

**THE FINCASTLE POTTERY (44BO304): SALVAGE EXCAVATIONS
AT A NINETEENTH-CENTURY EARTHENWARE KILN
LOCATED IN BOTETOURT COUNTY, VIRGINIA**

TECHNICAL REPORT SERIES NO. 3

**Kurt C. Russ
Laboratory of Anthropology
Washington and Lee University
Lexington, Virginia 24450**



**Commonwealth of Virginia
Department of Historic Resources
221 Governor Street
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John M. McDaniel, Director of the Laboratory and Professor of Anthropology at Washington and Lee, has enthusiastically supported and allowed our domestic ceramic industry research to continue since its inception in 1984. His myriad contributions to this research are implicit throughout this report. The hard work and dedication of several Washington and Lee undergraduates or recent graduates including Thomas Langheim, William O'Brien, Jonathan Preziosi, Andrea Hickman, Katherine Park and John Metz provided for successful completion of the field and lab work.

Special thanks are extended to Amy Bidwell whose artistic talent is evident on the several figures she prepared for this report, Karen Lyle for her patience, good humor and skill in typing the report, and the staff of Washington and Lee's printing center for assisting with figure preparation.

Of course, all errors in fact or interpretation are my sole responsibility.

ABSTRACT

THE FINCASTLE POTTERY (44BO304): SALVAGE EXCAVATIONS AT A NINETEENTH CENTURY EARTHENWARE KILN LOCATED IN BOTETOURT COUNTY, VIRGINIA

Archaeological salvage excavations were conducted under the auspices of Washington and Lee University and the Virginia Department of Historic Resources at the Fincastle Pottery Site (44BO304) located in Botetourt County, Virginia. Justification for the work was two-fold. The site was facing the immediate threat of destruction; it was also relevant to Washington and Lee's research design and ongoing statewide survey of the historic pottery manufacturing industry in Virginia.

The archaeological research identified a rectangular, two-flued, arched groundhog-type earthenware pottery kiln. Artifacts recovered included glazed and unglazed earthenware waster shards largely from utilitarian storage vessels, earthenware tile fragments, kiln furniture and mid-nineteenth-century refined ceramics, glass, nails, and activities-related artifacts. Documentary research suggests the kiln was operated by Joel and Mathias Nofzinger during the mid-nineteenth century.

This work documents the technology involved in the production of earthenware during the mid-nineteenth century. The lack of documentation of "groundhog"-type earthenware kilns during this period and in this region -- predominantly characterized by circular, up-and-down draft stoneware kilns -- makes these data particularly valuable from a comparative perspective for understanding the technological evolution of the pottery manufacturing industry in Virginia.

INTRODUCTION

The Fincastle Pottery Site (44BO304) was identified as a result of Washington and Lee's county-level survey concerned with documenting and exploring the historic pottery manufacturing industry in Virginia (Russ 1986, 1988; Russ and McDaniel 1988; also see Russ 1984). Situated in the Fincastle area of Botetourt County, Virginia, an area settled during the 1770s and thought to be characterized by a concentration of earthenware manufacturing activities, the site was potentially important for contributing to our understanding of the industry in this region.

Testing of the site, during the fall of 1987 by students enrolled in an archaeological survey course under the direction of the staff of the Laboratory of Anthropology, resulted in the identification of a mid-nineteenth century earthenware "groundhog" kiln. Because of the lack of documentation of this kiln type in the region--where circular, up-and-down draft stoneware kilns predominate--the site was viewed as National Register eligible in terms of its potential to document nineteenth-century earthenware manufacturing and, from a comparative perspective, to lend insight into the evolution of technology in the pottery manufacturing industry in Virginia.

Additional excavations were recommended not only because of the important research potential this site held but also in light of the destructive threats the site faced--erosion into the drainage ditch cut along the edge of the highway as well as the landowner's plan to develop the area and bulldoze the site.

A brief report on the work at the site, its potential importance, and the immediate threat it faced was included in a paper describing Washington and Lee's statewide survey

of the historic pottery manufacturing industry, emphasizing work in the counties of Rockbridge, Botetourt, and Alleghany which was presented to the Archeological Society of Virginia Spring Symposium, "Ceramics in Virginia", at Piedmont Virginia Community College (Russ and McDaniel 1988). In response to this information as well as submission of a site survey form and brief report summarizing the testing effort (Russ 1988) (Appendix I), the Virginia Department of Historic Resources (DHR) evaluated the site with respect to specific criteria developed within its threatened archaeological site program. The response was to make available funding for salvage excavations and preparation of a report summarizing the findings. This report details the initial testing of the site conducted by Washington and Lee's Laboratory of Anthropology as well as the subsequent salvage excavations sponsored by the Virginia Department of Historic Resources threatened archaeological site program.

As previously mentioned, the archaeological testing phase of work at the Fincastle Pottery site was conducted during the fall of 1987. The students participating in the project included Andrea Hickman, William O'Brien, Katherine Park, Jonathan Preziosi, and Thomas Langheim. Kurt C. Russ, research archaeologist at Washington & Lee, served as principal investigator. This work was accomplished intermittently during the period from 13 October through 5 December 1987.

The salvage excavations, sponsored by the Department of Historic Resources, were conducted by Thomas Langheim, Andrea Hickman, and John Metz with Kurt Russ serving as project director. Andrea Hickman and Thomas Langheim processed the artifacts. Artifact analysis and report preparation was the responsibility of Kurt C. Russ. The

fieldwork took place during the period from 10 July to 10 August 1988. Artifact processing, analysis and report preparation were subsequently undertaken and completed during the winter and spring of 1989.

All artifacts (Appendix II), field notes, photographs and other documentary materials relating to the work conducted at the Fincastle Pottery are being curated at the Laboratory of Anthropology, Washington and Lee University, Lexington, Virginia.

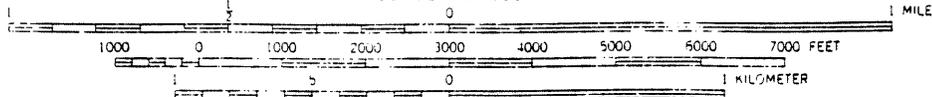
ENVIRONMENTAL SETTING

The site is located in the ridge and valley physiographic province just south of Fincastle, Virginia near the junction of Routes 640 and 602 (Figure 1). Identified as a mounded area adjacent to and just south of Route 640 at the edge of rolling pasture land, the site is at an elevation of approximately 1,280 feet above sea level.

The land on which the site is located is owned by Mr. John C. Dillon of Roanoke, Virginia. Mr. Dillon has divided the land into tracts and made them available for sale. Land alteration activities are planned for the site area in order to make the tract on which it is located more accessible. After contact by Washington and Lee (Appendix III), Mr. Dillon agreed to delay these activities until August 1988. During the interim, this tract of land was sold to a developer who planned to implement similar land alteration activities (which would result in destruction of the site) after which a house would be built and made available for sale. The closing date for the transfer of land deed was during mid-August, fortunately coinciding with the scheduled date for completion of salvage excavations.



SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
 DATUM IS MEAN SEA LEVEL

Figure 1. Map Showing the Location of the Fincastle Pottery (44BO304)

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Oral history and documentary research conducted in order to advance our knowledge of the historic pottery manufacturing industry in Botetourt County resulted in the recovery of information relevant to the location of the Fincastle pottery site (Russ 1986, 1988). Interviews with local informants, including Anna Gray Cronise and David Brough, revealed that a pottery site was located in the Amsterdam district of the County just east of Route 220. Surface pedestrian reconnaissance of the area by the author during May, 1985 resulted in the identification of a mounded area with glazed and unglazed earthenware shards scattered on the surface as well as eroding from the drainage ditch cut along Route 640. At this time the mounded area was in heavy vegetation being generally obscured from view. A research paper was written subsequent to the identification of the site and completion of preliminary documentary research (Russ 1986).

The potters associated with this site were unknown but oral history information had suggested two possibilities. First, Mrs. Cronise identified the house in which Philip Spigle lived as being located along Route 220 in the Amsterdam district of the county and further indicated that Spigle worked with Joseph Hinkle in a pottery shop located nearby. Pedestrian surface reconnaissance of the area failed to reveal any evidence of a pottery kiln. It was generally acknowledged according to family history that the Hinkle/Spigle pottery was destroyed with the construction of Route 220. Located nearby, however, just to the east of Route 220 along Route 640, is the Fincastle Pottery Site. Possibly, then, this was in fact the Hinkle/Spigle pottery shop. Another possibility suggested by the research was that this pottery was operated by Joel and Mathias Noftzinger and involved

George Fulton, as well. The oral history and documentary research indicated that this area of land was once owned by the Noftzingers. George N. Fulton is buried in the Noftzinger cemetery located northwest of the Fincastle Pottery Site, indicating that Fulton was in some way affiliated with the Noftzinger family. I will continue to explore these two possibilities as to which potters were associated with this site during the following presentation of relevant historical information about this early industry in Botetourt County.

Research conducted by the Laboratory of Anthropology at Washington and Lee University has resulted in the identification of 11 potters who worked in the Botetourt County area of Virginia during the nineteenth century indicating that this was, indeed, an important pottery center for the region (Table 1) (Russ 1984, 1986; Russ and McDaniel 1987a, 1987b). Perhaps the best known of these nineteenth-century potters is George N. Fulton, who produced in prodigious quantities a distinctive stoneware decorated with both manganese and cobalt oxides. Fulton was descended from a family who was deeply immersed in the pottery business in Fultonham, Ohio. Mr. Fulton's father and two brothers were potters; one brother having a kiln in Marietta and the other in Zanesville, Ohio. At the age of 21, Fulton moved to the Richmond area of Virginia and worked with David Parr, who had a successful pottery operation there. Thereafter, Fulton enlisted with the Union Army on the 23rd of July 1862 at Meadowbluff, Virginia, as a private in Company "E", 9th Regiment Virginia-West Virginia Infantry. He was later transferred in November 1864 to Company "B", First Regiment Virginia-West Virginia Veteran Infantry, and ultimately discharged on 14 June 1865 at Parkersburg, West Virginia as a private.

Table 1. Potters working in Botetourt County, Virginia, during the nineteenth century (also see Russ 1986, 1990a, 1990b).

Specific Location
Within the County

Fincastle/Amsterdam District/Western District # 8	<u>Potter</u>	<u>Approximate Dates of Operation</u>
	Edward Dunbar (b. ca. 1835)	ca. 1850
	Goerge N. Fulton (b.1835 - d. 1894)	ca. 1875-1894
	Robert Fulwiler (b. July 22, 1825 - d. June 17, 1908)	ca. 1850
	Joshua Hill (b. ca. 1790)	ca. 1850
	Joseph (Jessee) Hinkle (Henkle) (b. ca. 1796, in Maryland)	ca. 1830-1850
	Joel Noftzinger (b. Feb. 11, 1812 - d. Oct. 3, 1857)	ca. 1850
	Mathias Noftzinger	ca. 1850
	Peter M. Obenchain (b. 1828)	ca. 1850-1880
	William Obenchain (Obenshane) (b. 1804)	ca. 1860-1880
	Philip Spigle (b. Nov. 9, 1828 - d. Feb. 16, 1880)	ca. 1850-1880

After his service in the War Between the States, Fulton moved to the Potts Creek area of Alleghany County. There he established a pottery and had a thriving business from circa 1867 until 1875, according to oral and family history, although census records indicate he was still an active potter in Alleghany County in 1880 (Russ and Langheim 1988). Although Fulton is not listed in any census records, land records, or will books for Botetourt County, Virginia, (Arrit 1982:68) indicates that Fulton moved to a farm near Fincastle where he also established a pottery which he operated until his death in 1894. Fulton and his wife, Sarah Ellen Schaffer, are buried in the old Noftzinger cemetery which is located south of Fincastle along Route 220, situated on a hilltop just to the northwest of the pottery shop described herein. Fulton's inclusion in the Noftzinger cemetery and the oral tradition which indicates that Fulton lived on Noftzinger land after moving to Botetourt County, together with the lack of documentary evidence for Fulton's residence in Botetourt County, provides contradictory evidence regarding Fulton's residence and involvement with the Noftzingers in pottery manufacture in Botetourt.

