

**AN ARCHAEOLOGICAL INVESTIGATION OF
THE VULCAN RUDY SITE (15Jf685)
JEFFERSON COUNTY, KENTUCKY**

KAS REPORT 53

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Report Prepared For:


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ABSTRACT

At the request of Historic Homes Foundation Inc., the Kentucky Archaeological Survey conducted an archaeological investigation at the Vulcan Rudy site (15Jf685) located in Jefferson County, Kentucky. The property is privately owned and the owner plans to demolish or move the slave house for the development of new housing on the land. The purpose of the archaeological investigation was to locate and investigate intact archaeological resources that may be associated with the Vulcan Rudy slave house. The investigations consisted of the excavation of shovel probes and test units. A total of 29 shovel probes were excavated primarily on the south and east sides of the building because the north and west sides appeared to be disturbed. Six test units were excavated in and around the building. A total of 2,326 artifacts were recovered from the site. Most date from the late 1800s to early 1900s. However, a large number of artifacts date from the early to late 1800s. Although no features were identified, a turn of the twentieth century artifact midden was found underneath the floor of the slave house and adjacent to the outside foundation wall. Artifact concentrations documented to the east and south of the slave house may be the remains of other nineteenth century structures. Intact nineteenth century deposits were not documented around the slave house and this portion of the Vulcan Rudy site appears to have limited archaeological potential. However, significant nineteenth century archaeological deposits may be located near the main house.

ACKNOWLEDGEMENTS

I would like to thank Jonathan Noffke and Historic Homes Foundation Inc. for the opportunity to study this site. I appreciate the assistance provided by the Jefferson County Office of Historic Preservation and Archives, and architectural historian Bill Macintire of the Kentucky Heritage Council. Thanks to Eric Schlarb for analyzing the prehistoric projectile point and Donna Gilbreath for preparing the illustrations. I am most appreciative of my field crew and volunteers who donated some of their time to complete this project. A special thanks to David Pollack for editorial comments and to administrative staff Ed Winkle and Barbara Gortman.

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INTRODUCTION

At the request of Historic Homes Foundation Inc., the Kentucky Archaeological Survey conducted archaeological investigations at the Vulcan Rudy site located in Jefferson County, Kentucky (Figure 1). The project area, which consists of a brick slave house with associated yards is located at 1001 Westgate Place on Lot #18 in the Ashbrook subdivision (Figure 2). Adjacent to lot #18 is Lot #17 an open mowed grass yard and Lot #19, which consists of the Vulcan Rudy house (built ca. 1822), surrounding yard, and a modern garage. These lots formed the core of the 230-acre (93 ha) plantation owned by George Vulcan Rudy in the early nineteenth century. Currently, all three lots are owned by the same individual, who plans to demolish or move the slave house and sell Lots #17 and #18 for the development of new housing. The purpose of the archaeological investigation was to locate and document intact archaeological resources that may be associated with the Vulcan Rudy slave house. It also was intended to recover information about earliest use of the building as a slave house and aid in the understanding of architectural and functional changes to the building over time.

The area north of the structure appears to have been severely disturbed by the construction of the adjacent road. The area west of the structure also appears to be disturbed by the construction of a road and the demolition of a modern addition to the structure. Therefore the investigations were focused on the east and south sides of the structure, where deposits were least likely to have been disturbed.

The investigations consisted of the excavation of screened shovel probes and test units. A total of 29 shovel probes were placed around the structure, primarily on the east and south sides. A total of 6 test units were placed inside and around the foundation of the structure. No intact nineteenth century archaeological deposits or features were identified in the shovel probes or test units. However, an extensive artifact midden dating to the turn of the twentieth century was identified.

A total of 2,326 artifacts were recovered from the site during the investigations. Most of the artifacts date to the late 1800s and early 1900s, although some artifacts dating from the early 1800s also were found. Based on the recovery of a substantial amount of artifacts, an intact turn of the twentieth century midden, and the potential for significant archaeological deposits around the main house, this site (including all three lots) was assigned archaeological site number 15Jf685.

Field investigations were conducted by M. Jay Stottman, Matthew E. Prybylski, Ed Hardesty, Genie Fortunato, Tammy Seiter, Chris Rohe, Bob Ehrler, and Josh Jordan. Laboratory work and analysis of the historic artifacts was conducted by Tammy Seiter with assistance from students at the University of Louisville Department of Anthropology. M. Jay Stottman conducted the archival research. Donna Gilbreath prepared the illustrations for the report. All documentation and artifacts relating to this project are curated at the William S. Webb Museum of Anthropology at the University of Kentucky.

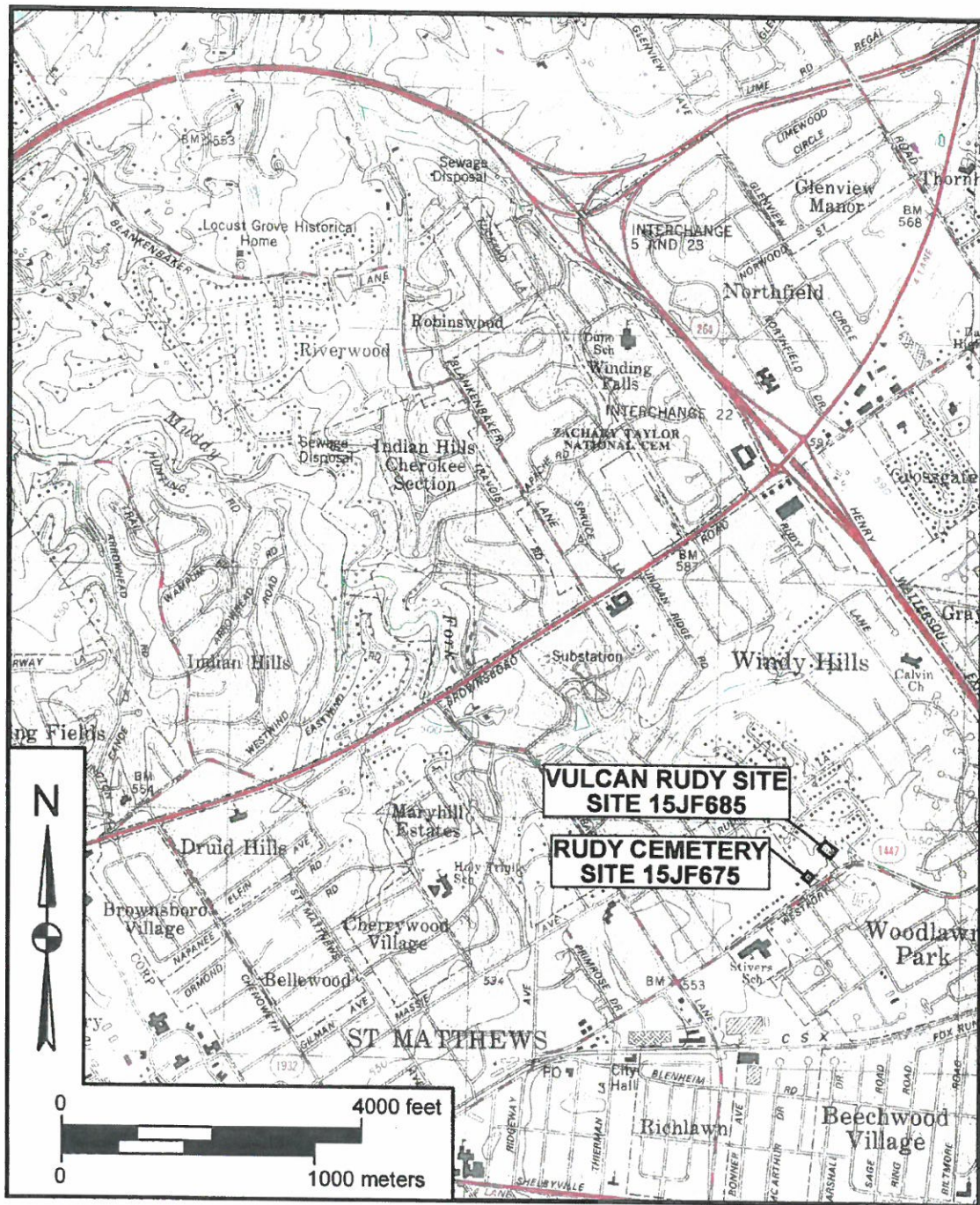


Figure 1. U.S.G.S. Topographic Map Showing the Vulcan Rudy Site and the Rudy Cemetery (Jeffersonville Quadrangle).

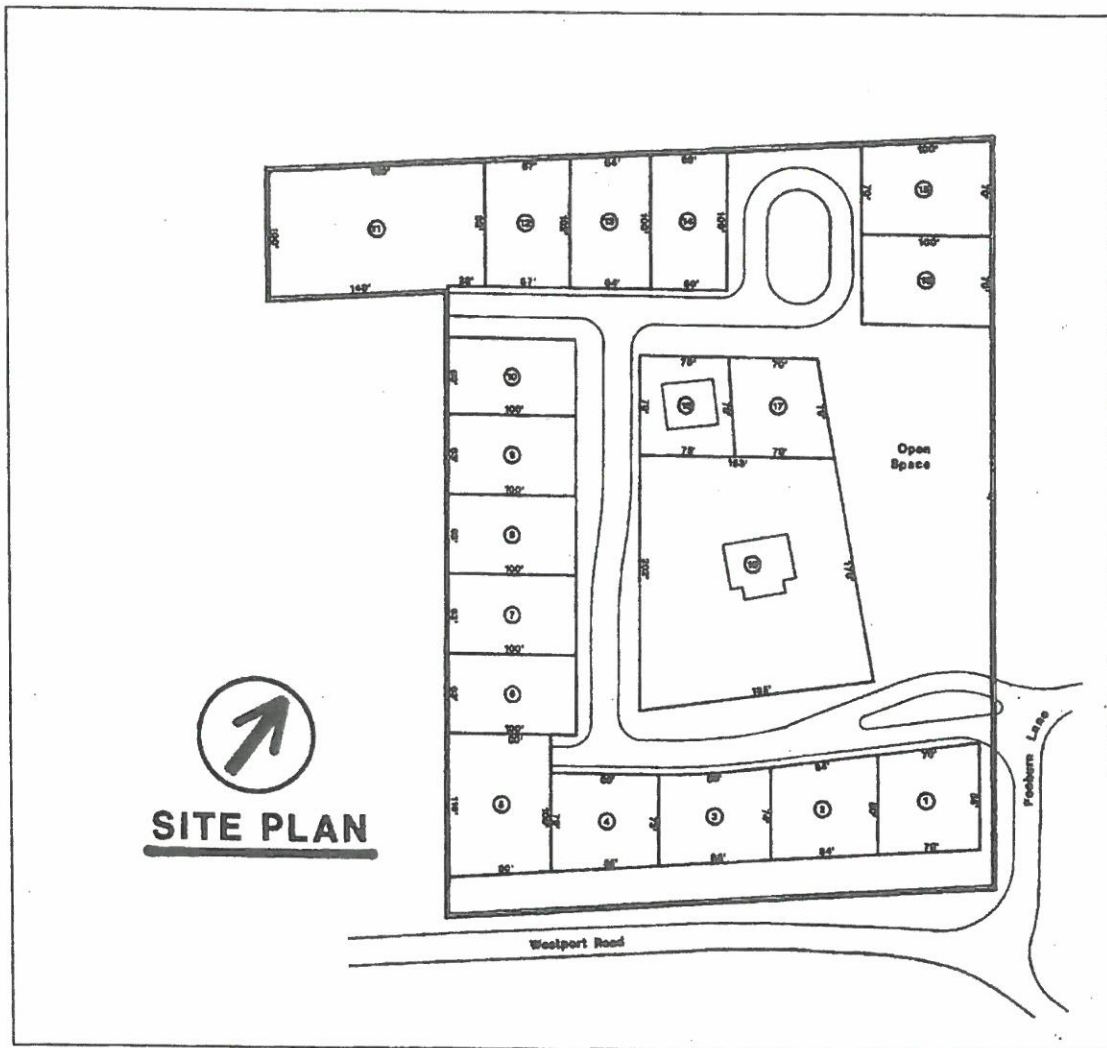


Figure 2. Plat of the Ashbrook Subdivision Showing Lots #17, #18, and #19, Which Form the Vulcan Rudy Site (15Jf685).

The Vulcan Rudy site (15Jf685) had previously been assigned Kentucky Historic Resources Inventory number Jf391 and is already listed on the National Register of Historic Places as part of a multiple resources nomination that includes seven nineteenth century houses associated with the Herr and Rudy families. They include the Daniel Rudy House (Jf393), the Edwards-Herr House (Jf392), the John Herr House (Jf395), George Herr House (Jf394), Taylor-Herr-Oldham House (Jf593), and the A.G. Herr House/Magnolia Stock Farm (Jf490). All of the houses are located within a few miles of each other and range in date from 1790 to 1877 (Oppel 1976).

HISTORICAL BACKGROUND

Jefferson County was created in 1780 as one of three original counties in Kentucky, which at that time was a part of Virginia. Its namesake is derived from Thomas Jefferson, then governor of Virginia (Keys 1992). The county is located in north central Kentucky along the Ohio River. This section of the river includes a series of rapids known as the Falls. Native Americans lived in the Falls area for thousands of years prior to Euro-American settlement of the region (Collins 1979). The Falls area was first explored by Euro-Americans in the 1760s. The first Euro-American settlement took place in 1778 at the present site of Louisville, near the Falls (Keys 1992; Thomas 1971; Yater 1987). Soon after the establishment of a fort at the site of Louisville, pioneers created a series of stations in the county to protect settlers from attacks by Native Americans. These earliest settlers would become the prominent families of Louisville who later built plantations with large mansions on the backs of slaves (Yater 1987). The Rudy family and the Vulcan Rudy property were a part of this early development of the Louisville and Jefferson County.

THE VULCAN RUDY HOUSE

The Vulcan Rudy House was constructed ca. 1822 by George Vulcan Rudy. Additions were made to the structure in the 1850s. The house is currently a five-bay, two-story brick house laid in Flemish bond (Figure 3). Originally, it appears to have been a two-story one room deep house, with a two-room central hall plan (Oppel 1976).



Figure 3. Photograph of the Vulcan Rudy House Looking from the South.

George Vulcan Rudy (1794-1854) was born in Pennsylvania. It is likely that his father, George Rudy (son of the previously discussed George Rudy) (1770-1831) immigrated to Louisville from Pennsylvania before 1800 with his wife, Jane and their children. Members of the Rudy family were already living in Louisville at the time. Jacob Rudy (1751-1841), a Revolutionary War veteran, traveled from Pennsylvania down the Ohio River to Louisville in 1783 and established a farm east of Louisville. It is unclear what the relation of Jacob Rudy to George Rudy was, but it is likely that Jacob was George Rudy's uncle. Vulcan Rudy's grandfather, like his son, was named George Rudy (1774-1806) later came to Louisville most likely to live near his son and brother (Rudy Family Genealogy nd; Oppel 1976).

George Vulcan Rudy married Eliza Herr in 1822. Eliza Herr (1804-1843) was the daughter of John Herr (1771-1842), a native Pennsylvanian who arrived in Louisville with the Jacob Rudy family in 1783. John Herr was the son of Michael Herr (1748-1778) who died in battle during the Revolutionary War and was a close friend of Jacob Rudy. John Herr eventually married Jacob Rudy's daughter Elizabeth Susan and over the years accumulated considerable wealth and land. It was their daughter Eliza that married George Vulcan Rudy. As a wedding gift, John Herr gave the newly weds some land that he had purchased from Joseph Edwards in 1814 (Oppel 1976). It was on this property, that George Vulcan Rudy constructed his home ca. 1822. In 1834, George added nearly 150 acres from the estate of Leonard Harbolt adjacent to his property (Deed Book 50:159). Included within this property was the Harbolt family cemetery, where Leonard Harbolt was buried (Deed Book 50:161). According to the deed, Rudy was to allow the Harbolt family access to the cemetery.

By 1850 George Vulcan Rudy had become a prominent farmer with 230 acres of land worth \$13,680. According the 1850 U.S. Agricultural Census, he had \$200 worth of farm machinery, 19 horses, 4 milk cows, and 5 head of cattle, 24 sheep, and 41 hogs. He grew 400 bushels of wheat, 2000 bushels of corn, 125 bushels of Irish potatoes, 8 tons of hay, and 4 tons of hemp. Jefferson County tax records indicate that he owned 18 slaves worth \$5,400. The Vulcan Rudy plantation was like many of the plantations located in Jefferson County, which consisted of 200-500 acres with diversified crops and livestock and a moderate slave holding. The production of hemp also has been documented at many plantations in the county. This particular crop is very labor intensive and those who grew it often used slaves to harvest and process the hemp for use in rope and bags.

