LAND TO THE EAST OF FEDERAL MOGUL, LYDNEY GLOUCESTERSHIRE

ARCHAEOLOGICAL EVALUATION

For

FEDERAL MOGUL

CA REPORT: 04157

OCTOBER 2004

LAND TO THE EAST OF FEDERAL MOGUL LYDNEY GLOUCESTERSHIRE

ARCHAEOLOGICAL EVALUATION

CA PROJECT: 1750 CA REPORT: 04157

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SUMMARY

Site Name: Land to the east of Federal Mogul

Location: Lydney, Gloucestershire

NGR: SO 645 026

Type: Evaluation

Date: 26 July-26 August 2004

Location of Archive: Dean Heritage Museum Trust

Site Code: FML 04

An archaeological evaluation was undertaken by Cotswold Archaeology between July and August 2004 at the request of AtisRealWeatheralls on behalf of Federal Mogul on land to the east of the Federal Mogul site, Lydney, Gloucestershire. In compliance with an approved WSI (CA 2004), 33 trenches were excavated across the development area.

The evaluation identified archaeological deposits within the proposed development area. Many of these date to the Roman period and possibly represent both landscape management features, such as drainage and and/or field boundary ditches, and also features which may relate to areas of occupation and possible industrial activity. In addition, the agricultural use of the site in the medieval and post-medieval periods is reflected in the discovery of further boundary or drainage ditches, as well as ridge and furrow cultivation features.

No primary deposits associated directly with industrial processes were encountered, but the recovery of quantities of metallurgical residues from a number of the features, mainly in the form of iron slag, indicates that iron smelting, and possibly smithing, was carried out in the vicinity during the Roman period and possibly again in the medieval period.

The evaluation has characterised the archaeological potential of the site, and has indicated that Roman, medieval, modern and undated deposits survive at depths of between 0.3m and 0.9m below the modern ground surface.

1. INTRODUCTION

- 1.1 Between July and August 2004 Cotswold Archaeology (CA) carried out an archaeological evaluation at the request of AtisRealWeatheralls for Federal Mogul on land to the east of the Federal Mogul foundry site (centred on NGR: SO 6450 0260; Fig. 1). The evaluation was undertaken in connection with a planning application for the development of the site.
- 1.2 The evaluation was carried out in accordance with a detailed WSI produced by CA (2004a) and approved by Charles Parry, Senior Archaeological Officer, Gloucestershire County Council and archaeological advisor to Forest of Dean District Council. The fieldwork also followed the *Standard and Guidance for Archaeological Field Evaluation* issued by the Institute of Field Archaeologists (1999), *Statement of Standards and Practices Appropriate for Archaeological Fieldwork in Gloucestershire* (GCC 1995) and the *Management of Archaeological Projects II* (EH 1991). It was monitored by Charles Parry, including a site visit on 12 August 2004.

The site

- 1.3 Details of the proposed development area, including its topography, geology and current land use, together with its historical and archaeological background have previously been researched and appear within a Cultural Heritage Assessment prepared by CA (2004b) in support of the planning application. It is not intended to repeat the findings of this investigation in full here, rather this report should be read in conjunction with it. In summary, the assessment identified limited archaeological features within the site, mainly comprising undated cropmarks and earthworks, thought to relate to pre-1839 agricultural features, as well as contemporary field boundaries surviving either as earth banks or extant hedgerows.
- 1.4 Archaeological assessments (CgMs 2002a, 2002b) of large areas of land to the north and north-east of the proposed development area identified potential for late medieval and post-medieval remains around Rodley Manor (NGR SO 6440 0380) and possible Saxon, medieval and post-medieval remains to the east of Crump Farm (an area centred on NGR SO 6500 0310). Subsequent archaeological

evaluation of the Rodley Manor site identified possible prehistoric activity represented by the recovery of five worked flint artefacts, the remains of timber-framed Roman buildings and substantial medieval stone buildings together with evidence of contemporary ironworking, and post-medieval drainage features (Wessex Archaeology 2003a). Evaluation of land to the east of Crump Farm also identified activity associated with late medieval ironworking (Wessex Archaeology 2003b)

Archaeological objectives

1.5 The objectives of the evaluation were to provide data on the date, character, quality, survival and extent of the archaeological deposits within the application area in order that an informed decision on their importance in a local, regional or national context can be made. This information will clarify whether any remains are of sufficient importance to warrant consideration for preservation *in situ*, or alternatively form the basis of mitigation measures that may seek to limit damage to significant remains.

Methodology

- 1.6 The agreed fieldwork methodology was initially to comprise the excavation of 44 trenches, numbered from 1 to 44, however in the event it was possible to excavate only 33 for a number of reasons: Trench 1 was located within a heavily wooded plantation and the discovery of slow-worms in the vicinity of the intended location of Trench 2 precluded its excavation. Consequently trenches 45 and 46 were excavated as a contingency. Unresolved access issues also prevented the excavation of trenches 21 to 30 and Trench 42 within the two fields in the south-eastern corner of the site. The presence of live services including overhead power lines, buried gas mains and the golf course irrigation system necessitated the relocation of a number of trenches. In addition, where trenches were initially positioned across course fairways these were moved slightly (Fig. 2).
- 1.7 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological

deposits were encountered they were excavated by hand in accordance with the CA Technical Manual 1: *Excavation Recording Manual* (1996).

- 1.8 Deposits were assessed for their palaeoenvironmental potential and, where appropriate, sampled and processed in accordance with the CA Technical Manual 2:
 The Taking and Processing of Environmental and Other samples from
 Archaeological Sites (2003). All artefacts recovered were processed in accordance
 with the CA Technical Manual 3: Treatment of Finds Immediately after Excavation
 (1995).
- 1.9 The archive and artefacts from the evaluation are currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the site archive (including artefacts) will be deposited with Dean Heritage Museum Trust.

2. RESULTS

- 2.1 Archaeological features were identified in 17 of the trenches. In many cases, trenches contained both dateable and undated contexts. Nine contained deposits dated to the Roman period and one contained a single medieval feature. Undated features were found in twelve of the trenches, although a number of these may be associated with more securely dated contexts. Seven trenches contained modern features and ten contained no archaeological evidence (trenches 7, 11, 12, 14, 16, 18, 36, 39, 41 and 46).
- 2.2 The results of the evaluation are presented below in chronological order. This section provides an overview of the evaluation results; detailed summaries of the recorded contexts, finds and environmental samples (biological evidence) are to be found in appendices 1, 2 and 3 respectively. A summary of the metallurgical residues is presented in Appendix 4.

Prehistoric

2.3 No features dating to the prehistoric period were revealed during the evaluation. A single residual flint flake recovered from Roman ditch 603 represents the only evidence of possible prehistoric activity on the site.

Romano-British

2.4 With two exceptions, Roman activity was confined to the ridge of higher ground which extends south-westwards from the north-eastern corner of the site (Fig. 3). This activity included pits, postholes and other types of features, however ditches were the most predominant. The Roman deposits were generally shallow and had clearly been heavily truncated by later cultivation processes which had tended to leave only the bases of negative features. All of the Roman features were sealed by a layer of subsoil, which is also likely to have formed through subsequent farming.

The ditches

2.5 Ditches dated to the Roman period were revealed in trenches 6, 10, 34, 37 and 44. Trenches 6 and 10 contained single ditches, whilst in trenches 34, 37 and 44 they were found in conjunction with other contemporary features. The majority of the Roman ditches varied between 0.55m and 1.5m in width, and 0.1m and 0.6m in depth. Their profiles tended to be broad in comparison to their depth and slightly rounded or irregular. A number were filled by single deposits representing gradual silting. These silts varied from light to dark red or orange-brown to dark grey-brown in colour. Amongst the Roman ditches, several were more notable due to their unusual size, shape or their fill(s); these are described below:

Trench 6

2.6 Ditch 603, measuring 2m wide and 0.4m deep, was larger than the majority of the remaining Roman ditches and was filled by a single silt deposit, 602 (Fig. 8).

Trench 10

2.7 Feature 1005 at the eastern end of Trench 10 appears to represent the rounded terminus of a ditch. It was filled by three separate deposits, probably representing dumping or intentional backfilling. Iron slag and pottery dated to the 3rd to 4th centuries was recovered from the primary and secondary fills (Fig. 8).

Trench 34 (Fig. 6)

2.8 Three Roman ditches were revealed in Trench 34, including ditch 3406/3409 which was considerably larger than the others, at 2.35m wide and 0.5m deep. It contained two fills indicative of separate episodes of silting. Ditch 3404 also appears to have silted up, whereas ditch 3403 may have been intentionally backfilled. Useful amounts of pottery were recovered from all three features, and fragments of possible furnace or hearth lining were found in ditch 3406/3409. The pottery from 3403 dates to the 2nd to 4th centuries, whilst that from the other two ditches is of 3rd to 4th century date.

Trench 37 (Fig. 7)

2.9 Due to its limited exposure within Trench 37, it is uncertain what type of feature 3709 represents; it may have been a pit or the terminus of a ditch. Its primary fill (3710) comprised redeposited natural clay and this was sealed by mixed backfill deposit 3708 which contained pottery, coal and iron slag. It was cut by ditch 3707 which appears to have silted up and from which pottery, slag and fragments of ceramic and stone building materials were recovered. Towards the north-eastern end of the trench was ditch 3711. This had a broad, almost v-shaped profile and was filled by a single sandy fill from which 97 sherds of pottery dated to the 3rd to 4th centuries was recovered. A small pit, 3716, had been cut into the ditch fill and a broken half of a Severn Valley ware wide-mouthed jar deposited into it (SF 1). Fragments of a possible stone tile, burnt animal bone and coal were also recovered from the pit fill.

Trench 44 (Fig. 7)

- 2.10 The square corner of ditched feature 4404/4415 was revealed at the north-eastern end of Trench 44. Its silty fill produced finds which included pottery and slag. A further similarly sized feature, 4410, lay 7m to the south-west and shared the same north-west/south-east alignment as ditch 4415. It cut into the south-eastern side of shallow feature 4412 and contained a single dark, organic fill (4411) from which pottery, stone roofing tile and slag was recovered.
- 2.11 Approximately 2.5m further south-west along the trench two more ditches were exposed. Ditch 4419 lay on an east/west alignment and contained a primary silting deposit (4420) overlain by charcoal-rich dark grey-brown clay 4418. It was cut by north/south aligned ditch 4406 which had moderately sloping sides and a flat-bottomed slot at the base. The slot was filled with compacted silty clay 4417 which

contained abundant charcoal and iron slag. This deposit was in turn sealed by a further iron slag and charcoal-rich deposit (4407).

Other features

2.12 Ditches were the most abundant form of Roman feature encountered during the evaluation, however other types of features were also found in limited numbers:

Trench 4

2.13 Pit 405 comprised a neat, circular cut with near-vertical sides and a flat base (Fig. 8). It had a diameter of 1.1m, was 0.35m deep and contained two deposit of dark material. The only perceptible difference in the two fills was that the thin basal layer, 404, was darker than the overlying deposit, 403. A small group of finds of pottery and fired clay was recovered from the later fill.

Trench 20

2.14 Trench 20 was situated down the north-eastern slope of a relatively steep combe which conveys a spring south-eastwards towards Plummers Brook. The south-western end of the trench was situated a few metres short of the base of the combe and at this end of the trench large feature 2004 was identified (Fig. 8). It is likely that this is a result of hydrological processes associated with the spring, however the material filling it (2005) is probably an accumulation of colluvium washed down the slopes of the combe. Finds from this deposit included Roman pottery, fired clay and a possible whetstone.

Trench 33 (Fig. 5)

2.15 Trench 33 contained small posthole 3306 from which a single sherd of Roman pottery was recovered. A further undated posthole of similar size and profile, 3304, was revealed 4m to the north, adjacent to circular pit 3302. The pit was 0.8m in diameter and 0.2m deep. It contained a single fill comprising mainly angular sandstone blocks within a silty matrix, suggestive of a single act of backfilling.

Trench 38

2.16 A linear deposit of light orange-grey clay was revealed at the north-eastern end of Trench 38 (Fig. 3). It filled a very shallow depression in the natural clay and may represent the remnants of a bank. It was distinct from the natural geological deposits

and the overlying subsoil, and contained a single sherd of Roman pottery, as well as several pieces of fired clay.

Trench 44 (Fig. 7)

2.17 Broad, shallow feature 4412/4423 was revealed towards the north-eastern end of Trench 44. It was situated between ditch 4404/4415 and intercutting ditches 4406 and 4419, and was cut along its south-western edge by linear feature 4410. It was approximately 6m wide, 0.3m deep and contained two distinct fills. Primary fill 4413/4425 was orange-grey in colour and evidently represents initial silting of the feature and was relatively sterile in contrast to overlying deposit 4403/4424 which comprised dark grey brown clay containing abundant charcoal and iron slag, as well as a small length of iron bar. A sample of this material was recovered for environmental analysis and, as well as further quantities of slag and charcoal, this contained a small quantity of hammerscale.

Medieval

2.18 Pottery dated to the medieval period was recovered from a single feature, ditch 3705, in Trench 37 (Fig. 7). The ditch was 0.85m wide and 0.35m deep, with a broad v-shaped profile. Its fill suggested that it had silted up naturally and it produced some large blocks of iron slag that differed from the majority of the residues recovered from features in other trenches (Appendix 4).

Modern

2.19 Modern features were recorded in seven trenches. These ranged from 19th-century agricultural features, such as furrows in Trench 17 and a field boundary ditch running through trenches 38 and 40, to those associated with landscaping of the golf course in trenches 1, 15 and 32 and a service trench in Trench 1.

Undated features

2.20 Undated deposits were found in ten trenches spread throughout the site. Although postulation of the dates of a number of these would be unreliable, the character and

location of others may be indicative of their origin. Hence, a number of these features have already been described briefly in the *Romano-British* section of the results, above. The remainder are covered below.

