



Phase II and Phase III Archaeological Database and Inventory

Site Number: 18FR330

Site Name: Catoctin Kunkel Ore Mine & RR

Prehistoric

Other name(s) Orr's "Check 16"; Fitzhugh-Kunkel Ore Bank

Historic

Unknown

Brief Description: 19th-early 20th century ore mine and railroad tracks

Site Location and Environmental Data:

Maryland Archaeological Research Unit No. 17

SCS soil & sediment code TeC

Latitude 39.5979 Longitude -77.4285

Physiographic province Blue Ridge

Terrestrial site

Underwater site

Elevation m Site slope 6-10%

Ethnobotany profile available Maritime site

Site setting

-Site Setting restricted

-Lat/Long accurate to within 1 sq. mile, user may need to make slight adjustments in mapping to account for sites near state/county lines or streams

Topography

- Floodplain High terrace
- Hilltop/bluff Rockshelter/cave
- Interior flat Hillslope
- Upland flat Unknown
- Ridgetop Other
- Terrace
- Low terrace

Ownership

- Private
- Federal
- State of MD
- Regional/county/city
- Unknown

Nearest Surface Water

Name (if any) High Run

Saltwater

Ocean

Estuary/tidal river

Tidewater/marsh

Minimum distance to water is 0 m

Freshwater

Stream/river

Swamp

Lake or pond

Spring

Temporal & Ethnic Contextual Data:

Paleoindian site Woodland site

Archaic site MD Adena

Early archaic Early woodland

Middle archaic Mid. woodland

Late archaic Late woodland

Unknown prehistoric context

Contact period site ca. 1820 - 1860 Y

ca. 1630 - 1675 ca. 1860 - 1900 Y

ca. 1675 - 1720 ca. 1900 - 1930 Y

ca. 1720 - 1780 Post 1930

ca. 1780 - 1820

Unknown historic context

Unknown context

Ethnic Associations (historic only)

Native American Asian American

African American Unknown Y

Anglo-American Other

Hispanic

Y=Confirmed, P=Possible

Site Function Contextual Data:

Prehistoric

Multi-component Misc. ceremonial

Village Rock art

Hamlet Shell midden

Base camp STU/lithic scatter

Rockshelter/cave Quarry/extraction

Earthen mound Fish weir

Cairn Production area

Burial area Unknown

Other context

Historic

Urban/Rural? Rural

Domestic

Homestead

Farmstead

Mansion

Plantation

Row/townhome

Cellar

Privy

Industrial

Mining-related

Quarry-related

Mill

Black/metalsmith

Furnace/forge

Other iron ore min

Transportation

Canal-related

Road/railroad

Wharf/landing

Maritime-related

Bridge

Ford

Educational

Commercial

Trading post

Store

Tavern/inn

Military

Battlefield

Fortification

Encampment

Townsite

Religious

Church/mtg house

Ch support bldg

Burial area

Cemetery

Sepulchre

Isolated burial

Bldg or foundation

Possible Structure

Post-in-ground

Frame-built

Masonry

Other structure

Slave related

Non-domestic agri

Recreational

Midden/dump

Artifact scatter

Spring or well

Unknown

Other context

tailings spoil piles,

Interpretive Sampling Data:

Prehistoric context samples

Soil samples taken

Flotation samples taken

Other samples taken

Historic context samples

Soil samples taken N

Flotation samples taken N

Other samples taken



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Diagnostic Artifact Data:

Projectile Point Types		Koens-Crispin	
Clovis	<input type="checkbox"/>	Perkiomen	<input type="checkbox"/>
Hardaway-Dalton	<input type="checkbox"/>	Susquehana	<input type="checkbox"/>
Palmer	<input type="checkbox"/>	Vernon	<input type="checkbox"/>
Kirk (notch)	<input type="checkbox"/>	Piscataway	<input type="checkbox"/>
Kirk (stem)	<input type="checkbox"/>	Calvert	<input type="checkbox"/>
Le Croy	<input type="checkbox"/>	Selby Bay	<input type="checkbox"/>
Morrow Mntn	<input type="checkbox"/>	Jacks Rf (notch)	<input type="checkbox"/>
Guilford	<input type="checkbox"/>	Jacks Rf (pent)	<input type="checkbox"/>
Brewerton	<input type="checkbox"/>	Madison/Potomac	<input type="checkbox"/>
Otter Creek	<input type="checkbox"/>	Levanna	<input type="checkbox"/>

