



Appendix B BGS Borehole Logs

Acc. ID. 15606204
ST. ID. 15606216

COMMERCIAL IN CONFIDENCE

ACCESSION NUMBER

SI 21306

RAEBURN DRILLING & GEOTECHNICAL LIMITED **BOREHOLE RECORD**

CONTRACT NO. 17530
LOCATION BRAEFoot ROAD
RIG TYPE BONES
DATE STARTED 7/7/04
INITIAL WATER LEVEL
BIT SIZE

BOREHOLE NO. 1
SHEET NO. ①
FLUSH TYPE
DATE FINISHED
DEPTH Cased
TOTAL DEPTH

STRATA DESCRIPTION	DEPTHS		THICKNESS	RECOVERY	CORE RL	
	FROM	TO			FROM	
Soil	0 00	0 10				
Clay fill		0 80				
Brown sandy clay		4 20				
Boulder clay		8 20				
COAL		8 30				
Start coring at 8 30 m						
COAL, fresh bright, broken		8 35		300	830	1130
Mudstone dark grey SILTY mudstone		9 35		300		14 20
fresh, silty to base				200		17 20
Mudstone strong grey SILTSTONE		12 50		0/4 300		18 20 21 00
fresh, with disturbed bioturbated				30.5		24 05
sandy laminae, burrowed + rooty				30.5		27 10
Mudstone poorly bedded grey		12 75		300		30 10
SILTY mudstone, fresh, roots.						
COAL fresh bright some dull		13 00	0 25			
laminae dip 8°						
Mudstone ripple laminated		14 90				
pale grey fine-medium						
grained SANDSTONE, fresh						
many silty bands + laminae						
rooty some ? burrows						
Mudstone strong grey SILTSTONE,		15 80				
slight rust staining, sandy						
laminae; plants.						
No recovery (driller records		17 20				
Air Loss + Waste 15 80 to 17 20)						



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

BGS ID: 15637684 : BGS Reference:
NT08SW222

NT08SW222

British National Grid (27700) : 300279,680157

[Report an issue with this borehole](#)

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[illegible]



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

BGS ID: 15637685 : BGS Reference:
NT08SW223

NT08SW223

British National Grid (27700) : 300281,680128

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RAEBURN DRILLING & GEOTECHNICAL LIMITED BOREHOLE RECORD

CONTRACT NO. 17530 BOREHOLE NO. 4
 LOCATION BRAEFoot ROAD SHEET NO. ①
 RIG TYPE BONESS FLUSH TYPE _____
 DATE STARTED 8/7/04 DATE FINISHED _____
 INITIAL WATER LEVEL _____ DEPTH CASSED _____
 BIT SIZE _____ TOTAL DEPTH _____

S McLean

STRATA DESCRIPTION	DEPTHS		THICKNESS	RECOVERY	CORE RUN	
	FROM	TO			FROM	TO
Soil	0 00	0 10				
Clay fill		3 00				
Brown sandy clay		9 90				
Sandstone		10 00				
Start coring at 10.00m						
Mod strong & strong, coars & ripple laminated pale grey medium grained SANDSTONE slightly weathered, rust stained patches, becoming coarser grained to base, sharp base		13 25		180	10 00	11 80
COAL, slight rust staining, bright with dull laminae		13 45	0 20	270		14 50
Mod weak grey SEAT mudstone, slightly weathered, coaly laminae at top, some silty & sandy bands		14 80		0/H		15 00
Mod strong grey SILTSTONE some slight rust staining, lenticular disturbed sandy laminae, barrows		19 30		305		18 05
Sandstone band 17 10 to 18 35, COAL, considerable rust staining, bright with dull laminae		19 55	0 25	300		21 05
Mod weak, grey SEAT SILTSTONE		19 75		160		23 80
Mod strong & strong, ripple laminated pale grey, medium grained SANDSTONE, hard many dark micaceous laminae		21 55				
Mod strong grey SILTY mudstone, fine, sandy laminae, plants, burrowed to base		22 15				

RAEBURN DRILLING & GEOTECHNICAL LIMITED
BOREHOLE RECORD

CONTRACT NO.....
 LOCATION..... BRAEFoot ROAD
 RIG TYPE.....
 DATE STARTED.....
 INITIAL WATER LEVEL.....
 BIT SIZE.....

BOREHOLE NO..... 4
 SHEET NO..... (2)
 FLUSH TYPE.....
 DATE FINISHED.....
 DEPTH CASED.....
 TOTAL DEPTH.....