Trench 3

2.21 Ditch 304 had a rounded base and had evidently silted up before becoming sealed by a layer of subsoil. Trench 3 also crossed a 10m-wide combe which ran down-slope from the higher ground to the south-east.

Trench 8 (Fig. 4)

2.22 Several intercutting features were revealed at the southern end of trench 8. These appear to represent a ditch (811) with stony primary and silty secondary fills, re-cut by later ditch 808 which also contained two similar fills. The later feature was cut by a possible posthole (805) which was filled mainly by gravel, suggestive of a single backfilling episode. Shallow, oval pit 812 lay 1m to the north of the three intercutting features and posthole 814 was revealed a further 3.5m further north. This feature had evidently silted up naturally.

Trench 9

2.23 Trench 9 contained small steep-sided pit 906 which was cut through the subsoil layer (Fig. 8). Its silty basal fill (907) contained abundant ash and charcoal and it was overlain by a more sterile silty deposit similar to the subsoil. A single 2.9m-wide furrow was also recorded in this trench, cut through the subsoil.

Trench 10

2.24 A small shallow spread of mixed material, 1004, possibly representing the remnant base of a negative feature, was exposed in Trench 10. This deposit contained abundant pieces of fired clay and produced a small amount of slag more likely to be derived from iron-working rather than smelting.

Trench 13 (Fig. 4)

2.25 Sinuous ditch 1304 was exposed in Trench 13. It had a shallow, rounded profile and was filled by a single silting deposit. An irregularly-cut linear feature, possibly a plough-scar, was exposed at the south-western end of the trench.

Trench 19

2.26 Trench 19 ran obliquely part-way across a wide, shallow combe which extended down the slope at the southern edge of the site, towards Plummers Brook (Fig. 8). The base of the hollow contained light grey-brown clay with occasional charcoal inclusions. It was sealed by a layer of subsoil (1901) which may be colluvial in origin. This material also sealed pit 1903, which extended eastwards beyond the edge of the trench. The pit contained a single mixed fill (1902) with numerous burnt clay and charcoal inclusions.

Trench 31 (Fig. 5)

2.27 Ditch 3102 was re-cut by ditch 3104 in Trench 31. The earlier ditch had silted up before 3104 was dug. The later feature partially silted up and may also have been re-cut, however this remains unclear. Deposit 3106 and the latest fill 3107 were also derived from general silting.

Trenches 32 and 45

2.28 The shallow base of a probable ditch, 3206, was revealed in Trench 32 (Fig. 8). It was 0.5m wide and 0.11m deep and filled with sterile silt and pebbles which were sealed by over 0.5m of subsoil. A similar feature, 4504, was exposed in trench 45, however its fill contained occasional small lumps of charcoal. It was sealed by subsoil of a similar depth to that in Trench 32.

Trench 44

2.29 Posthole 4408 lay adjacent to the northern edge of ditch 4419 (Fig. 7). It survived to a depth of 0.15m and contained several remnant packing stones. It appeared to have been deliberately backfilled after the post had been removed. Further along the trench, towards its south-western end, ditch 4422 was revealed. It had an irregular, almost v-shaped profile and was filled with a pale red-grey deposit unlike the rest of the features in the trench.

The Finds

Quantities of pottery, slag, ceramic and stone building material, glass, flint and fired clay were recovered during the evaluation. The bulk of the pottery is Roman in date with small quantities of medieval and post-medieval material also present. The pottery assemblage is dominated by locally produced Severn Valley ware with

smaller quantities of Dorset Black-Burnished ware and greywares. There are few examples of early Roman pottery, however the bulk post-dates AD 250. A single sherd of coarse medieval pottery was recovered from fill 3704 and is of likely 11th to 13th-century date.

The Biological Evidence

2.30 A ten litre sample of deposit 4403 was recovered from broad, shallow feature 4412/4423 for the purposes of confirming the presence of biological remains and gauging their state of preservation in order to assess the potential for analysis towards reconstructing former economies and environments. Processing of the sample identified mainly charcoal (119g) and metalworking slag fragments (1179g), however one unburnt seed (>1g) and 12 fragments of either flake or spherical hammerscale (1g) were also recovered.

3. DISCUSSION

3.1 The evaluation has identified archaeological deposits dispersed across the proposed development area, however the Roman features form a distinct group located along the ridge of higher ground in the eastern part of the site. The shallowness of the surviving features indicates extensive truncation and suggests that activity on the site may once have been more extensive, however further evidence may have been completely removed as a result of later agricultural practices, mainly ploughing.

Roman

- 3.2 Of the features that survive, the majority that contained artefactual evidence date to the Roman period, and more specifically to after the mid 3rd century. The absence of prehistoric deposits and artefacts suggests that the site was first exploited to any significant degree during the Roman period. Although a small number of sherds of the Roman assemblage are, or could be, earlier, the majority date this activity to the 3rd to 4th centuries.
- 3.3 The character of a number of the Roman features such as the ditches in trenches 6, 34 and 37 are suggestive of agricultural features, such as field boundaries or

drainage ditches. Similar undated features in Trenches 31, 32 and 45 may also be associated with these ditches and whilst no discernible pattern or prominent alignments can be identified, their presence indicates a degree of land management.

- 3.4 Elsewhere, limited discrete features such as pits and postholes in trenches 4 and 33 may indicate areas of occupation, as does the concentration of pottery from ditch 3711. Animal bone was absent, but this may be due to acidic soils. The proximity of the activity identified in Trench 8 to the concentration of Roman features on the ridge of high ground suggests a degree of contemporaneity and these features may also be associated with occupation of the site.
- 3.5 Although no primary deposits or structures relating directly to iron-making or iron-working were discovered during the evaluation, evidence of such activity in the form of metallurgical residues was found in a discrete area located on the ridge of high ground. This mostly took the form of iron slags generated during bloomery iron-making and these were recovered from features in trenches 10, 34, 37 and 44. In addition, slag was also found in a 19th-century field boundary ditch in Trench 40.
- 3.6 Metallurgical residues were found in limited quantities in the fills of ditches 3406/3409 and 3707, and in feature 3708, and appear to have entered these features incidentally whilst they were silting up. However in a number of instances, most notably in Trench 44, these residues were present in larger quantities within what appeared to be deliberate backfills which often also contained significant quantities of charcoal, suggesting that they may have been discarded directly from the source of smelting. It is possible that a number of the features in Trench 44 may be associated with this process; the precise angle of the corner of ditch 4404/4415 is perhaps indicative of a foundation trench or a drain, and although interpretation of feature 4412/4423 is somewhat problematical, it too may be connected with the smelting process. Both fills of ditch 4406 contained quantities of slag, as did ditch 1005. The slag in the latter appears to represent secondary dumping and is almost 100m away from the features in Trench 44.
- 3.7 The recovery of hammerscale from feature 4412/4423 may indicate that smithing was also taking place in the vicinity, but only a very small quantity was recovered.
- 3.8 The history of iron production in the region now known as the Forest of Dean is well documented. There is evidence that it was well established by the time of the

Roman conquest and initially the resource was exploited by the Romans to satisfy largely military requirements (Walters 1999). Following this, iron from the region was used extensively throughout the province, including in the development of Gloucester (*Glevum*) and Caerwent (*Venta Silurum*), and possibly Cirencester (*Corinium Dobunnorum*). The site appears to fit the pattern of production as seen at Chesters Villa, Woolaston (Fulford and Allen 1992), Park Farm, Lydney (Walters, 1992) and Blakeney (Barber and Holbrook 2000), which were amongst a number of sites in the vicinity exploiting local ore sources and producing iron in the third century.

Medieval and post-medieval

3.9 Ditch 3705 was the only feature that contained medieval dating evidence and was probably a field boundary or drainage ditch. It also produced an assemblage of slags which suggest that iron was being produced nearby in the medieval period. The discovery of ridge and furrow cultivation features were identified in trenches 9, 17 and 35 and a number survived as extant earthworks in parts of the site. It is likely that the field boundaries encountered in trenches 37, 38, 40 and 45 are associated with the ridge and furrow features. Although finds dated to the 19th-century were found in a furrow in Trench 17 and also in boundary ditch 4004, this should not preclude the possibility that these features are in fact medieval or post-medieval in origin. No medieval or post-medieval settlement remains were recorded from the site.

Modern

3.10 Evidence of modern disturbance was relatively limited and clearly associated with the construction of the golf course and the installation of its services.

Conclusions

3.11 The evaluation has identified previously unknown archaeological deposits throughout the site, including an area of Roman activity indicative of occupation and possible iron production. Management and agricultural exploitation of the land from the Roman period is also represented by a number of ditches and ridge and furrow cultivation features. The archaeological resource appears to have suffered considerably, mainly through ploughing. Modern disturbance associated with the construction and use of the golf course would appear to be limited.

4. CA PROJECT TEAM

Fieldwork was undertaken by Mark Brett, assisted by David Cudlip, Tim Havard, Emily King, Andrew Loader, Ben Powell, Eddie Stratford, Nick Witchell and Allen Wright. The report was written by Mark Brett, assisted by Andrew Loader. The illustrations were prepared by Peter Moore. The archive has been compiled by Mark Brett, and prepared for deposition by Ed McSloy. The project was managed for CA by Clifford Bateman and Mark Collard.

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Archaeological Evaluation

APPENDIX 1: CONTEXT DESCRIPTIONS

Trench 3		
Context No	Description	Depth/thickness
		(m)
300	Turf/topsoil. Dark red-brown friable sandy silt.	c.0.15m
301	Subsoil. Mid red-brown compact sandy silt.	c.0.47m
302	Subsoil. Mid yellow-brown compact silty sand. Natural	LOE
	geological feature, as above but more compact.	
303	Natural. Dark red-brown compact sandy silt.	-
304	Cut. Shallow ditch with shallowly sloped sides and a concave	c.0.13m
	base oriented E/W. Filled by 305 and cuts 303.	
305	Fill. Single fill of cut 304. Dark yellow-brown loose-compact	c.0.13m
	sandy silt	

Trench 4		
Context No	Description	Depth/thickness
		(m)
400	Topsoil. Dark grey-brown loose silt, with numerous roots and modern inclusions	<i>c</i> .0.35m
401	Subsoil. Red-brown firm silty clay. Contained roots and stones	c.0.25m
402	Natural. Reddish brown firm sand/clay, with lighter yellowish brown patches, some sand and frequent small pebbles.	-
403	Fill of 405 consisting of greyish mid brown loose/friable clay/silt. Contained frequent charcoal flecking with some small lumps, occasional organic staining and frequent unsorted rounded stones and pottery sherds.	c.0.28m
404	Fill of 405 consisting of quite an organic rich base comprising loose dark grey/brown clay/silt. It contained frequent charcoal flecking, staining and a few small lumps and quite frequent unsorted small stones.	c.0.08m
405	Cut. Round, near vertical sides, flat base (waterlogged unable to see clearly) feature. Filled by 403 and 404. Cuts 402.	c.0.36

Trench 5		
Context No	Description	Depth/thickness (m)
501	Topsoil. Mid pink/brown fine/friable/loose silt, with no visible inclusions, graduates into 503.	c.0.20m
502	Layer. Modern context present within last 7m of trench at its SE end only, lying between 501 and 503.	<0.15m
503	Subsoil. Light pink/brown firm/friable silt. Containing very frequent rounded pebbles.	<0.20m
504	Natural. Dark pink firm silt/clay. Contains seams of light green, orange sand and sandstone.	-
	N.B. Trench generally 0.35m – 0.55m deep, however 8.5m long test-pit dug at NW end of trench, to test natural substrate.	

Trench 6		
Context No	Description	Depth/thickness
		(m)
600	Topsoil. As elsewhere	c.0.30m

601	Subsoil. As elsewhere.	c.0.35m
602	Fill. Silting fill of ditch 603 comprising of dark reddish brown firm	c.0.40m
	clay/sand. Rare cobbles (0.05m).	
603	Cut. Gradual/concave sides with a flat base, oriented NE/SW. Possible Romano-British boundary ditch. Filled by 602 and cuts 604.	c.0.40m
604	Natural. Dark reddish brown clay/sand and containing mudstone.	-

Trench 7		
Context No	Description	Depth/thickness (m)
700	Topsoil. As elsewhere.	c.0.15m
701	Subsoil. Light reddish brown clay/sand with occasional 0.04m pebbles.	c.0.45m
702	Natural. Mottled dark reddish brown/yellowish brown mixed clay sands with occasional pebbles, platy sandstone and bedrock outcrop at NE end of trench.	-

Trench 8		
Context No	Description	Depth/thickness
		(m)
801	Topsoil. Mid brown loose silt.	c.0.25m
802	Subsoil. Orangey mid brown firm/loose clay/silt.	<i>c</i> .0.40m
803	Natural. Orange/red mid brown sand/clay.	-
804	Fill of 805 consisting of mid red/brown quite loose clay/sand. Unsorted rounded pebbles (≤6cm³) representing 75% of the deposit. A very gravelly deposit, possible backfill of a post-hole after post removed.	<i>c</i> .0.18m
805	Cut. Oval possible post-hole cut into north side of ditch 808, with rounded corners and sides at about 45° curving gently towards a rounded base. Filled by 804 and cuts 806.	<i>c.</i> 0.18m
806	Fill of 808 consisting of dark red/brown quite loose sand/clay, with inclusions of charcoal flecks and occasional unsorted rounded pebbles.	c.0.24m
807	Fill of 808 consisting of mid red/brown quite loose clay/sand, with numerous unsorted rounded stones (≤6cm³) marking up about 75% of total deposit and occasional charcoal flecks. Stones possibly carried by water or deposited for drainage.	c.0.28m
808	Cut. Linear with quite a sharp surface break of slope, sides at about 70° with a further sharp break of slope at the base, oriented E/W. Possible re-cut of an earlier ditch 811 and could represent a field boundary or drainage ditch. Filled by 806 and 807. Cuts 809.	<i>c</i> .0.28m
809	Fill of 811 consisting of mid brown/red quite loose silt/clay with some charcoal flecks and infrequent rounded stones (≤6cm³). Possibly a gradual silting process leading to re-cut 811. Fill of cut 811 and cut by 808.	c.0.36m
810	Fill of 811 consisting of dark red/grey quite loose sand/clay, about 70% of deposit make-up is of unsorted rounded pebbles. Gravel rich base fill suggesting either drainage of waterborne rocks.	<i>c</i> .0.38m
811	Cut. Linear quite steep sides sloping at 40°. Possible drainage ditch/field boundary with a shallow re-cut 808, flat base oriented E/W. Filled by 809 and 810. Cuts 803.	<i>c</i> .0.38m
812	Cut. Sub-rectangular feature with shallow concave sides, rounded corners, an uneven base and oriented N/S. Filled by 813 and cuts 803.	<i>c</i> .0.18m

