

Archaeological Evaluation Report



Ref: 100640.01 October 2013





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Summary

Wessex Archaeology was commissioned by CgMs Consulting Ltd to undertake a scheme of archaeological evaluation at Deanfield, Wakefield (43726 41991; hereafter 'the Site') as part of a planning application for surface coal mine.

The evaluation comprised trial trenching following on from a geophysical survey undertaken by ASWYAS (2012). The work was carried out in line with a Brief (WYAAS 2012) prepared by WYAAS, advisors to the planning authority.

A few archaeological features were found. Five former mining shafts were identified, with four clustered in the southeast corner of the site. Two 'V'-shaped ditches and a number of small undated gullies were recorded, with a minor cluster around Trenches 17 and 116. One of the 'V'-shaped ditches contained modern glass and pot in the upper fill. No archaeologically significant stratified finds were recovered.

The archive is currently held at the offices of Wessex Archaeology in Sheffield, under the project code 100640. The archive will be deposited with Wakefield M.D.C. Museums and Arts, Pontefract Museum under an accession number to be determined. An OASIS form will be submitted at the time of deposition.



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Acknowledgements

This project was funded by UK Coal Surface Mines and Wessex Archaeology are grateful to them in this regard. Rebecca Remmer of West Yorkshire Archaeological Advisory Service (WYAAS) monitored the work and Wessex Archaeology are grateful for her assistance. The evaluation fieldwork was carried out by Ashley Tuck, Mark Hackney, Jonathon Buttery, Laurence Savage, Tom Firth, Martina Tenzer and Chris Harrison. The report was compiled by Ashley Tuck and the illustrations produced by Chris Swales. Finds were assessed by Lorraine Mepham. Environmental analysis was undertaken by Sarah Wyles. The project was managed for Wessex Archaeology by Chris Swales.



Archaeological Evaluation Report

1 INTRODUCTION

1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned CgMs Consulting Ltd to undertake an archaeological trial trench evaluation at Deanfield, Wakefield (**Figure 1**), hereafter 'the Site' (centred on NGR 43726 41991). This work was undertaken as part of a planning application for a surface mine.
- 1.1.2 As a result, a Brief was prepared by WYAAS (2012), setting out a strategy and programme of archaeological work. It detailed a scheme of geophysical survey and trial trenching covering 2% of the total site. The geophysical survey was undertaken by ASWYAS (2012) and this report details the results of the trial trenching. CgMs (2012) produced a desk-based assessment which highlights the archaeological significance of the Site.

1.2 The Site

- 1.2.1 The Site is approximately 138 hectares and located west of New Sharlston. To the south is a railway line running approximately east to west. The Site is located north of Crofton and south of Warmfield. Doncaster Road runs east to west to the south of the railway line. The northern boundary is formed by the A655 Black Road, and Crossley Street and Cow Lane form the eastern boundary. A disused railway line marks the western side of the Site. The Site is a mixture of pasture land and cultivated agricultural land interspersed, especially along road lines, with some scrub. The Site slopes downhill from east to west with a prominence (60m OD) in the south west corner of the Site.
- 1.2.2 The Geology of the Site is Pennine Middle Coal Measure Mudstone, Siltstone and Sandstone. The soils are slow permeable seasonally wet acid loams and clays and fen peat soils. (http://www.bgs.ac.uk/education/geology of britain/home.html).

2 ARCHAEOLOGICAL BACKGROUND

2.1 Introduction

2.1.1 The following information is summarised from the Brief (WYAAS 2012).

2.2 Archaeological interest

2.2.1 The proposed Site lay in the centre of an area known to contain undesignated cropmark remains of a probable late prehistoric/Romano-British landscape. However, none of these remains have been identified within the boundary of the proposed Site. Two cropmark sites are situated immediately adjacent to the Site boundary these remains strongly suggested that the Site was likely to contain features of a similar date. One of these sites



is situated immediately south of the southern boundary and consists of a rectangular enclosure with an internal division and possible associated features, the other site is situated immediately west of the western boundary and consists of part of a field system with two associated enclosures; the surviving cropmark does suggest that this field system extends into the proposed development site.

- 2.2.2 Approximately 400m east of the Site boundary is a further cropmark site which consists of a large field system with associated enclosures. Beyond this feature the surrounding landscape is also dominated by the cropmark remains of a probable late prehistoric/Romano-British landscape of field systems, enclosures, lanes, pits and ditches.
- 2.2.3 The proposed Site lies in the centre of an area known to contain remains dating from the late prehistoric period onwards. These remains strongly suggest that the proposed development site is likely to contain features of a similar date, which have not shown up as crop marks on aerial photographs.
- 2.2.4 The desk based assessment (CgMs 2012) records evidence of medieval and post-medieval coal extraction from shallow workings (14th to 18th centuries) within the proposal area. In addition to any intrinsic information on the density, methods and technology used in working these pits, evidence may also be usefully compared with the results of archaeological excavations carried out at the nearby Sharlston Colliery which dates from the early 19th century. Evidence of early deep workings dating to the 18th and 19th centuries would also be of interest; in particular their drainage and haulage systems and any artefactual assemblages encountered.

3 METHODOLOGY

3.1 Aims and objectives

3.1.1 The aim of the evaluation was to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the area of interest. The information gained will allow the Planning Authority to make a reasonable and informed decision on the planning application as to whether archaeological deposits should be preserved in-situ, or more appropriately, be recorded prior to destruction (whether this be a summary record from a salvage excavation or watching brief, or a detailed record from full open area excavation).

3.2 Trench size and placement

- 3.2.1 The work was intended to involve the excavation of 123 trenches measuring either 100m by 2m or 50m by 2m. Four trenches were not excavated following on-Site discussion with Rebecca Remmer (WYAAS) and Myk Flitcroft (CgMs). These were **Trenches 100** and **159**, **160** and **161**, the latter three of which were in an area planted with osiers. In addition several trenches were extended slightly to fully expose the revealed features.
- 3.2.2 The location of **Trenches 1-34** were informed by the results of the geophysical investigation. These trenches were generally 50m long, but some were 100m. Trenches 100-189 were plotted in apparently blank areas in order to test 2% of the total area of the Site. These later trenches were all 100m in length (**Figure 2**).
- 3.2.3 A number of untargeted trenches were relocated in the field (**Figure 2**) to avoid overhead power cables, and to reduce the impact of the works to farmer's crops.



3.3 Fieldwork method

- 3.3.1 Topsoil and recent overburden was removed down to the first significant archaeological horizon in successive level spits of a maximum 0.2m thickness, by the use of an appropriate machine using a wide toothless ditching blade. The machine was not used to cut arbitrary trenches down to natural deposits. Machine work was carried out under direct archaeological supervision and the machine halted when archaeological deposits were encountered. The top of the first significant archaeological horizon was exposed by the machine, and was inspected for features, cleaned by hand and then dug by hand where appropriate.
- 3.3.2 All features identified were half-sectioned to the full depth of archaeological deposits with the exception of the exposed mine shafts which were augured for depth.
- 3.3.3 All artefacts were retained for processing and analysis except for unstratified 20th century material, which may be noted and discarded. Finds will be stored in secure, appropriate conditions in accordance with the relevant guidelines (Watkinson and Neal 1998).
- 3.3.4 The trenches were set out by means of a GPS system and tied into the Ordnance Survey grid.

3.4 Method of recording

- 3.4.1 The trenches were recorded according to Wessex Archaeology's recording guidelines and standard archaeological practice (IfA 2008). The stratigraphy of each area was recorded, even when no archaeological deposits were identified.
- 3.4.2 Section drawings presented here (at a minimum scale of 1:20) include heights A.O.D. Plans (at a minimum scale of 1:50) include O.D. spot heights for all principal strata and any features. At least one section of each trench edge, showing a representative and complete sequence of deposits from the modern ground surface to the natural geology, was drawn.
- 3.4.3 The actual areas of excavation and all archaeological (and possibly archaeological) features were accurately located on a Site plan and recorded by photographs, scale drawings and written descriptions sufficient to permit the preparation of a detailed archive and report on the material. The trench locations, as excavated, were accurately surveyed and tied into the O.S. National Grid with the use of GPS accurate to 0.02m.
- 3.4.4 Black and white photography using orthodox monochrome chemical development was used (ISO400). Black and white photography was supplemented by colour digital photographs.
- 3.4.5 Trenches were recorded according to accepted national professional standards (IfA 2008).

4 ARCHAEOLOGICAL RESULTS

4.1 Introduction

4.1.1 The following section provides a summary of the information held in the Site archive, with a full list of context numbers and context descriptions within each trench contained in **Appendix 1**.



4.2 General stratigraphy

- 4.2.1 Typically, trenches had between 0.25m and 0.4m of silty clay topsoil. The topsoil was described as either mid brown, dark brown or dark blackish brown, with the variation likely due to the weather at the time of excavation.
- 4.2.2 The natural was typically yellow clay overlying yellow-grey sandstone and mudstone (**Plate 1**). However, the clay varied greatly and was at times grey, orange or even purplish, and in some places consisted of silt. There were many instances of geologically deposited coal outcropping as well as sandstone and mudstone outcrops. The sandstone was typically grey or yellow but was at times red. The natural was very variable with multiple types often present in the same trench. A particularly complex patch of coal seams and variable natural is probably responsible for the false positives thrown up by the geophysics in the area of **Trenches 25-27**.
- 4.2.3 In some trenches, a thin relic ploughsoil subsoil was identified. This was in all instances a lighter, greyer version of the topsoil. Subsoil was recorded in **Trenches 5**, **9**, **12**, **33**, **108**, **112**. **118**. **135**. **157** and **180**.
- 4.2.4 In addition, colluvium was seen in five trenches. This was easily distinguished from the natural as it had a disturbed feel and contained mixed-in former topsoil. This was present in **Trenches 103** and **104**, situated on a steep hill in the southwest of the Site. It was also seen filling a natural hollow in **Trenches 18** and **135**, which were adjacent to each other. The south limit of this colluvium explains the geophysical anomaly that runs across these trenches. (The north limit was not identified; the trenches to the north did not contain colluvium.) **Trench 14** lay in a flat area at the base of a slope. It contained 0.54m depth of colluvium under which a small feature was found (see below).
- 4.2.5 The crop of oilseed rape had failed in the area of **Trench 171**. This may be due to the total absence of topsoil. The top 0.2m of natural had been ploughed up in this area, creating a yellow clay ploughsoil.

4.3 Former opencast

- 4.3.1 A number of areas of the Site had previously been the subject of modern opencast mining (Plate 2). Map data was available for the former extraction areas. It was discovered during excavation that, in general, the area disturbed by mining works was larger than the extraction area. In some localities the area of disturbed ground was smaller than the mapped extraction area.
- 4.3.2 In the southwest, **Trench 106** lay entirely on opencast backfill.
- 4.3.3 The limits of the former "Deanfield" area of opencast were defined. **Trenches 15**, **17** and **117** contained this boundary. This was some tens of metres further to the southwest than had been expected, and coincided with a geophysical anomaly that had been interpreted as "geology" (ASWYAS 2012). **Trenches 119** and **118** lay entirely within the former opencast area. Nearby, **Trenches 120** and **122** lay on the boundary, which was again tens of metres further out than anticipated, this time to the north. This coincided with a "geological" geophysical anomaly (*ibid.*). Conversely, **Trench 124**, which had been sited on the boundary, turned out to lie entirely on undisturbed natural. **Trench 130** once again contained the boundary which was this time as plotted on the mapping.
- 4.3.4 At the northeast end of Site, **Trench 176** was found to lie entirely on opencast backfill. This backfill extended as a 0.4m thick layer of overburden in the east part of **Trench 177**



(which was removed by machine). However, no opencast backfill was identified in **Trench 164**, only clean natural deposits.