George Vulcan and Eliza had nine children and remained married until Eliza's death in 1843. He married Jane Cox in 1844, who bore him two more Rudy children. The death date of George Vulcan Rudy is somewhat of a mystery. Family genealogical records indicate that he died October 19th 1862. However, a headstone from the Rudy cemetery is inscribed with the death date of Oct. 19 1864. Still another resource indicated that George Rudy was buried in the "Rudy Burial Ground" with the dates 1794 to 1854 (Kentucky Historical Society 1929). Furthermore, there are no listings in the Jefferson County tax records for George Rudy after 1854 (Clay 1999:3). Also, the division of Rudy's property took place in 1857 and was finalized in 1861. At that time it was noted that he was deceased (Chancery Court Book 106:584; Division Book 2:563).

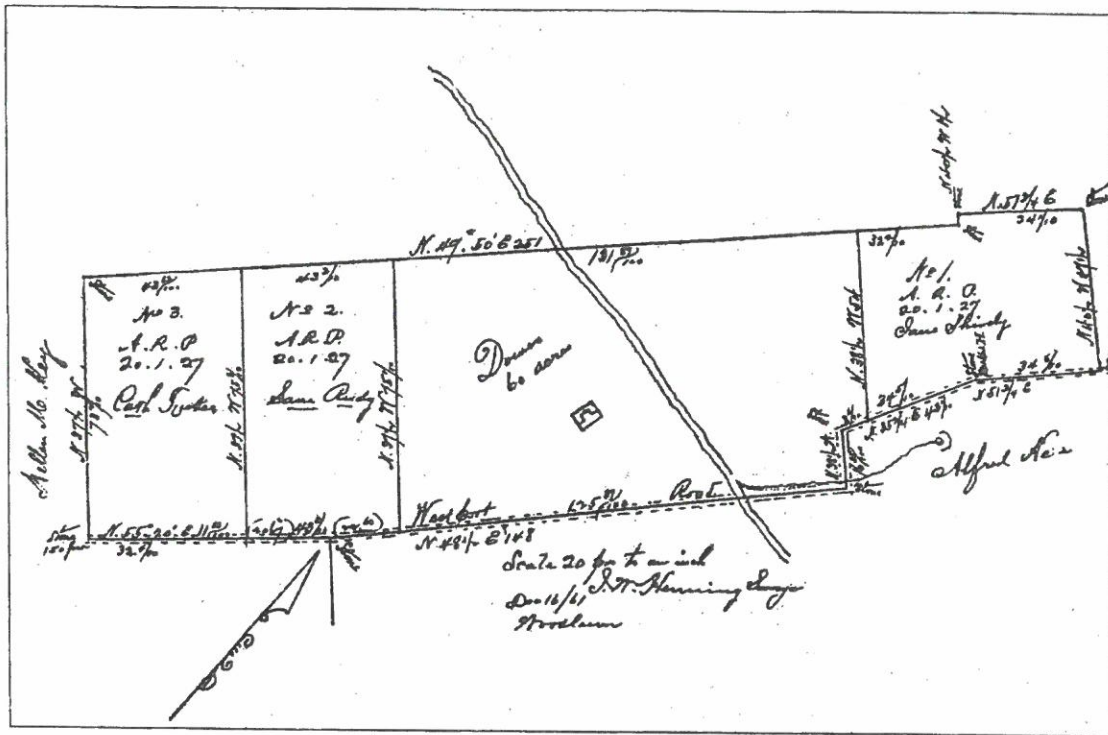


Figure 5. A Portion of the Division Map Showing the 60-acre Dower.

Jane Cox Rudy lived on her 60 acres until her death in 1878 (Will Book 10:389). She is depicted as the owner of the property on an 1879 map of Jefferson County, as "Mrs. Rudy" (Figure 6). It is likely that the map data was collected prior to her death. William C. Arterburn acquired most of the original George Vulcan Rudy property from 1870 to 1881, including the property with the house (Deed Books 153:321; 188:90; 187:391; 238:182; 238:184; 238:472; 238:498). The Arterburn family was a prominent Louisville family that had many ties to the Rudy family. William Arterburn owned property adjacent to the Vulcan Rudy property, depicted on the 1879 map as "WCA" (Figure 6). His home was located just south of the Rudy property along the Louisville-Lexington Turnpike and is listed on the 1879 map as Walnut Grove (Figure 6). The property associated with the Vulcan Rudy house remained in the Arterburn family until 1951, which at the time consisted of 35 acres (Oppel 1976; Lawton 1948). Currently, the property with the house consists of 6 acres on three lots in the Ashbrook subdivision.

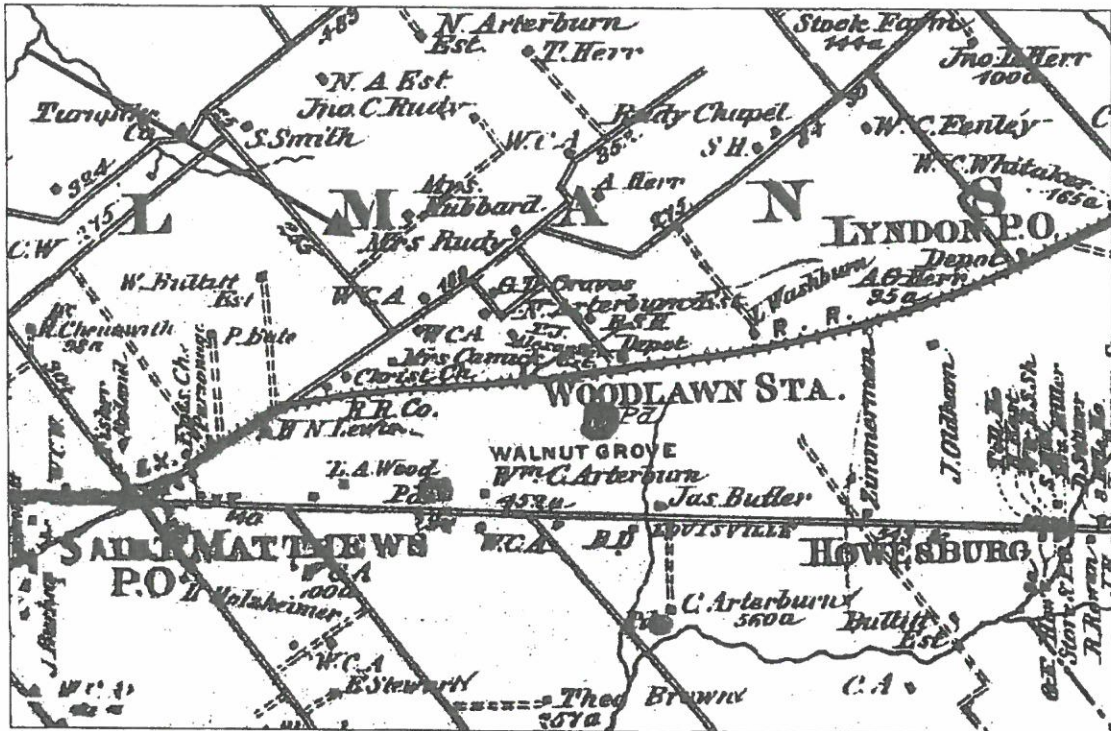


Figure 6. Section of the 1879 Beers and Lanagan Atlas of Jefferson County.

The Vulcan Rudy Slave House

During the peak of the Vulcan Rudy plantation the property would have consisted of many outbuildings, such as a kitchen, smoke house, icehouse, barns, sheds, and slave houses. Many of these buildings survived into the early 1900s. However, all that remains of the original outbuildings is a slave house located approximately 30.5 m (100 ft.) behind the main house. The slave house is a two-room brick building with a chimney on each end and a stone foundation (Figures 7 and 8). An examination of the building by architectural historian Bill Macintire of the Kentucky Heritage Council indicates that the structure has been significantly modified over the years. The back windows had been cut into doors, mantles were replaced, floorboards were replaced, a door and window were cut into the gable ends, a screen porch had been constructed, and a large addition constructed (See Appendix A). Basically all that remains of the original structure is the brick shell (Bill Macintire, personal communication). The slave house underwent a major renovation during the 1940s by Mr. and Mrs. Crawford Arterburn, who used it as their home. The Arterburns added a kitchen, bathroom, and a concrete stone patio. The building has not been renovated since and has fallen into disrepair.



Figure 7. Photograph of Slave House (North and West Sides).

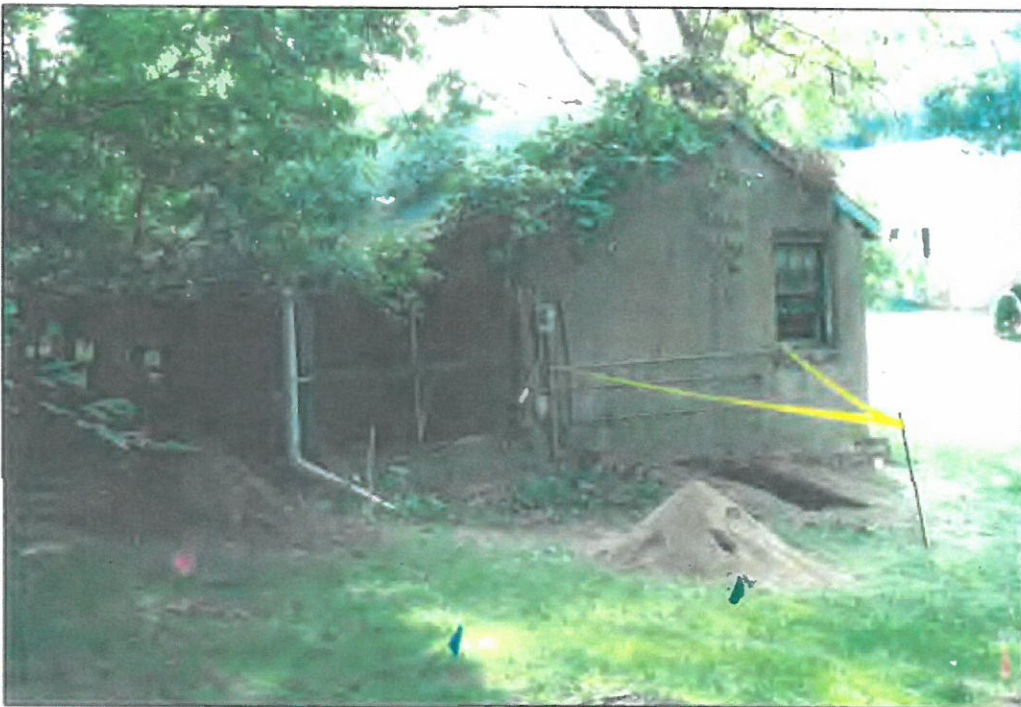


Figure 8. Photograph of Slave House (South and East Sides).

PREVIOUS ARCHAEOLOGICAL RESEARCH

Prior to this archaeological investigation, no other studies had been conducted at the Vulcan Rudy house or at the slave house. However, one other study had been conducted on property that was historically associated with the Vulcan Rudy House. In 1999, Cultural Resource Analysts (CRA) conducted a geophysical survey and archival documentation of the Rudy cemetery (15Jf675) located 150 m west of the Vulcan Rudy House for the Kentucky Transportation Cabinet (Figure 1). The results of the survey documented the remains of George Vulcan Rudy's headstone and three graves (Clay 1999). These are presumed to be associated with George Vulcan Rudy and two of his children, James M. Rudy and Emily Rudy, based on a cemetery survey conducted in 1929 (Kentucky Historical Society 1929). Although some archival information about George Rudy was uncovered during the study by CRA, there was no mention of the Vulcan Rudy house or the slave house. However, it is mentioned that it was unlikely that the graves of enslaved African-Americans were located in the cemetery and that they were likely buried in a separate cemetery (Clay 1999). Rumors exist amongst the locals that a graveyard, which some think may have been the enslaved African-American cemetery was disturbed during a road project in 1960s or 1970s. However, there is no evidence supporting these rumors.

Three prehistoric archaeological sites have been recorded within 2 km of the Vulcan Rudy site. All are open habitations and include 15Jf254 (Early Woodland), 15Jf259 (Mid to Late Archaic), and 15Jf259 (Archaic and Early Woodland).

Archaeological investigations have been conducted nearby at one of the Herr homes listed on the National Register of Historic Places with the Vulcan Rudy House. The University of Louisville conducted a field school, under the direction of Philip J. DiBlasi at the site of a kitchen foundation behind the John Herr House (Jf395). The foundation appears to have been filled with debris during the early to mid 1900s. No report of these investigations has been produced.

Several important historic period farmstead and plantation sites have been investigated archaeologically in Jefferson County. Extensive excavations have been conducted at Locust Grove (15Jf541), Farmington (15Jf574), Riverside, the Farnsley-Moremen Landing (15Jf531), and Johnson-Bates (15Jf538). Most of these projects have focused on outbuildings. At Locust Grove, the springhouse (Granger and Mocas 1972), three slave cabins (Young 1995), a barn, and an agricultural building (DiBlasi 1997) were excavated. A kitchen (McBride and Bellhorn 1992) and a slave cabin (Slider 1998) were excavated at Farmington. A detached kitchen was excavated at Riverside, the Farnsley-Moremen Landing (Stottman and Watts-Roy 1999). At the Johnson-Bates farmstead an extensive investigation of several outbuildings was conducted (O'Malley 1987). Limited excavations have taken place at several other historic sites in the county including Blackacre (15Jf681) (Stottman 2000), Oxmoor plantation (15Jf647) (Young 1997), Stonybrook plantation (15Jf676) (Stallings and Ross-Stallings 1999), the Conrad/Dravo farmstead (15Jf638) (Bader 1997), and the Hall-Standiford tenant house (15Jf571) (Stottman et al. 1992).

METHODS

The project area was investigated with shovel probes and test units. The shovel probes (approximately 30cm in diameter) were placed at intervals that range from 2 to 5 m and were excavated to subsoil. Soil removed from the probes was passed through 6.35 mm (1/4 inch) mesh and notes were taken on each probe. A total of 29 shovel probes were excavated during the project.

Test units that ranged in size from 50 x 50 cm to 1 x 1.2 m were excavated in strategic locations in and around the slave house. Each test unit was excavated according to stratigraphic layers to subsoil. Soil removed from each unit was passed through 6.35 mm (1/4 inch mesh) and notes were recorded for each strata excavated. A total of 6 test units were excavated during the project.

All of the artifacts recovered from the Vulcan Rudy site (15Jf685) were washed, identified, and cataloged. They along with field notes and other documentation are curated at the William S. Webb Museum of Anthropology at the University of Kentucky.

Analytical methods employed during the project consisted of mean dating, terminus post quem (T.P.Q.) dating, functional group distribution, and spatial analysis. Mean dating involves identifying artifacts that have a historically known date range of manufacture. The midpoint of each date range is then multiplied by the amount of each diagnostic artifact found. The total for all the artifacts is then averaged to derive a mean age of an artifact assemblage based on diagnostic artifacts with reliable manufacturing date ranges (South 1977). The T.P.Q. dates are simply derived from the latest inception date of the manufacturing date range, which indicates that a deposit could have only been formed sometime after the T.P.Q. date (Noel Hume 1968). Functional group distribution consists of categorizing artifacts into basic groups based on how an artifact was generally used or in which context it was used. The functional groups used in this study include activities, architecture, arms, clothing, entertainment, furniture, kitchen, miscellaneous, and personal. Most are self explanatory, however the activities groups is comprised of artifacts that relate to general activities that are not related to any other functional group and the miscellaneous group consists primarily of unidentified artifacts that do not fit in any other group. Other artifact categories not related to the function of artifacts includes faunal remains and prehistoric artifacts. A percentage was calculated for each functional group in order to facilitate intrasite comparisons and. Functional groups were used in this study characterize the artifacts from particular contexts and to locate activity areas. A spatial analysis was conducted by plotting the distribution of particular functional groups across the site, using only shovel probe data.

RESULTS

SHOVEL PROBES

A total of 29 shovel probes were excavated around the Vulcan Rudy slave house (Figure 9). Most of these probes were concentrated along the northeast and southeast sides of the house. The majority of the probes were excavated on a 4 m grid in these areas, although some probes were excavated at 2 and 3 m intervals. The area northwest and southwest of the house appeared to have been extensively altered during the construction of nearby roads.

