			Sampling Date ~	03/07/2025	04/07/2025	07/07/2025	07/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	< 0.20	< 0.20	< 0.20

Summary of Asbestos Analysis
Soil Samples

Our Ref 25-15598
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2535903	TP1-CV16 1 0.50	SOIL	NAD	none	Pierce Booth
2535904	BH-CV07 1 0.50	SOIL	NAD	none	Pierce Booth
2535905	TP1-CV10 1 0.50	SOIL	NAD	none	Pierce Booth
2535906	BH-CV02 1 0.50	SOIL	NAD	none	Pierce Booth
2535907	BH-CV03 1 0.50	SOIL	NAD	none	Pierce Booth
2535908	RC-CV04 1 0.50	SOIL	NAD	none	Pierce Booth
2535909	TP-CV05 1 0.50	SOIL	NAD	none	Pierce Booth
2535910	TP-CV18 1 0.50	SOIL	NAD	none	Pierce Booth
2535911	TP-CV20 1 0.50	SOIL	NAD	none	Pierce Booth
2535912	BH-CV04 1 0.50	SOIL	NAD	none	Pierce Booth
2535913	BH-CV08 1 0.50	SOIL	NAD	none	Pierce Booth
2535914	RC-CV03 1 0.50	SOIL	NAD	none	Pierce Booth
2535915	TP1-CV06 1 0.50	SOIL	NAD	none	Pierce Booth
2535916	TP1-CV07 1 0.50	SOIL	NAD	none	Pierce Booth
2535917	TP1-CV19 1 0.50	SOIL	NAD	none	Pierce Booth
2535918	TP1-CV17 1 0.50	SOIL	NAD	none	Pierce Booth
2535919	BH-CV06 1 0.50	SOIL	NAD	none	Pierce Booth
2535920	TP1-CV08 1 0.50	SOIL	NAD	none	Pierce Booth
2535921	TP1-CV09 1 0.50	SOIL	NAD	none	Pierce Booth

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 25-15598
Client Ref ~ 25-0509
Contract ~ DAA Cargo Relocation

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2535903	TP1-CV16 0.50 SOIL	30/06/25	GJ 250ml, GJ 60ml, PT 1L x2	Total Sulphur ICP (7 days), pH + Conductivity (7 days), VOC (7 days)	
2535904	BH-CV07 0.50 SOIL	01/07/25	GJ 250ml, GJ 60ml, PT 1L x2	Total Sulphur ICP (7 days), pH + Conductivity (7 days), VOC (7 days)	
2535905	TP1-CV10 0.50 SOIL	01/07/25	GJ 250ml, GJ 60ml, PT 1L x2	Total Sulphur ICP (7 days), pH + Conductivity (7 days), VOC (7 days)	
2535906	BH-CV02 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535907	BH-CV03 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535908	RC-CV04 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535909	TP-CV05 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535910	TP-CV18 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535911	TP-CV20 0.50 SOIL	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535912	BH-CV04 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535913	BH-CV08 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535914	RC-CV03 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535915	TP1-CV06 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535916	TP1-CV07 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535917	TP1-CV19 0.50 SOIL	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535918	TP1-CV17 0.50 SOIL	04/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535919	BH-CV06 0.50 SOIL	07/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535920	TP1-CV08 0.50 SOIL	07/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535921	TP1-CV09 0.50 SOIL	07/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535922	TP1-CV16 0.50 LEACHATE	30/06/25	GJ 250ml, GJ 60ml, PT 1L x2	Chromium, Hexavalent (4 days), Hardness (7 days), Kone (4 days), pH/Cond (1 days), PAH MS (4 days)	
2535923	TP1-CV10 0.50 LEACHATE	01/07/25	GJ 250ml, GJ 60ml, PT 1L x2	Chromium, Hexavalent (4 days), Hardness (7 days), Kone (4 days), pH/Cond (1 days), PAH MS (4 days)	
2535924	TP-CV05 0.50 LEACHATE	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535925	TP-CV18 0.50 LEACHATE	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		

Information in Support of the Analytical Results

Our Ref 25-15598
Client Ref ~ 25-0509
Contract ~ DAA Cargo Relocation

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2535926	TP-CV20 0.50 LEACHATE	02/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535927	TP1-CV06 0.50 LEACHATE	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535928	TP1-CV07 0.50 LEACHATE	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535929	TP1-CV19 0.50 LEACHATE	03/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535930	TP1-CV17 0.50 LEACHATE	04/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535931	TP1-CV08 0.50 LEACHATE	07/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2535932	TP1-CV09 0.50 LEACHATE	07/07/25	GJ 250ml, GJ 60ml, PT 1L x2		

Key: G-Glass P-Plastic J-Jar 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

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic >EC10-EC12	EH_2D_AL
Aliphatic >EC12-EC16	EH_2D_AL
Aliphatic >EC16-EC21	EH_2D_AL
Aliphatic >EC21-EC35	EH_2D_AL
Aliphatic C5-C35	EH_2D+HS_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic >EC10-EC12	EH_2D_AR
Aromatic >EC12-EC16	EH_2D_AR
Aromatic >EC16-EC21	EH_2D_AR
Aromatic >EC21-EC35	EH_2D_AR
Aromatic C5-C35	EH_2D+HS_1D_AR
TPH Ali/Aro Total C5-C35	EH_2D+HS_1D_Total

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 25.03.07

Certificate of Analysis

Certificate Number	25-15937	*Issued:*	25-Jul-25

Client Causeway Geotech
Unit 1 Fingal House
Stephenstown Industrial Estate
Balbriggan
Co. Dublin
K32 VR66

Our Reference	25-15937
Client Reference ~	25-02509
Order No ~	(not supplied)
Contract Title ~	DAA Cargo Relocation
Description	6 Soil samples, 7 Leachate prepared by DETS samples.
Date Received	14-Jul-25
Date Started	14-Jul-25
Date Completed	25-Jul-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