STRATA DESCRIPTION	DEPTHS		THICKNESS	RECOVERY	CORE RUN	
	FROM	TO			FROM	TO
30 mins recovered of weak very weak brown clay & dark mudstone friable Driller records total Air Loss COAL, highly rust stained, mostly bright Open hole driller records hard	22 15	23 40				
		23 80	0 40			
		24 00				
T.D. 24 00						



Appendix C Coal Authority Report & Shaft Plan & Data Sheets



The Coal
Authority

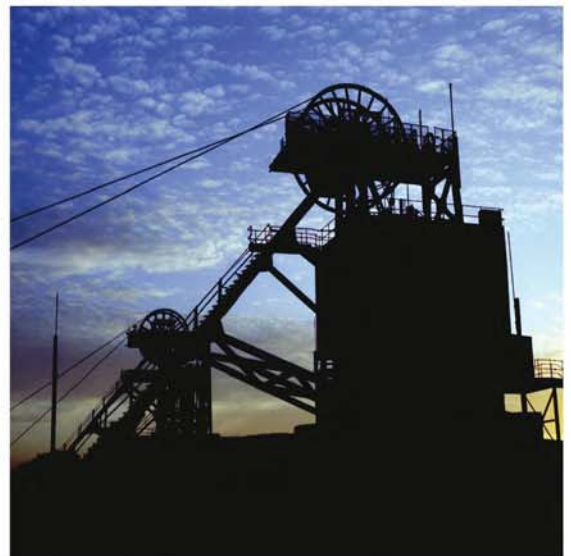
Resolving the **impacts** of mining

CON29M Non-Residential Mining Report

BRAEFoot ROAD
BO'NESS
FALKIRK
EH51 9TX

Date of enquiry: 31 May 2017
Date enquiry received: 31 May 2017
Issue date: 31 May 2017

Our reference: 51001461955001
Your reference: MM11356



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

MM-EC Geoenvironmental

Enquiry address

BRAEFoot ROAD, BO'NESS, FALKIRK, EH51 9TX

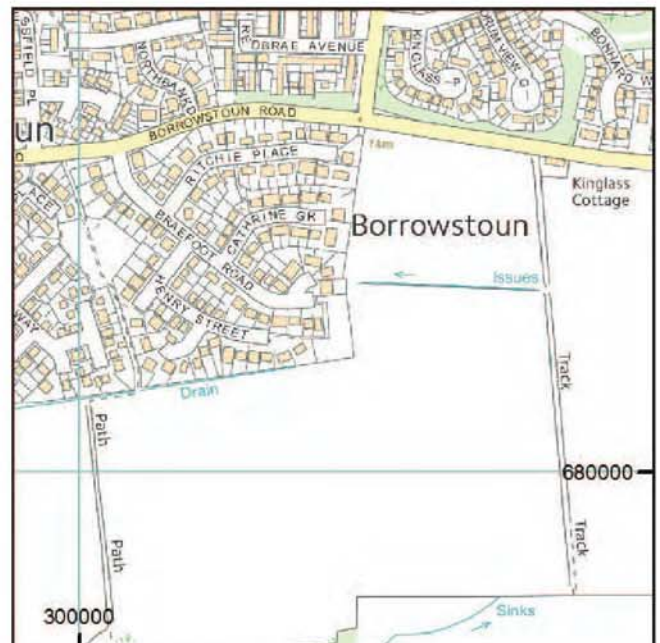
How to contact us

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Approximate position of property



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Summary

Has the search report highlighted evidence or potential of		
1	Past underground coal mining	Yes
2	Present underground coal mining	No
3	Future underground coal mining	Yes
4	Mine entries	Yes
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

Further recommended reports
Mine entry interpretive report
Mine entry plan and data sheets

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 4 seams of coal at 130m to 200m depth, and last worked in 1900.

Any movement in the ground due to coal mining activity should have stopped.

In addition the property is in an area where the Coal Authority believe there is coal at or close to the surface. This coal may have been worked at some time in the past. The potential presence of coal workings at or close to the surface should be considered prior to any site works or future development activity. Your attention is drawn to the Comments on the Coal Authority information section of the report.

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

Within, or within 20 metres of, the boundary of the property there are 2 mine entries, the approximate positions of which are shown on the enquiry boundary plot.

There is no record of what steps, if any, have been taken to treat the mine entries.

There may however be mine entries/additional mine entries in the local area which the Coal Authority has no knowledge of.

