

C M Edwards
Pendil
Llangollen Road
Acrefair
LL14 3RS

0209
14 August 2002

Dear Sir,

Adj Pendil, Llangollen Road, Acrefair

Report on mining investigation.

I enclose three copies of my mining investigation report for this site.

This report is on a detailed investigation meeting NHBC D5. Further remedial work will be necessary on the site before NHBC Validation Report D7 can be completed.

If you have any queries regarding this report, please let me know. To comply with the Indemnity Form issued by the Coal Authority, a copy of this report has been sent directly to their offices at Mansfield.

Yours faithfully,

Neil Catlow

Nkc Geotech Ltd

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Mining Investigation Report



Adj Pendil, Llangollen Road, Acrefair

0209
14 August 2002

C M Edwards
Pendil
Llangollen Road
Acrefair
LL14 3RS
3 0209 14 August 2002

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extract

This report meets NHBC D5 Detailed Investigation requirements
The site is undermined by old workings etc

Site

A plot for one dwelling at Adj Pendil, Llangollen Road, Acrefair

Investigation and site work by

Neil Catlow B.Sc F.G.S Engineering geologist.

Records inspected

Coal Authority at Mansfield.

Geological Survey.

My previous investigations in this vicinity.

Investigation results

Ground level

Unchanged throughout the investigation.

Site history

The site was formerly a domestic garden.

Contamination

Contamination testing is in progress, and the results and interpretation will be included in the final report.

Gas testing

There were no methane or carbon dioxide emissions during the investigation period. See borehole logs for gas testing results.

Radon

The site lies in an area susceptible to radon. Radon can only be accurately detected over a three month test period, beyond the scope of this investigation. Precautions against radon accumulation should be taken in the absence of evidence of no radon presence.

Foundation soils

Colliery derived shale fill upto 1.0m in thickness overlying brown sandy clay. Grey shale rockhead at predominantly 3.0m. See borehole logs for SPT testing results.

Shallow mineworkings

Predominantly collapsed pillar & stall workings in the Yard Coal at 13.5m.
See log for Bh1.

Disused mineshafts

There are no records of any shafts on the site, but the Yard Coal workings are shallow and old unrecorded shafts might be present.

Hazard management

There are old and unrecorded mineworkings present in the Yard Coal. Subsidence of these workings could cause crown holes to be formed on the site, with dimensions of upto 1.4m deep and 1.9m diameter. There may also be old and unrecorded mineshafts upto 2.0m in diameter present under the fill.

Ground improvement

Stabilise the mineworkings by grouting to prevent further void migration under the proposed buildings.

and

Specialist foundations

Use a structural foundation designed to span 3.0m in case there are old infilled crown holes and unrecorded shafts present.

Contamination

Contamination results will follow in the final report

For Nkc Geotech Ltd



Neil Catlow, B.Sc. F.G.S

Borehole plan

Scale 1:200

Disused railway

Pendil

Bh 1

Brookmount
Terrace

N

Llangollen Road

Bh 1

REF Bh 1	0209	SITE CLIENT	Adj Pendil, Llangollen Road, Acrefair Mr Edwards	DATE SCALE OSGN	14 August 2002 1:200
		TITLE	n/a	ORIENTATION FLUSH BIT	vertical water 1/c 75mm
		ORIGIN	printout direct from rig on site drilled & logged by Neil Catlow	SPT N value	SECTION
DEPTH	STRATA	GRAPHIC	DESCRIPTION		
0.0	0.0		gray shale		ground level
0.5					
1.0	1.1		brown sandy, firm	8 @ 1.0m	
1.5				9 @ 2.0m	
2.0				15 @ 3.0m	
2.5					
3.0	3.0		dark grey, soft drilling with black shale layers		rockhead
3.5					
4.0					
4.5					
5.0					
5.5					
6.0					
6.5					
7.0					
7.5					
8.0					
8.5					
9.0	9.2		black, soft drilling		
9.5					
10.0	10.1		dark grey, soft drilling		
10.5					
11.0					
11.5					
12.0					
12.5					
13.0	13.2		black, loose and soft		
13.5					
14.0					
14.5	14.5		gray, firm drilling		old workings in Yard Coal
15.0					
15.5					
16.0					
16.5					
17.0					
17.5					
18.0					
18.5					
19.0					
19.5					
20.0					
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24.5					
25.0					
25.5					
26.0					
26.5					
27.0					
27.5					
28.0					
28.5					
29.0					
29.5					
30.0	30.0		bottom of hole		

IN HOLE GAS TESTING

% oxygen	20.7
% methane	0.0
% carbon dioxide	0.0
% LEL	0.0

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