

United States Department of the Interior  
National Park Service

# National Register of Historic Places Continuation Sheet

Section number \_\_\_\_\_ Page \_\_\_\_\_

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### SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 88000613

Date Listed: 5/23/88

Cresswell, George, Furnace  
Property Name

Washington  
County

MO  
State

Multiple Name \_\_\_\_\_

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This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Beth Beland  
Signature of the Keeper

7/19/88  
Date of Action

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#### Amended Items in Nomination:

Add engineering as an area of significance, under criterion C

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#### DISTRIBUTION:

- National Register property file
- Nominating Authority (without nomination attachment)

United States Department of the Interior  
National Park Service

# National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

### 1. Name of Property

historic name George Cresswell Furnace  
other names/site number George Cresswell Furnace Stack

### 2. Location

street & number Nine miles northwest of Potosi on State Highway F  not for publication  
city, town Potosi  vicinity  
state Missouri code MO county Washington code 221 zip code 63664

### 3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
<input checked="" type="checkbox"/> private	<input type="checkbox"/> building(s)		<u>1</u> buildings
<input type="checkbox"/> public-local	<input type="checkbox"/> district	<u>1</u>	<u>1</u> sites
<input type="checkbox"/> public-State	<input type="checkbox"/> site		<u>1</u> structures
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	<u>2</u>	<u>1</u> objects
	<input type="checkbox"/> object		<u>1</u> Total

Name of related multiple property listing: N/A  
Number of contributing resources previously listed in the National Register 0

### 4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, 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.  See continuation sheet.

Frederick A. Brunner  
Signature of certifying official Frederick A. Brunner, Ph.D., P.E., Director Date 3/19/88  
Department of Natural Resources and State Historic Preservation Officer  
State or Federal agency and bureau

In my opinion, the property  meets  does not meet the National Register criteria.  See continuation sheet.

\_\_\_\_\_  
Signature of commenting or other official Date \_\_\_\_\_  
\_\_\_\_\_  
State or Federal agency and bureau

### 5. 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 the Keeper

Date of Action

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**6. Function or Use**

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Historic Functions (enter categories from instructions)

PROCESSING/processing site/lead furnace

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Current Functions (enter categories from instructions)

not in use

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**7. Description**

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Architectural Classification

(enter categories from instructions)

Other: American "Scotch hearth" furnace

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Materials (enter categories from instructions)

foundation stonewalls stone

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roof other 

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Describe present and historic physical appearance.

The George Cresswell Furnace Stack is located on a site adjacent to the banks of the Mineral Fork River in rural Washington County, Missouri. The structure is a vertical chimney-like stack used as the main portion of a "scotch hearth" blast furnace. The open hearth furnace is constructed of massive limestone blocks interlaced with mortar. At its base the stack covers approximately 100 square feet. The lower eight feet of the stack features an open hearth area (approximately 4' x 10' and oriented eastward) which originally housed the smelting operations of the furnace. The stack rises to a height of approximately 25 feet and tapers to a square shaped stack at the top. The stack remains substantially unaltered from its period of historic significance, remains stable and is protected from degradation by the current owners. This unique artifact of early industry reflects the important role lead mining played in the commerce of Missouri. By retaining its integrity in location, setting, design and workmanship the stack and site surrounding it objectively convey the beginnings of frontier industry that set the base for Missouri's role as the nation's leading lead supplier.

The main feature of the property is the massive furnace stack set adjacent to the Mineral Fork River. The associated site surrounding the furnace extends around the stack to include a dry laid stone wall which abuts the steeply sloped bank of the river (see site map). A lone stone pylon lies on the slope adjacent to this retaining wall.

A historic photograph (made between c. 1880-1900; date estimate based on external sources) shows the stack and furnace housed in a rectangular weatherboard structure of approximately 1200 square feet. The pylon served to anchor the southeast corner of this structure on the steeply sloped bank of the Mineral Fork River. The structure surrounding the furnace stack has long

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deteriorated and been removed. A picture from c. 1930 shows no evidence of the structure.

The stack stands on the west bank of the Mineral Fork River. The main portion of the modern Cresswell property (containing historically related properties) encompasses a 20-acre tract along this bank of the river. In historical time the property provided a prime mill seat and location for the furnace operation. It was also the location of the Cresswell's store, blacksmith shop, residence and slave cabins. The surrounding hill slopes once featured surface and near-surface deposits of the galena which could be smelted for lead during the Cresswells processing operations (c. 1840-1900). The mill seat was located on the first terrace lying above the stream course.