For an additional fee, the Coal Authority can provide a Mine Entry Interpretive Report. The report will provide a separate assessment for the mine entry/entries referred to in this report. It gives an opinion on the likelihood of mining subsidence damage caused from ground movement as a consequence of the mine entry/entries. It also gives details of the remedies available for subsidence damage where the mine entry was sunk in connection with coal mining.

Please note that it may not be possible to produce a report if the main building to the property cannot be identified from Coal Authority plans (ie for development sites and new build).

For further advice on how to order this additional information please visit www.groundstability.com.

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, since 31 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.

Comments on the Coal Authority information

The Coal Authority own the copyright in this report and the information used is protected by our database right.

The boundary plot shows the approximate location of the disused mine entry/entries referred to in this report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

Property owners have the benefit of statutory protection (under the Coal Mining Subsidence Act 1991*). This contains provision for the making good, to the reasonable satisfaction of the owner, of physical damage from disused coal mine workings including disused coal mine entries. A leaflet setting out the rights and obligations of either the Coal Authority or other responsible persons under the 1991 Act can be obtained by visiting www.groundstability.com.

If you wish to discuss the relevance of any of the information contained in this report, you should seek the advice of a qualified mining engineer or surveyor. If you or your advisor wish to examine the source plans from which the information has been taken, these are available to view, free of charge, at our Head Office in Mansfield. To book an appointment please ring 01623 637225. Should you or your advisor wish to carry out a physical investigation that may enter, disturb or interfere with any disused mine entry, prior permission of the owner must be sought. For coal mine entries, the owner will normally be the Coal Authority.

The Coal Authority, regardless of responsibility and in conjunction with other public bodies, provide an emergency call out facility in coalfield areas to assess the public safety implications of mining features (including disused mine entries). Our emergency telephone number is 01623 646333.

*Note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore if development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before

beginning work on site. All proposals should apply good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. 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.

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Alternative formats

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

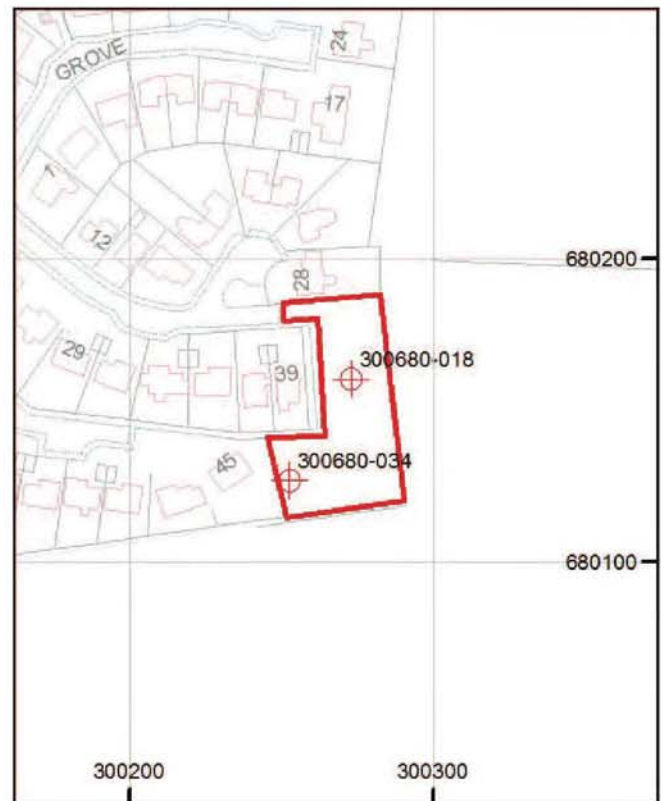
Enquiry boundary

Key

Approximate position of enquiry boundary shown



Disused mineshaft




How to contact us

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VAT receipt

Issued by	The Coal Authority 200 Lichfield Lane Mansfield Nottinghamshire NG18 4RG
Tax point date	31 May 2017
Issued to	MM-EC GEOENVIRONMENTAL 11 WESTERHILL PERTH PH1 1DH
Property search for	BRAEFOOT ROAD BO'NESS FALKIRK EH51 9TX
Reference number	51001461955001
Date of issue	31 May 2017
Cost	£78.30
VAT @ 20%	£15.66
Total received	£93.96
VAT registration	598 5850 68



The Coal
Authority

Issued by:

The Coal Authority, Property Search Services, 200 Lichfield Lane, Berry Hill, Mansfield, Nottinghamshire, NG18 4RG
Website: www.groundstability.com Phone: 0345 762 6848

**MM-EC GEOENVIRONMENTAL
11 WESTERHILL
PERTH
PH1 1DH**

Our reference:	51001461955002
Your reference:	MM11356
Date of your enquiry:	31 May 2017
Date we received your enquiry:	31 May 2017
Date of issue:	05 June 2017

This report is for the property described in the address below and the attached plan.

