CON29M Non-Residential Mining Report

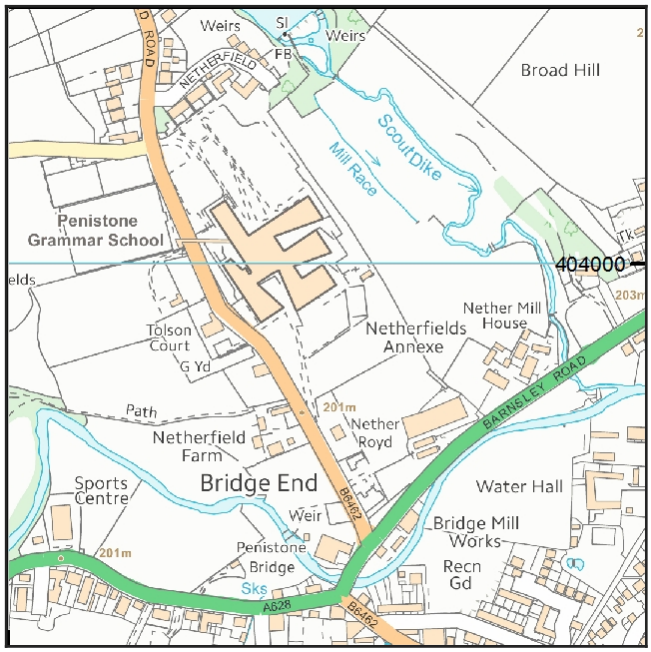
This report is based on, and limited to, the records held by the Coal Authority, at the time we answer the search.

Client name

Applied Geology Ltd

Enquiry address

PENISTONE GRAMMAR SCHOOL, HUDDERSFIELD ROAD, PENISTONE, SHEFFIELD, SOUTH YORKSHIRE



Approximate position of property

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

www.groundstability.com

/company/the-coal-authority
/thecoalauthority
/coalauthority

Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	No
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	No
5	Coal mining geology	No
6	Past opencast coal mining	No
7	Present opencast coal mining	No
8	Future opencast coal mining	No
9	Coal mining subsidence	No
10	Mine gas	No
11	Hazards related to coal mining	No
12	Withdrawal of support	No
13	Working facilities order	No
14	Payments to owners of former copyhold land	No

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is not within a surface area that could be affected by recorded past underground mining.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

4. Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

5. Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6. Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7. Present opencast coal mining
The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8. Future opencast coal mining
There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9. Coal mining subsidence
The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31st October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

10. Mine gas
The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining
The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

12. Withdrawal of support
The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

13. Working facilities order
The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14. Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.

Disclaimer

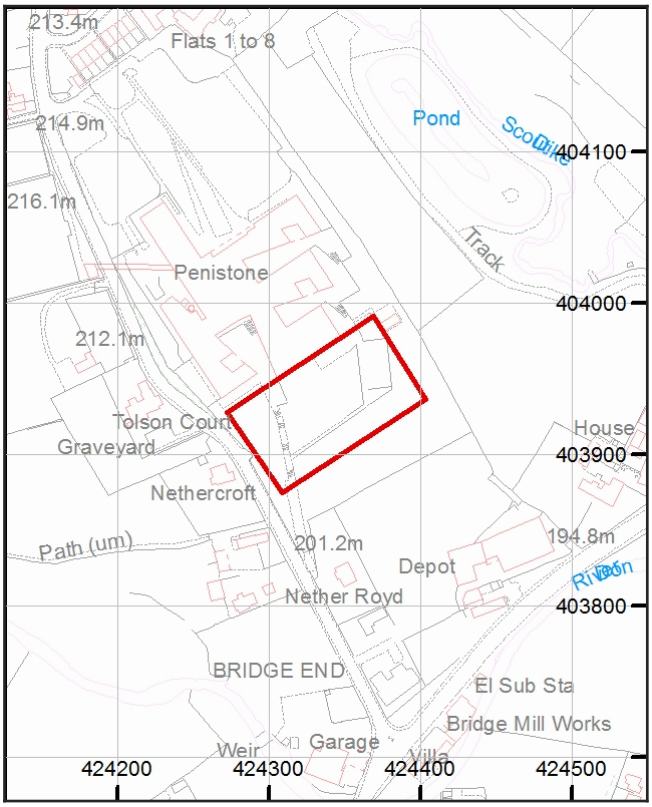
Alternative formats

If you would like this report in an alternative format, please contact our communications team.

