

**REPORT OF THE SKAGAFJÖRÐUR ARCHAEOLOGICAL SETTLEMENT SURVEY  
2009:  
EXCAVATIONS AT STÓRA-SEYLA, AREA C**



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## Introduction

Stóra-Seyla is one of two settlement period farms currently identified in the Langholt region. Located at the far southern end of Langholt it dates to the early 10<sup>th</sup> or late 9<sup>th</sup> century. Like Glaumbær, the initial occupation was located lower down the slope of Langholt, in this case quite near what would have been open fjord or river at that time but now is drained agricultural land. Also, like Glaumbær the farmhouse was relocated sometime in the 11<sup>th</sup> century to an area nearby but higher up the slope. Historical records show that the farm had a church by the 13<sup>th</sup> century, which was maintained until the 18<sup>th</sup> century and was one of the wealthiest farms on Langholt. Excavation during 2009 established that the church was originally founded sometime before the Hekla AD 1104 tephra in association with the Viking Age settlement down slope from the medieval and early modern farm site. The church was later moved to the site of the medieval farmhouse, presumably as part of the 11<sup>th</sup> century farm reorganization.

Stóra-Seyla, while a productive farmstead traditionally valued at 40 hundreds (Magnússon and Vídalín 1930), was not a significant political presence in the Langholt region after end of the Commonwealth. It was bought and sold by the aristocracy and not always owner occupied. Reynistaður and Glaumbær, which had been significant places during the Commonwealth, rose in prominence as church farms. Stóra-Seyla never came under the formal ownership of either the church or the Danish crown.

In terms of the Langholt survey, a particularly appealing aspect of Stóra-Seyla and many of its neighboring farms is that it was no longer farmed after 1972 and instead was rented out to other farmers as pastureland. As a result, the site has not suffered from extensive leveling or plowing and is still in its traditional state including some remnants of homefield walls on the north end of the homefield and the Viking Age site located east and below the medieval-modern site.

## 2009 Season Goals

The primary goal of the 2009 excavations at Stóra-Seyla was to expose architectural features and correlate them with shallow geophysical data from conductivity, resistivity, and ground penetrating radar (GPR). The excavations expanded on work from 2008 and extended the area of excavation to the east of the 2008 limit of excavation (see Bolender 2009). The Viking Age occupation at Stóra-Seyla is situated approximately 100 meters east and downhill from the medieval and early modern farmhouse ruins. The occupation at the Viking Age site lasted for approximately 100-200 years, beginning in the late 9<sup>th</sup> or early 10<sup>th</sup> century and ending sometime during the 11<sup>th</sup> century. Unlike the other relocated Viking Age farmstead on Langholt, Glaumbær, which is a well-preserved longhouse with one main architectural phase represented in the abandoned house, Stóra-Seyla is a complex set of buildings representing multiple construction and occupational phases, including major reconstructions of older buildings. Most of the architecture and midden deposits date to the Viking Age (based on the stratigraphic relationship to the Hekla 1104 tephra). Some buildings were constructed, abandoned, and partially collapsed by the time of the Veidavötn~1000 AD eruption. There is a least one post-

1104 structure on the site, a small barn (Structure 1), that attests to the continued use of the site as part of the medieval farm.

In 2009 an area of approximately 1200 meters<sup>2</sup> over the Viking Age domestic architecture was deturfed, surveyed with GPR, and excavated down to preserved architectural features. During the initial GPR survey a semi-circular anomaly approximately 16 meters in diameter was identified at the southern extend of the deturfed area. To fully survey the anomaly the deturfed area was extended an additional 10 meters to the south (figure 1).

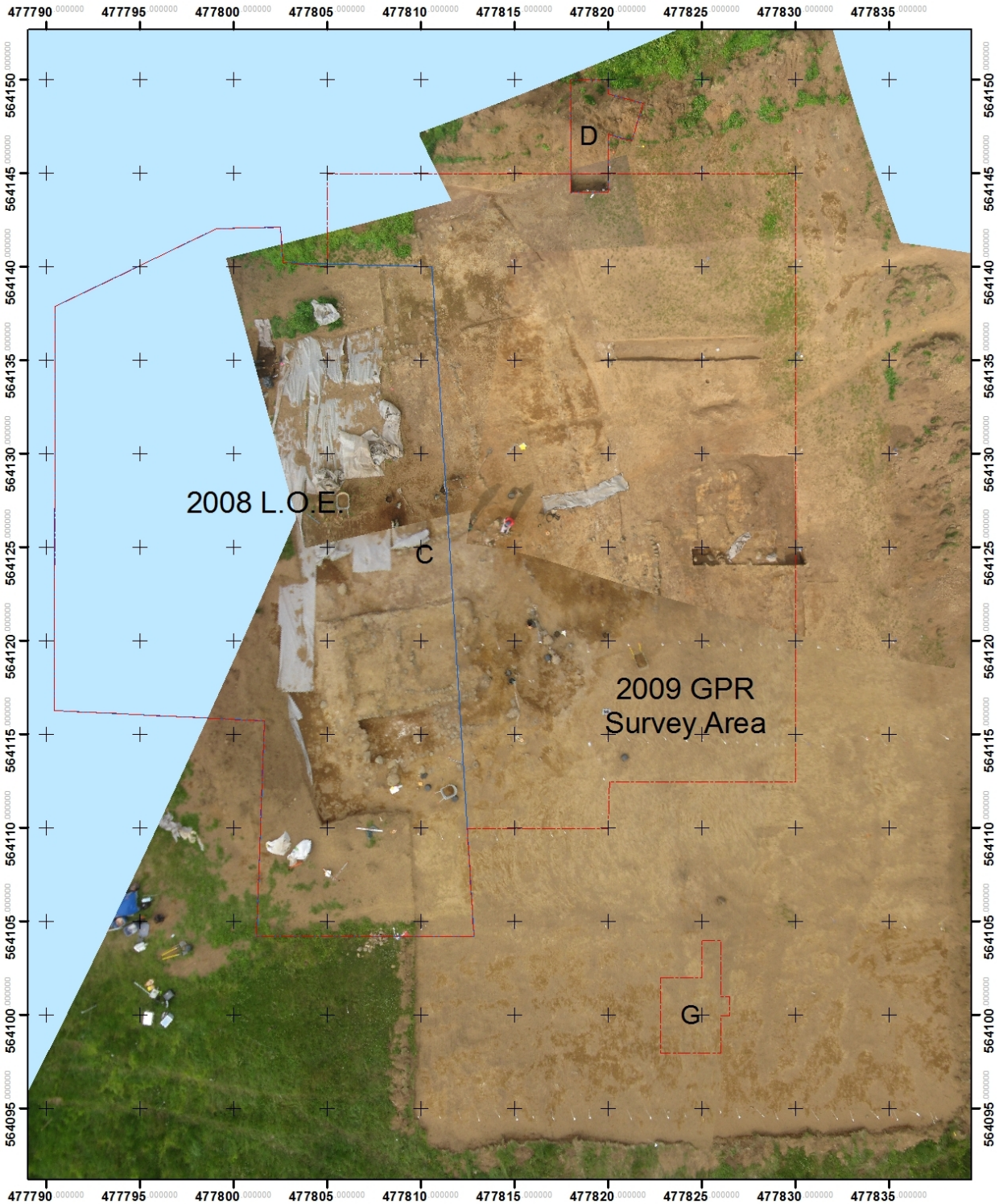
Excavations were largely limited to the removal of overburden and enough collapsed turf to reveal the upper interfaces of intact walls with the significant exception of the post-1104 Structure 1 which was removed to expose the Viking Age architecture below it. Collapsed turf layers overlying floor deposits were left in place and not excavated. Preservation of architectural features was often poor. This was in part due to the construction methods, which employed poor quality turf and a gravelly fill in some of the walls, and later activity on the site that truncated or destroyed some earlier deposits. It is clear the continued occupation and reconstruction of the site has damaged many of the buildings.

Most of the exposed area had architectural remains in it. In the north and east we appear to be at the limit of domestic structures which terminate in an extensive midden. GPR anomalies at the eastern boundary of the survey and small areas of collapsed turf suggest that additional isolated buildings or other architectural features may continue to the east. In the southeastern area the church is the only apparent architectural feature. To the north the site is limited by the old stream cut, although there are additional Viking Age buildings on the north side of the stream. Architectural features extended beyond the 2008 limit of excavation to both the west and east. While the extent of architecture to the west should be limited by the steep hill lying 5-10 meters beyond the excavation limit.

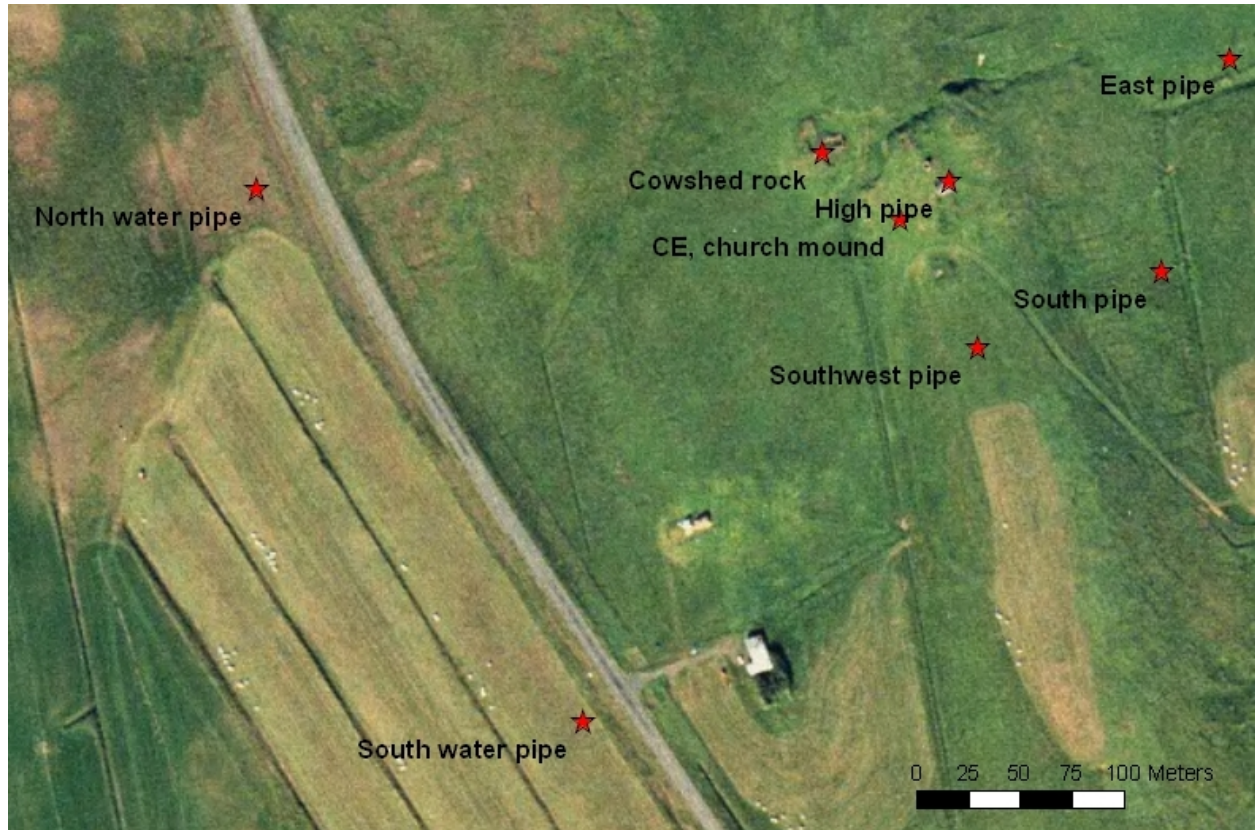
Stóra-Seyla is farm number 104 in 1847 Jarðatal á Íslandi (Johnsen 1847). Site number 104 has been used in all excavation records from the 2009 season.

### **Grid and Measurements**

All measurements from the 2009 work at Stóra-Seyla are in meters based on the ISN93 coordinate system. Two benchmarks were established on the west side of the road in 2007 using a high resolution dGPS system. Local site datums situated close to the excavation site were shot in from these benchmarks using a total station (table 1)(figure 2). The local site datums used for the daily set up of the total station and to position reference stakes on the site for drawing and measurement were established in 2009 based on these benchmarks, the same used in 2008. A resection was then performed using all four of these points, to establish coordinates for two further secondary (or more accurately tertiary) benchmarks. Plans were drawn based on measurement to a baseline established from these reference stakes. In most cases elevations were measured directly by the total station. When the total station was not available, elevations were measured with a transit and absolute elevations were calculated based on a local elevation benchmark. For excavation work in 2009 coordinates and bearings for occupied stations (total station locations) were established at least daily by means of resection, consistently utilizing three points (08 0307 HI PIPE R1, 08 0307 S PIPE R3, and 08 0307 E PIPE R3). For other purposes (e.g. topographic mapping of areas away from the excavation area), resections in 2009 each utilized 2-4 of the six secondary benchmarks, as available.



**Figure 1. Extent area deturfed for GPR survey in 2009. 2008 and 2009 areas of excavations are delineated.**



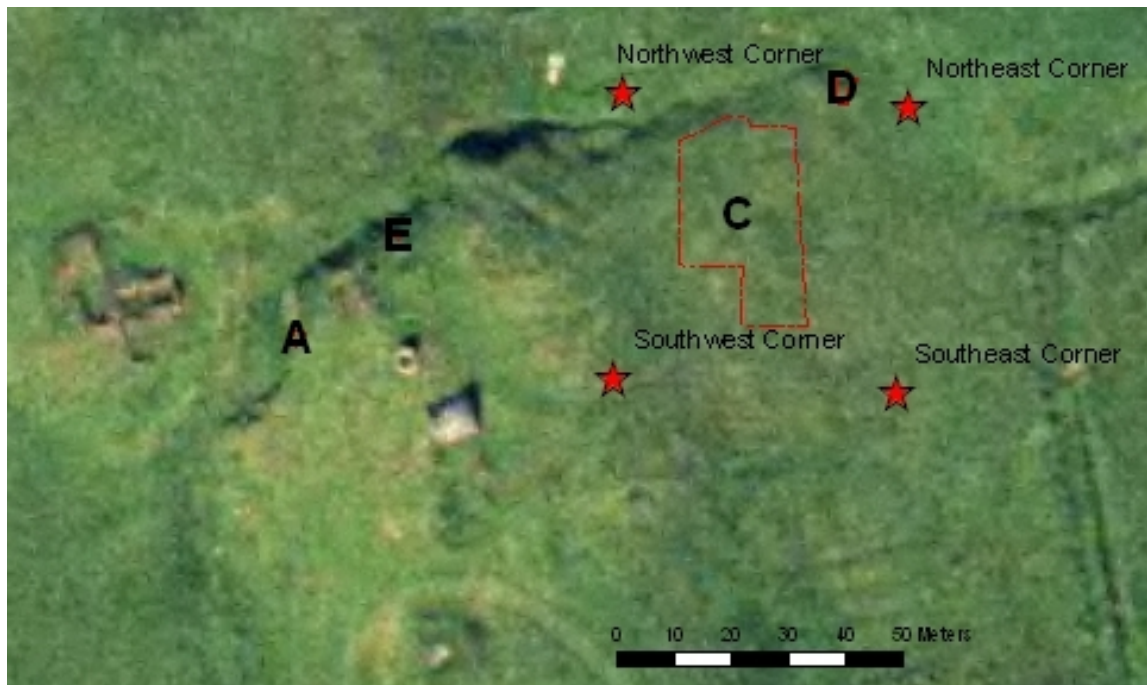
**Figure 2. Map of dGPS and total station set up benchmarks at Stóra-Seyla used during the 2008 excavation.**

Name	East (m)	North (m)	Elev (m)	Class
South water pipe	477577.705	563831.875	40.504	Bench-permanent
North water pipe	477421.050	564088.332	47.580	Bench-permanent
Cowshed rock (08 0307 COWSHD 08 2)	477692.804	564105.664	30.044	Local setup point
CE, church mound (08 0307 CE 2008 4)	477730.372	564073.645	29.091	Local setup point
High pipe (08 0307 HI PIPE R1)	477753.740	564092.082	26.792	Local setup point
Southwest pipe (08 0307 SW PIPE 2)	477767.882	564011.729	28.123	Local setup point
South pipe (08 0307 S PIPE R3)	477856.188	564048.255	10.664	Resection point
East pipe (08 0307 E PIPE R3)	477889.147	564151.024	10.380	Resection point

**Table 1. ISN93 coordinates for Stóra-Seyla benchmarks and local setup points.**

Remote sensing and test excavations at Stóra-Seyla during the 2002 and 2005 seasons were referenced to the Hjorsey UTM (zone 27N) grid. Base points were established using a dGPS unit with ca.  $\pm 5$  meters accuracy. Remote sensing grids were then laid out from these base points using tapes. The result was a grid with limited absolute accuracy (ca.  $\pm 5$  meters) but a high degree of internal consistency. Chaining pins were buried at the corners of the 50x50 meter remote sensing grid at the end of the 2002 season so that the exact grid could be re-established in

the future (figure 3). Test excavations conducted in 2002 and 2005 were positioned based on the original remote sensing grid. During the 2007 season these markers were exposed and measured with the total station in the ISN93 coordinate system. The dual measurements of the remote sensing grid corner points, in Hjorsey UTM and ISN93, were used to convert the older measurements using the Hjorsey UTM coordinate system into ISN93 (table 2). Spatial adjustments were performed in ArcGIS using an affine transformation utilizing all four corner points of the remote sensing grid. The residual error of the affine conversion from the Hjorsey UTM remote sensing grid corner points to the new ISN93 coordinates was 0.111 (measured in meters). The low error indicates a high degree of internal consistency within the original remote sensing grid, including the effect of vertical change on xy plane coordinates, and that remote sensing and excavations recorded in the original Hjorsey UTM grid can be integrated with more recent measurements, remote sensing, and excavation conducted in the ISN93 coordinate system with minimal discontinuity.



**Figure 3. Map of 2002 remote sensing grid and 2007-2008 excavation areas.**

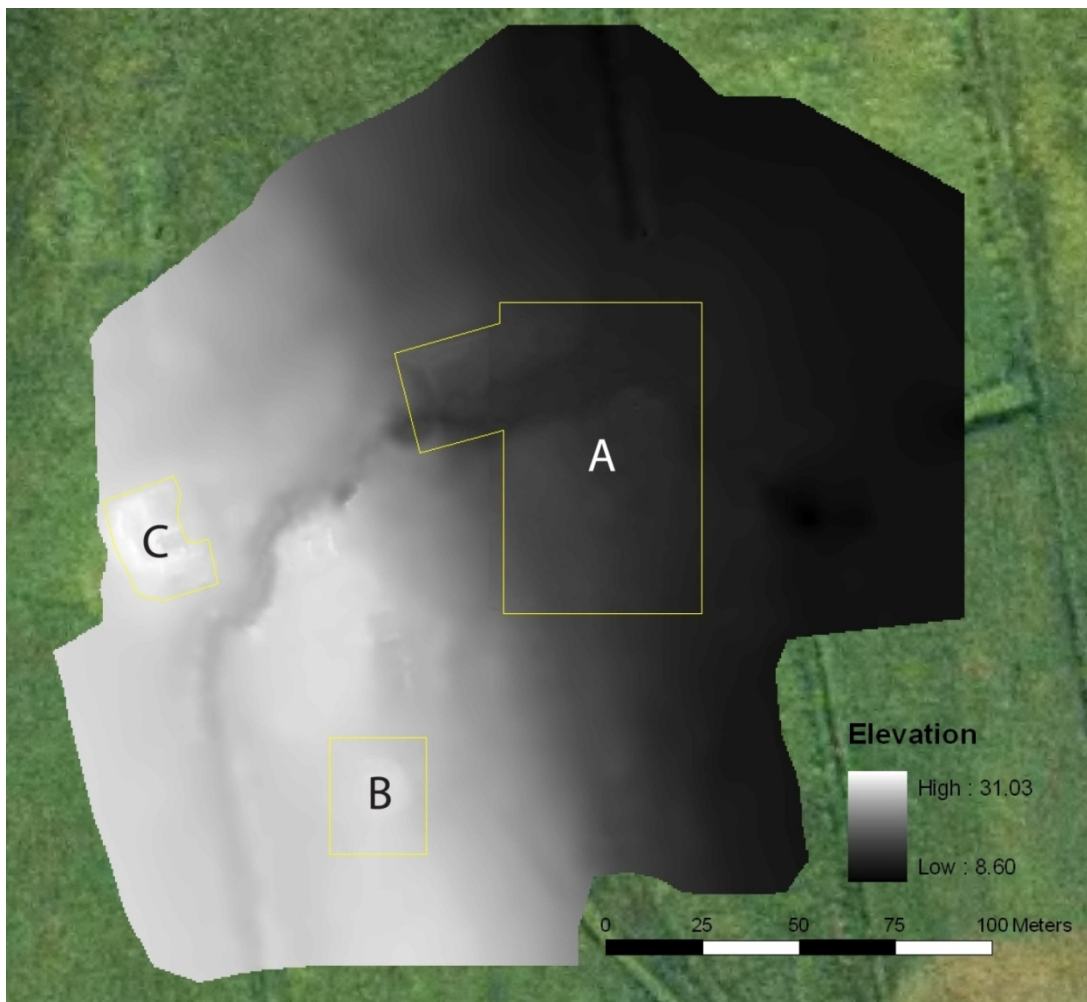
Name	East (ISN93)	North (ISN93)	Elev (ISN93)	East (UTM)	North (UTM)
Southwest corner	477779.381	564096.246	19.93	570050	7273500
Southeast corner	477828.880	564093.601	12.528	570100	7273500
Northeast corner	477830.902	564143.486	12.053	570100	7273550
Northwest corner	477780.958	564146.143	14.493	570050	7273550



**Table 2. Coordinates for remote sensing grid in Hjørsey UTM and ISN93 reference systems.**

### Elevation surface models

During the 2007-2009 field season the region surrounding the medieval-modern mound and Viking Age site was surveyed with the total station to produce topographic models of the terrain. Survey coverage varied based on the rapidity of surface change. Three areas were surveyed at a higher resolution, usually one measurement every meter: the area of the Viking Age domestic structures below the medieval-modern farm mound, the area of the possible church, and the 20<sup>th</sup> century turf cow barn which is currently in an advanced state of collapse (figure 4).



