NPS Form 10-900 (Rev. 10-90)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

OMB No. 1024-0018

NAT. REGISTER OF HISTORIC PLACES NAT. REGISTER OF HISTORIC PLACES

1. Name of Property

VIRGINIA FURNACE

historic name other names/site number Virginia Furnace Muddy Creek Furnace / Josephine Furnace

2. Location

street &	k number	WV State Rt. 26	o, along Muddy Creek		not for publication:	N/A
city or	town A	lbright			vicinity <u>x</u>	
state	West Virginia	code <u>WV</u>	county Preston	code <u>077</u>	zip code <u>26519</u>	

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this x 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 __x_ meets ____ does not meet the National Register Criteria. I recommend that this property be considered significant ____ nationally ____ statewide _x_ locally.

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

Virginia Furnace Name of Property Preston County, WV County, State

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	m A. Beall 7.1.99
other (explain): A Signature of Keeper	Date of Action
5. Classification	2 کا او کر وزیر بورو بورو بورو بورو بو بو والو و بورو و و و و و بورو بورو بورو و و و
Ownership of Property _x private public-local public-State public-Federal	Category of Property building(s) xdistrict site structure object
Number of Resources within Property Contributing 1	

Number of contributing resources previously listed in the National Register:____0_

Name of related multiple property listing: <u>N/A</u>

Virginia Furnace Name of Property

Preston County, WV County, State

6. Function or Use

Historic Functions

INDUSTRY/PROCESSING/EXTRACTION: Manufacturing Facility **Current Functions**

RECREATION & CULTURE: Outdoor Recreation

7. Description

Architectural Classification

Other: Stone Blast Furnace

Materials

foundation	Cut Sandstone
roof	
walls	Cut Sandstone
other	

Narrative Description

(See continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

- <u>x</u> 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.
- <u>x</u> D Property has yielded, or is likely to yield information important in prehistory or history.

Virginia Furnace Name of Property

Preston County, WV County, State

Criteria Considerations

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 Industry Archaeology: Historic

Period of Significance 1854-1880

Significant Dates N/A_

Significant Person N/A

Cultural Affiliation Euro-American

Architect/Builder

Narrative Statement of Significance (See continuation sheets.)

9. Major Bibliographical References

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
- <u>x</u>Other

Name of repository: Institute for the History of Technology and Industrial Archaeology, Morgantown, WV

10. Geographical Data

Acreage of Property 6.37 acres

UTM References

<u>17 617460 4376185</u> Zone Easting Northing Valley Point Quad Map

Verbal Boundary Description

(See continuation sheet.)

Boundary Justification

(See continuation sheet.)

11. Form Prepared	By			<u></u>	<u></u>		
name/title	Lee R. Maddex						
organization		date	10/19/98				
street & number 231	6 Stewartstown Road	telephor	ne <u>(304)599-9</u> 0	013			
city or town Morgar	city or town Morgantown state WV zip code 26508						
Property Owner:	این از میلی می اور این می بادی می از می می این این این می و میشند. این این این میلی وی این می می می می این این می می می می این این این می و می می این این می و می می می می می می						
Name Prest	on County Historical Society	Ł					
Street & number	109 East Washington Stre	et	telephone	<u>(304)789-2316</u>			
City or town <u>Terra</u>	Alta State_WV	zip co	de <u>26764</u>				

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

<u>Virginia Furnace</u>	<u>Preston County, WV</u>		
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Introduction

The Virginia Furnace, or Muddy Creek Furnace, is a cut stone blast furnace. Constructed in 1854, the furnace is located in Preston County on the east bank of Muddy Creek at the Falls of Muddy Creek, approximately 1.5 miles from its confluence with the Cheat River. The furnace is in a rural setting that includes a roadside park. Within the boundary are the Virginia Furnace, a wheel pit, and a salamander; as well as the road side park consisting of two picnic pavilions, a pump pavilion, a stone fireplace, and a pit toilet. Although long abandoned, the Virginia Furnace is in an excellent state of repair and retains a high degree of integrity.