Louise Cook
Contracts Manager

2139

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

	Lab No	2537929	2537930	2537931	2537932	2537933	2537934
	Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Preparation							
Moisture Content	DETSC 1004	0.1	%	11				17	
Metals							
Antimony	DETSC 2301*	1	mg/kg	1.8				2.2	
Arsenic	DETSC 2301#	0.2	mg/kg	9.9	12	10	12	12	14
Barium	DETSC 2301#	1.5	mg/kg	50				110	
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.3	0.2	< 0.2	< 0.2	0.3	0.4
Cadmium	DETSC 2301#	0.1	mg/kg	1.8	2.3	1.6	2.2	2.0	2.4
Chromium	DETSC 2301#	0.15	mg/kg	11	14	14	13	21	17
Chromium III	DETSC 2301*	0.15	mg/kg	11				21	
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0				< 1.0	
Copper	DETSC 2301#	0.2	mg/kg	39	32	26	34	32	35
Lead	DETSC 2301#	0.3	mg/kg	40	25	15	25	31	35
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.05	0.10	0.09
Molybdenum	DETSC 2301#	0.4	mg/kg	3.2				3.7	
Nickel	DETSC 2301#	1	mg/kg	28	39	28	38	35	37
Selenium	DETSC 2301#	0.5	mg/kg	1.1	0.8	1.5	0.7	0.7	0.9
Zinc	DETSC 2301#	1	mg/kg	64	75	49	70	70	72
Inorganics							
pH	DETSC 2008#		pH	8.7	8.7	8.7	8.7	8.3	8.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	1.4	1.8	1.3	1.3	1.1	1.5
Sulphide	DETSC 2024*	10	mg/kg	64	16	16	16	< 10	< 10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75				< 0.75	
Sulphur as S, Total	DETSC 2320	0.01	%	0.05	0.02	0.02	0.02	0.02	0.02
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.04				0.03	
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	385	338	298	345	313	309
Petroleum Hydrocarbons							
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40	< 3.40
Aliphatic >EC35-EC40: EH_2D_AL	DETSC 3521*	3.4	mg/kg	< 3.40				< 3.40	
Aliphatic >EC40-EC44: EH_2D_AL	DETSC 3521*	3.4	mg/kg	< 3.40				< 3.40	
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Aliphatic C5-C44: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00				< 10.00	
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

			Lab No	2537929	2537930	2537931	2537932	2537933	2537934
			Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60	< 0.60	< 0.60	< 0.60	1.29	0.83
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40	< 1.40	< 1.40	< 1.40	< 1.40	2.41
Aromatic >EC35-EC40: EH_2D_AR	DETSC 3521*	1.4	mg/kg	< 1.40				< 1.40	
Aromatic >EC40-EC44: EH_2D_AR	DETSC 3521*	1.4	mg/kg	< 1.40				< 1.40	
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
Aromatic C5-C44: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00				< 10.00	
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00	< 10.00
TPH Ali/Aro C5-C44: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00				< 10.00	
EPH >C24-C40: EH_2D_Total	DETSC 3521#	10	mg/kg	< 10.00				< 10.00	
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01				< 0.01	
PAHs									
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.04
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.04
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.04
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Naphthalene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Acenaphthylene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Acenaphthene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Fluorene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Phenanthrene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Anthracene	DETSC 3301	0.1	mg/kg	0.12				< 0.10	
Fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

	Lab No	2537929	2537930	2537931	2537932	2537933	2537934
	Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
Pyrene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Benzo(a)anthracene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Chrysene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Benzo(b)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Benzo(k)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Benzo(a)pyrene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Indeno(1,2,3-c,d)pyrene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Dibenzo(a,h)anthracene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Benzo(g,h,i)perylene	DETSC 3301	0.1	mg/kg	< 0.10				< 0.10	
Coronene	DETSC 3301*	0.1	mg/kg	< 0.10				< 0.10	
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.12
PAH 16 Total	DETSC 3301	1.6	mg/kg	< 1.6				< 1.6	
PCBs									
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
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	Lab No	2537929	2537930	2537931	2537932	2537933	2537934
	Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
VOCs							
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

	Lab No	2537929	2537930	2537931	2537932	2537933	2537934
	Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
	Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
	Other ID ~	1	1	1	1	1	1
	Sample Type ~	ES	ES	ES	ES	ES	ES
	Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
	Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**				
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs									
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

			Lab No	2537929	2537930	2537931	2537932	2537933	2537934
			Sample ID ~	BH-CV01	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES
			Sampling Date ~	08/07/2025	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**						
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

WASTE ACCEPTANCE CRITERIA TESTING
v20.25.02.03

Our Ref 25-15937
Client Ref 25-02509
Contract Title DAA Cargo Relocation
Sample Id BH-CV01 1 0.50

Sample Numbers 2537929 2537940
Date Analysed 25/07/2025

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	1.4	3	5	6
DETSC 2003# Loss On Ignition	%	1.7	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 3521* Mineral Oil >C10-C40 + Clean Up	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	< 1.6	100	n/a	n/a
DETSC 2008# pH	pH Units	8.7	n/a	>6	n/a
DETSC 2073* Acid Neutralisation Capacity (pH4)	mol/kg	4.2	n/a	TBE	TBE
DETSC 2073* Acid Neutralisation Capacity (pH7)	mol/kg	< 1.0	n/a	TBE	TBE

Test Results On Leachate

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.22	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	5.3	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	< 0.030	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	< 0.25	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	0.8	< 0.02	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	20	0.2	0.5	10	30
DETSC 2306 Nickel as Ni	< 0.50	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	< 0.090	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.39	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.43	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	< 1.3	< 0.01	4	50	200
DETSC 2055 Chloride as Cl	1900	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	250	2.5	10	150	500
DETSC 2055 Sulphate as SO4	3600	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	55000	550	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

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

Additional Information

DETSC 2008 pH	8.5
DETSC 2009 Conductivity uS/cm	78.2
* Temperature*	19.0

Mass of Sample Kg	0.102
Mass of dry Sample Kg	0.090

Stage 1

Volume of Leachant L2	0.888
Volume of Eluate VE1	0.8

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

V.2.07

WASTE ACCEPTANCE CRITERIA TESTING
v20.25.02.03

Our Ref 25-15937
Client Ref 25-02509
Contract Title DAA Cargo Relocation
Sample Id TP-CV13 1 0.50

Sample Numbers 2537933 2537941
Date Analysed 25/07/2025

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values: Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	1.1	3	5	6
DETSC 2003# Loss On Ignition	%	5.1	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 3521* Mineral Oil >C10-C40 + Clean Up	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	< 1.6	100	n/a	n/a
DETSC 2008# pH	pH Units	8.3	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

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate): Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	0.9	< 0.01	0.5	2	25
DETSC 2306 Barium as Ba	5.3	< 0.1	20	100	300
DETSC 2306 Cadmium as Cd	0.062	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	0.88	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	4.6	0.05	2	50	100
DETSC 2306 Mercury as Hg	0.015	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	5.3	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	1.8	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	1.2	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	0.66	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.91	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	8	0.08	4	50	200
DETSC 2055 Chloride as Cl	1900	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	280	2.8	10	150	500
DETSC 2055 Sulphate as SO4	3300	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	68000	680	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	5300	53	500	800	1000