4.4 Ridge and furrow

- The majority of trenches contained plough furrows from former field cultivation (**Plate 3**). This was normally consistent with the geophysical survey (ASWYAS 2012). In some trenches where the geophysical survey indicated the presence of ridge and furrow, none was identified. Sometimes, e.g. **Trench 187** this was because the trench was aligned exactly with the furrows and lay wholly on a ridge. In other cases, e.g. **Trench 110**, the absence of furrows must be due to their slight nature and poor preservation.
- 4.4.2 To the southwest, around **Trenches 104** and **105**, was an area of cultivation with north-south furrows. **Trenches 113** and **114** contained northeast-southwest aligned furrows. **Trench 112** had north to south aligned furrows, as did **Trenches 116** and **117**.
- 4.4.3 In the southeast of the Site, in the area of **Trenches 31, 32, 123** and **125-132**, the furrows again ran north-south. North of Hell Lane, furrows were seen running east-west in Trench 26. In **Trenches 29, 153-156** inclusive and **169**, the furrows ran on a north-south alignment. North of Hell Lane and West of Red Lane, all trenches with furrows (**19, 23, 24, 133, 136, 137-141** inclusive, **143-148** inclusive, **183-186** inclusive and **188**) had them running north-northeast to south-southwest. In the northeast corner of Site, a patch of east-west aligned furrows was identified in **Trenches 162, 166, 168, 170, 172-175** inclusive, **177, 178** and **180**.
- 4.4.4 In summary, there were at least seven different areas of ridge and furrow cultivation identified across the Site. The furrows were generally uniform, typically between 0.8 and 1.2m wide. The material filling the furrows was generally very uniform, a mid-brown greasy clay with inclusions. Sometimes it was grey, and in a couple of instances (Trenches 145 and 153) some of the fill was more like topsoil, suggesting these furrows may have been visible earthworks until very recently.
- 4.4.5 In **Trench 148**, in addition to the north-south furrows expected, a single east-west furrow was found. This was sited next to Hell Lane and is interpreted as a headland furrow or boundary. It was filled with the same material as the normal furrows.
- 4.4.6 The local farmer stated that the area of **Trenches 179**, **182**, **181** and part of **180** that was under pasture was too wet and "tough" to cultivate. This may explain the absence of furrows in this area.

4.5 Post-medieval

- 4.5.1 Five shafts for bell pits or other coal mining activities were identified (**Plate 4**). Four of these were in the southeast corner of this Site, as identified in the desk based assessment (DBA) (CgMs 2012). In the DBA it was thought likely that these shafts were early post-medieval in date through analogy with nearby examples at Sharlston and Warmfield commons.
- 4.5.2 The four shafts in the south east of the Site were **12806**, **13005**, **13104** and **13202** (in **Trenches 128**, **130**, **131** and **132** respectively), and were all 1.7m in diameter. The fills were generally poor quality coal spoil mixed with brown silts and clays. These were augured by hand. The auger refused in **12806** at a depth of 1.2m. In **13005**, natural yellow clay was found at 4.6m below ground level. **13104** refused at 1.25m; **13202** revealed natural at 3.35m.



4.5.3 In addition to these four shafts, a fifth (**15704**) was found north of Hell Lane in **Trench 157**. This refused at 2.1m, and was slightly larger, 1.8m in diameter, with a sub-square or sub-rounded shape.

4.6 Undated

- 4.6.1 A 'V'-shaped linear (**202**, **Plate 5**) was recorded in **Trench 2** (**Figure 2**). It was 0.65m deep by 0.9m wide and ran roughly east-west, correlating with a strong geophysical anomaly. Other anomalies revealed by geophysics were not found.
- 4.6.2 Two slight gullies were recorded in **Trench 9**. Gully **904** (**Plate 6**) extended north-south across the trench and was 0.32m deep by 1.5m wide. The subsoil that extended across the rest of the trench was absent in this particular location. Feature **906** (**Plate 7**) was similar and terminated in the middle of the trench. It was smaller, at 0.16m deep by 0.42m wide. It is possible that these were drainage features of uncertain date (**Figure 2**). They may be the poorly preserved remains of furrows: the geophysics suggested the presence of north-south aligned furrows in this area and none were found. Alternatively they might have been genuine archaeological features or just be ephemeral natural hollows.
- 4.6.3 In **Trench 14** there was 0.54m of colluvium in addition to 0.4m of topsoil. Under this was found a very small gully, **1404** (**Plate 8**). It was 'U'-shaped, 0.1m deep and 0.6m wide (**Figure 2**). The fill, **1405**, was silver grey sandy clay with <5% sandstone inclusions. In addition there was also a modern pit in **Trench 14**, discussed later.
- 4.6.4 **Trench 17** contained three intercutting linear features (**Figure 3**). The earliest of these, **1709**, ran northwest-southeast, was 'U'-shaped and measured 0.3m deep by 1.51m wide. Ditch **1706** ran on the same alignment, was irregular and may have been a re-cut of the earlier feature (**Plate 9**). It was deeper, at 0.5m deep and 1.54m wide, although it did not overlap with the earlier feature exactly. Both of these features were cut by a differently aligned gully, **1704**. This ran N-S and was 0.08m deep by 0.35m wide with a flat base. The fills of all of these features were grevish or yellowish brown silts.
- 4.6.5 A 'V'-shaped ditch (3304, Plate 10) was excavated in Trench 33 (Figure 3). This correlated with a geophysical anomaly interpreted as possible archaeology (ASWYAS 2012). It ran east-west and measured 0.72m deep and 1.82m wide. There were two fills. The lower, 3306, was 0.3m deep and consisted of dark grey clay with frequent sandstone and organic material which may be burnt wood or degraded roots. The upper fill, 3305, was dark orange brown sandy clay with occasional small sandstone, and produced modern pot and glass.
- 4.6.6 **11602** was a wide (1.09m) shallow (0.22m) gully in **Trench 116 (Figure 3)**. It was cut by furrows. The fill was reddish brown silty sand (**Plate 11**).
- 4.6.7 In **Trench 152**, a curvilinear feature, **15203**, was excavated (**Plate 12**). It was 0.26m deep by 0.62m wide and formed an arc within the trench, entering and leaving on the south side (**Figure 3**). It was again cut by a furrow. The fill was almost indistinguishable from the natural yellowish grey sandy clay.

4.7 Modern

- 4.7.1 A modern pit (**1403**, **Plate 13**) was recorded in **Trench 14**. This proved to be the collapsed upper part of a geotechnical borehole. A number of these boreholes were encountered, for example in **Trenches 106** and **147**.
- 4.7.2 A land drain with an unusually large cut (10903, Plate 14) was recorded in Trench 109.



- 4.7.3 As already mentioned, the upper fill of **3304** produced modern pot and glass.
- 4.7.4 A slight linear feature (**3406**, **Plate 15**) consisting of a mere scrape of soil was excavated in **Trench 34**. This was identified on the geophysics and correlates with historic mapping as a former field boundary.

4.7.5 **Natural**

4.7.6 A feature (**1903**, **Plate 16**) was recorded in **Trench 19** which has been reinterpreted as a natural lump of clay within a coal seam.

5 ARTEFACTUAL EVIDENCE

5.1 Summary

- 5.1.1 A very small quantity of finds was recovered, largely ceramic, and all dating to the post-medieval/modern period, with a focus in the 19th/20th century. Finds are listed by context in **Table 1**.
- 5.1.2 Only one context produced stratified finds. The upper fill of ditch **3304** (**3305**) produced glass and pot, which was examined by glass specialist Dr Hugh Willmott at Sheffield University. He concluded that the glass was modern.
- 5.1.3 Pottery constituted the most commonly occurring material. Wares represented include coarse redwares, both glazed (probably 18th century or later) and unglazed (modern flowerpot); bone china and refined whitewares (tea wares, 19th/20th century); and English stoneware (feldspathic glazed, 19th/20th century, probably from a preserve jar, base stamp of MANC[HESTER]). There is also a porcelain figurine, and a small porcelain doll's leg.
- 5.1.4 Other finds comprise clay pipe stem fragments; two glass bottle/jar fragments and a glass facet-cut button (all 19th/20th century); fragments of post-medieval brick and tile; a fragment of animal bone (large mammal long bone); and a twopenny token belonging to the People's Music Hall in Wakefield.

5.2 Further recommendations

5.2.1 No further analysis or publication is warranted for this assemblage. On the basis of quantity, nature of the finds, and date range, retention for long-term curation is not recommended.



Table 1: All finds by context (number / weight in grammes)

Context	Animal Bone	СВМ	Clay Pipe	Glass	Metal	Pottery
1407	1/14					1/7
1705						2/10
3300				1/4		
3305				1/4		2/5
10900					1/8	
13504		4/77	2/1	1/9		6/17
18500						1/261
unstrat				1/11		3/76
TOTAL	1/14	4/77	2/1	3/24	1/8	15/376

6 ENVIRONMENTAL ASSESSMENT

6.1 Introduction

- 6.1.1 A bulk sample of 20 litres was taken from ditch **3304** in **Trench 33** to evaluate the presence and preservation of palaeo-environmental remains. This information can contribute in discerning the archaeological significance of the Site.
- 6.1.2 The sample was processed for the recovery and assessment of charred plant remains and charcoal.

6.2 Charred plant remains and wood charcoal

- 6.2.1 The bulk sample was processed by standard flotation methods; the flot retained on a 0.3mm mesh, the residue fractionated into 5.6mm, 2mm and 1mm fractions and dried. The coarse fraction was sorted, weighed and discarded. The flot was scanned under a x10 x40 stereo-binocular microscope and the preservation and nature of the charred plant and wood charcoal remains recorded in **Table 2**. Preliminary identifications of dominant or important taxa are noted below, following the nomenclature of Stace (1997).
- 6.2.2 The flot was relatively small with low numbers of roots and modern seeds. The charred material comprised varying degrees of preservation.
- 6.2.3 Very few charred plant remains were recovered in this sample. These included fragments of sloe (*Prunus spinosa*) stone.
- 6.2.4 A small quantity of wood charcoal fragments greater than 4mm was retrieved from ditch **3304**. The charcoal included round and twig wood fragments.
- 6.2.5 There is no evidence for any specific settlement activity such as crop processing and the assemblage may represent scrub or hedgerow material. There is no indication of a possible date for the ditch from the charred assemblage.

6.3 Further potential

6.3.1 There is no potential for the analysis of the charred plant remains to provide detailed information on the nature of the settlement, and the local environment due to the paucity of remains recovered.



6.3.2 There is the potential for the analysis of the wood charcoal to provide some very limited information on the species composition.

Table 2: Assessment of the charred plant remains and charcoal

Samples				Flot								
Footure	Contout	Cample	Vol.	Flot	%		C	harred PI	ant Remains	Charcoal	Othor	Amaluaia
Feature Context		Ltrs	Ltrs	(ml)	ml) roots	Grain	Chaff	Other	Comments	>4/2mm	Other	Analysis
	Trench 33, ditch 3304											
3304	3306	1	20	65	5	-	-	С	Prunus spinosa stone frag, charcoal include round and twig wood		-	-

Key: A^{***} = exceptional, A^{**} = 100+, A^{*} = 30-99, A = >10, B = 9-5, C = <5;

7 DISCUSSION

7.1 Summary

- 7.1.1 The evaluation revealed only a small number of features. Aside from the early mining shafts, whose presence was already known, very few areas of archaeological interest were identified.
- 7.1.2 This area may have largely been a blank, un-utilised area prior to ridge and furrow cultivation. Extensive cultivation combined with the former opencast has likely removed what trace of archaeology may have once existed here. However, the almost total absence of finds is indicative of an area away from any historic settlement.
- 7.1.3 With few exceptions, this evaluation has demonstrated that there is low potential for archaeology in this area. There are early mining shafts in both the south east corner of Site and in **Trench 157**. It is likely that more shafts exist. Undated linears were found in **Trenches 2**, 9, 14, 17, 33, 116, and 152, but the features identified so far are slight and only of marginal interest.

7.2 Conclusions

7.2.1 Little was found and, in general, there is low potential for further archaeology. There are early mining shafts in **Trench 157** and in the southeast corner of Site. Other areas could be investigated further, but potential for significant discoveries is low.

8 STORAGE AND CURATION

8.1 Museum

8.1.1 It is recommended that the project archive resulting from the excavation be deposited with Wakefield M.D.C Museums and Arts, Pontefract Museum. The Museum has agreed in principle to accept the project archive on completion of the project under an accession code to be determined. Deposition of any finds with the Museum will only be carried out with the full agreement of the landowner.