Undoubtedly, the Noftzingers played a role in the manufacture of pottery in the county. Both Joel and Mathias are listed as potters in the 1850 U.S. Census (Table 1). No other details have been found in the documentary record regarding their involvement in the county's pottery industry. Because of the paucity of information, it was thought heretofore that their place in the industry was limited perhaps restricted to their working for another established potter.

As early as 1830, Jessie Hinkle worked in the county as a potter (Table 1). He was born in Maryland in 1796 and probably learned the pottery trade there by apprenticing

to an established potter. Having acquired the requisite skills, Hinkle moved to Botetourt County, Virginia during the early nineteenth century and established his own pottery business (Russ 1986). Philip Spigle, who worked with Hinkle, is listed on the 1850 County census. Spigle was "a potter of considerable talent and had a pottery shop in Amsterdam" (Austin and Austin 1977:166) which is located south of Fincastle along Route 220. Hinkle and Spigle produced lead-glazed earthenware utilizing both combing and free-hand incising as decorative treatments (Russ 1986). One extant semi-ovoid lead-glazed storage vessel with lid is signed Jessie Hinkle, Botetourt County, Virginia and dated 1839. This presentation piece exhibits a variety of incised decoration and was made by Hinkle for Mrs. Spigle. The vessel was acquired from Philip Spigle's granddaughter, Mrs. Meta Bertha Coffman Cronise, and her daughters, who still reside in Botetourt County.

Although this is the only signed Hinkle piece known, several pieces with similar form, glaze, and decorations survive in local collections. At least one piece with the typical lead-glaze and incised decoration on both the body of the vessel and matching lid has been identified with an "S" stamped in the bottom, undoubtedly indicating its manufacture by Spigle. A lead-glazed earthenware pitcher with an incised floral motif was handed down in the Spigle family as was a large impressive lead-glazed bowl with a prominent rim and bold applied handles.

In summary, oral history information and documentary research provide two possibilities as to which potters were associated with the Fincastle pottery kiln: (1) Jessie Hinkle and Philip Spigle or (2) Joel and Mathias Noftzinger, possibly in association with George N. Fulton.

FIELD INVESTIGATION AND FINDINGS

Testing Phase

Utilizing a surveyor's transit five five-foot square excavation units were established across the mounded kiln area on an east/west axis approximately parallel to Route 640 (Figure 2). With shovels and trowels, excavation was completed in Units 3 and 4. These units were chosen for excavation as they were located in the approximate center of the mounded kiln area thereby increasing the likelihood of defining a structural feature of the kiln such as a wall or foundation. All soil excavated from the units was screened through one-quarter inch wire mesh. No stratified soil horizons were observable and artifacts were collected according to arbitrary 12-inch levels.

Unit 3

The archaeological test excavations revealed two roughly parallel brick kiln walls, one in Unit 3 and one in Unit 4 (Figure 3). The kiln wall observed in Unit 3 is composed of alternating courses of bricks laid as follows: one course is arranged so that the interior and exterior bricks are lengthwise or parallel to the interior flue, while the bricks comprising the middle of the wall are laid out perpendicular to these bricks. The alternating layer is oriented so that the bricks are perpendicular to the interior flue being set end-to-end. The wall runs the entire length of the unit at a northeast/southwest orientation. Its westernmost edge measures 64 inches in length and the easternmost edge measures 40 inches in length at which point it turns to the east appearing to form a southern wall which joins the kiln wall observed in Unit 4. The remnant of what appears to be a southernmost wall measures approximately 2-1/2 feet in length and may represent either the southernmost extent of the kiln or the kiln walls may, perhaps, continue beyond this point to form another kiln chamber further to the south.

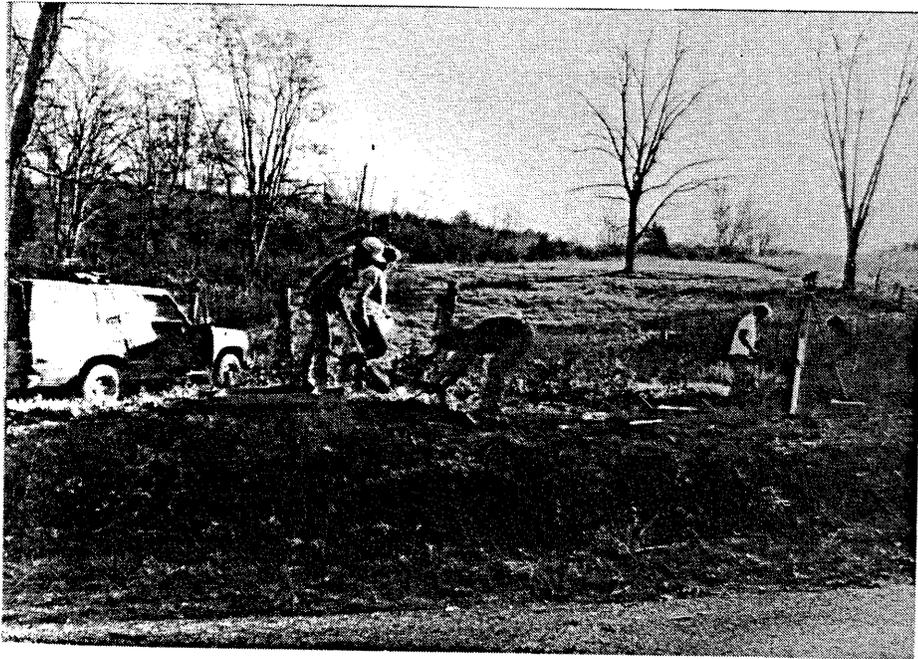


Figure 2. Initial testing excavations in progress at the Fincastle Pottery (44BO304).



Figure 3. Completion of the testing phase of excavations at 44BO304 revealed two parallel brick kiln walls separated by a flue with mortared floor; view to the north.

Unit 4

The kiln wall observed in Unit 4 is roughly parallel to the wall observed in Unit 3 and runs to the southwest for a distance of approximately 4 feet 6 inches before it appears to turn to the west forming the other end of the southernmost wall previously mentioned (Figure 4). The Unit 4 kiln wall consists of five courses of bricks composed of four rows of bricks laid side to side parallel with the kiln flue. Large roots substantially disturbed the southeastern portion of the kiln wall observed in Unit 4.

A portion of what appeared initially to be the southern wall of the kiln which may have connected the walls observed in both Units 3 and 4 was also disturbed near what would have been its juncture with Unit 4 as a result of the placement of a fencepost in this area after the kiln had fallen out of use. The two kiln walls observed in Unit 3 and Unit 4 are separated by a flue measuring approximately 2-1/2 feet in width running almost the entire length of the walls (see Figure 3). Both the western face of the kiln wall observed in Unit 4 and the eastern face of the wall observed in Unit 3 exhibit a heavy glaze deposit, indicating they faced an interior kiln flue. The area to the west of the kiln wall observed in Unit 3 contains large limestone rocks which appear to have been laid against the exterior of the wall to provide support, insulation, and protection for the kiln structure. This situation, however, is not observed to the exterior or to the east of the wall observed in Unit 4. This, together with the variation and the arrangement of bricks observed between the two walls and the presence of glaze deposits on the easternmost side of the wall observed in Unit 4, suggests that the area to the east of this kiln wall represents another flue.

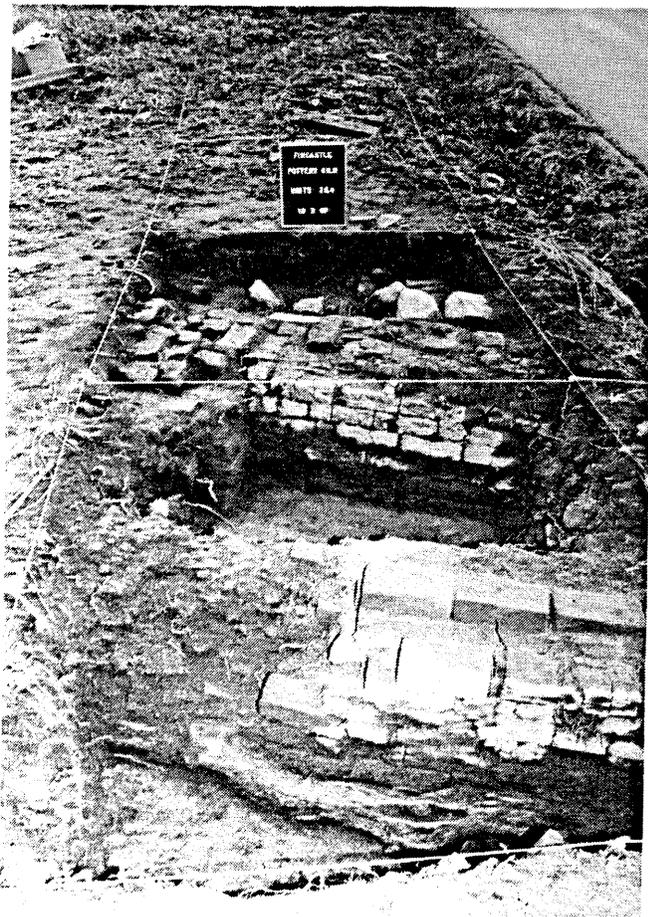


Figure 4. Detail of kiln walls showing heavy glaze deposit, mortared floor of easternmost kiln flue in foreground, disturbed southern kiln wall extending from western kiln wall; view to the west.

Figure 5. Southern portion of western kiln flue showing termination of mortared floor and remnant of possible southern wall connecting kiln walls; view to the south.



Excavation in the flue between Units 3 and 4 revealed a mortared floor at a depth of approximately two feet below the ground surface and approximately 20 inches below the top of the interior kiln wall (see Figure 4). Continued excavations in Unit 4 also revealed the presence of a mortared floor beyond the kiln wall observed in that unit. The floor was at a similar elevation as that recorded for the floor in the flue between the walls in Units 3 and 4. The presence of the mortared floor to the west of the wall observed in Unit 4 is further evidence that the Unit 4 kiln wall is, in fact, a central kiln wall within an exterior kiln wall, probably located further to the east of Unit 4 in the unexcavated area of Unit 5.

The mortared floor lining the western flue ends approximately 11-1/2 inches before it would have run into what has initially been interpreted as the southern wall of the kiln (Figure 5). The area to the south of the mortared floor is characterized by a heavy ash deposit containing artifacts, beneath which is a hard-baked earthen floor. The mortared floor, heavy ash deposit, and baked clay subsoil are suggestive of a presence of a fire box located further to the south, although continued excavations are necessary to evaluate this hypothesis. It should also be noted that the remnant of an arch constructed of bricks was observed along the top eastern portion of the kiln wall observed in Unit 4 and is taken as evidence indicating the two flues were arched over with brick. The structural evidence encountered during the testing phase of the excavations at the Fincastle Kiln indicates a two-flued, arched, rectangular groundhog or clamp-style pottery kiln.

