# Iron Working Debris from Elms Farm, Heybridge, Essex

David Dungworth

## Introduction

The site at Elms Farm, Heybridge, Essex (NGR TL847082) is a Roman settlement at the head of the Blackwater estuary. An area totalling 21 hectares across the eastern half of the settlement was investigated by Essex County Council Field Archaeology Unit on behalf of Bovis Homes and English Heritage. A range of features were excavated including roads, ditches, pits, post-holes and buildings and occupation continued from the late pre-Roman Iron Age through to the early Saxon period. The site is interpreted as a 'market village' (Atkinson & Preston 1998: 109).

## Excavation Strategy/Collection Policy

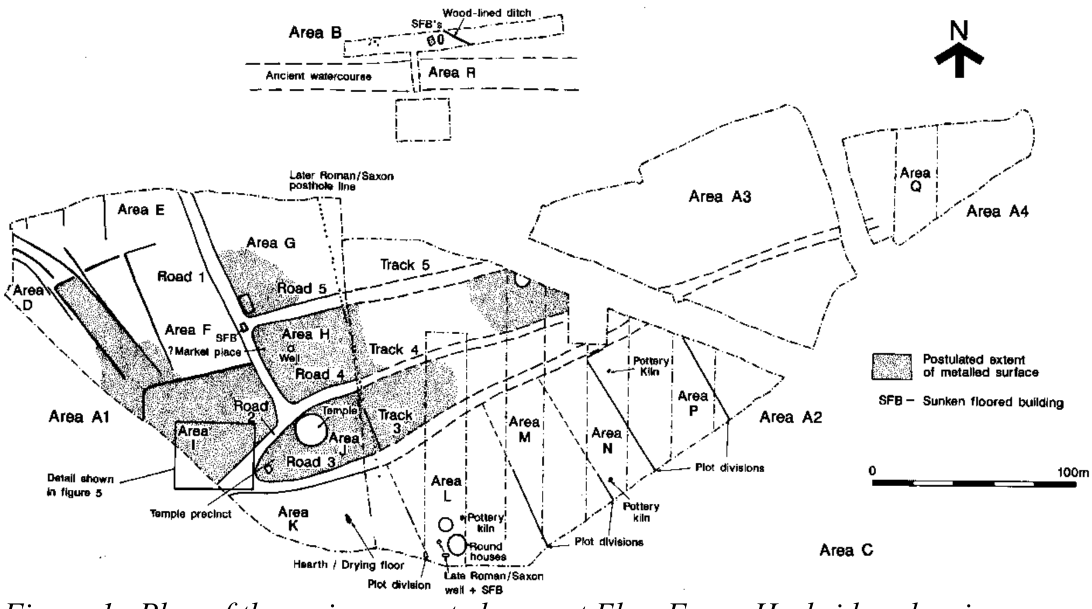


*Figure 1. Plan of the main excavated area at Elms Farm, Heybridge showing areas D–R (After Atkinson & Preston 1997: fig 4, drawn by Iain Bell)*

Initially, areas were mechanically stripped and all features were sampled by hand excavation. However, the density and complexity of deposits were greater than expected and the excavation strategy was altered with partial striping and selective sampling of features identified. In some cases, the areas stripped and sampled were selected to investigate good survival of stratigraphy, while in others the areas were alternate 20 m strips to provide a 'random' sample (see figure 1). While the total area excavated was large and a large quantity of material was recovered there may be biases which will affect attempts to compare different areas.

Numerous hearths were excavated although the exact function of these was not always clear; many were probably domestic rather than industrial. Metal working wastes, including hammerscale) were recovered from a number of secondary contexts (ditches, pits, etc) especially in the southern part of the site. No metal working debris was found in primary contexts.

## Nature of Occupation

The site comprises a temple complex at the centre of a road and trackway network with numerous domestic and industrial features (round houses, ditches, pits, gullies, kilns, etc). Occupation commences in the late pre-Roman Iron Age and continues into the early Saxon period (see table 1). The Roman occupation at the site has conventionally been characterised as a 'small' or minor town (e.g. Rodwell 1975) with port facilities (Wickenden 1986). The recent excavations, however, suggest that the occupation was principally agricultural albeit with a local religious significance (Atkinson & Preston 1997: 109).

| | | |
|---|---|---|
| I | Middle/Late Iron Age transition | |
| II | Late Pre-Roman Iron Age | Mid 1st century BC – mid 1st century AD |
| III | Early Roman | Late 1st century AD – mid 2nd century AD |
| IV | Mid Roman | Late 2nd century AD – mid 3rd century AD |
| V | Late Roman | Late 3rd century AD – mid 4th century AD |
| VI | Latest Roman – Early Saxon | Late 4th century AD – 5th century AD |
| VII | Later | 6th century – present |

*Table 1. Summary of phasing*

## Summary of results

The metalworking debris was categorised on criteria of morphology, density, colour and vesicularity and each category was separately weighed. It should be stressed that many categories of iron working slags form part of a compositional and morphological continuum. Only certain classes of material are strictly diagnostic and can be unambiguously assigned to a single metalworking process. Others may derive from a restricted range of processes but, when found in association with the diagnostic types, may provide support for the identification of these activities. Categories and the criteria on which they are based may vary between specialists; those currently used by the Centre for Archaeology are defined below.

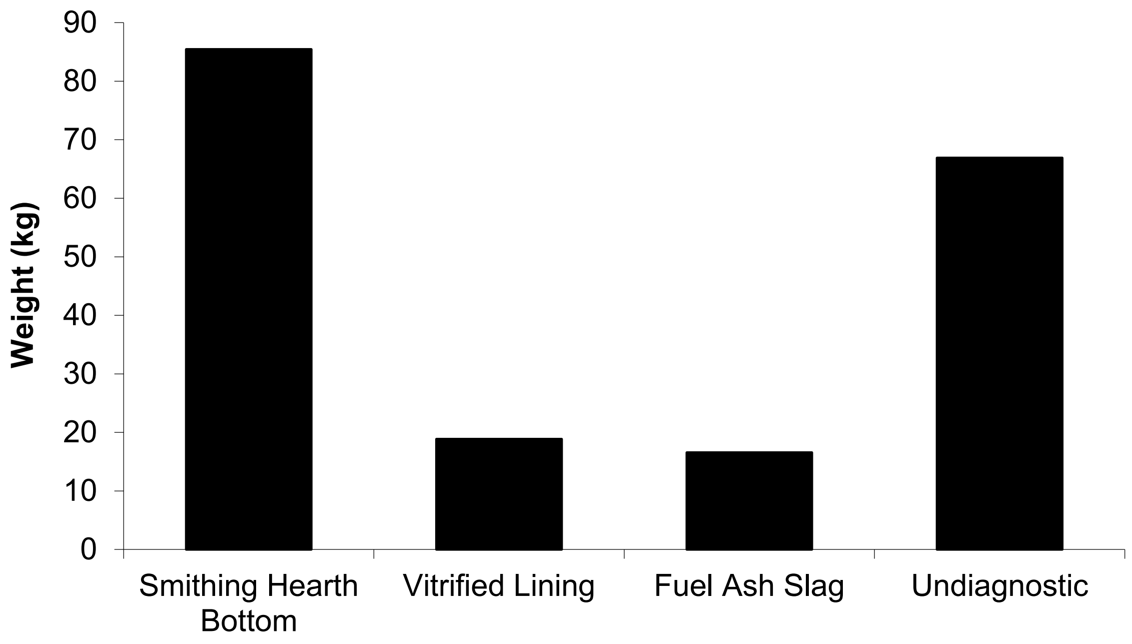


*Figure 2. Weights of all metal working debris from Elms Farm, Heybridge*

A total of 187.727kg of metal working (and possible metal working) debris has been identified. The categories which have been identified from Elms Farm are smithing hearth bottoms, vitrified lining, undiagnostic and fuel ash slag. Significantly no slags diagnostic of iron smelting were identified. The proportions of the categories of metal working debris identified are shown in figure 1. All of the debris which is diagnostic of a particular process was produced by iron smithing.

## Explanation of classification

In the debris from Elms Farm, Heybridge, evidence for smithing was recognised in two main forms; bulk slags and micro slags. Of the bulk slags produced during smithing only the **smithing hearth bottoms** are unlikely to be confused with the waste products of smelting and are therefore considered to be diagnostic of smithing. These hearth bottoms are recognisable by their characteristic plano-convex form, having a rough convex base and a smoother, vitrified upper surface which is flat, or even slightly hollowed as a result of the downwards pressure of the air blast. Compositionally, smithing hearth bottoms are predominantly fayalitic (iron silicate) and form as a result of high temperature reactions between the iron, iron-scale and silica from either the clay furnace lining or sand used as a flux by the smith.

In addition to bulk slags, iron smithing also produces micro slags of two types. **Flake hammerscale** consists of fish-scale like fragments of the oxide/silicate skin of the iron dislodged during working. **Spheroidal hammerscale** results from the solidification of small droplets of liquid slag expelled during working, particularly when two components are being fire welded together or when a slag-rich bloom of iron is first worked into a billet or bar. Hammerscale is considered important in interpreting a site not only because it is highly diagnostic of smithing but, because it is often allowed to build up in the immediate vicinity of the smithing hearth and anvil, it may give a more precise location of the activity than the bulk slags which may be transported elsewhere for disposal.

Three categories of slag not considered diagnostic are undiagnostic iron working slag, vitrified hearth lining and fuel ash slag. The debris classed as **undiagnostic iron working slag** is dense (having a composition which is predominantly fayalitic) but the morphology of the slag lumps is irregular and similar materials may be produced by either smelting or smithing operations. Material listed as **vitrified hearth/furnace lining** can be formed during either iron smelting, iron smithing or non-ferrous metal working as a result of a high temperature reaction between the clay lining of the hearth/furnace and the alkali fuel ashes or fayalitic slag. The material consists of unmodified clay on one surface and vitrified clay on the other. Occasionally original blow hole is preserved in the vitrified linings. The lack of smelting slags from the site indicates that the vitrified linings derive from smithing hearths rather than smelting furnaces. Some of the vitrified hearth lining may derive from non-ferrous alloy working. The occasional **slagged stones** found may also have formed part of metal working hearths. **Fuel ash slag** is a very lightweight, light coloured (grey-brown), highly porous material which results from the reaction between alkaline fuel ash and silicates from soil, sand or clay at elevated temperatures. The reaction is shared by many pyrotechnological processes and the slag is not diagnostic.

The assemblage submitted for examination included some non-metallurgical: ferruginous concretions, iron artefacts, pottery and quern fragments. These were separated and are not reported on here. **Ferruginous concretions** form as a result of the re-deposition of iron hydroxides, similar to the natural phenomenon of iron panning, although the process is likely to be enhanced when nearby archaeological deposits contain iron-rich waste. Where testing with a magnet or high density/surface cracking indicated the presence of metallic iron, material was classified as **iron objects.**

## Chronological Distribution of Debris

140kg of the iron working debris could be assigned to individual phases; the remainder was unstratified or came from features which could not be assigned to a single phase. The total weights of slag for each phase are shown in figure 2. A single fragment of vitrified lining (20g) came from the earliest phase of activity (I: the Middle/Late Iron Age transition). Most of the debris was recovered from phase II or III contexts (Late Iron Age–Early Roman).

