

VLR-3/17/99 NRHP-Pending

United States Department of the Interior  
National Park Service

**DRAFT**

NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM

VLR Listing - 3/17/1999  
NRHP Listing - Pending

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in How to Complete the National Register of Historic Places Registration Form (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

**1. Name of Property**

historic name Australia Furnace 3,98

other names/site number \_\_\_\_\_

**2. Location**

street & number 1/4 mile from Route 64  
George Washington and Jefferson National Forests

city or town Clifton Forge not for publication  
state Virginia code VA county Alleghany vicinity X  
code 005

zip code \_\_\_\_\_

**3. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this \_\_\_\_\_ nomination \_\_\_\_\_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant \_\_\_\_\_ nationally \_\_\_\_\_ statewide \_\_\_\_\_ locally. ( \_\_\_\_\_ See continuation sheet for additional comments.)

Signature of certifying official \_\_\_\_\_ Date \_\_\_\_\_

State or Federal agency and bureau \_\_\_\_\_

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register criteria. ( \_\_\_\_\_ See continuation sheet for additional comments.)

Signature of commenting or other official \_\_\_\_\_ Date \_\_\_\_\_

State or Federal agency and bureau \_\_\_\_\_

**4. National Park Service Certification**

I, hereby certify that this property is:

- entered in the National Register  
See continuation sheet.
- determined eligible for the National Register  
See continuation sheet.
- determined not eligible for the National Register
- removed from the National Register
- other (explain): \_\_\_\_\_

\_\_\_\_\_  
Signature of Keeper      Date of Action

**5. Classification**

- |  |   |
|--|---|
| <p><i>Ownership of Property</i><br/>(Check as many boxes as apply)</p> <p><input type="checkbox"/> private</p> <p><input type="checkbox"/> public-local</p> <p><input type="checkbox"/> public-State</p> <p><input checked="" type="checkbox"/> public-Federal</p> | <p><i>Category of Property</i><br/>(Check only one box)</p> <p><input type="checkbox"/> building(s)</p> <p><input type="checkbox"/> district</p> <p><input checked="" type="checkbox"/> site</p> <p><input type="checkbox"/> structure</p> <p><input type="checkbox"/> object</p> |
|--|---|

*Number of Resources within Property*  
(Do not include previously listed properties in the count)

<p>Contributing</p> <p><u>4</u></p> <p><u>10</u></p> <p><u>14</u></p>	<p>Noncontributing</p> <p><u>        </u> buildings</p> <p><u>        </u> sites</p> <p><u>        </u> structures</p> <p><u>        </u> objects</p> <p><u>0</u> Total</p>
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*Number of contributing resources previously listed in the National Register* N/A

*Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)* The Iron Industry of Virginia, 1620-1920

6. Function or Use

Historic Functions

(Enter categories from instructions)

Industry/Processing/Extraction

Iron Furnace

Current Functions

(Enter categories from instructions)

Vacant/Not in Use

7. Description

Architectural Classification

(Enter categories from instructions)

No Style

Materials

(Enter categories from instructions)

foundation: N/A

walls: N/A

roof: N/A

other: N/A

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance  
(Enter categories from instructions)

Period of Significance

Industry

1854-1866

Significant Dates

1854  
1862  
1866

Significant Person  
(Complete if Criterion B is marked above)

Cultural Affiliation

Architect/Builder

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

**9. Major Bibliographical References**

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # \_\_\_\_\_
- recorded by Historic American Engineering Record # \_\_\_\_\_

Primary Location of Additional Data

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**10. Geographical Data**

Acreage of Property   6  

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
A	<u>17</u>	<u>620200</u>	<u>4190420</u>	D	_____	_____
B	_____	_____	_____	F	_____	_____
C	_____	_____	_____	F	_____	_____
	<u>  </u> See continuation sheet.					