**Figure 4. Topographic coverage at Stóra-Seyla; areas of high resolution coverage indicated: (A) Viking Age occupation; (B) church mound; and (C) cow barn.**

The high resolution surface models were used to topographically correct geophysical data for variations in surface elevation and aspect. The surface model also provides a record of visible surface ruins. Additional high resolution data, again on an approximate 1 meter sampling interval, was collected on all deturfed surfaces prior to remote sensing with ground penetrating

radar (GPR). These allow GPR profiles and GPR slices to be incorporated into the site excavation model with absolute elevations.

### **Context surface modeling**

In general, surface points were taken over contexts when they were originally exposed and identified to produce a 3D representation of the site for integration with geophysical datasets in GIS. All digitized stones currently hold 3 dimension positions (a two dimensional outline and a single point elevation for the surface; although some stones have top and bottom measurements, these are not currently coded in the GIS). Some contexts have been digitized in the GIS using 3D coordinates but in general context models in the GIS are still 2 dimensional.

### **Low altitude aerial photography**

Kite-based, low altitude aerial photography (KAP) and pole-based top-down photography (PAP) are a low-cost and relatively quick way to map sites. The resulting photographs can be georeferenced and used to establish a quick visual overview of site and surface conditions including the location of visible ruins, surface cover, and excavation contexts to aid in the interpretation of geophysical anomalies.

A Canon Powershot A570 IS compact digital camera was used, running the CHDK (Canon Hack Development Kit) custom software suite from the camera's SD card. A CHDK intervalometer script automatically triggered the shutter during flight; this was usually set to take photographs every 6 to 10 seconds. To maximize shutter speed without unduly sacrificing quality, it proved effective to place the camera in aperture-priority mode with the aperture at or near its maximum setting.

Following design advice from Dr. Bruce Owen (Sonoma State Univ.), layers of closed-cell polyethylene foam were used to suspend the camera inside a Ziploc brand plastic box, which was hung from the kite line via a "Picavet" string suspension (Figure 5a). This design proved effective in protecting the camera during "hard landings" and in keeping the camera pointed downward at near-vertical angles during flight.

Three kites were used during the 2009 SASS season, and all provided sufficiently stable flight to generate useable images. In high-wind conditions, an Air Affairs Sutton Flow Form 8 was preferred. The most-used kite was an Air Affairs Sutton Flow Form 16, which is appropriate for 8-25 mph winds. Because its design features breakable spars, the G-Kites Fled was preferred only in gust-free lower-wind conditions in which the Flow Form kites were unable to lift the camera. While completely still conditions precluded the use of all kites, at the end of the season it was discovered that it was possible to lift the Fled (and camera) for short periods in extremely light wind conditions by walking rapidly upwind. Some useful site photographs were generated in this way, although the time-consuming logistics of this method made it appropriate only for exceptional situations.

Standard procedure was for the kite operator to walk a loose grid pattern, walking a set number of strides, stopping long enough for the camera to take 2-3 shots, and repeating. When available, a second person stood either directly under the camera or to the side in order to keep the operator appraised of the area being photographed. Flights were made over the large horizontal excavations at Stóra-Seyla at roughly 2-week intervals (depending on wind conditions) to document contexts in sequence as they were exposed. Flights also documented the deturfed area

at Glaumbaer, the excavations at the upper church mound at Stóra-Seyla, and the current land surface of an expansive zone surrounding the areas of excavation at Stóra-Seyla.

Pole-based “aerial” photography was also used to document parts of the excavations at Stóra Seyla, and likewise proved to be an effective aid in site documentation. Image-stabilized (IS) Canon Powershot camera models (including the A570 IS) were used, again controlled via CHDK scripts. The camera was screwed onto a wooden pendulum board that swung from a paint roller attached to an extension pole (in this case, a 12’ West Marine telescoping boathook, which was deemed to be more travel-worthy than a standard painter’s pole) (figure 5c-d). The operator stood with the butt of the pole on or near the sternum and the pole held at approximately 20 degrees from vertical. At each photography location, a couple of seconds of motionlessness were all that were required for the pendulum to come to rest with the camera pointed vertically downward at the deposits. The total station was used to record coordinates for chalk or tape marks included in the photographs, allowing them to be georeferenced and included in the excavation GIS. In comparison to kite photography, pole photography captures much smaller areas per photograph but requires less set-up time and can be used when wind is not available.

Kite-based and pole-based aerial photography datasets include:

- 1) Unprocessed images. Full collection of digital photos from each kite flight (3072 x 2304 pixels; ca. 3-5 MB each). Photos vary in subject, focus, and camera tilt relative to ground surface.
- 2) Lens corrected images. Full collection of digital photos from each kite flight processed to correct lens distortion (3072 x 2304 pixels; ca. 3-5 MB each). Photos vary in subject, focus, and camera tilt relative to ground surface.
- 3) Georeferenced images. High-quality, lens corrected kite photos were georeferenced for projection in GIS software. Images were georeferenced based on measured locations on the ground (usually geophysical survey grid flags) using a second order polynomial transformation to correct for angular distortion. Root mean square error on georeferenced images is generally under 0.010 meters. Georeferenced images are currently in ESRI formats with georeferencing data held in a separate .aux file from the raster image. Individual georeferenced images usually cover only a small portion of each site.
- 4) Composite georeferenced images. ESRI raster catalogs have been assembled from individual georeferenced kite photos to provide fuller coverage of sites.



**Figure 5. (a) KAP camera box, (b) kite in flight Stóra-Seyla, (c) pole-based photography, and (d) detail of pole-based camera mount.**

### **SASS Excavations at Stóra-Seyla**

Area A (2007): Upper (medieval-modern) mound; 2x2 meter excavation in northwest edge of mound by eroded stream cut.

Area Supervisor: Douglas Bolender

Area B (2007): Test pit in the fjord bottom; 1x1 meter excavation east of the Viking Age structures in the fjord bottom.

Area Supervisor: Allan Gontz

Area C (2008-2009): Large aerial excavation in the Viking Age habitation area below and east of the medieval-modern farm mound. In 2009 area C was greatly expanded to the east and south and encompassed the midden in area D. A larger area was deturfed in preparation for the collection of GPR data than was excavated.

Area Supervisor: Douglas Bolender

Area D (2008): Small, 2x2 meter, excavation in the Viking Age midden, northeast of area C. In 2009 area C was expanded to connect with the midden excavation in area D. We have retained the separate area designations to distinguish between the midden excavation and the architecture in area C. While area C was expanded to the edge of the 2008 midden in area D excavation did not include the midden itself.

Area Supervisor: Rita Shepard

Area E (2008): Cleaning of exposed midden and turf on the north side of the medieval-modern farm mound for profile mapping and micromorphology sampling.

Area Supervisor: Dennis Piechota

Area F (2008-2009): Church associated with the upper (medieval and early modern) farm ruins. Work in 2009 was a follow up to the high resolution surface modeling undertaken in 2008 and included: kite-based aerial photography, resistivity and GPR geophysics, and a small test excavation in the southwest corner of the circular enclosure wall. Excavation confirmed the presence of poorly preserved human skeletal material dating to sometime after the Hekla 1104 tephra layer.

Area Supervisor: Guðný Zoëga

Area G (2009): Part of the expanded deturfing for GPR associated with area C. A small area covering the southern circular enclosure wall and internal “cemetery” was excavated and confirmed the presence of human burials from before the Hekla 1104 tephra layer.

Area Supervisor: Guðný Zoëga

### ***Overview of 2009 Excavations***

Excavation in 2009 revealed a large Viking Age domestic occupation and medieval outbuildings. Much of the area was filled with the ruins of structures. Eight main structures were exposed.

- Structure 1: a post-1104 structure. This appears to be an outbuilding associated with the medieval farm and is likely a small animal barn with enclosing fence.

- Structure 2: a large Viking Age structure. The building is rectilinear in shape and appears to have a domestic-type floor. The building predates the Hekla 1104 AD eruption and possibly the Veidavötn ~1000 AD eruption.
- Structure 3: a small Viking Age structure. The building is sub-rectilinear in shape with gently bowed walls on the long axis (east and west sides). The building predates the Veidavötn ~1000 AD eruption and conforms to the shape of small skáli-type structure.
- Structure 4: A small Viking Age outbuilding east of the main farm ruins, possibly an animal barn.
- Structure 5: A Viking Age structure approximately 27 meters in length. The building is sub-rectilinear in shape when a gently bowed wall on the eastern side. The building likely predates Veidavötn ~1000 AD eruption and conforms to the shape of a skáli-type structure.
- Structure 6: a small roundish enclosure approximately 12 meters in diameter, possibly an animal corral. The building is highly damaged due to the reused of the area for Structure 1. The structure appears to predate the Hekla 1104 tephra.
- Structure 7: A Viking Age church and cemetery. The circular enclosure wall is approximately 16 meters in diameter. The entire structure appears to pre-date the Hekla 1104 eruption.
- Structure 8: A medieval church and cemetery associated with the upper farm mound. The circular enclosure wall is approximately 16 meters in diameter.

### **Structure 1: Post-1104 structure**

Excavations on structure 1 began in 2008. Only the western portion of the building was exposed during the 2008 field season; the eastern half was beyond the limit of excavation. During the 2008 work the walls in the western half of the building were uncovered and the upper layers of collapse were removed. The building was identified as a medieval animal barn consisting of a *hlaða*, in the west, and a byre, in the east (figure 6).

During the 2009 field season, the excavation of this building became a priority in order to better understand its architecture and its depositional relationship to nearby architecture. We were able to uncover several new contexts which related to the building's use as well as several exterior contexts which allowed us to interpret the building in relation to adjacent architecture. We were able to define all the interior and exterior walls of the building, the interior rooms and divisions. Throughout excavation, these areas remained distinct in their deposits suggesting the rooms at the very least had distinct but related uses.

Multiple new features were discovered which reinforced our original interpretation that the building was in fact two distinct rooms; one a *hlaða* or hay storage room [125] and the other a byre, or some type of animal shelter [210]. The two rooms were separated by a small ledge comprised of turf and stone [290] and [296]. The floor of the *hlaða* is raised compared to the floor of the byre by this ledge and separated by a turf and stone wall [195] and [197], and connected by a central passage [275]. This architectural arrangement is common in byres and allowed animals to use the building for shelter as well as to consume hay made available to them

from the *hlaða*. The entrance to the building faces east, where there is a break in the eastern wall [289] of the structure.



**Figure 6. Structure 1.**

The 2009 excavations also revealed that elements of earlier abandoned structures were used in the construction of Structure 1. At this point, the sequence appears to be that there was an earlier larger building in this location which fell into disrepair prior to 1104 (structure 6). When Structure 1 was built, a pre-existing wall of that building [302] was used in the construction of Structure 1's wall [105]. This type of construction technique is not isolated, and can also be seen elsewhere in Langholt, for example in the 19<sup>th</sup> century sheep barn at Meðalheimur. Excavations there in 2007 uncovered several sheep houses and revealed that existing walls or turf collapse layers were cut into and used as architectural elements in the new construction (Bolender 2008:7).

### **Western Room [125]**

Collapse and post-occupational deposits in the western room [125] of the building were divided into two spaces, a larger open area on the southern end and a small enclosed space at the northern edge next to wall [103]. Previously we thought these may have been separate rooms, though the enclosure at the northern end was not very big (approximately 2 meters E-W and 40

centimeters N-S). The entire room itself may have been used to store hay for animals that would have come to feed in the lower section of the building (eastern room). The small enclosed area in the northern part of this room was very turfy throughout, and was an area where both dog and other as yet unidentified bones had been discovered in the 2008 excavations. These are likely related to uses the building may have had after it no longer served as an animal barn. The main portion of the room itself consisted of alternating layers of organic material, hay, and aeolian deposits.

The first context we excavated in this room in 2009 was [249]. This was a layer of turf and rocks that appeared to bound the small enclosure on the north and the rest of the room. The removal of context [249] allowed us to further distinguish the relationship of the small enclosure with the rest of the room. [249] was deposited on top of [247], a turfy layer on the northern side of the room containing a dog skull. The northwest corner of the room had been enclosed with several large stones, and had a concentrated amount of whitish-pink hay inside of it [251]. The hay deposit was quite thick, and had spread substantially from that area out into the northeastern corner of the room as well. The hay was on top of [248], a layer which primarily consisted of a grayish blue clay mottled with gold specks of turf. This was interpreted as turf which had fallen in from the side walls of the building during the building's decay. Judging by the type and quality of the turf, this building likely was meant to be less permanent, or more of a utilitarian structure. Underneath [248] was a layer comprised of alternating depositions of whitish blue hay and organic material, and a dark brown compact aeolian soil. Below [248] were alternating layers of organic material and hay, until we reached the bottom floor surface [273] which was dark and compact.

During excavation of the alternating floor layers, a small pit [266] was uncovered after the removal of context [259] in the northwest corner of the room. The fill of this pit [264] was loose and organic with some small bits of hay in the topmost portion, suggesting that it had been dug while [259] was the topmost layer of the floor surface. It came away easily from the more compact sides of the feature which revealed a deep cut into the floor of the building. The cut [266] extended approximately 60 cm below the floor surface, slightly truncating a portion of an older wall [160] on top of which Structure 1 had been built. This wall is one of the N-S running walls of the Viking Age longhouse, Structure 2. The pit itself was approximately 1 meter long and 40cm wide. Within the fill we found the end of a large longbone fragment, but no other artifacts. The bone is currently under analysis to determine the type of animal it may have been.

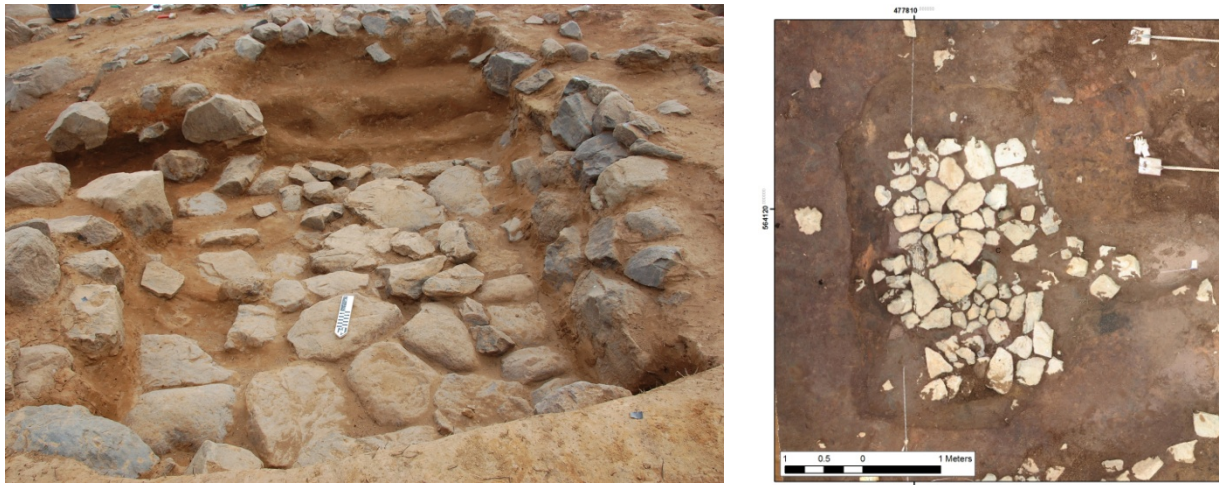
### **Eastern Room [210]**

The eastern room of the building had a different depositional sequence than the western room. This room was likely used to accommodate animals (likely cattle; the if the ledge separating *hlaða* and byre was used for feeding it is at an appropriate height for cattle) that would come to feed on hay stored in the western room of the building. The two rooms were connected by an opening between two interior walls [195] and [197] where a large flat rock was discovered in an aeolian deposit [275] abutting the floor layers [274] and [273] suggesting a planned passageway of some sort.

There were several layers of alternating turf collapse [261] in the eastern room ([229], [250]). After [250] was excavated, it was evident that the northern and southern sides of the room differed from the center. Both the north and south had separate turf collapse layers, which were designated [255] for the southern side and [257] for the northern side. Once these and context



[262] in the middle of the room were removed, a layer of large stones was revealed. A layer of white hay and turf was also exposed, suggesting a use relationship between the east and west rooms. A vertical cut and several courses of stones stacked against the resulting profile on the western side of the room were also revealed which created a distinct space between the eastern and western rooms. At the lowest level of this room, a floor surface with large carefully placed stones was uncovered, which is likely a surface that animals would likely have stood on as they were fed hay from the western room (figure 7). There was a cut against the northern edge of wall [196] where there was a distinct depositional difference. It appears there may have been a trough of some kind. The western room was raised, while the eastern room was much lower. The area in between likely served as some sort of passage to access the hay.



**Figure 7. Structure 1 Stone pavement [298] in East Room [210]**

### **Removal of Structure 1**

We removed all elements of Structure 1 at the end of the field season except the stone pavement [298], and found that a layer of bluish black tephra had been preserved underneath all the architecture of Structure 1. This tephra layer began underneath wall [196] in the southeast and continued to the northwest; connecting with [191] which had been identified in the 2008 excavations as an exterior deposit of hay, sand and tephra on the north side of Structure 1's wall [103]. This layer appears to be the 1300 tephra. It runs along the surface under wall [196] and was actually cut into at this point to create the floor surface for the east room [210]. Since it runs underneath Structure 1, and is even cut into by Structure 1's east room, it appears the tephra was laid down first and then built upon.

### **The construction sequence of Structure 1**

Based on the available stratigraphic and tephrochronological evidence, Structure 1 was built after AD 1300; how long after is not clear. The construction process appears to have begun by leveling a foundation area within the ruins of Structures 2 and 6, an older Viking Age hall and later possible corral. A rectangular area, corresponding to the interior of the building, including the west and east rooms and the connecting passage between them, was then excavated into the ruins. This was done at two different levels: a higher platform in the western half for the *hlaða*, central wall ([195], [197]) and ledge ([290], [296]) and a deeper cut for the eastern half of the

byre including the entrance to the building. This foundation cut was then filled in with a turf and stone lining that formed the interior base of the structure walls, including the central partition of the building, and the stone floor in eastern half of the room. These interior linings were built up to level the building of the surrounding surface. The structure walls were then built on this leveled foundation consisting of the interior lining and the original leveled surface around the building trench.