The concentration of metalworking debris in phases II and III is underlined by the high proportion of vitrified lining from these phases (figure 3). Vitrified linings are the most fragile class of metal working debris recovered from Elms Farm and large quantities will only be recovered when it was deposited relatively quickly.

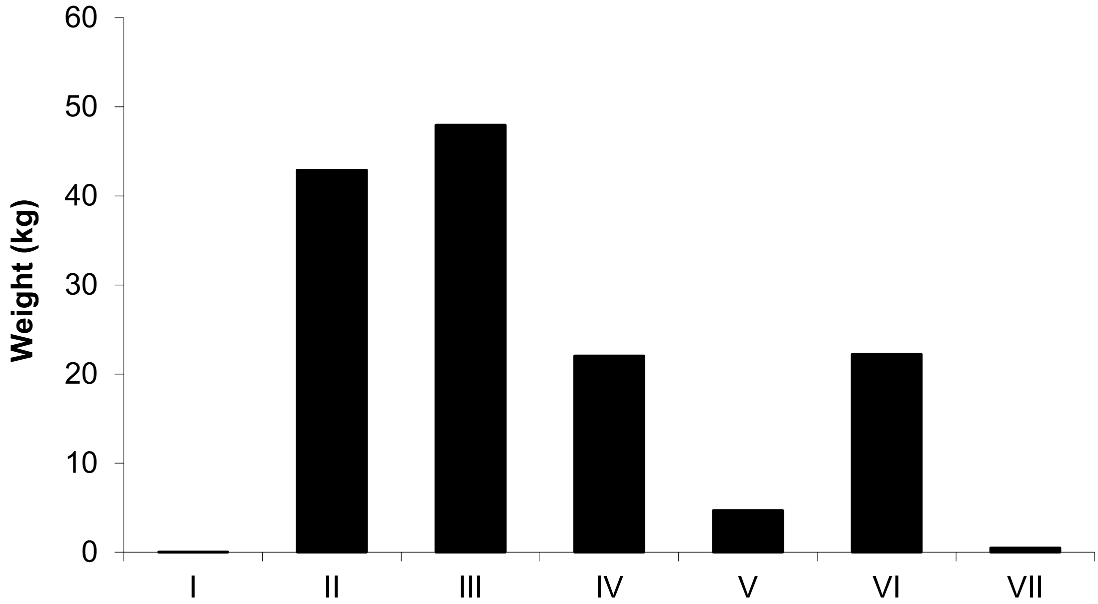


*Figure 3. Weights of metal working debris assigned to each phase*

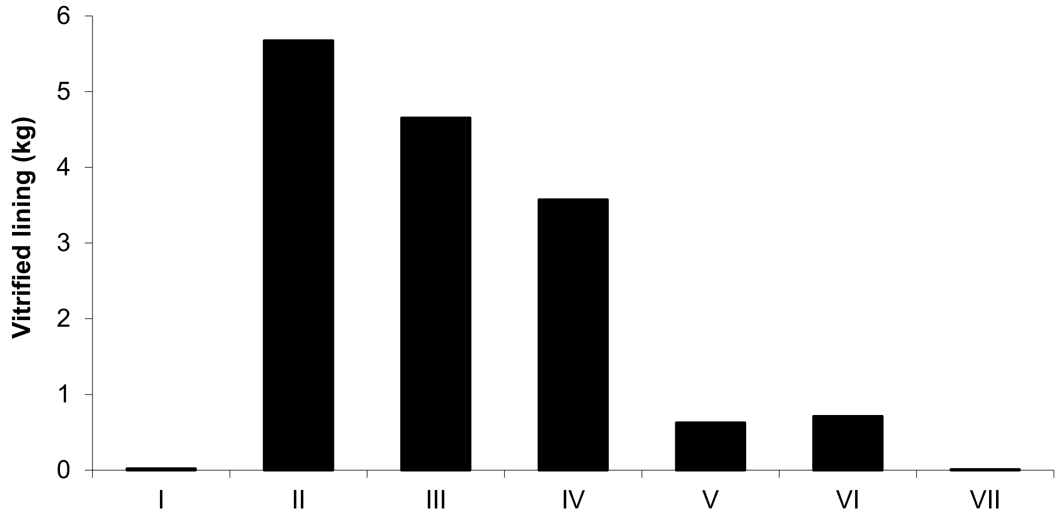


*Figure 4. Weights of vitrified lining from each phase*

Among the numerous pieces of vitrified lining examined there were seven with blow holes (the holes within the lining where air would be blown in using bellows). Three of the blow holes were recovered from phase II contexts, two from phase III, one from phase VI, one from phases IV–V and one unphased. This shows that the chronological focus for the iron smithing is clearly phases II and III. It is not clear, however, whether the iron smithing debris from phase III onwards is residual or represents continuing iron smithing but at a lower intensity.

## Spatial Distribution of Debris

The spatial distribution of the iron smithing debris can be seen in figure 4. As outlined above the areas were defined differently: some are effectively plots defined by the road and trackway network while others were alternate 20m strips. The location of areas D–R are shown in figure 5 (area W lies to the north-west of the main excavated area shown in figure5). The areas with the largest quantities of iron smithing debris are K, W, H, D and L. Figure 6 shows the spatial distribution of the vitrified lining. The vitrified lining is concentrated in areas K, L and W. The apparent concentration of vitrified lining in area W may be questioned as this area is much larger than most of the other areas and approximately half of the vitrified lining from this area derives from pottery kiln structures and may not be metallurgical. Five of the blow holes in the vitrified lining come from area K. It can be seen from the spatial distribution that the most significant concentrations of iron smithing debris come from south of track 3 and area K in particular.

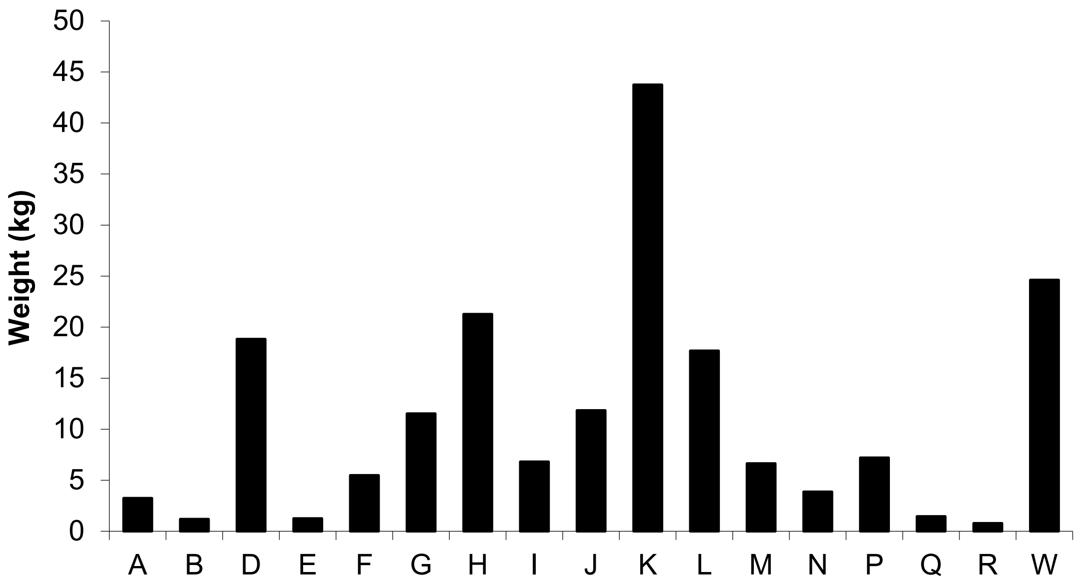


*Figure 5. Weights of iron working debris from each area (see figure 1 for the location of areas)*

While much of the iron smithing debris was recovered from area K it is not certain that this was an area in which iron smithing was particularly focussed. Most of the contexts which contain large quantities of iron smithing debris are secondary (pits and ditches) and no structures or features positively linked to iron smithing were recognised during excavation. The kilns or ovens identified in this area are unlikely to be connected directly with iron smithing. The debris recovered may have been brought from elsewhere, although the large size of some of the pieces of (relatively fragile) vitrified lining suggests that the debris was not transported far before being dumped. It is possible that iron smithing was focussed in the area immediately south of the area excavated.

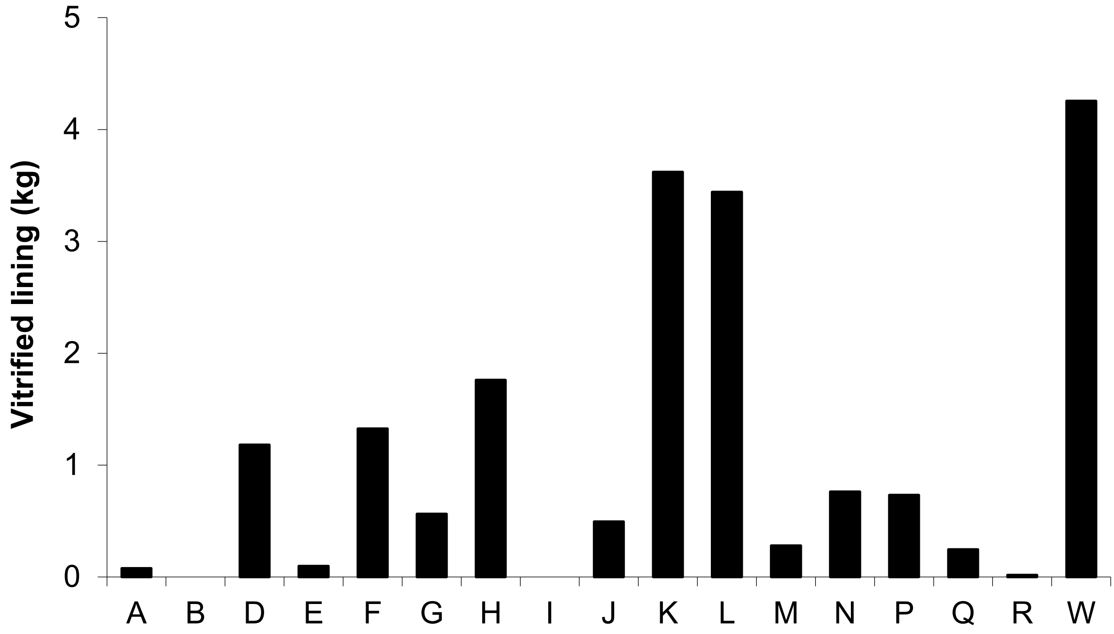


*Figure 6. Weights of vitrified lining from each area (see figure 1 for the location of areas)*

## Examination of the Iron Ingot or Bloom

During the excavation a large cylindrical ingot or bloom of iron (sf 2676 context 11000) was recovered. The bloom is approximately 65mm thick and 210mm in diameter and weighs 22kg. The bloom is larger than other recorded weights for Roman blooms (see table 2).

| Site | | Reference | Weight |
|---|---|---|---|
| Forewood, Sussex | Bloom | Smythe 1936–7 | 1.2kg |
| Lower Slaughter, Gloucestershire | Bloom | O'Neil & Brown 1966 | 11kg |
| Cranbrook, Kent | Bloom | Brown 1964 | 0.7kg |
| Corbridge beam | Beam | Bell 1912 | 7.5kg* |
| Catterick beam | Beam | Wright 1972; Starley 1997 | 7.5kg* |

*Table 2. Weights of Roman blooms (* average values obtained by dividing the total weights of the beams by the number of metallographically identified blooms)*

The ingot was recovered while topsoil was removed by machine but the exact find spot within area M was recorded and it is possible that it derived from pit 15573 or pit 15588 (phases II–III). Given the large size of the Elms Farm bloom and its provenance, it would be helpful if the bloom could be directly dated.

