13mm, plain slightly everted collar the rim upper edge pinched to a slight everted profile. *Phase 1 Extraction Area; Context 3356; Pit 3357*

8 Collared Urn 5: Collar fragment from a large vessel, surfaces dark grey-terracotta, fabric dark grey, many medium sized quartz grits and occasional large quartz gritrs, plain upright collar, the rim upper external edge bevelled. *Phase 1 Extraction Area; Context 3356; Pit 3357*

9 Six miscellaneous Collared Urn sherds include a base seemingly not belonging with any of the collars noted, also a fragment from another collar. *Phase 1 Extraction Area; Context 3356; Pit 3357*

10 Collared Urn 6: Single upper rim sherd, buff surfaces and fabric, occasional small and medium-sized angular cavities from which calcitic grits have leached, many small igneous grits, wall thickness 10mm. *Phase 1 Extraction Area; Context 3441; Pit 3442*

11 Two miscellaneous body sherds, similar to Collared Urn 6. *Phase 1 Extraction Area; Context 3441; Pit 3442*

12 Three Miscellaneous undiagnostic sherds, probably Collared Urn. *Phase 1 Extraction Area; Context 3441; Pit 3442*

13 Single fragment of rim, clearly Collared Urn 4. *Phase 1 Extraction Area; Context 3453; Pit 3454*

14 Four unattributed sherds, Collared Urn. *Phase 1 Extraction Area; Context 3453; Pit 3454*

15 Collared Urn 7: Nine rim and body sherds from a Collared Urn, exterior surface, interior surface and fabric dark grey, a few angular medium-sized igneous grits and a few cavities from which small and medium-sized calicitic grits have leached, wall thickness 10mm, collar profile slightly concave rounded upper edge to rim, external decoration comprises an impressed cord line around the collar upper edge, below which is a row of diagonal cord impressions. *Phase 1 Extraction Area; Context 3459; Pit 3442*

16 Collared Urn 8: Single rim sherd from a Collared Urn, surfaces and fabric dark grey, fabric similar to Collared urn 2 but with more small cavities, wall thickness 11 mm, slightly concave collar profile, rim upper edge rounded, the collar bears a row of roughly executed diagonal incised grooves between horizontal incised grooves. *Phase 1 Extraction Area; Context 3459; Pit 3442*

17 Miscellaneous body sherds, probably Collared Urn, lacking calcitic grits. *Phase 1 Extraction Area; Context 3459; Pit 3442*

18 Collared Urn 9: 13 rim sherds from a Collared Urn, surfaces and fabric dark grey, many small and medium-sized sedimentary quartz grits, wall thickness 9mm, slightly concave collar profile, rounded upper surface to rim, roughly executed incised line above which is a row of short diagonal lines, a design very similar to that seen on Collared Urn 3, but the fabric is slightly different. Body sherds may be from this vessel, and have been counted as such. *Phase 1 Extraction Area; Context 3507; Pit 3508*

19 Collared Urn 10: Two sherds from the lower part of a collar surviving, exterior surface buff, dark grey interior surface and fabric, occasional small igneous grits, trace of carbonised accretion on the interior. *Phase 1 Extraction Area; Context 3507; Pit 3508*

20 Four miscellaneous sherds, unattributed. *Phase 1 Extraction Area; Context 3507; Pit 3508*

*Contexts with Iron Age or native Romano-British material*

21 Single sherd, Fabric 3. *Southern Stockpile area; Context 3105; Pit 3106*

22 Single sherd, Fabric 1. *Phase 1 Extraction Area; Context 3112; Ditch 1*

23 31 sherds from a small bucket-shaped jar, Fabric 1. *Phase 1 Extraction Area; Context 3129; Pit 3130*

24 Single sherd, Fabric 3. *Phase 1 Extraction Area; Context 3129; Pit 3130*

25 18 base sherds, Fabric 1. *Phase 1 Extraction Area; Context 3291; Pit 3292*

26 18 sherds from a heavy jar, Fabric 1, wall thickness 16mm, with thick slightly expanded vertical rim. *Phase 1 Extraction Area; Context 3291; Pit 3292*