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

Additional Information

DETSC 2008 pH	8.0
DETSC 2009 Conductivity uS/cm	97.3
* Temperature*	19.0

Mass of Sample Kg	0.108
Mass of dry Sample Kg	0.090

Stage 1

Volume of Leachant L2	0.882
Volume of Eluate VE1	0.79

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

V.2.07

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

				Deviating	Deviating	Deviating	Deviating	Deviating	Deviating	Deviating
			Lab No	2537935	2537936	2537937	2537938	2537939	2537940	2537941
			Sample ID ~	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12	BH-CV01	TP-CV13
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES	ES
			Sampling Date ~	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025	08/07/2025	08/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**							
Preparation										
BS EN 12457-2 10:1	DETSC 1009*								Y	Y
Leachate 2:1 250g Non-WAC	DETSC 1009*			Y	Y	Y	Y	Y		
Metals										
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.29	0.29	0.45	0.54	0.50		
Boron, Dissolved	DETSC 2306*	12	ug/l	< 12.0	< 12.0	< 12.0	< 12.0	< 12.0		
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	0.04	< 0.03		
Chromium III, Dissolved	DETSC 2306*	0.001	mg/l	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		
Chromium, Hexavalent	DETSC 2203	0.007	mg/l	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007		
Copper, Dissolved	DETSC 2306	0.4	ug/l	1.0	0.7	1.1	1.6	1.6		
Iron, Dissolved	DETSC 2306	5.5	ug/l	180	39	310	930	410		
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.28	< 0.09	0.23	0.76	0.40		
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Nickel, Dissolved	DETSC 2306	0.5	ug/l	0.7	< 0.5	0.7	0.9	0.8		
Selenium, Dissolved	DETSC 2306	0.25	ug/l	0.27	< 0.25	< 0.25	< 0.25	< 0.25		
Zinc, Dissolved	DETSC 2306	1.3	ug/l	8.0	13	2.5	3.5	2.9		
Inorganics										
pH	DETSC 2008		pH	8.1	8.7	8.4	7.7	7.6		
Cyanide, Total Low Level	DETSC 2131	0.0001	mg/l	0.0003	< 0.0001	< 0.0001	0.0004	< 0.0001		
Cyanide, Free Low Level	DETSC 2131	0.0001	mg/l	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001		
Total Hardness as CaCO3	DETSC 2303	0.1	mg/l	31.8	28.4	34.5	16.2	37.4		
Un-Ionised Ammonia	*	0.02	mg/l						< 0.02	< 0.02
Ammoniacal Nitrogen as NH4	DETSC 2207	0.0193	mg/l	< 0.02	0.02	< 0.02	0.03	< 0.02	0.02	0.04
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015	0.017	< 0.015	0.022	< 0.015		
Nitrite as N	DETSC 2055	0.03	mg/l	0.09	0.19	0.12	0.04	0.12		
Nitrate as N	DETSC 2055	0.0226	mg/l	0.43	0.66	0.45	0.40	0.47		
Sulphate as SO4	DETSC 2055	0.1	mg/l	6.2	3.5	3.7	3.3	3.3		
Total Organic Carbon	DETSC 2085	1	mg/l	1.1	< 1.0	1.2	1.4	1.4		
PAHs										
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05		
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Phenanthrene	DETSC 3304	0.01	ug/l	< 0.01	0.01	0.01	0.01	< 0.01		
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.01	< 0.01		
Pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.01	< 0.01		
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

				Deviating	Deviating	Deviating	Deviating	Deviating	Deviating	Deviating
			Lab No	2537935	2537936	2537937	2537938	2537939	2537940	2537941
			Sample ID ~	TP1-CV02	TP1-CV04	TP1-CV11	TP-CV13	TP-CV12	BH-CV01	TP-CV13
			Depth ~	0.50	0.50	0.50	0.50	0.50	0.50	0.50
			Other ID ~	1	1	1	1	1	1	1
			Sample Type ~	ES	ES	ES	ES	ES	ES	ES
			Sampling Date ~	09/07/2025	09/07/2025	09/07/2025	08/07/2025	08/07/2025	08/07/2025	08/07/2025
			Sampling Time ~	n/s	n/s	n/s	n/s	n/s	n/s	n/s
Test	**Method**	**LOD**	**Units**							
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01		
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20		

Summary of Asbestos Analysis
Soil Samples

Our Ref 25-15937
Client Ref ~ 25-02509
Contract Title ~ DAA Cargo Relocation

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2537929	BH-CV01 1 0.50	SOIL	NAD	none	Lucy Lindsley
2537930	TP1-CV02 1 0.50	SOIL	NAD	none	Lucy Lindsley
2537931	TP1-CV04 1 0.50	SOIL	NAD	none	Lucy Lindsley
2537932	TP1-CV11 1 0.50	SOIL	NAD	none	Lucy Lindsley
2537933	TP-CV13 1 0.50	SOIL	NAD	none	Lucy Lindsley
2537934	TP-CV12 1 0.50	SOIL	NAD	none	Lucy Lindsley

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 25-15937
Client Ref ~ 25-02509
Contract ~ DAA Cargo Relocation

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2537929	BH-CV01 0.50 SOIL	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537930	TP1-CV02 0.50 SOIL	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537931	TP1-CV04 0.50 SOIL	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537932	TP1-CV11 0.50 SOIL	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537933	TP-CV13 0.50 SOIL	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537934	TP-CV12 0.50 SOIL	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537935	TP1-CV02 0.50 LEACHATE	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537936	TP1-CV04 0.50 LEACHATE	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537937	TP1-CV11 0.50 LEACHATE	09/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537938	TP-CV13 0.50 LEACHATE	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537939	TP-CV12 0.50 LEACHATE	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537940	BH-CV01 0.50 LEACHATE	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		
2537941	TP-CV13 0.50 LEACHATE	08/07/25	GJ 250ml, GJ 60ml, PT 1L x2		

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

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic >EC10-EC12	EH_2D_AL
Aliphatic >EC12-EC16	EH_2D_AL
Aliphatic >EC16-EC21	EH_2D_AL
Aliphatic >EC21-EC35	EH_2D_AL
Aliphatic >EC35-EC40	EH_2D_AL
Aliphatic >EC40-EC44	EH_2D_AL
Aliphatic C5-C35	EH_2D+HS_1D_AL
Aliphatic C5-C44	EH_2D+HS_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic >EC10-EC12	EH_2D_AR
Aromatic >EC12-EC16	EH_2D_AR
Aromatic >EC16-EC21	EH_2D_AR
Aromatic >EC21-EC35	EH_2D_AR
Aromatic >EC35-EC40	EH_2D_AR
Aromatic >EC40-EC44	EH_2D_AR
Aromatic C5-C35	EH_2D+HS_1D_AR
Aromatic C5-C44	EH_2D+HS_1D_AR
TPH Ali/Aro Total C5-C35	EH_2D+HS_1D_Total
TPH Ali/Aro C5-C44	EH_2D+HS_1D_Total
EPH >C24-C40	EH_2D_Total
Mineral Oil >C10-C40 + Clean Up	EH_CU_2D_Total

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 25.07.18

Certificate of Analysis

Certificate Number	25-16266	*Issued:*	28-Jul-25

Client Causeway Geotech
Unit 1 Fingal House
Stephenstown Industrial Estate
Balbriggan
Co. Dublin
K32 VR66

Our Reference 25-16266

Client Reference ~ 25-0509

Order No ~ (not supplied)

Contract Title ~ DAA Cargo Relocation

Description 1 Soil sample, 1 Leachate prepared by DETS sample.