Samples were taken from the bloom to examine the microstructure in order to determine whether it is a bloom. In addition, metallographic examination was carried out to determine the carbon content of the metal and so whether or not the bloom could be directly dated using radiocarbon dating (at the time of writing this report the radiocarbon dating of the bloom had not been completed). A metallographic sample was cut through the depth, but only 10 mm into the width of the bloom (the bloom was extremely hard; probably due to the presence of slag inclusions). The cut sample (55 by 10mm) was mounted in epoxy resin and polished to a 1 micron finish.

Macro-examination showed that the metal is moderately porous with some pores as large as 4 by 1.3mm. The sample was etched in nital and the microstructure examined using optical and electron microscopes.

The sample of the bloom has a heterogeneous microstructure with widely varying amounts of carbon and slag. Most of the iron is present as ferrite but there are small areas where pearlite (ferrite–cementite eutectoid) is visible (see figure 7) and this is most noticeable towards the outer parts of the bloom. The carbon content (estimated from the presence of pearlite) varies from virtually nil up to 0.8%. An overall estimate of the carbon content is difficult to make but probably lies in the region 0.01–0.1%.

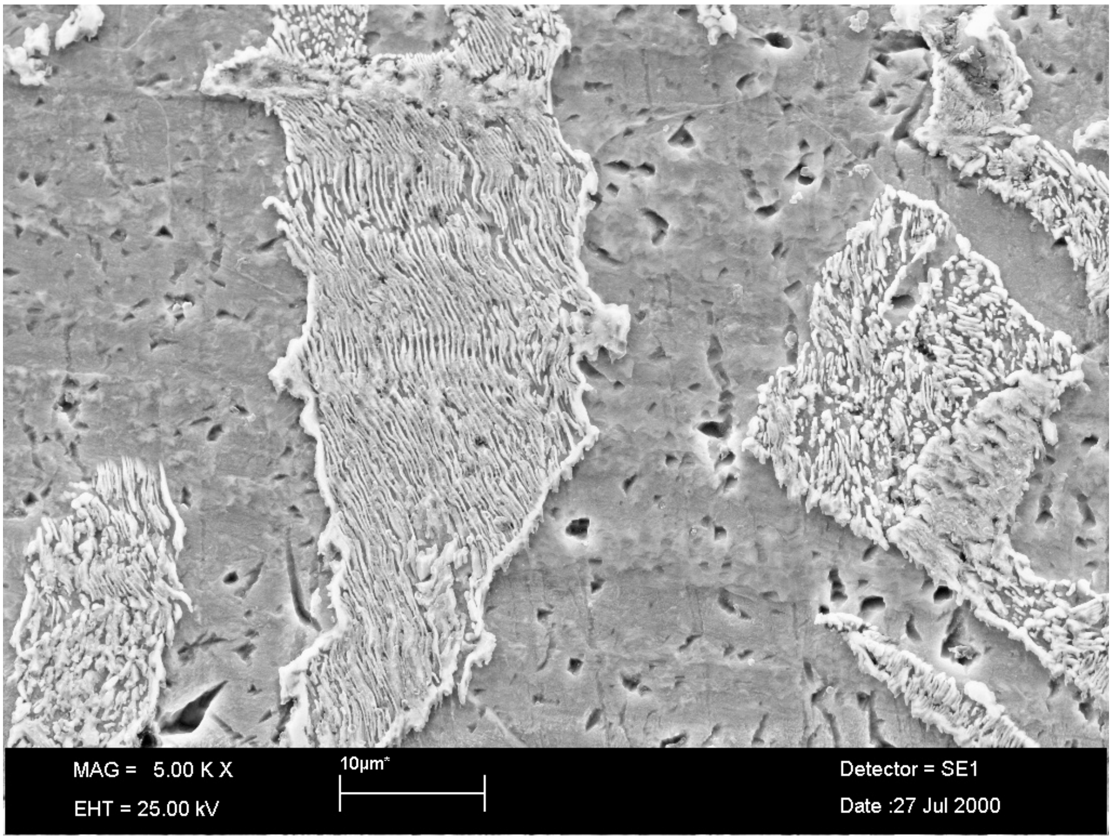


*Figure 7. Secondary electron SEM image of a carbon-rich area of the bloom/ingot. The image of the polished and etched surface shows a series of equiaxed ferrite grains and some patches of pearlite (ferrite and cementite eutectoid)*

Chemical analysis of the iron (using the energy dispersive spectrometer attached to the scanning electron microscope [SEM-EDS] — see table 3) showed that the bloom contained 1.3% phosphorous. Figures 8 and 9 show an SEM image and a phosphorous x-ray map of the iron-phosphorous eutectic (Stead 1900) which is occasionally present

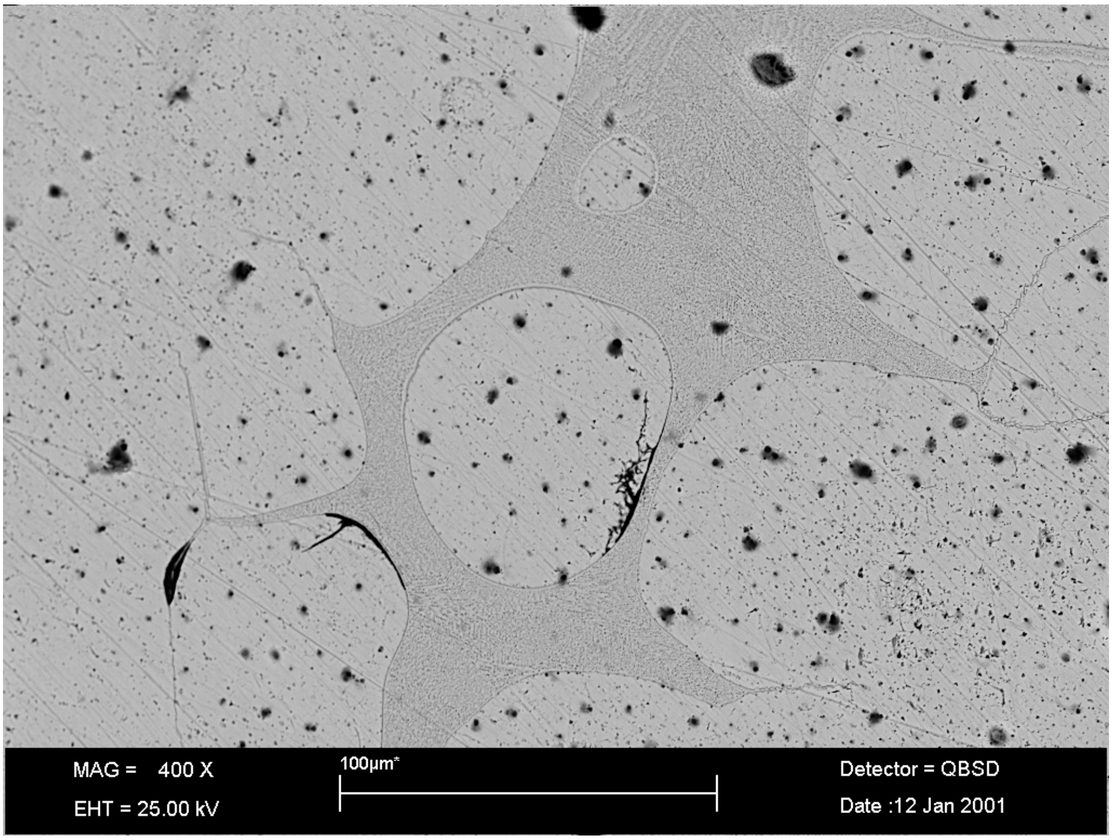


*Figure 8. Back Scattered electron SEM image of iron-phosphorous eutectic*

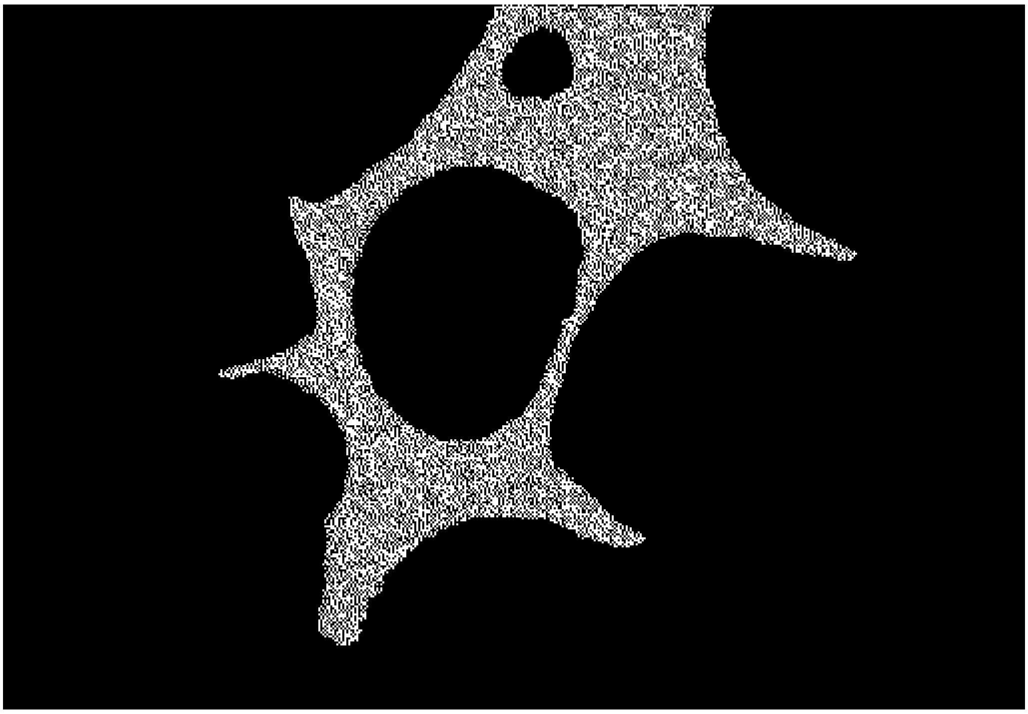

*Figure 9. SEM-EDS x-ray map of phosphorous for the region shown in figure 8*

within the metal. Microhardness tests of the metal yielded an average value of 280 (200 g weight, 5 measurements) which is in exact agreement with a phosphorous content of 1.3% (Table 3, cf Tylecote & Gilmour 1986: table 2).

| Site | Details | Reference | C% | P% | S% |
|---|---|---|---|---|---|
| Elms Farm | Metal | | ~0.1 | 1.3 | 0.02 |
| | | | | | |
| Lower Slaughter | | O'Neil & Brown 1969 | ~0.1 | 0.085 | 0.007 |
| Cranbrook | | Brown 1964 | 1.27 | 0.020 | 0.027 |
| Little Waltham | | Tylecote 1976 | <0.02 | 0.9–1.1 | na |

*Table 3. Analysis (SEM-EDS, weight percent) of the bloomery iron and comparison with other published data on Roman blooms and ingots*

The slag inclusions, which in some cases are over 1 mm across, do not display any particular orientation and indicate that the bloom has not been heavily forged. The slag inclusions consist of fayalite laths in a glassy groundmass (see figure 10) but no wüstite dendrites are present. The slag inclusions are frequently associated with ferritic iron (little or no carbon or phosphorous) which is poorly consolidated: having a dendritic or coral like structure (cf Blomgren & Tholander 1986).

