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**ARCHAEOLOGICAL INVESTIGATIONS AT THE QUINCY MINING
COMPANY OFFICE (TRACT 102-04) THE QUINCY NATIONAL
GUARD ENCAMPMENT (TRACT 102-03). KEWEENAW NATIONAL
HISTORICAL PARK, HOUGHTON COUNTY, MICHIGAN.**

Gideon Hoekstra

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ARCHAEOLOGICAL INVESTIGATIONS AT THE QUINCY MINING
COMPANY OFFICE (TRACT 102-04) THE QUINCY NATIONAL GUARD
ENCAMPMENT (TRACT 102-03). KEWEENAW NATIONAL HISTORICAL
PARK, HOUGHTON COUNTY, MICHIGAN.

By

Gideon Hoekstra

A REPORT

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

In Industrial Archaeology

MICHIGAN TECHNOLOGICAL UNIVERSITY

2020

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This report has been approved in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE in Industrial Archaeology.

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Abstract

This report presents the results of preliminary archaeological research at the Quincy Unit as part of the Cooperative Agreement P18AC00178 between the United States Department of Interior/National Park Service and Michigan Technological University titled An Inventory of Historic Archaeological Resources at Keweenaw National Historical Park (KEWE) and Isle Royale National Park (ISRO). Archaeological investigation concentrated on the lot housing the Quincy Mine Office and the location of the Quincy Michigan National Guard encampment located across US-41 from the No.2 Rockhouse, used during the Copper Country Miners' Strike of 1913-14. This is a multi-year project, primarily looking at the Quincy Mining Company property in an assessment of cultural resources in accordance with Section 110 of the National Historical Preservation Act. This is crucial information to the development and interpretation of this area in the future.

I. Introduction

This report presents the results of preliminary archaeological research at the Quincy Unit as part of the Cooperative Agreement P18AC00178 between the United States Department of Interior/National Park Service and Michigan Technological University titled An Inventory of Historic Archaeological Resources at Keweenaw National Historical Park (KEWE) and Isle Royale National Park (ISRO). This is a multi-year project, primarily looking at the Quincy Mining Company property in an assessment of cultural resources in accordance with Section 110 of the National Historical Preservation Act. This is crucial information to the development and interpretation of this area in the future. This project (FY2019) expands upon preliminary background research and field survey conducted in FY2018, where surface archaeological features were identified for further subsurface testing and documentation (Gohman 2019). All the effort focused on National Park Service Tracts 102-04 and 102-03 (Figure 1.1).



Figure 2.1: Map of National Park Service land holdings within KEWE Quincy Unit, showing Tracts 102-04 and 102-03.

The goals for the 2019 investigations were based on the results of the 2018 Phase I Survey (Gohman 2019), developed in consultation with Dawn Bringelson and Timothy Schilling from the Midwest Archaeological Center (MWAC), Jo Holt from the Keweenaw National Historical

Park (KEWE), and Seth DePasqual from Isle Royale National Park (ISRO). All research related to this cooperative agreement taking place on ISRO is reported in a separate document (Anklam and Wurst 2020).

The scope of work for the Quincy Unit defined four separate activities for further investigation, targeting areas that were likely to generate evidence for pre-contact mining activities at Quincy (Activities 1 & 2), exploring the potential for archaeological evidence related to the earliest Quincy mining period on the Quincy Lode (Activity 3), and identifying and testing the location of the Michigan National Guard ¹ encampment at Quincy, utilized during the Copper Country Miners' Strike of 1913-1914 (Activity 4). The 2018 Phase I pedestrian survey found several features that could be related to mining such as F26 and F277, which influenced our decision to focus our investigation on collecting evidence for the early mining of the Quincy Lode (Gohman 2019). Phase I archival background research also revealed that the location of the Quincy National Guard camp was near the Quincy F30 boarding house, leading to the decision to target Phase I testing in this area.

The Keweenaw Peninsula has been the site of copper extraction for several millennia. The area north of Portage Lake was well known to possess evidence of this pre-contact extraction. In the 1850s, Charles Whittlesey documented several trenches and other diggings along the shoreline and running up the slope to Quincy Hill (Whittlesey 1863). Quincy Mining Company began work in the late 1840s on some of these pre-contact mining features. In the early 1850s, Quincy moved their operations to the top of the hill on a vein referred to as the "Quincy Lode." This vein ran parallel to the richer amygdaloid "Pewabic" Lode but surfaced west of present-day US-41. Considering the Quincy Mining Company's earlier focus on pre-contact features, the confirmation of the Quincy Lode's location at surface may also uncover evidence of pre-contact activities. From a historical perspective, the activities of the company west of US-41 have not been well documented. Since these activities constitute the first decade of the company's extractive activities, further examination of these areas could help to broaden, both temporally and geographically, the Quincy Mine story. This is the basic context that substantiates Activities 1-3. Activity 1 focused on a possible pre-contact copper mining feature, and Activities 2 and 3 entail documenting features and cultural material associated with the earliest Quincy operations.

¹ The National Guard was formed from earlier state militias. The 1903 Dick Act created the predecessor of the modern National Guard and recommended usage of that term. The 1933 National Guard Mobilization Act finalized the split between the National Guard and state militias, marking the technical beginning of the National Guard. However, the term "National Guard" became standard across the US early in the 20th century and is the term used by most historians of the Copper Country (i.e. Lankton 1997, 2010; Lankton and Hyde 1982; Hoagland 2010; Thurner 1998; Kaunonen and Goings 2013). Newspapers from the time refer to the troops in the Copper Country Miners' Strike as both the Michigan National Guard and the Michigan Militia, though National Guard is more common. For these reasons, this report will use the common term National Guard even though it did not technically exist as such at the time.

The goal of Activity 4 was to identify and test the location of a National Guard encampment at Quincy utilized during the Copper Country Miners' Strike of 1913-1914, one of the region's most contentious events. When the local Western Federation of Miners (WFM) chapter called for a general strike in the Copper County on July 23, 1913, mining companies fearing violence and sabotage requested that Michigan's National Guard be mobilized to the region. They also hoped the presence of the National Guard would inspire the WFM to settle the conflict on the owner's terms. Two primary camps were set up on the Keweenaw Peninsula. The best-known camp was located on the Calumet & Hecla Mining Company's property and the second was on the Quincy Mining Company's property, across US-41 from the Quincy No. 2 Shaft-Rockhouse. These encampments were only occupied for a matter of months, and little specific information is available about them. Since no archaeological investigations have been conducted at these camps, this project offers the opportunity to learn about the Quincy encampment size, layout, organization, provisioning, and even company involvement in National Guard activities during the strike. This is the basic context that substantiates Activity 4.

The ultimate goal of this cooperative agreement is to provide park managers with critical baseline and diagnostic data about the archaeological record at both units for cultural resource management and interpretation. It offers the opportunity to understand copper mining on a regional level and the hope is that a greater understanding of the early mining period will balance the historical perspective that is so dominated by the later Quincy period. While not addressed in this document, our goal is to use this greater understanding of the early mining period at Quincy to better connect the parallel mining histories of the Keweenaw Peninsula and Isle Royale, and to manage and interpret extant resources (where appropriate) at both parks.

II. Physical Environment and Previous Archaeological Work

2.1 Geology of the Region

The geology of Michigan's Keweenaw Peninsula is best known for its large deposits of "native copper" or copper metal, rather than copper oxides or sulfides that form ores (Krause 1992). The large deposits stretch in a band from Isle Royale south to the Upper Peninsula's border with Wisconsin with a length of 150 miles and a width that varies between 1-12 miles (Foster and Whitney 1850). The copper was originally created in a formation process that had begun over one billion years ago. In the Precambrian era, periodic eruptions of lava, now termed the Portage Lake Lava Series, flowed over what would become the Lake Superior basin. Once these layers of molten rock solidified, they became layers of basalt or trap rock, which now forms the western half of the Keweenaw Peninsula (Krause 1992). The cooling basalt became dotted with small gaps and spaces filled with gas. Layers of gravel and boulders were washed down from streams and rivers, covering the surface of the basalt, and creating a barrier of conglomerate between layers of basalt (Pettit 1847). These created layers of conglomerate and almond-shaped amygdaloid belts, like the one eventually known as the Pewabic Lode. The pressure of the earth's shifting mantle squeezed these layers upward, creating the Lake Superior Basin. The Keweenaw Peninsula is at the southeast end of the basin. Under immense geological pressure, this layer cake was fractured, and over time the resulting fissures filled with metallic copper deposited by rising water from below. Great temperature and pressure under the various layers of basalt and conglomerate rock probably forced water up through the amygdaloid layer, leaving elemental copper to fill the gaps. During the ice age glaciers reshaped the Lake Superior region with a cycle of covering and retreating from the area. Traveling glaciers carved the softer and more recent rock away, exposing the erosion-resistant trap and copper bearing belts to the surface. Newly exposed outcrops of copper from fissure lodes were often carried away by glaciers and smoothed into large rounded masses (Krause 1992). These masses of copper ended up deposited away from the original source and would become known as the region's iconic "float copper."

2.2 Physical Description and Soils in the Project Area

The land parcel 102-03 containing the ruins of the Quincy Mining Company's dry house is roughly 11 acres in size. The whole of the parcel is located on a hill overlooking US-41 and the Quincy Mine Hoist Association's property, with much of that hill consisting of exposed or partially exposed bedrock. No. 2 Road bisects the parcel, connecting US-41 to the Frenchtown and Sing Sing neighborhoods. Another gravel road runs through the parcel, ending at the dry house ruins and some KEWE interpretive signage.

Tract 102-04 contains the historic Quincy Mining Company Office Building and the surrounding 4 acres. The easternmost quarter of the tract consists of the office building, a driveway, and a mowed lawn. The rest of the parcel is forested with mixed hardwood trees and open understory.

Utility clearings run along the northeastern and western corners of the tract. Several property markers can be found denoting the irregular shape of the tract.

The soils typically found across the tracts subject to our investigations are generally Arcadian-Michigamme Rock Outcrop Complex with 1 to 8 % slopes (labeled 92B, Figure 2.1). These soils are well-drained and found on hills at the summit, shoulder, backslope, and footslope. The typical profile of the Arcadian Series is: Oa (0-8 cm) highly decomposed plant material; E (8-13 cm) very gravelly fine sandy loam; Bhs (13-30.5 in) very fine gravelly sandy loam; and 2R (30.5-203 cm) unweathered bedrock. Michigamme soil's typical profile is: Oi (0-3 cm) slightly decomposed plant material; A (3-8 cm) cobbly fine sandy loam; E (8-13 cm) cobbly silt loam; Bhs (13-20 cm) silt loam; Bs1 (20-38 cm) silt loam; Bs2 (38-53 cm) silt loam; Bs3 (53-64 cm) very cobbly silt loam; 2E/Bx (64-81 cm) gravelly fine sandy loam; 3R (81-203 cm) unweathered bedrock (USDA Web Soil Survey). These soil profiles indicate that excavation to depths of 30 cm is adequate in areas representing Arcadian soils, but depths of 53 to 80 cm are more appropriate in Michigamme soils.

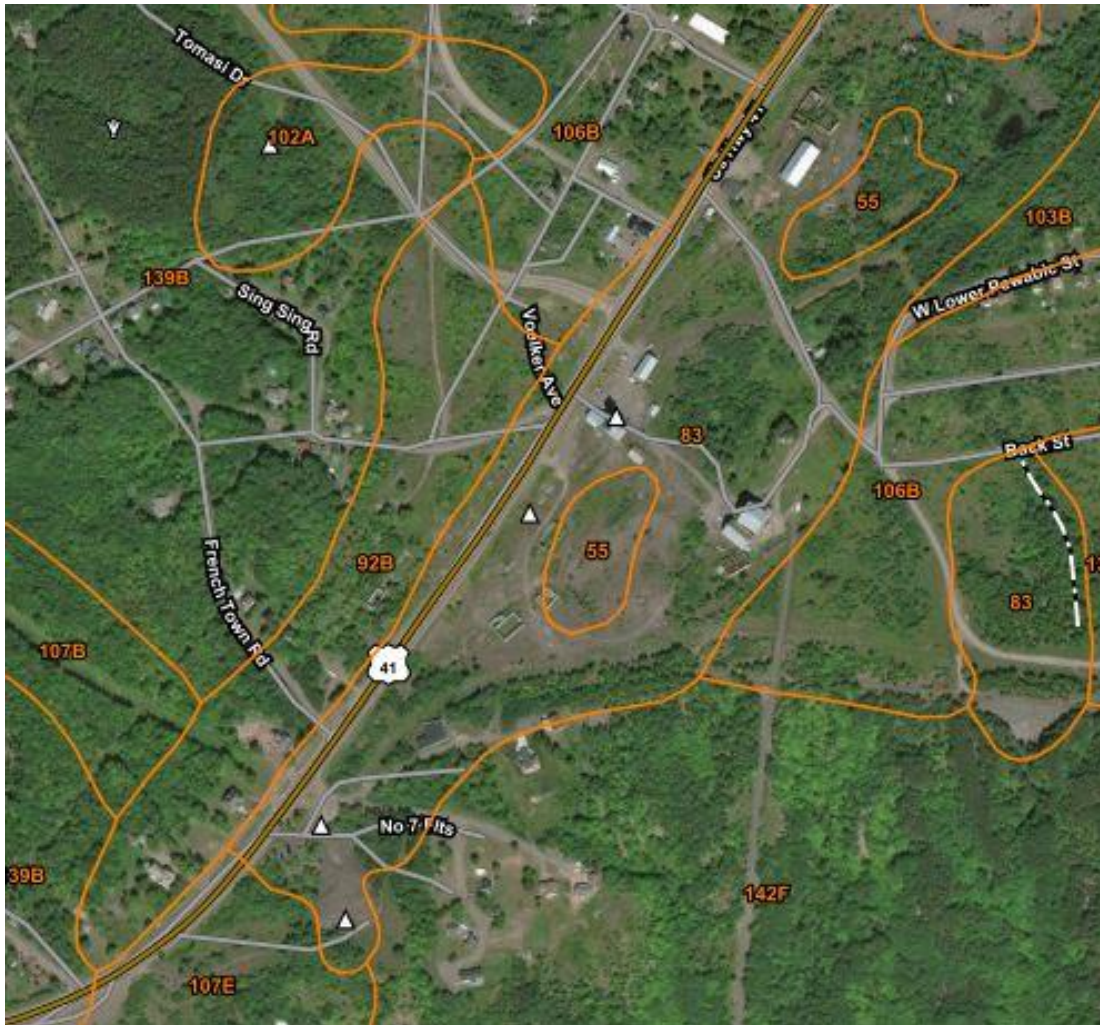


Figure 3.1: Soil Map of the Project Area, tracts 102-04 and 102-03.

2.3 Previous Archaeological Research (modified from Gohman 2019)

Several historical and archaeological studies have been conducted on lands associated with the Quincy Mining Company. Perhaps the most significant of these studies is the survey and recordation of the site by the Historic American Engineering Record (HAER) over 1977-78. Several historians and architects documented the site's history through photography, drawings, and report writing that recorded the mine's chronology and the status of its historic structures and resources. Maps illustrating the growth of the Quincy mine between 1865 and 1920 were also created, and currently provide an excellent starting point for directing archaeological fieldwork. Additionally, a mass consumption book, *Old Reliable: An Illustrated History of the Quincy Mining Company* (Lankton and Hyde 1982) was published a few years later based on many of HAER's findings.

Many projects have been concerned with the Quincy Mining Company and its landscape. Several of these studies have examined roughly 80 years of company housing and/or the evolving usage of company property to exert paternalistic control over its workforce. Others have tackled questions regarding the interpretation of such a large and complex site either from a landscape scale down to the individual building. In some cases, modern utility and land development projects have demanded surveys to evaluate risks to cultural resources and in some cases, these projects have directly impacted areas included in this survey and assessment. A list of some of these projects with summaries is included below.

1995: Spencer, H.L. *Quincy Mine National Historic Landmark Interpretive Trail System* (Report). Department of Social Sciences, Michigan Technological University.

This report analyzes the (then current) interpretive program at the Quincy Mine Hoist Association. It reviews the cultural resources identified and associated interpretive materials on site and recommends the construction of an interpretive trail system to enhance the visitor experience to the site.

1997: Fisher, N.B. *Quincy Mining Company Housing, 1840s-1920s* (Thesis). Department of Social Sciences, Michigan Technological University.

This decade-by-decade study describes the company housing built by the Quincy Mining Company between the 1840s and 1920s. It focuses on the types of houses built, the company's goals for its housing, and workers' response to the provided housing. The study concludes that Quincy Mining Co's goals were often not met as workers continually moved from, modified, and ultimately abandoned those homes constructed for them.

2000: LaRonge, M.B. *Company Family Company Coffin: The Role of Quincy Mining Company's Paternalistic Practices at the Ingot Street Cemetery* (Thesis). Department of Social Sciences, Michigan Technological University.

The result of uncovered human remains during preparatory work for the construction of a new pumphouse for the City of Hancock, this report documents what is likely the earliest Euro-American burial site in the Portage Lake area.

2000: Martin, Patrick E. *Historical and Archaeological Survey: Franklin/Quincy Water Authority Water System Improvements*. Department of Social Sciences, Michigan Technological University.

This report assesses potential impact to cultural resources within the KEWE Quincy Unit due to the proposed construction of a water main east of the No. 2 Hoist House. The report recommended using an alternate route.

2001: Martin, Patrick E. and Leopold, Dennis H. *Historical and Archaeological Investigation of the Hancock Industrial Park Project*. Department of Social Sciences, Michigan Technological University.

This report assesses potential impact to cultural resources within the KEWE Quincy Unit due to the proposed creation of an Industrial Park west of Lake Annie Road and Mine Rock Road. The report identified several cultural features associated with the Franklin Mining Company's historic Backstreet Location and recommended avoiding these features. The Industrial Park project did not go forward.

2003: Leopold, Dennis H. *A Historical and Archaeological Survey of Proposed Sewer Construction in and Near the Quincy Mining Company NHL, Quincy and Franklin Townships*. Department of Social Sciences, Michigan Technological University.

This report assesses potential impact to cultural resources within the KEWE Quincy Unit due to a proposed sewer line improvement project for Franklin Township. The proposed line intersected through many culturally sensitive areas within the unit, and sub-surface testing was utilized to determine potential for impact. The project called for a sewer line to pass through former Mesnard Mining Company property (though east of US-41) and well as through the historic Limerick Location, but east of Limerick Street, and therefore not within tract 102-03. Shovel testing resulted in the determination of no adverse effect.

2005: Mishkar, Larry. *Land Use History and Archaeological Survey: Seaman Mineral Museum Project*. Department of Social Sciences, Michigan Technological University.

This report provides a land use history and survey of the Quincy Mining Company's blacksmith and machine shop buildings, constructed in 1900, as part of planned rehabilitation efforts for the expansion of the Seaman Mineral Museum.

2009: *Quincy Mine Historic Landscape, Keweenaw National Historical Park: Cultural Landscape Report/Environmental Assessment*. Government Task Order Q641007K472. Quinn Evans, Architects and Woolpert Inc.

This report assesses the above-ground cultural resources within KEWE's Quincy Unit. The documentation of historic significance and evaluation of integrity of the historic landscapes thus far serves as a framework for future treatment recommendations and is the most holistic study of the site thus, as the HAER report was mostly concerned with only the Quincy Mining Company's activities.

2010: Wilson, Craig .P. *From Ruin to Museum: Preserving and Interpreting the Quincy and Torch Lake Railroad Engine House* (Thesis). Department of Social Sciences, Michigan Technological University.

Wilson's thesis was concerned with best practices in the rehabilitation and interpretation of the Quincy Mining Company's Q&TLRR Engine House. Excavations of the building provided clues to its several decades of use, and documented in-situ machines on site.

2011: Leopold, Dennis H. *Quincy and Torch Lake Railroad Engine House Facility Management and Interpretive Plan* (Report). Department of Social Sciences, Michigan Technological University.

This report is designed to serve as a guide to aid the Quincy Mine Hoist Association in the efforts to restore and interpret the historic railroad resources and infrastructure under their stewardship. The report presents a 3-stage, second phase restoration process.

2011: Blackburn, Renee M. *Preserving and Interpreting the Mining Company Office: Landscape, Space and Technological Change in the Management of the Copper Industry* (Thesis). Department of Social Sciences, Michigan Technological University.

Blackburn's thesis is concerned with the role of the mining company office in the management of the Lake Copper industry. The thesis also offered a prototype virtual exhibit experience of the Quincy Mine Office Building.

2014: DePasqual, Seth and Dawn Bringleon. *Memorandum of Project Results: Archeological Inventory and Evaluation: Accessible Trail and Overlook at Quincy Dry House Ruins*. Keweenaw National Historical Park.

This project assesses potential impacts to cultural resources in tract 102-03 due to the construction of two interpretive trails that overlook the dry house ruins. The memorandum concludes that the project will have no adverse effect.

2017: Bringelson, Dawn and Adam Wiewel. *Trip Report: Archaeological Investigations at Quincy Mine Office, Keweenaw National Historical Site, July 2017*. Midwest Archeological Center.

This project evaluated deposits identified within areas in which disturbance was anticipated in conjunction to landscape treatment recommendations for the Quincy Mine Office Building's grounds. Geophysical survey indicated several possible sub-surface resources and further testing revealed the location of the company's first office building, sited just south of the present office building.

2018: Wurst, LouAnn. *Quincy Mine Office: South Store Cellar Entry* (Site Report). Department of Social Sciences, Michigan Technological University.

Previously mentioned landscape treatment uncovered the remains of a historic structure underneath and to the north of the Quincy Mine Office Building. This report summarizes mitigation activities including artifact collection and documentation, but findings did not alter the landscape treatment (the laying of new utility conduit).

2019: Gohman, Sean. *Inventory and Assessment of Historic Archaeological Resources at Keweenaw National Historical Park (KEWE) and Isle Royale National Park (ISRO) (Phase I) Report*. Department of Social Sciences, Michigan Technological University.

Report of the Phase 1 Survey conducted as year 1 activities of this cooperative agreement, which entailed the pedestrian survey and GPS mapping of roughly 135 acres of fee simple tracts owned by the Quincy Development Corp, representing Tracts associated with activities connected to the Quincy, Franklin, and Mesnard Mining companies in the late nineteenth and early twentieth centuries.

III. Historic Context

Given that the particular goals are so different for each of the archaeological activities reported here, we have elected to present only the general historic overview of the Quincy Hill area in this section. More particular historic background and context will be presented in Section 5 as relevant to the discussion of each specific activity.

3.1 Pre-contact Context

The pre-contact record of the Upper Great Lakes region dates back approximately 10,000 years, and clear evidence of human activity on the Keweenaw Peninsula is firmly dated to the Middle Archaic period with less clear evidence of occupation in the Early Archaic period (Martin 1999:140-145). The Indigenous peoples of Upper Great Lakes practiced subsistence patterns based on the hunting, gathering, and fishing of seasonally available resources in small, highly mobile groups. Even though a great deal of archaeological research has been conducted in the Great Lakes region (i.e. Fitting 1970; Mason 1981; Halsey and Stafford 1999), little work has focused on precontact sites on the Keweenaw Peninsula and our overall knowledge is extremely limited (Gohman 2019:16). The archaeology work that has been done has emphasized research relating to Indigenous copper mining, copper trade networks, and copper use in the northern Great Lakes (Halsey 2018; Martin 1999; Krause 1992).

Native Americans were the first people to mine the copper of the Keweenaw Peninsula between 5000 BCE and 1200 BCE. Copper mining carried out by Indigenous peoples targeted copper deposits in veins visible in exposed bedrock or digging trenches in glacial gravel deposits to find float copper. Fire was often used to heat the copper-bearing rock which was then cooled with water to fracture the rock and free the copper (Martin 1999:108-112, 140). Hammerstones, scrapers, and other wooden tools were used in the mining process (Gohman 2019:7). The archaeological evidence for these precontact mining activities include pits, trenches, and associated mining tools found in proximity to copper bearing deposits or rock.

Once freed, the raw copper was hammered into tools and ornaments such as fish hooks, awls, celts, crescent choppers, knives, projectile points, scrapers, chisels and beads (Martin 1999:230-239; Lankton 2010). During the Middle and Late Archaic periods, trade in raw copper or processed objects likely occurred in limited geographic ranges under 300 km from the mineral's source (Gohman 2019:7). The copper trade expanded during the Late Woodland period and spread throughout half of North America (Gohman 2019:7). This Indigenous copper trade was disrupted when Iroquois groups moved into the western Great Lakes, and copper mining had been abandoned by the time Euro-American explorers arrived in the area (Mulholland 1981:41; Krause 1992: 28-34).

Even so, knowledge of Ojibwe and other Native Americans' use of and trade in copper in the Lake Superior region had reached Euro-Americans on the east coast as early as 1608. In 1608 Samuel De Champlain notes the use of copper by some Native Americans in the St. Lawrence area, which is described as coming from a large lake to the west (Krause 1992:25). Over the next two centuries several Euro-American expeditions into the Lake Superior basin were conducted to identify the location and assess the nature of the copper deposits. These expeditions eventually determined that the Keweenaw Peninsula was home to large quantities of pure or 'native' copper which existed in a natural state and required little refinement. When Euro-Americans began to search for copper in the region, they had the physical evidence of ancient diggings as a source of previous generations' knowledge to guide them (Halsey 2018; Krause 1989).

Some evidence of these Indigenous mining activities was noted by surveyors tasked with the linear survey of the Keweenaw in the mid-1840s who often mapped the location of "Indian Diggings" or "ancient pits." None of these are designated on the map of Quincy Hill, but the presence of "Indian clearings" are noted along the north shore of Portage Lake (Figure 3.1), located outside and to the east of the Quincy property (Burt and Houghton 1845). However, Charles Whittlesey, commissioned by the US government to do a mineralogical and geological survey of the Lake Superior and the Upper Mississippi River Valley, worked as a surveyor in the region in the late 1840s and early 1850s and noted the presence of several "ancient excavations" along the north shore of Portage Lake. His 1863 publication "Ancient Mining on the Shores of Lake Superior" refers to ancient mining pits positioned in three classes: those bearing with the mineral range, those bearing against or across it, and pits in drift gravel. Most of the evidence for Indigenous mining was found close to shore, representing pits in the gravel drift forming a line about 100 feet above the water level. Whittlesey (1863:15) noted even larger broad, deep and regular ditches with the "appearance of old fortifications" located at the headlands of the gravel drift and connecting to adjacent ravines (Figure 3.2). None of the pits designated on this drawing appear to lie at the top of Quincy Hill. The map of the Keweenaw included as his frontispiece shows a row of pits 'bearing with the mineral range' in the vicinity of Quincy Hill, and he states that:

In the winter of 1854-5, after the land had been explored and worked for ten years, a line of depressions was discovered on the summit of the range that attracted immediate attention. On this elevated ground the old operators had discovered and worked a rich deposit of copper which was nowhere visible upon the surface. The direction of the line of pits is northeast and southwest, corresponding to the range. (Whittlesey 1863:16).

The physical evidence for pre-contact mining played a crucial role in the later development of Keweenaw's copper mining industry, providing "pretty sure guides to valuable lodes" (Whittlesey 1863:5; Halsey 2018). According to Whittlesey (1863:5):

In the opening of our principal mines, we have followed in the path of our predecessors, but with much better means of penetrating the earth to great depths. The old miners performed the part of surface explorers.

This pre-contact context indicates the high probability that Indigenous mining took place on the top of Quincy Hill and that evidence for these activities may be located during this archaeological investigation.

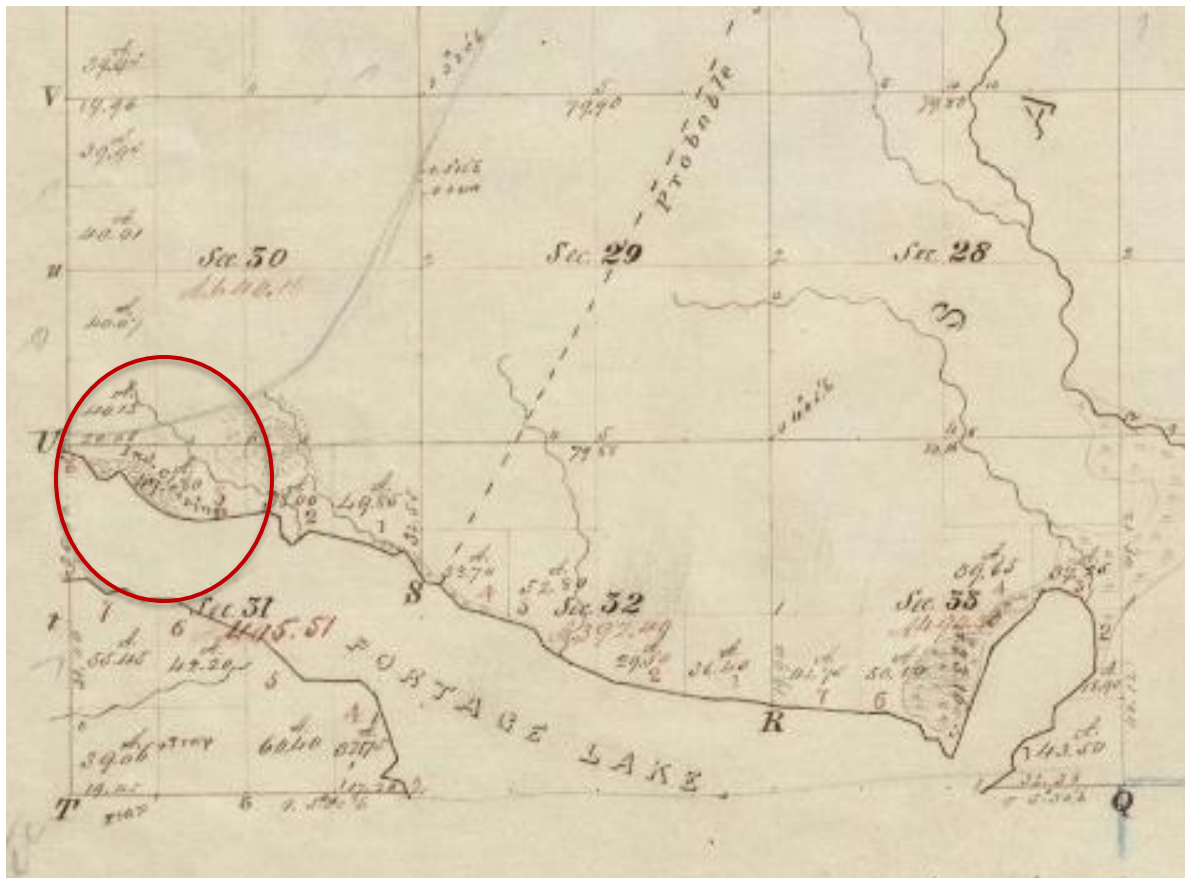
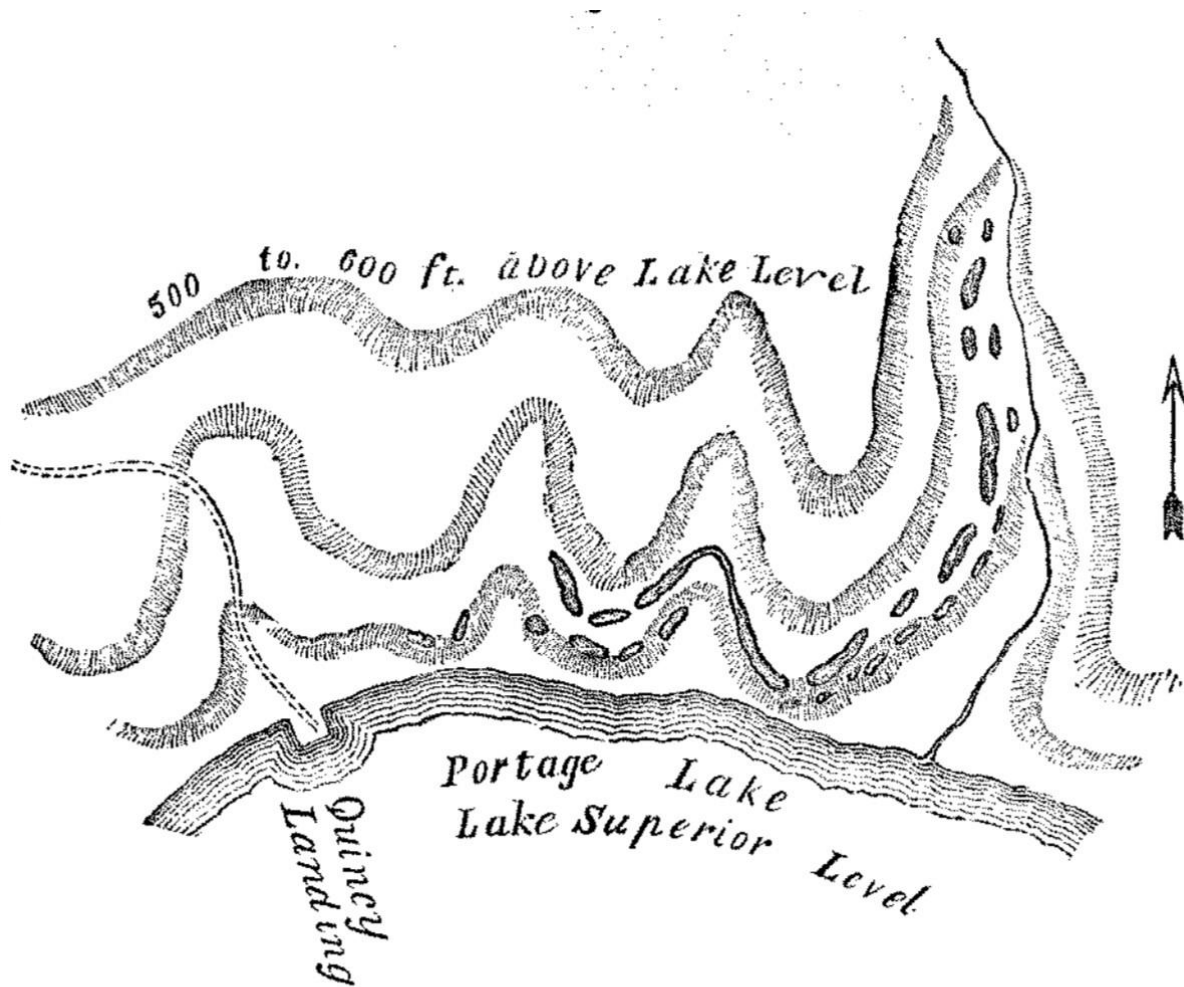


Figure 4.1: Detail of T55N, R32W showing “Indian Clearings” in Section 31 (Burt and Houghton 1845).



ANCIENT PITS IN THE BOULDER DRIFT OR GRAVEL, QUINCY LOCATION.

Figure 4.2: Charles Whittlesey's (1863) sketch of "Ancient Pits" along the hillside of Quincy Location.

3.2 Historic Context

The historic period of the Upper Peninsula and Lake Superior begins with the involvement of French as fur traders, explorers, or missionaries. Stephen Brulé was arguably the first to report the presence and description of Lake Superior in 1618, which appears on Champlain's 1632 map of New France (Collections of the Minnesota Historical Society 1885:399–400). By the mid-1600s French explorers, traders and Jesuit missionaries were more active in the area (Trudel 1973:269). In the 1670s expeditions pushed west of the Keweenaw in search of furs, minerals, and an easier route beyond the continent. While the fur trade brought American interest to the Keweenaw, it was the discovery of the extent of copper resources that catalyzed the flood of people and money to the Keweenaw.

With the signing and ratification of the 1842 Treaty of LaPointe, coming shortly after the State Geologist Douglass Houghton's fourth annual geological report (aka, *The Copper Report*), the Keweenaw Peninsula soon became the location for one of North America's great mineral rushes (Gohman 2019:8). As signatories of the treaty, the Ojibwa ceded their mineral rights to the western half of modern-day Michigan's Upper Peninsula and northwest Wisconsin but retained their rights to hunt, fish, gather, and worship until such time that they were ordered removed. The mineral district, surveyed by Douglass Houghton and located in the copper and iron regions, was expressly mentioned in Article 6 of the treaty showing how important these regions were (Kappler 1904). In the wake of reports from Houghton and newly acquired land, prospectors from across the country rushed to the Keweenaw in search of copper. Initially, mining activities concentrated on exposed veins of copper found at the northern and southern ends of the peninsula, while the area centered on Portage Lake saw little attention until the mid-1850s.

