

ROSEMARKIE CAVES PROJECT

Archaeological Excavation in Learnie 2B Near Rosemarkie, Ross-shire

Data Structure Report 2016



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1 SUMMARY

- 1.1 The Rosemarkie Caves Project has been investigating the archaeology of 19 caves on the southeast side of the Black Isle, near Inverness since 2006. The project is run by a team of voluntary professional and amateur archaeologists, and is linked to the North of Scotland Archaeology Society (NOSAS). During 2011 and 2015 a programme of survey and test pitting provided baseline data of the sites' archaeological potential. The results indicated that a number of the caves, in particular the Learnie group, had been visited or occupied during the 7th-9th centuries AD. A test pit evaluation in Learnie 2B had revealed that there was significant potential for surviving archaeological deposits in this cave, which contained a substantial mortared stone wall at the entrance.
- 1.2 The 2016 open-area excavation uncovered significant archaeological results, including evidence for iron-working activity and a c. 5th-7th century male inhumation burial. Found in a dark alcove below a post-medieval cobbled floor and midden deposits, the burial comprised the well-preserved remains of a young male who had suffered severe, multiple trauma to the head. The individual had been placed in an unmarked grave with stones weighting down the limbs and butchered animal bone over the location of the head.
- 1.3 A group of pits and cobbled features associated with considerable iron slag finds indicates that metal-working was taking place within a defined area in the rear of the cave. A sequence of archaeological layers covering the metal-working area, suggests that it took place before or during the early medieval period. The cave continued to be used at least intermittently through the medieval and post-medieval periods, where there appears to be a phase of significant occupation until a mortared stone wall across the entrance was put out of use. The cave continued to be in use subsequent to this, probably by travellers, who may have been employed specifically in shoe manufacture or repair.
- 1.4 This report contains the results of the excavation undertaken in Learnie 2B in September 2016. The full data lists from the fieldwork are supplied in the appendices.

2 LOCATION AND GEOLOGY

- 2.1 The Rosemarkie Caves Project (RCP) identified 19 caves on the Moray Firth shoreline northeast of Rosemarkie on the Black Isle in Ross-shire, Scotland. The most southerly cave is situated approximately 9 miles northeast of Inverness. The group of south- and east-facing caves are located between 3-10m above the present high water mark and most would have been large enough to be occupied permanently or intermittently. Learnie 2B is located on the east-facing coastline below Learnie Farm (NH 755 610) (Figure 1).
- 2.2 The caves formed at the base of cliffs comprising psammite, a brittle and easily fractured stone that over time has formed talus mounds at the entrances to many of the caves. The 2-mile stretch of coastline runs northeast to southwest comprising rocky outcrops and offshore reef complexes that would have been accessible only to small boats, while a number of access tracks descend the steep, vegetated slopes from the northwest. The section of coast is a Site of Special Scientific Interest (SSSI), under the protection of Scottish Natural Heritage.
- 2.3 Learnie 2B is a large cave with a fairly flat floor composed of sand and rocks, with opposing stone built walls breaching the entrance (Plates 1; 2). The cave, situated at 5 metres OD at the entrance prior to excavation, was easily accessible and unhindered by talus banks or other debris. With the basal bedrock of the cave lying at approximately 3.8-4m OD, the falling sea level rate for the cave resulting from isostatic rebound from the mid Holocene onwards indicates that Learnie 2B would have been dry from around 3,500 ago (A. Dawson¹ pers comm).

¹ University of Dundee

3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 2011-2015 Test Pitting

- 3.1.1 The Rosemarkie Caves Project conducted test pitting in eight of the caves (Gunn and Peteranna 2016), four of which were located in the Learnie group (1B, 2B, 3B and 3C). Stratified samples of animal bone and charcoal from archaeological layers in the cave test pits established 7th-9th century occupation in the Learnie cave group, with 2nd-4th century and 11th-12th century dates also derived from material in Learnie 3C. Significant evidence for 19th-20th century traveller occupation was found across the caves, particularly in the Learnie group and Ivy Cave, with frequent evidence for leather shoe making or repair. Learnie 2B was highlighted as a particularly intriguing cave given a 1m depth of archaeological material and the presence of two buried mortar and stone-built entrance walls.
- 3.1.2 During the 2013 test pit evaluation of Learnie 2B, two test pits were excavated. Test Pit 1 was located inside the cave along the front of a rough wall built against the north side of the cave. Test Pit 2 was placed at the entrance against a mortared stone wall forming access across the north side of the entrance. Test Pit 1 revealed at least eight stratified contexts, the upper layers containing post-medieval midden material and the lower layers showing a sequence of archaeological layers with animal bone, charcoal, shell and several sherds of medieval pottery. A fragment of animal bone from the lowest layer sampled provided a 7th/8th century AD date (*Ibid*). Test Pit 2 was excavated to below the base of the north entrance wall, which had cut through a sequence of earlier occupation layers. Two further radiocarbon measurements from charcoal and animal bone taken from layers below the wall also provided 7th / 8th century AD dates on material recovered from a depth of 1-1.05m (*Ibid*).

3.2 2006 Excavation in Learnie 2B

- 3.2.1 In 2006, a small archaeological excavation of Learnie 2B was undertaken by volunteers led by Highland Archaeology Services (Wood 2008). Excavation was undertaken mostly across the southern half of the cave (Figure 2), with one 1m x 1m pit (Sondage 1) excavated near the centre of the cave and a second, deeper trench (Sondage 2) excavated against the outside face of the south entrance wall. After the removal of modern material and a soil-dung layer, the upper sequences revealed finds from late 19th-early 20th century occupants (*Ibid*). Underlying layers partly covered a thick deposit of "wall tumble" (context 5) that was not fully excavated. Sondage 1 went through a sequence of three layers approximately 0.25m deep, ending excavation on top of a compact occupation layer (context 18). The Sondage 2 excavation revealed the base of the south entrance wall and exposed a shell midden mostly containing limpets (context 14) below its base (*Ibid*).
- 3.2.2 As part of the present work, the 2006 assemblage was catalogued. The material included: a small amount of late 19th century ceramic sherds, clay pipe stem fragments and iron pieces including a fragment of an iron key, various leather shoes and shoe fragments, a copper alloy rivet (SF250), limpet shells and mammal bone samples. The assemblage included a sample from the context 14 midden that proved to contain mammal bone, fish bone and scallop/whelk shells. Interestingly, while the 2008 report referred to recovery of a 1916 half penny and two farthings of unknown date, only two coins were found in the assemblage, neither of which had context information. One coin was a 1900 penny (SF236) while surprisingly the second coin was a 2nd century Tetricus I Roman coin (SF235).

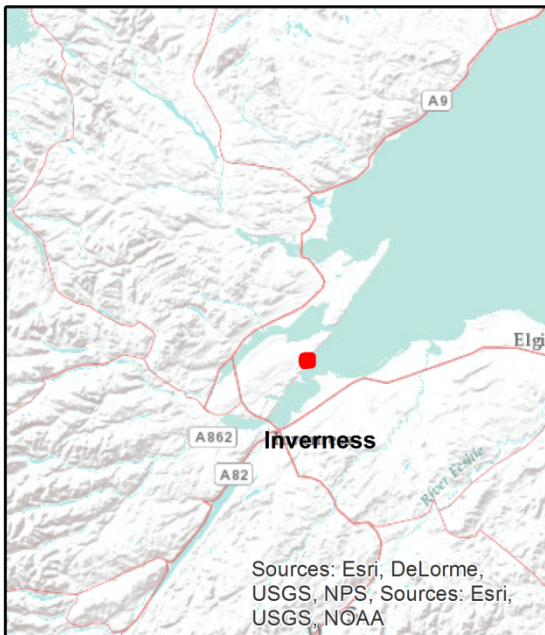
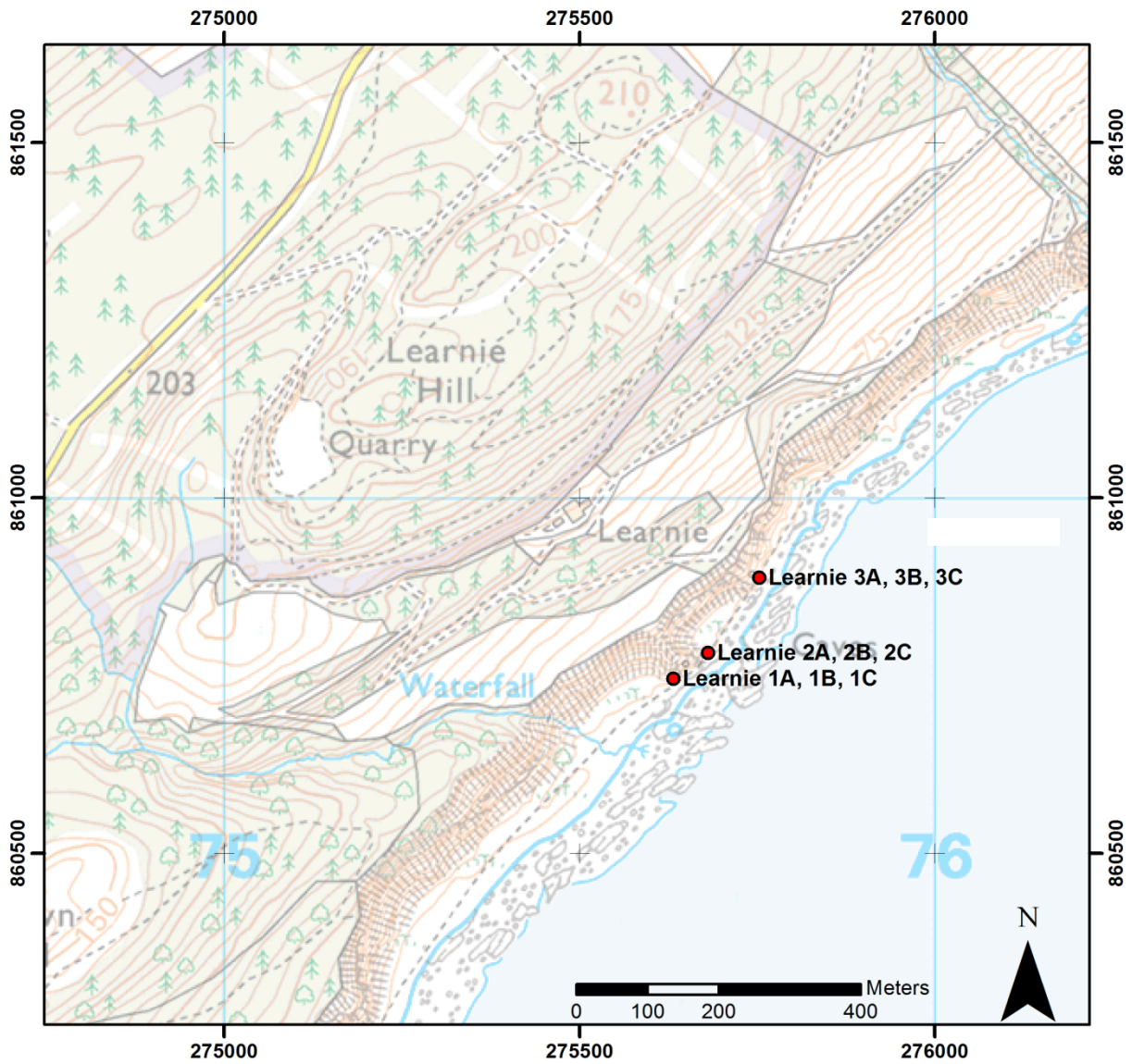
3.3 2010 Caird's Cave Excavation

- 3.3.1 In 2010, the Rosemarkie Caves Project undertook an excavation in Caird's Cave, located southeast of Learnie 2B, to establish the extent of antiquarian excavations by Maclean and Hall (1907-1912), which had yielded an important assemblage of prehistoric bone tools. The 2010 excavation revealed the presence of in situ deposits, from which a bone pin and bone working debris similar to Maclean and Hall's assemblage were recovered. The sequences also provided radiocarbon dates obtained from bone and charcoal from the 4th - 3rd century BC at the base of the deposits and dates from the 2nd - 3rd century AD at the top of the sequence. As a part of the 2010 project, additional radiocarbon

dates were obtained from worked bone and antler artefacts from the Maclean and Hall assemblage, also providing evidence of activity in the 2nd/3rd century AD and the 7th/8th century AD. Also, as part of this work, a small stone structure occupied by travellers during the late 19th to early 20th centuries was also investigated outside of the cave (Anderson-Whymark 2011).

3.4 Iron Age and Early Medieval Cave Use

- 3.4.1 Up to now, the Rosemarkie Caves Project has provided evidence that these caves were used substantially during the under-researched Early Medieval (Pictish) period and the Iron Age. Recent research has led to a resurgence of academic interest in caves in Scotland and elsewhere. A number of caves with Pictish and early Christian iconography have been investigated in Scotland, especially around the Fife, Ayrshire and Galloway coastlines, and on the island of Bute. These sites included a number of caves at East Wemyss (Mackie 1986; Ritchie & Stevenson, 1993), which contained Pictish symbols and the associated occupation deposits; St. Medan's Cave and St. Ninian's Cave in Wigtownshire and St. Molio's Cave in Bute (Wilson 1882). Early medieval burials and Iron Age disarticulated human remains are also a notable feature in Scottish caves, such as at Covesea Cave and Sculptor's Cave on the Moray Coast. Many other caves have been found in the southwest of Scotland that have associations with religion and the movement of the dead by boat to offshore burial sites. They may have served as 'corpachs', temporary resting places for the dead during their final journeys for burial on offshore islands, including Oronsay and Iona. Some of these caves, such as St Cormac's Cave on Eilean Mor in the Sound of Jura and St Columba's Cave on the mainland opposite Jura, contain religious iconography carved into the cave walls including incised crosses and other inscriptions, and it is possible that they may have been used as retreats by monks or missionaries. Trial trench excavations at a number of caves and rockshelters on the Applecross Peninsula on the Scottish west coast by the *Scotland's First Settlers Project* (Hardy & Wickham-Jones 2009), has also produced evidence for their use during the Early Medieval period. These sites include Crowlin 1 rockshelter (AD 650-810), Toscaig 9 rockshelter (AD 630-990), and the Camusteel 2 rockshelter (AD 680-890).
- 3.4.2 In Ireland, recent research into Irish cave sites (Dowd 2015) has shed much new light on their use during the Early Medieval period. This included a marked change in site function and in the way caves were perceived from the earlier periods of use during prehistory, although links between caves and religious activities continued. Some caves were regarded as important because of their association with saints, as can be seen with some of the caves in Scotland, but during this period it is also obvious that caves were used to fulfil a range of everyday activities. Caves appear to lose some of their earlier potency and became spaces that could be inhabited, used for storage, to conceal valuables, and as hideaways and places of refuge. Activities within the Irish caves generally took place around cave entrances and within small dry chambers, with little indications of occupation in the deeper recesses. Structural features include breached walls across cave entrances, internal dividing walls, trodden and cobbled floors, and hearths. The finds from the Irish cave sites are typical of material recovered from enclosed settlements such as ringforts and crannogs, and often produce large quantities of animal bone, fish bone, shellfish, burnt hazelnut shells and cereal grains. Similar assemblages of material have been recovered from some of the Scottish caves including St. Columba's Cave in Argyll (Tolan-Smith 2001).
- 3.4.3 The broad diversity of activities taking place in Irish caves during the Early Medieval period stands out from all other periods of use, including their use in a wide variety of secular and religious functions. However, this pattern of use did not continue into the medieval period, where it appears that major changes occurred around the 12th century – during which the use of caves dramatically decreased. This does not appear to be the case in Scotland, where a number of the caves producing Early Medieval dates continue to be used into the medieval and later medieval periods (Hardy & Wickham-Jones 2009). Therefore, with a number of sites investigated by the Rosemarkie Caves Project producing Early Medieval dates and with some caves indicating a continuation of activities into the medieval and later periods, there exists a unique opportunity to further investigate this important transition in practices seen elsewhere.



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Figure 1: Location of the Learnie cave group, showing Learnie 2B



Plate 1: Looking WSW across Learnie 2B during excavation, entrance walls in front



Plate 2: Looking W across Learnie 2B during excavation

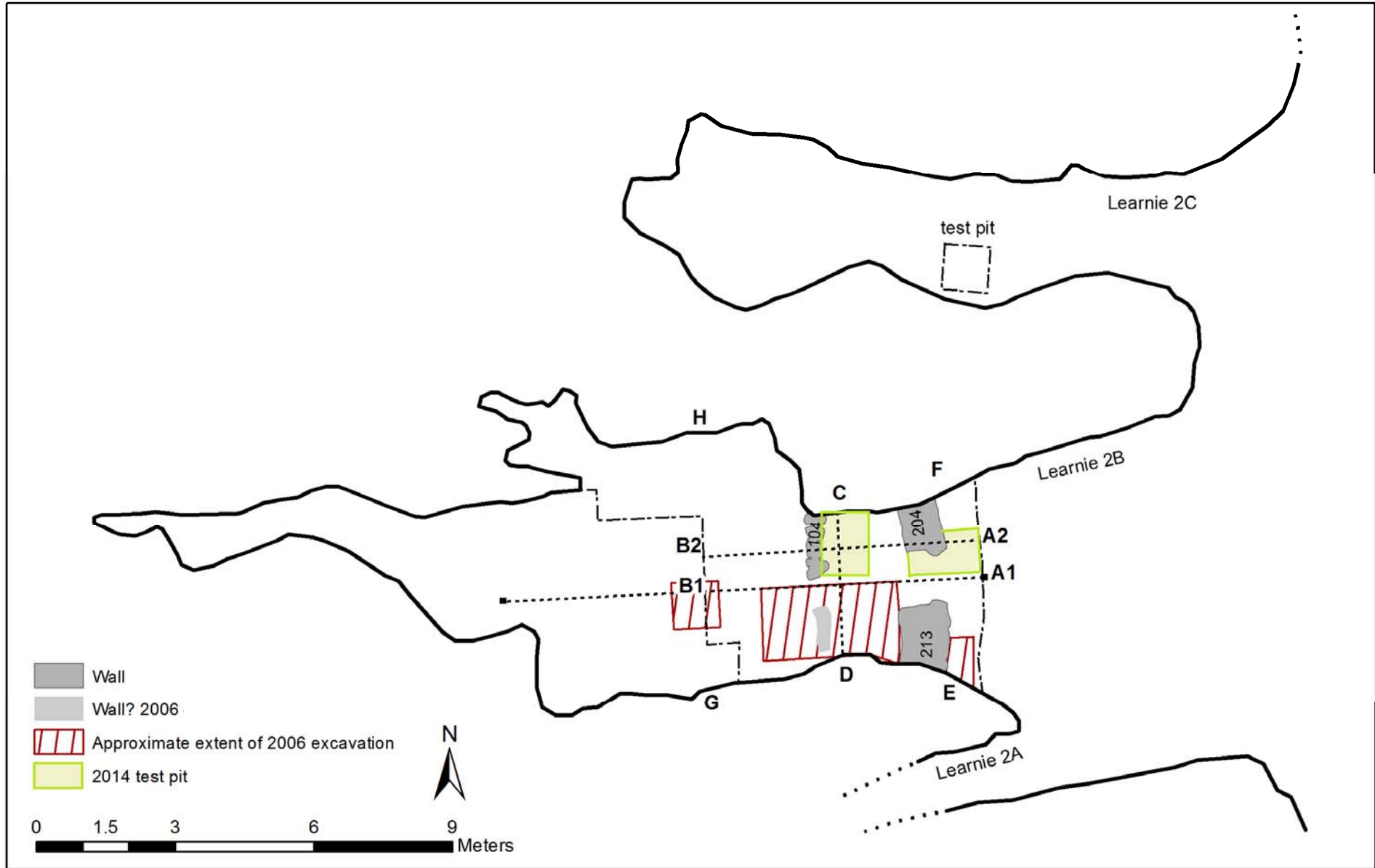


Figure 2: Location of the 2016 excavation, showing the 2014 test pit and 2006 approximate extent of excavation

4.0 AIMS AND OBJECTIVES

4.1 The 2016 excavation in Learnie 2B aimed to clarify the function and dates of occupation in the cave, and its importance in interpreting Iron Age and Early Medieval culture in the area. The fieldwork provided an opportunity for volunteers and students to learn archaeological techniques. The caves, situated in a remote coastal location, also provided the chance to experience a unique environmental setting whilst undertaking new research.