Shaft Plan and Data Sheets

BRAEFOOT ROAD, BO'NESS, FALKIRK, EH51 9TX

I refer to the enquiry dated 31 May 2017, received 31 May 2017, in connection with the above.

As requested I enclose the mine entry data sheet(s) held for the mine entry/entries referred to.

Mine Entry Data

Shaft/adit:	Shaft
Reference:	300680-018
Source:	Ab Plan:S2308 Other:Area Shaft Register.
Colliery name:	Unknown
Entry name:	Old Shaft
Date abandoned:	Unknown
Depth of superficial deposits (m):	Unknown
Depth of shaft (m):	Unknown
Diameter of shaft (m):	Unknown
Probable adit azimuth:	Not Applicable
Treatment details:	Unknown
Conveyance:	Not Applicable
Easting:	300273
Northing:	680160
Other information:	None

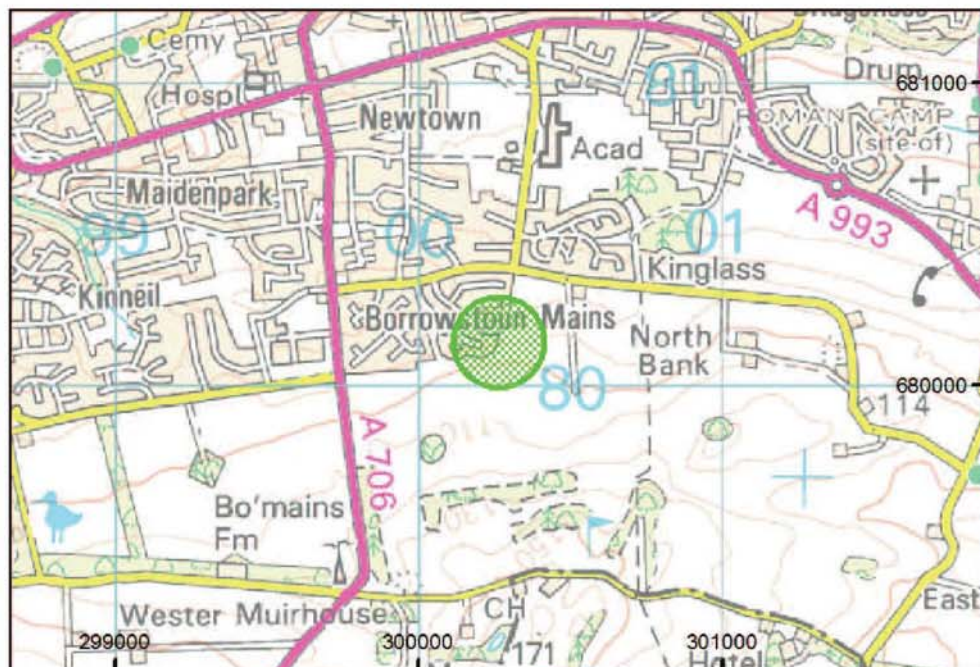
Mine Entry Data (continued)

Shaft/adit:	Shaft
Reference:	300680-034
Source:	Ab Plan:S4580 S3224 S4322/2 S4581 Geol:1/4 geological sheet
Colliery name:	Unknown
Entry name:	Unknown
Date abandoned:	Unknown
Depth of superficial deposits (m):	Unknown
Depth of shaft (m):	Unknown
Diameter of shaft (m):	Unknown
Probable adit azimuth:	Not Applicable
Treatment details:	Unknown
Conveyance:	Not Applicable
Easting:	300253
Northing:	680127
Other information:	None

Issued by:	The Coal Authority, 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG
Tax Point Date:	31 May 2017
Issued to:	MM-EC GEOENVIRONMENTAL 11 WESTERHILL PERTH PH1 1DH
Property Search for:	BRAEFOOT ROAD, BO'NESS, FALKIRK, EH51 9TX
Reference Number:	51001461955002
Date of Issue:	05 June 2017
Cost:	£51.92
VAT @ 20%:	£10.38
Total Received:	£62.30
VAT Registration	598 5850 68

Location map

Approximate position of enquiry



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This plan shows the approximate location of the disused mine entry / entries referred to in the attached mining report. For reasons of clarity, mine entry symbols may not be drawn to the same scale as the plan.

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Our emergency telephone number is 01623 646333.

Key

Disused Adit or Mineshaft