The hand excavated millrace was conveniently constructed along the low lying spur of land jutting into the course of the Mineral Fork. The location of the mill seat is still observable on the lower reaches of the first stream terrace, approximately 50 meters south of the furnace stack location. A 36' diameter mill stone lies embedded in what appears to have been a rectangular rock foundation for the mill. A remnant of the mill race is nearby and is cut into the current stream bank immediately southwest of the mill seat. The original mill, constructed in 1850, was an important component in the local economy. A report by A. Litton on the geological activity within the region reported the mill provided power for the furnace bellows in 1854 (Litton 60). The mill operated up until its destruction by fire in 1903.

It is difficult to ascertain the dimensions of the original mill due to the heavy impact erosion has had on the site. Similarly, it is difficult to trace the course of the mill race beyond 20 meters west of this site locality due to erosion, road construction and landscaping around the modern Cresswell property. In the area proximate to the mill site the potential for sub-surface historic archaeological deposits has not been fully assessed. Excavation of the mill site could, however, clear up many of the questions regarding the exact location of the mill. In addition, the light distribution of artifacts (including ceramics and glass) found adjacent to the site surface component suggest at least some test excavation of the site is merited. The lack of written documentation on these rural sites is acute in this region.

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Systematic historic survey for cultural resources in the region has not revealed any other furnace site retaining a comparable amount of integrity (Missouri State Cultural Resource Inventory). Certainly the preservation of the site's setting, the maintenance of the characteristics of the stack's mode of construction, materials and workmanship and the retention of the site's ability to convey its historic associations are prominent factors in its nomination. Integrity of the site has been affected by the construction of a small corrugated metal shed on the north side of the structure (see photograph #1); happily this small structure is not fixed to the outer stone wall of the north side and only "leans" on it. The interior of the stack has not been altered although the cast iron hearth has long since disappeared (see photograph #2). The owner does still possess the original "pig molds" of the furnace. The housing that originally surrounded the structure, a wood weatherboard canopy-like structure, has long since deteriorated and been salvaged. This does not seriously compromise the stack's ability to evoke the feeling that the site was an important locale in the development of industry. Few, if any, 19th century furnaces not in production for over 80 years would be expected to retain such impermanent features and none discovered thus far have. On balance the Cresswell Furnace Stack possesses sufficient integrity to be included on the National Register as an important reflection of the development of Missouri industry.

Although not included in the nomination, several buildings historically related to the Cresswell property lie adjacent to the stack. Approximately 150 meters northwest of the furnace stack lies the Cresswell house (photograph #4). The back portion of this house is actually the original historic home (built in 1834) of the furnace operator George Cresswell. Substantial additions and refurbishing (c. 1880 and, more dramatically, 1965) have radically altered the interior and exterior of this house. Although some elements of integrity are retained (i.e., location, most of the materials) the house cannot be included in the nomination. The extensive refurbishing undertaken in 1965 removed the 1880s Victorian style porch and replaced it with a two-story porch supported by columns. In addition, a large incompatible addition to the house's rear cooking area was added to reconfigure the interior space and add a fireplace. Near the house an enclosed well house has been constructed over the site of Cresswell's original rock-lined well. A "dog-trot" cabin and smoke-house have been reconstructed on the site. All of these structures are the results of Dr. George Cresswell's renovations beginning in the mid-1960s.

**8. Statement of Significance**

Certifying official has considered the significance of this property in relation to other properties:

nationally     statewide     locally

Applicable National Register Criteria     A     B     C     D

Criteria Considerations (Exceptions)     A     B     C     D     E     F     G

Areas of Significance (enter categories from instructions)  
Industry

Period of Significance  
c. 1840-1900

Significant Dates  
c. 1840

Cultural Affiliation  
n/a

Significant Person  
n/a

Architect/Builder  
n/a

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The George Cresswell Furnace Stack is a structure significant for its association with the development of the minerals industry of the Meramec River region and because it embodies distinctive characteristics of a type of lead furnace. In operation from approximately 1840 until the turn of the century the furnace was used to smelt lead ore garnered from the rich surface and near-surface lead deposits found in the area. The furnace is a representative property type for the early American development of the mineral resources of the area. It is also representative of the persistent practice of small scale lead smelting well into the period of major industrial production of lead statewide. In retaining a substantial amount of its integrity and having the ability to convey its historic associations the Cresswell Furnace is a justifiable addition to the National Register of Historic Places under criteria A and C and within industry as an area of significance.