4.2 The overall aims of the archaeological excavation were to:

- ❖ To establish the character and extent of surviving archaeological deposits in the cave
- ❖ To uncover in plan the walling and other structural remains at the cave entrance
- ❖ To uncover in plan any earlier structural remains and related layers
- ❖ To improve understanding of the types of activities taking place in the cave and to compare this evidence with the findings of the test pitting programme
- ❖ To enhance the archaeological record
- ❖ To provide training in archaeological excavation and recording techniques to students and volunteers
- ❖ To encourage the inclusion of local people in the discovery, discussion and outcome of the project, and to develop practical, research and educational benefits for the community as a whole
- ❖ To publish and report on the archaeological results to the wider public and research community

4.3 The specific objectives of the archaeological evaluation were:

- ❖ To conduct an open area excavation in Learnie 2B
- ❖ To excavate, by context, the archaeological horizons in the cave
- ❖ To expose the layout of structural remains in Learnie 2B
- ❖ To recover environmental samples and artefacts which will assist interpretation and chronology of the past activities within the site and function of the structures
- ❖ To collate the Learnie 2B fieldwork data with the test pitting evaluation data to plan and implement a programme of post-excavation work on the recovered materials from the excavation and test pitting evaluation

5.0 METHODOLOGY

5.1 Permissions

5.1.1 Prior to excavation, the landowner permission was obtained and the cave was assessed for any changes since the 2013 test pit excavation. Fieldwork was scheduled to comply with Scottish Natural Heritage guidance on bat nesting seasons.

5.2 Excavation

5.2.1 Open area excavation was undertaken, following a single context recording system based on standard stratigraphic principles. Excavation was undertaken in quadrants with a base site datum set up at the mouth of the cave opposing a second datum set up at the back of the cave and forming the baseline for excavation and recording (Figure 2). Running sections were recorded as layers were excavated inside the cave. The stone wall at the mouth of the cave served as a static reference for deposits in the cave entrance. Baseline levels were calculated using a standard dumpy level, with measurements taken from a fixed point on the shore retrieved using a Trimble Geo-XR rover using VRS-Now (RTK) corrections rated at centimetre accuracy.

5.2.2 All artefacts and ecofacts were hand retrieved and sorted on site. Dry sieving was undertaken on site for certain key deposits. Bulk sampling of all archaeological layers was undertaken and a minimum of 50% of cut fills were sampled for palaeoenvironmental analysis. Quadrant sampling was undertaken for total recovery of artefacts and environmental data, specifically in 1.0m grids for metal-working and magnetic residues and 0.5m grids for the recovery of human remains (plans shown in Appendix 1).

5.2.3 Recording was undertaken using standard recording sheets, plan and section drawings (scales of 1:20 and 1:10) and high-resolution digital photography. All excavation and recording was carried out in accordance with *CifA (Chartered Institute for Archaeologists) Code of Conduct (2014)* and the Highland Council *Standards for Archaeological Work (2012)*.

5.3 Sample and finds processing

5.3.1 All finds and samples were recorded following on from the sequence established in the cave during the 2013 test pit excavation. Upon completion of the fieldwork, small finds and samples were checked, rapidly assessed and stored in a controlled environment along with the 2013 assemblage. In addition, finds and samples from the 2006 Learnie 2B excavation was assessed and catalogued within the 2016 data lists. The material is being stored for future post-excavation analysis.

6 RESULTS

6.1 Extent of the excavation

6.1.1 The excavation area targeted the main deposits inside the cave, terminating at an arbitrary location at the back of the cave, approximately 10m from the datum set at the mouth of the cave, located 1m outside the stone-built blocking walls [204]/[213] in the cave entrance. The walls were a clear reference point and indicator of a significant phase of use of the cave. A test pit was also excavated in Learnie 2C, located to the north of Learnie 2B, while Learnie 2A, a narrower cave to the south side (Figure 3), was not investigated during the present works.

6.1.2 The 2006 excavation results (Wood 2008) indicated that the upper (19th/20th century) deposits had been excavated and backfilled across the south half of the cave. A single coursed wall (2006 context 11) had also been removed from the location nearly opposite wall [104], that had been recorded in 2013 (Gunn and Peteranna 2016). Two deeper sub-trenches had also been excavated and backfilled in 2006 near the middle of the cave (c.1.0m x 1.0m across and 0.25m deep) and outside of wall [213] (c.0.6m x 0.7m across and 1.1m deep). The 2016 excavation was unable to clarify the exact extent and location of this work. However, the location of the trench outside of wall [213] was located after the truncated lower deposits were exposed.

6.1.3 Excavation in 2016 started with removal of modern debris and loose stone from the area. The fragmentary stone wall [104] was removed, and both test pits were emptied. The accuracy of fieldwork recording and interpretation of contexts was probably affected by the previous disturbance from the earlier fieldwork, the unclear records from the 2006 work and the low light conditions in the cave. Illustrations of the main features are shown in Figures 4 and 6, while the section drawings showing the archaeological sequence are shown in Figures 7, 8, 9 and 10.

6.2 Late Iron Age / Early Medieval

6.2.1 *Male inhumation burial*

6.2.1.1 The earliest confirmed deposit (264) in the cave was a male inhumation burial (SF210) located in the north side of the cave above the natural sand and bedrock (221). The well-preserved skeletal remains represented a young, Caucasian male (pers comm. Prof S Black²) who had been buried within a dark alcove in the cave interior. The body had been placed with the skull adjacent to the cave wall on the east-southeast side of the alcove, with the torso fairly level to pelvis over the natural sand.

² Centre for Anatomy and Human Identification, Leverhulme Research Centre for Forensic Science, University of Dundee

The skeletal remains were recorded and excavated in 0.5m grid squares, with bulk sampling of the surrounding sediment undertaken in grid squares.

- 6.2.1.2 The position of the burial and the condition of the individual at the time of death is unusual (Figures 4; 5). Aligned northwest-southeast with the skull to the southeast, the arms were level by the side of the torso, while the lower limbs/feet had been crossed to form a “cross-legged” position with the knees splayed and raised upward. A heavy beach cobble that measured approximately 0.15m by 0.2m long had been placed over the feet and lower limbs, with smaller cobbles placed over the right hand and left upper leg limb. Initial forensic information provided the following information: the limb bones and teeth indicate he was very healthy with no systemic pathology or tooth decay and of an average, robust build. His skull had been severely smashed, fractured by multiple trauma wounds formed by more than one weapon. One tooth recovered from below the sternum would have been projected into his throat by the trauma (*Ibid*). The individual had suffered a terrible death, with his body weighed down with stones during burial.
- 6.2.1.3 A discrete deposit of butchered mammal bone (SF209) was located over the location of the skull, with scattered deposits of butchered bone (SF213/214) found within the sand (264) over the inhumed remains. Other isolated marine shells and beach cobbles were presumed natural in origin, and the only other artefactual material recovered was a hardened sand concretion (SF212) next to the burial.
- 6.2.1.4 The inhumation deposit (264) was located on the same horizon as the basal sand layer (235), which also formed the underlying deposit for a series of features and metal-working deposits in the middle of the cave. However, the two areas were not stratigraphically linked – the metal-working deposits did not continue to the burial location apparently due to a separation of space defined by posts and natural bedrock between the two areas. Stratigraphically, the burial was located below a late/post medieval layer (239), and there was no grave cut identified in these deposits. A sample of a left rib fragment provided a radiocarbon date of cal AD 430-631 (SUERC-70721) for the individual buried.

6.2.2 *Metal-working activity and associated features*

- 6.2.2.1 A suite of features was uncovered inside the cave at the base of the archaeological sequence, overlying the lowest horizon (235) (Figure 4). Although excavation was undertaken at different rates in the quadrants, the features were clearly separated from the later deposits by context (231), a mostly clean, coarse sand and cobble layer with some animal bone and shell, which was the beginning of a notable change in the sequence. It signalled a transition between periods, which, to judge from the 2013 test pit sample radiocarbon results, marked the deposits where early medieval occupation began. There was also a visible change in the artefact types recovered from these layers.
- 6.2.2.2 Below (231), context (232) formed a mostly continuous, thin surface comprising a compact dark silt with charcoal-rich lenses and ash patches – possibly an occupation horizon. Removal of (232) followed by the sequence of underlying sandy deposits formed by the mostly similar layers of (233) overlying (234) revealed several pits, post-holes and hearths visible overlying (235). Overall, contexts (233) and (234) represent the same occupation layer, below which most of the features were clearly identified. Described as yellow-brown coarse sand with animal bone, shellfish and charcoal/ash patches, the horizon also contained substantial amounts of ferrous metal-working residues, primarily small lumps of slag. Below this horizon and merging with the natural sand/bedrock was context (235), where the metal-working residues continued, with a discrete slag-rich concentration in the southwest corner of the excavation area.
- 6.2.2.3 On the south side of the cave a cobbled surface [261] had been set into the lower sand layer (235), situated between a cobble-lined ash-filled hearth [267]/(268) and a pit [258] containing charcoal-rich lenses (257). The quality of the natural sand environment, which was very mobile and rich in beach cobbles, caused difficulty in feature identification. However, the recovery of iron-working evidence provided a stronger basis for interpreting a setting of larger upright cobbles at the west end of the cobbled area as part of a work surface. The type of vitrified residues, including plano-convex hearth

fragments and a vitrified ceramic fragment forming part of a tuyere, indicates that smithing, as opposed to smelting, was probably taking place in the cave (pers comm. Dr G Cruickshanks³).

- 6.2.2.4 The concentration of ferrous residues was found mostly on the south side and towards the rear of the cave around the hearth, cobbled surface and the pit although material was spread beyond this. The three features were interpreted as part of an activity area where metal-working was taking place. The surrounding deposits (233), (234) and (235) were excavated in bulk with samples taken within 1m-square grids for the recovery of micro residues.
- 6.2.2.5 A series of stakeholes [260] and a small post-hole [259] within the area may represent remnants of structural screens defining the western end of the work area. Larger post-settings [255], [256] and [265] on the north side could have supported a structure that defined the northern limit of the zone, perhaps supported by central post-hole [254]. If so, the space could have been enclosed on three sides by screens to the north and west and the cave wall to south, while open on the east through the cave entrance. This interpretation, along with the location of some of the post-holes, also suggests the possibility that the burial (264) location was known and respected by the smithing area.
- 6.2.2.6 Also within the area and at the sand horizon, three further pits [236], [249] and [263] (Figure 7), which contained dark soily sand fills with some charcoal fragments, may represent a function related to the industry or other types of activity. Pit [237] contained a metal object, possibly a handle (SF198 from context 237). The top of the natural sand horizon also contained scattered charcoal/ash patches, mammal bone and shell fragments. Post-excavation analysis of the animal bone and environmental material will provide more information relating to economy at the time of the industrial activity.
- 6.2.2.7 A sheep rib sample taken from context (234), which represents the layer covering most of the features, provided a radiocarbon date of cal AD 718-941 (SUERC-70720). Contexts (233) and (234) stratigraphically equate to contexts (108) and (210) from the 2013 Test Pit 1 and Test Pit 2, although the 2013 layers were not so clearly stratified. A mammal bone sample from (108) at a depth of 110cm provided a radiocarbon date of cal AD 604-757 (SUERC-49921), and samples of a sheep bone at 100cm deep and a hazel charcoal fragment at 105cm deep from (210) provided radiocarbon dates of cal AD 645-767 (SUERC-49923) and cal AD 660-770 (SUERC-49922), respectively. Given the spread of dates for overlapping horizons, the activity appears to correlate with early 8th century AD occupation. This could place the metal-working industry as earlier than or contemporary with this period.

6.3 Medieval / Late medieval

6.3.1 Entrance blocking walls and related stratigraphy

- 6.3.1.1 The most substantial physical feature in the cave comprised two lime mortared stone walls [204] and [213] forming a set of opposing walls blocking the cave entrance from the outside. Wall [204], on the north side, stands up to 1.4m high at the north end against the cave wall and 1.05m high at the south end. The east face measures 1.2m long and the west face 1.0m long by 0.9-1.0m wide. The end face steps in to form a vertical slot. Wall [213], on the south side, stands up to 1m high and 1m wide as built against the south cave wall. The east face measures 1.25-1.5m long and the west face measures 1m long. The end face also steps in to form a vertical slot, although some stonework had collapsed out. Both walls have a slight curve, constructed with large stones infilled with small stones and lime mortar. They oppose each other by a distance of 1.35m, providing an entrance passage into the cave. The vertical slots and checks on the wall ends most likely supported a door.
- 6.3.1.2 Construction of the walls had cut through layer (244), a brown sandy soil containing periwinkle and limpet shells. This layer appears to equate to the midden layer context (14) excavated in 2006. The 2006 samples contained fish bone, whelk and scallop shell, and mammal bone. Layer (244) overlay a

³ National Museums Scotland

compact dark soil (245), an occupation horizon in the front of the cave that overlay (231), which continued through the sequence to the back of the cave.

6.3.1.3 After the wall was constructed, a series of layers built up through the entrance passage, each tapering away and terminating on the inside. Context (246) lay below a possible surface (247), which lay below discontinuous layers (248) and (224). There was no cultural material recovered from these deposits, other than some animal bone recovered from (246). One feature was identified in the excavated section between the walls. The cut, context [241], appeared in the excavated section to have truncated the middle of the sequence, through layer (248) and the underlying deposits. It was filled with a homogenous gritty soil containing some small bone fragments (242). The horizontal extent of the pit was unclear, probably due to the 2006 and 2013 excavation in the same location. One possibility is that it related to a structural function associated with the wall.

6.3.1.4 At the top of the sequence, a thin compact surface (222) was noted across the cave interior, forming the last occupation surface before the wall was put out of use. An isolated thick layer of grey clay (223) spread approximately 0.6m x 0.5m was uncovered on the inside of wall [204]. It had formed at the base of the wall over surface (222) and was unique to this part of the cave. Although the use of the deposit is unclear, one possibility is that it formed a structural clay element of the upper wall.

6.3.1.5 Finds associated with the surface of (222) include post-medieval ceramic and clay pipe fragments, which may be related to the final phase of occupation before the walls were buried. While there was no cultural material recovered to relatively date the construction of the walls, it clearly post-dated the early 8th century samples recovered from the lower deposits, context (234) and contexts (108) / (210) in Test Pits 1 and 2. Therefore, the primary period of use of the entrance blocking walls is unclear, given the lack of material cultural related to the layers immediately surrounding it. It is clear however that its construction falls somewhere between the early medieval layers and the post-medieval occupation associated with surface (222), indicating the possibility that the wall could have been built during the medieval or late medieval periods

6.3.2 *Back of the cave*

6.3.2.1 Across the centre of the cave, the deposits became thinner towards the rear (west end of the cave), with context (222) forming the uppermost continuous horizon through most of the sequence. Below this layer, at the back of the cave, context (239) overlay context (231). While this shell and animal bone midden layer (239) also sealed the inhumation burial deposit, recovery of finds may have become mixed with overlying deposit (238). Several finds of interest from the layer include iron pins, hooks and rivets (SF183-4, SF 186/8), a brass button (SF191), a possible ceramic furnace fragment (SF197) and a possible whetstone (SF189). A sheep rib sample from context (239) provided a radiocarbon date of cal AD 1495-1799 (SUERC-70995), which fills in some chronological information between the confirmed 8th century and 19th century use. Finally, one worked flint (SF169) was recovered in the back of the cave from context (240), a layer that equates to context (231).

6.3.3 *Pottery*

6.3.3.1 Given the lack of clear datable material, it is worth mentioning the recovery of several medieval or late medieval pottery sherds recovered during the excavation of Test Pit 1 in 2013. Redware fragments found included a jug handle sherd, SF64 from context (107), and body sherds SF234 (unstratified) and SF152 from context 103. While it appears that both SF234 and SF152 represent displaced material, SF64 derived from the lower context (107). The situation of this layer closely correlates with surface (232) recorded in the 2016 excavation, and provides potential evidence to support that there is a medieval or late medieval sequence within the intermediate layers in the cave.

6.4 **Post-Medieval**

6.4.1 *Surface (222) and hearth [228]*

6.4.1.1 As discussed above, surface (222) was identified as a mostly continuous horizon inside the cave, post-dating the sequence of layers inside and below the entrance blocking walls. Only one feature, a small hearth defined by a rough stone setting [228] was identified within this surface (Figure 12). There were no finds recovered from the hearth or associated deposits, which underlay context (253), a probable late 19th century layer.

6.4.2 *Infill deposit (205)*

6.4.2.1 In the front half of the cave, a deep deposit of large boulders and small subangular clasts within a clean sandy silt (205/217) covered surface (222) and had banked up against the west and east sides of the entrance blocking walls [204] and [213]. There was little artefactual material recovered from this homogenous deposit, which sloped down and terminated towards the inside of the cave. While the mechanism that formed the deposit is perhaps unclear, there was only a small amount of mortared stone found at the base of the layer to indicate wall collapse. This suggests that there was only a partial collapse of the walls as the rubble layer was laid down. The event most likely occurred as a natural collapse of talus material that was later levelled off to enable re-occupation of the cave. However, it is also possible that the material represents a deliberate closure event, with talus material being brought into the cave to put the entrance walls out of use. If so, it suggests that this was done as a deliberate act of control to discourage cave use. It is clear, however, that the event took place within the post-medieval period, given the materials recovered from (222) underneath it and the materials recovered from the late 19th century layers overlying (202).

6.4.3 *Cobbled floor (219)*

6.4.3.1 Below context (218), excavation in the northern alcoves of the cave uncovered a surface of small rounded cobbles set into a compact dark brown loam. The floor [219] (Figure 11) ran up to the cave walls but dissipated towards the middle of the cave, where its edges became less defined with infrequent angular clasts. Material recovered from below the cobbles included a broken bone knife handle (SF87), a fragment of a decorated metal (copper alloy?) sheet (SF88), as well as dairy bowl sherds, clay pipe stems, a c. late 19th century ale bottle base and limpets and periwinkles. To judge by the overlying and underlying deposits, the cobbled floor formed a late 19th century occupation surface of unknown function. It overlay (238), which also contained post-medieval material.

6.4.4 *Late 19th/ early 20th century deposits*

6.4.4.1 Previous excavation in the cave had indicated that, below modern debris, a shallow sequence of deposits in the cave represented late 19th century/Victorian occupation. The remaining material from this period excavated in 2016 was represented by contexts (201), (202), (206), (216), (218), (220) and (253) and contained a variety of glass bottle and ceramic vessel sherds, corroded iron nails and wire, and leather shoes and shoe fragments. Deposit (220) abutted context (218), both of which formed the upper layers of material in the alcoves on the north side of the cave. While (218) overlay the cobbled surface, context (220) overlay the natural sand and bedrock (221) in the northwest alcove. There were no features noted within these deposits, other than wall [104] recorded in 2013 in Test Pit 1, which may have once formed a higher rubble wall utilised to demarcate space and offer protection from the elements during this period of use. It may be related to a possible wall (context 11) briefly mentioned in the 2006 report (Wood 2008).