General Description

The Virginia Furnace was a "charcoal" iron furnace used to smelt iron. Built against a hillside, the top of the furnace was charged with alternating layers of iron ore, charcoal and limestone. A wooden bridge connected the furnace to the hillside, while a water powered blowing engine furnished a low pressure air injection or "blast" that was blown into the furnace to produce cast iron. Once smelting started it was a continuous twenty-four hours a day process. Every eight hours or so molten iron was run or "cast" from the bottom of the furnace into a sand bed with voids. The iron filled the voids forming "pigs" that, once cooled, were broken up and hauled to market. An open-sided wooden shed would have likely covered the sand bed or "casting floor" permitting work in all types of weather. Above the furnace there would have been a number of buildings needed for storage, at the minimum a charcoal shed. Today none of these structures except the furnace survive.

Architectural Description

The Virginia Furnace is constructed of cut sandstone. The truncated pyramidal furnace measures approximately thirty-four feet square in plan and rises about thirty feet. On each face are flat corbeled arches. The largest of these openings is on the west elevation with smaller arches on the north and south elevations. Potentially the east elevation also has openings, but alluvial deposits have covered this side over. The west arch functioned as the casting arch where the molten iron was "cast." On the north and south facades are smaller tuyere arches, where piping injected the blast into the furnace. The stones forming the outside edges of the furnace and arches feature a tooled margin, a distinctive feature not usually found on stone blast furnaces. Crowning the furnace are cut capstones. The interior of the furnace, called the "bosh," was lined with firebrick to resist the intense heat required during smelting. It has collapsed, forming a pile of debris. The furnace is a contributing structure.

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Just to the north of the Virginia Furnace is the **wheel pit**. This structure supported the waterwheel which supplied the mechanical energy for the blast machinery. This structure is constructed of cut sandstone and measures approximately ten feet wide by fifty feet long and is about five feet deep. Local tradition holds that a fifty-two foot diameter waterwheel was used at the site, and the size of the wheel pit supports this concept. Water to turn the wheel was diverted from Crab Orchard Run, a run located approximately three-eights of a mile above the furnace, and was probably conveyed in a flume or wooden trough to the wheel. The falling water turned the wheel and exited through a passage constructed in the wall of the wheel pit. Between the wheel pit and the furnace are the foundation remains for the blast machinery. The **blast machinery** supplied the low pressure air blast which was required for the smelting process to work. Although there are no machinery remains, this mechanism probably included tandem blowing tubs. The wheel pit, and the foundations for the blast machinery, are each a contributing structure. Just in front of the casting arch is a **salamander**. A salamander is a mass of iron which collected in the bottom of the furnace and eventually had to be removed.

Roadside Park

In the 1933, the Virginia Furnace was acquired by the Kingwood Chapter of the Daughters of the American Revolution who created a roadside park at the furnace site. The park consists of two picnic pavilions, a pump pavilion, a stone fireplace, and a pit toilet.

Picnic Pavilions 1933 2 noncontributing structures

The two picnic pavilions, upper and lower, are identical. Each is built on a poured concrete pad with six wooden timbers supporting a end gabled roof. King post trusses and brackets provide the structural support for the asphalt shingled roofs. The upper pavilion is built on top of a mound of charcoal that was left after operations were abandoned.

Pump Pavilion 1933 noncontributing structure

Of a similar design, but smaller in scale is the pump pavilion. This structure is built upon a concrete pad with two wooden timbers supporting the end gabled roof. Again king post trusses and brackets support an asphalt shingled roof. This structure is unique to the site as it features a hand powered water pump built into a picnic table.

Fireplace 1933 noncontributing structure

A small stone fireplace is situated near the upper picnic pavilion. It is built of sandstone, similar to that used to build the furnace.

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Pit Toilet unknown date noncontributing building

At the northern end of the roadside park is a pit toilet. This is wood framed building with a end gabled roof. It is clad with vertical siding and has a corrugated metal roof. Statement of Significance

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The Virginia Furnace is significant under Criterion A for the theme of Industry. Built in 1854 by Harrison Hagans, the Virginia Furnace was an important northern West Virginia furnace. It was one of the last furnaces constructed in this region and was the last "charcoal" iron furnace to operate in Preston County. The Virginia Furnace is significant under Criterion D for the potential archeological remains associated with the manufacture of pig iron. The Virginia Furnace's period of significance was 1854 to 1880.