Salvage Excavations

The methodology implemented during the salvage phase of the excavations at 44BO304 was consistent with that of the testing phase. Four additional excavation units

(6,7,8,9) were established immediately south and contiguous with Units 2-5 in order to further explore the exposed structural features of the kiln as well as its possible continuation perhaps in the form of a fire box arrangement to the south (Figure 6). Excavations were completed in Units 3 and 4 and begun in Unit 5 in order to explore the possibility of another kiln wall as suggested by interpretations of the structural features encountered during the testing excavations.

Freezing and thawing during the time excavations were halted in December, 1987 caused only minimal damage to the top layers of bricks forming the western and central kiln walls. In addition, some visits to the site by curious local inhabitants caused some collapse of unit walls and at least one small pot-hole within the site area. The northernmost bank of the site which forms part of the drainage ditch was also eroded considerably and the northernmost walls of Units 3, 4 and 5 showed only modest integrity as a result.

Unit 5

Excavations in Unit 5 confirm the presence of an additional eastern exterior kiln wall (Figure 7). This wall is parallel with and approximately 30 inches to the east of the central kiln wall. The exterior wall observed in Unit 5 exhibits only modest integrity apparently as a result of disturbance by substantial root growth from a large tree located further to the north. A mortared floor runs the entire length of the flue separating the central kiln wall from this exteriormost or easternmost kiln wall. Both kiln flues are approximately 2-1/2 feet in width and both are mortared (Figure 8). This exterior most kiln wall appears to run the length of the unit in roughly a north to south direction. Although disturbed, it appears that the southernmost portion of this wall turned to the west, forming another wall which would have joined the central kiln wall. It also appears



Figure 6. Salvage excavations at 44BO304.

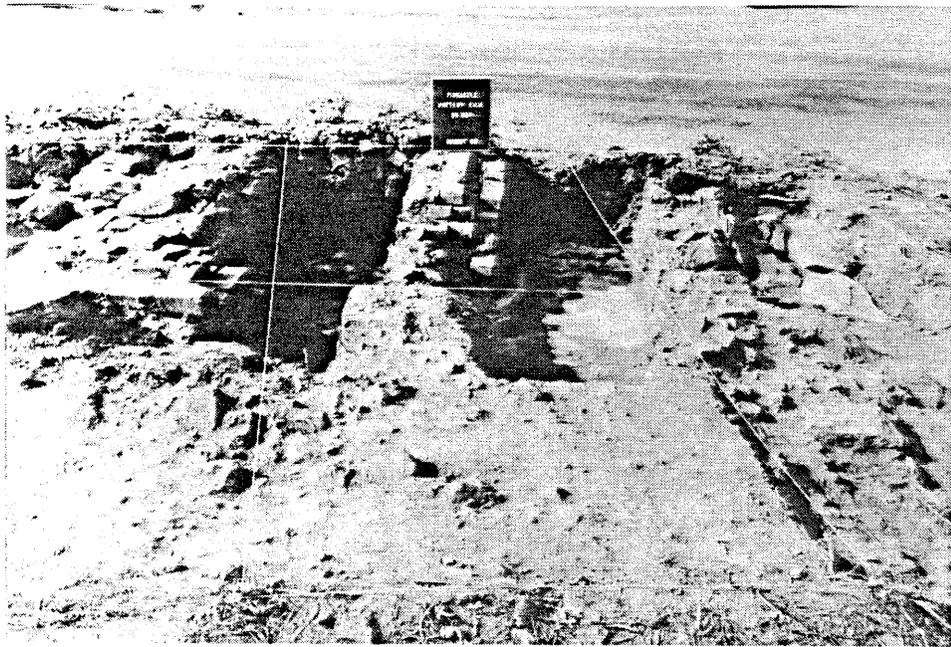


Figure 7. Overall view of site area during salvage phase of excavation showing easternmost kiln wall and kiln channels extending to the south of both flues; view to the north.

that approximately 10 inches of the wall's length measured from the southernmost portion would have been involved in the east/west oriented wall which would have joined the central kiln wall (termed the southern wall during the testing phase and which appeared to connect the westernmost kiln wall with the central kiln wall). The undisturbed portions of the western face of the eastern wall exhibit the characteristic glaze deposit indicating the wall faced an interior flue. The area to the east of the eastern kiln wall observed in Unit 5, although also disturbed, is characterized by both brick and limestone rocks which were placed against the outside of the kiln to provide support, insulation, and protection for the kiln structure. This situation mirrors that observed to the outside of the western wall in Unit 3 and provides further support for the interpretation that this is in fact an exterior kiln wall.

Units 7 and 8

Archaeological excavations were undertaken in Units 7 and 8 in order to expose: (1) what initially appeared to be an east/west oriented wall (the southern wall) connecting the eastern and central kiln walls; and (2) the concentration of large-to-moderate size brick rubble in this general vicinity. The excavations revealed what appeared to be a continuation of the flue further to the south in the form of two parallel walls extending southward (Figures 9 and 10). These walls were not flush with the western and central kiln walls respectively, but rather appeared to extend toward the kiln flue for an approximate distance of eight inches from the western wall and four inches from the central wall. These two brick walls were separated by a distance of approximately 18 inches defining a channel. The western channel is approximately 23 inches long, while the eastern channel



Figure 8. Structural features of the Fincastle kiln include one central, two parallel exterior brick kiln walls separated by two flues with mortared floors with remnants of channels extending to the south of each flue, view to the northeast.

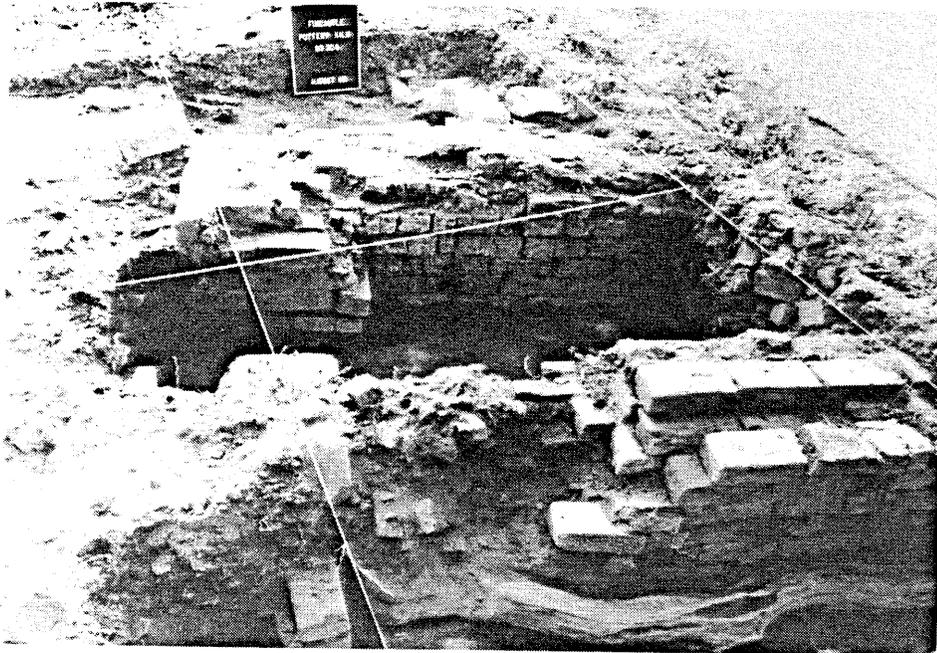


Figure 9. Photograph emphasizing kiln channels. Note western face of western channel wall as well as two bricks in foreground representing remnant of disturbed western wall of eastern channel; view to the west.

wall is approximately 19 inches long. The mortared floor lining the western flue ends at the juncture of the flue with the channel. The channel floor is characterized by a highly-baked compact clay soil. A row consisting of four large bricks or brick fragments, each approximately five inches in length, set side to side, is observed at the southernmost extent of the western channel. This row of bricks is only one layer in height and may have defined the termination of this western channel which is connected further to the north with the western kiln flue.

Excavation in Layer 2 of Unit 4 along the southern extent of the eastern flue, as well as in Unit 8, Layer 2, revealed two bricks representing what appeared to have been the western wall of the eastern channel. This would have been parallel and symmetrical to the channel extending to the south of the western flue (see Figures 9 and 10). Significant disturbance caused by the growth of a tree in the northeastern quadrant of Unit 8 as well as in the southeastern quadrant of Unit 4 resulted in a lack of integrity for what appears to have been the eastern channel. In other words, the eastern channel extending from the south of the eastern flue exhibits only minimal integrity and is poorly defined archaeologically. It is clear, however, from similarities between the brick arrangements and variation in floors observed between the flue and the channel, that a symmetry existed in terms of the original definition and appearance of the eastern channel mirroring that of the western channel.

Continued excavation of the channels and areas further to the south revealed significant disturbance of the eastern channel as a result of tree root activity and an absence of any evidence of a fire box or stoke pit to the south of either channel (Figure

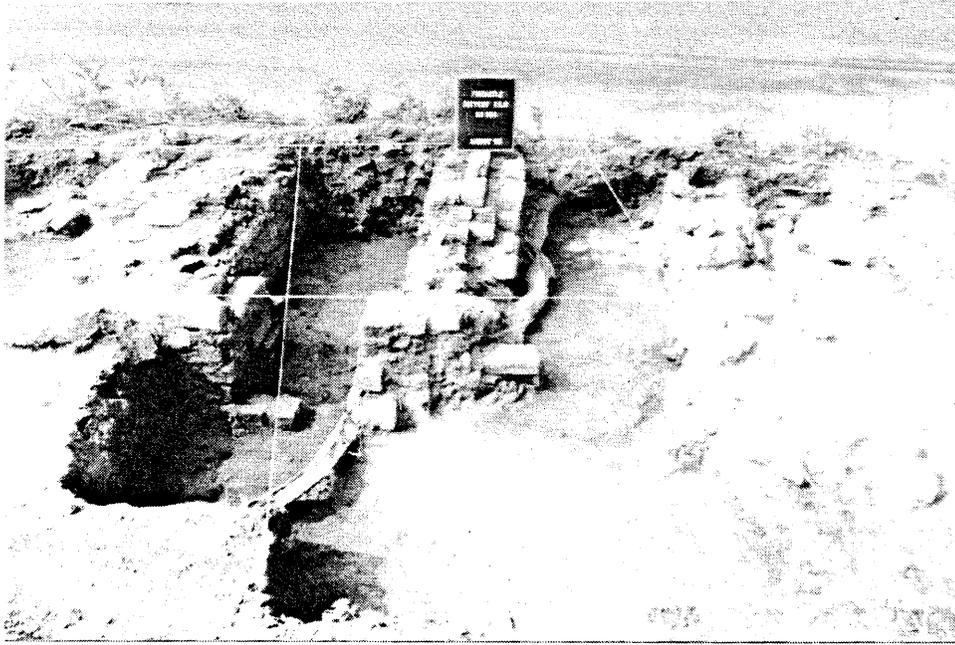


Figure 10. Completed excavations in Units 7 and 8 reveal preserved features of kiln channels; view to the north.



Figure 11. Overall view of 44BO304. Note disturbed eastern kiln wall in foreground with layered limestone rocks and bricks placed against exterior of wall; view to the west.

11). As a result, the channels are interpreted as having a flue-venting function providing for the escape of fire, smoke and fumes from the flues into the channels and then into the kiln chimney system. The heavy rubble concentration in the area of and to the south of the channels is interpreted as a disturbed and collapsed chimney base. The termination of the baked clay floors to the south of the channels proper indicates their southernmost extent and what is now interpreted as the beginning of the chimney base flue system.