Three different soil profiles were identified in the shovel probes. The most common soil profile identified consisted of a 10-35 cm thick dark brown silt loam topsoil with brick and coal inclusions and a yellow brown silt clay subsoil (Profile 1) (Figure 10). The topsoil was slightly mottled in some of the probes with this profile. Another soil profile that also was frequently found in the shovel probes was similar to Profile 1. It consisted of a 5-15 cm thick dark brown silt loam topsoil, a 10-25 cm thick mottled yellow/brown silty clay with brick and coal inclusions, and a yellow/brown silty clay subsoil (Profile 2) (Figure 11). The topsoil was missing from this soil profile in some of the shovel probes. Both of these profiles were extensively found in the southern and eastern portions of the yard. The third soil profile (Profile 3) (Figure 12) consisted of a 14-25 cm thick light brown silt loam topsoil with stone and brick inclusions and a heavy yellow/brown mottled clay with stone inclusions. Subsoil was not encountered in probes that exhibited this profile, which were primarily found in the yard along the north side of the slave house. It is likely that the soil on the north side of the structure was severely disturbed by grading activities associated with the construction of the nearby roads. No features were identified in any of the shovel probes excavated at the Vulcan Rudy slave house.

TEST UNITS

A total of six test units were excavated at the Vulcan Rudy slave house (Figure 8). Unit 1 was a 50 x 50 cm unit excavated in the screened porch adjacent to the west doorway located on the south side of the structure (N44 E52). This unit contained four strata consisting of a 4 cm thick yellow brown sand (Stratum 1), a 2 cm thick red silt clay (Stratum 2), a 5 cm thick gray ashy loam (Stratum 3), and a yellow brown subsoil (Stratum 4). Unit 2, also 50 x 50 cm, was excavated in the porch 1 m west of the doorway (N44 E51) and exhibited a soil profile similar to that documented in Unit 1. The soil profile for Unit 2 consisted of a 4 cm thick yellow brown sand, a 4 cm red silt clay, a 9 cm thick gray brown silt clay, and yellow brown subsoil. No features were identified in these units.

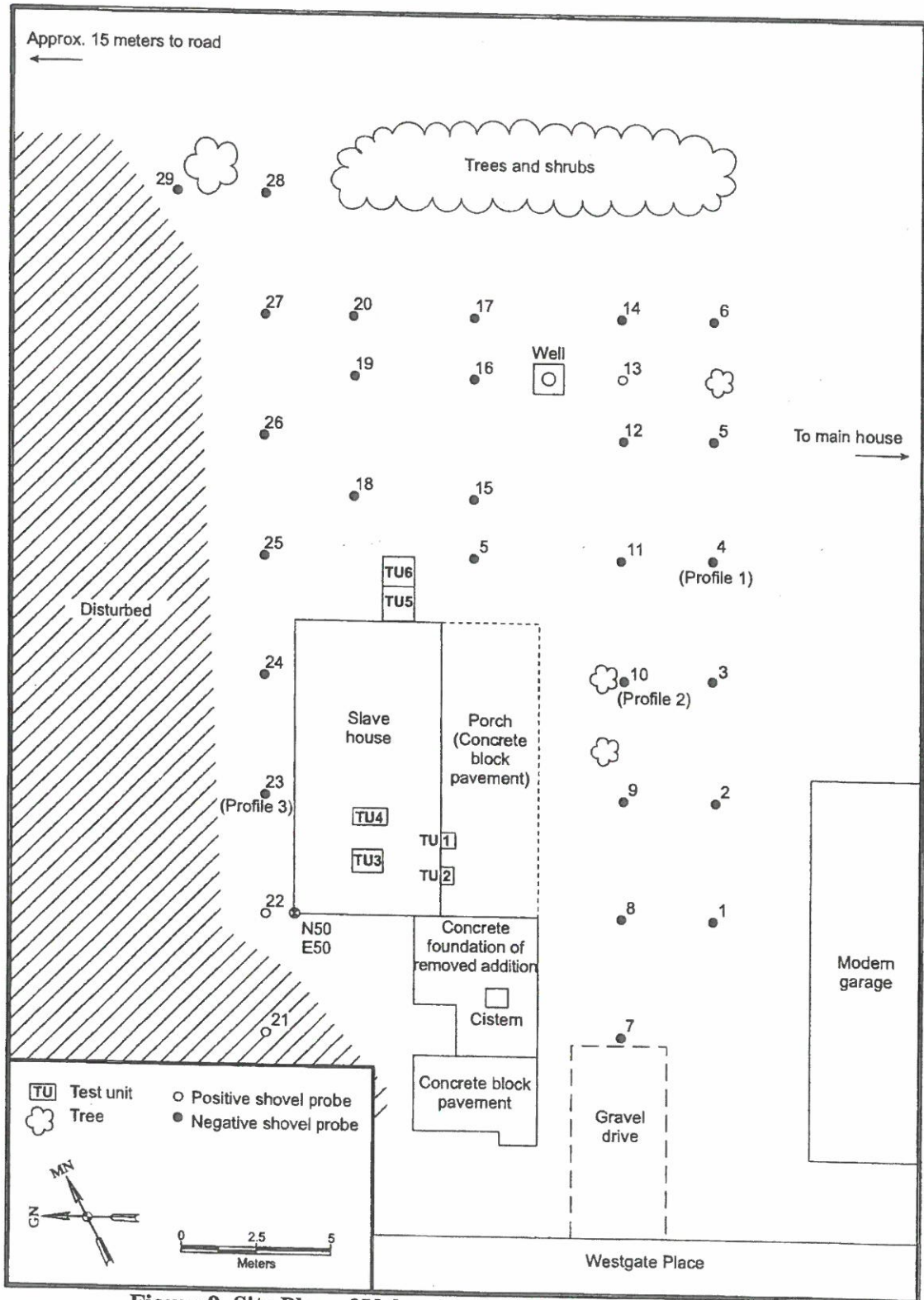


Figure 9. Site Plan of Vulcan Rudy Slave House, Site 15JF685.

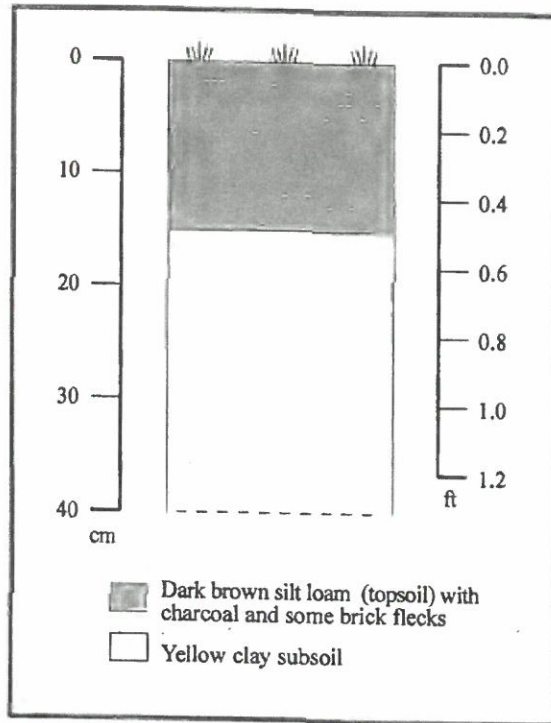


Figure 10. Profile of Shovel Probe 4 (Profile 1).

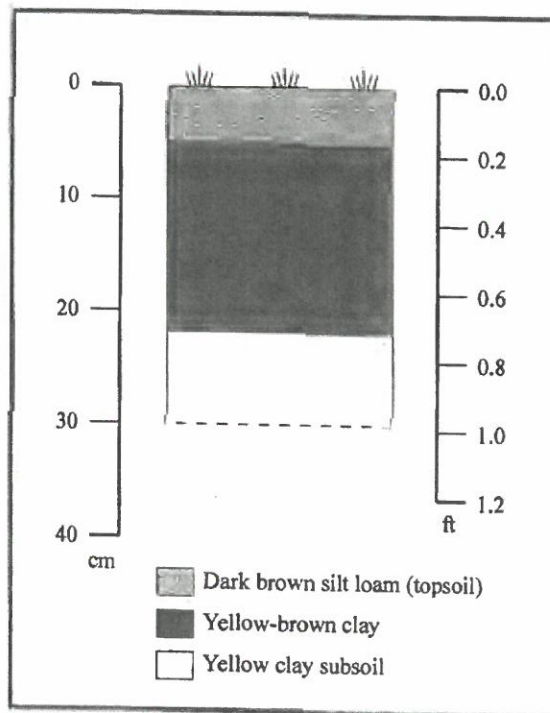


Figure 11. Profile of Shovel Probe 10 (Profile 2).

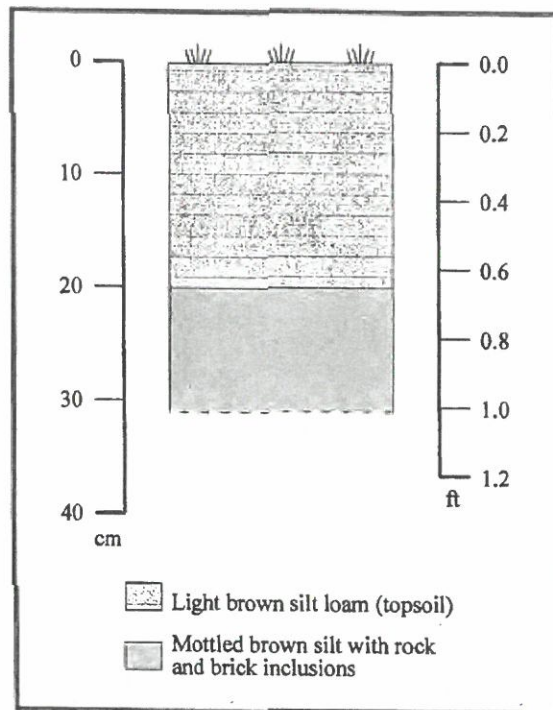


Figure 12. Profile of Shovel Probe 23 (Profile 3).

Two units were excavated under the floorboards and in between the joists of the west room (Units 3 and 4). Unit 3 (N47 E51.5) was a 1 x .9 m unit excavated near the west hearth of the structure. The soil profile exhibited in Unit 3 consisted of a 23 cm thick gray brown silt loam midden with brick and coal inclusions (Stratum 1), a 10 cm thick compact orange brown silt clay transitional layer (Stratum 2), and an orange brown silt clay subsoil (Stratum 3). Unit 4 (N47 E53) was a 1.2 x .6 m unit excavated towards the middle of the west room. The soil profile documented in this unit consisted of a 12 cm thick gray brown silt loam midden with brick and coal inclusions (Stratum 1), a compact gray orange silt clay loam transitional layer (Stratum 2), and an orange brown silt clay subsoil (Stratum 3). No features were identified in these units.

Two 1 x 1 m units were placed adjacent to the east wall of the structure to form a trench (Units 5 and 6). Unit 5 (N46 E61) was excavated near the east foundation wall of the structure. This unit was extended 20 cm to the west in order to expose the stone foundation of the structure. Unit 6 (N46 E62) was excavated 1 m east and adjacent to Unit 5 to form a 1 x 2.2 m trench. The soil profile documented in this trench consisted of a 4-9 cm thick dark brown silt loam topsoil (Stratum 1), a 2-10 cm thick orange brown silt clay fill (Stratum 2), a 22-37 cm thick gray brown silt clay loam midden with brick and coal inclusions (Stratum 3), a 7-10 cm thick compact orange brown silt clay transitional soil (Stratum 4), and an orange brown silt clay subsoil (Stratum 5) (Figure 13).

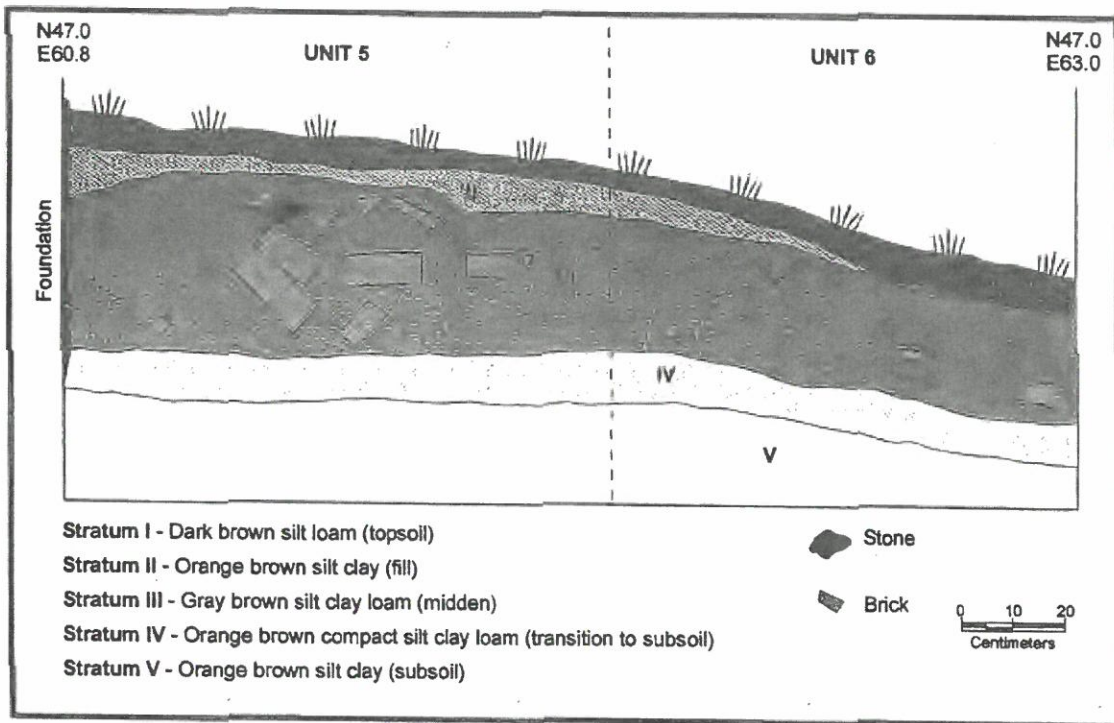


Figure 13. North Wall Profile of Units 5 and 6.

MATERIALS RECOVERED

A total of 2,326 artifacts were recovered from shovel probes and test units excavated at the Vulcan Rudy site (15Jf685) (Table 1). Most of the artifacts were assigned to the kitchen (39.8%) and the architecture (30.3%) functional groups (Table 2). Other historic functional groups included the activities (1.5%), arms (0.3%), clothing (6.4%), entertainment (1.0%), furniture (3.9%), miscellaneous (10.5%), and personal (0.6%) groups. Other artifacts represented in the assemblage consisted of faunal remains (5.6%) and prehistoric artifacts (0.1%). A detailed discussion of historic artifact types is presented in the Artifact Typology in Appendix B.

KITCHEN GROUP

Kitchen group was comprised mostly of ceramic sherds (n=416) and glass fragments (n=506) (Table 3). An iron fork fragment (n=1) and tin can fragments (n=2) also were recovered.

Table 1. Frequency of Artifacts by Context

Unit Number	Coordinates	Frequency
<i>Shovel Probes</i>		
1	N36 E50	13
2	N36 E54	9
3	N36 E58	16
4	N36 E52	3
5	N36 E68	8
6	N36 E74	3
7	N39 E46	2
8	N39 E50	3
9	N39 E54	9
10	N39 E58	2
11	N39 E62	4
12	N39 E66	4
13	N39 E68	0
14	N39 E70	3
15	N44 E64	14
16	N44 E68	13
17	N44 E74	7
18	N48 E64	27
19	N48 E68	16
20	N48 E74	14
21	N51 E46	0
22	N51 E48	0
23	N51 E50	1
24	N51 E54	2
25	N51 E62	5
26	N51 E66	3
27	N51 E70	8
28	N51 E74	1
29	N55 E74	10
	Total	200
<i>Test Units</i>		
1	N44 E52	0
2	N44 E51	14
3	N47 E51.5	766
4	N47 E53	285
5	N46 E61	566
6	N46 E62	494
	Total	2,125
	Total	2,325*

*One surface collected artifact not included.

