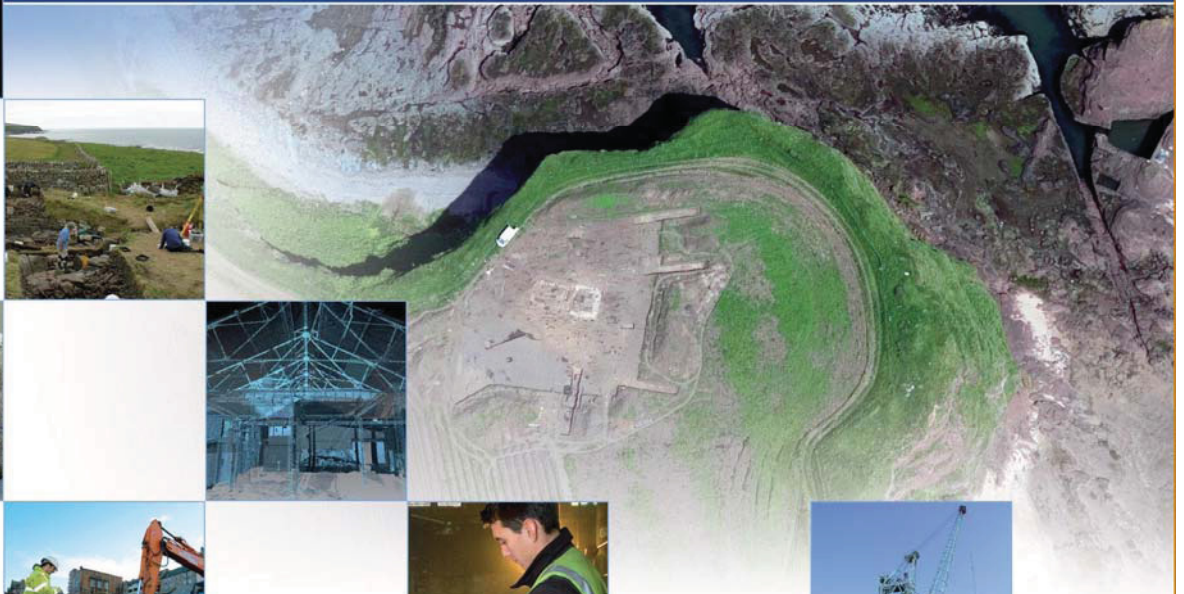


Cragmill Quarry Extension: Archaeological Evaluation Report

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AOC 21923

17th October 2012



ARCHAEOLOGY

HERITAGE

CONSERVATION

Cragmill Quarry Extension: Archaeological Evaluation Report

On Behalf of:	Cemex UK Ltd Tannochside Park Uddingston Scotland G71 5PH
National Grid Reference (NGR):	NU 1075 3470
AOC Project No:	21923
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Date of Evaluation:	9th to 10th of October
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This document has been prepared in accordance with AOC standard operating procedures.

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Non-Technical Summary

This report presents the results of an archaeological evaluation undertaken by AOC Archaeology Group on the site of a proposed extension and railway sidings at Cragmill Quarry, Northumberland.

The archaeological evaluation comprised the machine excavation of thirty two linear trenches, totalling 6064 m² (basal) across the development.

A series of rubble filled drains were identified during the course of the work, no other significant features were found.

1. INTRODUCTION

1.1 Reasons for the project

- 1.1.1 AOC Archaeology Group was commissioned by Cemex UK Ltd, to undertake an archaeological evaluation at Cragmill Quarry, Belford, Northumberland (centred on NGR: NU 1075 3470; Figure 1) in advance of an outline planning application for the extension of quarrying and new railhead facilities on the site.
- 1.1.2 The evaluation follows on from an environmental impact assessment, undertaken by AOC Archaeology Group in 2012. This identified that there are two sites of probable archaeological significance within the development area. The first, a well recorded on the first edition of the Ordnance Survey is of local significance, the second is a possible cropmark site, identified through aerial photography, is amorphous and may be of natural origin (AOC, 2012).

1.2 Location and topography

- 1.2.1 The site comprises an area of greenfield covering approximately 29ha and located 500m north of the settlement at Belford, Northumberland, and the grounds of Belford Hall, a Grade 1 listed property with an extensive designed and landscaped gardens. The site is bounded by open agricultural land to the north, and by the existing quarry to the south.