The salvage excavations served to verify the existence of an eastern kiln wall confirming the interpretation of the groundhog kiln as being two-flued or channeled (Figure 12). What were interpreted as southern kiln walls during the testing excavations were found to actually represent channels leading from the respective kiln flues southward. Exploration of these newly discovered features and the areas surrounding them failed to identify any features suggestive of a fire box or stoke pit arrangement. As a result, the kiln channels are interpreted as having a flue-venting function and the rubble surrounding them was interpreted as a collapsed and highly disturbed chimney-base flue system.

Summary of Field Findings

The testing and subsequent salvage excavations revealed structural foundations and features interpreted as a double-chambered, two-flued, arched, rectangular groundhog pottery kiln (Figure 13). The portions of the kiln which had not been destroyed included evidence of one central and two exterior kiln walls separated by flues with mortared floors leading into smaller channels which provided a flue venting function leading into the

chimney system representing the kiln's proximal end. Figure 14 provides an artist's conjectural sketch of the rear portion of the kiln and chimney.



Figure 12. Structural features revealed during salvage excavations suggest southern portion of kiln represents highly disturbed chimney base; view to the east.

Groundhog Kiln Overview

The American groundhog kiln is simply a cross draft-rectangular kiln usually built into a hillside or slope with a firebox situated on the lower ground level at the front of the

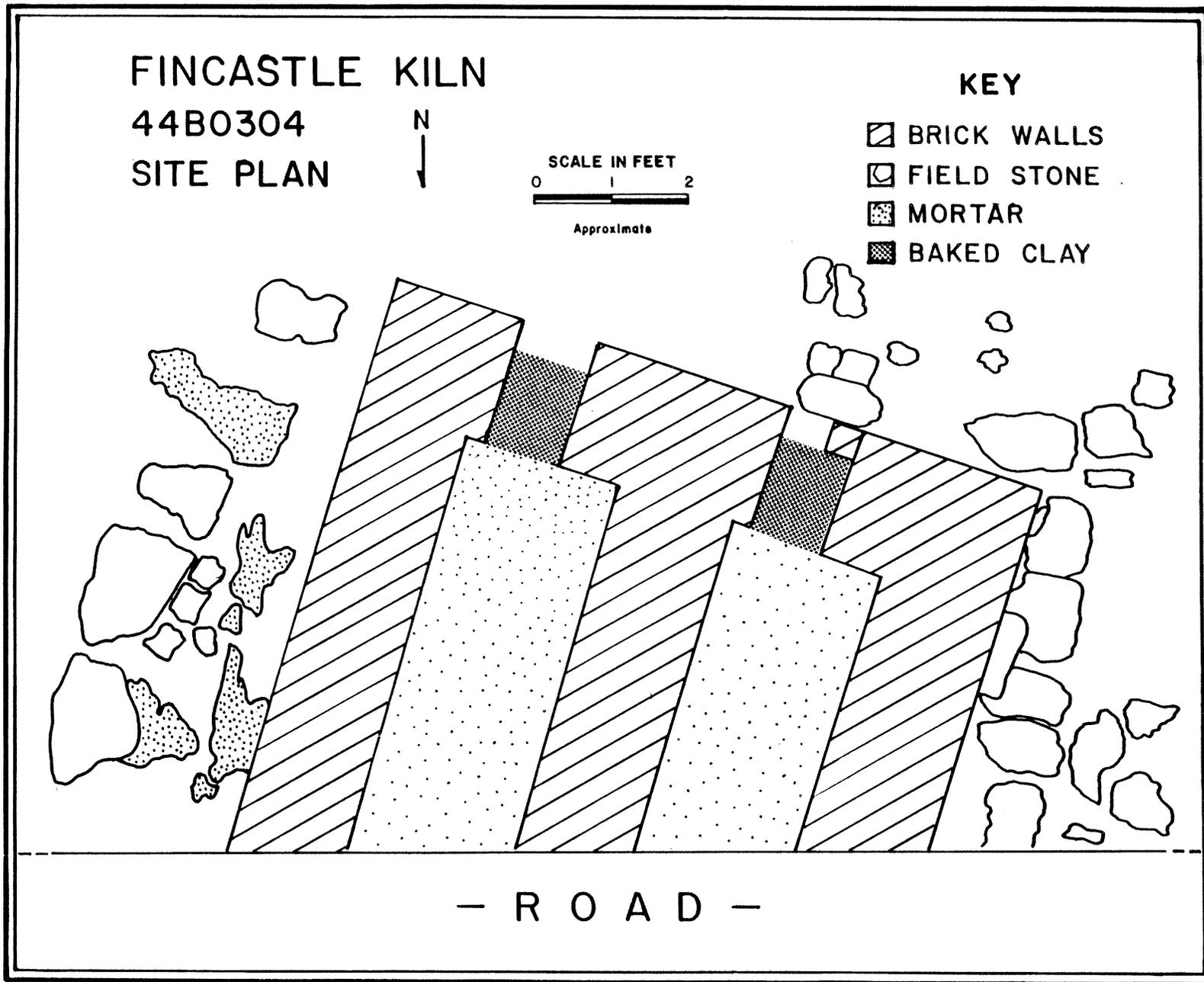


Figure 13. Site plan map of 44B0304 showing structural features of kiln

kiln (Greer 1977:45, 1979:142) (Figure 15). The low linear nature of the kiln, earthen banking of its sidewalls, and front opening result in it resembling an animal burrow and undoubtedly related to the development of the name (Greer 1977:46).

According to Greer (1977:46), constant features of this kiln type include:

a firebox at the front end; a single flat shelf for loading the wares and forming the floor of the firing chamber, this being raised at least 18-24 inches above the floor of the firebox; and a true chimney structure terminating the kiln at the rear.

The expression of these constant features is highly variable between individual kilns as noted by Greer and illustrated by the Fincastle example. As detailed previously, the Fincastle Pottery Kiln has three brick walls separating two parallel flues with mortared floors. The outside of the two exterior walls were banked with both earth and limestone rock providing support and insulation. The central kiln wall separates the two flues each of which were arched over with brick. It is within the firing chamber that vessels were stacked for firing. Leading from the flues into the chimney base are two channels which would have functioned in controlling the exiting kiln draft. The structure of the kiln's firebox is presently unknown because what may survive of the front portion of the kiln lies below the road to the north. Firebox dimensions were commonly eight feet wide and four feet deep. The Fincastle kiln was probably between 16 and 20 feet long, which is the general length range for documented groundhog kilns. Its width is approximately nine feet which is just beyond the six-to-eight-foot width range observed by Greer (1977:47). In terms of the kiln operation, when fired the heat or flames travel up from the firebox and a bag or baffle wall directs them over into the firing chamber where they travel across the kiln firing the stacked vessels, eventually escaping through the chimney.

ARTIFACT ANALYSIS

A total of 2,482 artifacts was recovered from both the testing and salvage excavations conducted at the Fincastle Pottery (Tables 2 and 3). Of this number, 1,767 or 71.2% were recovered from the salvage excavations (Table 3), while the remaining 715 or 28.8% were found during the initial testing phase of the excavations (Table 2). Of the combined total of artifacts recovered from both phases of excavation, 72.2% are industry manufactured items while 27.8% are non-industry manufactured items.

Among the recovered industry manufactured items, 59.45% were earthenware vessel fragments, 3.79% unglazed tile fragments, 14.11% coarse earthenware shards, 2.29% unidentified earthenware fragments, 19.86% kiln furniture, and .5% stoneware shards (Table 3). Of the 1,066 earthenware vessel shards, 12.1% are glazed or unglazed rim shards, 78.4% are body shards, 9.1% are base shards, .3% are handle fragments, and .1% is a possible lid fragment. With respect to glazing, 22.1% of the 1,066 earthenware vessels are unglazed, 4.8% have both interior and exterior glaze, 71.8% have interior glaze only and 1.3% have exterior glaze only (Table 4). Based on the reconstruction of several crocks, the most common vessel form represented in the assemblage is the wide or open-mouth storage crock (Figure 16). Several rim treatments were observed on this crock form and are illustrated in Figure 17. Two unique vessel forms were recognized from Unit 7, Layer 2, including two tall cylindrical, straight-sided jar forms and one shallow unglazed earthenware bowl form. Decorative treatments and maker's marks are generally absent from the shards excavated at 44BO304 with the exception of one interior glazed body shard with an incised "3", probably indicating vessel capacity (Unit 7, Layer 1), as well as another interior glazed body shard with the exterior exhibiting incised letter-

Table 2. Artifacts recovered from the testing phase of excavations at the Fincastle Pottery Kiln according to provenience.

ARTIFACT TYPE TYPE	PROVENIENCE										TOTAL	
	UNIT 1		UNIT 2		UNIT 3		UNIT 4		UNIT 5			
	LAYER 1	LAYER 2	LAYER 1	LAYER 2	LAYER 1	LAYER 2	LAYER 1	LAYER 2	LAYER 1	LAYER 2		
Earthenware											<u>272</u>	(38.04%)
Unglazed Shards												
base					1	0	1	1			3	
body					14	10	9	27			60	
rim					2	1	6	0			9	
Interior lead-glazed shards												
base					0	2	0	19			21	
body					6	30	3	106			145	
rim					4	4	0	20			28	
Int./Ext. lead-glazed shards												
base					0	0	0	0			0	
body					1	0	0	5			6	
rim					0	0	0	0			0	
Tile Fragments											<u>7</u>	(.98%)
glazed and unglazed shards					0	0	3	4			7	
Coarse Earthenware Shards											<u>97</u>	(13.57%)
curved (body)					26	2	16	6			50	
flat (base)					16	0	26	5			47	

Table 2. Artifacts recovered from the testing phase of excavations at the Fincastle Pottery Kiln according to provenience (continued).

ARTIFACT TYPE TYPE	PROVENIENCE										TOTAL		
	UNIT 1		UNIT 2		UNIT 3		UNIT 4		UNIT 5				
	LAYER	1	2	1	2	1	2	1	2	1	2		
Kiln Furniture												<u>215</u>	(30.07%)
Hand-formed circular pins					99	9	60	17				185	
Placing Bars					1	0	7	2				10	
Points					5	1	1	0				7	
Stilts					3	0	2	0				5	
Triangular pins					3	0	3	0				6	
Spurs					0	0	1	0				1	
Possible sagger					0	0	0	1				1	
Miscellaneous												<u>124</u>	(17.34%)
Undecorated whiteware					4	0	16	4				24	
Bottle glass													
Clear					13	0	43	2				58	
Blue					10	0	4	1				15	
Pink					3	0	4	0				7	
Olive green					0	0	3	0				3	

Table 2. Artifacts recovered from the testing phase of excavations at the Fincastle Pottery Kiln according to provenience (continued).

		PROVENIENCE											
ARTIFACT TYPE		1		2		3		4		5		TOTAL	
TYPE		1	2	1	2	1	2	1	2	1	2		
Glassware						0	0	1	0			1	
Nails						0	0	1	1			2	
Cut						2	0	2	0			4	
Wire													
Staple						0	0	0	3			3	
Tack						0	0	1	0			1	
Screw						1	0	0	0			1	
Metal gear						0	0	0	1			1	
Unidentifiable Metal						0	0	2	0			2	
Animal Bone						0	0	1	0			1	
						214	59	217	225			715	(100%)
						273 (38.18%)		442 (61.82%)					

Table 3. The Fincastle Pottery Site (44BO304) artifact assemblage from salvage excavations according to provenience.