8.2 Archive

- 8.2.1 The complete Site archive, which will include paper records, photographic records, graphics, artefacts, ecofacts and digital data, will be prepared following the standard conditions for the acceptance of excavated archaeological material by Wakefield M.D.C Museums and Arts, Pontefract Museum and in general following nationally recommended guidelines (SMA 1995; UKIC 2001; IfA 2009; Brown 2011; ADS 2013).
- 8.2.2 All archive elements will be marked with the site/accession code, and a full index will be prepared. The physical archive comprises the following:

8.3 Discard policy

- 8.3.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. Any discard of artefacts will be fully documented in the project archive.
- 8.3.2 The discard of environmental remains and samples follows nationally recommended guidelines (SMA 1993; 1995; English Heritage 2011).

8.4 Security copy

8.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.



9 REFERENCES

9.1 Bibliography

- ADS, 2013, Caring for Digital Data in Archaeology: a guide to good practice, Archaeology Data Service & Digital Antiquity Guides to Good Practice
- Archaeological Services WYAS, 2012, Deanfield Surface Mine, Wakefield, West Yorkshire: Geophysical Survey.
- Brown, D.H., 2011, Archaeological archives; a guide to best practice in creation, compilation, transfer and curation, Archaeological Archives Forum (revised edition)
- CgMs 2012, Archaeological Desk-Based Assessment: Deanfield Surface Mine.
- English Heritage, 2011. Environmental Archaeology. A Guide to the Theory and Practice of Methods from Sampling and Recovery to Post-excavation.
- Institute for Archaeologists (IfA), 2008. Standards and Guidance for an Archaeological Excavation [online]. Available at: www.archaeologists.net.
- IfA, 2009, Standard and Guidance for the creation, compilation, transfer and deposition of archaeological archives, Institute for Archaeologists
- SMA, 1993, Selection, Retention and Dispersal of Archaeological Collections, Society of Museum Archaeologists
- SMA, 1995, Towards an Accessible Archaeological Archive, Society of Museum Archaeologists
- Stace, C, 1997, *New flora of the British Isles* (2nd edition), Cambridge: Cambridge University Press.
- United Kingdom Institute of Conservation (UKIC), 2001, Guidelines for the Preparation of Excavation Archives for Long Term Storage.
- Watkinson, D. and Neal. V. 1998. *First Aid for Finds* (3rd edition), London: Rescue/UKIC Archaeology Section.
- West Yorkshire Archaeological Advisory Service (WYAAS), 2012, Specification for Geophysical Survey and Trial Trenching to Evaluate Archaeological Remains in Advance of Development at Deanfield Surface Mine, Wakefield.



10 APPENDIX 1: CONTEXT DESCRIPTIONS

Trench No. 1		Max depth: 0.25m
Context	Description	Depth (m)
100	Topsoil: Mid brown clayey silt.	0- 0.25m
101	Natural: Claggy yellow brown clay at north end 60% stone, at south end with 0% stone.	0.25m+

Trench No. 2		Max depth: 0.9m
Context	Description	Depth (m)
200	Topsoil: Mid brown silty clay.	0- 0.25m
201	Natural: Yellow grey silty clay up to 80% sandstone.	0.25m+
202	Cut: East-west linear conforming with geophysics. 'V'-shaped ditch, rock cut at base. Undated.	0.25- 0.9m
203	Fill: Fill of 202; orange-brown silty clay with 10% sandstone. Unmodified native material.	0.25- 0.9m

Trench No. 3		Max depth: 0.3m
Context	Description	Depth (m)
300	Topsoil: Mid brown clayey silt.	0- 0.3m
301	Natural: Yellow brown clay with 20% small stones.	0.3m+

Trench No. 4		Max depth: 0.3m
Context	Description	Depth (m)
400	Topsoil: Mid brown clayey silt.	0- 0.3m
401	Natural: Yellow brown clay with 20% small stones.	0.3m+

Trench No. 5		Max depth: 0.56m
Context	Description	Depth (m)
500	Topsoil: Mid brown silty clay.	0- 0.3m
501	Natural: Yellow brown sandy clay with 50% sandstone.	0.44- 0.56m
502	Subsoil: Mid orangish brown silty sand.	0.3- 0.44m



Trench No. 6		Max depth: 0.7m
Context	Description	Depth (m)
600	Topsoil: Mid brown clayey silt.	0- 0.25m
601	Natural: Mixed orange and grey clays. 5% stone.	0.25- 0.7m+
602	Cut: Hexagonal pit in centre of trench. 0.25m diameter. Modern borehole.	0.25- 0.7m+
603	Fill: Fill of 602; oily purple/black clay. Not excavated. Fill of modern borehole.	0.25- 0.7m+

Trench No. 7		Max depth: 0.25m
Context	Description	Depth (m)
700	Topsoil: Rich dark-mid brown clayey silt.	0- 0.25m
701	Natural: 40% sandstone in yellow clay.	0.25m+

Trench No. 8		Max depth: 0.25m
Context	Description	Depth (m)
800	Topsoil: Mid-brown silty clay.	0- 0.25m
801	Natural: Yellow and grey clays, 5% stone.	0.25m+

Trench No. 9		Max depth: 0.38m
Context	Description	Depth (m)
901	Topsoil: Dark blackish brown silty sand.	0- 0.3m
902	Subsoil: Mid orangish brown silty sand with very frequent sandstone inclusions (<3cm).	0.3- 0.38m+
903	Natural: Sandstone bedrock.	0.38m+
904	Cut: Linear drainage channel running northwest-southeast. 'V'-shaped, rock cut.	0.26- 0.58m+
905	Fill: Fill of 904 . Mid reddish brown silty sand with frequent sandstone inclusions up to 4cm. No finds.	0.25- 0.58m+
906	Cut: Curvilinear gully terminus continues southeast into section. Irregular shape; likely a drainage feature if genuine.	0.26- 0.42m+
907	Fill: Fill of 906. Mid orangish brown silty sand with frequent sandstone inclusions up to 5cm. No finds.	0.25- 0.42m+

Trench No. 10		Max depth: 0.34m
Context	Description	Depth (m)
1000	Topsoil: Dark blackish brown silty clay.	0- 0.34m
1001	Natural: Mid greyish brown clay frequent very small coal fragments and plough scars.	0.34m+



Trench No. 11		Max depth: 0.34m
Context	Description	Depth (m)
1101	Topsoil: Dark blackish brown silty clay.	0- 0.34m
1102	Natural: Mid greyish brown clay with frequent sandstone inclusions.	0.34m+

Trench No. 12		Max depth: 0.74m
Context	Description	Depth (m)
1200	Topsoil: Mid greyish brown sandy clay.	0- 0.37m
1201	Subsoil: Mid greyish brown sandy clay. Possibly a furrow larger than the trench as seen on the geophysical survey.	0.37- 0.62m
1202	Natural: Sandstone.	0.62- 0.74m+

Trench No. 13		Max depth: 0.3m
Context	Description	Depth (m)
1300	Topsoil: Mid brown clayey silt.	0- 0.3m
1301	Natural: Yellow-brown clay. Seen in north of trench.	0.3m+
1302	Natural: Sandstone. Grey. Seen in south of trench.	0.3m+

Trench No. 14		Max depth: 1.31m
Context	Description	Depth (m)
1400	Topsoil: Mid brown clayey silt.	0- 0.4m
1401	Natural: Yellow-brown clay.	0.94m+
1402	Colluvium: Large mid brown mixed clay/silt.	0.4- 0.94m+
1403	Cut: Very regular circular vertical pit. Modern pot in fill 1407. Possibly associated with boreholes?	0.4- 1.31m
1404	Cut: 0.3m wide cut running east-west. Shallow 'U'-shaped gully. Undated.	0.94- 1.04m
1405	Fill: Fill of 1404. Silver grey silty clay with 5% sandstone. Undated.	0.94- 1.04m
1406	Natural: Filver grey clay band. Appeared to be a feature but upon excavation proved to be just a band of natural.	0.94m+
1407	Fill: Fill of 1403. Dark greyish brown sandy clay. Mottled and industrial character. Contains modern pot.	0.4- 0.94m



Trench No. 15		Max depth: 0.66m
Context	Description	Depth (m)
1500	Topsoil: Mid greyish brown sandy clay.	0- 0.54m
1501	Layer: Opencast backfill. Mixed coal and clay. Bluish-grey. At the northeast end of the trench.	0.54- 0.66m+
1502	Brick Rubble : Rough line of bricks running northwest-southeast within the opencast backfill. Perhaps corresponds with the anomaly on the geophysical survey.	0.54m+
1503	Layer: Mixed red and blue deposit adjacent to 1502.	0.54m+
1504	Natural: Yellow sandy clay and sandstone.	0.54- 0.66m+

Trench No. 16		Max depth: 0.3m
Context	Description	Depth (m)
1600	Topsoil: Mid brown clayey silt.	0- 0.3m
1601	Natural: Yellow-brown clay.	0.3m+
1602	Cut: Modern north-south linear, probably land drain. Modern pot in fill. Unexcavated.	0.3m+

Trench No. 17		Max depth: 0.44m
Context	Description	Depth (m)
1701	Topsoil: Dark brownish grey sandy clayish silt. 1% stone inclusions.	0- 0.38m
1702	Layer: Opencast mine backfill. Mid yellowish grey sandy clay stone and brick up to 60mm. Occasional coal.	0.38m+
1703	Natural: Greyish yellow clay occasional shale inclusions.	0.38m+
1704	Cut: North-south gully. Irregular with flat base. Fill contains modern pot. Cuts 1706.	0.38- 0.44m
1705	Fill: Fill of 1704. Light yellowish brown silty sand with common small round stones and modern pot.	0.38- 0.44m
1706	Cut: Irregular steep sided northwest-southeast linear feature. Cuts 1708. Probably field boundary or drainage ditch.	0.38- 0.8m
1707	Fill : Fill of 1707 . Mid greyish brown silty clay with 5% sonte inclusions. No finds. Backfill of boundary ditch possibly due to mining or return to agriculture.	0.38- 0.88m
1708	Cut: Shallow northwest-southeast linear. Possible field boundary.	0.38- 0.6m
1709	Fill: Fill of linear 1708 . Mid greyish yellow silty sand with 70% stones up to 3cm. Deliberate backfill when ditch went out of use.	0.38- 0.6m
1710	Natural: Mixed glacial clay. Initially identified as linear features, upon excavation proved to be layers of clay that had undergone movement (landslip? Glacial processes?) and were now vertical.	0.38- 0.6m+



Trench No. 18		Max depth: 1.22m
Context	Description	Depth (m)
1800	Topsoil: Dark brown silty clay.	0- 0.2m
1801	Natural: Yellow clay.	0.2m+
1802	Natural: Coal seams and associated geology: grey clays etc.	0.2m+
1803	Colluvium: Redeposited natural yellow clay with 10% mixed in topsoil, coal etc. Easily distinguishable from natural.	0.2- 0.47m+
1804	Buried Soil: Mid brown silt topsoil.	0.47- 1.06m+

Trench No. 19		Max depth: 0.36m
Context	Description	Depth (m)
1901	Topsoil: Dark blackish brown silty sand.	0- 0.29m
1902	Natural: Light yellowish orange sandy clay.	0.29- 0.36m+
1903	Cut: Possible small pit/post-hole cut into coal seam. Likely to be a lump of roundish redeposited clay.	0.36- 0.43m
1904	Fill: Fill of 1903. Light brown sandy silt with rare white stone inclusions. Probably a lump displaced clay.	0.2- 0.47m+
1905	Natural: Coal seam cut by 1903.	0.36m+
1906	Furrow: North-south across trench, 1.2m wide, 6m spacing.	0.36m+
1907	Fill: Typical furrow fill. Brown greasy clay.	0.36m+

