

**2014 Investigations to Locate
Camp Security
a Revolutionary War Prison Camp
in
Springettsbury Township, York County,
Pennsylvania**



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November 26, 2014

Acknowledgments

I sincerely thank the Friends of Camp Security for giving me the opportunity to help them search for the site of Camp Security. Although the 2014 investigation did not discover the camp complex, their commitment to site discovery and interpretation is genuine and will surely prevail.

The present project was funded in part by a grant from the Battlefield Fund of the National Trust for Historic Preservation. Matching funds were provided by the Friends of Camp Security. I am grateful to both organizations for their support.

Carol Tanzola, President, Friends of Camp Security, energetically helped administer the project. Chris and Jerry Curran provided a constant supply of cold drinking water, snacks, assistance with tool collection at the end of the work day, pickup truck rides to the parking area, and welcome camaraderie.

Above all, archaeology requires teamwork. Sixty-eight volunteers, many of whom had no previous experience, donated 1,166 hours to thoroughly investigate the project area and clean recovered artifacts. The amount of work achieved far exceeded my expectations. Volunteers readily learned and applied new skills and maintained enthusiasm even when test holes proved to be empty. Thanks to all for your motivation, hard work, good company, and a job well done.

I thank Amanda C. Snyder, field assistant, for her capable help with every aspect of the investigation. She demonstrated mature field skills, cheerfully instructed volunteers, and skillfully recorded nearly every test hole profile.

I am also grateful to Dr. John Wah, soil scientist, for voluntarily visiting the site to inspect and confirm suspicions regarding soil erosion in the project area.

Kinsley Construction, Inc. kindly donated a spacious tool storage trailer for the duration of the project.

Finally, I thank Springettsbury Township for permitting this research to be conducted in the Camp Security Preservation Area and creating a temporary parking lot for project staff and volunteers. I also acknowledge Township Supervisors for agreeing to submit the present artifact collection, associated field records, and future Camp Security collections to The State Museum of Pennsylvania for long-term curation. There

the collections will be housed with all previous collections from the Preservation Area and made available to future researchers upon request.

Though so many people contributed to the project's success, I, alone, assume full responsibility for any errors which may appear in graphics, text, or interpretations offered herein.

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Introduction

"How do you know where to dig?" This is probably the most frequently asked question by visitors to an archaeological site. Indeed, to the uninitiated, it must seem like magic when excavators unearth objects and expose soil disturbances associated with people who lived there hundreds or even thousands of years before the present. Yet, site discovery can be quite challenging. Sometimes the target site is found on the first attempt; at other times, multiple investigations are required to locate "the prize." At all times exploration is the product of systematic investigation, utilizing evidence derived from a variety of sources.

Between August 17 and October 1, 2014, more than a thousand man-hours were spent searching for the site of Camp Security, a Revolutionary War prison camp built in Springettsbury Township, York County. The purpose of this report is to review site history and previous archaeological research; examine the rationale for project area selection; enumerate project objectives; discuss investigation strategies, methods, and findings; and provide interpretations and conclusions based on collected information. An inventory of artifacts submitted for curation at The State Museum of Pennsylvania is provided in Appendix 2 of this report.

Site History Summary

To eliminate confusion, it is important to understand that the name "Camp Security" refers to a complex of two camps, known to those who were incarcerated there as Camps Security and Indulgence (see Houlding and Yates 1990:34-35). The initial camp, built and opened in July 1781, housed a portion of the nearly five thousand British and German troops, under command of General John Burgoyne, captured at the Battle of Saratoga in 1777. This Convention Army, so-named for the surrender agreement called the Convention of Saratoga, was previously interned in Cambridge (MA), Rutland (VT), and Charlottesville (VA) (Hagist 2004:vii-ix, 55-57; Miller 2014:156-158). When the British Army made significant advances in Virginia in 1781, detainees were moved north to Winchester (VA), Frederick (MD), and eventually Lancaster (PA) to prevent their release and reintegration into the main army should the Continental Army not prevail.

Upon arrival in Pennsylvania, British commissioned officers were incarcerated in Lancaster, while regular soldiers and noncommissioned officers were sent to York; German soldiers were sent to Reading. It is estimated that the York contingent numbered approximately 800-1000 men, women, and children (Jonathan Stayer, personal communication 2014).

The camps were built approximately 4 ½ miles east of York on land owned by Lancaster County resident David Brubaker. A portion of Brubaker's 280 acre tract was farmed by a tenant and included 100 acres of cleared land and structures. Significant acreage, however, was in wood lot. While the camps were active and after closure in 1783, Brubaker made claims for losses he incurred. The claims demonstrate, beyond doubt, that the camps were located on the Brubaker tract and provide some clues as to initial camp construction. In his 1781 claim he states:

That above 100 Acres thereof being already cleared, the persons employed constructing the **Stockade & Huts** for the **Prisoners & Guards** have made use of large quantities of wood growing on the said Plantation, & have already cleared 30 Acres of wood land thereon, so that the Plantation aforesaid is considerably impaired in value.

That the Guards have used & destroyed almost all the Rails on the Plantation, utterly depriving the Tenant of the Indian Corn thereon, & the benefit of the Pasturage of his Meadow.

(Brubaker 1896; emphasis added)

Pension records of York County militia who guarded prisoners at Camp Security indicate not all of the Convention Army prisoners lived inside the stockade. John Stewart, a guard in 1781, notes: "They kept the single men in a stockade under guard and the married men, after they had been there awhile, were permitted to remain outside the stockade. A great sickness set among the prisoners and the married were then permitted to build huts on the hill outside of the stockade..." (Lloyd 2014).

Following the Battle of Yorktown and capture of more than six thousand British and German troops under command of General Charles Lord Cornwallis in October

1781, newly-taken prisoners were placed in established detention camps in Virginia and Maryland (Miller 2014:158). Like the Convention Army prisoners before them, the Yorktown captives were eventually moved to York and Lancaster, Pennsylvania (Miller 2014:159). Approximately 800 British soldiers, women, and children, swelled the population of the York camp in January 1782 (Jonathan Stayer, personal communication 2014).

More hostile and a greater escape risk, these Yorktown troops were apparently placed in the stockaded compound originally constructed for Convention Army prisoners. Captain Samuel Graham, a member of the Cornwallis army, noted that they were kept in huts "newly constructed ... surrounded by a high stockade and ... strictly guarded" (Graham 1862:73). Presumably, all of the Convention Army detainees were moved out of the stockade. Sergeant Roger Lamb, who was originally captured at the Battle of Saratoga, escaped on his way to Charlottesville, and returned to British military service only to be recaptured at the Battle of Yorktown, entered the York camp in January 1782 (Hagist 2004:100). He was permitted to stay with his former comrades and clearly notes the primary difference characterizing the two camps when he writes: "... a small village had been built by the remains of general Burgoyne's army, who were allowed very great privileges with respect to their liberty in the country ... while the soldiers of lord Cornwallis's army were closely confined in their pen" (Hagist 2004:100).

According to Lamb, the space enclosed by the stockade was, "a little more limited" than the two to three acre enclosure in which he and Convention Army prisoners were confined during their stay in Rutland, Vermont (Hagist 2004: 57, 100). "About two hundred yards" separated Camps Security and Indulgence (Hagist 2004:100). Graham further notes that Camp Indulgence was located "upon a rising ground" (1862:73).

It is likely that defined areas near one or both camps were set aside for kitchens and latrines. It is also possible that a distinct work area attended Camp Indulgence (see Baumgardt [2000]:6-7). The nature of camp industry was described by Lamb.

Men, women, and even the children were employed making lace, buckles, spoons and exercising other mechanical trades which they had learned during their captivity.

(Hagist 2004:100)

The detention complex was composed of more than just Camps Security and Indulgence. In 1781 construction of a hospital began. However, Benjamin Shield, a Surgeon's Mate in Burgoyne's Canada Army, reported it was not completed due to an outbreak of disease and death that affected camp inhabitants.

... they having in about five weeks Buried upwards of forty Men, women, and children ... **having no hospital** ... is an unusual trouble ... the Men had laid the foundation for an Hospital but falling Sick so fast there was not Men enough to attend the Sick ...

(Sellers 1895; emphasis added)

The hospital's location is not known nor is it known if construction was completed.