813	Fill. Single fill of shallow cut feature 812 comprising a soft mid brown silt/clay matrix with inclusions of small/medium pebbles and a few charcoal flecks.	c.0.18m
814	Cut. Circular possible post-hole with vertical sides breaking towards the base, rounded corners and a flat slightly uneven base. Filled by 815 and cuts 803.	c.0.15m
815	Fill. Single fill of possible post-hole 814 comprising a firm/very loose reddish mid-brown silt/clay with inclusions of small/medium pebbles and charcoal flecks.	c.0.15m

Trench 9		
Context No	Description	Depth/thickness (m)
901	Topsoil. Light brown clay/silt/turf.	
902	Subsoil. Light orange/brown silt.	
903	Mid grey/brown pink silt/clay.	-
904	Cut. Linear with shallow irregular sides oriented NW/SE. Possible furrow appears to run at 90° to others within the area. Filled by 905 and cuts 902.	c.0.50m
905	Fill. Single fill of 904 comprising friable mid/brown clay/silt with inclusions of moderate charcoal flecks, pebbles (0.03m in size) and pottery. Possibly derived from spoil deposited during landscaping.	<i>c</i> .0.50m
906	Cut. U-shaped pit only visible in trench bank near vertical sides, with a rounded even transition to a concave base. Filled by 907 and 908. Cuts 902 and 903.	c.0.36m
907	Fill. Primary fill of pit 906 comprising friable dark brown/grey black clay/silt with a high charcoal content, could be in-situ burning or a dump of ash and charcoal.	c.0.20m
908	Fill. Secondary fill of 906 comprising friable mid orange/brown clay/silt with inclusions of rare pebbles and occasional charcoal flecks, very similar to subsoil 902.	c.0.16m

Trench 10		
Context No	Description	Depth/thickness
		(m)
1001	Topsoil. Very loose light brown silt.	<i>c</i> .0.17m
1002	Subsoil. Firm orangey light brown silt.	<i>c</i> .0.32m
1003	Orangey mid brown with bands of reddish mid brown clay.	-
1004	Layer. A thin layer comprising loose orangey mid brown with patches of dark brown/black clay/silt. Containing inclusions of lumps of burnt clay, slag and a metal find. Probable agricultural deposit derived from plough activity. Within the subsoil 1002.	c.0.04m
1005	Cut. Linear with rounded corners a concave west side and a convex east side, flat base aligned North. Probable ditch terminus deliberately backfilled. Filled by 1006, 1007 and 1008 and cuts 1003.	c.0.34m
1006	Fill of 1005 consisting of friable/compact orangey light brown clay with inclusions of charcoal flecks.	<i>c</i> .0.11m
1007	Fill of 1005 consisting of loosely/friable mid brown with dark patches silty clay. Containing charcoal flecks, burnt clay, ironstone and large amount of slag inclusions, along with some pottery sherds. Possible deliberate backfill.	c.0.24m
1008	Primary fill of probable ditch terminus 1005 consisting of friable orangey light brown slightly silty clay. A relatively clean layer with a few charcoal fleck inclusions.	c.0.34m

Trench 11		
Context No	Description	Depth/thickness
		(m)
1101	Topsoil. Loose mid brown clay silt.	<i>c</i> .0.20m
1102	Subsoil. Firm orangey light brown clay/sand.	<i>c.</i> 0.40m
1103	Natural. Reddish light brown/yellowish brown silt/clay.	-

Trench 12		
Context No	Description	Depth/thickness
		(m)
1201	Topsoil. Loose mid brown clay/silt.	c.0.24m
1202	Subsoil. Firm orangey mid brown clay/sand.	c.0.45m
1203	Natural. Reddish mid brown/yellowish brown mixed clay sands	-
	with frequent pebble inclusions.	

Trench 13		
Context No	Description	Depth/thickness
		(m)
1301	Topsoil. As elsewhere.	≥0.25m
1302	Subsoil. Firm light red/brown sand/clay with infrequent pebbles	≥0.40m
	(10%) and gravels (5%) well sorted.	
1303	Single fill of 1304 consisting of well firm mid red/brown silt/clay	c.0.50m
	with few inclusions of well sorted pebbles (10%) and gravels	
	(5%).	
1304	Cut. Large "U" shaped ditch cut into pebbly natural with shallow	<i>c</i> .0.50m
	concaving sides and a regular concave base, oriented N/S.	
	Filled by 1303.	
1305	Single fill of 1306 consisting of soft mid orange/brown silt/clay,	<i>c.</i> 0.30m
	with inclusions of pebbles (20%) and gravels (10%).	
1306	Cut. Plough furrow scar, shallow linear with irregular sides and	c.0.30m
	base, oriented E/W. Filled by 1305.	

Trench 14		
Context No	Description	Depth/thickness
		(m)
1401	Topsoil. As elsewhere.	c.0.20m
1402	Subsoil. Mid brown/red sand/clay with pebble (15%) inclusions.	c.0.70m
1403	Natural. Deep orange sand with occasional pockets of pebbles	-
	(Possible old water courses?).	

Trench 15		
Context No	Description	Depth/thickness
		(m)
1501	Topsoil. As elsewhere.	≥0.20m
1502	Subsoil. Firm light grey/brown silt/clay with pebble (10%) inclusions.	≥0.80m
1503	Layer. Modern build up comprising firm mid orange/brown sand/clay with inclusions of pebbles (10%), grits (10%) and metal and glass.	≥0.40m

1504	Layer. Firm deep red/brown silt/clay, with infrequent inclusions, poorly sorted cobbles (≥5%), pebbles (5%), grits (5%) and modern debris including bottle handlebars and wood.	≥0.50m
1505	Natural. Loose deep orange/red coarse sand	-
1506	Cut. Large cut probably mechanical, possibly related to the construction of nearby green to north of trench. Cut visible in section only.	-

Trench 16		
Context No	Description	Depth/thickness (m)
1601	Topsoil. Loose mid brown clay/silt.	<i>c</i> .0.30m
1602	Subsoil. Orangey mid brown clay silt	c.0.25m
1603	Natural. Reddish mid brown sand/clay with pebbles inclusions.	-

Trench 17		
Context No	Description	Depth/thickness
		(m)
1701	Topsoil. Friable mid orange/brown silt in pasture.	≥0.10m
1702	Subsoil. Light orange/brown clay/sand/silt.	≥0.10m
1703	Natural. Mid orange/brown/yellow mottle sand overlying 1704.	-
1704	Natural. Mid grey/pink with sandstone inclusions. Appears at	-
	25m continuing towards east end of trench.	
1705	Cut. Linear with gently sloping edges and concave base.	<i>c</i> .0.18m
	Appears as a 1.40m wide linear in the trench, although much	
	wider (approx 6m) within the trench bulk becoming mixed with the subsoil. Probably a Post-Medieval furrow or boundary,	
	visible on the surface as a slight dip running SE/NW. Another	
	lies directly 10m east, not visible within the trench and more	
	occluded by subsoil in section. Filled by 1706 and cuts 1703.	
1706	Single fill of 1705 consisting of soft mid brown clay/sand with	c.0.18m
	occasional small stones and a glass bottle neck.	

Trench 18		
Context No	Description	Depth/thickness (m)
1801	Topsoil. Friable light reddish grey/brown silt in pasture.	c.0.29m
1802	Subsoil. Friable mid/light orange/brown clay/silt.	c.0.40m
1803	Natural. Mid grey/pink clay.	-
1804	Natural. Purple/grey outcrops of sandstone within 1803.	-

Trench 19		
Context No	Description	Depth/thickness
		(m)
1900	Topsoil. Loose/friable mid pink/brown silt containing occasional pebble and sandstone pieces.	c.0.25m
1901	Subsoil. Firm/friable light pink/brown clay/silt with occasional charcoal, pebbles, and sandstone inclusions. Considerable depth in Tr.19 suggests alluvial origin	<i>c</i> .1.10m
1902	Single fill of 1903 consisting of firm dark grey mid brown	c.0.54m

	sand/clay, containing frequent burnt sandstones (0.04m). Backfill of pit/gully terminus, possible small-scale industry, too little revealed in Tr.19 to come to any firm conclusions.	
1903	Cut. Semi-circular cut of pit/gully terminus with steep sides, rounded corners a concave base, oriented E/W. Filled by 1902 and cuts 1906.	<i>c.</i> 0.54m
1904	Single fill of 1905 consisting of soft light grey/brown silt/clay with occasional pebbles (0.05m), charcoal and mineral staining. Probably a silted up stream; orientation can still be seen running E-W across the current golf course towards the road, woods and railway line.	<i>c</i> .0.60m
1905	Cut. Linear with gradual irregular sides, oriented E/W. Probable stream channel.	c.0.60m
1906	Natural. Red/brown sand/clay.	-

Trench 20		
Context No	Description	Depth/thickness (m)
2001	Topsoil. Mid orange/grey/brown silt in pasture.	≤0.25m
2002	Subsoil. Friable mid orange/brown clay/silt.	≤0.60m
2003	Natural. Bands of grey/pink clay and outcrops of grey sandstone, with variation throughout trench.	-
2004	Cut. Linear feature situated towards base of SW facing slope with only NE side visible in trench. Filled by 2005 and cuts 2003.	>0.40m
2005	Single fill of 2004 consisting of firm dark brown/grey silt/clay with inclusions of moderate charcoal flecks and occasional small sandstone pieces.	>0.40m

Trench 31		
Context No	Description	Depth/thickness (m)
3100	Turf/Topsoil. Firm/friable light re/brown sand/silt with occasional angular sandstone fragments.	<i>c</i> .0.10m
3101	Subsoil. Friable light brown/red silt/sand with small pebble (0.05m) inclusions.	<i>c</i> .0.30m
3102	Cut of gully, linear with gently sloping concave sides and concave base oriented NE/SW. Filled by 3103.	c.0.26m
3103	Fill. Silting fill of 3102 consisting of firm/friable mid red/grey silt/sand with occasional pebble (0.04m) inclusions. No dating evidence recovered.	c.0.07m
3104	Cut of gully terminus, linear with steep sides, concave base and oriented NE/SW. Filled by 3105 3106 and 3107. Cuts earlier gully 3102.	c.0.25m
3105	Primary silting fill of 3104 consisting of friable dark grey/brown sand/silt with inclusions of rare pebbles (0.03m).	c.0.13m
3106	Secondary fill of 3104 consisting of friable mid orange/grey/brown sand/silt with occasional pebble (0.03m) inclusions.	<i>c</i> .0.10m
3107	Fill. Final silting fill of 3104 consisting of friable dark red/brown sand/silt.	c.0.15m

Trench 32		
Context No	Description	Depth/thickness
		(m)
3201	Topsoil. Light red/brown silt.	c.0.20m

3202	Subsoil. Red/brown clay/sand.	c.0.60m
3203	Natural. Coarse gravel/clay/sand.	-
3204	Fill of 3205.	-
3205	Cut. Modern landscaping cut. Filled by 3204.	-
3206	Cut. Linear feature with gradual sloping sides, concave base, oriented E/W. Filled by 3207 and cuts 3203.	<i>c</i> .0.11m
3207	Fill. Silting fill of 3206 consisting of friable mid red/brown clay/silt with inclusions of moderate pebbles (0.02m).	c.0.11m

Trench 33		
Context No	Description	Depth/thickness (m)
3300	Turf/Topsoil. Friable dark red/brown sand/silt.	c.0.15m
3301	Subsoil. Friable mid grey/brown sand/silt with pebble (c.0.05m) inclusions.	c.0.25m
3302	Cut. Circular pit with sloped sides and concave base. Filled by 3303.	<i>c</i> .0.18m
3303	Single fill of 3302 consisting of friable dark red/brown sand/silt with inclusions of large flat surfaced sandstone blocks and occasional charcoal lumps.	c.0.18m
3304	Cut. Small circular posthole with steeply sloped sides and concave base. Filled by 3305.	c.0.07m
3305	Single fill of 3305 consisting of friable dark grey/brown sand/silt with occasional charcoal flecks.	c.0.07m
3306	Cut. Small circular posthole with steeply sloped sides and a concave base. Filled by 3307.	c.0.07m
3307	Single fill of 3306 consisting of friable dark grey/brown sand/silt with occasional charcoal flecks and a sherd of pottery.	<i>c</i> .0.07m

