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## REPORTS

### Rock Art of Etna Cave, Nevada

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*Recent field and archival studies of the Etna Cave site (26LN111) in southeastern Nevada have documented the presence of heretofore undescribed rock art, including both pictographs and petroglyphs. Some of these images were previously documented in photographs from Samuel M. Wheeler's original fieldwork at the site in the 1930s, while others are newly discovered or rediscovered images. It is unclear why Wheeler failed to include a description of the pictographs and petroglyphs in his publications on Etna Cave, but the historical photographs confirm the ancient origins of the art and highlight the utility of historical museum records for new studies of even well-known sites.*

In any given region, there are usually a small number of archaeological sites that are known to nearly all professional archaeologists through print, if not via fieldwork or by means of a visit to see for oneself an iconic locale foundational to regional archaeology. In the Great Basin, and especially in southeastern Nevada, Etna Cave is one such site. Originally excavated in the 1930s, it remains one of only a few sites in the area subject to extensive excavation, and thus represents an important site both for its research contribution and as an enduring symbol of early Great Basin archaeology. This general familiarity, however, may also lead us to think that we are aware of everything there is to know about sites such as Etna Cave, when—in fact—additional important information may lie buried in original field notes or existing museum collections. Recent research investigating the potential contribution of collections from Etna Cave to regional obsidian hydration studies has revealed such a gem: two historic photographs of rock art not previously described in the literature on Etna Cave. Furthermore, fieldwork completed as part of the obsidian hydration project has also resulted in the possible discovery of some additional rock art at this site, suggesting that visual

imagery was a more significant facet of activities at Etna Cave than was heretofore believed.

#### PREVIOUS INVESTIGATIONS AT ETNA CAVE

Etna Cave lies at the base of a volcanic tuff cliff face (Fig. 1) in a tributary canyon of Meadow Valley Wash in the northern portion of Rainbow Canyon, south of the town of Caliente, Nevada. Although not a true cave in the sense often intended by geologists—since the depth of the concavity does not preclude penetration of natural light throughout the shelter—this geological feature is both distinctive in the region and prominent at the site, measuring 14 m. wide, 5 m. high at the opening, and 8 m. in maximum depth. In addition, a smaller cave is immediately upslope in the same cliff face, while a broad, high overhang formed by substantial rockfall (Wheeler's

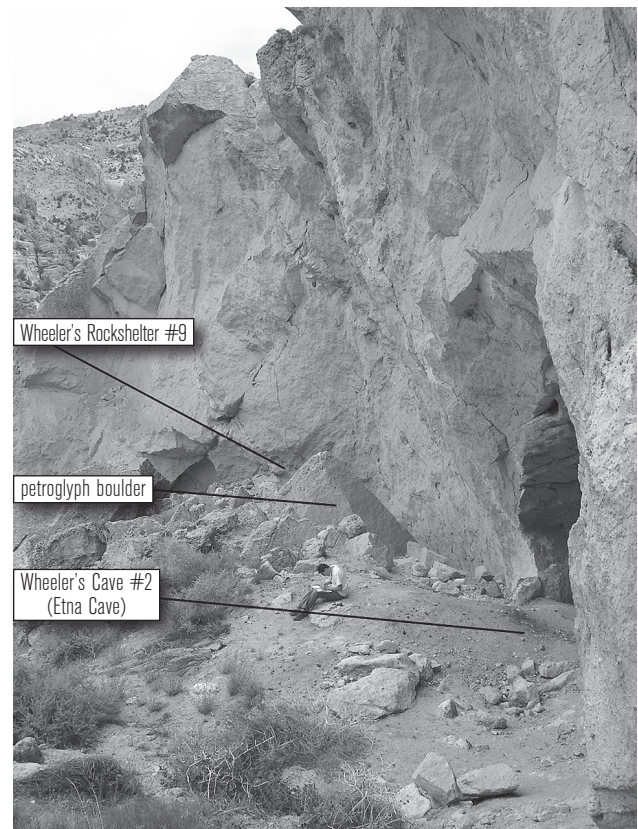


Figure 1. Overview of features at 26LN111 from Wheeler's Cave #3 at site.