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

**11. Form Prepared By**

name/title Heather Crowl; Emlen Myers, Project Archaeologist  
organization Dames & Moore, Cultural Resource Services  
date 10-03-96  
street & number 7101 Wisconsin Avenue, Suite 700 telephone (301) 652-2215  
city or town Bethesda state MD zip code 20814

**Additional Documentation**

Submit the following items with the completed form:

Continuation Sheets

**Maps**

A USGS map (7.5 or 15 minute series) indicating the property's location.  
A sketch map for historic districts and properties having large acreage  
or numerous resources.

**Photographs**

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

**Property Owner** (Complete this item at the request of the SHPO or FPO.)

name George Washington and Jefferson National Forests, USDA Forest Service  
C/O Mike Barber  
street & number 5162 Valley Pointe Parkway telephone (540) 265-5100  
city or town Roanoke state VA zip code 24019-3050

United States Department of the Interior  
National Park Service  
NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Australia Furnace  
*name of property*

Alleghany, Virginia  
*county and State*

Section 7 Page 7

### Description of Historic Resources

Australia Furnace is no longer standing. The site of the furnace, however, includes features such as ramps and retaining walls, related to the furnace operation. This site is on a steep incline above Simpson Creek in the George Washington and Jefferson National Forests.

### Original

The iron furnace complex at Australia was built in 1854 and included the iron furnace and its support facilities, as well as facilities necessary to support the workers and animals who operated the furnace. The hot-blast charcoal stack was 40' high and 11' across the bosh. The furnace was constructed of dry-laid local stone, with a brick chimney. Terraces originally supported a ramp up to a deck bridge over which iron ore, limestone flux, and charcoal were wheeled and dumped into the central, brick-lined cavity. A casting house where molten iron was formed into pigs and sows by the sand molding process was located near the tap arch of the furnace. Tub bellows powered by a waterwheel produced a heated blast which powered the furnace. A race ran from Simpson Creek over the wheel. Additional wooden structures would have been located in the adjacent area.

### Present

Few architectural features remain at the site of Australia Furnace. The furnace itself was removed in the late nineteenth century by the Longdale Iron Company. The original location of the furnace can be determined from the remaining features in the area. Two retaining walls supporting terraces upon which ramps were built to the deck bridge are still present. The wooden bridge to the furnace is gone, and the present erosional creek/"run wild" head race runs through where it would have been. This drainage suggests the path that the original head race followed to the wheel and furnace. A built drain is also present, suggesting the location of the beginning of the tail race. A dirt slope is built up north of the furnace site. Concentrations of slag are found just east of the furnace location.

An old road bed connects the area described above to a more northern area about 100 feet further up the mountain. This area contains more modern structures; their relationship to Australia furnace is not known. At this location three structures constructed of brick and mortar, with vertical metal tie rods, are lined up parallel to each other. The structures are thin trapezoids and increase in size down the mountain, creating a relatively even surface across them. These appear to have been some kind of support, perhaps supporting a bridge to a more modern furnace. One structure is situated perpendicular to the line of three structures. A built-up dirt road ramp leads up to the first of the three brick structures. Another attached road includes two additional shorter brick structures.

United States Department of the Interior  
National Park Service  
NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET  
Section 8 Page 8

Australia Furnace  
*name of property*  
Alleghany, Virginia  
*county and State*

## History

The history of Australia Furnace is tied to nearby Lucy Selina Furnace. In 1852 E & B.J. Jordan and Co. stopped using Lucy Selina Furnace (it was rebuilt 1861) in order to concentrate their efforts on construction of a more modern furnace. They finally built Australia Furnace in 1854, on Simpson Creek near Lucy Selina. Australia furnace was larger to accommodate a hot-blast. This steam and water-powered hot-blast charcoal furnace is situated twenty-five miles east of Covington, twelve miles southeast of Clifton Forge, and thirty-six miles north of Buchanan. Brown hematite ore was mined from banks six hundred yards northeast of Australia furnace. Earlier, a narrow gauge railway had connected Lucy Selina Furnace with the mines near Australia. The same ore was later used by the Longdale Iron Co.; in 1907 the mines had the largest output of any in Virginia. The extensive mining operations developed here were called Campbell Fields.