27 Three sherds from a medium-sized jar, Fabric 2, wall thickness 10mm, tall everted rim with simple expanded upper edge. *Phase 1 Area; Context 3291; Pit 3292*

28 Five sherds Fabric 3. *Phase 1 Extraction Area; Context 3291; Pit 3292*

29 Three sherds Fabric 4, wall thickness 7mm, no obvious grits. *Phase 1 Extraction Area; Context 3291; Pit 3292*

30 Three sherds including a rim fragment, Fabric 4, wall thickness 7mm, from a small jar, short everted rim with rounded upper edge. *Phase 1 Extraction Area; Context 3291; Pit 3292*

31 Single sherd, Fabric 1. *Phase 1 Extraction Area; Context 3332; Roundhouse 5*

32 Single sherd, Fabric 3. *Phase 1 Extraction Area; Context 3371; Roundhouse 6*

33 Single sherd, Fabric 3, from a thick-walled jar, wall thickness 12mm. *Phase 1 Extraction Area; Context 3406; Pit 3407*

34 Sherds and undiagnostic ceramic scraps, perhaps somewhat earlier - ?Bronze Age. *Phase 1 Extraction Area; Context 3406; Pit 3407*

35 Single sherd, Fabric 3. *Phase 1 Extraction Area; Context 3414; Post-hole 3413*

36 Undiagnostic sherds together with a quantity of abraded fired clay fragments. *Phase 1 Extraction Area; Context 3441; Pit 3442*

37 Single sherd, Fabric 3. *Phase 1 Extraction Area; Context 3460; Pit 3442*

38 Six small sherds, seemingly Fabric 1, but with small cavities only, wall thickness 6-7mm, abraded simple slightly-rounded everted rim seen on four sherds. *Phase 1 Extraction Area; Context 3464; Post-hole? 3462*

39 Rim and other sherds from a medium-sized jar, Fabric 1, wall thickness variable between 7 mm and 9 mm, near-vertical slightly everted rim with simple expanded upper edge and external angular bead, another rimsherd with plain squared upper edge. *Phase 1 Extraction Area; Context 3472;Ditch 4*

40 Two rim sherds, Fabric 2, wall thickness 9mm. inverted rim with simple expanded upper edge. *Phase 1 Extraction Area; Context 3472;Ditch 4*

41 Single body sherd, Fabric 3, wall thickness 12mm. *Phase 1 Extraction Area; Context 3472;Ditch 4*

42 40 rim sherd and fragments, Fabric 1. *Phase 1 Extraction Area; Context 3472; Ditch 4; Spread 2*

43 44 Sherds, Fabric 1. *Phase 1 Extraction Area; Context 3472; Ditch 4; Spread 2*

44 Two sherds, Fabric 2, including a rim fragment from an apparently small vessel. *Phase 1 Extraction Area; Context 3472; Ditch 4; Spread 2*

45 Single sherd, Fabric 3. *Phase 1 Extraction Area; Context 3472; Ditch 4; Spread 2*

46 143 sherds, probably from the same vessel, a large barrel-shaped jar, Fabric 3, the base, if from the same vessel, is distinctive in having numerous small and medium-sized angular milky quartz grits, wall thickness typically 10mm. Short sharply everted rim with finger print impressions. This vessel is poorly made with frequent breaks at joins. No accretions present, perhaps 20% of the vessel represented by these sherds. *Phase 1 Extraction Area; Context 3483; Ditch 5*

*Contexts with Romano-British material*

47 Single sherd of greyware, perhaps Crambeck, Romano-British. *Phase 1 Extraction Area; Context 3229; Ditch 4*

48 Single undiagnostic fragment, probably Iron Age. *Phase 1 Extraction Area; Context 3273; Ditch 4*

49 Three sherds of greyware, Crambeck or similar, Romano-British. *Phase 1 Extraction Area; Context 3273; Ditch 4*

50 Two undiagnostic sherds, probably Iron Age. *Phase 1 Extraction Area; Context 3463; Ditch 4*

51 Sherds, Fabric 4. *Phase 1 Extraction Area; Context 3481; Ditch 4*

52 Single rim sherd, Fabric 1, everted simple rounded upper edge, abraded body sherd of the same fabric. *Phase 1 Extraction Area; Context 3483; Ditch 5*