A cemetery was required for burial of the dead. In 1781 Corporal James Fox, a Convention Army prisoner, noted that "after the huts were builded we sunk wells and made a grave yard [a quarter-mile] from the camp..." (Houlding and Yates 1990:34-35). Anecdotal evidence places the camp cemetery in a residential neighborhood outside of the Camp Security Preservation Area (160 acres of the Brubaker tract preserved and administered by Springettsbury Township). It is uncertain that this unmarked hallowed ground survived land modification associated with subdivision development.

Although the Treaty of Paris, an agreement ending the Revolutionary War, was not signed until September 1783, the Continental Congress declared a formal cessation of hostilities on April 11, 1783 (Miller 2014:181). Historian Ken Miller notes that General George Washington, Commander of the Continental Army, instructed prisoners of war to be "conducted from their places of detention ... in incremental detachments of five hundred" (Miller 2014:181). Camps Security and Indulgence were vacated in early May 1783 (Jonathan Stayer, personal communication 2014).

In summary, the Camp Security complex consisted of two residential camps, huts for guards, activity areas, possibly a hospital, and a cemetery located about one-quarter mile from the camps. Camp Security was enclosed by a closely guarded stockade; whereas, Camp Indulgence was a village of huts located on "rising ground." It was neither guarded nor enclosed by a stockade. Built in July 1781, the detention facility was only inhabited for twenty-two months. Prisoners were released and returned to England

in May 1783. No contemporary documents have been found which pinpoint camp locations on the Brubaker tract.

Previous Archaeological Investigations

Limited archaeological excavations were conducted on the Wiest Farm property in 1979 by the Pennsylvania Historical and Museum Commission (PHMC) in partnership with Springettsbury Township and Historic York, Inc. (see Figure 1). [The Wiest Farm property is located in the western third of the Camp Security Preservation Area.] The project successfully recovered artifacts and several refuse-filled pits dating to the camp period (see Hunter 1979). Although investigators pronounced the discovery to be the site of Camp Security, re-examination of collected artifacts and the lack of below-ground structural evidence, such as a stockade trench and postholes, suggests the site is more likely affiliated with Camp Indulgence. The large quantity of brass straight pins and bone button blanks found during the excavation may identify the location as a work area

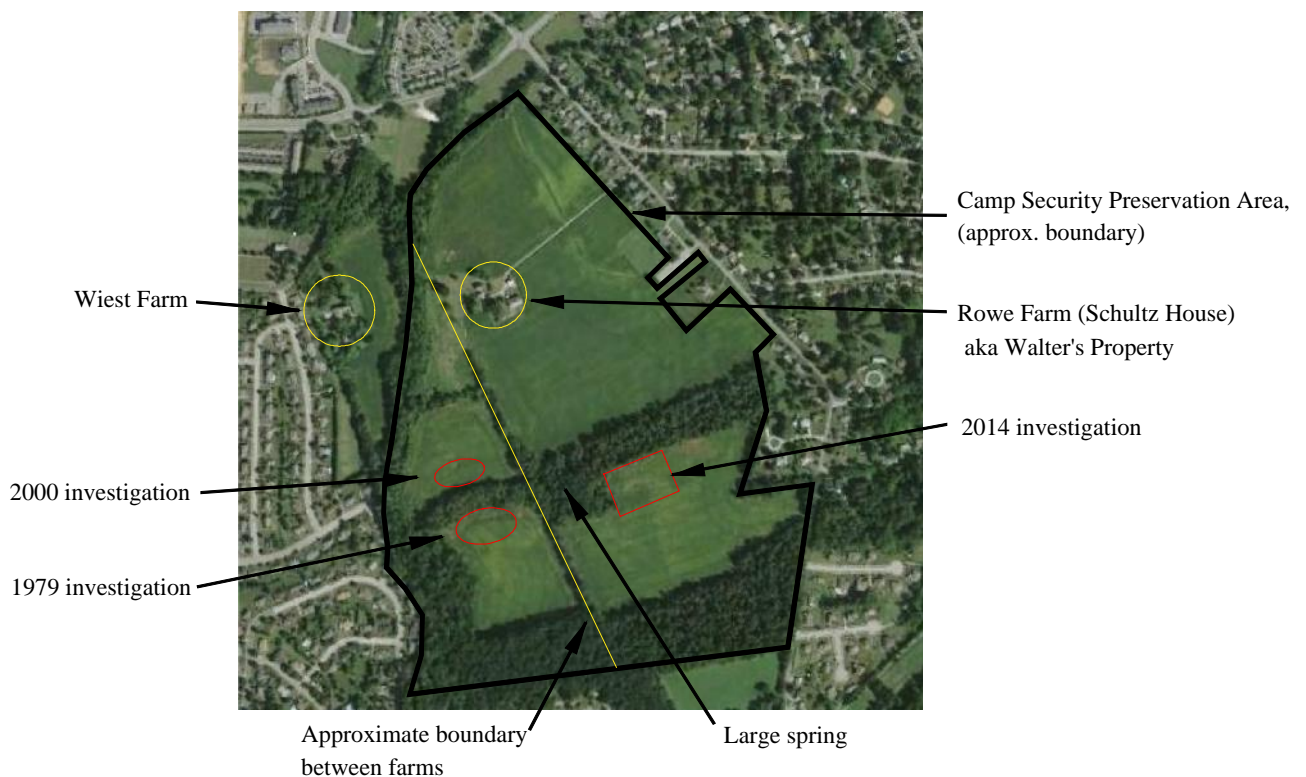


Figure 1. Camp Security Preservation Area and significant elements.

affiliated with the residential compound (cf. Baumgardt [2000]:6-7).

In May 2000, a Phase I archaeological survey was conducted on the Wiest Farm property to evaluate the effects of a proposed housing subdivision on buried cultural resources associated with Camp Security/Indulgence (see Catts and Roberts 2000). Utilizing techniques of surface survey and shovel tests, investigators recovered additional camp period artifacts and found features possibly associated with camp activities. Based on evidence collected during the 1979 and 2000 studies and inferences drawn from documentary accounts, approximate boundaries of Camp Security/Indulgence were postulated. Although not explicitly stated, Catts and Roberts suggest Camp Indulgence lies in the so-called Upper Field where PHMC investigations were conducted in 1979; while, Camp Security was located in the so-called Lower Field north of the PHMC investigation site (2000:15-15).

In August-September 2009 Historic York, Inc. sponsored archaeological investigations around the Schultz House, located on the former Rowe Farm (see Warfel 2010). The mid-eighteenth century structure was the principal house on the David Brubaker tract when the camps were built and placed into service. Oral tradition and local histories have long-held that the building was used as a headquarters for camp guards (Stayer 1981:22), even though the 1781 Brubaker claim indicates huts were built for guards near the camp. The excavation of seventy-nine close interval test holes discovered only a handful of eighteenth century artifacts, none of which are directly associated with military activity. Hence, investigations were unable to verify that the house was used by camp guards.

To summarize, previous archaeological investigations did discover camp period artifacts and below-ground features on the former Wiest Farm. Insufficient evidence, however, exists to clearly define camp locations or positively attribute artifacts and features to one or the other camp. Aside from archaeological testing around the Schultz House, no previous investigations have been conducted on the Rowe Farm, which adjoins the Wiest Farm and was an integral piece of the Brubaker tract in the 1780s.

Project Area Selection

The 2014 project area is a 3.3 acre plot of agricultural land situated in the Upper Field of the former Rowe Farm (see Figure 1). The location lies on the 1780s Brubaker tract and was selected for several reasons.

- A 2012 remote sensing study, utilizing a Geoscan Research FM-256 gradiometer survey, aerial photograph analysis, and LiDAR examination, detected two large anomalies (areas of unusual magnetic readings) at this location, known as the "Q Block" (Figure 2). The study concluded by stating:

Based on the magnetic surveys, aerial photographs, and (to some extent) the LiDAR data, Blocks D, F, and Q exhibit the most conclusive evidence as the probable site for Camp Security. The magnetic responses in this location are the highest anywhere on the property; even higher than around buildings currently occupied. The crop marks visible on the PAMAP aerial photograph clearly suggest rectangular (i.e., non-natural) features in the same location. The available LiDAR data, although coarse, also appear to show rectangular features. In short, all of the available evidence suggests there is a large, rectangular, highly magnetic feature that extends from the eastern half of Block D, through Q, into the western half of Block F.