Table 2. Functional Groups and Other Artifacts

Artifact Group	Frequency	Percentage
<i>Functional Group</i>		
Activities	34	1.5
Architecture	706	30.3
Arms	6	0.3
Clothing	150	6.4
Entertainment	24	1.0
Furniture	90	3.9
Kitchen	925	39.8
Miscellaneous	244	10.5
Personal	15	0.6
<i>Other Artifacts</i>		
Faunal	130	5.6
Prehistoric	2	0.1
Total	2,326	100

Table 3. Kitchen Group Artifacts

Material/Artifact Type	Frequency (MNV)
<i>Ceramics</i>	
Bowl	6 (2)
Cup	11 (3)
Lid	1 (1)
Plate	18 (10)
Saucer	12 (6)
Storage Jar/Crock	34 (14)
Unidentified	334 (137)
Total	416 (173)
<i>Glass</i>	
Bottle, beer	6 (2)
Bottle, liquor	2 (2)
Bottle, medicine	1 (1)
Bottle, unidentified	81 (15)
Canning jar	7 (2)
Cup	3 (1)
Jar, unidentified	38 (3)
Lid	1 (1)
Lid liner	3 (2)
Unidentified	364 (101)
Total	506 (130)
<i>Metal</i>	
Fork	1 (1)
Can fragments	2 (1)
Total	3 (2)
Total	925 (305)

The kitchen group ceramics consisted of 173 individual vessels or minimum number of vessels (MNV). Most of these vessels were unidentified for form or function (n=137). The identified kitchen ceramic vessels consisted mostly of storage jars (n=14) and plates (n=10). Other identified kitchen ceramic vessels included bowls (n=2), cups (n=3), saucers (n=6), and a lid.

All but one of the storage jars was made from buff stoneware; the exception being made of Rockingham decorated yellow ware. The stoneware jars consisted of a variety of glaze types, consisting mostly of undecorated slip (n=3), clear (n=3), and salt (n=3) glazed vessels. Other buff stoneware storage jars also were undecorated, but were either unglazed (n=2) or the glaze type was unidentified (n=1). Most of the plates were made of undecorated whiteware (n=6). Other whiteware plates consisted of brown transfer print (n=1) and unidentified decoration (n=1). An undecorated porcelain plate (n=1) and a pattern molded white granite plate also were recovered. Most of the saucers were made of whiteware (n=4), consisting of undecorated (n=2), blue transfer printed (n=1) and polychrome transfer printed (n=1) vessels. One of the undecorated whiteware saucers exhibited a partial maker's mark "...PERIAL STONE CHINA", which probably read Imperial Stone China. Other saucers consisted of brown transfer printed white granite (n=1) and undecorated white granite with a partial maker's mark "...RGESS", which was probably made by the Henry Burgess Pottery in England from 1864-1892 (Kowalsky 1999) (n=1). The bowls were made of undecorated white granite (n=1) and an unidentified ceramic type (n=1). All of the cups found were undecorated made from either white granite (n=2) or whiteware (n=1). The lid was made of undecorated porcelain.

The kitchen group ceramic sherds consisted of a variety of paste types and decorations (Table 4). The majority of the sherds were classified as whiteware (n=237). Buff stoneware (n=63) was the second most common ceramic type recovered from the site. Other paste types included white granite (n=34), redware (n=21), yellow ware (n=17), porcelain (n=26), rough porcelain (n=5), pearlware (n=3), and creamware (n=1). A total of eight kitchen ceramic sherds were unidentified for type. The majority of the buff stoneware was undecorated (n=56) with clear glaze (n=23), salt glaze (n=10), slip glaze (n=21), and unglazed (n=2). Decorated buff stoneware consisted of slip banded (n=1) and brown speckled glazed (Rockingham) (n=1) sherds. The only creamware sherd recovered from the site was undecorated, as were the pearlware sherds (n=2). Most of the porcelain sherds were undecorated (n=19). The decorated porcelain included edge decorated (n=1), gilded and hand painted (n=1), hand painted (n=3), and pattern molded (n=1). The majority of the redware was undecorated (n=19) with clear glaze (n=5), slip glaze (n=11), and salt glaze (n=3). Decorated redware consisted of slip banding with relief decoration (n=2). The rough porcelain sherds were undecorated (n=4) and hand painted (n=1). The white granite sherds consisted of undecorated (n=29), edge decorated (n=1), pattern molded (n=2), and brown transfer printed (n=2) specimens. A maker's mark from the J & G Meakin pottery in Hanley, England that dates from 1890 to the present (Figure 14)(Kowalsky 1999) was identified on white granite sherds (n=4). Most of the whiteware was undecorated (n=186). Decorated whiteware consisted colored glaze (n=1), edge decorated (n=9), gilt and hand painted (n=13), hand painted (n=1), pattern molded (n=5), and transfer printed (n=13) specimens. The edge-decorated whiteware consisted of embossed patterns (n=7), scalloped (n=1), and blue unscaloped impressed patterns (n=1). The transfer printed whiteware occurred in blue (n=5), brown (n=3), green (n=1), and polychrome (n=4). The yellow ware sherds were undecorated (n=10) with clear (n=3) and slip (n=7) glazes, and decorated with brown speckled glaze (Rockingham) (n=1).

Table 4. Kitchen Ceramic Types and Decorations

Ceramic Type/Decoration	Frequency (MNV)
<i>Buff Stoneware</i>	
Banded	1 (1)
Rockingham	1 (1)
Undecorated, clear glaze	23 (10)
Undecorated, salt glaze	10 (9)
Undecorated, slip glaze	21 (5)
Undecorated, unglazed	2 (2)
Unidentified	5 (5)
Total	63 (33)
<i>Creamware</i>	
Undecorated	1 (1)
<i>Pearlware</i>	
Undecorated	3 (1)
<i>Porcelain</i>	
Edge decorated	1 (1)
Gilted and hand painted	1 (1)
Hand painted	3 (2)
Pattern molded	1 (1)
Undecorated	19 (11)
Unidentified	1 (1)
Total	26 (17)
<i>Redware</i>	
Banded and relief	2 (1)
Undecorated, clear glaze	5 (4)
Undecorated, slip glaze	11 (6)
Undecorated, salt glaze	3 (1)
Total	21 (12)
<i>Rough Porcelain</i>	
Hand painted	1 (1)
Undecorated	4 (3)
Total	5(4)
<i>White Granite</i>	
Edge decorated	1 (1)
Pattern molded	2 (2)
Transfer printed	2 (1)
Undecorated	29 (14)
Total	34 (18)
<i>Whiteware</i>	
Colored glazed	1 (1)
Edge decorated	9 (4)
Gilt and hand painted	13 (1)
Hand painted	1 (1)
Pattern molded	5 (3)
Transfer printed	13 (10)
Undecorated	186 (47)
Unidentified	9 (3)
Total	237 (67)
<i>Yellowware</i>	
Rockingham	3 (1)
Undecorated, clear glaze	3 (2)
Undecorated, slip glaze	7 (6)
Unidentified	4 (1)
Total	17 (10)

Ceramic Type/Decoration	Frequency (MNV)
<i>Unidentified</i>	
Undecorated	8 (6)
Total	415 (169)

The kitchen glass was comprised of 130 vessels. Most of these vessels were unidentified for form or function (n=101). The identified vessels consisted of bottles (n=20), canning jars (n=2), a cup (n=1), unidentified jars (n=3), a lid (n=1), and lid liners (n=2). Most of the bottles were unidentified for function (n=15). However some bottles were identified as beer (n=2), liquor (n=2), and medicine (n=1) bottles. The medicine bottle was made of clear glass with an applied tooled lip, an improved pontil marked base, and a portion of an illegible paper label. The beer bottles consisted of undecorated brown body sherds.



Figure 14. Maker's Mark from J & G Meakin.

The liquor bottles consisted of an amethyst colored pint flask with an improved tooled lip and a two-piece molded base, and a clear glass case bottle with a machine-made lip. Several of the unidentified bottles exhibited lip or base types. One example was a bottle made of clear glass that consisted of an applied tooled lip. Another unidentified bottle was made of clear glass with a machine made lip and base and was embossed with the letter "K" on the base. This letter was the mark of the Knox Glass Bottle Company from 1924 to 1968 (Toulouse 1971). Other unidentified bottles consisted of an amethyst colored glass machine made lip, a clear glass pontil marked base, and a milk glass push-up base.

The canning jars consisted of aqua colored glass with a machine made rim and a green tinted glass body sherd that was embossed with "...858," which was part of the Nov. 30th 1858 patent date embossed on Mason brand canning jars. The unidentified jars included a pattern molded clear glass body sherd (n=1) and undecorated blue tinted glass body sherds (n=37) representing two vessels. The cup was represented by a three pattern molded clear glass body sherds. The lid was a lightning style lid for canning jars made of green tinted glass. The lid-liners for zinc canning jar caps were made of white milk glass (n=3).

ARCHITECTURE GROUP

The architecture group was primarily comprised of nails (n=485). Most of these were machine cut nails (n=220) (Table 5). Significant amounts of wire (n=147) and unidentified nail types (n=118) also were found. Most of the machine-cut nails were fragmented (n=157). The whole machine cut nails (n=63) occurred in a variety of conditions, the majority of which were unaltered (n=38). Pulled (n=20) and clinched (n=5) machine cut nails also were recovered. The whole machine cut nail sizes consisted of 2d (n=1), 3d (n=3), 4d (n=3), 5d (n=3), 6d (n=7), 7d (n=8), 9d (n=5), 10d (n=7), 12d (n=6), 16d (n=1), 20d (n=1), 30d (n=4), and 40d (n=2). The wire nails were almost evenly divided between whole (n=77) and fragments (n=70). The whole wire nails were primarily unaltered (n=47). However, pulled (n=19) and clinched (n=11) specimens also were recovered. The whole wire nail sizes consisted of 2d (n=7), 3d (n=8), 4d (n=12), 5d (n=4), 6d (n=5), 7d (n=2), 8d (n=18), 9d (n=16), 10d (n=1), and 12d (n=4).

Other architecture group artifacts consisted of plumbing hardware (n=1), an iron spike, an iron screw, window glass (n=171), and synthetics (n=45). Most of the window glass was green tinted (n=151). Other colors represented included blue tinted (n=17) and clear (n=3). The window glass assemblage ranged in thickness from 0.9 mm to 3.2 mm and averaged 1.97 mm thick. The synthetic architecture artifacts consisted of unidentified rubber fragments (n=15), shingle fragments (n=2), vinyl flooring (n=2), and unidentified construction related synthetics (n=26).

Table 5. Architecture Group Artifacts

Material/Artifact Type	Frequency
<i>Metal</i>	
Nail, machine cut	220
Nail, unidentified	118
Nail, wire	147
Plumbing hardware	1
Screw	1
Spike	3
Total	490
<i>Glass</i>	
Window Glass	171
<i>Synthetics</i>	
Rubber, unidentified	15
Tar paper/shingle	2
Vinyl flooring	2
Unidentified, construction related	26
Total	45
Total	706

CLOTHING GROUP

The clothing group was primarily comprised of buttons (n=76). Other clothing artifacts consisted of metal buckles (n=3), a metal clasp (n=1), safety pins (n=2), an unidentified fragment of cloth (n=1), and leather shoe parts (n=65). Most of the buttons

were made of shell (n=33) and porcelain (n=27). The majority of the porcelain buttons were undecorated (n=23). The decorated porcelain buttons were glazed black (n=2), tan (n=1), and cream colored with a tan band (n=1). The metal buttons were primarily made of brass (n=10). Other metal buttons were made of iron (n=3) and an unidentified metal (n=1). The plastic button was undecorated and white in color. The rubber button was shaped in a flower motif.

Table 6. Clothing Group Artifacts

Artifact Type	Frequency
Ceramic, porcelain button	27
Metal, button	16
Metal, buckle	3
Metal, clasp	1
Metal, safety pin	2
Cloth, unidentified	1
Leather, shoe parts	65
Shell, button	33
Plastic, button	1
Rubber, button	1
Total	150

FURNITURE GROUP

The furniture group contained mostly glass lamp chimney fragments (n=76), representing 11 vessels (Table 6). All of these were undecorated clear glass, except for one clear glass vessel with a scalloped edge. Other furniture group artifacts consisted of an unidentified porcelain figurine fragment (n=1), a terra cotta flowerpot (n=1), a fixture porcelain furniture castor (n=1), unidentified fixture porcelain (n=1), pattern molded green tinted vase (n=1), a decorative brass furniture part (n=1), iron hinge (n=1), a brass lamp pull chain (n=1), and the base to a light bulb.

Table 7. Furniture Group Artifacts

Artifact Type	Frequency (MNV)
Ceramic, porcelain figurine	1 (1)
Ceramic, terra cotta flowerpot	2 (1)
Ceramic, castor wheel	1 (1)
Ceramic, unidentified	1 (1)
Glass, lamp chimney	76 (11)
Glass, vase	2 (1)
Glass, unidentified	1 (1)
Metal, furniture part	1 (1)
Metal, hinge	2 (2)
Metal, lamp parts	3 (2)
Total	97 (23)

OTHER FUNCTIONAL GROUPS

The activities group consisted of a washer (n=1), nuts (n=2), a bicycle chain (n=1), wire fencing (n=4), farm machinery part (n=4), an iron grate fragment (n=1), a railroad spike (n=1), staples (n=3), and unidentified wire fragments (n=16). The arms contained brass cartridge shells (n=4), a copper bullet (n=1), and a lead bullet (n=1). The entertainment group was primarily comprised of marbles (n=12), doll parts (n=10), and metal toy wheels (n=2). The marbles included Bennington decorated earthenware (n=1), green and red linear pattern (n=1), undecorated earthenware (n=9) (Figure 15), and unidentified glass (n=1). All of the doll parts were made of porcelain and represented arms, legs, and head fragments. They consisted of hand painted earthenware (n=8).

The miscellaneous group was mostly comprised of unidentified metal (n=233), plastic (n=10), and a piece of slate (n=1). The personal group contained coins (n=2), pocketknife parts (n=4), brass rings (n=2), smoking pipe fragments (n=5), a plastic comb (n=1), and a bone toothbrush (n=1). The coins consisted of one-cent pieces dated 1880 and 1900 respectively. The pocketknife fragments included the metal frame, blades, and wood side plates. The smoking pipe fragments consisted of pattern molded buff stoneware embossed with "FINZER" (n=2), pattern molded earthenware bowl fragments (n=2), and an earthenware stem fragment (n=1).

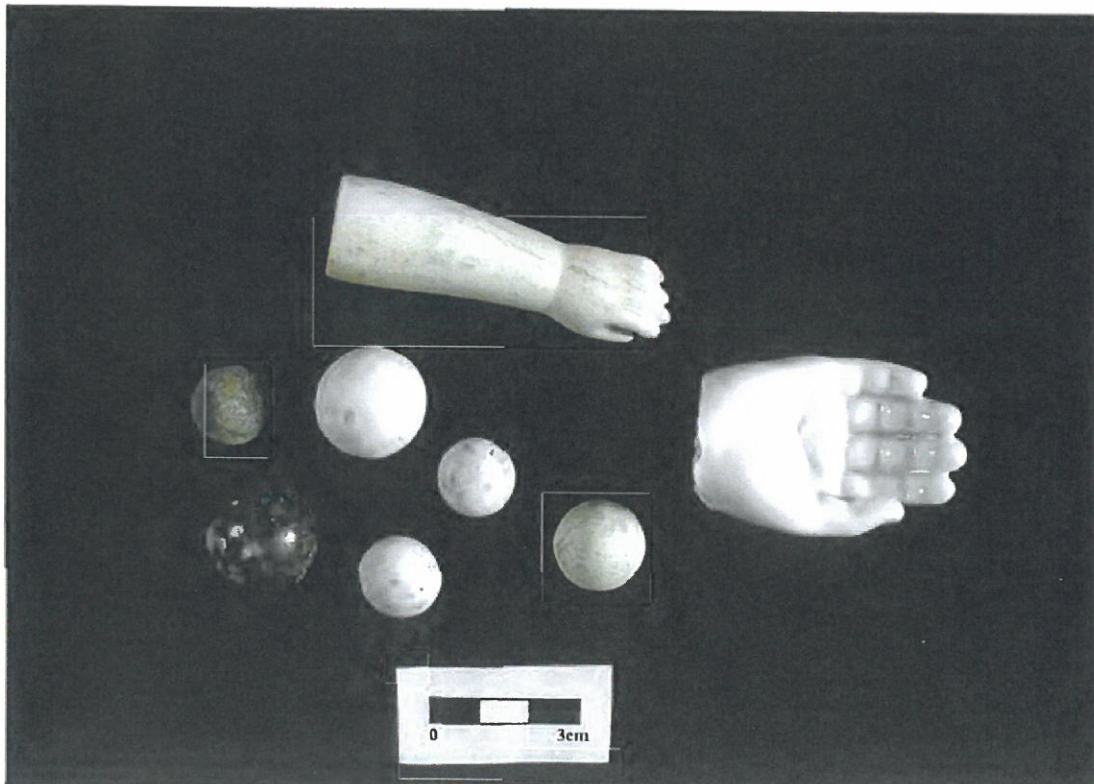


Figure 15. Marbles and Doll Parts.