Industry

The George Cresswell Furnace Stack is associated with the development of regional historic mineral exploitation and displays distinctive characteristics of construction which make it a representative type of the American "scotch hearth" furnace.

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George Cresswell Furnace

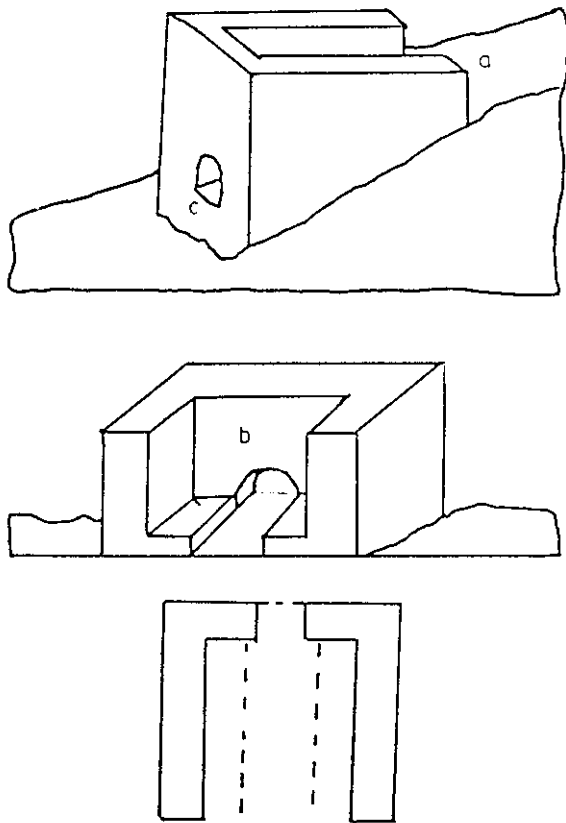
Section number 8 Page 1Historic Background

As early as the first quarter of the eighteenth century French explorers and entrepreneurs attempted to realize financial gain from the smelting of lead and iron ores in the "Illinois" country that generally extended across both sides of the Mississippi (Ingalls 28). By 1720, when Missouri was considered a part of Louisiana, Philip Francis Renault in his position of director-general of a subsidiary of the French chartered Company of the Indies had large parties departing from Kaskaskia on the Illinois side of the Mississippi into Missouri. Renault hoped to tap the mineral wealth of the area and did manage to establish the systematic exploitation of the shallow lead deposits in the Meramec River basin (Johnson 71).

Smelting of the lead ore during this period was conducted by simply mixing the ore with logs and burning the lead out of the rocks or using crude log furnaces like that depicted in figure 1 (Gibson 15; Ingalls 96; Johnson 80-81). In these early furnaces a number of oak logs were rolled into the furnace transversely with other split logs set vertically within the walls. Sufficient room was allowed to remain in the furnace to allow the piling of a couple of tons of ore inside, generally about 5000 pounds of material. This ore was then covered with logs and the fire started. The roast-reaction process was very primitive and the lead ore yielded at best 50% lead per ton of ore. The reaction period for this smelting normally extended between 12-24 hours. Production of lead was heavily dependent on the skill of the smelter.

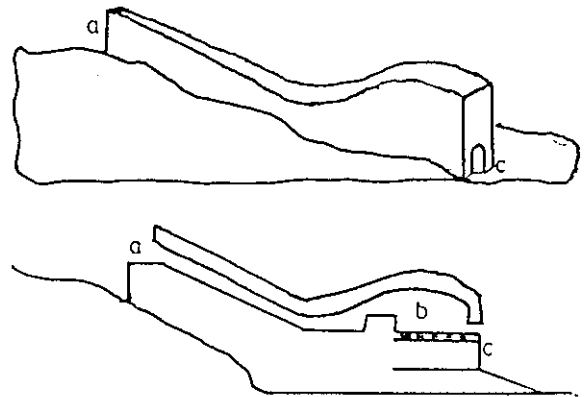
There was no substantial change in the exploitation of the region's lead deposits from Renault's operations up until the time of the Louisiana Purchase in 1803. Renault had kept his dream of greater wealth going until 1742. From this time onward the area lead production was limited to the small scale production of the French-American inhabitants of the region. By the 1790s, by which time Spain had acquired Louisiana from France, Anglo-Americans drawn by the promise the region held for hunting/trapping, farming and mineral works, began to occupy the region. Spanish officials made liberal grants to the Americans and required minimal conformity to Spain's laws. One beneficiary of the liberal Spanish concessions was Moses Austin, a Virginian. Austin arrived in 1797 and began a cooperative venture with the Spanish authorities to aid in the dissemination of information on mining technology and construction of