(Quick 2013:26)

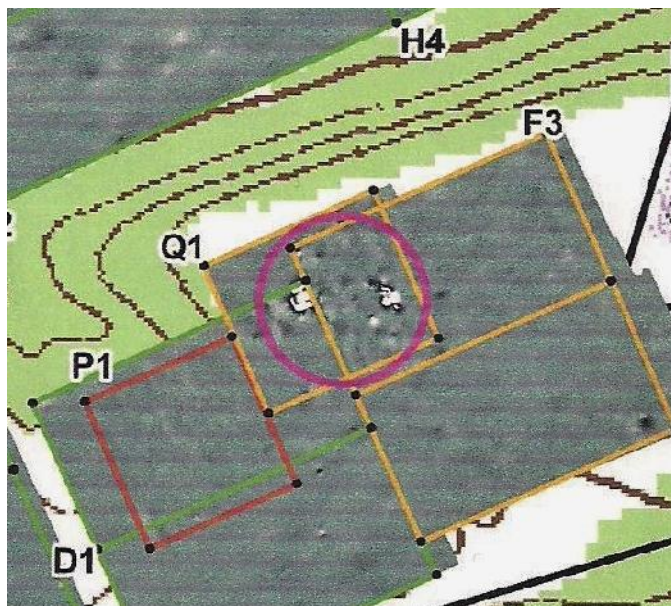


Figure 2. Q Block and associated hot spots.
(Adapted from Quick 2013:16, Figure 13).

- Two previous historical analyses of Camp Security suggest that at least one of the residential camps occupied the selected project area landscape (see Baumgardt [2000]:3-4; Stayer 1981:23).
- The 2014 project area lies at nearly the same elevation as the 1979 excavation site, thought to be the location of Camp Indulgence. Both are positioned near a large fresh water spring – one on the east side and the other on the west side. Because drinking water was a requirement for all detainees, it is not unreasonable to hypothesize that Camp Indulgence was a dispersed "village of huts" that occupied land on both sides of the spring.
- No previous archaeological excavations were conducted in the project area; hence, its potential was unknown.

For all of these reasons the selected project area seemed a logical place to search for elements of the Camp Security complex. If a different area had been chosen, one would always question why investigations did not target such a promising location.

Objectives

Project objectives sought to test conclusions of the 2012 remote sensing study and previous historical analyses which placed residential elements of the Camp Security complex in the project area. Because the selected location lies at nearly the same elevation as the site discovered in 1979, findings were expected to be affiliated with Camp Indulgence rather than Camp Security. This belief is based on Graham's observation that Camp Indulgence was not positioned on a landscape elevation similar to Camp Security but, rather, was located "upon a rising ground."

Proof of camp period habitation is dependent on the recovery of artifacts associated with construction and domestic life. Also, below-ground soil disturbances created by site activity, such as latrine pits, hearths, and postholes, should be present. It was further hoped that remnants of the detention complex would exhibit spatial patterning required to identify which element of the camp complex was discovered and its relationship to previously unearthed artifacts and features.

Strategies, Methods, and Findings

To achieve the above-stated objectives, three distinct but related strategies were utilized. They include systematic surface survey, systematic metal detector survey, and systematic test hole excavation. All are commonly employed in the process of archaeological site discovery.

Because each requires horizontal spatial control of found artifacts and/or features, a grid of 40'-squares was imposed over the Q Block location, documented in 2012 with reconstructable GPS coordinates (Figure 3). The southwest corner of the grid was designated as the datum and labeled N0 E0. This placed all project area grid coordinates in a northeast quadrant respective of the datum point. The southwest corner of each grid square was used as the referent for the square.

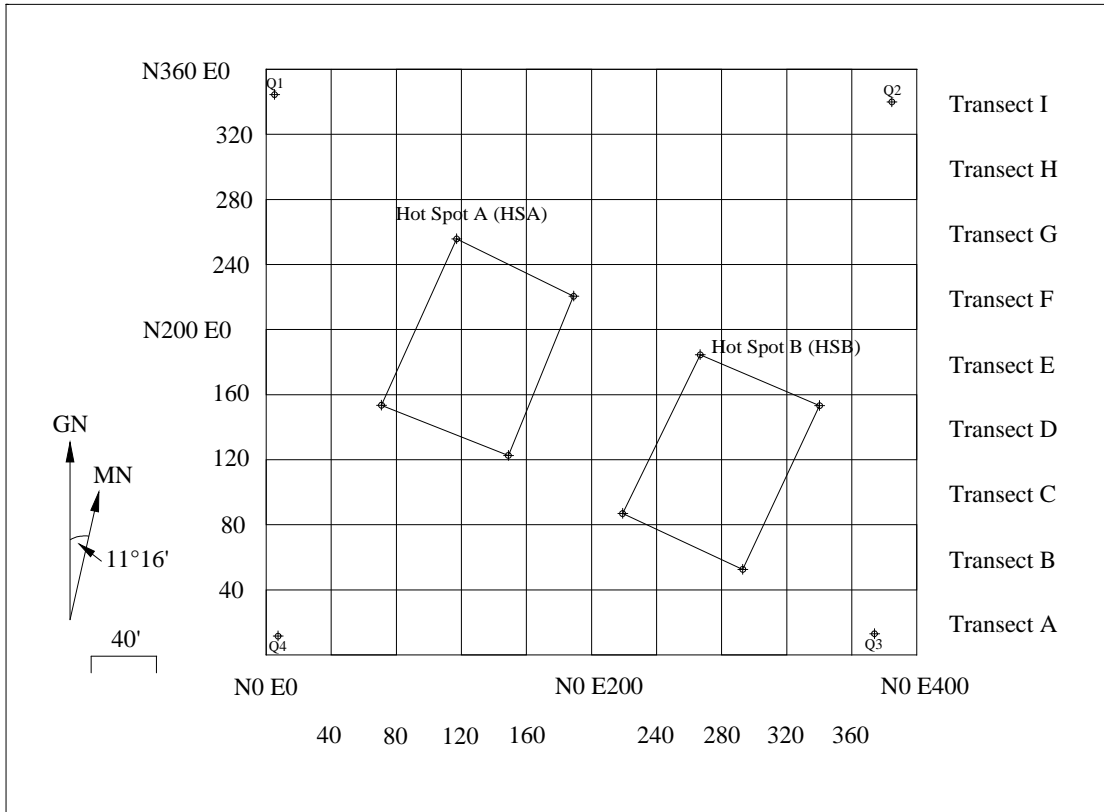


Figure 3. Site grid, imposed over Q Block corners and geophysical hot spots.

Vertical control of the investigation site was accomplished by recording ground level elevation at each test hole location with respect to a single point of known elevation

or benchmark. Ground level (grade) at grid coordinate N0 E400 was selected for the benchmark. GPS was used to define the benchmark's elevation as 580' above mean sea level.

Systematic Surface Survey

Prior to the project's start, the Q Block was cultivated to optimize visibility of artifacts on the ground surface (Figure 4). Ideally, a moldboard plow works best for this purpose, because it turns artifacts contained within the soil to the surface. However, most modern farmers no longer use it, as deeply turned soils promote erosion. Therefore, a chisel plow was employed. It successfully broke up the top 3"-5" of topsoil and provided approximately 85 percent ground visibility.



Figure 4. Preparing the Q Block for investigation (left) and chisel plow (right).

In the initial sweep crew members were spaced at arm's length from one another and walked the entire field on an east-west axis. Discovered artifacts were marked with pin flags and left in place. A second sweep of the entire field was then conducted on a north-south axis. Again artifact locations were marked with pin flags.

As a result of the survey, no eighteenth century artifacts were found. Discovered objects dated from the third quarter of the nineteenth century to the present day. They included fragments of bottle and jar glass, pieces of coal and cinder, a brick fragment, an iron plow tip, a screw driver with plastic handle, and several golf balls. A light concentration of bottle and jar glass was observed in the northern half of grid block N200 E40. Because these objects post-date the era of interest and have little curatorial value,

they were collected, photographed, and discarded. Exact discovery locations were not mapped.

A diagnostic prehistoric artifact was found on the surface later in the investigation, during the shovel test phase of the project. The item is a straight-stemmed rhyolite bifacially-worked blade with a broken tip (Figure 5). Its asymmetrical shape suggests it was used as a knife rather than a spear tip. Similar straight-stemmed stone projectile points and tools are commonly found in the Lower Susquehanna Valley and generally date to the Archaic Period of prehistory, ca. 2500-2200 BC (see Kent 1996:24, 27).



Figure 5. Prehistoric rhyolite knife.