53 Single sherd of Black Burnished Ware, Romano-British. *Phase 1 Extraction Area; Context 3483; Ditch 5*

54 Miscellaneous abraded sherds (total 6) greyware, probably Crambeck, Romano-British. *Phase 1 Extraction Area; Context 3492; Ditch 4*

55 Two Sherds of greyware, Crambeck or similar, Romano-British. *Phase 1 Extraction Area; Context 3299; Ditch 5*

*Other material*

56 Five sherds of china, 19th or early 20th century. *Southern Stockpile area; Context Topsoil*

57 Sherd, terracotta surfaces, light terracotta fabric, rough external surface, the interior surface appears to be spalled or otherwise damaged, hard-fired fabric, wall thickness 7mm. Perhaps briquetage, although a somewhat harder fabric than usual. *Phase 1 Extraction Area; Context 3318; Post-hole 3319*

*Ceramic scraps*

Undiagnostic ceramic scraps are present in contexts 3237, 3254, 3265, 3287, 3297, 3330, 3332, 3348, 3441, 3448, 3459, 3463 and 3487.

*Fired clay*

*3459*

Abraded ceramic scraps and fragments of fired clay abraded from sieving, perhaps early Bronze Age as there is pottery of this horizon from the context.

In addition to a few scraps of fired clay retrieved during sieving, noted above.

*3103*

Fragment of fired clay, possibly from a mould or metal-working hearth, weight 10g.

*3327*

Fired clay fragments, fired variously to light and dark grey, with some oxidised surfaces. Few clear edges, but one fragment has roughly-shaped outer side with vegetation – grass or reed – impressions, the broken interior surface has a smooth impression from a cane or stripped willow wand which might served as a framework for an oven, the piece being too well made to have been wall daub.

Two fired clay raised pellets, one complete which shows it to be a raised conical piece on a slightly concave circular base, 14mm high, base diameter 17mm. The second piece is fragmentary, uncertain height, the base diameter extrapolated at around 30mm.

Table 1: Early Bronze Age pottery – contexts, sherd counts and weights, CU = Collared Urn

| Context | Vessel | Sherds (wt g) |
|---|---|---|
| 3099 | CU1 | 4 (25 g) |
| 3110 | Beaker 1 | 9+ (70 g) |
| | Beaker 2 | 1 (15) g |
| | ?Beaker | 1 (10 g) |
| | misc Beaker | 2+ (10 g) |
| 3326 | CU2 | 1 (10 g) |
| 3328 | CU3 | 1 (15 g) |
| 3356 | CU4 | 1 (45 g) |
| | CU5 | 1 (45 g) |
| | misc CU | 6 (60 g) |
| 3441 | CU6 | 1 (15 g) |
| | ?CU7 | 2+ (30 g) |
| | misc CU | 3 (25 g) |
| 3453 | CU4 | 1 (35 g) |
| | misc CU | 4+ (50 g) |
| 3459 | CU7 | 9 (160 g) |
| | CU8 | 1 (15 g) |
| 3507 | CU9 | 13+ (150 g) |
| | CU10 | 2 (10 g) |
| | misc CU | 4+ 35 g) |

Table 2: Pre-Roman Iron Age or native style pottery – contexts, sherd counts and weights

| Context | Fabric 1 | Fabric 2 | Fabric 3 | Fabric 4 |
|---|---|---|---|---|
| 3105 | | | 1 (5 g) | |
| 3112 | 1+ (5 g) | | | |
| 3129 | 31 (195 g) | | 1 (5 g) | |
| 3291 | 18+ (130 g) | | | |
| 3492 | 18+ (150 g) | 3 (40 g) | 5 (40 g) | 6 (25 g) |
| 3331 | | | 1 (15 g) | |
| 3332 | 1 (5 g) | | | |
| 3371 | | | 1 (15 g) | |
| 3406 | | | 1 (10 g) | |
| 3414 | | | 1 (5 g) | |
| 3460 | | | 1+ (10 g) | |
| 3464 | 6+ (40 g) | | | |
| 3472 | 44+ (200 g) | 2+ (45 g) | 1 (10 g) | |
| 3472 spread 1 | 24+ (110 g) | 3 (15 g) | | |
| 3472 spread 2 | | 40+ (155 g) | | |
| 3482 | | | | 2+ (10 g) |
| 3483 | | | | 143 (2100 g) |
| TOTAL | 143+ (835 g) | 48+ (255 g) | 13+ (125 g) | 151 (2135 g) |

**Lithics** by Ian Brooks

A total of 76 lithic artefacts were recovered during the course of excavations, the majority of these were of flint, however, a single broken polished stone axe was also found. Many of the artefacts are likely to be residual.