Trench 34		
Context No	Description	Depth/thickness (m)
3400	Topsoil. Loose dark brown silt with inclusions of small angular/rounded stones (≤5cm³) and roots.	c.0.24m
3401	Subsoil. Quite loose brown/red clay/silt containing numerous small unsorted angular/rounded stones (≤5cm³).	c.0.55m
3402	Fill. Possible backfill of 3403 consisting of firm/friable light brown clay/sand with frequent pebble inclusions, some heat cracked and occasional charcoal flecks and a Roman pottery sherd.	<i>c</i> .0.15m
3403	Cut. Linear feature with steep irregular sides, a flat base, oriented N/S. Possible Roman gully/filed boundary. Cuts 3416.	c.0.15m
3404	Cut of Romano-British gully, linear with irregular sides, flat base and oriented NW/SE. Possible relationship with 3403 as a returning gully. Cuts 3416.	<i>c.</i> 0.09m
3405	Single fill of 3404 consisting of friable light brown sand/silt/clay with small/medium pebble inclusions and frequent finds of pottery sherds.	c.0.09m
3406	Cut. Linear feature with gradual break of surface slope and sides at about 30° gradual towards base and oriented NW/SE. Part of large ditch running diagonally across Tr.34. Filled by 3407 and 3408. Same as 3409 and cuts 3416.	c.0.32m
3407	Fill. Top fill of 3406 consisting of quite firm light red/brown sandy/clay, containing numerous pebbles, some small pieces of slag, a piece of burnt clay, numerous modern roots and pottery, probably Romano-British.	c.0.18m
3408	Fill. Base fill of 3406 consisting of firm dark reed/brown	<i>c</i> .0.14m

	sandy/clay, containing quite frequent small stones/pebbles, occasional root disturbance and some sherds of Romano-British cooking pottery.	
3409	Cut. Section of large linear ditch running diagonally across Tr.34, revealing the SW side of ditch. Convex sides which become more irregular towards the base and oriented NW/SE. Filled by 3410 and 3411. Same as 3406 and cuts 3416.	c.0.46m
3410	Fill. Upper fill of 3409 consisting of firm/friable reddish light brown silt/clay, with inclusions of small/medium pebbles, patches of burnt clay, Romano-British pottery sherds and frequent fragments of possible stone tiles.	c.0.22m
3411	Fill. Lower fill of 3409 consisting of friable reddish mid brown silt/clay with inclusions of small pebbles, Romano-British pottery sherds and a few possible stone tiles.	c.0.25m
3412	Cut. Circular post-hole with rounded corners a sharp surface break of slope and sides at about 65° with quite a sharp break of slope at a flat base. Situated close to 3403. Filled by 3413 and cuts 3416.	c.0.18m
3413	Single fill of 3412 consisting of quite loose mid brown/grey sand/clay, containing numerous small pebbles (≤8cm³) about 20% of deposit and 3/4 large packing stones (≤16cm³). No sign of post having rotted in situ, fill is homogenous with no post-pipe.	c.0.18m
3414	Cut. Terminus of a linear feature oriented NE/SW, with sharp break of slope on surface with sides curling inwards towards a flat base to give a bowl shape in section. Possible drainage feature. Filled by 3415 and cuts natural 3416.	c.0.12m
3415	Single fill of 3414 consisting of quite loose light red/brown sandy/clay containing small pebbles (≤8cm³) comprising about 70% of deposit total, possibly for drainage Similarity in form compared to other linear feature in Tr.34 suggests Romano-British in date.	c.0.12m
3416	Natural. Compact brown/red sand/clay, clean with some small mixed angular/rounded rocks.	-

Trench 35		
Context No	Description	Depth/thickness (m)
3500	Turf/Topsoil. Firm/friable light red/brown sand/silt.	c.0.17m
3501	Subsoil. Friable light brown/red silt/sand with frequent pebble (0.05m) inclusions.	c.0.20m
3502	Natural. Same as Tr.36, however silty patches more frequent in this trench	
	N.B. Ridge and furrow noticeable within east part of trench, crossing on NE/SW alignment. Furrows c.9-10m (obliquely) apart, c.0.3m deep and filled by same material as 3500.	
Trench 36		
Context No	Description	Depth/thickness (m)
3600	Turf/Topsoil. Firm/friable light brown/red sand/silt.	c.0.17m
3601	Subsoil. Friable light red/brown silt/sand with frequent pebbles (0.05m)	c.0.70m
3602	Natural. Coarse gravels plus occasional cobbles within silty/sand matrix, varies in colour from light pink/orange to dark red/brown, includes patches of light orange/brown silt. Friable/soft slightly loose silty patches. Manganese staining throughout.	1

Context No	Description	Depth/thicknes
Context No	Description	рерининскиез (т)
3701	Topsoil. As elsewhere.	<i>c</i> .0.20m
3702	Subsoil. As elsewhere.	c.0.40m
3703	Natural. Coarse gravel within soft light orange/brown silt matrix	-
	with manganese staining.	
3704	Single fill of 3705 consisting of firm deep red/brown silt/clay with	c.0.34m
	frequent poorly sorted small-large pebbles (25%), cobbles (5%),	
	slag various ≥cobble size (10%) and grit/gravels (10%). No	
	evidence for deliberate backfilling, although section suggests it	
2705	silted up rapidly. Inclusions of slag.	. 0.24
3705	Cut. Small ditch cut, possible "U" shaped linear with steep slightly concaving regular sides, concaving regular base about	<i>c</i> .0.34m
	30% width of top and oriented SW/NE. Filled by 3704 and cuts	
	3703.	
3706	Single fill of 3707 consisting of firm deep orange/brown silt/clay7	c.0.10m
	with fairly frequent moderately sorted sands (5%), gravels (10%)	
	and pebbles (15%). Pottery found within suggests a possible	
	Medieval date	
3707	Cut. A small linear gully with shallow steep regular sides,	<i>c</i> .0.10m
	concaving very gently towards a regular base. Running	
	approximately N/S at 90° to the hedgerow along the south of the	
2700	site. Filled by 3706 and cuts 3708. Fill. Deliberate backfill of 3709 consisting of firm deep red/	a 0 10m
3708	brown silt/clay with frequent poorly sorted sands (10%) gravels	c.0.18m
	(15%) pebbles (10%) and flat cobbles (≤5%). Horizon clarity	
	diffuses with 3706. Contains slag and possible Medieval pottery.	
3709	Cut. A large shallow linear ditch oriented N/S with steep regular	c.0.25m
	sides cut into the natural slope along eastern edge and regular	
	sides gently sloping, cut away from the natural slope on its east	
	edge. Possibly enclosed something further upslope. Filled by	
0710	3708 and 3710. Cuts 3703 and cut by 3707.	0.05
3710	Fill. Redeposit natural at the bottom of 3709 consisting of firm	<i>c</i> .0.05m
	mid orange/red silt/clay with few moderately sorted charcoal	
3711	(15%), grits/gravels (10%) and pebble (≤5%) inclusions. Cut. Possible Romano-British ditch linear with steeply sloped	c.0.41m
07.11	sides and concave base oriented E/W. Filled by 3713. Cut by	0.0. 7 IIII
	3717 and cuts 3703.	
3712	Fill. Primary fill of 3716 consisting of friable dark red/brown	c.0.27m
	sand/silt with occasional charcoal flecking and large sherds of	
	pottery probably a single pot. Further inclusions of flat stones	
	some burnt, possibly from a floor surface all fairly uniform	
2712	thickness with particularly flat surfaces.	0.0.44***
3713	Single fill 3711 consisting of loose dark grey/brown silt/sand occasional charcoal lumps, and pottery recovered suggesting	c.0.41m
	possible Romano-British date. Cut by 3716 and 3717.	
3714	Single fill of 3714 consisting of light grey/brown silt/clay	c.0.25m
.	inclusions of pebbles (35%), modern concrete.	0.0.2011
3715	Cut. Modern small "U" shaped gully with steep sides and flat	c.0.25m
	bottom. Filled by 3714 and cuts 3701.	
3716	Cut. Probable Romano-British circular pit with near vertical	c.0.27m
	sides, uneven base, cut into the fill of ditch 3711. Filled by 3712	
	and cuts 3713.	
3717	Cut. Modern linear trench with vertical sides for ceramic field	c.0.41m
0740	drain, oriented N/S. Filled by 3718. Cuts 3711 and 3713.	
3718	Single fill of 3717 consisting of loose dark grey/brown sand/silt	c.0.41m

Trench 38		
Context No	Description	Depth/thickness
		(m)
3800	Topsoil. Loose grey/brown silt, with numerous modern roots and	c.0.30m
	disturbance	
3801	Subsoil. Red/brown silt/clay, with some root action and modern	c.0.24m
	disturbance.	
3802	Natural. Brown/red sand/clay with quite large numbers of small	-
	pebbles as inclusions.	
3803	Deposit. A narrow banked linear deposit consisting of quite firm	c.0.08m
	pale mottled orange/grey silt/clay with inclusions of some small	
	stones, frequent charcoal flecks, some organic material and a	
	single pottery sherd. Very distinct from the 3801 and 3802.	
3804	Single fill of 3805 consisting dark grey/brown clay/silt.	-
3805	Cut. Linear feature not excavated. Same as 4004.	-

Trench 39		
Context No	Description	Depth/thickness (m)
3901	Topsoil. As elsewhere on site.	c.0.25m
3902	Subsoil. Soft/friable mid pink/brown clay/silt, containing very frequent coarse gravel, rounded pebbles plus occasional larger cobbles.	<0.20m
3903	Natural. Comprises mostly light pink/brown clay/silt mottled very heavily with black manganese plus containing 50% pebbly gravel. Patches of dark pink clay also evident	-
	N.B. At SW end of trench, large amount of charcoal within subsoil indicative of stubble burning?	

Trench 40		
Context No	Description	Depth/thickness (m)
4001	Topsoil. Loose/friable mid pink/brown silt with very frequent pebbles plus roots (turf above).	c.0.20-0.30m
4002	Subsoil. Loose/friable light pink/brown silt with very frequent pebbles (c.30%), few sandstone fragments and contains frequent charcoal flecks.	c.0.15-0.25m
4003	Natural. At NE end of trench comprises dark pink clay (for last c.20m); further SW, comprises coarse gravel within a dark red/brown silt/sand matrix, highly mottled with manganese.	-
4004	Cut. Linear ditch running parallel to plus adjacent to E side of NW/SE aligned bank, still visible as an earthwork plus upon which several large ancient oaks are situated. Rounded profile SW side slightly steeper than NE side (c.45°+35° respectively): broad flat base. Filled by 4005 and cuts 4003. Same as 3805.	c.0.30m
4005	Single fill of 4004 consisting of very plastic/friable mid red/brown sand/silt, contains very frequent gravel, occasional large lumps of slag (towards top of feature), charcoal flecks and glass fragments. Cut by ceramic field drain, however construction cut for this difficult to make out.	c.0.30m

Trench 41		
Context No	Description	Depth/thickness
		(m)
4100	Topsoil/Turf. Friable dark red/brown sand/silt	c.0.13m

4101	Subsoil. Dark grey/brown silt/sand with pebbles (c.0.05m) as inclusions.	c.0.32m
4102	Natural. Mid orange/brown sand/clay.	-

Trench 43		
Context No	Description	Depth/thickness
		(m)
4301	Topsoil. As elsewhere.	≥0.25m
4302	Subsoil. Firm deep red/brown sand/clay clear with well sorted	≥0.30m
	pebble (15%) and grits (5%) inclusion	
4303	Natural. Orange/red sand with pebbly clay inclusions.	ı
4304	Single fill of 4305 consisting of red/brown sand/clay with	<i>c</i> .0.65m
	charcoal flecking. Close resemblance to subsoil could indicate rapid backfill.	
4305	Cut. Modern drainage trench cut, linear with steep regular sides and a slightly concaving base, oriented NNE-SSW	c.0.65m

Trench 44		
Context No	Description	Depth/thickness (m)
4401	Topsoil. Very loose dark grey/brown silt /clay with abundant tree and grass roots especially in mid-section of trench.	c.0.30m
4402	Subsoil. Quite loose mid orange/brown sand/clay with quite numerous rocks, tree roots and charcoal.	c.0.30m
4403	Layer. Loose dark grey/brown silt/clay. Quite a large spread of charcoal about 60-70% of total deposit, with some small unsorted rounded rocks (≤4cm³) and a few small pottery sherds. Not much iron slag unlike nearby ditch 4406. Sampled for charcoal analysis. Cut by 4410.	c.0.08m
4404	Cut. Gully/edge of ditch with convex sides, flat base although possibly not bottomed, due to edge of trench, oriented NE/SW. Possible relationship to 4415 as part of a returning ditch, both have similar fills. Filled by 4405 and cuts 4414. Same as ?4415.	.≥0.16m
4405	Single fill of 4404 consisting of friable orange/grey light brown sand/clay with small pebble inclusions, a few pottery sherds and fragment of possible stone tile.	.≥0.16m
4406	Cut. Romano-British ditch, quite a gradual break of surface slope, with sides curving towards base at about 45°, gradual break of slope at the base which is quite flat forming a narrow gully oriented NE/SW. Contained large amounts of iron slag, particularly in the gully at the base of cut. Filled by 4407 and 4417. Cuts 4418.	c.0.62m
4407	Upper fill of 4406 consisting of very compact/solid mid grey/brown sand/clay with large amounts of iron slag/ore/waste about 20% of deposit, unsorted mixed angular/rounded rocks (≤5cm³) and several pottery sherds suggesting a Romano-British date. Sandy clay fill bonded with iron waste to form a very hard deposit	<i>c</i> .0.62m
4408	Cut. Clearly defined oval posthole with rounded corners with a sharp surface break of slope and sides ant about 70 quite a sharp break of slope at a flat base. Situated east of ditches 4419 and 4406. Filled by 4409 and cuts 4414.	c.0.16m
4409	Single fill of 4408 consisting of loose mid brown/grey sand/clay with 3 large packing stones, largest being 20cmx20cmx15cm and numerous unsorted mixed rounded/angular stones. No post-pipe suggesting post was removed and backfilled	c.0.16m
4410	Cut. Broad linear with gradual breaks of slope at top and	<i>c</i> .0.16m