OTHER MATERIALS

Other materials represented in the artifact assemblage include faunal remains and prehistoric artifacts. The faunal remains included bone (n=117) and snail shell (n=13). The prehistoric artifacts consisted of a chert flake and an Elk River Stemmed projectile point, dating from 3500 to 2000 B.C. (Figure 16) (Justice 1987). The projectile point was made of Sonora chert and was 5 cm long and 2.2 cm wide.



**Figure 16. Elk River Stemmed
Projectile Point.**

SITE DESCRIPTION

SITE 15Jf685

Site Type: Historic farmstead
UTM Coordinates: Northing 423589 Easting 619463
Elevation: 168 m amsl (550 ft.)
Physiography: Ridge top
Aspect: Flat
Slope: Less than 5 Degrees
Soil Type: Silt Loam
Proximity to Water: On Site
Visibility: Less than 10%
Dimensions: 6,912 sq. meters

The site is situated on a small ridge top along Westport Road. It is located on Lots #17, #18, and #19 of the Ashbrook subdivision. The site consists of a ca. 1822 Vulcan Rudy House, a modern garage, a brick slave house, and associated yards. The area north of the structure appears to have been severely disturbed by the construction of the adjacent road. The area west of the structure also appears to be disturbed by the construction of a road and the demolition of a modern addition to the structure. No intact nineteenth century archaeological deposits or features were identified in the shovel probes or test units. However, an extensive artifact midden dating to the turn of the twentieth century was identified. The artifacts recovered from the site range in date from the early 1800s to the mid 1900s. An Elk River Stemmed (3,500-2,000 BC) projectile point and a flake also were recovered from the site. Based on the distribution of architecture artifacts the remains of at least two other nineteenth century outbuildings may be present on the site.

ANALYSIS AND INTERPRETATIONS

Construction Of The Slave House

The lack of intact architectural features found at the site, such as builder's trenches, post holes, robber's trenches, and pit cellars, limits architectural interpretations derived from the archaeological investigations. Fortunately the standing structure itself offers many clues about the construction of the building. A preliminary examination of the building by architectural historians suggests that it was probably constructed during the Antebellum period, based on the rough-hewn log floor joists and basic layout. The recovery of a whole bottle with an applied tooled lip and an improved tooled lip that dates from the 1840s to 1870s from an interior doorjamb, lends support to this suggestion (Newman 1970). In addition, most of the nails recovered were machine cut nails, indicating that building was built prior to the 1880s. Also, the large number of wire nails found is consistent with alterations to the building post 1880s. The structure had been altered significantly during its history (See Appendix A for a floor plan of the building).

Spatial Analysis

Most of the artifacts recovered from the shovel probes were found on the eastern and southern sides of the house, which is where most of the probes were excavated. The northern and western sides of the house were largely disturbed and only minimally investigated. The artifacts recovered from the shovel probes were rather evenly distributed, except for a large concentration of materials just east of the slave house (Figure 17). The distribution of artifacts recovered from the shovel probes by functional group further defines this artifact distribution. Kitchen group artifacts were rather evenly distributed on the south side of the slave house and in a large concentration just east of the slave house. The latter corresponds to the previously mentioned large concentration (Figure 18). The south side of the slave house also faced the main house, which suggests that this area may have been the site of more activity in the past. The concentration of kitchen artifacts east of the slave house indicates that a trash midden may be located there. The distribution of architecture artifacts illustrates two distinct concentrations of artifacts: one east of the slave house and one to the south of the structure towards the main house (Figure 19). The architecture artifacts do not appear to be evenly distributed around the slave house, as one might typically find around a standing structure.

The spatial analysis indicates that artifacts were evenly distributed along the south side of the slave house, which faces the rear of the main house approximately 30.5 m to the south. This is particularly true of kitchen artifacts. A large concentration of artifacts located just east of the slave house contains a substantial amount of kitchen and architecture artifacts. This concentration is likely the location of another domestic outbuilding, perhaps another slave house, or a dump associated with the demolition of another domestic outbuilding. A second concentration of architecture artifacts is likely the remains of a non-domestic outbuilding located between the main house and the slave house.

Units 1 and 2

Units 1 and 2 were excavated under the enclosed porch on the south side of the building. The floor of the porch consisted of a dry-laid concrete slab masonry. Several small slabs were removed from two areas near the Westside doorway. Beneath the slabs was a 4 cm thick layer of sand (Stratum 1), a 2 cm thick red silt clay (Stratum 2), a 5 cm thick gray silt loam (Stratum 3), and subsoil (Stratum 4). Only 14 artifacts were recovered from the excavation of these layers. The sand layer (Stratum 1) consisted of only four artifacts, which were all wire nails. Stratum 2 did not contain any artifacts. A total of 10 artifacts were recovered from Stratum 3, including machine cut nails (n=4), clear container glass fragments (n=3), green tinted container glass fragments (n=2), and a leather shoe part (n=1).

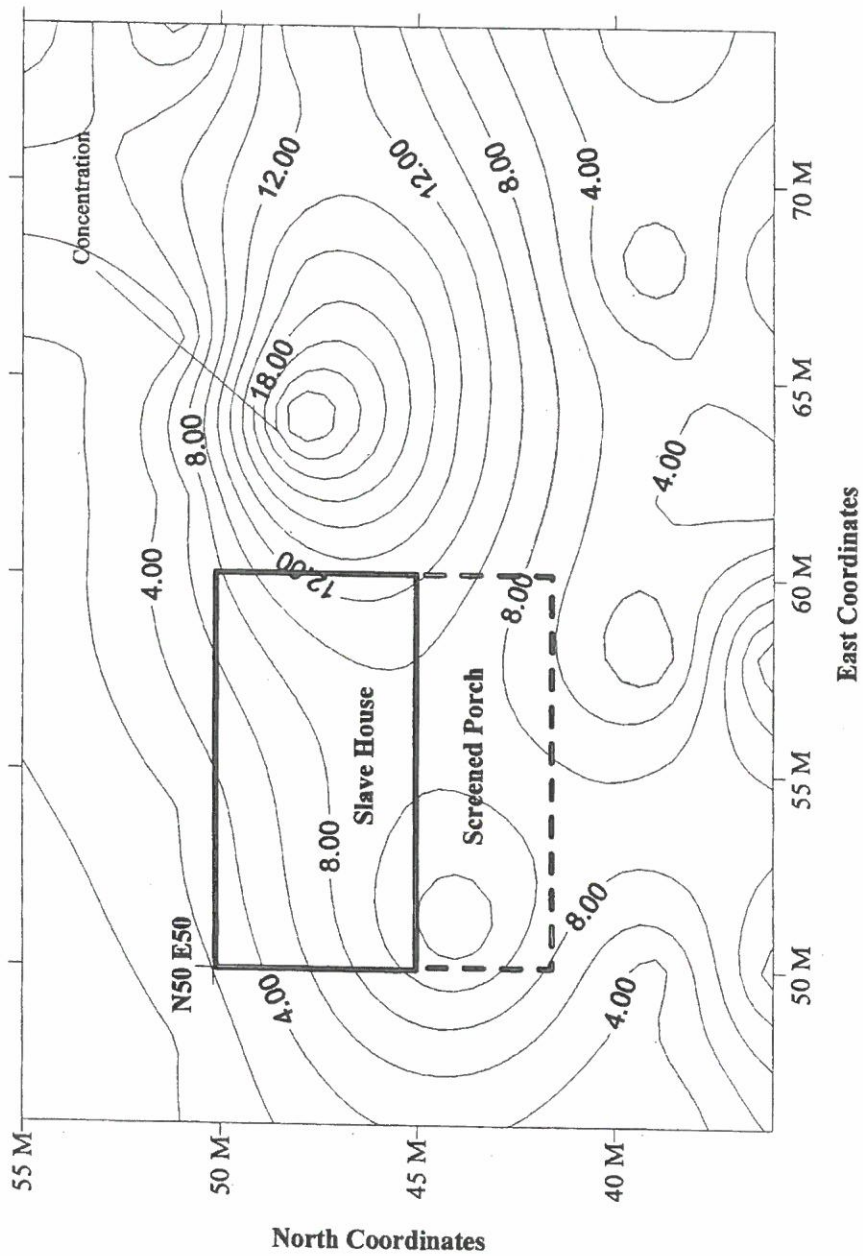


Figure 17. Distribution of All Artifacts.

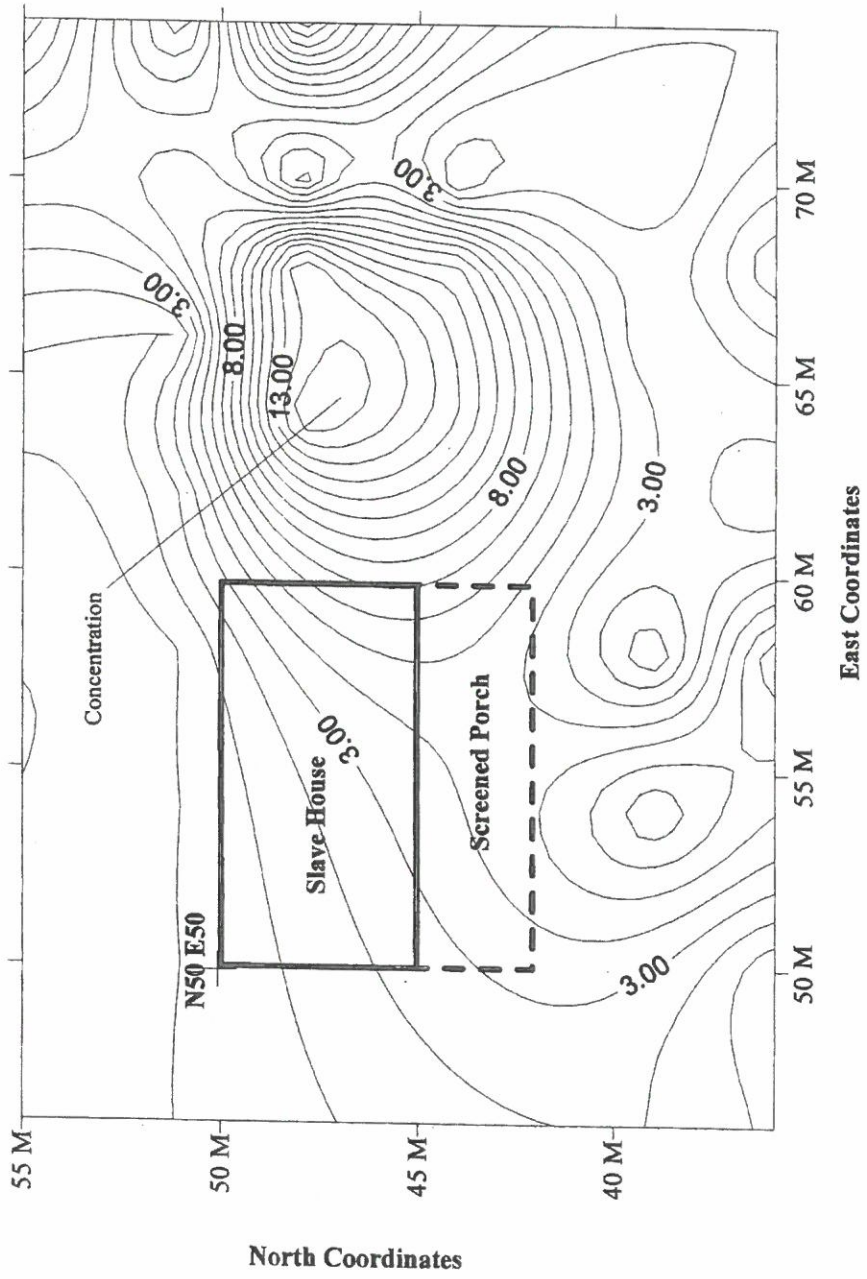


Figure 18. Distribution of Kitchen Group Artifacts.

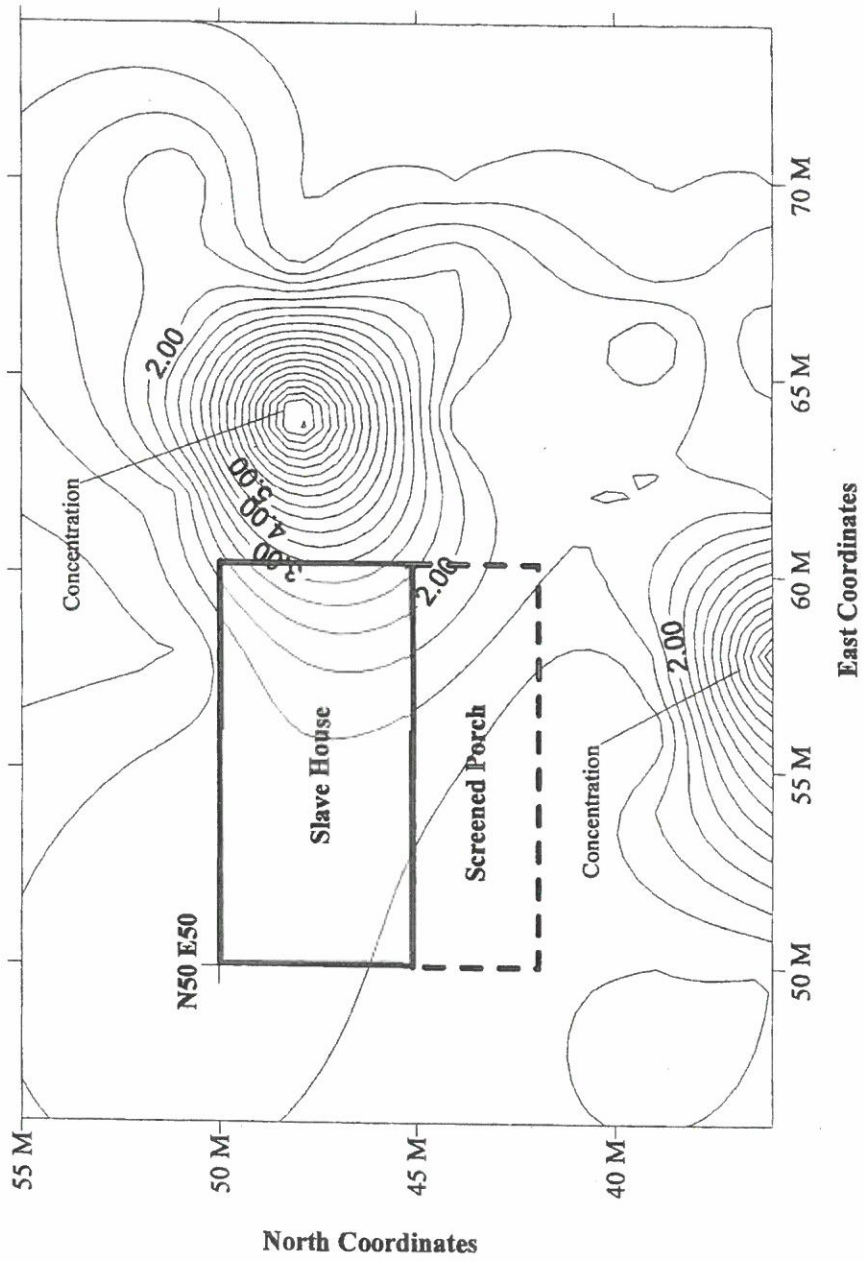


Figure 19. Distribution of Architecture Group Artifacts.

The concrete masonry floor was laid in the 1940s during a renovation of the structure. The sand layer (Stratum 1) and its contents were deposited at this time, as sand is used as a base for dry-laid masonry flooring. It appears that a thin layer of red silt clay (Stratum 2) had been deposited over the area prior to the construction of the floor, possibly as part of the base for the floor. The gray silt loam soil (Stratum 3) was most likely a nineteenth century construction/modification episode or represents the occupation of the structure during that time.