Rhyolite does not occur locally; hence, the native peoples who made and used the tool either traveled to the mineral source in the South Mountain of Adams County or acquired it through trade. Its discovery in the project area is not unexpected, as other Archaic Period stone artifacts were found in the Preservation Area during 1979, 2000, and 2009 excavations.

Systematic Metal Detector Survey

A systematic metal detector survey was conducted in a manner similar to the surface survey. Volunteers – using their own equipment calibrated to find all metal types, including iron – spaced themselves at an appropriate distance from one another so that erroneous readings would not be produced by being too close to a fellow surveyor's apparatus. The first field sweep was conducted on an east-west axis. This was followed by a field sweep on a north-south axis. Target objects were unearthed, pin-flagged, and

returned to discovery locations. Project team members, working with the field assistant and senior archaeologist, visited each discovery location and evaluated finds.

Diagnostic eighteenth century artifacts and select nonferrous objects were precisely mapped within the grid before being housed in appropriately labeled bags. On the other hand, the locations of ubiquitous and fragmentary iron objects, many associated with agricultural activity, were noted by grid block designation only, collected, photographed, and discarded. Nearly all were fragmentary, in an advanced state of corrosion, and have little curatorial value.

Two hundred and sixty-two objects were found as a result of the metal detecting survey. The assemblage includes cut and unidentified nails, spikes, bolts, nuts, washers, kerosene lamp parts, a Colt 45 bottle cap, a Hutchinson bottle stopper, chain links, plow tips, wagon hardware, animal tack (shoes and miscellaneous harness pieces), wire, shotgun shells and cartridge casings, an aluminum arrow shaft, a pocket knife, a wrench, and many miscellaneous unidentifiable iron fragments (Figure 6). Although 61.83% (n=162) of the collection was found in the south half of the field (south of the N200 line), no discernible pattern is associated with object distribution. The collection represents items shed from farm equipment over a period of more than one hundred and fifty years, refuse discarded by farm house (Schultz House) occupants, and seasonal hunters.



Figure 6. Sample of metal artifacts found during metal detector survey.

To the survey team's delight, seven eighteenth century artifacts were found with metal detectors (Figure 7). The artifacts include: a George II copper halfpenny, a 1780 Spanish silver real, two tombac buttons, one brass button, a lead musket ball, and a piece of lead shot. All are items that could have been in use during the camp period.



Figure 7. Eighteenth century artifacts. (Top row, left to right: copper halfpenny, Spanish silver real, large tombac button, small brass button, small tombac button; Bottom row, left to right: lead musket ball, lead shot.)

The George II copper halfpenny is heavily worn, in poor condition, and does not retain a date (Figure 8). However, details of hair style/decoration on the king's bust identify it as an "old-head," minted between 1740 and 1754 (Noel Hume 1976:162).



Figure 8. Close-up of George II copper halfpenny before cleaning. (Courtesy of Paul Kuehnel, York Daily Record)

The 1780 Spanish silver real is also heavily worn but visibly bears the portrait of King Carlos III. The legend on the obverse side of the coin reads: CAROLOS•III•DEL•GRATIA (Charles III by the Grace of God). The 1780 date, found in a fold at the bottom of the coin, is legible with a magnifying eye loupe. The reverse side of the coin displays the two Pillars of Hercules and the crowned Shield of Leon and Castile. The reverse side legend reads: [HIS]PAN•ET[IND]•REX (King of Spain and the Indies)• M(topped by superscript o)•1R•F•[F]. M topped by a superscript o indicates the coin was minted in Mexico City (see Jordan 1999). 1R specifies the denomination as 1 real. FF are the assayers initials. According to Louis Jordan (1999), Department of Special Collections, University of Notre Dame, Francisco de la Pena and Francisco Arance Cobos worked together as assayers at the Mexico City mint between 1774 and 1788.

Two tombac buttons and one brass button were made in a manner that dates them to the second half of the eighteenth century. (Tombac is a white metal alloy of copper and zinc which imitates more expensive metals.) In each case the button's wire eye is set in a daub of metal, a characteristic of manufacture most commonly associated with the period 1760-1785 (White 2005:64). The large tombac button was likely used on a coat; whereas, the two smaller buttons could have been used on any number of garments. Carolyn White in her detailed study of colonial and Early American artifacts of personal adornment emphasizes that buttons were primarily worn by men in the eighteenth century (2005:57). Hence, these objects suggest gender-specific activity in the project area.

The lead musket ball and shot, admittedly, cannot be attributed to eighteenth century activity per se, since both were in common use during the first half of the nineteenth century. However, militia guarding Camp Security complex prisoners would have in their possession lead balls and shot similar to the found objects for use in smoothbore muskets and/or pistols. Because local militia often used their personal firearms during the Revolutionary War, a standard size ball should not be expected to be found on sites they occupied. The recovered lead musket ball measures .552" diameter; the lead shot measures in the range of .25"-.44" diameter. Precise measurement of the shot could not be made, as its shape is distorted due to impact.

When discovery locations of the eighteenth century artifacts are plotted on a site grid map, no tight pattern of distribution is apparent (Figure 9). At best, one can say they are loosely clustered in the southeast quadrant of the 3.3 acre field.

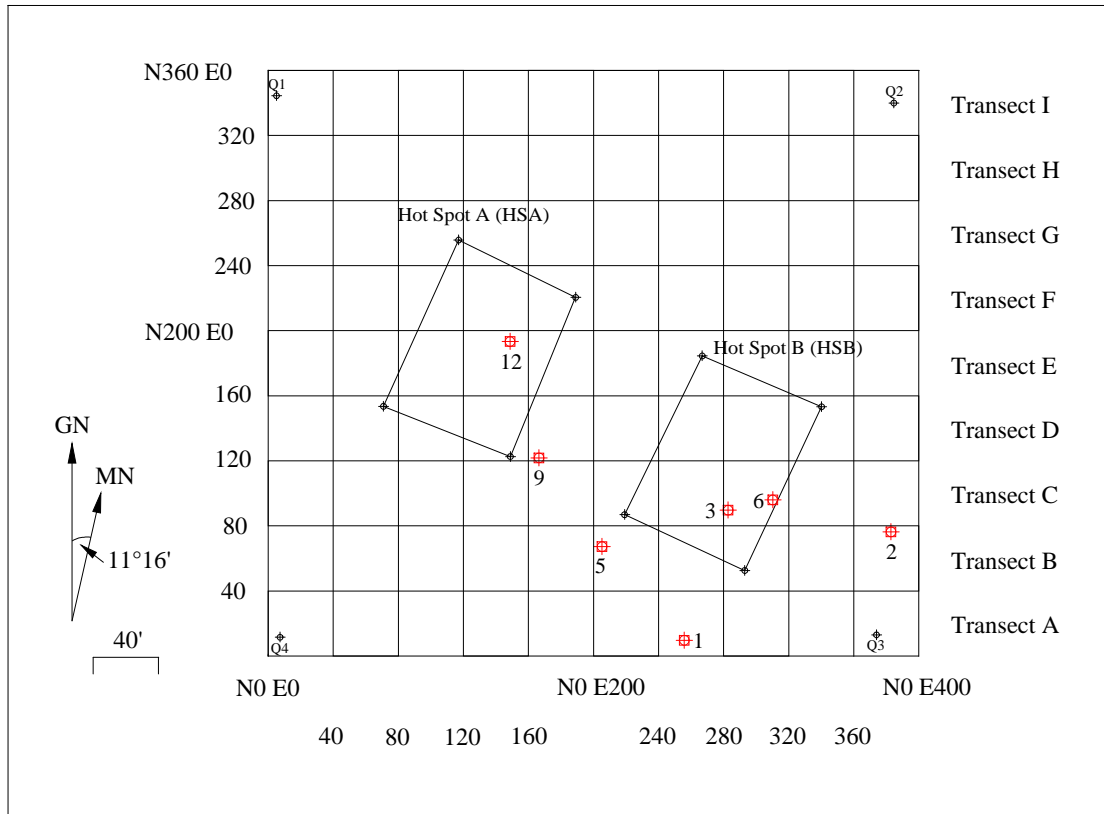


Figure 9. Distribution of eighteenth century artifacts. (#12 = 1780 Spanish silver 1 real; #9 = lead shot; #5 = lead musket ball; #3 = George II copper halfpenny; #6 = small tombac button; #1 = large tombac button; #2 = small brass button)

In summary, a systematic metal detector survey of the project area was productive. Though most found metal artifacts are associated with nineteenth and twentieth century site activity, seven objects which could have been in use during the camp period were recovered and precisely mapped. Their distribution in the project area is loose but largely confined to the southeast grid quadrant, possibly indicating an area of light camp period activity.