3.2.1 Quincy Mining and Exploration

The Quincy Mining Company emerged out of a dispute between two existing ventures, the Portage Mining Company and the Northwestern Mining Company of Flint, Michigan. A meeting was held in Marshall, Michigan on November 17, 1846 "for the purpose of organizing a new company based upon the locations late in dispute between the two companies" (Quincy Mining Company, Director's Minutes 1846). The precise origin of the dispute is not clear, but it involved conflicting deeds for the same lands. The companies resolved to form a new company and issued 3,000 shares of stock, with 500 shares to be retained by the new company. The remaining 2,500 shares were divided equally between the two parent companies. The new company appointed five trustees with Eurotas P. Hastings acting as President (Quincy Mining Company, Director's Minutes 1846). The company listed no explanation as to why they selected the name Quincy Mining Company. On March 30, 1848, Michigan State Legislature passed "An Act to Incorporate the Quincy Mining Company" which made the partnership officially and legally recognized (State of Michigan 1848). The first exploring parties employed by the Quincy Mining Company began working on the slopes of Portage Lake in 1846. During this period, the Portage Lake area was still very remote. In 1846, John H. Forster (1846: 189-190) described the region as follows:

The native forests, almost unbroken, starting from the water's edge, slope upwards toward the sky precipitately...As we row silently along we hear no sounds except those made by dipping oars...Man with his restless spirit has as yet scarcely disturbed the scene. A little clearing (where now stands the great smelting works) has been made at one place, and a trail winds up the hill to a point where exploring for copper has been attempted.

The undeveloped nature of the area was also reflected in the employees of the company. Christopher Columbus Douglass, a geological surveyor and explorer was selected to run the

mining operations. He hired Ransom Shelden, the first Euro-American to live in the Portage Lake district and the husband of Douglass' cousin (Forester 1846). He worked at the Quincy Mining Company from 1851 until he left to manage the neighboring Pewabic Mining Company in 1853.

Laborers on Quincy Hill removed trees and cut trenches into the topsoil looking for mass copper or copper bearing rock. Pits and shafts were sunk into the landscape at the most promising locations discovered by this trenching (Lankton and Hyde 1982). For the first 32 years of the company's history, all this work was done by hand, utilizing hand drills, sledges, and black powder (Quincy Mining Company, Director's Minutes 1847). Early explorations continued in this fashion from 1847-1851, with a labor force never exceeding a dozen men, and sometimes as few as two. Charles T. Jackson visited Quincy Hill in 1848 and reported only two workers living in a single log house, working one large shaft that was 4 square feet and 67 feet deep that had penetrated a lode that ran 43 degrees northeast and dipped 58 degrees to the northwest (Jackson 1849). By March 1851, the company had spent \$11,000 without producing much copper. After a temporary suspension of work, the company management moved from Detroit to Philadelphia (Quincy Mining Company, Director's Minutes 1851).

The new management in Philadelphia began to employ more people. By the end of July, the company had 17 workers and reached 28 employees by October 1851. At least three veins were opened on the hillside in 1852-53 and shafts were sunk to 100 feet deep (Lankton and Hyde 1982). These efforts produced nearly 10 tons of copper, including two large masses of 2,020 and 1,320 pounds. The company also decided to start collecting copper from "stamp rock" which contained only 2-3% copper, and the company invested in stamps to break the rock (Davidson 1852).

In early 1854 the Quincy Mining Company moved up to the top of the Quincy Hill and discovered the first extensive vein of amygdaloid copper which was subsequently called the Quincy Lode. The company director gave Douglass the authority to proceed developing the Quincy Lode or explore nearby ancient diggings, stating "we wish you to do it, in the most economical manner to develop the veins: leaving it to your discretion to work the vein you have already found or to trace the other vein by the ancient digging to our land" (Davidson 1852). Douglass chose to concentrate efforts on the Quincy Lode, but if he had traced the line of ancient diggings, he would have found the Pewabic Lode earlier. The Quincy Lode was not as rich as hoped and all mining activities ceased from March 1855 until July 1856 (Lankton and Hyde 1982).

Just before the temporary shutdown in 1855, Douglass hired William B. Frue to explore several ancient pits on the Quincy property near the Pewabic Mine activities, which had recently identified the Pewabic Lode. The Frue party discovered amygdaloid copper at the bottom of

these ancient pits, clear evidence of a lode beneath the surface. The discovery that the Pewabic Lode crossed into the Quincy Mining Company property revitalized the company and saved it from permanent closure, but even these diggings shut down in 1855. Mining efforts on Quincy Hill did not continue until 1856, when the Quincy Mining Company resumed efforts under new directors who moved their base of operations from Philadelphia back to Detroit (Lankton and Hyde 1982).

The Quincy Mining Company did not spend much time in Detroit, relocating quickly to New York to more easily acquire credit (Quincy Mining Company, Director's Minutes 1856). After resuming mining operations in 1856, Douglass concentrated on the Quincy Lode. Miners extended the two existing shafts to depths of 210 and 174 feet by August 1858 and opened a third shaft to a depth of 113 feet (Lake Superior Miner 1858). Work on the Pewabic Lode took longer to start, but by the end of 1857 they had sunk three shafts in the lode, quickly followed by a fourth shaft in December of 1858, and two more in the summer of 1859 (Quincy Mining Company, Director's Minutes 1860). Literature from the time express that a decade of failure finally gave way to an age of optimism. That optimism was appropriate for the company, but not for the fate of the Quincy Lode. After Douglass resigned as agent in June of 1858, the new agent Samuel Worth Hill abandoned working the Quincy Lode completely within a few months. It had apparently never yielded enough ore to justify the cost of continued operations (Quincy Mining Company, Director's Minutes 1858).

The company moved on to focus on the Pewabic Lode which proved to be a wise decision as production continuously increased. Employment at the mine swelled from 80-120 men in 1858, to 257 in 1859, and to 500 one year later in 1860 (Lankton and Hyde 1982). The western portion of the hill containing the Quincy Lode became peripheral to the actively mined land just to the east and the area of the Quincy Lode became a landscape of houses for management and miners, the mine office, general store, blacksmith shop, and the dry house. The area of the original Quincy Lode became a locus of support and infrastructure for the mining activities that now occurred elsewhere (Figure 3.3). Most of these structures are represented only in the rich archaeological record of the Quincy area of the Keweenaw National Historical Park.



Figure 4.3: View south from Quincy No 2 Rockhouse. The original Quincy Lode runs parallel to the road immediately west of the dry house, visible to the right of this photograph. ACC-98-120A-8-14-91-01-03. Michigan Technological University Archives.

3.2.2 The 1913-14 Copper Country Miners' Strike and the Quincy National Guard Encampment

Kaunonen and Goings (2013:4) note that the themes of class, conflict, and a working class perspective are noticeably absent in Copper Country history, but you do not have to dig very deep to uncover the 'hidden history' of labor activism, unionists, radicals and strikes. Company policies, economic hardships, ethnic conflict, and higher costs of living all played a role in the class relations between the Quincy Mining Company and its employees over the decades which finally boiled over in the Copper Country Miners' Strike of 1913. The social conditions resulting in this strike have deep historical roots.

Between the Civil War and 1885, Quincy experienced only a small series of short strikes beginning in April 1872 when a sharp rise in the cost of living in the region combined with a shortage of miners led the men to demand higher wages. Quincy miners struck successfully for 2 weeks in May, and miner's wages went up from an average of \$47.08 per month to \$60.62 at the end of 1872 (Rowe 1974). The president of Quincy believed his miners would strike again the next year but avoided the conflict by giving the miners an "easy" contract which helped raise the

average wage to \$63 a month in 1873 (Rowe 1974). These would be the last truly successful labor actions at Quincy until the company closed.

Workers at Calumet and Hecla began another strike for higher wages in January of 1874, but the effort collapsed after one week (Corey 1874). No other strikes occurred in the Copper Country between 1874 and June 1890. Since the 1890s, the region was punctuated by labor strikes. Gates (2013) argues that these labor actions resulted from sharp increases in the cost of living, the growing size of the mining companies that produced impersonalization and failures in communication, and rapid technological change which often threatened job security. The dramatic growth of the Quincy Mining Company and growing ethnic divisions within the labor force also exacerbated relations (Gates 2013:92).

Until 1885, Quincy's labor force was dominated by German, Cornish, and Irish workers (Turner 1999) but quickly changed dramatically. In 1880 the Bureau of Industrial and Labor Statistics surveyed 3070 men in the copper district and found 20% of them were now Finns, Swedes, Italians, and Norwegians (Michigan Bureau of Labor and Industrial Statistics 1889:91). The Quincy workforce reflected this new ethnic makeup as well; half of the foreign-born workers hired between 1890-1900 were Finnish and another 25% were Italian. These new immigrants were illiterate in English and often their own language (Lankton and Hyde 1982). Unlike the Cornish, these immigrant groups often came from agricultural backgrounds rather than mining ones, a fact which lowered their labor value. These limitations, along with outright discrimination, meant groups like the Finns began working as underground laborers and general surface workers which were the most physically demanding and poorly paid jobs at the company (Hoglund 1960:58). This increase in population and laborers would not only contribute to the increased cost of living, but also depressed the value of these positions' labor.

Between 1890 and 1905, the Quincy Mining Company faced five strikes, all lasting only three weeks or less. Of these five strikes, three were strikes by trammers resulting from wage cuts or stagnation. The remaining two strikes were for higher wages across the board. All five of these strikes ended with a compromise between workers and the company. One example is the January 1904 strike, called after the company announced a cut to trammers' wages from \$60 to \$55 a month. The strike ended after the trammers accepted a compromise of a pay reduction to \$58.50 a month (Harris 1904). Another strike in 1906 ended when Quincy workers accepted a major compromise in their demands for pay in exchange for better safety conditions, a major concern for the miners at Quincy (Kaunonen & Goings 2013).

The final irritant to the laborers in the Copper Country was the one-man drill, a technological innovation that allowed single miners to work alone. It put an end to the "buddy" system where miners worked in tandem, and each miner had a nearby co-worker to assist him in the event of an accident or injury (Turner 1999). Miners feared that the one-man drill would reduce the amount

of labor needed, thus threatening their jobs, as well as their safety and lives. As the final straw, the workers of the region determined to take a stand. Kaunonen and Goings (2013:98) note that “union activity in the Copper Country began as a whimper, progressed to a mutter, and became a roar”, and the key issues were wages, working conditions, unwanted technological change, and recognition of the union as worker's representative.

The strike began on July 23, 1913 with employees walking out from Calumet & Hecla, Quincy, and all other copper mines in the region. The day after the strike officially began, a battle between a group of miners and deputized men broke out on the streets of Red Jacket. Unlike the previous strikes, 1913 would be characterized by its violence and bloodshed. Mining companies, including Quincy, refused to meet with union representatives for the entirety of the strike.

James A. Cruse, Sheriff of Houghton County, realized he could not protect the mine company property or the safety of those who did not strike. Although other local government officials thought it was a bad idea that would escalate the situation, Cruse took action into his own hands and swore in about 600 deputy sheriffs the day the strike was called (Kaunonen and Goings 2013:103) and subsequently hired 52 guards from the Waddel-Mahon Corporation, a notorious strike-breaking organization (Ferris 1922; Kaunonen & Goings 2013). Cruse sought help from the state as well, petitioning Governor Ferris for help on July 24th via telegram:

I am convinced that the situation will become worse and will result in great destruction of property and possible loss of life unless I receive the aid of the State troops. I will require about 2,000 men to cover the territory, and as the Sheriff of Houghton County I ask that you call out the troops to that number and detail them for service here at once.

This was the start of the longest mobilization of the Michigan National Guard in history (McDougall 1913). The governor reportedly exchanged telegrams with several citizens, all of whom suggested that sending the entire Guard was the best means of avoiding serious conflict. An order was given to each commander and they began to mobilize immediately. Units from the Menominee and Soo companies arrived in Calumet the morning of the 25th, and companies from downstate arrived shortly after. General Abbey, the officer in charge of the deployment, spread his troops across the district's 20 mining companies including Quincy, which was the second largest mine at the time. By July 28th troops were sent further north to Keweenaw County as well, when the Sheriff of that county also applied for help from the Governor (McDougall 1913).

A total of 2,817 militiamen were deployed to the Copper Country, and they stayed until August 14th, when the numbers were reduced to 133 officers and 1,325 men. Cost seems to have been a big factor in this reduction. Deploying the National Guard was expensive, costing the state of Michigan nearly \$400,000 for their stay in the Keweenaw (Hoagland 2010:64; Lankton 1991:227). The number of troops was continuously reduced until there were 59 officers and

1,007 men on August 29th. The tour was finally concluded on January 12th when all troops had left the Copper Country (Thurner 1999). The largest camp was in Calumet, located between Calumet and Hecla's library and bathhouse. The Calumet and Hecla Mining Company piped water and strung electric lights for the camp, and even provided trucks and automobiles (Hoagland 2010:61). The Quincy Mining Company also provided space for the National Guard, and the 525 troops at Quincy camped in the shadow of the No. 2 Rockhouse (Hoagland 2010:61). It is unclear exactly when the camp was established or abandoned at Quincy Hill, though it likely coincides closely to the general dates of troop presence in the Copper Country.

The role of the National Guard was to diffuse tension and keep the peace, but this was not easy in the tense atmosphere of the early period of the strike. John H. Walker, the secretary of the Illinois State Federation of Labor, issued a controversial report that General Abbey used the troops as "scab herders, strike-breakers, and black-leg protectors" (Calumet News Aug. 23) Walker continued stating that the militia "have shot people in the back, browbeaten men and women, insulted women and girls, and *after filling up on beer and whiskey sent them by the mine owners*, swaggered up and down the streets with their big guns and sabers, a disgrace to the rottenest government on earth, let alone ours." General Abbey asked Walker for the evidence for these charges so they might investigate, but he never received it (Calumet News Aug. 23, italics added). Even though this is a sensationalist report, it does suggest that the mine companies may have supplied these camps with more than just electricity.

The relationship between the National Guard and local law enforcement was also tense. General Abbey expressed frustration when dealing with law enforcement and their deputized men, observing that they often instigated and contributed to conflicts with strikers, often boiling over to region-wide violent events in retaliation. One example can be seen in the message General Abbey wired to Governor Ferris (Ferris Records RG-46) after a deputy shot a striker on October 23rd:

Lawlessness broke loose throughout the district today. Northwestern train windows smashed with rocks. 30 men broke into the workmen's home at Quincy. Row [sic] with deputies at Quincy. Paraders at Calumet armed with clubs. Three fights, 2 deputies badly cut up. 13 strikers arrested. 4 arrests near Ahmeek for shooting up workmen's premises. 2 arrested at Allouez. Picketing throughout the entire district.

Abbey described the region as "absolutely without officials to enforce the law, and furthermore, they do not try to." As another example, intimidators in Keweenaw county threatened to dynamite houses of non-union men and WFM deserters but Keweenaw police made no attempt to arrest anyone (MacNaughton 1913).

The Quincy Mining Company seemed to take a tougher stance against the strike than other copper mines in the region. Quincy was the first company to import replacement or “scab” workers. The first arrived on September 19th and included 37 workers hired from an Austro-American labor agency; all but 14 of these either fled the area or joined the strike before beginning work. Many of these strike-breakers claimed they did not know about the strike until they arrived (Calumet News Sept. 19th). During the strike, miners occupying company housing stopped paying rent, and Quincy tried to oust strikers from their houses through a Michigan Supreme Court decision. WFM lawyers got stays of the writs of eviction in more than 600 cases in the Copper Country. Across the entire region, there were never more than six forceful evictions (Thurner 1999; Hoagland 2010). Instances also exist of General Abbey dispersing multiple parades of striking Finnish workers setting out from Hancock to Quincy Hill, despite the orderly ranks flying American flags (Kaunonen and Goings 2013).

The strength of the WFM and the strike waned as the months rolled by. The momentum shifted back in favor of the strikers one final time on Christmas 1913 as a result of the Italian Hall Disaster. This tragedy occurred during a children’s Christmas party hosted by the Ladies Auxiliary of the WFM in Calumet after someone shouted fire in the crowded building, resulting in a stampede where 73 people were killed, 59 of which were children. The WFM was quick to use the tragedy to favor the miners, and WFM President Charles Moyer told an AP reporter “I believe the strike is won” and that he would be returning to Calumet soon (Chicago Tribune 1913). Politicians and Union leaders from across the country at every level expressed sympathy for the families in Calumet. Support for Michigan strikers surged in the wake of the calamity, but missteps made by WFM leadership turned the tide of sympathy. The strike officially ended April 13, 1914. The miners of the Copper Country did win an 8-hour workday, but the workers did not achieve their other goals.

IV. Methods

4.1 Field Methods

Field work on parcels 102-03 and 102-04 was conducted as part of the 2019 Michigan Technological University (MTU) archaeological field school. Excavations took place over a six-week period between May 13 and June 25 of 2019. A metric grid was laid out in the parcels so all structures, STPs and excavation units could be mapped using the same coordinate system in order to facilitate the production of site maps. The orientation of the grid and all datum points are recorded in the GIS files. All identified features, STPs, and excavation units were mapped using a total station and hand-held GPS unit. All features were assigned unique numbers and are referred to in this report by the convention “F” with the number. A list of all assigned features is included as Appendix A. All of the spatial data was organized into a single project GIS that will be submitted to MWAC as part of this cooperative agreement. The maps have been used to document the dimensions and orientation of present features and excavations.

All units were excavated in standard metric sizes. Most measured 1 X 1 meter, along with a single 2 X 1 meter unit at F294. All units were excavated in 10 cm arbitrary levels within natural stratum or newly encountered features. All units were excavated with the use of shovels, trowels, and dustpans. Soil was removed by bucket and screened through a ¼ inch hardware mesh cloth to recover any artifacts. Artifacts were collected separately for each level and bagged as such. Each bag was given a unique number (unit and level) and were recorded in an artifact catalog. Records were kept from each level denoting location, depth, soil color, and texture, recovered artifacts, and any notes from the excavators. Units were excavated until reaching a level of sterile soil, devoid of cultural material. An exception to this would be the excavation F31C Unit 1, which was not excavated to sterile soil due to time constraints at the end of the field school. Plan and profile drawings were made when their information contributed to the understanding and record of the site. Photographs of units and features were taken by a Nikon D5200 at 6000x4000 pixels. After the completion of excavation, all units were backfilled by hand.

4.2 Lab Methods

All collected artifacts were washed, dried, and re-bagged at the MTU archaeology lab. All artifacts were cataloged by the MWAC artifact card system with slight modifications to include attributes from our own non-hierarchical catalog system based on a modification of South’s artifact classification (South 1978). Each artifact was classified by functional group (food related, architectural, smoking, etc.) to facilitate quick comparisons, along with a specific type attribute (cut nail, beer bottle, wire, etc.) that allows more fine-grained analysis. None of our excavations generated sufficient material culture to warrant assessment of minimal or unique

ceramic and glass vessels. We did, however, use an estimate of object completeness to aid in assessing formation processes.

Artifacts were also coded based on their material, decoration type and color of decoration for ceramic and glass vessels. Information on manufacturing technique, neck design, and form were all cataloged when applicable. The catalog also contains fields for artifact count, weight, and diameter. Date ranges were added for diagnostic artifacts based on maker's marks, decorative or manufacturing techniques, or patent dates to allow assignment of mean and Terminus Post Quem (TPQ, the date after which the object and associated layer must date) for various site areas, which would allow assessment of their temporal and spatial association. More details about this catalog system and the attribute coding sheets are included as Appendix B and the complete artifact catalog can be found in Appendix C.

Faunal analysis consisted of determining the element of a bone (ex. femur) and its portion (ex. distal or proximal), whether or not the bone was fused, which side of the animal it was from, and any markings on the bone. Bone fusion is indicative of the relative age of the animal. Markings on the bone could suggest butchery techniques, preferences for cuts of meat, and post-depositional processes such as rodent activity. Identification was made based on species, however, when the species identification was questionable, the classification was more general (ex. Medium mammal) or the "SP" (species) term was used (ex. Rattus SP) rather than the more specific taxon. Evidence of burning if present was also recorded to better understand the ways that meat was processed, or food waste treated. The faunal catalog is included as Appendix D.

V. Description of Activity Areas

Since each of the activities associated with the 2019 investigations used such different methods and approaches related to the diverse goals and objectives, each activity will be discussed separately in this section. Activity 1 is straightforward, requiring little elaboration. The others are more complex, and we have elected to include a detailed historical background focusing on the particulars of each area or activity in addition to the detailed description of the archaeological methods and results for each.

5.1 Activity 1: Fissure Feature 26 (Tract 102-03)

Activity 1 consisted of investigating what appears to be a natural fissure in the bedrock located to the north of No. 2 Road and south of Campus Drive that is visible on the ground surface on Tract 102-03 (Figure 5.1). The fissure, designated F26, runs roughly parallel to current US-41 in a direction N/NE by S/SW, and extends for 35 meters. The visibility of the fissure is obscured in places by brush and overburden. Historic maps link this area to the Quincy Lode, suggesting that this fissure may be evidence of the lode's surface outcropping. The 1898 Quincy map that shows the extent of the original Quincy Lode demonstrates that this fissure and associated rockpile are oriented to the same line, but that the fissure is located further to the northeast (Figure 5.2). A 1903 traced map of early Quincy Lode exploration (Figure 5.4) shows that the early exploratory cuts were oriented east-west, roughly perpendicular to US-41 casting doubt that this feature represents one of the early Quincy cuts. It is also possible that it represents pre-contact mining activity or even a filled-in prospect trench.

Five STPs were excavated in order to clarify this fissure and evaluate its research potential. These STPs were located on the immediate northwest side of the fissure since there was too much rock to allow excavation inside the fissure (Figure 5.2). All of the STPs were excavated to an average depth of 50 cm and all contained only one soil layer of 10YR 3/3 brown silty sand densely filled with rock.

Artifacts were recovered from all of the STPs except Fissure STP 5. The 49 total artifacts consist mainly of coal and slag (9) and clear (13), aqua (5), and brown (10) glass fragments. In addition, 6 ironstone fragments including one identified as a plate, and two unglazed flowerpot fragments were recovered. A small number of cut (2) and wire nails (1) were found, as was a pipe bowl with a dotted and lined pattern. The materials in these STPs all seem to be similar, indicating they originated from the same processes. The average weight of these fragments is only 4.27 gm, suggesting that these materials derive from low density sheet midden. None of these artifacts are diagnostic although the ironstone fragments and wire nails do indicate a post-1850 date.

Unfortunately, this preliminary testing did not help to clarify the nature of this fissure since the STPs were located outside of the fissure itself, and all materials represent low density sheet midden, likely derived from nearby domestic sites. Possibilities include the F30 multi-family

dwelling located about 80 feet (24 m) southeast from the F26 fissure or the bath house/clubhouse (F29) constructed in 1917 and located 66 feet (20 m) to the east.

In sum, it is possible that the fissure represents a natural feature, a natural feature that may have been modified by trenching in an attempt to locate the extent of the Quincy Lode in the early-to-mid 1850s, or evidence of a prehistoric mining trench. Since all of the artifacts from these STPs relate to low density sheet midden that likely derived from nearby structures, they offer little clarification of the fissure feature itself. Since the actual fissure is covered with so much rock, little more can be learned about this area unless the rock can be removed to allow more intensive testing. This feature has a high potential for interpreting the company's exploratory efforts, but this would require a great deal of effort to remove the vegetation the rock from the fissure.



Figure 6.1: F26, extending parallel to US-41 facing north.



Figure 6.2: F26 Fissure STPs and low-lying rock in relation to original Quincy Lode shown on the 1898 Quincy map.

5.2 Activity 2: Quincy Dry House Area (Tract 102-03)

Activity 2 centers on a narrow band of land south and west of the dry house ruins. The goal of this activity is to confirm or identify features and resources related to the Quincy Mining Company's efforts to exploit the Quincy Lode in the mid-1850s and to potentially locate material culture linked to pre-contact activities as well.

5.2.1 Historical Background for the Quincy Dry House Area

This area is one of the oldest continuously used parcels during the Quincy Mining Company's century of active mining, first as the site of initial prospecting and exploitation of the Quincy Lode, then as a site of early mining community development, and finally as the site of both a company blacksmith shop and a dry house.

In 1854, Douglass discovered the Quincy Lode on top of Quincy Hill and focused development efforts there by opening at least three separate shafts that were worked until the mine temporarily closed in 1855 (Lankton and Hyde 1982:12). When operations continued in 1856, Douglass concentrated all mining operations on the Quincy Lode. Miners worked to sink two existing shafts down to depths of 210 and 174 feet by August 1858, along with opening a third shaft down to 113 feet (Lake Superior Miner 1858). After Douglass resigned as agent in June of 1858, the new agent Samuel Worth Hill totally abandoned working the Quincy Lode within a few months since it never yielded enough ore to justify the cost of continued operations (Quincy Mining Company, Director's Minutes 1858). It is revealing that Hill's 1859 map of Quincy does not show any of these early workings on the Quincy Lode even though work on the Pewabic vein is well represented (Figure 5.3). Subsequently, the company moved on to focus exclusively on the Pewabic Lode.

The early mining work is shown on a 1903 traced map that includes two shafts and four exploratory cuts in the area of the Quincy Lode as well as a line of ancient diggings that seem to lie above the extent of the Pewabic Lode (Figure 5.4). The HAER map reconstructing Quincy Mine as it existed in 1865 (Figure 5.5) shows the extent of the original Quincy Lode running parallel to current US-41. The undated post-1917 map (Figure 5.6) documents abandoned shafts "now covered at surface." One is located due south of the south end of the dry house, the only one shown on the west side of US-41, but a line of four abandoned shafts are shown in the area on the opposite side of the road.

After Quincy abandoned work on the Quincy Lode, this area became a locus for non-mining activities. The company blacksmith shop and a dry house were built in this area between 1859-1865. A row of five houses were built about the same time to the north of the dry house. To the south of the dry house was a supply house and carpenter shop which became the site of North's Store, relocated there in 1900 after the original store was replaced with the Mine Office in 1897.

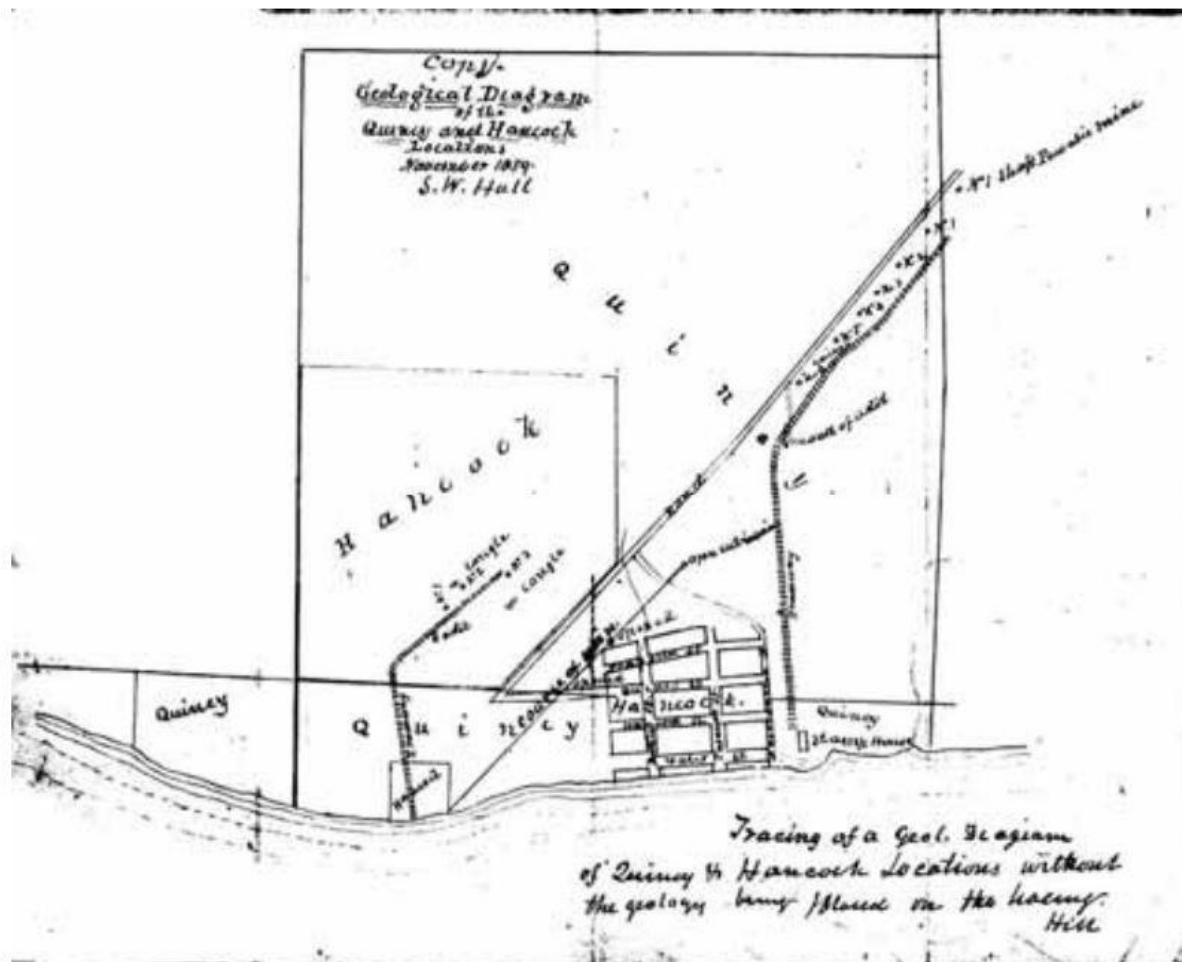


Figure 6.3: 1859 Hill map of Quincy operations.

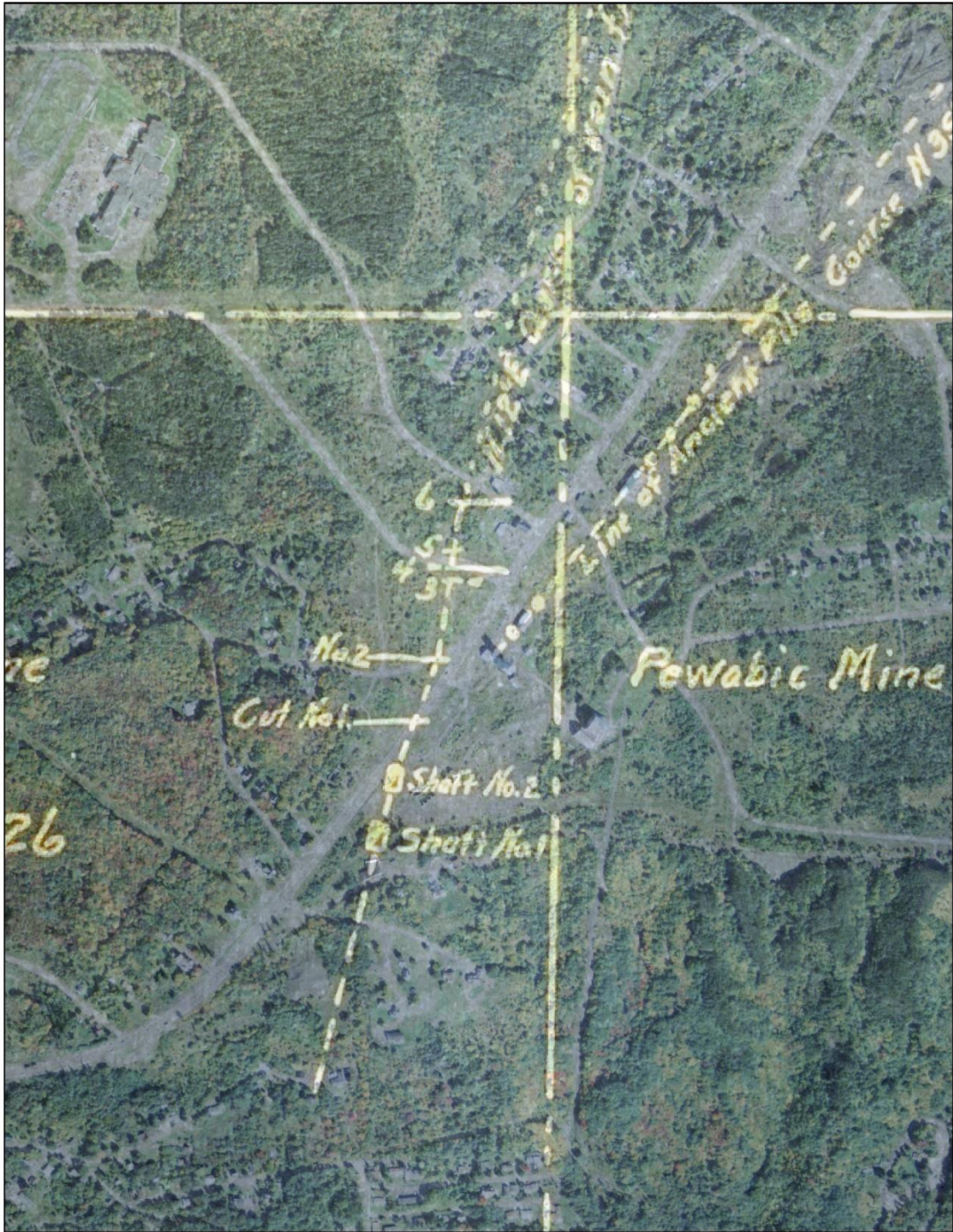


Figure 6.4: 1903 traced map showing exploratory mining shafts and cuts on Quincy property as well as a line of ancient diggings, georeferenced and projected over current ortho imagery. MTU archives.

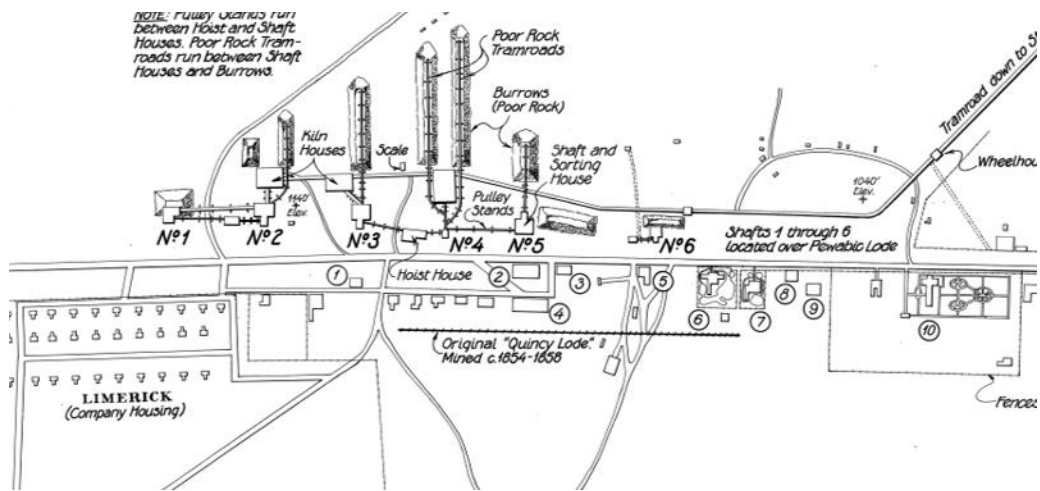


Figure 6.5: Detail of HAER map showing Quincy Mine in 1865 and the original Quincy Lode.