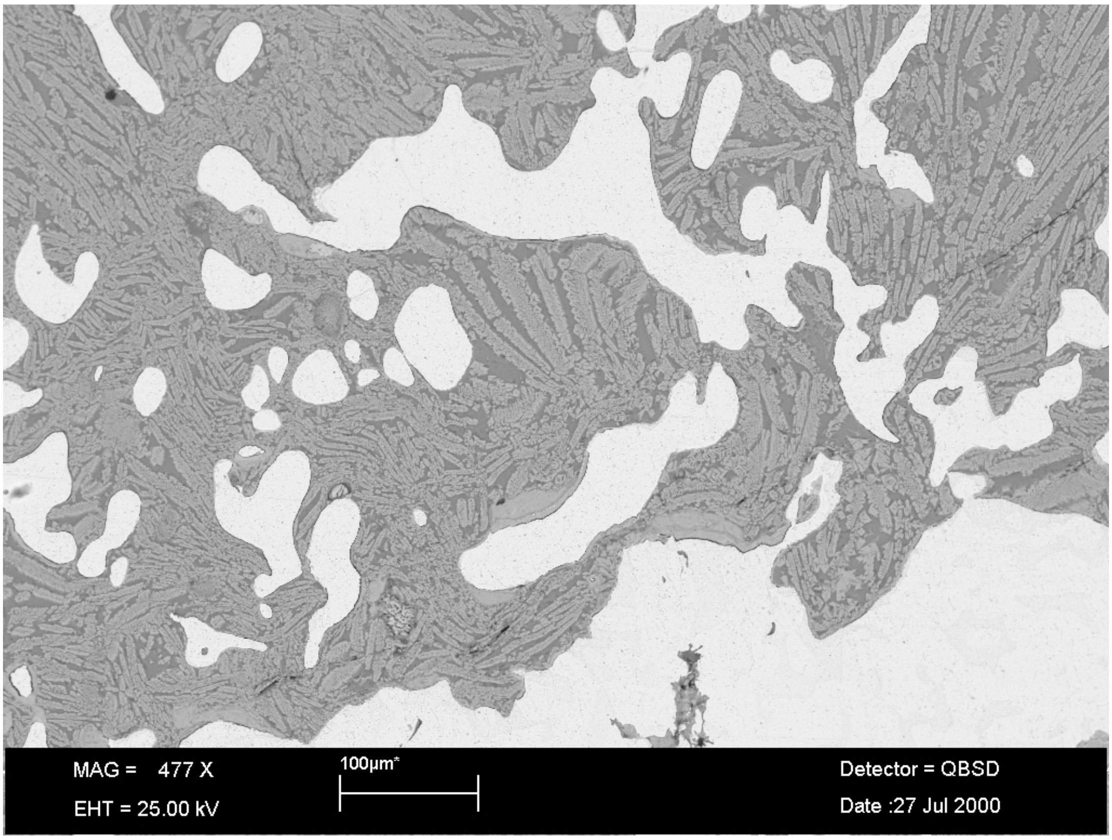


*Figure 10. Back scattered electron SEM image of a mixed metal and slag area of the bloom/ingot. The image of the polished surface reveals the metallic iron (white), and slag (light grey = fayalite; dark grey = 'glassy' matrix)*

The lack of wüstite in the slag suggests that the smelting conditions were very reducing and so the maximum yield of iron was obtained. The bloom would not, however have taken up appreciable amounts of carbon because the phosphorous content of the metal inhibits the diffusion of carbon in iron (Stead 1918: 389).

Bulk SEM-EDS analysis of four areas of slag (and four spot analyses of the fayalite laths and the interstitial glass) are shown in table 4. The micro-morphology and composition of the slag is typical of bloomery smelting slags.

| | $Na_2O$ | MgO | $Al_2O_3$ | $SiO_2$ | $P_2O_5$ | $SO_3$ | $K_2O$ | CaO | $TiO_2$ | MnO | FeO |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fayalite | <0.3 | 1.1 | 0.4 | 26.5 | 0.6 | <0.1 | 0.2 | 0.5 | <0.1 | 3.4 | 66.5 |
| Glass | <0.3 | <0.2 | 16.6 | 39.6 | 3.5 | 0.3 | 4.6 | 7.3 | 0.9 | 1.4 | 24.1 |
| **Bulk** | **<0.3** | **0.6** | **8.4** | **33.2** | **1.8** | **0.1** | **2.4** | **3.1** | **0.5** | **2.5** | **46.8** |

*Table 4. Analysis of slag inclusions*
*(SEM-EDS, weight percent, average of four determinations in each case)*

The composition of the slag inclusions is characterised by relatively high phosphorous, manganese and aluminum contents. The composition of an iron smelting slag (and by extension the slag inclusions in a bloom) reflects the smelting technology and the composition of the ore, clay and fuel (Serneels & Crew 1997; Crew 1998). While there still remains much work to be done before the composition of slag inclusions can be used to determine the ore source (cf Hedges & Salter 1979; Høst-Madsen & Buchwald 1999), the composition of the slag inclusions in the Elms Farm bloom probably rule out the use of either the haematite ores of Cumbria or the limonite ore of the Forest of Dean. The bloom may well have been smelted from bog-ores which found throughout virtually the whole of the British Isles (including Essex).

The microstructures observed in the Elms farm bloom are comparable with those seen in other archaeological examples as well as those from modern experimental bloomery smelting. The bloom from Lower Slaughter, Gloucestershire (O'Neil & Brown 1966) is described as heterogeneous and quite porous. The relatively abundant slag inclusions showed no particular directionality (indicating little forging) and the carbon content varied from virtually nil to that of eutectoid composition (around 0.8%). The bloom from Forewood, Sussex (Smythe 1936–7) also had a heterogeneous microstructure (ferrite and some pearlite with plentiful slag inclusions). The size and shape of the slag inclusions showed that little or no forging of the bloom had taken place. Examination of the microstructure of experimental iron blooms have shown these to have a relatively high slag content (present as randomly shaped inclusions), the metallic iron is on occasion found as dendritic or coral-like structures within the slag inclusions and the metallic iron has a very variable carbon content (Blomgren and Tholander 1986).

To summarise, the examination of microstructure of sf 2676 has confirmed that it is a bloom. There is, however, no aspect of the microstructure of the bloom which would allow it to be positively identified as Roman in date as iron smelting technology changed relatively little between the Iron Age and the later Middle Ages.

## Conclusions

The extensive excavations at Elms Farm recovered over 150kg of iron working debris. All of the diagnostic slags present indicated iron smithing (there were no slags diagnostic of iron smelting) and the stratified examples were concentrated in phase II and III deposits in areas K and L. The quantity of iron smithing slags recovered is not great considering the total area excavated and the duration of prehistoric and Roman activity on the site. Iron smithing is unlikely to have form a significant part of the local economy. The examination of the iron bloom has confirmed its identity but cannot, unfortunately, shed light on whether or not it is actually Roman in date. As the bloom is larger than other known Roman blooms, it is important that a direct date is obtained by radiocarbon dating. The bloom was definitely imported to the site but could have been smelted from a range of possible ores (including Essex bog ores).

## Retention, Storage and Dispersal

Iron working slag, being predominantly fayalitic, is not prone to deterioration and requires no special storage treatment. Material classed as “iron objects” was separated during the assessment, it is recommended that this is stored in a similar way to other ironwork. All of the metal working debris has been recorded and the unstratified material has been disposed of; all remaining metallurgical debris should be saved.

## References


Atkinson, M. & Preston, S.J. 1998. The Late Iron Age and Roman settlement at Elms farm, Heybridge, Essex, excavations 1993–5: an interim report. *Britannia* 29: 85–110.

Bell, H. 1912. Notes on a bloom of Roman iron found at Corstopitum (Corbridge). *Journal of the Iron and Steel Institute* 85: 118–33.

Blomgren, S. & Tholander, E. 1986. Influence of the ore smelting course on the slag microstructures at early ironmaking, usable as identification basis for the furnace process employed. *Scandinavian Journal of Metallurgy* 15: 151–160.

Brown, G.T. Roman bloom from Cranbrook. *Journal of the Iron and Steel Institute* ??: 502–4.

Crew, P. 1998. The influence of clay and charcoal ash on bloomery slags. In C.C Tizzoni & M. Tizzoni (eds) *Il Fero nelle Alpi*. Bienno, 38–48.

Drury, P.J. 1978. *Chelmsford Excavations 1: excavations at Little Waltham, 1970–71*. London: Council for British Archaeology.

Høst-Madsen, L. & Buchwald, V.F. 1999. The characterization and provenancing of ore, slag and iron from the Iron Age settlement at Snorup. *Historical Metallurgy* 33: 57–67.

O'Neil, H.E. & Brown, G.T. 1966. Metallurgical investigation of an iron object of Roman origin from Lower Slaughter, Glos. *Bulletin of the Historical Metallurgy Group* 1(7): 30–4.

Rodwell, W. 1975. Trinovantian towns and their setting: a case study. In W. Rodwell & T. Rowley (eds) *Small Towns of Roman Britain*. Oxford: British Archaeological Reports, 85–101.

Serneels, V. & Crew, P. 1997. Ore-slag relationships from experimentally smelted bog-iron ore. In P. Crew & S. Crew (eds) *Early Ironworking in Europe. archaeology and experiment. Abstracts*. Plas Tan y Bwlch: Snowdonia National Park Study Centre, 78–82.

Smythe, J.A. 1936–7 Ancient Sussex iron blooms: a metallographic examination. *Transactions of the Newcomen Society* 17: 197–203.

Starley, D. 1997. *Metallurgical study of a Roman iron beam from the 1959 by-pass excavations, Catterick, North Yorkshire*. Ancient Monuments Laboratory Report 89/97.

Stead, J.E. 1900. Iron and Phosphorous. *Journal of the Iron and Steel Institute* ??: ??–??

Tylecote, R.F. 1976. Bloomery iron. In P.J. Drury *Chelmsford Excavations 1: excavations at Little Waltham, 1970–71*. London: Council for British Archaeology.

Tylecote, R.F. & Gilmour, B.J.J. 1986. *The Metallography of Early Ferrous Edge Tools and Weapons*. Oxford: British Archaeological Reports.

Wickenden, N.P. 1986. Prehistoric settlement and the Romano-British small town at Heybridge, Essex. *Essex Archaeology and History* 17: 7–68.

Wright, J.H. 1972. Metallurgical examination of a Roman iron beam from Catterick Bridge, Yorkshire. *Bulletin of the Historical Metallurgy Society* 6: 24–7.