Enquiry boundary

Key

Approximate position of enquiry boundary shown



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APPENDIX C

BOREHOLE LOG - CABLE PERCUSSION

BH1

Project	Penistone Grammar School	**Project No.**	AG2882-18
Client	Barnsley SPV1 Ltd	**Sheet**	1 of 1
Start	26/06/2018 **Coordinates**	**Scale**	1:50
End	26/06/2018 **Ground Level** 206.40m AOD	**Total Depth**	5.25m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.20					Grass over brown clayey gravelly SAND. Gravel is fine to coarse, subrounded to subangular sandstone, mudstone, brick and occasional concrete. (MADE GROUND)			
PID	0.40	PID = 0.0			(1.00)				
B	0.70								
				205.40	1.00				
B	1.20					Very stiff brown sandy gravelly CLAY. Gravel is fine to coarse subangular to subrounded mudstone. (PENNINE LOWER COAL MEASURES FORMATION)			
D	1.20								
S	1.20	N = 35	1.20						
B	2.00								
D	2.00								
S	2.00	N = 35	1.50		(3.00)				
B	3.00								
D	3.00								
S	3.00	N = 38	3.00						
B	4.00			202.40	4.00	Extremely weak brown MUDSTONE recovered as fine to coarse, subangular to subrounded sandy clayey gravel. (PENNINE LOWER COAL MEASURES FORMATION)			
D	4.00								
S	4.00	N >50	4.00		(1.25)				
D	5.00								
S	5.00	N >50	4.70						
				201.15	5.25	End of Borehole at 5.25m			

Chiselling

From	To	Duration (hh:mm)

Groundwater Strikes

Depth Strike	Rose to	Remarks	Cased	Sealed

Drilled: Lundy Site Investigation

Logged: JMS

Checked: PG

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 5.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLiED GEOLOGY

BOREHOLE LOG - CABLE PERCUSSION

BH2

Project	Penistone Grammar School	**Project No.**	AG2882-18
Client	Barnsley SPV1 Ltd	**Sheet**	1 of 1
Start	26/06/2018 **Coordinates**	**Scale**	1:50
End	26/06/2018 **Ground Level** 208.10m AOD	**Total Depth**	5.25m

Sample / Test Type	Depth (m)	Result	Casing Depth (m)	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
B	0.10					Grass over firm dark brown sandy gravelly CLAY. Gravel is fine to coarse, subrounded to subangular sandstone, mudstone and rare concrete cobbles. (MADE GROUND)			
B	0.70				(1.90)				
B	1.20								
C	1.20	N = 35	1.20						
				206.20	1.90				
B	2.00					Stiff brown slightly silty gravelly sandy CLAY. Gravel is fine to medium subangular to subrounded brick, sandstone and mudstone with rare geotextile membrane fragments. (MADE GROUND)			
D	2.00								
S	2.00	N = 15	1.70		(1.10)				
B	3.00			205.10	3.00	Dense yellow-brown sandy clayey GRAVEL of fine to coarse subangular mudstone. (PENNINE LOWER COAL MEASURES FORMATION)			
D	3.00								
S	3.00	N = 31	3.00		(1.00)				
B	4.00			204.10	4.00	Extremely weak yellow brown MUDSTONE recovered as fine to coarse, subrounded to subangular sandy mudstone gravel. (PENNINE LOWER COAL MEASURES FORMATION)			
D	4.00								
S	4.00	N >50	4.00		(1.25)				
D	5.00								
S	5.00	N >50	4.70	202.85	5.25	End of Borehole at 5.25m			

Chiselling

From	To	Duration (hh:mm)

Groundwater Strikes

Depth Strike	Rose to	Remarks	Cased	Sealed

Drilled: Lundy Site Investigation

Logged: JMS

Checked: PG

Remarks: Hand dug service inspection pit excavated to 1.20m bgl. Borehole backfilled with arisings on completion.