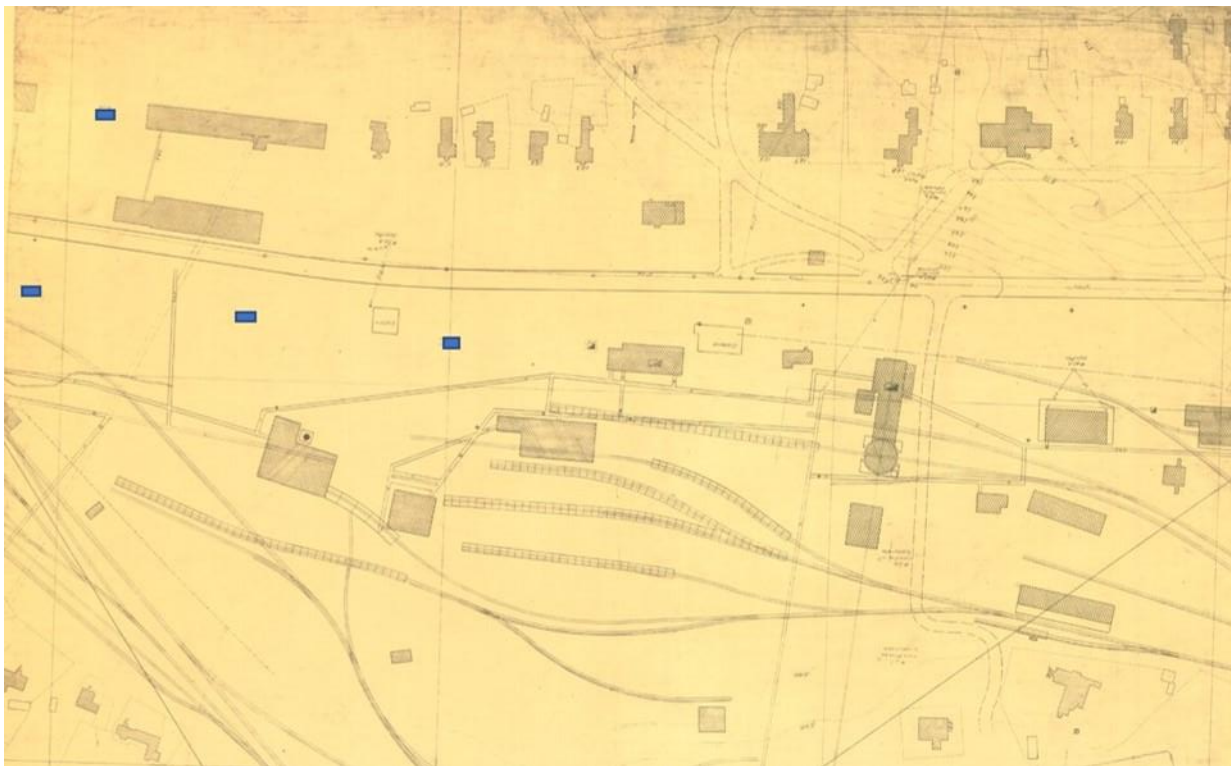


Figure 6.6: Quincy property post-1917 map showing abandoned shafts.

5.2.2 Archaeological Methods and Results

The narrow band of land south and west of the dry house ruins is made up of uneven land and poor rock deposits, with dry grassy patches surrounded by thorny brush. The brush gives way to trees south of the dry house ruin. These poor rock deposits and uneven ground surface made any systematic investigation of this area difficult. Instead, two STPs (designated QD1 and QD2) were excavated within a depression located to the south of the dry house, in the vicinity of the abandoned mineshaft shown on the post-1917 Quincy Map (Figure 5.6), designated F328 (Gohman 2019). The poor rock pile is visible in historic photographs showing this area (see Figure 3.3).

STP QD1 was placed 14 meters straight southeast of the southeastern corner of the dry house ruin, in a bare patch of land clear of any trees (Figure 5.7). Given the potential for this STP to go deep, it was larger than the typical STP, measuring 60 X 70 cm. It had a 15 cm layer of topsoil, followed by a 5 cm layer of plaster. Beneath this was another fill layer extending from 20-27 cm. From 27-46 cm a second layer of plaster-infused soil was encountered. Beneath this was a dark-brown soil to the final depth of 65 cm, where large rocks prevented continuing any deeper. Artifacts were collected from the STP as a single provenience so comparison between soil layers is impossible. The depth of these deposits and alternating layers indicate deep fill deposits consistent with the location of an abandoned and filled shaft.

STP QD2 was placed in a depression a few meters southwest of QD1 in order to clarify the stratigraphic record of this possible shaft and recover more diagnostic information about the timing of its abandonment and methods used to cap and fill it. Although QD2 is farther away from the shaft location documented on the post-1917 map, the depression suggests that it was associated with the same F328 shaft. This STP measured 50 X 40 cm and was excavated to a final depth of 120 cm. All the soils encountered were the same layer of grey silty and rocky soil with no discernable stratigraphic layers. Fragments of plaster were found throughout, but not in any solid layer as noted in STP QD1. The continuous deposit of fill indicates all the artifacts in the STP were deposited at roughly the same time. If so, this contradicts the idea that both STPs sampled the same shaft that was filled at the same time utilizing the same processes, since the stratigraphic profile is so different for each. It is possible that what appeared to be a cap of plaster in QD1 was actually a concentration of plaster fill that settled to create this appearance. It seems likely that the shaft was filled with multiple dumping episodes, such as many separate wheelbarrows loads of fill, that settled in different areas creating different stratigraphic profiles.



Figure 6.7: 1898 Quincy Map showing the location of STPs QD1 & QD2.

A few other interpretive dilemmas are raised by the artifacts recovered from these STPs. A total of 456 artifacts were recovered from them, 97 from QD1 and 359 from QD2. These sample size differences are also reflected in the percentages of the most common artifact group (Table 5.1). The most common groups from QD1 are unidentified, followed by food related and architectural groups, QD2 has a higher percentage of food related objects, followed by unidentified and architectural groups. These slight differences in the artifact assemblages are also present in the artifact types represented by the unidentified group category. The most common types in each STP are unidentified glass and bottle fragments which comprise 54% of the QD1 unidentified group artifacts, but 72% of those from QD2. Unidentified metal is more similar between the STPs, representing 27% of the QD1 unidentified group, and 25% from QD2.

STP	Food-Related	Architectural	Medicinal	Household	Personal	Other	Unidentified
QD1	27 (28%)	18 (19%)	4	0	0	2	48 (49%)
QD2	139 (39%)	97 (27%)	1	5	3	10	110 (31%)

Table 6.1: Common Artifact Groups for F328 Shaft STPs (Tract 102-03)

Only a few diagnostic artifacts were recovered from QD1: several fragments of sun purpled glass (1880-1914) and a carbon battery rod that post-dates 1880. QD2 had a wider range of diagnostic artifacts, including an ironstone serving vessel marked J&G Meakin Hanley, England which post-dates 1891, an ironstone saucer marked “Canonsburg China” which post-dates 1909, a gold-painted ceramic vessel marked Homer Laughlin (1926+), a clear tumbler from the Capstan Glass Company (1919-1938), a tube for “Princess Pat” lipstick (1919+), a milk bottle made by the Thatcher Manufacturing Company (1904+), and a pink Fenton Depression Glass candy dish with ornamental birds which postdates 1930 (Figure 5.8).

These dates indicate early 20th century deposition in this depression feature, a situation at odds with the time frame of the shaft’s abandonment. It is hard to imagine that this 1850s shaft was left open and only capped and filled in the 1930s. It is possible that the shaft was covered with boards that rotted and slumped over time, creating a depression suitable for later refuse disposal. The high percentage of food-related artifacts and unidentified glass suggests a domestic origin for this assemblage, and the differences in the STP’s assemblages noted above would indicate the gradual accumulation of this domestic refuse. It is impossible to determine which households created these refuse deposits, but it is likely they derived from households occupying the houses to the north of the dry house or even the North Store, moved immediately to the south in 1900 and operated at least until 1942. In any case, none of these materials are linked to the early Quincy exploration period which was the goal of this activity. Given the apparent association of F328 with the early mining of the Quincy Lode, this feature does provide material evidence for the early period and thus has a high research potential. Larger scale excavations could clarify the nature of this shaft and its abandonment and subsequent filling. However, the 1930s fill deposits indicate that this research would require a great deal of effort.



Figure 6.8: Photo of pink depression glass candy dish, 'Princess Pat' lipstick case and souvenir ribbon part, all from STP QD2.

5.3 Activity 3: Quincy Mine Office Area (Tract 102-04)

Activity 3 concentrated on the parcel of land directly behind the Quincy Mine Office. The goal of this activity was to document, evaluate and date the structural features identified during the 2018 survey of the tract, determine if they constitute some of the earliest structures associated with the Quincy Mining Company, and provide a precise map of features to offer additional resources for the interpretation of an already managed landscape linked to the office building.

5.3.1 Historical Background for the Quincy Mine Office Area

The scarred landscape in the tract behind the Quincy Mine Office may provide evidence of the early mining period at the original Quincy Lode. The Quincy Mining Company began exploratory mining on Quincy Hill in 1854 and continued to mine what is now the western side of US-41 until 1858 when they shifted focus entirely to the Pewabic Lode. This exploratory mining was done with hand-tools by shoveling away topsoil and breaking bedrock to find copper

veins, leaving behind depressions and trenches. Later more intensive mining activities on the Quincy Lode involved digging much further down into the rock. At least three shafts were sunk to depths between 100-210 feet into Quincy Hill.

The HAER map of Quincy c. 1865 (Figure 5.5) and an 1898 map of Quincy (Figure 5.9) both show the line of the original Quincy Lode as running parallel to and on the west side of current US-41, originating to the north of the current Mine Office and extending just south of the No. 2 Road. This indicates that the Mine Office area under investigation here is just outside and to the southwest of the original underground excavation of the Quincy Lode. All the mining activities had shifted further east to the Pewabic Lode, leaving the west side of current US-41 for dwelling and service-related functions.

The HAER map of Quincy in 1865 shows a line of buildings on the west side of the road and parallel to the line of the original Quincy Lode (Figure 5.5). The original Quincy office building constructed in the 1850s was replaced by a two-story frame structure in 1864-1865 (Blackburn 2011). A December 20, 1864 journal entry for Emery Lord & Company includes a payment of \$1,125 for the construction of a new mine office, with an additional \$45.00 for extra labor (Quincy Mining Company 1865:486). The company paid \$79.60 for “46 days of digging sellars [sic]” on September 19, 1864 (Quincy Mining Company 1895:446).

At the same time, the Quincy Mining Company built a store located just to the north of the office and operated it in 1863-64. This venture was not a success, so they sold the store to Seth D. North in September 1866. North operated the store in that location for several decades, but it was demolished to make room for the new office building in 1897. North moved his operations further north to a new building located just south of the dry house.

The location of both the 1864 office and the store are shown on the 1865 HAER map (Figure 5.5). A sizable fence encloses the Agent’s House lot to the south, and the clerk’s and possible doctor’s house lots to the north are also enclosed by fences. This left the store and company office unbounded in between. The 1888 Sanborn map shows a dwelling to the south of the office, labeled as ‘Clerk’s Residence’ on the HAER map of Quincy in 1920. This dwelling is not shown in 1865 and was added in the intervening years. We do not know when the clerk’s dwelling was removed, but the location is currently an empty lot.

The overlay of the 1898 Quincy map on the 1888 Sanborn (Figure 5.10) shows the relationship between these structures. North’s Store and the original mine office partially overlap the new office building footprint. This is consistent with the results of recent archaeological investigation in the area which documented traces of the foundation for North’s Store (Wurst 2018). It appears that the original office was moved further to the south on the site to make room for the construction of the existing mine office in 1897, reflected in a historic photo title ‘New Mine Office,’ that shows the 1864 office immediately to the south of the new mine office (Figure 5.11). The fact that the old office building is placed on piers supports the idea that the old office

was situated within the footprint of the current office and moved out of the way of the construction of its replacement (Bringelson and Wiewel 2017). The clerk's residence and Quincy Agent's House can be seen in the background of this photograph.

Unfortunately, these maps show nothing further away from the road that would document historic land use within our survey area. The 1888 and 1893 Sanborn maps do show a large structure directly behind the store, labeled as a warehouse with a two-story central portion, and one-story wings on both north and south sides. This warehouse was gone in 1900, likely removed when the store moved, and the new office was built. The 1898 Quincy map (Figure 5.9) shows the new mine office with the entire area surrounded by a fence. No outbuildings are shown behind the office.

Another visual indication of the land use in the space behind the mine office derives from the 1873 bird's eye image (Figure 5.12). This image shows five structures to the west and northwest behind the office (labeled #13) and store (noted as #14), and large piles of milled lumber lie further to the north. These structures are shown with little detail, nor can we assume that they are accurately located, rendered, or represent all the structures in this area. However, only one of these structures is shown with a door and window, in what appears to be a salt-box shape. The others are all narrow rectangular structures with gable roofs oriented perpendicular to the road. Other houses shown further to the north (not included in this detail) appear to be Frenchtown and Limerick locations, both constructed in 1864. All of these structures are shown with doors and windows, and smaller buildings with no windows are located next to or behind these houses. While tenuous evidence, this would suggest that the structures shown behind the mine office were either outbuildings or not recognized as dwellings by the artist. It must also be pointed out that many structures and landscape features could have come and gone before this idealized Quincy view was drawn in 1873.

It is interesting that no trace of the mining and exploration of the Quincy Lode is evident from this image. The bird's eye image depicts no waste rock piles or evidence of former shafts along the line of the Quincy Lode. While not surprising, it does indicate that by 1873 the land use in this area had already changed dramatically. No other maps include this area behind the structures. Other than these few traces, virtually nothing is known about the parcel behind the mine office.



Figure 6.9: 1898 map of the Quincy property showing the extent of the original Quincy Lode.

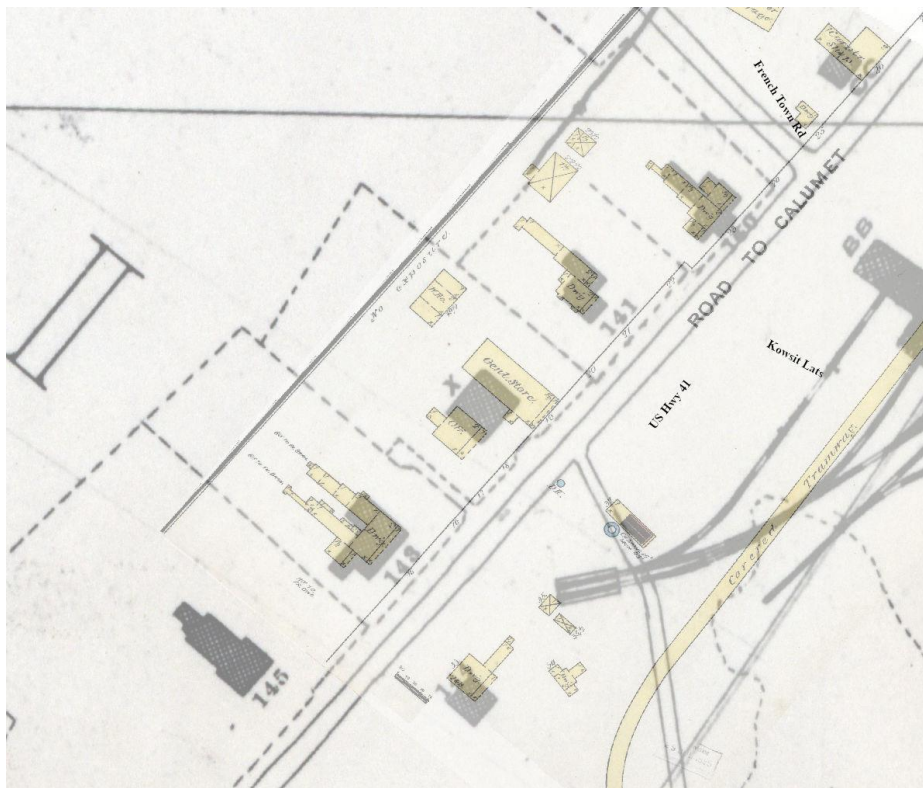


Figure 6.10: Overlay of the 1888 Sanborn and 1898 Quincy map showing the relationship of the old and new office buildings.



Figure 6.11: ‘New Mine Office’ photograph showing the new mine office with the old mine office, clerk’s residence, and agent’s houses in line toward the south. Image MS015-MI-2-218. Michigan Technological University Archives and Copper Country Historical Collections.



Figure 6.12: 1873 bird’s eye detail drawing of the Quincy property, the Mine Office, labeled 13, is circled in red.

5.3.2 Archaeological Methods and Results

Archaeological investigation on KEWE Tract 102-04 focused mainly behind the Mine Office and its grounds. A pipeline right of way extends through the parcel along the northern edge, and traces of an old road extend from the mine office lot, through the southern end of the area, and wraps toward the north at the point in the tract boundary configuration. The landscape of this tract was uneven with depressions, many structural features, several piles of refuse consisting of cans, clinker, and other construction materials, along with many trees. The water table was very high when the testing was conducted, and most of the depressions were filled with water. The ground was saturated and muddy. Numerous features were identified in this area, but only a few were subject to subsurface testing. In order to investigate this parcel, all identified features were mapped, and measured drawings of a few of the features were executed. A shovel test pit grid was dug at the western end of the parcel, and units were dug to sample several of the features. These are described in detail below.

A systematic grid of 89 STPs laid out at the western end of Tract 102-04 in 5 m intervals (Figure 5.13). Nine of the STPs located at the western extent of this grid were not excavated. The soil profile across this grid was very consistent, generally containing a dark brown organic topsoil layer followed by a reddish-brown silty sand layer, often containing many angular rocks, going to an average depth of 70 cm.

Only 20 of these STPs yielded any cultural material. Only STPs OB1, 4 and 9 contained ceramics, and they were all located along the eastern edge of the area tested, closest to the North Store/ Mine Office structure. Two of these yielded fragments of stoneware seltzer bottles that were also found in units excavated in F261. All of these fragments cluster in this area, suggesting a concentration of this artifact type. Six other STPs yielded fragments of beer bottles or brown bottle glass. While only six pieces in all, they clustered at the northwestern end of the parcel, near F286, F294, F298, and F299. One piece marked “A. Haas Brewing Co, Houghton Mich, Bottle Not to be Resold,” dating about 1905-1920, was found in STP OB50, located between F298 and F299, indicating an association with the later Quincy mining period. While little can be said about these fragments, it is interesting that their distribution does not correspond to that of the other ceramic artifacts. Other unidentified group bottle and glass fragments were found in low numbers scattered through these STPs with no apparent patterning. Given the number of structural features in the area, it is curious that only three architectural artifacts were found, representing one piece of window glass from OB8 and two wire nails in OB11, located just outside and to the north of F261.

Various artifacts were also collected from the surface of the Quincy Mining Office site. The locations were recorded with GPS and collected as “Surface Finds” to form a better understanding of the landscape of the area over time. Diagnostic artifacts include a beer bottle with “federal law prohibits resale...” which dates 1930+. A glass catsup bottle marked

“Duraglass” which dates 1940+ was also collected. Artifacts like soda/beer cans and a clear plastic panel seem to indicate contemporary trash deposited in the area. This contributes to the evidence from the F294 units which contained large amounts of burned trash from the 1980s. These surface finds indicate the intermittent depositing of trash on this parcel by nearby residents.



Figure 6.13: Quincy Mine Office Tract 102-04 STP grid. Unexcavated STPs are in pink.

Numerous features were documented at the Quincy Mine Office parcel (Figure 5.14). They are described individually or as feature clusters below.

Feature 259

Feature 259 was a large stone foundation located about 25 m (82 ft) to the west of Feature 261 and just outside the Tract 102-04 boundary. An abandoned, rutted, roadway (F 282) leads east from this feature toward the rear of the Quincy Agent’s House located next to the mine office. What remains is a very robust stone foundation with walls standing a meter and a half tall, doubled walled with plastered interior, and supported with a berm of packed earth surrounding the foundation that obscures the dimensions of the outer walls (Figures 5.15 and 5.16). The inner dimensions of F259 is 12 X 16 feet (3.7 X 4.9 m), and the entire feature including the earthen

berm is 32 X 28 feet (9.8 X 8.6 m). An entrance measuring 5 feet (1.52 m) wide is located on the south end where it would open to the F282 road. The inside of the building contained at least 15 wooden beams that probably represent fragments of a collapsed roof (Figure 5.17). One STP was placed inside this feature and recovered a piece of black plastic tape, two cut nails and two wire nails.

A small depression representing a possible well is located approximately 7 m (23 ft) to the south of F259. The small depression measures about 2 m in diameter and extends 35 cm deep. It was not assigned a feature number since it clearly lies outside Tract 102-04.

When it was discovered, F259 was thought to be a powder house for the early 1850s activities of the Quincy Mine on the Quincy Lode. This interpretation is consistent with the size, configuration, and construction of this feature. However, the presence of wooden roofing elements would make this interpretation less likely since any wooden elements from the 1850s would have long since rotted away, although it is possible these wooden elements were added later when the structure was reused after the period of exploratory mining. The distance from any recorded working of the Quincy Lode also makes the powder house interpretation less likely. Another interpretation, that it was a root cellar, also makes sense of the construction, location, and preservation of this feature. The large size, orientation toward a small road, and location just outside the parcel with a road connected to the Quincy Agent's House would support the idea that this was a root cellar associated with that neighboring structure.



Figure 6.14: Quincy Mine Office Tract 102-04 feature locations.



Figure 6.15: Photo of the earthen berm surrounding F259 facing west.



Figure 6.16: Photo of the stone walls of F259 facing northwest.

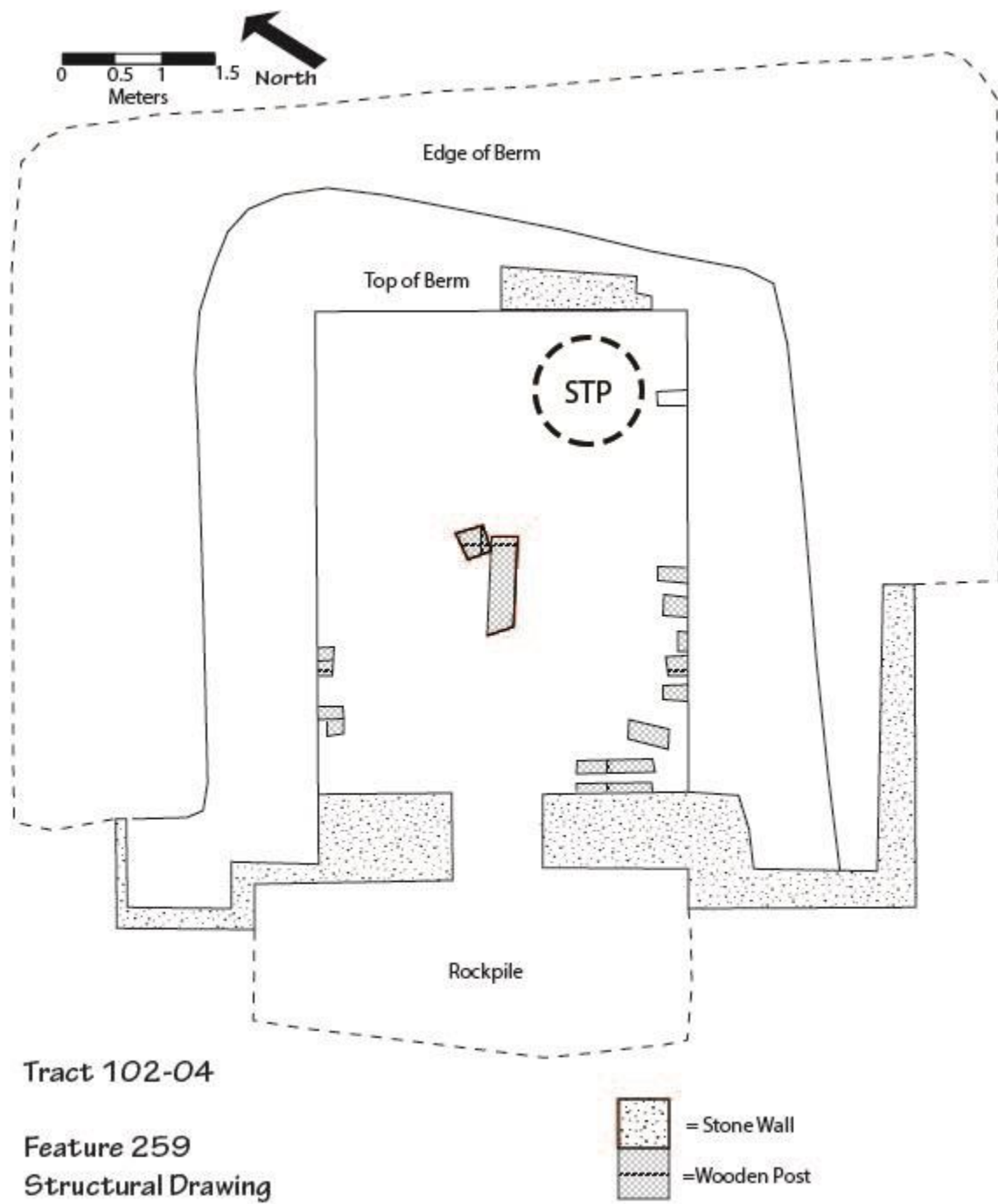


Figure 6.17: Plan drawing of Feature 259.

Feature 261

F261 was a 2-room building foundation located along the south edge of the parcel, directly west of the Mine Office and due southeast of F259 along a road that runs along the south side of the mine office parcel and extending from the highway northwest towards the concentration of features in that area. This building is not present on any of the historical maps of Quincy. The foundation of the building is square, measuring about 20 X 20 feet (6.1 x 6.2 m) with a foundation wall separating it evenly into two halves. The F261 foundation walls are well-constructed and measure about 2 feet (0.6 m) thick, although the interior wall is generally rougher and more jagged (Figure 5.19). At some point the remaining foundation has been stabilized by the National Park Service by reapplying mortar. The center of the feature contained a large amount of clinker. The feature also exhibited three small circular depressions, one in the top room and two in the bottom. Three STPs were dug around this structure. The STP at the northeast corner yielded a German stoneware Seltzer Water bottle fragment.

In order to test this feature, a series of three 1x1m units and one 2 X 2 m unit were placed to create a trench bisecting the feature through the two halves in a northwest-southeast orientation (Figure 5.18). Unit 1 bisected the interior wall and sampled deposits inside the western half of the structure. Units 2 and 4 were all located in the eastern half, with Unit 2 bisecting the interior wall and Unit 4 bisecting the eastern exterior wall. An additional 1x1m unit, Unit 8, was placed immediately to the north of Unit 2. Finally, Unit 5 encountered the exterior wall on its western end, but mainly sampled the soils outside of the feature.

Unit 1 was excavated to a final depth of 30 centimeters. All of the soils in this unit consisted of a 10YR 4/2 rocky sandy soil that contained many slag fragments ranging between pebble and fist size pieces. The unit was barren of any artifacts and lacked the stratigraphic changes seen in the other nearby units, indicating the western bay of F261 is fundamentally different from the rest of the feature.

Unit 2 was the 2 X 2 m unit that bordered Unit 1 on the south and partially contained the interior feature wall, although most of the soils sampled lay in the southern half of the structure. Unit 4 sampled this same area and had similar stratigraphy. The first layer of soil, extending 15 cm, was the same 10YR 4/2 rocky and sandy soil as found in Unit 1. The second level was an uneven 35 cm layer of 10YR 5/6 orange sandy soil and contained some large stones, perhaps collapsed from the adjacent wall. The third layer was a 40 cm 10YR4/2 ashy grey-brown sandy soil on bottom to a final depth of 92 cm. A large metal drill bit sticking halfway out of the eastern unit wall was found in the first soil layer (Figure 5.20). Level 3 contained darker soil spots, which appear to have been natural due to shape, location, and lack of artifacts, likely caused by moisture.

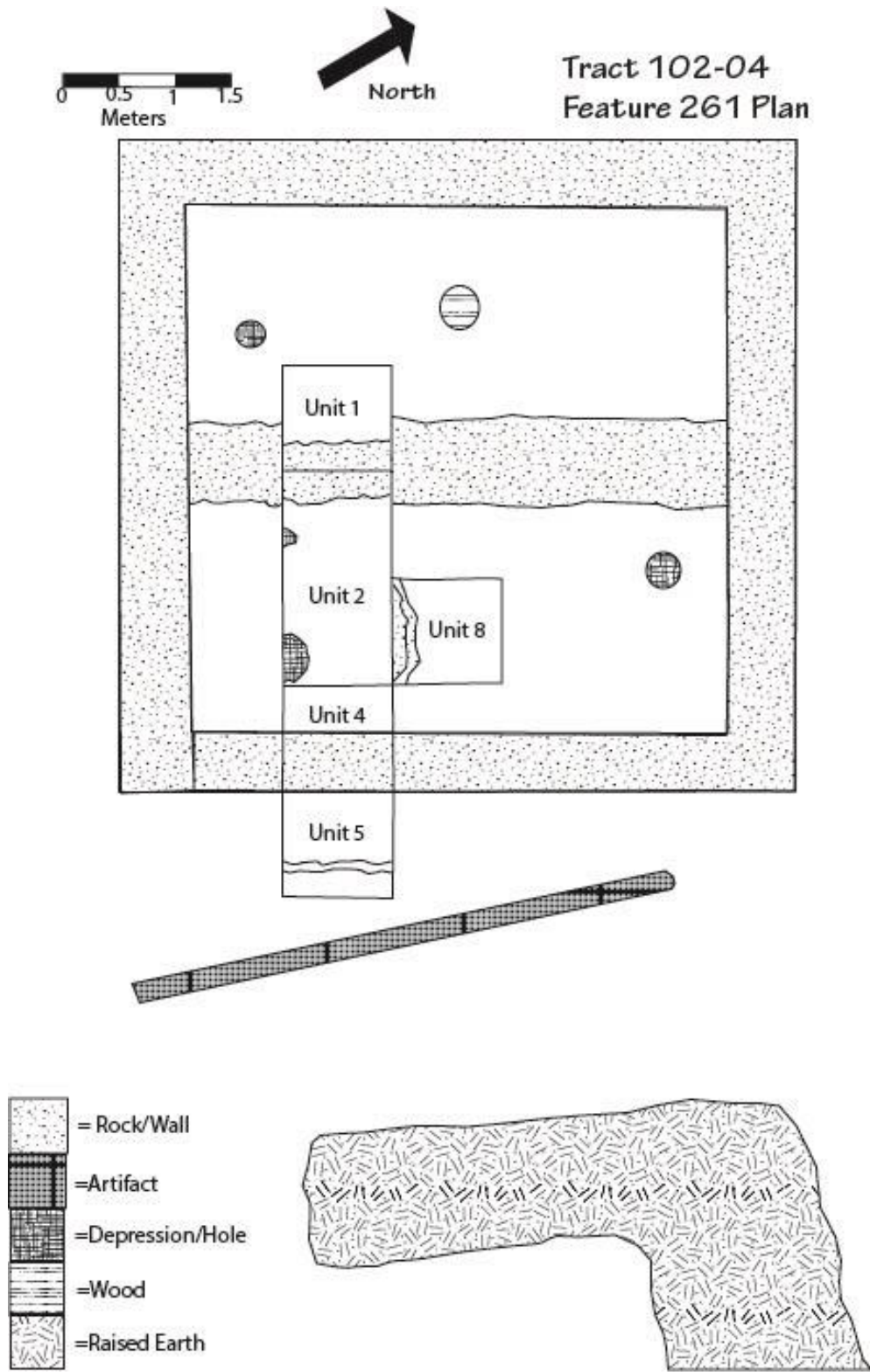


Figure 6.18: Plan drawing of Feature 261.



Figure 6.19: Quincy Mine Company Office Feature 261 Unit 2 Level 3, western wall visible.



Figure 6.20: F261 Unit 2 Level 3. note drill bit extending from the north wall.

Unit 4 was laid out as a 1 X 1 meter unit but the eastern wall of F261 took up $\frac{2}{3}$ of the unit. Unit 4 contained the same 10YR 4/2 rocky sandy soil with slag but yielded no artifacts. The unit was closed at 30 cm when a layer of rocks made further excavation impossible.

Unit 8, bordering Unit 3 to the west, also sampled these interior deposits. The first layer was 30 cm of a rich and loamy topsoil (10YR 3/2) with slag. The second level consisted of 15 cm of a 10YR 4/1 grey-brown ashy layer and the third level was a 10YR 4/2 sandy soil excavated to a final depth of 41 centimeters.

Since Units 2, 3, 4 and 8 all sampled the interior area of the eastern half of this structure, the artifacts will be considered as a single assemblage (Table 5.2). Of the total 218 artifacts, 83% were recovered from level 1. Level 2 yielded only 6 artifacts, and 32 came from level 3. There seems to be little difference in the artifact types across these levels except that all 23 stoneware seltzer bottle fragments were found in level 3. These were the only food related objects found in these units. These units had a low diversity of artifact types, with cut nails representing 78% of the total assemblage. Other artifacts include 7 clear glass fragments, a leather piece, a bolt, 9 miscellaneous metal fragments, and 7 pieces of slag.

Unit 5 was located outside of the eastern wall of F261, bordering the east end of Unit 4. The first level contained 10YR 4/2 rocky sandy soil for 15 cm. The second level contained a moist 10YR 4/4 orange sandy soil for 20 cm, followed by a layer of 10YR 4/2 sandy rocky soil. The third level was sterile, and the soils were too saturated to continue digging deeper. The final depth was 46 cm. Figure 5.21 shows a post hole located in the northeast corner, as well as the deeper dark brown soils that extended deeper along the foundation wall and probably represents a builder's trench. The post hole is related to a fence line shown in aerial photography with several posts still visible on the ground.

Unit 5 contained only 58 artifacts that derived only from level 1; 97% of these were cut nails. The only other objects were a clothing-related snap and a slag fragment. The similarity of artifact types, lack of diversity, and concentration in level 1 suggest little difference between the assemblages from inside and outside this feature.



Figure 6.21: F261 Unit 5 Level 1, pocket of darker soil is visible in the northeastern corner.

Unit	Level	Food-Related	Architectural	Household	Clothing
2	1	6	113	2	1
2	2	0	5	0	0
2	3	19	5	0	0
5	1	0	5	2	1
8	1	1	52	1	0
8	2	0	1	0	0
8	3	4	4	0	0
Total		30	185	5	2

Table 6.2: Common Artifact Group by Level for Feature 261 units.

The only truly diagnostic artifacts from F261 are the stoneware seltzer bottles marked “Nassau,” referring to naturally carbonated mineral waters from the Duchy of Nassau in western Germany. F261 yielded at least three different of these stoneware bottles (Figure 5.22). These Nassau ‘Selter’ bottles were exported to England by the early 19th century and may have arrived in the U.S. as early as 1846, but they continued in use until the beginning of World War I (Schulz et al 1980:116-117). Munsey (1970) dates these Nassau stoneware bottles between 1880-1900. Thus, these bottles could have arrived at Quincy by the 1850s and represent the early mine exploration period, but it is just as likely they date to the turn of the 20th century. While technically not a tightly dated artifact type, the nails provide additional information. Every one of the 226 nails from F261 were cut nails. This would suggest an earlier period for the construction of F261; it is unlikely that any building from the late 19th or early 20th century would be constructed with only cut nails.

Unfortunately, the artifact assemblage from these units do little to help figure out the function of the F261 structure. The foundation is much more robust than would be expected for a barn, shed, or outbuilding, but the large drill bit might support this type of usage. The dearth of domestic artifacts would suggest that it was not a dwelling unless it was only occupied for a very short period. Even if this was a dwelling, there seems little reason for the dividing wall; the span is just not wide enough to require additional internal support, but it could have been used to support a floor. It is possible that this division represents a duplex-type dwelling, but that would make two

very small dwellings at less than 20 X 10 feet. No conclusions about these various scenarios can be drawn without additional archaeological data.



Figure 6.22: Stoneware seltzer bottle fragments from F261.

Several other structural features exist in the vicinity of F261, including a small cluster to the east, and a larger cluster to the northwest (Figure 5.14). The cluster to the east includes F283, a “U”-shaped area defined by an elevated earth berm that measures about 16 x 15 ft (4.8 X 4.6 m). This berm resembles earth piled against a structure for insulation. If so, this would be a relatively small structure with no sign of a stone foundation. A seven-foot length of iron pipe extends between F261 and F283 but there is no indication that this pipe is *in situ*. Just to the southeast of F283 and immediately in front of the “U” is a small rock pile. Further to the southeast is F270, a large trash dump that appears to cover a stone foundation (Figure 5.23). None of the characteristics of this foundation can be discerned under the trash besides a vague “L” shape.

A cluster of four features lie further to the northwest of F261. Of these, F284 is an earthen berm foundation that forms an incomplete “U” measuring 26 X 22 ft (8 X 6.7 m) with a small cellar

depression in the center. Two small depressions (F285 and F289) lie just to the east. Another earthen berm foundation designated F286 lies further to the northwest. This feature is oriented roughly north-south and measures 20 X 10 feet (6.1 X 3 m). It has a wide interior berm defining two interior bay-like spaces.

Another cluster of six features was identified at the western edge of the parcel, with a few extending outside of the 102-04 tract boundary. F290 is a roughly square shaped earthen berm measuring about 13 feet (4 m) square. Just to the north, F291 is a rectangular earthen berm structure measuring 18 X 14 feet (5.5 X 4.2 m) (Figure 5.24). F296 is a large rectangular shaped structure measuring 22 X 16 feet (6.7 X 4.8 m) that seems to parallel the F288 road and has two interior depressions. F292 lies just to the north and was also oriented to the F288 road. It consists of a rectangular earth berm with small interior depression measuring 18 X 8.5 feet (5.5 X 2.6 m). A privy like depression (F293) is located about 100 feet (30.5 m) west from the F288 road and may be associated with any or all of these structures. F293, however, is well outside of the Tract 102-04 boundaries (see Figure 5.25).