ARTIFACT TYPES	UNIT LAYER	1		2		3		4		5		6		7		8		9		TOTAL
		1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	
<u>Industry Manufactured Items</u>																				
Earthenware Vessels																				
Rim																				
Unglazed								0	3	1			2	5	4	0	2			17
Interior & Exterior lead-glaze								3	1				0	6	0	0	0			10
Interior lead-glazed only								10	3	2			4	12	16	11	7			65
Body																				
Unglazed								19	13				10	17	26	29	7			121
Interior & Exterior glaze								6	1				1	11	2	7	4			32
Interior glaze only						2		73	55	3			16	113	97	41	56			456
Interior glaze with incising								1					1	0	0	0				2
Exterior glaze only								0	1				1	7	4	1				14
Base																				
Unglazed								0	4				3	3	8	3	3			24
Interior & Exterior glaze								0					0	0	0	0	1			1
Interior glaze								9	10	1			0	6	7	9	6			48
Handle																				
Strap with glaze								0		1			1	0	0	0				2
Applied with glaze								0						0	1	0				1
Possible Lid																				
Unglazed													1			0				1
Tile Fragments																				
						1		15	3				6	19	8	8	1			61
Coarse Earthenware Shards																				
Rim						1		6	5				5	2	2	3	2			26
Body						1		2	4				10	5	9	6	13			50
Base						1		7	33				10	2	5	14	8			80
Unidentified																				
								13	4	1			5	5	0	5	8			41
Kiln Furniture																				
Placing Bars						8		9	22				31	5	9	10	7			101
Hand-Formed Circular Pins						1		4	11				4	1	4	1	3			29
Points									1						2					3
Stilts													1		2					3
Spurs																				0
Circular Placing Piece																	1			1
Possible Saggar																				0
Triangular Pin								1	1				1	1						4

Table 3. The Fincastle Pottery Site (44B0304) artifact assemblage from salvage excavations according to provenience (continued.)

ARTIFACT TYPES	UNIT 1		2		3		4		5		6		7		8		9		TOTAL
	LAYER	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2		
Stoneware Vessels																			
Body																			
Salt-glazed													1						1
Lead/slipped glaze														2			6		8
<u>Miscellaneous Items</u>																			
Ceramics																			
Whiteware						1		1	7				2		12	2	19		44
Stoneware																			
Bristol/slipped glaze															5				5
Bristol Int./Salt-Glazed Ext.															1		1		2
Earthenware																			
Refined with Brown Glaze						1							1				9		11
Nails																			
Cut								1	7	1			4	1	4	2	9		29
Roundwire									34						2	1	8		45
Fence													1				2		3
Bottle/Jar Glass																			
clear								1	5	2			5		91	3	63		170
blue/green						5		1	2				2		10		3		23
pink/purple															4		3		7
olive green										1			2		5	2	1		11
Flat Glass																			
clear								1	8						2		5		16
blue/green									10	1			1		28		69		109
Fence wire															1				1
Tin Container Fragments									2								80		82
Iron Container /Lid Fragments																	2		2
Iron Horseshoe																	1		1
Iron Bar													1						1
Unidentified Iron Implement/Tool																	1		1
Brass Rivet															1				1
Brass Clock Furniture Part															1				1
Stamped "Waterbury Clock "Co."															1				1
TOTALS								22	185	248	14		133	223	373	159	410		1767

Table 4. Totals and percentages of industry manufactured items from both testing and salvage excavations at 44B0304.

	SALVAGE	TESTING	% / TOTAL
			<u>59.45</u> <u>1066</u>
EARTHENWARE VESSELS			
Rim			
Unglazed	17	9	26
Interior & Exterior	10	0	10
Interior Only	65	28	93
Body			
Unglazed	121	60	181
Interior & Exterior	32	6	38
Interior Glaze	456	145	601
Interior Glaze w/incising	2	0	2
Exterior Glaze	14	0	14
Base			
Unglazed	24	3	27
Interior & Exterior	1	0	1
Interior	48	21	69
Handle			
Strap with glaze	2	0	2
Applied with glaze	1	0	1
Possible Lid			
Unglazed	1	0	1
TILE			<u>3.79</u> <u>68</u>
Unglazed	61	7	68
COARSE EARTHENWARE SHARDS			<u>14.11</u> <u>253</u>
Rim	26	50	126
Body	50		
Base	80	47	127
UNIDENTIFIED			<u>2.29</u> <u>41</u>
Misc. fragments	41	0	41
KILN FURNITURE			<u>19.86</u> <u>356</u>
Placing Bars	101	10	111
Hand Formed Circular Pins	29	185	214
Points	3	7	10
Stilts	3	5	8
Spurs	0	1	1
Cir. Placing Piece	1	0	1
Possible Saggar	0	1	1
Triangular Pin	4	6	10
STONEWARE			<u>0.50</u> <u>9</u>
Body			
Salt-glazed	1	0	1
Lead-glazed	8	0	8
TOTAL	1,202	591	<u>100 / 1793</u>

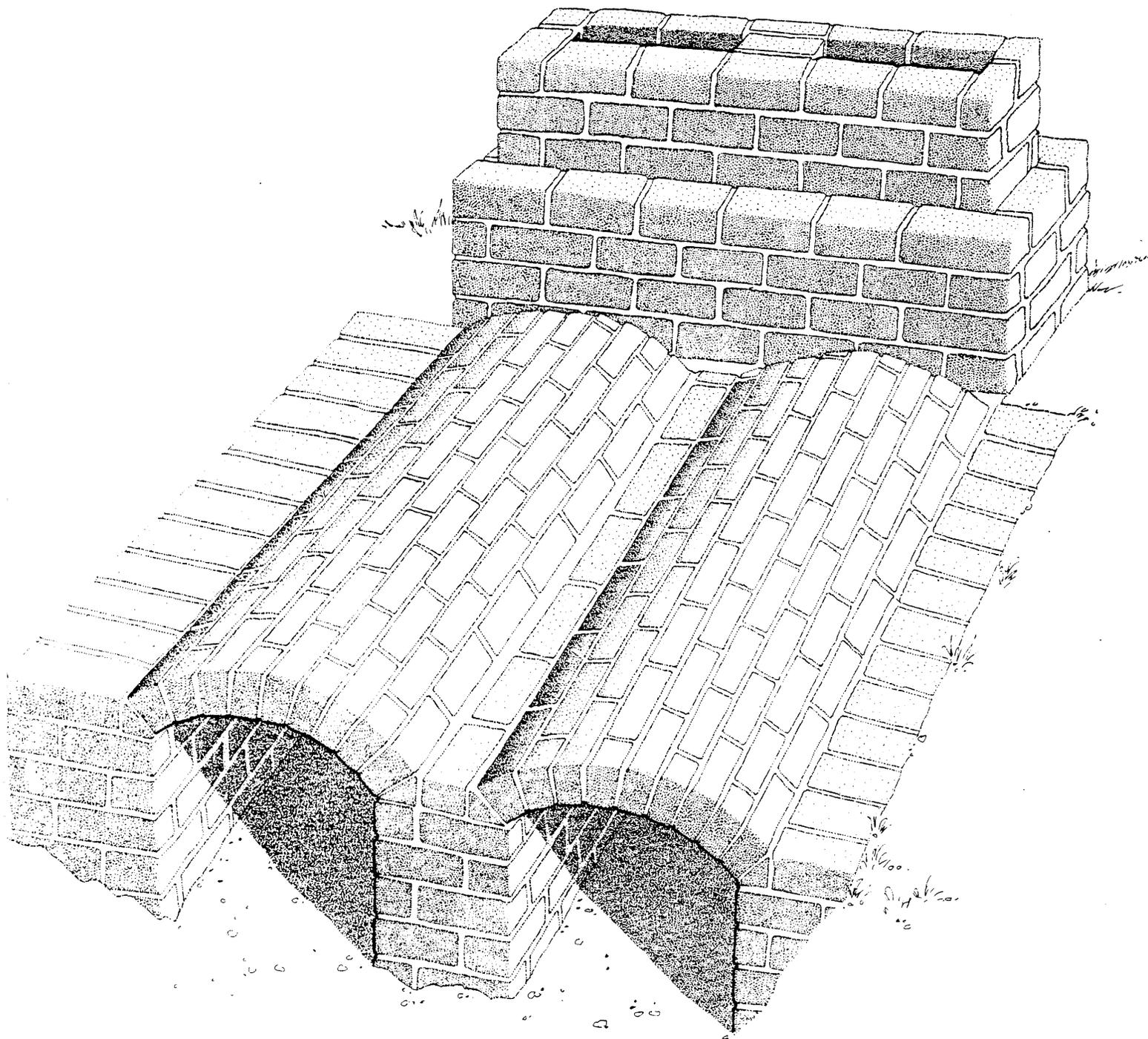


Figure 14. Artist's conjectural sketch of the rear portion of kiln and chimney

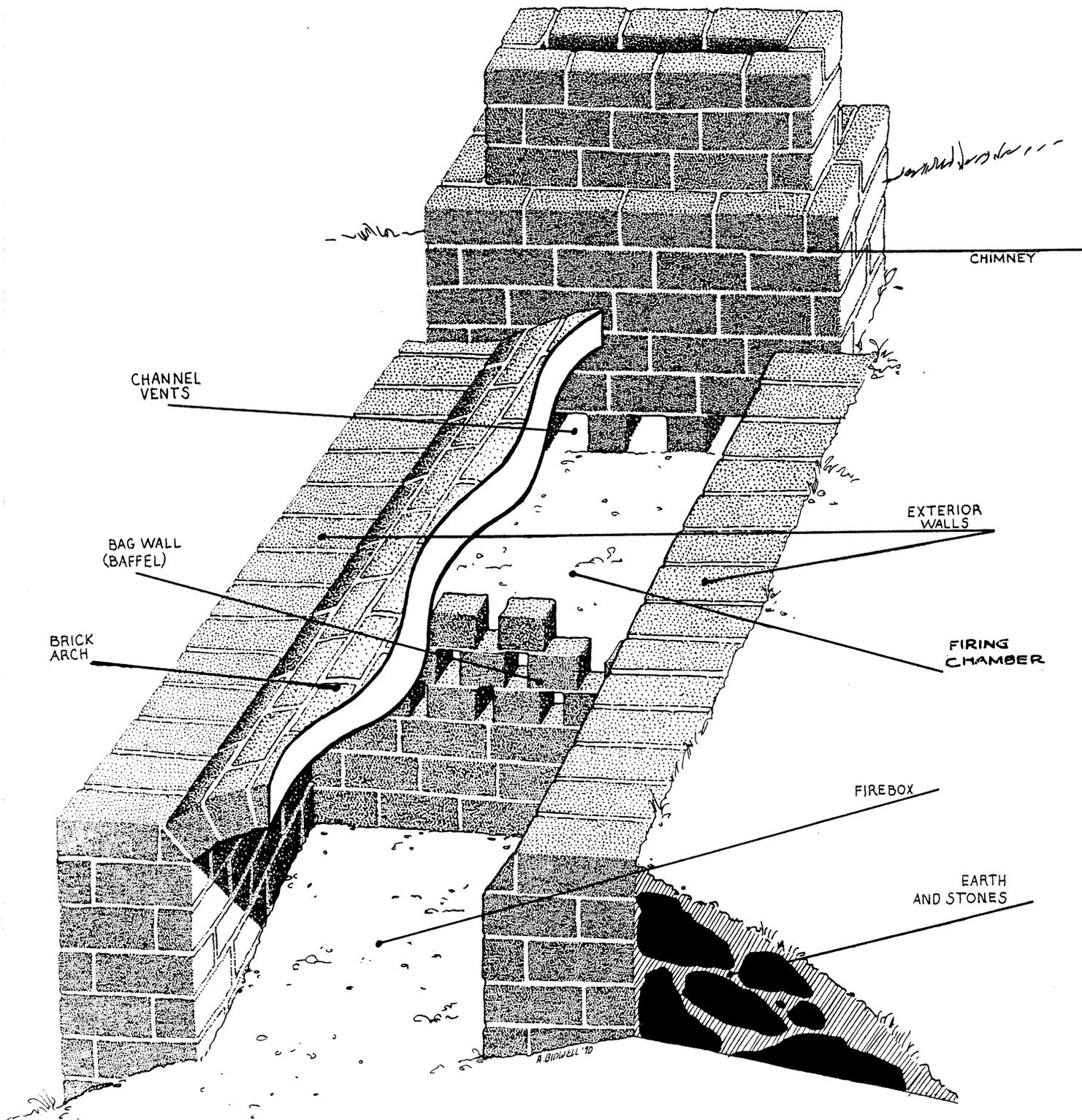


Figure 15. Typical groundhog kiln (after Greer 1977:46, Figure 3)

ing consisting of two indistinguishable letters one above the other (Unit 4, Layer 2) (Figure 18). No other decorative treatments or incising was observed in the assemblage. Generally, the earthenware vessels were skillfully made, well-fired, properly glazed and technologically efficiently produced as few exhibit warping/slumping. The majority of the earthenware shards recovered are in the yellowish-red range of color while the glazing ranges from yellowish red (5YR5/8) to dark yellowish brown (10YR4/6) to black (10YR2/1). A majority of the lead-glaze appears yellowish red in color.