Northern West Virginia Iron Context

The manufacture of iron in what is now the state of West Virginia began in present-day Jefferson County. Vestal's Bloomery, constructed in 1734 near the Shenandoah River, was the first ironworks west of the Blue Ridge Mountains. Three decades later in 1763-64 John Semple erected the Keep Tryst Furnace, the state's first blast furnace along the Potomac River above what is now Harpers Ferry. From these humble origins sprang an extensive charcoal iron industry that spanned the upper counties of West Virginia from the Eastern to Northern Panhandles.

West Virginia's Potomac Highland counties began manufacturing iron in the 1790s but the major center of West Virginia's iron production was along Chestnut Ridge in the north-central part of the state. Along this north-south ridge (stretching from Pennsylvania to Kentucky) were found all the necessary ingredients of iron making-iron ore, timber for charcoal, limestone, and fast flowing streams for waterpower. Constructed in 1789 in Fayette County, Pennsylvania the Alliance Furnace was the first ironworks west of the Alleghenies, and was the first furnace to exploit Chestnut Ridge's natural resources. As Fayette County's iron industry expanded, iron making slowly worked its way southward down Chestnut Ridge into Monongalia, Preston, Marion, Harrison, and Barbour counties in present-day northern West Virginia.¹

Production in Monongalia County began in 1798, when two blast furnaces and a forge began operations. By 1823 there were at least seven blast furnaces and at least three forges in production in northern West Virginia. The region's iron industry continued to grow and by 1850 there were six furnaces in Monongalia County, two in Preston County, three in Marion County, two in Harrison County, and one in Barbour County. Yet by the time of the Civil War, Monongalia, Marion, Harrison, and Barbour county's iron industries had fallen into a general decline from which they would not recover. The depletion of timber and ore reserves, coupled with the region's lack of a well-developed transportation system prohibited the iron industry from capturing larger markets. On the other hand, with the development of a system of interconnecting turnpikes and the early 1850s arrival of the Baltimore and Ohio (B&O) Railroad, Preston County was poised to expand its iron industry.

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Preston County Context

Despite an abundance of natural resources iron production was slow to expand in the county. The Greenville Furnace, Preston County's first iron furnace, was not built until circa 1815. The Old Valley Furnace, completed in 1837, was the second furnace in the county but unfortunately it only operated for a year or two before being abandoned due to its isolated position. The industry languished until the opening of the B&O Railroad in 1853. The B&O Railroad passed through the center of Preston County and had a profound effect on the development of the county's iron industry. Harrison Hagans was the first to recognize the railroad's importance and erected his 1854 Virginia Furnace along a turnpike that connected with the B&O at present-day Terra Alta.

George Hardman, a Wheeling capitalist, began construction of the Franklin Furnace in 1859. Although the Civil War slowed its completion, it was connected to the B&O mainline by a siding still called Hardman's Switch. The furnace was renamed the Irondale Furnace in 1876. Hardman, in the early 1870s erected the last Preston furnace at Gladesville. Located close to each other, the Irondale and Gladeville furnaces had a reciprocal agreement for sharing access to the B&O main stem. Ultimately, the scale-of-economy of the major iron making centers like Pittsburgh that arose in the 1870s may have caused an end to Preston County's post-Civil War iron boom. The Gladeville Furnace was abandoned first in about 1878. The Virginia Furnace was next in 1880. The Irondale Furnace was the last "coke fired furnace" to cease operations, closing in the early 1890s.

The Virginia Furnace

Harrison Hagans (1796-1867), a prominent nineteenth century Preston County merchant, politician, and industrialist, erected the Virginia Furnace. He began his ironmaster career in 1837 when he was elected president of the short-lived Greenville Furnace and Mining Company. After the failure of the Greenville Furnace in 1839, Hagans turned to other pursuits. He eventually established a stove factory at Brandonville, [West] Virginia in about 1847. Hagans' factory produced a ten-plate stove known as the Hagans' Cooking Stove (also the Brandonville Stove). Stove production required a large quantity of cast iron and perhaps Hagans lacked an adequate supply for his factory. More likely though, Hagans recognized that in 1854 the price of pig iron on the open market had skyrocketed from an average of \$22.62 per ton to \$36.12 per ton and iron making was suddenly very profitable.² Whatever his motivations, Hagans decided to build the Virginia Furnace at the Falls of Muddy Creek north of Albright.