Units 3 and 4

Units 3 and 4 were excavated under the floor of the west side room of the building. Two layers of flooring, consisting of wood sheeting and planking, were removed to expose rough log joists and a gray/brown loamy soil (Stratum 1). Below this soil, a compact orange brown silt clay loam transition to subsoil (Stratum 2) was identified, followed by subsoil (Stratum 3).

A total of 870 artifacts were recovered from Stratum 1, most of which were assigned to the kitchen (27.4%), architecture (25.2%) and miscellaneous (20.1%) functional groups (Table 8). Other functional groups represented included clothing (8.5%), furniture (6.4%), entertainment (1.6%), activities (1.0%), personal (0.8%), and arms (0.2%). Other artifacts types included a substantial amount of faunal remains (8.7%) and a prehistoric chert projectile point (0.1%). Stratum 1's artifact collection exhibited a large amount of diversity consisting of materials from all functional categories.

As expected, the assemblage is dominated by the kitchen and architecture functional groups. These functional groups predominate in artifact assemblages associated with domestic buildings. However, the large amount of artifacts representing other aspects of domestic activities, such as clothing, furniture, entertainment, and various other activities, suggests that many of the materials recovered from Stratum 1 were not derived from periodic trash disposal associated with a domestic outbuilding. The large amount of architecture related materials associated with this deposit may represent trash disposal during a major alteration to the structure and a possibly a change in its function. The location of the deposits under the floor indicates that the replacement of the floor was a part of those alterations.

While most of the artifacts recovered from Stratum 1 were not diagnostic, many were. A total of 16 artifacts exhibited reliable inception and terminal manufacturing dates. A mean date of 1867 and a T.P.Q. of 1924 were calculated from these artifacts (Table 9). The majority of the artifacts date to the late 1800s. However a clear glass bottle exhibited a maker's mark that dates to the early 1900s and other diagnostic artifacts, such as plastic and other synthetics also suggest an early 1900s date. While this data suggests that a replacement of a floor likely took place in the early 1900s, it is also possible that that an earlier floor replacement had occurred in the late 1800s.

Table 8. Artifacts Recovered from Units 3 and 4 by Strata.

Functional Group/ Artifact Type	Sherd Frequency (MNV)	
	Stratum 1	Stratum 2
Kitchen	27.4%	33.1%
<i>Ceramics</i>		
Bowl	3 (1)	0 (0)
Crock	5 (3)	3 (2)
Cup	11 (3)	0 (0)
Lid	1 (1)	0 (0)
Plate	2 (1)	3 (3)
Saucer	1 (1)	7 (3)
Unidentified	88 (31)	21 (9)
<i>Glass</i>		
Bottle, unidentified	9 (4)	0 (0)
Canning jar	1 (1)	0 (0)
Cup	3 (1)	0 (0)
Lid	1 (1)	0 (0)
Unidentified	111 (19)	26 (7)
<i>Metal</i>		
Can	2 (1)	0 (0)
Total	238 (58)	60 (24)
Architecture	25.2%	27.1%
Nail, machine cut	41	11
Nail, unidentified	51	11
Nail, wire	24	5
Spike	1	1
Window glass	74	21
Unidentified synthetic	28	0
Total	219	49
Miscellaneous	20.1%	4.4%
Metal, unidentified	173	7
Metal handle	0	1
Unidentified plastic	1	0
Total	174	8
Clothing	8.5%	7.7%
Ceramic buttons	20	4
Metal buttons	13	3
Metal clasp	2	1
Metal safety pin	0	2
Shell buttons	31	1
Plastic buttons	0	1
Leather shoe parts	7	0
Cloth, unidentified	1	0
Total	74	12
Furniture	6.4%	6.6%
Ceramic castor	1 (1)	0 (0)
Ceramic figurine	2 (1)	0 (0)
Ceramic flower pot	1 (1)	0 (0)
Glass oil Lamp globe	47 (2)	14 (1)
Glass Vase	2 (1)	0 (0)
Metal lamp part	3 (1)	0 (0)
Total	56 (7)	14 (1)
Entertainment	1.6%	3.9%
Ceramic marble	7	3
Ceramic doll parts	6	2

Functional Group/ Artifact Type	Sherd Frequency (MNV)	
	Stratum 1	Stratum 2
Glass marble	0	1
Metal toy wheel	1	1
Total	14	7
Activities	1.0%	1.1%
Farm machinery, unidentified	4	0
Hardware, washer	3	0
Staple	2	0
Unidentified wire	0	1
Total	9	1
Personal	0.8%	0.6%
Metal coin	1 (1)	1
Metal jewelry	1 (1)	0
Bone toothbrush	1 (1)	0
Wood handle	2 (2)	0
Ceramic smoking pipe	2 (1)	0
Plastic comb	0	1
Total	7 (6)	2
Arms	0.2%	0.0%
Metal bullet	1	0
Metal shell casing	1	0
Total	2	0
Other Artifacts		
Faunal Remains	76	27
Prehistoric-projectile point	1	0
Prehistoric-chert flake	0	1
Total	870	181

Table 9. Diagnostic Artifacts From Strata 1 and 2.

Artifact	Date Range	Mean	T.P.Q.	Count	Reference
<i>Stratum 1</i>					
Whiteware-hand painted	1830-1870	1850	1830	1	Price 1979
Whiteware-transfer printed	1830-1860	1845	1830	4	Price 1979
Whiteware-undecorated	1830-1890	1860	1830	7	Smith 1983
Applied tooled lip	1840-1913	1876.5	1840	2	Newman 1970
Knox Glass Co. maker's mark	1924-1968	1946	1924	1	Toulouse 1968
Coin-penny	1880	1880	1880	1	
Total	1830-1968	1864	1924	16	
<i>Stratum 2</i>					
Pearlware-undecorated	1780-1830	1805	1780	1	South 1977
Whiteware-transfer printed	1830-1860	1845	1830	2	Price 1979
Whiteware-undecorated	1830-1890	1876.5	1840	6	Smith 1983
Maker's mark-Henry Burgess	1864-1892	1878	1864	1	Kowalsky 1999
Coin-penny	1900	1900	1900	1	
Total	1780-1900	1872	1900	11	

A total of 181 artifacts were recovered from Stratum 2. The distribution of these artifacts amongst the functional groups was similar to Stratum 1, with all but one of the functional groups represented. As with Stratum 1, most of the artifacts from Stratum 2 were assigned to the kitchen (33.1%) and architecture (27.1%) groups (Table 8). However, Stratum 2 contained fewer unidentified objects, than are typically classified as miscellaneous (4.4%). Other functional groups represented in the Stratum 2 assemblage consisted of: furniture (7.7%), clothing (6.6%), entertainment (3.9%), personal (1.1%), and activities (.6%). Other artifacts recovered included faunal remains (7.7%) and a prehistoric chert flake (.6%).

Most of the artifacts recovered from Stratum 2 were not diagnostic. However, 11 artifacts exhibited reliable manufacturing dates. A mean artifact date of 1872 and a T.P.Q. of 1900 were calculated from these artifacts (Table 9). Again, most of the artifacts date to the late 1800s, while only one artifact, a penny dated 1900, was not. The plastic comb and the safety pins recovered from Stratum 2 also are indicative of an early 1900s date. Also a partial maker's mark from the J & G Meakin pottery dates from 1890 to the present, which again suggests an early 1900s date. These dates are similar to the diagnostics from Stratum 1.

The artifacts recovered from Stratum 2 suggest that this deposit was likely formed around the turn of the twentieth century. It is likely that the majority of the artifacts recovered from both Stratum 1 and Stratum 2 were deposited during a major alteration to the building, which included the replacement of the floor, in the late 1800s to early 1900s, possibly 1890s to 1910. It appears based on the artifact density and richness of the deposit that a house cleaning episode or abandonment took place prior to the alteration of the structure. This circumstance probably signifies a change in the function of the building at that time. It also appears that the floor may have been replaced a second time, later in the mid 1900s, which disturbed the earlier deposits and introduced a few artifacts to it.

Units 5 and 6

Units 5 and 6 were excavated adjacent to the east stone foundation wall of the Vulcan Rudy Slave House to form a 1 x 2.2 m unit (Figure 8). Five strata were identified in this unit, consisting of a topsoil (Stratum 1), a clay fill (Stratum 2), a loam midden with brick (Stratum 3), a transition to subsoil (Stratum 4), and subsoil (Stratum 5) (Figure 13). No features, such as a builder's trench, were identified in these units.

Stratum 1 (Topsoil)

A total of 108 artifacts were recovered from Stratum 1, most which were assigned to the kitchen (43.5%) and architecture (39.8%) functional groups. The remainder was assigned to the miscellaneous (3.6%), furniture (2.8%), clothing (2.8%), and activities (1.9%). Other artifacts included faunal remains, which comprised 5.6% of the total Stratum 1 assemblage.

Diagnostic artifacts recovered from Stratum 1 consisted primarily of ceramics, including undecorated whiteware (n=8) and yellow ware (n=1). Both of these ceramic types were manufactured throughout the mid to late 1800s. Based on the presence of these ceramics and modern artifacts, such as plastic, that were not collected, Stratum 1 contains artifacts from the late 1800s to present day. This is to be expected of topsoil deposits adjacent to domestic structures, where trash originating from the use of the building and repairs to the building periodically accumulate.

Stratum 2 (Clay Fill)

A total of 59 artifacts were recovered from Stratum 2. These materials consisted primarily of kitchen (52.5%) and architecture (33.9%) group artifacts (Table 10). Other functional categories represented included the activities (5.1%), clothing (5.1%), and miscellaneous (3.4%) groups. Only a few diagnostic artifacts were recovered from Stratum 2, including mostly ceramic sherds, such as undecorated whiteware (n=3) and edge-decorated whiteware (n=5). These ceramics date from the mid-to late 1800s. The presence of synthetics indicates that this deposit likely dates after the turn of the twentieth century. Stratum 2 was a clay fill that was most likely used in the early 1900s to add slope around the foundation of the house to promote good drainage or as a cap to seal a loamy midden layer (Stratum 3).

Stratum 3 (Midden)

A total of 662 artifacts were recovered from Stratum 3. These artifacts were quite diverse representing nine different functional groups. Most of these materials were assigned to the kitchen (42.9%) and architecture (37.3%) groups (Table 10). Other functional groups represented included clothing (8.3%), miscellaneous (6.6%), activities (2.9%), furniture (0.6%), arms (0.3%), and personal (0.3%). Faunal remains (0.8%) and whole bricks also were recovered from Stratum 3. This characterization of artifacts by functional groups was very similar to the midden located under the floor of the structure (Stratum 1 in Units 3 and 4) and it is possible that these two deposits may be related. Stratum 3 in Units 5 and 6 also may be associated with a major alteration to the structure.

While most of the artifacts recovered from Stratum 3 were not diagnostic, some were. A total of 14 artifacts have reliable inception and terminal manufacturing dates. A mean date of 1855 and a T.P.Q. of 1870 were calculated from these artifacts (Table 11). However, other diagnostic artifacts such as plastics, other synthetics, machine cut and wire nails, machine made jar rims, and other artifacts that do not have definitive manufacture dates suggests that the deposit was probably formed during the early 1900s at the turn of the twentieth century.

Table 10. Artifacts Recovered from Units 5 and 6 by Strata.

Functional Group/ Artifact Type	Sherd Frequency (MNV)			
	Stratum 1	Stratum 2	Stratum 3	Stratum 4
Kitchen	43.5%	52.5%	42.9%	52.8%
<i>Ceramics</i>				
Bowl	0 (0)	0 (0)	3 (1)	0 (0)
Crock	0 (0)	0 (0)	21 (8)	0 (0)
Plate	0 (0)	0 (0)	11 (4)	0 (0)
Saucer	0 (0)	0 (0)	3 (1)	0 (0)
Unidentified	16 (12)	9 (4)	81 (20)	39 (11)
<i>Glass</i>				
Bottle, unidentified	0 (0)	0 (0)	69 (8)	0 (0)
Bottle, beer	0 (0)	0 (0)	5 (1)	0 (0)
Bottle, liquor	0 (0)	0 (0)	2 (2)	0 (0)
Jar, unidentified	0 (0)	1 (1)	37 (2)	0 (0)
Lid-liner	0 (0)	0 (0)	2 (1)	0 (0)
Unidentified	31 (11)	21 (4)	49 (5)	47 (7)
<i>Metal</i>				
Fork	0	0	1	0
Total	47 (23)	31 (9)	284 (53)	86 (18)
Architecture	39.8%	33.9%	37.3%	35.6%
Nail, machine cut	9	8	93	28
Nail, unidentified	11	0	20	10
Nail, wire	12	5	86	7
Spike	1	0	0	0
Screw	0	0	1	0
Window glass	8	4	35	13
Unidentified synthetic	2	3	12	0
Total	43	20	247	58
Miscellaneous	3.9%	3.4%	6.6%	3.1%
Metal, unidentified	4	2	37	4
Slate	0	0	0	1
Unidentified plastic	0	0	7	0
Total	4	2	44	5
Clothing	2.8%	5.1%	8.3%	0.0%
Ceramic buttons	0	0	1	0
Metal clasp	0	0	1	0
Shell buttons	0	0	1	0
Rubber buttons	1	0	0	0
Leather shoe parts	2	3	52	0
Total	3	3	55	0
Furniture	2.8%	0.0%	0.6%	3.6%
Glass oil Lamp globe	3 (1)	0 (0)	1 (1)	6 (1)
Metal furniture hardware	0 (0)	0 (0)	3 (3)	0 (0)
Total	3 (1)	0 (0)	4 (4)	6 (1)
Entertainment	0.0%	0.0%	0.0%	0.6%
Doll part	0	0	0	1
Activities	1.9%	5.1%	2.9%	0.0%
Bicycle chain	0	0	1	0
Metal grate fragment	0	0	1	0
Hardware, nut	2	0	0	0
Fencing	0	3	1	0
Railroad spike	0	0	1	0
Unidentified wire	0	0	15	0
Total	2	3	19	0

APPENDIX B HISTORIC ARTIFACT TYPOLOGY

Often historic artifacts recovered from archaeological sites are classified according to artifact types. Artifacts can be classified in a variety of way, such as by function, material, and age. The historic artifacts recovered from the Vulcan Rudy project were classified according to material. This section discusses the artifact typology used for this project and provides background information on specific types.

CERAMICS

Ceramic artifacts are initially described by their types. Archaeologists have given these ceramic types different names based on the time periods when a particular ceramic type was manufactured or the predominant use for the type. There are two basic categories of ceramics, refined and coarse. Refined ceramics were used in the manufacture of fine dishes or delicate objects, which were mostly made abroad. Coarse ceramics were used in the manufacture of utilitarian containers, which were commonly made locally. The ceramic objects will be discussed in this section according to their ceramic type.

Refined Ceramics

The refined ceramics group includes several chronologically significant types. As ceramic technology improved over time, different types of refined ceramics were produced. The most prominent ceramic type produced during Kentucky's early historic settlement was creamware, so called because of its creamy yellowish-green tinted glaze. Creamware was developed in the 1760s by Josiah Wedgwood, after several years of experimentation (Noel Hume 1969). This ware represents one of many attempts by Staffordshire potters in England to produce an inexpensive version of the fine Asian hard white porcelain they sought to emulate. Throughout the late 1700s, creamware was the most popular English made china in America (Miller 1991; Noel Hume 1969). Creamware continued production into the 1810s, but was most prominent prior to 1800, gradually being replaced by pearlware in the 1780s (South 1977).

By the 1780s, the utilization of better clays and new glazes allowed potters to create a whiter English ceramic called pearlware. Although this type of ceramic is characterized by a blue tinted body, it has a whiter appearance than the yellowish green tinted creamware (Miller 1991; Noel Hume 1969). Pearlware was most popular in America in the early 1800s, although production lasted into the 1830s (South 1977). By 1830, English potters had developed an even whiter colored ceramic, known to archaeologists as whiteware (Miller 1991). This ceramic type was the predominant ceramic produced throughout the mid to late 1800s. Although whiteware lacked the hardness of porcelain, it was almost as white and proved to be a popular substitute. By

the time whiteware was being produced, the American appetite for imported refined ceramics had grown. The British dominated the whiteware market throughout most of the 1800s.