A wide variety of earthenware kiln furniture types was encountered during the excavations (Figure 19). These include placing bars (31.18%), hand-formed circular pins (60.11%), points (2.81%), stilts (2.25%), spurs (.28%), circular placing pieces (.28%), a possible saggar fragment (.28%), and triangular pins (2.81%).

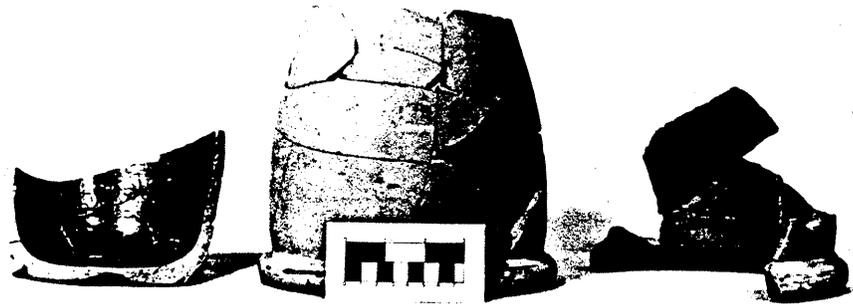


Figure 16. On vessel form represented in the 44BO304 assemblage is the wide or open mouth lead glazed earthenware storage crock.



Figure 17. Rim treatment variations observed within the Fincastle artifact assemblage.

The kiln furniture examples recovered from the site were distinctively different from those observed on nineteenth-century stoneware pottery kiln sites. The differences in this kiln furniture assemblage compared with those from other stoneware pottery sites reflect the technology unique to manufacturing lead-glazed earthenwares. The low linear nature of the groundhog kiln and the type of glaze utilized are two factors which might help to explain the variation in kiln furniture types encountered. Stacking of vessels in the kiln before firing was much more limited in a groundhog kiln when compared with a stoneware kiln. Not only was the vessel wall of the earthen crock less sturdy than a corresponding stoneware example, (so that stacking would have been a problem in terms of wares surviving the weight), but also the nature of the lead glaze was such that it would drip and run between vessels it stacked. Therefore the kiln furniture utilized was adapted to and part of the technology of the earthenware production in the Valley of Virginia.

The coarse earthenware shards of unknown function are relatively thick (approximately one inch), large and roughly made so they may have functioned as kiln furniture allowing vessels to be placed within them and then stacked or may represent some sort of crude storage container. Further investigation comparing this assemblage to other earthenware pottery site assemblages should shed light on their exact function.

The 689 non-industry manufactured items represent approximately 27.8% of the entire recovered assemblage and include mid-nineteenth-through twentieth-century kitchen, architectural, furniture and activities-related artifacts (see Tables 1 and 2). Of these miscellaneous artifacts from both the testing and salvage excavations, 67.2% are kitchen related; including 62 ceramics, 211 bottle/jar glass fragments, 82 tin container fragments and

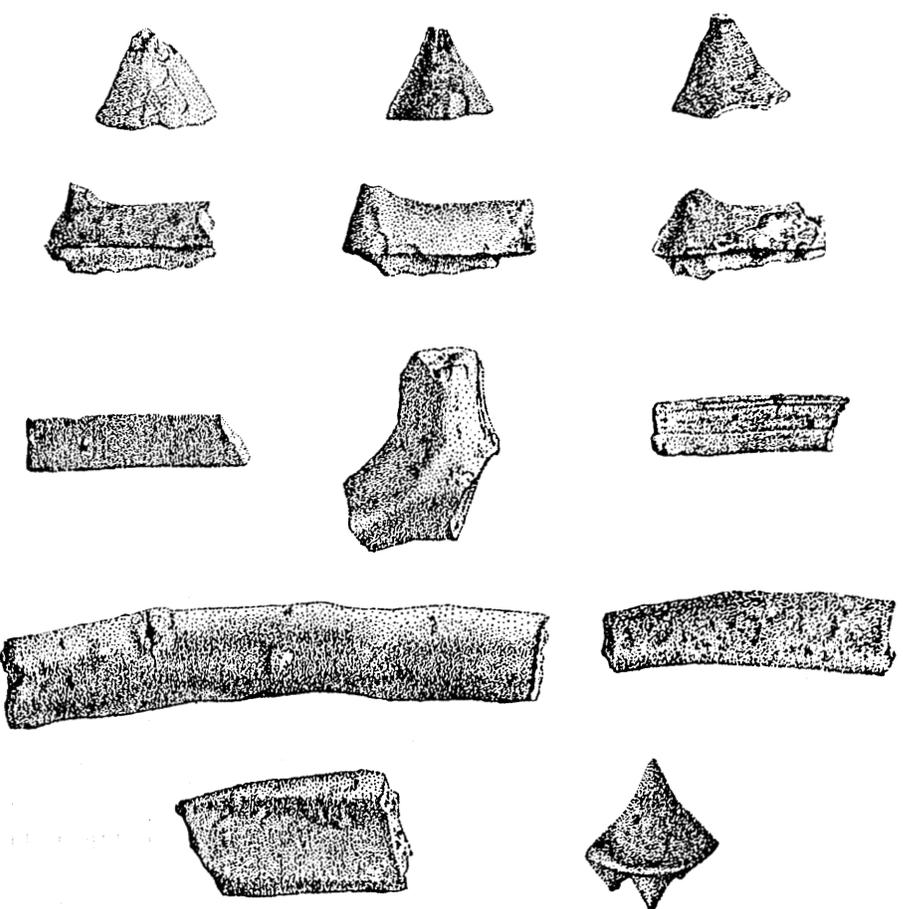


Figure 18. Kiln furniture types encountered at 44BO304

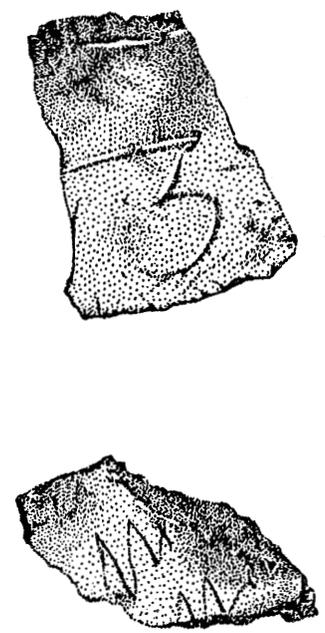


Figure 19. Incising observed on two earthenware body shards

one glassware fragment; 30.2% are architecturally related including 77 nails and 125 flat glass fragments, .15% is a furniture-related artifact, one brass clock furniture part stamped "Waterbury Clock Company"; 2.3% are activities-related artifacts, including three staples, two pieces of unidentifiable metal, two iron container/lead fragments, one horseshoe, one brass rivet, one iron bar, one unidentified iron implement/tool, one tack, one screw, one metal gear; and .15% is subsistence refuse related, unidentified animal bone. Generally, the non-industry manufactured ceramic shards, cut nails and certain of the bottle/jar glass fragment corroborate the mid-nineteenth-century chronological affiliation for the kiln. The majority of the remaining non-industry manufactured items appear to relate to twentieth century reuse of the area for farming/agricultural activities as well as more recent and occasional refuse discard activities associated with use of Route 640.

In summary, the artifact analysis indicates that a relatively restricted variety of lead-glazed earthenware utilitarian vessels as well as earthenware tiles were manufactured at the pottery. The nature of the artifact assemblage with well-potted, glazed and fired earthenwares suggests a technologically efficient operation. The kiln furniture types encountered are varied and relate to the specific technology involved in the production of earthenwares in the Valley of Virginia. Dates for certain of the non-industry manufactured items corroborate the suggested mid-nineteenth-century affiliation for the kiln, while many of the other non-industry manufactured items are indicative of subsequent agricultural/farming reuse of the area and refuse discard practices associated with Route 640.

SUMMARY/CONCLUSIONS

Archaeological test and subsequent salvage excavations conducted by the Laboratory of Anthropology, Washington and Lee University, and sponsored in part by the Virginia

Department of Historic Resources at the Fincastle Pottery resulted in the identification of a mid-nineteenth-century earthenware kiln and the associated manufactured products. Interpretation of the structural features and artifacts indicate this was a single-chambered, two-flued, arched groundhog type earthenware kiln in which a restricted variety of glazed and unglazed utilitarian vessels and tiles were manufactured. The well-potted, glazed, and fired nature of the wares suggests a technologically efficient operation. The limited variety of wares produced, nature of deposition, and size of the kiln suggest a relatively short-lived pottery operation. Kiln furniture examples encountered are indicative of the specific technology involved in the production of earthenwares.

It is assumed that construction of Route 640 which took place some time ago resulted in the destruction of a portion of the pottery. The subsequent lack of documentation and attention afforded this site by the Virginia Department of Transportation has resulted in its deterioration as a result of erosion occurring along the drainage ditch cut at the edge of the highway which bisected the kiln proper. The excavations revealed that the portion of the kiln which still contained some integrity included evidence of a central and two exterior kiln walls separated by flues with mortared floors leading into two smaller parallel channels which provided a flue venting function representing the basal portion of the chimney-base flue system. The highway construction appears to have destroyed what would have been the distal end of the kiln containing the fireboxes and associated features. The growth of a large tree in the area of the kiln as well as agricultural/farming practices which involved the construction of a fence in the area significantly contributed to disturbing the remaining features of the kiln.

Documentary and oral history research suggests that the pottery may have been operated either by Jessie Hinkle and Philip Spigle or by Joel and Mathias Noftzinger possibly in association with George N. Fulton. The lead-glazed earthenware shards recovered are not consistent with extant examples manufactured by Hinkle/Spigle in terms of a number of specific attributes of vessel form and decorative treatments. On the other hand, the relative absence of salt-glazed stoneware shards seems to suggest that George N. Fulton, who was involved in the stoneware industry in Alleghany County for several years, may not have been associated with the pottery. In either case the evidence seems to suggest that this was the kiln operated by the Noftzingers, and if in fact Fulton was involved in pottery making in Botetourt County, then he was either working at a different site or was involved with the Noftzingers in the manufacture of earthenware exclusively (Russ 1988). The absence of maker's marks and the identification of any signed extant vessels has limited our ability to make definitive statements regarding which potters were associated with this site.