6.5 **Learnie 2C Test Pit**

6.5.1 *Test Pit*

6.5.1.1 A single test pit measuring 1m x 1m (Figure 13) was excavated during 2016 in Learnie 2C, located immediately to the north of Learnie 2B. Below the modern disturbance, layers containing Victorian ceramics and iron debris (501) and (502) covered possible structural stonework and charcoal-rich ash lenses. The extent of the excavation was not enough to properly evaluate or interpret the underlying deposits. It did, however, identify that there is further archaeological potential in the cave.

Table 1: Radiocarbon Dating Results from Learnie 2B

Lab Code	Test Pit No.	Context No.	Description	Uncal (BP)	Calibrated 1-sigma (68.2%)	Calibrated 2-sigma (95.4%)	Delta ¹³ C%	Delta ¹⁵ N%	C/N ratio
SUERC-70721 (GU42494)	2016 trench	264	Human bone, inhumation: left rib	1508±3	537-603 AD	430-631 AD	-0.00208	12.20%	3.3
SUERC-49921 (GU32431)	T1	108	Animal bone from base of deposit at 110cm deep	1372±32	640-672 AD	604-757 AD	-22.6%	5.8%	3.2
SUERC-49923 (GU32433)	T2	210	Sheep bone from 100cm deep in context	1337±32	651-769 AD	645-767 AD	-20.8%	6.0%	3.2
SUERC-49922 (GU32432)	T2	210	Hazel charcoal at 105cm deep from base of context, transition to underlying Context 211	1299±32	669-764 AD	660-770 AD	-26.7%	-	-
SUERC-70720 (GU42493)	2016 trench	234	Sheep rib from lowest archaeological level (sand below main occupation horizon)	1197±30	775-873 AD	718-941 AD	-21.9%	7.3%	3.2
SUERC-70995 (GU42644)	2016 trench	239	Sheep left rib from midden deposits overlying metalworking horizon and burial	269±33	1524-1793 AD	1495-1799 AD	-21.8%	5.9%	3.2

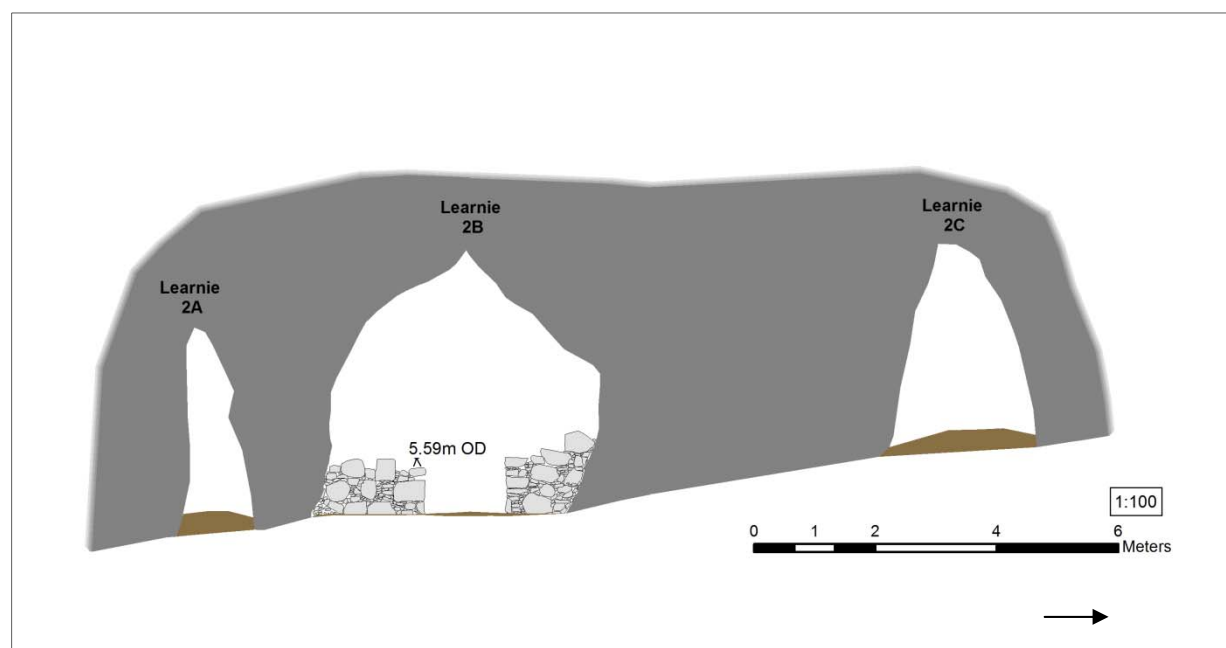


Figure 3: Profile illustration of a section through the Learnie 2A, 2B and 2C group; showing the Learnie 2B wall

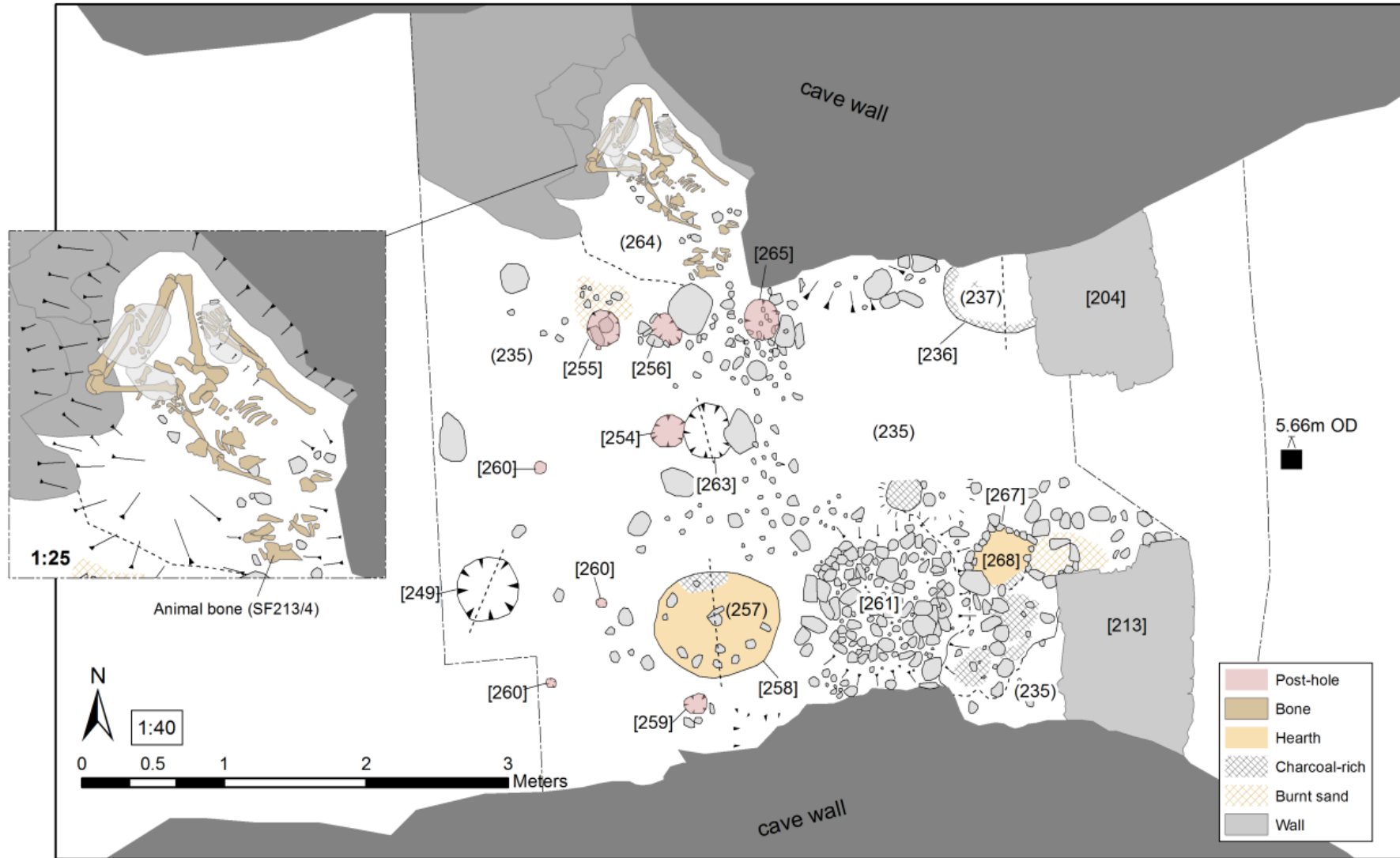


Figure 4: Plan of the metal-working features, post-holes and pits and the inhumation burial in top centre; inset: mid-excitation of the inhumation showing the location of the stone placement over the body

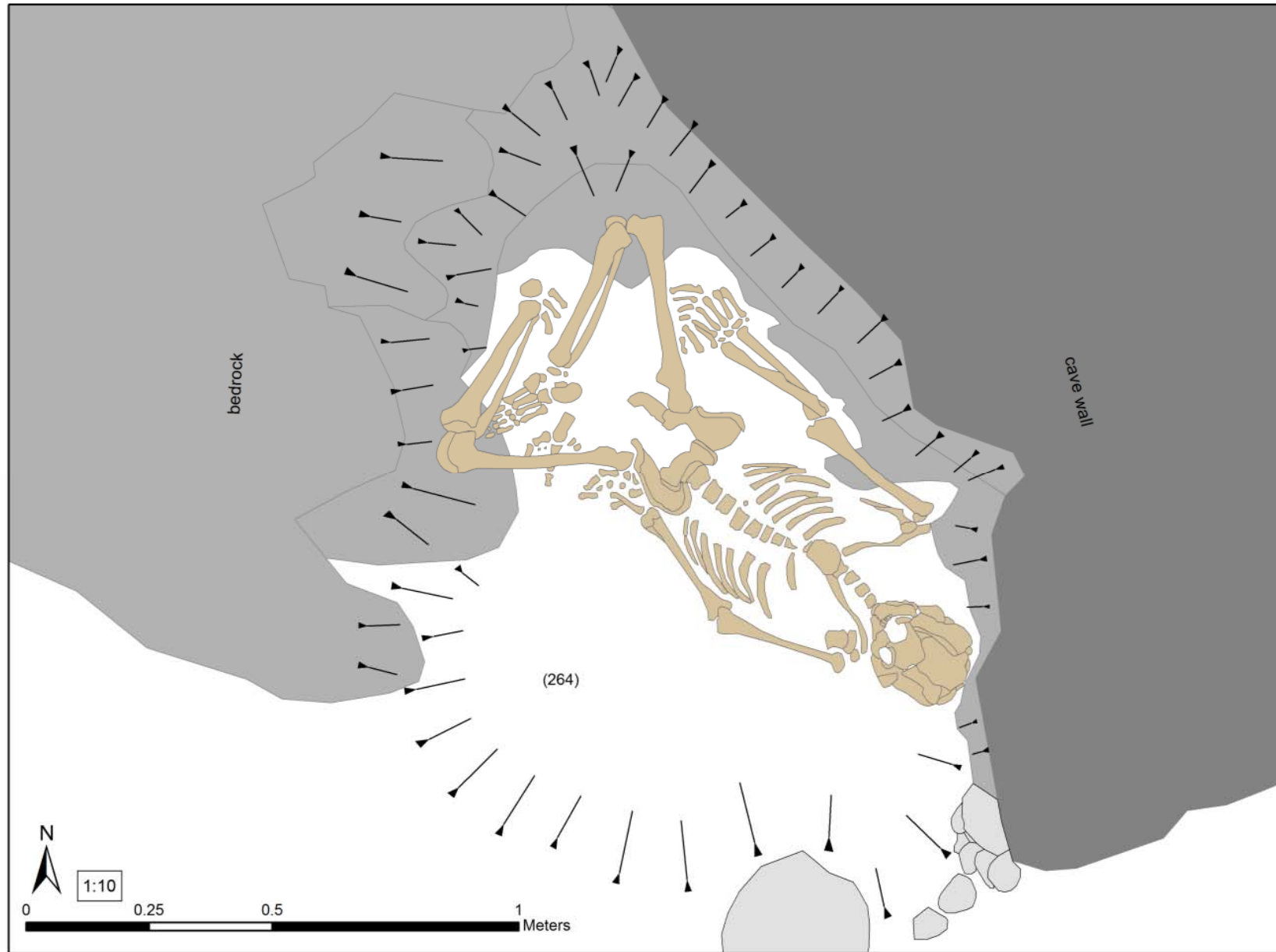


Figure 5: Post-excavation plan of the inhumation burial

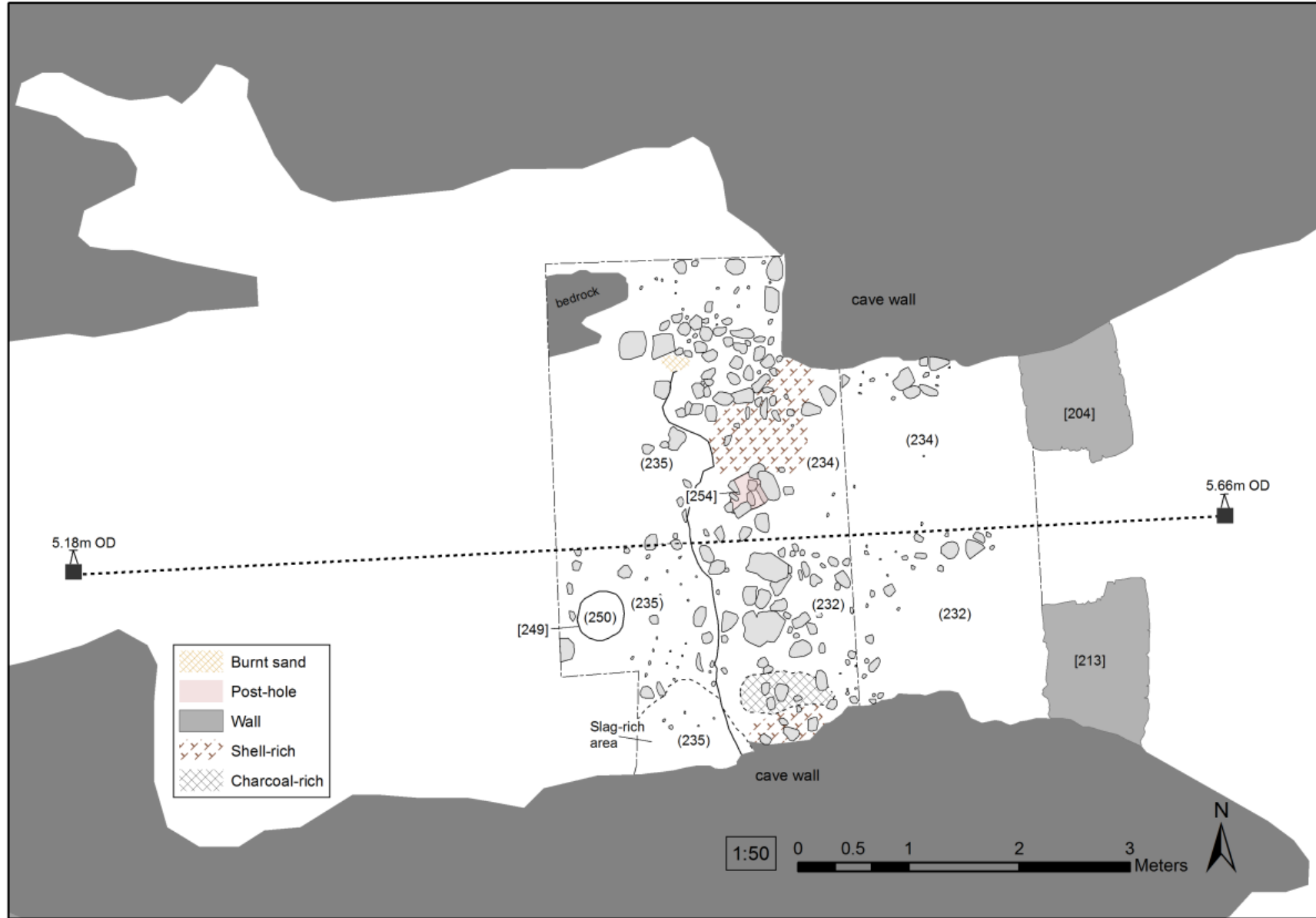


Figure 6: Mid-excavation plan showing the baselines and quadrants excavated, before the identification of the metal-working features and burial

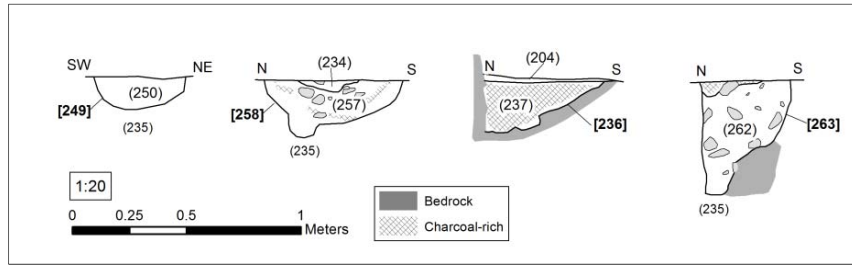


Figure 7: Section drawings of pits [249], [258], [236] and [263]

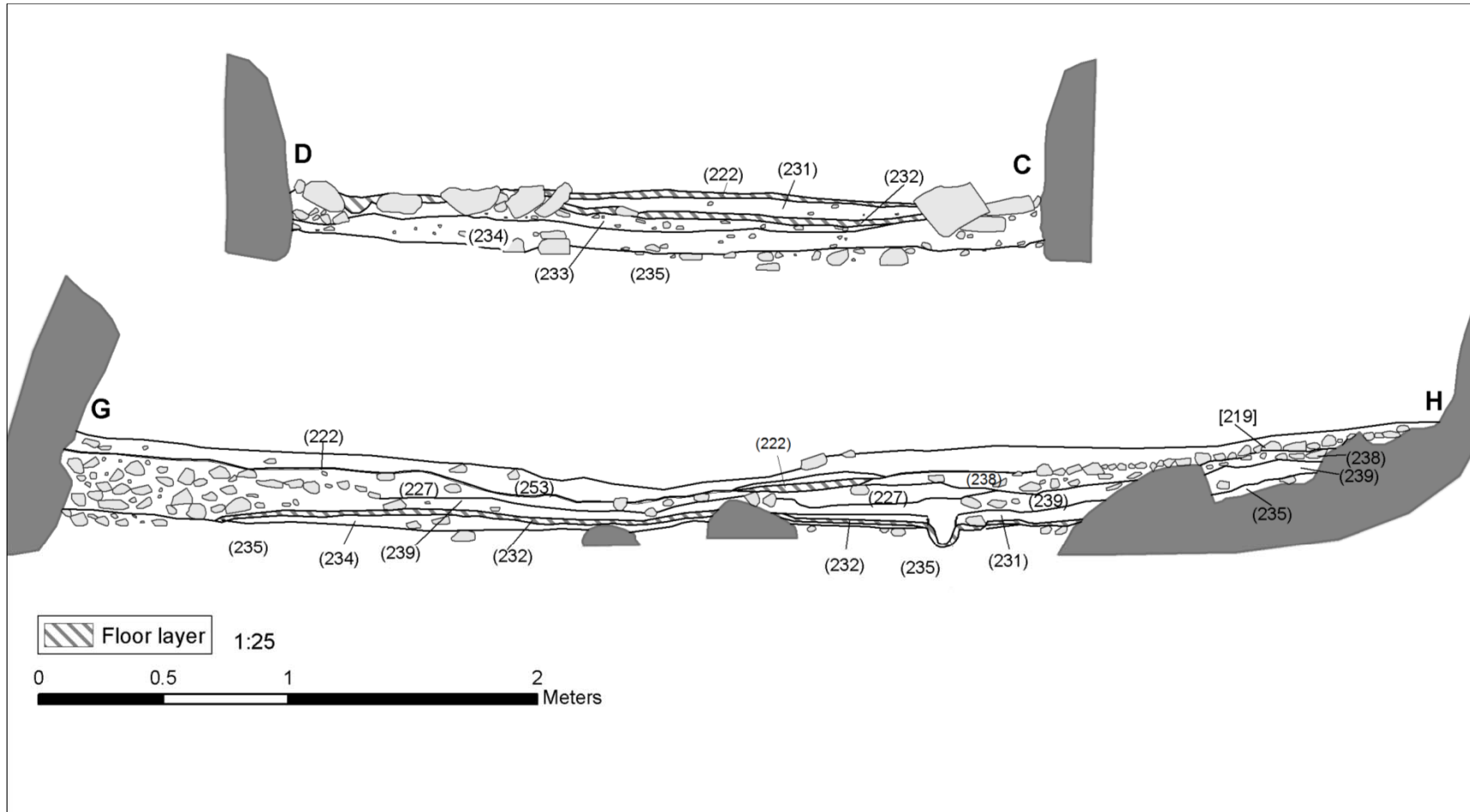


Figure 8: Section drawings D-C and G-H, showing the north-south sequence of archaeological deposits across the cave