Two other earthen berm structures lie further to the east. F298 is a rectangular earthen berm surrounding an interior depression measuring 19 X 10 feet (5.8 X 3 m). Finally, F299 is a long, narrow earthen berm measuring 23 X 6 feet (7 X 1.8 m). Of all the features defined here with earthen berms, this is the only one that does not clearly look structural.

In all, this area seems to contain evidence for at least eight small structures with earthen berms defining their perimeters. Except for F261 and F270, there is no evidence that any of these structures were erected on stone foundations. It is interesting that the STPs dug in and around these features recovered no artifacts at all, but several of the gridded STPs in the vicinity of the earthen berm features were not excavated (Figure 5.25). Other methods would be necessary to make chronological and/or functional assessments. The dearth of artifacts would indicate a short-term occupation, and the earthen berms in conjunction with lack of nails and other architectural objects would suggest that they were log structures.

All of these features have different dimensions but seem to group into several distinct sizes (Table 5.3). Several are larger and more rectangular (F284, F291 and F296) and are consistent with the dimensions of dwellings, although F291 would be quite small. All three of these features have interior depressions, and the depression in F284 appears to be a cellar. Several other of these features are generally long and narrow (especially F286, F292, F298, and F299) and may represent outbuildings. Both F283 and F290 are small and square in shape, consistent with small outbuildings such as tool sheds. The spatial distribution shows that these different sized earthen berm structures seem to be paired; in each case a larger possible dwelling is located near a smaller or narrower possible outbuilding (Figure 5.26). The exceptions are F298 and F299. We cannot be confident in any interpretation without additional testing and data, but the orientation, layout and variability in size would suggest that these features represent a series of

dwellings and outbuildings such as woodsheds barns, perhaps similar to those structures shown on the 1873 bird's eye map discussed above.



Figure 6.23: Photo of Feature 270 facing north.



Figure 6.24: Photo of Feature 291.

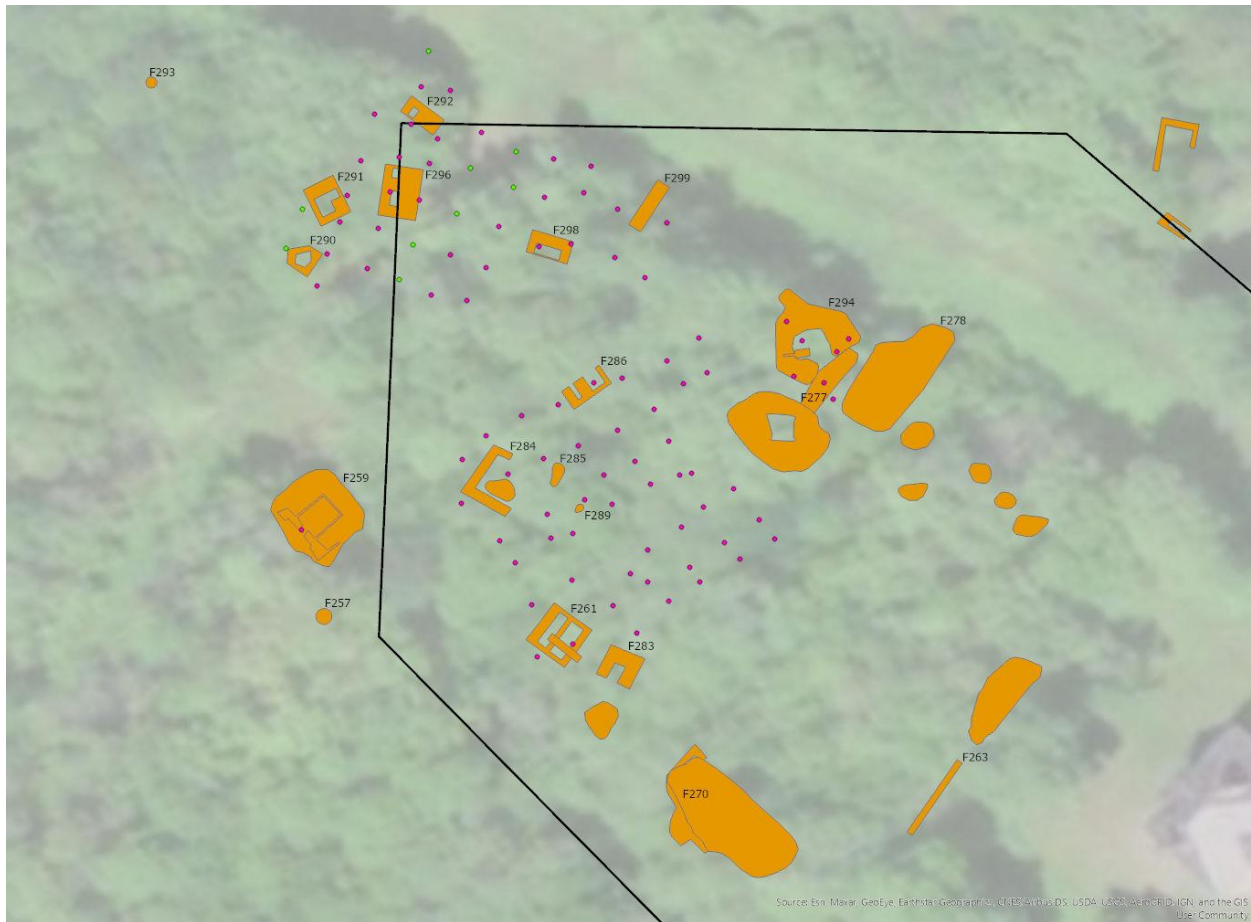


Figure 6.25: Relationship of mapped features to STP grid on tract 102-04. Unexcavated STPs rendered in green.

Feature	Dimensions	Characteristics	Possible Function
F283	16 x 15 ft		Outbuilding?
F284	26 x 22 ft	Interior cellar depression	Possible dwelling
F286	20 x 10 ft	Interior division; 3 bays	Outbuilding? Associated w/ F284?
F290	13 x 13 ft	Interior depression	Outbuilding? Associated w/ F291?
F291	18 x 14 ft	Interior depression	Possible dwelling
F296	22 x 16 ft	Interior depression	Possible dwelling
F292	18 x 8.5 ft		Outbuilding? Associated w/ F296?
F298	19 x 10 ft		Outbuilding?
F299	23 x 6 ft		Outbuilding?

Table 6.3: Quincy Mine Office earthen berm features.



Figure 6.26: Quincy Mine Office, spatial relationship of earthen berm features with possible functions.

Recent Trash Burning Features

Feature 277

Feature 277 consists of a raised earthen berm around a deep depression, located about 70 meters northwest of and directly behind the mine office (Figure 5.26 & 5.27). The size of the feature is 33 X 46 feet (10 X 14 m) with a 13 X 13 foot (4 X 4 m) central depression. Very little angular rock is visible in either the center of the depression or the surrounding raised earth berm. A 2-inch diameter iron pipe (F276) measuring about 8 m in length lies to the west of the F277 depression, but whether it is associated with the feature or not is difficult to ascertain. Within a 25-meter radius of F277 are several metal fence posts sticking up from the surface that may represent the remains of a fence that once enclosed F277. At first, we thought F277 might be mining related, since the size and configuration of this feature are consistent with a former mineshaft, with the depression representing the shaft itself, and the berm around it consisting of the earth removed from the shaft. The lack of poor rock piles in the vicinity is not consistent with

this interpretation. Personnel from MWAC excavated a 50 X 100 cm test unit in the center of this feature and encountered modern landscaping debris and other refuse to a depth of at least 2 m (Bringelson and Wiewel 2017). The previous owners of the office building also describe using burn barrels in this area, indicating that F277 was a depression used to burn and bury trash in the modern era.



Figure 6.27: Photo of Feature 277 facing north, focused on the depression in the feature's center.



Figure 6.28: Photo of F277 facing east, showing the deep depression in the center and the landscape around it.

Feature 294

Feature 294 was a raised earthen berm feature three meters north of F277. The feature measures 29.5 X 36 feet (9 X 11 m) in size and is defined by a circular raised earth berm perimeter with a flat area in the center (Figure 5.28). The proximity of this feature to F277, along with its doughnut-like shape with a leveled area on the top of the earthen berm suggested that it might have been a horse whim for the possible F277 shaft. A 2 X 1 m unit was placed in the center of the feature and revealed no artifacts or features that indicated a horse whim or any evidence of early mining activity. The excavation unit contained no artifacts until hitting a dense layer of modern trash at a depth of 45 cm. This trash continued at least another 30 cm until hitting the water table. All the artifacts appear to be post-date 1980. Since this was so obviously modern, none of these materials were collected. The similarity of the F294 trash deposit with that discovered by Bringelson and Wiewel (2017) in F277 suggests that F294 is also related to burning and burying trash. It is possible that these activities made use of already existing depressions or features, but our limited testing provides no evidence for possible earlier features.



Figure 6.29: Photo of Feature 294, showing the round shape of the earthen berm.

Miscellaneous Features

Several of the features identified relate to water or drainage functions. F263 represents several segments of a substantial stone lined water trough that runs in a northeast-southwest line along the rear of the Mine Office lot. While this line does not correspond with the fence line depicted on the 1898 map, it is in line with the fence line of the house lot further to the north. Interestingly, this is also in line with the Quincy Lode also depicted on this map further to the north east. It is doubtful that this means anything other than the location of the original parcel boundary. The post-1917 map does show a ‘covered pipe launder’ that extends from the rear of the mine office before connecting to another northeast-southwest line, connecting to the two structures to the southwest (Figure 5.30). The various segments of F263 line up with this covered pipe launder almost perfectly, and probably represent a ‘greywater’ pipe system.

The stone-lined trough measured 50 cm wide and 50 cm deep. Segments of reused rails cross the trough it at some intervals (Figure 5.31). These rails hold brackets that are used to suspend an iron pipe (1.5” diameter). The bracket can be used to adjust the height of the pipe in the trough, an interesting example of vernacular problem solving. The actual function of this feature configuration is unclear. It is possible that the stone-lined trough was constructed first and reused as a convenient place to extend the later pipe launder. No other interpretations are possible with the current data available.

F268 was a historic stone-lined well located in the southwestern rear yard of the mine office. It was capped on 8/15/18 by NPS personnel. It was not mapped, so the location of this well is not included in our GIS. The relationship between this well and the F263 trough is not clear.

Three separate water valves were mapped that seem to form a line along the mine office fence line as shown on the 1898 Quincy map (Figure 5.32). The central point is a T-shaped pipe extending to both north and south with a shut-off valve on each side. Each side of the T appears to connect to another valve further to the northeast or southwest (Figure 5.33). Each of these measure about 55 feet apart. It is not clear where this water line connects or why.

Other features identified and mapped include a series of seven trash or material dump piles (Figure 5.34). The largest of these was Feature 278, a large oblong-shaped pile of rock/clinker located east of F277 and F294 (Figure 5.35). It was 39 X 22 feet (12 X 7 m) in size and in places it reached a height of nearly 2 meters. Remains of a barbed wire fence and post survive on the eastern side. Four other small historic dump piles create a rough line between F278 extending east toward the mine office. Another historic refuse pile is located at the southern end of this area. It is a linear pile oriented roughly northeast-southwest along the same line as the segments of the F263 water trough. Traces of a wall fragment are visible beneath the refuse, suggesting that this trash was thrown on top of a perimeter wall or other outbuilding. Further to the southwest is a small dump pile with both historic and modern trash adjacent to the F263 water

trough, and a large trash dump overlying the F270 foundation lies further to the northwest. F280 is a 2 X 2 m dump of sandstone masonry and F281, a 1 X 1 m dump of sandstone and cement fragments. Sandstone is a common construction material in the Copper Country and it is not surprising to find it in an area used to dump garbage. The office building itself was partly constructed from sandstone, which might be the source of these fragments. None of these trash dumps were sampled, so we cannot assess their dates.

Seven different metal fence posts were mapped (Figure 5.36), each labeled separately as F260, F262, F264, F272, F273, F274, F275, F279. The other two fence posts (F260 and F274) lie in the F261 vicinity, one at the northeast corner of the structure, and the other on the opposite side of the F288 road.

Three different property markers were also recorded as F255, F256, and F258 located just outside the 3 northern corners of the QDC tract boundaries. F256 and F258 are both property markers with a cement base, while F255 is a stick with pink flagging tape.

Other miscellaneous features include F271, isolated barrel, another object related to the decades of trash dumping and F269, an iron bar bent into a “U” shape and standing 1.2 m tall.

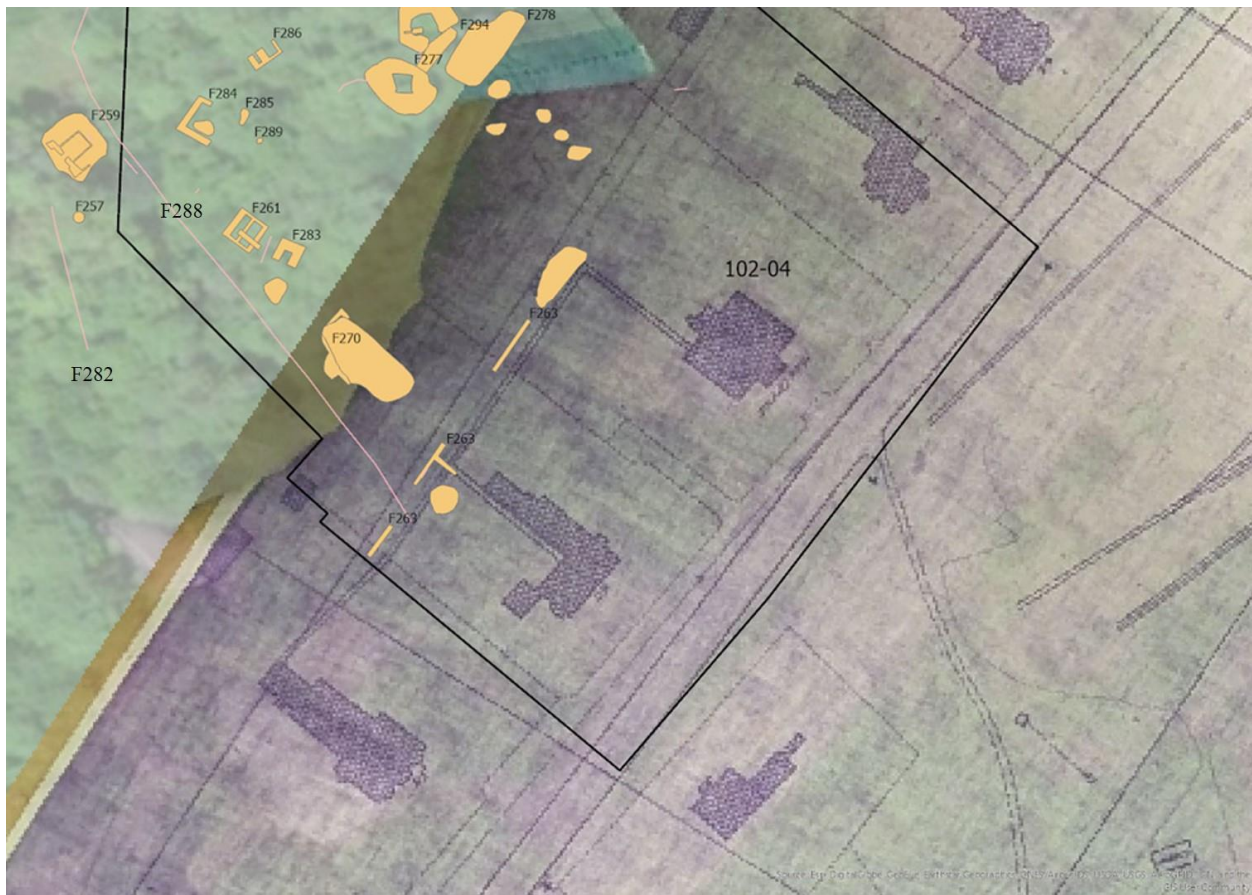


Figure 6.30: Tract 102-04 post-1917 map showing the pipe in the vicinity of Feature 263.



Figure 6.31: Photo of Feature 263 facing east, showing a rail holding brackets that hold an iron pipe.

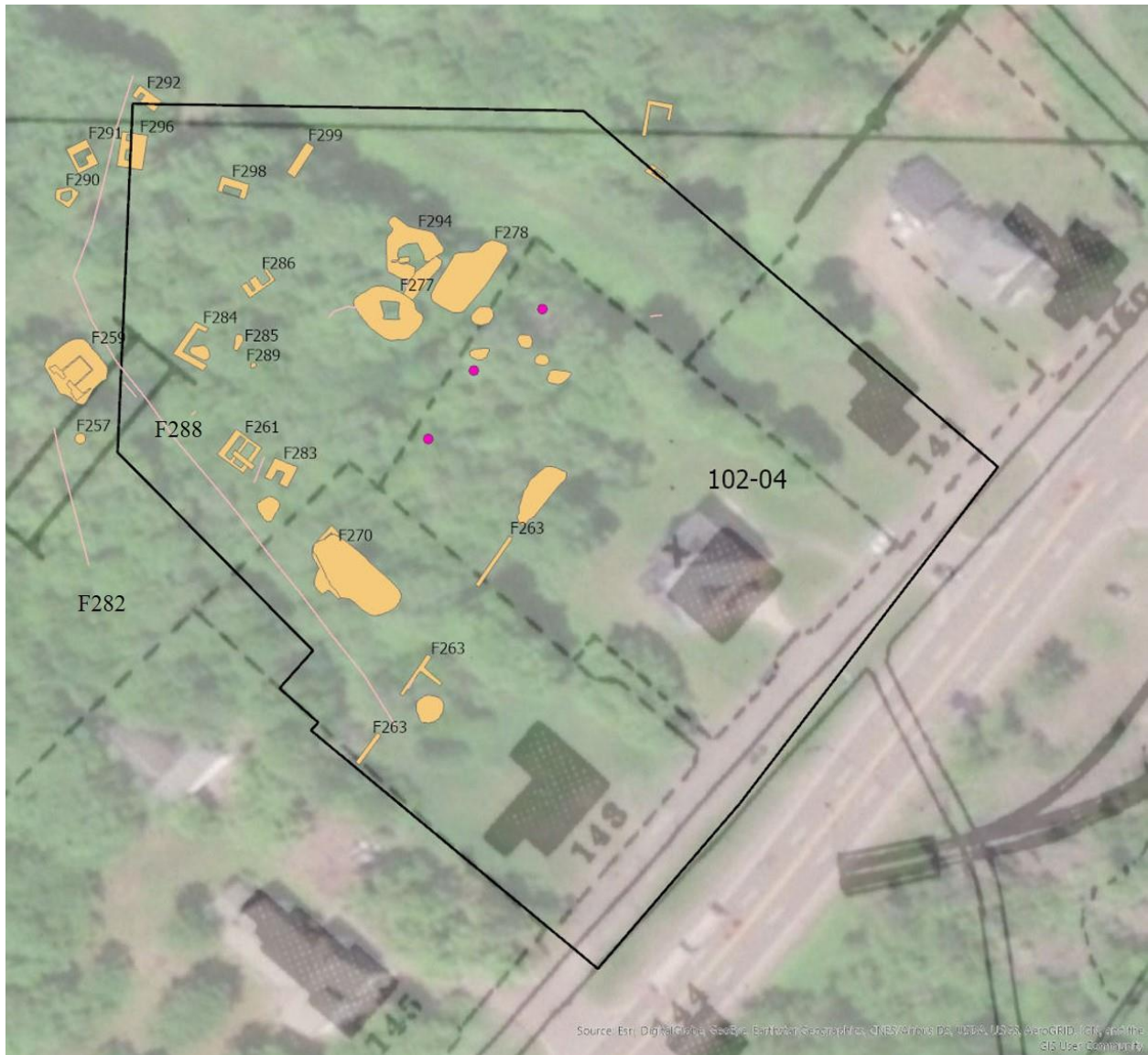


Figure 6.32: Water valve features designated in pink with the 1898 Quincy 102-04 map.



Figure 6.33: Photo of a T-shaped water valve.

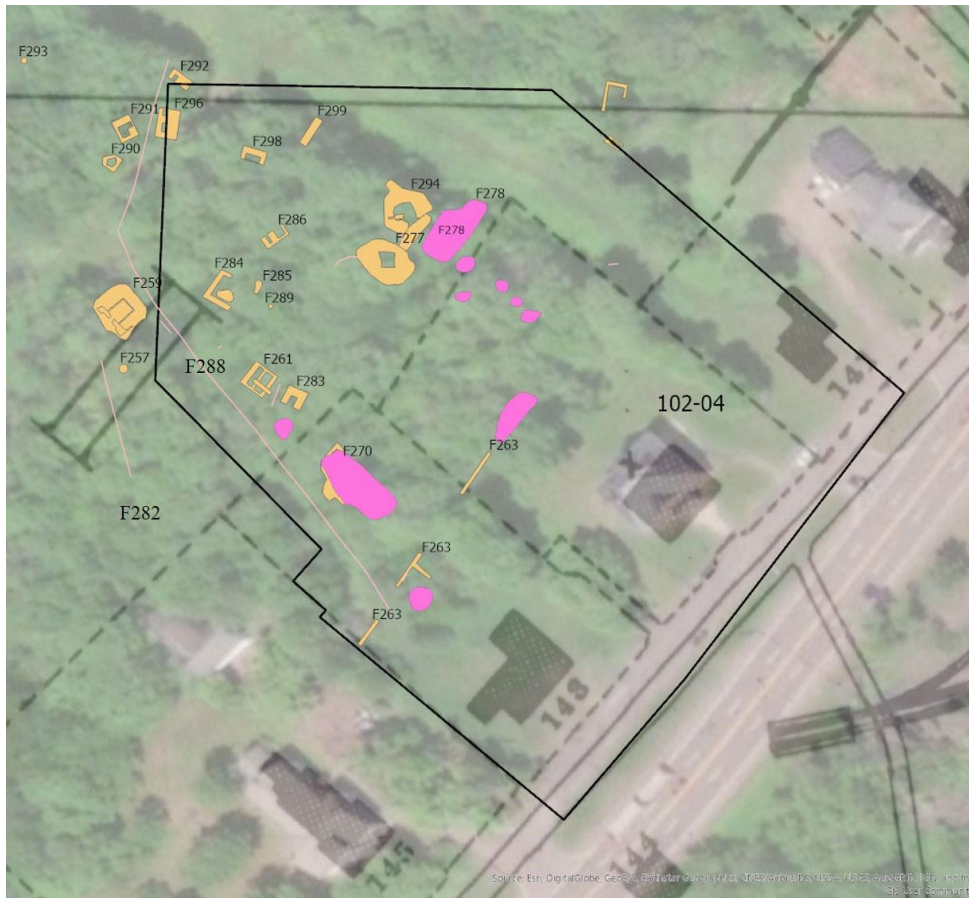


Figure 6.34: Quincy Mine Office tract 102-04, trash and material dumps shown in pink.



Figure 6.35: Photo of Feature 278 facing northeast, a rock and clinker pile.

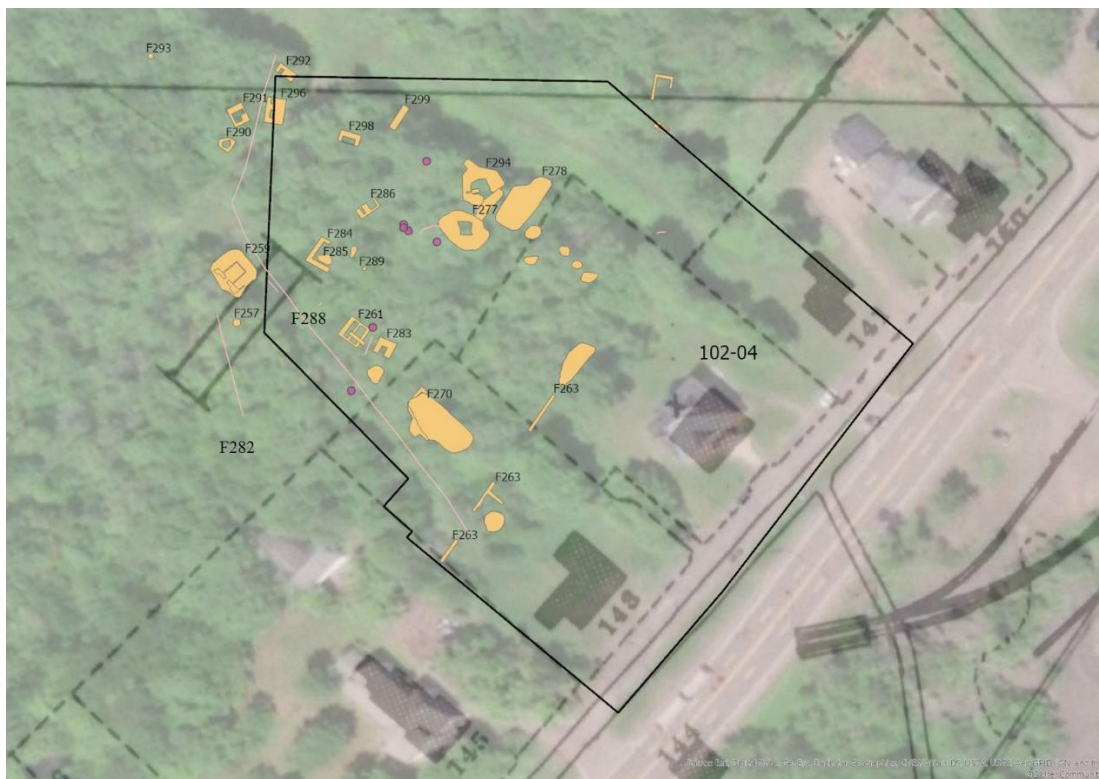


Figure 6.36: Quincy Mine Office tract 102-04 with fence posts shown in pink.

Summary of Quincy Mine Office Area

The area behind the Quincy Mine Office represents a much more complex landscape than initially evident. Numerous features were identified and mapped, but time allowed only the most preliminary investigation, making any coherent assessment and interpretation impossible for all the features. Even so, the spatial patterning and surface indications do offer some clues that suggest these features form clusters that have different functional contexts or are associated with several of the structures in the vicinity (Figure 5.37). First, it seems clear that the F259 root cellar is associated with the Quincy Agent's House located to the south. The nature of this feature is different from any other in the area, and a small segment of road (F282) directly connects them together. Second, it is revealing that the only structural features we documented that have stone foundations (F261 and F270) lie along the road feature (F288) and directly behind the clerk's residence located next to the new office building/ North Store. Little can be said about the functional nature of these outbuildings since F261 yielded few artifacts and F270 is obscured by later refuse, but the association with the clerk's residence property seems clear. A third context relates to recent trash burning, probably by area residents, represented by F277 and F294. Finally, a series of earthen berm features that appear to define structures were identified at the western end (and some outside of) Tract 102-04. The limited testing in this area and lack of material culture makes it difficult to assess the function of these structures. However, their location, concentration, access to a road, and size differences suggest they may represent a series of dwelling and outbuildings. It is possible that they relate to the early mining and exploration of the Quincy Lode, but we cannot be sure of this without additional archaeological testing. Regardless, the Tract 102-04 area retains a high level of integrity and a great deal of research potential.



Figure 6.37: Quincy Mine Office Tract 102-04 highlighting the outbuildings associated with nearby structures and other functional associations of the features identified.

5.4 Quincy National Guard Encampment (Tract 102-03)

The fourth activity during the 2019 summer archaeological field season was to identify the location of the National Guard encampment at Quincy occupied during the 1913-14 Copper Country strike. Our goal was to attempt to confirm the footprint and layout of the encampment, collect artifacts related to the day-to-day lives of the National Guard troops, and offer interpretive possibilities for this aspect of the 1913-14 strike. These goals are challenging because of the short duration and ephemeral nature of this encampment in conjunction with the long history of Quincy mining and residential activities in this area. In what follows, we will review the history of the National Guard camp, evaluate historic maps of the area to analyze the structures land use for the area, and present a detailed analysis of existing historic photographs of the camp, paying special attention to landscape features, location, and the size, composition and organization of the camp. This will be followed by a discussion of our archaeological field methods and results.

5.4.1 History of the National Guard Camp

The Copper Country Strike of 1913-14 was a massive strike affecting all mines in the Copper Country of the Keweenaw. Organized by the Western Federation of Miners, the strike was the longest and most violent labor strike in the Copper Country. The strike began on July 23, 1913 and would not end until April 1914. All the 2,817 militiamen men stayed on duty in the Copper Country until August 14th, when the numbers were reduced to 133 officers and 1,325 men. This reduction was likely related to the heavy cost to the state who paid for their deployment and Governor Ferris' fear that they were seen as strike breakers (Lankton 2010:197; Hoagland 2010:64). The number of troops was further reduced to 59 officers and 1,007 men on August 29th. The tour was finally concluded on January 12th when all troops had left the Copper Country, although they may have left Quincy slightly earlier than this date. The troops assigned to the Quincy Mine were stationed on top of Quincy Hill on Tract 102-03, likely because of its high elevation and proximity to the active mines across the road that they were there to protect. A letter from Quincy's general manager Charles Lawton to company president Todd describes how the company was housed:

We have the militia quartered in Quincy Hall; the Waddell men are in the Kitt house just this side and are using the old No. 4 compressor-house as a bunk-house. The soldiers are quartered in the South Quincy Captain's Office, and we have had to move out the four families in the big boarding-house by the South Quincy Captain's office, so as to quarter the cavalrymen. We have rigged up the south end of the old Quincy dry, where we can care for upwards of one hundred men or better (Lawton to Todd, cited in Hoagland 2010: 85).

According to this letter, any residents of the F30 boarding house were removed to house the cavalry and soldiers were billeted in the Mining Captain's house (F33). According to photographs, tents for enlisted men and other camp functions were set up around F30 and F33. This also hints to the hierarchy of the National Guard, with different housing conditions for the cavalry and soldiers. While this quote does not mention it, we can probably assume that the officers were quartered elsewhere.

5.4.2 Historic Map Analysis

Any map analysis of this area is made difficult by the fact that the area to the west of current US-41 is seldom shown since the main focus of any cartography is the mining operations concentrated on the east side of US-41. The 1888 and 1893 Sanborn maps detail the area to the south, extending only to the blacksmith shop and dry house, and shows another area further north depicting parts of the Franklin and Pewabic Mining companies. The 1888 and 1893 Sanborn maps do show the area north of the blacksmith shop all the way to across from Shaft No.2, but this area is simply listed as vacant. Since we know many of the structures in this vicinity were constructed before 1893, it seems that the map simply did not extend far enough to include them. The 1900 Sanborn also excludes most of this area, but only the scale house located at the edge of the road is shown. The 1907 and 1917 Sanborn maps also show the scale house as well as the front half of the mine captain's office (F33), but nothing else in this area.

More details are provided by maps of Quincy's operations. The 1900 Quincy map (Figure 5.38) shows F30 with a large open area with no structures or fences behind it to the north/northwest. Other area structures present include the scale house, mine captain's house, and the row of five dwellings that extend south from No. 2 Road to the dry house.

The 1902 map (Figure 5.39) shows the same structures as the 1900 map but with a bit more detail. All of these structures are depicted as constructed of wood. Feature 30 (designated as 20 on this map), appears to be a large dwelling, with the rectangular main part of the house oriented parallel to US-41, a narrow rear addition extends northwest off the northern end of the main structure, and a smaller addition extends northeast off of the northeastern end of the dwelling. This is the same basic outline shown on the 1900 map.

An undated post-1917 Quincy map (Figure 5.40) shows most of the same structures and all are depicted as company owned. The most significant change is that the dwelling located between Dwelling 21 and Limerick shown on the 1902 map has been removed and replaced with a large rectangular structure with small jutting projections on the front and rear faces. This configuration is identical to the plan of the Clubhouse and Bathhouse built by Quincy in 1916-17, indicating that this map was produced sometime after 1917. The F30 structure is depicted with small jutting additions at both rear corners of the main structure and one on the northeast face of the rear addition. Four house/dwelling numbers are included, indicating that F30 was a dwelling housing

for four different households. This makes sense of the configuration of the existing feature's plan (Figure 5.47) that includes three separate cellars. The four house numbers and separate cellars strengthens the association of F30 with the "big boarding-house by the South Quincy Captain's office" used to quarter the cavalry as noted above.

The post-1917 map also depicts the configuration of the yard and outbuildings. The north yard is enclosed by a fence that extends off the northeast corner of F30 and the center of the northwest face of the rear addition, extending to equally divide the yard between the F30 dwelling and the house to the northeast. Two barn or garage outbuildings are shown lying on an uneven line to the northwest of the rear addition. This uneven line probably relates to the location of rock outcroppings to the rear of this structure. It is interesting that the entire rear yard was not enclosed, indicating that this area to the rear of the house, where we suspect the National Guard Encampment was located, was always mainly open. The 1942 Sanborn map (Figure 5.42) labels the mine captain's house and F30 as vacant, and neither structure is shown on the 1949 Sanborn map.

The available maps show that the area of the National Guard Encampment was subject to no obvious previous land use besides the residential occupation at F30. The location of F30's outbuildings and the fenced in yard on the north side may indicate that most of these resident's outdoor activities occurred away from the National Guard camp area. Of course, the presence of remains related to Indigenous mining and from the early period of exploration of the Quincy Lode are still possible.



Figure 6.38: 1900 Quincy Mining Company map of tract 102-03 showing F30. Michigan Tech Archives.

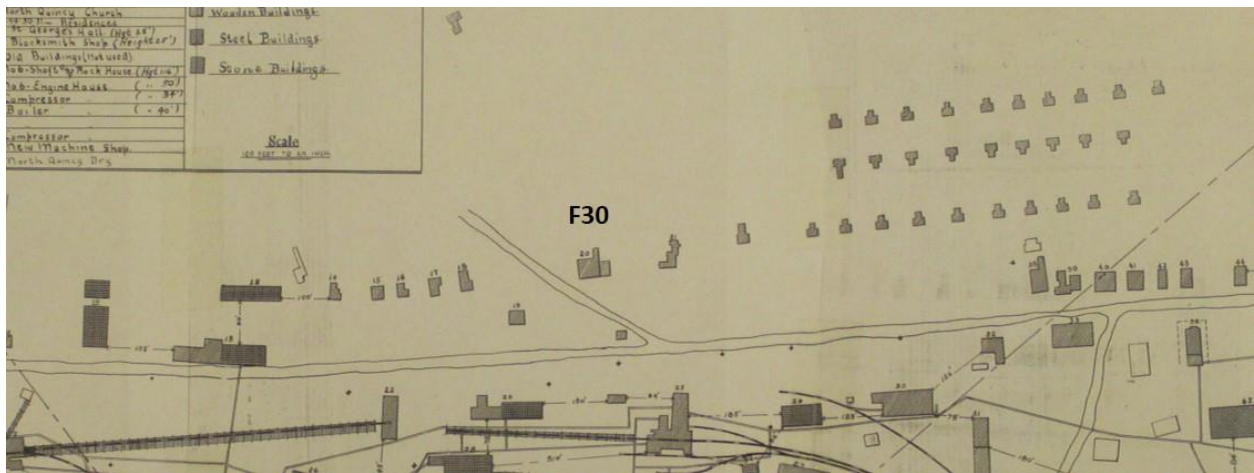


Figure 6.39: 1902 Quincy Mining Company map of tract 102-03 showing F30. Michigan Tech Archives.

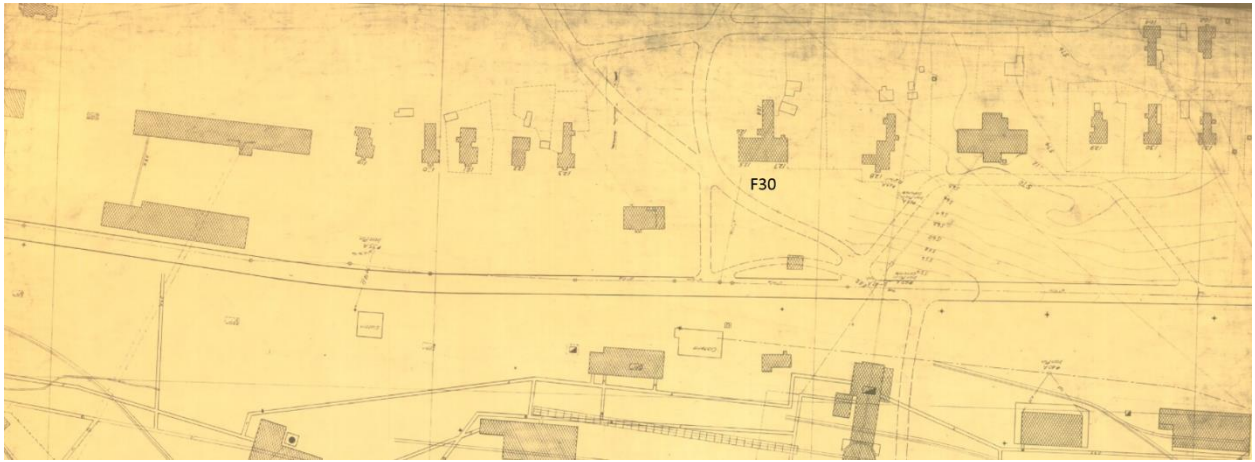


Figure 6.40: Post-1917 Quincy Mining Company map of tract 102-03.