Systematic Shovel Testing

The majority of site investigation was devoted to shovel testing in so-called "hot spots," defined by remote sensing, and within the surrounding Q Block (Figure 10). All test holes were two feet in diameter, excavated to the depth of undisturbed soil, and positioned according to a systematic unaligned (staggered) sampling design (see Berry and Baker 1968). Inside the hot spots, designated HSA and HSB, test holes were placed at 15' intervals. In the Q Block, surrounding hot spots, test holes were placed at 45' intervals. For ease of reference, test holes excavated outside the hot spots were grouped according to 40'-wide transects, labeled A-I, which traverse the project area on an east-west axis. [See Appendix 1 for hot spot and transect test hole number assignments.]

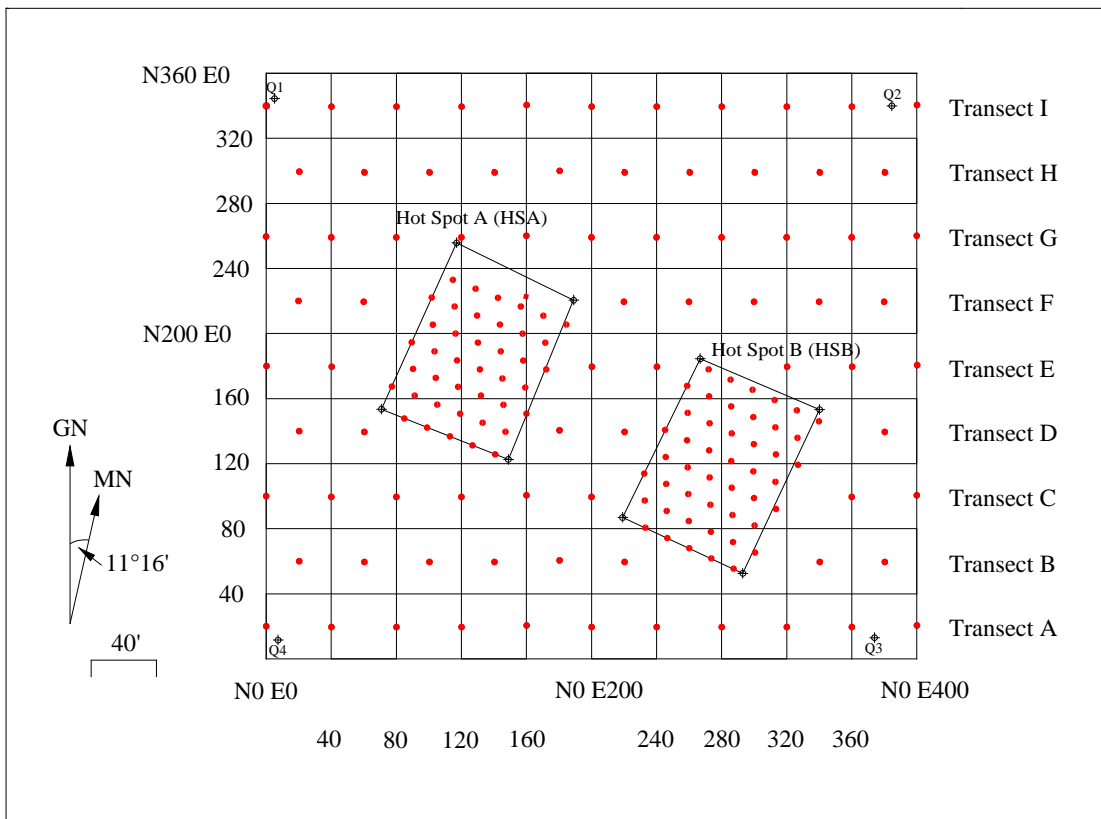


Figure 10. Test hole locations in Hot Spots A and B and the surrounding Q Block.

All field measurements were recorded in feet and inches except for stadia (vertical) measurements, which were recorded in feet and tenths of feet.

Shovel testing involved the removal of sod/ground cover with a spade shovel. Thereafter, soil was scraped and removed with sharpened mason's trowels (Figure 11). Each unit was excavated according to natural and/or cultural levels, defined by soil color and/or texture differences. Soil color was determined by comparison of samples with Munsell Soil Color Charts (2009 revision). Soil texture determinations were made by the field assistant or the senior archaeologist, relying on prior training and experience. Excavated soils were dry-screened through ¼" hardware cloth.



Figure 11. Test hole excavation in progress.

Upon the exposure of undisturbed subsoil, test hole excavation was judged complete unless a below-ground feature, demarcated by a dark soil stain, was present. Features were photographed and drawn in plan view before and/or after investigation. Artifacts were placed in appropriately-labeled bags bearing the designation of the test hole, soil layer, and/or feature number from which they were recovered. Before back-filling, each test hole was photographed and drawn in profile.

Ground surface elevations on the south side of each test hole were recorded, using an engineer's transit and stadia rod. Each test hole profile is linked to a common elevation point, the benchmark.

Hot Spot A

Hot Spot A is located in the western half of the Q Block (see Figure 10). Forty-one test holes were dug to evaluate the area, characterized by westward-sloping grade (see Appendix 1). Soil Level 1 consists of a 6"-17"-thick dark yellowish brown (10YR4/4) channery loam. In all but a few instances the layer rests directly on Level 2 subsoil, a yellowish brown (10YR5/6) clay loam (Figure 12). Level 1 is the plow zone. It yielded ten objects, not including pieces of coal which were noted and discarded.

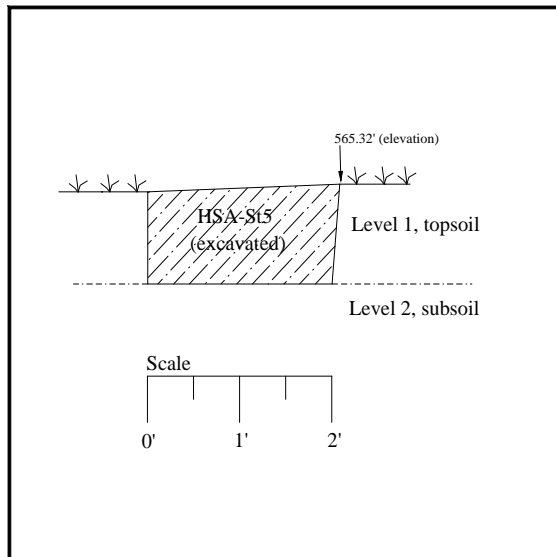


Figure 12. East profile of HSA-St5. (soil layers typical of most test holes)

The artifact assemblage consists of one cut nail, one wire nail, two unidentifiable nails, thin copper wire, one plain glazed red earthenware pottery sherd, and four pieces of quartz chipping debris. All but the chipping debris are attributed to the nineteenth and twentieth centuries. Red earthenware pottery is commonly found on both eighteenth and nineteenth century sites. Because its form and method of manufacture change slowly through time, it can rarely be assigned to any one century unless found with other datable artifacts.

Quartz is a native mineral in the project area and readily available. Chipping debris is a byproduct of Native American stone tool manufacture during the site's prehistory. Because native peoples used this mineral type for thousands of years and no distinctive quartz tools were found, it cannot be dated per se.

In five test holes – HSA-St23, HSA-St28, HSA-St34, HSA-St37, and HSA-St39 – the removal of Level 1 soil revealed a sub-layer, designated Level 1B. This sub-layer has virtually the same dark yellowish brown color as Level 1 but is more granular in texture and contains gravel lenses. Thickness varies between 4" and 18 ½". Dr. John Wah, an independent soil scientist who examined the sub-layer, identified it as the product of erosion, that is, soil transported and redeposited by natural processes. Indeed, erosion gullies appear in twentieth century aerial photographs of the project area and adjoining fields.

All but two features discovered in Hot Spot A proved to be soil disturbances associated with deep plowing or rodents. Features 4 and 5, on the contrary, mark refuse-filled erosion gullies. Both contained glasswares and ceramic sherds dating to the twentieth century.