Shortly after the initial development of whiteware, a harder paste whiteware known by a variety of names, mostly commonly white granite, ironstone, and semi-porcelain, was developed. All of these names refer to brand names for the hard paste whiteware developed by the different potters. White granite is a term commonly used by archaeologists to describe the harder paste whiteware (Miller 1991). Although some English potters had produced what they called ironstone and semi-porcelain by 1805 or 1815, white granite types of ceramics were not in wide spread production until 1845 (Noel Hume 1969; Miller 1991). While both whiteware and white granite ceramics were manufactured throughout the mid-1800s, white granite had become much more common than the older and softer whiteware by the 1870s (Miller 1991; Smith 1983). Because it is very difficult to distinguish whiteware from white granite, some archaeologists do not attempt to make a distinction. However, distinguishing between the softer paste whiteware from the harder paste white granite can provide some chronological information, with whiteware being more indicative of the 1830s-1850s and white granite being more indicative of post 1850s.

By the 1880s American potteries began to cut into the English dominance of the American ceramic market. Major ceramic producing regions began in the Midwest and East and became centered in the Ohio Valley, particularly Ohio and West Virginia (DeBolt 1994). White granite ceramics were, at the turn of this century, mass-produced by both English and American potters, making them affordable to most of the country's population. By the 1900s, white granite was more like porcelain than whiteware and American potteries frequently used terms like semi-porcelain, semi-vitreous, and vitreous to describe their wares (DeBolt 1994). The term semi-porcelain is used to describe this later ceramic, although the term had been used periodically throughout the 1800s to describe other ceramic types. Again, the distinction between semi-porcelain, white granite, and whiteware is difficult to make. Semi-porcelain, also known as rough porcelain, is characterized by its porcelain-like paste. Typical porcelain has a very refined paste that is almost smooth like glass. While semi-porcelain is quite like porcelain, it is not as refined and has a grainy texture.

Some porcelain was manufactured in England and Europe in the 1700s, but it was very expensive to produce, thus beginning the quest for an inexpensive substitute described above (Noel Hume 1969). Most porcelain during the 1700s and 1800s was produced in Asia but some was produced in Europe. Although English and Asian porcelain was exported to America in the 1700s and early 1800s, it was generally only accessible to the very wealthy. By the mid- to late-1800s porcelain was more accessible to wealthy Americans and became popular for even the moderately wealthy families. Because of the expense, most porcelain was probably purchased in the form of tea sets rather than complete dinner sets of dishes. It is difficult to date porcelain without maker's marks or specific decorations, because it has been manufactured for such a long time.

Other refined ceramics include pipe clay and fixture porcelain. Pipe clay was a fine bright white clay that was used in the production of smoking pipes from the 1600s to 1800s. This type of ceramic is often confused with Kaolin, which is a type of ceramic derived from a specific clay source. Pipes were generally made of any fine white clay, often known as white ball clay. Fixture porcelain refers to an industrial type of porcelain that is characterized by a thick porcelain-like body. This type of ceramic was used in the manufacturing of lighting and bathroom fixtures, as well as, electrical insulators, during the 1900s.

Refined Ceramic Decoration Types

Although refined ceramics were often undecorated, a wide variety of decorative types were used on these wares throughout history. Some of these are described below.

Transfer prints were printed designs transferred from copper engravings to plain dishes and then overglazed. The patterns were usually very elaborate, depicting scenes or having geometric or floral motifs that were available in several colors: black, brown, blue, red, cranberry, purple, and green (Samford 1997). Transfer printed decorations had been developed in 1756, but were not frequently used until the end of the 1700s (Noel Hume 1969). Transfer prints were most popular from the 1830s to the 1850s and had a small resurgence in the 1870s and 1880s (Miller 1991).

Similar to transfer prints are flowed decorated ceramics that have the appearance of a smeared transfer print where the coloring runs together. During the firing of transfer printed wares, a volating solution was added, which created the flowed effect (Samford 1997). Flowed decoration usually occurs in the color blue or black and was used throughout the 1800s.

Edge decoration is one of the earliest types of decoration and occurs in many different forms, ranging from impressed designs to painted bands. Patterns of impressed, embossed, or molded patterns on the edge of wares were common in the early 1700s on through the end of the 1800s (Noel Hume 1969; Miller 1989). The most common types of edge decoration found in America are usually the vessels that have scalloped rims. The rims of these vessels were often decorated with curved or impressed lines and embossed patterns, which were covered with a blue, green, or red colored slip. Collectively this type of edge decoration was known as shell edged wares. Shell edged decoration types were most common on pearlwares and early whitewares, roughly dating from the 1780s to the 1840s.

Hand painted designs are common on ceramic vessels throughout the historic period as are many banded designs, which involves the application of slip bands around the edges and body of a vessel. Hand painted decorations typically reflected floral motifs in a variety of colors. Blue handpainted vessels were common, as were polychrome designs that utilized green, gold, blue, and red. During much of the 1800s mocha style decoration referred to a brown dendritic fern-like design concocted from a mixture of tobacco juice and urine (Noel Hume 1969). However, this term has come to include

several different decorative types, most notably annular banded wares that utilized colored glaze, often a brown, a pale green, or blue glaze, into which ceramic vessels were dipped. This is also referred to as "dipped" decoration (Miller 1991). A worm pattern or cable design is often associated with dipped mocha wares. It refers to the worm-like circular designs created on the ceramic vessel, also known as finger-painted wares.

Pattern mold designs, which were used through out the nineteenth century, consisted of decorative patterns that were molded directly into a ceramic vessel and then overglazed. Pattern molding is often used to create paneled designs on the vessels, which were very common on whiteware and white granite of the late 1800s. This is similar to impressed, incised, and embossed decorative patterns of various designs used throughout the 1700s and 1800s.

The final refined ceramic decorative type discussed is decal decorations, which simply consists of a decal applied to a ceramic vessel. This development allowed more intricate designs to be used on table wares and reduced the cost of highly decorated ceramics that would otherwise have to be handpainted or transfer printed. Decal decorations were first introduced in the 1890s, but did not become fully mass-produced until 1900 (Adams 1980). Decal decorations are still widely used today.

Coarse Ceramics

Coarse ceramics include types such as redware, stoneware, yellow ware, and terra cotta that were not typically used in the production of dinner wares and tended to be used in the manufacture of utilitarian vessels, such as crocks, bowls, and jars. Smoking pipes were also widely manufactured from coarse ceramics. Although most coarse ceramics found in America were produced locally, some were imported from England, particularly yellow wares (Gallo 1985). Because these ceramics tended to be produced locally, they were relatively inexpensive.

Redwares, called so because of their distinctive red paste, were the predominant coarse ceramic from the 1750s to the 1850s, but continued to be manufactured into the 1900s. Because redware became less desired after 1850, it is generally considered to be a primarily late-eighteenth century to mid-nineteenth century ceramic. Typically, redware consisted of a clear lead glaze or alkaline slip glaze with very little decoration. However, colored glazes, most predominantly green, were also frequently used. Some redware, particularly English varieties and types produced by Moravian potters along America's East coast, are highly decorative with slip-trailed designs (Noel Hume 1969; Thomas 1994).

By the 1850s, the more durable coarse ceramics known as stonewares had pretty much taken over the market for utilitarian wares (Ketchum 1983). Primarily, these types of stoneware were minimally decorated, consisting of only a glazed surface. While clear glazes were the most frequently used, salt and slip glazes were also popular. The addition of salt to the glaze results in a pitted exterior surface that is formed during the

Functional Group/ Artifact Type	Sherd Frequency (MNV)			
	Stratum 1	Stratum 2	Stratum 3	Stratum 4
Personal	0.0%	0.0%	0.3%	0.6%
Metal pocket knife	0	0	2 (1)	0
Ceramic smoking pipe	0	0	0	1
Total	0	0	2	1
Arms	0.0%	0.0%	0.3%	0.6%
Metal bullet	0	0	1	0
Metal shell casing	0	0	1	1
Total	0	0	2	1
Other Artifacts				
Faunal remains	6	0	5	5
Total	108	59	662	163

Table 11. Diagnostic Artifacts from Stratum 3

Artifact	Date Range	Mean	T.P.Q.	Count	Reference
Creamware-undecorated	1762-1820	1791	1762	1	South 1977
Whiteware-embossed rim patterns	1830-1860	1845	1830	1	Price 1979
Whiteware-transfer printed	1830-1860	1845	1830	1	Price 1979
Whiteware-undecorated	1830-1890	1860	1830	10	Smith 1983
Bottle-improved tool lip/two piece base	1870-1913	1891.5	1870	1	Deiss 1981
Total	1762-1913	1855	1870	14	

Stratum 4 (Transition to subsoil)

A total of 163 artifacts were recovered from Stratum 4, most of which were assigned to the kitchen (52.8%) and architecture (35.6%) functional groups (Table 10). Other functional groups represented include furniture (3.6%), miscellaneous (3.1%), personal (0.6%), entertainment (0.6%), and arms (0.6%).

The diagnostic artifacts consisted primarily of ceramics, including whiteware, redware, and yellow ware. Only the whiteware vessels (n=3) have reliable manufacturing dates. However, there are too few of these artifacts to calculate accurate mean dates. The presence of both machine cut (1790-1870) and wire (1860-present) indicate that this deposit was likely formed during the late 1800s to early 1900s (Nelson 1968; Wells 1998). No synthetic materials were recovered from this stratum.

Stratum 4 is the transitional soil between the midden (Stratum 3) and the subsoil (Stratum 5). It likely contains a mix of artifacts from the midden and possibly artifacts from older deposits that may have been destroyed or disturbed by the deposition of the midden. Thus, the artifact assemblage is much like Stratum 3 in content, but was deposited slightly earlier. Furthermore, this stratum may be associated with Stratum 2 in Units 3 and 4 that were excavated under the floor.

Interpretations

The spatial analysis of the artifacts recovered from the shovel probes resulted in the identification of a concentration of artifacts to the east and south of the slave house. The concentration south of the slave house is probably the remains of an outbuilding that once stood between the main house and slave house.

The concentration east of the slave house contains a large amount of kitchen and architecture group artifacts, suggesting that a domestic building may have once been located in this area. Since no features were found in association with this concentration, it cannot be confirmed that it does represent a domestic outbuilding. However, it is possible that it represents the remains of another slave house. Rudy owned 18 enslaved African Americans and would have most likely needed at least two houses similar to the one still existing. Furthermore, this concentration of artifacts may also be associated with an artifact midden identified in units less than 10 m to the west.

Based on the soil matrix and similarity of artifacts recovered, it is possible that the artifact midden identified under the floor of the structure and the midden identified adjacent to the foundation are part of the same deposit. Both deposits date to the turn of the twentieth century and are representative of a domestic outbuilding. However, they are separated by the east wall and foundation of the slave house. There was no evidence of a builder's trench or any other disruption by the foundation in the midden, which indicates that the midden was deposited after the building, was constructed. In order for the middens to be part of the same deposit, the floor must have been open and a substantial amount of trash deposited in this area. A subsequent renovation in the 1940s may have introduced more artifacts into the midden with a second replacement of the floor. It is also possible that soil and artifacts from outside of the house were used to fill the area under the floor. When Units 3 and 4 were excavated the soil under the floor had been built up to the joist, which was unusual for a permanent building. It would have been more likely that there was a considerable amount of space between the floor joists and the ground surface to prevent rot of the floor. The trash and soil associated with the midden may have been used as a fill under the floor during the initial floor replacement. The trash in the midden may have originated from the demolition of a nearby domestic outbuilding and the renovation of the slave house during the early 1900s. As previously mentioned, such an outbuilding may be represented by the concentration of artifacts to the east of the structure that was identified during the spatial analysis

The presence of prehistoric Native American artifacts was expected, given the location of the site on high ground near a water source. The presence of these artifacts suggests that there may have been a prehistoric occupation of the site. However, the low frequency of prehistoric artifacts (n=2) found indicates that this occupation was light. It is also possible that the prehistoric artifacts recovered were curated or redeposited in historic times. If this is the case, then these materials do not represent a prehistoric utilization of the Vulcan Rudy site.

CONCLUSIONS

The archaeological investigations conducted around the Vulcan Rudy slave house indicate that much of the area has been disturbed or modified since the end of slavery. While a large number of artifacts dating to the early to mid-1800s were recovered, most of the artifacts date from the late 1800s to early 1900s. No intact Antebellum deposits or features were identified during the project. However a substantial midden dating to the turn of the twentieth century was identified under the floor of the slave house and adjacent to the house.

The results of the investigations indicate that the outbuilding complex associated with the Vulcan Rudy house changed significantly at the turn of the twentieth century. It is known that many outbuildings associated with the Vulcan Rudy plantation survived to 1900. However, the archaeological evidence suggests that most of these buildings were probably demolished or dismantled a short time after 1900. It is believed that at this time the existing slave house underwent a renovation or modification, which likely included replacement of the floor, roof, interior detail, etc. The building may have been in a major state of disrepair, as the artifact assemblage from the midden indicates that the structure had been abandoned with many items left in it. Mr. and Mrs. Arterburn, who live in the building during the 1940s, indicated that much of the house was original to slave times prior to their renovation of the structure (Lawton 1948). Given this information it is probable that the slave house retained much of its original configuration and was used as a tenant house during the Postbellum. It was not until the late 1940s that the second most extensive renovation took place, altering most of the building's original fabric and configuration.

Analysis of the materials recovered from the shovel probes suggests that another outbuilding was located to the east in close proximity to the slave house. This outbuilding was used for domestic purposes and may have been a slave house that was converted to a tenant house during the Postbellum. Furthermore, there may be more outbuildings located south of the slave house towards the main house. However, the existing outbuilding was the only one that survived the dismantling of the plantation outbuilding complex, which also disturbed much of the archaeological deposits associated with them. Furthermore, extensive grading and filling of the rear yard of the Vulcan Rudy house in recent times also has severely disturbed archaeological deposits.

While it was hoped that the archaeology could shed some light on the lives of the African Americans enslaved at the Vulcan Rudy plantation, there was very little archaeological evidence of the Antebellum period left intact. However, there is much that can be learned from the information recovered during these investigations. Most of the information collected is associated with a time of great change at the property. What happened after slavery? Did some slaves stay as tenants? Who were the tenants if there were any? We have an opportunity to investigate Postbellum tenancy with the information collected. Much could be learned about the lives and conditions of those who replaced the slaves.

The death of Jane Rudy in 1878 signified the end of the Rudy farming operation. With a change in ownership, there may have been less emphasis on the vitality of the property as a major farming operation. William C. Arterburn, who owned the property after the Rudy family, may not have been interested in maintaining the plantation image of the property. No longer were outbuildings needed to serve the main house or to house slaves. This situation was one that was being repeated at many old plantations throughout the south and ushered in a new era in farming without slavery. The archaeological investigations conducted at the Vulcan Rudy slave house could help researchers understand this change in plantations.

While there is much that can be learned from the archaeological investigations conducted at the Vulcan Rudy slave house, the disturbed nature of the site make its potential to investigate slavery and the Antebellum period limited. It is possible that there are some isolated intact deposits located in the area around the slave house (lot #17 and #18), but the slave house area is not considered a significant archaeological site. However, the status of any archaeological deposits located around the main house on lot #19 is unknown. Significant nineteenth century archaeological resources may be located on that lot and would benefit from an extensive archaeological survey.

Cemeteries

During archival research conducted for this archaeological investigation, some new information pertaining to cemeteries associated with the George Vulcan Rudy property was collected. The Rudy family cemetery that was once located on the property and located approximately 150 m west of the house had been previously defined and documented (Clay 1999). Another cemetery was discovered in deed references that refer to George Rudy's purchase of 150 acres from the Leonard Harbolt estate in 1830 (Deed Book 50:161). The deed states:

“...and do reserve the burying ground of said Leonard Harbolt and his family on said premises in the locust grove on the side of the said Westport road with free ingress and egress to and from the same, and the right to enter in said graveyard, any of the family and descendents of said Leonard Harbolt, without the molestation, disturbances, or hindrances of the said George Rudy Jr. his heirs and assigns.”

It is not clear where the Harbolt cemetery is located. It is possible that it is in the same place as the Rudy cemetery. However, there is no evidence to suggest that anyone other than George Rudy and his two children are buried there (Clay 1999). It is also possible that the rumors concerning a cemetery being destroyed years ago by roadwork, is the Harbolt cemetery. There may have been as many as three cemeteries associated with the George Vulcan Rudy property; the Rudy Cemetery, the Harbolt Cemetery, and possibly an Enslaved African American Cemetery. More research is needed to clarify the locations and histories associated with these cemeteries.