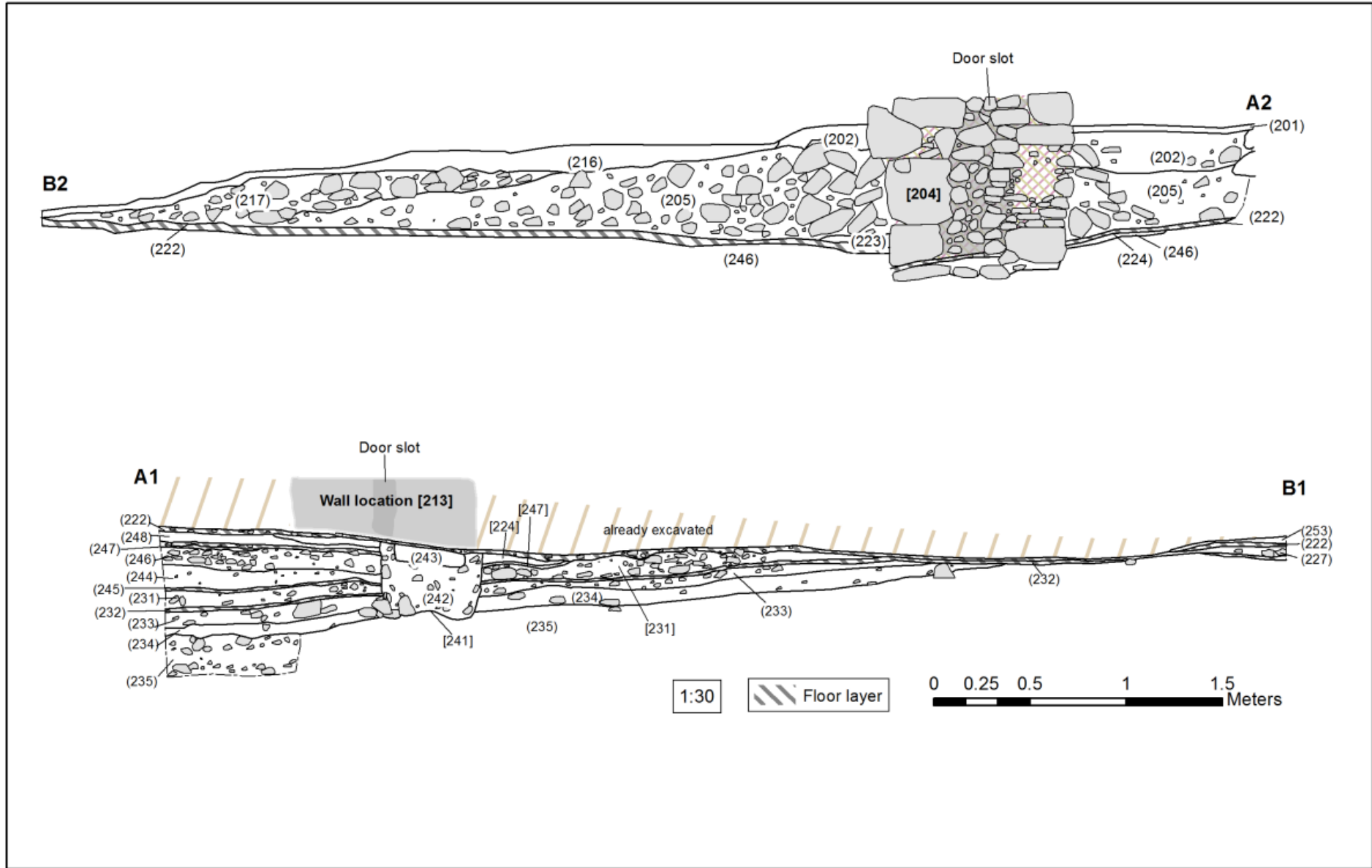


Figure 9: Section drawings B2-A2 and A1-B1, showing the east-west sequence of archaeological deposits across the cave

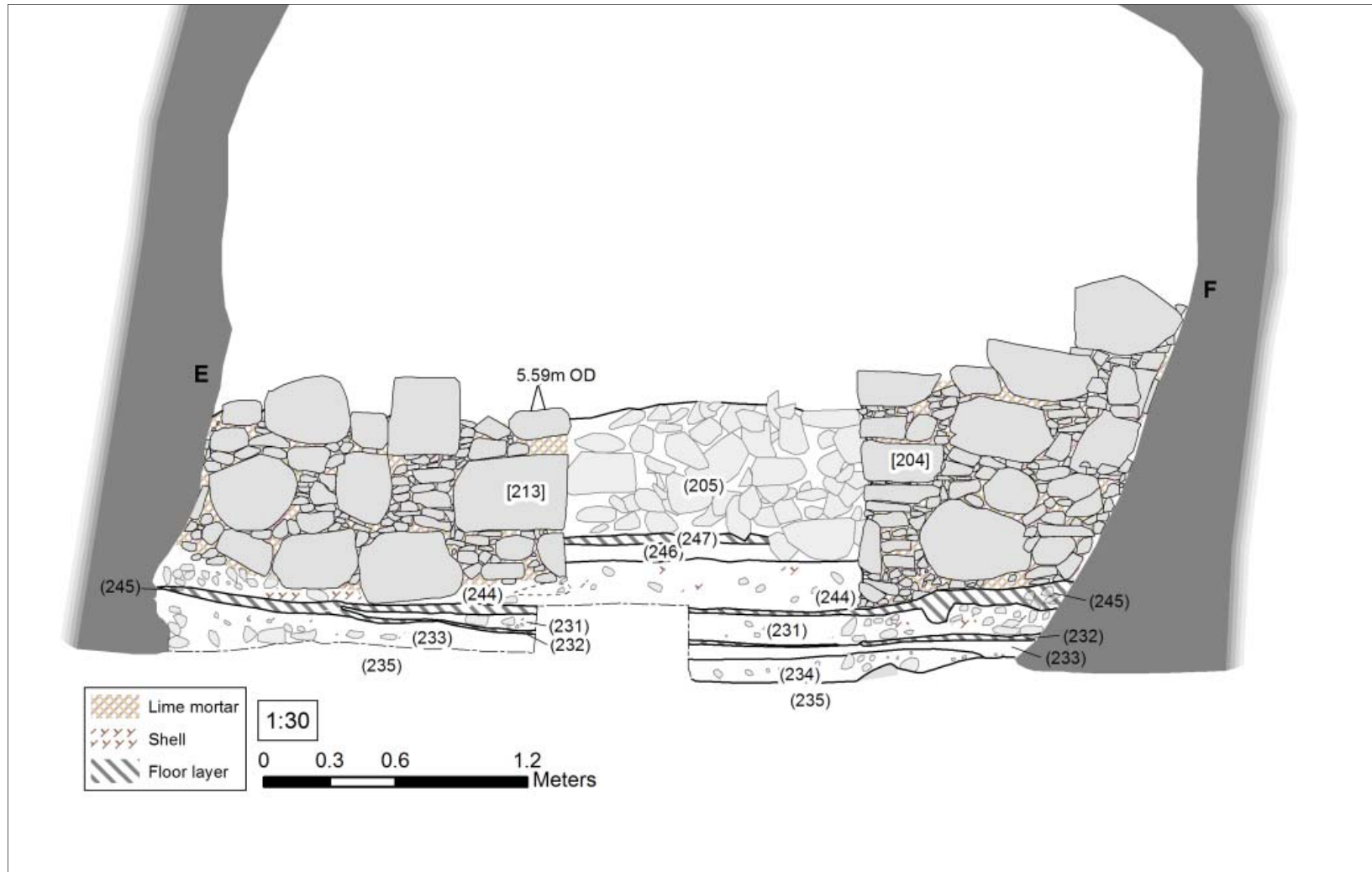


Figure 10: Section drawing E-F, showing the cave entrance walls and the underlying archaeological sequence



Figure 11: Plan of the cobbled floor [219] in the north alcove of the cave

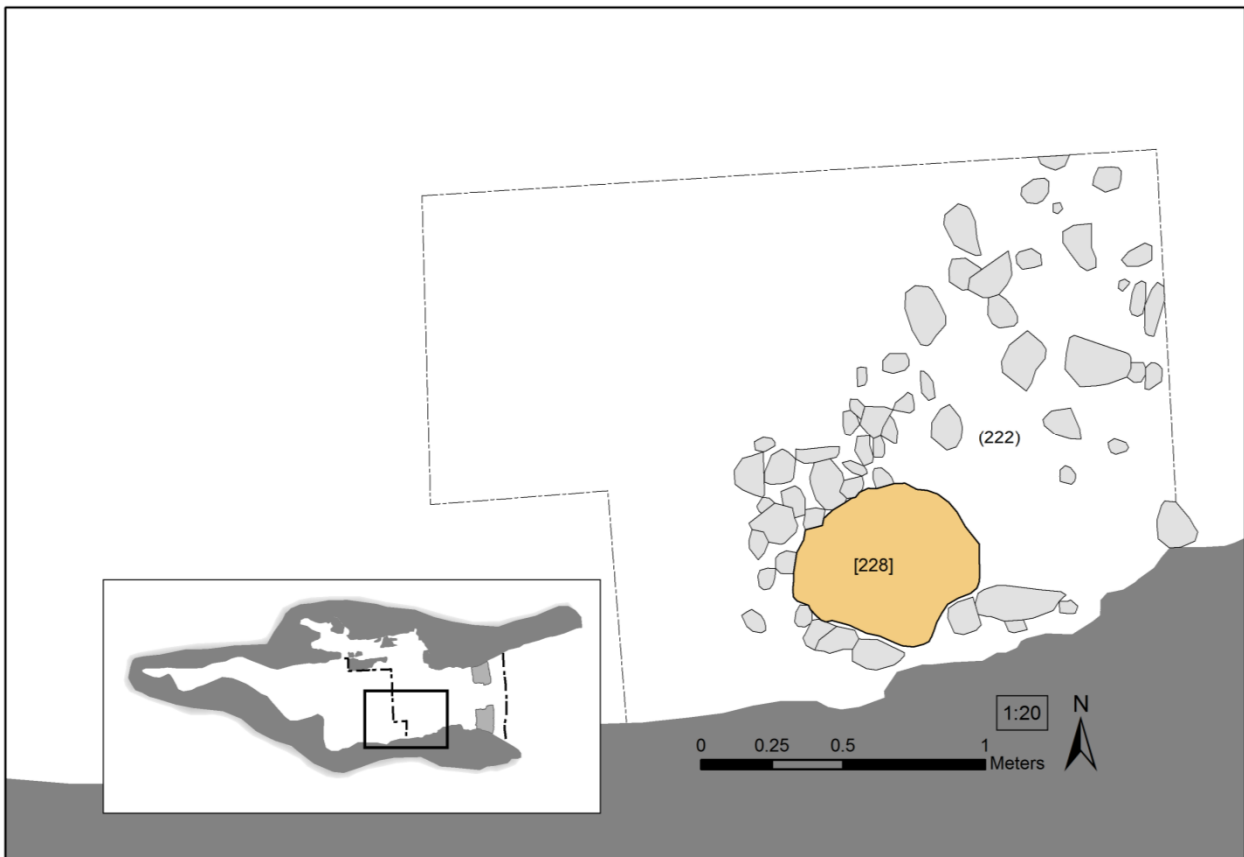


Figure 12: Plan showing the hearth [226] over surface (222)

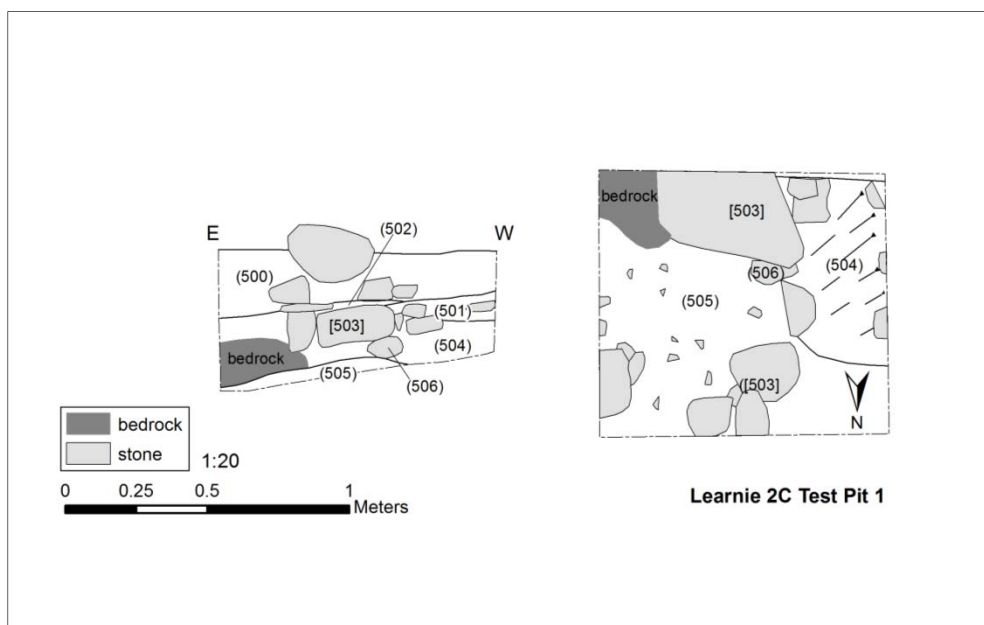


Figure 13: Learnie 2C test pit N-facing section drawing (left) and plan drawing (right)

7 DISCUSSION

7.1 Inhumation burial

- 7.1.1 The inhumation burial was a surprise discovery during the excavation. With no grave cut visible, the extended leg bones appeared through a sand layer immediately after removal of the overlying midden material. The unusual situation of the burial is a clear indication of a deliberate procedure. The cross-legged position of the individual, whose skull displayed the effects of multiple wounds, the placement of large stones over the body and the placement of butchered animal bone over the body, indicates that he was of considerable importance. The purpose of the stone appears to represent a deliberate attempt to hold down the body after death, while the placement of the animal remains could represent an offering. This evidently superstitious act indicates that the selection of the cave location formed an important part of the burial process. Given the early 5th to early 7th centuries date range, throughout which period there were a great many cultural influences and developments in the region, the burial has the potential to represent Pictish, Viking, early Christian or other influencing factors.
- 7.1.2 The burial could be classified as “deviant”, that is, one that has been treated differently than others. Traits often used to classify a burial as deviant, include decapitations, amputation or mutilation (overkill), burials in isolated or unusual places, binding of limbs and stones placed over a body or in the jaw (Farrell 2012). The treatment of bodies seen as different from the norm can be viewed in either a positive or a negative light. Farrell refers to Reynolds (2009), to suggest that placing stones on a grave can be seen as an attempt to render a corpse safe, to prevent the return of the ghost of a criminal or an individual with a grievance against those living (62). The burial act could also have been seen as part of an act of communal responsibility, sacrifice or remembrance. Therefore the classification of the burial should be looked at objectively. As Green says, “what seems to us as violence and extreme cruelty may have been perceived very differently in the past, perhaps being regarded within a perspective of positive and beneficial ritual action (55).”

7.2 Metal-working industry

- 7.2.1 Iron metal-working industry was taking place in the cave. Recovery of furnace base fragments, the tuyère fragment and scattered large and small slag fragments across the horizon provide good evidence for this. The suite of features also indicates that the industry took place around an area of small work surfaces and hearth settings, within a defined work zone in the back of the cave. Although initial information suggests that it was iron smithing taking place, it is hoped that retrieval of micro residues will help to clarify this.
- 7.2.2 The metal-working zone appears to respect the burial site, and while the relationship between the two is unclear, both form basal archaeological deposits in these areas of the cave. While the radiocarbon dating results from the test pit samples and the metal-working horizon show that the results overlap within the early to mid 8th century AD, it is unclear how the animal bone and charcoal samples relate to the metal-working activity. Given the shallow nature of the deposits and mobile condition of the sandy cave environment, mixing of archaeological horizons would have been difficult to avoid. Therefore, further analysis of the metal-working residues, animal bone and environmental material will be necessary before further chronological interpretation is made. It is possible that the metal-working activity predates the early medieval date range associated with the sheep rib from context (234).
- 7.2.3 The occurrence of specialist industries in caves, particularly metal-working, is not unknown in Scottish Iron Age contexts. Fiskavaig rock shelter, Rubh an' Dunain Cave and Leitir Fura Cave on Skye, have provided good evidence for such activity during the Iron Age. There is a growing body of evidence that the unusual venue supplied by a cave – a dark, liminal space – would have held more significance than an open location and would have served to highlight the specialised and possibly elite skill. It will be particularly interesting to see if the other caves in the Learnie group, which have

good Early Medieval dating evidence, also provide evidence for the same or other specialist industries. It is a good possibility that these caves were workshops of the special elite. If so, they have an important story to tell about the transition between the Late Iron Age and Early Medieval periods.

7.3 Medieval activity

- 7.3.1 The fieldwork has shown that there is a sequence of intermediate archaeological horizons present in the front of the cave that overlie the early medieval occupation, and this includes the entrance blocking wall, which falls within the sequence. Above this, a series of later, post-medieval to Victorian layers, overlie the intermediate horizons. Unfortunately very little diagnostic material was recovered from within the intermediate sequence, other than several sherds of medieval/late medieval pottery. This pottery combined with a single radiocarbon date spanning the 16th-18th centuries, begins at least to build a chronology between the 8th/9th centuries and the 18th century. This last dated layer contained iron nails/needles and a hook, finds which may represent small-scale industry or a particular activity taking place within the cave.
- 7.3.2 Interestingly, an animal bone sample from Learnie 3B provided an 11th-12th century date for a neighbouring cave. Furthermore, dates from both Broad Cave and Through and Through Cave have shown that late medieval activity is present inside other caves on the Rosemarkie shoreline. This increases the chances that Learnie 2B was occupied during these periods. Further analysis of the small finds and samples will provide information to better understand these layers.

7.4 Entrance walls

- 7.4.1 The walls built across the entrance of the cave would have been taller than 1m and may have included a composite screen increasing this height, although there was no clear evidence for such a structure. Along with a probable wooden door, the enclosure created by the substantial walls implies that they were built to contain a specialised function within the cave, a function that necessitated seclusion or security. There are multiple explanations for the use, including occupation as a dwelling, shelter, securing animals, storage or gathering. It is interesting that the Learnie 2B walls were put out of use, either intentionally or inadvertently. There are many cave sites with walling across the entrance, such as St Cormac's Cave in the Sound of Jura (Am Baile 2017), Torr Cave on the Galloway Coast and St Ninian's Cave and St Medan's Cave in Wigtownshire.
- 7.4.2 There is substantial evidence that cave sites have been used for early Christian and medieval religious activities, such as monastic retreats, burial sites and chapels. In St Columba's Cave, Knapdale, Argyll, a stone-built altar in the cave and the ruins of a chapel provide visible evidence for Christian worship. In the Polochar Caves at Sand of Udrigle, near Laide in north Scotland, two caves were used for refuge and religious worship. In the larger cave, the Free Church of Scotland held services there in the second half of the 19th century, while the smaller cave was occupied by a widow until she was evicted (Am Baile 2017). The Church Cave on the island of Rona, located to the north of the island of Raasay within the Inner Hebrides, also has a relatively long history for its use for religious services. The cave even includes a small alter stone and stone pews for the congregation (Hardy & Wickham-Jones, 2007).