Trench No. 20		Max depth: 0.3m
Context	Description	Depth (m)
2001	Topsoil: Mid brown silty loam.	0- 0.3m
2002	Natural: Mudstone.	0.3m+
2003	Natural: Mid yellow clay.	0.3m+
2004	Natural: Sandstone.	0.3m+
2005	Natural: Silty clay mid-light brown <5% sandstone, <2% coal.	0.3m+
2006	Natural: Blue black coal shale.	0.3m+
2007	Field Drain	0.3m+
2008	Natural: Mid yellow clay.	0.3m+



Trench No. 21		Max depth: 0.8m
Context	Description	Depth (m)
2100	Topsoil: Dark brown clayey silt.	0- 0.3m, 0.6m at N end.
2101	Natural: Yellow clay.	0.3m+
2102	Natural: Mid-brown clayey silt with minor stripes and "undisturbed" appearance.	0.3m+ at S, 0.6- 0.8m at N
2103	Natural: Sandstone bedrock.	0.8m+

Trench No. 22		Max depth: 0.35m
Context	Description	Depth (m)
2201	Topsoil: Mid brown silty loam.	0- 0.35m
2202	Natural: Mid red-brown sandy silt <2% sandstone inclusions, <3% 1% coal inclusions.	0.35m+
2203	Natural: Sandstone bedrock.	0.35m+
2204	Natural: Patch of iron rich sandy clay precipitate within natural.	0.35m+

Trench No. 23		Max depth: 0.3m
Context	Description	Depth (m)
2300	Topsoil: Dark brown clayey silt.	0- 0.3m.
2301	Natural: Yellow clay.	0.3m+
2302	Furrows: Two furrows. North-South aligned with trench. 1m wide.	0.3m+
2303	Fill: Fill of 2302. Typical furrow fill. Greasy brown clay with roots.	0.3m+

Trench No. 24		Max depth: 0.5m
Context	Description	Depth (m)
2401	Topsoil: Dark brown silty loam.	0- 0.4m
2402	Natural: Mid yellow clay.	0.4- 0.5m+
2403	Furrows: Two furrows. North-south aligned with trench. 1m wide.	0.4m+
2404	Fill: Fill of 2402. Typical furrow fill. Greasy brown clay with roots.	0.4m+



Trench No. 25		Max depth: 0.5m
Context	Description	Depth (m)
2501	Topsoil: Dark blackish brown silty clay.	0- 0.39m
2502	Natural: Light yellowish grey sandy clay.	0.39- 0.46m+
2503	Natural: Underlying shale/coal deposit and discolouration.	0.46m+
2504	Natural: Coal seam breaks surface of natural at W extent of trench.	0.46m+

Trench No. 26		Max depth: 0.45m
Context	Description	Depth (m)
2601	Topsoil: Mid brown silt loam.	0- 0.3m
2602	Natural: Silver yellow clay with 2% sandstone <3cm.	0.3m+
2603	Furrow: E-W 2m wide furrow.	0.3- 0.45m
2604	Fill: Fill of 2603. Light-mid brown clay with <5% sandstone and coal <3cm.	0.3- 0.45m
2605	Land Drain	0.3m+
2606	Natural: Sandstone.	0.3m+
2607	Natural: Silver yellow mudstone.	0.3m+

Trench No. 27		Max depth: 0.45m
Context	Description	Depth (m)
2701	Topsoil: Dark brown silty sand.	0- 0.3m
2702	Natural: Blue/black coal shale.	0.3m+
2703	Natural: Silver/grey clay forming mudstone.	0.3- 0.45m
2704	Natural: Orange red clay 5% sandstone.	0.3- 0.45m
2705	Land Drain	0.3m+
2706	Natural: Light orange brown sand with shale.	0.4- 0.5m+



Trench No. 28		Max depth: 0.5m
Context	Description	Depth (m)
2801	Topsoil: Mid brown silt loam.	0- 0.3m
2802	Natural: Yellow orange clay 5% sandstone <3cm	0.3m+
2803	Natural: Sandstone.	0.3m+
2804	Natural: Silver yellow clay 2% sandstone <2cm	0.3m+
2805	Natural: Silver yellow clay >50% sandstone <6cm	0.3m+
2806	Natural: Mid-light brown clay <5% sandstone and coal <3cm	0.3m+

Trench No. 29		Max depth: 0.5m
Context	Description	Depth (m)
2900	Topsoil: Mid-brown clayey silt.	0- 0.5m
2901	Natural: Brownish yellow silt clay.	0.5m+
2902	Furrow: Example of furrow. >2m wide running north-south at 5m centres.	0.5m+
2903	Fill: Fill of 2902. Typical furrow fill. Greasy brown clay with roots.	0.5m+
2904	Cut: North-south linear at northeast end of the trench. Modern. 2.4m wide, on edge of furrow.	0.5m+
2905	Fill: Fill of 2904. 1950s opencast style backfill. Blue-brown clay with 2% stone frags, machine brick, coal etc.	0.5m+

Trench No. 30		Max depth: 0.3m
Context	Description	Depth (m)
3001	Topsoil: Mid brown clayey silt.	0- 0.3m
3002	Natural: Yellow silt clay.	0.3m+

Trench No. 31		Max depth: 0.3m
Context	Description	Depth (m)
3100	Topsoil: Mid-brown loamy silt.	0- 0.3m
3101	Natural: Yellow clay with plough scars north-south.	0.3m+
3102	Natural: Blue-black shale coal in south 0.4m of trench.	0.3m+
3103	Layer: Opencast backfill. Yellow-brown clay with mixed topsoil, blue-black shaley coal and red silt clay patches.	0.3m+
3104	Furrow: Example of furrow. N-S following trench. Width unknown.	0.3m+
3104	Fill: Fill of 3104. Typical furrow fill. Greasy brown clay with roots.	0.3m+



Trench No. 32		Max depth: 0.48m
Context	Description	Depth (m)
3201	Topsoil: Dark blackish brown silty clay.	0- 0.39m
3202	Natural: Light yellowish brown sandy clay.	0.39- 0.48m+
3203	Furrow: Example of furrow. North-south across trench. 5-6m width. Approx 11m centres.	0.48m+
3204	Fill: Fill of 3203. Typical furrow fill. Greasy brown clay with roots.	0.48m+

Trench No. 33		Max depth: 1.12m
Context	Description	Depth (m)
3300	Topsoil: Dark brown clay silt.	0- 0.4m
3301	Natural: Yellow clay.	0.4m+
3302	Furrows: Two furrows. North-south running with trench. 1m wide.	0.4m+
3303	Fill: Fill of 3302. Typical furrow fill. Yellowish mid brown greasy clay with roots and coal.	0.4m+
3304	Cut: Wide 'V'-shaped ditch running northeast-southwest. Field boundary.	0.4- 1.12m
3305	Fill: Upper fill of 3304. Dark orangey brown sandy clay with sandstone, ?modern pot and modern glass.	0.4- 0.83m
3306	Fill: Lower fill of 3304. Dark grey clay with frequent sandstone and possible burnt material or degraded roots. Water-lain.	0.83- 1.12m
3307	Subsoil: Light greyish brown silty sand with coal flecks.	0.3- 0.4m

Trench No. 34		Max depth: 1.12m
Context	Description	Depth (m)
3400	Topsoil: Dark brown silty clay.	0- 0.8m Max.
3401	Layer: Overburden – opencast backfill-style material spread over southwest end of trench. Medium brown slightly silty clay with fragments of yellow and red sandstone.	0.6m- 0.8m
3402	Furrow: Example of furrow. 1.6m wide. Northwest-southeast running with trench. Seen at southwest end of trench.	0.4m+
3403	Fill: Fill of 3402. Typical furrow fill. Yellowish mid brown greasy clay with roots and coal.	0.4m+
3404	Cut: Field drain.	0.5m+
3405	Fill: Field drain.	0.5m+
3406	Cut: Number assigned to natural geological feature. Sub-oval shallow scoop.	0.8m+
3407	Fill: Fill of 3406. Naturally deposited material. Mottled tan yellow clay with a thin lens of white clay. Compact.	0.8m+
3408	Layer: Red silty sand below 3401. Possibly natural; possibly associated with opencast backfill.	0.5m+
3409	Natural: Yellow clay with bands of outcropping sandstone.	0.4m+



Trench No. 100		Max depth: 0m
Context	Description	Depth (m)
	Not dug on permission of Rebecca Remmer during site visit 2/9/13	-

Trench No. 101		Max depth: 0.95m
Context	Description	Depth (m)
10101	Topsoil: Mid greyish brown silty sand.	0- 0.2m
10102	Natural: Light orangish yellow clay.	0.2m+
10103	Natural: Sandstone bedrock.	0.48m+

Trench No. 102		Max depth: 0.4m
Context	Description	Depth (m)
10200	Topsoil: Mid brown clayey silt. No finds.	0- 0.3m
10200	Natural: Yellow/grey clays and silty clays.	0.3m+

Trench No. 103		Max depth: 0.7m
Context	Description	Depth (m)
10301	Topsoil: Mid greyish brown silty sand.	0- 0.2m
10302	Subsoil: Possible colluvium. Mid orangish brown clay, mottled in appearance, accumulated at southern extent of slope.	0.2- 0.7m
10303	Natural: Light greyish white clay containing very frequent pellets of mid reddish orange clay.	0.7m+

Trench No. 104		Max depth: 0.7m
Context	Description	Depth (m)
10400	Topsoil: Mid brown silty clay.	0- 0.3m Typical, 0.6m max.
10401	Fill: Fill of 10402. Typical furrow fill. Greasy brown clay with roots.	0.3m
10402	Furrows: Three furrows. Southeast-northwest across trench.	0.7m+
10403	Subsoil: Possible colluvium seen in north 10m of trench. Yellow clay, easily distinguished from natural.	0.3- 0.4m
10404	Natural: Coal seam. Very low quality coal mixed with yellow clay.	0.4m+



Trench No. 105		Max depth: 0.4m
Context	Description	Depth (m)
10500	Topsoil: Mid brown clayey silt.	0- 0.3m
10501	Fill: Fill of 10502. Typical furrow fill. Greasy mid yellow-brown clay with roots.	0.3m
10502	Furrows: Two furrows. North-south across trench.	0.3m+
10503	Natural: Yellow clay.	0.3- 0.4m

Trench No. 106		Max depth: 0.6m
Context	Description	Depth (m)
10600	Topsoil: Mid brown clayey silt.	0- 0.25m
10601	Layer: Opencast backfill. Mixed redeposited natural and blue-brown shales and coals with clear bulldozer marks.	0.25- 0.6m
10602	Cut: Modern borehole.	0.25m+

Trench No. 107		Max depth: 0.25m
Context	Description	Depth (m)
10700	Topsoil: Mid brown clayey silt.	0- 0.25m
10701	Natural: Yellow-orange clay. 20% stones.	0.25m+

Trench No. 108		Max depth: 0.36m
Context	Description	Depth (m)
10801	Topsoil: Mid brown clayey silt.	0- 0.3m
10802	Subsoil: Mid orangish brown silty sand.	0.3- 0.36m
10803	Natural: Mid-light yellowish brown silty sand.	0.36m+

Trench No. 109		Max depth: 0.62m
Context	Description	Depth (m)
10901	Topsoil: Mid greyish brown sandy silt loam.	0- 0.28m
10902	Natural: Yellowish brown clay with infrequent outcropping sand and ironstone.	0.28m+
10903	Cut: Northwest-southeast linear feature. Modern land drain.	0.28- 0.62m+
10904	Land Drain: In 10903.	0.62m
10905	Fill: Fill of 10903. Mixed backfill in base of 10904 consisting of redeposited natural and topsoil.	0.41- 0.62m+
10906	Fill: Dark laminations above 10905 sat in shallow "U". Water derived.	0.28- 0.49m



Trench No. 110		Max depth: 0.62m
Context	Description	Depth (m)
11000	Topsoil: Mid brown silty clay.	0- 0.25m
11001	Natural: Yellow clay, 5% stone.	0.25- 0.4m+
11002	Cut: Modern core sample borehole.	0.25m+

Trench No. 111		Max depth: 0.25m
Context	Description	Depth (m)
11100	Topsoil: Mid brown silty clay.	0- 0.25m
11101	Natural: Yellow brown clay.	0.25m+