In August 1854, Hagans contracted Levi Kennett, a local mason, to build the furnace. Construction began in the fall of 1854 and the Virginia Furnace, as Hagans named it, was completed and in operation late that year or

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early 1855. Kennett's very fine stone work indicates that Hagans intended the Virginia Furnace to be a lasting monument. The finished furnace measured about thirty-four feet square in plan and stood about thirty-six feet tall (a six foot tall extension called a trunnel head once topped the furnace). The cold blast furnace measured eleven feet across the bosh and was powered with a fifty-two foot diameter waterwheel.³ Water for the wheel was diverted from Crab Orchard Run, located about three-eighths of a mile above the furnace and conveyed to the site in a flume or a headrace. Iron ore was mined to the south and west on the Muddy Creek tract and to the north on the Deep Hollow tract, both abutting the Furnace tract. Charcoal for the furnace was reportedly made near present-day Valley Point, about five miles up the Brandonville and Evansville Turnpike from the furnace.⁴

The location of the Virginia Furnace at the Falls of Muddy Creek was carefully chosen. Not only did the falls supply more than adequate waterpower potential for the furnace, but its location was about equidistant between Brandonville and the B&O at Cranberry Summit. Furthermore, the furnace was situated along the Brandonville to Evansville Turnpike that joined the Cranberry Summit Turnpike at Kingwood. The centralized location permitted the hauling of iron to the Brandonville factory or to Cranberry Summit where it could be shipped on the B&O to Wheeling, Baltimore, and other locations along the line.⁵ In the late 1850s, the Virginia Furnace was producing about twenty-five tons of forge grade pig iron per week indicating much of the iron produced was being shipped along the rail line.⁶

Under Hagans' ownership, the Virginia Furnace was said to have flourished with much credit given to furnace manager George Maust. After Hagans died in 1867, the furnace operation began to decline. Since it was cheaper to rent and/or purchase a furnace than to build one, the Virginia Furnace passed to other hands if only temporarily. The first man to operate the furnace following Hagans' death was named Lloyd, who presumably rented the property.⁷ This may have been Dr. J. N. Lloyd, who operated a woolen factory on Muddy Creek. The length of Lloyd's tenure is unknown but it was likely for a short period.

The next known owner was John G. Landon, who purchased the furnace property from the Hagans heirs in January 1874. For the sum of \$12,000 the heirs conveyed to Landon the Virginia Furnace and 366 acres.⁸ The Panic of 1873 ruined many iron masters, a fate which probably befell Landon when he quickly failed to meet the deed's payment schedule. The Preston County sheriff foreclosed and James C. McGrew, Hagans' son-in-law, purchased the furnace property at a public auction in November 1879 for back taxes totaling \$75.80.⁹

As the lingering effects of the Panic of 1873 dispersed late in the decade, once idle furnaces were purchased and returned to production. The same became true for the Virginia Furnace when it was sold to Seely B. Patterson and his wife Amanda in April 1880. For a sum of \$6,000 the Patterson's acquired the furnace property and

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renamed it the Josephine Furnace.¹⁰ It was difficult to achieve prosperity from iron making in the nineteenth century, particularly with an isolated charcoal furnace. The Josephine Furnace failed rapidly, never to operate again. Significantly, the Virginia Furnace was the last "charcoal" iron furnace to cease operating in northern West Virginia.

The property again reverted to James McGrew, who in November 1893 sold the property to Alexander Tait. Tait owned the property until 1902 when it was conveyed to Stephen B. Elkins. From 1902 until 1940, the property was owned by a series of coal companies that eventually became Bethlehem Mines Corporation (today Beth Energy), a subsidiary of Bethlehem Steel Corporation. In the spring of 1933, Bethlehem Mines granted the Kingwood Chapter of the Daughters of the American Revolution (DAR) a long-term lease on the property finally conveying it in fee to the DAR in 1940.¹¹

In June 1933, the DAR established a roadside park at the furnace site. A decline in the Kingwood Chapter membership led to the Virginia Furnace property reverting back to Bethlehem Steel who deeded the property to the Preston County Historical Society, Inc., in July 1997.¹²

Archeological Potential

The Virginia Furnace was a "charcoal-fueled" cold blast iron furnace, used to manufacture pig iron. Because charcoal furnaces of this period were nearly always built against a hillside, there were always specific structures constructed both above and below the furnace to aid in charging the furnace and casting pigs and for raw material storage and preparation.