Installation:

Diameter: 150mm to 5.00m

Exploratory hole logs should be read in conjunction with key sheets

APPLiED GEOLOGY

Cable Percussion

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref:	LSI3
Test Date:	12/03/2018
Report Date:	12/03/2018
File Name:	LSI3.spt
Test Operator:	RM

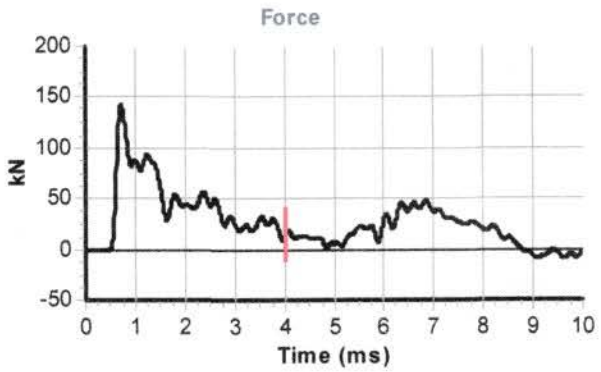
Instrumented Rod Data

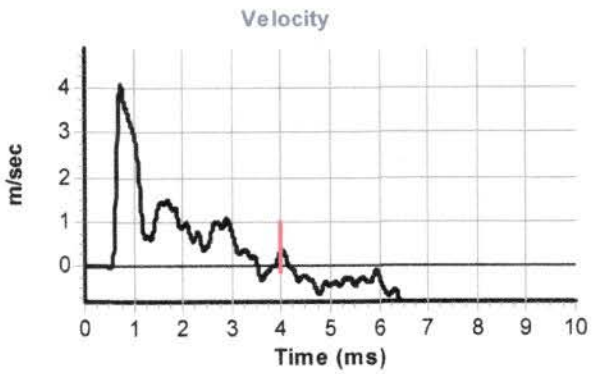
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.3
Assumed Modulus E_a (GPa):	200
Accelerometer No.1:	7080
Accelerometer No.2:	11609

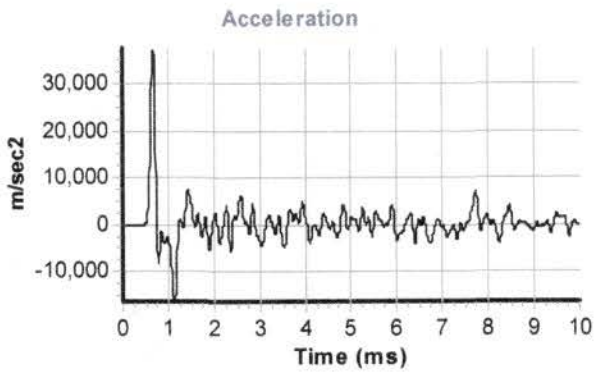
SPT Hammer Information

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):	944
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	282

Energy Ratio E_r (%): **60**

Signed: M.GARDNER
Title: FITTER

The recommended calibration interval is 12 months

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS1

Project	Penistone Grammar School	**Project No.**	AG2882-18
Client	Barnsley SPV1 Ltd	**Sheet**	1 of 1
Start	26/06/2018	**Coordinates**	**Scale** 1:50
End	26/06/2018	**Ground Level** 207.65m AOD	**Total Depth** 5.31m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
ES	0.40					Grass over brown slightly clayey gravelly SAND. Gravel is fine to coarse, subrounded to angular sandstone, quartzite, occasional brick and asphalt. Occasional cobbles of brick. (MADE GROUND)			
PID	0.40	PID = 0.0							
B	0.80								
S	1.20	N = 12			(2.55)	*Below 1.20m bgl: medium dense.*			
			101mm /100%						
ES	1.80					*Between 1.70m and 1.85m bgl: black staining.*			
PID	1.80	PID = 0.0							
S	2.00	N = 23							
			92mm /100%						
B	2.55			205.10	2.55	Medium dense greyish brown sandy clayey GRAVEL of fine to coarse, subangular clayey gravel of sandstone. (PENNINE LOWER COAL MEASURES FORMATION)			
S	3.00	N = 23							
D	3.45		79mm /100%						
					(2.45)				
S	4.00	N = 27							
D	4.50		70mm /100%						
S	5.00	N >50		202.65	5.00				
					(0.31)	Extremely weak yellow brown MUDSTONE recovered as fine to coarse subangular to subrounded sandy clayey mudstone gravel. (PENNINE LOWER COAL MEASURES FORMATION)			
				202.34	5.31	End of Borehole at 5.31m			