	bottom, the sides are at about 30° towards a quite flat slightly undulating base, oriented N/S. May not represent a true cut, rather a depression silted up with Roman material. Filled by 4411 and cuts 4403.	
4411	Single fill of 4410 consisting of loose brown/grey clay/silt with rare charcoal flecking, quite rare small mixed and unsorted stones. Pottery sherds suggest a Romano-British date.	c.0.16m
4412	Cut. Broad linear shallow feature, the sides not visible beyond limit of excavation to the east and cut away by 4410 to the west. Flat base with slight undulation oriented N/S. Possible depression rather than a deliberately cut feature. Filled by 4403 and 4413. Cuts 4414.	c.0.32m
4413	Base fill of 4412 consisting of quite loose mid orange/grey silt/clay, with some charcoal flecks, a few small stones and a couple of possible Romano-British pottery sherds. Fill was quite clean and silty, possibly gradual silting process.	c.0.16m
4414	Natural. Compact brown/red sand/clay with occasional small rounded pebbles (≤5cm³).	-
4415	Cut. Shallow linear gully/ditch with concave sides, flat/concave base oriented NW/SE. Possible returning ditch in relationship to ditch cut 4404, both with similar fills. Filled by 4416 and cuts 4414. Same as ?4404.	<i>c</i> .0.10m
4416	Single fill of 4415 consisting of soft/friable orange light brown silt/clay with inclusions of small pebbles, charcoal flecks a fragment of burnt clay and a few sherds of pottery.	c.0.10m
4417	Fill. Extremely solid base fill of 4406 consisting of very/compact/solid mid grey/red silty/clay bonded by iron waste into one solid mass. Inclusions of iron slag about 30% of total deposit and charcoal about 20%.	c.0.10m
4418	Uppermost fill of 4419 consisting of firm dark grey/brown sand/clay with some iron slag (≤5cm³), frequent charcoal flecking and a few possible Romano-British pottery sherds. Iron slag had partially bonded with soil, making it feel quite solid.	c.0.28m
4419	Cut. Shallow linear ditch at quite a gradual break of surface slope with sides at about 30° oriented SE/NW and the base truncated by 4406. The quantity of iron slag suggests association with nearby metalworking and the pottery appeared to be Romano-British. Filled by 4418 and 4420. Cuts 4414.	c.0.36m
4420	Fill. Basal silting of 4419 consisting of firm mid brown/red silt/clay, quite clean and similar to natural 4414. Contained occasional charcoal flecking, some small unsorted mixed rounded/angular stones (≤4cm³).	c.0.08m
4421	Single fill of 4422 consisting of quite loose pale red/grey silt/clay with occasional charcoal flecking and several small rounded pebbles (≤5cm³). Much paler in colour and siltier than features at eastern end of Tr.44. The bleaching of colour from it is an earlier feature.	c.0.24m
4422	Cut. Shallow linear "V" shaped ditch, quite a sharp break of slope at surface, with the sides at about 45° and a shape break of slope at the base, which is "V" shaped. Oriented NNW/SSE, curving southwards. Not closely associated with other features, possibly earlier than those at the eastern end of Tr.44, suggesting an Iron-Age/Romano-British date. Filled by 4421 and cuts 4414.	c.0.24m
4423	Cut. Shallow linear feature, only NE edge visible as concave sides with a probable flat base only 0.25m visible, oriented NW/SE. Possibly the same as 4412, both have a similar sequence of layers. Filled by 4424 and 4425. Cuts 4414 and same as ?4412.	c.0.26m
4424	Upper fill of 4423 consisting of friable greyish mid brown silt/clay with charcoal flecks and small pebble inclusions. Containing	c.0.14m

	iron slag, metal fragments, stone tiles, degraded black-burnish pottery sherds suggesting a Romano-British date and a fragment of wood	
4425	Primary fill of 4423 consisting of firm greyish light brown with orange lenses, very clean layer only a few medium pebbles and a single sherd of pottery, suggesting a gradual silting process.	c.0.12m

Trench 45		
Context No	Description	Depth/thickness (m)
4501	Topsoil.	c.0.25m
4502	Subsoil.	c.0.30m
4303	Natural. Mainly coarse gravel within mid red/brown silt/sand matrix. Larger patches of light pink/brown clay/silt. Manganese staining throughout.	-
4504	Cut. Roman field boundary ditch, linear with moderate sides a concave base, oriented NW/SE. Filled by 4505 and cuts 4503.	<i>c.</i> 0.15m
4505	Single fill of 4504 consisting of friable mid pink/brown clay/silt with frequent pebbles and charcoal lumps. General silting of Roman field system/boundary ditch.	c.0.15m

Trench 46		
Context No	Description	Depth/thickness
		(m)
4600	Topsoil. Mid red/brown silt.	c.0.20m
4601	Subsoil. Light red/brown clay sand/clay silt.	c.0.60m
4602	Natural. Mid red/brown clay/ mid brown clay sand/ occasional	-
	lenses of coarse gravel.	

APPENDIX 2: THE FINDS

By Sam Inder

Quantities of pottery, slag, ceramic and stone building material, glass, flint and fired clay were recovered.

The bulk of the pottery is Roman in date with small quantities of medieval and post-medieval material also present. The pottery is dominated by locally produced Severn Valley ware with smaller quantities of Dorset Black-Burnished ware and greywares recovered. There are few examples of early Roman pottery with the majority of the pottery dated to beyond AD 250. A sherd of a Severn Valley ware tankard recovered from fill 4413 is of late 1st to 2nd-century AD date and represents the only stratified material of this date. A sherd of a Severn Valley ware mortaria recovered from fill 1007 is dated from the late 1st to early/mid 2nd century AD although an everted rim of 3rd to 4th-century AD date was also retrieved from this context. Several sherds of charcoal-tempered Severn Valley ware were recovered from fills 3402 and 3410. This fabric is dateable to the 1st century although later Roman material is present in both contexts.

A small collection of pottery is dated from the 2nd to 3rd century AD including a Severn Valley ware wide mouthed jar recovered from fill 3712. Other pottery from this context is however later in date, including a sherd of Black-Burnished ware with acute lattice decoration dateable to the late 3rd to 4th century. A Severn Valley ware tankard recovered from fill 3401 and a wide mouthed jar from fill 4402 are both dateable to the 2nd to 3rd century.

The remainder of the Roman pottery is of 3rd to 4th century date. Dorset Black-Burnished ware seems abundant in later forms including flanged bowls from fills 4416 and 4424 and a handled oval fish dish recovered from fill 4407. Sherds exhibiting obtuse lattice decoration were recovered from fills 3712 and 3410 and are also of 3rd to 4th century date.

Severn Valley ware remains dominant and later forms include a flared everted rim jar from fill 3411 and a pronounced T-shaped rim bowl from fill 3408.

A single sherd of coarse medieval pottery was recovered from fill 3704 and is of likely 11th to 13th-century date.

Finds concordance

403	1 sherd of pottery	(3a): Severn	Vallev ware?
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7 pieces of fired clay (25g) Spot-date: Romano-British

2 sherds of pottery (16g); Severn Valley ware

1 flint flake (11g) Spot-date: Romano-British

905 1 sherd of pottery (9g); Severn Valley ware/misc oxidised ware

Spot-date: Romano-British

1004 2 pieces of fired clay (101g)

1007 8 sherds of pottery (71g); Severn Valley ware

Spot-date: 3rd to 4th century

1008 3 sherds of pottery (54g); Coarse micaceous greyware

4 fragments of cremated bone (3g); possible human pelvis

Spot-date: 3rd to 4th century

1706 1 fragment of bottle glass (107g)

Spot-date: 19th century

2005	1 sherd of pottery (15g); Severn Valley ware 1 possible whetstone (255g) 1 piece of burnt flint (6g) 11 pieces of fired clay (76g) Spot-date: Romano-British
2242	8 pieces of charcoal (4g)
3307	1 sherd of pottery (8g); coarse quartz tempered ware Spot-date: Romano-British
3401	6 sherds of pottery (41g); Severn Valley ware Spot-date: 2nd to 3rd century
3402	23 sherds of pottery (98g); Severn Valley ware, Dorset Black-Burnished ware, misc greyware Spot-date: 2nd to 4th century
3405	9 sherds of pottery (41g); Severn Valley ware, coarse micaceous ware Spot-date: 3rd to 4th century
3407	1 fragment of ceramic building material (68g)
3408	3 sherds of pottery (62g); Severn Valley ware, Dorset Black-Burnished ware Spot-date: 3rd to 4th century
3410	25 sherds of pottery (72g); Severn Valley ware, SVW early type, Dorset Black-Burnished ware 1 fragment of stone roofing tile (153g) Spot-date: 3rd to 4th century
3411	60 sherds of pottery (465g); Severn Valley ware, SVW early type, Dorset Black-Burnished ware Spot-date: 3rd to 4th century
3704	7 sherds of pottery (44g); Severn Valley ware, coarse medieval fabric Spot-date: Medieval
3705	7 pieces of coal (24g)
3706	2 sherds of pottery (9g); Dorset Black-Burnished ware 1 fragment of ceramic building material 2 fragments of stone roofing tile (446g) Spot-date: Romano-British
3708	2 sherds of pottery (6g); Severn Valley ware 10 pieces of coal (39g) Spot-date: Romano-British
3712	222 sherds of pottery (1387g); Severn Valley ware, Dorset Black-Burnished ware SF1 143 sherds of pottery (851g); Severn Valley ware wide mouthed jar 1 fragment of burnt animal bone (2g) 1 fragment of possible stone tile (16g) 19 pieces of coal (17g) Spot-date: 3rd to 4th century
3713	97 sherds of pottery (873g); Severn Valley ware, Dorset Black-Burnished ware, micaceous black sandy ware Spot-date: 3rd to 4th century
3718	9 sherds of pottery (29g); Severn Valley ware, Dorset Black-Burnished ware Spot-date: 2nd to 4th century
3803	1 sherd of pottery (1g); Severn Valley ware? 10 pieces of fired clay (26g)

	Spot-date: Romano-British
4005	6 fragments of bottle glass (68g) Spot-date: 19th century
4402	11 sherds of pottery (398g); Severn Valley ware Spot-date: Mid to Late 2nd to Late 3rd century
4403	1 piece of fired clay (38g)
4405	3 sherds of pottery (43g); Severn Valley ware, Dorset Black-Burnished ware 1 fragment of stone roofing tile (92g) Spot-date: 2nd to 4th century
4407	7 sherds of pottery (98g); Dorset Black-Burnished ware 1 fragment of ceramic building material (28g) Spot-date: 3rd Century
4411	8 sherds of pottery (41g); micaceous greyware 2 pieces of fired clay (16g) 2 fragments of stone roofing tile (407g) 1 piece of charcoal (3g) Spot-date: 2nd to 4th century
4413	2 sherds of pottery (29g); Severn Valley ware 2 pieces of fired clay (12g) Spot-date : Late 1st to 2nd century
4416	10 sherds of pottery (169g); Dorset Black-Burnished ware, misc greyware 1 piece of fired clay (10g) Spot-date: Mid 3rd to 4th century
4418	1 sherd of pottery (7g); Severn Valley ware/misc oxidised ware Spot-date: Romano-British
4424	4 sherds of pottery (51g); Dorset Black-Burnished ware, misc greyware 1 fragment of stone roofing tile (218g) Spot-date: Mid 3rd to 4th century
4425	1 sherd of pottery (4g); Severn Valley ware Spot-date: Romano-British

APPENDIX 3: THE BIOLOGICAL EVIDENCE

By Teresa Gilmore

A bulk environmental sample was taken for the purposes of confirming the presence of biological remains and gauging their state of preservation in order to assess the potential for analysis towards reconstructing former economies and environments. A single 10 litre sample was taken from layer 4403.

The sample was taken using a sealable plastic tub and transported to the CA offices for processing. The sample was processed for purposes of assessment. Processing was by means of floatation utilising meshes of 250µm and 500µm for the flot and residue respectively. The residue and flot were dried in a low temperature drying cabinet prior to sorting. The dried flot was scanned under a low power binocular microscope for charred plant remains, molluscan material and artefacts.

The flot contained mainly charcoal (24g) and one unburnt seed (>1g). The sorted residue from sample 4403 contained 12 fragments of either flat or spherical hammerscale (1g); a quantity of metalworking slag fragments (1179g) and a quantity of charcoal (95g).

APPENDIX 4: THE METALLURGICAL RESIDUES

By Dr T.P. Young

Summary

The total collection comprised some 9.3kg of slag and associated materials from 16 contexts. Reasonable assemblages were derived from Trench 10 (0.6kg), Trench 37 (3.7kg) and Trench 44 (5kg). These sample weights are relatively low, reflecting the limited sampling strategy of the evaluation. The assemblages were dominated by slags certainly or probably generated during bloomery iron-making. None of the macroscopic slags was certainly from a bloomsmithing or blacksmithing process. None of the adhering concretionary material was observed to contain flake hammerscale (an indicator of smithing), although coal was a frequent clast in these materials (coal is not used in bloomery iron smelting, but may be used in smithing).

The overall collection is unusual for an assemblage of iron-making slags in containing only a low proportion of typical, dense, low-vesicularity, bloomery tap slags. These materials comprise 0% in Trench 10, 43% in Trench 37 and 6% in Trench 44. In contrast slag "runners" and rods comprise 18% in Trench 10, 0% in Trench 37 and 37% in Trench 44. Despite the small sample size this suggests either a significant taphonomic difference between Trench 37 and Trenches 10/43, or an underlying technological difference.

Methodology

Specimens were weighed and then inspected using a hand lens

or low-power binocular microscope. The specimens were supplied washed, and only in a small number of cases required further cleaning.

The samples were catalogued and where possible interpreted on the basis of their overall morphology. No specimens were cut, nor were any chemical or mineralogical analyses employed, for this evaluation report.

Results

Trench 10

Context 1004 yielded a small amount of slags of uncertain origin, but which might possibly have an origin in the iron-working rather than iron-smelting process.