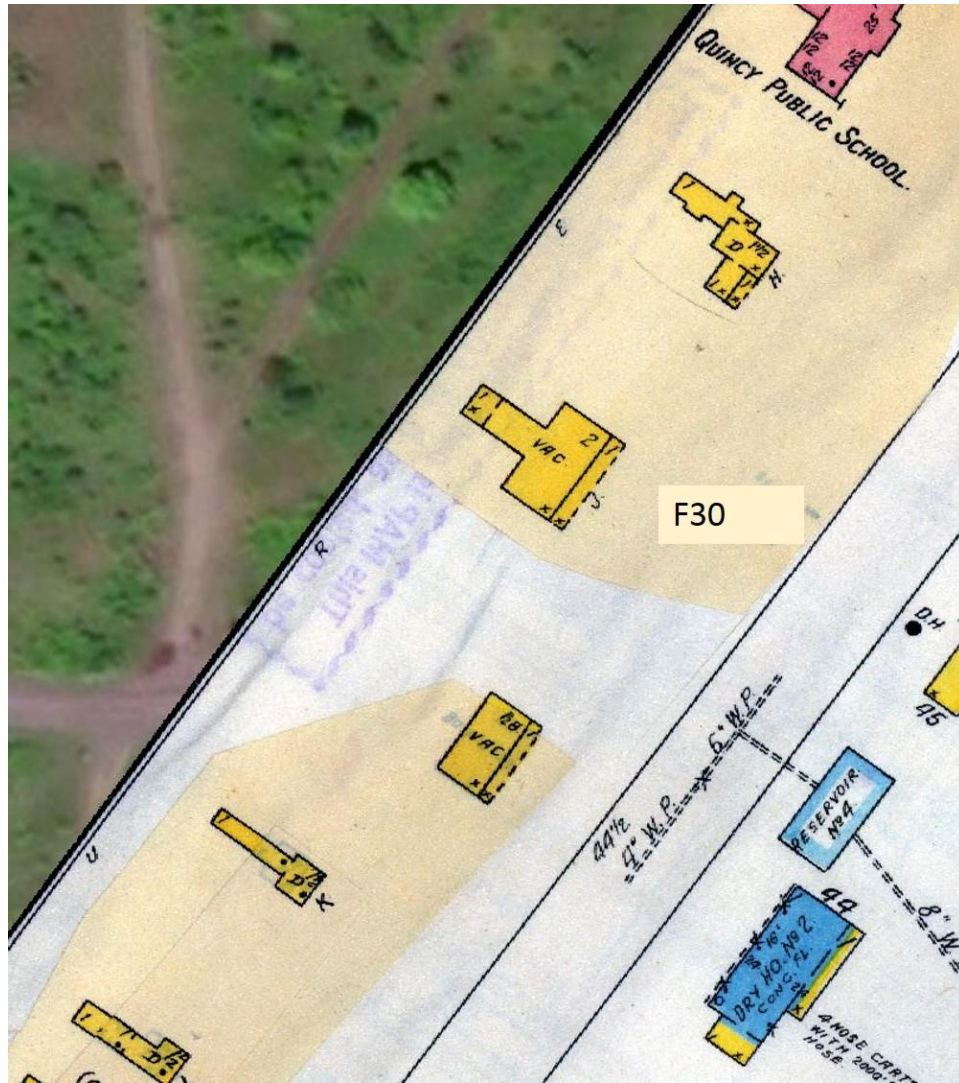


Figure 6.41: 1942 Sanborn insurance map showing F30.

5.4.3 Description and Analysis of Historic Photographs

Photographs of the time provide evidence of the rough size and layout of the National Guard encampment, located across current US-41 from the Quincy No. 2 Rockhouse in the south yard of the F30 dwelling.

One photograph of the National Guard camp (Figure 5.42) shows the rear face of F30, with one tent against the back wall of the F30 addition, and four rows of tents evenly spaced extending to the south. The uneven ground surface and rock outcrops are clearly visible, as are two possible washing or bathing stations. A concentration of three half barrels and two galvanized bathtubs lie at the left side of the photograph and a guardsman leaning over a galvanized bucket sitting on top of an outcropping can be seen directly behind the F30 structure.

Another photograph of the National Guard camp (Figure 5.43) shows part of the roof of F30 and was taken from the Southwest. Three chimneys are present on F30. This photo shows several tents with a single row containing six tents. One man in a suit poses in front of a tent, with two men in uniform standing to his right. A barbed wire fence can be seen near the old No.2 Road to the South, across the road from the tents. A single tent can also be seen on the south side of the road to the west of the mine captain's office which is visible behind it.

One final photograph of the National Guard camp (Figure 5.44) was taken just south of No.2 Road, behind the barb wire fence that borders No. 2 Road on the south side. Several troops in uniform can be seen among the tents. A row of at least five smaller, rectangular tents can be seen very close to F30 on its southwest side. A row of at least three large rectangular tents run perpendicular to the line of the smaller tents and extend west from the rear of F30, closer to the camera and running north to south. Two rows of pyramidal tents extend in an east-west line parallel and slightly in from the edge of No. 2 Road. A few others can be discerned at the far left of the photograph. This photograph shows fewer tents than the others and may date after troop numbers were reduced. Comparison of Figures 5.43 and 5.44 indicate that the row of tents at the south side of camp along No. 2 Road were removed.

The mostly vacant area between US-41 and the residential area of Limerick provided a large open area across from the No. 2 shaft for a camp at the heart of Quincy's mining operations. This location also fulfilled National Guard sanitary requirements. A 1927 manual emphasizes that sanitary concerns were important considerations when situating a National Guard camp, and this hilltop fulfilled these (War Department Militia Bureau 1927). Drainage was the top of these concerns; a site should be sufficiently high and rolling to drain away any storm water. Dryness was also an advantageous feature of Quincy Hill, with a gravelly/sandy subsoil. Since this local does not contain any infection-prone areas such as standing water, its location was a favorable one.

The pyramidal tents, which can be seen in all the historic photographs, housed the enlisted men. Optimally, the stakes of the tents were laid out with a two-foot gap between each tent for easy movement (War Department Militia Bureau 1927:35). The pyramidal tents were also laid out in parallel rows with a perpendicular row of rectangular tents to the west. The rectangular tent west of Feature 30 and west of the southernmost pyramidal tent row is likely the kitchen tent. This inference is based on the several troops standing or sitting idly by the open tent, likely eating. This location also fits well within standard protocol for setting up permanent/semi-permanent camps. Several rectangular tents to the right of the kitchen are likely the company orderly room, followed by tents for the mess sergeant, cooks, and storage of rations. Based on National Guard standard protocol, to the left of the kitchen tent(s) are likely the company headquarters. The same protocol dictates that the camp's latrines be covered by rectangular tents and located on the opposite end of the camp from the kitchen (War Department Militia Bureau 1927:36). With this

in mind, the latrines of this camp are likely further west, outside the frame of any available photographs.



Figure 6.42: Quincy National Guard Encampment photo taken from northwest of the camp, F30 also pictured. MS42-05-53-440, Michigan Technological University Archives.



Figure 6.43: Quincy National Guard Encampment photo taken from the southwest of the camp on No. 2 road. The roof of F30 is visible behind the camp, MSO15-MI-2-235, Michigan Technological University Archives.



Figure 6.44: Quincy National Guard Encampment southwest of the camp and south of No.2 road. F30 is visible east of the encampment, Michigan Technological University Archives.

5.4.4 Archaeological Methods and Results

This flat, relatively barren stretch of land occupies a high point along Campus Drive. Its openness and visibility made it an excellent location for housing Michigan National Guard troops during the early months of the 1913-14 strike. Our initial attempt to locate any remaining archaeological trace of the National Guard encampment focused on a relatively level, open area situated to the north of the dry house ruins. This area was roughly located south of Campus Drive, north of No.2 Road, and west of the unnamed dirt road that runs through the property. We began by excavating a grid of 45 STPs evenly spaced at 10-meter intervals in seven uneven transects oriented north/south across this area (Figure 5.45). These STPs were labeled by their grid location based on north and east coordinates. STP 2N5E contained a solid layer of asphalt covering the entire bottom of the test pit at a depth of 35 cm, which indicated a parking lot had once existed in this area. Sixteen of these STPs were not excavated once it became clear that this was all leveled and filled land for the construction of a previous parking lot.

A total of 63 artifacts were recovered from these STPs, but most were small fragments of bottle and window glass, ceramics, and nail fragments. Fragments of redware drainpipe were found in

four of the STPs (2N1E, 3N5E, 5N4E, and 5N5E), but they appear to be just scattered with no linear relationship among them. Pieces of coal were found in six of the STPs, indicating a wide spatial distribution even though it occurs in low density. This entire area appears to represent a low-density scattering of artifacts, perhaps related to grading and filling for a previous parking lot.

The identification of additional photographs of the National Guard camp demonstrated that it was located further south than originally thought. A second grid of STPs was laid out in the open area further south to encompass this area, bounded on the south by the No. 2 Road and extending on both sides of the unnamed road that connects No. 2 Road with Campus Drive (Figure 5.45). This grid consisted of 28 STPs evenly spaced at a 10-meter interval. Additional STPs were placed inside or next to several depressions or suspected features. The south STP grid was in an area characterized by uneven ground and rock outcroppings. The vegetation consisted of many thorny brush plants and the occasional scattered tree. These STPs were excavated to about 45 cm deep unless they were stopped sooner due to large rocks. The typical soil profile was a shallow (average of 9 cm) organic layer of 10YR 2/2 black loamy soil, followed by a thicker layer of 10YR 3/3 dark brown sandy loam that extended to the final depth in all of these STPs. One exception was STP 5S1W, which had stamp sand filling the top 20 cm, and a dark grey/brown fill extended to the final depth of 49 cm.

Only 13 of these 28 STPs contained cultural material, and only four had more than a few fragments. STP 2S3E had eleven artifacts, including three bottle glass fragments, one ironstone fragment, a piece of slag, five cut nails, and a fragmented drill core. STP 4S0E had nine artifacts: five fragments of glass, two of ironstone, and two pieces of metal. STP 5S1W contained cultural deposits from 15-35 cm, including four pieces of coal, six pieces of brown glass, and single fragments of clear glass and ironstone with a trace of red decoration. Finally, STP 5S4W had six glass fragments and 1 piece of coal.

The STPs from this area yielded only a low density of artifacts with no clear spatial patterning. No features related to the National Guard camp were discovered during this testing operation. The only result of note is the drill core recovered from STP 2S3E, a mining byproduct that would date to after the Quincy Lode mining operations. Why it was present in this location is not clear.

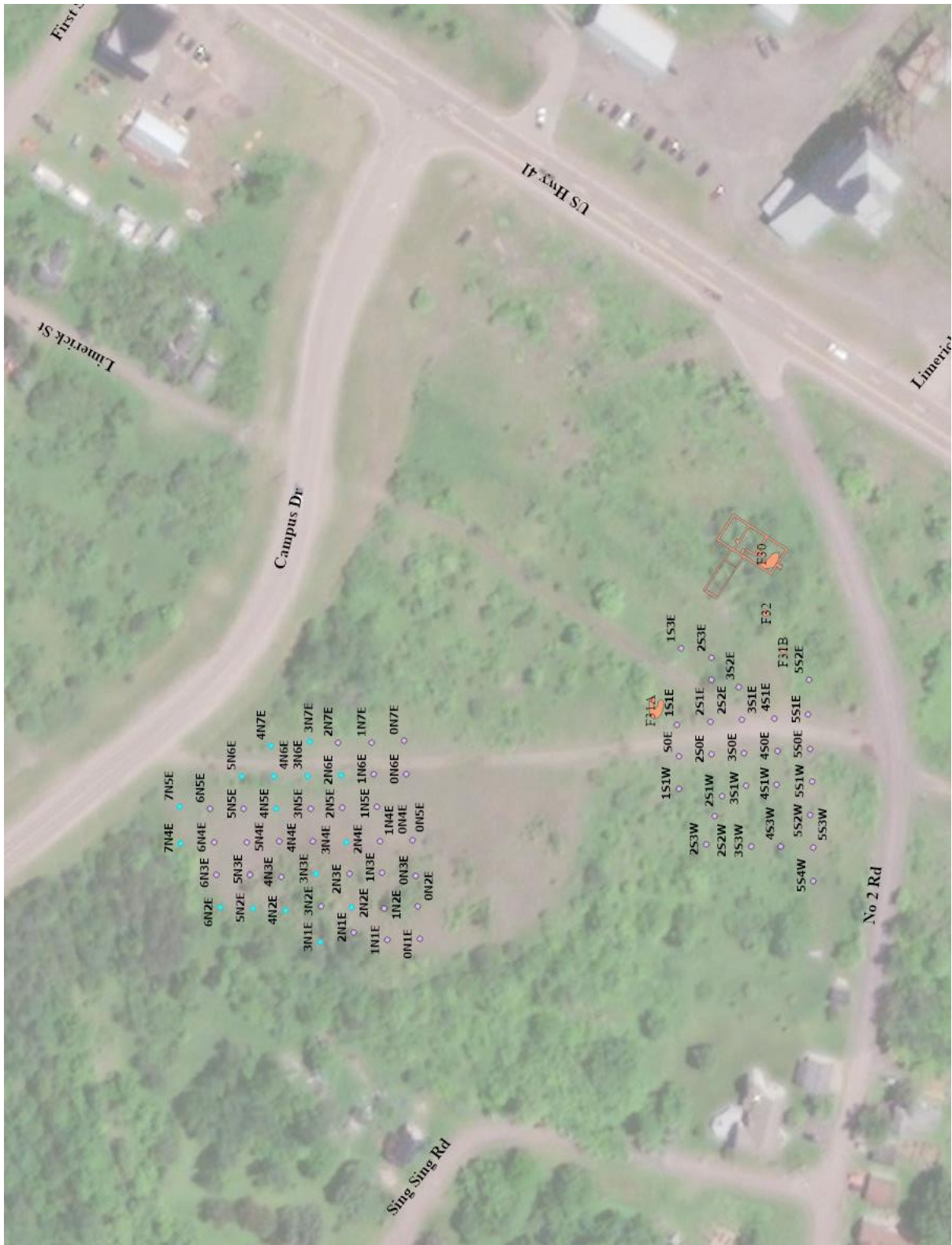


Figure 6.45: Tract 102-04 North and South STP grids. Blue dots represent unexcavated STPs. F30, F31A, F31B, and F32 all pictured.

Feature Descriptions

Feature 30

F30 represents a large building with a mortared stone foundation located between Campus Drive and No. 2 Road, north of F31 and East of F26 (Figure 5.46 and 5.48). This large multi-room foundation has an off center “T” shape (Figure 5.47). The north-south oriented main structure measures 65 X 31 feet (19.8 x 9.4 m). An east-west oriented addition measuring 16 X 48 feet (4.9 X 14.7 m) extends west from the main structure. The mortar of the southern section of this building is different, suggesting that it represents post-construction repair or maintenance. The structure has three different cellars: one in the western addition, one in the center of the foundation that still exhibits stairs, and the third cellar is an oblong shape in the southernmost room of the main part of the feature.



Figure 6.46: Photo of Feature 30 facing northeast, showing the stone foundation.

Tract 102-03
Feature 030

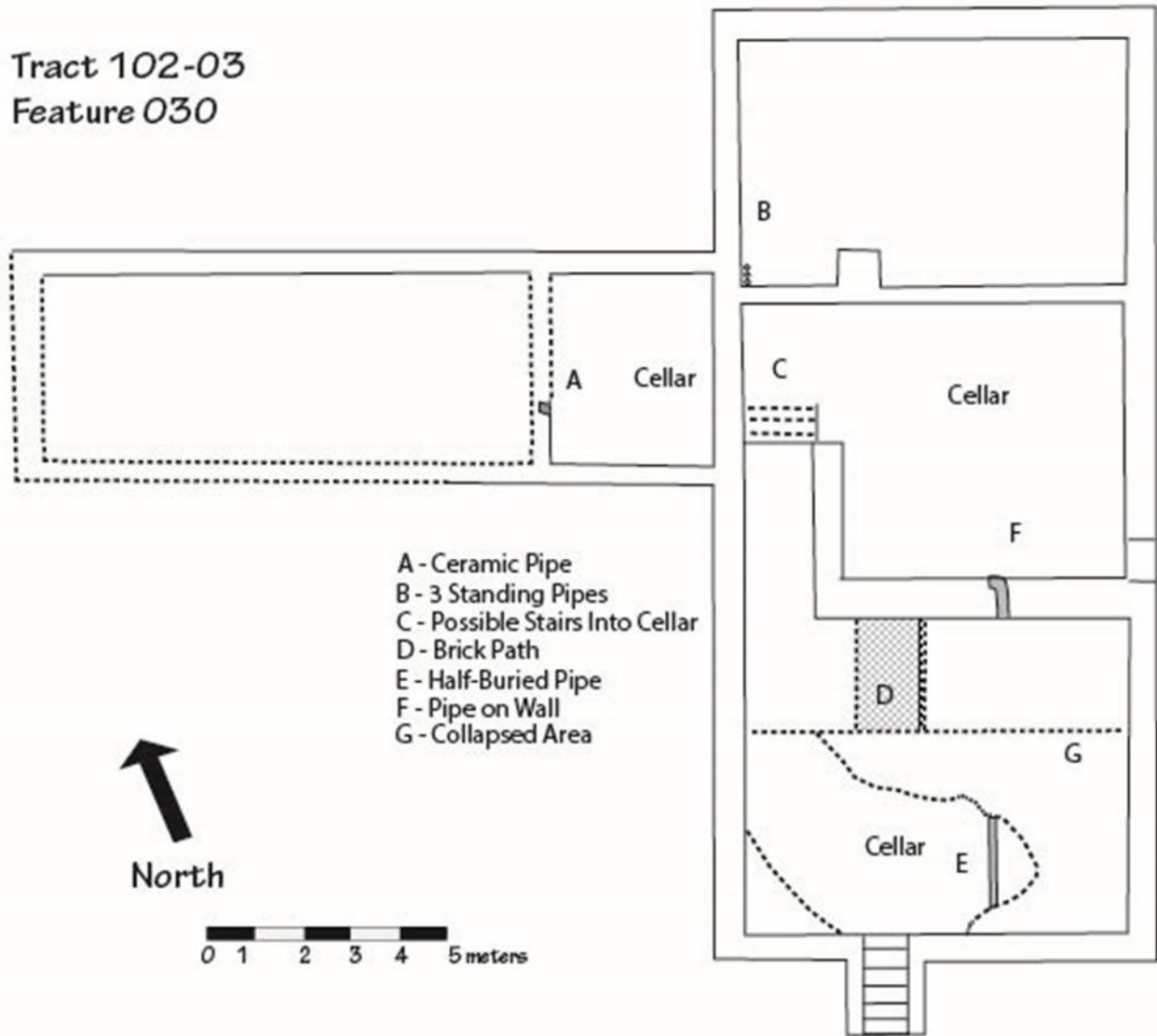


Figure 6.47: Plan drawing of Feature 30.



Figure 6.48: Photo of Feature 30 facing south, showing an entrance to the structure.

Feature 31

Feature 31 represents a series of three depressions located in the southwest and north yard areas of the F30 dwelling, all in the location of the National Guard camp as shown in historic photos (Figure 5.49). Since the relationship between these depression features is not clear, they all have been referred to as F31 but designated with separate letters. Each will be described separately below.

Feature 31A

A feature depression labeled Feature 31A was visible on the ground surface located between the two unnamed dirt roads that connect No.2 Road and Campus Drive. The depression was located just north of the southern STP grid and south of the trench F27, directly in line behind the F30 rear addition, and northwest of the other F31 depressions (Figure 5.49). A single STP was excavated in this feature, placed off center in the middle of this depression, in order to evaluate its stratigraphy and artifact assemblage. The STP measured 45 X 45 cm, encompassing about half the size of the entire depression. The first 30 cm consisted of a 10YR 2/2 rocky silt soil level. Below this was a rocky 10YR 3/3 brown silty soil with no artifacts that extended to the

final depth of 70 cm. The soils from this feature are not consistent with ‘night soil’ privy fill, although if used for only a short time, the typical dark, organic soils would be less likely to accumulate. Without additional information from flotation or soil chemical analysis, we cannot determine if this pit was used as a privy or for refuse disposal.

This STP yielded a total of 255 artifacts, most of which were unidentified as to group (120), but food-related (93), architectural (39) and medicinal (3) groups were also represented. The food-related objects consist of ceramic fragments (14), glass (77), 1 crown cap and 1 jar lid. The most common types in the food-related group are beer bottle fragments (47), unidentified bottle fragments (24), and ceramic pieces (14). A single fragment of a chicken fibula was also recovered. The architectural artifacts include wire nails (28), cut nails (10), and a bolt. Finally, the medicinal group is represented by a clear medicine bottle, a blue Vick’s jar, and a Hind’s Honey and Almond Cream bottle.

Diagnostic artifacts from Feature 31A include a beer bottle fragment reading “this bottle not to be sold” used on alcohol bottles that date from 1905-1920, an ironstone fragment marked “White W.S. George 108B” which dates 1909-1920, a Hind’s Honey and Almond Cream machine made bottle which post-dates 1907, and an early twentieth century style spoon, dating circa 1900-1930. Together, this information yields a TPQ date of 1909 for F31A. These dates are consistent with the 1913 National Guard encampment, suggesting that Feature 31A may have been a small trash pit or privy associated with that camp, but it is just as likely to be associated with other occupants of the area in the 1905-1920 period. The presence of beer bottles and a narrow range of other artifact types is consistent with the population occupying this camp and its short duration.

A short shallow trench (F27), located just to the north of the F31A depression, was thought to be a possible latrine pit or trench dug for refuse disposal. Two STPs were dug in the base of the trench, STP Trench 1 towards the western end and STP Trench 2 to the east. Both STPs contained dark brown sandy silt. Trench 1 had a final depth of 40 cm and Trench 2 a depth of 50 cm. STP Trench1 contained four brown bottle glass fragments, one with the warning that this bottle was not to be sold, generally dated to 1905-1920. In addition to one fragment each of aqua bottle glass and wire, this STP also contained 40 fragments of a plastic bowl marked “dishwasher safe” which dates to the second half of the 20th century. STP Trench 2 contained only a single clear glass shard. The presence of the plastic dish demonstrates that this trench is a modern disturbance not associated with the Quincy structures in this area or the National Guard camp.



Figure 6.49: Location of F31 depressions.

F31B

Feature 31B was a depression located to the southwest of the southwest corner of F30. This depression was first tested with a STP in the center. Given the artifact assemblage, four additional STPs were excavated in all four cardinal directions around this original STP. Finally, a 200 X 50 cm unit was excavated that bisected the F31B depression. Each of these are described separately below.

The original STP D2 was placed inside the F31B depression. The first soil layer (0-30 cm) was very dark brown silty loam, followed by a dark brown sandy silt (30-46 cm), and finally a very dark brown sandy silt with small cobbles (46-70 cm). The STP hit the water table at 70 cm. Unidentified and food-related group artifacts are the most common represented by the 58 artifacts, but they all represent glass or bottle fragments. This STP also contained three four-hole milk glass buttons and an 1853 Seated Liberty dime, pierced for hanging (Figure 5.50). The fact that this dime was pierced suggests that it was a curated object and the date probably does not relate to its deposition.

Four additional STPs were dug in each cardinal direction around this original STP to determine the nature of F31B. STP D2 North, located 5 m away, contained a layer of sandy silt from 0-15 cm, followed by a dark yellow/brown sandy soil from 15-67 cm. Only five pieces of brown glass, one of clear glass and two cut nail fragments were found in this STP. The fact that this soil

profile and artifact density is so different from others excavated in this area suggests that it lies outside the pit feature.

STP D2 East contained only one layer of 10YR 2/1 very dark brown sandy silt until the closing depth of 70 cm. This STP yielded 41 artifacts, but the field notes indicate they were only found in the top 15-20 cm. These artifacts include ironstone (6), ungrouped glass and bottle fragments (24), beer bottle (3), and a lamp chimney fragment. It also contained a stone drill core fragment (Figure 5.51), a bi product of mining exploration that post-dates the 1870s. This STP was located outside of the clearly defined F31B depression, but the depth of soils and artifact density do indicate that this feature may be larger than what is visible on the surface. The types of artifacts present are similar to the other F31B deposits. The only diagnostic artifact was a beer bottle fragment marked "This Bottle Not To Be Sold" dating to 1905-1920, indicating an early 20th century date, consistent with the National Guard camp, but possibly also associated with occupants of F30 during the same era.

STP D2 South was also 5 m away from the original STP and contained a level of very dark silt measuring 0-21 cm, followed by a dark brown sandy silt from 21-70 cm. The field notes indicate that most of the 45 artifacts were found from 35-55 cm in the dark brown soil. Food related is the most common group representing 78% of the cultural material. Most of these are beer or soda bottle fragments (28), but 7 canning jar pieces are also represented. A brick fragment, two spikes, and a wire nail were also found. Four white ball clay smoking pipe fragments were found in this STP, including two pipe stems, one marked Henderson Montreal, and two pipe bowls with different decorative patterns. These pipe fragments were recovered from 35-55 cm, in association with all of the artifacts recovered from this STP. Like STP D2 East, the soils and materials are all consistent with the rest of the F31B deposit, indicating that it may also be inside the feature.

STP D2 West was located immediately southwest of the original STP, also inside the F31B depression. It contained a layer of coarse sandy soil from 0-20 cm, a layer of dark brown loam from 20-34 cm, and a layer of dark grey sandy loam from 34-57 cm. Most of the 25 artifacts were found between 10-20 cm, representing yellowware, ironstone, beer bottles, clear and aqua glass fragments, wire nails, and two white ball clay tobacco pipe bowl fragments.

All of the soil and artifact profiles for these STPs are similar with the exception of D-2 North. This STP had very different soils and significantly fewer artifacts, suggesting it was actually located outside of the F31B depression.

STP/Unit	Unidentified	Food-Related	Architectural	Clothing	Personal	Smoking
D2	28	25	1	3	1	
D2 north	1	5	2			
D2 east	28	9	2			
D2 south	2	35	4			4
D2 west	13	7	3			2
Unit 1 L1	32	44	9			1
Unit 1 L2	64	112	5	3		11
Unit 1 L3	28	26	1	4		7

Table 6.4: Common Artifact Groups for F31B, Tract 102-03

Because of the variety of the materials from the D2 STPs, Unit 1 was excavated in Feature 31B to collect additional information about this feature. It was a 200 X 50 cm unit oriented southeast/northwest, bisecting the depression across its narrow axis. This unit was excavated in three levels. The first level was excavated to a depth of 45 cm and contained the same sandy 2.5YR 3/4 reddish-brown color soil 55 cm from the west and east walls and a darker smoother 10YR 3/1 sandy and silty soil in the center (Figure 5.52). The second level, measuring 46-65 cm below surface, was only excavated in the center of the unit, representing the darker feature fill (Figure 5.53). Through this level there was an increase in the amount of rocks and cobbles, but the soil remained a 10YR 3/1 sandy and silty dark brown. Level 3 was only excavated in the darkened center of the unit, which had an angled decline, shrinking downward in a “V” shape (Figure 5.54). Level 3 fill soils were characterized by another increase in cobblestone and gravel density that began at 65 cm, but the soil continued as a 10YR 3/1 dark brown sandy silt. This level and the unit were closed with a final depth of 91 centimeters at the base of the dark soils on a dense layer of rock.

This unit yielded a total of 405 artifacts (Table 5.3). The highest concentration of material was recovered from level 2, representing 57% of the total assemblage, while lesser amounts were found in level 1 (23%) and level 3 (21%). Thus, more artifacts were found in the middle of the pit fill rather than the top or base. Most of these artifacts belong to the food related and unidentified groups. There are few discernable differences in the artifact profiles from the different levels that would indicate different depositional episodes. Level 1 sampled soils inside

the feature as well as the surrounds yard area. The similarity in artifacts suggests that very little refuse disposal occurred in this area of the F30 yard, and the absence of clear sheet midden deposits may indicate that the bulk of these materials are associated with the F31B depression feature. The number of artifacts by group shown in Table 5.3 also suggests that the STPs, except for D2 north, all sampled the F31B deposits even if they were not clearly located within the visible depression. The similarity among the levels is reinforced by the fact that the same vessel was found in all levels. Even though we did not assess the artifacts by minimum unique vessels, fragments from the same Bristol-slipped stoneware butter crock and Vick's VapoRub jar were found in every level. The similarity of soils, artifact profile, and cross-mended vessels support the interpretation that this feature represents a single assemblage.

Taken as a whole, the F31B STPs and unit yielded a sample of 582 artifacts. The most common group is food related (263), followed by unidentified (196), hygienic/medicinal (57), architectural (27), smoking related (25) and clothing (10). The tools group is represented by two stone diamond drill core fragments. These cores date c. 1870s or 1880s and thus do not relate to the era of exploratory mining in our area of excavation. They were likely lost in process as part of Quincy's widespread use of core drilling technology (Pat Martin, personal communication). Personal and lighting groups are represented by only a single artifact each.

The food related group consists predominantly of beer bottle fragments (153) and food preparation/storage ceramic pieces (57), representing stoneware (51) and yellowware (6) fragments. Other types present include food service (6) and tableware (12) ceramics, canning jar fragments (7), soda bottle (4), and a single liquor bottle piece. Glass represents 87% of the unidentified group, suggesting that many of these objects may also be related to food. In addition, 38 bone fragments were recovered from F31B, representing 57% of all faunal remains from the 2019 field work. Most of these are unidentified as to taxa, but a cow tibia, pig femur, and radius from a medium-sized mammal are represented. It is interesting that 23 (61%) of these bone fragments are calcined or show evidence of burning. These faunal remains reinforce the data from other groups highlighting an emphasis on food preparation in the F31B assemblage.

In addition to the focus on food, F31B yielded personal kinds of artifacts, including medicine bottles such as the Vicks VapoRub jar, eight buttons, a heel plate, and suspender clip representing clothing, the pierced Liberty dime, and beer bottle fragments. These are the types of artifacts that may relate to a National Guard camp occupied by many young men. In addition, 25 fragments of white ball clay smoking pipes were recovered. The 13 pipe bowl fragments represent a range of decoration including fish scale pattern, cross-hatched lines, flutes, and an eagle pattern. The 12 pipe stem fragments include 1 with a bit end and 6 marked "Henderson Montreal," with 1 found in STP D2 South, 4 from Unit 1 level 2, and 1 from Unit 1 level 3 (Figure 5.55). These smoking pipe fragments occur in a similar distribution as noted above, with

the largest number from level 2 (58%), the next highest from level 3 (37%), and fewest from level 1 (5%).

Few diagnostic artifacts were recovered from this feature, but the ones that can be dated provide some contradictory information. They include a brown bottle fragment with “Forbidden Reuse of Bottle,” generally dated from 1905-1920, in addition to a clear glass shard with an Owen’s suction scar (1905+), sun-purpled glass bottle fragments (1880-1914), Bristol-slip stoneware (1885+), and a carbon battery rod (1881+). The TPQ dates (dates after which the deposit had to form) are very similar for each level: 1905 for levels 1 and 2 and 1885 for level 3. The earlier TPQ date for level 3 likely stems from the smaller sample size from this level rather than a real difference in depositional date.

The accepted dates for the smoking pipes from this feature contradict these early 20th century dates. White ball clay pipes were most popular in the 19th century, but their use did continue into the 20th century; indeed, they are still made today. Archaeologists generally date “Henderson Montreal” pipes 1846-1876 (Reid 1976; Smith 1986). These dates are at odds with the 1905 TPQ date from this feature and are especially problematic given the consistent soil profile and lack of evidence for soil mixing that might indicate an earlier disturbed deposit. In addition, F31B did not yield any other obvious mid to late 19th century artifacts except for the pierced 1853 Liberty head dime; but since this represents a curated object, its diagnostic association is unreliable.

Smith notes that refining these pipe dates is difficult, but “James McKean Henderson sold the Henderson and Son pipe factory to his nephew William Dixon in 1876” (Smith 1986:58). It is possible that this mark continued in use after Dixon took over his uncle’s factory. An 1890 insurance map still shows the pipe kiln (Katz 2019), and operations continued until the 1890s when a forge took the pipe factory’s place. The factory was razed in the 1920s but was discovered by archaeologists in 2019 (Hester 2019). Even if this mark was used until the 1890s, that would still be several decades too old, a gap that is hard to reconcile with an artifact type that breaks easily and has such a short use life. However, other domestic sites in the region show this same pattern of older pipes in later assemblages². For example, the three house structures at Franklin Location, with TPQ dates ranging from 1888 to 1910, all contained clay smoking pipe stems marked Henderson, Montreal. While these all represent disturbed contexts, the excavations at nearby Limerick House 163 recovered Henderson Montreal pipe stems from sealed contexts dating to the 1920s. This data of pipe use runs counter to typical dates and suggest that their common use in this neighborhood may represent regional popularity or even availability because of old store stock (Pat Martin, personal communication).

² There is no report on the archaeological investigations at the Franklin and Limerick Sites, but the complete catalog is housed in the Industrial Heritage and Archaeology curation facilities at MTU. Dr. Pat Martin graciously discussed their findings with us.

There are indications that many of the F31B objects were deposited in this pit feature as primary refuse. For example, several of the bones are large fragments, such as the cow tibia (72 gm) and medium mammal radius (22 gm). Of course, these are dense long bones, but still indicate larger artifact size than expected for typical sheet midden deposits (artifact bearing soils originating from low density disposal in yard areas, see LeeDecker 1994). A total of 47 fragments of a single stoneware butter crock, weighing 326 gm, were recovered from Level 2 of Unit 1, a concentration unlikely for secondary refuse or disturbed contexts. Even so, the 4.7 gm average for the artifacts from this feature indicates that many others were small. In addition, four of the smoking pipes are over 50% complete, and one is over 75% complete. The completeness of these pipes would suggest that they represent primary refuse in this pit feature rather than older artifacts in sheet midden soils used to fill or cap a later pit feature; it is hard to imagine these pipes not breaking from later trampling if they were discarded earlier in the yard. As noted above, these earlier pipes were found in deposits with a 1905 TPQ date with no indication of stratigraphic separation or mixed deposits. A possible solution is that the National Guard or a local store had once ordered these pipes in bulk and had gradually gone through the stockpile. This seems likely due to similar Henderson Montreal clay pipes being found in 1920s and 1930s artifact deposits in the nearby Limerick Location (Pat Martin, personal communication).

In sum, F31B is a filled pit feature. The TPQ dates indicate an early 20th century date that is consistent with the Quincy National Guard camp but may also be associated with occupants of the F30 boarding house. The indications of primary refuse would suggest that this feature was likely a trash pit. The concentration of faunal remains, food preparation ceramics, and bottles suggest that the F31B area was predominantly a food preparation area. If it is associated with the National Guard, this would indicate that it was near the camp kitchen. F31B is located in the general proximity of a large rectangular tent, the type that would be used for a camp mess. The detail of the reduced-size camp photo seems to show a concentration of people and equipment in this area (Figure 5.56).



Figure 6.50: Photo of pierced 1853 liberty head dime from STP D2.



Figure 6.51: Drill cores from the Tract 102-04 National Guard Encampment area. From left to right, F31C L1; F31B Unit 1 L3; STP 2S3E; F31B STP.