Installation: 50mm diameter standpipe installed to 5.00m bgl.
Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Groundwater Strikes

Depth Strike	Rose to	Remarks	Cased	Sealed

Drilled: Exploration Ltd
Logged: JMS
Checked: PG

APPLiED GEOLOGY

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS2

Project	Penistone Grammar School	**Project No.**	AG2882-18
Client	Barnsley SPV1 Ltd	**Sheet**	1 of 1
Start	26/06/2018 **Coordinates**	**Scale**	1:50
End	26/06/2018 **Ground Level** 207.70m AOD	**Total Depth**	4.44m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
					(0.25)	Grass over brown slightly clayey gravelly SAND. Gravel is fine to coarse, subrounded to angular sandstone and mudstone.			
				207.45	0.25	(MADE GROUND/TOPSOIL)			
ES	0.40								
PID	0.40	PID = 0.0			(0.75)	Brown clayey gravelly SAND. Gravel is fine to medium, subrounded to subangular sandstone, coal and mudstone.			
B	0.80					(MADE GROUND)			
				206.70	1.00	Firm to stiff brown gravelly CLAY. Gravel is fine to medium, subangular to subrounded sandstone and mudstone.			
S	1.20	N = 8				(PENNINE LOWER COAL MEASURES FORMATION)			
ES	1.40								
PID	1.40	PID = 0.0	101mm /100%		(1.00)				
B	2.00			205.70	2.00	Medium dense yellow-brown very sandy GRAVEL. Gravel is fine to coarse angular sandstone.			
S	2.00	N = 25				(PENNINE LOWER COAL MEASURES FORMATION)			
			92mm /100%						
					(1.50)				
S	3.00	N = 16							
			79mm /100%	204.20	3.50	Very stiff brown gravelly CLAY. Gravel is fine to medium subangular to subrounded sandstone and mudstone.			
D	3.70				(0.50)	(PENNINE LOWER COAL MEASURES FORMATION)			
S	4.00	N >50		203.70	4.00	Extremely weak yellow brown MUDSTONE recovered as fine to coarse subangular sandy clayey gravel.			
					(0.44)	(PENNINE LOWER COAL MEASURES FORMATION)			
				203.26	4.44	End of Borehole at 4.44m			

Installation: 50mm diameter standpipe installed to 4.00m bgl.
Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Groundwater Strikes

Depth Strike	Rose to	Remarks	Cased	Sealed

Drilled: Exploration Ltd
Logged: JMS
Checked: PG

APPLiED GEOLOGY

BOREHOLE LOG - DRIVEN CONTINUOUS SAMPLING

DCS3

Project	Penistone Grammar School	**Project No.**	AG2882-18
Client	Barnsley SPV1 Ltd	**Sheet**	1 of 1
Start	26/06/2018	**Coordinates**	**Scale** 1:50
End	26/06/2018	**Ground Level** 205.25m AOD	**Total Depth** 3.37m