Above the furnace, these structures included a charging bridge that connected the furnace to the hillside to facilitate charging, a charcoal house for charcoal storage, and an ore roasting and crushing structure. Surrounding the base of the furnace were the casting house, a structure for housing furnace blast machinery, and a wheelhouse to enclose the wheel pit. All of these structures would have existed during the Virginia Furnace's period of operation. In addition, archival research has shown that the furnace complex also included an office, a sawmill, and an unidentified structure across Muddy Creek (Preston County Papers, A&M 956, West Virginia and Regional History Collection).

Since abandoned, the above ground remains of these wooden structures have disappeared, leaving only the furnace. With this in mind, the area above the furnace, where the roadside park exists, and at the base of the furnace, would be prime areas for archeological investigations. Work on the site should reveal: the location and size of the charcoal house; if and where the ore was roasted prior to smelting; the size and configuration of the casting house; data regarding the type of blast machinery employed; evidence of the sand casting floor; and potentially the location of the office. This knowledge would greatly help in determining the technology used and scale of industrial activity

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at the Virginia Furnace site.

The Virginia Furnace was a water powered blast furnace. The physical remains of the wheel pit indicate that a very large waterwheel was once employed (on the order of fifty feet in diameter) at the furnace. An investigation of the site seems to indicate that water was diverted from Crab Orchard Run, a quarter mile above the furnace, and conveyed along the hillside into a small mill pond above the furnace. Thence, it was directed to the waterwheel. Archeological investigations might reveal more precise information about the location and construction of the raceway and how water was conveyed to the furnace. At present there is no known evidence of nearby workers housing, but further testing may reveal foundations.

Nationally only a handful of extant charcoal furnace sites have been excavated. Those furnaces that have been examined, such as the Joanna Furnace in Berks County, Pennsylvania and the Tannehill Furnaces in Tuscaloosa County, Alabama have revealed new knowledge about the technology of iron making. There have been no formal excavations of furnace sites in West Virginia. Such an undertaking would reveal information and insight into local pig iron production at the county level, and information about the history of the industry on a state level.

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Footnotes

- ¹ The c. 1794-96 Peter Tarr Furnace in Hancock County was the first furnace constructed west of the Alleghenies in West Virginia, but has little association with the northern West Virginia iron industry.
- ² Reardon S. Cuppett, "Harrison Hagans and His Times" (Master's Thesis, West Virginia University, 1933), p. 56-59; Historical Statistics of the United States Colonial Times to 1957 (Washington, D.C.: US Department of Commerce, 1957), p. 366.
- ³ Cuppett, "Harrison Hagans," pp. 59-60; Samuel T. Wiley, The History of Preston County (Parson, WV: McClain Printing Company, 1968 reprint), p. 357.

⁴ Interview with Connie Gibson, by Lee Maddex, 18 June 1998.

⁵ Cuppett, "Harrison Hagans," p. 60.

⁶ J.P. Lesley, The Iron Manufacturer's Guide (New York: John Wiley, Publisher, 1859), p. 84.

⁷ Wiley, Preston County, p. 357, 399-400.

⁸ Preston County Deed Book 40, pp. 370-72. Preston County Courthouse, Kingwood, West Virginia.

⁹ Preston County Deed Book 45, p. 259.

¹⁰ Preston County Deed Book 48, p. 29.

¹¹ "Old Furnace Taken Over by DAR," Preston County Journal, 22 June 1933, p. 1; Preston County Deed Book 76, p. 283; Preston County Deed Book 98, p. 29; Preston County Deed Book 209, p. 187.

¹² "Old Virginia Furnace, " p. 4; Preston County Deed Book 598, p. 410.

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Cuppett, Readon S. "Harrison Hagans and His Times." Masters Thesis, West Virginia University, 1933.

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Historical Statistics of the United States: Colonial Times to 1957. Washington, DC: United States Department of Commerce, 1957.

Moreland, James. The Cheat Mountain Iron Industry. Morgantown, WV: Monongalia Historical Society, 1992.