7.5 Post-medieval occupation

- 7.5.1 The post-medieval material, probably c.19th century in date, recovered from the upper sequence of archaeological deposits has provided evidence for significant occupation in the cave. As well as personal objects, such as brass and bone buttons, a bone knife(?) handle and a small buckle, economic evidence was recovered. This includes sawn horn cores, animal bone, ceramic sherds, cobble tools and small horse(?) shoes. Further analysis of the assemblage will provide a greater understanding of post-medieval activity – which seems to indicate domestic occupation and possibly small-scale industry.

- 7.5.2 The continued appearance of leather shoes and shoe offcuts in these layers suggests that a small scale shoe-making or repair industry was taking place in the caves. This may represent traveller or 'tinker' occupation, and remains consistent with the results from the other caves in the Learnie group as well as Ivy Cave. A number of interesting small finds have also been recovered from the latest layers, such as pen knives, iron implements, coins and other personal objects. Analysis of the small finds and further documentary research into this period is recommended.
- 7.5.3 Cave dwelling was common by travelling people up until the end of the 19th century, with Tinkers Cave near Wick being one good example. Jonathon's Cave at Wemyss was named after the nail maker who occupied the cave, itself an iconic site for Pictish cave carvings.

7.6 Roman coin

- 7.6.1 As part of the data assessment for the 2016 excavation, cataloguing of the 2006 excavation assemblage was undertaken. Within the material, an uncatalogued Roman coin was found. It had not been noted in the 2006 report, which did not contain a list of finds or samples. However the 2006 report did refer to "two farthings of uncertain date, and a 1916 halfpenny (Wood 2008)." None of these coins were found in the 2006 assemblage, although a 1900 penny (SF236) was catalogued. The Roman coin (SF235) has been tentatively identified as a Tetricus I (A.D. 270 to 273). While there is no further information available about the location of the findspot inside Learnie 2B, the presence of it in the cave is intriguing.

8 CONCLUSION

- 8.1 The extensive tradition of archaeological research in Scotland, as elsewhere in the United Kingdom, has more commonly focused on monuments, stratified occupation sites, and humanely modified landscapes, and only in the past two decades has an awareness of natural-place archaeology become salient in intellectual and curatorial approaches to the archaeological record. As is the case with other elements of the natural landscape, the aesthetic and natural-history values of caves are well established and appreciated, but the archaeological properties of caves are often difficult to characterise. Caves and underground spaces have always fascinated humankind and present one of the most enduring natural features in the wider landscape. Caves are not simply convenient cavities, but are "ideologically charged spaces imbued with meaning (Moyes 2012)". As such, caves not only inform us about ancient religion and ritual practice, but also shed light on the social, economic, and political structures of which they are a part.
- 8.2 Recent research has led to a resurgence of interest in caves, in particular the place of these enigmatic sites in the worldviews of later prehistoric communities. The investigation of caves in the past has generally attributed a domestic function, comprising temporary homes and shelter for hunter-gatherers, farmers and pastoralists, reflecting more mobile forms of social and economic organisation. This has generally been based on artefact and ecofacts assemblages recovered from caves, with cave morphology forming a minor factor within analytical models. In line with contemporary settlements elsewhere in the landscape, the discovery of hearths and midden deposits, ceramics and other types of artefact have generally been interpreted as representing 'domestic' signatures.
- 8.3 In reality, prehistoric activity in caves has produced evidence supporting a wide range of site function, including what we might more confidently attribute to 'ritual' purposes, such as burial in caves during the Neolithic, which is in step with changes toward more sedentary societies. While there is less evidence of the use of caves for burial during the Iron Age, a number of excavated sites have demonstrated the continuing significance of caves from this period for the deposition of the dead. Some cave sites from these later periods have also produced evidence for their use as workshops, for storage, and as hideaways.

- 8.4 Generally, human remains recovered from Scottish caves include disarticulated fragments and only rarely are more complete skeletal remains found. Examples of the latter include at least four individuals at MacArthur Cave, Oban, up to seven individuals at High Pasture Cave, Skye, including the inhumation of an adult woman (Birch, 2010) and several young individuals at Sculptor's Cave at Covesea on the Moray Firth (Armit *et al*, 2011). Sculptor's Cave also contained hearths and their associated deposits and animal bones, while a number of crude Pictish symbols were identified carved into the cave walls. This site, difficult of access due to imposing cliffs and tidal fluctuations, produced a wide range of objects dating from the Bronze Age to the Romano-British period. Some of the human bone recovered from this cave, relating to Roman-British use, display evidence for decapitation.
- 8.5 Other Scottish caves have produced human remains, but most derive from old excavations and for which we have no associated radiocarbon dates. For the Early Medieval and Medieval period, a number of human remains have been recovered from caves in Ireland and recently published by Marion Dowd. These include remains from The Catacombs, County Clare (AD 670-890 and AD 775-980); Robber's Den, County Clare (AD 690-935); Dunkerron Cave, County Kerry (AD 895-1025); Plunkett Cave, Kesh, County Sligo (AD 440-670); Dunmore Cave, County Kilkenny (a range of dates covering AD 780-1015); and Cloghermore Cave, County Clare (including a fairly large number of dates on human remains spanning AD 410-980). The remains from the Irish caves generally include disarticulated fragments of bone and teeth and show a remarkable continuity in depositional practices from prehistoric into historic times. Dunmore Cave and Cloghermore Cave have both produced extensive quantities of human bones and assemblages of Viking artefacts. With the exception of one articulated burial, the remains from Cloghermore Cave comprise disarticulated fragments. One of the individuals had died by violent means, possibly by a sword or axe.
- 8.6 Due to the often disturbed character of cave deposits and data from earlier, poorly recorded excavations, it is difficult to attribute other discrete forms of activity during their use, especially during the later periods of prehistory and through into the historic period. Artefacts and features recovered from caves from these periods display a very wide range of types indicating that caves were used for an expanding range of activities. It is now thought that many caves, especially during prehistory and the Early Medieval period, were used for rituals involving the preparation and display of human remains and the structured deposition of material culture, and other forms of organic material. These were clearly performative acts and the recurrent use of caves as the arenas for such performances tells us much about their role in the cosmology of later prehistoric communities.
- 8.7 Although Scotland adopted Christianity as the dominant religion from the 5th century AD onwards, caves continued to be incorporated into religious practices through an association with saints and possible monastic foundations. They were sometimes also used for burial and veneration. However, this marked period in time also heralded a transformation in how caves were perceived and used. For the first time there are clear indications that caves were inhabited for lengthy periods of time, as well as functioning as storage spaces, workshops, and hideouts. In Scotland in particular, there is a wealth of evidence to suggest that caves were used as hermitages by monks, possibly introduced by Irish missionaries. Several caves on the west coast of Scotland, on the Mull of Kintyre and especially on offshore islands such as Arran, have crosses carved into their walls, while St. Columba's Cave also has a rubble-built altar and substantial occupation deposits relating to this period of activity. Some of the Scottish caves, as with those in Ireland, have also produced ecclesiastical metalwork.
- 8.8 The archaeological potential of caves is increasingly being recognised, while the number of caves of archaeological significance is growing. In Scotland, an awareness of this potential is also increasing, developing our knowledge with regard to how caves were used and perceived by communities in the past, from the first human colonisation of the country by hunter-gatherers, through to the 21st century urban dweller. It is important that we do not investigate caves in isolation. Along with other types of underground structures including souterrains, caves should be seen as a part of a much wider cultural and symbolic landscape. On a site-based scale of study, this should at least include a survey of the environs immediately surrounding a cave entrance and in the wider landscape. All too often in

the past, cave excavations have focused on the cave entrances and interior spaces, ignoring the potential for contemporaneous activities at the surface.

- 8.9 The Learnie 2B 2016 fieldwork consisted of a larger-scale excavation of one of the caves - a quite large internal space, which had a well-built breached wall across the entrance complete with door checks. The wall was most likely constructed at some stage during the Late Medieval period. The excavations have revealed excellent evidence for metalworking in the cave, occupation deposits including butchered animal waste, fish bone and shellfish and internal partitions (represented by post and stake-holes) dating to the Early Medieval period or earlier. Learnie 2B also contained an unusual inhumation burial with a butchered animal bone offering. Was the cave selected as a suitable burial site for the individual because he formed part of the narrative of its past use? Or was it considered a sacred place for an important burial, or simply a convenient location for what might be considered a deviant burial?
- 8.10 There is the possibility that the Learnie 2B metal-working industry is related to the inhumation burial in the north alcove. The earliest burials from monastic sites at Whithorn Inchmarnock, the Isle of May, Portmahomack, Govan, and St Andrews Kirkhill are all associated with craft working, domestic and industrial activity, especially metalworking. The man buried in Learnie 2B displayed traits of good health and strong stature, in particular his forearms. Could he have been a metal smith and could his burial have marked the start of iron smithing in Learnie 2B? The burial act for the man certainly displays traits of a deliberate, ritual act.
- 8.11 It should also be considered how Learnie 2B and the overall cave group could relate to the early ecclesiastical site at Rosemarkie. The selection of the cave for metal-working could have been under the control and direction of an authority – and one possibility is that this was a religious centre. If the cave did have early religious connotations, then perhaps it makes later use of the site for worship an even greater possibility. The presence of the later walling indicates that there was a significant use for the site, and a site of worship is not out of the question.

9 RECOMMENDATIONS

- 9.1 Alongside a programme of further fieldwork, a programme of post-excavation analysis of the small finds and animal bone assemblage from Learnie 2B is recommended. This will provide a much more in depth understanding of results and allow for critical analysis of the fieldwork interpretation. In particular, analysis of the metal-working results by Dr Gemma Cruickshanks of National Museums Scotland is highly recommended.
- 9.2 A forensic analysis of the Learnie 2B burial has been undertaken, while facial reconstruction is being prepared by specialists at the University of Dundee. It is recommended that isotope analysis of the human remains be undertaken, providing the potential to discuss the origin of the individual buried in the cave.
- 9.3 Volunteers are currently undertaking flotation processing of the Learnie 2B samples, in order to retrieve all environmental material and artefacts not recovered during excavation, including the smaller-scale metalworking fractions. It is recommended that the remaining test pit samples are processed, followed by specialist identification and analysis of the retrieved material.
- 9.4 An assemblage of small finds and samples has also been recovered from the test pitting fieldwork in 2012-2015. Post-excavation analysis of this material will complete the work on this phase of work and has the potential to provide comparative information for the interpretation of the overall use of the Rosemarkie caves and how they fit into the wider picture.

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Plates 3 and 4: Large cobble placed over the legs of the burial, looking SE (left) and NE (right)



Plate 5: Mid-excavation of the inhumation burial, facing NE; inset: human skull with evident trauma looking ESE



Plate 6: *Post-excavation of the male inhumation burial, facing ESE*



Plate 7: *Suite of features, mid-excavation of context (234) in 3 quadrants of the trench*



Plate 8: *Post-excavation of the (235) horizon features, facing W, entrance walls in front*



Plate 9: *Mid-excavation (232) in the front right and back left quadrants, facing W*

Photo 80



Plate 10: Mid excavation of the north alcove, showing the burial location before discovery



Plate 11: North entrance wall [204], facing WSW



Plate 12: Looking NW over the entrance walls; south wall [213] in front, north wall [204] in back, door slot is visible



Plate 13: Looking E over the passage between wall [204] left and wall [213] right



Plate 14: Pre-excavation of surface (222), facing W



Plate 15: *Mid-excavation of stone infill layer (205), section between the entrance walls*



Plate 16: *Cobbled floor [219], facing NW*



Plate 17: *Mid-excavation of the cave floor, after removal of upper Victorian layers*



Plate 18: *Excavation progress on Day 2, Learnie 2B 2016*



Plate 18: SF88 decorative metal sheet (left) and SF87 bone handle (right)



Plate 19: Iron buckle, SF86



Plate 20: SF233, cu alloy(?) rivet



Plate 21: SF129, bone button

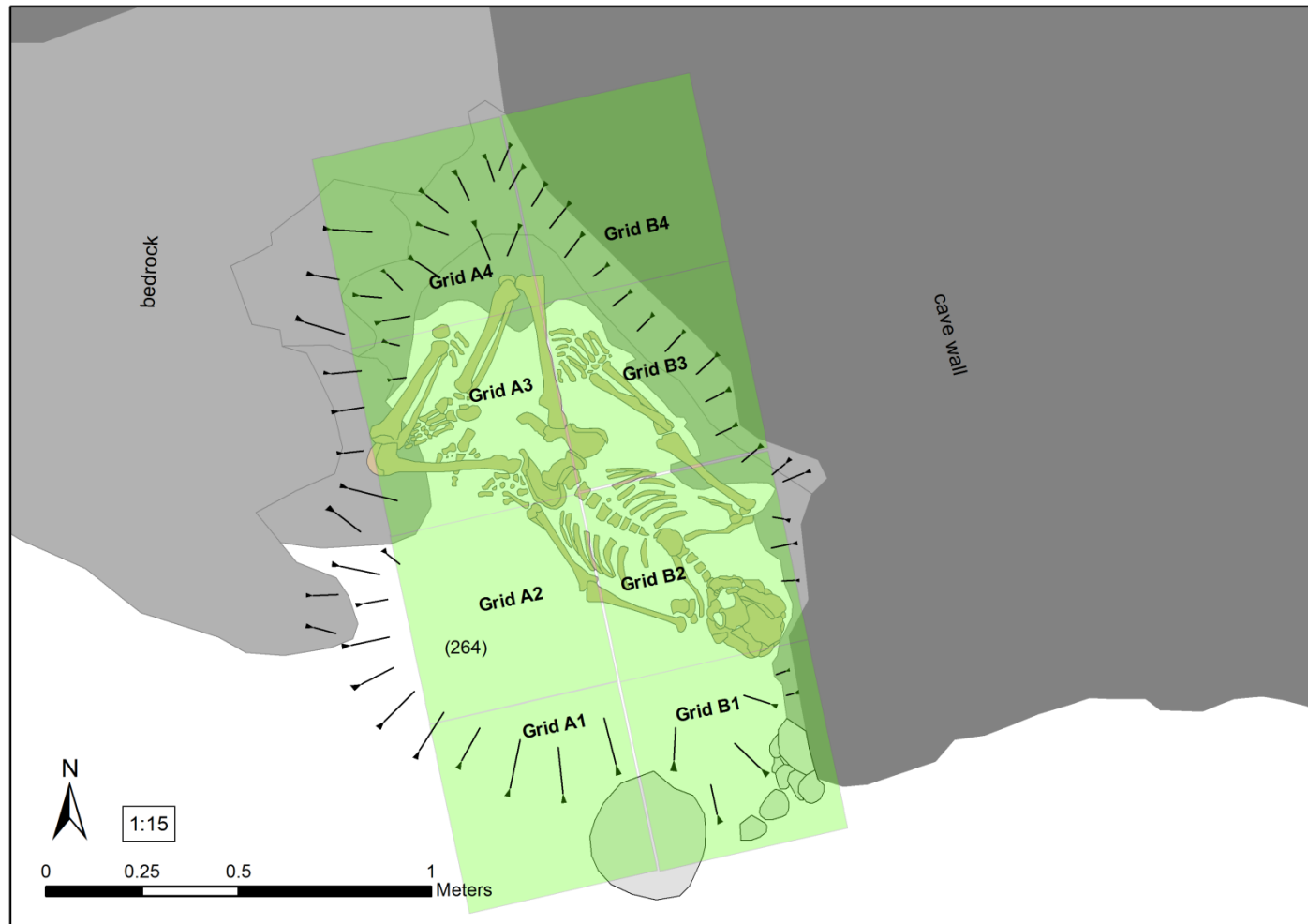


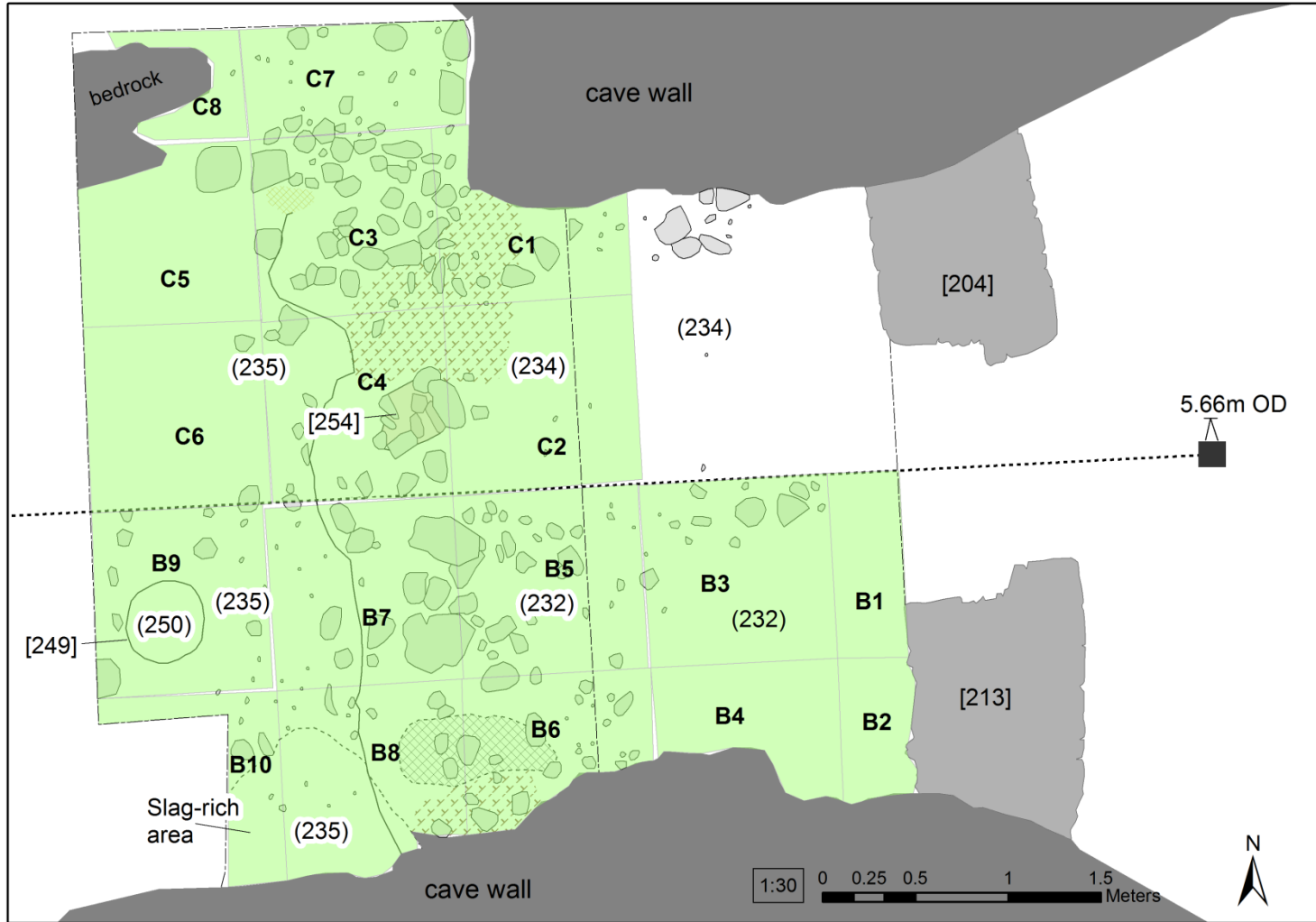
Plate 22: SF84, hammerstone tool



Plate 23: SF235, Roman **coin from Learnie 2B**

Appendix 1 Sample grid plans





Appendix 2 L2B List of Contexts

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
201	L2B	Deposit	Thin layer of loose, dark brown soil with scattered, small, angular stones. Vegetation and some evidence of recent campfire.		202			101	Recent soil layer, modern disturbance
202	L2B	Deposit	Mid brown, silty soil with small to large, subangular stones. Rubble on east side (wall tumble) overlies stony layer similar to 205 but very compact	201	205				Soil layer
204	L2B	Structure	Well-built, mortared stone wall aligned N-S, measures 1.2m long on the outside and 0.9m long on the inside by 1m wide, and stands up to 1.4m high at N end against cave wall and 1.05m high at S end; the outside face curves slightly outward; it opposes wall [213] at a distance of 1.35m, where it forms an entrance into cave; the end face opposing [213] steps in and has a linear vertical slot that formed a door slot	209	244, 245				North wall in cave entrance, part of structure with [213]
205	L2B	Deposit	Pale orange-light brown sandy silt with large boulders and small subangular clasts on the west and east sides of walls [204] and [213]; clean layer, no mortar or artefactual material; has been levelled against wall faces	103, 202	206, 222, 223, 247			217	Same as (105) from Test Pit 1, same as (217); thick layer of natural talus, appears to have been landscaped off against both sides of wall to level off cave floor for re-use, predating late 19th/early 20th century use of the cave; unclear if deposition was initially a natural or man-made event of natural material; could relate to a closure event to stop use of cave; post-dates a post-medieval layer
206	Test Pit 2, L2B	Deposit	Dark brown loose layer containing gravel, charcoal, shells and bone. Context layer 40 cm in depth and contains lens of ash and charcoal	205	212, 210				Probably several thin layers not distinguishable in the test pit, consisting of at least (244) and (246)
209	Test Pit 2, L2B	Deposit	Comprises medium stone slabs and some small subangular cobbles. Overlies 204.	201	204				Soil layer