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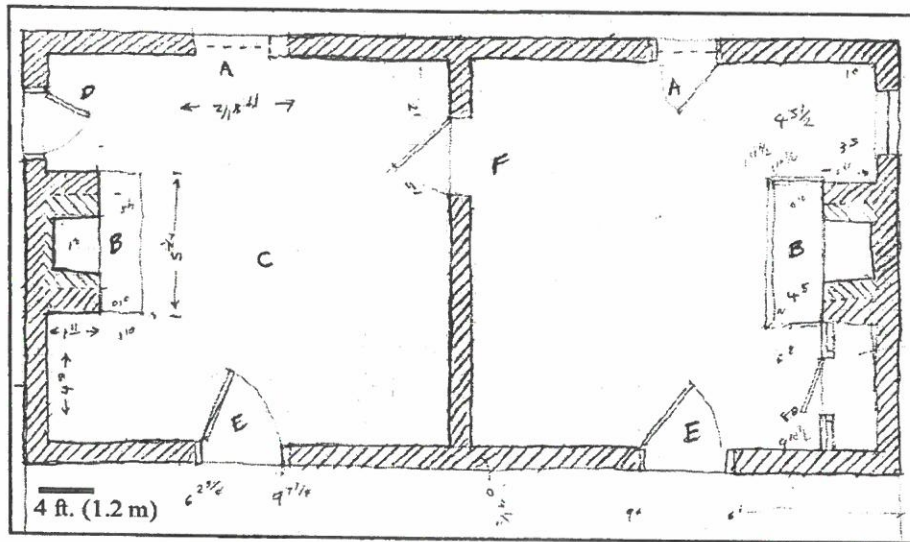
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**APPENDIX A
ARCHITECTURAL FLOOR PLAN OF
THE VULCAN RUDY SLAVE HOUSE**



Drawing by Bill Macintire

Key:

- A** Former window openings on north side of building (modified into doors)
- B** Fireplace openings filled (probably 1930s-40s)
- C** Original joists log flattened on top on 3ft. center (with later 2x10" joists)
- D** Modern door, not original opening
- E** Modern doors, original openings, jambs may be original
- F** Opening original or early
whole bottle found in the jamb dates from 1840-1880

firing process. Potters have been able to create a wide variety of stoneware glazes by adding different chemical compounds to the glaze (Greer 1981; Noel Hume 1969).

Yellow ware production began in the 1830s, but these ceramics found their greatest popularity in the late 1800s and early 1900s (Ketchum 1983). By the late-nineteenth century it was the most popular locally produced nineteenth century American ceramic type, although a substantial amount was imported from England, as well. This ceramic was called yellow ware because of the yellow color of its paste. When covered with a clear glaze this type of paste produced a vessel with a deep mustard colored yellow. This term also refers to white-bodied wares that have a yellow glaze. Unlike many red wares and stonewares, yellow ware could be used to make very thin walled vessels. Common decorations on these vessels were slipped bands, worm patterns (swirled patterns), dendritic patterns, and pattern molded/relief designs. Rockingham is a brown glaze that is usually applied to yellow ware vessels in spatter like designs (Gallo 1985). Decorated yellow wares were extremely popular during the late 1800s. Everything from mixing bowls to wall plaques were made from it.

Terra cotta is characterized by its orangish red paste and is much like redware. Terra cotta has been produced for hundreds of years and is still quite common today. Most terra cotta is unglazed and undecorated, but occasionally it was made with impressed or relief designs. Terra cotta was and is most commonly used for flowerpots; although in some countries and parts of the United States it has frequent use as roofing tiles. Flowerpots have been common at American sites since the 1600s (Noel Hume 1969).

GLASS

Like ceramics, glass bottle manufacturing technology has evolved over the years. Glass bottles were all hand blown or blown into molds prior to the 1800s, with the first American production of bottles occurring in the mid-1700s (Noel Hume 1969). However, the 1800s was a time of rapid advancement in bottle making technology, especially towards the end of the century. In the 1810s the three piece or Rickets mold was developed, which improved bottle making efficiency, although hand blown bottles continued to be produced throughout the 1800s (Jones and Sullivan 1989). The three-piece mold would remain a common manufacturing technique until the 1890s (Newman 1970). Other bottle manufacturing techniques that were developed during the 1800s include the two-piece mold (1845-1913), turn/paste mold (1870-1920), and the snap case (1855-1913) (Jones and Sullivan 1989; Newman 1970). In 1867 the letter plate mold was developed for molding lettering onto bottles, a process that is still used today.

The goal in producing bottles was to make them standard and uniform, but this was difficult, since many aspects of bottles (i.e., bottle finish or lip) continued to be made by hand, even after the three-piece mold was developed. However, bottle-lipping technology evolved over time. Early in the manufacture of bottles, lips were made by folding over the excess glass to form an edge or the bottles had no lips at all, in which the

necks were smoothed by fire polishing. Applied lips are basically globs of glass that were added to the neck of a bottle to make a lip that is better for pouring and accommodating a stopper. Different types of applied lips were used from about 1840 to 1913 (Newman 1970). From 1840 to 1870 small strings of glass were laid on the neck to form a lip, and from 1850 to 1870 a lipping tool was usually used to shape the applied lip (Newman 1970). By 1875, improved lipping tools were used directly on the neck itself, bypassing the need to apply a glob of glass to form a lip. This improved tooled lip technique was common until 1903, when molds that formed the lips at the same time as the body were developed (Deiss 1981).

The base of a bottle also went through an evolutionary process. For the most part, bottles could only be made with the aid of a pontil, a long iron rod that was attached to the molten glass of the bottle to hold it in place for shaping. The pontil was typically attached to the base of the bottle. Once the bottle was finished, it would be removed from the pontil, leaving a mark of rough glass on the base (Jones and Sullivan 1989). This technique was used primarily from 1810 to 1870 (Newman 1970). Sometimes pontil marks were improved by grounding them down. This process, which left a smoothed base, dates from 1840 to 1880 (Newman 1970). In some cases, the base of the bottle was molded as part of the body in a process known as dip molding. This process involved dipping molten glass into a mold. This was a common practice in the 1800s and is still in use today. Some bottle bases were molded as a separate piece in plate bottom molding, which dates from 1821 to 1920 (Jones and Sullivan 1989).

Despite the technological innovations of the late 1800s, by the turn of the century, bottles were still not standardized or close to being uniform. Several semi-automatic bottle-making machines were introduced in the 1880s, but they still relied on some handmade aspects (Jones and Sullivan 1989). However, in 1903 Michael J. Owens developed the first fully automatic bottle-making machine, which injected molten glass into a mold from the base and then cut the base, leaving what is referred to today as an Owen's scar. By the 1910s this form of bottle making was predominant and was used until the 1940s, when machines were improved so they did not leave a scar (Fike 1987; Jones and Sullivan 1989; Kendrick 1964). During the same time period, other bottle making machines left valve scars on the base that were formed from the use of a valve to inject glass into the molds.

The manufacture of glass jars was a direct result of, and benefited from, the technological advancements made in bottle production. The increased demand for better food packaging and food preservation created the popularity of home canning in the mid-1800s. Home canning was actually developed as a result of an 1810 contest sponsored by the French government to perfect long-term food preservation, won by Nicholas Appert. However, it was not until the 1850s when tinsmith John Mason developed a metal screw cap for preserving jars, that jars were widely produced (Sives 1991). Utilizing the new technologies for producing bottles, jar manufacture increased greatly by the end of the 1800s. Along with the development of canning jars were jar lid liners made of glass and porcelain. By 1869, a lid liner was developed for Mason's metal screw caps, which greatly enhanced the preservation process.

Other technological advances in making bottles involved techniques for developing new colors of glass and decorating containers. Glass is naturally a blue or green tinted color depending on the natural contaminants that occur in the glass material and certain chemicals must be added to change the color. Early glass was either blue or green tinted, black, or dark green. Although cobalt was used to manufacture blue colored glass prior to the 1800s, it was not until after the 1860s that it was used to make bright blue colored glass for mass produced medicine bottles that became popular with products like "Phillips Milk of Magnesia" and "Bromo Seltzer." Brown glass was also made prior to the 1800s, but became more popular for bottling beer and household chemicals in the late 1800s. However, consumers wanted to see the contents of the bottles they were buying, creating a demand for transparent colorless glass (Kendrick 1964). The desire for clear glass was the result of this demand. Clear or colorless glass had been produced prior to the 1800s through the manufacture of soda lime and lead glass (Jones and Sullivan 1989). Typically clear glass tablewares were manufactured with these types of glass. However, an inexpensive and dependable means to achieve clear glass required the addition of chemicals to remove contaminants that altered color. By 1875 clear glass bottles had attained widespread use (Fike 1875).

Attempts to make clear glass coupled with the lack of the necessary chemicals to make it created two very distinct glass colors. Amethyst colored glass is a byproduct of attempts to make clear glass by adding manganese to the glass in order to bleach-out the natural impurities in glass. Although amethyst glass was clear at the time of manufacture, when exposed to the sun the glass turned purple due to the manganese. This glass was only made for a short time from the 1870s to 1914 (Kendrick 1964; Newman 1970; Jones and Sullivan 1989). Amber or straw colored glass (not to be confused with brown colored glass) was the result of the use of a substitute chemical (selenium) used to bleach-out the glass, because manganese was scarce during World War I. This type of glass was generally produced from 1914 to 1930 (Kendrick 1964).

Other glass colors include milk glass and swirled mixed colored glass. Milk glass was an opaque white colored glass that was the color of milk, hence the name. Milk glass was most popular after the 1860s and was used for a wide variety of vessels and objects. Although some bottles were made of it, milk glass was used mostly for decorative dishes in the early 1900s. Milk glass was also extensively used for buttons and canning jar lid liners, replacing more expensive porcelain ceramics. Lid liners were being used to line the inside of zinc metal canning jar lids by the 1870s and their use continued into the 1910s. Swirled colored glass consisted of different colored glass swirled together. This type of glass was typically used in the production of machine made marbles, which were first produced in 1902 (Gartley and Carskadden 1987). Prior to this, glass marbles were made of blown glass. Games using marbles were a favorite past time for children in the 1800s and 1900s.

Unlike container glass and glass objects, which are generally classified as daily domestic refuse, window or flat glass is considered architectural. Window glass generally occurs in three colors, blue tinted, green tinted, or clear. All are highly

transparent. The blue or green tints are a result of the natural color of glass. They are difficult to distinguish from one another without viewing the edge of a pane or sherd and have no real bearing on glass chronology. It is understood that truly clear window glass is an indication of later time periods, most likely after 1900s.

METAL

Nails

Wrought nails are essentially handmade nails forged by a blacksmith. Machine cut nails are cut from sheets of metal by a machine, which gives them their squared shape. Wire nails are basically the same kind of nails that are used today. They are cut from a linear metal wire. Each of these nail types have chronological significance with respect to a particular time period during which they were manufactured.

Prior to 1800, nails had to be made by hand, which made them a rather expensive item to purchase. Because nails were fairly expensive, techniques that limited the amount of nails needed for construction prevailed, like log and stone buildings. Wrought nails were consistently made throughout the 1800s, despite the development of machine made nails. By 1800, cut nails had been developed, which allowed for the mass production of nails and the lowering of their price (Smith 1975; Nelson 1968). Although machine cut nails were cheaper than wrought nails, they were still an expensive item, particularly when they were not manufactured locally. Despite the fact that machine cut nails could be mass-produced, they did not become commonplace in construction until after the 1830s, when large nail factories were opened (Nelson 1968). Machine cut nails would be the preferred nail type throughout most of the 1800s.

Although the United States Patent Office granted the first patent for wire nails strong enough for heavy construction in 1877 (Loveday 1983; Wells 1998), they were used primarily for the construction of packing cases until the last two decades of the nineteenth century. However, by around 1890, wire nails had become the preferred nail for all construction, being even more inexpensive to produce than the cut nails (Smith 1975). Preiss (1973:90) suggests that an effective beginning date for the use of wire nails in building construction is 1880. By 1913, machine cut nails accounted for less than 10% of all nails produced in the United States (Loveday 1983).

BONE/SHELL

Animal bone and shell are typically recovered from historic archaeological sites, representing primarily the disposal of food remains used by people or the remains of an animal that had died on the spot. While food was the most common use for animals during the 1800s, a variety of items were produced with animal products. Many of these items rarely survive in the archaeological record (fur and leather garments or the various products made from animal fat). However, animal bones were also used to produce items

that are frequently found at archaeological sites, like buttons, combs, handles, or decorative items. Just about anything could be carved from bone, which essentially was the counterpart to plastic prior to the invention of that particular substance.

Although buttons were commonly made of metal, ceramic, and glass during the 1800s, they were often made from bone (South 1964). But, with the exception of ornately carved buttons, most bone buttons were generally used for casual or work clothing, because they were rather inexpensive to produce and bone was readily available. As with the bone buttons, shell buttons were also made throughout the 1800s (South 1964). While freshwater mussel shells from America's rivers were ample and inexpensive, domestic production of shell buttons did not occur until the 1890s. Most of the shell buttons used in America during the 1800s were made from marine mussel shell imported from Europe (Claassen 1994). While bone buttons became less popular towards the end of the 1800s and beginning of the 1900s, shell buttons became increasingly popular. The reason for this may have been that shell buttons were considered to be much more elegant than bone buttons. Even the simplest shell buttons produced a bright white and iridescent appearance that was commonly associated with formal clothing. Prior to the mass production of shell buttons in America, the European shell buttons were probably rather expensive.

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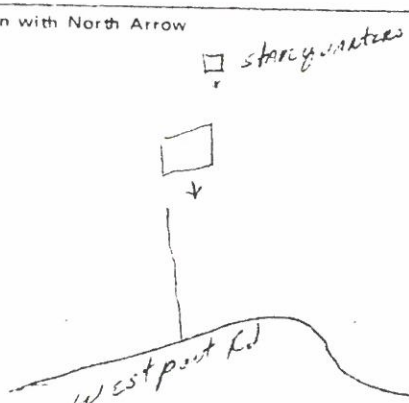
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KENTUCKY HISTORIC RESOURCES INVENTORY

JF-~~50~~ 391 44E III

1. Historic Name (s) <i>Westover (Vulcan George Rudy House)</i>		22. ADD/County <i>JE Jefferson/Jefferson</i>	
Original Owner <i>Vulcan George Rudy</i>		23. Zoning Classification Magisterial District	
Present Name		24. U.S.G. S. Quadrant (15'/75') <i>JEFFERSONVILLE, IND.</i>	
3. Owner's Name <i>Mrs. Louis W. Deems</i>		25. UTM Reference Zone <i>16</i> Easting <i>617400</i> Northing <i>4235900</i>	
4. Owner's Address <i>4319 Westport Road, Louisville</i>		26. Prehistoric Site Historic Site Building <input checked="" type="checkbox"/>	
5. Location <i>4319 Westport Road, Louisville</i>		27. District Name: <i>HELL-RUDY Family Houses</i>	
6. Open to Public Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		8. Ownership Private <input checked="" type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/>	
7. Visible from road Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		28. Significance Evaluation	
9. Local Contact/Organization		29. Status National Landmark <input type="checkbox"/> National Register <input checked="" type="checkbox"/> Landmark Certificate <input type="checkbox"/> Kentucky Survey <input checked="" type="checkbox"/> Local Landmark <input type="checkbox"/> HABS/HAER <input type="checkbox"/>	
10. Site Plan with North Arrow 		30. Theme Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Other <input type="checkbox"/>	
11. Architect		31. Endangered Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
12. Builder <i>Thomas Wins Hubbard</i>		32. ATTACH PHOTO	
13. Date <i>2. 1820</i>		Roll No. <i>see back</i>	
14. Style		Picture No. _____	
15. Original Use <i>Dwelling</i>		Direction _____	
16. Present Use <i>Dwelling</i>		33. Tape No. _____ Negative No. _____	
17. Condition Interior <i>good</i> Exterior <i>good</i>		34. Prepared by: <i>Mary Jean Appel</i> <i>Historian</i>	
18. Description <i>5-bay 2-story brick structure, see N.R. form for full description & history</i>		35. Organization <i>KHC</i>	
19. History <i>see back of next page for brief history. The Vulcan Rudy House is constructed on land included in the conveyance bought by John Hess from Joseph Edwards in 1817. The land was given to Hess's daughter, Elizabeth, upon her marriage to Vulcan Rudy around 1820. (over)</i>		36. Date <i>2/??</i>	
20. Significance		37. Revision Dates _____ 38. Staff Review _____	
21. Source of Information			