The majority of the assemblage was either flakes or broken flakes, particularly if the 15 spalls (19.7% of the assemblage) are discounted. There are, however, an unusually large number of formal tools (12, 15.8%) within the assemblage together with three cores and six worked lumps.

The flakes were divided into four groups: primary flakes with completely cortical dorsal surfaces, secondary with partly cortical dorsal surfaces, tertiary with uncorticated dorsal surfaces, and broken flakes. Where possible the flint colours are defined by the Geological Society of America's Rock-Colour Chart (Goddard *et al.* 1948). The description of the tools follows that of Inizan *et al.* (1992).

There are no local sources of flint in the immediate vicinity of the site. The nearest possible primary (chalk) source for flint is that of the Yorkshire Wolds (Rawson *et al.* 1978), some 50km to the east. The flint here, however, tends to be of relatively poor quality, often opaque, pale grey in colour and faulted. More importantly there are a series of derived sources available, particularly the tills and associated gravels of East Yorkshire, outcropping along the coast between Flamborough Head and Kilnsea (Brooks 1989, Henson 1985). These contain considerable flint resources, often of good quality which could be used for tool manufacture. Within the immediate area of the site there are various drift and alluvial deposits overlying the Kimmeridge Clay of the Vale of Pickering which are now sealed by post-Neolithic sediments (Manby 1979, 74, Phillips *et al.* 1988, 52). These may have given a more immediate potential source for some of the flint. There were, however, four unworked fragments of flint weighing a total of 154.2g which are clearly directly from a chalk source. The colour and texture of this flint would indicate they were from one of the tabular bands of the Yorkshire Wolds. The quality of this flint is so poor, that it could never have been used for knapping and these fragments must therefore have been brought to the site for some other purpose.

The flakes from the site consist of seven (9.2% of the assemblage) secondary flakes, 12 (15.8%) tertiary flakes and 21 (27.6%) broken flakes. No primary flakes were recovered and the relatively few other flakes with cortical dorsal surfaces would suggest that primary reduction was not carried out on the site. The complete flakes vary in length from 8-44 mm, although they are generally from flakes with length/width ratio of between 0.9 and 1.5 suggesting there is little evidence for blades being a regular part of the knapping regime. The majority of these flakes have no further modification with only two tertiary flakes, both recovered from the subsoil, having any sign of modification or wear (Plate 12.2 for best example). There is some evidence that some knapping did take place on, or near, the site with

the recovery of three formal cores and a core face rejuvenation flake. Two of the cores were flake cores and the third a multi-platformed blade core of Mesolithic type. This core also had battered surfaces suggesting it may have been re-used as a hammerstone. There were also six worked lumps found weighing a total of 47.6 g.

A surprisingly large number of the artefacts recovered show signs of having been heated. Eighteen artefacts (23.7%) have significant heat damage such that, by either modifying the colour or inducing crazing, the original flint type could not be recognised. This crazing is not necessarily an indication of extreme heat as it can be induced by rapid heating or cooling (Purdy 1975).