Trench No. 112		Max depth: 0.64m
Context	Description	Depth (m)
11200	Topsoil: Mid greyish brown sandy clay loam.	0- 0.4m
11201	Subsoil: Mid orangey brown sandy clay.	0.4- 0.64m+
11202	Furrow: Example of furrow. Northwest-southeast at 5m intervals across trench. Typically 4m in width. Filled with subsoil 11201.	0.64+
11203	Natural: Mix of ironstone and sandstone.	0.64m+

Trench No. 113		Max depth: 0.41m
Context	Description	Depth (m)
11300	Topsoil: Mid brown silty clay.	0- 0.31m
11301	Natural: Yellow-brown clay.	0.4- 0.64m+
11302	Furrow: Example of furrow. Two furrows are present in this trench The eastern furrow continues into Trench 114. 3m wide, 5m centres.	0.41m+
11303	Fill: Fill of 11302. Typical furrow fill. Greasy mid yellow-brown clay with roots.	0.41m+
11304	Natural: Coal seam in centre of trench.	0.41m+

Trench No. 114		Max depth: 0.38m
Context	Description	Depth (m)
11400	Topsoil: Mid brown clayey silt.	0- 0.38m
11401	Natural: Yellow-brown clay.	0.38m+
11402	Furrow: Example of furrow. East-west across trench. Typically 2m wide at 6m centres, but decreasing in size to south and eventually petering out halfway down trench.	0.38m+
11403	Fill: Fill of 11402. Typical furrow fill. Greasy mid yellow-brown clay with roots.	0.38m+



Trench No. 115		Max depth: 0.3m
Context	Description	Depth (m)
11500	Topsoil: Mid brown silty clay	0- 0.3m
11501	Natural: Yellow-brown clay	0.3m+

Trench No. 116		Max depth: 0.32m
Context	Description	Depth (m)
11600	Topsoil: Mid grey clayey silt. Friable.	0- 0.32m
11601	Natural: Yellow-brown clay.	0.32m+
11602	Cut: Gully. Straight sides with flat base – did not penetrate bedrock. Undated.	0.32- 0.54m
11603	Fill: Fill of 11602. Secondary fill of gully. Light reddish brown silty sand with rare small stones.	0.32- 0.54m
11604	Furrow: Example of furrow. Cuts gully 11602. N-S across trench. Typically 1.09m wide at 6m centres. Harder to spot to the west, but still present.	0.32- 0.54m
11605	Fill: Fill of 11604. Typical furrow fill. Greasy mid yellow-brown clay with roots.	0.32- 0.54m
11606	Natural: Sandstone bedrock.	0.54m+

Trench No. 117		Max depth: 0.38m
Context	Description	Depth (m)
11701	Topsoil: Sandy clayish silt dark greyish brown with 1% stone <0.3m.	0- 0.38m
11702	Layer: Opencast backfill – mixed mostly yellowish grey sandy clay with some patches of silty clay – mid brownish grey.	0.38m+
11703	Natural: Grey yellow sandy clay with occasional shale patches.	0.38m+

Trench No. 118		Max depth: 0.5m
Context	Description	Depth (m)
11801	Topsoil: Dark brownish grey sandy clayish silt.	0- 0.2m
11802	Subsoil: Mid-brownish grey sandy clay.	0.2- 0.48m
11803	Layer: Opencast backfill. Dark brownish grey sandy clay with frequent large stone rubble and charcoal inclusions.	0.5m+

Trench No. 119		Max depth: 0.34m
Context	Description	Depth (m)
11901	Topsoil: Dark brownish grey sandy clayish silt. 1% sandstone.	0- 0.34m
11902	Layer: Opencast backfill. Mixed deposit mostly yellowish grey silty clay frequent stone <0.7m, mostly 0.2m and occasional charcoal and rubble.	0.34m



Trench No. 120		Max depth: 0.4m
Context	Description	Depth (m)
12001	Topsoil: Dark brownish grey sandy clayish silt.	0- 0.3m
12002	Natural: Mid greyish yellow sandy clay.	0.3m+
12003	Layer: Opencast backfill. Mixed mid greyish brown material in north side of trench.	0.3m+

Trench No. 121		Max depth: 0.68m
Context	Description	Depth (m)
12101	Topsoil: Very dark brownish grey clayish silt stained by coal dust and high levels of coal inclusions.	0- 0.68m
12102	Natural: Pale greyish yellow sandy clay.	0.68m+

Trench No. 122		Max depth: 0.44m
Context	Description	Depth (m)
12201	Topsoil: Dark brownish grey sandy clayish silt.	0- 0.31m
12202	Layer: Opencast mine backfill/dirty natural – mixed deposit mostly mid yellowish grey sandy clay with stone, coal and brick fragments.	0.31- 0.44m+
12203	Natural: Mid greyish yellow sandy clay with occasional stone fragments.	0.31- 0.44m+

Trench No. 123		Max depth: 0.25m
Context	Description	Depth (m)
12301	Topsoil: Dark brown silty sand.	0- 0.25m
12302	Natural: Yellowish grey clay.	0.31- 0.25m+
12303	Furrow: Example of furrow. North-south across trench. 1m wide, 6m centres.	0.25m+
12304	Fill: Fill of 12503. Typical furrow fill. Greasy mid-brown clay with roots.	0.25m+

Trench No. 124		Max depth: 0.45m
Context	Description	Depth (m)
12401	Topsoil: Dark brown silty sand.	0- 0.45m
12402	Natural: Yellowish clay.	0.45m+



Trench No. 125		Max depth: 0.25m
Context	Description	Depth (m)
12500	Topsoil: Dark brown clayey silt.	0- 0.25m
12501	Natural: Yellow-clay.	0.25m+
12502	Furrow: Example of furrow. North-south across trench. Typically 2m wide at 6m centres.	0.25m+
12503	Fill: Fill of 12502. Typical furrow fill. Greasy mid yellow-brown clay with roots.	0.25m+

Trench No. 126		Max depth: 0.3m
Context	Description	Depth (m)
12600	Topsoil: Mid-brown clayey silt.	0- 0.3m
12601	Natural: Yellow-clay.	0.3m+
12602	Furrow: Example of furrow. NW-SE across trench. Typically 1m wide at 5m centres.	0.3m+
12603	Fill: Fill of 12602. Typical furrow fill. Greasy mid orange-brown clay with roots.	0.3m+
12604	Natural: Coal seam. Irregular patch of blue black shale/coal. 3m wide.	0.3m+

Trench No. 127		Max depth: 0.43m
Context	Description	Depth (m)
12700	Topsoil: Dark blackish brown silty sand.	0- 0.36m
12701	Natural: Yellow-clay.	0.36- 0.43m+
12702	Furrow: Example of furrow. N-S across trench. Typically 1m wide at 6m centres.	0.36m+
12703	Fill: Fill of 12702. Typical furrow fill. Greasy mid orange-brown clay with roots.	0.36m+
12704	Natural: Coal seam. Irregular patch of blue black shale/coal. 3m wide.	0.36m+

Trench No. 128		Max depth: 0.34m
Context	Description	Depth (m)
12801	Topsoil: Dark blackish brown silty sand.	0- 0.28m
12802	Natural: Light yellowish brown clay.	0.28- 0.34m+
12803	Furrow: Running lengthways with trench. Typically 2m wide.	0.28m+
12804	Fill: Fill of 12802. Typical furrow fill. Greasy mid brown silty clay with 2% coal.	0.28m+
12805	Natural: Mudstone outcrops.	0.28m+
12806	Cut: Bell pit. 1.7m Diameter. Auger no. 1.	0.28m- 1.2m+
12807	Fill: fill of 12806. Yellow-brown clayey silt with 5% coal.	0.28m- 1.2m+



Trench No. 129		Max depth: 0.36m
Context	Description	Depth (m)
12901	Topsoil: Mid brown silty loam.	0- 0.25m
12902	Furrow: 2m wide, N-S across trench, 6m centres.	0.25m+
12903	Natural: Orange-yellow clay with 4% sandstone <5cm.	0.25- 0.36m+
12904	Natural: Blue/black shale coal.	0.28m+
12905	Fill: Fill of 12902. Typical furrow fill. Greasy dark grey loamy clay with 5-10% coal etc.	0.25m+

Trench No. 130		Max depth: 0.36m
Context	Description	Depth (m)
13001	Topsoil: Mid brown silty loam.	0- 0.3m
13002	Natural: Light yellow clay.	0.3m+
13003	Furrow: North-south across trench. 1m wide, 6m centres.	0.3m+
13004	Fill: Fill of 13003. Typical furrow fill. Grey brown silty clay.	0.3m+
13005	Cut: Bell pit. 1.7m diameter. Unexcavated. Auger no. 2.	0.3- 4.6m
13006	Fill: Fill of 13005. Blue black shale coal.	0.3- 1.95m
13007	Layer: Opencast backfill seen at west end of trench. Mixed yellow brown clay.	0.3m+

Trench No. 131		Max depth: 0.45m
Context	Description	Depth (m)
13101	Topsoil: Mid brown silty clay.	0- 0.3m
13102	Natural: Light yellow clay.	0.3m+
13103	Fill: Fill of 13104. Blue-black shale/coal with sandstone 2% <15cm diameter.	0.3m+
13104	Cut: Bell pit. 1.7m diameter. Sub-rounded. Auger no. 4.	0.3m- 1.25m+
13105	Furrow: North-south across trench. 2m wide, 6m centres.	0.3m- 1.25m+
13106	Fill: Fill of 13105. Typical furrow fill: orange brown silty clay 2% inclusions of sandstone and clinker <5cm.	0.3m+
13107	Natural: Blue/black shale coal.	0.3m+



Trench No. 132		Max depth: 0.35m
Context	Description	Depth (m)
13200	Topsoil: Dark brown silty sand.	0- 0.35m
13201	Natural: Yellow clay.	0.35m+
13202	Cut: Bell pit. 1.7m diameter. Auger no. 5.	0.35m- 3.35m
13203	Fill: Fill of 13202. Blue black shale coal, mudstone and grey clay mixed.	0.35m- 2.65m
13204	VOID	0.35m+
13205	Fill: Fill of 13202. Grey brown sandy silt at centre of 13203. Diameter 1m.	0.35m+
13206	Furrow: North-south running along trench. 1 seen. About 2m wide.	0.35m+
13207	Fill: Typical furrow fill. Mid brown silty clay <5% sandstone and coal <1cm.	0.35m+
13208	Natural: Mudstone outcrops.	0.35m+

Trench No. 133		Max depth: 0.3m
Context	Description	Depth (m)
13301	Topsoil: Dark brown clay silt.	0- 0.3m
13302	Fill: Light brown silt clay <5% sandstone and coal.	0.3m+
13303	Furrow: North-south across trench. 0.8m wide, 6m centres.	0.3m+
13304	Natural: Silver grey clay <5% coal <2cm.	0.3m+
13305	Natural: Mudstone outcrops.	0.3m+

Trench No. 134		Max depth: 0.3m
Context	Description	Depth (m)
13401	Topsoil: Dark brown clay silt.	0- 0.3m
13402	Natural: Yellow brown clay silt.	0.3m+

Trench No. 135		Max depth: 0.3m
Context	Description	Depth (m)
13501	Topsoil: Dark greyish brown sandy clay.	0- 0.3m
13502	Natural: Mid orangish grey sandy clay matrix around sandstone.	0.3m+
13503	Cut: Shallow 'U'-shaped ditch. Modern; not fully excavated. Steep sides, concave base.	0.3m+
13504	Fill: fill of 13503. Modern pot and glass. Dark blackish grey sandy clay. Not fully excavated.	0.3m+



Trench No. 136		Max depth: 0.3m
Context	Description	Depth (m)
13501	Topsoil: Dark greyish brown sandy silt.	0- 0.3m
13502	Subsoil: Mid brown sand and mixed sandstone inclusions.	0.3m+
13503	Natural: Mid orangish brown silty sand.	0.3m+
13504	Furrow: North-south across trench. 9m spacing, 0.8m wide. Five examples. Sixth example with 4.5m spacing, none in west end.	0.3m+
13505	Fill: Typical furrow fill. Greasy brown clay with roots.	0.3m+