Prehistoric Sherd Types

Marcey Creek	<input type="checkbox"/>	Popes Creek	<input type="checkbox"/>	Shepard	<input type="checkbox"/>	Keyser	<input type="checkbox"/>
Dames Qtr	<input type="checkbox"/>	Coulbourn	<input type="checkbox"/>	Townsend	<input type="checkbox"/>	Yeocomico	<input type="checkbox"/>
Selden Island	<input type="checkbox"/>	Watson	<input type="checkbox"/>	Minguannan	<input type="checkbox"/>	Monongahela	<input type="checkbox"/>
Accokeek	<input type="checkbox"/>	Mockley	<input type="checkbox"/>	Sullivan Cove	<input type="checkbox"/>	Susquehannock	<input type="checkbox"/>
Wolfe Neck	<input type="checkbox"/>	Clemson Island	<input type="checkbox"/>	Shenks Ferry	<input type="checkbox"/>		
Vinette	<input type="checkbox"/>	Page	<input type="checkbox"/>	Moyaone	<input type="checkbox"/>		
				Potomac Crk	<input type="checkbox"/>		

Historic Sherd Types

Earthenware		Ironstone	Staffordshire	Stoneware	
Astbury	<input type="checkbox"/>	Jackfield	<input type="checkbox"/>	English Brown	<input type="checkbox"/>
Borderware	<input type="checkbox"/>	Mn Mottled	<input type="checkbox"/>	Eng Dry-bodied	<input type="checkbox"/>
Buckley	<input type="checkbox"/>	North Devon	<input type="checkbox"/>	Nottingham	<input type="checkbox"/>
Creamware	<input type="checkbox"/>	Pearlware	<input type="checkbox"/>	Rhenish	<input type="checkbox"/>
				Wt Salt-glazed	<input type="checkbox"/>

All quantities exact or estimated minimal counts

Other Artifact & Feature Types:

Prehistoric Artifacts		Other fired clay	
Flaked stone	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Ground stone	<input type="checkbox"/>	Modified faunal	<input type="checkbox"/>
Stone bowls	<input type="checkbox"/>	Unmod faunal	<input type="checkbox"/>
Fire-cracked rock	<input type="checkbox"/>	Oyster shell	<input type="checkbox"/>
Other lithics (all)	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Ceramics (all)	<input type="checkbox"/>	Uncommon Obj.	<input type="checkbox"/>
Rimsherds	<input type="checkbox"/>	Other	<input type="checkbox"/>

Prehistoric Features

Mound(s)	<input type="checkbox"/>	Storage/trash pit	<input type="checkbox"/>
Midden	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>
Shell midden	<input type="checkbox"/>	Ossuary	<input type="checkbox"/>
Postholes/molds	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
House pattern(s)	<input type="checkbox"/>	Other	<input type="checkbox"/>
Palisade(s)	<input type="checkbox"/>		
Hearth(s)	<input type="checkbox"/>		
Lithic reduc area	<input type="checkbox"/>		

Lithic Material

Jasper	<input type="checkbox"/>	Fer quartzite	<input type="checkbox"/>	Sil sandstone	<input type="checkbox"/>
Chert	<input type="checkbox"/>	Chalcedony	<input type="checkbox"/>	European flint	<input type="checkbox"/>
Rhyolite	<input type="checkbox"/>	Ironstone	<input type="checkbox"/>	Basalt	<input type="checkbox"/>
Quartz	<input type="checkbox"/>	Argilite	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Quartzite	<input type="checkbox"/>	Steatite	<input type="checkbox"/>	Other	<input type="checkbox"/>
		Sandstone	<input type="checkbox"/>		

Dated features present at site

Historic Artifacts		Tobacco related	
Pottery (all)	<input type="checkbox"/>	Activity item(s)	<input type="checkbox"/>
Glass (all)	<input type="checkbox"/>	Human remain(s)	<input type="checkbox"/>
Architectural	<input type="checkbox"/>	Faunal material	<input type="checkbox"/>
Furniture	<input type="checkbox"/>	Misc. kitchen	<input type="checkbox"/>
Arms	<input type="checkbox"/>	Floral material	<input type="checkbox"/>
Clothing	<input type="checkbox"/>	Misc.	<input type="checkbox"/>
Personal items	<input type="checkbox"/>	Other	<input type="checkbox"/>