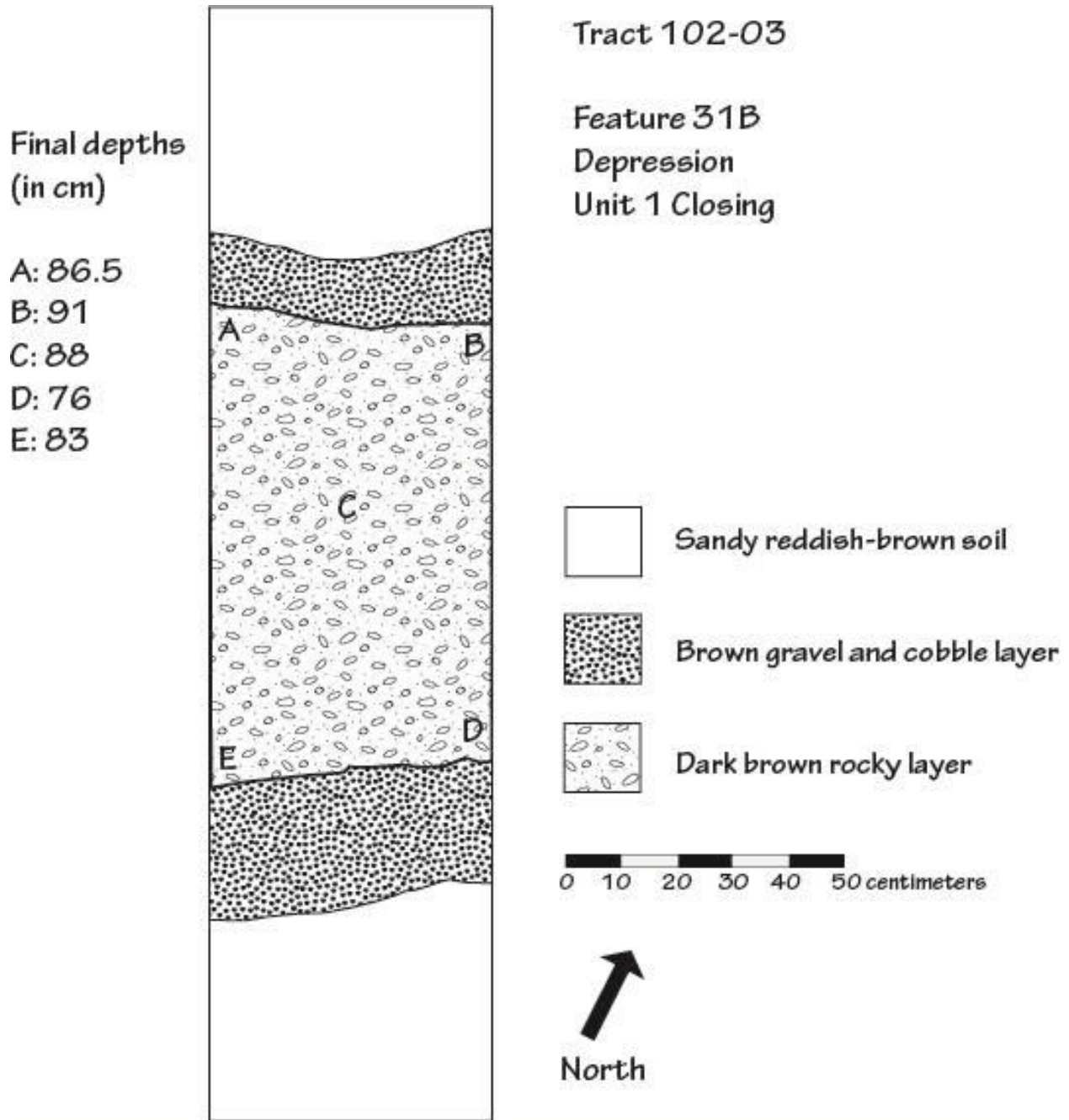


Figure 6.52: F31B plan at close of level 1.



Figure 6.53: Feature 31B Unit 1 Level 3 showing the narrowing V-shape of the darker central soil deposit.

20H0128
Tract 102-03: Quincy Dryhouse Area

Feature O31/D2
Unit 1 Closing

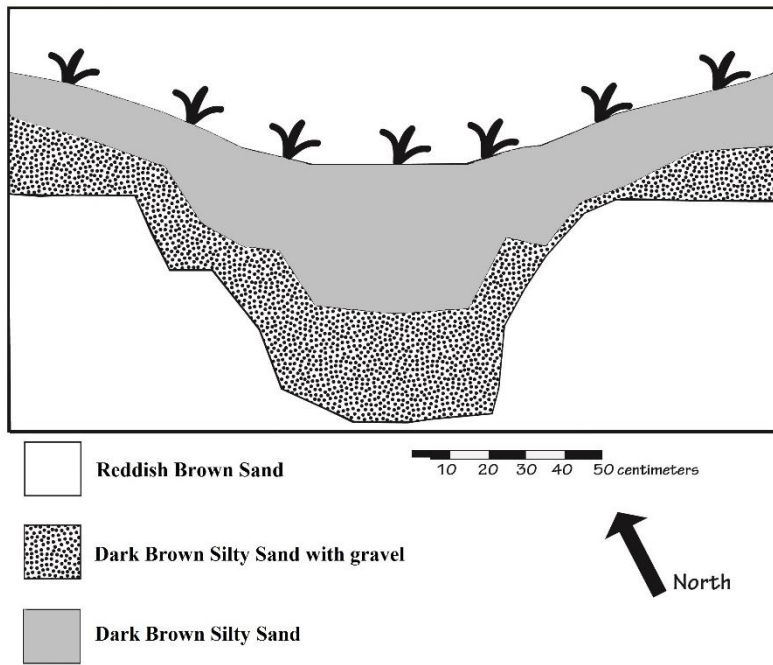


Figure 6.54: Feature 31B profile drawing.



Figure 6.55: Smoking pipe sample from F31B Unit 1 Level 3.



Figure 6.56: Detail of Quincy National Guard Encampment photo with approximate location of F31B circled in red. Michigan Technological University Archives.

Feature 31C

Feature 31C was a depression located 5 meters east of Feature 31B. The depression measures about 2 m east-west by about 1 m north-south. An STP was placed inside this depression to determine the nature of the feature. It contained a layer of dark brown sandy silt with several roots from 0-41 cm, followed by a layer of very wet medium brown sandy silt from 41-62 cm. A total of 63 artifacts were found in this STP, including ceramics, bottle glass, and a stone drill core fragment. Even though none of these artifacts were clearly datable, the diversity of the assemblage indicated that F31C warranted further investigation.

A 1x1 meter unit, designated F31C Unit 1, was placed inside the depression and was excavated in two levels. Level 1 was dug to a depth of 38 cm and consisted of dark brown silty sand with many rocks. Level 2, excavated to a depth of 60 cm, contained a yellow-brown sandy soil in the corners, with the dark-brown rocky sand soil representing the pit feature fill in the center of the unit. The artifact density dropped dramatically in level 2 and, given that time was running out at the end of the field school, the unit was closed at this point. The photograph, however, shows that mottled and mixed pit fill soils may continue a bit deeper in the center of the unit (Figure 5.57).

Altogether, F31C yielded a total of 277 artifacts. There seems to be no difference in the assemblage between the STP and unit or the different unit levels, except that the density decreased with depth. The assemblage also seems to have a limited range of groups; only unidentified (89), food related (174), architectural (13) and tools, consisting of the drill core, are represented. Within each of these groups, only a narrow range of types are present. The unidentified group artifacts are all unidentified glass and unidentified bottle fragments. The only food-related types are food preparation (40), table/tea wares (3), unidentified ceramic (8), and beer bottle fragments (123), and the architectural group consists of only window glass and cut nail fragments.

An additional 15 faunal remains were found in this feature, all from level 1 of the unit. Twelve of these are small unidentified fragments, but a cow radius/ulna (250 gm), a cow femur (139 gm), and a cow tooth were also present. The large size of these bones indicates primary refuse disposal in this feature.

Very few diagnostics were found in F31C. Only one fragment of blue shell-edged ironstone (1850-1900), Bristol-slip stoneware (1885+) and a machine-made bottle (1905+) are represented. While not as clear as we would like, the 1905 TPQ and lack of later artifacts does suggest that this feature may date to the same period as the National Guard camp, although it could also be associated with F30 occupants. The artifact types from F31C are similar to F31B, especially the presence of large faunal remains, the prevalence of food related group artifacts consisting mainly of food preparation vessel ceramics and beer bottle fragments, although the absence of smoking, clothing, and personal artifacts in F31C does distinguish them. The indications of primary refuse would suggest that this feature was likely a trash pit.

STP/Unit	Unidentified	Food-Related	Architectural	Tools
STP	17	38	7	1
Unit 1 L1	59	117	3	0
Unit 1 L2	13	19	3	0

Table 6.5: All Artifact Groups for F31C, Tract 102-03



Figure 6.57: F31C Unit 1 Level 2, facing Northwest.

Feature 32

Feature 32 is a depression located just west of the southwest corner of the F30 structure, and northeast of the F31C depression. The depression measures 1.5 X 1.5 m (3.3 X 3.3 ft), bounded by an earthen berm with rock (Figure 5.58) and is interpreted as a possible privy. An STP excavated in this feature encountered a single layer of very dark sandy silt extended to the closing depth of 75 cm. The soils were dense with many roots and contained a strong unpleasant organic smell, all consistent with privy deposits.

A total of 215 artifacts were recovered in this STP. The most common group is unidentified, but these fragments are predominantly glass (104), with unidentified metal (9) and a single fragment of ivory-bodied ceramic. The food related group includes food preparation, beer, liquor, and milk bottle fragments, a crown cap, food product jar, and a canning jar rubber. The architectural group

represents only three types: cut nails (3), wire nails (3), and window glass fragments (15). A melted medicine bottle and fragments of a glass lamp chimney are also present.



Figure 6.58: F32 privy, view north

STP	Unidentified	Food-Related	Architectural	Medicinal	Lighting
D4	116	38	21	1	39

Table 6.6: Artifact Groups for F32, Tract 102-03

Few diagnostic artifacts were recovered from this STP but they include a machine-made bottle neck (1890+) and a crown bottle cap (1892+). The clearest diagnostic artifact is the base from a clear bottle or packer jar with the Capstan Glass Company mark, dating from 1919-1938. This would suggest that F32 is associated with the later occupation of the F30 boarding house. As a stone-lined feature, F32 has very different construction than the F31 depressions described above, as well as a wider range of artifact types that indicate that this privy is more likely associated with the F30 boarding house occupation than the National Guard camp.

Summary of the National Guard Encampment

Finding archaeological traces of a tent camp occupied for less than six months in the heart of an already complex historic industrial landscape is a difficult task. Even so, we succeeded in identifying three different pit features that date to the period of the National Guard Encampment. STPs excavated across the area yielded extremely low artifact numbers and no sheet midden deposits, indicating that this tract was not typically used for refuse disposal by nearby residents. Two of the features, F31B and F31C appear to be trash pits related to food preparation or consumption activities, indicating proximity to the kitchen, while F31A is most likely a latrine or privy pit. The F31A possible privy is located outside the northwestern perimeter of the camp as noted in historic photographs, in an appropriate location for latrines as stipulated by the National Guard protocols on temporary camp sites. All the F31 pits represent nothing more than a hole dug into the ground, distinguished from the nearby F32 privy which exhibits a constructed stone-lined vault. These differences may strengthen the idea that they are associated with the National Guard camp, as would the limited artifact diversity. The assemblages are characterized by large faunal remains and the prevalence of food related group artifacts consisting mainly of food preparation vessel ceramics and beer bottle fragments. The sample sizes are small, and few vessels are represented. The small sample, narrow range of artifact types, and information construction methods are consistent with the population occupying this camp and its short duration.

Given the current data, however, it is not possible to unambiguously associate these materials to the National Guard camp or distinguish them from deposits associated with the domestic occupation of the F30 boarding house. However, differences in the material culture between the F31 pit features and other nearby mining family residences strengthen the suggestion that they may relate to the National Guard camp³. For example, data from three Franklin residences and House 163 at Limerick, all located less than a mile from the National Guard encampment, show a higher artifact type diversity than the F31 pit features (Table 5.7). F31B has a slightly higher percentage of smoking pipe fragments than these other residences, although this is the only feature where pipes were recovered. The Franklin and Limerick assemblages exhibit a great deal of diversity in the incidence of beer as a percentage of all bottle fragments, ranging from 1.5 to 86%. Even so, the figures of 66%, 96%, and 100% from the F31 features indicate that beer bottles are generally more common to these assemblages than many other mine family households. The F31 features also have very small sample sizes, striking in light of the intensity of the F31B and F31C excavations. These possible trash pits did not contain that much trash, a pattern consistent with a short duration of use.

³ This discussion is based on analysis of the artifact catalogs for the Franklin and Limerick Sites excavated by Dr. Pat Martin in 1982. No report has been produced for this work, but the complete catalog is housed in the Industrial Heritage and Archaeology curation facilities at MTU. Martin graciously discussed their findings with us.

Feature	# of different artifact types represented	Smoking pipe % of total sample	Beer as a % of all bottle fragments	TPQ date	Total artifact sample
31A	13	0	66	1909	255
31B	33	4.4	96	1905	560
31C	9	0	100	1905	291
Franklin F1	55	3.6	59	1910	812
F2	39	3.3	1.5	1886	670
F3	73	2.3	86	1902	1140
Limerick	89	1.1	6	1929	2798

Table 6.7: Comparison of F31 pit features to other nearby domestic contexts

Given the significance of the 1913-14 Copper Country Strike and the possibility that these pit features may be associated with the National Guard camp, additional research is needed to provide a larger sample of material culture and greater stratigraphic control to better interpret the function of these features and their cultural association.

VI. Summary and Recommendations

This report presented the results of the 2019 archaeological field work which targeted four different activities in the Quincy unit of the Keweenaw National Historical Park. Several of these activities did not achieve their goals of generating additional information, while several others succeeded to an unexpected level. As is common, this field work clarified some aspects of the cultural resources at Quincy while simultaneously raising new questions and issues. We conclude this report by summarizing our key findings and offer recommendations for future research.

Activity 1 investigated what appears to be a natural fissure oriented along the same line as the original Quincy Lode. Five STPs excavated along the line of this fissure yielded only low-density sheet midden refuse associated with nearby dwellings. This testing did not yield any artifacts related to Indigenous or early mining activities or clarify the nature of this fissure. Since our investigations added no new data, the research potential of this activity area remains high until the nature of this feature can be determined. Any further excavation of the fissure would require a great deal of brush clearing and stone removal.

The goal of Activity 2 was to confirm or identify features and resources related to early mining of the Quincy Lode and perhaps even recover material culture linked to Indigenous mining activities. STPs were dug into a possible shaft feature located where an abandoned shaft is depicted on historic maps. These STPs encountered very deep trash-bearing soils dating to the 1st half of the 20th century which means that little new information was acquired about the mine shaft itself. Additional large-scale testing could clarify the nature of this shaft feature, but the density of 1930s trash deposits indicate that this would be a great deal of effort for little potential reward. Excavating deep into an area containing a mineshaft also presents some danger. Therefore, no further work in this area is recommended.

Activity 3 concentrated on the area behind the Quincy Mine Office. The work yielded information on many previously undocumented features representing a very complex cultural landscape. Given the limited scale of our testing, this activity has raised more questions than it has answered. The spatial patterning of these features suggest they form four different associations or functional contexts related to:

1. the Quincy agent's house: represented by a root cellar and possible well, but these features lie outside the tract boundaries, so no further work is recommended.
2. the Quincy Mine clerk's residence: Several outbuildings were identified directly behind the clerk's residence and one (F261) was intensively tested although the few artifacts recovered did not help clarify the function of this structure. Additional testing at these features may be warranted to gain this information.

3. Recent trash burning activities: Both F277 and F294 are deeply filled with modern refuse and the likely origin of these two features were burn pits for trash by area residents. Since this activity is not related to the Quincy Mining Company, no further work is recommended.
4. Earthen berm structures: A series of earthen berm structures located at the western end of the mine office tract may represent an early residential area oriented toward a road. These features have various sizes that may represent a combination of dwellings, outbuildings and barns. Few artifacts were found in the STP testing in this area, but several were not excavated, and low artifact density does not necessarily translate to low research potential. Other investigative methods should be considered. This area has a high level of integrity and a great deal of research potential since this area is likely to yield information that can inform on this period of mining history. The proximity of this area to the mine office also presents a great opportunity for public interpretation. Our recommendation is that this area of the mine office parcel warrants additional archaeological research.

Activity 4 concentrated on the area of the National Guard camp, housed at Quincy during the 1913-14 Copper Country Miners' Strike. Three different pit features were identified and testing that date to the period of the National Guard encampment and may be associated with it. Two of them (F31B and F31C) are trash pits with food preparation and food related artifacts indicative of the kitchen or 'mess' area. The other pit (F31A) is located at the other end of the camp and may represent a latrine or privy. These features yielded the artifact types we would expect for a temporary camp of young men occupied for a short duration, show different construction than the F30 Boarding House structure or the F32 privy, and are located in an area with very low generalized artifact density indicating that refuse disposal was not common in this area. Preliminary comparison with other assemblages from nearby worker houses indicates that the F31 deposits have less artifact diversity and a higher incidence of beer bottles than this household sample. Additional archaeological excavation is needed to clarify these associations. Regardless, our investigations have demonstrated that this part of Tract 102-03 has a high level of integrity. Given the significance of the 1913-14 Copper Country Miners' Strike and the possible association of materials to the National Guard Encampment, this area has a great deal of research potential. The public interpretation of the Quincy National Guard camp is facilitated by its proximity to the dry house ruins and the existing public parking, trails, and signage.

Bibliography

Anklam, Andrew & LouAnn Wurst. 2019 Government Land Office Survey, ISRO.2019.005, Isle Royale National Park. Report submitted to the US Department of Interior/ National Park Service. Houghton, Michigan: Michigan Technological University.

Beck, William. 1970. Law and Order during the 1913 Copper Strike. Michigan History 54.
Benedict, Harvey. 1952. Red Metal: The Calumet and Hecla Story. Ann Arbor: University of Michigan Press

Blackburn, Renee M., "Preserving and interpreting the mining company office: landscape, space and technological change in the management of the copper industry", Master's Thesis, Michigan Technological University, 2011. <http://digitalcommons.mtu.edu/etds/300>.

Burt, William and Douglass Houghton. 1845. General Land Office Survey Map of Township 55 North, Range 33 West, June 25th, 1845.
<https://gloreCORDS.blm.gov/results/default.aspx?searchCriteria=type=patent|st=MI|cty=131|sp=true|sw=true|adv=false>

Calumet News, August 2,8,15,20. September 20th, 1913. Houghton, Michigan: Michigan Technological University Archives.

Calumet News August 23, 1913. Houghton, Michigan: Michigan Technological University Archives.

Calumet News, November 17,26,28, 1913. Houghton, Michigan: Michigan Technological University Archives.

Calumet News, September 19, 1913. Houghton, Michigan: Michigan Technological University Archives.

Calumet News, April 23, 1914. Houghton, Michigan: Michigan Technological University Archives.

Chicago Tribune. 1913. Dec. 25.

Corey, A.J. 1874. Letters to W.R. Todd, Jan. 2,7. Houghton, Michigan: Michigan Technological University Archives.

Davidson, R.B. 1852. Letter to C.C. Douglass, March 16 1852. Houghton, Michigan: Michigan Technological University Archives.

Ferris Records, *RG-46,B1,F3*. Houghton, Michigan: Michigan Technological University Archives.

Ferris, Woodridge. 1922. "The Autobiography of Senator Woodridge N. Ferris" unpublished manuscript, Michigan Historic Collections.

Fitting, James E. 1970. *The Archaeology of Michigan: A Guide to the Prehistory of the Great Lakes Region*. Natural History Press, New York.

Forester, John H. 1846. "Early Settlement of the Copper Regions of Lake Superior". Michigan Historical Collections, Vol. 7.

Foster, J.D. & Whitney J.W. 1850. Report on the Geology and Topography of a Portion of the Lake Superior Land District. Washington, House of Representatives, Executive Doc. 69. 31st Congress. P.34.

Gates, William. 2013. *Michigan Copper and Boston Dollars: An Economic History of the Michigan Copper Mining Industry*. Harvard Press.

Gohman, Sean. 2019. Inventory and Assessment of Historic Archaeological Resources at Keweenaw National Historical Park (KEWE) and Isle Royale (ISRO) (Phase 1) Report.

Halsey, John R. 2018. Prehistoric Copper Mining in Michigan. Anthropological Papers No. 99. Museum of Anthropology, Ann Arbor, MI.

Halsey, John R. and Michael D. Stafford. 1999. Retrieving Michigan's Buried Past: The Archaeology of the Great Lakes State. Bulletin 64, Cranbrook Institute of Science. Bloomfield Hills, Michigan.

Harris, J.L. 1904. Letters to W.R. Todd. Jan. 17,18,23,26 and Feb. 2,5. Houghton, Michigan: Michigan Technological University Archives.

Hester, Jessica L. 2019. A Kiln That Fired Millions of Clay Pipes Was Unearthed Under a Montreal Bridge. Atlas Obscura. Accessed April 8, 2020.

<https://www.atlasobscura.com/articles/montreal-clay-pipes-excavated>

Hoagland, Alison K. 2010. *Mine Towns: Buildings for Workers in Michigan's Copper Country*. Minneapolis: University of Minnesota Press.

Hoglund, William. 1960. *Finnish Immigrants in America: 1880-1920*. Madison, Wis.

Jackson, Charles T. 1849. *Report on the Geological and Mineralogical Survey of the Mineral Lands of the United States in the State of Michigan, 31st Congress, First Session, Executive Document No.5*. Washington.

Kappler, Charles J.(editor). 1904. *Indian Affairs: Laws and Treaties, Vol. 2 (Treaties)*. Vol. 2. Government Printing Office, Washington, D.C.

Katz, Brigit. 2019. *Archaeologists Unearth 19th-Century Kiln That Fired Up Pipes for Montreal's Smokers*. *Smithsonian Magazine*. Accessed April 8, 2020.

<https://www.smithsonianmag.com/smart-news/found-19th-century-kiln-fired-pipes-montreal-smokers-180973682/>

Kaunonen, Gary and Goings, Aaron. 2013. *Community in Conflict: A Working-Class History of the 1913-14 Michigan Copper Strike and the Italian Hall Tragedy*. East Lansing: Michigan State University Press.

Krause, David J. 1992. *The Making of a Mining District: Keweenaw Native Copper 1500-1870*. Detroit: Wayne State University Press.

Lake Superior Miner. 1858. April 17th issue. Houghton, Michigan: Michigan Technological University Archives.

Lankton, Larry D. 2010. *Hallowed Ground: Copper Mining and Community Building on Lake Superior, 1840s-1990s*. Detroit: Wayne State University Press.

Lankton, Larry D. 1997. *Beyond the Boundaries: Life and Landscape at the Lake Superior Copper Mines 1840-1875*. New York: Oxford University Press.

Lankton, Larry D. and Charles K. Hyde. 1982. *Old Reliable: An Illustrated History of the Quincy Mining Company*. Hancock: The Quincy Mine Hoist Association, Inc.

LeeDecker, Charles H. 1994. *Discard Behavior on Domestic Historic Sites: Evaluation of Contexts for the Interpretation of Household Consumption Patterns*. *Journal of Archaeological Method and Theory* 1(4):345-375.

MacNaughton. 1913. Letter to Shaw, Aug. 26. Houghton, Michigan: Michigan Technological University Archives.

McDougall, William. 1913. National Guard in the Copper Country. Copper Country Vertical File. Houghton, Michigan: Michigan Technological University Archives.

Mahoney, Hietala. 1914. WFM Assessment Register, statements on importance of drill in WFM success. *Calumet News*.

Martin, Susan R. 1999. *Wonderful Power: The Story of Ancient Copper Working in the Lake Superior Basin*. Great Lakes Books; Variation: Great Lakes Books. Detroit: Wayne State University Press.

Mason, Ronald R. 1981. *Great Lakes Archaeology*. Academic Press, New York.

Michigan Bureau of Labor and Industrial Statistics. 1889. *Sixth Annual Report*. Lansing MI.

Mining Magazine. 1858. Issue 11. New York.

Mulholland, James. 1981. *A History of Metals in Colonial America*. University of Alabama Press. P41-42.

Munsey, Cecil (1970) *The Illustrated Guide to Collecting Bottles*. Hawthorne Books, New York.

Pettit, William. 1847. Remarks Respecting the Copper District of Lake Superior, made at the Monthly Meeting of the Franklin Institute, March 18th 1847., *Journal of the Franklin Institute* 1847: 340-41.

Quincy Mining Company Annual Report. 1864. Houghton, Michigan: Michigan Technological University Archives.

Quincy Mining Company, Director's Minutes, November 17, 1846; State of Michigan, Acts of the Legislature, 1848.

Quincy Mining Company, Director's Minutes, 1847, 1856, 1858, 1860. Houghton, Michigan: Michigan Technological University Archives.

Quincy Mining Company Map. 1898. <http://gis-core.sabu.mtu.edu:6080/arcgis/rest/services/KeweenawHSDI/Quincy1883/MapServer?f=jsapi>

Quincy Mining Company Map. 1900. Michigan Technological University Archives and Copper Country Historical Collections, Houghton, Michigan.

Quincy Mining Company Map. 1902. Michigan Technological University Archives and Copper Country Historical Collections, Houghton, Michigan.

Quincy Mining Company Map. Post-1917. Map 30E24C-QD2875. Michigan Technological University Archives and Copper Country Historical Collections, Houghton, Michigan.

Reid, C.S. 1976. Clay Pipes in the Upper Great Lakes: The Ermatinger Assemblage. *Northeast Historical Archaeology* 5(1):1-11).

Rowe, John. 1973. *The Hard Rock Men: Cornish Immigrants and the North American Mining Frontier*. New York: Cornish Hillside Publishing.

Sanborn Map. 1888, 1893, 1900, 1917. Accessed online: <https://www.loc.gov/maps/>.

Sanborn Map. 1942. Accessed online:
<http://geospatialresearch.mtu.edu/kettexplorerapp/index.html>

Smith, Robin H. 1986. Analysis of The Clay Tobacco Pipe Assemblage from the Front Street Site (AjGu-15), Toronto. *Ontario Archaeology* 46:55-61

South, Stanley. 1978. Pattern Recognition in Historical Archaeology. *American Antiquity* 43(2):223-230.

Schulz, Peter D., Betty J. Rivers, Mark M. Hales, Charles A. Litzinger, and Elizabeth A. McKee. 1980. *The Bottles of Old Sacramento: A Study of Nineteenth Century Glass and Ceramic Retail Containers. Part 1*. California Archaeological Report No. 20, Department of Parks and Recreation, Sacramento, CA.

Thurner, Arthur W. 1998. *Rebels on the Range: The Michigan Copper Miners' Strike of 1913-1914*. Lake Linden, MI: John H. Forster Press.

Trudel, M. 1973. *The Beginnings of New France, 1524-1663*. Toronto: McClelland and Stewart.

USDA Web Soil Survey
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

War Department Militia Bureau. 1927. *Manual of Basic Training and Standards of Proficiency for the National Guard*. Washington: U.S. Government Printing Office.

Whittlesey, Charles. 1863. *Ancient Mining on the Shores of Lake Superior*. Washington: Smithsonian Contributions to Knowledge 13(4):1-1-29.

Appendix A: List of Features

Site 20HO128	Feature Number	Notes
Quincy DryHouse 102-03	F024	Artifact concentration pile. Picture 1022.
Quincy DryHouse 102-03	F025	Collection of brick.
Quincy DryHouse 102-03	F026	Linear fissure of broken rock, could indicate mining of the Quincy vein.
Quincy DryHouse 102-03	F027	Rock pile/ wall trench, 2x.5m. 0.5m tall.
Quincy DryHouse 102-03	F028	Possible Privy.
Quincy DryHouse 102-03	F029	Club House Foundation, 5x10m.
Quincy DryHouse 102-03	F030	Building Foundation (multi-room), 14.5x11.5m. Southern section may have been an addition, mortar looks different.
Quincy DryHouse 102-03	F032	Possible privy, 1.5x1.5m, contains stone and artifacts. Picture 1022 West.
Quincy DryHouse 102-03	F033	Foundation Duplex, 16.5x9m. Poor rock foundation with mortar. Picture 1028&1029 North.
Quincy DryHouse 102-03	F034	Building Foundation, 5.5x7.3m poor rock & mortar foundation. Picture 1031 South.
Quincy DryHouse 102-03	F035	Building Foundation 5.5x7.2m, poor rock and mortar foundation. Picture 1030 South.
Quincy DryHouse 102-03	F036	Well circular depression, 1m diameter, stone-lined.
Quincy DryHouse 102-03	F037	Drainage pipe, stone lined metal pipe, possibly linked to F036.

Quincy DryHouse 102-03	F038	Iron Spike with a ring pressed into bedrock.
Quincy DryHouse 102-03	F039	Partial Foundation with poor rock and mortar. 5x4.5m.
Quincy DryHouse 102-03	F040	Building Foundation with poor rock foundation, also contains brick and mortar. 8x12.7m.
Quincy DryHouse 102-03	F041	Wall Foundation, partial poor rock and mortar. 5.8x6.2m.
Quincy DryHouse 102-03	F042	Possible well or privy 1m round depression surrounded by poor rock.
Quincy DryHouse 102-03	F043	Dry House ruins. Picture 1038 South.
Quincy DryHouse 102-03	F044	Concrete Post, 0.5m tall.
Quincy DryHouse 102-03	F045, F046, F047, F048	Concrete Pillars, 1.5x0.7m. Picture 1039.

Site 20HO128	Feature Number	Notes
Quincy Office 102-04	F254	2 Segments of iron pipe, both 2m long, 5" & 2" diameter.
Quincy Office 102-04	F255	Property corner marker, pink tape on stick.
Quincy Office 102-04	F256	Property marker, cement with yellow flagging.
Quincy Office 102-04	F257	Water Filled depression. 1x5m, 35cm deep.
Quincy Office 102-04	F258	Property marker, cement post.
Quincy Office 102-04	F259	Stone foundation, stoutly built like a powder house or root cellar.
Quincy Office 102-04	F260	Metal fence post
Quincy Office 102-04	F261	Stone foundation with 2 rooms. Stabilized

		by the NPS. 6x6m with interior berm wall.
Quincy Office 102-04	F262	Metal fence post, 1m height with ½” diameter.
Quincy Office 102-04	F263	Stone-lined trough, 50cm wide and 50cm deep. Runs WNW. Rails cross it at some intervals. The rails hold pins that in turn cradle an iron pipe (1.5” diameter). Pipe is thus suspended in the trough.
Quincy Office 102-04	F268	Historic stone-lined well, capped on 8/15/18
Quincy Office 102-04 20HO128	F269	Iron “U” shaped bar standing 1.2m tall.
Quincy Office 102-04	F270	Stone foundation obscured by a trash dump
Quincy Office 102-04	F271	Isolate barrel.
Quincy Office 102-04	F272	5” diameter pipe, 30 cm tall. Capped.
Quincy Office 102-04	F273	Metal fence post, 70 cm tall.
Quincy Office 102-04	F274	Metal Fence post, 50 cm tall.
Quincy Office 102-04	F275	Metal fence post, 30 cm tall.
Quincy Office 102-04	F276	2” diameter iron pipe running west out of F277. Lying on the ground 8m in length.
Quincy Office 102-04	F277	Depression, likely a prospect shaft on the Quincy Lode. 4x3m depression with a 1.5m depth. Earthen berm surrounds the depression, with some angular rock present/visible.
Quincy Office 102-04	F278	Heap of burned, pumice-like slag material. Located 7m NE of F277. The heap is 15x6m and 1.5m high with an oblong shape. Picture 1072,74.