Trench No. 137		Max depth: 0.3m
Context	Description	Depth (m)
13701	Topsoil: Mid brown silty loam.	0.3m+
13702	Natural: Silver grey clay with <5% sandstone.	0.3m+
13703	Natural: Mudstone outcrops.	0.3m+
13704	Fill: fill of 13707. Light brown sandy silt <5% sandstone.	0.3m+
13705	Natural: Blue black coal shale.	0.3m+
13706	Natural: Silver yellow clay.	0.3m+
13707	Furrow: Northwest-southeast across trench. 1m wide, 6m centres.	0.3m+
13708	Natural: Mid yellow clay.	0.3m+

Trench No. 138		Max depth: 0.3m
Context	Description	Depth (m)
13801	Topsoil: Dark blackish brown silty sand.	0- 0.3m
13802	Natural: Mid yellowish brown silty sand. Clay content increases towards east.	0.3m+
13803	Furrow: Ten in west end, nine in east end, gap of 25m in middle. 0.8m wide, 5m centres. North-south across trench.	0.3m+
13804	Fill: Typical furrow fill. Greasy brown clay with roots.	0.3m+



Trench No. 139		Max depth: 0.3m
Context	Description	Depth (m)
13901	Topsoil: Mid brown silty loam.	0- 0.3m
13902	Natural: Mid yellow clay <5% sandstone.	0.3m+
13903	Natural: Mudstone outcrops.	0.3m+
13904	Natural: Blue black coal shale.	0.3m+
13905	Natural: Silver grey clay with mudstone.	0.3m+
13906	Natural: Orange sandstone.	0.3m+
13907	Furrow: East-west across trench. 1m wide, 6m centres.	0.3m+
13908	Fill: Fill of 13906. Mid-light brown sandy clay <5% sandstone <2cm, <2% coal <1cm.	0.3m+

Trench No. 140		Max depth: 0.3m
Context	Description	Depth (m)
14001	Topsoil: Dark greyish brown silty sand.	0- 0.3m
14002	Natural: Light yellowish grey clay with ironstone outcrops.	0.3m+
14003	Furrow: North-south across trench. 0.8m wide, 4.5m centres. 9 seen in west half of trench only.	0.3m+
14004	Fill: Typical furrow fill. Greasy brown clay with roots.	0.3m+

Trench No. 141		Max depth: 0.3m
Context	Description	Depth (m)
14001	Topsoil: Dark greyish brown silty sand.	0- 0.3m
14002	Natural: Light yellowish grey clay with sandstone outcrops.	0.3m+
14003	Furrow: 24 furrows. Aligned north-south across trench. 0.4-1.2m wide, 4.5m centres.	0.3m+
14004	Fill: Typical furrow fill. Greasy brown clay with roots.	0.3m+



Trench No. 142		Max depth: 0.35m
Context	Description	Depth (m)
14201	Topsoil: Mid brown silty loam.	0- 0.35m
14202	Natural: Mid yellow clay <5% sandstone.	0.35m+
14203	Natural: Mudstone outcrops.	0.35m+
14204	Natural: Blue black coal shale.	0.35m+
14205	Natural: Silver yellow clay.	0.35m+
14206	Natural: Orange brown mudstone.	0.35m+

Trench No. 143		Max depth: 0.3m
Context	Description	Depth (m)
14300	Topsoil: Dark brown clayey silt.	0- 0.3m
14301	Natural: Yellow, purplish in places, clay with patches of coal.	0.3m+
14302	Furrow: North-south c. 0.8m wide, 4.4m centres.	0.3m+
14303	Fill: Typical furrow fill. Greasy brown clay with roots.	0.3m+
14304	Natural: Coal seam in east of trench southwest-northeast consisting of blue/black coal abd silver grey clay.	0.3m+

Trench No. 144		Max depth: 0.3m
Context	Description	Depth (m)
14401	Topsoil: Dark blackish brown sandy silt.	0- 0.3m
14402	Natural: Light-mid yellowish brown silty sand with 40-100% bedrock.	0.3m+
14403	Furrow: Oblique across trench. Aligned north-south. 0.8m wide 4m centres.	0.3m+
14404	Fill: Typical furrow fill. Grey clay with roots.	0.3m+
14405	Natural: Coal seams – blue black coal grit bands.	0.3m+

Trench No. 145		Max depth: 0.33m
Context	Description	Depth (m)
14501	Topsoil: Dark blackish brown sandy silt.	0- 0.26m
14502	Natural: Mid orangish yellow sandy clay.	0.26- 0.33m+
14503	Furrow: Northwest-southeast across trench. 1m wide, 6m centres.	0.3m+
14504	Fill: Typical furrow fill. Light brown silty sand fill.	0.3m+
14505	Fill: Bands of fill within each furrow to the east of the main fill. Dark brown clay silt.	0.3m+



Trench No. 146		Max depth: 0.3m
Context	Description	Depth (m)
14600	Topsoil: Dark brown clay silt.	0- 0.3m
14601	Natural: Yellow clay with sandstone.	0.3m+
14602	Furrow: Aligned north-south along trench c.4m. Two furrows identified.	0.3m+
14603	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+

Trench No. 147		Max depth: 0.3m
Context	Description	Depth (m)
14701	Topsoil: Dark blackish brown silty sand.	0- 0.3m
14702	Natural: Mid yellowish brown sandy clay.	0.3m+
14703	Cut: Modern borehole. Auger no. 3.	0.3- 2.75m+
14704	Fill: Fill of modern borehole 14703. Topsoil fallen into hole.	0.3- 2.75m+
14705	Furrow: One furrow. Aligned north-south along trench c.5m wide.	0.3m+
14706	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+
14707	Natural: Coal seam and associated grey/brown patch in natural.	0.3m+

Trench No. 148		Max depth: 0.3m
Context	Description	Depth (m)
14800	Topsoil: Dark brown clayey silt.	0- 0.3m
14801	Natural: Yellow clay.	0.3m+
14802	Furrow: Perpendicular headland at end of furrows. East-west with trench 5m wide.	0.3m+
14803	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+
14804	Furrow: North-south along trench c.1m wide, 5m centeres.	0.3m+
14805	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+
14806	Natural: Silver and blue black patch of clay outcropping 15m at centre of trench.	0.3m+



Trench No. 149		Max depth: 0.3m
Context	Description	Depth (m)
14901	Topsoil: Mid brown silty loam.	0- 0.3m
14902	Natural: Light yellow clay with <2% sandstone <2cm.	0.3m+
14903	Natural: Mudstone.	0.3m+
14904	Natural: Silver yellow clay with ferrous mudstone.	0.3m+
14905	Natural: Blue black coal shale.	0.3m+
14906	Natural: Silver grey clay.	0.3m+
14907	Cut: French drain.	0.3m+
14908	Fill: Fill of 14908. Land drain – loose clinker and brick rubble.	0.3m+

Trench No. 150		Max depth: 0.3m
Context	Description	Depth (m)
15001	Topsoil: Mid brown loamy silt.	0- 0.3m
15002	Natural: Light yellow clay with <2% sandstone <3cm.	0.3m+
15003	Cut: French drain N-S.	0.3m+
15004	Fill: Fill of 15003. Loose clinker c.5cm diameter with occasional brick.	0.3m+
15005	Natural: Mudstone.	0.3m+
15006	Natural: Light brown clay.	0.3m+
15007	Natural: Blue/black coaly clay/mudstone.	0.3m+
15008	Natural: Silver grey clay.	0.3m+
15009	Natural: Grey brown clay.	0.3m+



Trench No. 151		Max depth: 0.3m
Context	Description	Depth (m)
15101	Topsoil: Mid brown silty loam.	0- 0.3m
15102	Natural: Blue black shale coal.	0.3m+
15103	Natural: Silver grey mudstone/clay.	0.3m+
15104	Natural: Light yellow clay with 2% mudstone.	0.3m+
15105	Natural: Mudstone.	0.3m+
15106	Cut: Land drain 9cm wide.	0.3m+
15107	Fill: Fill of 15106 loose clinker and brick fragments <6cm.	0.3m+
15108	Natural: Light-mid brown clay with coal and sandstone <5cm.	0.3m+

Trench No. 152		Max depth: 0.4m
Context	Description	Depth (m)
15201	Topsoil: Dark greyish brown clay.	0- 0.4m
15202	Natural: Light greyish yellow clay.	0.4m+
15203	Cut: Curvilinear gully, possibly ring gully. 0.26m deep by 0.62m wide with irregular base.	0.4m+
15204	Fill: Fill of 15203. Mid yellowish grey sandy clay with frequent red sandstone. No finds.	0.4m+
15205	Furrow: Aligned north-south along trench. 0.64m wide with straight sides and irregular base. 0.8m deep. Cuts 15203.	0.4m+
15206	Fill: Typical furrow fill. Mid yellowish brown sandy clay with frequent small coal fragments <0.5cm.	0.4m+

Trench No. 153		Max depth: 0.29m
Context	Description	Depth (m)
15300	Topsoil: Dark brown sandy silt.	0- 0.23m
15301	Natural: Light orangey brown sandy clay.	0.23- 0.29m+
15302	Furrow: One furrow aligned north-south with trench. 1m wide.	0.23m+
15303	Fill: Fill of 15302. Typical furrow fill. Mid brown greasy clay with roots.	0.23m+
15304	Fill: Fill of 15302. Unusual upper fill of furrow – compact ashy dark brown silt with modern pot.	0.23m+
15305	Cut: Modern geotechnical borehole (no fill – contains void).	0.23m+
15306	Cut: East-west aligned gully or atypical furrow. 0.12m deep, 0.35m wide.	0.23m+
15307	Fill: Fill of 15306. Grey brown greasy clay.	0.23m+



Trench No. 155		Max depth: 0.35m
Context	Description	Depth (m)
15401	Topsoil: Dark blackish brown silty sand.	0- 0.3m
15402	Natural: Mid yellowish grey sandy clay.	0.3- 0.35m+
15403	Furrow: Faint. Southeast-northwest alignment along trench c.1.2m wide, 4m centres.	0.3m+
15404	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+
15405	Natural: Sandstone outcrop in centre.	0.3m+

Trench No. 156		Max depth: 0.3m
Context	Description	Depth (m)
15600	Topsoil: Dark brown clayey silt.	0- 0.3m
15601	Natural: Yellow clay with 10% sandstone.	0.3m+
15602	Natural: Grey-yellow sandstone bedrock.	0.3m+
15603	Furrow: Two furrows in trench running north-south along trench c.10m wide.	0.3m+
15604	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+
15605	Cut: Modern linear at southwest limit of furrow. 0.9m wide, 0.07m deep.	0.3m+
15606	Fill: Fill of 15605. Ashy black fill with modern glass and pot.	0.3m+

Trench No. 157		Max depth: 0.32m
Context	Description	Depth (m)
15701	Topsoil: Dark blackish brown silty clay.	0- 0.32m
15702	Subsoil: Concentrated at west extent of trench. Lighter brown silt clay.	0.3- 0.35m+
15703	Natural: Light yellowish grey sandy clay.	0.3m+
15704	Cut: Bell pit. Sub-rounded, c. 1.8m diameter. Not excavated. Auger no. 6.	0.3- 2.1m+
15705	Fill: Fill of 15704. Blue black coal shale and silt.	0.3- 2.1m+

Trench No. 158		Max depth: 0.42m
Context	Description	Depth (m)
15701	Topsoil: Blackish brown silty sand.	0- 0.32m
15702	Natural: Mid orangish brown sandy clay.	0.3- 0.35m+



Trench No. 159		Max depth: 0m
Context	Description	Depth (m)
	Not dug as within a plantation of osiers.	-

Trench No. 160		Max depth: 0m
Context	Description	Depth (m)
	Not dug as within a plantation of osiers.	-
Trench No. 161		Max depth: 0m
Context	Description	Depth (m)
	Not dug as within a plantation of osiers.	-