Historic Features

Const feature	<input type="checkbox"/>	Privy/outhouse	<input type="checkbox"/>	Depression/mound	<input type="checkbox"/>	Unknown	<input type="checkbox"/>
Foundation	<input type="checkbox"/>	Well/cistern	<input type="checkbox"/>	Burial(s)	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Cellar hole/cellar	<input type="checkbox"/>	Trash pit/dump	<input type="checkbox"/>	Railroad bed	<input checked="" type="checkbox"/>	tailings spoil piles	
Hearth/chimney	<input type="checkbox"/>	Sheet midden	<input type="checkbox"/>	Earthworks	<input type="checkbox"/>		
Postholes/molds	<input type="checkbox"/>	Planting feature	<input type="checkbox"/>	Mill raceway	<input type="checkbox"/>		
Paling ditch/fence	<input type="checkbox"/>	Road/walkway	<input checked="" type="checkbox"/>	Wheel pit	<input type="checkbox"/>		

All quantities exact or estimated minimal counts

Radiocarbon Data:

Sample 1: +/- years BP Reliability Sample 2: +/- years BP Reliability Sample 3: +/- years BP Reliability

Sample 4: +/- years BP Reliability Sample 5: +/- years BP Reliability Sample 6: +/- years BP Reliability

Sample 7: +/- years BP Reliability Sample 8: +/- years BP Reliability Sample 9: +/- years BP Reliability

Additional radiocarbon results available



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Unknown

External Samples/Data:

Collection curated at MAC

Additional raw data may be available online

Summary Description:

Site 18FR330 is the location of the former Catoctin Kunkel Ore Mine and the purported railroad thought to be associated with it. The site is also referred to as the Blue Mountain Mine and the Fitzhugh-Kunkel Ore Bank. The site is located north of the Catoctin Furnace Historic District, along US Route 15 in Frederick County, Maryland. This mine is thought to have been opened up around 1857 and supplied ore to two nearby iron furnace stacks. According to historic records and interviews with local informants who remember operations at the furnace, the ore was hauled to the Catoctin Furnace area by railroad along tracks that crossed under the present Route 806, the site of the ore washer and dump. The enormous ore banks measure about 701 meters (2300 ft) north-south by 91-244 meters (300-800 ft) east-west with a depth varying from 7.62 to 18.29 meters (25-60 ft) from east to west sides. The mine was in operation continuously until the closure of the furnaces in 1903 and then continued to supply ore for export to Pennsylvania furnaces until 1912.

The mine area is well known locally and was first examined by archeologists in 1977 during a Phase I survey through the Catoctin Furnace Historic District and environs prior to the dualization of US 15. During the Phase I investigations, the mine area was surveyed on foot on two occasions. The absence of limestone outcrops was noted in both instances. It was seen that the right-of-way for the new US 15 alignment crossed over the broad, flat valley which formed the entrance of the mine. The alignment did not touch either the mine banks of the west or an administrative area (the former location of mine offices and a repair shop) located some 152.4 meters (500 ft) to the east. The valley was heavily shaded with tall trees and was largely free of ground vegetation with the exception of a moss-like growth (which the excavators describe as giving the locale an eerie, other-worldly appearance). An entrance road flanked the northern rim of the valley, some 152.4 meters (500 ft) from a centrally located stream that flows through the valley. The stream provided water for the washer dump located just east of the administrative area off MD 806. No evidence was encountered for the two railroad tracks though to be used for transporting ore to the washer dump and furnaces, although several flat zones were interpreted as potential roadbeds.

In 1979 it was determined that the proposed widening of US Route 15 on the western edge of the existing highway would possibly impact the presumed location of the former railroad bed. Thus, Phase II testing in the vicinity of the Catoctin Kunkel Ore Mine and Railroad was designed, principally, to determine if a railroad had in fact been present and whether it would be severely impacted by construction of the new highway lanes. Phase II work involved extensive background archival research, shovel test pitting, and the excavation of several trenches. The results of archival investigation will be discussed briefly prior to a description of the field examinations.