There are an unusually large number of tools within this assemblage. Twelve (15.8% of the assemblage) tools were found, of which ten (13.6 % of the assemblage) were scrapers (Plate 11). These were largely made on flakes of varying size and shapes, however one was made on a core fragment (Plate 11.4). The two other tools consist of a polished stone axe fragment (Plate 13) and a plano-convexed knife of a type commonly known as a "slug knife" (Plate 12.1). The stone axe was made on a very fine micritic limestone probably a concretion. It has one very small shelly fossil fragment and the darker areas of the limestone contain small areas of pyrite. Within the majority of the rock, however, the pyrite has weathered to a range of hydrated iron oxides. The centre of the concretion appears to have an early digenesis as the faint paler banding contains more compressed limestone with a fracture boundary against the main body of the specimen (Dorning *pers. comm.*). Macroscopically, at least, this would accord with the description of Group XXVI (Phillips *et al.* 1988, 53 – 55.) The distribution of other artefacts assigned to this group is centred on the parish of Nunnington, in the western part of the Vale of Pickering (ibid 53), approximately 15km to the south west where it would appear to be related to a series of locally made replicas of assumed 19th century date (ibid 56). The example from Newbridge Quarry, however, does not immediately appear to have been a replica. Unfortunately the butt of the axe has been lost, but its form would correspond to Manby's B2a or B3a forms with a slightly convexed cutting edge and marked facetted sides (Manby 1979, 65). It was totally polished, but given the fine grained nature of the rock used, it is assumed that the original shaping was by knapping.

The plano-convex knife (Plate 12.1) is a small example of its type; only 34mm long it has a marked "D" shaped cross section which seems unsuitable for cutting. The tool however, is also too delicate, and does not have a suitable wear pattern to have been a fabricator of some type. It does have a series of scars on its ventral surface suggestive of significant use. Tools of this type are typically Early Bronze age in date (Sieveking, 1968, 90).

**Discussion**

The lithic assemblage from Newbridge Quarry, Pickering would appear to be a fairly typical, mixed assemblage recovered as residual artefacts from later contexts. A date range of between the late Mesolithic and Early Bronze Age is suggested by the range of artefacts

present. Of particular note are the polished axe and the plano-convex knife. The axe would appear to be sufficiently worked and damaged to be a genuine Neolithic artefact, but at least macroscopically it also appears to be made of a rock type which has been associated with 19th-century fakes. This dilemma may only be resolved by a more detailed investigation of the rock used for this artefact. The plano-convex knife is a rather small example, but the quality of workmanship would confirm its Early Bronze Age date. Its function, however, is still not certain. The profile of this tool is not ideal for cutting and the damage to the ventral surface is too invasive. This damage is not, however, of a type normally associated with a tool such as a fabricator.

It is unusual for almost 24% of an assemblage to be burnt, it is assumed that most of the burning took place after the use-life of the flint artefacts as is suggested by the burnt scraper from Context 3328 (Plate 11.6). The presence of unworked blocks of flint on the site, of a flint quality which is unsuitable for knapping, is also unusual. It may be that some flint was being brought to, or near to, the site in a later period, possibly burnt and used for some semi-industrial process although this remains speculative.

*Select Catalogue*

1 A broken side scraper on a tertiary flake of opaque, light grey (N7) flint. The right hand side of this tool is missing; however, there are a series of long, abrupt , sub-parallel removals defining the left hand side. 31 by 20 by 10mm; Plate 11.1. *Southern Stockpile Area; Context 3105; Pit 3106*

2 A well made end scraper on a tertiary flake of semi–translucent pale yellowish brown (10 YR 4/2) flint. The distal end of this tool is defined by a series of short, semi-abrupt, sub-parallel removals. The quality of the knapping would tend to suggest an Early Bronze Age date for this tool. 29 by 30 by 5mm; Plate 11.2. *Southern Stockpile Area; Context 3110; Pit 3110*

3 An end scraper on the distal end of a broken, thick secondary flake of opaque, very light grey (N8) flint with worn cortex. Whilst the original source for this flint type is likely to have been the Yorkshire Wolds, the worn cortex would suggest a derived source such as a till or gravel was used. The distal end is defined by a series of long, abrupt, scalar removals forming a near straight working edge. 28 by 26 by 13mm; Plate 11.3. *Phase 1 Extraction Area; Context 3198; Roundhouse 3*

4 An end scraper on a secondary flake of medium light grey (N6) flint with poor translucency. The cortex on the dorsal surface of this tool is highly worn suggesting a derived source, such as a till or gravel, for the flint. The distal end has a series of short, abrupt, semi-parallel removals defining a slightly convexed working edge. 34 by 19 by 5mm; Plate 11.4. *Phase 1 Extraction Area; Context 3273; Ditch 4*