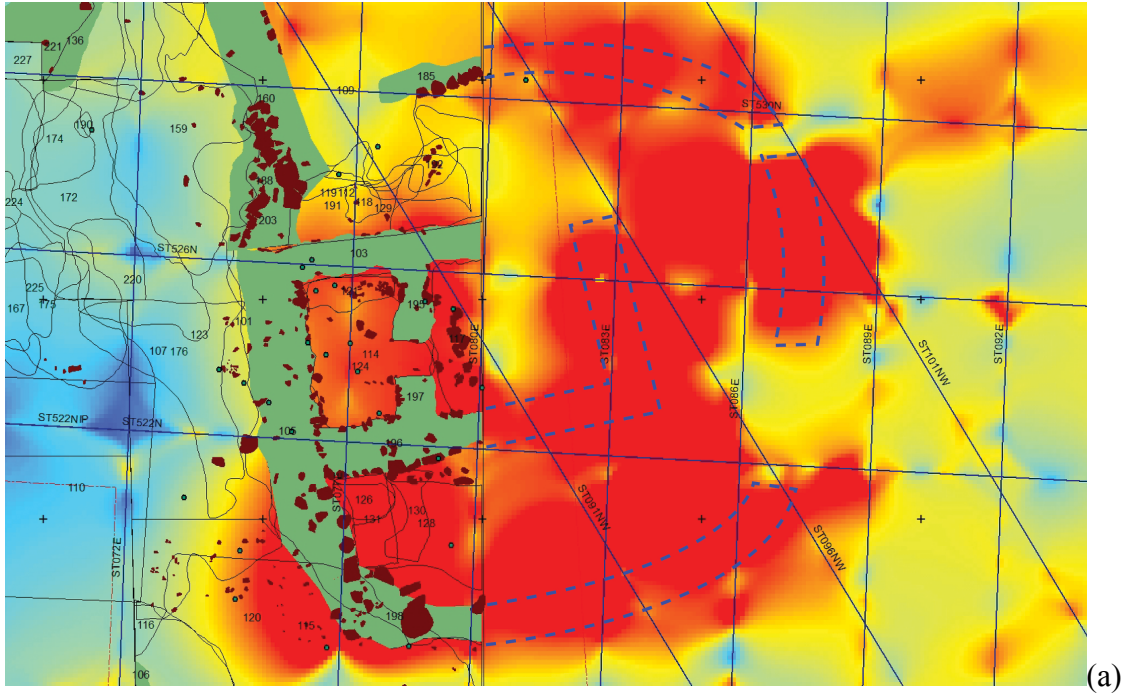
### **Structure 1: Evaluation of 2008 excavations and archaeogeophysical interpretation**

Based on the geophysical survey and limited excavation during the 2008 field season predictions about the overall structure were made (figure 8). Further excavation during 2009 showed that while the general structural outlines predicted by the geophysics were correct – a small animal barn and enclosure ring – but significantly underestimated the complicated stratigraphy of the three partially preserved buildings, Structures 1, 2, and 6. Initially structure 1 and the southern part of structure 6 were thought to participate in the same structure as a roofed building (structure 1) with an unroofed external enclosure wall (now structure 6): a simple, single-phase interpretation of the structure in part based on the fact that the western wall of structure 6 was reused in structure 1. However, excavation clearly shows that the two are stratigraphically distinct structures separated by over 200 years. The highly damaged enclosure ring predates the Hekla 1104 tephra. Little more survives than was originally defined in 2008. Due to the significant damage it is unclear what function the enclosure ring had. A stone lining on the interior walls is suggestive that the structure was used for animals.

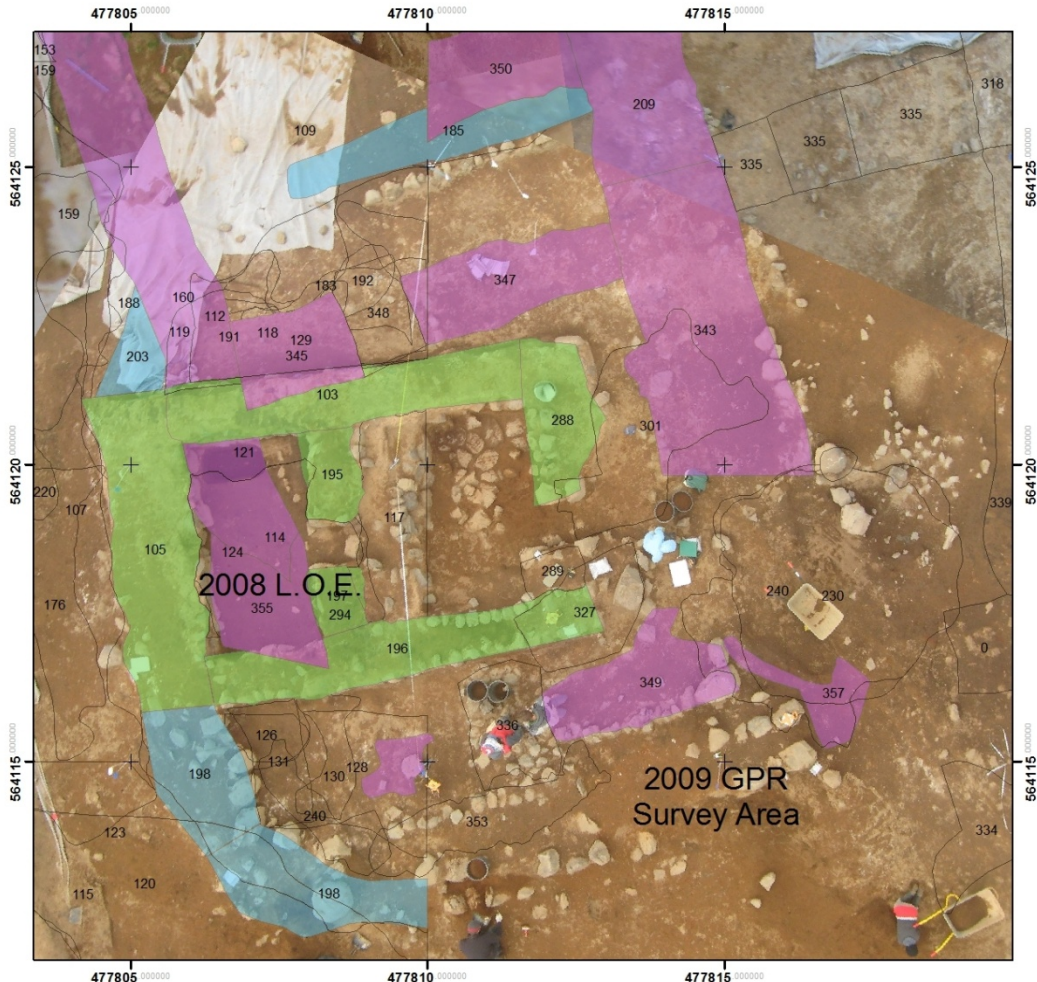
Structures 6 and 2 were also conflated in the interpretation. The large resistive masses in the south and east were thought to be an extension of structure 6's circular enclosure wall. They are, in fact, parts of the earlier structure 2. This misidentification is not surprising as they closely conform to the expected location of the destroyed enclosure ring. The large break interpreted in the eastern part of the enclosure wall also corresponds to a large, late pit feature.

The positioning of structure 1's entrance on the north is a mistake that can be attributed largely to the problems of interpolated data between resistivity transects. The main east-west transect covering the north wall of structure 1 runs inside the building wall in the eastern half of the building and correctly show a lower resistivity in the collapsed turf compared to the turf and stone wall. This strong single was extended north in the interpolation process making it appear that there was a break in the wall there. These problems with the interpretation are not due to a failure of the geophysical method to accurately represent the underlying deposit but rather in the extension of geophysical data into areas between survey transects. There was no GPR data available for the eastern half of the buildings when the interpretation was made.

**Figure 8. (a) 2008 excavated contexts from Structure 1 overlaying interpolated resistivity slice of upper 40 centimeters of deposit, blue-red spectrum with red indicating highest resistive anomalies. Walls are shown in green and projected in dotted lines. Resistivity transects are shown as blue lines crisscrossing the structure. (b) 2009 excavated contexts with walls from structures 1 (green), 2 (purple), and 6 (blue) highlighted.**



(a)



(b)

## Structure 2: Viking Age Hall

To the north and under structure 1 lies another, older, structure (figure 9). Three walls were exposed during the 2008 season: [160] on the west, [180] on the north, and a small section of the eastern wall [209]. With the removal of structure 1 during the 2009 season, the rest of structure 2 was revealed. The building is rectangular in form with squared corners on the northern end. Coring in the middle of the building revealed a compact and stratified floor composed of laminated ash and charcoal under an additional 20-30 centimeters of turf collapse. The structure is probably domestic and conforms to the basic layout and dimensions of a Viking Age hall but has some significant differences.

Hekla 1104 AD tephra was found mixed in the collapsed turf overlaying the structure but there is no indication of the H 1104 tephra in the walls themselves. This suggests that the ash layer either fell on the structure during the process of collapse and was mixed in with the turf or fell on the uneven surface of the already collapsed building. In either case the building appears to date to the 11<sup>th</sup> century or earlier. The two cores placed in the unexcavated interior of the building showed the V~1000 AD tephra layer in the turf. The tephra was horizontal in orientation, suggestive of an in situ tephra horizon. If the tephra is an in situ horizon in the collapse of the building it may date as early as the 10<sup>th</sup> century.

Despite the truncations and damage from structures 1 and 6, structure 2 is relatively well-preserved, especially in the north. The southern half of the building is damaged, especially where the foundation trench for structure 1 was excavated. The deeper, eastern half of the foundation appears to have truncated the layers associated with structure 2 entirely largely removing the southern, interior part of the building. The sections exposed by the removal of structure 1 show layers of mixed turf, organic material, and concentrations of peat ash but no clearly defined laminate floor. This indicates a potential difference in use or flooring between the northern and southern half of the building.

The building differs from the typical Viking Age domestic building (*skáli*) in significant and intriguing way. The building is rectilinear with sharp corners and straight walls, unlike the other Viking Age structures on the site. It also has entrances on the short (north and south) ends. These entrances are roughly aligned to the long axis of the building and were paved in stone. Both entrances appear to step down into the building. Also, there is little evidence for a turf wall on the southern end of the building, although later reuse of the site in structures 1 and 6 could have removed most evidence. There is a clear stone foundation with an interior platform of mixed turf. It may be a foundation for a wooden wall. Outside there are stepped rows of stone running the length of the short, south wall and it appears that a person entering the building would have walked up, in and then down into the structure.

Overall, structure 2 bears a marked resemblance to the structure in area E at Hólar, which was rectilinear and has central entrances on the short ends that stepped down into the building. Unlike the building at Hólar, structure 2 is divided into at least two sections by a central wall with a central passage located approximately 2/3 along the length of the building (similar to structure 5, below). There interior space shows a marked bilaterality between the eastern and western sides. In the east short sections of turf construction ran perpendicular to the wall into the interior of the building separated by areas of turf fill and mixed peat ash. None of these deposits was significantly compacted and did not appear to be walking surfaces or structural foundations.

Conversely, the western half of the building is highly compact in the GPR and suggests a more traditional floor.

### **Structure 3: Small Viking Age Hall**

No excavations were conducted at structure 3 during the 2009 field season and the area was not reopened.

### **Structure 4: Small Viking Age structure, possible barn**

The structure was initially identified in 2002 based on electromagnetic conductivity survey. A small test trench was excavated which confirmed the presence of a structure. Deposits of hay above the floor suggested the possibility of a byre. During the 2009 field season the full building was exposed and the 2002 test trench was reopened for micromorphological sampling. The turf wall is constructed of outer and inner layers of turf blocks and mixed turf fill. The outside corners of the building are rounded and made up of a continuous curving face of turf blocks

Initially, the inner edge of the wall was difficult to determine. This was due to an extensive layer of turf blocks and strips filling the interior of the building, probably the product of a deliberate leveling and infilling of the structure. The interpretation is supported by the high degree of compaction in the upper interface of the ruin seen in the GPR (figure 11). Stratigraphically, structure 4 predates the neighboring structure 5. In all likelihood the building was leveled to create easier access to the middle entrance to structure 5 and that the compaction of the turf is a result of trampling. A thin layer of sheet midden covered the collapsed building and extending to the east. The midden is probably associated with the occupation of structure 5.

No door was identified in structure 4 but it is mostly likely that the original door was in the middle of the eastern wall and was filled with turf along with the rest of the building.

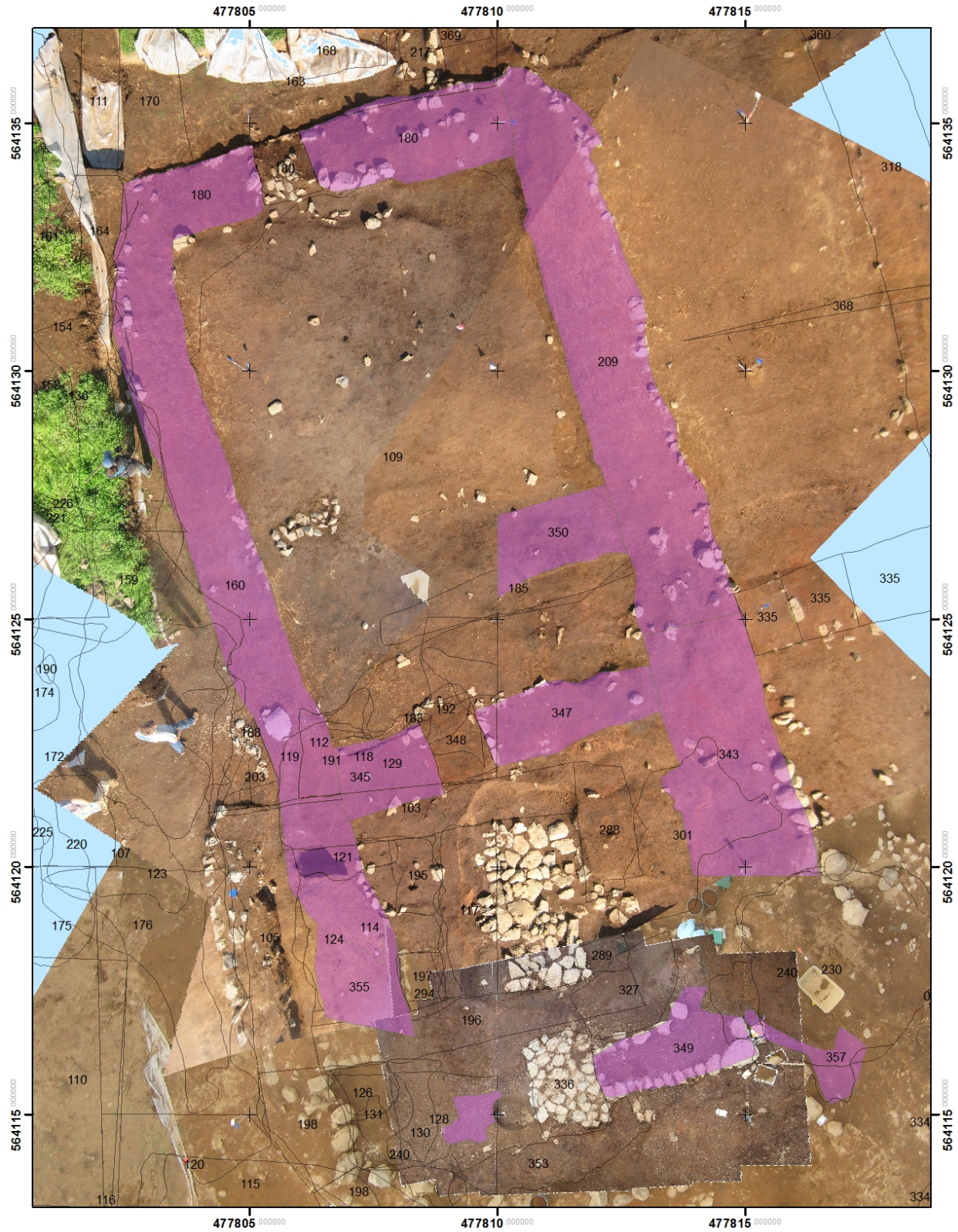


Figure 9. Structure 2.

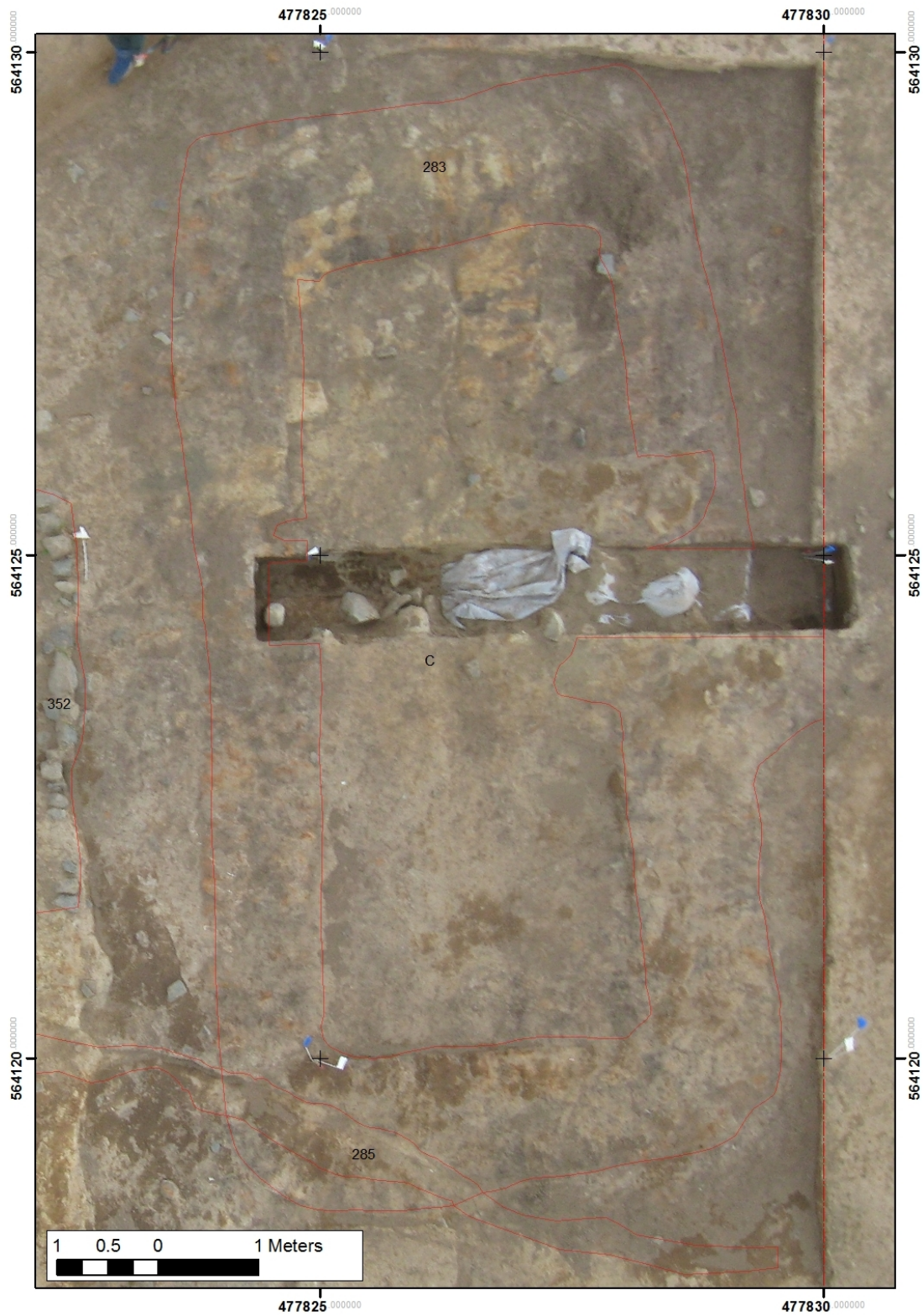
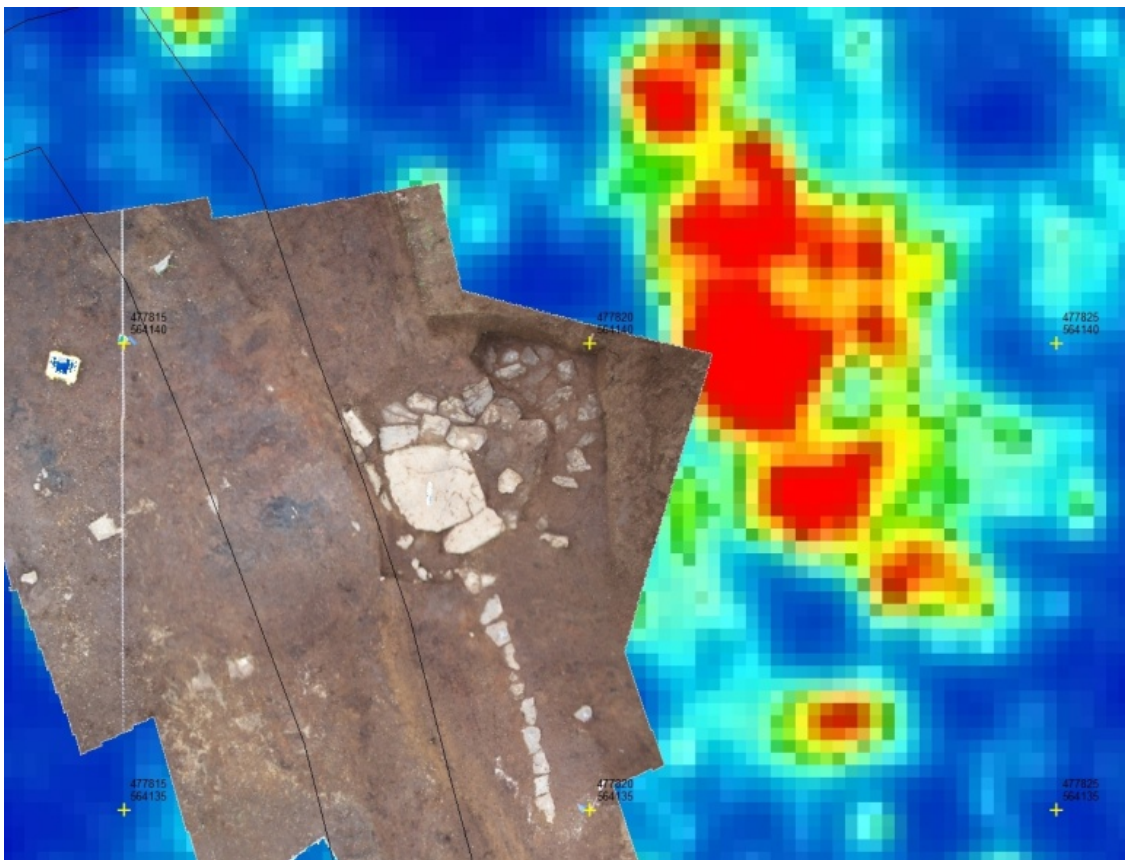


Figure 10. Structure 4.