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
210	Test Pit 2, L2B	Deposit	Very loose, gritty sand. Dark grey, like 206. Charcoal, bone and antler found. Cow(?) femur found in NW corner at depth of 70cm	206, 212	211				Probably several thin layers not distinguishable in the test pit, probably consisting of (231) and (232)
211	Test Pit 2, L2B	Deposit	Coarse sand with no finds. Bedrock at base, 125 cm depth	210	235			235	Basal layer in Test Pit 2, probably (235) or natural sand
212	Test Pit 2, L2B	Deposit	Lens of silty ash and charcoal within 206	206	210			245	Lens of material below wall [204] in Test Pit 2
213	L2B	Structure	Double-faced mortared stone wall on south side of cave, forms part of a wall related to [204]; measures 1.25-1.5m long on the outside and 1m long on the inside by 1m wide, and stands up to 1m high as built against cave wall; constructed with large stones infilled with small stones and lime mortar ; the outside face is slightly curving outward; it opposes wall [204] at a distance of 1.35m, where it forms an entrance into cave; the end face opposing [204] steps in and has a linear vertical slot that formed a door slot, although some stonework has collapsed out	202, 205	244				South wall in cave entrance, part of structure with [204]
214	L2B	Deposit	Mixed layers and spoil from excavation						Test Pit 2 backfill
215	L2B	Deposit	Collapse of rubble and wall 204 with thin mortar leaching on the surface. Consists of hard packed broken stones in silty soil of a mid brown colour. Very similar to 205.	202	205				Compacted surface over (205)
216	L2B	Deposit	Mid brown sandy silt with small stones. The upper deposit inside the wall sitting over 217.	201	217, 205			202	Same as (103) from Test Pit 1, contains post-medieval material
217	L2B	Deposit	Orange-brown soil with large stones over small subangular stones on west of wall 204 and 209 and overlying 206. No mortar in this layer, very clean ~ possibly a backfill layer behind wall? Appears to stretch beyond trench to below 201 topsoil	216				205	Same as (105) from Test Pit 1, same as (205); thick infill layer to landscape off level of cave floor to the top of walls [204] and [213]; post-medieval (late 19th c?) closure event to stop use of cave

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
218	L2B	Deposit	Dark brown clayey soil overlying 219.		219			253	Post-medieval soil layer
219	L2B	Deposit/ Structure	Partly cobbled deposit under 218 at the edges of cave. It is more disturbed away from the edges and stones become more angular. Some finds including a broken bone knife handle as well as limpets and winkles embedded in the layer.	218	238, 239, 227				Cobbled floor in north alcove of cave; post-medieval/Victorian?
220	L2B	Deposit	Upper deposit of NW corner alcove. Dark brown clay like deposit with rounded beach pebbles and small to medium angular stones. Inclusions of shells (oyster, scallops, winkles and whelks), some iron nails, animal bones and a ceramic ball.	253	221				Upper deposit of NW corner alcove, late-19th-20th century layer
221	L2B	Deposit	Coarse beach sand under 220 in the NW corner alcove.	220					Natural sand over bedrock
222	L2B	Deposit	Compact floor horizon at the interface between contexts 205 and 206. Midden-rich firm sediment, dark brown to black, with mixed shells, bone and small stones throughout, some beach pebbles. Outside and east of wall entrance the deposit slopes down into the entrance but does not continue beyond.	223, 205, 253	224, 229, 248				Upper floor horizon, post-medieval , 19th century?; predates infill (205) event and could have been a surface during a time that the walls were in use; post-dates construction of the walls
223	L2B	Deposit	0.6 x 0.8m spread of a thick deposit of compact grey clay located against the N wall of cave and W inner wall of entrance. Slopes down to the S and overlies floor surface 222. Underlies 205. May have formed a clay bonded structure - related to wall	205	222, 225				Collapsed clay layer? Same as (106 from Test Pit 1?; possibly formed part of structural remains related to the wall? But post-dating formation of floor (222)
224	L2B	Deposit	Light to mid brown sandy silt under 222. Possibly windblown and appears to peter out towards the S wall.	222	246				Wind blown layer
225	L2B	Deposit	Cache of fish bones and scales under 205 and 223 and abutting the inside of wall 204.	205, 223	222				Midden material

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
226	L2B	Deposit	Ashy spread comprising several discrete patches of grey or orange or black and grey colour.	205					Scattered lenses of ash along the edge of the south side of the cave - possibly residual material from 2006 excavation
227	L2B	Deposit	Mid brown silty sediment containing numerous stones (beach cobbles and angular stones)	222	232, 239				Post-medieval layer, predates floor (222), post-dates (239)
228	L2B	Structure	Roughly circular spread of ash (bright orange and white/grey) contained within a rough stone setting. A hearth contemporary with context 222.	253	222				Hearth, built against the S wall of the cave, post-medieval
229	L2B	Deposit	Coarse sand containing beach cobbles, some angular stones, charcoal, fish bone, animal bone and shellfish under context 222.	222	232			231	Levelling deposit in the cave
230	L2B	Deposit	Bright orange and white/grey ash within 228.	253	222			228	Part of hearth (228)
231	L2B	Deposit	Coarse to fine sand with shell and some bone and small rounded pebbles, under 222 and over 232 and up to 7cm thick.	222, 239, 245	232			210, 229, 240	Same as (229) and (210) from Test Pit 2; medieval occupation?
232	L2B	Deposit	Compact thin occupation horizon comprising a dark brown-black silt with charcoal-rich lenses and buff-grey ash patches; under 231 and over 233 and up to 2cm thick.	227, 231, 239	233				Occupation horizon, probably same as the base of (107) from Test Pit 1 and probably upper part of (210) from Test Pit 2; floor horizon that pre-dates post-medieval period - medieval layer?
233	L2B	Deposit	Pale yellow-brown coarse sand containing animal bone, shell and bones. Under 232 and over 234 and up to 5cm thick.	232	234			210	(210) from Test Pit 2 roughly equates to this; occupation layer that pre-dates floor (232) and contains some spread of slag - could be upper part of sandy occupation horizon, so contemporary with (234)
234	L2B	Deposit	Mid brown gritty sand with charcoal rich lenses and shellfish. Under 233 and over 235 and up to 5cm thick.	233	235			108, 211	Sandy occupation layer, upper deposit of (235); (108) from Test Pit 1 - circa 8th/7th c AD - roughly equates to this
235	L2B	Deposit	Pale orange-yellow-brown coarse sand containing beach cobbles/pebbles, bone fragments, limpet and periwinkle shells and fish bone.	234	bedrock, clean sand				Natural sand layer with occupation material, particularly a spread of ferrous residues associated with metal-working

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
236	L2B	Cut	Amorphous shaped feature against N wall of cave and under wall 204. It cuts through 235.	237	235		237		Pit - hearth pit?
237	L2B	Fill	Fill of pit 236, a mid brown to buff sandy sediment containing numerous charcoal fragments and pieces of shell.	233	236	236			Charcoal rich fill of pit 236
238	L2B	Deposit	Dark brown earth under cobbles containing bone and a few pieces of pottery and clay pipe and 2 steel pins. Under cobbles 219.	219	239				Post-medieval layer in back of cave
239	L2B	Deposit	Dark brown soil under 238 containing shells and bone	227, 238	235				Midden layer, post-medieval c.16th/17th/18th c
240	L2B	Deposit	Mid brown loose sandy gravel with small angular stones, lots of shells (limpet and winkle) and some animal bone. Also contained 1 boar tusk and 1 piece of flint. Contemporary with/part of 231 and over 232.	222	232			231	Medieval occupation?
241	L2B	Cut	U-shaped, steep sided cut for a pit with a U-shaped base; below surface (222.); cuts through all layers below (222), possibly related to post-medieval occupation for a structure?	222	248				Post-medieval structural slot?
242	L2B	Fill	Homogenous mid to dark brown gritty sediment containing angular and rounded stone fragments and small bones.	243, 222	241	241			Fill of cut [241]
243	L2B	Deposit	Light to mid brown fine silt with virtually no stone forming a compact wedge of material up to 80mm deep at threshold of entrance.	222	242				Trampled soil layer
244	L2B	Deposit	Mid to dark brown gritty sediment containing small stone chips, some shell and fine roots.	204, 213	245				Equates to lower part of (206) from Test Pit 2; layer through which walls [204] and [213] were constructed; same as (14) midden from 2006 excavation

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
245	L2B	Deposit	Thin black occupation lens under 244, possibly trampled. Contains fine shell fragments and some ash. Above 232 and the same as 212.	244	231				Occupation surface, predates construction of walls, medieval?
246	L2B	Deposit	Wedge of deposit containing numerous angular and rounded stones, some shell and bone. Mid brown silty matrix with lots of roots. Thin lens of silt which could be ash within 246	247	244			206	Same as (206) from Test Pit 2; post-medieval layer
247	L2B	Deposit	Thin dark brown trampled surface containing some shell and small stone fragments. Sits above 246.	205	246				Post-medieval layer
248	L2B	Deposit	Thin occupation/trampled lens comprising mid brown silty matrix containing stone chips and fine roots. Sits over 247 and under 222 and 224.	222, 224	247				Post-medieval layer
249	L2B	Cut	Cut of circular pit with angled sides cut into sand 235 and filled by 250. 0.38m NW-SE by 0.28m and 0.18m deep. Under 232.	232	234, 235		250		Pit - hearth pit?
250	L2B	Fill	Fill of pit 249, a mid to dark brown silty sediment containing small rounded stone fragments, charcoal pieces and thin lenses of ash.	232	249	249			Fill of pit 249
251	L2B	Cut	Possible stake and hole within midden below and outside E face of wall.	232	234		252		Possible stake hole for screen at entrance
252	L2B	Fill	Charred wood and charcoal-rich soil within cut 251	232	251	251			Fill of stake hole 251
253	L2B	Deposit	Dark brown loam at back of cave overlying 222. Probably same as 102/101.	202	222			218, 102	Victorian layer
254	L2B	Cut	Post hole cut through 235 with upright packing stones, 0.3m diameter and 0.23m deep. Under and filled by 234.	234	235		234		Post hole
255	L2B	Cut	Post hole cut through 235 with post pad stone in base, 0.22m diameter and 0.24m deep. Filled by 234.	234	235		234		Post hole

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
256	L2B	Cut	Post/stake hole cut through 235 with 2 small packing stones, 0.22m diameter and 0.24m deep. Fill by 234.	234	235		234		Post hole
257	L2B	Fill	Mid brown gritty sand with charcoal rich lenses and shellfish	233	258	258			Fill of 258
258	L2B	Cut	Suboval pit cut through 235, 0.7m E-W by 0.6m.	257	235		258		Pit
259	L2B	Cut	Small pit cut through 235, 0.15m diameter and 0.14m deep. Filled by 234.	234	235		234		Stake/post hole
260	L2B	Cut	Small stakeholes through 235, 0.05m to 0.07m diameter	234	235				Stake holes
261	L2B	Deposit	Area of cobbling below 234 inside of S wall. Comprises small to medium cobbles, 0.8m N-S by 0.9m.	234	235				Cobbled surface against inside of S wall, contemporary with metal-working activity
262	L2B	Fill	Dark brown soily sand with charcoal and shell	234	263	263			Fill of 263
263	L2B	Cut	Suboval pit cut into 235, 0.35m deep.	234	235		262		Pit
264	L2B	Deposit	Mostly clean sand same as 235 but damper and slightly darker. Contains some animal deposits and contains the human inhumation.	239	235				Deposit covering inhumation
265	L2B	Cut	Cut of post hole, steep sided with a rounded bottom, 0.3m diameter and 0.18m deep.	234	235		266		Post hole
266	L2B	Fill	Fill of post hole 265, a mid brown gritty sediment with small stones, shells and charcoal.	234	265	265			Fill of post hole 265
267	L2B	Structure	Square shaped hearth 0.4m diameter at the base of 234 comprising beach pebbles.	268	235		268		Forge hearth/re-heating hearth
268	L2B	Fill	Fill of hearth 267 containing charcoal and ashy rich sediment with some charcoal pieces.	234	267	267			Fill of hearth 267
500	L2C	Deposit	Upper deposit/top surface		501, 502				Recent soil layer, modern disturbance

Context No.	Area or Trench	Type	Description	Under	Over	Fill of	Filled by	Same as	Interpretation
501	L2C	Deposit	Mid to dark brown silty sand with large angular stones, a few beach pebbles and some ash. Contains bones, 19th and 20th century ceramics and metal.	500					Occupation layer, Victorian and later
502	L2C	Deposit	Layer of yellowish ash on top of stone on south side of test pit. Test pit approximately 4m from cave entrance on left hand side looking into cave.	500	503				Hearth spread
503	L2C	Deposit	Large stone alignment in situ with clay bonding. Appears to be part of in situ wall running south which abuts the N facing cave wall.	502	504				Basal remains of wall or other structural remains
504	L2C	Deposit	Compacted layers of ash lenses appear to be rising up towards south, north facing cave wall. The ash layers may have been raked up towards the N-facing cave wall. There is a probably sequence of orange-yellow and black charcoal rich lenses suggesting a dump or hearth.	503, 501	505				Possible hearth or dump of burnt material
505	L2C	Deposit	Small angular stone and gravel layer within soily sand matrix. May be sealed by 504. Underlying 503 and 506.	503, 506					Natural or archaeological layer at the base of the wall
506	L2C	Deposit	Stone cobbles which may form lower course of wall or may be part of earlier hearth setting below 503. It may form part of a hearth setting encircling the ash layer 504. It may have later been used as the lower course of stone in the wall 503.	504	505				Stone setting for hearth or wall base

Appendix 3 L2B Small Finds Register

Find No.	Context No.	Material	Description	Initials	Date
53	108, test pit 1	Bone	Animal bone from 110 cm deep	-	2013
54	210, test pit 2	Bone and antler	Sheep bone + worked antler(?) from basal layer	-	2013
61	105, test pit 1	Metal	Iron nail	-	2013
62	105, test pit 1	Pottery	Misc pot sherds, Victorian?	-	2013
64	107, test pit 1	Pottery	Medieval pot sherds x3 with one jug handle attachment	-	2013
67	103, test pit 1	Pottery	Misc pottery sherds, post-medieval	-	2013
68	103, test pit 1	Clay	Part of clay pipe bowl	-	2013
70	103, test pit 1	Leather	Leather shoe fragments	-	2013
72	103, test pit 1	Stone	Possible pebble tools x3	-	2013
73	206, test pit 2	Metal	Ferrous residue (slag) from deposit	-	2013
76	202, test pit 2	Stone	Two possible small cobble tools	-	2013
79a	201, test pit 2	Glass	Small glass vessel sherd	-	2013
79b	201, test pit 2	Pottery	One Victorian pot sherd	-	2013
79c	201, test pit 2	Metal	One rifle cartridge	-	2013
83	203, test pit 2	Clay	Piece of clay pipe bowl	-	2013
84	202	Stone	Hammer stone with peck marks on both ends	RJ	3.9.16
85	214	Stone	3 possible cobbles possibly worked? found in soil from backfill	RJ	3.9.16
86	214	Metal	Small iron? Buckle	RJ	3.9.16
87	219	Bone	Broken bone (knife) handle	RJ	3.9.16
88	219	Metal	Decorative broken copper? Piece	RJ	4.9.16
89	214	Metal	2 pieces of horse shoes	RJ	4.9.16
90	219	Pottery	Various broken sherds of pottery, dairy bowl, porcelain vessel sherds, post-medieval	RJ	4.9.16
91	219	Leather	2 parts of a child's shoe	RJ	4.9.16
92	219	Horn	Sawn horn, possibly sheep	RJ	4.9.16
93	219	Clay	Piece of clay pipe stem	RJ	4.9.16
94	219	Glass	Base of glass bottle, mid 19th century?	RJ	4.9.16
97	205	Bone	2 pieces of cut bone	RJ	4.9.16
98	205	Glass	Small piece of dark glass, burnt	RJ	4.9.16
99	205	Stone	Possible hammerstone or sharpener	RJ	4.9.16
101	206	Clay	Piece of clay pipe stem	RJ	4.9.16