5 An end scraper on a mid flake fragment, possibly from a flake core. The artefact is patinated to a pale grey colour making its original flint type difficult to determine. The working edge is defined by a series of short, abrupt, scalar removals. 25 by 28 by 7mm; Plate 11.5. *Phase 1 Extraction Area; Context 3273; Ditch 4*

6 A broken side scraper on a burnt tertiary flake. The left hand side of this tool has a series of short, semi-abrupt, scalar removals. The right side has at least two fractures which took place before the tool has been burnt. It is assumed that the burning of this tool took place after the scraper had been discarded. 38 by 24 by 8mm; Plate 11.6. *Phase 1 Extraction Area; Context 3328; Pit 3329*

7 A side end scraper on a tertiary flake of opaque, light olive grey (5 Y 6/1) flint. The distal and right sides have a series of short, abrupt, sub-parallel removals defining the working edges. The right hand side of the artefact has a post-manufacture break on its ventral side. 27 by 28 by 8mm; Plate 11.7. *Phase 1 Extraction Area; Context 3356, Pit 3357*

8 A small plano-convexed knife or "slug knife" made on a tertiary flake of translucent dusky yellowish brown flint. Apart from some use damage the ventral surface is unmodified and retains the bulb of percussion. The dorsal surface, however, has invasive, semi abrupt, scalar removals, completely around the periphery. At the proximal and distal ends these removals become even steeper, almost giving scraper-like ends to this tool. Although classified as a "knife" the profile of this tool would make it unlikely that it was used in a cutting role. There is some irregular flaking caused by use on the ventral surface. 34 by 14 by 4.5mm; Plate 12.1. *Phase 1 Extraction Area; Context 3356; Pit 3357*

9 An end scraper on a tertiary flake of opaque, pale yellowish brown (10 YR 6/2) flint. The distal end is defined by a series of short, semi-abrupt, sub-parallel removed defining a convexed working edge. The form of this tool would suggest a broadly Neolithic date for this artefact. 41 by 23 by 8mm; Plate 11.8. *Phase 1 Extraction Area; Context 3431; Pit 3432*

10 A crude side scraper on the proximal section of a tertiary flake of opaque, medium light grey (N6) flint. The right hand edge has a series of long, semi-abrupt, scalar removals forming a crude working edge. There is also a single flake removed from the left hand, ventral surface. 24 by 21 by 10mm; Plate 11.9. *Phase 1 Extraction Area; Context 3453; Pit 3454*

11 A polished stone axe on a very fine micritic limestone probably a concretion. It has one very small shelly fossil fragment and the darker areas of the limestone contain small areas of pyrite. Within the majority of the rock, however the pyrite has weathered to a range of hydrated iron oxides. The centre of the concretion appears to have an early digenesis as the faint paler banding contains more compressed

limestone with a fracture boundary against the main body of the specimen (Dorning pers. comm.). Macroscopically, at least, this would accord with the description of Group XXVI (Phillips *et al.* 1988, 53 – 55.). The axe has a slightly convexed cutting edge which has a slightly different profile on the dorsal and ventral surfaces suggesting it may have been an adze. The sides have been facetted. The butt has been lost through damage and there are a few modern chips along the cutting edge. Many of the axes assigned to Group XXVI have been assumed to be 19th-century fakes Philips *et al.* 1998, 56), however, at least superficially this artefact would appear to be sufficiently worn to have been Neolithic. 82 by 50 by 25mm; Plate 13. *Phase 1 Extraction Area; Context 3497; Ditch 4; SF. 12*

12 A broken side end-scraper on a tertiary flake of opaque, light grey (N7) flint. The left hand side of this tool has been lost, however, the right and distal edges are defined by a series of short, semi-abrupt, scalar removals. 39 by 17 by 10mm; Plate 11.10. *Phase 1 Extraction Area, unstratified; unknown find spot*

13 A tertiary flake of a semi-translucent dark yellowish brown flint (10 YR 4/2) with a punctiform platform. Both the right and left proximal edged of this artefact has edge damage suggestive of considerable use. 38 by 6 by 4.5mm; Plate 12.2. *Phase 1 Extraction Area, north-eastern side; unstratified; SF. 11*