During the Civil War, Australia Furnace supplied the Tredegar Iron Works in Richmond with iron. J. R. Anderson of Tredegar bought the furnace during the Civil War. Operations were hampered because of the difficulty of transporting materials from the furnace to Richmond. Iron was hauled to the junction of the Cow Pasture and James Rivers below Clifton Forge, and carried on barges to Buchanan, where it was transferred to barges for transportation on the James River and Kanawha Canal to Richmond. After Anderson purchased Rebecca Furnace in Botetourt County, Tredegar was further limited because of a shortage of men to operate barges from both Australia and Rebecca Furnaces. In December 1864, Australia Furnace employed 53 negroes, 29 white men, 60 women and children, and 38 animals who together consumed 2113 bushels of corn and 55,632 lbs. of hay a year. Tredegar did not get high yields from Australia due to difficulties in transportation, shortages of men, and poor management; they stopped production and in 1863 put Australia up for sale.

Soon after the Civil War, the Longdale Iron Co. bought the land on which Australia and Lucy Selina Furnaces were located. They removed Australia and established a mining hamlet, but continued to operate Lucy Selina.

## Significance and Integrity

Australia iron furnace is representative of the importance of the iron industry in the Valley of Virginia during the nineteenth century. Australia Furnace was an important part of the iron industry of Virginia. Its activities altered the local landscape through deforestation for charcoal production, and brought money and people into the area. Australia Furnace gained national importance as a key producer of iron for the Confederacy during the Civil War. The mines around Australia Furnace became important to the early twentieth century iron industry in Virginia.

The potential for archeological investigation is significant. Archeological research could provide information about workers' living conditions, ethnicity, and economic background. Transportation of raw materials and finished products could be investigated as well as the relations between the furnace and the Tredegar Iron Works. Australia Furnace would provide information about iron extraction technology, innovation, and change over time.

Although Australia Furnace is no longer standing, it retains structures and features related to iron processing. A high potential exists for intact archeological resources that could contribute information about the nineteenth century Virginia iron industry.





United States Department of the Interior  
National Park Service  
NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Australia Furnace  
*name of property*  
Alleghany, Virginia  
*county and State*

Section 9 Page 9

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**Bibliography**

Bruce, Kathleen

1930 *Virginia Iron Manufacture in the Slave Era*. The Century Company, New York, New York.

Cappon, L. J.

1957 Lucy Selina's Charcoal Era. *American Cavalcade*. Autumn.

Capron, John D.

1955 Australia Furnace. Personal Files of John D. Capron. Typescripts dated March 20, 1955, Oct. 9, 1966, and March 20, 1967. Lynchburg College, Virginia.

Hotchkiss, Jed, editor

1882 *The Virginias*.

Lesley, J. Peter

1866 *The Iron Manufacturers Guide to the Furnaces, Forges and Rolling Mills of the United States*. New York: Wiley.



United States Department of the Interior  
National Park Service  
NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Australia Furnace  
*name of property*  
Alleghany, Virginia  
*county and State*

Section 10 Page 10



**Boundaries**

Australia furnace is located on Simpson Creek in Alleghany County. It is bounded on the east by Simpson Creek, to the north by the limit of the remains of structures on the hill, to the south by a tributary of Simpson Creek, and to the west by Route 60. The boundary includes both the area around the original furnace location, and the more modern structures north of the furnace. Although the relationship of this area to Australia furnace is not known, it appears to be related to either mining or iron processing. The boundary includes all structures and features associated with the historic iron industry that retain integrity and are likely to yield information.