Context 1007 included an assemblage in which the larger specimens are likely to be from iron smelting. The context notes indicate "copious" slag inclusions, so it is unclear whether these six specimens represent the entire assemblage. One characteristic of this assemblage was the presence of small coal particles in the iron-pan material accreted on the outside of almost all the specimens. In one case the accretion also include a small piece of botryoidal goethite iron ore.

Trench 34

Contexts 3407 and 3408 yielded pieces (possibly broken fragments of the same piece) of a curious mauveish fired clay sheet, tempered with small quartzite grains and abundant organic matter. One part of the material appears to be attached to a more normal orange fired clay on one side. This may represent a rather unusual furnace or hearth lining.

Trench 37

Context 3704 yielded a single large block (900g) of extremely dense bloomery tap slag.

Context 3705 yielded a very large block (1.8kg) of slag, but this was so encrusted with iron-pan material as to make certain identification possible. It is likely to be either a piece of massive furnace slag, or a piece of bloomery tap slag. A smaller block (350g) was of a more straightforward bloomery tap slag. A series of small slag pieces may have all derived from a single bock of highly vesicular slag, likely to have been a bloomery furnace slag. A nub of burnt coal was also present.

Context 3706 yielded a single block of conventional dense bloomery tap slag.

Context 3708 yielded two small pieces probably of bloomery tap slag, together with a larger (235g) piece of slag, which despite having a slightly lobate upper surface might be part of slag cake from within a bloomery furnace.

Trench 44

Context 4403 yielded an assemblage dominated by slag runners with highly vesicular slags. The typical size appears to be 40-60mm wide, but narrower pieces are present. The maximum length seen is 200mm, but the original length of the runners is not known. Other pieces of slag are of similar texture and may represent parts of small slag cakes generated at the end of the runners. A small piece of dense tap slag flow in the form of a narrow "finger" is also present, as is a small fragment of blue glassy slag of the kind known as "fuel-ash" slag.

Context 4407 has an assemblage dominated by slags formed within the bloomery furnace. These include two blocks of very dense slags with large charcoal inclusions (345 and 460g) as well as a very corroded specimen (180g) which appears to be from the zone of secondary reduction below the bloom, in which the furnace slags are further reduced to iron where in direct contact with pieces of charcoal. Smaller slag pieces may be degraded pieces of dense tap slag. The assemblage also included a small (10g) piece of brecciated goethite iron ore.

Context 4411 yielded a small scrap of indeterminate slag.

Context 4416 contained a single piece of low density slag with much included ash, probably from the basal part of a smelting furnace, but similar materials can be formed in smithing hearths.

Context 4417 contained an assemblage of mainly rather indeterminate materials, but also a curious double slag tube, with two individual slag tubes/rods of subcircular cross section, each about 25mm across.

Contest 4418 also had a piece of slag rod of similar diameter, some degraded tap slag pieces and a small piece of blue glassy fuel-as slag.

Context 4424 has only a single piece of possible tap slag, but also an 85mm length of iron bar with section 20 by 6mm.

Discussion

The material from trenches 10 and 44 is somewhat atypical of slag assemblages from slag-tapping bloomery sites, in that there is a predominance of slags which solidified within the furnace and of slag runners in a vesicular material, and a dearth of dense, low vesicularity conventional tap slags.

Current understanding of the details of bloomery operation is rather too superficial to explain fully such an assemblage, but it is noteworthy that a rather similar assemblage was recorded from the iron smelting operation at the Chesters Villa, Woolaston, dated to a period after the mid 3rd century AD, and lying only some 7km SW of the present site (Fulford and Allen 1992). At Woolaston the furnaces appear to have been tapped via "U"- or "V"- shaped runners, 0.4 – 0.6m in length, which may, or may not, have terminated in hollows for the accumulation of slag cakes.

The same assemblages also occasionally contain small pieces of "fuel ash" slags. These blue glassy materials are easily recognisable, but have not been adequately explained. They do not appear to be common products of experimental bloomeries, but some experiments at high blowing rates do produce small quantities of low-iron glasses immediately adjacent to the bloom, although these are not typically of quite such a brilliant blue colour.

The narrow slag rods present in the assemblage have also been recorded on many sites around the Forest of Dean hinterland. One school of thought has suggested that these may be slag plugs produced during tapping of liquid iron; the liquid iron cooling to produce cast iron which would then be decarburised to make steel. This suggestion is highly controversial (bloomeries are normally thought to produce only solid iron blooms, and cast steels are not well evidenced before the Saxon period; Mack *et al.* 2000), and given the abundance of these materials, it is perhaps more likely that they represent some flowage through holes,

perhaps in the tap arch block, either as a deliberate small scale tapping or perhaps following use of a rodding tool to break the slag crust, or some similar manipulation of the sub-bloom slags.

In contrast to the slightly curious late Roman assemblages, the small collection from Trench 37 has a predominance of dense conventional tap slags. Although this may be simply a taphonomic difference (particularly given the small sample size), it remains possible that this is a real technological difference, and it may be no coincidence that these contexts are medieval in date.

References

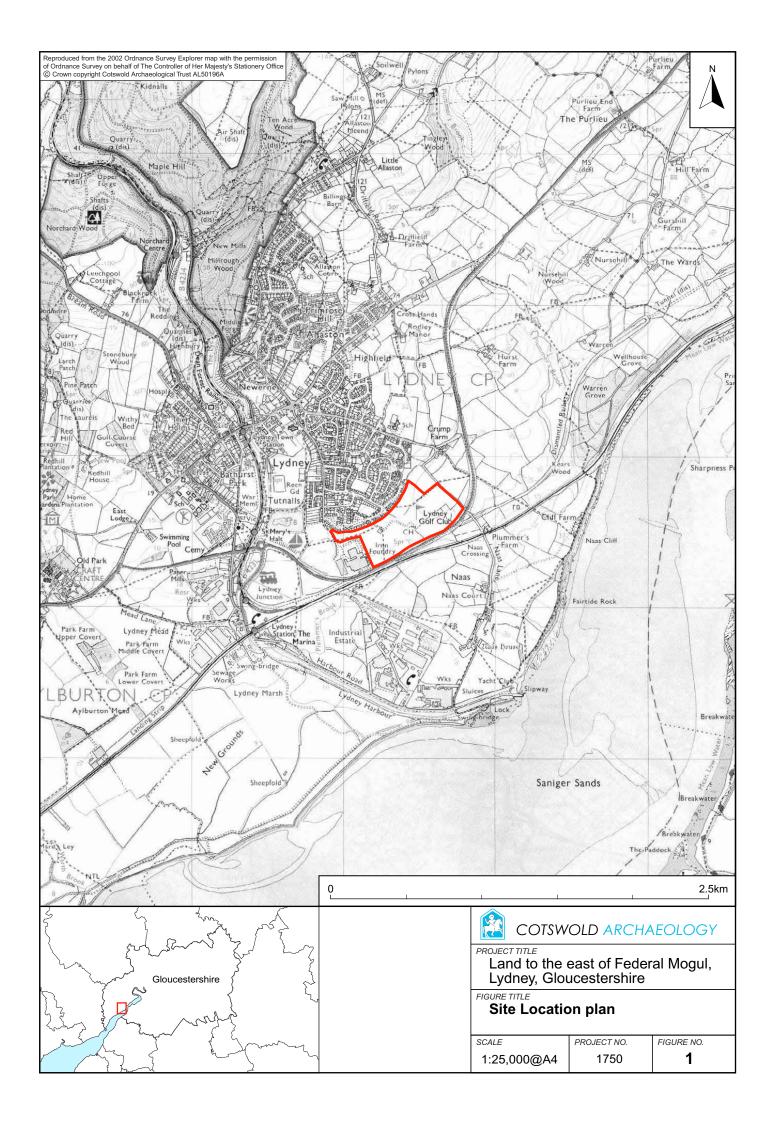
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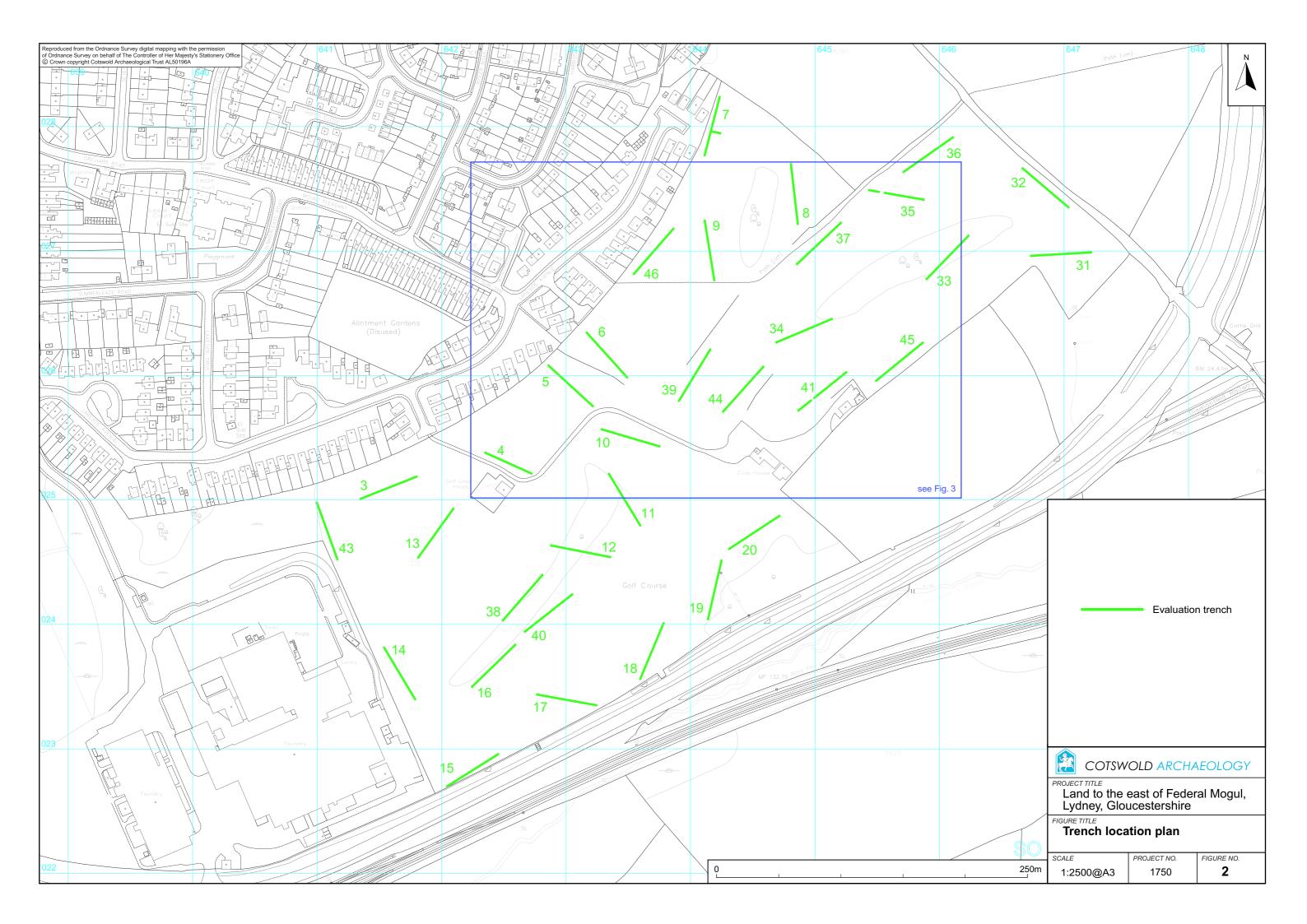
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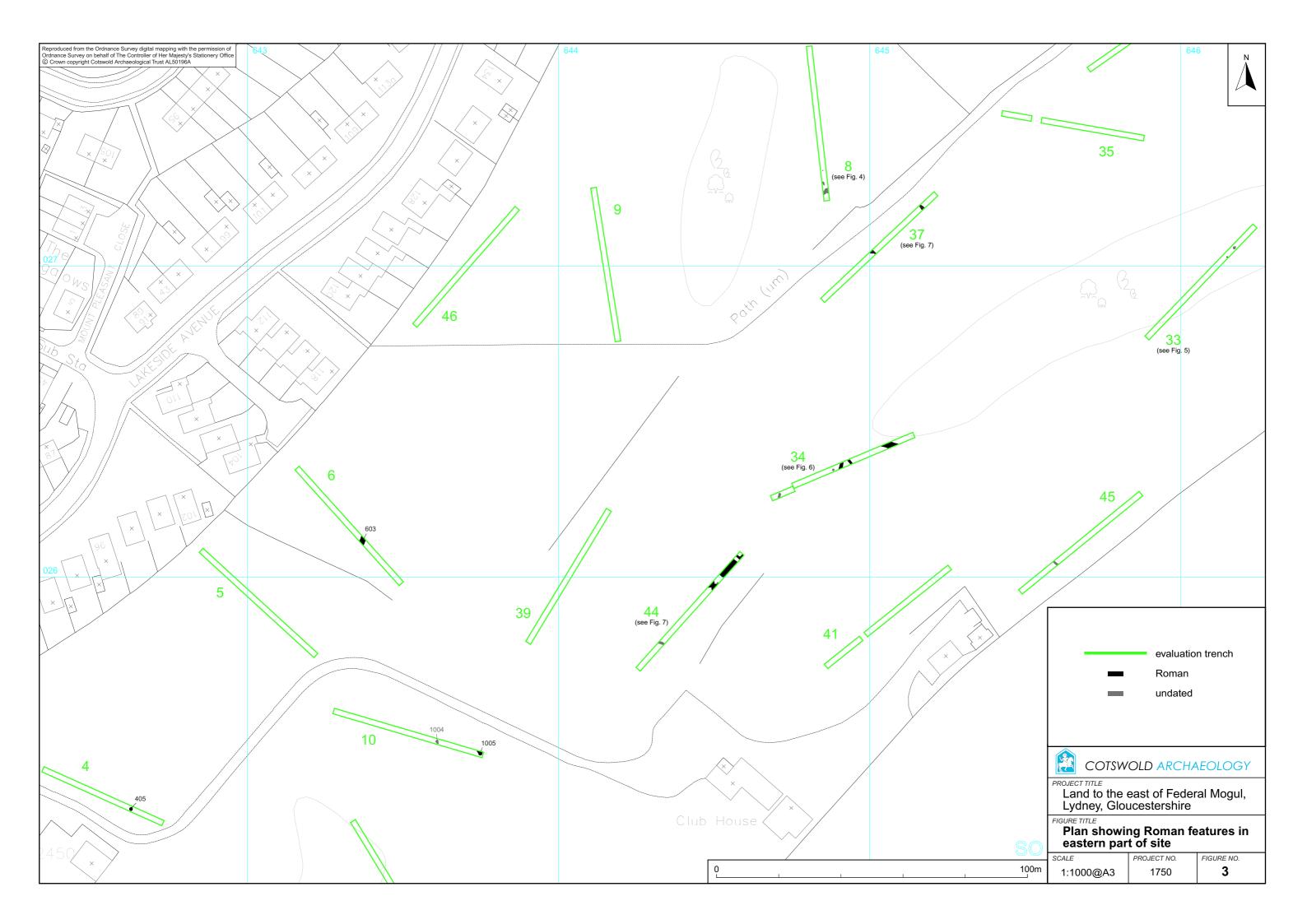
Context	Weight (g) Notes
Trench 6 602	5	grey fired clay with organic temper and grog
Trench 10 1004	70 90 25	agglomeration of corroded material including slag, coal, slag spheres and fired clay. Could be slag or iron inside or maybe it is just smithy floor accretion. piece of deformed dense slag attached to and flowed over by wall with vitreous layer. Might be a burr but not clearly so. elongate piece as 1
1007	135 65 35 25 105 25	dense slag, piece is in form of slab 50x40x25mm thick but original orientation unknown, internal texture is very dense but includes charcoal and may be brecciated nub c.40mm diameter, with irregularly lobed surface Accretion includes lots of coal small irregularly lobed/dimpled piece with accretion including lots of coal piece of hearth lining, broken in 2, coal present - probably in fabric but may be accretion. Clay orange in rear going mauve near surface, with thin veneer of Fe slag runner fragment? Broken in 2, curved surface with dense crust to 8mm?, becoming solid towards one end, but very vesicular. accretion shows much coal. small nub of vesicular slag, corroded material includes goethite botryoid and coal
Trench 34 3407	45	fragmented piece as 3408, on opposite side to main smooth surface 1 end appears attached to conventional fired clay backing. Tempered with small rounded quartzite grains and organics - may be a thin protective furnace lining
3408	10	piece of sheet of dark mauveish fired clay, probably with slightly vitrified surface
Trench 37 3704	900	block 70 x 90 x 90mm thick of conventional dense tap slag cake, thins to 50mm on one side suggesting it is part of semicircular section cake
3705	350 10 85 1765 55 35 40 25 55 20	broken piece of tap slag cake, 50mm thick, very steep edge, in two pieces coked coal, in 2 pieces irregular fracture bounded piece of slag with abundant vesicles and other holes, 40x35x25mm very dense slag block large coated in accreted debris. 130x100x100mm. Could be furnace slag, but not clear enough to tell without cutting as 3 as 3 as 3 as 3 as 3 as 3
3706	45	40 x 35 x 10-20mm thick slab of conventional tapped slag with multiple lobes in sheet form