Quincy Office 102-04	F279	Metal fence post.
Quincy Office 102-04	F280	Sandstone masonry pieces dump, 2x2m.
Quincy Office 102-04	F281	Sandstone fragments and pieces of cement. 1x1m pile/dump.
Quincy Office 102-04	F282	Section of old road leading from the F259 root cellar towards the Quincy agent's house
Quincy Office 102-04	F283	U shaped earthen berm
Quincy Office 102-04	F284	Earthen berm structure with cellar hole
Quincy Office 102-04	F285	Small depression
Quincy Office 102-04	F286	Earthen berm structure with interior wall forming an E shape
Quincy Office 102-04	F288	Roadway along SW border of property. 5m wide and hard-packed with ruts visible in places.
Quincy Office 102-04	F289	Small depression
Quincy Office 102-04	F290	Earthen Berm structure
Quincy Office 102-04	F291	Earthen Berm structure
Quincy Office 102-04	F292	Earthen berm with interior depression
Quincy Office 102-04	F293	Depression; possible privy?
Quincy Office 102-04	F294	

Quincy Office 102-04	F296	Earthen berm structure
Quincy Office 102-04	F298	Earthen berm with interior depression
Quincy Office 102-04	F299	Long, narrow earthen berm

Appendix B: Artifact Coding Sheets

Group Code	Group
0	UNIDENTIFIED
1	FOOD RELATED
2	FOOD REMAINS
3	ARCHITECTURAL
4	HYGIENE/MEDICINAL
5	HOUSEHOLD/FURNISHING
6	CLOTHING
7	PERSONAL/AMUSEMENT
8	LIGHTING
9	TOOLS/ARMS
10	SMOKING
11	MISC. MODERN
12	TRANSPORTATION/MECHANICAL
15	PREHISTORIC

Complete Code	Completeness
0	NOT APPLICABLE
1	0-25% COMPLETE
2	26-50% COMPLETE
3	51-75% COMPLETE
4	76-100% COMPLETE
5	COMPLETE/WHOLE

Type Code	Type
0	UNIDENTIFIED
1	FOOD PREP/STORAGE
2	FOOD SERVICE
3	
4	
5	TABLEWARE/TEAWARE
6	HOUSEHOLD/DECORATIVE
7	TOILET
8	UNIDENT CERAMIC
9	SERVICE/TOILET
10	TABLE/DRINKING GLASS
11	DECANTER
12	UNIDENT GLASS
13	MELTED GLASS
14	
15	
16	
17	
18	
19	BOTTLE-OTHER
20	BOTTLE-UNIDENT
21	BOTTLE-WINE
22	BOTTLE-BEER
23	BOTTLE-LIQUOR
24	BOTTLE-BITTERS
25	BOTTLE-MEDICINAL
26	BOTTLE-CONDIMENT
27	BOTTLE-STORAGE
28	BOTTLE-SODA
29	BOTTLE-MILK
30	BOTTLE-EXTRACT
31	BOTTLE-INK
32	BOTTLE-COSMETIC/TOILETRY
33	BOTTLE-SPICE
34	BOTTLE-CHEMICAL
35	BOTTLE/JAR-FOOD PRODUCT
36	BOTTLE-MINERAL WATER
37	
38	

39	BOTTLE/JAR LID
40	BOTTLE STOPPER
41	CORK
42	BOTTLE SEAL/FOIL
43	TUBE/LID
44	
45	
46	
47	
48	
49	CAN
50	CAN FRAGS
51	CAN LID
52	CAN LID FRAGS
53	KEY CAN OPENER
54	
55	THERMOS
56	
57	TIN CONTAINER
58	
59	
60	KITCHEN TOOL
61	
62	SPOON
63	FORK
64	UTENSIL HANDLE
65	KNIFE
66	UTENSIL
67	
68	
69	
70	
71	
72	BIRD FOUNTAIN
73	
74	ENAMELWARE UNIDENT
75	POT/PAN
76	KETTLE
77	COLANDER
78	
79	KEG PART
80	BARREL/CASK HOOP

81	BUCKET HANDLE
82	BUCKET
83	
84	
85	
86	
87	
88	
89	JELLY JAR
90	FRUIT/CANNING JAR
91	FRUIT/CANNING JAR LINER/LID
92	FRUIT/CANNING JAR BALE
93	JAR RUBBER
94	
95	
96	
97	TOKEN
98	CORSET PART
99	CLOTHING FASTENER
100	THERMOMETER
101	TOOTHBRUSH
102	COIN
103	COMB
104	WAX SEAL
105	GLASSES- EYE
106	THIMBLE
107	MIRROR
108	PEN NIB
109	DENTURE
110	RAZOR
111	SCISSORS
112	BRUSH HANDLE
113	CANE SHIELD
114	MUSICAL INSTRUMENT
115	PENCIL
116	PEN FRAG
117	FAN HANDLE
118	PURSE FRAG
119	JEW'S HARP
120	KEY
121	JACK KNIFE

122	PAINT BRUSH
123	ADVERTISING
124	SYRINGE/DROPPER
125	MAGNIFYING LENS
126	UMBRELLA PART
127	STATIONARY/WRITING RELATED
128	SLEEVE OR TUX BUTTON
129	ZIPPER
130	BUTTON
131	PANT'S RIVET/BUTTON
132	SNAP
133	GROMMET
134	BOOT/SHOE BUCKLE
135	BEAD
136	PAPER CLIP
137	BRA SLIDE ADJUSTER
138	EARRING
139	JEWELRY FRAG
140	JEWELRY-PIN
141	JEWELRY-RING
142	WATCH PART
143	CUFF LINK
144	LIPSTICK CASE
145	STUD
146	COMPACT
147	COLLAR STAY
148	CLOTHES PIN
149	THREAD SPOOL
150	HAIR PIN
151	SAFETY PIN
152	STRAIGHT PIN
153	HOOK AND EYE
154	SEWING IMPLEMENT
155	CLOTH
156	YARN
157	SUSPENDER PART
158	HOSE SUPPORT (GARTER)
159	BUCKLE
160	BELT BUCKLE
161	SHOE HEEL
162	SHOE FRAG

163	UPPER PART
164	SOLE & HEEL
165	SOLE, UPPER & HEEL
166	SOLE
167	SOLE & UPPER
168	SOLE, HEEL, & PART. UPPER
169	HEEL & PART UPPER
170	PART SOLE
171	SOLE & PART UPPER
172	HEEL, PART SOLE & PART UPPER
173	HEEL PLATE
174	SHOE NAIL
175	SHOE EYE
176	LEATHER STRAP
177	LEATHER FRAG
178	WORKED BONE
179	TOY
180	MARBLE
181	DOLL
182	DOLL DISH
183	CAR/ TRUCK TOY
184	ANIMAL TOY
185	TOY SOLDIER
186	GAME PIECE
187	BALL
188	TOY GUN
189	TOBACCO OTHER
190	SMOKING PIPE
191	PIPE BOWL FRAG
192	PIPE BOWL FRAG W/ HEEL
193	PIPE STEM FRAG
194	PIPE STEM FRAG W/ HEEL
195	PIP STEM FRAG W/ BIT END
196	PIPE STEM FRAG W/ MODIFIED BIT
197	LIGHTER
198	PAD LOCK
199	KEY
200	DOOR HANDLE

201	DOOR KNOB
202	FURNITURE KNOB
203	FURNITURE HANDLE
204	WINDOW SHADE
205	DRAPERY TIE BACK
206	CLOCK
207	CLOCK PART
208	CASTOR
209	BIRD FOUNTAIN
210	SANITARY PORCELAIN
211	
212	
213	UPHOLSTERY TACK
214	CURTAIN HARDWARE
215	
216	
217	
218	
219	LAMP PART
220	LAMP CHIMNEY
221	LAMP GLOBE
222	LAMP BASE
223	LAMP BURNER-FRAG
224	LIGHT BULB
225	CANDLE HOLDER
226	
227	CANDLE SNUFFER
228	CHANDELER PRISM
229	LAMP SHADE
230	
231	
232	
233	
234	
235	MICA
236	
237	
238	
239	
240	TRUNK LOCK
241	TRUNK HARDWARE
242	LUGGAGE FRAG

243	
244	
245	
246	
247	
248	PICTURE FRAME HARDWARE
249	PICTURE FRAME GLASS
250	PICTURE FRAME FRAG
251	
252	
253	
254	HOUSEHOLD-OTHER
255	
256	
257	
258	
259	
260	BELL
261	
262	
263	
264	FIGURINE
265	
266	
267	
268	
269	
270	BED SPRING
271	
272	
273	
274	
275	REFRIGERATOR SHELF
276	
277	COAT HANGER
278	WASHBOARD
279	
280	FURNITURE FRAGMENT
281	
282	
283	

284	
285	RADIO PART
286	
287	
288	
289	SAD IRON
290	STOVE PART
291	
292	
293	
294	
295	
296	
297	
298	
299	WINDOW HARDWARE
300	WINDOW GLASS
301	WINDOW CASING FRAG
302	SAFETY GLASS
303	STAINED GLASS
304	
305	SCREENING/ WIRE MESH
306	
307	ROPE
308	ASBESTOS SHINGLE
309	FLOORING
310	BRICK
311	MORTAR
312	ROOFING
313	TAR PAPER
314	DRAIN PIPE
315	TILE
316	PLASTER
317	CORNER METAL STRIPPING
318	
319	TAR PAPER BACKER
320	UNIDENT. NAIL
321	CUT NAIL
322	WIRE NAIL
323	WROUGHT NAIL
324	CUT NAIL FRAG

325	WIRE NAIL FRAG
326	CUT/ WROUGHT NAIL FRAG
327	
328	
329	CHARCOAL
330	COAL
331	WOOD
332	LEAD
333	CONCRETE
334	
335	
336	
337	
338	
339	
340	WOOD
341	MILLED LUMBER
342	
343	
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352	
353	
354	
355	
356	FERRULE
357	CABLE WIRE
358	BAR METAL
359	WIRE RING
360	WIRE
361	ROD
362	METAL DISK
363	
364	HARDWARE- UNIDENT
365	HOOK

366	STAPLE
367	TACK
368	RIVET
369	SPIKE
370	SCREW
371	BOLT
372	WASHER
373	HINGE
374	BRACKET
375	HANDLE
376	EYE HOOK
377	CLOTHES HOOK
378	CHAIN LINK
379	SPRING
380	NUT
381	DOOR HARDWARE
382	DOOR LOCK
383	NUT & BOLT
384	CLIP
385	COTTER PIN
386	WATER HOSE/NOZZLE
387	BARREL TOP
388	
389	DRAIN PLUG
390	PIPE FITTING
391	PIPE
392	STOVE PIPE
393	
394	ELEC. WIRE
395	ELEC. INSULATOR
396	ELEC. SOCKET
397	FUSE
398	ELEC. OTHER
399	PERFORATED METAL
400	UNIDENT. METAL
401	UNIDENT. SHEET METAL
402	
403	
404	
405	PUMP PART
406	PLUMBING FIXTURE/FRAG

407	WAGON/CARRIAGE HARDWARE
408	STIRUP
409	HORSE BIT
410	MACHINERY PART?
411	SADDLE FRAG
412	HARNESS FRAG
413	HITCH
414	SLEIGH BELL
415	TOOL
416	TOOL PART
417	WHET STONE
418	FILE
419	HORSE SHOE
420	AX
421	RAKE
422	DRILL BIT
423	SAW
424	MULL
425	HOE HEAD
426	WRENCH
427	RUG BEATER
428	
429	STORE SCALE WEIGHT
430	CHICKEN WATERER
431	
432	
433	
434	
435	
436	
437	
438	
439	
440	
441	
442	
443	
444	
445	PULLEY
446	
447	

448	BALE TIE
449	BOX CAR SEAL
450	RAILROAD SPIKE
451	BARBED WIRE
452	MAPLE SPILE
453	PAD LOCK
454	
455	
456	METAL STRIPPING
457	METAL TUBE
458	
459	
460	FARM EQUIPMENT FRAG
461	PITCH FORK
462	SHOVEL
463	TROWEL
464	
465	
466	SPARK PLUG
467	
468	
469	BATTERY
470	BATTERY ROD
471	BITUMEN
472	
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500	GUN CARTRIDGE/SHELL
501	GUN FLINT
502	FISHING EQUIPMENT
503	GUN PART
504	CAP
505	FLIP TOP
506	CROWN CAP
507	FOIL
508	DOG TAG
509	
510	RUBBER
511	PLASTIC
512	
513	
514	
515	AUTO SAFETY GLASS
516	AUTO HEADLIGHT
517	GASKET
518	TIRE
519	
520	CLAY PIGEON
521	
522	RECORD ALBUM
523	
524	
525	ICE SKATE
526	
527	
528	
529	CIGARETTE RELATED
530	NEWSPAPER
531	

532	MODERN BEVERAGE CAN
533	
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539	
540	AUTO PART
541	
542	
543	
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595	SEED-OTHER
596	APRICOT PIT
597	CHERRY PIT
598	PLUM PIT
599	PEANUT SHELL
600	PEACH PIT
601	NUT SHELL
602	EGG SHELL
603	CLAM
604	OYSTER
605	MUSSELL
606	WELK
607	UNIDENT. SHELL
608	GULLET STONE
609	CORAL
610	SNAIL SHELL
700	FAUNAL-BONES
701	TOOTH
900	PREHISTORIC

Material Code	Material
0	UNKNOWN
1	WHITEWARE
2	IRONSTONE
3	PEARLWARE
4	PEARLWARE/WHITEWARE
5	WHITEWARE/IRONSTONE
6	REDWARE
7	CREAMWARE
8	YELLOWWARE
9	EARTHWARE
10	STONEWARE
11	PORCELAIN
12	UNDIF. CERAMIC
13	SEMI-PORCELAIN
14	COMMON CREAMWARE
15	IVORY BODIED WARE
16	
17	
18	
19	ENAMEL
20	GLASS
21	MILK GLASS
22	CRYSTAL
23	
24	PEWTER
25	FERROUS ALLOY
26	CUPROUS METAL
27	ALUMINUM
28	CHROME
29	GOLD
30	UNDIFF. METAL
31	LEAD
32	MERCURY
33	SILVER
34	STEEL
35	TIN
36	ZINC
37	AGATE
38	CHALK
39	

40	MARBLE
41	MICA
42	PRECIOUS STONE
43	OTHER STONE
44	CARBON
45	WOOD
46	BARK
47	PAPER
48	BURLAP
49	CHARCOAL
50	LEATHER
51	WOOL
52	COTTON
53	CLOTH
54	KRETIN
55	BONE
56	IVORY
57	SHELL
58	ORGANIC OTHER
59	
60	RUBBER/SOFT
61	RUBBER/HARD
62	CELLULOID
63	NYLON
64	PLASTIC
65	SYNTHETIC
66	WAX
67	
68	
69	SLAG
70	COAL
71	ASPHALT
72	FORMICA
73	LINOLEUM
74	
75	TAR PAPER
76	SLATE
77	BRICK
78	CEMENT
79	MORTAR
80	PLASTER
81	ASBESTOS

82	
83	
84	
85	KAOLIN
86	RED BALL CLAY
87	CLAY
88	
89	
90	
91	
92	
93	
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96	
97	
98	
99	PREHISTORIC
100	

Form Code	Form
0	UNIDENTIFIABLE
1	TEACUP HANDLELESS
2	TEACUP HANDLE
3	MUG HANDLELESS
4	MUG HANDLE
5	SAUCER
6	PLATE
7	FRUIT BOWL
8	SLOP BOWL
9	PLATTER
10	BAKER
11	TEAPOT
12	CREAMER
13	SUGAR BOWL
14	PITCHER
15	BASIN/WASH BOWL
16	CHAMBERPOT
17	NAPPY
18	PIE PLATE
19	CROCK
20	CROCK LID
21	JAR
22	CANDY DISH
23	FLOWER POT
24	CUP PLATE
25	TEAPOT LID
26	EWER
27	MUFFINEER
28	FOOTED BOWL
29	COVERED DISH
30	CASSEROLE LID
31	TOOTHPICK HOLDER
32	CHAMBERPOT LID
33	RELISH DISH
34	FLOWER POT DISH
35	BUTTER CROCK
36	SPITTOON
37	SALT
38	VASE
39	SOUP PLATE

40	BUTTER PAT
41	BOWL
42	MIXING BOWL
43	SOAP DISH
44	REFRIGERATOR DISH
45	SALAD PLATE
46	
47	
48	
49	
50	HANDLE
51	CHICKEN WATERER
52	LID
53	GINGER JAR
54	CITRUS DRILL
55	CHEESE/BUTTER DISH
56	TOOTHBRUSH BOX
57	JUG
58	TUREEN
59	SIDE ORDERED DISH
60	OATMEAL BOWL
61	BUTTER CHURN
62	DESSERT DISH
63	BUTTER DISH
64	CAKE PLATE
65	OYSTER PLATE
66	CELERY VASE
67	BATTER JUG
68	COFFEE POT
69	SPOONER
70	HONEY DISH
71	GRAVY BOAT
72	BIRD FOUNTAIN/SEED BOX
73	COMPOTE
74	SYRUP PITCHER
75	CUSTARD CUP
76	URINAL
77	BAKING DISH
78	
79	
80	BREAD PLATE-SERVING
81	

82	
83	
84	
85	
86	
87	
88	
89	
90	PULL TAB
91	PUSH BUTTON
92	FLIP TOP
93	
94	
95	
96	
97	
98	
99	
100	STEMMED GOBLET
101	TUMBLER
102	FOOTER TUMBER
103	STEMMED WINE
104	LAMP
105	STEMMED GLASS-UNIDENT
106	
107	COLOGNE BOTTLE
108	CASTOR BOTTLE
109	STEMMED CORDIAL
110	SHOT GLASS
111	BEER MUG
112	PUNCH CUP
113	JUICE GLASS
114	
115	
116	
117	
118	
119	
120	
150	WAX SEALER
151	WAX SEALER/JELLY JAR LID
152	MASON JAR

153	MASON JAR LID/LINER
154	LIGHTENING SEAL JAR
155	LIGHTENING SEAL LID
156	BAIL
157	JELLY JAR
158	OTHER CANNING JAR
159	OTHER SEALING DEVICE
160	JAR RUBBER
161	
162	
300	COMMON HEAD
301	ROOFING
302	FLOORING
303	HORSESHOE NAIL
304	FINISHING
305	SIDING NAIL
306	
307	RAILROAD DATE NAIL
308	
309	
310	
311	
312	
313	
314	
315	
316	
317	
318	
319	
320	BENT WIRE
321	TWISTED WIRE
322	COILED WIRE
323	
324	
325	
326	

Decoration Code	Decoration
0	UNDECORATED
1	TRANSFER
2	FLOW TRANSFER
3	OLD BLUE TRANSFER
4	BAT TRANSFER
5	TRANSFER W/ PAINTED
6	
7	DECAL
8	MOLDED
9	FAINTLY MOLDED
10	MONO PAINTED
11	POLY PAINTED
12	MOLDED/PAINTED
13	FAINTLY MOLDED/DECAL
14	FAINTLY MOLDED/PAINTED
15	BRISTOL SLIPPED
16	GLAZED
17	ROCKINGHAM
18	LEAD GLAZED
19	ALBANY SLIP
20	MANGANESE GLAZE
21	SALT GLAZE
22	SLIPPED
23	ALKALI SLIP
24	LUSTER/TRANSFER
25	SPONGE
26	SPONGE/PAINTED
27	SPATTER
28	LUSTER
29	SPRIGGED
30	ANNULAR
31	ANNULAR W/ FINGER
32	ANNULAR W/ MOCHA
33	FIESTA WARE
34	MAJOLICA
35	
36	
37	TIN GLAZED
38	STENCILED/PAINTED
39	BANDED/EDGED

40	SHELL EDGE-SCALLOPED
41	SHELL EDGE-UNSCALLOPED
42	FEATHER EDGE
43	EDGED W/ IMPRES BUD
44	BEADED RIM
45	FEATHER EDGE SCALES
46	EDGED OTHER
47	
48	
49	
50	GILT BANDED
51	
52	
53	
54	
55	AIR BRUSHED
56	
57	
58	
59	
60	UNKNOWN DECORATION
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	ETCHED
71	PRESSED
72	RUBY WASH
73	SWIRLED
74	CARNIVAL GLASS
75	FROSTED
76	MERCURY GLASS
77	
78	
79	
80	ENAMELED

81	
82	
83	
84	
85	
86	
87	
88	
89	
90	HAND CRIMPED- PIE CRUST RIM
91	
92	
93	HAND TEMPLATE- PIE CRUST
94	
95	MACHINE TEMPLATE- PIE CRUST
96	MACHINE TEMPLATE- BEADED
97	
98	
99	
100	
216	SCREW TOP

Color Code	Color
0	CLEAR/WHITE
1	AQUA
2	GREEN
3	BROWN
4	BLUE
5	RED
6	YELLOW
7	GRAY
8	TAN
9	LAVENDER
10	MULBERRY
11	PINK
12	PURPLE
13	BLACK
14	PALE BLUE
15	STEEL BLUE
16	
17	
18	GOLD/BROWN
19	IVORY
20	BLUE/GREEN/PINK
21	BLUE/GOLD
22	BLUE/PINK
23	BLUE/GREEN
24	RED/YELLOW
25	RED/GREEN
26	BLUE/GREEN/YELLOW
27	YELLOW/GREEN
28	BROWN/BLUE
29	BROWN/GREEN
30	AMBER
31	OLIVE
32	ORANGE
33	SUN PURPLED
34	SUN YELLOWED
35	AMETHYST
36	LIME GREEN
37	MILK GLASS
38	GILT
39	SILVER

40	COPPER
41	
42	GREEN/PINK
43	GREEN/YELLOW
44	
45	PINK/YELLOW/GREEN W/ GOLD
46	BLUE/YELLOW/BROWN
47	BLUE/RUST
48	PINK/GREEN
49	
50	RED/GREEN/BLUE
51	
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Appendix C: Artifact Catalog

Tract	Locus	Unit Type	Unit	Feature	Level	Group	Type	Material	%	Dec	Color	Description	N	Weight	Date	
102-03	Dry House	STP	QD1			0	0	0			5	Unidentified fragments	6	46.5		
102-03	Dry House	STP	QD1			0	12	20	1		0	Thin clear glass fragments	4	1.6		
102-03	Dry House	STP	QD1			0	12	20	1		33	Sun purple fragments	5	6.3	1880	1914
102-03	Dry House	STP	QD1			0	20	20	1		0	Clear bottle glass fragments	14	70		
102-03	Dry House	STP	QD1			0	20	20	1		1	Aqua glass fragments	2	5		
102-03	Dry House	STP	QD1			0	20	20	1		31	Olive glass fragments	1	1.9		
102-03	Dry House	STP	QD1			0	330	70				Coal	1	3.2		
102-03	Dry House	STP	QD1			0	400	25				Large metal plate	1			
102-03	Dry House	STP	QD1			0	400	25				Round ferrous metal piece	1	22.9		
102-03	Dry House	STP	QD1			0	400	25				Square ferrous metal piece	1	33.1		
102-03	Dry House	STP	QD1			0	400	25				Unidentified ferrous metal fragments	10	6.2		
102-03	Dry House	STP	QD1			0	470	44			13	Battery rod with copper/zinc cap	1	4.3	1881	
102-03	Dry House	STP	QD1			0	470	44			13	Carbon body that fits around the battery rod	1	9.2	1881	
102-03	Dry House	STP	QD1			1	1	10		21		Salt-glazed stoneware	8	103.4		
102-03	Dry House	STP	QD1			1	8	2				Ironstone fragment	9	14		
102-03	Dry House	STP	QD1			1	22	20	1		3	Brown bottle glass	3	8.8		
102-03	Dry House	STP	QD1			1	35	20	1		0	Rim of a jar fragment	1	6.3		
102-03	Dry House	STP	QD1			1	50	25	1			Can fragments	6	21.3		
102-03	Dry House	STP	QD1			3	310	77	1		3	Brick	1	404.1		
102-03	Dry House	STP	QD1			3	310	77	1		5	Brick fragments	7	20.5		
102-03	Dry House	STP	QD1			3	316	80			0	Large plaster fragment	1	493.3		
102-03	Dry House	STP	QD1			3	316	80			0	Plaster fragments	4	5.4		
102-03	Dry House	STP	QD1			3	321	25				Cut nail fragment	4	12.4		
102-03	Dry House	STP	QD1			3	333	78				Cement fragment	1	60.2		
102-03	Dry House	STP	QD1			4	25	20	2		0	Medicinal bottle fragments	3	73.9		
102-03	Dry House	STP	QD1			4	25	20	4	200	0	Clear medicinal bottle marked "Sheldon"	1	82.4		
102-03	Dry House	STP	QD2			0	12	20	1		0	Clear glass fragments	72	185.3		
102-03	Dry House	STP	QD2			0	20	20	1		0	Clear bottle bottom, marked with an Owen's Manufacturing mark.	1	51.3	1890	
102-03	Dry House	STP	QD2			0	20	20	1		0	Clear bottle glass fragments	2	70.6		
102-03	Dry House	STP	QD2			0	20	20	1		1	Aqua bottle glass fragments with "NAEWY"	1	10.9		

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102-03	Dry House	STP	QD2			0	20	20	1		31	Olive glass fragments	1	4.7		
102-03	Dry House	STP	QD2			0	20	20	1		4	Aqua-Blue bottle glass	1	2.1		
102-03	Dry House	STP	QD2			0	20	20	1	209	0	Double bead bottle top fragment	1	7		
102-03	Dry House	STP	QD2			0	39	64	2		5	Plastic bottle cap	1	1.4		
102-03	Dry House	STP	QD2			0	330	70				Coal	2	8.7		
102-03	Dry House	STP	QD2			0	400	25				Misc. metal fragments	25	47.1		
102-03	Dry House	STP	QD2			0	400	25				Unidentified metal core	1	180.3		
102-03	Dry House	STP	QD2			0	400	25				Unidentified twisted metal	1	58.9		
102-03	Dry House	STP	QD2			0	400	25	5			Threaded hexagonal cap	1	6.2		
102-03	Dry House	STP	QD2			1	2	2				Ironstone serving vessel, J&G Meakin Hanley England	1	24.7	1891	
102-03	Dry House	STP	QD2			1	2	20			11	Fenton Depression glass, pink bird candy dish fragments	2	110.1	1930	
102-03	Dry House	STP	QD2			1	2	20			11	Fenton Depression glass, pink bird candy dish fragments	13	169.1	1930	
102-03	Dry House	STP	QD2			1	3	15				Ivory-bodied ware serving vessel	7	140		
102-03	Dry House	STP	QD2			1	5	2				Ironstone "Homer Laughlin" "6N" Gold painted rim with a cloud/mountain pattern decal	9	65.8	1926	
102-03	Dry House	STP	QD2			1	5	2				Ironstone saucer fragments	10	33		
102-03	Dry House	STP	QD2			1	5	2				Ironstone saucer fragments marked "Canonsburg China"	12	67.8	1909	
102-03	Dry House	STP	QD2			1	5	2				Ironstone sherd marked "Bros"	1	6.6		
102-03	Dry House	STP	QD2			1	5	15		7		Ivory-bodied ware saucer with a pink floral decal	4	34.7	1890	
102-03	Dry House	STP	QD2			1	10	20			0	Clear paneled glass drinking tumbler, stamped with a pawn logo, Capstan Glass Co	3	122.6	1919	1938
102-03	Dry House	STP	QD2			1	22	20	1		3	Brown beer bottle bottom	1	102.8		

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102-03	Dry House	STP	QD2			1	22	20	1		3	Brown beer bottle bottom marked "Grand Rapids Bottling Works, Wisconsin	1	118		
102-03	Dry House	STP	QD2			1	22	20	1		3	Brown bottle glass	64	517		
102-03	Dry House	STP	QD2			1	22	20	1	214	0	Crown bottle top fragment	1	18.5	1892	
102-03	Dry House	STP	QD2			1	29	20	1		0	Clear milk bottle bottom stamped "BR" and "S" made by Thatcher Manf Co	1	88.9	1904	
102-03	Dry House	STP	QD2			1	37	25	3			Bottle caps and fragments	5	12.8	1892	
102-03	Dry House	STP	QD2			1	40	47	5		8	Bottle stopper	1	0.3		
102-03	Dry House	STP	QD2			1	62	26	3		2	Spoon fragments	2	17.5		
102-03	Dry House	STP	QD2			1	90	20			1	Aqua bottle bottom stamped "1" likely a canning jar.	1	41.8		
102-03	Dry House	STP	QD2			3	299	25	5			Window Hardware	2	23.4		
102-03	Dry House	STP	QD2			3	300	20			1	Window glass fragment	64	152.2		
102-03	Dry House	STP	QD2			3	310	77	2		3	Brick marked with an "H"	1			
102-03	Dry House	STP	QD2			3	321	25				Cut nail fragment	12	35.2		
102-03	Dry House	STP	QD2			3	322	25				Wire nail	15	144.7		
102-03	Dry House	STP	QD2			3	369	25				Spike	3	115		
102-03	Dry House	STP	QD2			4	25	21	5			Grooved and threaded white ointment ceramicmilk glass oinment jar fragment	1	224.3		
102-03	Dry House	STP	QD2			5	270	25	2			Bed springs and frame fragments	5	228.6		
102-03	Dry House	STP	QD2			7	32	20	1	208	0	toiletory bottle neck w/ narrow apperture	1	40.9		
102-03	Dry House	STP	QD2			7	140	26	1		2	Pin for sourvenir ribbon	1	1.8		
102-03	Dry House	STP	QD2			7	144	25	1			Lipstick tube marked "Princess Pat"	1	2.7		
102-03	Dry House	STP	QD2			9	410	25	2			Drill bits	2	192		
102-03	Dry House	STP	QD2			12	162	25	1			Horse hardware, yoke fragments?	2	27.5		
102-03	Fissure	STP	Fissure 1	26		0	12	20	1		0	Clear glass fragment	1	1.3		
102-03	Fissure	STP	Fissure 1	26		0	20	20	1		1	Aqua glass fragment	1	0.3		
102-03	Fissure	STP	Fissure 1	26		1	8	2				Ironstone fragment	5	18.3		
102-03	Fissure	STP	Fissure 1	26		1	22	20	1		3	Brown bottle glass fragment	1	2.3		

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102-03	Fissure	STP	Fissure 1	26		3	321	25				Cut nail fragment	1	8.3		
102-03	Fissure	STP	Fissure 1	26		3	322	25				Wire nail	1	40.4		
102-03	Fissure	STP	Fissure 1	26		5	6	6	1			Redware, unglazed flowerpot frag	2	10.9		
102-03	Fissure	STP	Fissure 2	26		0	12	20	1		0	Clear Glass fragments	6	2.6		
102-03	Fissure	STP	Fissure 2	26		0	20	20	1		1	Aqua Glass fragments	2	0.7		
102-03	Fissure	STP	Fissure 2	26		0	334	69				Slag	5	9.3		
102-03	Fissure	STP	Fissure 2	26		1	22	20	1		3	Brown Glass fragments	4	2.8		
102-03	Fissure	STP	Fissure 3	26		0	12	20	1		0	Clear glass fragments	4	2.1		
102-03	Fissure	STP	Fissure 3	26		0	20	20	1		1	Aqua glass fragments	2	11.6		
102-03	Fissure	STP	Fissure 3	26		0	330	70				Coal	4	8.8		
102-03	Fissure	STP	Fissure 3	26		1	22	20	1		3	Brown bottle glass fragments	4	6.1		
102-03	Fissure	STP	Fissure 4	26		0	12	20			0	Clear horizontal ribbed glass with rough unpolished rim; insulator? candle holder?	1	4.2		
102-03	Fissure	STP	Fissure 4	26		0	12	20	1		0	Clear glass fragment	1	1.6		
102-03	Fissure	STP	Fissure 4	26		1	5	2				Ironstone plate fragment	1	30.2		
102-03	Fissure	STP	Fissure 4	26		1	22	20	1		3	Brown bottle glass fragments	1	15.3		
102-03	Fissure	STP	Fissure 4	26		3	321	25				Cut nail fragment	1	17.3		
102-03	Fissure	STP	Fissure 4	26		10	192	87	3			Pipe bowl with heel, contains an oval pattern and well as dotted and lined patterns	1	14.7		
102-03	Natl Guard Camp	STP	D-1	31A		0	12	20	1		0	Clear glass fragment	43	160.1		
102-03	Natl Guard Camp	STP	D-1	31A		0	360	25				Wire	59	128.8		
102-03	Natl Guard Camp	STP	D-1	31A		0	400	25				Unidentified flat metal fragments	1	29.1		
102-03	Natl Guard Camp	STP	D-1	31A		0	400	25				Unidentified thin metal fragments	17	15.1		
102-03	Natl Guard Camp	STP	D-1	31A		1	8	2				Ironstone marked "Raddison Geon 989B	6	26.6		
102-03	Natl Guard Camp	STP	D-1	31A		1	8	2				Ironstone marked "White W.S. George 108B	6	63.5	1909	1920
102-03	Natl Guard Camp	STP	D-1	31A		1	8	2				Ironstone with partial gold logo containing "EL	1	5.4		
102-03	Natl Guard Camp	STP	D-1	31A		1	8	15				Ivory-bodied ceramic fragment	1	13.9		

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102-03	Natl Guard Camp	STP	D-1	31A		1	20	20	1		1	Aqua glass fragments	20	115.2		
102-03	Natl Guard Camp	STP	D-1	31A		1	20	20	1		31	Olive green glass fragments	1	4		
102-03	Natl Guard Camp	STP	D-1	31A		1	20	20	1		33	Sun purple glass fragments	3	21.4		
102-03	Natl Guard Camp	STP	D-1	31A		1	22	20	1		3	Brown bottle glass fragments	43	380		
102-03	Natl Guard Camp	STP	D-1	31A		1	22	20	1		3	Brown bottle glass with a 3 inch diameter bottom	1	31.3		
102-03	Natl Guard Camp	STP	D-1	31A		1	22	20	1		3	Brown fragment with the word "Beer	1	14.8		
102-03	Natl Guard Camp	STP	D-1	31A		1	22	20	1		3	Brown fragments with the text "OTTLE" "TO" and "LD	2	27	1905	1920
102-03	Natl Guard Camp	STP	D-1	31A		1	35	20	1		0	Clear fragments of jar rim	6	84.2		
102-03	Natl Guard Camp	STP	D-1	31A		1	37	25	5			Cap with hole in the center	1	4.5	1892	
102-03	Natl Guard Camp	STP	D-1	31A		1	62	25	5		3	Spoon with "M" stamp, early 20th century style	1	22.4	1900	1930
102-03	Natl Guard Camp	STP	D-1	31A		3	321	25				Cut nail fragment	10	73		
102-03	Natl Guard Camp	STP	D-1	31A		3	322	25				Wire nail	28	235		
102-03	Natl Guard Camp	STP	D-1	31A		3	371	25				Bolt with washer	1	38		
102-03	Natl Guard Camp	STP	D-1	31A		4	25	20	1		4	blue glass fragments, Vicks?	1	1.5		
102-03	Natl Guard Camp	STP	D-1	31A		4	25	20	5		0	Clear medicinal bottle, machine made w/ stamp	1	14.7		
102-03	Natl Guard Camp	STP	D-1	31A		4	25	20	5		0	Hand lotion bottle "HINDS Honey and Almond Cream" "NJ, USA." Machine made.	1	45.1	1907	
102-03	Natl Guard Camp	STP	D-2	31B		0	12	20	1		0	Clear glass fragments	14	31.5		
102-03	Natl Guard Camp	STP	D-2	31B		0	20	20	1		1	Aqua glass fragments	14	85.5		
102-03	Natl Guard Camp	STP	D-2	31B		1	1	8			6	Yelloware fragment	3	5.5		
102-03	Natl Guard Camp	STP	D-2	31B		1	2	20	1		33	Sun purple fragments with sugar bowl bottom	3	16.1		
102-03	Natl Guard Camp	STP	D-2	31B		1	8	2				Ironstone fragment	1	2		
102-03	Natl Guard Camp	STP	D-2	31B		1	8	2				Ironstone fragment	6	21		
102-03	Natl Guard Camp	STP	D-2	31B		1	20	20	1		1	Aqua glass fragment with "MICH" and "EGISTER"	1	23.3		
102-03	Natl Guard Camp	STP	D-2	31B		1	22	20	1		3	Brown fragments of glass	9	38.2		

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102-03	Natl Guard Camp	STP	D-2	31B		1	22	20	1		3	Brown glass fragments with "KE" and "LIND	2	20.1		
102-03	Natl Guard Camp	STP	D-2	31B		3	321	25				Cut nail fragment	1	10.9		
102-03	Natl Guard Camp	STP	D-2	31B		6	130	21	5		0	4-Hole button	1	0.8		
102-03	Natl Guard Camp	STP	D-2	31B		6	130	21	5		0	4-Hole button	1	1		
102-03	Natl Guard Camp	STP	D-2	31B		6	130	21	5		0	4-Hole button	1	1.2		
102-03	Natl Guard Camp	STP	D-2	31B		7	102	33	5		39	1853 Liberty Dime with hole punched for hanging	1	2.3	1853	
102-03	Natl Guard Camp	STP	D-2(E)	31B		0	12	20	1		0	Clear glass fragments	16	36.9		
102-03	Natl Guard Camp	STP	D-2(E)	31B		0	12	20	1		11	Pink glass fragment	1	0.3		
102-03	Natl Guard Camp	STP	D-2(E)	31B		0	20	20	1		1	Aqua glass fragments	7	3.8		
102-03	Natl Guard Camp	STP	D-2(E)	31B		0	400	25				Unidentified ferrous fragments	4	5.9		
102-03	Natl Guard Camp	STP	D-2(E)	31B		1	2	2				Ironstone platter fragment	2	23.5		
102-03	Natl Guard Camp	STP	D-2(E)	31B		1	8	2				Ironstone fragment	4	2.1		
102-03	Natl Guard Camp	STP	D-2(E)	31B		1	22	20	1		3	Brown bottle glass fragments	2	1.5		
102-03	Natl Guard Camp	STP	D-2(E)	31B		1	22	20	1		3	Brown bottle glass with "BE" "S" "TT" also likely not to be resold	1	50.5	1905	1920
102-03	Natl Guard Camp	STP	D-2(E)	31B		3	321	25				Cut nail fragment	2	4.6		
102-03	Natl Guard Camp	STP	D-2(E)	31B		8	220	20			0	Lamp chimney clear glass	1	0.1		
102-03	Natl Guard Camp	STP	D-2(E)	31B		9	0	43				Stone drilling core, grooved	1	94.7		
102-03	Natl Guard Camp	STP	D-2(N)	31B		0	12	20	1		0	Clear glass fragment	1	0.8		
102-03	Natl Guard Camp	STP	D-2(N)	31B		1	22	20	1		3	Brown glass fragment with "RC	1	2.4		
102-03	Natl Guard Camp	STP	D-2(N)	31B		1	22	20	1		3	Brown glass fragments	4	9.1		
102-03	Natl Guard Camp	STP	D-2(N)	31B		3	321	25				Cut nail fragment	2	6.9		
102-03	Natl Guard Camp	STP	D-2(S)	31B		0	20	20	1		2	Green glass fragments	2	4.5		
102-03	Natl Guard Camp	STP	D-2(S)	31B		1	22	20	1		3	Brown glass fragment with "KE	1	5.1		
102-03	Natl Guard Camp	STP	D-2(S)	31B		1	22	20	1	214	3	Brown bottle glass with crown finish	25	81.4	1892	
102-03	Natl Guard Camp	STP	D-2(S)	31B		1	28	20	1		1	Aqua soda bottle fragments	2	28		
102-03	Natl Guard Camp	STP	D-2(S)	31B		1	90	20	1	209	0	Clear glass canning jar fragments	7	31.4		
102-03	Natl Guard Camp	STP	D-2(S)	31B		3	310	77	3		3	Brick	1			
102-03	Natl Guard Camp	STP	D-2(S)	31B		3	322	25				Wire nail	1	2.3		