1.3 Project parameters

- 1.3.1 The project conforms to the *Standard and guidance for archaeological field evaluation* (IFA 1994, rev. 2008). The project was conducted in accordance with a Written Scheme of Investigation (AOC 2012), approved in advance of work by Northumberland County Council Conservation Team (NCCCT).

2. AIMS & OBJECTIVES

- 2.1 The aims of the archaeological evaluation were to identify significant archaeological structures, features or deposits and to determine, if present, their extent, state of preservation, date, type and vulnerability to disturbance. The purpose of this was to determine their significance so as to inform any future planning application relating to the land and any associated archaeological mitigation strategy.
- 2.2 The general objectives of the archaeological evaluation were:
- i) to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.
 - ii) given the discovery of highly significant archaeological material in quantity that that will suffer an adverse impact from construction works (ie preservation *in situ* is impractical), the development of a mitigation strategy to be formulated with NCCCT.

3. METHODOLOGY

3.1 Fieldwork

- 3.1.1 Initially 32 linear trenches (Trenches 1 – 32) were excavated using a 360° tracked excavator equipped with a toothless ditching bucket. The trenches covered a total basal area of 6064 m².
- 3.2.2 Excavation of the evaluation trenches was conducted in shallow spits until the first significant archaeological horizon or the natural geology was reached. All machine excavation was supervised by an experienced field archaeologist.
- 3.2.3 Any potential archaeological features were cleaned by hand and then hand excavated to determine their nature and to retrieve artefactual and environmental samples where appropriate. For all investigated features, an adequate proportion was excavated to satisfy the aims of the project.
- 3.2.4 The trenching and recording was undertaken according to AOC Archaeology Group's standard operating procedures, as outlined in the specification (AOC Archaeology 2012, Appendix 7, 7.15-7.25).
- 3.2.5 All trenches were surveyed using a Trimble RS differential GPS and related to nearby landscape features. Levels were taken across all trenches. On completion of the evaluation, all trenches were backfilled.

3.3 Structural analysis

- 3.3.1 All fieldwork records were checked and cross-referenced. Stratigraphic relationships were also checked once fieldwork was completed. Structural and artefactual evidence was considered in combination with the results of documentary research. This analysis provides the basis of the narrative in Sections 5 and 6.

3.4 Artefact recovery and methodology

- 3.4.1 The artefact recovery policy conformed to AOC Archaeology's standard operating procedures (AOC Archaeology 2008d, Appendix 7, 7.26-7.29). In the event, few artefacts were observed and all were clearly late post-medieval or modern in date. Unstratified, modern artefacts were noted but not retained.

3.5 Environmental methodology

- 3.5.1 The environmental sampling methodology conformed to AOC Archaeology's standard operating procedures (AOC Archaeology 2012, Appendix 7, 7.11) and was confirmed in advance by Dr. Jacqui Huntley, the English Heritage Advisor for North East England. A list of the contexts sampled is given below.

4. ARCHAEOLOGICAL AND HISTORICAL CONTEXT

- 4.1.1 An environmental impact assessment had been undertaken (AOC 2012). This identified that there were two known archaeological sites within the development area, a late post-medieval well and an unidentified cropmark. The extension to the quarry and the proposed area for the new railway sidings have lain relatively undisturbed since at least the late 18th century. The EIA suggested a moderate chance for prehistoric activity on the site, with Mesolithic flint scatters at nearby Chapel Hill, and also due to the proximity of the scheduled enclosure at Kippy Heugh, which is thought to be Late Iron Age in date. There was no evidence for Romano British activity either within the bounds of the site or within the 1.5km² catchment area for the study (AOC, 2012).



Plate 1 - Trench 20 Post-Ex

5. RESULTS

5.1 Statement of confidence

- 5.1.1 The fieldwork was undertaken between Tuesday 9th and Friday 12th of October 2012. Weather conditions were bright and sunny, and ample opportunity was had to examine the bases of all trenches and archaeological visibility was generally good. The conditions and the methodologies adopted therefore allow a high degree of confidence that the aims of the project have been achieved.
- 5.1.2 The trenches and features recorded are shown in Figures 1 and 2 and Plate 1. The results of the structural analysis are presented in Appendix 1. The following sections should be read in conjunction with these data.

5.2 Natural deposits

- 5.2.1 Natural deposits were exposed in all trenches and consisted of red/orange clays with frequent small and medium sized stones and occasional larger stones.
- 5.2.2 The entire field was covered in wheat stubble and plough soil between 0.25 m and 0.50 m in depth, depending on the local topography. Unstratified artefactual material was rare, but some white ceramic of late date was observed within the topsoil but not collected.