## Appendix: List of metal working debris from each context

Abbreviations:
SHB: Smithing Hearth Bottom
VL: Vitrified Lining
FAS: Fuel Ash Slag
SS: Slagged stones
UD: Undiagnostic
HS: Hammerscale
nq: Not Quantified

All weights given in grammes.

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 33 | W | VI | 184 | 137 | | | | | 321 |
| 92 | W | VI | | | 26 | | | | 26 |
| 401 | W | III | 1299 | 62 | 8 | | 481 | | 1850 |
| 403 | W | III | | | 1 | | | | 1 |
| 404 | W | III | 623 | | 85 | | 120 | | 828 |
| 405 | W | III | | 5 | 3 | | | | 8 |
| 423 | W | II | | 7 | 2 | | | | 9 |
| 424 | W | II | | | 1 | | | | 1 |
| 441 | W | II | 175 | | | | 40 | | 215 |
| 444 | W | IIB | | 48 | 7 | | 267 | | 322 |
| 461 | W | II | 381 | | | | 68 | | 449 |
| 463 | W | III-IV | | | | | 29 | | 29 |
| 466 | W | II | 502 | 221 | 40 | | 246 | | 1009 |
| 497 | W | II | | 75 | 38 | | 164 | | 277 |
| 503 | W | II | | | | | 21 | | 21 |
| 506 | W | II | | 11 | 128 | | 303 | nq | 442 |
| 517 | W | II | | | | | 13 | | 13 |
| 527 | W | 0 | | | | | 6 | | 6 |
| 532 | W | III | 215 | | | | 262 | | 477 |
| 534 | W | II-III | 1092 | 43 | | | 286 | | 1421 |
| 545 | W | II | | 51 | | | | | 51 |
| 552 | W | III-IV | | | | | 116 | | 116 |
| 567 | W | III | 209 | | | | | | 209 |
| 578 | W | III-VI | | 74 | | | | | 74 |
| 609 | W | II | | | | | | | 0 |
| 1000 | W | IV | | | | 3 | | | 3 |
| 1007 | W | IV | | | | | 30 | | 30 |
| 1030 | W | IV | | | 1 | | | | 1 |
| 1563 | W | IV | | 1563 | | | | | 1563 |
| 2035 | | | 208 | | | | | | 208 |
| 2100 | W | 0 | 293 | | | | | | 293 |
| 2103 | W | IV | | | 10 | | | | 10 |
| 2108 | W | IIB-IV | 205 | | | | | | 205 |
| 2118 | W | II | | 3 | | | 50 | nq | 53 |
| 2160 | W | IV | | | 1 | | | | 1 |
| 2165 | W | II-III | | | 1 | | | | 1 |
| 2398 | W | IV-V | | 8 | | | | | 8 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 2423 | W | 0 | | | 2 | | | | 2 |
| 2919 | W | III-VI | 336 | | | | | | 336 |
| 3011 | W | IV | | | 3 | | | | 3 |
| 3063 | W | IV | 344 | | | | 69 | | 413 |
| 3500 | W | 0 | | | 19 | | | | 19 |
| 3501 | W | III | | | | | 54 | | 54 |
| 3510 | W | III | | | 41 | | | | 41 |
| 3559 | W | III-VI | | | 18 | | | | 18 |
| 3566 | W | III | 336 | 834 | 746 | | 1588 | nq | 3504 |
| 3570 | W | III | 1435 | 770 | 859 | | 581 | | 3645 |
| 3578 | W | III | | 19 | 137 | | 287 | | 443 |
| 3579 | W | III | | 20 | 211 | | 49 | | 280 |
| 3582 | W | III | | | | | 88 | | 88 |
| 3586 | W | III | 105 | 48 | 14 | | 105 | | 272 |
| 3595 | W | III | 515 | | | | 318 | | 833 |
| 3596 | W | III | | | 39 | | 37 | | 76 |
| 3631 | W | III-VI | 133 | | 21 | | 211 | | 365 |
| 3671 | W | II | 149 | 116 | | | | | 265 |
| 3675 | W | III | 90 | 137 | | | 13 | | 240 |
| 3699 | W | III | 1478 | | 142 | | 324 | | 1944 |
| 3700 | W | III | | | 61 | | 74 | | 135 |
| 3752 | W | III | 304 | | | | | | 304 |
| 3754 | W | III | | | 33 | | | | 33 |
| 3766 | W | IV | 352 | | | | | | 352 |
| 3768 | W | III | 424 | | | | | | 424 |
| 3783 | W | IV | | | | | 97 | | 97 |
| 3793 | W | III | | | | | 102 | | 102 |
| 4000 | A | 0 | 228 | 41 | | | 1482 | | 1751 |
| 4004 | K | 0 | 124 | 136 | | | 571 | | 831 |
| 4006 | K | IV | | 11 | | | | | 11 |
| 4009 | K | III | | | | | 46 | | 46 |
| 4011 | K | IV | | | | | 6 | | 6 |
| 4025 | K | II | | | | | 1 | | 1 |
| 4035 | K | III | | | | | 1 | | 1 |
| 4037 | K | IV | | | | | 5 | | 5 |
| 4049 | K | III | 376 | 218 | | | 376 | | 970 |
| 4085 | K | IV | | | 21 | | | | 21 |
| 4129 | K | VI | 4051 | 268 | 4068 | 105 | 9762 | nq | 18254 |
| 4140 | K | VI | | | | | 15 | | 15 |
| 4142 | K | 0 | | | | | 22 | | 22 |
| 4150 | K | VI | | | | | 35 | | 35 |
| 4154 | K | VI | 229 | 30 | | | | | 259 |
| 4164 | K | III | | | | | 21 | | 21 |
| 4167 | K | III | | | 6 | | | | 6 |
| 4187 | K | VI | 1245 | 35 | 193 | | 394 | nq | 1867 |
| 4200 | K | III | | | | | 292 | | 292 |
| 4208 | K | III | | | | | 80 | | 80 |
| 4225 | K | III | 1411 | | | | | nq | 1411 |
| 4239 | K | VI | | | 35 | | | | 35 |
| 4259 | K | II-III | | 22 | 34 | | 178 | | 234 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 4273 | K | II-III | | 37 | | | 27 | | 64 |
| 4286 | K | II | 444 | | | | 174 | | 618 |
| 4294 | K | IV | 1574 | | 106 | | 950 | nq | 2630 |
| 4301 | K | 0 | | | | | 1 | | 1 |
| 4307 | K | 0 | | 131 | | | 243 | | 374 |
| 4315 | K | V | | | | | 14 | | 14 |
| 4325 | K | 0 | | 36 | | | 4 | | 40 |
| 4326 | K | II-III | | | | | 58 | | 58 |
| 4328 | K | II | | | | | 20 | | 20 |
| 4330 | K | II-III | | | | | 23 | | 23 |
| 4334 | K | II-III | | | | | 45 | | 45 |
| 4336 | K | II | | 206 | | | 258 | | 464 |
| 4364 | K | V | | | | | 2 | | 2 |
| 4380 | K | V | | | | 465 | | | 465 |
| 4395 | K | III | | 85 | | | 143 | | 228 |
| 4430 | K | IV | | | 61 | | | | 61 |
| 4433 | K | II | | 37 | | | | | 37 |
| 4434 | K | II-III | | | 40 | | | | 40 |
| 4459 | K | III | | 69 | | | | | 69 |
| 4460 | K | III | | 51 | | | | | 51 |
| 4461 | K | III | | 34 | | | | | 34 |
| 4462 | K | II-III | | | 5 | | | | 5 |
| 4481 | K | II | | | | | 50 | nq | 50 |
| 4485 | K | II | | | | | 66 | | 66 |
| 4493 | K | II-III | | | 21 | | 23 | | 44 |
| 4497 | K | II-III | | | | | 2 | | 2 |
| 4537 | K | III | 221 | | | | | | 221 |
| 4539 | K | II | 380 | 233 | 164 | | 128 | nq | 905 |
| 4540 | K | 0 | | | | | 161 | | 161 |
| 4579 | K | III | | | | | 19 | | 19 |
| 4584 | K | III | | | 10 | | 6 | | 16 |
| 4596 | K | III | | | | | 2 | | 2 |
| 4598 | K | 0 | | | | | 1 | | 1 |
| 4609 | K | IV | | | | | 124 | | 124 |
| 4657 | K | II-III | | 8 | 9 | | | | 17 |
| 4682 | K | III | | | 31 | | | | 31 |
| 4683 | K | 0 | | | | | 106 | | 106 |
| 4686 | K | IV | | | 62 | | 369 | | 431 |
| 4688 | K | V | | | | | 25 | | 25 |
| 4689 | K | IV-V | | | | | 70 | | 70 |
| 4690 | K | 0 | | | | | 1 | | 1 |
| 4692 | K | 0 | 227 | | 1 | | 138 | | 366 |
| 4699 | K | II | 428 | 379 | 974 | | 297 | nq | 2078 |
| 4715 | K | VI | | 15 | 8 | | | | 23 |
| 4753 | K | IV | | | | | 2 | | 2 |
| 4761 | K | III | | | | | 1 | | 1 |
| 4794 | K | III | | | | | 48 | | 48 |
| 4800 | K | IV | | 61 | | | 77 | | 138 |
| 4801 | K | IV | | 26 | | | | | 26 |
| 4819 | K | IV | | | 1 | | | | 1 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 4820 | K | IV | | | | | 20 | | 20 |
| 4823 | K | III | | | | | 1 | | 1 |
| 4832 | K | VI | | 1 | 3 | | 5 | | 9 |
| 4835 | K | IV | | | 1 | | | | 1 |
| 4839 | K | IV | | | 1 | | | | 1 |
| 4844 | K | IV | | 185 | | | 229 | | 414 |
| 4848 | K | II-III | | | | | 218 | | 218 |
| 4869 | K | IV | | | | | 2 | | 2 |
| 4870 | K | IV | | 26 | | | 114 | | 140 |
| 4874 | K | V | | 115 | 50 | | 583 | | 748 |
| 4875 | K | V | | | 38 | | 322 | | 360 |
| 4880 | K | IV | | 69 | 94 | | 86 | | 249 |
| 4881 | K | 0 | | | | | 14 | | 14 |
| 4895 | K | II | | | 1 | | | | 1 |
| 4909 | K | IV | | | 18 | | | | 18 |
| 4910 | K | 0 | | 19 | | | | | 19 |
| 4925 | K | IV | 49 | | | | 34 | | 83 |
| 4932 | K | II | | | | | 126 | | 126 |
| 4934 | K | II | | | | | 155 | | 155 |
| 4936 | K | IV | | | | | 32 | | 32 |
| 4937 | K | II-III | 132 | 33 | 19 | | | | 184 |
| 4944 | K | II | | | 35 | | | | 35 |
| 4962 | K | IV | | 10 | 34 | | | | 44 |
| 4963 | K | 0 | | | 1 | | | | 1 |
| 4974 | K | III | | | | | 21 | | 21 |
| 4977 | K | III | 315 | 38 | 11 | | 18 | | 382 |
| 4985 | K | II-III | | | 8 | | 89 | | 97 |
| 4994 | K | 0 | | 15 | | | 362 | | 377 |
| 4999 | K | II-III | | | | | 1 | | 1 |
| 5000 | J | 0 | | | | | 23 | | 23 |
| 5146 | J | III | | | | | 63 | | 63 |
| 5149 | J | III | 600 | | | | | | 600 |
| 5162 | J | V-VI | | | | | 73 | | 73 |
| 5207 | J | V-VI | | | | | 1 | | 1 |
| 5211 | J | IIA | | | | | 58 | | 58 |
| 5269 | J | IIA | 144 | | | | | | 144 |
| 5275 | J | V-VI | | | | | 25 | | 25 |
| 5337 | J | IV | | | | | 169 | | 169 |
| 5374 | J | V-VI | | | | | 1 | | 1 |
| 5376 | J | V-VI | | | 131 | | 14 | | 145 |
| 5393 | J | IV | | | | | 1 | | 1 |
| 5427 | I | 0 | | | | | 113 | | 113 |
| 5429 | J | V-VI | | | | | 1 | | 1 |
| 5434 | J | 0 | | | | | 137 | | 137 |
| 5518 | J | IV | 200 | | | | | | 200 |
| 5559 | J | 0 | | | | | 22 | | 22 |
| 5598 | I | 0 | 502 | | | | | | 502 |
| 5601 | I | 0 | | | | | 178 | | 178 |
| 5602 | I | 0 | | | | | 84 | | 84 |
| 5603 | I | 0 | | | | | 232 | | 232 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 5607 | I | 0 | | | 8 | | | | 8 |
| 5608 | I | 0 | | | | | 140 | | 140 |
| 5610 | I | 0 | | | | | 158 | | 158 |
| 5628 | I | 0 | | | | | 36 | | 36 |
| 5630 | J | IV | 197 | | | | | | 197 |
| 5676 | I | IIIB | | | | | 57 | | 57 |
| 5691 | I | IIIB | | | 27 | | | | 27 |
| 5692 | I | IIIB | | | | | 1 | | 1 |
| 5694 | J | 0 | 157 | | | | 312 | | 469 |
| 5709 | I | IIIB | | | 34 | | | | 34 |
| 5732 | J | 0 | | | | | 42 | | 42 |
| 5747 | I | II-VI | | | | | 314 | | 314 |
| 5748 | J | V | 249 | | | | 58 | | 307 |
| 5783 | J | II-III | | | | | 1 | | 1 |
| 5808 | J | IIIB | | | | | 78 | | 78 |
| 5809 | J | 0 | | | | | 6 | | 6 |
| 5858 | J | V-VI | | 90 | | | 9 | | 99 |
| 5877 | I | IIIB | | | | | 5 | | 5 |
| 5883 | I | IIIB | 539 | | | | | | 539 |
| 5907 | I | IIIB | | | | | 97 | | 97 |
| 5936 | I | IIIB | | | | | 102 | | 102 |
| 5939 | J | IV | | | | | 150 | | 150 |