“Rockshelter #9”) is directly adjacent on the downslope side of Etna Cave (see Fig. 1). Large boulders from this rockfall litter the slope in front of the cliff.

All three of these natural shelters revealed evidence of use by native people when first recorded by S. M. Wheeler in 1934 (Wheeler 1935), although each was designated by an individual appellation rather than being considered together as a single site. The original names also reflect Wheeler’s (1935:8, 1942:10) distinction between the genesis of the features, as the main cave was designated Cave #2, the smaller cave as Cave #3, and the broad overhang as Rockshelter #9 (N-L-RC-Et-Map, Reconnaissance Index and Field Notes Nevada, Mark Raymond Harrington Archaeological Papers [MRHAP], Southwest Museum, Autry National Center). Today, the name Etna Cave (26LN111 [also designated 26LN2 and 26LN302]) refers to both Wheeler’s Cave #2 (also sometimes referred to as “Wheeler Cave” in original collection records, correspondence, and publications) and the site as a whole, including the adjacent cave and rockshelter.

Lt. S. M. Wheeler undertook archaeological investigations in the Caliente area between 1934 and 1937, largely while serving as a mess officer for the Civilian Conservation Corps (CCC). Although this West Point graduate had no formal training or background in archaeology prior to this service, Wheeler acquired relevant knowledge and experience while stationed near Overton, Nevada during the winter of 1933–1934. At that time, Mark R. Harrington of the Southwest Museum was directing CCC crews in an excavation of the Lost City ruins (Wheeler 1935:6), and he later commented that “during my work for the State Park Division [at Lost City] Mr. Wheeler took a very active interest and through actual experience and study developed into an excellent field archaeologist. His records are especially good” (letter dated June 4, 1936 from M. R. Harrington to Ansel Hall, MRHAP). Thus, when Wheeler was transferred north to the CCC camp at Panaca, Nevada in the spring of 1934, he initiated a study of the local archaeology, maintaining correspondence with and hosting rare site visits by Harrington to help guide his efforts.

Like many investigators of the time, Wheeler began by querying local landowners and residents about the location of archaeological sites, and followed up with visits to some of these locales (Wheeler 1935). Given the

pace of work and limited personnel (initially consisting of just Wheeler and his wife Georgia, working when free from other duties), site-specific observations entailed designating a site by a number (generally unique to the canyon or day of survey, but not necessarily unique to the project as a whole), drawing a simple sketch map of the site location (not necessarily to scale), writing brief notes on a map or in a field journal, and perhaps taking a black-and-white photograph of one or more site features. Wheeler’s reconnaissance work encompassed efforts in the Panaca area northeast of Caliente, as well as visits to several locales within Rainbow Canyon and its tributaries, including Etna Cave, a pictograph site in the canyon below Etna Cave (26LN110), and cave or rock art sites in Stine Canyon (noted as “Stein” in Wheeler’s notes) and near Elgin, both several miles south of Etna Cave in Rainbow Canyon (MRHAP).

Unlike the other sites Wheeler recorded, however, Etna Cave had a unique status in his research, since he subsequently oversaw extensive excavations at the site. The initial subsurface work with his wife in 1934 focused on Rockshelter #9, but he returned with a small CCC crew in 1935 and again with Georgia in 1937 to carry out excavations of deposits within Etna Cave itself (Wheeler 1935, 1937a, 1942). Much of the day-to-day work during the substantial effort in 1935 was actually directed by Willis Evans, a member of the CCC crew at Lost City who was detailed by Harrington for this express purpose (Wheeler 1942:14). As described in Wheeler’s later report (Wheeler 1942), the excavations effectively removed all cultural deposits from within the cave and resulted in the recovery of a substantial collection of both perishable and non-perishable artifacts—this, despite the fact that (as was typical of the time) sediments were not screened to recover cultural materials.