Feature 4 was first detected during the metal detecting survey when a metal target was identified nearly two feet beneath the ground surface. A 3' x 3' square test hole, labeled TU1, was laid out and excavated at the location of the find. The removal of Level 1 revealed Level 1B soil in which was deposited a variety of artifacts. The assemblage includes: an iron bucket (the metal detection target), an unidentified iron container, window glass pieces, beverage bottles (dairy and alcohol), patent medicine bottles, a Ball canning jar, milk glass jars (cold cream?), and plain and decorated hardwhite earthenware pottery sherds (Figures 13-17). As illustrated in Figure 13, the bucket was filled with bottles before disposal.



Figure 13. TU1, Feature 4 (left); close-up of iron bucket filled with bottles and jars (right).



Figure 14. Select patent medicine bottles and Shampoo Jelly jar found in Feature 4.



Figure 15. Emigsville Dairy bottle and alcohol flask found in Feature 4.



Figure 16. Milk glass jars found in Feature 4.



Figure 17. Plain and decorated hard white earthenware pottery sherds found in Feature 4.

Close examination of the bottles reveals embossed labels and maker's marks that suggest a date for the collection. For example, the dairy bottle is embossed "Emigsville Dairy." This York County dairy operated between 1903 and 1930 (Hartman 2013). A jar, embossed "Shampoo Jelly, JR Watkins Medical Company, Winona, Minn., USA," dates to 1914-1920, the only period during which the product was made (JR Watkins Company, personal communication 2014). An "O.D." maker's mark on the bottom of an alcohol flask identifies it as a product of the Old Dominion Glass Company which used the mark between 1901 and 1927 (Lindsey 2014: O Logo Table). And finally, a plain medicine bottle in the assemblage bears the mark of a diamond shape enclosing the letter "I." This maker's mark was used by the Illinois Glass Company between 1915 and 1929 (Lindsey 2014:I Logo Table).

Because all of the Feature 4 glasswares date to the first two decades of the twentieth century, it is likely they were deposited in the erosion gully in the 1930s or early 1940s. This allows for a ten year time lag between manufacture, purchase, use, and disposal. Iron containers in the feature were not retrieved due to their poor condition (advanced corrosion) and limited curatorial value. The full extent of the feature was not defined due to time constraints; complete investigation would not contribute to the realization of project objectives.

Feature 5 was first observed after a 12"-thick layer of Level 1 soil was removed in HSA-St37. Feature fill was only 3" thick and consisted of mottled dark yellowish brown (10YR4/4) and yellowish brown (10YR5/4) loam. Unlike Feature 4, which was

identified in Level 1B soil and extended into Level 2 subsoil, Feature 5 was found at the interface between Levels 1 and 1B (Figure 18).

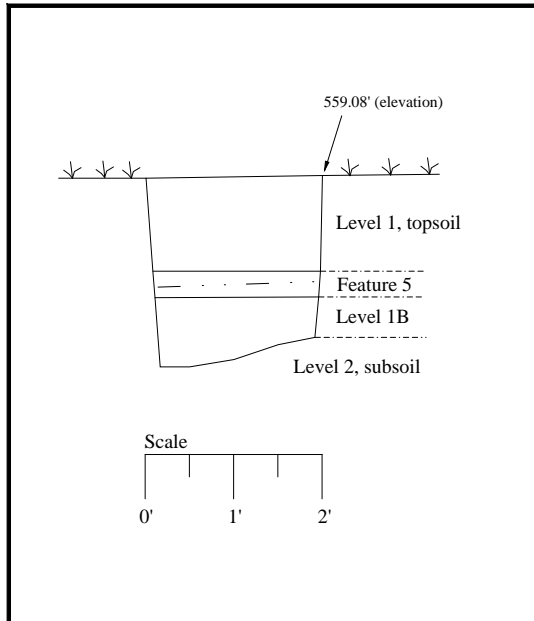


Figure 18. East profile of HSA-St37, depicting position of Feature 5.

Excavation yielded eighteen artifacts, including five unidentifiable nails, an iron rod, three pieces of molded porcelain with overglaze painted decoration, two glass canning jar fragments with embossed letters and a mold seam, and seven glass vessel fragments. The porcelain and canning jar pieces suggest an early twentieth century date for the feature. It is entirely possible that Feature 5, discovered only 30' west of TU1, is an extension of Feature 4. Horizontal limits of the feature or possible relationships to Feature 4 were not pursued due to time constraints and recognition that the feature is the result of modern refuse disposal.

In summary, shovel testing in Hot Spot A revealed filled erosion gullies and two buried twentieth century artifact deposits. Because these were the only unusual below-ground disturbances observed in the hot spot, it is likely they produced unusual magnetic readings captured during the 2012 remote sensing survey.

Hot Spot B

Hot Spot B is located in the eastern half of the Q Block (see Figure 10). Forty-seven test holes were dug to evaluate the area, characterized by relatively level grade (see Appendix 1). Soil Level 1 consists of a 6"-10"-thick dark yellowish brown (10YR4/4) channery loam. The layer rests directly on Level 2 subsoil, a yellowish brown (10YR5/6) clay loam. Level 1 is the plow zone. It yielded three objects: two pieces of plain glazed red earthenware pottery and a single fragment of oyster shell. Pieces of coal were also noted and discarded.

Aside from plow scars and rodent disturbances, no features were observed in the subsoil. Furthermore, no Level 1B soil or in-filled erosion gullies were encountered. There is no explanation for unusual remote sensing readings recorded in Hot Spot B during the 2012 survey.

Transects A-H

Seventy-eight test holes were excavated in the Q Block surrounding Hot Spots A and B (see Figure 10; Appendix 1). The same Level 1 plow zone soil observed in the hot spots was encountered throughout the project area. Table 1 below lists the varying depths of Level 1 soil as well as test holes that revealed Level 1B erosional soil.

Transect	Level 1 Thickness (inches)	Test Holes with Level 1B Soil
A	5-9	--
B	6-9 ½	B5
C	7-9½	C4
D	6½-10	--
E	7-11	E6
F	5-9	--
G	4-8½	--
H	5-9½	H6
I	6-10	--

Table 1. Comparison of Level 1 soil thicknesses encountered on Transects A-H.

Aside from occasional pieces of coal, only one piece of window glass and an iron washer (discarded) were found. This is a surprisingly small number of objects and attests to the efficiency of the metal detector survey conducted during the early days of the project.

Conclusions

The selected excavation site does not contain residential evidence of the Camp Security complex. A handful of eighteenth century artifacts, found during the metal detector survey, represent objects that could have been in use during the camp period. Yet, they might just as easily be objects lost long after the camps were closed. Certainly the wear noted on the 1780 Spanish silver real indicates it was in circulation for considerable time after the camp period.

Testing in Hot Spot A detected deep erosional soils and in-filled gullies that may have produced unusual readings during the remote sensing survey. No unusual below-ground disturbances were found in Hot Spot B; it is not known what produced anomalous remote sensing readings there. Furthermore, the present project puts to rest earlier speculation by historians that this location was the site of a residential camp in the Camp Security complex. It is also clear that the remnants of Camp Indulgence, found west of the large spring in 1979, do not extend into the field on the east side of the water source.

When one does not find what is expected, it is often useful to evaluate strategies and methods employed in the undertaking. In this case, independent but complementary strategies were used. Each yielded similar results – artifacts representative of nineteenth and twentieth century agricultural practice and farm life are present. Artifacts and features definitively associated with the Camp Security complex are not.

The extraordinary effort of project team members combined with a relatively thin plow zone permitted the excavation of far more test holes than was expected, given a five-week field season. With such coverage – 166 test holes and one 3'x 3' test unit – camp period artifacts and/or features would have been discovered if extant.

Although disappointing, negative evidence is positive information. We now know where the camp is not located and have tested conclusions long-held by historians who wrote about the site. There is no need for additional work in the project area.

Importantly, future attention can be directed to investigations at other promising locations in the Camp Security Preservation Area.