Trench No. 162		Max depth: 0.3m
Context	Description	Depth (m)
16201	Topsoil: Dark blackish brown silty sand.	0- 0.3m
16202	Natural: Mid orangish brown sandy clay.	0.3m+
16203	Furrow: One seen running east-west with trench >2m wide.	0.3m+
16204	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+

Trench No. 163		Max depth: 0.4m
Context	Description	Depth (m)
16301	Topsoil: Dark brown clay silt with charcoal and roots.	0- 0.4m
16302	Natural: Yellow clay with coal. Contained a band of white clay that initially looked like a feature but that ran under the yellow clay on both sides.	0.4m+

Trench No. 164		Max depth: 0.4m
Context	Description	Depth (m)
16400	Topsoil: Dark brown clay silt.	0- 0.4m
16401	Natural: Yellow clay with gravel and coal.	0.4m+



Trench No. 165		Max depth: 0.6m
Context	Description	Depth (m)
16500	Topsoil: Dark brown silt clay with red sandstone inclusions.	0- 0.6m
16501	Natural: Mottled light brown sandy clay.	0.6m+

Trench No. 166		Max depth: 0.4m
Context	Description	Depth (m)
16600	Topsoil: Dark brown silty clay. Rooty.	0- 0.4m
16601	Natural: Yellow clay with coal.	0.4m+
16602	Furrow: East-west furrows 1m wide, 6m centres throughout trench.	0.4m+
16603	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.4m+
16604	Natural: Outcropping coal at southeast end of trench.	0.4m+

Trench No. 167		Max depth: 0.3m
Context	Description	Depth (m)
16700	Topsoil: Dark blackish brown sandy silt.	0- 0.3m
16701	Natural: Mid greyish yellow sandy clay. In middle and w part, rising to 100% sandstone in places.	0.3m+

Trench No. 168		Max depth: 0.3m
Context	Description	Depth (m)
16800	Topsoil: Dark blackish brown clay silt.	0- 0.3m
16801	Natural: Mid yellowish brown sandy clay with occasional sandstone/cobble inclusions.	0.3m+
16802	Furrow: Seen only in northern 2/3 of trench. Aligned east-west. Only 0.6m wide, 6m centres.	0.3m+
16803	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.3m+



Trench No. 169		Max depth: 0.38m
Context	Description	Depth (m)
16900	Topsoil: Dark brown silty clay.	0- 0.38m
16901	Natural: Predominantly yellow clay with bands of orange sandy clay and bedrock.	0.38m+
16902	Furrow: Northwest-southeast alignment. 1.4m wide, 5m apart.	0.38m+
16903	Fill: Typical furrow fill. Grey yellow silty clay with frequent coal inclusions and post- medieval ceramic.	0.38m+
16904	Cut: Linear cuts for field drains 0.4m wide.	0.38m+
16905	Fill: Fill of 16904. Medium brown silty clay fill of field drains.	0.38m+

Trench No. 170		Max depth: 0.34m
Context	Description	Depth (m)
17000	Topsoil: Dark blackish brown silty clay.	0- 0.34m
17001	Natural: Mid reddish brown silty sand 50% sandstone rubble at surface of bedrock. Shale outcrop at mid point.	0.38m+
17002	Furrow: Aligned east-west. 1.5m wide, 3m spacing between them.	0.38m+
17003	Fill: Typical furrow fill. Mid brown greacy clay with roots.	0.38m+

Trench No. 171		Max depth: 0.2m
Context	Description	Depth (m)
17100	Ploughsoil: Yellow brown clay.	0- 0.2m
17101	Natural: Yellow clay natural with minor grey stripes.	0.2m+
17102	Natural: Coal seam and associated geology.	0.2m+

Trench No. 172		Max depth: 0.4m
Context	Description	Depth (m)
17200	Topsoil: Mid brown clay silt.	0- 0.4m
17201	Natural: Grey brown clay with 10% sandstone.	0.4m+
17202	Furrow: East-west variable width from 0.6-2m, 6m centres. Absent in far south of trench.	0.4m+
17203	Fill: Typical furrow fill. Mid brown greasy clay with roots.	0.4m+



Trench No. 173		Max depth: 0.3m
Context	Description	Depth (m)
17300	Topsoil: Mid greyish brown rooty sandy clay.	0- 0.3m
17301	Natural: Yellow clay.	0.4m+
17302	Furrow: East-west alignment with trench width of 2.2m, 6m centres.	0.4m+
17303	Fill: Typical furrow fill. Mid brown greasy clay silt with roots, lime, red sandstone and coal.	0.4m+

Trench No. 174		Max depth: 0.4m
Context	Description	Depth (m)
17400	Topsoil: Mid greyish brown rooty silty clay.	0- 0.4m
17401	Natural: Greyish yellow clay with coal and sandstone.	0.4m+
17402	Furrow: East-west with trench width 0.5m, 6m centres.	0.4m+
17403	Fill: Typical furrow fill. Mid brown greasy clay silt with roots, lime, red sandstone and coal.	0.4m+

Trench No. 175		Max depth: 0.4m
Context	Description	Depth (m)
17500	Topsoil: Dark brown clayey silt with roots.	0- 0.4m
17501	Natural: Yellow clay with coal.	0.4m+
17502	Furrow: One seen, running east-west with trench. Width 2m.	0.4m+
17503	Fill: Typical furrow fill. Mid brown silty clay with roots and sandstone.	0.4m+

Trench No. 176		Max depth: 0.4m
Context	Description	Depth (m)
17600	Topsoil: Dark greyish brown with roots.	0- 0.4m
17601	Layer: Opencast backfill. Mixed redeposited yellow clay with coal, gravel, patches of grey clay and other dirt.	0.4m+



Trench No. 177		Max depth: 0.8m
Context	Description	Depth (m)
17700	Topsoil: Dark greyish brown with roots.	0- 0.4m
17701	Layer: Spread of overburden. Opencast backfill material spread out to level up ground. Dirty brownish yellow clay with coal.	0.4- 0.8m
17703	Natural: Clean grey clay with coal.	0.8m+
17702	Furrow: Two seen, running east-west with trench. Width 1m.	0.8m+
17703	Fill: Typical furrow fill. Mid brown clayey silt with roots, lime and red sandstone.	0.8m+

Trench No. 178		Max depth: 0.4m
Context	Description	Depth (m)
17800	Topsoil: Dark brown silty clay.	0- 0.4m
17801	Natural: Yellow brown silty clay.	0.4m+
17802	Furrow: Two seen, running east-west with trench. Width 0.8m, 6m centres. Absent in middle of trench but present at both ends.	0.4m+
17803	Fill: Ttypical furrow fill. Mid brown clayey silt with roots, coal etc.	0.4m+
17804	Cut: Field drain.	0.4m+
17805	Fill: Field drain fill.	0.4m+
17806	Cut: 1.5m wide modern linear.	0.4m+
17807	Fill: Fill of 17806 . Black sandy clay fill containing frogged bricks with white cement stamped "Wilson Bro Normanton" dimensions 23cm x 11cm x 8cm.	0.4m+

Trench No. 179		Max depth: 0.3m
Context	Description	Depth (m)
17901	Topsoil: Grey brown silty clay.	0.3m+
17902	Natural: Dark brown clay with coal seen at W end of trench.	0.3m+
17903	Cut: French drain.	0.3m+
17904	Fill: Hardcore crush fill of french drain.	0.3m+
17905	Natural: Tan yellow clay with coal flecks. Seen at E end of trench.	0.3m+



Trench No. 180		Max depth: 0.46m
Context	Description	Depth (m)
18000	Topsoil: Dark black brown silty sand.	0- 0.45m
18001	Furrow: East-west across trench, 1m wide, 6m centres.	0.45m+
18002	Fill: Typical furrow fill. Mustard brown silty clay.	0.45m+
18003	Cut: French drain cut.	0.45m+
18004	Fill: Stone hardcore fill of french drains.	0.45m+
18005	Subsoil: Medium brown grey clay. Seen only in part of trench under grassland.	0.4- 0.45m+
18006	Natural: Yellow brown clay with bands of whitish grey blue clay at southern end mottled yellow and blue with coal fragments.	0.45m+

Trench No. 181		Max depth: 0.3m
Context	Description	Depth (m)
18100	Topsoil: Dark brownish grey clay.	0- 0.3m
18101	Natural: Mid greyish brown clay.	0.3m+

Trench No. 182		Max depth: 0.3m
Context	Description	Depth (m)
18200	Topsoil: Dark brown slightly silty clay with infrequent brick fragments.	0-0.4m
18201	Natural: Yellow clay mottled with blue/grey clay.	0.4m+

Trench No. 183		Max depth: 0.4m
Context	Description	Depth (m)
18300	Topsoil: Dark brown silty clay with roots.	0- 0.4m
18301	Natural: Greyish yellow clay with coal, ironstone and sandstone.	0.4m+
18302	Furrow: 0.6m width. North-south running along trench.	0.4m+
18303	Fill: typical furrow fill. Mustard brown silty clay.	0.4m+



Trench No. 184		Max depth: 0.46m
Context	Description	Depth (m)
18400	Topsoil: Medium brown silty clay.	0- 0.3m
18401	Cut: Hedgerow/hedge line following existing field boundary.	0.3m+
18402	Fill: Fill of 18401. Mustard brown silty clay with coal.	0.3m+
18403	Furrow: 0.5m width, 6m centres. North-south running across trench.	0.3m+
18404	Fill: Typical furrow fill. Grey tan silty clay with coal.	0.3m+
18405	Cut: Field drain.	0.3m+
18406	Fill: Field drain fill.	0.3m+
18407	Natural: Mottled yellow tan clay with coal.	0.3m+

Trench No. 185		Max depth: 0.3m
Context	Description	Depth (m)
18500	Topsoil: Grey brown silty clay with brick frags and modern pot.	0- 0.3m
18501	Furrow: 0.9m width. North-south running across trench. One seen at east end of trench only.	0.3m+
18502	Fill: Typical furrow fill. Mid brown greasy clay with roots etc.	0.3m+
18503	Natural: Mottled yellow/blue grey clay.	0.3m+