There was a significant delay between the conclusion of fieldwork and the publication of the final report, likely due in part to Wheeler’s responsibilities with the CCC in the years following the main cave excavations. In addition, the collection had been divided between the Southwest Museum and the National Park Service (NPS) at Boulder Dam Park after excavation, and correspondence indicates that artifacts had to be shipped back and forth between the two repositories to allow analysis of the complete collection for the report (letter dated December 3, 1936 from M. R. Harrington to the

NPS Regional Officer, MRHAP). Correspondence suggests that some artifacts may also have been sent to various specialists for analysis. Finally, while Wheeler's report appears to have been completed in 1939, publication did not occur until sufficient funds could be secured for production (letter dated September 1, 1939 from M. R. Harrington to A. C. Whitford, MRHAP).

Since the Etna Cave project represented the first archaeological work conducted within Lincoln County, Wheeler's report is primarily descriptive rather than interpretive, focusing on brief narrative descriptions of the many artifacts recovered, sometimes augmented by photographs or line drawings. Still, Wheeler (1942) did attempt to fit his finds within existing knowledge of Southwestern chronology (e.g., Basketmaker and Puebloan), while also noting the presence of artifacts such as Fremont-style moccasins that hinted at cultural connections to the east. The only mention of visual imagery on rock, however, was limited to discussion of portable lithic objects, including three pendants with incised designs and similar engraved markings on a piece of slate (Wheeler 1942:37). In other words, there was no mention or illustration of either pictographs or petroglyphs at Etna Cave in Wheeler's report or in earlier brief articles on his work in Lincoln County (Wheeler 1935, 1937a, 1937b, 1938, 1939), although he did note the presence and later collection of a larger grooved stone used "in shaping and sharpening implements" (Wheeler (1942:13, Fig. 10), as well as the presence of pictographs in the canyon below the site (Wheeler 1942:10, Fig. 3).

Despite the seminal nature of Wheeler's investigations, the Etna Cave report did not enjoy wide dissemination until more than 30 years after its publication, when Fowler et al. (1973) reprinted the document in conjunction with their report on investigations at other sites in Lincoln County, including O'Malley and Conaway shelters. At that time, Don Fowler also reexamined—or attempted to reexamine—some of the Etna Cave artifacts, but the convoluted history of the collection, a portion of which had been divided yet again by the NPS, stymied these efforts (Fowler 1973:1). At least some, if not all, of the field notes for Wheeler's work reside at the Southwest Museum in the form of catalogue cards, as well as in files pertaining to the archaeological work of M. R. Harrington (Southwest Museum Ms. 214). Of course, the history of dividing the collection between

repositories makes very real the possibility that some field records were either stored elsewhere or were lost shortly after the fieldwork was completed.