FIGURE 1



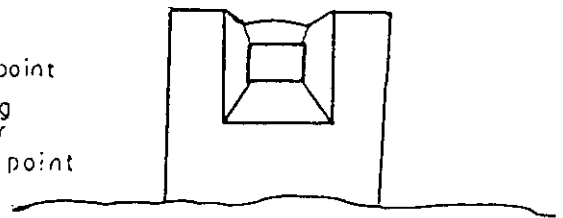
LOG FURNACE

FIGURE 2



ASH FURNACE

- a input point
- b smelting chamber
- c output point



after Schoolcraft 1819



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reverberatory furnaces (Gibson 16). On a square league of land granted him by the Spanish, Austin erected a furnace and associated works. Austin introduced what was called the "ash furnace", a thoroughly more efficient furnace than its predecessors. The log furnaces used in the region were incapable of reducing coarse ores which left much of their lead content within the ashes of the log pile used to fire the ore. Austin crushed these ashes moderately fine and placed them into an ash furnace (like that pictured in figure 2) where they could be refired and up to 15% more lead extracted. The ash furnace was a crude reverberatory wherein heat is radiated from the roof of the furnace structure unto the material treated. By the time Austin began his operation, 20 log furnaces were in operation near his complex adjacent to Potosi. His efficient furnace played a major role in reducing the number of log furnaces to only 2 by 1802 (Ingalls 97).

The old log and ash furnaces continued to be used throughout the first third of the nineteenth century. By 1836 a new kind of furnace was making its presence known, the American style "scotch hearth" furnace. This furnace type, having its early progenitors in England, was introduced into the region by Major Manning of Webster in Washington County (Ingalls 38, 106; Thompson 84) although crude progenitors might have antedated this development (Thompson 84).

The scotch hearth furnace centerpiece was a rectangular box, several feet square, originally with a back and sides of stone, but later generally of less corrosive cast iron. The upper portion of the front wall of the rectangular box sloped downward. This sloping wall, commonly called the apron, was fitted with a diagonal groove that led to the melting pot outside the furnace box. A blast pipe entered the lower portion of the rear of the box to force air into the furnace, commonly this blast of air was provided by a water powered set of bellows. Chimneys were constructed over the furnace to insure a powerful draft of air and to help vent the fumes produced in smelting. The mineral, sorted, cleaned of debris and crushed to small chunks, was placed into the furnace and mingled with the fuel, generally wood or charcoal. This was lighted, the blast turned on and a steady heat maintained. The molten lead flowed from the box down the hearth groove to the melting pot from where it was ladled into pig molds. A blast period was maintained by adding additional ore to the furnace while in blast; the melted lead from the ore, sitting in the rectangular box, helped to smelt the newer material as it was added. When the blast period was

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completed the residue that gathered in the furnace box bottom was drawn out to be placed on the new charge of fuel material and ore, and the process was initiated again. Figure 3 depicts a later (i.e., late 19th century version; see Ingalls 63-4, 107) scotch hearth furnace, but the basic configuration was the same as the early types. Although the scotch hearth type of furnace did not overwhelm the other kinds of furnaces (Ingalls 106) it did become a widespread type in the lead regions of the Mississippi Valley. Until the advent of large scale lead production after the Civil War the scotch hearth played a major role in Missouri lead production. Its use spread from the Meramec region into the newly developing Tri-State Mineral region in southwest Missouri during the subsequent decades (Gibson 24,119).