- Lesley, J. P. The Iron Manufacturer's Guide. New York: John Wiley, Publisher, 1859.
- "Old Virginia Furnace Taken Over by DAR," Preston County Journal, 22 June 1933.
- Pierce, Carleton C. "Harrison Hagans--Early Industrial Attempts in Northern Preston," *The West Virginia Review* May (1930): 238-39.

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Verbal Boundary Description

Beginning at a stump standing South seven degrees fifty-eight minutes West (S. 7º 58' W.) seven hundred forty-five and sixty-six hundredths (645.66) feet from the corner of the original McGrew Tract (point in Muddy Creek, opposite the Mouth of Crab Orchard Run), said beginning corner stands on the edge of the West Virginia State Highway, Route No. 26, right of way, and running with the West side of the highway right of way. South eleven degrees fifty-five minutes West (S. 11° 55' W.) two hundred thirty and fifty-one hundredths (230.51) feet, South nine degrees twenty-two minutes West (S. 9° 22' W) two hundred two and seventy hundredths (202.70) feet, South seven degrees thirty-six minutes West (S. 7° 36' W.) one hundred five and eighty-two hundredths (105.82) feet, South no degrees fifty-eight minutes West (S. 0° 58' W.) two hundred thirty-six and fourteen hundredths (236.14) feet, South four degrees eight minutes West (S. 4° 08' W.) sixty and forty-eight hundredths (60.48) feet, thence crossing said highway North eighty-six degrees thirty minutes East (N. 86° 30' E.) one hundred ninety-eight (198.00) feet to a stone, thence South fourteen degrees thirty-two minutes West (S. 14° 32' W.) six hundred seventysix and sixty-eight hundredths (676.68) feet to a stake and Birch Pointers, thence South eighty-six degrees thirty minutes West (S. 86° 30' W.) three hundred seventy (370.00) feet crossing said highway to a point in the center of Muddy Creek, thence up and with the center of Muddy Creek, North sixteen degrees nineteen minutes East (N. 16° 19' E.) one hundred sixty-six and fifty-six hundredths (166.56) feet, North twenty-seven degrees forty-three minutes East (N. 27° 43' E.) one hundred eighteen and sixty-nine hundredths (118.69) feet, North five degrees nine minutes East (N. 5° 09' E.) one hundred twenty-two and forty-nine hundredths (122.49) feet, North eight degrees seventeen minutes East (N. 8° 17' E.) two hundred ninety eight and twenty-two hundredths (298.22) feet, North one degree fourteen minutes East (N. 1º 14' E.) three hundred and twenty-four and ninety-six hundredths (324.96) feet, North twenty-two degrees eighteen minutes East (N. 22° 18' E.) two hundred thirty-eight and thirty-seven hundredths (238.37) feet, thence leaving Muddy Creek, South seventy-six degrees no minutes East (s. 76° 00' E.) sixty-two (62.00) feet to the place of beginning, Containing six and thirty-seven hundredths (6.37) acres more or less.

Boundary Justification

The nominated property boundary is defined by the parcel as described in Preston County Deed Book 598, page 410. This boundary includes all of the historic resources associated with the Virginia Furnace and those associated with the roadside park.

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Name Address	Virginia Furnace Off SR 26, along Muc Albright Vicinity Preston County, WV	ldy Creek			
Photographer	r Lee Maddex				
Date	January 1997				
Negatives	Lee Maddex				
Photo 1	View of South Elevation sh Camera looking North	nowing Tuyane	Arch with Falls of Mu	ddy Creek in Background	
Photo 2 1	North and West Elevations; Camera looking Southeast	showing Tuya	e Arch (left) and Wor	k Arch (right)	
Photo 3 I	Detail of Work Arch, Came	ra looking East			
Photo 4 I	Detail of tooled edge, Camera looking Northeast				
Photo 5	Wheel pit, Camera looking Northeast				
Photo 6	Salamander				
Photo 7 U	Upper picnic pavilion, Camera looking North				
Photo 8 I	Pump Pavilion, Camera loo	king Northwest			
Photo 9	Stone Fireplace, Camera loc	oking East			
Photo 10 I	Pit Toilet, Camera looking 1	North			



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VIRGINIA FURNACE SITE MAP PILESTON COUNTY, W No SCALE