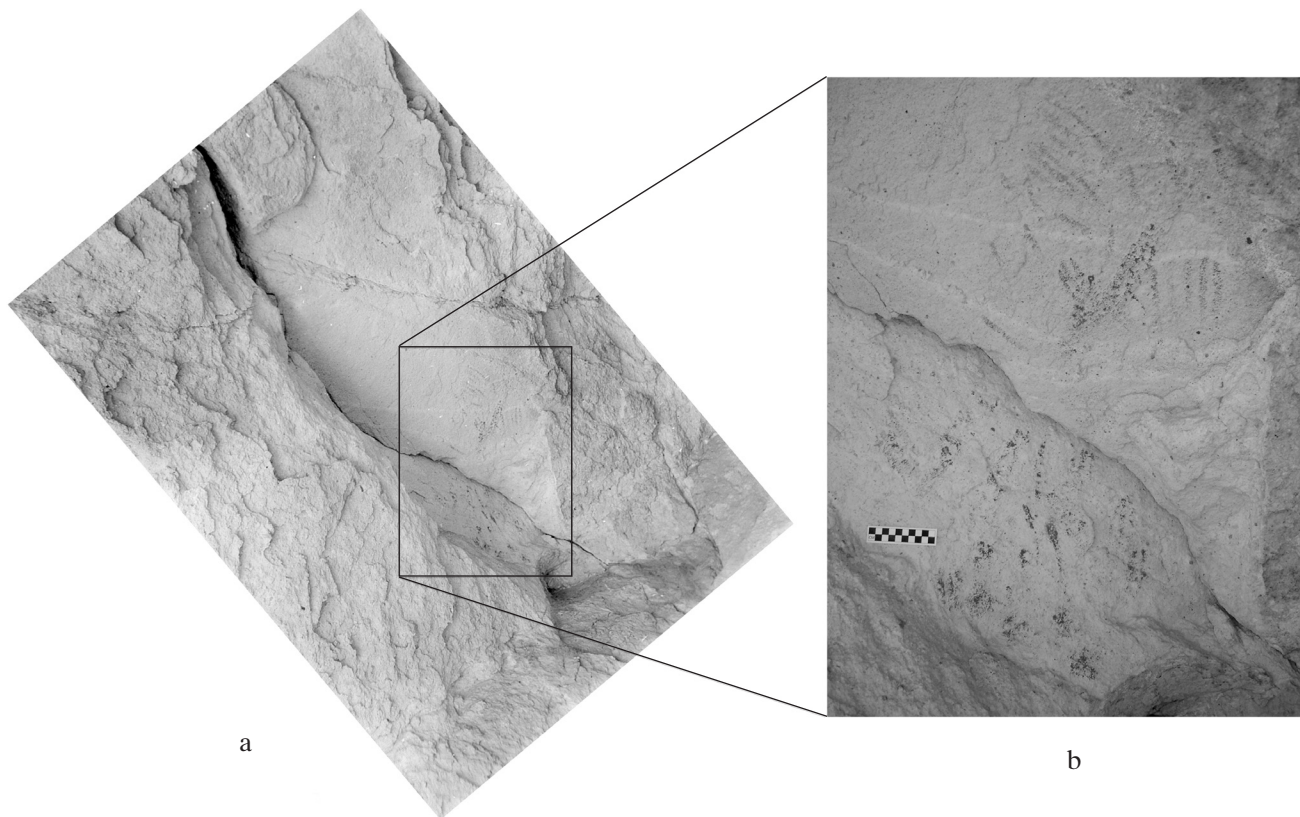
The only other primary archaeological work relevant to Etna Cave prior to the current fieldwork is a site record prepared in 1967 by "D. Turner" of the Desert Research Institute (DRI), as part of the survey work reported by Fowler and Sharrock (1973; see also Fowler 1973:2). Significantly, this brief record notes the presence of both petroglyphs and pictographs, but provides no descriptive or locational information for these features. Thus, it may be that this note refers instead to the rock art at the site in the canyon below (26LN110), since Fowler (1973:2) makes a point of noting that "the red pigment pictographs reported by Wheeler...near the site are still visible" (see also Heizer and Baumhoff 1962:41–42, Fig. 81c–g). In addition, Fowler and Sharrock (1973:109) make no mention of rock art in their brief summary of Etna Cave, despite the possible observation of pictographs and petroglyphs by Turner.

### REVISITING ETNA CAVE

The "rediscovery" and documentation of the rock art of Etna Cave reported here resulted from a visit to the site by the author and a research assistant during the summer of 2009 (Hull 2010). The intent was simply to assess the original depositional context and microenvironmental conditions pertaining to obsidian artifacts recovered by Wheeler, but since significant time had elapsed since the previous site record had been prepared, re-recording of the site seemed prudent. Still, identification of at least two rock art panels—one pictograph within the cave and a petroglyph panel comprised of four clusters of elements on a boulder directly outside the cave—was a pleasant surprise given the rather vague reference to rock art in the previous site record. One additional "rock art" panel was also observed on the cliff face immediately adjacent to the downslope side of the cave, although this cultural modification may relate to Wheeler's archaeological work rather than to native activity (see below).

Since no previous descriptive record existed for rock art at this site, it was difficult to know if some, or perhaps any, of these images had been previously identified. In fact, the lack of documentation from previous archaeological investigations even called into question





**Figure 2. Historic (a) and modern (b) photographs of the pictograph inside Etna Cave. (Historic photograph courtesy of the Braun Research Library, Autry National Center of the American West, Los Angeles; Photo #23542).**

the authenticity of such features. This was especially true of the pictograph, since it appeared rather crudely executed and different in both content and media from the well-known images at nearby 26LN110. In contrast, the boulder petroglyphs were weathered and difficult to observe, suggesting some antiquity for these elements.