Sample / Test Type	Depth (m)	Result	Dia./ Rec.	Level (mAoD)	Strata Depth (thickness) (m)	Description of Strata	Legend	GW	Install
				205.05	(0.20) 0.20	Purplish brown sandy CLAY. (MADE GROUND/TOPSOIL)			
ES	0.40					Soft yellow brown gravelly silty CLAY. Gravel is fine to medium, subangular to rounded quartzite, sandstone and brick. (MADE GROUND)			
PID	0.40	PID = 0.0							
S	1.20	N = 4			(1.70)				
D	1.70		101mm /100%						
S	2.00	N = 12		203.35	1.90				
B	2.30		92mm /100%	202.95	(0.40) 2.30	Medium dense yellowish white subangular GRAVEL. Gravel is fine to medium, subrounded to rounded sandstone and quartzite. (MADE GROUND)			
ES	2.70				(0.70)	Medium dense grey sandy very clayey GRAVEL of fine to coarse subangular to subrounded mudstone. (PENNINE LOWER COAL MEASURES FORMATION)			
PID	2.70	PID = 0.0							
S	3.00	N >50		202.25	3.00				
				201.88	(0.37) 3.37	Extremely weak grey brown MUDSTONE recovered as sandy very clayey fine to coarse gravel. (PENNINE LOWER COAL MEASURES FORMATION)			
						End of Borehole at 3.37m			

Installation: 50mm diameter standpipe installed to 4.00m bgl.
Remarks: Hand dug service inspection pit excavated to 1.20m bgl.

Groundwater Strikes

Depth Strike	Rose to	Remarks	Cased	Sealed

Drilled: Exploration Ltd
Logged: JMS
Checked: PG

Exploratory hole logs to be read in conjunction with key sheet

APPLiED GEOLOGY

SPT SUMMARY SHEET

Project: Penistone Grammar School
Client: Barnsley SPV1 Ltd
Project No: AG2882-18

Borehole No.	Borehole depth (m)	Bottom depth (m)	Casing depth (m)	Water Level (m)	Equipment ref.	Seating Drive				Test Drive								Total Pen (mm)	Test Type	N Value
						Blows		Pen (mm)		Blows				Pen (mm)						
BH1	1.20	1.65	1.20	Dry	LSI3	4	5	75	75	9	9	8	9	75	75	75	75	300	S	35
BH1	2.00	2.45	1.50	Dry	LSI3	6	7	75	75	9	8	9	9	75	75	75	75	300	S	35
BH1	3.00	3.45	3.00	Dry	LSI3	7	7	75	75	8	9	10	11	75	75	75	75	300	S	38
BH1	4.00	4.35	4.00	Dry	LSI3	7	8	75	75	12	16	22		75	75	50		200	S	>50
BH1	5.00	5.25	4.70	Dry	LSI3	9	10	75	75	21	29			75	20			95	S	>50
BH2	1.20	1.65	1.20	Dry	LSI3	2	4	75	75	6	8	9	12	75	75	75	75	300	C	35
BH2	2.00	2.45	1.70	Dry	LSI3	2	4	75	75	4	4	5	2	75	75	75	75	300	S	15
BH2	3.00	3.45	3.00	Dry	LSI3	3	3	75	75	5	7	9	10	75	75	75	75	300	S	31
BH2	4.00	4.32	4.00	Dry	LSI3	5	11	75	75	12	19	19		75	75	20		170	S	>50
BH2	5.00	5.32	4.70	Dry	LSI3	5	8	75	75	16	32	18		75	75	20		170	S	>50
DCS1	1.20	1.65			DART400	3	4	75	75	3	3	3	3	75	75	75	75	300	S	12
DCS1	2.00	2.45			DART400	1	1	75	75	3	7	6	7	75	75	75	75	300	S	23
DCS1	3.00	3.45			DART400	5	6	75	75	5	6	6	6	75	75	75	75	300	S	23
DCS1	4.00	4.45			DART400	5	6	75	75	7	6	7	7	75	75	75	75	300	S	27
DCS1	5.00	5.32			DART400	10	13	75	75	18	22	10		75	75	20		170	S	>50
DCS2	1.20	1.65			DART400	2	2	75	75	2	2	2	2	75	75	75	75	300	S	8
DCS2	2.00	2.45			DART400	3	3	75	75	5	6	7	7	75	75	75	75	300	S	25
DCS2	3.00	3.45			DART400	3	3	75	75	4	3	4	5	75	75	75	75	300	S	16
DCS2	4.00	4.44			DART400	8	9	75	75	10	12	14	14	75	75	75	60	285	S	>50
DCS3	1.20	1.65			DART400	1	1	75	75	1	1	1	1	75	75	75	75	300	S	4
DCS3	2.00	2.45			DART400	1	2	75	75	2	2	3	5	75	75	75	75	300	S	12
DCS3	3.00	3.41			DART400	15	10	75	60	12	12	15	11	75	75	75	50	275	S	>50

Notes:
1. Test carried out in general accordance with BS EN ISO 22476-3:2005
2. N values have not been subjected to any correction.
3. Test carried out using split spoon S, or solid cone C.