Appendix 1: Hot Spot and Transect Test Hole Number Assignments

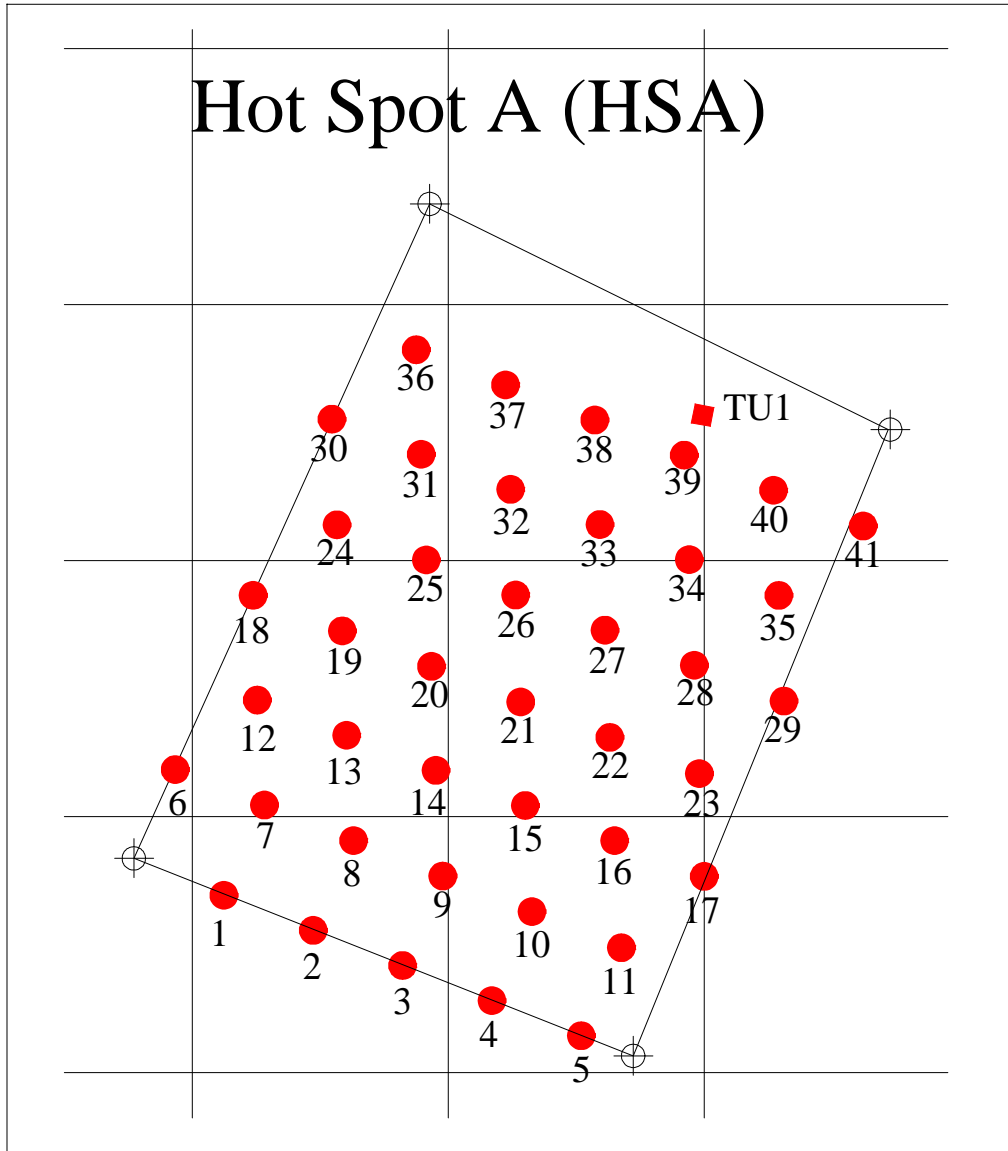


Figure 19. Hot Spot A test hole numbers.

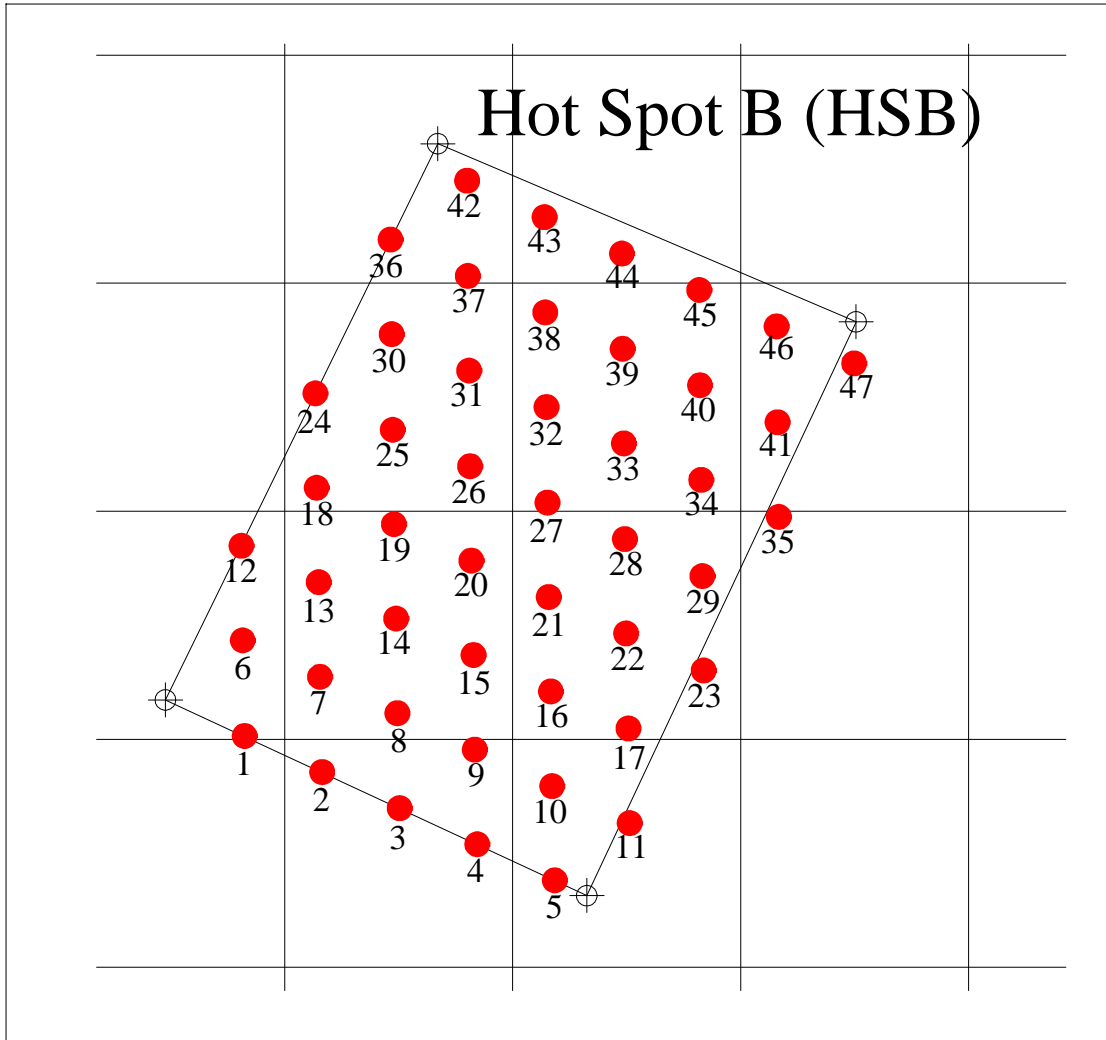


Figure 20. Hot Spot B test hole numbers.