Date Received 16-Jul-25

Date Started 16-Jul-25

Date Completed 28-Jul-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

Reyhan Irfan
Operations Manager

2139

Normec DETS Limited
Unit 2, Park Road Industrial Estate South, Consett, Co Durham, DH8 5PY
Tel: 01207 582333 • email: info-dets@normecgroup.com • normecdets.com

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
Preparation				
Moisture Content	DETSC 1004	0.1	%	19
Metals				
Antimony	DETSC 2301*	1	mg/kg	2.1
Arsenic	DETSC 2301#	0.2	mg/kg	16
Barium	DETSC 2301#	1.5	mg/kg	110
Boron, Water Soluble (2.5:1)	DETSC 2311#	0.2	mg/kg	0.6
Cadmium	DETSC 2301#	0.1	mg/kg	3.0
Chromium	DETSC 2301#	0.15	mg/kg	23
Chromium III	DETSC 2301*	0.15	mg/kg	23
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	34
Lead	DETSC 2301#	0.3	mg/kg	34
Mercury	DETSC 2325#	0.05	mg/kg	0.07
Molybdenum	DETSC 2301#	0.4	mg/kg	5.6
Nickel	DETSC 2301#	1	mg/kg	43
Selenium	DETSC 2301#	0.5	mg/kg	1.2
Zinc	DETSC 2301#	1	mg/kg	95
Inorganics				
pH	DETSC 2008#		pH	7.9
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1
Total Organic Carbon	DETSC 2084#	0.5	%	1.1
Sulphide	DETSC 2024*	10	mg/kg	< 10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75
Sulphur as S, Total	DETSC 2320	0.01	%	0.03
Sulphate as SO4, Total	DETSC 2321#	0.01	%	0.03
Sulphate as SO4, Total	DETSC 2321#	100	mg/kg	290
Petroleum Hydrocarbons				
Aliphatic C5-C6: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic C6-C8: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic C8-C10: HS_1D_AL	DETSC 3321*	0.01	mg/kg	< 0.01
Aliphatic >EC10-EC12: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50
Aliphatic >EC12-EC16: EH_2D_AL	DETSC 3521#	1.2	mg/kg	< 1.20
Aliphatic >EC16-EC21: EH_2D_AL	DETSC 3521#	1.5	mg/kg	< 1.50
Aliphatic >EC21-EC35: EH_2D_AL	DETSC 3521#	3.4	mg/kg	< 3.40
Aliphatic >EC35-EC40: EH_2D_AL	DETSC 3521*	3.4	mg/kg	< 3.40
Aliphatic >EC40-EC44: EH_2D_AL	DETSC 3521*	3.4	mg/kg	< 3.40
Aliphatic C5-C35: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00
Aliphatic C5-C44: EH_2D+HS_1D_AL	DETSC 3521*	10	mg/kg	< 10.00
Aromatic C5-C7: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01
Aromatic C7-C8: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
Aromatic C8-C10: HS_1D_AR	DETSC 3321*	0.01	mg/kg	< 0.01
Aromatic >EC10-EC12: EH_2D_AR	DETSC 3521#	0.9	mg/kg	< 0.90
Aromatic >EC12-EC16: EH_2D_AR	DETSC 3521#	0.5	mg/kg	< 0.50
Aromatic >EC16-EC21: EH_2D_AR	DETSC 3521#	0.6	mg/kg	< 0.60
Aromatic >EC21-EC35: EH_2D_AR	DETSC 3521#	1.4	mg/kg	< 1.40
Aromatic >EC35-EC40: EH_2D_AR	DETSC 3521*	1.4	mg/kg	< 1.40
Aromatic >EC40-EC44: EH_2D_AR	DETSC 3521*	1.4	mg/kg	< 1.40
Aromatic C5-C35: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00
Aromatic C5-C44: EH_2D+HS_1D_AR	DETSC 3521*	10	mg/kg	< 10.00
TPH Ali/Aro Total C5-C35: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00
TPH Ali/Aro C5-C44: EH_2D+HS_1D_Total	DETSC 3521*	10	mg/kg	< 10.00
EPH >C24-C40: EH_2D_Total	DETSC 3521#	10	mg/kg	< 10.00
Benzene	DETSC 3321#	0.01	mg/kg	< 0.01
Ethylbenzene	DETSC 3321#	0.01	mg/kg	< 0.01
Toluene	DETSC 3321#	0.01	mg/kg	< 0.01
Xylene	DETSC 3321#	0.01	mg/kg	< 0.01
MTBE	DETSC 3321	0.01	mg/kg	< 0.01
PAHs				
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03
Naphthalene	DETSC 3301	0.1	mg/kg	< 0.10
Acenaphthylene	DETSC 3301	0.1	mg/kg	< 0.10
Acenaphthene	DETSC 3301	0.1	mg/kg	< 0.10
Fluorene	DETSC 3301	0.1	mg/kg	< 0.10
Phenanthrene	DETSC 3301	0.1	mg/kg	< 0.10
Anthracene	DETSC 3301	0.1	mg/kg	< 0.10
Fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
Pyrene	DETSC 3301	0.1	mg/kg	< 0.10
Benzo(a)anthracene	DETSC 3301	0.1	mg/kg	< 0.10
Chrysene	DETSC 3301	0.1	mg/kg	< 0.10
Benzo(b)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10
Benzo(k)fluoranthene	DETSC 3301	0.1	mg/kg	< 0.10
Benzo(a)pyrene	DETSC 3301	0.1	mg/kg	< 0.10
Indeno(1,2,3-c,d)pyrene	DETSC 3301	0.1	mg/kg	< 0.10
Dibenzo(a,h)anthracene	DETSC 3301	0.1	mg/kg	< 0.10
Benzo(g,h,i)perylene	DETSC 3301	0.1	mg/kg	< 0.10
Coronene	DETSC 3301*	0.1	mg/kg	< 0.10
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10
PAH 16 Total	DETSC 3301	1.6	mg/kg	< 1.6
PCBs				
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 118	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 180	DETSC 3401#	0.01	mg/kg	< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg	< 0.01
Phenols				
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
VOCs				
Vinyl Chloride	DETSC 3431*	0.01	mg/kg	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
sec-butylbenzene	DETSC 3431*	0.01	mg/kg	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
Hexachlorobutadiene	DETSC 3431*	0.01	mg/kg	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01
SVOCs				
Phenol	DETSC 3433	0.1	mg/kg	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1

Summary of Chemical Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539675
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1
Di-n-octylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1

Summary of Chemical Analysis
Leachate Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

	Deviating
Lab No	2539676
Sample ID ~	TP1-CV01
Depth ~	0.50
Other ID ~	1
Sample Type ~	ES
Sampling Date ~	n/s
Sampling Time ~	n/s