Had the 2009 investigations been limited to fieldwork, questions of authenticity may have gone unanswered, and in addition, full appreciation of the significance of the rock art at Etna Cave might not have been forthcoming. As it was, however, the study also entailed review of archival records related to Etna Cave on file at the Southwest Museum in Los Angeles (Hull 2010), including a review of catalogue cards, field notebooks, photographs, correspondence, and Wheeler's draft report, all housed in the M. R. Harrington Archaeological Papers (Southwest Museum Ms. 214). Two black-and-white photographs directly germane to visual imagery at Etna Cave were identified in these records. The first was a photographic print (No. 23542) of a pictograph panel, on the back of which was written "Pictographs in a cave west of

Delamar Power Plant, south of Caliente, Nevada. Near Stein, Nevada." Given Wheeler's reconnaissance in Stine Canyon and recordation of four caves there—including one to which he gave the name "Painted Cave" (N-L-RC-S-Map, Reconnaissance Index and Field Notes Nevada, MRHAP)—the rock art in this photograph could easily be misinterpreted as relating to a site other than Etna Cave. Certainly no specific mention of Etna Cave (by this, or any other name) is made in the records for this photograph. A comparison of this historical image with a photograph of the pictograph panel taken during the site visit in 2009 (Fig. 2), however, clearly demonstrates that the photograph in the Southwest Museum archives documents the pictograph at Etna Cave. Thus, this early photograph—presumably taken by Wheeler, one of his crew, or perhaps even Harrington—verifies the authenticity of this rock art, since it is unlikely that either forgery or vandalism had occurred at this site by the 1930s.

The second historical photographic print in the archive (Fig. 3) depicts a petroglyph on a boulder of unknown size (No. 23541). The note on the reverse of



**Figure 3. Historic photograph of the spiral petroglyph from Etna Cave. (Courtesy of the Braun Research Library, Autry National Center of the American West, Los Angeles; Photo #23541).**

this print reads “Petroglyph on rock from Etna Cave deposit. Rock brought to SWM.” The catalogue record for the photograph indicates that this piece relates to the 1937 expedition. Although apparently transported to the Southwest Museum, there is no catalogue record for this object and museum records indicate that it was not located during a 1987 inventory of rock art in the collections. Still, if the caption is correct—and this seems likely given that excavated matrix is visible in the photograph—this photograph provides additional evidence of rock art at Etna Cave that once again escaped inclusion in Wheeler’s (1942) report.

In fact, it is curious that the photographic (or even material) evidence for both rock art images documented by Wheeler was omitted from his report. The apparent misattribution of the pictograph to Stine Canyon—or, at least, the vague provenience information—may account for the omission of this feature. Alternatively,

perhaps the pace of fieldwork or the somewhat detached supervision of first Harrington and then Wheeler resulted in the oversight. Omission of any description of the petroglyph, however—especially if accessioned by the Southwest Museum—is more puzzling, although knowledge of this imagery or the object itself may have been lost in the division of the collection between the Southwest Museum and the NPS. Still, if the piece was collected during the short fieldwork in 1937—which was undertaken just by Wheeler and his wife—then it seems that Wheeler would have had personal knowledge of this rock art, and thus should have included a discussion of it in his report. Perhaps a focus on artifacts and an omission of features was a specific decision, although Wheeler’s (1942) inclusion of a photograph of the pictographs at the nearby site (26LN110) renders this conclusion unlikely. Regardless of how the omission came about, the historical photographs in the archives of the Southwest



Museum clearly document the presence of rock art at Etna Cave, while the discovery of additional petroglyphs during the 2009 field visit underscores the investment in rock art production by site occupants.