Find No.	Context No.	Material	Description	Initials	Date
103	205	Stone	Definite worked cobble, mortar?	RJ	4.9.16
104	206	Stone	3 possible hammerstones	RJ	4.9.16
105	205	Stone	Possible hammerstone from inside of wall	RJ	4.9.16
108	206	Bone	Broken bone point from midden in centre of entrance through wall	SB	5.9.16
109	103	Bone	Worked bone, possible knife? handle	RJ	6.9.16
110	103	Clay	Clay pipe, part of stem	RJ	6.9.16
111	103	Wood	Pieces of wood	RJ	6.9.16
112	103	Glass	2 pieces of glass	RJ	6.9.16
115	103	Metal	Miscellaneous iron fragments, including 1 small horseshoe	RJ	6.9.16
116	103	Leather	Leather shoe fragments including child's shoe	RJ	6.9.16
118	222	Metal	Miscellaneous iron fragments	RJ	6.9.16
119	222	Clay	Part of clay pipe stem	RJ	6.9.16
121	222	-	Vitrified material	RJ	6.9.16
122	222	Wood	Burnt and partially burnt wood pieces	RJ	6.9.16
123	103	Stone	Possible stone tools x2	RJ	6.9.16
125	103	Ceramic	5 pieces of clay pipe stem	RJ	6.9.16
127	103	Leather	Leather shoe fragments	RJ	6.9.16
128	103	Metal	Miscellaneous metal fragments including a bullet and large nail/stake	RJ	6.9.16
129	103	Antler?	Antler/bone? Button	RJ	6.9.16
132	102	Ceramic	Part of clay pipe bowl	RJ	6.9.16
133	102	Ceramic	Ceramic ball from lemonade bottle, Victorian	RJ	6.9.16
135	102	Ceramic	Various sherds of pottery, Victorian?	RJ	6.9.16
136	102	Glass	Small glass sherds from multiple vessels, Victorian or later	RJ	6.9.16
137	102	Metal	1x sheet of iron? Burnt	RJ	6.9.16
138	102	Metal	Miscellaneous iron fragments, nails, wire, safety pin	RJ	6.9.16
140	102	Metal	Miscellaneous metal fragments, 20th Century	RJ	6.9.16
141	102	Glass	Glass, Victorian or later	RJ	6.9.16
142	261	Slag	Slag	RJ	12.9.16
143	102	Wood	Burnt wood	RJ	6.9.16
146	222	Antler	Antler tip, worked?	RJ	8.9.16
147	222	Wood	Burnt wood pieces	RJ	8.9.16
149	222	Ceramic	2x Victorian pot sherd	RJ	8.9.16
150	103	Metal	miscellaneous iron wire fragments and nails	RJ	8.9.16
152	103	Ceramic	1 piece of medieval pottery, with glaze	RJ	8.9.16
153	103	Stone	Possible stone tool x1	RJ	8.9.16
154	103	Ceramic	Various ceramic pieces, Victorian	RJ	8.9.16
155	103	Clay	Part of bowl & part of stem of clay pipe(s)	RJ	8.9.16
157	103	Leather	Leather shoe fragments	RJ	8.9.16
158	103	Glass	1 piece of glass, scalloped impression, same as 224	RJ	8.9.16

Find No.	Context No.	Material	Description	Initials	Date
163	unstratified	Ceramic	2 pieces of clay pipe stem	RJ	8.9.16
167	233	Slag/ furnace	Slag & ceramic (including tuyere) pieces attached to furnace wall	RJ	8.9.16
169	240	Flint	Small piece of worked flint	RJ	9.9.16
172	206	Glass	Small fragment of vitrified blue glassy material	RJ	9.9.16
173	233	Stone	3 Possible stone tools, hammerstone & polisher?	RJ	9.9.16
174	206	Stone	2 stone tools?	RJ	9.9.16
179	202	Metal	Iron nail	RJ	9.9.16
183	239	Metal	1 iron nail and 1 iron needle?	SB	9.9.16
184	239	Metal	Curved iron needle/hook?	SJG	9.9.16
185	239	Stone	Smooth pebble	SJG	9.9.16
186	239	Metal	Long iron pin	SJG	9.9.16
187	239	Metal	3 iron nails	SJG	9.9.16
188	239	Metal	1 iron nail rivet	SJG	9.9.16
189	239	Stone	Possible whetstone	SJG	9.9.16
190	239	Ceramic	2 glazed sherds of post-medieval pottery	SJG	9.9.16
191	239	Metal	Brass button	SJG	9.9.16
193	501	Metal	Miscellaneous iron nails/wire from Learnie 2C	SJG	10.9.16
194	501	Ceramic	Pot sherds, post-medieval from Learnie 2C	SJG	10.9.16
195	501	Metal	Brass ring object from Learnie 2C	SJG	10.9.16
196	501	Glass	4 pieces of window glass from Learnie 2C	SJG	10.9.16
197	239	Ceramic	Ceramic part of furnace with hole	SJG	10.9.16
198	237	Metal	Iron handle fragment? Unknown date	SJG	10.9.16
199	234	Slag	Metalworking residue	SJG	10.9.16
201	240	Slag	Vitrified material, slag?	SJG	10.9.16
202	240	Stone	2 stones	SJG	10.9.16
203	501	Ceramic	Dairy bowl sherd from Learnie 2C	SJG	10.9.16
204	501	Ceramic	Glazed pottery sherd, Victorian?, from Learnie 2C	SJG	10.9.16
205	501	Metal	Metal wire from Learnie 2C	SJG	10.9.16
207	235	Slag	Metalworking residue/slag	SJG	10.9.16
208	504	Vitrified material	Possible metalworking residue from Learnie 2C	SB	10.9.16
209	264	Bone	Mammal bone overlying inhumation, may have been mixed with fish bone	MP	11.9.16
210	264	Bone	Inhuned remains	MP	11.9.16
211	264	Stone	Possible pebble tool, whetstone?	MP	11.9.16
212	264	Vitrified matter	Possible vitrified concretion in sand	MP	11.9.16
213	264	Bone	Mammal bone from grave fill	SB	12.9.16
214	264	Bone	Mammal bone from grave fill	SB	12.9.16
215	233	Slag	5 x Fe slag	SB	12.9.16
217	102	Ceramic	2 pieces of Victorian? pottery	SJG	13.9.16

Find No.	Context No.	Material	Description	Initials	Date
218	264	Stone	23kg stone recovered from between legs of burial	SJG	13.9.16
219	261	Stone	Possible hammer stone	SJG	12.9.16
220	219	Metal	Rifle cartridge	RJ	4.9.16
221	unstratified	Leather	1x child's shoe	-	-
222	218	Iron	Miscellaneous iron, one possible tool and one nail	-	4.9.16
223	220	Iron	Two large iron nails/stakes	-	4.9.16
224	220	Glass	Clear glass vessel sherds, probably Victorian. One has a scalloped design	-	4.9.16
225	220	Ceramic	One ceramic ball from a Victorian lemonade bottle	-	4.9.16
226	220	Ceramic	One sherd of stoneware jug base	-	4.9.16
227	218	Ceramic	One large stoneware jar sherd and miscellaneous stoneware and white glazed Victorian pot	-	4.9.16
228	218	Leather	One small leather shoe fragment	-	4.9.16
229	218	Glass	Miscellaneous glass bottle sherds, one small bottle base, Victorian	-	4.9.16
230	218	Clay	Ball of clay	-	4.9.16
231	234	-	Vitrified surface	-	10.9.16
232	234	-	Vitrified surface	-	11.9.16
233	102	Metal	1 x Cu alloy/bronze rivet	-	6.9.16
234	test pit 1	Ceramic	1 sherd of glazed medieval? Pot	-	2013
235	-	Metal	Roman coin, Tetricus I (A.D. 270 to 273)	SG	2006
236	-	Metal	1900 penny	SG	2006
237	3	Metal	Misc Fe objects, including large iron stake/nail, wires, key; 1 x possible Cu alloy sheet fragment from unknown object	SG	2006
238	3	Leather	2 x small leather shoes (child)	SG	2006
239	3	Ceramic	3 x fragments of clay pipe stem	SG	2006
240	3	Ceramic	Misc late 19th c. small pot sherds	SG	2006
241	3	Stone	Possible small stone tool - whetstone?	SG	2006
242	16	Leather	Misc shoe fragments, probably adult shoes	SG	2006
243	16	Metal	Misc Fe sheet fragments from unknown objects	SG	2006
244	16	Ceramic	1 x fragment clay pipe stem	SG	2006
245	16	Ceramic	2 x small ceramic sherds - c. late 19th c/Victorian	SG	2006
246	10	Ceramic	Misc small pot sherds, probably Victorian	SG	2006
247	10	Ceramic	1 x clay pipe stem	SG	2006
248	10	Metal	1 x Fe nail	SG	2006
249	5	Leather	1 x small fragment of shoe leather	SG	2006
250	6	Metal	1 x Cu alloy small rivet	SG	2006
251	10	Leather	1 x small shoe (adult?) fragment	SG	2006

Appendix 4 L2B Samples Register

Sample No.	Context No.	Location	Volume L/g	Description	Initials	Date
12	108	Test Pit 1	-	Charcoal sample @ 105 cm deep	SJG	2013
13	210/211	Test Pit 2	-	Charcoal sample @ 105 cm deep	SJG	2013
16	107	Test Pit 1	-	Charcoal sample @ 100 cm deep	SJG	2013
17	108	Test Pit 1	-	Charcoal sample @ 90 cm deep	SJG	2013
18	106	Test Pit 1	700g	Sample of clay-ash layer	SJG	2013
19	107	Test Pit 1	220g	Sample of ash and charcoal layer	SJG	2013
20	210	Test Pit 2	-	Charcoal sample @ 100 cm deep	SJG	2013
21	206	Test Pit 2	-	Charcoal sample from context	SJG	2013
22	206	Test Pit 2	90g	Sample of ash & burnt turf	SJG	2013
23	206	Test Pit 2	40g	Charcoal sample from context	SJG	2013
24	204	-	-	Mortar from wall	RJ	4.9.16
25	225	-	-	Fish scales & bone in cache between wall and clay, below 205 and behind wall 204	RJ	9.9.16
26	222	-	-	Bulk sample	RJ	9.9.16
27	240	-	-	Bulk sample	RJ	9.9.16
28	232	-	-	Bulk sample	RJ	9.9.16
29	239	-	-	Bulk sample from upper part of 239	RJ	9.9.16
30	213	-	-	Bulk sample from outside south wall	RJ	9.9.16
31	239	-	-	Bulk sample from lower part of 239	RJ	9.9.16
32	239	-	-	Animal bones	SJG	9.9.16
33	240	-	-	Floor, bones & shells	SJG	9.9.16
34	239	-	-	Fish bones	SJG	9.9.16
35	239	-	-	Charcoal	SJG	9.9.16
36	250	-	-	Sediment with ash & charcoal from Pit 249	SJG	9.9.16
37	251	-	-	Charred wooden stake within cut 251	SJG	9.9.16
38	501	-	-	Bones, mostly rodent	SJG	9.9.16
39	242	-	-	Shell & fish bone, dark organic matter	SJG	9.9.16
40	501	-	-	Horn	SJG	9.9.16
41	501	-	-	2 animal bones	SJG	9.9.16
42	234	-	-	Animal bones	SJG	9.9.16
43	234	-	-	Fish bones	SJG	9.9.16
44	234	grid C2	0.25 L	Sample for magnetic residue	SJG	9.9.16
45	234	grid C4	0.25 L	Sample for magnetic residue	SJG	9.9.16
46	234	grid C3	0.25 L	Sample for magnetic residue	SJG	9.9.16
47	234	grid C1	0.25 L	Sample for magnetic residue	SJG	9.9.16
48	235	grid B9	0.25 L	Sample for magnetic residue	SJG	9.9.16
49	235	grid B7	0.25 L	Sample for magnetic residue	SJG	9.9.16
50	235	grid B8	0.25 L	Sample for magnetic residue	SJG	9.9.16
51	239	-	-	Animal bones	SJG	9.9.16
52	234	grid B5	0.25 L	Sample for magnetic residue	SJG	9.9.16
53	234	grid B6	0.25 L	Sample for magnetic residue	SJG	9.9.16
54	239	-	-	Charcoal	SJG	9.9.16

Sample No.	Context No.	Location	Volume L/g	Description	Initials	Date
56	234	-	-	Animal & fish bones	SJG	9.9.16
57	240	-	-	Animal bone and fish bone	SJG	9.9.16
58	501	-	-	Animal bones	SJG	9.9.16
59	206	-	-	Animal bones	SJG	9.9.16
60	233	-	-	Animal bones	SJG	9.9.16
61	235	-	-	Animal bones	SJG	9.9.16
62	234	-	-	Animal bones	SJG	9.9.16
63	246	-	-	2 x Animal bones	SJG	9.9.16
64	245	-	-	2 x Animal bones	SJG	9.9.16
65	234	quad D	-	Sieved sand/floor	SJG	9.9.16
66	234	quad C	-	Sieved sand/floor	SJG	9.9.16
67	234	grid B2	0.25 Lt	Sample for magnetic residue	MP	9.9.16
68	234	grid B4	0.25 Lt	Sample for magnetic residue	MP	9.9.16
69	234	grid B3	0.25 Lt	Sample for magnetic residue	MP	9.9.16
70	235	grid B10	0.25 Lt	Sample for magnetic residue	MP	9.9.16
71	235	grid B9	0.25 Lt	Sample for magnetic residue	MP	9.9.16
72	235	grid B7	0.25 Lt	Sample for magnetic residue	MP	9.9.16
73	235	quad D	-	Sand floor with slag	SJG	9.9.16
74	234	quad C	-	Sand floor	SJG	9.9.16
75	234	quad C	-	Sand floor	SJG	9.9.16
76	235	quad D	-	Sand floor, some slag	SJG	9.9.16
77	234	grid B1	-	Sand floor	SJG	9.9.16
78	235	quad D	-	Charcoal sample with slag deposit	SB	9.9.16
79	235	grid B8	-	Sand floor, magnetic residue	SJG	9.9.16
80	235	grid B5	-	Sand floor, magnetic residue	SJG	9.9.16
81	235	grid B6	-	Sand floor, magnetic residue	SJG	9.9.16
82	235	grid C7	-	Sand floor, magnetic residue	SJG	9.9.16
84	234	-	-	Animal bones	SJG	9.9.16
85	234	-	-	Burnt bone	SJG	9.9.16
86	234	-	-	Charcoal	SJG	9.9.16
87	234	-	-	Blackened plant material	SJG	9.9.16
88	237	-	2 bags	Charcoal-rich fill of pit feature	SB	9.9.16
89	257	-	-	Fill of pit feature with charcoal	SB	9.9.16
90	237	-	-	Charcoal lumps from pit - metalworking?	SB	9.9.16
91	262	-	-	Charcoal-rich fill in cut feature 263	SB	9.9.16
92	235	quad B, B3	-	Sand floor (metalworking control sample)	SB	9.9.16
93	235	quad B, B4	-	Sand floor (metalworking control sample)	SB	9.9.16
94	233	-	-	Animal & fish & burnt bone	SB	9.9.16
95	242	-	-	Dark organic fill of cut 241	SB	9.9.16
96	220	-	-	Assorted shells	SJG	4.9.16
96	268	-	-	Sample from hearth 267	SB	9.9.16
97	205	-	-	5 x animal bones	SJG	9.9.16
98	206	-	-	Animal & fish bones	SJG	9.9.16

Sample No.	Context No.	Location	Volume L/g	Description	Initials	Date
99	103	-	-	Bones	SJG	9.9.16
100	138,139	-	-	Bones	SJG	9.9.16
101	233	-	-	Animal & fish bones	SJG	9.9.16
102	233	-	-	2 pieces of bone	SJG	9.9.16
103	103	-	-	Bones, various	SJG	9.9.16
104	205	-	-	Bone from inside of wall	SJG	9.9.16
105	102	-	-	Bone, various	SJG	9.9.16
106	222	-	-	Bone, various animals and fish	SJG	9.9.16
107	202	-	-	Various animal & fish bones	SJG	9.9.16
108	206	-	-	Various animal & fish bones	SJG	9.9.16
109	102	-	-	Various animal & fish bones	SJG	9.9.16
110	240	-	-	Fish and animal bone	SJG	9.9.16
111	239	-	-	Shellfish	SJG	9.9.16
112	206	-	-	Fish & animal bones	SJG	9.9.16
113	239	-	-	Fish & animal bones	SJG	9.9.16
114	103	-	-	Bone, several different animals, some fish bones	SJG	9.9.16
115	222	-	-	Bones, various animals & fish	SJG	9.9.16
116	206	-	-	Periwinkle shells	SJG	9.9.16
117		-	-	Basal sediment under pelvis	SJG	9.9.16
118	106	Test pit 1	-	Learnie 2B 2013 test pit 1	SJG	9.9.16
119	220	-	-	Animal bone and fish bone	SJG	9.9.16
120	218	-	-	Animal bone	SJG	9.9.16
121	105	Test pit 1	-	Animal bone	SJG	2013
122	206	Test pit 2	-	Animal bone, including cow (?) femur	SJG	2013
123	103	Test pit 1	-	Animal bone	SJG	2013
124	203	Test pit 2	-	Animal bone	SJG	2013
125	261	-	-	One animal bone sherd	SJG	9.9.16
126	242	-	-	Fish bone and small mammal bones	REJ	8.9.16
127	222	-	-	Possible burnt mammal bone	REJ	8.9.16
128	202	Test pit 2	-	Animal bone from deposit	SJG	2013
129	108	Test pit 1	-	Animal bone from basal layer	SJG	2013
130	107	Test pit 1	-	Animal bone at 90cm deep	SJG	2013
131	105	Test pit 1	-	Animal bone from deposit	SJG	2013
132	242	-	-	Small pieces of burnt wood and charcoal	SJG	8.9.16
133	205	-	-	Various pieces of charcoal and hazelnut shell	SJG	4.9.16
134	233	-	-	Charcoal from below north wall at entrance	SJG	7.9.16
135	233	-	-	Charcoal, burnt wood and bone	REJ	9.9.16
136	234	-	-	Charcoal	REJ	10.9.16
137	103	-	-	Shells from deposit	REJ	2013
138	105	-	-	Shells from deposit	REJ	2013
139	108	-	-	Shells from basal layer	REJ	2013
140	103	-	-	Crab shell fragments	REJ	2013
141	202	-	-	Shells from deposit	REJ	2013

Sample No.	Context No.	Location	Volume L/g	Description	Initials	Date
142	206	-	-	Assorted shells from context	REJ	2013
143	206	-	-	Burnt wood/charcoal	REJ	2016
144	3	2006 trench	-	Misc shell fragments, mostly limpet	SG	2006
145	3	2006 trench	-	Misc mammal bone, including sawn horn core	SG	2006
146	16	2006 trench	-	Misc shell fragments, mostly limpet	SG	2006
147	16	2006 trench	-	Misc mammal bone, including fragment of a horn core	SG	2006
148	14	2006 trench	-	Mammal bones, including sheep/goat? jawbone from midden layer	SG	2006
149	14	2006 trench	-	Small bag of shells from midden layer (scallop, whelk)	SG	2006
150	14	2006 trench	-	Small bag of fish bones from midden layer	SG	2006
151	14	2006 trench	-	4 x small charcoal fragments	SG	2006
152	10	2006 trench	-	Small bag mammal bone	SG	2006
153	10	2006 trench	-	Small bag fish bone	SG	2006
154	10	2006 trench	-	Small bag misc shells	SG	2006
155	5	2006 trench	-	Small bag of misc mammal bones	SG	2006
156	5	2006 trench	-	Small bag misc shells, mostly limpet	SG	2006
157	6	2006 trench	-	Small bag of winkles	SG	2006
Human Remains Samples						
LB1	264	A2-B2	-	Front left ribs	SB	9.9.16
LB2	264	B2-B3	-	Front right ribs	SB	9.9.16
LB3	264	B2	-	Sternum (degraded)	SB	9.9.16
LB4	264	B2	-	Sternum with imbedded tooth underneath	SB	9.9.16
LB5	264	B2	-	Found N/W of right clavicle - tooth fragments x 2	SB	9.9.16
LB6	264	B2	-	Left clavicle	SB	9.9.16
LB7	264	B2	-	Right clavicle	SB	9.9.16
LB8	264	B3	-	Right lower forearm	SB	9.9.16
LB9	264	B2-B3	-	Right humerus (upper arm)	SB	9.9.16
LB10	264	B3	-	Right hand and wrist	SB	9.9.16
LB11	264	B3-A3	-	Right femur and left femur	SB	9.9.16
LB12	264	A3	-	Left lower leg	SB	9.9.16
LB13	264	A3	-	Left foot and ankle (most toe bones recovered)	SB	9.9.16
LB14	264	A3-A4	-	Lower right leg	SB	9.9.16
LB15	264	A3	-	Right foot and ankle	SB	9.9.16
LB16	264	B2	-	Left humerus	SB	9.9.16
LB17	264	A2	-	Left lower forearm	SB	9.9.16
LB18	264	A3	-	Left hand and wrist	SB	9.9.16