Table 3. Summary of the Assemblage

| Context | Primary Flakes | Secondary Flakes | Tertiary Flake | Broken Flakes | Tools | Worked Lumps | Cores | Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| 3099 | | | | 1 | | | | | 1 |
| 3101 | | | | 1 | | | | | 1 |
| 3105 | | | | | 1 | | | | 1 |
| 3110 | | | | | 1 | | | | 1 |
| 3194 | | | | | | 1 | | | 1 |
| 3198 | | | | | 1 | | | | 1 |
| 3202 | | | | | | 1 | | | 1 |
| 3224 | | | | | | | | 1 | 1 |
| 3232 | | | 1 | 2 | | | | | 3 |
| 3233 | | | 1 | 1 | | | | | 2 |
| 3235 | | | | | | | 1 | | 1 |
| 3254 | | 1 | | | | | | | 1 |
| 3265 | | | 1 | | | 1 | | | 2 |
| 3273 | | | | | 2 | | | | 2 |
| 3287 | | | | | | 1 | | | 1 |
| 3291 | | 1 | | | | | | | 1 |
| 3299 | | | 1 | | | | | | 1 |
| 3326 | | 1 | | 1 | | | | 1 | 3 |
| 3327 | | | | | | 1 | | | 1 |
| 3328 | | | | | 1 | | | | 1 |
| 3339 | | | 1 | 1 | | | | | 2 |

| Context | Primary Flakes | Secondary Flakes | Tertiary Flake | Broken Flakes | Tools | Worked Lumps | Cores | Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| 3348 | | | | 1 | | | | | 1 |
| 3356 | | 1 | 1 | | 2 | | 1 | 1 | 6 |
| 3371 | | | | | | | | 2 | 2 |
| 3389 | | | | 1 | | | | | 1 |
| 3431 | | | | | 1 | | | 2 | 3 |
| 3441 | | | | 2 | | | | 5 | 7 |
| 3447 | | | | 1 | | | | 2 | 3 |
| 3448 | | | 1 | | | | | 1 | 2 |
| 3453 | | | | | 1 | | | | 1 |
| 3455 | | | 2 | | | | | | 2 |
| 3463 | | 1 | | | | | | | 1 |
| 3474 | | | | 1 | | | | | 1 |
| 3487 | | | 1 | | | | | | 1 |
| 3492 | | | | 3 | | | | | 3 |
| 3497 | | | | | 1 | | | | 1 |
| 3515 | | | | 1 | | | | | 1 |
| subsoil | | 1 | | 4 | 1 | 1 | 1 | | 8 |
| subsoil | | 1 | 2 | | | | | | 3 |
| Total | 0 | 7 | 12 | 21 | 12 | 6 | 3 | 15 | 76 |
| | 0.0% | 9.2% | 15.8% | 27.6% | 15.8% | 7.9% | 4.0% | 19.7% | 100.00% |

**Fired Clay** by S.E. Tibbles

*Introduction and Methodology*

Assessment of the submitted assemblage was based on a visual scan and examination using a x15 magnification lens. Diagnostic features such as rod and/or sail impressions and original surfaces were taken into account to aid identification. Non-diagnostic material was categorised as featureless. All of the material was subject to basic quantification by count and weight.

Table 4. Assemblage of daub/fired clay recovered from the excavations

| Context | Context Notes | No. of Fragments | Weight (g) |
|---|---|---|---|
| 3131 | | 1 | 11g |
| 3136 | | 1 | 0.5g |
| 3226 | | 2 | 0.5g |
| 3232 | | 1 | 4g |
| 3269 | Sample 421 | 8 | 1g |
| 3291 | | 8 | 7g |
| 3326 | Inc from sample 448 | 820 | 851g |
| 3441 | Sample 484 | 19 | 10g |
| 3451 | Sample 475 | 12 | 3g |

| Context | Context Notes | No. of Fragments | Weight (g) |
|---|---|---|---|
| 3462/3428 | Sample 468 | 1 | 0.5g |
| Total | | 873 | 888.5g |

*The Daub/Fired Clay*

The daub/fired clay assemblage consisted of approximately eight hundred and seventy-three fragments, with a combined weight of 888.5g. All the material was of a similar fabric:

Soft to 'firm', occasionally crumbly. Inclusions of occasional fine quartz grains, fine mica flecks and fine black flecks (0.1mm – 0.25mm).