### ROCK ART IMAGERY

Archival records from the 1930s and recent field observations indicate the presence of four panels of images on rock at, or from, the Etna Cave site. The first of these is the red pigment pictograph panel on the sloping, west rear wall of Etna Cave itself. The rough texture of the stone surface, uneven pigment application, and/or subsequent weathering make it difficult to determine if the image is representational, abstract, or some combination of both. However, it appears to consist of an upper portion with one array of five roughly parallel vertical lines on the lower right side approximately 10 cm. long and 1 cm. wide, a second array of eight roughly parallel 1 cm. wide straight or bowed lines on the upper left side up to 13 cm. in length at an approximately 45-degree angle to the lower array of lines, and an elongate, solid, roughly L-shaped motif between the two arrays of parallel lines (Fig. 4). This central figure has three adjacent 3 cm. long parallel lines extending out from the lower left side and at least three other parallel lines extending out along the opposite side of the solid mass. It may be that this figure represents an animal with legs and antlers, respectively. Three other widely separated parallel lines approximately 5 cm. in length occur above the central figure, and two additional lines of similar size were placed below and to the left of the central motif. The pigment of the central figure is a darker red than that of the surrounding parallel lines, perhaps indicating production at different times.

The lower portion of the pictograph panel—below a natural crack that bisects the panel from upper left to lower right—consists of a series of less distinct linear or geometric applications of paint (Fig. 4). These include an array of six roughly circular dots 7 cm. in diameter in the lowermost portion of the panel and at least six elongate, striped or solid, roughly vertical areas of paint ranging from 8 to 17 cm. in length and 3 to 6 cm. in width above the dots. The striping appears to have been produced by dragging three adjacent fingers across the rock to apply the paint. The elongate motifs are primarily oriented with the long axis just slightly right of vertical, although



**Figure 4. Schematic depiction of pictograph panel inside Etna Cave.**

the figure on the far left end of this array is oriented at nearly 90 degrees to the others. Digital enhancement of the photograph of the panel also reveals that at least four lines 1 cm. wide radiate out from just below the central cluster of elongate motifs toward the large dots below. In fact, such lines may have connected several of the dots to the array above.

The pigment of the lower half of the panel is similar in color to that of the central figure of the upper half of the panel, perhaps indicating contemporaneity of these elements of the panel. The entire panel is approximately 55 cm. wide and 90 cm. high, and its lower margin is currently situated more than 2 m. above the cave floor. At the time of execution, however, intact cave deposits presumably made this wall surface more readily accessible to the artist. In addition, the lower portion of the cave wall bulges inward near the northern edge



**Figure 5. Schematic depiction of petroglyphs on the boulder outside of Etna Cave.**

of the panel; thus, it may have been possible, although physically challenging, to complete the painting while standing on this elevated surface.

The second rock art panel is the cobble or boulder petroglyph collected in whole or in part from the site and transported to Southwest Museum. Since its final deposition is unknown, the only source of information is the close-up photograph taken of the object during Wheeler's excavation (see Fig. 3) and the photographic catalogue information in the Southwest Museum archives. Unfortunately, these records provide no specific information about intrasite provenience or orientation—although the photographic backdrop of midden matrix suggests recovery within the excavated area of the cave—nor is there any information about the size of either the rock or the motifs. The photograph shows a spiral wrapping clockwise 2.5 times out from an unpecked center. The width and depth of the line appear to vary only slightly over its length. If the width of this

pecked line is similar to those of the other petroglyphs at this site (see below), the maximum diameter of the spiral may have been at least 20 cm. It appears that one straight line was also pecked into the rock surface slightly down and away from the spiral. The length of this line is slightly shorter than the diameter of the spiral, and a relatively fresh crack bisects it. If the previous size estimate for the spiral is correct, then the overall size of the panel was approximately 25 cm. in width and 28 cm. in height, while the rock itself—which appears to be a coarse-grained rock such as tuff—was greater than 30 cm. in maximum dimension. Such spirals are a common element in Great Basin rock art (e.g., Heizer and Baumhoff 1962), although this is the only example from Etna Cave.