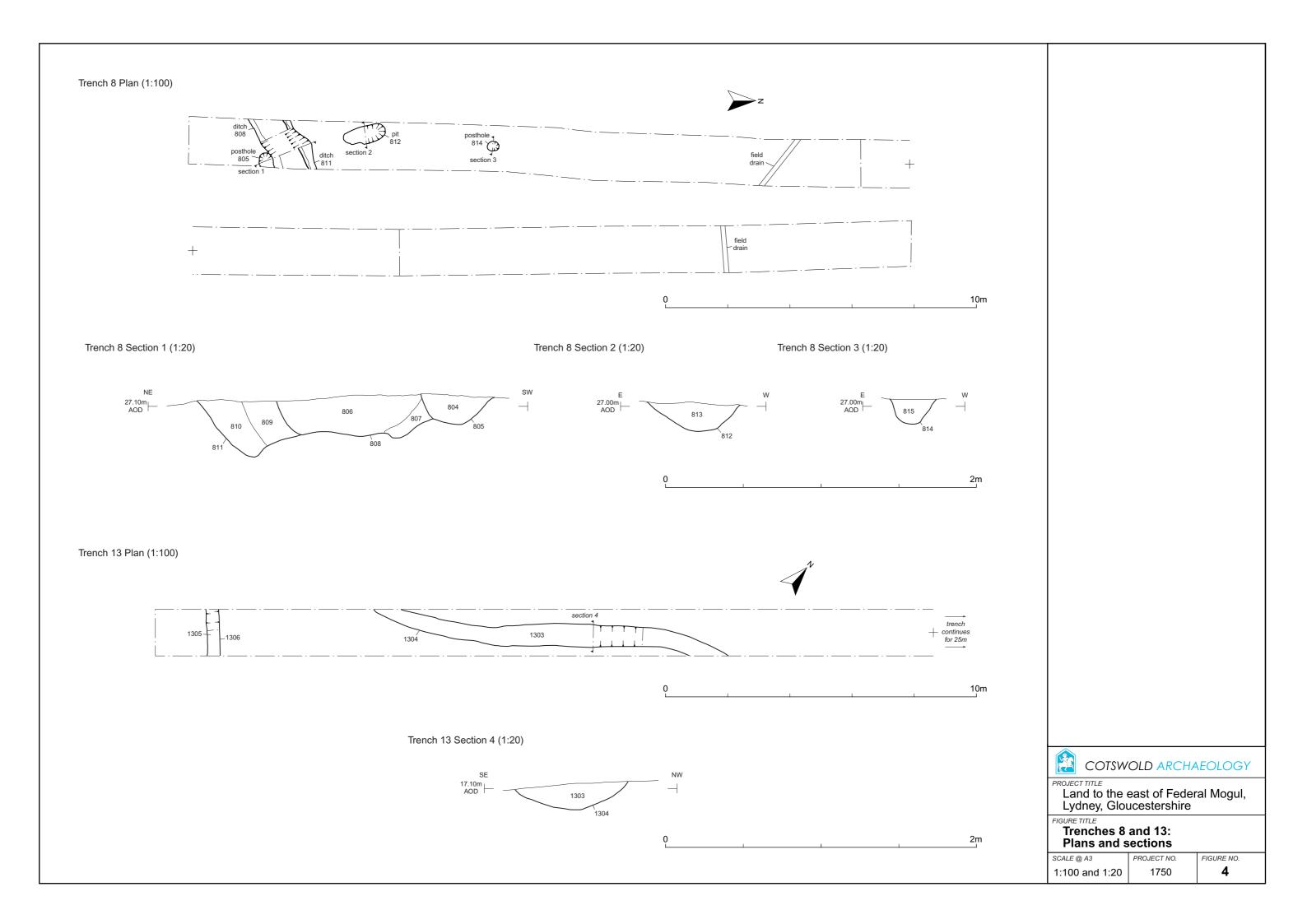
3708	45 20 235	piece from edge of dense lobed tap slag flow, 20mm thick with vertical edge, 45mm long, 20mm wide triangular fragment of a single lobe layer, 10mm thick, from a tap slag, lower surface probably fractured off larger cake very dense slag with lobate top 50mm thick, slab 30 x 70mm, overall form uncertain, possibly suffered contortion during removal	
Trench 44			
4403	785	200mm length of slag runner, roundedly triangular in cross section, apparently from widened obliquely ellipsoidal original hole. No good free surfaces, base slightly arched, slag vesicular and "dirty" looking. 50mm deep, 40mm wide at one end widening to >65mm.	
	505	150mm length of runner, main flow transversely elliptical, 55 x 37mm, widens at one end to 80mm, loses centre and nearby gains free top with rather plastic looking lobes, presumably this end is internal.	
	150	95mm length of narrow, lobed runner. 43mm wide by up to 32mm tall. Still many vesicles but denser than larger pieces.	
	35	85mm length of moderately dense runner, crescentic section, 18mm wide, 10mm deep, with adhesions to concave side extending up 7mm	
	105	rather messy appearing cake of slag 60 x 55 x 10-25mm thick. Limited lobation of upper surface, broken in two	
	95	75mm length of runner, semicircular section 20mm deep by 30mm wide, upper part locally almost lobate, very vesicular and "messy looking"	
	110	part of fractured cake, lower surface has charcoal dimples, upper dominated by large ?vesicle 50x 25. Main cake 20mm thick, dense.	
	50 5	50mm length of finger of "normal" tap slag, dimpled lower surface, mainly single lobe 10-15mm thick by 12-30mm wide, proximally with second lobe on top. blue fuel ash slag with encrustation	
4407	200	irregular cake, 85mm long x 58mm wide, 30mm thick proximally?, 10mm distally, internally full of irregular vesicles, basal dense crust 4mm in places, top locally smooth but irregular, base rough, very dense, base corroded but probably dimpled	
	180	irregular fragment 80x60x40mm thick of highly corroded material with big charcoal remnants - probably secondary reduction material	
	460	110x60x70mm irregular very dense slag block containing large charcoal moulds	
	345	2 pieces and some bits of broken dense slag block with very large (and well-preserved) charcoal inclusions 110x50x60mm in total	
	75	dense nub bounded by fractures 40mm diameter, internal shows flow lobes, so probably a tap slag	
	70	dense nub 35mm diameter, possibly from runner	
	40	irregular fragment of dense flow with extremely large internal cavity	
	15	small fragment of tap slag with single lobe thickness (8mm) surviving	
	15	flow lobe of dense slag	
	15 10	flow lobe of dense slag small nub of brecciated goethite ore	
	5	fragment of flow lobe	
	5	pottery (black burnished ware)	
4411	10	small fragment of broken vesicular slag	
4416	80	50x50x30mm rounded piece of low density slag full of well-preserved charcoal, much of pore space has ashy material contained within.	
4417	250	fragment of burr 55mm deep x 60mm wide, very dense, but plenty of included charcoal, burr c50mm radius in plan	
	675	rather corroded rounded block of uncertain nature - may be corroded iron rich furnace/hearth slag or might be "smithy floor" accretion (needs cutting). 105x70x90mm	
	260	bilobed slag runner in three pieces. Suggests origin as two separate tubes, 23wx22d and 25wx35deep, whole is 48mm wide x c40mm deep max and	

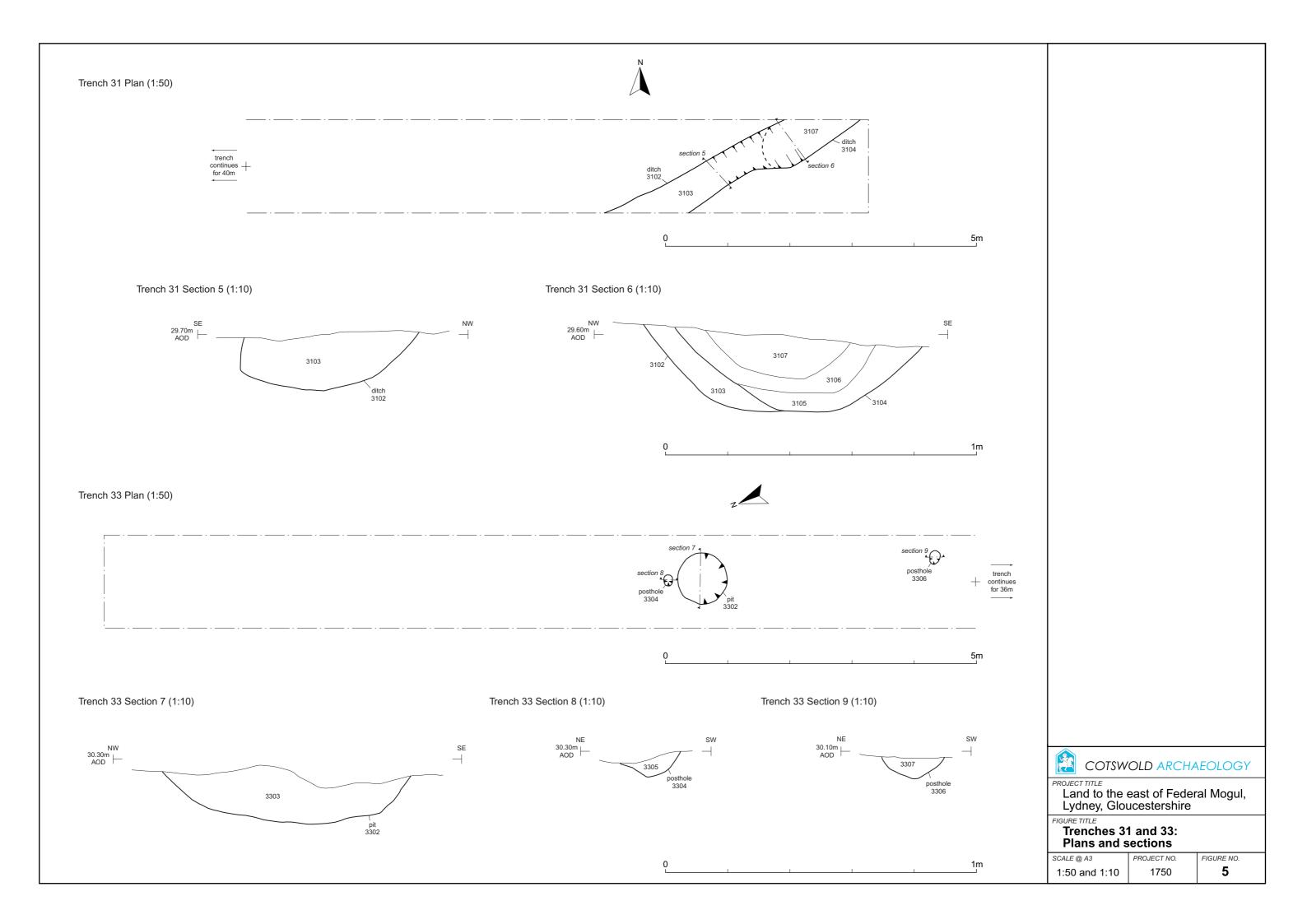
	0.5	100mm long, each lobe has crescentic dense layer and concave top, tops not lobed, but irregularly flowed, frothy and sandy.
	25	small highly weathered nub of uncertain nature
	35	triangular piece of flat slab, 40mm wide x 9mm thick, top very smooth with raised edges, base irregular, slag with rounded vesicles and moderately dense
	25	30x20x25mm small nub of broken lobate slag with adhering pale fired clay (probably runner fragment?)
4418	90	80mm length of slightly flaring slag rod, 20-25mm diameter, wider end has more open vesicular core, may have been more semicircular originally and one side has been crushed in when plastic
	55	nub of very dense slag with some large ellipsoidal vesicles up to 20mm, 35x30x20mm
	10	irregular piece with flat side - possible corrosion products broken off an artefact
	20	triangular cross section of flow edge in dense tap slag with central open vesicle, top within a single lobe?, base slightly dimpled, 35 long x 15 x18mm deep
	5	blue fuel ash slag with incipient drip
4424	50	piece of iron bar
	25	adjoining piece to 1 with adhering corrosion, bar totals 85mm long, 20mm wide, 6mm thick, end may be oblique
	85	v dense slag with smooth top, ?raised edges and large internal void, 55x45x30mm thick
	5	coked coal
	10	2 pieces of corrosion as attached to 2
	10	2 pieces of corresion as attached to 2