**NPS Form 10-900-a  
(8-86)**

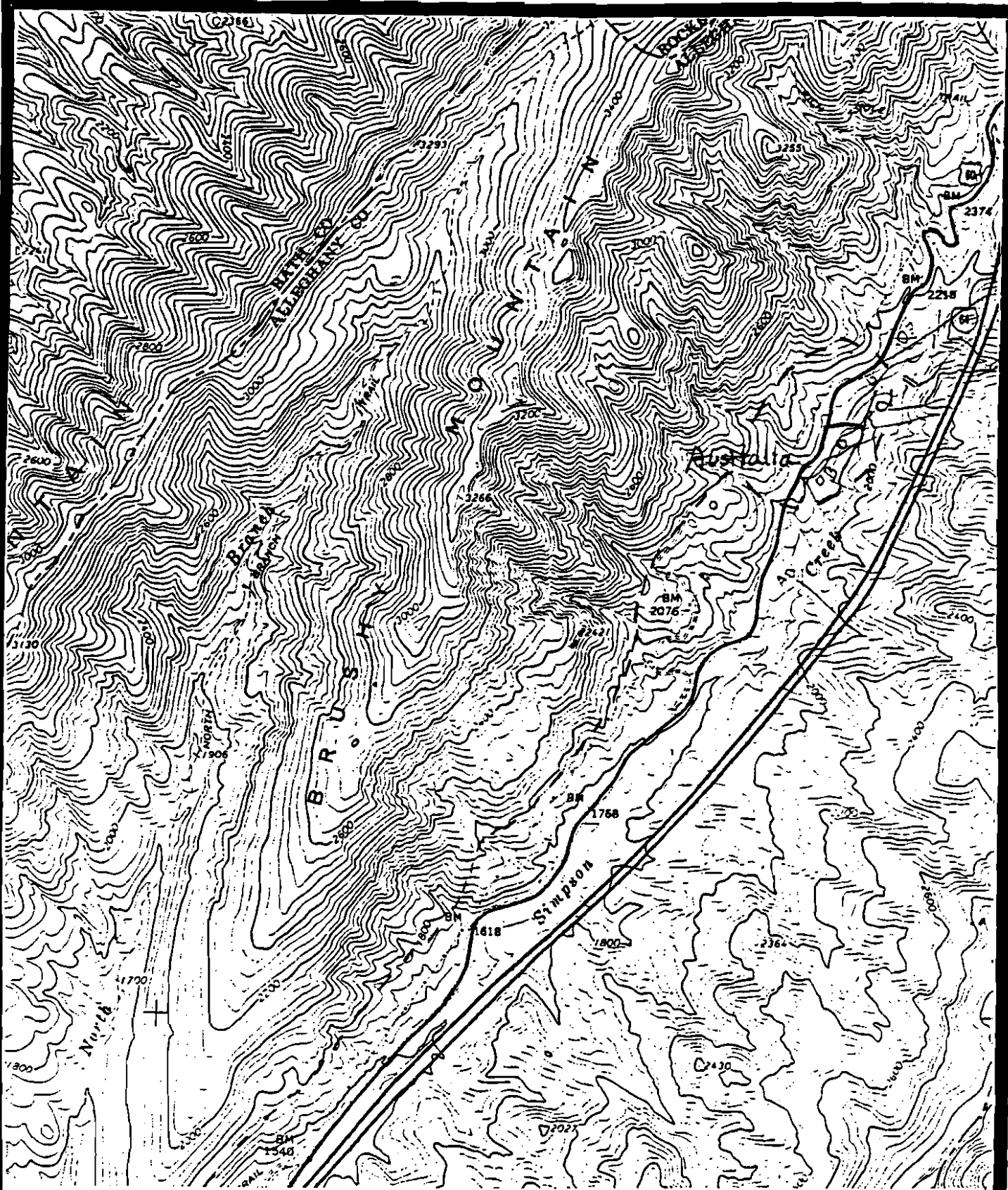
**OMB No. 1024-0018**

**United States Department of the Interior  
National Park Service  
NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET  
Maps Page 1**

**Australla Furnace  
*name of property***

**Alleghany, Virginia  
*county and State***

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AUSTRALIA FURNACE Longdale Furnace, VA Quadrangle, 1969, Photorevised 1984

3-90 Allegheny Co.