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102-03	Natl Guard Camp	STP	D-2(S)	31B		3	369	25	2			Spike	2	40.8		
102-03	Natl Guard Camp	STP	D-2(S)	31B		10	191	87	4			Pipe bowl with grooved and netted patterns	1	17.1		
102-03	Natl Guard Camp	STP	D-2(S)	31B		10	192	87	3			Pipe bowl and stem with grooved pattern and heel	1	19.9		
102-03	Natl Guard Camp	STP	D-2(S)	31B		10	193	87	1			Pipe stem fragment	1	3.4		
102-03	Natl Guard Camp	STP	D-2(S)	31B		10	193	87	3			Henderson Montreal pipe stem fragment	1	7.1		
102-03	Natl Guard Camp	STP	D-2(W)	31B		0	12	20	1		0	Clear glass fragments	2	1.4		
102-03	Natl Guard Camp	STP	D-2(W)	31B		0	20	20			211	Aqua glass fragments	10	11		
102-03	Natl Guard Camp	STP	D-2(W)	31B		0	360	25				Wire	1	1.6		
102-03	Natl Guard Camp	STP	D-2(W)	31B		1	1	8			6	Yelloware fragment	1	3.2		
102-03	Natl Guard Camp	STP	D-2(W)	31B		1	8	2				Ironstone fragment	4	8		
102-03	Natl Guard Camp	STP	D-2(W)	31B		1	22	20	1		3	Brown bottle fragments	2	0.5		
102-03	Natl Guard Camp	STP	D-2(W)	31B		3	322	25				Wire nail	2	5.8		
102-03	Natl Guard Camp	STP	D-2(W)	31B		3	322	25				Wire nail thick	1	5.8		
102-03	Natl Guard Camp	STP	D-2(W)	31B		10	191	87	1			Pipe bowl fragments	2	3.3		
102-03	Natl Guard Camp	STP	D-3	31C	1	0	20	20	1		0	Clear bottle glass	5	3.6		
102-03	Natl Guard Camp	STP	D-3	31C	1	0	20	20	1		1	Aqua bottle glass	7	19.6		
102-03	Natl Guard Camp	STP	D-3	31C	1	0	20	20	1		2	Green bottle glass	5	19.8		
102-03	Natl Guard Camp	STP	D-3	31C	1	1	1	10			19	Brown stoneware fragments, molded w/ wavy lines	3	7.3		
102-03	Natl Guard Camp	STP	D-3	31C	1	1	1	10			21	Salt-glazed stoneware	6	11.2		
102-03	Natl Guard Camp	STP	D-3	31C	1	1	5	2				Ironstone with trace of maker's mark	2	6		
102-03	Natl Guard Camp	STP	D-3	31C	1	1	8	2				Ironstone fragment	4	11.2		
102-03	Natl Guard Camp	STP	D-3	31C	1	1	22	20	1		3	Brown bottle glass	23	75.1		
102-03	Natl Guard Camp	STP	D-3	31C	1	3	321	25				Cut nail fragment	7	24.7		
102-03	Natl Guard Camp	STP	D-3	31C	1	9	0	43				Stone drilling core	1	78.5		
102-03	Natl Guard Camp	STP	D-4	32		0	8	15				Ivory-bodied ceramic fragment	1	2.2		
102-03	Natl Guard Camp	STP	D-4	32		0	12	21			0	Milkglass fragment	1	1.2		
102-03	Natl Guard Camp	STP	D-4	32		0	20	20			0	Thin clear glass fragments	12	20		
102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1		0	Clear bottle glass fragments	77	347		
102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1		0	Ribbed bottle glass	1	24.3		
102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1		1	Aqua bottle glass	10	21.5		
102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1		2	Green bottle glass	1	15.9		

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102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1	215	0	Machine made bottle neck fragment	1	21	1890	
102-03	Natl Guard Camp	STP	D-4	32		0	20	20	1	216	0	Machine made bottle neck fragment	1	49.6	1890	
102-03	Natl Guard Camp	STP	D-4	32		0	39	64			3	Plastic threaded cap	1	0.3		
102-03	Natl Guard Camp	STP	D-4	32		0	50	25	4			Can lining fragment	1	9.6		
102-03	Natl Guard Camp	STP	D-4	32		0	400	25				Unidentified ferrous fragments	8	16.2		
102-03	Natl Guard Camp	STP	D-4	32		0	400	26				Cuprous object	1	12		
102-03	Natl Guard Camp	STP	D-4	32		1	1	10		21		Salt-glazed stoneware	1	0.9		
102-03	Natl Guard Camp	STP	D-4	32		1	8	2				Ironstone fragment	16	72.3		
102-03	Natl Guard Camp	STP	D-4	32		1	8	2				Ironstone with w/ partial mark, royal crest	1	1.2		
102-03	Natl Guard Camp	STP	D-4	32		1	20	20	1		3	brown colored glass	1	0.3		
102-03	Natl Guard Camp	STP	D-4	32		1	20	20	1		31	Olive bottle glass	1	5.3		
102-03	Natl Guard Camp	STP	D-4	32		1	22	20	1		3	Brown bottle glass	11	73		
102-03	Natl Guard Camp	STP	D-4	32		1	23	20	1		0	Clear fragment with "OF ONE Qu(art)	1	2.9		
102-03	Natl Guard Camp	STP	D-4	32		1	29	20	1		0	Clear milk bottle marked "45" and "One Quart Liquid" on Bottom	1	108		
102-03	Natl Guard Camp	STP	D-4	32		1	35	20	1		0	Clear jar rim frag	2	20		
102-03	Natl Guard Camp	STP	D-4	32		1	35	20	1		0	Clear packer bottom with Pawn maker's mark; Capstan Glass Co, 2.5 inch dia	1	133	1919	1938
102-03	Natl Guard Camp	STP	D-4	32		1	37	25	1			Crown cap fragment	1	2.9	1892	
102-03	Natl Guard Camp	STP	D-4	32		1	93	60				Canning jar rubber fragment	1	2.6		
102-03	Natl Guard Camp	STP	D-4	32		3	300	20			1	Window glass fragment	15	34.5		
102-03	Natl Guard Camp	STP	D-4	32		3	321	25				Cut nail fragment	3	27		
102-03	Natl Guard Camp	STP	D-4	32		3	322	25				Wire nail	3	14		
102-03	Natl Guard Camp	STP	D-4	32		4	25	20	5		0	Melted medicinal bottle	1	12.1		
102-03	Natl Guard Camp	STP	D-4	32		8	220	20			0	Lamp chimney clear glass	39	45.5		
102-03	Natl Guard Camp	STP	Trench 1			0	20	20	1		1	Aqua glass fragment	1	5.8		
102-03	Natl Guard Camp	STP	Trench 1			0	360	25				Wire	1	1.6		
102-03	Natl Guard Camp	STP	Trench 1			1	5	64			0	White Plastic bowl fragments with "Dishwasher Safe" 5" diameter	40	29		

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102-03	Natl Guard Camp	STP	Trench 1			1	22	20	1		3	Brown bottle glass fragments	3	15.7		
102-03	Natl Guard Camp	STP	Trench 1			1	22	20	1		3	Brown bottle glass with "MICH Registered" and "This Bottle	1	101.4	1905	1920
102-03	Natl Guard Camp	STP	Trench 1			3	321	25				Cut nail fragment	1	2.6		
102-03	Natl Guard Camp	STP	Trench 2			0	12	20	1		0	Clear glass fragment	1	0.5		
102-03	Natl Guard Camp	STP North	0N1E			1	8	2				Ironstone fragment	2	3.7		
102-03	Natl Guard Camp	STP North	0N1E			1	22	20	1		3	Brown bottle glass	2	4.5		
102-03	Natl Guard Camp	STP North	0N2E			0	20	20			1	Aqua glass fragment	1	0.3		
102-03	Natl Guard Camp	STP North	0N2E			0	330	70				Coal	11	170.6		
102-03	Natl Guard Camp	STP North	0N2E			1	20	20			3	Brown bottle glass fragments	2	1.6		
102-03	Natl Guard Camp	STP North	0N2E			1	22	20	1		0	Clear glass fragments	1	0.6		
102-03	Natl Guard Camp	STP North	0N3E			3	300	20			1	Window glass fragment	1	5.5		
102-03	Natl Guard Camp	STP North	0N4E			0	330	70				Coal	1	1.3		
102-03	Natl Guard Camp	STP North	0N5E			0	330	70				Coal	5	8.6		
102-03	Natl Guard Camp	STP North	0N5E			0	334	69				Slag	2	9.5		
102-03	Natl Guard Camp	STP North	0N5E			3	321	25				Cut nail fragment	1	4.6		
102-03	Natl Guard Camp	STP North	0N6E			0	20	20			1	Aqua glass fragments	2	3.3		
102-03	Natl Guard Camp	STP North	0N7E			0	12	20			0	Clear glass fragment	1	1.1		
102-03	Natl Guard Camp	STP North	0N7E			0	20	20			1	Aqua glass fragment	1	2.2		
102-03	Natl Guard Camp	STP North	0N7E			3	321	25				Cut nail fragment	1	14		
102-03	Natl Guard Camp	STP North	1N3E			0	330	70				Coal	5	21		
102-03	Natl Guard Camp	STP North	1N5E			0	20	20			1	Aqua glass fragment	1	1		
102-03	Natl Guard Camp	STP North	1N5E			0	330	70				Coal	4	7.2		
102-03	Natl Guard Camp	STP North	1N7E			0	20	20			0	Clear bottle glass	1	0.5		
102-03	Natl Guard Camp	STP North	1N7E			0	20	20			1	Aqua bottle glass	1	2.6		
102-03	Natl Guard Camp	STP North	2N1E			0	314	6				Glazed Redware Drain Pipe	1	136.2		
102-03	Natl Guard Camp	STP North	3N2E			0	20	20			1	Aqua glass fragments	1	2.2		
102-03	Natl Guard Camp	STP North	3N2E			1	22	20	1		3	Brown bottle glass	1	4.7		
102-03	Natl Guard Camp	STP North	3N5E			0	314	6				Glazed Redware Drain Pipe	2	54		
102-03	Natl Guard Camp	STP North	3N5E			3	369	25				Spike	1	43.6		
102-03	Natl Guard Camp	STP North	4N3E			3	371	25				Bolt with washer	1	138.2		
102-03	Natl Guard Camp	STP North	4N4E			1	8	2				Ironstone fragment	1	0.1		
102-03	Natl Guard Camp	STP North	5N4E			0	314	6				Glazed Redware Drain Pipe	1	21		
102-03	Natl Guard Camp	STP North	5N5E			0	314	6				Glazed Redware Drain Pipe	2	620.5		
102-03	Natl Guard Camp	STP North	5N5E			0	330	70				Coal	3	1.2		
102-03	Natl Guard Camp	STP North	5N5E			3	300	20			0	Window glass fragment	1	0.7		
102-03	Natl Guard Camp	STP North	6N4E			0	470	44			13	Battery rod	1	10.3	1881	

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102-03	Natl Guard Camp	STP North	6N4E			1	8	2				Ironstone fragment	1	2.7		
102-03	Natl Guard Camp	STP South	1S3E			0	0	69				Slag	1	3.1		
102-03	Natl Guard Camp	STP South	1S3E			0	12	20			0	Clear glass fragment	1	6		
102-03	Natl Guard Camp	STP South	2S0E			0	12	20			0	Clear glass fragment	1	0.3		
102-03	Natl Guard Camp	STP South	2S0E			0	20	20			33	Sun Purple Glass fragment	1	0.3	1880	1914
102-03	Natl Guard Camp	STP South	2S0E			1	22	20	1		3	Brown glass fragments	1	0.8		
102-03	Natl Guard Camp	STP South	2S1E			0	12	20			0	Clear glass fragment	1	0.1		
102-03	Natl Guard Camp	STP South	2S1E			0	20	20			2	Green glass fragment	1	0.1		
102-03	Natl Guard Camp	STP South	2S1E			1	8	2				Ironstone fragment	1	2.6		
102-03	Natl Guard Camp	STP South	2S1E			1	22	20	1		3	Brown glass fragment	1	0.4		
102-03	Natl Guard Camp	STP South	2S1W			1	8	2				Ironstone fragment	1	4.4		
102-03	Natl Guard Camp	STP South	2S1W			1	22	20	1		3	Brown glass fragments	1	0.6		
102-03	Natl Guard Camp	STP South	2S2E			1	22	20	1		3	Brown glass fragment	1	0.9		
102-03	Natl Guard Camp	STP South	2S3E			0	20	20			0	Clear glass fragment with checkered pattern	1	2.5		
102-03	Natl Guard Camp	STP South	2S3E			0	20	20			1	Aqua glass fragment	1	0.9		
102-03	Natl Guard Camp	STP South	2S3E			0	20	20			31	Olive glass fragment	1	5.9		
102-03	Natl Guard Camp	STP South	2S3E			0	334	69				Slag	1	1.4		
102-03	Natl Guard Camp	STP South	2S3E			1	8	2			0	Ironstone	1	14		
102-03	Natl Guard Camp	STP South	2S3E			3	321	25				Cut nail fragment	5	15.2		
102-03	Natl Guard Camp	STP South	2S3E			9	0	43				Stone drilling core	1	55.7		
102-03	Natl Guard Camp	STP South	3S0E			1	22	20	1		3	Brown glass fragment	1	0.5		
102-03	Natl Guard Camp	STP South	4S0E			0	12	20			0	Clear glass fragment	1	0.8		
102-03	Natl Guard Camp	STP South	4S0E			0	20	20			1	Aqua glass fragment	1	0.2		
102-03	Natl Guard Camp	STP South	4S0E			0	400	25				Unidentified ferrous metal fragment	1	0.7		
102-03	Natl Guard Camp	STP South	4S0E			1	8	2				Ironstone fragment	2	1		
102-03	Natl Guard Camp	STP South	4S0E			1	22	20	1		3	Brown glass fragments	3	27.3		
102-03	Natl Guard Camp	STP South	4S0E			3	321	25				Cut nail fragment	1	1.6		
102-03	Natl Guard Camp	STP South	4S1E			0	12	20	1		0	Clear glass fragment	1	0.5		
102-03	Natl Guard Camp	STP South	5S1E			0	12	20	1		0	Clear glass fragment	1	1.4		
102-03	Natl Guard Camp	STP South	5S1E			0	330	70				Coal	1	0.2		
102-03	Natl Guard Camp	STP South	5S1W			0	20	20	1		1	Aqua glass fragment	1	0.1		
102-03	Natl Guard Camp	STP South	5S1W			0	330	70				Coal	4	0.9		
102-03	Natl Guard Camp	STP South	5S1W			1	5	2			5	Ironstone w/ trace of red decoration	1	0.1		
102-03	Natl Guard Camp	STP South	5S1W			1	22	20	1		3	Brown glass fragments	6	10.3		
102-03	Natl Guard Camp	STP South	5S2E			1	22	20	1		3	Brown glass fragment	1	2.1		
102-03	Natl Guard Camp	STP South	5S4W			0	12	20	1		0	Clear glass fragment	2	2.3		
102-03	Natl Guard Camp	STP South	5S4W			0	330	70				Coal	1	0.2		

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102-03	Natl Guard Camp	STP South	5S4W			1	22	20	1		3	Brown bottle glass fragments	4	9.8		
102-03	Natl Guard Camp	Unit	1	31B	1	0	12	20			0	Clear glass fragments	23	53		
102-03	Natl Guard Camp	Unit	1	31B	1	0	20	20			0	Clear glass fragments with unknwn letter fragments	2	1.9		
102-03	Natl Guard Camp	Unit	1	31B	1	0	20	20			1	Aqua bottle fragment with "B	1	0.6		
102-03	Natl Guard Camp	Unit	1	31B	1	0	20	20			1	bottle glass fragments	6	5.6		
102-03	Natl Guard Camp	Unit	1	31B	2	0	8	11				Porcelain fragment	1	0.4		
102-03	Natl Guard Camp	Unit	1	31B	2	0	12	20			0	Clear glass fragments	39	80.5		
102-03	Natl Guard Camp	Unit	1	31B	2	0	20	20			0	Clear glass fragments with "NO	1	1.5		
102-03	Natl Guard Camp	Unit	1	31B	2	0	20	20			0	Owens bottle company suction fragment	1	7.8	1905	
102-03	Natl Guard Camp	Unit	1	31B	2	0	20	20			1	Aqua glass fragments	17	54.5		
102-03	Natl Guard Camp	Unit	1	31B	2	0	20	20			33	Sun purple fragments	5	14.5	1880	1914
102-03	Natl Guard Camp	Unit	1	31B	3	0	12	20			0	Clear glass fragments	5	8.4		
102-03	Natl Guard Camp	Unit	1	31B	3	0	20	20	1		2	green glass fragments	3	12.5		
102-03	Natl Guard Camp	Unit	1	31B	3	0	80	25				Barrel hoop fragments	8	167.4		
102-03	Natl Guard Camp	Unit	1	31B	3	0	400	25				Misc. metal fragments	11	63.2		
102-03	Natl Guard Camp	Unit	1	31B	3	0	470	44				battery rod fragment	1	3.1	1881+	
102-03	Natl Guard Camp	Unit	1	31B	1	1	1	10		15		Bristol Slipped Stoneware	3	7	1885	
102-03	Natl Guard Camp	Unit	1	31B	1	1	5	2				Ironstone base fragment with partial maker's mark	1	3.1		
102-03	Natl Guard Camp	Unit	1	31B	1	1	5	2				Ironstone plate base fragment	1	14		
102-03	Natl Guard Camp	Unit	1	31B	1	1	8	2				Ironstone fragment	3	2.9		
102-03	Natl Guard Camp	Unit	1	31B	1	1	22	20	1		3	Brown glass fragments	33	75.3		
102-03	Natl Guard Camp	Unit	1	31B	1	1	23	20	1		0	Fragment of "Forbidden Reuse of Bottle	1	1.9	1905	1920
102-03	Natl Guard Camp	Unit	1	31B	1	1	28	20	1		1	Soda Bottle Glass fragments	2	5.6		
102-03	Natl Guard Camp	Unit	1	31B	2	1	1	8			6	Yelloware fragment	1	1.3		
102-03	Natl Guard Camp	Unit	1	31B	2	1	1	10		19		Stoneware butter crock fragments	47	326.3		
102-03	Natl Guard Camp	Unit	1	31B	2	1	2	20	1		33	Sun purple sugar bowl bottom fragment	1	12.8	1880	1914
102-03	Natl Guard Camp	Unit	1	31B	2	1	5	2				Ironstone Plate Base	1	13.4		
102-03	Natl Guard Camp	Unit	1	31B	2	1	5	2				Ironstone cup fragment 3.5inch diameter	1	2.3		

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102-03	Natl Guard Camp	Unit	1	31B	2	1	5	2				Ironstone saucer fragment	1	7.1		
102-03	Natl Guard Camp	Unit	1	31B	2	1	8	2				Ironstone fragments	1	1.6		
102-03	Natl Guard Camp	Unit	1	31B	2	1	8	2				Ironstone fragments	1	4		
102-03	Natl Guard Camp	Unit	1	31B	2	1	22	20	1		3	Brown bottle glass fragments	58	178		
102-03	Natl Guard Camp	Unit	1	31B	3	1	1	8			6	Yellowware fragment	1	0.6		
102-03	Natl Guard Camp	Unit	1	31B	3	1	1	10			15	Bristol Slipped Stoneware Sherd	1	3.5	1885	
102-03	Natl Guard Camp	Unit	1	31B	3	1	5	2				Ironstone fragments, possible saucer	7	9.8		
102-03	Natl Guard Camp	Unit	1	31B	3	1	22	20	1		3	Brown bottle glass fragments	14	43.5		
102-03	Natl Guard Camp	Unit	1	31B	3	1	22	20	1		3	Brown bottle glass with "CH	1	5.4		
102-03	Natl Guard Camp	Unit	1	31B	3	1	39	24				Pewter cap to food container	2	13.9		
102-03	Natl Guard Camp	Unit	1	31B	1	3	300	20			1	Window glass fragment	5	5.6		
102-03	Natl Guard Camp	Unit	1	31B	1	3	321	25				Cut nail fragment	2	4.2		
102-03	Natl Guard Camp	Unit	1	31B	1	3	369	25	4			Spike	2	117.2		
102-03	Natl Guard Camp	Unit	1	31B	2	3	321	25				Cut nail fragment	4	32.3		
102-03	Natl Guard Camp	Unit	1	31B	2	3	371	25				Bolt	1	168.9		
102-03	Natl Guard Camp	Unit	1	31B	3	3	322	25				Wire nail	1	7.7		
102-03	Natl Guard Camp	Unit	1	31B	1	4	25	20	1		4	Vick's Vapor Rub Medicinal fragments, Double Beaded Rim	4	2.4		
102-03	Natl Guard Camp	Unit	1	31B	1	4	25	20	1	200	33	Sun Purple bottle neck, hand-tooled	1	12.7	1880	1914
102-03	Natl Guard Camp	Unit	1	31B	2	4	25	20	1		4	Vick's medicinal, partial triangle marker's mark	34	34.2		
102-03	Natl Guard Camp	Unit	1	31B	3	4	25	20	1		4	blue glass fragments; Vick's jar	1	0.8		
102-03	Natl Guard Camp	Unit	1	31B	3	4	25	20	1	211	1	Aqua glass fragments wide mouth packed	14	51		
102-03	Natl Guard Camp	Unit	1	31B	3	4	25	20	1	211	1	Aqua glass fragments with "C" and "W	2	4.5		
102-03	Natl Guard Camp	Unit	1	31B	3	4	25	20	5	210	1	Aqua medicine bottle, hand tooled	1	52.5		
102-03	Natl Guard Camp	Unit	1	31B	2	6	130	21	1		0	Button fragment	1	0.2		
102-03	Natl Guard Camp	Unit	1	31B	2	6	130	21	5		0	4-Hole button	1	0.3		
102-03	Natl Guard Camp	Unit	1	31B	2	6	173	26	4			Heel Plate	1	2.2		

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102-03	Natl Guard Camp	Unit	1	31B	3	6	130	21	5	0	4-hole button	1	0.4		
102-03	Natl Guard Camp	Unit	1	31B	3	6	130	21	5	0	4-hole button	1	0.5		
102-03	Natl Guard Camp	Unit	1	31B	3	6	130	21	5	0	4-hole button	1	0.7		
102-03	Natl Guard Camp	Unit	1	31B	3	6	157	25	5		Suspender clip	1	1.4		
102-03	Natl Guard Camp	Unit	1	31B	3	9	0	43			Stone drilling core	1	127.5		
102-03	Natl Guard Camp	Unit	1	31B	1	10	193	87	1		Tobacco Pipe Fragments	1	0.9		
102-03	Natl Guard Camp	Unit	1	31B	2	10	191	87	1		Pipe Bowl fragments with grooves	1	1.5		
102-03	Natl Guard Camp	Unit	1	31B	2	10	191	87	2		Pipe Bowl fragments with "P" or "b"	2	5.4		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	1		"Henderson Montreal" Pipe Stem	1	2.9		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	1		"Henderson Montreal" Pipe Stem	1	3.4		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	1		"Henderson Montreal" Pipe Stem	1	4.1		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	1		Pipe Stem fragment	1	4.9		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	1		Pipe Stem fragment	2	3.3		
102-03	Natl Guard Camp	Unit	1	31B	2	10	193	87	2		"Henderson Montreal" Pipe Stem	1	8.2		
102-03	Natl Guard Camp	Unit	1	31B	2	10	195	87	1		Pipe stem with bit	1	2.2		
102-03	Natl Guard Camp	Unit	1	31B	3	10	190	87	3		Smoking pipe with eagle pattern	1	21.4		
102-03	Natl Guard Camp	Unit	1	31B	3	10	191	87	1		3 lined pattern bowl fragment	1	0.5		
102-03	Natl Guard Camp	Unit	1	31B	3	10	191	87	1		Fish scale pattern bowl fragment	1	1.4		
102-03	Natl Guard Camp	Unit	1	31B	3	10	191	87	3		Lined and grooved pattern pipe bowl fragment	2	12.5		
102-03	Natl Guard Camp	Unit	1	31B	3	10	192	87	3		Grooved pipe bowl and stem with heel	1	18.1		
102-03	Natl Guard Camp	Unit	1	31B	3	10	193	87	2		Henderson Montreal pipe stem fragment	1	5.5		
102-03	Natl Guard Camp	Unit	1	31C	1	0	12	21	1	0	Milkglass fragment	1	0.9		
102-03	Natl Guard Camp	Unit	1	31C	1	0	20	20		1	Aqua glass fragments	40	134.8		
102-03	Natl Guard Camp	Unit	1	31C	1	0	20	20		208	0	Clear glass fragments, machine made and double beaded. "RA" and "ER	18	55.8	1905
102-03	Natl Guard Camp	Unit	1	31C	2	0	20	20		0	Clear glass fragments with "U	7	18.9		

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102-03	Natl Guard Camp	Unit	1	31C	2	0	20	20			1	Aqua glass fragments	6	14		
102-03	Natl Guard Camp	Unit	1	31C	1	1	1	10				Stoneware w/ yellowish slip	2	8		
102-03	Natl Guard Camp	Unit	1	31C	1	1	1	10				Stoneware, Bristol slipped?	2	4.1		
102-03	Natl Guard Camp	Unit	1	31C	1	1	1	10		15		Bristol slipped stoneware	17	40.1	1885	
102-03	Natl Guard Camp	Unit	1	31C	1	1	1	10		21		Salt-glazed stoneware	1	6.8		
102-03	Natl Guard Camp	Unit	1	31C	1	1	1	10		7	6	Stoneware, yellowish glazed ext & albany slipped interior, bottle? narrow dia	1	11.1		
102-03	Natl Guard Camp	Unit	1	31C	1	1	5	2			4	Ironstone w/ blue shell edged decoration	1	0.8	1850	1900
102-03	Natl Guard Camp	Unit	1	31C	1	1	8	2				Ironstone fragment	1	0.6		
102-03	Natl Guard Camp	Unit	1	31C	1	1	8	2				Ironstone fragment	2	3.1		
102-03	Natl Guard Camp	Unit	1	31C	1	1	22	20	1		1	Aqua glass with "Bottling" and "South Range"	6	70		
102-03	Natl Guard Camp	Unit	1	31C	1	1	22	20	1		3	Brown glass fragments	84	157.5		
102-03	Natl Guard Camp	Unit	1	31C	2	1	1	10		15		Bristol slipped stoneware fragments	5	8.5	1885	
102-03	Natl Guard Camp	Unit	1	31C	2	1	1	10		19		Brown stoneware fragments, molded w/ wavy lines	2	9.2		
102-03	Natl Guard Camp	Unit	1	31C	2	1	1	10		21		Salt-glazed Stoneware	1	5.4		
102-03	Natl Guard Camp	Unit	1	31C	2	1	8	2				Ironstone fragment	1	0.9		
102-03	Natl Guard Camp	Unit	1	31C	2	1	22	20	1		3	Brown glass fragments	10	22.3		
102-03	Natl Guard Camp	Unit	1	31C	1	3	300	20			1	Window glass fragment	3	4.3		
102-03	Natl Guard Camp	Unit	1	31C	2	3	300	20			1	Window glass fragment	3	3.4		
102-04	Office Building	STP	OB-01			0	12	20	1		33	Sun purple glass fragment	1	3.2		
102-04	Office Building	STP	OB-01			1	28	10	1		32	Seltzer water ceramic bottle fragment	1	7.3	1880	1920
102-04	Office Building	STP	OB-02			0	20	20	1		31	Olive bottle glass	1	17.3		
102-04	Office Building	STP	OB-02			1	91	21	1		37	Milkglass canning jar lid liner	1	4.2		
102-04	Office Building	STP	OB-03			0	12	20	1		0	Clear glass fragment	3	2.9		
102-04	Office Building	STP	OB-03			0	12	20	1		0	Clear glass fragment with white paint floral pattern	1	1.6		
102-04	Office Building	STP	OB-04			0	12	20	1		0	Clear glass fragments	6	1.6		

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102-04	Office Building	STP	OB-04			1	1	10				Salt-glazed stoneware w/ blue decoration	1	39.8		
102-04	Office Building	STP	OB-04			3	300	20	1		1	Window glass	4	15.2		
102-04	Office Building	STP	OB-05			0	507	27				Foil	2	0.2		
102-04	Office Building	STP	OB-07			0	511	64			0	Clear thin plastic	5	5.5		
102-04	Office Building	STP	OB-07			0	511	64			0	Hard white plastic	1	1.2		
102-04	Office Building	STP	OB-08			3	300	20	1		1	Window glass	2	3.3		
102-04	Office Building	STP	OB-09			1	5	2			4	Ironstone with blue decoration	1	0.5		
102-04	Office Building	STP	OB-09			1	28	10	1		32	Seltzer water ceramic bottle fragment	2	21.1	1880	1920
102-04	Office Building	STP	OB-09			4	25	20	1		4	Blue glass fragments, Vicks?	2	0.4		
102-04	Office Building	STP	OB-11			3	322	25				Wire nail	1	7.9		
102-04	Office Building	STP	OB-17			0	12	20	1		33	Sun purple glass fragments	4	2.2		
102-04	Office Building	STP	OB-17			0	20	20	1		0	Clear bottle glass	2	5.2		
102-04	Office Building	STP	OB-17			1	22	20	1		3	Brown bottle glass	1	3.4		
102-04	Office Building	STP	OB-19			0	20	20	1		0	Clear bottle glass	1	0.7		
102-04	Office Building	STP	OB-32			0	20	20	1		2	Green bottle glass fragment	1	0.7		
102-04	Office Building	STP	OB-44			0	20	20	1		1	Aqua bottle glass	2	5		
102-04	Office Building	STP	OB-44			1	22	20	1		3	Brown bottle glass	1	10		
102-04	Office Building	STP	OB-46			0	20	20	1		0	Clear bottle glass	1	0.9		
102-04	Office Building	STP	OB-50			1	22	20	5		3	Full beer bottle "A. Haas Brewing Co." "Houghton Mich." "Bottle Not to be Resold	1		1905	1920
102-04	Office Building	STP	OB-53			1	22	20	1		3	Brown bottle glass	1	2.1		
102-04	Office Building	STP	OB-63			1	22	20	1		3	Brown bottle glass	1	8.1		
102-04	Office Building	STP	OB-71			0	20	20	1		1	Aqua bottle glass	1	1.8		
102-04	Office Building	STP	OB-90			0	20	20	1		0	Clear bottle glass	2	0.6		
102-04	Office Building	STP	OB-90			0	20	20	1		1	Aqua glass fragments	12	29.6		
102-04	Office Building	STP	OB-90			1	22	20	1		3	Brown bottle glass	1	3.2		
102-04	Office Building	STP	OB-90			11	62	64			0	White plastic spoon fragments	5	2.1		
102-04	Office Building	STP	OB-90			12	371	25	5			Small bolt	1	2.4		
102-04	Office Building	STP	OB-93			0	360	25				Wire	1	8		
102-04	Office Building	STP	STP NE	259		3	322	25				Wire nail	2	29.5		
102-04	Office Building	STP	STP SW	259		0	0	64			13	Black plastic tape	1	0.4		

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102-04	Office Building	STP	STP SW	259		3	321	25				Cut nail fragment	2	18.5		
102-04	Office Building	STP	STP SW	261		1	28	10	1		32	Seltzer water ceramic bottle fragment	1	13.8	1880	1920
102-04	Office Building	STP	STP SW	261		3	321	25				Cut nail fragment	2	10.8		
102-04	Office Building	STP	STP SW	261		3	322	25				Wire nail	1	3		
102-04	Office Building	Surf Find	SF?		Surface	1	50	25	4			Soda/Beer can	1	62.2		
102-04	Office Building	Surf Find	SF13		Surface	5	34	20	5	216	3	Clorox 32oz bottle "US. Pat. Office	1	479		
102-04	Office Building	Surf Find	SF15		Surface	1	22	20	5	216	3	Beer bottle with "federal law prohibits resale...	1	484.5	1930	
102-04	Office Building	Surf Find	SF15		Surface	1	23	20	2		3	Brown bottle fragments with "4/5 Quart" "MTG D-126" and "Use of this Bottle	5	255.8		
102-04	Office Building	Surf Find	SF19		Surface	1	50	25	1			Can fragment	1	28.9		
102-04	Office Building	Surf Find	SF2		Surface	0	511	64			0	Clear plastic panel	1	125		
102-04	Office Building	Surf Find	SF20		Surface	1	23	20	1	203	33	Sun purple bottle neck fragments. Possible brandy bottle.	2	115.3	1880	1914
102-04	Office Building	Surf Find	SF3		Surface	7	32	20	4		0	Perfume bottle with cap. Stamped "Yardley	1	108.5		
102-04	Office Building	Surf Find	SF4		Surface	1	22	20	5	214	3	Beer bottle with "No Deposit, No Return	1	243.1		
102-04	Office Building	Surf Find	SF9		Surface	0	49	25	4			Spray Can cylinder	1	87.1		
102-04	Office Building	Surf Find	SF9		Surface	1	26	20	5	216	0	Clear glass ketsup bottle, paneled and stamped "Duraglass" Owens IL. manufactured.	1	280.9	1940	
102-04	Office Building	Surf Find			Surface	9	415	25	4			Shovel head, 9.5inch length.	1			
102-04	Office Building	Unit	2	261	1	0	12	20			0	Clear glass fragment	1	11.6		
102-04	Office Building	Unit	2	261	1	0	12	20			0	Clear glass fragment	5	11.3		
102-04	Office Building	Unit	2	261	1	0	177	50				Leather	1	2.8		
102-04	Office Building	Unit	2	261	1	0	334	69				Slag	2	6.3		
102-04	Office Building	Unit	2	261	1	0	334	69				Slag	4	194		
102-04	Office Building	Unit	2	261	1	0	400	25				Misc. metal fragments	9	19.5		
102-04	Office Building	Unit	2	261	1	3	321	25				Cut nail fragment	19	122.3		
102-04	Office Building	Unit	2	261	1	3	321	25				Cut nail fragment	84			
102-04	Office Building	Unit	2	261	1	3	371	25				Bolt	1	127.7		
102-04	Office Building	Unit	2	261	2	3	321	25				Cut nail fragment	2	32.1		

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102-04	Office Building	Unit	2	261	2	3	321	25				Cut nail fragment	3	42.4		
102-04	Office Building	Unit	3	261	3	1	28	10	1		32	Seltzer water ceramic bottle fragment 1 w/ "47"	16	394.2	1880	1920
102-04	Office Building	Unit	3	261	3	1	28	10	1		32	Seltzer water ceramic bottle fragments with "Nassau" "OLIN" and "S"	3	60.7	1880	1920
102-04	Office Building	Unit	3	261	3	3	321	25				Cut nail fragment	5	49.1		
102-04	Office Building	Unit	5	261	1	0	334	69				Slag	1	91.1		
102-04	Office Building	Unit	5	261	1	3	321	25				Cut nail fragment	56	368.1		
102-04	Office Building	Unit	5	261	1	6	132	26	5			Snap/Cap	1	4.4		
102-04	Office Building	Unit	8	261	1	0	12	20	1		0	Clear glass fragment	1	1.5		
102-04	Office Building	Unit	8	261	1	0	334	69				Slag	1	4.8		
102-04	Office Building	Unit	8	261	3	1	28	10	1		32	Seltzer water ceramic fragments	4	49.4	1880	1920
102-04	Office Building	Unit	8	261	1	3	321	25				Cut nail fragment	52	428.5		
102-04	Office Building	Unit	8	261	2	3	321	25				Cut nail fragment	1	10.3		
102-04	Office Building	Unit	8	261	3	3	321	25				Cut nail fragment	4	14.8		

Appendix D: Faunal Artifact Catalog

Unit	Feature	Level	Number	Description	Weight(g)	Taxonomy	Ele	Pattern	Sec	Side	Completeness	Mark	Gnaw	Heat	Wthr	Age
D1	31A		1	Chicken Fibula, PX	0.5	900	20	60	3	0	4	4	0	0	0	-
1	31B	1	2	Med-Mammal Radius-DISCEC	22.7	991	6	60	4	0	2	8	0	0	1	7
1	31B	1	3	Unid frag-char	1.4	999	0	2	0	0	0	0	0	1	1	-
1	31B	1	3	Unid frag calcine	1.7	999	0	2	0	0	0	0	0	2	1	-
1	31B	2	1	Navicular Cuboid, left	33.1	1	31	1	1	2	4	0	0	0	1	-
1	31B	2	3	Unid frag	21.5	999	0	2	0	0	0	0	0	0	0	-
D2(W)	31B		1	Pig Femur, PX ME EO	5	2	18	5	27	0	1	3	0	0	1	5
D2(W)	31B		8	Unid frag	10	999	0	2	0	0	0	0	0	0	0	-
D2	31B		3	Unid Calcine frag	3	999	0	2	0	0	0	0	0	2	0	-
D2(E)	31B		1	Cow Tibia- DISCEC	71.2	1	19	60	4	1	1	10	0	0	1	7
D2(E)	31B		4	Unid frag	105	999	0	2	0	0	0	0	0	0	0	-
D2(E)	31B		2	Unid Calcine frag	0.8	999	0	2	0	0	0	0	0	2	0	-
D2(S)	31B		4	Unid frag	8.9	999	0	2	0	0	0	0	0	0	0	-
D2(S)	31B		3	Unid Calcine frag	11.4	999	0	2	0	0	0	0	0	2	0	-
1	31B	3	9	Unid Calcine frag	20.6	999	0	2	0	0	0	0	0	2	0	-
1	31C	3	1	Cow Radius/Ulna DISCEC	249.9	1	6	60	4	0	2	1	0	0	1	7
1	31C	3	1	Cow Femur, Left DISCEC	138.7	1	18	60	4	2	1	1	0	0	1	7
1	31C	3	1	Cow Tooth	14.7	1	1	3	0	0	4	7	0	0	1	-
1	31C	3	12	Unid frag	31.1	999	0	2	0	0	0	0	0	0	1	-
STP D-4	32		1	Cow Humerus, Left DI SH	83.8	1	5	7	4	2	1	1	0	0	14	-
STP D-4	32		3	Unid frag	17.1	999	0	2	0	0	0	0	0	0	1	-