| 5993 | I | IIIB | | | | | 185 | | 185 |
| 6000 | H | 0 | 445 | 293 | | | 30 | | 768 |
| 6008 | H | VII | 308 | | | | | | 308 |
| 6029 | H | IV | 374 | | | | | | 374 |
| 6053 | H | III | 367 | 33 | 21 | | | | 421 |
| 6057 | H | 0 | 203 | 251 | | | | | 454 |
| 6095 | H | VII | 180 | | | | | | 180 |
| 6132 | H | IV | | | | | 191 | | 191 |
| 6148 | H | IV | 121 | | | | | | 121 |
| 6219 | H | IV | 655 | | | | | | 655 |
| 6240 | H | IV-VI | 112 | | | | | | 112 |
| 6250 | H | IV | | 52 | | | | | 52 |
| 6292 | H | III | | 7 | | | 55 | | 62 |
| 6314 | H | IV | | | | | 36 | | 36 |
| 6349 | H | IV | 1653 | | | | 22 | | 1675 |
| 6350 | H | IIB | | 172 | | | 223 | | 395 |
| 6367 | H | III-IV | 196 | | | | 48 | | 244 |
| 6396 | H | IV | | | | | 4 | | 4 |
| 6414 | H | III | | | | | 16 | | 16 |
| 6420 | H | IV | 2216 | 87 | | | 1691 | | 3994 |
| 6421 | H | III | 306 | | | | | | 306 |
| 6426 | H | III | 2379 | 767 | 862 | | 2633 | | 6641 |
| 6437 | H | III | 166 | | | | | | 166 |
| 6515 | H | 0 | | | | | 92 | | 92 |
| 6516 | H | III | 492 | | | | 555 | | 1047 |
| 6522 | H | III | | 21 | | | | | 21 |
| 6523 | H | IIB-III | | | | | 86 | | 86 |
| 6533 | H | III | | | | | 10 | | 10 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 6538 | H | III | | | | | 1 | | 1 |
| 6552 | H | 0 | | | | | 23 | | 23 |
| 6572 | H | III | | | | | 1 | | 1 |
| 6589 | H | V | 458 | | | | | | 458 |
| 6609 | H | 0 | 168 | | | | | | 168 |
| 6642 | H | III | | 9 | | | 300 | | 309 |
| 6672 | H | III | 237 | | | | | | 237 |
| 6710 | H | III | | | | | 2 | | 2 |
| 6750 | H | IIB | | | | | 4 | | 4 |
| 6760 | H | III | | | | | 99 | | 99 |
| 6774 | H | IV | | | | | 87 | | 87 |
| 6811 | H | IIA | | 69 | | | | | 69 |
| 6828 | H | IIA | 151 | | | | 309 | | 460 |
| 6876 | H | IIA | | | | | 1 | | 1 |
| 6937 | H | IIB-III | 140 | | | | | | 140 |
| 7000 | G | 0 | | 141 | | | 536 | | 677 |
| 7024 | G | VII | | | | | 2 | | 2 |
| 7057 | G | V | 244 | | | | 67 | | 311 |
| 7059 | G | IIB-III | 492 | | | | | | 492 |
| 7066 | G | V | | | | | 41 | | 41 |
| 7071 | G | IV | | 2 | | | 205 | | 207 |
| 7073 | G | 0 | 460 | | | | 102 | | 562 |
| 7080 | G | IV | 236 | | | | | | 236 |
| 7082 | G | V | 256 | | | | | | 256 |
| 7086 | G | V-VI | 3295 | 140 | 1270 | | | | 4705 |
| 7103 | G | 0 | | | | | 77 | | 77 |
| 7116 | G | III-VI | 660 | | | | 667 | | 1327 |
| 7118 | G | III | | | | | 70 | | 70 |
| 7140 | G | III | | | | | 142 | | 142 |
| 7154 | G | IV-V | | | | | 1 | | 1 |
| 7158 | G | III | 228 | | | | | | 228 |
| 7173 | G | III | | | | | 132 | | 132 |
| 7178 | G | II | | 44 | | | | | 44 |
| 7186 | G | II | | | 4 | | | | 4 |
| 7258 | G | II | | | 2 | | 4 | | 6 |
| 7298 | G | II | | | 1 | | | | 1 |
| 7315 | G | IV | 232 | | | | | | 232 |
| 7358 | G | II | | 16 | 243 | | 116 | | 375 |
| 7376 | G | II | 315 | | | | | | 315 |
| 7381 | G | P | | 20 | | | | | 20 |
| 7390 | G | IV | | | | | 54 | | 54 |
| 7417 | G | II | 478 | 69 | | | | | 547 |
| 7539 | G | IV | 140 | | | | | | 140 |
| 7595 | G | 0 | | | | | 1 | | 1 |
| 7597 | G | 0 | | | | | 63 | | 63 |
| 7598 | G | 0 | | | | | 20 | | 20 |
| 7620 | G | III-VI | | 28 | | | | | 28 |
| 7664 | G | II | | | 38 | | 69 | | 107 |
| 7682 | G | III-V | | | 2 | | | | 2 |
| 7684 | G | III-V | | 104 | | | | | 104 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 7705 | G | IV | | | | | 2 | | 2 |
| 8000 | E | 0 | 769 | 73 | | | 17 | | 859 |
| 8016 | E | II | | | | | | nq | 0 |
| 8021 | E | II | | 4 | | | | | 4 |
| 8065 | E | VI | | | | | 92 | | 92 |
| 8076 | E | VI | | | 12 | | | | 12 |
| 8077 | E | III-VI | | | | | 1 | | 1 |
| 8093 | E | IV | | 21 | | | 86 | | 107 |
| 8141 | E | V | | | 43 | | 2 | | 45 |
| 8153 | E | V | | | 5 | | 18 | | 23 |
| 8167 | E | III | | | | | 19 | | 19 |
| 8214 | E | III | | | | | 6 | | 6 |
| 8229 | F | IIB | | 14 | | | | | 14 |
| 8500 | P | 0 | | 30 | | | | | 30 |
| 8537 | P | III | | | | | 1 | | 1 |
| 8543 | P | II | | | | | 18 | | 18 |
| 8723 | P | III | | 37 | | | 253 | | 290 |
| 8724 | P | II | | 334 | | | 33 | | 367 |
| 8739 | P | VI | | 1 | | | | | 1 |
| 8746 | P | IIB | | | 15 | | 45 | | 60 |
| 8747 | P | VI | | | | | 113 | | 113 |
| 8795 | P | III | 237 | | | | | | 237 |
| 8804 | P | III | 1316 | 120 | 213 | | 1304 | | 2953 |
| 8825 | P | III | 962 | 164 | | | 733 | | 1859 |
| 8924 | P | III | | | | | 24 | | 24 |
| 8991 | P | III-IV | | | 57 | | | | 57 |
| 9008 | D | IIIC | | | | | 11 | | 11 |
| 9064 | D | IIIC | | 92 | | | 1 | | 93 |
| 9109 | D | II | | | | | 63 | | 63 |
| 9110 | D | II | | | | | 268 | | 268 |
| 9237 | D | 0 | | | | | 1 | | 1 |
| 9242 | D | 0 | 88 | | | | | | 88 |
| 9245 | D | 0 | 415 | | | | 146 | | 561 |
| 9247 | D | IIB | | | | | 72 | | 72 |
| 9248 | D | IIB | | | | | 12 | | 12 |
| 9250 | D | IIB | | | 221 | | | | 221 |
| 9259 | D | II | 135 | 87 | 866 | | 258 | | 1346 |
| 9263 | D | II | | | | | 6 | | 6 |
| 9265 | D | III-IV | | | | | 6 | | 6 |
| 9272 | E | II | | | | | | | 0 |
| 9280 | D | IIA | | | | | 37 | | 37 |
| 9282 | D | 0 | | | | | 9 | | 9 |
| 9288 | D | IIA | 310 | 90 | 61 | | 930 | | 1391 |
| 9297 | D | IIA | | | | | 7 | | 7 |
| 9299 | D | IIIC-IV | 62 | | 12 | | 644 | | 718 |
| 9317 | D | IIIC | | 18 | | | | | 18 |
| 9321 | D | IIIC-IV | | | | | 21 | | 21 |
| 9337 | D | IIIA-B | | 110 | | | | | 110 |
| 9344 | D | III-IV | | | | | 36 | | 36 |
| 9365 | D | 0 | | | | | 49 | | 49 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 9370 | D | IIB | 250 | | | | | | 250 |
| 9388 | D | IIB | 761 | 94 | 26 | | 1073 | | 1954 |
| 9415 | D | IIA | | 22 | | | 37 | | 59 |
| 9416 | D | IIA | | 113 | | | 656 | | 769 |
| 9417 | D | IIA | 99 | | | | 97 | | 196 |
| 9418 | D | IIA | | 83 | 16 | | 22 | | 121 |
| 9419 | D | IIA | | | 12 | | 161 | | 173 |
| 9420 | D | IIIB | 191 | | | | | | 191 |
| 9426 | D | 0 | | | | | 44 | | 44 |
| 9427 | D | 0 | 1955 | | 107 | | 1302 | | 3364 |
| 9444 | D | IIIC-IV | 2145 | 326 | 28 | | 301 | | 2800 |
| 9446 | D | II | | | | | 1 | | 1 |
| 9458 | D | III | | | | | 1 | | 1 |
| 9469 | D | IIIC-IV | | | | | 230 | | 230 |
| 9475 | D | IIIC-IV | | 27 | | | | | 27 |
| 9480 | D | IIIC-IV | 171 | | | | | | 171 |
| 9488 | D | IIB | 209 | | | | 231 | | 440 |
| 9497 | D | IIB | 1359 | | | | 368 | | 1727 |
| 9510 | D | 0 | | | | | 64 | | 64 |
| 9533 | D | 0 | | | | | 49 | | 49 |
| 9549 | D | IIIA-B | | | | | 172 | | 172 |
| 9560 | D | IIIB | | 22 | | | | | 22 |
| 9565 | D | IV | | | | | 2 | | 2 |
| 9592 | D | IV | | | | | 7 | | 7 |
| 9610 | D | IIA | | | 1 | | | | 1 |
| 9648 | D | IIIB | | | | | 73 | | 73 |
| 9660 | D | IIA | | | 2 | | | | 2 |
| 9683 | D | 0 | | | | | 87 | | 87 |
| 9695 | D | IIIC | | | | | 433 | | 433 |
| 9703 | D | IIA | | 2 | | | 4 | | 6 |
| 9715 | D | 0 | | | | | 142 | | 142 |
| 9720 | D | 0 | | 4 | | | | | 4 |
| 9737 | D | II-III | | | | | 15 | | 15 |
| 9749 | D | IIIC | | 91 | | | | | 91 |
| 10011 | E | IV | | | | | 43 | | 43 |
| 10017 | E | V | | | 18 | | | | 18 |
| 10028 | E | IV | | | 13 | | 12 | | 25 |
| 10033 | E | II-III | | | | | 1 | | 1 |
| 10073 | F | 0 | | | | | 25 | | 25 |
| 10088 | F | IV | 112 | | | | | | 112 |
| 10104 | F | IV | | 206 | | | 43 | | 249 |
| 10109 | F | II | | 3 | | | | | 3 |
| 10121 | F | III | 210 | | | | 31 | | 241 |
| 10182 | F | III | | | | | 125 | | 125 |
| 10184 | F | III | | | 1 | | | | 1 |
| 10194 | F | IV | | | | | 46 | | 46 |
| 10249 | F | 0 | | | | | 177 | | 177 |
| 10250 | F | 0 | 150 | 46 | 23 | | 217 | | 436 |
| 10255 | F | V | 112 | | 25 | | | | 137 |
| 10261 | F | V | 99 | | 20 | | | | 119 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 10280 | F | V | | | | | 118 | | 118 |
| 10291 | F | V | | | | | 10 | | 10 |
| 10296 | F | V-VI | | | 8 | | | | 8 |
| 10304 | F | 0 | | | | | 18 | | 18 |
| 10310 | F | 0 | | | | | 190 | | 190 |
| 10320 | F | IV | 434 | | | | | | 434 |
| 10330 | F | IV | | | | 60 | 135 | | 195 |
| 10350 | F | III | | | 1 | | 73 | | 74 |
| 10376 | F | III | | | 20 | | | | 20 |
| 10379 | F | 0 | | | | | 118 | | 118 |
| 10496 | F | V | | | | | 154 | | 154 |
| 10502 | F | V | | 47 | 50 | | 99 | | 196 |
| 10514 | F | V-VI | 194 | | | | | | 194 |
| 10528 | F | 0 | | | | | 71 | | 71 |
| 10539 | F | V-VI | | | | | 187 | | 187 |
| 10540 | F | III | | 90 | | | | | 90 |
| 10594 | F | III | | | | | 86 | | 86 |
| 10621 | F | IV | | | | 860 | 41 | | 901 |
| 10642 | F | V | | | 7 | | | | 7 |
| 10649 | F | IV | | | | | 1 | | 1 |
| 10688 | F | V | 124 | | | | 213 | | 337 |
| 10751 | F | V | 394 | | | | | | 394 |
| 10800 | N | 0 | | | | | 134 | | 134 |
| 10869 | N | II | | | | | | nq | 0 |
| 10897 | N | IV | | | | | 68 | | 68 |
| 10898 | N | 0 | | | | | 75 | | 75 |
| 10909 | N | IV-V | | | | | 1 | | 1 |
| 10930 | N | 0 | | | | | 165 | | 165 |
| 11000 | A | 0 | 403 | 37 | 73 | | 977 | | 1490 |
| 11036 | N | II | 205 | 45 | 12 | | 228 | | 490 |
| 11105 | N | 0 | | | | | 55 | | 55 |
| 11107 | N | 0 | | | | | 82 | | 82 |
| 11138 | N | II | | | | | 78 | | 78 |
| 11146 | N | II | | | | | 28 | | 28 |
| 11153 | N | II | | | 245 | | 209 | | 454 |
| 11156 | N | II | | 54 | | | 54 | | 108 |
| 11216 | N | II-III | | | | | 86 | | 86 |