5.3 Features of Unknown Date

- 5.3.1 Several field drains were encountered. These could not be dated, but are thought to be post-medieval; being analogous with other post-medieval rubble drains found across Scotland and Northern England.

6. CONCLUSIONS

- 6.1 The evaluation demonstrated the presence of neither significant archaeological features nor artefacts on the site. The balance of probability suggests, therefore, that the proposed development site is archaeologically sterile.

7. ACKNOWLEDGEMENTS

- 7.1 AOC Archaeology would like to thank Alan Black and Linzi Mcdade (Cemex UK Ltd) and Nick Best (NCCCT) for their assistance in the successful conclusion of this project.
- 7.2 The project was managed by Martin Cook and the report written by Jake Streatfeild-James. Fieldwork was managed by Rob Engl. The illustrations were prepared by Stefan Sagrott.

8. SITE ARCHIVE

The archive consists of:

32	Trench record sheets
1	Photographic register sheets
29	Digital photographs

The project archive is intended to be deposited at:

Northumberland Museum and Archives
Queen Elizabeth 11 Country Park
Ashington
NE63 9YF

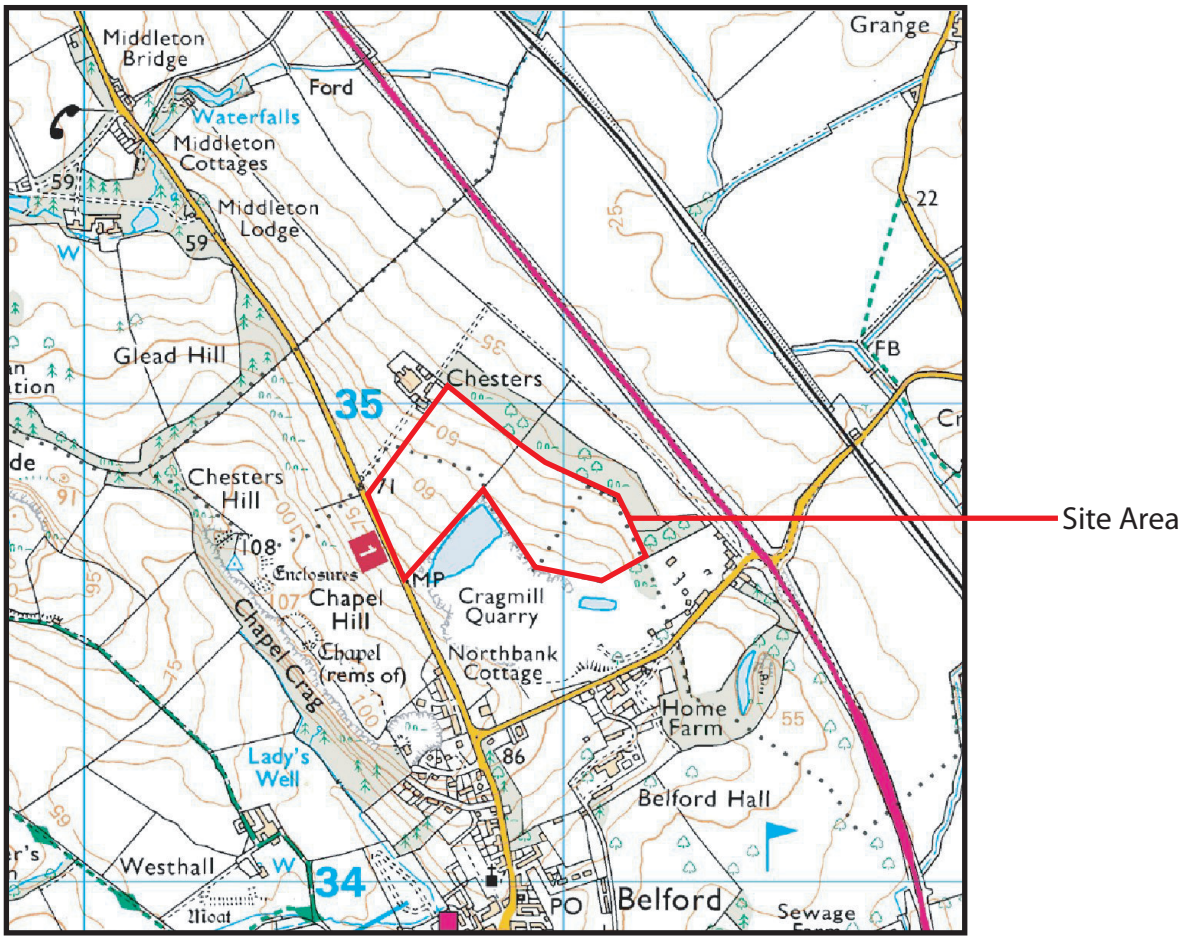
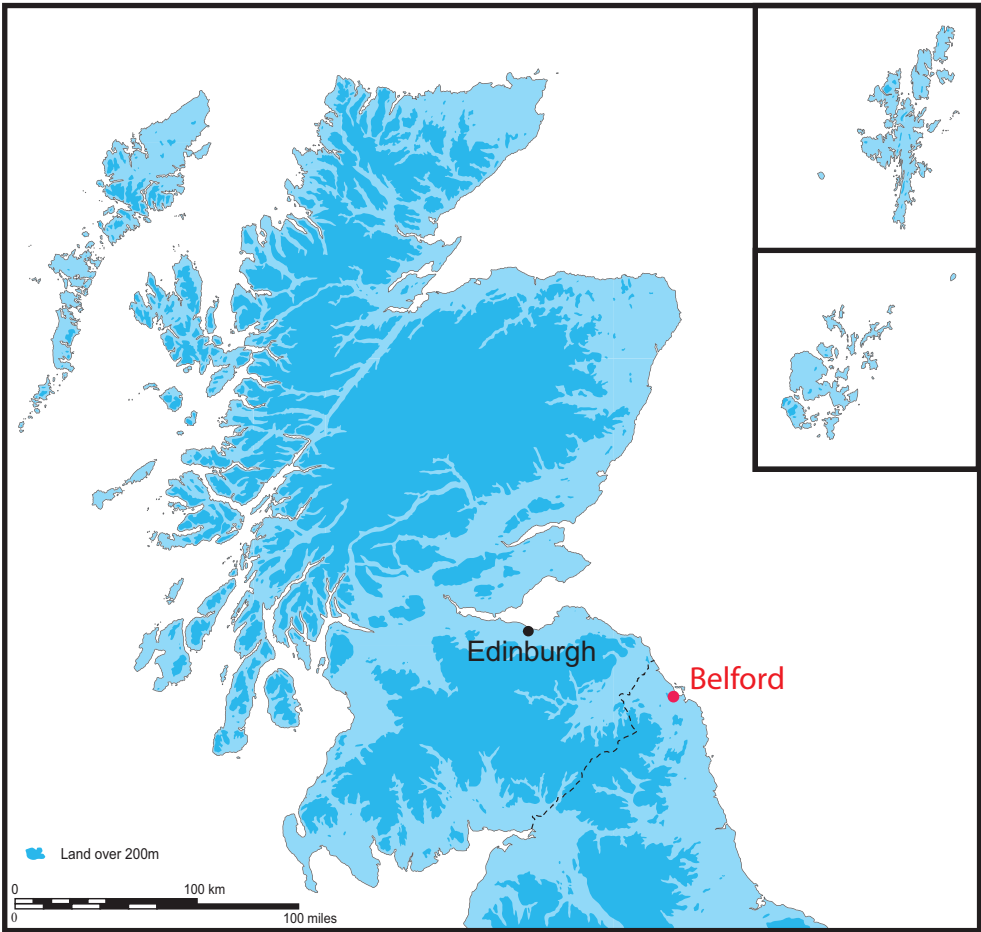
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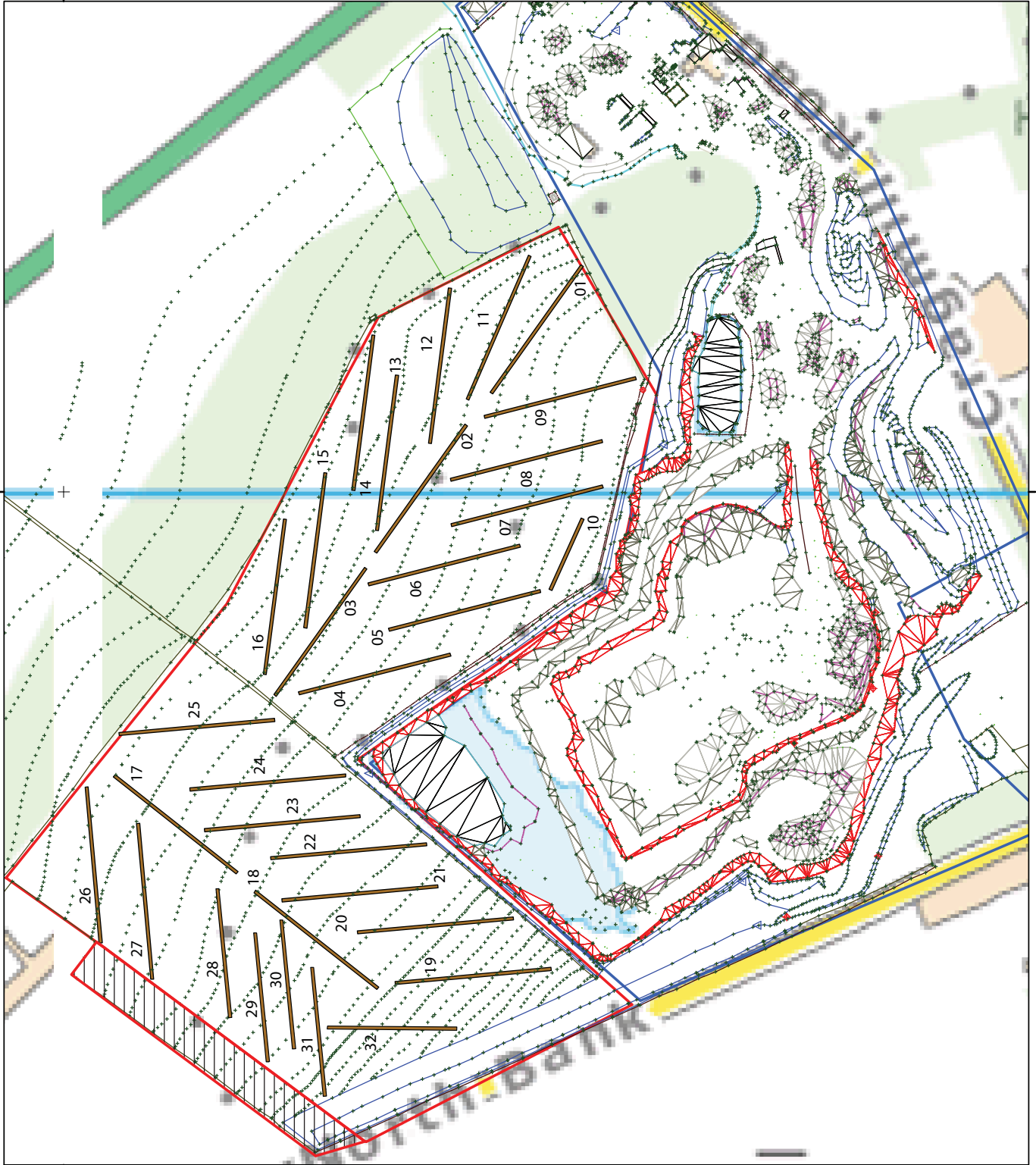
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Figure 1: Location of the site at Belford Quarry