The third panel consists of four groups of pecked lines or dots (Fig. 5) on the northeast-facing surface of a large pyramidal tuff boulder located less than 2 m. from the cliff face and 4 m. southeast of the mouth of Etna Cave. This boulder is approximately 2 m. wide,



3 m. high, and 4 m. thick, and the pecked face is tilted back approximately 25 degrees from vertical. Although perhaps protected somewhat from the elements by the high overhang of the adjoining cliff, the upward tilt of the rock face may account for some apparent deterioration of its elements and the initial difficulty in observing them on the rough, undulating surface. In addition, such weathering may account for Wheeler's apparent ignorance of these features, despite his repeated visits to the site. Three clusters are evidently abstract curvilinear, while the fourth is non-linear geometric.

The cluster of elements located on the upper left portion of the boulder face consists of a series of curved and straight intersecting or isolated lines that are either U- or V-shaped in cross-section. These lines vary from less than 1 to a maximum of 2 cm. in width and from 0.3 to 1 cm. in depth. The narrower, shallower lines are likely etched rather than pecked into the rock surface. Overall, this panel measures approximately 55 cm. in both width and height (see Fig. 5). Three small triangular divots immediately below this panel appear to be modern cultural damage to the rock face, perhaps from a claw hammer or chisel. The element situated in the upper right portion of the boulder is a sinuous line with two small branches in the upper right. The line is U-shaped in cross-section, up to 1 cm. in width and 0.3 cm. deep, and the rough L-shape of its meandering path is approximately 25 cm. wide and 20 cm. high. Similarly, the element located in the lower right portion of the boulder consists of an indistinct pattern of curved and straight lines within a 20 by 25 cm. area. These lines are U-shaped in cross section and are approximately 1 cm. wide and 0.3 cm. deep. Finally, three to four partially overlapping or adjoining circles of dots—with the circles trending in a diagonal from the upper left to the lower right—are located in the lower center of the boulder. Each dot is approximately 1.5 cm. in diameter and a maximum of 0.5 cm. deep, and the three distinct circles appear to be comprised of 11 to 12 such dots, some of which are shared between two circles. The possible fourth circle is represented by an alignment of three dots below the circle on the right. This grouping is approximately 33 cm. wide and 33 cm. high. Similar elements have not been observed at other rock art sites in Lincoln County, but the weathering of these elements (which is comparable to that of the curvilinear panels on the same boulder)



**Figure 6. Scratched 'V' figure adjacent to Etna Cave.**

support their indigenous authenticity. In form, at least two of the abstract curvilinear groups are reminiscent of the motifs found in the pictograph panel at nearby 26LN110, although the latter are much more elaborate.

The final panel is a large 'V' with three short parallel vertical lines beneath it located on the south-facing cliff face directly adjacent to the mouth of Etna Cave (Fig. 6). V-shaped in cross section, all the lines were scratched and/or gouged into the rock rather than pecked. The parallel lines are 10 cm. long, 0.7 to 1 cm. wide, and 0.5 cm. deep, while the lines of the upper 'V' are approximately 30 cm. long, up to 2 cm. wide, and 1 cm. deep. The bright tone of the lines relative to the surrounding rock, the fact that they are incised rather than pecked, and the even V-shaped cross section of the lines all argue for a modern production of this image. In fact, this "rock art" may relate to Wheeler's excavations, as he reported that "two base points were first chiseled into the rock wall, one on each side of the entrance" to establish the excavation grid (Wheeler 1942:14). The location of this feature is consistent with his description.

## CONCLUSION

While it remains a puzzle why Wheeler (1942) did not describe the rock art he clearly observed at Etna Cave, we are fortunate that some record remains of these images. In the case of the pictograph, the historical photograph verifies its ancient origin, while the photograph of the spiral petroglyph is the only evidence we have for such a feature at this site. On their own, such records might have been viewed with some suspicion—that is, were they really from Etna Cave?—were it not for field verification and the more recent discovery of the additional petroglyph panel on the boulder outside the cave. It is easy to see how these latter elements were apparently missed by Wheeler. Now that they have been recognized, however, data for this feature and that derived from the museum records reveal considerable diversity in the rock art at Etna Cave. This observation likely merits further analysis in light of other rock art in southeastern Nevada, but the value of revisiting field records, photographs, catalogues, and notebooks on Great Basin archaeology stored with artifact collections has already been demonstrated.

## ACKNOWLEDGMENTS

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