The archaeological testing and salvage excavations conducted at the Fincastle Pottery Site have provided documentation of the technology involved in the production of earthenware during the mid-nineteenth century in the Valley of Virginia. The lack of documentation of "groundhog"-type earthenware kilns during this period and in this region--where circular, up and down draft stoneware kilns predominate--makes the data generated by this work particularly valuable from a comparative perspective for understanding the evolution of technology in the pottery manufacturing industry in Virginia.

REFERENCES CITED

- Arritt, Gay
1982 Historical Sketches - "Fulton Pottery". Alleghany Historical Society, Covington, Virginia. Originally published 13 October 1952.
- Austin, William and Rebecca H.R. Austin
1977 Related Families of Botetourt County, Virginia. Commonwealth Press, Radford, Virginia.
- Greer, Georgeanna H.
1977 Groundhog Kilns - Rectangular American Kilns of the Nineteenth and Early Twentieth Centuries. Northeast Historical Archaeology 6:42-54.
- 1979 Basic Forms of Historic Pottery Kilns Which May Be Encountered in the United States. In The Conference on Historic Site Archaeology Papers 1978, Vol. 13, edited by S. South, pp. 133-147. The Institute of Archeology and Anthropology, University of South Carolina, Columbia, South Carolina.
- Rawson, Marion N.
1938 Candleday Art. E.P. Dutton, New York, New York.
- Russ, Kurt C.
1984 Historic Pottery Making in Virginia. In Upland Archaeology in the East II:252-272. USDA Forest Service Southern Region Cultural Resources Report No. 5.
- 1986 Pots, Potters, and Potteries in Botetourt County, Virginia--1830-1894. Paper presented to the Roanoke Chapter of the Archeological Society of Virginia, Roanoke, Virginia.
- 1988 Archaeological Investigation at an Historic Earthenware Pottery Kiln in Botetourt County, Virginia. Paper presented at the annual meeting of the Virginia Social Science Association, Sweet Briar College, Sweet Briar, Virginia.
- 1990a The Traditional Pottery Manufacturing Industry in Virginia: Examples from Botetourt and Rockbridge counties. Rockbridge Historical Society Proceedings X: 453-489. Rockbridge Historical Society, Lexington, Virginia.
- 1990b The Nineteenth Century Traditional Pottery Manufacturing Industry in Botetourt County, Virginia. Paper presented to the Roanoke Historical Society, Roanoke, Virginia. 27 March.

- Russ, Kurt C. and Tom Langheim
1988 The Alleghany County Pottery Manufacturing Industry. Paper presented at the annual meeting at the Virginia Social Science Association, Sweet Briar College, Sweet Briar, Virginia.
- Russ, Kurt C. and John M. McDaniel
1987a The Traditional Pottery Manufacturing Industry in Virginia: Examples from Botetourt and Rockbridge Counties, 1785-1894. Presented at the winter meeting of the Rockbridge Historical Society, Lexington, Virginia.
- 1987b A Survey of the Traditional Pottery Manufacturing Industry in Botetourt and Rockbridge Counties. Upland Archaeology in the East: A Third Symposium, Cultural Resources Report Series 87-1:35-50, USDA Forest Service Southern Region, Atlanta, Georgia.
- 1988 Understanding Virginia's Traditional Pottery Manufacturing Industry: An Interim Report on the Statewide Survey. Invited paper presented at the Archeological Society of Virginia Symposium Ceramics in Virginia, Piedmont Virginia Community College, Charlottesville, Virginia.

APPENDIX I

May 30, 1988

Mr. Keith T. Egloff
Division of Historic Landmarks
221 Governor Street
Richmond, Virginia 23219

Dear Keith:

Please find enclosed a Site Survey form identifying the Fincastle pottery site as well as a copy of a paper presented at the Virginia Social Science Association Meetings which describes the testing/salvage excavations conducted at the site during the fall. The paper elaborates on the comments I made at the Ceramics in Virginia Symposium regarding the threatened nature of the site.

At this stage, we would like to ask you for comments regarding which steps would now be reasonable to take in an attempt to either protect or further investigate this important 19th century industrial pottery site. I would be happy to draft a proposal regarding what could be done to further investigate the site with respect to those questions raised in the enclosed paper. The proposal could detail the cost necessary for the additional work. I will wait to hear from you regarding which approach would be the most appropriate in our attempt to learn more from this national register eligible site.

Again, thank you for providing us with the schematic drawing of the Photographic Light Table. It would be most helpful to our buildings and grounds crew if you could provide us with a photograph of the table which you have. We would happy to pay any cost associated with your getting that copy to us. Again, thank you for your time and I look forward to hearing from you in regard to which steps would now be appropriate for us to take regarding the Fincastle pottery site.

Sincerely,

Kurt C. Russ
Research Archaeologist

KCR:ksl
Enclosures (2)

APPENDIX II

FINDS LIST FOR SALVAGE EXCAVATIONS AT THE FINCASTLE POTTERY (44BO304)

Unit 3 Layer 2 8/1/88 n=22

- 1 unglazed coarse earthenware base shard
- 1 glazed interior coarse earthenware body shard
- 1 glazed interior coarse earthenware rim shard
- 2 glazed interior earthenware body shards
- 1 circular pin
- 8 placing bars
- 1 unglazed tile fragment
- 5 glass bottle shards, blue tint
- 1 whiteware shard
- 1 refined earthenware shard with brown glaze

Unit 4 Layer 2 8/1/88 n=55

- 4 interior glazed earthenware rim shards
- 3 interior glazed earthenware base shards
- 2 interior and exterior glazed earthenware body shards
- 5 unglazed earthenware body shards
- 26 interior glazed earthenware body shards
- 1 unglazed earthenware tile fragment
- 1 unglazed coarse earthenware body shard
- 1 unglazed coarse earthenware base shard
- 1 triangular pin
- 4 hand formed circular pins
- 2 placing bars
- 2 tin fragments
- 1 cut nail
- 1 flat clear glass shard
- 1 whiteware rim shard

Unit 4 Layer 2 9/31/88 n=42

- 2 interior and exterior glazed earthenware body shards
- 3 interior glazed earthenware base shards
- 5 interior glazed earthenware rim shards
- 22 interior glazed earthenware body shards
- 5 unglazed tile fragments
- 3 interior glazed coarse earthenware rim shards
- 11 flat base coarse earthenware shards

Unit 4 Layer 7/31/88 n=88

- 1 earthenware rim shard with interior glaze
- 3 earthenware rim shards with interior and exterior glaze
- 3 earthenware base shards with interior glaze
- 14 earthenware body shards without glaze

Unit 4 Layer 7/31/88 n=88 Continued

- 2 earthenware body shards with interior and exterior glaze
- 25 earthenware body shards with interior glaze only
- 1 body shard with interior glaze and incised lettering appearing to represent 2 letters one over the other
- 9 unglazed earthenware tile fragments
- 7 hand formed placing bars
- 4 coarse earthenware base shards
- 3 coarse earthenware rim shards
- 1 coarse earthenware body shard
- 13 miscellaneous unidentified clay fragments
- 2 bottle/jar glass fragments (1 clear, 1 blue tint)

Unit 5 Layer 1 7/10/88 n=23

- 1 unglazed earthenware base shard
- 1 interior and exterior glazed earthenware body shard
- 2 interior glazed earthenware body shard
- 1 interior glazed earthenware base shard
- 12 coarse earthenware base shards
- 1 coarse earthenware body shard
- 1 hand formed circular pin
- 2 curved hand formed placing bars
- 1 straight hand formed placing bar
- 1 wire nail

Unit 5 Layer 1 7/10/88 n=117

- 2 unglazed earthenware base shards
- 2 unglazed earthenware tile fragments
- 1 interior glazed earthenware rim shard
- 1 interior glazed earthenware base shard
- 36 interior glazed earthenware body shards
- 8 unglazed earthenware body shards
- 1 unglazed earthenware rim shard
- 2 interior glazed earthenware body shards
- 6 coarse earthenware base shards
- 1 coarse earthenware body shard
- 2 coarse earthenware rim shards
- 5 whiteware shards
- 5 blue/green flat glass shards
- 8 clear flat glass shards
- 17 round wire nails
- 2 cut nails
- 1 triangular pin
- 4 hand formed circular pins
- 13 hand formed placing bars

Unit 5 Layer 1 7/10/88 n=31

- 4 interior glazed earthenware base shards
- 4 interior glazed earthenware body shards
- 5 coarse earthenware base shards
- 2 hand formed circular pins
- 4 cut nail fragments
- 12 wire nail fragments

Unit 5 Layer 1 7/10/88 n=77

- 2 earthenware rims with interior glaze
- 1 earthenware rim without glaze
- 3 earthenware bases with interior glaze
- 11 earthenware body shards with interior glaze
- 1 earthenware body shard with exterior glaze only
- 1 earthenware rim without glaze
- 1 interior and exterior greenish leadglazed rim shard (possibly an experimental glaze type)
- 5 earthenware body shards without glaze
- 1 earthenware unglazed earthenware tile fragment
- 4 unidentifiable earthenware shards
- 1 earthenware base shard with interior glaze
- 1 earthenware base shard without glaze
- 2 coarse earthenware body shards
- 3 coarse earthenware rim shards
- 9 coarse earthenware base shards
- 1 coarse earthenware base shards with three incised lines on bottom
- 1 earthenware point
- 4 earthenware hand formed circular pins
- 6 placing bars
- 1 cut nail fragment
- 4 wire nails
- 2 whiteware shards
- 5 flat blue/green tinted glass shards
- 2 blue/green bottle glass/jar fragments
- 5 clear bottle glass fragments

Unit 5 Layer 2 7/28/88 n=14

- 2 earthenware rim shards with interior glaze
- 1 earthenware rim shard without glaze
- 1 earthenware base shard with interior glaze
- 3 earthenware body shards with interior glaze
- 1 earthenware strap handle with leadglaze
- 1 unidentifiable earthenware fragment
- 1 flat blue/green glass shard
- 2 clear bottle/jar glass fragments
- 1 olive/green bottle/jar glass fragment
- 1 cut nail

Unit 7 Layer 1 7/17/88 n=50

- 1 glazed earthenware strap handle fragment
- 1 saltglazed stoneware body shard
- 2 earthenware base shards without glaze
- 1 earthenware body shard with interior and exterior glaze
- 2 earthenware body shards with interior glaze
- 2 unidentified earthenware shards
- 2 earthenware rim shards with interior glaze
- 1 earthenware body shard with exterior glaze only
- 3 coarse earthenware body shards
- 3 coarse earthenware rim shards
- 3 coarse earthenware base shards
- 4 handformed circular pins
- 1 stilt arm fragment
- 18 handformed placing bars
- 1 triangular pin
- 1 modern fencing nail
- 1 refined earthenware shard with dark brown exterior glaze
- 2 clear bottle/jar glass fragments
- 1 blue/green tinted bottle/jar glass fragment

Unit 7 Layer 1 7/28/88 n=30

- 1 earthenware rim shard with interior glaze
- 1 earthenware base shard without glaze
- 1 earthenware body shard without glaze
- 5 earthenware body shards with interior glaze
- 3 coarse earthenware body shards
- 2 coarse earthenware rim shards
- 6 coarse earthenware base shards
- 6 handformed placing bars
- 2 whiteware shards
- 2 olive/green bottle/jar glass fragments
- 1 blue/green bottle/jar glass fragment