Figure 2: Evaluation trench layout for Cragmill Quarry Extension



Cragmill Quarry Extension: Archaeological Evaluation Report

Appendices

APPENDIX 1

Trench summaries

Cragmill Quarry				AOC 21923			
Trench 1							
Length	100 m	Width	2 m	Depth	0.40	Alignment	SE-NW
<i>Soil Descriptions</i>							
Topsoil	V Stony red brown clay topsoil						
Subsoil	0.10 interface/plough zone						
Natural	Red boulder clay with occasional stone holes						
<i>Features</i>							
White ceramic recovered from topsoil							

Cragmill Quarry				AOC 21923			
Trench 2							
Length	100 m	Width	2 m	Depth	0.30	Alignment	NW-SE
<i>Soil Descriptions</i>							
Topsoil	Rd brown clay plough soil (heavy)						
Subsoil							
Natural	Pale brown clay						
<i>Features</i>							
Rubble drain at 75m - N-S							

Cragmill Quarry				AOC 21923			
Trench 3							
Length	100 m	Width	2 m	Depth	0.40	Alignment	NW-SE
<i>Soil Descriptions</i>							
Topsoil	Pale red brown clay plough soil						
Subsoil	0.10 horizon interface						
Natural	Pale brown clay						
<i>Features</i>							
Rubble drain N-S at 35m 40m 50m 75 and 80m							