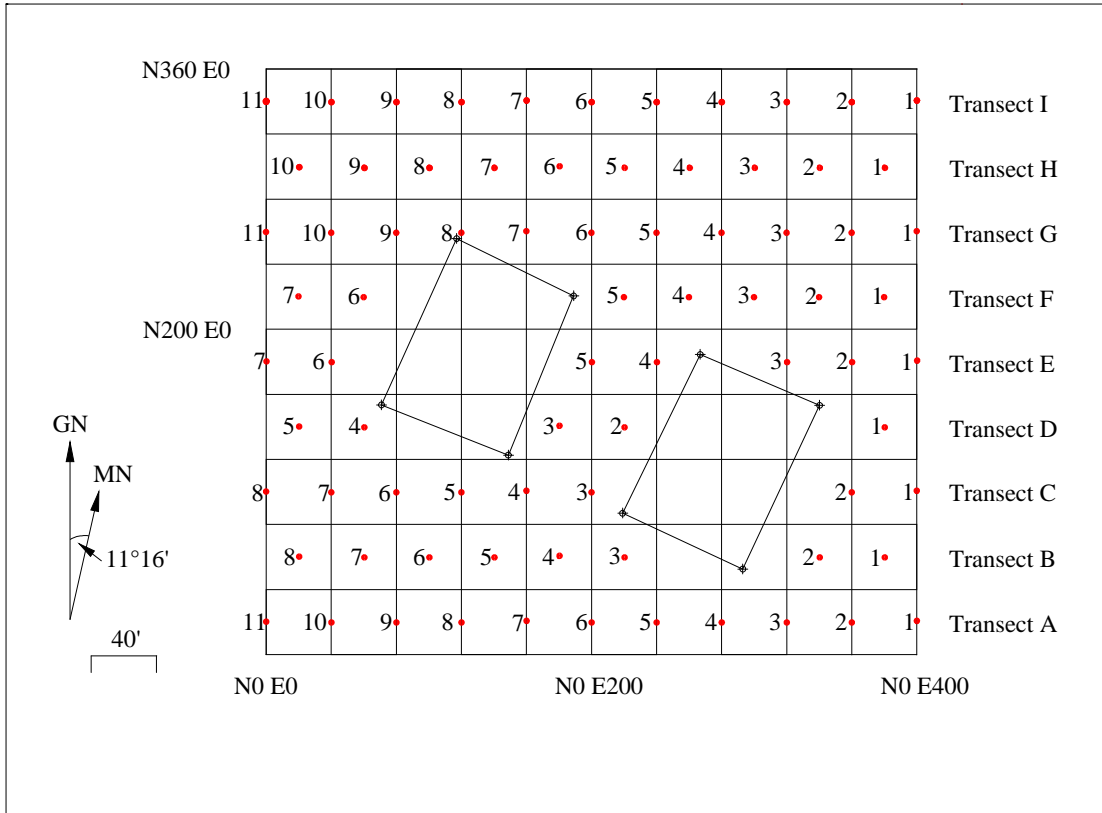


Figure 21. Transect test hole numbers.

Appendix 2: Inventory of Rowe Farm, Upper Field Artifacts Submitted for Curation

<i>County</i>	<i>Site No.</i>	<i>Cat. No.</i>	<i>Excavation Unit #</i>	<i>Site Level</i>	<i>Fea. #</i>	<i>Artifact Description</i>	<i>Traits</i>	<i>Quant.</i>	<i>Quant. Discard</i>	<i>Comments</i>
Yo	415	241		surface		Straight stem point	rhyolite, hafting notch; asymmetry	1		likely Bare Island style, ca. 2500-2200 BC
Yo	415	242		1		Buttons	tombac, large; wire eye set in metal	1		ca. 1760-1785
Yo	415	243		1		Buttons	brass/copper wire eye set in metal	1		ca. 1760-1785
Yo	415	244		1		Coins	George II, copper half penny, "old head"	1		no date, ca. 1740-1754
Yo	415	245		1		Animal tack	brass harness ring	1		
Yo	415	246		1		.47-.56 caliber	lead, .552"	1		
Yo	415	247		1		Buttons	tombac, small, wire set in metal, leaf-like design on face	1		ca. 1760-1785
Yo	415	248		1		Spikes	iron, wrought(?)	1		

<i>County</i>	<i>Site No.</i>	<i>Cat. No.</i>	<i>Excavation Unit #</i>	<i>Site Level</i>	<i>Fea. #</i>	<i>Artifact Description</i>	<i>Traits</i>	<i>Quant.</i>	<i>Quant. Discard</i>	<i>Comments</i>
Yo	415	249		1		Misc. metal	brass, oval, possible gasket?	1		
Yo	415	250		1		.25-.44 caliber	lead, distorted/flattened by impact	1		
Yo	415	251		1		Buttons	copper, brazed shank (omega?)	1		ca. late 18th c-1850
Yo	415	252		1		Misc. metal	pewter? Scrap	1		
Yo	415	253		1		Coins	Spanish silver, 1 real, Carolus III, 1780	1		
Yo	415	254		1		Animal tack	brass harness buckle	1		
Yo	415	255		1		Cut nails		1		
Yo	415	256		1		Animal tack	iron harness buckle	1		
Yo	415	257		1		Miscellaneous metal	brass rivet (too large for clothing)	1		
Yo	415	258	HSA-St3	1		Wire nails		1	1	badly corroded
Yo	415	259	HSA-St4	1		Slag		1		
Yo	415	260	HSA-St9	1		Unidentifiable nails		4	4	badly corroded
Yo	415	261	HSA-St11	1		Cut nails		1	1	badly corroded

<i>County</i>	<i>Site No.</i>	<i>Cat. No.</i>	<i>Excavation Unit #</i>	<i>Site Level</i>	<i>Fea. #</i>	<i>Artifact Description</i>	<i>Traits</i>	<i>Quant.</i>	<i>Quant. Discard</i>	<i>Comments</i>
Yo	415	262	HSA-St15	1		Unidentifiable nails		2	2	badly corroded
Yo	415	263	HSA-St19	1		Miscellaneous		1	1	not an artifact
Yo	415	264	HSA-St20	1		Quartz chipping		1		
Yo	415	265	HSA-St21	1		Other wire	thin copper wire	1	1	
Yo	415	266	HSA-St29	1		Plain/glazed redware		1		
Yo	415	267	HSA-St32	1		Quartz chipping		3		
Yo	415	268	HSA-St37	1B interface	5	Unidentifiable nails		5	5	badly corroded
Yo	415	268	HSA-St37	1B interface	5	Other porcelain	molded decoration with hints of overglaze painting	3		Likely 20th c.; pieces mend
Yo	415	268	HSA-St37	1B	5	Other vessel glass		7		
Yo	415	268	HSA-St37	1B interface	5	Food storage	mold seam; embossing	2		
Yo	415	268	HSA-St37	1B interface	5	Misc. metal	iron rod	1		badly corroded
Yo	415	269	HSA-St39	1B		Miscellaneous plastic	Bakelite fragment with brass electrical connectors	4		post 1907 (Bakelite introduction date)
Yo	415	270	HSA-TU1	1B&2	4	Window glass		59	54	
Yo	415	270	HSA-TU1	1B&2	4	Hurricane or Oil lamp	lamp glass	17		

<i>County</i>	<i>Site No.</i>	<i>Cat. No.</i>	<i>Excavation Unit #</i>	<i>Site Level</i>	<i>Fea. #</i>	<i>Artifact Description</i>	<i>Traits</i>	<i>Quant.</i>	<i>Quant. Discard</i>	<i>Comments</i>
Yo	415	270	HSA-TU1	1B&2	4	Plain hardwhite earthenware		3		
Yo	415	270	HSA-TU1	1B&2	4	Transfer printed	molded and transfer printed decoration	4		
Yo	415	270	HSA-TU1	1B&2	4	Medicine bottle	1-probable patent medicine bottle, with diamond and I mark on base; 1-Watkins Shampoo Jelly jar (in 3 pieces); 1-Porter's Pain King bottle; 1-Watkins bottle with embossed "Trial Mark"	4		
Yo	415	270	HSA-TU1	1B&2	4	Other bottle (misc.)	1-aqua-colored paneled bottle, function uncertain (in 5 pieces); 8-aqua-colored bottle pieces	9		

<i>County</i>	<i>Site No.</i>	<i>Cat. No.</i>	<i>Excavation Unit #</i>	<i>Site Level</i>	<i>Fea. #</i>	<i>Artifact Description</i>	<i>Traits</i>	<i>Quant.</i>	<i>Quant. Discard</i>	<i>Comments</i>
Yo	415	270	HSA-TU1	1B&2	4	Milk glass	3- probable cold cream jars (one is in 3 pieces)	3		
Yo	415	270	HSA-TU1	1B&2	4	Beverage bottle	1-milk bottle marked Emigsville Dairy; 1-alcohol bottle embossed "Warranted Flask" (in 8 pieces)	2		
Yo	415	270	HSA-TU1	1B&2	4	Food storage & canning containers	1-"Ball" canning jar (in 23 pieces)	1		
Yo	415	270	HSA-TU1	1B&2	4	Barrels/buckets/ metal containers	iron bucket and other unidentified container fragments	29	29	badly corroded
Yo	415	271	HSB-St2	1		Miscellaneous natural rock		1	1	not an artifact
Yo	415	272	HSB-St17	1		Miscellaneous natural rock		1	1	not an artifact
Yo	415	273	HSB-St37	1		Plain/glazed redware		2		
Yo	415	274	HSB-St41	1		Historic shellfish	oyster	1		
Yo	415	275	Transect C-8	1		Window glass		1		
Yo	415	276	Transect D-2	1		Coal/cinder		1	1	

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