### Structure 5: Longhouse

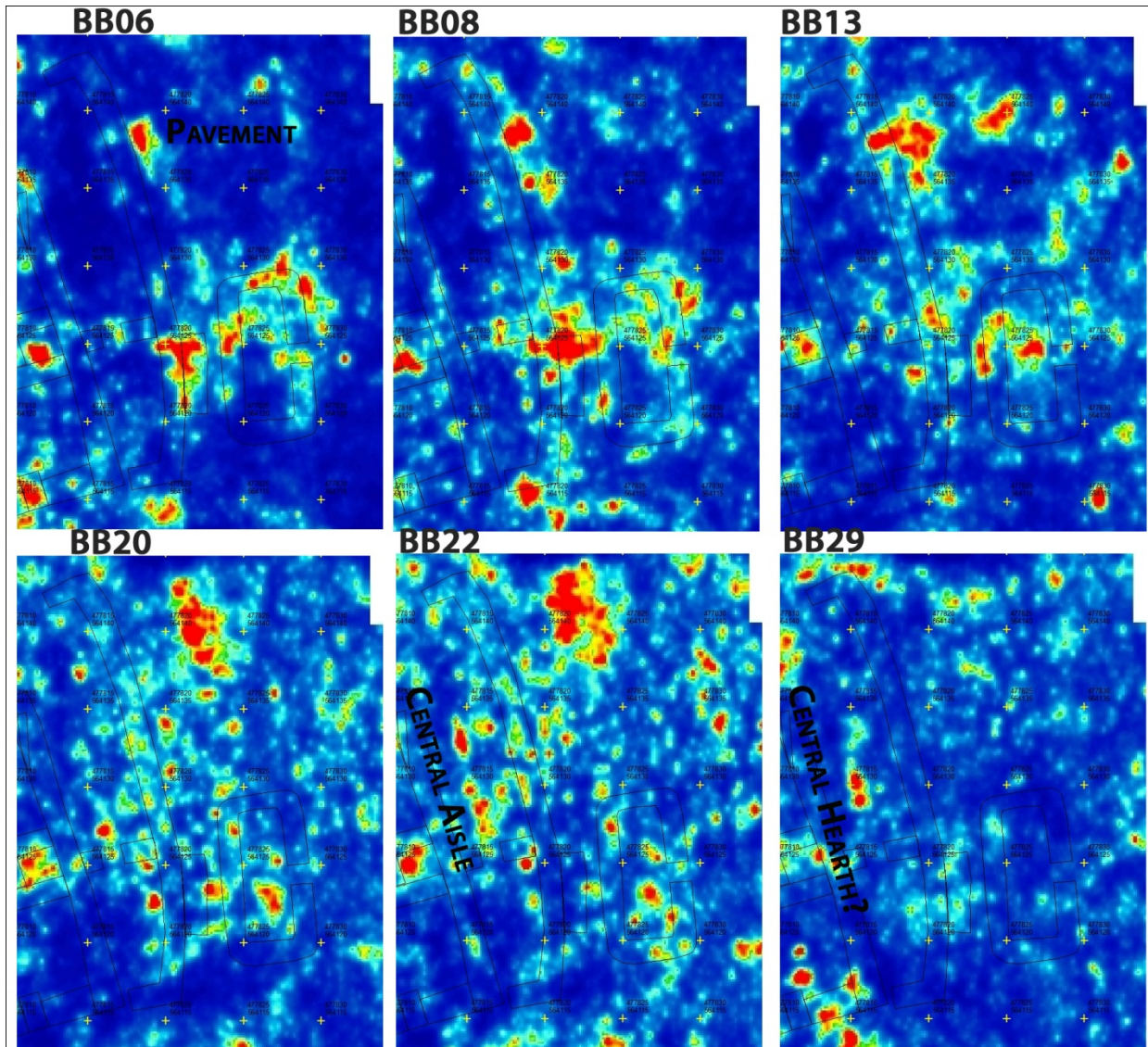
Structure 5 dates to the Viking Age and is approximately 27 meters in length. The building is sub-rectilinear in shape with a gently bowed wall on the eastern side. The building likely predates Veidavötn ~1000 AD eruption and conforms to the shape of a skáli-type structure. The building is divided by a turf and stone wall with a central passage connecting the two rooms situated approximately 2/3 of the way down the long axis of the building. There are two entrances to the building, one for each room and both opening to the east. The western wall of the building was not revealed in excavation as it lay under Structure 2. The structure appears to have consisted of two primary sections divided by central turf and stone wall with a central passage.

The most distinctive feature of the building is the large stepped, stone pavement leading to the northern entrance to the building. Only the first two steps, including a near meter wide entrance stone, were exposed in the excavation but GPR strongly indicates additional steps to the east (figure 11 and 12). GPR indicates a compacted central aisle and may show the location of a central long fireplace (figure 12).



**Figure 11. Detail of the northern entrance to structure 5 including doorway and stone paved steps. GPR slice is from BB20 (see figure x above) show the relationship between the exposed stone steps and the unexcavated reflector.**





**Figure 12. Structures 4 and 5, integration of contexts and GPR slices: (BB06) reflective pavement in northern and southern entrances to longhouse (structure 5) and compact surfaces over structure 4, (BB08) similar to above at greater depth; (BB13) the compact surface of the passage entrance into structure 5 in the north and expanding stone steps; (BB20) a possible additional paved step at northern entrance to structure 5; (BB22) further expansion of steps at northern entrance and first appearance of a reflective ‘central aisle’ in the northern half of structure 5; (BB29) deepest reflective feature associated with the central aisle in structure 5, the feature is below the rest of the compact aisle and *may* represent a fireplace.**

### **Structure 6: Pre-1104 structure, possible corral**

Structure 6 is the fragmentary remains of a turf and stone enclosure (figure 8). Little of the structure remains. It appears to have collapsed and was covered by an in situ Hekla 1004 tephra layer.

### Structure 7: Pre-1104 church, circular enclosure wall, and cemetery

During the GPR survey a half-circle approximately 16 meters in diameter was identified extending to the south of the deturfed area. We extended the deturfed area by an additional 10 meters south to capture the rest of the circle, if it existed. It does. The basic size and shape suggested the circular outer wall of a Christian cemetery with a central church. A small area crossing the wall and extending into the cemetery was opened in the south of the structure (area G) to ground-truth the GPR and check for graves. The excavation was placed based on the GPR signature or a possible grave. The grave, inhumation, and wall were found in their expected locations.

A description of the archaeogeophysics and human skeletal material will be found in separate reports.

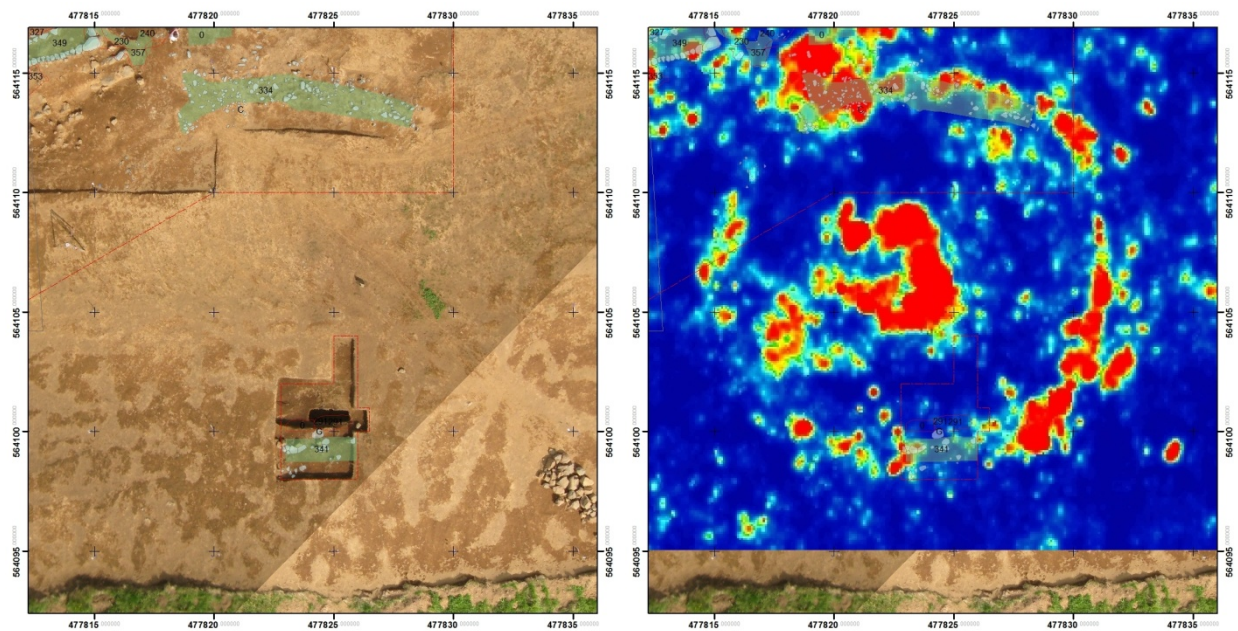


Figure 13 . Lower church and excavation area; (a) aerial view with excavated contexts, (b) GPR composite overlay at 21-37 cm below deturfed surface.

**APPENDIX A. CONTEXT REGISTER, AREA C**

<b>CONTEXT</b>	<b>AREA</b>	<b>TYPE</b>	<b>CLASS</b>	<b>DATE</b>	<b>ID</b>
1	C	Group			
2	C	Group			
2	1	Deposit	Collapse		
3	C	Group			
4	C	Deposit			
11	C	Deposit	Topsoil		
12	C	Deposit	Tephra		
13	C	Deposit			
14	C	Deposit			
15	C	Deposit			
16	C	Deposit			
17	C	Deposit			
18	C	Deposit			
19	C	Deposit			
30	C	Deposit			
31	C	Deposit			
33	C	Deposit			
34	C	Deposit	Cultural Layer		
35	C	Deposit	Upcast		
36	C	Deposit	Collapse		
37	C	Deposit	Floor		
101	C	Deposit	Topsoil	07/03/2008	KMJ
102	C	Deposit	Hearth	07/03/2008	KMJ
103	C	Deposit	Wall	07/04/2008	KEG
104	C	Deposit	Wall	07/04/2008	KDL
105	C	Deposit	Wall	07/04/2008	AA
106	C	Deposit	Wall	07/06/2008	KMJ
107	C	Deposit	Midden	07/06/2008	AA
108	C	Deposit		07/06/2008	KEG
109	C	Deposit	Collapse	07/06/2008	KDL
110	C	Cut	Excavation	07/07/2008	JWS
111	C	Cut	Excavation	07/07/2008	JWS
112	C	Deposit	Collapse	07/07/2008	HMR
113	C	Deposit		07/07/2008	AA
114	C	Deposit	Collapse	07/08/2008	KEG
115	C	Deposit	Collapse	07/08/2008	PJG
116	C	Deposit	Collapse	07/08/2008	PJG
117	C	Deposit	Collapse	07/09/2008	DJB
118	C	Deposit	Cultural Layer	07/09/2008	KDL
119	C	Deposit	Aeolian Deposit	07/09/2008	RSS
120	C	Deposit	Collapse	07/09/2008	PJG
121	C	Deposit	Midden	07/09/2008	CGC
122	C	Deposit		07/09/2008	
123	C	Deposit	Collapse	07/09/2008	AA

CONTEXT	AREA	TYPE	CLASS	DATE	ID
124	C	Deposit	Collapse	07/09/2008	KMJ
125	C	Group		07/09/2008	KMJ
126	C	Deposit	Collapse	07/12/2008	PJG
127	D	Deposit		07/12/2008	HT
128	C	Deposit	Collapse	07/12/2008	PJG
129	C	Deposit	Collapse	07/12/2008	DJB
130	C	Deposit	Cultural Layer	07/12/2008	PJG
131	C	Deposit	Collapse	07/12/2008	PJG
132	C	Group	Structure	07/15/2008	DJB
133	D	Deposit	Midden	07/16/2008	JMS
134	D	Deposit	Midden	07/16/2008	JMS
135	D	Deposit	Wall	07/16/2008	JMS
136	C	Deposit	Collapse	07/17/2008	KMJ
137	C	Deposit	Collapse	07/17/2008	CGC
138	C	Deposit	Collapse	07/17/2008	CGC
139	C	Deposit	Midden	07/17/2008	KMJ
140	C	Deposit	Excavation	07/18/2008	ALM
141	C	Deposit	Collapse	07/18/2008	ALM
142	C	Deposit	Collapse	07/18/2008	PJG
143	C	Deposit	Collapse	07/19/2008	KMJ
144					
145	D	Deposit	Midden	07/19/2008	HT
146	D	Deposit	Midden	07/19/2008	HT
147	C	Deposit	Collapse	07/19/2008	DJB
148	D	Deposit	Midden	07/19/2008	HT
149	C	Deposit	Wall	07/19/2008	PJG
150	C	Deposit	Collapse	07/20/2008	PJG
151	D	Deposit		07/20/2008	HT
152	C	Deposit	Stone Cluster	07/23/2008	KEG
153	C	Deposit	Collapse	07/23/2008	KMJ
154	C	Deposit	Wall	07/24/2008	DJB/PJG
155	C	Deposit	Collapse	07/25/2008	DJB
156	C	Deposit	Collapse	07/25/2008	PJG
157	D	Deposit		07/25/2008	JMS
157	D	Deposit		07/25/2008	JMS
158	D	Deposit		07/25/2008	JMS
159	C	Deposit	Collapse	07/28/2008	AA
160	C	Deposit	Wall	07/29/2008	AA
161	C	Deposit	Wall	07/29/2008	AA
162	C	Deposit	Stone Cluster	07/30/2008	PJG
163	C	Deposit	Collapse	07/30/2008	DJB
164	C	Deposit	Collapse	07/30/2008	AA
165	D	Deposit		07/30/2008	JMS
166	E	Deposit		07/30/2008	JMS
167	C	Deposit	Collapse	07/31/2008	RST

CONTEXT	AREA	TYPE	CLASS	DATE	ID
168	C	Deposit	Collapse	07/31/2008	JMS
169	D	Deposit	Midden	07/31/2008	JMS
170	C	Deposit	Collapse	07/31/2008	PJG
171	D	Deposit	Midden	08/01/2008	ELB
172	C	Deposit	Collapse	08/01/2008	AA
173	D	Deposit	Midden	08/01/2008	ELB
174	C	Deposit	Aeolian Deposit	08/01/2008	AA
175	C	Deposit	Floor	08/01/2008	AA
176	C	Deposit	Collapse	08/02/2008	KMJ
177	C	Deposit	Collapse	08/02/2008	DJB
178	C	Deposit	Aeolian Deposit	08/02/2008	DJB
179	C	Cut	Excavation	08/02/2008	JMS
180	C	Deposit	Wall	08/02/2008	PJG
181	C	Deposit	Cultural Layer	08/02/2008	KMJ
182	D	Deposit	Midden	08/02/2008	ELB
183	C	Deposit	Cultural Layer	08/02/2008	DJB
184	D	Deposit		08/02/2008	KEG
185	C	Deposit	Wall	08/04/2008	PJG
186	C	Deposit	Collapse	08/04/2008	PJG
187	D	Deposit	Midden	08/04/2008	ELB
188	C	Deposit	Wall	08/04/2008	DJB
189	C	Deposit	Collapse	08/04/2008	AA
190	C	Deposit	Hearth	08/04/2008	JMS
191	C	Deposit	Cultural Layer	08/05/2008	DJB
192	C	Deposit	Stone Cluster	08/05/2008	KMJ
193	D	Deposit	Midden	08/05/2008	ELB
194	D	Deposit	Midden	08/05/2008	ELB
195	C	Deposit	Wall	09/21/2009	KMJ
196	C	Deposit	Wall	09/21/2009	KMJ
197	C	Deposit	Wall	08/05/2008	KMJ
198	C	Deposit	Wall	08/05/2008	KMJ
199	D	Deposit	Midden	08/06/2008	ELB
200	D	Deposit	Midden	08/06/2008	JMS
201	D	Deposit	Midden	08/06/2008	ELB
202	D	Deposit		08/06/2008	ELB
203	C	Deposit	Wall	08/06/2008	DLW
204	D	Deposit		08/06/2008	JMS
205	C	Deposit	Collapse	08/06/2008	DJB
206	C	Deposit	Wall	08/06/2008	DJB
207	C	Deposit	Collapse	08/06/2008	DJB
208	C	Deposit		08/06/2008	PJG
209	C	Deposit	Wall	08/06/2008	PJG
210	C	Group	Group	08/06/2008	PJG
211	C	Deposit	Collapse	08/06/2008	PJG
212	C	Deposit	Wall	08/06/2008	DJB

CONTEXT	AREA	TYPE	CLASS	DATE	ID
213	C	Deposit	Wall	08/06/2008	PJG
214	C	Deposit	Collapse	08/06/2008	PJG
215	C	Deposit	Collapse	08/07/2008	KMJ
216	C	Deposit	Wall	08/07/2008	DJB
217	C	Deposit	Stone Cluster	08/07/2008	KMJ
218	C	Deposit	Wall	08/07/2008	AA
219	C	Group	Group	08/07/2008	PJG
220	C	Deposit	Cultural Layer	08/07/2008	
221	C	Deposit	Wall	08/07/2008	PJG
222	C	Group	Structure	08/07/2008	DJB
223	C	Group		08/09/2008	DJB
224	C	Deposit	Hearth	02/09/2009	DJB
225	C	Deposit	Floor	02/09/2009	DJB
226	C	Cut		02/09/2009	DJB
227	C	Cut	Excavation	02/23/2009	DJB
228	C	Group	Group	05/11/2009	DJB
229	C	Deposit		07/02/2009	KMJ
229	C	Deposit	Collapse	07/02/2009	KMJ
230	C	Deposit		07/03/2009	RST
231	C	Deposit	Tephra	07/03/2009	PJG
231	C	Deposit		07/03/2009	LWN
232	C	Deposit	Aeolian Deposit	07/06/2009	PJG
233	C	Deposit	Collapse	07/07/2009	PJG
233	C	Deposit	Collapse	07/07/2009	LWN
234	C	Deposit		07/08/2009	KEG
235	C	Deposit		07/09/2009	KEG
236	C	Deposit	Tephra	07/09/2009	LWN
236	C	Deposit	Tephra	07/10/2009	LWN
237	C	Deposit		07/10/2009	KEG
238	C	Deposit	Aeolian Deposit	07/10/2009	LWN
238	C	Deposit		07/10/2009	LWN
239	C	Deposit	Midden	07/10/2009	CMB
240	C	Cut	Cut	07/12/2009	KMJ
241	C	Deposit	Midden	07/13/2009	DJB
242	C	Deposit		07/13/2009	PJG
243	C	Deposit		07/14/2009	CMB
244	C	Deposit		07/14/2009	LWN
245	C	Deposit	Collapse	07/14/2009	KEG
246	C	Deposit	Midden	07/14/2009	CMB
247	C	Deposit		07/16/2009	DJB
248	C	Deposit	Collapse	07/16/2009	DJB
249	C	Deposit	Collapse	07/16/2009	DJB
250	C	Deposit	Collapse	07/17/2009	PJG
251	C	Deposit		07/17/2009	KMJ
252	C	Deposit		07/17/2009	DJB