Cragmill Quarry				AOC 21923			
Trench 4							
Length	100 m	Width	2 m	Depth	0.50	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 5							
Length	100 m	Width	2 m	Depth	0.50	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown clay						

<i>Features</i>	
Rubble drain at 60m NW-SE	
Outcrop of bedrock at 80-85m	

Cragmill Quarry				AOC 21923			
Trench 6							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown clay						
<i>Features</i>							
Outcrop of bedrock at 5m							
Occasional stone drags							

Cragmill Quarry				AOC 21923			
Trench 7							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown clay						
<i>Features</i>							
Exposed bedrock 0.10m from surface intermittently from 5m							
Rubble drain 15m NE-SW							

Cragmill Quarry				AOC 21923			
Trench 8							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Red clay						
<i>Features</i>							
Rubble drain at 20m NW-SE							
Clay drain at 25m NW-SE							
Clay drain at 80m NW-SE							
Clay drain at 90m NW-SE							

Cragmill Quarry				AOC 21923			
Trench 9							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Red clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 10							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Red clay						
<i>Features</i>							
Drain at 15m E-W							
Bedrock outcrop at 30m 0.10 below surface							

Cragmill Quarry				AOC 21923			
Trench 11							
Length	100 m	Width	2 m	Depth	0.50	Alignment	NW-SE
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Red clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 12							
Length	100 m	Width	2 m	Depth	0.50	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Clayey silt						
<i>Features</i>							
Bedrock at 10-20m							

Cragmill Quarry				AOC 21923			
Trench 13							
Length	100 m	Width	2 m	Depth	0.30	Alignment	W-E
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 14							
Length	100 m	Width	2 m	Depth	0.60	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
Rubble N-S at 20m							

Cragmill Quarry				AOC 21923			
Trench 15							
Length	100	Width	2	Depth	0.75	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
Colluvium 0.30 in depth red-brown Sandy clay silt at E end of trench Bedrock under 0.25m of topsoil for the remainder of the trench							

Cragmill Quarry				AOC 21923			
Trench 16							
Length	100 m	Width	2 m	Depth	0.75	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
From 80m Culluvium at a depth of 0.50m Rubble drains at 40m N-S and E-W							

Cragmill Quarry				AOC 21923			
Trench 17							
Length	100 m	Width	2 m	Depth	0.50	Alignment	NW-SE
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 18							
Length	100 m	Width	2 m	Depth	0.50	Alignment	NW-SE
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 19							
Length	100 m	Width	2 m	Depth	0.30	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 20							
Length	100 m	Width	2 m	Depth	0.50	Alignment	S-N
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural							
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 21							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 22							
Length	100 m	Width	2 m	Depth	0.50	Alignment	S-N
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 23							
Length	100 m	Width	2 m	Depth	0.40	Alignment	S-N
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 24							
Length	100 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 25							
Length	100 m	Width	2 m	Depth	0.30	Alignment	S-N
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Yellow clay – Pale Brown						
<i>Features</i>							
Obvious ploughmarks							

Cragmill Quarry				AOC 21923			
Trench 26							
Length	80 m	Width	2 m	Depth	0.30	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 27							
Length	100 m	Width	2 m	Depth	0.30	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
None							

Cragmill Quarry				AOC 21923			
Trench 28							
Length	78 m	Width	2 m	Depth	0.35	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						

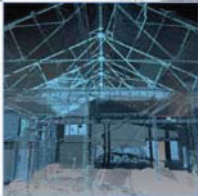
<i>Features</i>
<i>None</i>

Cragmill Quarry				AOC 21923			
Trench 29							
Length	80 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
<i>None</i>							

Cragmill Quarry				AOC 21923			
Trench 30							
Length	85 m	Width	2 m	Depth	0.50	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
<i>None</i>							

Cragmill Quarry				AOC 21923			
Trench 31							
Length	79 m	Width	2 m	Depth	0.40	Alignment	N-S
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
<i>None</i>							

Cragmill Quarry				AOC 21923			
Trench 32							
Length	80 m	Width	2 m	Depth	0.40	Alignment	E-W
<i>Soil Descriptions</i>							
Topsoil	Red brown heavy clay plough soil						
Subsoil							
Natural	Pale brown compact boulder clay						
<i>Features</i>							
<i>None</i>							



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