Archival research and discussions with local informants reveal important background information relating to the site. In the year 1774, James, Thomas, Baker, and Roger Johnson constructed the first iron furnace at Catoctin. In 1776, they began producing pig iron under the name of James Johnson and Company. Hematite ore from the Catoctin Mountains provided the raw material for production of the iron while the Catoctin forests provided charcoal for fuel. One of the most important early products of the furnace is rumored to have been supplies (including munitions) for George Washington's Army. While pig iron continued to be produced at the furnace, other important products were machine parts, foundry rolling mills, iron car/cart wheels, cast-iron stoves, and other materials. During the Civil War, iron from the furnace was used to armor the famous iron-clad ship, the Monitor. Over the course of history a number of additional furnace stacks, support structures, quarries, casting areas, and other structures were constructed in the area. Some structures were demolished and improved facilities were built. The furnace continued to operate until the early 20th century.

The Catoctin Kunkel Ore Mine is thought to have been opened up around the year 1857. The mine had recently come under new ownership and a second furnace stack was built by 1856 to operate alongside the original one built in the 18th century. The new ore bank may have been needed to meet the demands of the dually operating furnaces. The Kunkel mine had its own community located just east of it, which was known as "Ore Bank Village". Together with "Catoctin Village", located in the furnace area, it formed the greater Catoctin community. Many of the older local residents were members of this community and the sons of miners who worked there. One local informant relayed that his father had dug a number of exploratory pits in the early 20th century at the locale, in the desperate days when iron ore began to run out. Another informant's father ran a massive steam shovel used for strip mining the area. However, they were unable to provide detailed descriptions of daily life for the full site report.

Field investigations at 18FR330 began and were completed in July of 1979. An extensive pedestrian survey of the surrounding area was conducted and provided the investigators with an understanding of topographic and cultural features in the area. The survey was conducted on both banks of the aforementioned stream and continued from Route 15 upstream to the ore mine site. No obvious evidence of railroad tracks, road bed or ballast, or railroad-oriented artifacts were found on the surface or in the stream bank cuts. Just above the near vertical bank cuts, however, was a series of flat zones that warranted further investigation. Large tailings piles were located on the north bank of the stream to the west of US Route 15 and between the highway and the ore mine. Early 20th century maps indicate that the railroad was located on that side of the stream, but the configuration and topography at the time of the Phase II testing would not support this as the actual location of the railroad. The south side of the stream, however, had several terraces that were relatively flat and that could be the site of the railroad leading from Kunkel Ore Mine to the washing area.

Five large tailing piles were recorded on this south side of the stream above the potential road beds. Each contained evidence of its method of formation. Narrow road beds were present on the tops of each leading from the upland side of the tailings edges. All five appeared to have narrow gage wheel ruts, apparently due to the use of small horse or mule drawn carts for the dumping of spoils. Eight post hole tests were excavated on the lowest terrace. Profiles varied greatly, suggesting that the area had been filled. The same situation was encountered in post holes excavated to the south on a second terrace; revealing fill that consisted of iron ore fragments, blue clay pockets, ash, large rocks, and organic material.

Three test trenches were excavated below the tailings piles in the area thought to be the potential railroad beds. The trenches were situated in order to transect these flat areas. Two of the trenches were 91 cm X 7.62 meters (3 ft X 25 ft), while the third was aborted short of that length. In all trenches evidence was found to support the idea that the flat areas were road (not railroad) beds. In one trench, a ballast network of large rocks underlay a cap of yellow and blue clay. The rock strata contained numerous air pockets since the clay caps prevented sediments from percolating into the strata. These prepared road beds were used by wheeled carts with uniform wheel bases (axle widths), as indicated by observed wheel ruts. The only artifacts recovered during the excavations were a cast iron fragment and a single railroad spike recovered from a wheel rut.

It is not possible, on the basis of these archeological investigations to validate the oral history and historic map record that the Kunkel Ore Mine was serviced by a railroad. One certainly did exist, there are late 19th century photographs of the railroad in operation within the Ore bank. But based on the test trench observations, it is likely that these deposits represent an earlier period of the mine's operations (prior to the 1850s) when the mine was serviced by wheeled



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Historic

Brief
Description:

19th-early 20th century ore mine and railroad tracks

Unknown

vehicles; probably mule drawn carts. Tailings piles were created by the dumping of spoil from wheeled vehicles of similar configuration (wheel bases). Excavations revealed that the entire area has been extensively modified and that the site topography is due largely to mining operations. No significant intact artifact deposits appeared to be present in the area tested prior to US Route 15 dualization, but areas just to the northwest, closer to the actual Kunkel Ore mine may have additional research potential.

External Reference Codes (Library ID Numbers):

00005963, 00005972, 00005973