Test	Method	LOD	Units	
Preparation				
BS EN 12457-2 10:1	DETSC 1009*			Y
Inorganics				
Un-Ionised Ammonia	*	0.02	mg/l	< 0.02
Ammoniacal Nitrogen as NH4	DETSC 2207	0.0193	mg/l	< 0.02

WASTE ACCEPTANCE CRITERIA TESTING
v20.25.02.03

Our Ref 25-16266
Client Ref 25-0509
Contract Title DAA Cargo Relocation
Sample Id TP1-CV01 1 0.50

Sample Numbers 2539675 2539676
Date Analysed 28/07/2025

Test Results On Waste

Determinand and Method Reference	Units	Result	WAC Limit Values Inert Waste	SNRHW	Hazardous Waste
DETSC 2084# Total Organic Carbon	%	1.1	3	5	6
DETSC 2003# Loss On Ignition	%	4.5	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 3521* Mineral Oil >C10-C40 + Clean Up	mg/kg	< 10	500	n/a	n/a
DETSC 3301 PAHs	mg/kg	< 1.6	100	n/a	n/a
DETSC 2008# pH	pH Units	7.9	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

Determinand and Method Reference	Conc in Eluate ug/l 10:1	Amount Leached mg/kg LS10	WAC Limit Values (Limit values for LS10 Leachate) Inert Waste	SNRHW	Hazardous Waste
DETSC 2306 Arsenic as As	1.7	0.02	0.5	2	25
DETSC 2306 Barium as Ba	23	0.2	20	100	300
DETSC 2306 Cadmium as Cd	0.092	< 0.02	0.04	1	5
DETSC 2306 Chromium as Cr	2.6	< 0.1	0.5	10	70
DETSC 2306 Copper as Cu	4.9	0.05	2	50	100
DETSC 2306 Mercury as Hg	< 0.010	< 0.002	0.01	0.2	2
DETSC 2306 Molybdenum as Mo	4.4	< 0.1	0.5	10	30
DETSC 2306 Nickel as Ni	4.5	< 0.1	0.4	10	40
DETSC 2306 Lead as Pb	1.5	< 0.05	0.5	10	50
DETSC 2306 Antimony as Sb	1.7	< 0.05	0.06	0.7	5
DETSC 2306 Selenium as Se	0.69	< 0.03	0.1	0.5	7
DETSC 2306 Zinc as Zn	6.2	0.06	4	50	200
DETSC 2055 Chloride as Cl	1600	< 100	800	15,000	25,000
DETSC 2055* Fluoride as F	190	1.9	10	150	500
DETSC 2055 Sulphate as SO4	5100	< 100	1000	20,000	50,000
DETSC 2009* Total Dissolved Solids	88000	880	4000	60,000	100,000
DETSC 2130 Phenol Index	< 100	< 1	1	n/a	n/a
DETSC 2085 Dissolved Organic Carbon	12000	120	500	800	1000

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

Additional Information

DETSC 2008 pH	7.1
DETSC 2009 Conductivity uS/cm	126.0
* Temperature*	20.0

Mass of Sample Kg	0.111
Mass of dry Sample Kg	0.090

Stage 1

Volume of Leachant L2	0.879
Volume of Eluate VE1	0.79

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

V.2.07

Summary of Asbestos Analysis
Soil Samples

Our Ref 25-16266
Client Ref ~ 25-0509
Contract Title ~ DAA Cargo Relocation

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
2539675	TP1-CV01 1 0.50	SOIL	NAD	none	Josh Best

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 25-16266
Client Ref ~ 25-0509
Contract ~ DAA Cargo Relocation

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2539675	TP1-CV01 0.50 SOIL		GJ 250ml, GJ 60ml, PT 1L x2	Sample date not supplied, ANC (1095 days), Boron (365 days), BTEX / C5-C10 (14 days), Chromium, Hexavalent (4 days), Sulphur (free) (7 days), EPH/Aliphatic/Aromatic (14 days), Hardness (7 days), Mercury (28 days), Total Sulphur ICP (7 days), Total Sulphate ICP (30 days), ICP WS Boron (182 days), Metals ICP (182 days), Metals ICP Prep (182 days), Anions (28 days), Kone Cr6 (30 days), Loss on Ignition (730 days), pH/Cond (1 days), Metals (Soluble) ICPMS (182 days), Naphthalene (14 days), Ammoniacal Nitrogen as NH4 (10 days), Organic Matter (Auto) (28 days), PAH FID (14 days), PAH MS (4 days), PCB (30 days), pH + Conductivity (7 days), Cyanide/Mono pHoh (14 days), Cyanide/Mono PhOH Low Level (14 days), SVOC (14 days), TOC AN (28 days)	
2539676	TP1-CV01 0.50 LEACHATE		GJ 250ml, GJ 60ml, PT 1L x2	Sample date not supplied, Conductivity (non reportable) (28 days), Conductivity uS/cm (25oC) (28 days), Anions (28 days), Kone (4 days), pH/Cond (1 days), Metals (Soluble) ICPMS (182 days), Un-Ionised Ammonia (10 days), Ammoniacal Nitrogen as NH4 (10 days), Phenol Index (30 days), Cyanide/Mono pHoh (14 days), Total Dissolved s (28 days), TOC AN (28 days)	

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

Information in Support of the Analytical Results

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic >EC10-EC12	EH_2D_AL
Aliphatic >EC12-EC16	EH_2D_AL
Aliphatic >EC16-EC21	EH_2D_AL
Aliphatic >EC21-EC35	EH_2D_AL
Aliphatic >EC35-EC40	EH_2D_AL
Aliphatic >EC40-EC44	EH_2D_AL
Aliphatic C5-C35	EH_2D+HS_1D_AL
Aliphatic C5-C44	EH_2D+HS_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic >EC10-EC12	EH_2D_AR
Aromatic >EC12-EC16	EH_2D_AR
Aromatic >EC16-EC21	EH_2D_AR
Aromatic >EC21-EC35	EH_2D_AR
Aromatic >EC35-EC40	EH_2D_AR
Aromatic >EC40-EC44	EH_2D_AR
Aromatic C5-C35	EH_2D+HS_1D_AR
Aromatic C5-C44	EH_2D+HS_1D_AR
TPH Ali/Aro Total C5-C35	EH_2D+HS_1D_Total
TPH Ali/Aro C5-C44	EH_2D+HS_1D_Total
EPH >C24-C40	EH_2D_Total
Mineral Oil >C10-C40 + Clean Up	EH_CU_2D_Total

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 25.07.18

Certificate of Analysis

Certificate Number	25-16836	*Issued:*	01-Aug-25

Client Causeway Geotech
Unit 1 Fingal House
Stephenstown Industrial Estate
Balbriggan
Co. Dublin
K32 VR66