Unit 7 Layer 1 7/31/88 n=48

- 1 unglazed earthenware probable lid fragment
- 2 unglazed earthenware rim shards
- 1 interior glazed earthenware rim shard
- 1 earthenware body shard with interior glaze and incised 3 on exterior indicating capacity
- 7 earthenware body shards with interior glaze
- 9 earthenware body shards without glaze
- 4 coarse earthenware body shards
- 1 coarse earthenware base shard
- 3 unidentifiable earthenware fragments
- 6 earthenware tile fragments
- 5 handformed placing bars
- 1 flat blue/green glass shard
- 3 clear bottle/jar glass fragments
- 4 cut nails

Unit 7 Layer 1 8/1/88 n=5

- 2 interior glazed earthenware body shards
- 2 handformed placing bars
- 1 iron bar fragment

Unit 7 Layer 2 8/12/88 n=142

- 1 earthenware base shard with interior glaze
- 4 earthenware body shards with interior and exterior glaze
- 6 earthenware body shards with exterior glaze only
- 10 earthenware body shards without glaze
- 2 stoneware shards with dark brown metallic interior glaze
- 84 earthenware body shards with interior glaze only
- 8 unglazed earthenware tile fragments
- 4 earthenware rim shards without glaze
- 3 earthenware rim shards with interior and exterior glaze
- 8 earthenware rim shards with interior glaze only
- 5 unidentifiable earthenware fragments
- 1 coarse earthenware body shard
- 3 handformed placing bars
- 1 triangular pin
- 1 handformed circular pin
- 1 cut nail

Unit 7 Layer 2 8/12/88 n=46

- 6 earthenware body shards without glaze
- 5 earthenware body shards with interior and exterior glaze
- 22 earthenware body shards with interior glaze
- 5 earthenware tile fragments
- 1 earthenware rim fragment without glaze
- 1 earthenware rim fragment with interior glaze
- 2 earthenware base shards with interior glaze
- 1 earthenware base shard without glaze
- 1 coarse earthenware base shard with interior glaze
- 1 coarse earthenware body shard with interior glaze
- 1 coarse earthenware body shard without glaze

Unit 7 Layer 2 8/12/88 n=35

- 1 earthenware body shard without glaze
- 1 earthenware body shard with exterior glaze
- 2 earthenware body shards with interior and exterior glaze
- 7 earthenware body shards with interior glaze only
- 1 interior and exterior glazed earthenware rim shard from a tall cylindrical vessel form
- 1 interior glazed earthenware base shard from a tall cylindrical vessel form

Unit 7 Layer 2 8/12/88 n=35 Continued

- 2 earthenware base shards with interior glaze
- 1 earthenware base shard without glaze
- 1 earthenware base shard without glaze from a shallow bowl form
- 2 earthenware rim shards with interior and exterior glaze
- 3 earthenware rim shards with interior glaze only
- 2 coarse earthenware rim shards
- 2 coarse earthenware body shards
- 1 coarse earthenware base shard
- 6 earthenware tile fragments
- 2 handformed placing bars

Unit 8 Layer 1 7/18/88 n=26

- 1 earthenware rim shard with interior glaze only
- 1 earthenware rim shard without glaze
- 1 earthenware base shard without glaze
- 4 earthenware body shards without glaze
- 1 earthenware body shard with exterior glaze
- 7 earthenware body shards with interior glaze
- 1 handformed placing bar
- 1 whiteware shard
- 1 cut nail
- 1 blue/green bottle/jar glass fragment
- 2 clear flat glass fragments
- 5 clear bottle/jar glass fragments

Unit 8 Layer 1 7/31/88 n=129

- 7 earthenware body shards without glaze
- 2 earthenware body shards with interior and exterior glaze
- 1 earthenware body shard with exterior glaze only
- 31 earthenware body shards with interior glaze only
- 1 earthenware base shard with interior glaze only
- 1 earthenware base shard without glaze
- 4 unglazed earthenware tile fragments
- 1 earthenware rim fragment without glaze
- 5 earthenware rim shards with interior glaze only
- 2 coarse earthenware body shards
- 4 coarse earthenware base shards
- 3 handformed placing bars
- 3 circular pins
- 5 whiteware shards
- 1 fencewire fragment
- 1 cut nail
- 1 round wire nail
- 2 olive/green bottle/jar glass fragments
- 2 pink/purple bottle/jar glass fragments
- 16 flat blue/green glass fragments
- 3 blue/green bottle/jar glass fragments
- 15 clear thin curved glass fragments
- 18 clear bottle/jar glass fragments

Unit 8 Layer 1 7/31/88 n=218

2 exterior glazed earthenware body shards
15 earthenware body shards without glaze
1 earthenware applied handle without glaze
6 earthenware base shards without glaze
6 earthenware base shards with interior glaze
10 earthenware rim shards with interior glaze
2 earthenware rim shards without glaze
59 earthenware body shards with interior glaze
4 earthenware unglazed tile fragments
1 coarse earthenware base fragment
2 coarse earthenware rim fragments
7 coarse earthenware body shards
2 earthenware points
2 stilts
1 handformed circular pin
5 handformed placing bars
2 cut nails
1 wire nail
6 whiteware shards
1 brass rivet
1 brass clock furniture part stamped Waterbury Clock Company
12 blue/green flat glass shards
2 pink/purple bottle/jar glass fragments
3 olive/green bottle/jar glass fragments
6 blue/green bottle/jar glass fragments
53 clear bottle/jar glass fragments
5 bristol glaze stoneware shards
1 bristol glaze stoneware shard with saltglazed exterior

Unit 8 Layer 2 8/1/88 n=8

1 earthenware body shard without glaze
1 earthenware base shard with interior glaze
1 earthenware body shard with interior glaze
2 earthenware rim shards with interior glaze
1 unidentified earthenware fragment
2 handformed placing bars

Unit 8 Layer 2 8/10/88 n=47

1 earthenware rim shard with interior glaze
1 earthenware base shard without glaze
3 earthenware base shards with interior glaze
4 earthenware body shards with interior and exterior glaze
8 earthenware body shards without glaze
14 earthenware body shards with interior glaze only
7 coarse earthenware base shards
3 coarse earthenware rim shards

Unit 8 Layer 2 8/10/88 n=47 Continued

- 4 coarse earthenware body shards
- 1 circular placing piece
- 1 olive/green bottle/jar glass fragment

Unit 8 Layer 2 7/31/88 n=104

- 2 unglazed earthenware base shards
- 5 earthenware base shards with interior glaze
- 20 earthenware body shards without glaze
- 1 earthenware body shard with exterior glaze only
- 3 earthenware body shards with interior and exterior glaze
- 26 earthenware body shards with interior glaze only
- 8 earthenware rim shards with interior glaze
- 4 unidentified earthenware fragments (weathered and small)
- 8 earthenware tile fragments without glaze
- 7 coarse earthenware base shards
- 2 coarse earthenware body shards
- 8 handformed placing bars
- 1 circular pin
- 2 whiteware shards
- 1 olive/green bottle/jar glass fragment
- 3 clear bottle/jar glass fragments
- 2 cut nails
- 1 round wire nail

Unit 9 Layer 1 8/10/88 n=25

- 1 earthenware rim shard with interior glaze
- 9 earthenware body shards with interior glaze
- 1 unglazed earthenware tile fragment
- 2 coarse earthenware body shards
- 1 coarse earthenware base shard
- 4 clear bottle/jar glass fragments
- 5 flat blue tinted glass fragments
- 1 cut nail
- 1 refined earthenware shard with brown glaze

Unit 9, Layer 1 7/31/88 n=254

- 34 earthenware body shards with interior glaze
- 6 earthenware rim shards with interior glaze
- 1 earthenware rim shard without glaze
- 2 earthenware body shards with interior and exterior glaze
- 4 earthenware base shards with interior glaze
- 2 earthenware base shards without glaze
- 3 earthenware body shards without glaze
- 4 unidentified earthenware shards extremely weathered without glaze
- 4 coarse earthenware body shards
- 2 coarse earthenware base shards

Unit 9, Layer 1 7/31/88 n=254 Continued

- 3 handformed placing bars
- 1 handformed circular pin
- 14 whiteware shards
- 2 cut nails
- 2 roundwire fencing nails
- 5 roundwire nails
- 5 refined earthenware shards with brown glaze
- 1 stoneware shard bristol glazed
- 40 greenish blue tinted flat glass shards
- 1 pink bottle/jar glass fragment
- 4 thin curved clear glass fragments
- 43 clear glass bottle/jar glass fragments
- 71 tin container fragments

Unit 9 Layer 1 8/1/88 n=131

- 1 earthenware base shard with interior glaze
- 1 earthenware base shard without glaze
- 1 earthenware rim shard without glaze
- 2 earthenware body shards with interior and exterior glaze
- 4 earthenware body shards without glaze
- 13 earthenware body shards with interior glaze
- 1 earthenware base shard with interior and exterior glaze
- 6 stoneware shards with lead slipped glaze
- 1 earthenware base shard with interior glaze
- 4 unidentified earthenware fragments
- 5 coarse earthenware bases
- 2 coarse earthenware rims
- 7 coarse earthenware body shards
- 4 handformed placing bars
- 2 handformed circular pins
- 3 brown glazed refined earthenware fragments
- 5 whiteware shards
- 1 olive green bottle/jar glass fragment
- 5 clear flat glass shards
- 24 blue tinted flat glass shards
- 1 blue tinted bottle/jar glass fragment
- 1 pink bottle/jar glass fragment
- 2 clear bottle/jar glass fragments
- 2 blue bottle/jar glass fragments
- 6 curved clear glass fragments
- 5 curved very thin clear glass fragments
- 9 tin container fragments
- 2 miscellaneous iron container/lead fragments
- 1 large iron horseshoe
- 3 wire nails
- 6 cut nails
- 1 unidentified iron implement/tool

APPENDIX III

July 29, 1988

Mr. John C. Dillon
2745 Calloway Street, N.W.
Roanoke, VA 24019

Dear Mr. Dillon:

I would like to take this opportunity to thank you for allowing us to conduct archaeological excavations on your property located near Fin-castle, Virginia.

As you know, we identified an historic pottery kiln site on your property located near the junction of Routes 640 and 602. Thus for the archaeological investigation has revealed a portion of what we believe to be a 19th century earthenware "groundhog" type pottery kiln. This is an important find as this kiln type was typically thought to have been restricted to the deep south, with the circular updraft or downdraft kilns being common place in this region. Utilitarian leadglazed earthenware crocks and tile were manufactured at this site. Initial historical research suggests that this may have been the pottery operated by Joel and Mathias Noftzinger, circa. 1850.

Because of the importance of the site for elucidating our understanding of the traditional pottery manufacturing industry in Virginia, our most recent phase of work is being sponsored by the archaeological salvage program of the Virginia Division of Historic Landmarks.

I am confident that we will be able to complete this final phase of our work by 15 August 1988. We are grateful for your cooperation in delaying construction and land alteration activities until this important work is complete.

As I said during our conversation on 28 June 1988, we will restrict our work to the area adjacent to the road and refill all the excavated units.

Again thank you for your cooperation and interest in this archaeological research. We will be preparing a final report on our work at the site and will forward a copy to you upon completion. Should you have any questions my numbers are 463-8574 (office) and 463-9509 (home).

Sincerely,

Kurt C. Russ
Research Archaeologist

KCR:ks1