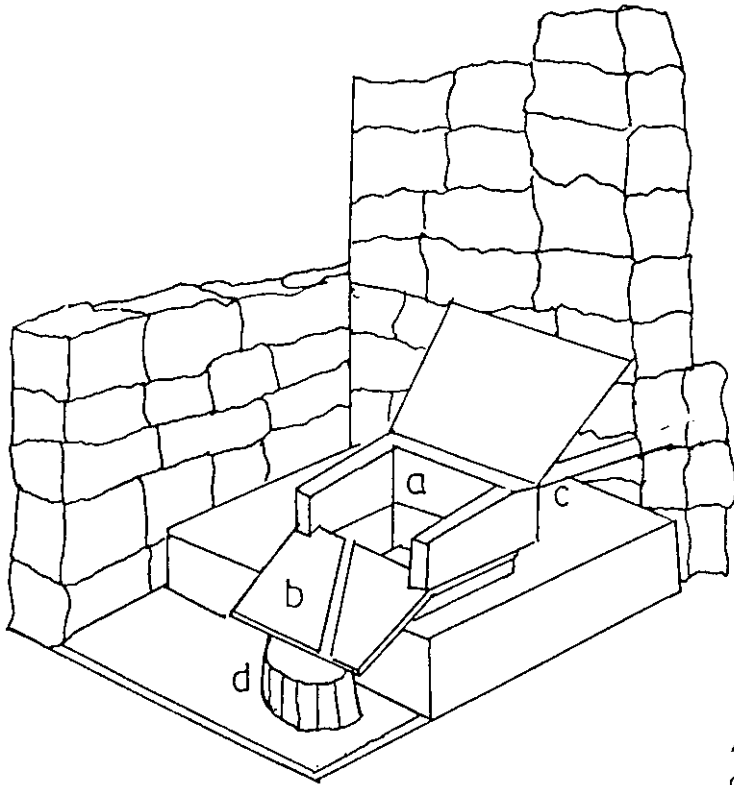
George Cresswell Furnace Stack

The operator of the George Cresswell Furnace Stack was George Cresswell. Cresswell came to America with his wife Hannah in 1821. Cresswell and his wife resided for a short time in Pittsburgh before emigrating to Missouri between 1823-4. Family tradition relates they disembarked from Ste. Genevieve and walked, carrying their possessions on their back, to Washington County (Halleck 1). The Cresswells reputedly maintained themselves by trading among the area inhabitants. By 1828, Cresswell had become sufficiently well established to begin smelting lead in a small operation along the Fourche-a-Renault (Litton 60; Thompson 74). He later moved to Cold Springs Hollow where he continued his smelting operation (Litton 60; Thompson 84).

In 1834, Cresswell acquired 40 acres of land along the present Mineral Fork River from Etenna and Louisa Lamarque. This purchase was the start of the Cresswell property. The site purchased by Cresswell must have been extremely appealing. The site contained a prime mill seat upon which he later constructed his mill; there was also an abundance of lead in the area and the site lay on relatively level land abutting a major stream course. For some time roads had existed in the area, the earliest, scarcely more than commonly used trails from French occupation; but nonetheless, the potential of transporting smelted lead existed.

Cresswell built himself and his growing family a home on the property in 1834. He began to farm, continued to sell merchandise and opened a blacksmith shop

FIGURE 3



AMERICAN  
SCOTCH HEARTH  
FURNACE

- a box
- b apron
- c blast pipe
- d melting pot

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adjacent to the house (Graff). In 1837, Cresswell was in correspondence with John Shensley of Iowa. The Iowa-Illinois-Wisconsin lead belt was beginning to be exploited during this period, much in the same fashion as the Missouri lead region. Shensley, a Dubuque resident, had apparently been contracted by Cresswell to superintend the building of one segment of a blast furnace. Scheduling conflicts led Shensley to ask Cresswell to remove him from his obligation and allow one "Robert Hanson", a man evidently in the Missouri mines region, to take his place. Shensley reported that the patterns necessary for the mold castings had been prepared and he was willing to change them to conform to "Hanson's" needs if necessary. This seemingly unimportant bit of information establishes that Cresswell was at least considering erecting some larger smelting operation in the later 1830s. Considering the nature of the hearth constructed by Cresswell later, it can be suggested the castings were for an interior "smelter box" making up an American style "scotch hearth" furnace. Unfortunately, no other correspondence in the family collections addresses this issue. Family tradition maintains that Cresswell did in fact begin operating the scotch hearth furnace on his property in 1840, though a local lead mining company periodical places the date at 1838 (St. Joe 13). The Cresswell family tradition is lent more credence by A. Litton's Missouri geological survey report on mineral activities in the area (Litton 60). In a report published in 1854, Litton records Cresswell's furnace in operation and producing 292,570 pounds of lead in 1841. A privately funded Cresswell family history states the lead furnace began operations in August of 1840. Cresswell is reported to have sustained this level of production through the next nine years (Litton 60-1). Production dipped in the next three years for unknown reasons.