CONTEXT	AREA	TYPE	CLASS	DATE	ID
253	C	Deposit		07/18/2009	CMB
254	C	Deposit		07/18/2009	KMJ
255	C	Deposit	Aeolian Deposit	07/21/2009	PJG
255	C	Deposit		07/21/2009	PJG
256	C	Deposit		07/21/2009	MAW
257	C	Deposit	Collapse	07/21/2009	PJG
258	C	Deposit	Collapse	07/22/2009	PJG
259	C	Deposit	Cultural Layer	07/21/2009	KMJ
260	C	Deposit	Floor		KMJ
261	C	Group		07/21/2009	DJB
262	C	Deposit	Collapse	07/22/2009	LWN
263	C	Deposit	Collapse	07/22/2009	CMB
264	C	Deposit		07/22/2009	KMJ
265	C	Deposit		07/22/2009	CMB
266	C	Cut	Cut	07/23/2009	KMJ
267	C	Deposit		07/23/2009	KRH
268	F	Deposit		07/23/2009	KRH
269	F	Cut		07/23/2009	KRH
270	F	Deposit		07/23/2009	KRH
272	C	Deposit	Collapse	07/25/2009	KRH
273	C	Deposit	Floor	07/28/2009	KEG
274	C	Deposit	Floor	07/27/2009	KEG
275	C	Deposit		07/27/2009	KMJ
276	C	Deposit	Midden	07/27/2009	CMB
277	C	Deposit	Cultural Layer	07/27/2009	KMJ
278	C	Deposit	Collapse	07/28/2009	LWN
279	C	Deposit	Collapse	07/29/2009	MAW
280	C	Deposit	Collapse	07/29/2009	PJG
281	C	Deposit		07/29/2009	DJB
282	C	Deposit	Collapse	07/29/2009	DJB
283	C	Deposit	Wall	07/30/2009	CMB
284	C	Deposit	Collapse	07/30/2009	PJG
285	C	Cut		07/30/2009	CMB
286	C	Deposit		07/31/2009	PJG
287	C	Deposit	Collapse	07/31/2009	LWN
288	C	Deposit	Wall	07/31/2009	PJG
289	C	Deposit	Wall	07/31/2009	PJG
290	C	Deposit	Collapse	08/01/2009	KMJ
291	G	Deposit	Grave	08/01/2009	KRH
292	C	Deposit	Wall	08/01/2009	CMB
293	C	Deposit	Collapse	08/01/2009	CMB
294	C	Deposit	Wall	08/03/2009	MAW
295	C	Deposit		08/03/2009	KEG
296	C	Deposit		08/03/2009	PJG
297	C	Deposit		08/03/2009	KMJ

CONTEXT	AREA	TYPE	CLASS	DATE	ID
298	C	Deposit	Pavement	08/03/2009	PJG
299	C	Deposit	Wall	08/03/2009	RST
300	C	Deposit		08/03/2009	RST
301	C	Deposit	Collapse	08/04/2009	KEG
302	C	Deposit	Wall	08/04/2009	KMJ
303	C	Cut	Grave	08/04/2009	KRH
304	C	Deposit		08/05/2009	MAW
305	C	Deposit	Collapse	08/05/2009	PJG
306	C	Deposit	Collapse	08/05/2009	KMJ
307	C	Deposit		08/05/2009	KEG
308	C	Group	Structure	08/06/2009	DJB
309	C	Cut		08/06/2009	DJB
310	C	Deposit		08/06/2009	PJG
311	C	Deposit		08/06/2009	PJG
312	C	Cut	Cut	08/06/2009	RST
313	C	Deposit		08/06/2009	RST
314	C	Deposit		08/06/2009	RST
315	C	Deposit		08/06/2009	KEG
316	C	Cut	Cut	08/06/2009	KEG
317	C	Deposit		08/07/2009	MAW
318	C	Deposit	Wall	08/07/2009	PJG
319	C	Deposit	Wall	08/07/2009	KEG
320	C	Cut		08/07/2009	PJG
321	C	Deposit	Collapse	08/07/2009	PJG
322	C	Deposit	Collapse	08/10/2009	KMJ
323	C	Deposit	Wall	08/10/2009	KMJ
324	C	Deposit		08/10/2009	KEG
325	C	Deposit	Pavement	08/10/2009	PJG
326	C	Deposit	Collapse	08/10/2009	RST
327	C	Deposit	Collapse	08/11/2009	PJG
328	C	Deposit	Hearth	08/11/2009	DJB
329	C	Deposit		08/11/2009	KMJ
330	C	Cut		08/11/2009	KMJ
331	C	Deposit	Collapse	08/11/2009	DJB
332	C	Deposit	Collapse	08/11/2009	DJB
333	C	Deposit	Wall	08/11/2009	DJB
334	C	Deposit	Wall	08/11/2009	JWS
335	C	Deposit	Wall	08/11/2009	DJB
336	C	Deposit	Pavement	08/11/2009	KMJ
337	C	Deposit		08/11/2009	KMJ
338	C	Cut	Excavation	08/12/2009	DJB
339	C	Deposit	Wall	08/12/2009	DJB
340	C	Deposit	Wall	08/12/2009	KEG
341	G	Deposit	Wall	08/12/2009	DJB
342	C	Deposit		08/13/2009	MAW



CONTEXT	AREA	TYPE	CLASS	DATE	ID
343	C	Deposit	Wall	08/13/2009	PJG
344	C	Cut		08/13/2009	PJG
345	C	Deposit	Wall	08/13/2009	PJG
346	C	Deposit	Structure	08/13/2009	PJG
347	C	Deposit	Wall	08/13/2009	PJG
348	C	Deposit	Entrance	08/13/2009	PJG
349	C	Deposit		08/13/2009	KMJ
350	C	Deposit	Wall	08/13/2009	PJG
351	C	Deposit	Stone Cluster	08/13/2009	PJG
352	C	Deposit		08/13/2009	JEC
353	C	Deposit	Cultural Layer	08/13/2009	KMJ
354	C	Deposit		08/13/2009	KMJ
355	C	Deposit	Wall	08/13/2009	PJG
356	C	Deposit	Wall	08/13/2009	PJG
357	C	Deposit		08/13/2009	PJG
358	C	Deposit	Pavement	08/13/2009	RST
359	C	Deposit	Wall	08/13/2009	RST
360	C	Deposit	Entrance	08/13/2009	RST
361	C	Deposit	Floor	08/13/2009	RST
362	C	Deposit		08/13/2009	RST
363	C	Deposit	Wall	08/13/2009	RST
367	C	Deposit	Pavement	08/13/2009	KRH
368	C	Deposit		08/13/2009	KMJ
369	C	Deposit	Wall	08/13/2009	RST
370	C	Group	Structure	09/14/2009	DJB
371	1	Deposit	Collapse		
372	1	Deposit			
373	1	Deposit	Collapse		
374	1	Deposit	Collapse		
1104	C	Deposit		07/12/2008	AA
1300	1	Deposit	Tephra		

**APPENDIX B. FINDS REGISTER, AREA C**

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	101	03/07/2008	KEG	Metal	coin/disc	2 small drilled holes
C	107	06/07/2008	AA	Metal	unid shape	small roundish piece of copper
C	107	07/07/2008	ELB	Metal	unid shape	small round piece of flat copper and iron
C	109	07/07/2008	KDL	Metal	unid shape	small round piece of flat copper
C	109	07/07/2008	KDL	Metal	unid shape	small round piece of flat copper
C	109	07/07/2008	KDL	Metal	nail	nail
C	101	07/07/2008	DJB	Ceramic	Pipe	
C	101	07/07/2008	DJB	Lithic		
C	109	07/07/2008	RSS	Metal	nail	bent nail
C	109	07/07/2008	RSS	Bone	fragment	burned
C	109	07/07/2008	RSS	Lithic	obsidian	
C	109	07/07/2008	DJB	Metal	Nail	
C	101	08/07/2008	DLW	Metal	unid shape	poss. Buckle, long cylindrical, bent at top
C	101	08/07/2008	DLW	Metal	slag	
C	101	08/07/2008	PJG	Ceramic	ceramic	porcelain
C	101	08/07/2008	PJG	Metal	slag	
C	101	08/07/2008	PJG	Lithic	worked roud?	possibly worked roud
C	101	08/07/2008	PJG	Metal	unid shape	
C	101	08/07/2008	PJG	Metal	?	
C	109	08/07/2008	CGC	Ceramic	transferware, plate sherd	
C	109	08/07/2008	RSS	Metal	unknown	copper "cap", dust
C	101	08/07/2008	JWS	Lithic		flint or obsidian
C	101	08/07/2008	JWS	Metal		rivet
C	101	08/07/2008	JWS	Glass		green glass shard
C	101	08/07/2008	JWS	Metal		localized collection of rivets and slag
C	101	08/07/2008	JWS	Metal		rivet
C	101	08/07/2008	JWS	glass and ceramic		localized collection of glass and ceramic
C	115	08/07/2008	KMJ	Slag		slag
C	115	08/07/2008	KMJ	Lithic		obsidian, prob.

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	115	08/07/2008	KMJ	Metal		Natural, not worked slightly curved, poss nail?
C	107	08/07/2008	AA	bone (calc), ceramic		calcified bone and ceramic
C	107	08/07/2008	AA	Slag		slag
C	101	08/07/2008	KMJ	Metal		context is iffy, copper
C	114	08/07/2008	KEG	Slag		collection from all context
C	101	08/07/2008	PJG	Metal	unknown	copper
C	117	08/07/2008	CGC	Bone		slice of horn
C	117	09/07/2008	DLW	Wood		wood splinters/ fragments
C	114	09/07/2008	KEG	Metal	unid shape	flat poss. Copper rectangular disc
C	114	09/07/2008	KEG	Metal	unid shape	flat metal rectangular disc flaked into two equal pieces
C	114	09/07/2008	KEG	Slag		slag
C	115	09/07/2008	PJG	Slag		slag
C	120	09/07/2008	PJG	Slag		slag
C	119	10/07/2008	RSS	Lithic	fragment	quartz?
C	121	10/07/2008	KEG	Bone		poss. Worked
C	117	10-0-08	JWW	Slag	fragment	3 pieces of slag-like material
C	121	10/07/2008	KEG	Slag	fragment	slag
C	120	11/07/2008	AA	Ceramic	fragment	piece of ceramic in disturbed area
C	121	11/07/2008	KEG	Bone		worked in some places
C	105	11/07/2008	KEG	Ceramic	unid shape	poss. Pipe stem frags
C	124	12/07/2008	DLW	Wood	fragment	wood splinters/ fragments
C	129	12/07/2008	CGC	Metal		
C	124	12/07/2008	KMJ	Lithic		possibly polished stone
D	134	17-07-08	MDP	stone		2 fragments, possible spindle weight
D	134	17-07-08	MDP	Iron	nail?	Iron nail is fairly

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	137	17-07-08	CGC	Bone		corroded/ actively corroding found in profile where H1 dives down, possibly under or with H1
C	101	17-07-08	PJG	Ceramic	fragment	
C	107	17-07-08	RSS	Bone	worked?	hole in end of bone made by shovel
C	140	18-07-08	AM	sheep poop?		NW corner in 1104 tephra layer
C	142	18-07-08	PJG	Metal	?	metal piece over 1104 tephra, no past color shape possible nail in between 1104 and 1000
C	143	19-07-08	KMJ	Metal	nail	these two iron nails are actively corroding
D	135	17-07-08	MDP	Metal	2 iron nails	
D	134	16-07-08	MDP	Metal	2 frag	
C	150	20-07-08	KEG	Metal	Nail	
C	150	20-07-08	AA	Metal	nail	iron nail beneath 1104
C	150	20-07-08	KEG	Metal	?	pointy
D	127	20-07-08	MDP	Metal	fragments	5 copper frags
D	127	20-07-08	MDP	Lithic	fragment	
C	136	22-07-08	RST	Metal		horse shoe? Assoc. w/ 1104 tephra
C	150	22-07-08	KEG	Metal	nail?	bent
C	136	22-07-08	KMJ	Metal		architectural
C	152	21-07-08	KEG	Bone		worked, groove on top
C	136	22-07-08	RST	Metal	?	sharp, pencil-shaped
C	150	23-07-08	PJG	Metal	nail	curved
C	150	23-07-09	PJG	Metal	?	
C	152	23-07-10	PJG	Metal	nail? Rivet?	found between rock piles
C	150	25-07-08	PJG	Slag		
C	154	25-07-08	PJG	Metal	?	in wall
C	154	25-07-08	PJG	Metal	?	in wall
C	156	25-07-08	PJG	Metal	?	in turf collapse

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	123	26-07-08	DJB	Lithic	Whetstone	in turf collapse post-1104
C	156	28-07-08	KEG	Metal	Ring pin	long copper pin with ring on one end
C	156	25-07-08	PJG	Metal	nail	
C	156	28-07-08	KEG	Metal	iron	oval shaped iron disc
C	156	28-07-08	KEG	Metal	iron	2 pcs. Found while screening, 1.) flat and bumpy, 2.) bent nail?
C	153	30-07-08	KMJ	Metal	iron	slightly curved- wrought
C	162	30-07-08	KEG	Lithic	stone	sm. Rock with spherical, irony hole
D	169	31-07-08	RSS	Wood	?	
D	169	31-07-08	RSS	Metal		
D	169	31-07-08	ELB	Metal		
D	169	31-0-08	ELB	Shell		
C	170	01/08/2008	KEG	Slag		Slag
C	164	01/08/2008	DJB	Lithic	Obsidian	Lt. Brown core
D	169	01/08/2008	RSS	Metal	?	
C	167	01/08/2008	DJB	Lithic	?	Polished stone
D	171	01/08/2008	ELB	Lithic		Not worked probably
D	171	01/08/2008	ELB	Metal		
D	171	01/08/2008	ELB	Shell		
D	171	01/08/2008	ELB	Metal		
D	171	01/08/2008	ELB	Plant?	?	
D	171	01/08/2008	ELB	Lithic	Shiny and round	Bead? Pebble? Obsidian?
C	0	01/08/2008	AA	Metal	Nail	Nail, well preserved, about 10cm long
D	0	01/08/2008	ELB	Metal		3 cm long, narrow, bent
D	173	01/08/2008	ELB	Metal		
D	173	01/08/2008	ELB	Metal		
D	173	01/08/2008	ELB	Shell		
D	182	02/08/2008	ELB	Metal		
D	182	02/08/2008	ELB	Metal		
D	182	02/08/2008	ELB	Shell		

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
D	173	02/08/2008	RSS	Lithic	Frag.	
D	187	04/08/2008	RSS	Metal	?	
D	187	04/08/2008	RSS	Lithic	Frag.	
C	183	05/08/2008	KMJ	Lithic	Frag	
C	189	05/08/2008	AA	Leather	Frag	
D	193	05/08/2008	RSS	Lithic	Frag	
D	193	05/08/2008	ELB	Metal		
D	193	05/08/2008	ELB	Textile		tear, piece
D	193	05/08/2008	ELB	Shell	Skin	
C	178	05/08/2008	RST	Metal	frag	
D	194	05/08/2008	ELB	Metal		
C	195	05/08/2008	KJ	Lithic		
D	199	06/08/2008	RSS	Metal	Frag	
C	196	06/08/2008	KMJ	Lithic	Frag	
D	204	07/08/2008	ELB	Metal	Frag	
D	201	07/08/2008	ELB	Metal	Frag	
D	201	07/08/2008	ELB	Wood	Charcoal	
D	201	07/08/2008	ELB	Lithic	odd pebble	
D	201	07/08/2008	ELB	Lithic	odd pebble	Polished?
D	202	07/08/2008	ELB	Wood	Wood	
C	117	07/02/2009	KRH	Slag	slag	
C	117	07/03/2009	RST	Glass		glass fragment, ceramic piece
C	117	07/03/2009	KRH	Metal		rolled copper piece
C	101	07/04/2009	KMJ	Metal	unknown	iron
C	101	07/04/2009	RST	Metal	nail	nail
C	230	07/08/2009	MDP	Slag		slag
A	101	07/26/2008				
C	101	07/04/2009				
C	117	07/03/2009				
C	101	06/30/2009				
C	101	07/03/2009				
C	117	07/02/2009	KRH	Metal	unknown	iron
C	117	07/02/2009	KRH	Ceramic		whiteware
C	117	07/02/2009	KRH	Metal	unknown	silver?
C	128	07/02/2009	SAM	Slag	slag	
C	101	07/03/2009	KEG	Metal	Nail	iron
C	101	07/03/2009	KEG	Metal	horseshoe	iron
C	101	07/04/2009	JEC	Ceramic		ceramic samples
C	101	07/03/2009	RST	Glass		fragment
C	101	07/03/2009	RST	Metal	Nail	iron
C	117	07/03/2009	KRH	Metal		copper piece
C	243	07/03/2009	DJB	Metal		copper piece
C	101	07/03/2009	PJG	Metal		straight flat piece,

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	101	07/03/2009	KEG	Bone		two holes frag w possible paint
C	101	07/03/2009	KEG			poss foil
C	101	07/03/2009	KEG	Mixed		glass, ceramic, iron
C	101	07/03/2009	KEG	Metal		wood w copper bar/nail
C	230	07/03/2009	RST	Mixed		glass, ceramic
C	101	07/03/2009	PJG	Metal	Nail	
C	209	07/04/2009	RST	Metal	Nail	nail
C	101	07/04/2009	RST	Ceramic		fragments
C	101	07/04/2009	KMJ	Metal	unknown	copper
C	101	07/04/2009	RST	Metal	nail	nail
C	101	07/04/2009	RST	Metal	Nail	nail
C	101	07/04/2009	KEG	Lithic		worked stone
C	101	07/06/2009	KRH	Metal	Nail	nail
C	101	07/06/2009	KRH	Lithic		worked sandstone
C	101	07/06/2009	PJG	Metal	Nail	nail
C	101	07/06/2009	KMJ	Ceramic		blue annular bands
C	101	07/06/2009	RST	Metal		copper piece
C	230	07/06/2009	MAW	Mixed		copper, lithic, redware
C	230	07/07/2009	MDP	Metal		copper
C	230	07/07/2009	MAW	Metal	nails, door hardware	screen finds
C	128	07/07/2009	KEG	Lithic		flat stone slice?
C	230	07/07/2009	MAW	Metal		copper w two holes
C	128	07/07/2009	KEG	Ceramic		pink transfer print
C	230	07/07/2009	KMJ	Lithic		worked rim to small vessel
C	128	07/08/2009	KEG	Metal	Nail	iron, possibly burnt
C	230	07/09/2009	KMJ	Metal	ring	copper w rivet
C	230	07/08/2009	KMJ	Lithic	Sledge	1/2 stone sledge
C	230	07/08/2009	MDP	Metal		misc from screen: coin nails, copper frags
C	230	07/10/2009	KMJ	Bone	Spoon	worked handle, poss spoon, horn?
C	235	07/09/2009	KEG	Textile	twine	
C	235	07/09/2009	KEG	Bone	Die	dice? decorative holes on end

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	235	07/09/2009	KEC	Lithic		tubular stone w poss drill holes
C	230	07/09/2009	MDP	Metal		nails, cuperous objects, poss scissor handle
C	235	07/10/2009	KEC	Lithic	mica	
C	235	07/10/2009	RST	Ceramic		stoneware
C	235	07/10/2009	KEG	Lithic	Whetstone	poss. whetstone
C	101	07/13/2009	RST	Metal	Nail	nail
C	243	07/14/2009	CMB	Lithic	chert	
C	243	07/14/2009	CMB	Metal	nail?	
C	243	07/14/2009	RST	Metal		
C	243	07/14/2009	CMB	Metal		
C	243	07/14/2009	CMB	Metal	nail?	
C	101	07/15/2009	RST	Lithic		green/blue stone
C	244	07/15/2009	PJG	Metal	knife	blade
C	243	07/15/2009	CMB	Lithic		greenish
C	114	07/16/2009	KEG	Ceramic		porcelain
C	114	07/16/2009	KMJ	Metal	nail	
C	249	07/17/2009	KEG	Wood		
C	246	07/17/2009	CMB	Metal		iron, disc shaped
C	246	07/17/2009	RST	Lithic		obsidian and other lithics
C	246	07/17/2009		Metal		iron, multiple frags
C	247	07/17/2009	KMJ	Wood		piece of wood next to turf wall
C	101	07/21/2009	CMB	Metal	nail?	iron
C	258	07/21/2009	PJG	Metal		iron, round disc
C	230	07/09/2009	MDP	Metal	slag	
C	230	07/10/2009	KMJ	Metal	slag	
C	191	07/13/2009	LWN	Leather		round leather piece?
C		07/13/2009	KMJ	Lithic		rounded quartzite w pecking marks
C	1104	07/22/2009	RST	Metal		long iron object
C	256	07/22/2009	MAW	Lithic		obsidian
C	265	07/22/2009	RST	Metal	nail	iron
C	265	07/22/2009	CMB	Metal		iron, hooked
C	265	07/22/2009	CMB	Metal		iron
C	265	07/22/2009	CMB	Metal		iron, flat, perforated?
C	1104	07/22/2009	RST	Metal		iron ring
C	247	07/22/2009	KEG	Wood		long, thick
C	167	07/23/2009	KRH	Metal	buckle	iron



AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	264	07/23/2009				
C	229	07/17/2009	PJG	Metal		
C	265	07/24/2009	CMB	Metal		iron
C	101	07/25/2009	VXF	Lithic		quartz
C	101	07/25/2009	PJG	Metal	nail	iron
C	101	07/25/2009	VXF	Lithic	whetstone	
C	265	07/25/2009	CMB	Metal	button?	copper, possibly decorated
C	109	07/25/2009	KEG	Lithic	obsidian	flake, possibly natural
C	271	07/27/2009	LWN	Metal		small iron piece
C	271	07/27/2009	PJG	Metal		copper, flat
C	1104	07/27/2009	DJB	Lithic	whetstone	found in mixed in situ 1104 and turf over church
C	276	07/28/2009	CMB	Lithic		sandstone, possibly shaped
C	276	07/28/2009	GHB	Metal		iron
C	276	07/28/2009	GHB	Lithic		screen finds: obsidian, chert?, slag or iron?
C	276	07/29/2009	KRH	Metal		screen finds: iron
C	278	07/29/2009	LWN		hair	
C	276	07/29/2009	CMB	Metal	nail	iron
C	276	07/29/2009	CMB	Metal		iron
C	281	07/29/2009	KEG	Lithic		worked quartz
C	280	07/30/2009	PJG	Bone		one that Pete really liked, which is why it's a find
C	279	07/30/2009	VXF	Metal	nail	
C	276	07/29/2009	CMB	Lithic	obsidian	
C	283	07/30/2009	KRH	Metal		"iron ball"
C	270	07/30/2009	KRH	Metal	Nail	nail in grave fill
C	196	08/01/2009	KEG	Metal		small copper piece
C	291	08/01/2009	KRH	Metal	Nail	iron nail in grave
C	101	08/05/2009	DJB	Lithic		Obsidian, duplicate find number 137 from 2008 replaced with 242
C	150	08/05/2009	DJB	Metal		Metal, duplicate find number 136 from 2008 replaced with 243

AREA	CONTEXT	DATE	ID	MATERIAL TYPE	OBJECT TYPE	DESCRIPTION
C	150	08/05/2009	DJB	Metal		Metal, duplicate find number 138 from 2008 replaced with 244
C	127	07/12/2008	HBT	Textile		woven cloth fragments, duplicate find number 140 from 2008 replaced with 245
C		08/05/2009	DJB	Metal		Metal, duplicate find number 135 from 2008 replaced with 246
C	305	08/05/2009	RST	Lithic		Obsidian
C	321	08/07/2009	PJG	Metal		
C	186	08/07/2009	KRH	Lithic		Spindle whorl
C	323	08/10/2009	PJG	Metal		
C	329	08/10/2009	KMJ	Lithic		obsidian drillpoint
C	326	08/10/2009	RST	Metal		
C	120	08/11/2009	LWN	Metal		
C	328	08/11/2009	DJB	Ceramic	Crucible	hollow copper piece
C	327	08/11/2009	PJG	Metal		nail
C	327	08/11/2009	PJG	Metal		nail
C	349	08/11/2009	PJG	Lithic		stone (white)
C	353	08/14/2009	KEG	Lithic		obsidian point
C	353	08/14/2009	KEG	Lithic		obsidian point
C	186	08/10/2009	MAW	Metal	nail	nail
C	369			Lithic		lamp?
C	0	07/29/2009	GHB	Metal	Iron bloom	Retrieved out of context, no provenience
C	186	08/10/2009	MAW	Metal		
C	363	08/10/2009	MAW	Metal	Iron nail	Fragments of nail

**APPENDIX C. SAMPLE REGISTER**

<b>AREA</b>	<b>CONTEXT</b>	<b>SAMPLE</b>	<b>EAST</b>	<b>NORTH</b>	<b>Z</b>	<b>VOL.</b>	<b>TYPE</b>
C	102	1				8L	Flotation
C	118	2					Flotation
C	129	3					
D	133	4	477820	564128		4L	Flotation
D	133	5	477820	564128		4L	Flotation
D	133	6	477820	564128		4L	Flotation
D	133	7	477820	564128		4L	Flotation
D	133	8	477820	564128		60g	Pollen
D	134	9	477820	564128		4L	Flotation
D	134	10	477820	564128		4L	Flotation
D	145	11	477820	564128		4L	Flotation
D	145	12	477820	564128		4L	Flotation
D	145	13	477820	564128		4L	Flotation
D	148	14	477820	564128		4L	Flotation
D	148	15	477820	564128		4L	Flotation
D	148	16	477821.19	564147.08	12.29		Radiocarbon
D	148	17	477820.198	564147.878	12.57		Tephra
D	151	18	477821.64	564148.4	12.3		Tephra
D	157	19	477820	564144	13.92	100ml	Pollen
D	157	20	477820	564144	13.92	100ml	Pollen
C	156	21	477794.27	564136.24	5.29	4L	
C	156	22					
C	156	23	477797.24	564139.13	14.85	-	Soil, Bulk
D	127	24					Soil, Bulk
D	127	25					Tephra
D	127	26					
D	127	27					Radiocarbon
D	127	28					Soil, Bulk
D	127	29					
D	127	30					

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
D	127	31					
D	127	32					
C	154	33	477799.76	564136.76	14.82		Tephra
D	127	34					
D	127	35					
D	127	36					
D	127	37					
D	127	38					
C	164	39	477800.62	564137.98	14.55		
D	127	40					
D	127	41					
D	127	42					
D	127	43					
D	127	44					
D	127	45					
D	127	46					
D	127	47					
D	127	48					
D	127	49					
E	166	50	0	0	0		
E	166	51	0	0	0	-	
E	166	52	0	0	0	-	
E	166	53	0	0	0	-	
D	169	54	477819.31	564144.24		4L	
D	165	55	0				
D	169	56					
E	166	57	0	0	0	-	
E	166	58	0	0	0	-	
E	166	59	0	0	0	-	
E	166	60	0	0	0	-	
E	166	61	0	0	0	-	

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
E	166	62	0	0	0	-	
E	166	63	0	0	0	-	
E	166	64	0	0	0	-	
E	166	65	0	0	0	-	
E	166	66	0	0	0	-	
D	169	67	477819.31	564144.25		4L	Flotation
D	169	68	477818	564144	0	4L	Flotation
D	169	69	477820	564145	0	4L	Flotation
D	169	70	477818	564145	0	4L	Flotation
D	171	71	477818.51	564144.5	0	4L	Flotation
D	171	72	477819.5	564144.5	0	4L	Flotation
D	171	73	477818.5	564145.5	0	4L	Flotation
D	171	74	477819.5	564145.5	0	4L	Flotation
D	169	75	477818.5	564144.5	0	4oz	Soil, Bulk
D	169	76	477819.5	564144.5	0	4oz	Soil, Bulk
D	169	77	477818.5	564145.5	0	4oz	Soil, Bulk
D	169	78	477819.5	564145.5	0	4oz	Soil, Bulk
D	171	79	477818.5	564144.5	0	4oz	Soil, Bulk
D	171	80	477819.5	564144.5	0	4oz	Soil, Bulk
D	171	81	477818.5	564145.5	0	4oz	Soil, Bulk
D	171	82	477819.5	564145.5	0	4oz	Soil, Bulk
D	173	83				4L	Flotation
D	173	84				4L	Flotation
D	173	85				4L	Flotation
D	173	86				4L	Flotation
D	173	87				4L	Flotation
D	173	88				4L	Flotation
	0	89					
	0	90					
	0	91					
	0	92					

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
	0	93					
	0	94					
	0	95					
	0	96					
	0	97					
	0	98					
	0	99					
	0	100					
	0	101					
C	179	102					
D	182	103	477819.5	564144.5		4L	
D	182	104	477818.5	564144.5		4L	
D	182	105	477819.5	564145.5		4L	
D	182	106	477818.5	564145.5		4L	
D	182	107	477819.5	564146.5		4L	
D	182	108	477818.5	564146.5		4L	
D	1000	109	477819	564145		4 oz	
C	183	110	477810	564123		4L	Flotation
C	189	111	0				Radiocarbon
C	190	112					Flotation
D	187	113	477819.5	564144.5		4L	Flotation
D	187	114	477818.5	564144.5		4L	Flotation
D	187	115	477819.5	564145.5		4L	Flotation
D	187	116	477818.5	564145.5		4L	Flotation
D	187	117	477819.5	564146.5		4L	Flotation
D	187	118	477818.5	564146.5		4L	Flotation
D	194	119	477819.5	564144.5		4L	Flotation
D	194	120	477818.5	564144.5		4L	Flotation
D	193	121	477819.5	564145.5		4L	Flotation
D	193	122	477818.5	564145.5		4L	Flotation
D	193	123	477818.5	564146.5		4L	Flotation

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
D	193	124	477818.5	564146.5		4L	Flotation
D	194	125	477819.5	654145.5		4L	Flotation
D	194	126	477818.5	564145.5		4L	
D	194	127	477819.5	564146.5		4L	
D	194	128	477818.5	564146.5		4L	
C	178	129	477795.14	564124.22	15.96	4L	
C	178	130	477795.14	564124.22	15.96	4L	
D	199	131	477819.5	564144.5		4L	Flotation
D	199	132	477818.5	564144.5		4L	Flotation
D	199	133	477819.5	564145.5		4L	Flotation
D	199	134	477818.5	564145.5		4L	Flotation
D	199	135	477819.5	564146.5		4L	Flotation
D	199	136	477818.5	564146.5		4L	Flotation
D	204	137	477819.1	564146.85	12.74	4 oz	
D	950	138	0			4 oz	Tephra
D	200	139	477819.5	564144.5		4L	Flotation
D	200	140	477818.5	564144.5		4L	Flotation
D	200	141	477819.5	564145.5		4L	Flotation
D	200	142	477818.5	564145.5		4L	Flotation
D	200	143	477818.5	564146.5		4L	Flotation
D	204	144	0			6-7 L	
D	201	145	477819.5	564144.5		4L	Flotation
D	201	146	477818.5	564144.5		4L	Flotation
D	201	147	477519.5	564145.5		4L	Flotation
D	201	148	477518.5	564145.5		4L	Flotation
D	201	149	477519.5	564146.5		4L	Flotation
D	201	150	477518.5	564146.5		4L	Flotation
D	202	151	477519	564144.5		4L	Flotation
D	202	152	477519	564145.5		4L	Flotation
D	0	153	477819.75	564145		4L	Flotation
D	0	154	477818	564145		4L	Flotation

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
D	204	155				4 oz	Phytolith
D	204	156				4 oz	Phytolith
C	124	157					Flotation
C	231	158	477813.63	564124.21	14.2		Tephra
C	230	159				2	Flotation
C	230	160				2	Flotation Flotation
C		161				Micro	Tephra
C	235	162				2	Flotation
C	237	163				100 mL	
C	237	164				100 mL	
C	191	165				Micro	Tephra
C	191	166				Micro	Tephra
C	191	167				Micro	Tephra
C	245	168				2	Flotation
C	249	169				2	Flotation
C	250	170				2	Flotation
C	254	171				2	Flotation
C	256	172				Micro	Tephra
C	259	173		0		2	Flotation
C	259	174		0		2	Flotation
C	260	176	477807.61	564119.92		2	Flotation
C	260	175	477807.82	564117.21		2	Flotation
C	260	177	477806.93	564117.34		2	Flotation
C	260	178	477806.42	564119.41		2	Flotation
C	260	179	477806.13	564118.96		2	Flotation
C	256	180	477815.72	564112.26		1 Teaspoon	Tephra
C	260	181				2	Flotation
C	274	182				5	
C	274	183	477807.82	564117.21		4	Flotation



AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
C	274	184	477806.42	564119.41		4	Flotation
C	274	185	477807.61	564119.92		4	Flotation Flotation
C	274	186	477806.13	564118.34		4	Flotation
C	274	187	477806.13	564117.34		4	Flotation
C	274	188				4	Flotation
C	274	189	477806.68	564118.34		4	Flotation
C	274	190				100 mL	
C	276	192	477825	564120		4	Flotation
C	280	193	477810	564120		2	Flotation
C	280	194	477810.09	564118.55	14.1	2	Flotation
C	280	195	477809.89	564120.38	14.1	2	Flotation
C	280	196	477811.08	564120.72	13.99	2	Flotation
C	280	197	477811.41	563119.18	13.91	2	Flotation
C	280	198				2	
C	280	199				2	Flotation
C	280	200	477810	564118.5		2	Flotation
C	286	201				2	Flotation Flotation
C	286	202				2	Flotation
C	286	203				2	Flotation
C	286	204				2	Flotation
C	286	205				2	Archaeoentomology Archaeoentomology
D	1000	206	477819.51	564144.05	13.28	5m	Tephra
D	950	207	477870.01	564144.87	13	5m	Tephra
D	871	208	477819.47	564144.06	12.9	5m	Tephra
D		209				5m	Tephra
C	1104	210	477819.16	564177.07	13.59		Tephra
C	286	211				4L	Flotation
C	309	212				4L	Soil

AREA	CONTEXT	SAMPLE	EAST	NORTH	Z	VOL.	TYPE
C	309	213				4L	Soil
C	309	214				4L	Soil
C	309	215				4L	Soil
C	309	216				4L	Soil
C	309	217				4L	Soil
C	309	218				4L	Soil
C	309	219				4L	Soil
C	111	220				4L	Soil
C	111	221				4L	Soil
C	111	222				4L	Soil
C	111	223				4L	Soil
C	111	224				4L	Soil
C	111	225				4L	Soil
C	111	226				4L	Soil
C	111	227				4L	Soil
C	111	228				4L	Soil
C	315	229				2l	Flotation
C	313	230				>1L	Flotation
C	111	231				Micro	Flotation
C	315	232					
C	311	233				2L	Flotation
1	374	3	570015	7273456	-0.93		Radiocarbon

## APPENDIX D. 2007-2009 CREW LIST AND REGISTER IDENTITIES

FULL NAME	ID
Amelie Allard	AA
Antonio Gilman	AG
Allen Gontz	AMG
Amanda Schreiner	AMS
Ayshe Rezan Yeager	ARY
Brian Damiata	BND
Colin Connors	CGC
Christa M. Beranek	CMB
David B. Landon	DBL
Douglas James Bolender	DJB
David White	DLW
Dennis Vincent Piechota	DVP
Emily Button	ELB
E. Paul Durrenberger	EPD
Gregory Howard Bailey	GHB
Heather Bethany Trigg	HBT
Howell M. Roberts	HMR
Jessica Bowes	JDB
Jane D. Piechota	JDP
Joanna Curtis	JEC
Jennifer M. Landon	JML
John Michael Steinberg	JMS
John Walter Schoenfelder	JWS
Josiah Wagener	JWW
Kathryn Catlin	KAC
Kristina D. Larkin	KDL
Katharine Corwin	KEC
Katherine Goldberg	KEG
Katharine Johnson	KMJ
Kelly Renee Hale	KRH

Konrad Smiarowski	KS
Laura Wai Ng	LWN
Michael Way	MAW
Marisa Diane Patalano	MDP
Michael Slawson	MRS
Nick	NXS
Peter Gangemi	PJG
Rita Shepard	RSS
Rosie Taylor	RST
Susan Ann Jacobucci	SAJ
Stephen Albert Mrozowski	SAM
Sam Mrozowski	SAMj
Tess Ostrowsky	TEO
Véronique Forbes	VXF

## REFERENCES

Johnsen, J. (1847). Jarðatal á Íslandi. Copenhagen.

Magnússon, Á. and P. Vídalín (1930). Járðabók Árna Magnússonar og Páls Vídalíns I-XIII. Copenhagen, Hið íslenska fræðafélag.

<b>SITE</b> 104	<b>FIND</b> 159	<b>AREA</b> C	<b>CONTEXT</b> 101
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b> nail	<b>DESCRIPTION</b> nail	<b>ATTENTION</b> Y
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<b>DATE</b> 7/4/2009	<b>ID</b> RST	<b>UNIQUE_ID</b> 104C101F159	<b>Conservation Date</b> 8/11/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron object, t-shaped, 20 x 17 x 10mm

**Condition**  
Dirt, corrosion present on all surfaces, heavy crust

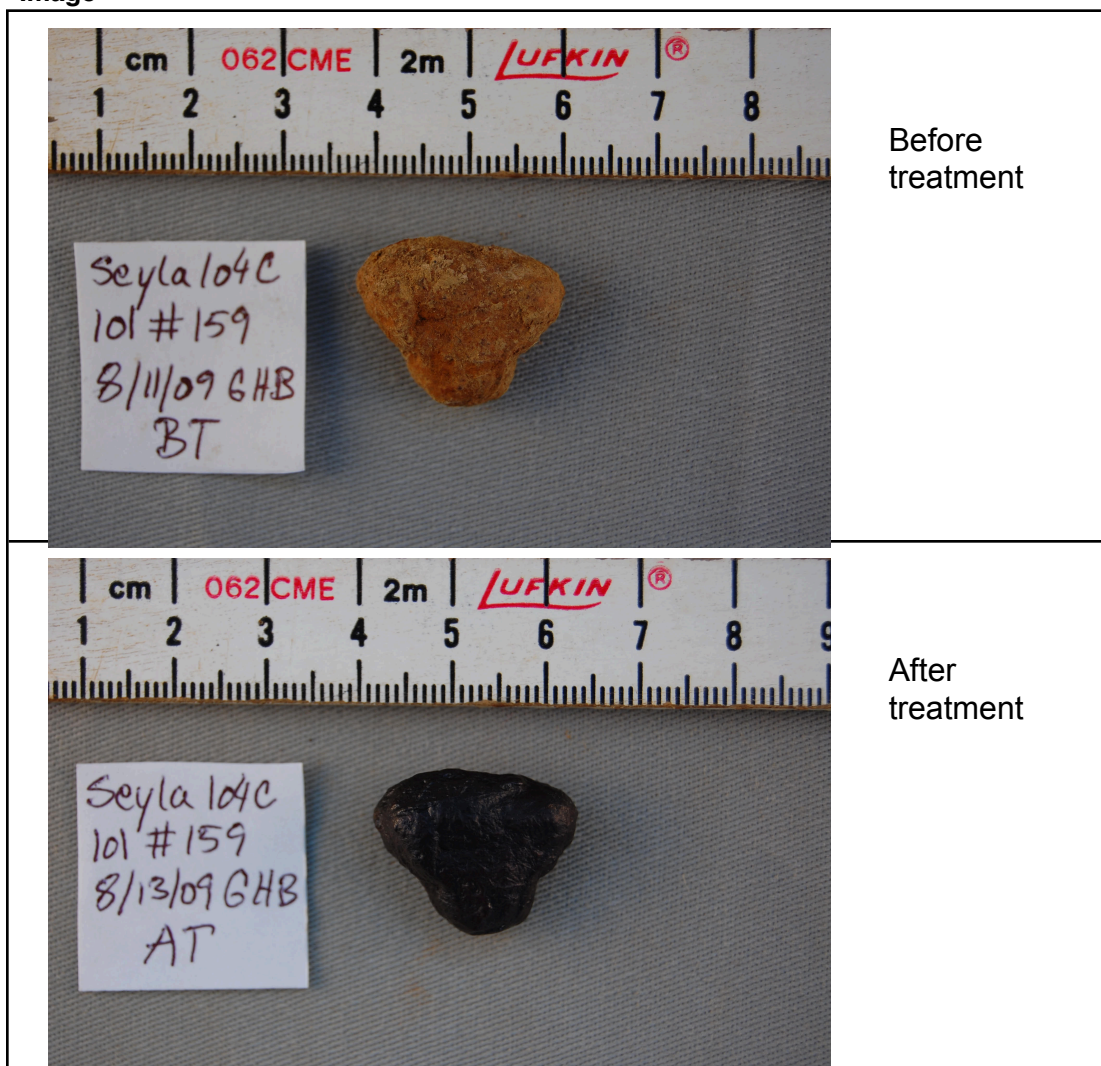
**Storage Location**  
Seyla 104 2009 Box Metals Container 1

**Treatment**  
Object was cleaned mechanically using a bamboo skewer and nylon bristle brush. The object was then treated with three applications of tannic acid solution (10% by weight tannic acid in deionized water with a small amount of isopropyl alcohol) rolled on cotton swabs, with three hours between applications.