| 11255 | N | II-III | | | | | 180 | | 180 |
| 11263 | N | II | | | | | 1 | | 1 |
| 11265 | N | II | 109 | | | | | | 109 |
| 11281 | N | III | | | 7 | | | | 7 |
| 11300 | N | II | | | | | 16 | | 16 |
| 11307 | N | II | | 145 | 194 | | | nq | 339 |
| 11369 | N | II | | 15 | | | | | 15 |
| 11426 | N | IV | | | | | 3 | | 3 |
| 11436 | N | II | | | | | 2 | | 2 |
| 11449 | N | IIB | | | | | 151 | | 151 |
| 11474 | N | II | | | 10 | | | | 10 |
| 11492 | N | II | | | 1 | | | | 1 |
| 11528 | N | II | | 11 | | | | | 11 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 11559 | N | IV | | | | | | nq | 0 |
| 11565 | N | III | | 20 | | | | | 20 |
| 11577 | N | IV | | | | | 1 | nq | 1 |
| 12000 | R | 0 | 365 | | | | | | 365 |
| 12019 | R | IV | | | 20 | | | | 20 |
| 12026 | R | IV-V | | | | | 24 | | 24 |
| 12043 | R | 0 | | | | | 28 | | 28 |
| 12044 | R | IV-VI | 136 | | 25 | | | | 161 |
| 12045 | R | IV-VI | | 17 | | | | | 17 |
| 12113 | R | VI | | | | | 87 | | 87 |
| 12235 | R | III | | | 1 | | | | 1 |
| 12246 | R | III-VI | | | | | 85 | | 85 |
| 12346 | B | 0 | 1143 | | | | 49 | | 1192 |
| 13043 | J | 0 | | | | | 11 | | 11 |
| 13048 | I | IV | 265 | | | | 17 | | 282 |
| 13093 | I | IV | | | 29 | | | | 29 |
| 13148 | I | IIIB | | | | | 1 | | 1 |
| 13276 | J | 0 | 744 | | | | | | 744 |
| 13281 | J | IV | 526 | | | | | | 526 |
| 13289 | J | 0 | | | | | 129 | | 129 |
| 13317 | I | V | | | | | 1 | | 1 |
| 13389 | J | III | | | | | 4 | | 4 |
| 13400 | J | III | 492 | | | | | | 492 |
| 13410 | I | IIIB | | | 2 | | | | 2 |
| 13419 | I | II-VI | 288 | | | | | | 288 |
| 13452 | J | IIIA | | | | | 4 | | 4 |
| 13551 | J | IIB | | | | | 2 | | 2 |
| 13561 | J | IIIA | | | | | 3 | | 3 |
| 13576 | I | IIIB | 155 | | | | | | 155 |
| 13639 | I | IIIA | | | 18 | | | | 18 |
| 13641 | I | II-VI | | | | | 19 | | 19 |
| 13692 | I | IIIA | 721 | | | | | | 721 |
| 13697 | I | IIB | | | | | | nq | 0 |
| 13734 | I | IIIB | | | | | 121 | | 121 |
| 13779 | J | 0 | | 39 | | | | | 39 |
| 13791 | J | II | | | | | | nq | 0 |
| 13803 | J | 0 | | | | | 60 | | 60 |
| 13822 | I | IIIB | 334 | | | | | | 334 |
| 13834 | I | IIIB | | | | | 37 | | 37 |
| 13844 | I | IIIB | 400 | | 13 | | 1219 | | 1632 |
| 13890 | I | IIIB | 355 | | | | | | 355 |
| 14008 | K | II | | | 4 | | | | 4 |
| 14022 | K | IV-V | 3358 | | 1 | | 1 | | 3360 |
| 14032 | K | II | | | 1 | | | | 1 |
| 14045 | K | II | 160 | | 5 | | 408 | | 573 |
| 14046 | K | II | 212 | 411 | | | 350 | | 973 |
| 14058 | K | III | | | | | 1 | | 1 |
| 14062 | K | II | | | | | 1 | | 1 |
| 14067 | K | II-III | | | | | 5 | | 5 |
| 14089 | K | IV-V | | | | | 63 | | 63 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 14093 | K | IV-V | 178 | | | | 98 | | 276 |
| 14204 | L | VI | | | 1 | | 14 | | 15 |
| 14206 | L | IIA-B | | 50 | | | 207 | | 257 |
| 14226 | L | IIA-B | | 85 | 107 | | 337 | | 529 |
| 14235 | L | IIC | | 15 | | | 115 | | 130 |
| 14258 | L | II | 286 | 135 | | | 261 | | 682 |
| 14259 | L | IIC | 200 | | | | 189 | | 389 |
| 14341 | L | III | | | | | 1 | | 1 |
| 14346 | L | 0 | | | | | 1 | | 1 |
| 14354 | L | II | | | | | 101 | | 101 |
| 14381 | L | IIC | 559 | 312 | 3 | | 543 | | 1417 |
| 14407 | L | IIA-B | | | | | 2 | | 2 |
| 14432 | L | 0 | | 28 | | | 67 | | 95 |
| 14466 | L | IIC | | | | | 25 | | 25 |
| 14510 | L | IIC | 475 | | | | 557 | | 1032 |
| 14519 | L | IIC | | | | | 20 | | 20 |
| 14521 | L | IV | 612 | 70 | 318 | | 98 | | 1098 |
| 14525 | L | V | | | 4 | | | | 4 |
| 14533 | L | IIA-B | | 25 | 186 | | | | 211 |
| 14547 | L | IIA-B | | | 22 | | | | 22 |
| 14548 | L | IIA-B | | | | | 1 | | 1 |
| 14558 | L | VI | | | | | 7 | | 7 |
| 14564 | L | V | | | 1 | | 6 | | 7 |
| 14569 | L | IIC | 220 | 101 | 40 | | 30 | | 391 |
| 14573 | L | 0 | 130 | | | | | | 130 |
| 14583 | L | IIC | | | 13 | | 39 | | 52 |
| 14590 | L | IIC | | | 33 | | | | 33 |
| 14591 | L | V | | | 1 | | 2 | | 3 |
| 14595 | L | II | | 33 | 13 | | | | 46 |
| 14600 | L | IV | | | | | 177 | | 177 |
| 14609 | L | 0 | | 36 | | | 45 | | 81 |
| 14610 | L | IV | | | 3 | | | | 3 |
| 14613 | L | VI | | | | | 3 | | 3 |
| 14619 | L | 0 | | | | | 111 | | 111 |
| 14625 | L | II | | 124 | | | | | 124 |
| 14627 | L | II | | | | | 10 | | 10 |
| 14662 | L | 0 | | | | | 18 | | 18 |
| 14664 | L | 0 | | | | | 12 | | 12 |
| 14679 | L | IV | | 151 | | | | | 151 |
| 14684 | L | IIB | | | | | 3 | | 3 |
| 14706 | L | IIA-B | | 31 | | | | | 31 |
| 14711 | L | III | | | | | 32 | | 32 |
| 14743 | L | V | | | | | 90 | | 90 |
| 14753 | L | 0 | | 159 | | | 83 | | 242 |
| 14762 | L | IIC | | | | | 28 | | 28 |
| 14784 | L | IIA-B | | | 1 | | 1 | | 2 |
| 14789 | L | 0 | | 118 | | | | | 118 |
| 14800 | L | V-VI | | | | | 3 | | 3 |
| 14807 | L | IIA-B | | | 22 | | 74 | | 96 |
| 14818 | L | 0 | | | | | 53 | | 53 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 14824 | L | II | | | | | 29 | | 29 |
| 14839 | L | IIC | | 167 | 30 | | | | 197 |
| 14861 | L | IIA-B | | | | | 280 | | 280 |
| 14862 | L | IIA-B | | 78 | | | 242 | | 320 |
| 14879 | L | 0 | | 25 | | | 58 | | 83 |
| 14884 | L | II | | | | | 80 | | 80 |
| 14893 | L | VI | | | 1 | | | | 1 |
| 14901 | L | IIB | | | 1 | | | | 1 |
| 14902 | L | IIB | | | | | 18 | | 18 |
| 14914 | L | IIC | | 25 | | | | | 25 |
| 14936 | L | III | | | | | 60 | | 60 |
| 14948 | L | IIA-B | | 24 | | | | | 24 |
| 14998 | L | IIC | | | 11 | | | | 11 |
| 15025 | M | 0 | | | | | 47 | | 47 |
| 15044 | M | 0 | | | | | 87 | | 87 |
| 15058 | M | 0 | | | | | 1 | | 1 |
| 15122 | M | VI | | | | | 17 | | 17 |
| 15228 | M | IV | | | | | 1 | | 1 |
| 15232 | M | VI | | | | | 18 | | 18 |
| 15281 | M | 0 | | 4 | | | 1 | | 5 |
| 15288 | M | II-III | | | 12 | | | | 12 |
| 15307 | M | II-III | | 5 | 4 | | 2 | | 11 |
| 15308 | M | II-III | | | | | 30 | | 30 |
| 15386 | M | II-III | | | | | 5 | | 5 |
| 15420 | M | II | | | 23 | | | | 23 |
| 15458 | M | II-III | 222 | | | | | | 222 |
| 15459 | M | II-III | | | | | | nq | 0 |
| 15463 | M | III | | 5 | | | 134 | | 139 |
| 15464 | M | II-III | | | | | 1 | | 1 |
| 15515 | M | IV | 179 | | | | | | 179 |
| 15555 | M | II-III | | | | | 17 | | 17 |
| 15586 | M | II-III | 329 | | | | | | 329 |
| 15587 | M | II-III | 327 | | | | | | 327 |
| 15592 | M | II-III | | 10 | | | | | 10 |
| 15611 | M | II-III | | | 2 | | | | 2 |
| 15612 | M | II-III | | 54 | 15 | | 135 | | 204 |
| 15667 | M | V-VI | | | | | 172 | | 172 |
| 15668 | M | IV-V | | | 3 | | | | 3 |
| 15683 | M | III | | | | | 23 | | 23 |
| 15686 | M | II-III | | | 13 | | | | 13 |
| 15756 | M | IV-V | | | | | 2 | | 2 |
| 15787 | M | III | 486 | | | | | | 486 |
| 15816 | M | II | 311 | | | | | | 311 |
| 15857 | M | IV-V | 245 | | | | 78 | | 323 |
| 15869 | M | VI | | | | | 1 | | 1 |
| 15881 | M | II-III | 537 | | | | | | 537 |
| 15889 | M | III | 567 | | | | 108 | | 675 |
| 15893 | M | V-VI | | 14 | 8 | | 11 | | 33 |
| 15982 | M | IV | 997 | 15 | | | | | 1012 |
| 16016 | H | III | | | | | 4 | | 4 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 16040 | H | IIB | | | 3 | | | | 3 |
| 16051 | H | 0 | 344 | | | | 21 | | 365 |
| 16073 | H | IV | | | | | 67 | | 67 |
| 16082 | H | III-IV | | | 11 | | | | 11 |
| 16230 | H | VI | 92 | | | | | | 92 |
| 16333 | H | VI | 235 | | | | | | 235 |
| 17012 | Q | III | | 10 | 21 | | 2 | | 33 |
| 17016 | Q | 0 | | | | | 105 | | 105 |
| 17031 | Q | III | | | | | 89 | | 89 |
| 17033 | Q | III | | 132 | | | 46 | | 178 |
| 17037 | Q | IV | | | 50 | | 301 | | 351 |
| 17058 | Q | III | | | | | 10 | | 10 |
| 17060 | Q | IIA | | 18 | 5 | | 4 | | 27 |
| 17070 | Q | IIA | | | 11 | | 5 | | 16 |
| 17211 | Q | III | | | 1 | | 3 | | 4 |
| 17255 | Q | IIB | 180 | | | | | | 180 |
| 17258 | Q | IIB | | 16 | | | | | 16 |
| 17323 | Q | IIA | | | 32 | | | | 32 |
| 17352 | Q | IIA | | 70 | 146 | | 200 | | 416 |
| 18028 | J | IIA | | | 13 | | | | 13 |
| 18200 | I | IIIA | | | 13 | | | | 13 |
| 18229 | I | IIIA | | | 1 | | | | 1 |
| 18240 | I | IIIA | | | 2 | | | | 2 |
| 18256 | J | IIA | | | | | 1 | | 1 |
| 18765 | J | IIA | | | | | 121 | | 121 |
| 18812 | J | IIB | 317 | | | | | | 317 |
| 18961 | J | IIB | 1976 | | | | 119 | | 2095 |
| 19005 | P | 0 | | | | | 21 | | 21 |
| 19150 | P | III | 992 | 46 | | | 148 | | 1186 |
| 19163 | P | II | | | 1 | | | | 1 |
| 20000 | L | 0 | | | | | 111 | | 111 |
| 20007 | L | V-VI | 145 | | | | | | 145 |
| 20031 | L | IIC | 711 | 24 | | | 211 | | 946 |
| 20039 | L | IIA-B | | 39 | | | 171 | | 210 |
| 20040 | L | IIA-B | 355 | | | | | | 355 |
| 20041 | L | IIA-B | | 489 | | | 378 | | 867 |
| 20042 | L | IIA-B | 230 | | | | | | 230 |
| 20072 | L | II | | 35 | | | | | 35 |
| 20096 | L | IIA-B | 88 | | | | | | 88 |
| 20101 | L | IIA-B | | | | | 25 | | 25 |
| 20147 | L | IIC | 571 | 537 | 668 | | 49 | | 1825 |
| 20148 | L | IIC | 1233 | 468 | 582 | | 230 | nq | 2513 |
| 20149 | L | 0 | | 28 | | | | | 28 |
| 20164 | L | 0 | | | | | 51 | | 51 |
| 20194 | L | V | | | | | 37 | | 37 |
| 20197 | L | IIC | | | | | 47 | | 47 |
| 20200 | L | IIC | 415 | | | | | | 415 |
| 20210 | L | IIC | | | | | 51 | | 51 |
| 20230 | L | IIC | | | | | 88 | | 88 |
| 20280 | L | IV | | | | | 116 | | 116 |