APPLiED GEOLOGY

Driven Continuous Sampling

SPT Hammer Energy Test Report

in accordance with BSEN ISO 22476-3:2005

ARCHWAY ENGINEERING
AINLEYS INDUSTRIAL ESTATE
ELLAND
WEST YORKSHIRE
HX5 9JP

SPT Hammer Ref:	DART400
Test Date:	02/02/2018
Report Date:	02/02/2018
File Name:	DART400.spt
Test Operator:	RM

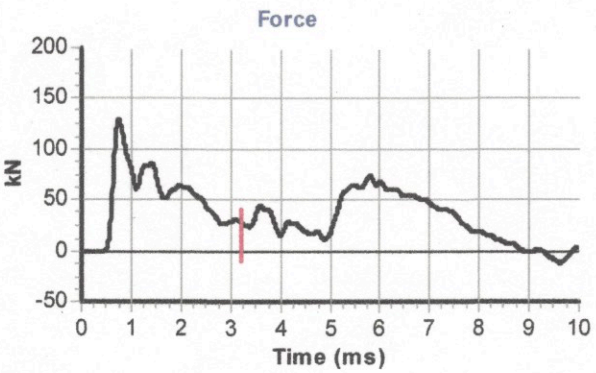
Instrumented Rod Data

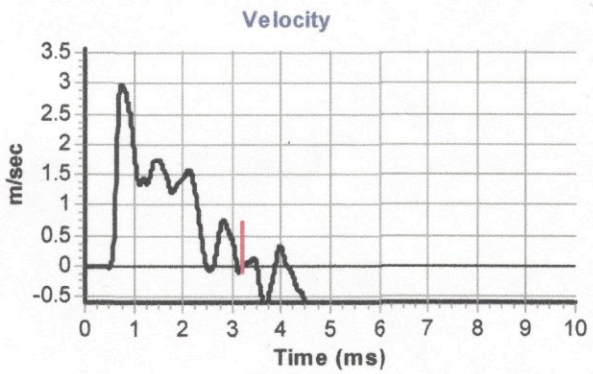
Diameter d_r (mm):	54
Wall Thickness t_r (mm):	6.3
Assumed Modulus E_a (GPa):	200
Accelerometer No.1:	7080
Accelerometer No.2:	11609

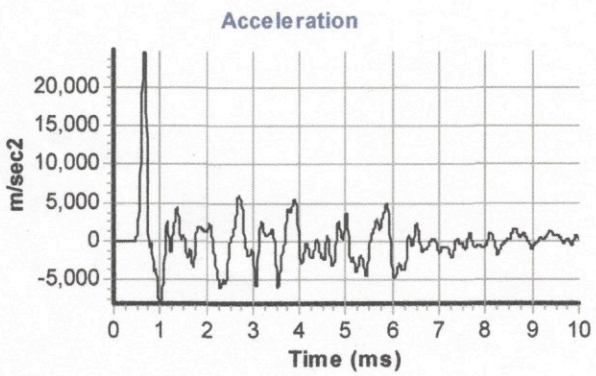
SPT Hammer Information

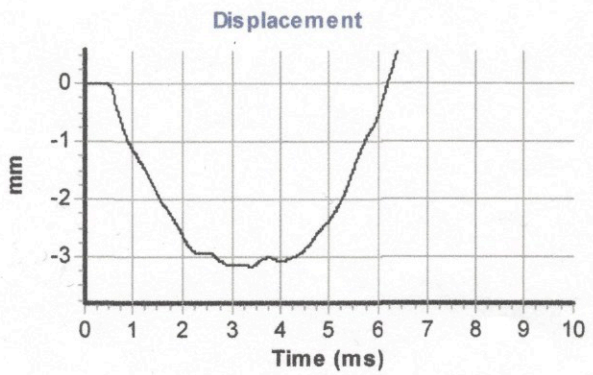
Hammer Mass m (kg):	63.5
Falling Height h (mm):	760
SPT String Length L (m):	10.0