**Storage Recommendations**

**Other Notes**

**Image**



<b>SITE</b>	<b>FIND</b>	<b>AREA</b>	<b>CONTEXT</b>
104	179	C	235

<b>MATERIAL TYPE</b>	<b>OBJECT TYPE</b>	<b>DESCRIPTION</b>	<b>ATTENTION</b>
Bone	Die	dice? decorative holes	Y

<b>DATE</b>	<b>ID</b>	<b>UNIQUE_ID</b>	<b>Conservation Date</b>	<b>Conservator</b>
7/9/2009	KEG	104C235F179	7/9/2009	Gregory Bailey

**Material Characteristics**  
 Bone object, appears to be cubic, with incised concentric circles/dots present on at least 2 surfaces, approximately 10 mm to a side

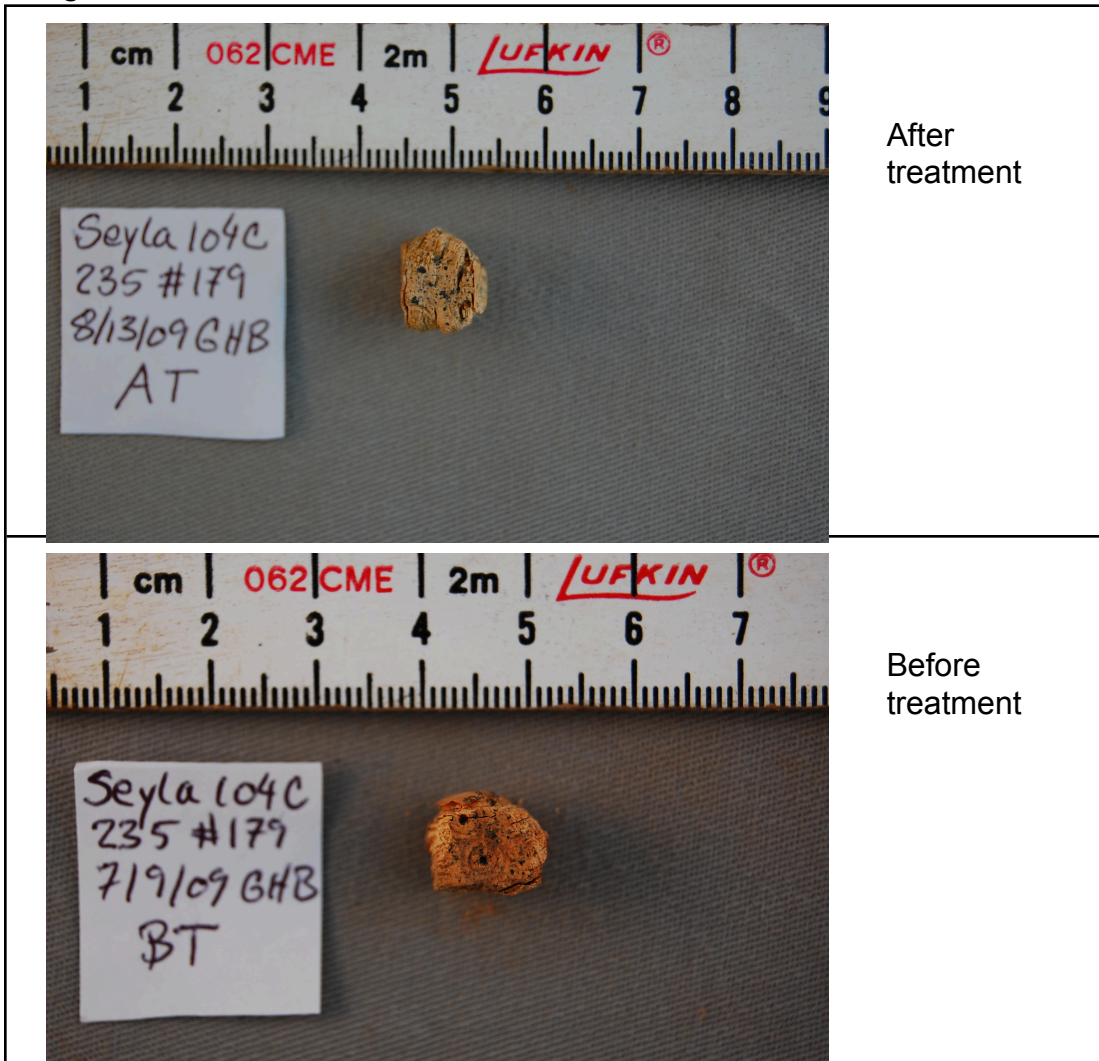
**Condition**  
 Damp, dirt present on all surfaces. Bone appears degraded and friable. Object is very fragile.

**Storage Location**  
 Seyla 104 2009 Box

**Treatment**  
 Placed in solvent chamber with isopropanol and deionized water to dry slowly. Removed after three weeks and cleaned gently with a soft hair bristle brush. Object was immersed in acetone for 2 hours to dehydrate and increase penetration of consolidant. Object was removed and then immersed in a solution of 5% by weight B-72 in acetone for 6 hours. Object was removed and placed on a metal screen in a partially sealed chamber of acetone vapor to dry. After 24 hours, object was removed and placed in supportive housing of volara and blueboard.

**Storage Recommendations**      **Other Notes**

**Image**



<b>SITE</b> 104	<b>FIND</b> 210	<b>AREA</b> C	<b>CONTEXT</b> 265
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b> nail	<b>DESCRIPTION</b> iron	<b>ATTENTION</b> Y
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<b>DATE</b> 7/22/2009	<b>ID</b> RST	<b>UNIQUE_ID</b> 104C265F210	<b>Conservation Date</b> 7/23/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron object, possibly rivet,  
27 x 15 x 14mm, 5.7g

**Condition**  
Dirt present on all surfaces,  
active corrosion evident,  
shows signs of previous  
spalls and break edges.  
Object appears brittle,  
unknown if metallic core  
remains.

**Storage Location**  
Seyla 104 2009 Box Metals  
Container 2

**Treatment**  
Object was cleaned  
mechanically using bamboo  
skewers and a soft nylon bristle  
brush. Object was then rinsed  
in running tap water and  
immersed in deionized water  
with <1% tannic acid by weight.  
The object was removed after 5  
days and scrubbed with a nylon  
bristle brush under running tap  
water, then allowed to air dry  
for 24 hours. The object was  
then treated with two  
applications of tannic acid  
solution (10% by weight tannic  
acid in a 50/50 mixture of  
deionized water and isopropyl  
alcohol) with three hours  
between applications. The  
object was then allowed  
another 24 hours to air dry.

**Storage Recommendations**

**Other Notes**

**Image**



Before  
treatment



Before  
treatment



<b>SITE</b> 104	<b>FIND</b> 216	<b>AREA</b> C	<b>CONTEXT</b> 167
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b> buckle	<b>DESCRIPTION</b> iron	<b>ATTENTION</b> Y
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<b>DATE</b> 7/23/2009	<b>ID</b> KRH	<b>UNIQUE_ID</b> 104C167F216	<b>Conservation Date</b> 7/24/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron buckle, pin broken, break does not appear to be recent. Pin fragment, 45 x 5 x 5mm, 3.7g. Buckle, oval shape, with ring, 65 x 41 x 5mm, 28.6g.

**Condition**  
Damp. Dirt and corrosion present on all surfaces. Evidence of previous breaks and spalls.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Objects were cleaned mechanically using bamboo skewers and a soft hair bristle brush. Corrosion was reduced with a scalpel under magnification. Objects were then scrubbed with a nylon bristle brush under running tap water, wrapped in aluminum foil, and placed in a galvanic bath (5% by weight sodium carbonate in deionized water). After one week, objects were removed and scrubbed with a nylon bristle brush under running tap water. Objects were then immersed in deionized water with ~1% by weight tannic acid. After five days, the objects were removed and scrubbed with a nylon bristle brush, then allowed to dry over night. After drying, the objects were treated with a final two applications of tannic acid solution (10% by weight tannic acid in deionized water with a small amount of isopropyl alcohol). The solution was applied with cotton swabs, with approximately 3 hours between applications.

**Storage Recommendations**

**Other Notes**

**Image**



Before treatment



Before treatment

<b>SITE</b> 104	<b>FIND</b> 217	<b>AREA</b> C	<b>CONTEXT</b> 265
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b>	<b>DESCRIPTION</b> iron	<b>ATTENTION</b> Y
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<b>DATE</b> 7/24/2009	<b>ID</b> CMB	<b>UNIQUE_ID</b> 104C265F217	<b>Conservation Date</b> 7/25/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron fragment, 40 x 8 x 6mm, 3.7g.

**Condition**  
Dirt, corrosion present on all surfaces.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Object was cleaned mechanically using a bamboo skewer and soft nylon bristle brush. The object was then rinsed under running tap water, wrapped in aluminum foil, and placed in a galvanic bath (5% by weight sodium carbonate in deionized water). After five days, object was removed and scrubbed with a nylon bristle brush. The object was allowed to dry over night, and then placed in a low concentration (~1% by weight) solution of tannic acid in deionized water. After three days, the object was removed and scrubbed once again, then left to dry. After drying, two final treatments of tannic acid solution (10% by weight in deionized water with a small amount of isopropyl alcohol) were applied, with approximately 3 hours between applications.

**Storage Recommendations**      **Other Notes**

**Image**



Before treatment

<b>SITE</b> 104	<b>FIND</b> 237	<b>AREA</b> C	<b>CONTEXT</b> 283
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b>	<b>DESCRIPTION</b> "iron ball"	<b>ATTENTION</b> Y
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<b>DATE</b> 7/30/2009	<b>ID</b> KRH	<b>UNIQUE_ID</b> 104C283F237	<b>Conservation Date</b> 8/1/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Cylindrical or oblong iron object with two protrusions on opposite sides of one end, 27 x 25 x 22mm at widest points, 31.9g

**Condition**  
Dirt, corrosion present on all surfaces, structure unclear. Object shows evidence of previous breaks/spalls, and surface crust is very brittle.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Object was cleaned mechanically using bamboo skewers and soft nylon bristle brush. During this process, one of the protrusions cracked, revealing it to be a hollow blister. The object was then scrubbed with a stiff nylon brush under running tap water, wrapped in aluminum foil, and placed in a galvanic bath (5% by weight sodium carbonate in deionized water). After five days, object was removed and scrubbed with a nylon bristle brush. The object was allowed to dry over night, and then placed in a low concentration (~1% by weight) solution of tannic acid in deionized water. After three days, the object was removed and scrubbed once again, then left to dry. After drying, two final treatments of tannic acid solution (10% by weight in deionized water with a small amount of isopropyl alcohol) were applied, with approximately 3 hours between applications.

**Storage Recommendations**      **Other Notes**

**Image**



Before treatment

<b>SITE</b> 104	<b>FIND</b> 238	<b>AREA</b> C	<b>CONTEXT</b> 270
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b> Nail	<b>DESCRIPTION</b> nail in grave fill	<b>ATTENTION</b> Y
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<b>DATE</b> 7/30/2009	<b>ID</b> KRH	<b>UNIQUE_ID</b> 104C270F238	<b>Conservation Date</b> 8/3/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Small rivet or nail with roughly square head, 22 x 22 x 16mm, 4.7g

**Condition**  
Dirt, corrosion present on all surfaces.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Cleaned mechanically and corrosion reduced using bamboo skewers and a soft nylon bristle brush. Object was then scrubbed with a stiff nylon bristle brush under running tap water. The object was placed in a low concentration (~1% by weight) solution of tannic acid in deionized water. After five days, the object was removed and scrubbed with a nylon bristle brush, then allowed to dry over night. After drying, the object was treated with a final two applications of tannic acid solution (10% by weight tannic acid in deionized water with a small amount of isopropyl alcohol). The solution was applied with cotton swabs, with approximately 3 hours between applications.

**Storage Recommendations**      **Other Notes**

**Image**



Before treatment

SITE 104 FIND 239 AREA C CONTEXT 196

MATERIAL TYPE Metal OBJECT TYPE small copper piece ATTENTION N

DATE 8/1/2009 ID KEG UNIQUE\_ID 104C196F239 Conservation Date 8/3/2009 Conservator Gregory Bailey

**Material Characteristics**  
Copper fragment, with possible 1/4 hole on one edge, 12 x 9 x 1mm, 0.5g

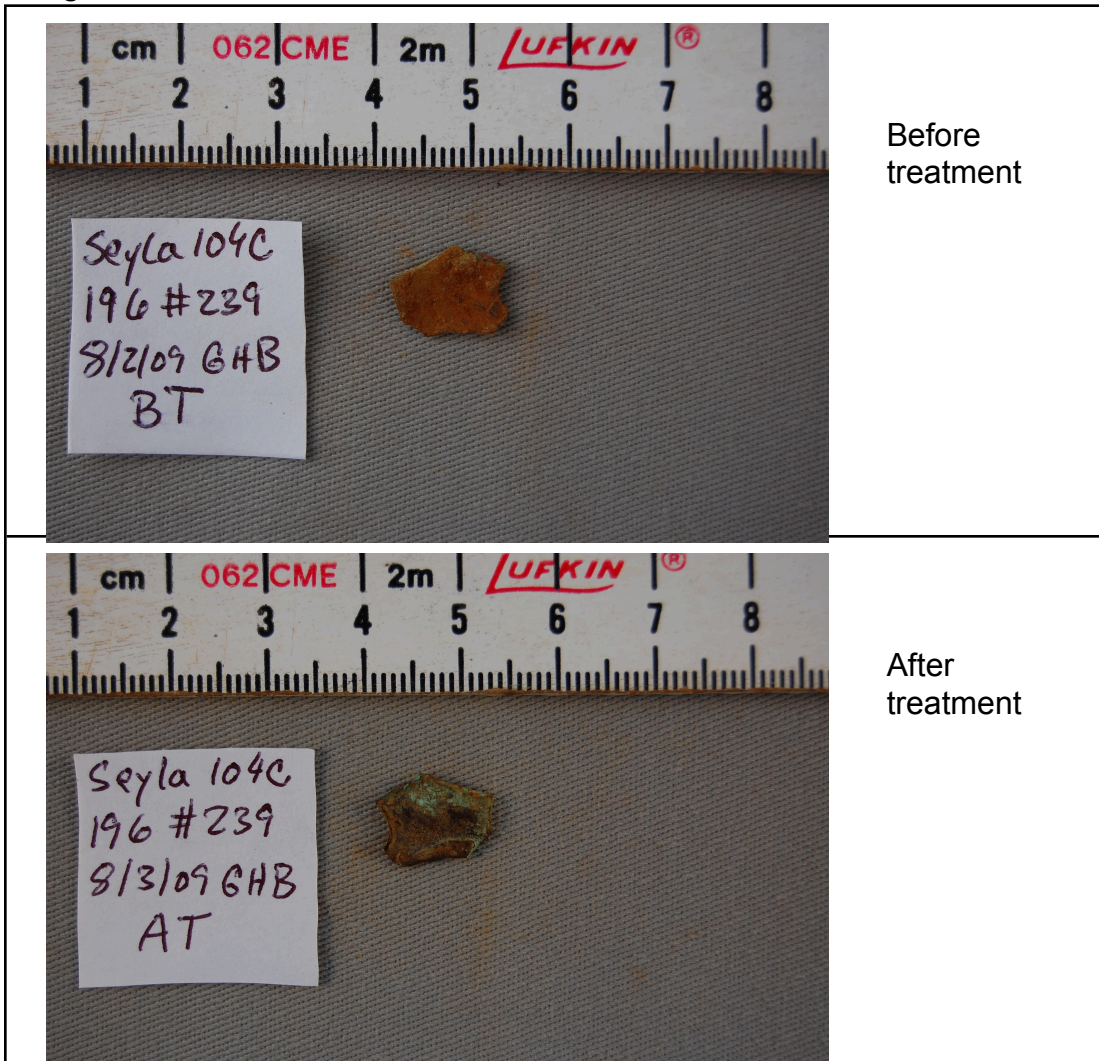
**Condition**  
Dirt and slight, friable corrosion present on all surfaces, break edges show extensive corrosion, unlikely that robust metallic core remains.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Cleaned mechanically using bamboo skewers and soft nylon bristle brush. Placed in supportive volara housing and returned to original artifact bag.

Storage Recommendations Other Notes

Image



<b>SITE</b> 104	<b>FIND</b> 240	<b>AREA</b> C	<b>CONTEXT</b> 291
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b> Nail	<b>DESCRIPTION</b> iron nail in grave	<b>ATTENTION</b> Y
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<b>DATE</b> 8/1/2009	<b>ID</b> KRH	<b>UNIQUE_ID</b> 104C291F240	<b>Conservation Date</b> 8/3/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron nail or rivet, 27 x 25 x 20mm, 7.3g

**Condition**  
Dirt, corrosion present on all surfaces, some concretion on head, plant root included.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Cleaned mechanically using bamboo skewers and a soft nylon bristle brush. Scrubbed with a stiff nylon brush under running tap water and then immersed in a low concentration (~1% by weight) solution of tannic acid in deionized water. After five days, the object was removed and scrubbed with a nylon bristle brush, then allowed to dry over night. After drying, the object was treated with a final two applications of tannic acid solution (10% by weight tannic acid in deionized water with a small amount of isopropyl alcohol). The solution was applied with cotton swabs, with approximately 3 hours between applications.

**Storage Recommendations**      **Other Notes**

**Image**



Before treatment

**SITE** 104      **FIND** 241      **AREA** C      **CONTEXT** 305

**MATERIAL TYPE** Lithic      **OBJECT TYPE**      **DESCRIPTION** Obsidian      **ATTENTION** N

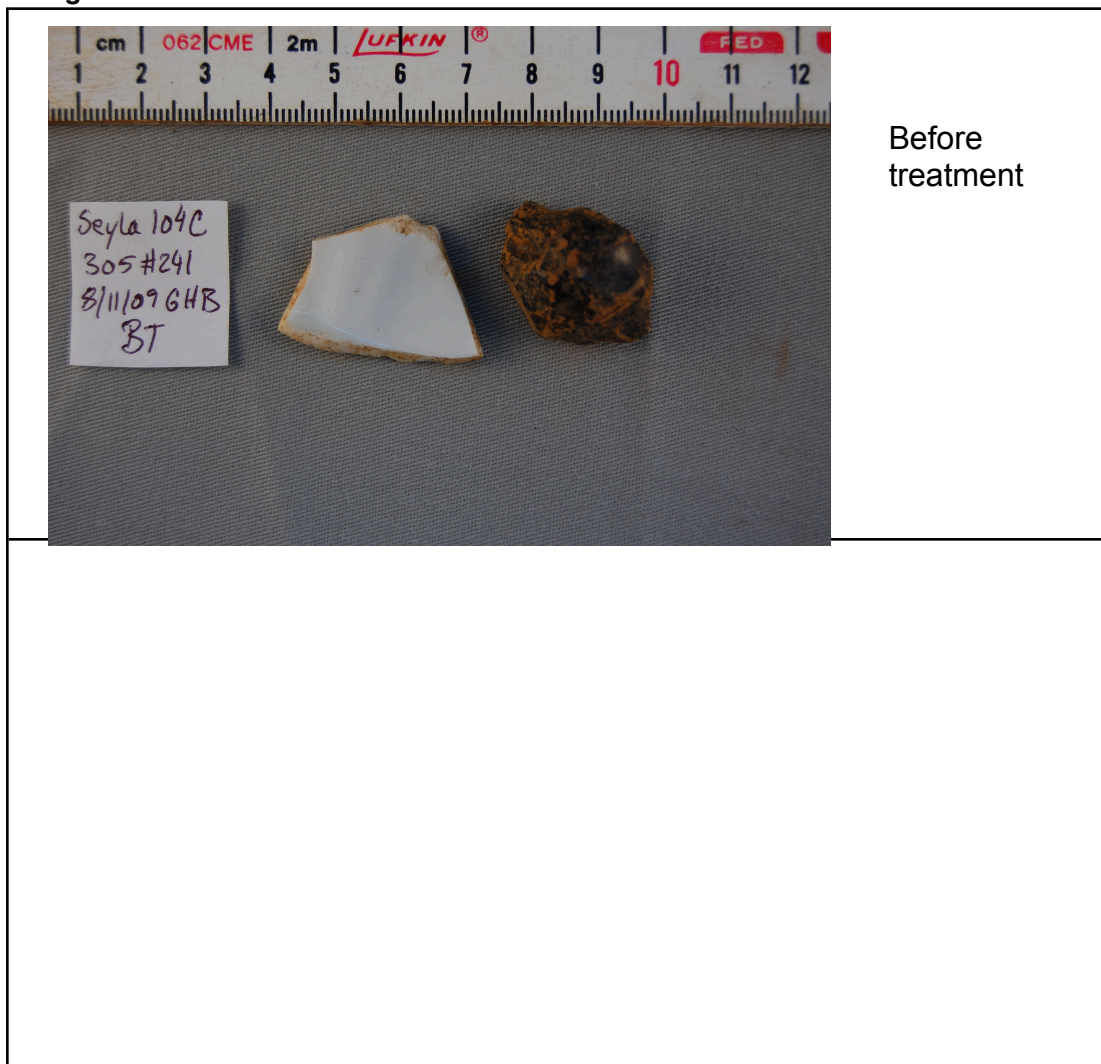
**DATE** 8/5/2009      **ID** RST      **UNIQUE\_ID** 104C305F241      **Conservation Date** 8/11/2009      **Conservator** Gregory Bailey

<b>Material Characteristics</b>	<b>Condition</b>	<b>Storage Location</b>	<b>Treatment</b>
1 piece obsidian, 22 x 21 x 14mm; 1 piece white glazed porcelain, 31 x 22 x 1mm	Dirt present on all surfaces	Seyla 104 2009 Box	Cleaned mechanically using nylon bristle brush. Obsidian and glazed surfaces washed with deionized water rolled on cotton swabs.

**Storage Recommendations**

**Other Notes**

**Image**



<b>SITE</b> 104	<b>FIND</b> 248	<b>AREA</b> C	<b>CONTEXT</b> 321
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<b>MATERIAL TYPE</b>	<b>OBJECT TYPE</b>	<b>DESCRIPTION</b>	<b>ATTENTION</b>
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Metal

<b>DATE</b> 8/7/2009	<b>ID</b> PJJ	<b>UNIQUE_ID</b> 104C321F248	<b>Conservation Date</b> 8/11/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
Iron bar, 56 x 8 x 7mm

**Condition**  
Dirt, corrosion present on all surfaces.

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Cleaned mechanically using bamboo skewers and nylon bristle brush. Object was then treated with three applications of tannic acid solution (10% by weight tannic acid in deionized water with a small amount of isopropyl alcohol) rolled on cotton swabs with three hours between applications.