Our Reference	25-16836
Client Reference ~	25-0509
Order No ~	(not supplied)
Contract Title ~	DAA CARGO RELOCATION
Description	2 Other Water samples.
Date Received	22-Jul-25
Date Started	22-Jul-25
Date Completed	01-Aug-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



Reyhan Irfan
Operations Manager

Summary of Chemical Analysis
Water Samples

Our Ref 25-16836
Client Ref ~ 25-0509
Contract Title ~ DAA CARGO RELOCATION

		Deviating	Deviating
Lab No		2542945	2542946
Sample ID ~		RC-CV02	RC-CV04
Depth ~		3.20	2.20
Other ID ~			
Sample Type ~		WATER OTHER	WATER OTHER
Sampling Date ~		17/07/2025	17/07/2025
Sampling Time ~		n/s	n/s
Test	**Method**	**LOD** **Units**	
Metals			
Arsenic, Dissolved	DETSC 2306	0.16 ug/l	1.0 1.5
Boron, Dissolved	DETSC 2306*	12 ug/l	336.6 210.8
Cadmium, Dissolved	DETSC 2306	0.03 ug/l	0.06 < 0.03
Chromium, Dissolved	DETSC 2306	0.25 ug/l	2.6 < 0.25
Chromium III, Dissolved	DETSC 2306*	0.001 mg/l	0.0026 < 0.0010
Chromium, Hexavalent	DETSC 2203	0.007 mg/l	< 0.007 < 0.007
Copper, Dissolved	DETSC 2306	0.4 ug/l	3.8 1.5
Iron, Dissolved	DETSC 2306	5.5 ug/l	180 20
Lead, Dissolved	DETSC 2306	0.09 ug/l	0.92 < 0.09
Mercury, Dissolved	DETSC 2306	0.01 ug/l	0.05 0.74
Nickel, Dissolved	DETSC 2306	0.5 ug/l	18 7.2
Selenium, Dissolved	DETSC 2306	0.25 ug/l	14 4.3
Zinc, Dissolved	DETSC 2306	1.3 ug/l	840 82
Inorganics			
pH	DETSC 2008	pH	7.1 6.9
Cyanide, Total Low Level	DETSC 2131	0.0001 mg/l	0.0011 0.0006
Cyanide, Total	DETSC 2130	0.04 mg/l	< 0.04 < 0.04
Cyanide, Free Low Level	DETSC 2131	0.0001 mg/l	0.0010 0.0004
Phenol - Monohydric Low Level	DETSC 2131	1.5 ug/l	< 1.5 < 1.5
Total Hardness as CaCO3	DETSC 2303	0.1 mg/l	249 117
Ammoniacal Nitrogen as NH4	DETSC 2207	0.0193 mg/l	0.85 0.15
Ammoniacal Nitrogen as N	DETSC 2207	0.015 mg/l	0.66 0.12
Nitrite as N	DETSC 2055	0.03 mg/l	< 0.16 < 0.16
Nitrate as N	DETSC 2055	0.0226 mg/l	0.18 < 0.12
Sulphate as SO4	DETSC 2055	0.1 mg/l	61 51
Total Organic Carbon	DETSC 2085	1 mg/l	63 64
Petroleum Hydrocarbons			
Aliphatic C5-C6: HS_1D_AL	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aliphatic C6-C8: HS_1D_AL	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aliphatic C8-C10: HS_1D_AL	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aliphatic C10-C12: EH_CU_1D_AL	DETSC 3072*	1 ug/l	15 68
Aliphatic C10-C44: EH_CU_1D_AL	DETSC 3072*	1 ug/l	260 2700
Aliphatic C12-C16: EH_CU_1D_AL	DETSC 3072*	1 ug/l	240 710
Aliphatic C16-C21: EH_CU_1D_AL	DETSC 3072*	1 ug/l	2.5 100
Aliphatic C21-C35: EH_CU_1D_AL	DETSC 3072*	1 ug/l	2.3 1700
Aliphatic C35-C44: EH_CU_1D_AL	DETSC 3072*	1 ug/l	< 1.0 130
Aromatic C5-C7: HS_1D_AR	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aromatic C7-C8: HS_1D_AR	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aromatic C8-C10: HS_1D_AR	DETSC 3322	0.1 ug/l	< 0.1 < 0.1
Aromatic C10-C12: EH_CU_1D_AR	DETSC 3072*	1 ug/l	4.5 14
Aromatic C12-C16: EH_CU_1D_AR	DETSC 3072*	1 ug/l	39 90

Summary of Chemical Analysis
Water Samples

Our Ref 25-16836
Client Ref ~ 25-0509
Contract Title ~ DAA CARGO RELOCATION

				Deviating	Deviating
			Lab No	2542945	2542946
			Sample ID ~	RC-CV02	RC-CV04
			Depth ~	3.20	2.20
			Other ID ~		
			Sample Type ~	WATER OTHER	WATER OTHER
			Sampling Date ~	17/07/2025	17/07/2025
			Sampling Time ~	n/s	n/s
Test	**Method**	**LOD**	**Units**		
Aromatic C16-C21: EH_CU_1D_AR	DETSC 3072*	1	ug/l	3.7	53
Aromatic C21-C35: EH_CU_1D_AR	DETSC 3072*	1	ug/l	2.5	810
Aromatic C35-C44: EH_CU_1D_AR	DETSC 3072*	1	ug/l	< 1.0	39
Aromatic C10-C44: EH_CU_1D_AR	DETSC 3072*	1	ug/l	50	1000
Ali/Aro C10-C44: EH_CU_1D_Total	DETSC 3072*	1	ug/l	310	3700
EPH (C10-C40): EH_1D_Total	DETSC 3311	10	ug/l	650	1600
PAHs					
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.50
Acenaphthylene	DETSC 3304	0.01	ug/l	0.03	< 0.10
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	0.20
Phenanthrene	DETSC 3304	0.01	ug/l	0.01	0.80
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.16
Pyrene	DETSC 3304	0.01	ug/l	0.01	0.23
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.11
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.13
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.10
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	< 2.00
Phenols					
Phenol - Monohydric	DETSC 2130	0.1	mg/l	0.4	< 0.1

2542945, 2542946 - WATER OTHER testing is not accredited

Information in Support of the Analytical Results

Our Ref 25-16836
Client Ref ~ 25-0509
Contract ~ DAA CARGO RELOCATION

Containers Received & Deviating Samples

Lab No	Sample ID ~	Date Sampled ~	Containers Received	Holding time exceeded for tests	Incorrect container for tests
2542945	RC-CV02 3.20 WATER OTHER	17/07/25	GB 1L x2, GV x4, PB 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days), PAH MS (4 days), EPH (4 days)	
2542946	RC-CV04 2.20 WATER OTHER	17/07/25	GB 1L x2, GV x4, PB 1L x2	Chromium, Hexavalent (4 days), Kone (4 days), pH/Cond (1 days), PAH MS (4 days), EPH (4 days)	

Key: G-Glass P-Plastic B-Bottle V-Vial
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.