LONGDALE FURNACE QUADRANGLE  
VIRGINIA  
7.5 MINUTE SERIES (TOPOGRAPHIC)

8009 1 NE  
(MILLBORO)

617 40'

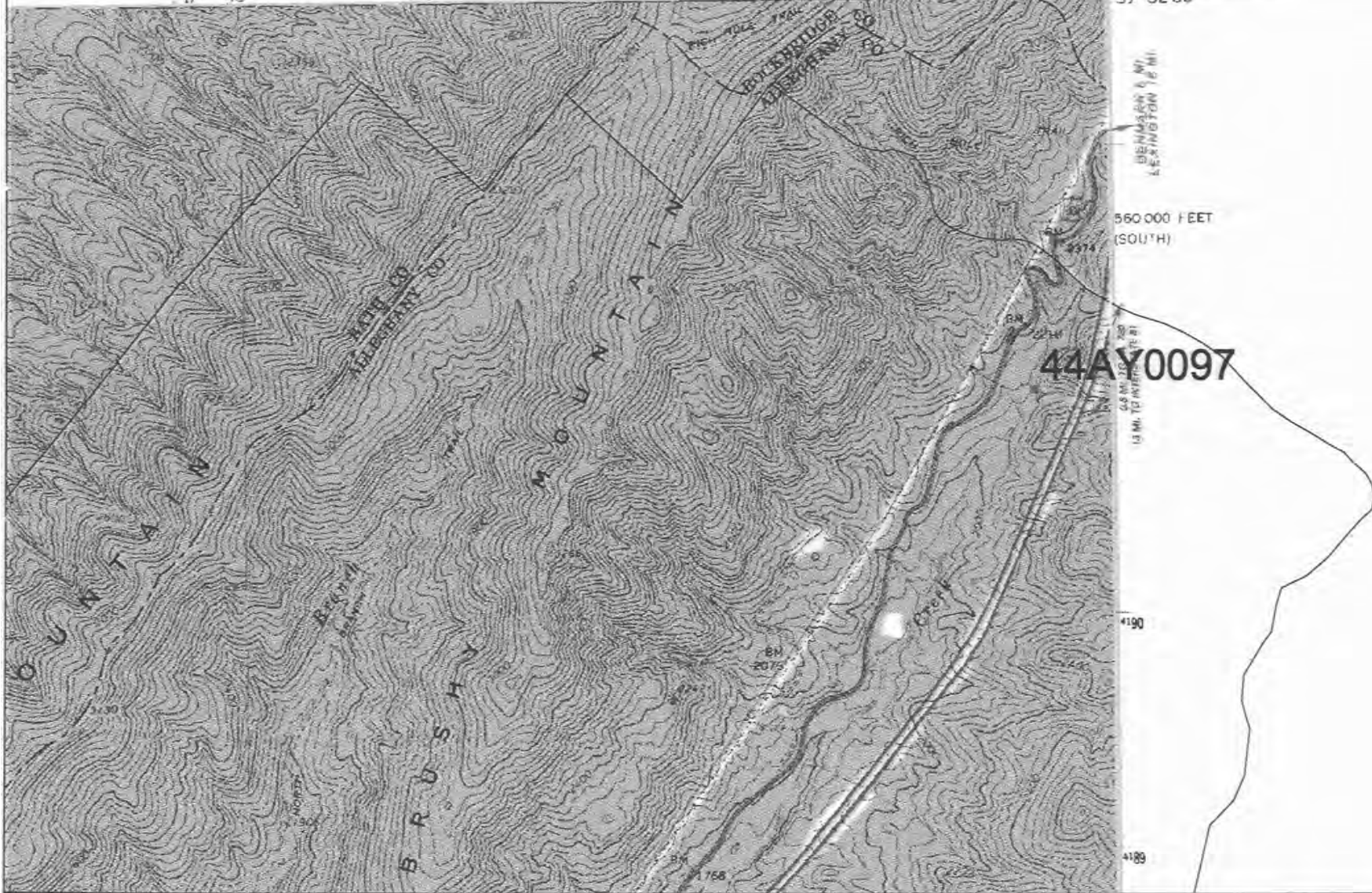
618

619

1 670 000 FEET (SOUTH)

79° 37' 30"

37° 52' 30"



BENJAMIN I. W.  
LEWISTON 16 MI.

560 000 FEET  
(SOUTH)

44AY0097

68 MI. TO  
13 MI. TO

4190

4189

Virginia Department of Historic Resources  
Australia Iron Furnace

252 0 252 504 Meters



1:25186



Map printed 11/17/1999