**Storage Recommendations**

**Other Notes**

**Image**



Before treatment



After treatment



SITE 104 FIND 247 AREA C CONTEXT 186

MATERIAL TYPE Lithic OBJECT TYPE Spindle whorl DESCRIPTION ATTENTION

DATE 8/7/2009 ID KRH UNIQUE\_ID 104C186F247 Conservation Date 8/11/2009 Conservator Gregory Bailey

**Material Characteristics**  
Two associated pieces of red sandstone object, circular, with cylindrical hole in center, one face flat, one face rounded, both 29 x 16 x 11mm

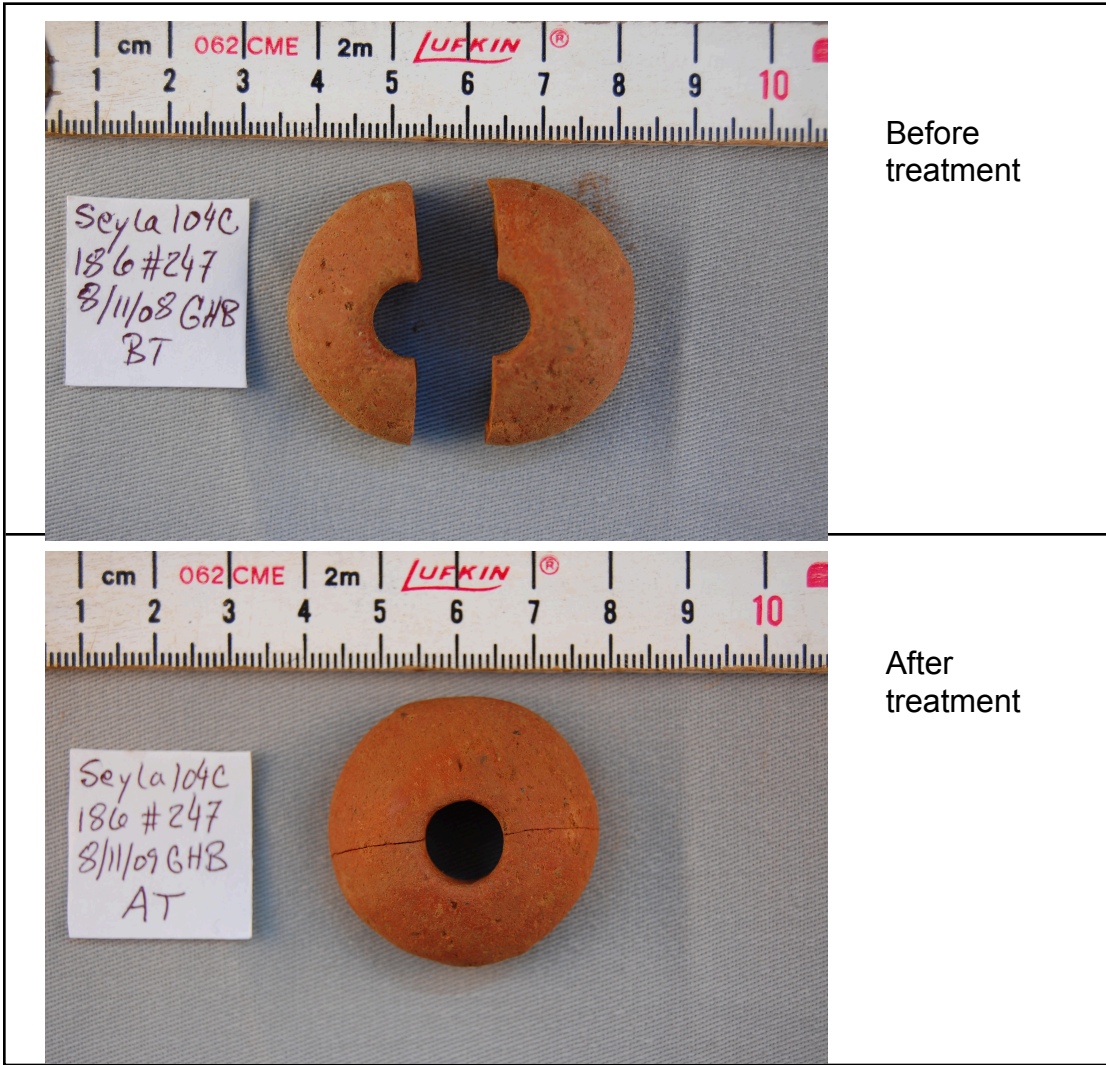
**Condition**  
Dirt, break edges which appear recent, loss to flat face on one piece

**Storage Location**  
Seyla 104 2009 Box

**Treatment**  
Cleaned mechanically using soft hair bristle brush. Break edges were cleaned using isopropyl alcohol and joined with B-72 in acetone.

Storage Recommendations Other Notes

Image



Before treatment

After treatment

<b>SITE</b> 104	<b>FIND</b> 250	<b>AREA</b> C	<b>CONTEXT</b> 323
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<b>MATERIAL TYPE</b> Metal	<b>OBJECT TYPE</b>	<b>DESCRIPTION</b>	<b>ATTENTION</b>
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<b>DATE</b> 8/10/2009	<b>ID</b> PJK	<b>UNIQUE_ID</b> 104C323F250	<b>Conservation Date</b> 8/11/2009	<b>Conservator</b> Gregory Bailey
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**Material Characteristics**  
6 iron and wood pseudomorph objects. Fragments appear to associate with hing/clasp hardware. Small size suggests book or casket fittings

**Condition**  
Dirt and corrosion present on all surfaces, break edges, some of which appear recent.

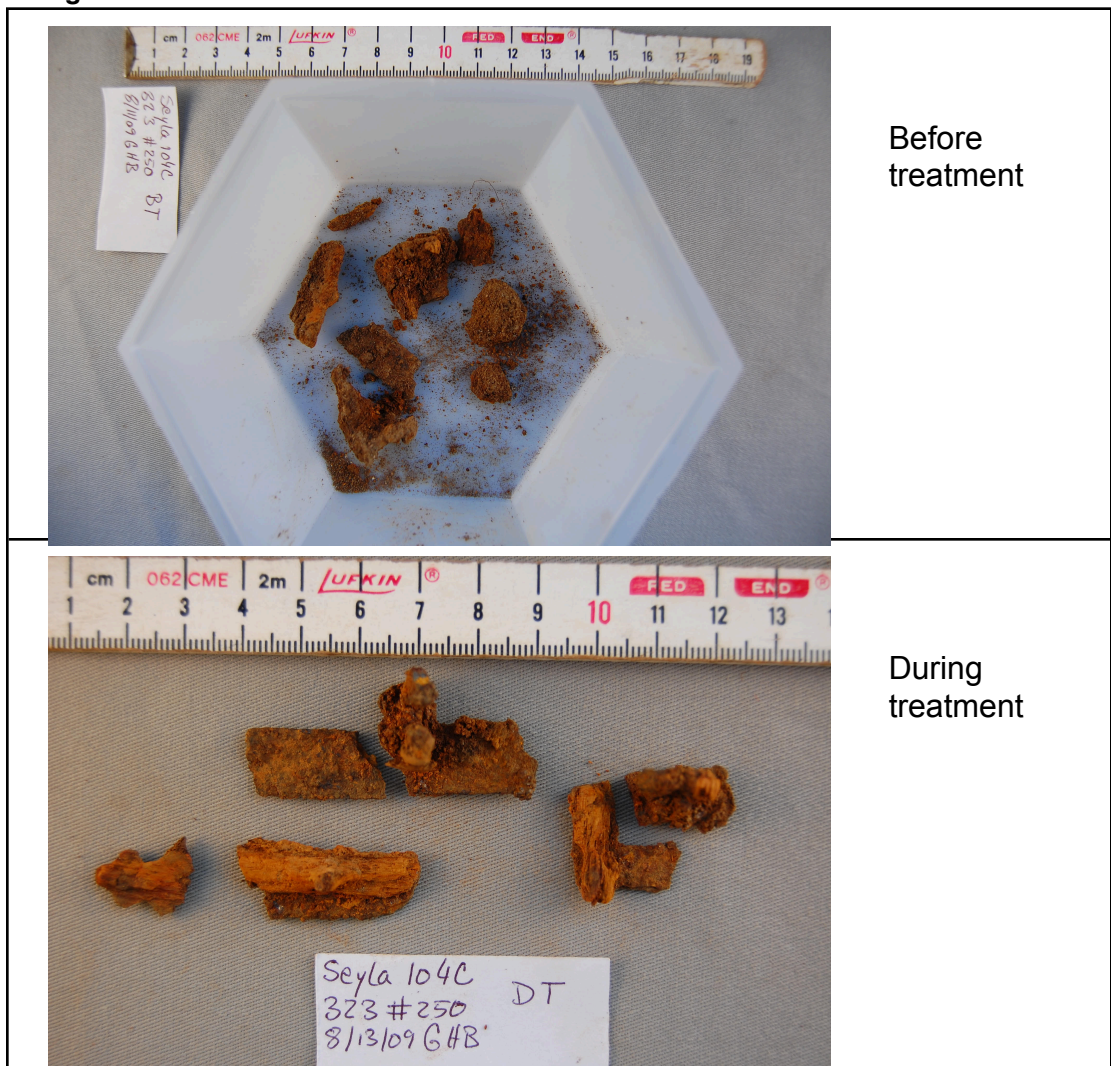
**Storage Location**  
Seyla 104 2009 Box Metals Container 2

**Treatment**  
Cleaned mechanically using bamboo skewers and soft hair bristle brush to define surfaces/fragments. Documented and placed in storage in dry storage.

**Storage Recommendations**  
Monitor for Corrosion

**Other Notes**  
Further treatment/assessment recommended

**Image**



SITE FIND AREA CONTEXT  
104 256 C 329

MATERIAL TYPE OBJECT TYPE DESCRIPTION ATTENTION  
Lithic obsidian drillpoint

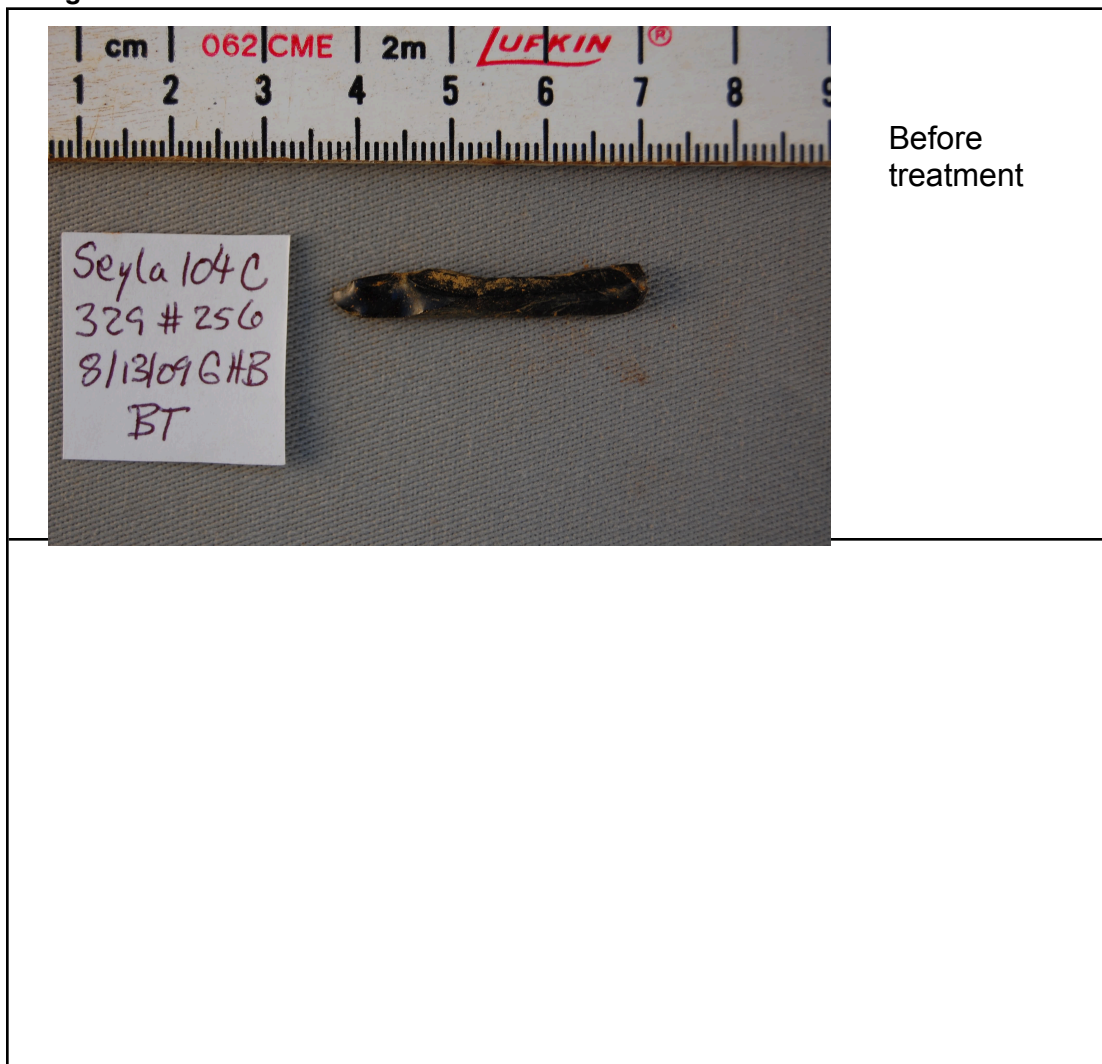
DATE ID UNIQUE\_ID Conservation Date Conservator  
8/10/2009 KMJ 104C329F256 8/13/2009 Gregory Bailey

Material Characteristics Condition Storage Location Treatment  
Obsidian point, triangular in cross-section, possibly worked, 35 x 4 x 4 Dirt present on all surfaces Seyla 104 2009 Box Cleaned mechanically using soft hair bristle brush. Washed with deionized water rolled on swabs.

Storage Recommendations

Other Notes

Image



**SITE** 104      **FIND** 251      **AREA** C      **CONTEXT** 326

**MATERIAL TYPE**      **OBJECT TYPE**      **DESCRIPTION**      **ATTENTION**

Metal

**DATE** 8/10/2009      **ID** RST      **UNIQUE\_ID** 104C326F251      **Conservation Date** 8/13/2009      **Conservator** Gregory Bailey

<b>Material Characteristics</b> Triangular, concave iron fragment, 50 x 45 x 5mm	<b>Condition</b> Dirt, corrosion present on all surfaces	<b>Storage Location</b> Seyla 104 2009 Box Metals Container 2	<b>Treatment</b> Cleaned mechanically using bamboo skewers and nylon bristle brush. Documented and placed in storage solution of 5% by weight sodium carbonate in deionized water, beginning 8/14/09.
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**Storage Recommendations**

Monitor for corrosion

**Other Notes**

Further treatment/assessment recommended

**Image**



SITE 104 FIND 252 AREA C CONTEXT 120

MATERIAL TYPE OBJECT TYPE DESCRIPTION ATTENTION

Metal

DATE 8/11/2009 ID LWN UNIQUE\_ID 104C120F252 Conservation Date 8/13/2009 Conservator Gregory Bailey

Material Characteristics Iron nail, tapered, 49 x 19 x 5 Condition Dirt, corrosion present on all surfaces Storage Location Seyla 104 2009 Box Metals Container 2 Treatment Cleaned mechanically using bamboo skewers and nylon bristle brush. Documented and placed in storage solution of 5% by weight sodium carbonate in deionized water, beginning 8/14/09.

Storage Recommendations

Monitor for corrosion

Other Notes

Further treatment/assessment recommended

Image



**SITE** 104      **FIND** 253      **AREA** C      **CONTEXT** 328

**MATERIAL TYPE** Ceramic      **OBJECT TYPE** Crucible      **DESCRIPTION** hollow copper piece      **ATTENTION**

**DATE** 8/11/2009      **ID** DJB      **UNIQUE\_ID** 104C328F253      **Conservation Date** 8/13/2009      **Conservator** Gregory Bailey

**Material Characteristics**  
Rolled cup with rounded bottom, possibly crucible, vitrified material with metallic residue, 37 x 29 x 25mm

**Condition**  
Some dirt present

**Storage Location**  
Seyla 104 2009 Box Metals Container 2

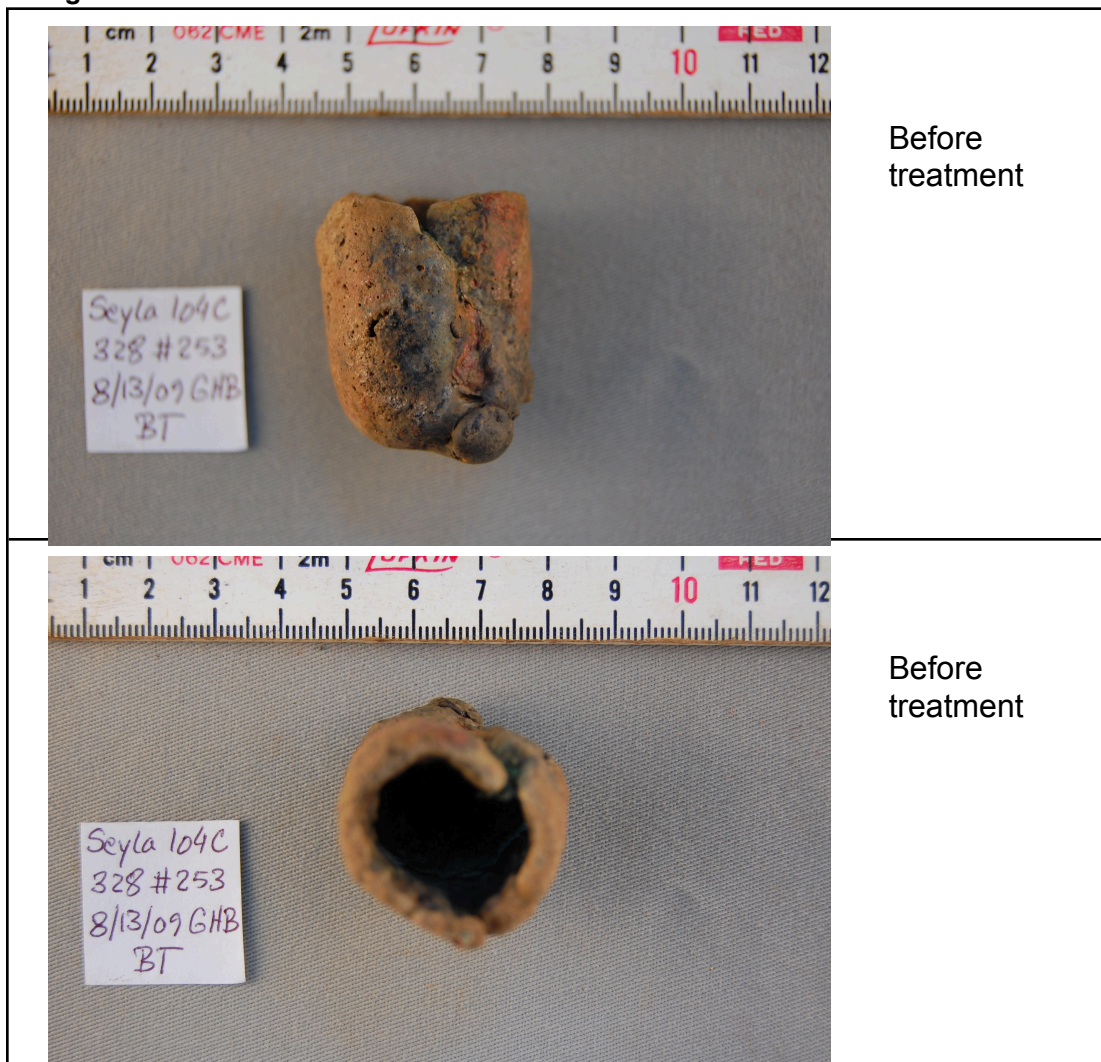
**Treatment**  
Placed in clean polyethylene bag

**Storage Recommendations**

Monitor for corrosion

**Other Notes**

**Image**



**SITE** 104      **FIND** 254      **AREA** C      **CONTEXT** 327

**MATERIAL TYPE** Metal      **OBJECT TYPE** nail      **DESCRIPTION**      **ATTENTION**

**DATE** 8/11/2009      **ID** PJG      **UNIQUE\_ID** 104C327F254      **Conservation Date** 8/13/2009      **Conservator** Gregory Bailey

<b>Material Characteristics</b> Iron object, tapered, 52 x 11 x 10mm	<b>Condition</b> Dirt, corrosion present on all surfaces	<b>Storage Location</b> Seyla 104 2009 Box Metals Container 2	<b>Treatment</b> Cleaned mechanically using bamboo skewers and nylon bristle brush. Documented and placed in storage solution of 5% by weight sodium carbonate in deionized water, beginning 8/14/09.
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**Storage Recommendations** Monitor for corrosion      **Other Notes** Further treatment/assessment recommended

**Image**



Before treatment