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

List of HWOL Acronyms and Operators

Acronym	Description
HS	Headspace analysis
EH	Extractable Hydrocarbons - i.e. everything extracted by the solvent
CU	Clean-up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
2D	GC-GC - Double coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative eg. EH+HS_Total or EH_CU+HS_Total

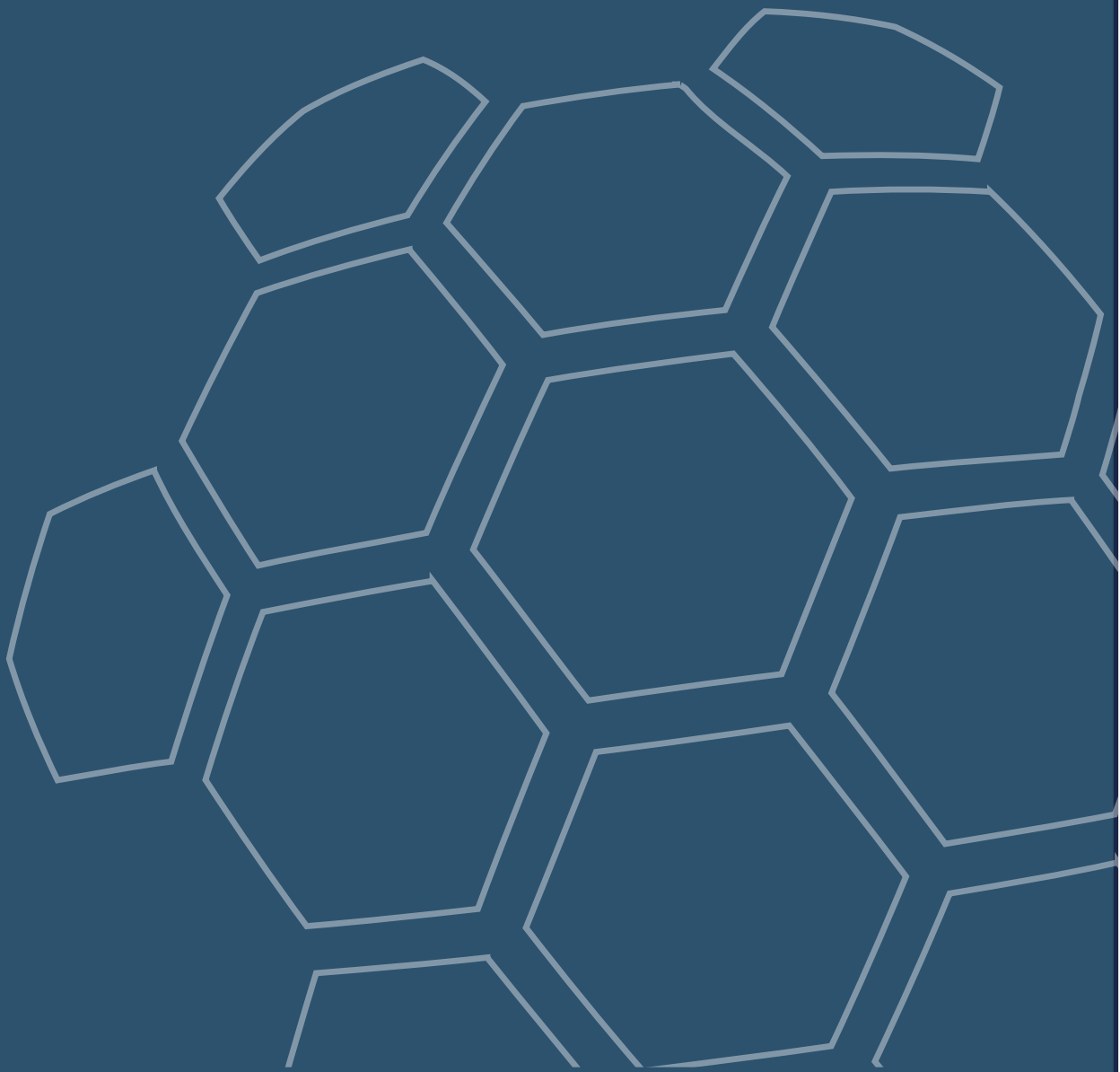
Det	Acronym
Aliphatic C5-C6	HS_1D_AL
Aliphatic C6-C8	HS_1D_AL
Aliphatic C8-C10	HS_1D_AL
Aliphatic C10-C12	EH_CU_1D_AL
Aliphatic C10-C44	EH_CU_1D_AL
Aliphatic C12-C16	EH_CU_1D_AL
Aliphatic C16-C21	EH_CU_1D_AL
Aliphatic C21-C35	EH_CU_1D_AL
Aliphatic C35-C44	EH_CU_1D_AL
Aromatic C5-C7	HS_1D_AR
Aromatic C7-C8	HS_1D_AR
Aromatic C8-C10	HS_1D_AR
Aromatic C10-C12	EH_CU_1D_AR
Aromatic C12-C16	EH_CU_1D_AR
Aromatic C16-C21	EH_CU_1D_AR
Aromatic C21-C35	EH_CU_1D_AR
Aromatic C35-C44	EH_CU_1D_AR
Aromatic C10-C44	EH_CU_1D_AR
Ali/Aro C10-C44	EH_CU_1D_Total
EPH (C10-C40)	EH_1D_Total

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 25.07.19a

APPENDIX L – SPT HAMMER ENERGY MEASUREMENT REPORT



SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Causeway Geotech LTD
8 Drumahiskey Road
Ballymoney
Co Antrim
BT53 7QL

SPT Hammer Ref:	1530
Test Date:	08/05/2025
Report Date:	08/05/2025
File Name:	1530.spt
Test Operator:	CD

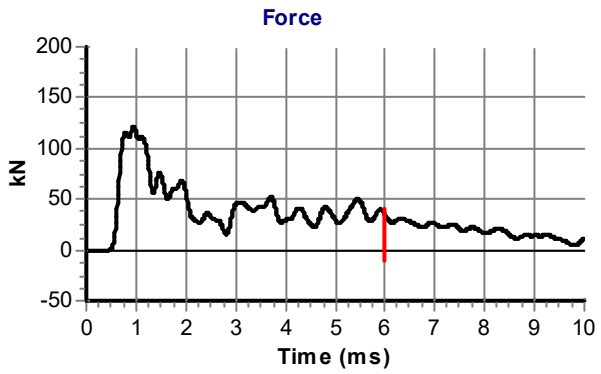
Instrumented Rod Data

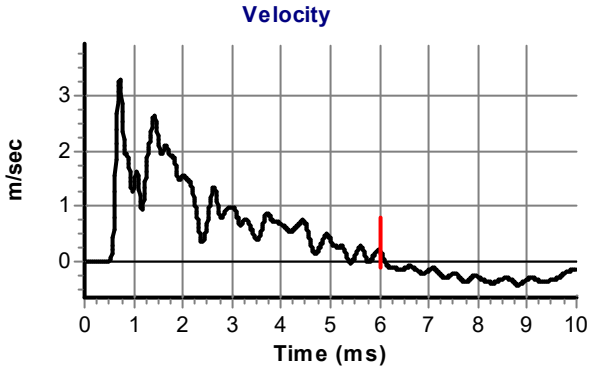
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.4
Rod Length l_r (m):	1.0
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	78855
Accelerometer No.2:	78856