| Context | Area | Phase | SHB | VL | FAS | SS | UD | HS | Total |
|---|---|---|---|---|---|---|---|---|---|
| 20304 | L | IIA | | 30 | | | | | 30 |
| 20331 | L | IIB | 174 | | | | 77 | | 251 |
| 21500 | J | 0 | 107 | | | | | | 107 |
| 21503 | J | IIA | | 40 | 30 | | 20 | | 90 |
| 21543 | J | IIA | | | | | 149 | | 149 |
| 21568 | J | IIIB | | | | | 58 | | 58 |
| 21614 | J | IV | | 76 | | | | | 76 |
| 21615 | J | IIIB | 1375 | | | | 862 | | 2237 |
| 21686 | J | VII | | 10 | | | | | 10 |
| 21705 | J | IIIA | | | | | 32 | | 32 |
| 21710 | J | VI | | | | | 82 | | 82 |
| 21917 | J | V-VI | | | | | 52 | | 52 |
| 21971 | J | III | | | | | 16 | | 16 |
| 22077 | J | IIA | | 57 | | | | | 57 |
| 22078 | J | IIB | 236 | 140 | 15 | | 296 | | 687 |
| 22256 | J | IIB | | | | | 48 | | 48 |
| 22328 | J | IIB | | 6 | | | 85 | | 91 |
| 22350 | J | IIB | | 37 | 12 | | 14 | | 63 |
| 22352 | J | IIIA | | | | | 182 | | 182 |
| 22354 | J | IIB | | | | | 118 | | 118 |
| 22365 | J | IIB | | | | | 121 | | 121 |
| 23001 | N | 0 | | 4 | | | | | 4 |
| 23002 | N | 0 | 403 | | | | 120 | | 523 |
| 23005 | N | II | | | | | 9 | | 9 |
| 23020 | N | IV | | | | | 39 | | 39 |
| 23025 | N | III | | 220 | | | | | 220 |
| 23056 | N | IIB | | | | | 55 | | 55 |
| 23134 | N | II | | | | | 84 | | 84 |
| 23283 | N | III | | 249 | | | | | 249 |
| 24003 | M | VI | 484 | 120 | | | | | 604 |
| 24120 | M | II-III | 495 | | | | 25 | | 520 |
| 24133 | M | 0 | | | | | 94 | | 94 |
| 24198 | M | IV | | 20 | | | | | 20 |
| 24221 | M | IV-V | | 33 | | | | | 33 |
| 24313 | M | III | | | | | 92 | | 92 |