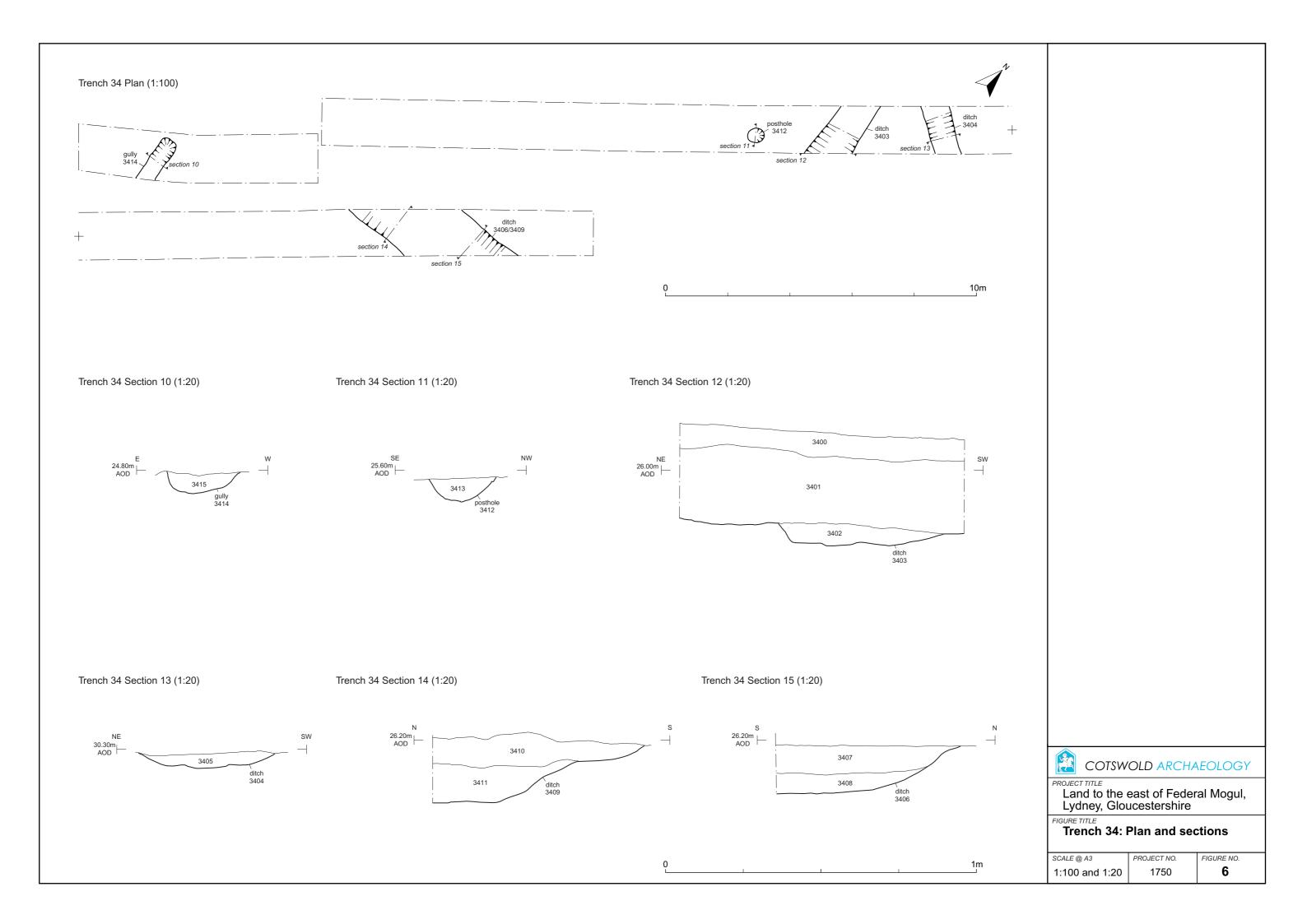


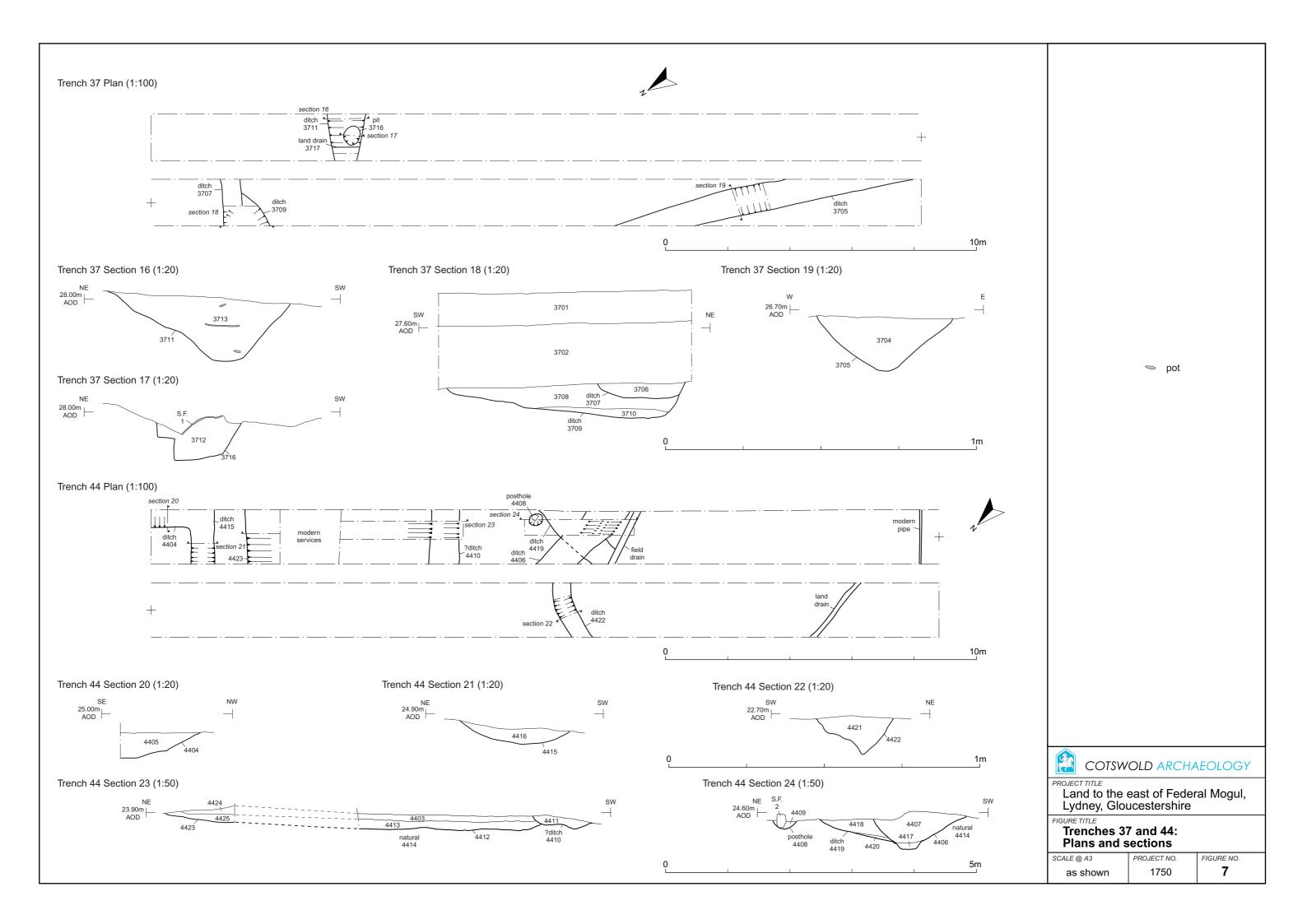


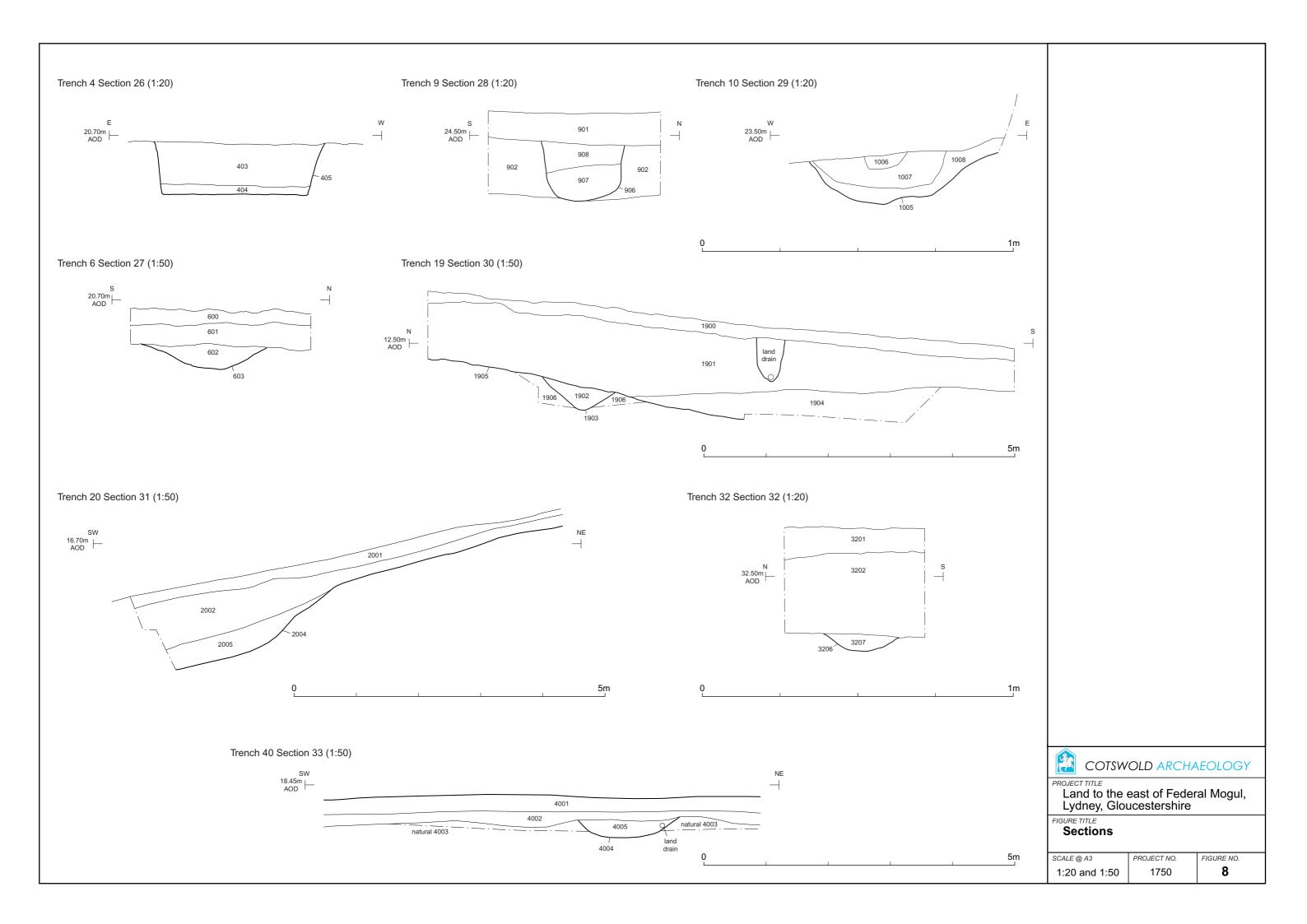














9 General vie w of site from clubhouse, looking south-west



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Land to the east of Federal Mogul,
Lydney, Gloucestershire

FIGURE TITLE

Photograph

SCALE	PROJECT NO.	FIGURE NO.
n/a	1750	9



10 Severn Valley ware jar in pit 3716



COTSWOLD ARCHAEOLOGY

PROJECT TITLE

Land to the east of Federal Mogul,
Lydney, Gloucestershire

FIGURE TITLE

Photograph

SCALE	PROJECT NO.	FIGURE NO.
n/a	1750	10