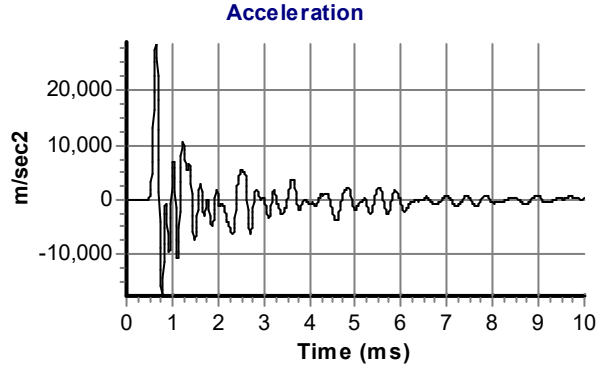
SPT Hammer Information

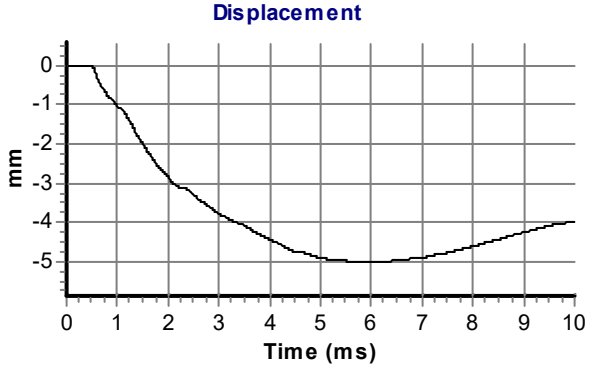
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

Comments / Location









Calculations

Area of Rod A (mm2):	957
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	296

Energy Ratio E_r (%): **63**

Signed: Colin Dunlop

Title: Plant Manager

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SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

Causeway Geotech LTD
8 Drumahiskey Road
Ballymoney
Co Antrim
BT53 7QL

SPT Hammer Ref:	1411
Test Date:	08/05/2025
Report Date:	08/05/2025
File Name:	1411.spt
Test Operator:	CD

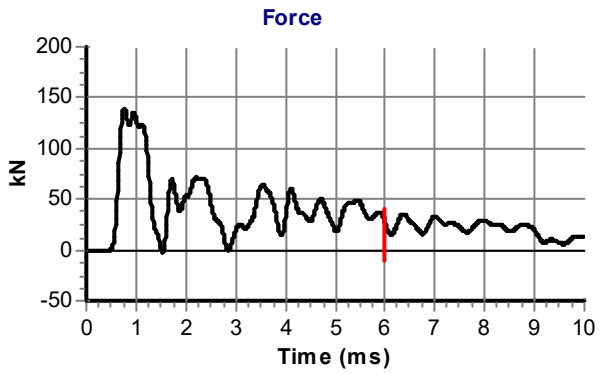
Instrumented Rod Data

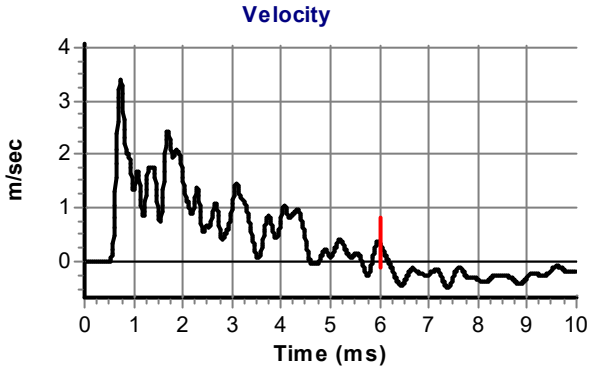
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.4
Rod Length l_r (m):	1.0
Assumed Modulus E_a (GPa):	208
Accelerometer No.1:	78855
Accelerometer No.2:	78856

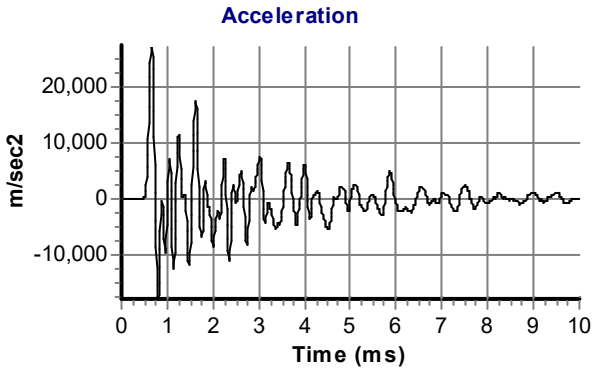
SPT Hammer Information

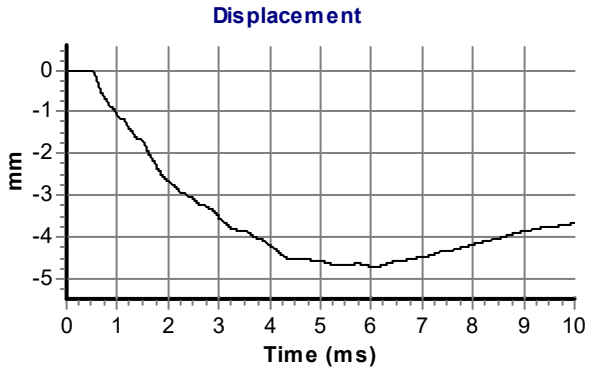
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

Comments / Location









Calculations

Area of Rod A (mm2):	957
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	307

Energy Ratio E_r (%): **65**

Signed: Colin Dunlop

Title: Plant Manager

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CAUSEWAY GEOTECH

Causeway Geotech Limited has made its commitment to health and safety of people, the environment and the quality of its services an integral part of our strategy.

Whether it be ensuring people's safety or meeting the challenges of operating in an ecologically diverse environment, we aim to act in a sustainable and responsible manner at all times.

CERTIFICATIONS /ACCREDITATIONS

Constructionline Gold Member

SCS INTEGRATED CERTIFICATION ISO 9001, 14001 & 45001 — UKAS MANAGEMENT SYSTEMS 9235

MEMBERSHIPS

AGS

BRITISH DRILLING ASSOCIATION

BGA · THE BRITISH · GEOTECHNICAL ASSOCIATION

INTERNATIONAL JACK-UP BARGE OPERATORS ASSOCIATION

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