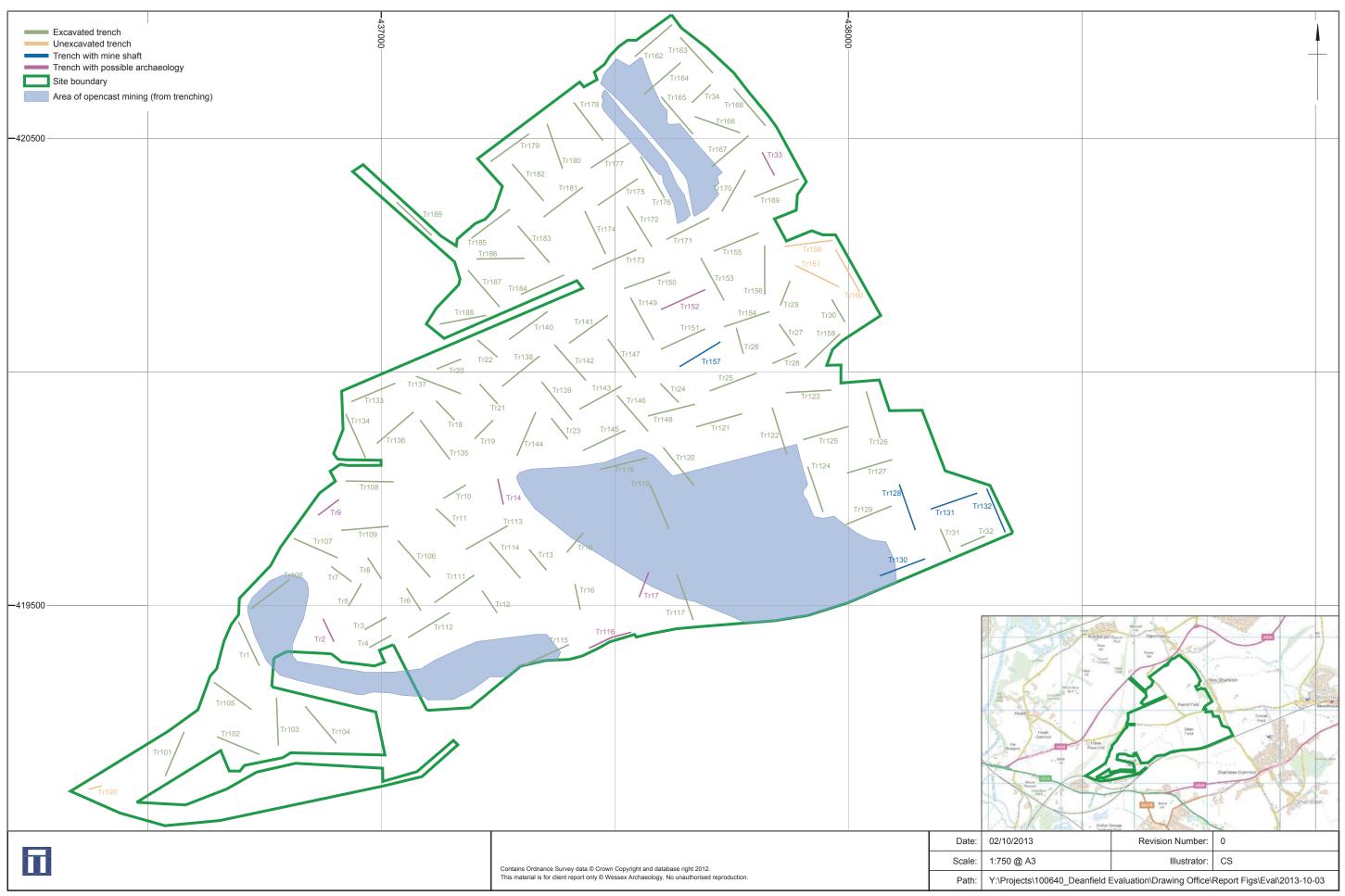
Trench No. 186		Max depth: 0.3m
Context	Description	Depth (m)
18600	Topsoil: Dark brown silt clay.	0- 0.3m
18601	Natural: Yellow-brown clay. Yellower at southeast, browner at northwest.	0.3m+
18602	Furrow: 0.9m wide, 6m centres. North-south running across trench. Four seen at east end of trench only.	0.3m+
18603	Fill: Typical furrow fill. Mid brown greasy clay with roots etc.	0.3m+

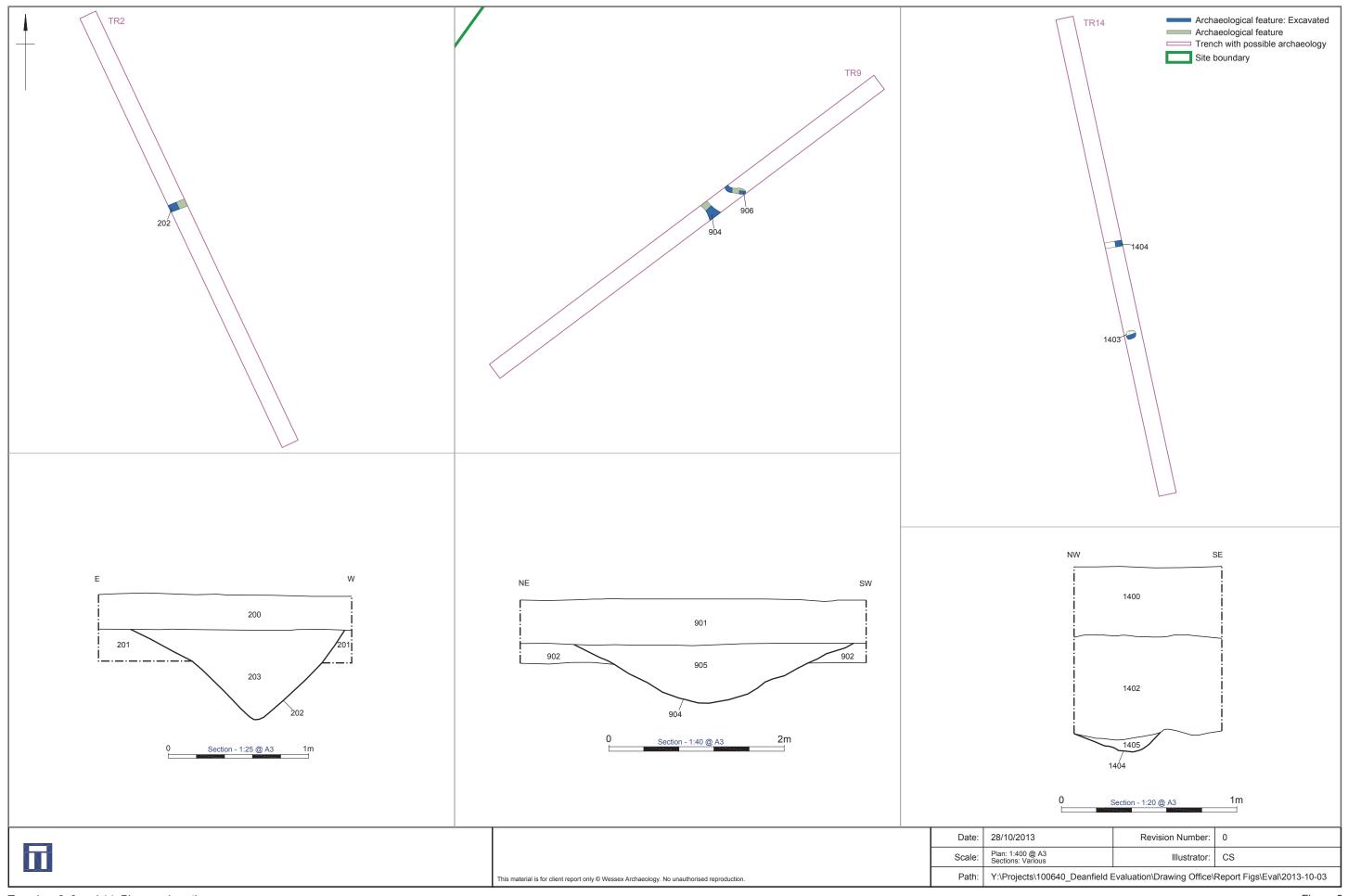
Trench No. 187		Max depth: 0.3m
Context	Description	Depth (m)
18700	Topsoil: Medium brown slightly silty clay, brick and coal frags and modern pot.	0- 0.3m
18701	Natural: Yellow clay, coal frags, bands of brown yellow clay.	0.3m+



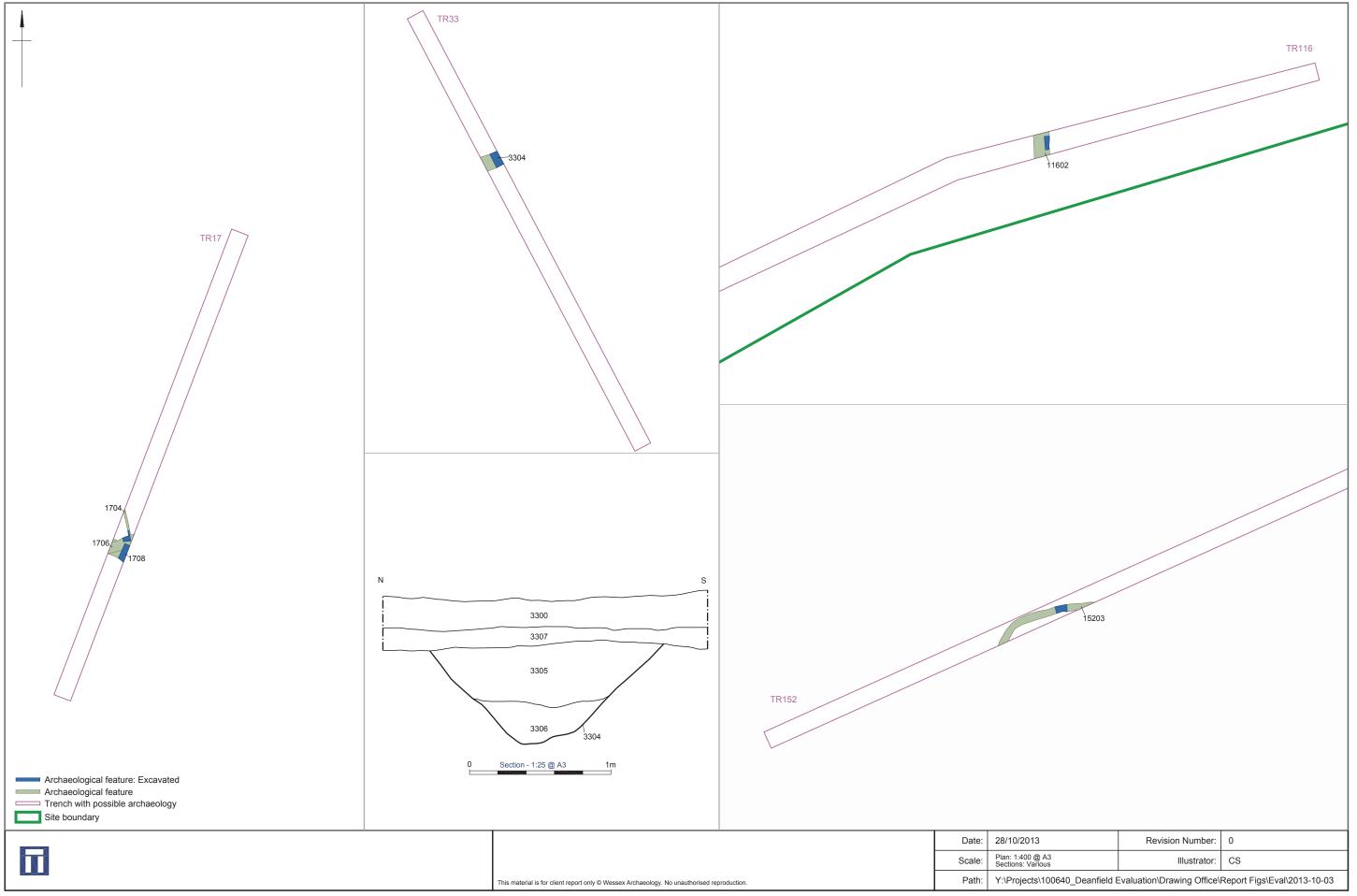
Trench No. 188		Max depth: 0.4m
Context	Description	Depth (m)
18800	Topsoil: Dark blackish brown clay silt.	0- 0.4m
18801	Natural: Yellow-brown clay. Yellower at southeast, browner at northwest.	0.4m+
18802	Furrow: 1m wide, 6.5m centres. North-south running across trench. Hard to see at west end but still present.	0.4m+
18803	Fill: Typical furrow fill. Mid brown greasy clay with roots etc.	0.4m+

Trench No. 189		Max depth: 0.25m
Context	Description	Depth (m)
18900	Topsoil: Medium brown silty clay with brick frags, modern ceramic and glass.	0- 0.25m
18901	Cut: Field drain.	0.25m+
18902	Fill: Field drain fill.	0.25m+
18903	Natural: Yellow clay with mottled patches of blue grey clay.	0.25m+





Trenches 2, 9 and 14: Plans and sections



Trenches 17, 33, 116 and 152: Plans and sections



Plate 1: Blank Trench 111, post-excavation



Plate 2: Trench 127, example of furrows, from east

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Plate 3: Trench 17 from the northeast, example of opencast backfill



Plate 4: Trench 130, example of early post-medieval shaft 13005

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Plate 5: Trench 2, undated linear 202



Plate 6: Trench 9, undated linear 904

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Plate 7: Trench 9, undated linear 906



Plate 8: Trench 14, undated linear 1404

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Plate 9: Trench 17, undated linear 1706 and 1709



Plate 10: Trench 33, ditch 3304

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Plate 11: Trench 116, undated linear 11602



Plate 12: Trench 152, undated curvilinear 15203



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Plate 13: Trench 14, modern pit (geotechnical borehole) 1403



Plate 14: Trench 109, land drain 10903

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Plate 15: Trench 34, modern field boundary 3406



Plate 16: Trench 19, lump of natural clay identified as pit 1903

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