The majority of the assemblage (94%) was featureless and comprised small rounded '*granules*' and amorphous fragments with abraded surfaces. Fifty-one fragments bore diagnostic features either in the form of one rod/sail impression or an original surface of a '*flattish*' appearance; three and forty-eight pieces respectively. The dimensions of the rod/sail impressions ranged between 10mm to 12mm.

Two hundred and fifty-nine fragments displayed discolouration, indicative of exposure to direct heat exposure/burning. This may have occurred during original use.

*Discussion*

The paucity of evidence of diagnostic features does lead to an ambiguous interpretation for use. The heat discolouration/burning noted may indicate oven or hearth material. However it should also be considered that this might have been a result of secondary high temperature destruction, i.e. if the material was part of a wattle and daub structure such as a wall or partition or used as packing around timber posts.

Overall, the daub/fired clay is of little archaeological potential. The small size and abraded condition of the majority of the assemblage limits the interpretation and conclusion of use.

**Industrial Residue** by Jennifer Jones

Small quantities of possible industrial residues with a total weight of 1.15g were recovered from environmental samples taken from nine contexts. Most of the material was found to be fragments of magnetic geology, though a few minute fragments of probable slag and/or hammerscale were also identified.

*Methodology and examination*

All the material was examined visually and under x16 magnification. The aim of the examination was to characterise the residues and identify the industrial processes from which they originated. Classification was primarily based on morphology, density, colour and vesicularity. Contexts and identifications are recorded in Table 5 below. Category criteria are

based on the English Heritage Centre for Archaeology Guidelines on *Archaeometallurgy* (Bayley *et al.* 2001).

*EDXRF analysis*

EDXRF (energy dispersive X-ray fluorescence) analysis, using an Oxford Analytical ED2000 facility, was carried out on the two samples of silver-coloured foil from contexts (3269) and (3282). The aim was to look at the range of elements present to assist with identification. The remaining residue samples were too small to be analysed.

*Identifications*

Most of the material was identified as minute fragments of geology (Table 5). All fragments are magnetic, suggesting that they are iron-rich, though non-magnetic materials can become magnetised through contact with already magnetic material. Some of the thinner fragments appear to be pieces of iron pan (context 3460). Some of the more rounded fragments may be composed of finely crushed iron slag or iron corrosion agglomerated with silica (sand), though all are too small to be certain. Five contexts, (3237), (3279), (3339), (3447) and (3460) produced a few very small pieces of possible slag, though only two contexts, (3279) and (3339), had pieces of spheroidal hammerscale.

The two pieces of thin, silver-coloured foil from contexts (3269) and (3282) were both identified by EDXRF as fragments of nickel plating. Such plating was developed in the 19th century.

*Discussion*

The samples produced very little evidence for ironworking. The fragments of iron-rich geology might possibly be remnants of ores used for iron production, but were too small for analysis to assess their iron content. If either primary or secondary ironworking was taking place in the vicinity, far larger quantities of residue would be expected.

It would seem probable that ironworking was of very minor economic importance at the site.

Table 5. Industrial residue identifications

| Context | Sample # | No pieces | Description |
|---|---|---|---|
| 3237 | <416> | 4 | 2 frags of magnetic geology |
| | | | 2 frags possible crushed slag /corrosion agglomerated with silica |
| 3269 | <421> | 1 | 1 frag nickel plating foil |
| 3279 | <424> | 8 | 7 frags of magnetic geology |
| | | | 1 spheroidal hammerscale |
| 3281 | <427> | 11 | 10 frags of magnetic geology |
| | | | 1 frag of nickel plating foil |
| 3326 | <448> | 47 | 37 frags of magnetic geology |
| | | | 10 frags possible crushed slag/corrosion agglomerated with silica |
| 3339 | <450> | 6 | 5 frags of magnetic geology |
| | | | 1 spheroidal hammerscale |