Comments / Location









Calculations

Area of Rod A (mm2):	944
Theoretical Energy E_{theor} (J):	473
Measured Energy E_{meas} (J):	239

Energy Ratio E_r (%): **51**

M. Gardner

Signed: M.GARDNER
Title: FITTER

The recommended calibration interval is 12 months

Exploratory Hole Log Key Sheet

Sample Notation

D	Small Disturbed sample
B	Bulk Disturbed sample
ES	Environmental sample
U	Undisturbed U100 sample
UT	Undisturbed UT100 sample
C	Core sample
W	Water sample

In Situ Test Notation

S	Standard Penetration Test
S (C)	Standard Penetration Test (cone)
HV	Hand Shear Vane Test
PID	Photoionization Detector Test
MEXE	Mexecone Cone Penetrometer Test
PP	Pocket Penetrometer Test
K	Permeability Test

Results Notation

Cu	Shear Strength	kN/m^2
N	SPT N Value	-
PID	VOC Concentration	ppm
( )	U/UT Blow Count	-

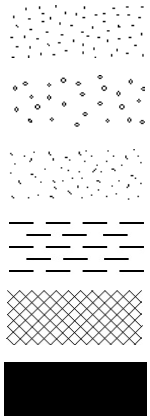
Rotary Core Notation

TCR	Total Core Recovery
SCR	Solid Core Recovery
RQD	Rock Quality Designation
FI	Fracture Index
If	Fracture Spacing
NI	Non Intact
NR	No Recovery
NA	Not Applicable

Ease of Dig

VE	Very Easy
E	Easy
M	Moderate
H	Hard
VH	Very Hard

Backfill Symbols



Sand

Gravel

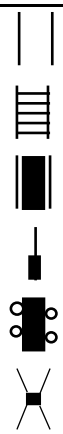
Concrete

Bentonite

Arisings

Grout

Installation Symbols



Plain Standpipe

Slotted Standpipe

Piezometer

Vibrating Wire Piezometer

Inclinometer

Extensometer
(with magnet locations)

Groundwater (GW)

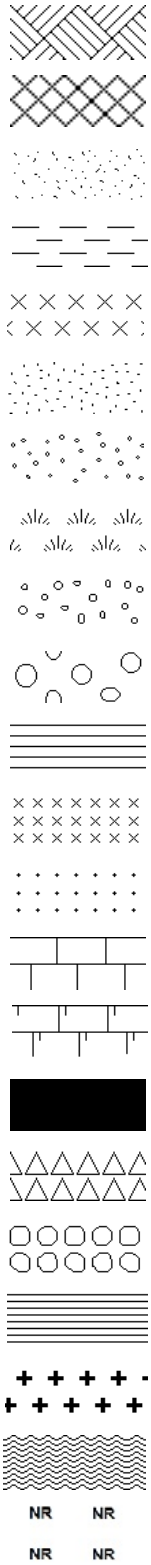
Rise

Groundwater Strike -
with Recorded Rise

Strike

Groundwater Strike -
No Recorded Rise

Legend Symbols



Topsoil

Made Ground

Concrete

Clay

Silt

Sand

Gravel

Peat

Cobbles

Boulders

Mudstone

Siltstone

Sandstone

Limestone

Chalk

Coal

Breccia

Conglomerate

Shale

Igenous Rock

Metamorphic Rock

NR NR
NR NR

No Recovery

Note: Most soils comprise a mixture of particle sizes. The soil type is graphically represented on the log and may be a combination of these symbols.

General Notes

1. Details of the standpipe/piezometer are given on the log. The 'Install' column shows a graphical representation of the installed including depth of instruments including slotted section or piezometer depth, and backfill details.

2. Standard Penetration Test is defined in BS EN ISO 17892. Total N value is shown on the logs, full details of the test increments, equipment references, water and casing levels shown on the SPT Summary Sheet.

APPLiED GEOLOGY