Sample No.	Context No.	Location	Volume L/g	Description	Initials	Date
LB19	264	A3	-	Left pelvis joint	SB	9.9.16
LB20	264	A3-B3	-	Right pelvis joint	SB	9.9.16
LB21	264	A3	-	Base of spine	SB	9.9.16
LB22	264	B2	-	Spinal column	SB	9.9.16
LB23	264	B2	-	Right shoulder blade	SB	9.9.16
LB24	264	B2	-	Left shoulder blade	SB	9.9.16
LB25	264	B2	-	2 x loose bones, upper spine	SB	9.9.16
LB26	264	B2	-	Skull and some vertebrae	SB	9.9.16
LB27	264	A3	-	Possible coprolite	SB	9.9.16

Appendix 5 L2B16 List of Photographs

Photo No.	Direction Facing	Context No.	Description	Initials	Date
1	WNW	-	Day 1 working shot	MP	03/09/2016
2	W	-	Day 1 working shot	MP	03/09/2016
3	W	-	Day 1 working shot	MP	03/09/2016
4	NW	204	Looking over N wall 204	MP	03/09/2016
5	W	-	Day 1 working shot	MP	03/09/2016
6	W	-	Day 1 working shot	MP	03/09/2016
7	W	-	Day 1 working shot	MP	03/09/2016
8	NW	-	Day 1 working shot	MP	03/09/2016
9	NW	213	Looking over S wall 213	MP	03/09/2016
10	NW	213	Looking over S wall 213	MP	03/09/2016
11	SW	-	Day 1 working shot	MP	03/09/2016
12	NNE	215	Day 1 working shot of 215	MP	03/09/2016
13	N	204, 215	Day 1 working shot of 204 and 215	MP	03/09/2016
14	NE	204, 215, 217	Working shot of 215 and 204 showing top of 217	MP	03/09/2016
15	NE	204, 215, 217	Working shot of 215 and 204 showing top of 217	MP	03/09/2016
16	SW	-	Day 2 working shot	RJ	04/09/2016
17	SW	-	Day 2 working shot	RJ	04/09/2016
18	SW	-	Day 2 working shot	RJ	04/09/2016
19	SW	-	Day 2 working shot	RJ	04/09/2016
20	NW	-	Day 2 working shot	RJ	04/09/2016
21	NW	-	Day 2 working shot	RJ	04/09/2016
22	NW	-	Day 2 working shot	RJ	04/09/2016
23	WNW	204, 213	Entrance gap between wall 213 and wall 204	MP	04/09/2016
24	WNW	204, 213	Entrance gap between wall 213 and wall 204	MP	04/09/2016
25	W	-	Entrance	MP	04/09/2016
26	W	-	Entrance	MP	04/09/2016
27	SSW	-	Entrance	MP	04/09/2016
28	SSW	-	Entrance	MP	04/09/2016
29	SSW	-	Entrance	MP	04/09/2016
30	SSW	-	Entrance	MP	04/09/2016
31	NW	204, 213	Walls 213 and 204	MP	04/09/2016
32	NW	204, 213	Walls 213 and 204	MP	04/09/2016
33	NW	204, 213	Walls 213 and 204	MP	04/09/2016
34	W	205	E-facing section through 205	MP	04/09/2016
35	W	205	E-facing section through 205	MP	04/09/2016
36	SSW	-	S wall	MP	04/09/2016
37	W	-	S wall	MP	04/09/2016
38	W	204	N wall	MP	04/09/2016
39	W	204	N wall	MP	04/09/2016
40	S	206	Top of 206 showing previous sondage	MP	04/09/2016
41	SSW	206	Top of 206 showing previous sondage	MP	04/09/2016
42	SW	206	Top of 206 showing previous sondage	MP	04/09/2016

Photo No.	Direction Facing	Context No.	Description	Initials	Date
43	SW	205	Mid-excavation of inside walls showing the top of 205	MP	04/09/2016
44	SW	205	Mid-excavation of inside walls showing the top of 205	MP	04/09/2016
45	SW	205	Mid-excavation of inside walls showing the top of 205	MP	04/09/2016
46	SE	-	Day 2 working shot	MP	04/09/2016
47	E	205	Looking at top of 205	SB	04/09/2016
48	E	-	Workers at entrance	SB	04/09/2016
49	SSW	-	Steve surveying	RJ	04/09/2016
50	SSW	-	Steve surveying	RJ	04/09/2016
51	SSW	-	Steve surveying	RJ	04/09/2016
52	NNE	223	Grey clay deposit 223 before removal	SB	05/09/2016
53	W	-	Day 4 working shot	RJ	06/09/2016
54	W	-	Day 4 working shot	RJ	06/09/2016
55	W	224	Mini sondage starting through 224	RJ	06/09/2016
56	W	224	Mini sondage starting through 224	RJ	06/09/2016
57	W	216	Close up view of 216	RJ	06/09/2016
58	W	-	Day 4 working shot	RJ	06/09/2016
59	SSW	2C	Heat-affected stones on top surface pre-excavation	RJ	06/09/2016
60	S	2C	Heat-affected stones on top surface pre-excavation	RJ	06/09/2016
61	SSW	2C	Heat-affected stones on top surface pre-excavation	RJ	06/09/2016
62	S	2C	Heat-affected stones on top surface pre-excavation	RJ	06/09/2016
63	W	213, 222	View across 222	REJ	06/09/2016
64	W	213, 222	View across 222	REJ	06/09/2016
65	W	213, 222	View across 222	REJ	06/09/2016
66	W	213, 222	View across 222	REJ	06/09/2016
67	E	213, 222	View across 222	REJ	06/09/2016
68	E	213, 222	View across 222	REJ	06/09/2016
69	N	213, 222	View of cobbles continuing towards alcove	REJ	06/09/2016
70	NNW	213, 222	View of cobbles continuing towards alcove	REJ	06/09/2016
71	WNW	213, 222	View of cobbles continuing towards alcove	REJ	06/09/2016
72	W	213, 222	Burnt area at S wall within 222	RJ	06/09/2016
73	W	213, 222	Burnt area at S wall within 222	RJ	06/09/2016
74	N	226	Pre-excavation of hearth 226	SB	07/09/2016
75	N	226	Pre-excavation of hearth 226	SB	07/09/2016
76	N	226	Pre-excavation of hearth 226 with flash	SB	07/09/2016
77	NW	227	In situ sheep jaw in 227	SW	07/09/2016
78	SW	226	NE-facing section through hearth 226	SB	07/09/2016
79	SW	226	NE-facing section through hearth 226	SB	07/09/2016
80	E	-	General shot looking into cave	SB	07/09/2016
81	E	-	General shot looking into cave	SB	07/09/2016
82	ESE	-	General shot looking into cave	SB	07/09/2016

Photo No.	Direction Facing	Context No.	Description	Initials	Date
83	E	-	E-facing section of sondage	SB	07/09/2016
84	E	-	E-facing section of sondage	SB	07/09/2016
85	NW	222	Cobbled surface	REJ	08/09/2016
86	NW	222	Cobbled surface	REJ	08/09/2016
87	W	-	Working shot	REJ	08/09/2016
88	SW	-	Working shot	REJ	08/09/2016
89	W	-	Working shot	REJ	08/09/2016
90	-	-	Furnace fragment	REJ	08/09/2016
91	-	-	Furnace fragment	REJ	08/09/2016
92	W	-	Working shot	REJ	09/09/2016
93	W	-	Working shot	REJ	09/09/2016
94	W	-	Working shot	REJ	09/09/2016
95	W	-	Rosemary excavating	REJ	09/09/2016
96	W	240	Area B	REJ	09/09/2016
97	W	240	Area B	REJ	09/09/2016
98	W	240	Area B	REJ	09/09/2016
99	W	233	Area D	REJ	09/09/2016
100	W	233	Area D	REJ	09/09/2016
101	W	233	Area D	REJ	09/09/2016
102	-	-	Working shot L2B	MP	10/09/2016
103	-	-	Working shot L2B	MP	10/09/2016
104	-	-	Working shot L2B	MP	10/09/2016
105	-	-	Working shot L2B	MP	10/09/2016
106	-	-	Working shot L2B	MP	10/09/2016
107	-	-	Working shot L2B	MP	10/09/2016
108	-	-	Working shot L2B	MP	10/09/2016
109	NNW	234	Surface of 234 and 235	SB	10/09/2016
110	NNW	234	Surface of 234 and 235	SB	10/09/2016
111	W	503, 504	Working shot L2C	MP	10/09/2016
112	W	503, 504	Working shot L2C	MP	10/09/2016
113	SW	503, 504	Working shot L2C	MP	10/09/2016
114	SW	503, 504	TP1 in L2C	MP	10/09/2016
115	S	503, 504	TP1 in L2C	MP	10/09/2016
116	SE	503, 504	TP1 in L2C	MP	10/09/2016
117	SW	503, 504	TP1 in L2C	MP	10/09/2016
118	W	503, 504	TP1 in L2C, E-facing section	MP	10/09/2016
119	E	503, 504	TP1 in L2C, W-facing section	MP	10/09/2016
120	S	503, 504	TP1 in L2C, N-facing section	MP	10/09/2016
121	SW	503, 504	Working shot L2C	MP	10/09/2016
122	SW	503, 504	Working shot L2C	MP	10/09/2016
123	ENE	-	View looking out of cave L2C	MP	11/09/2016
124	WSW	-	View looking into cave L2C	MP	11/09/2016
125	NW	-	Working shot L2B	MP	11/09/2016
126	NW	-	Working shot L2B	MP	11/09/2016
127	NW	-	Working shot L2B	MP	11/09/2016

Photo No.	Direction Facing	Context No.	Description	Initials	Date
128	-	-	Working shot of sieving	MP	11/09/2016
129	ENE	-	Mid-excavation of bone assemblage	SB	11/09/2016
130	ENE	-	Mid-excavation of bone assemblage	SB	11/09/2016
131	ENE	-	Mid-excavation of bone assemblage	SB	11/09/2016
132	-	-	Working shot	SB	11/09/2016
133	WNW	-	Working shot	SB	11/09/2016
134	WNW	-	Working shot	SB	11/09/2016
135	WNW	-	Working shot	SB	11/09/2016
136	NNE	264	Inhumation	SB	11/09/2016
137	NNE	264	Inhumation	SB	11/09/2016
138	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
139	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
140	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
141	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
142	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
143	NE	264	Mid-excavation of inhumation with stone in situ	SB	11/09/2016
144	E	264	Mid-excavation of inhumation	SB	11/09/2016
145	E	264	Mid-excavation of inhumation	SB	11/09/2016
146	E	264	Mid-excavation of inhumation	SB	11/09/2016
147	E	264	Mid-excavation of inhumation	SB	11/09/2016
148	E	264	Mid-excavation of inhumation	SB	11/09/2016
149	E	264	Mid-excavation of inhumation	SB	11/09/2016
150	E	264	Mid-excavation of inhumation	SB	11/09/2016
151	ESE	264	Mid-excavation of inhumation	SB	11/09/2016
152	ESE	264	Mid-excavation of inhumation	SB	11/09/2016
153	E	264	Mid-excavation of inhumation	SB	11/09/2016
154	E	264	Mid-excavation of inhumation	SB	11/09/2016
155	E	264	Mid-excavation of inhumation	SB	11/09/2016
156	E	264	Mid-excavation of inhumation	SB	11/09/2016
157	NE	264	Mid-excavation of inhumation	SB	11/09/2016
158	NE	264	Mid-excavation of inhumation	SB	11/09/2016
159	NE	264	Mid-excavation of inhumation	SB	11/09/2016
160	ENE	264	Mid-excavation of inhumation	SB	11/09/2016
161	ENE	264	Mid-excavation of inhumation	SB	11/09/2016
162	ENE	264	Mid-excavation of inhumation	SB	11/09/2016
163	NE	264	Mid-excavation of inhumation	SB	11/09/2016
164	NW	235, 261	Context 235 and negative features in quadrants B, C & D showing cobbles 261	SB	11/09/2016
165	NW	235, 261	Context 235 and negative features in quadrants B, C & D showing cobbles 261	SB	11/09/2016
166	NW	235, 261	Context 235 and negative features in quadrants B, C & D showing cobbles 261	SB	11/09/2016

Photo No.	Direction Facing	Context No.	Description	Initials	Date
167	NW	235, 261	Context 235 and negative features in quadrants B, C & D showing cobbles 261	SB	11/09/2016
168	NE	264	Inhumation	REJ	12/09/2016
169	NE	264	Inhumation	REJ	12/09/2016
170	NE	264	Inhumation	REJ	12/09/2016
171	NE	264	Inhumation	REJ	12/09/2016
172	NE	264	Inhumation	REJ	12/09/2016
173	NE	264	Inhumation	REJ	12/09/2016
174	NE	264	Inhumation	REJ	12/09/2016
175	SW	264	Inhumation	REJ	12/09/2016
176	SW	264	Inhumation	REJ	12/09/2016
177	SW	264	Inhumation	REJ	12/09/2016
178	SW	264	Inhumation	REJ	12/09/2016
179	NW	258	Half section of possible furnace pit 258	REJ	12/09/2016
180	NW	258	Half section of possible furnace pit 258	REJ	12/09/2016
181	NW	258	Pit 258 and adjacent cobbling	REJ	12/09/2016
182	W	258	Post-excavation of pit 258	REJ	12/09/2016
183	W	258	Post-excavation of pit 258	REJ	12/09/2016
184	NE	264	Inhumation after animal bone removal	REJ	12/09/2016
185	NE	264	Skull of inhumation	REJ	12/09/2016
186	NE	264	Skull of inhumation	REJ	12/09/2016
187	NE	264	Inhumation upper body	REJ	12/09/2016
188	-	264	Detail of inhumation right foot	REJ	12/09/2016
189	-	264	Detail of inhumation right foot	REJ	12/09/2016
190	-	264	Detail of inhumation right hand	REJ	12/09/2016
191	NE	264	Inhumation	REJ	12/09/2016
192	NE	264	Inhumation	REJ	12/09/2016
193	SW	264	Inhumation	REJ	12/09/2016
194	SW	264	Inhumation	REJ	12/09/2016
195	SE	237	Mid-excavation of charcoal filled cut 237	REJ	12/09/2016
196	SE	237	Post-excavation of charcoal filled cut 237	REJ	12/09/2016
197	SE	237	Post-excavation of charcoal filled cut 237	REJ	12/09/2016
198	SE	237	Post-excavation of charcoal filled cut 237	REJ	12/09/2016
199	SE	237	Post-excavation of cut 237 and wall	REJ	12/09/2016
200	SE	237	Post-excavation of cut 237	REJ	12/09/2016
201	NW	263	Post-excavation of cut 263	REJ	12/09/2016
202	NW	263	Post-excavation of cut 263	REJ	12/09/2016
203	SSW	268, 267	Hearth deposit (268) mid excavation	REJ	16/09/2016
204	SSW	268, 267	Hearth deposit (268) mid excavation	REJ	16/09/2016
205	NE		Post-excavation of burial area	REJ	16/09/2016
206	NE		Post-excavation of burial area	REJ	16/09/2016
207	NE		Post-excavation of burial area	REJ	16/09/2016
208	NE		Post-excavation of burial area	REJ	16/09/2016
209	W		Post-excavation photo at end of 2016 dig	REJ	16/09/2016
210	W		Post-excavation photo at end of 2016 dig	REJ	16/09/2016

Photo No.	Direction Facing	Context No.	Description	Initials	Date
211	W		Post-excavation photo at end of 2016 dig	REJ	16/09/2016
212	W		Post-excavation photo at end of 2016 dig, showing E-facing section at end of excavation area	REJ	16/09/2016
213	W		Post-excavation photo at end of 2016 dig, showing E-facing section at end of excavation area	REJ	16/09/2016
214	W			REJ	16/09/2016
215	S		Wall of cave showing line of removed deposits on wall	REJ	16/09/2016
216	N		North wall post-excavation	REJ	16/09/2016
217	NE		Wall of cave showing line of removed deposits on wall, in location of burial	REJ	16/09/2016
218	NE		Wall of cave showing line of removed deposits on wall, in location of burial	REJ	16/09/2016
219	NE		Wall of cave showing line of removed deposits on wall, in location of burial	REJ	16/09/2016
220	-		Boulder from between burial legs	REJ	16/09/2016
221	NE		Wall of cave showing line of removed deposits on wall, in location of burial	REJ	16/09/2016
222	-		Burial with human bones in situ	JM	-
223	-		Burial with close up of skull	JM	-
224	-		Burial with human bones in situ	JM	-
225	-		Burial with human bones in situ	JM	-
226	-		Results of photogrammetry of burial	JM	-
227	-		Results of photogrammetry of burial	JM	-
228	-		Results of photogrammetry of burial	JM	-
229	NW	213	Post-excavation of walls at cave entrance showing E facing section	JM	-
230	W	213	Post-excavation of walls at cave entrance showing E facing section	JM	-
231	W	204	Post-excavation of walls at cave entrance showing E facing section	JM	-
232	S	213	Post-excavation of S wall showing N facing section	JM	-
233	N	204	Post-excavation of N wall showing S facing section	JM	-
234	E	204	Post-excavation of N wall showing W facing section	JM	-
235	E	204, 213	Post-excavation of entrance between walls	JM	-
236	W	204	Post-excavation of N wall showing E facing section	JM	-
237	W	204	Close up of cave deposits under the N wall	JM	-
238	NW	204	Close up of cave deposits under the N wall	JM	-
239	E	213	Close up of cave deposits under the S wall	JM	-
240	-	204, 213	Results of photogrammetry of the walls at cave entrance	JM	-
241	-	204	Results of photogrammetry of the N wall	JM	-

Appendix 6 L2B16 Site Plans Register

Plan No.	Section No.	Scale	Description	Direction Facing	Contexts	Feature	Drawn By	Date
-	S1	1:20	Pre-ex of profile after clean	SSE	-	-	SB	03/09/2016
-	S2	1:20	Pre-ex of profile after clean	ENE	-	-	SB	03/09/2016
-	S3	1:20	Post-ex section drawing of main trench	SSE	-	-	SB	03/09/2016
-	S4	1:20	Post-ex section drawing of main trench	ENE	-	-	SB	03/09/2016
-	S5	1:10	Entrance between walls 204 and 213	N-S	-	-	MP	04/09/2016
P1	-	1:20	Hearth located against the S wall of cave	-	-	226	SB	07/09/2016
P2	-	1:20	Plan of cobbled surface within north alcove of cave	-	-	219	SB	07/09/2016
-	S6	1:10	N-facing long section through cave	N	231-235	-	SB	09/09/2016
-	S7	1:10	E-facing section	E	222, 231-235	-	SB	09/09/2016
-	S8	1:10	SE-facing section of pit	SE	249, 250, 235	249	SB	09/09/2016
P3	-	1:20	Surface of 232, 234, 235 showing metalworking zones	-	232, 235	249	SB	10/09/2016
P4	-	1:20	TP 1 plan	-	503-506	-	MP	11/09/2016
-	S9	1:10	N-facing trench section	N	503-506	503, 504	MP	11/09/2016
P5	-	-	Location of excavation in cave	-	-	-	MP	11/09/2016
-	S10	1:10	E-facing section through walls	E	-	-	MP	11/09/2016
P6	-	1:10	Mid-excavation plan of inhumation and animal bone deposits	-	264, 235	-	SB	14/09/2016
P7	-	1:20	Post-excavation plan of main features and contexts	-	235, 261, 257	-	SB	16/09/2016
-	S11	1:10	Section through furnace pit 258	ENE	258, 257	-	SB	12/09/2016
-	S12	1:10	Section through charcoal filled pit 236	W	236, 237	-	SB	12/09/2016
-	S13	1:10	Section through post hole 263	ENE	263, 262	-	SB	12/09/2016
-	S14	1:20	Post-excavation of trench section	E	222, 253	-	SB	16/09/2016
P8	-	1:10	Post-excavation of human remains	-	264	-	SB	16/09/2016