Litton's 1854 report and furnace record books show Cresswell received a great deal of his ore from area miners. Most would convey the raw ore to the smelter where its estimated weight was computed. The resultant lead extracted from the ore would be molded into "pigs" or elongated rectangular bars of lead. These pigs would then be hauled to Plattin Rock or Selma Landing on the Mississippi River along a road that had for some time existed along an old French trace into the Mineral Fork region (Eschback 81). In Selma the ore would be stored by the firm of Theodore Foster & Company (and, later Chadbourne & Foster) for sale and transshipment to the manufacturing firms of the upper Ohio River Valley. The relationship between this commercial merchant firm and Cresswell was maintained throughout his life. The majority of his commercial accounts

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were kept by this firm. In return for his lead profits the firm supplied him with materials for his smelting operation and store operated out of his house. Even after the construction of the St. Louis-Iron Mountain Railroad in 1858 (allowing transshipment by rail via Cadet) Cresswell maintained his close relationship with this firm though other St. Louis specialty stores were purchased from as well.

The lead smelting industry in the years before the Civil War was firmly established in the region. A geologic survey conducted in the region in 1858 recorded 14 Washington County furnaces among the state's total of 34 (Ingalls 110). Of these furnaces were 16 scotch hearths, 1 log and 11 unclassified; obviously the scotch hearth was seen as a profitable type and more or less the standard for smelting. Although the Civil War had an inhibiting effect on the lead industry a post-war boom, precipitated by deep shaft mining, better smelting techniques and railroad expansion dramatically changed the nature of the mining industry. This post-war period initiated what geographer Hugh Johnson called the "Large scale mining stage" featuring shaft house, concentrators, chat piles, shaft mines and newer reverberatory furnaces replacing the scotch hearths (163). The shadow of these large scale mining complexes loomed large over the smaller firms, competition was marked and those capable of production on a massive scale dominated the scene. This did not mean that small operators immediately disappeared, many continued to produce lead up to the end of the century. The George Cresswell Furnace Stack continued to operate in close proximity to one of the largest firms, the St. Joseph Lead Company (est. 1864); an obvious indication that some profit could still be garnered by operation of a family owned concern. J. F. Kemp reported in the Missouri School of Mines Quarterly that farmers throughout the region could mine and smelt lead profitably so long as the price of lead remained above five cents per pound; the advent of large scale mining and massive production dropped the price below this level and Kemp reports the farmers had necessarily given up by the late 1880s (Kemp 74).

The production account book for the George Cresswell Furnace Stack shows smelting continued up to 1875. In 1871, George Cresswell died and operation of the furnace was conducted by his son, Joseph. A lead hauling book dated 1877 is the last documentary evidence of lead mining or smelting activities in the family papers. Family tradition relates the furnace continued in use to the turn of the century.

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The important role this furnace played in the area economy was underscored in the late 1930s when a dramatization of its operation was reenacted by St. Joseph Lead Mining Company employees (St. Joe 13). A film, "Lead Mining in Southeast Missouri" was produced from this authentic dramatization of the operations of the smelter. The significance of this structure is still recognized throughout the area into the modern era, it retains its ability to connote meaning as a reflection of the early mineral development of the region and embodies characteristics of a type of furnace that, up unto this point, have not been commonly found in a state retaining integrity of location, setting, design and workmanship.

**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 # \_\_\_\_\_

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: \_\_\_\_\_

**10. Geographical Data**

Acreage of property less than one acre

UTM References

A 

1	1	5
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6	8	9	6	6	0
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4	2	1	2	3	5	0
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Zone Easting Northing

B 

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Zone Easting Northing

C 

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D 

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See continuation sheet

Verbal Boundary Description

See continuation sheet

Boundary Justification

See continuation sheet

**11. Form Prepared By**

name/title Hugh Davidson, Preservation Planner  
organization DNR, Historic Preservation Program date \_\_\_\_\_  
street & number P. O. Box 176 telephone 314/751-5377  
city or town Jefferson City state Missouri zip code 65102

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Cresswell Family Papers (1823-1979). Joint Collection, Western Historical Manuscript Collection-Rolla - State Historical Society of Missouri Manuscripts.

Eschbach, W. L. and M. C. Drummond. Historic Sites of Jefferson County, Missouri. Hillsboro, MO: Harland Bartholomew and Associates, 1968.

Gibson, A. M. Wilderness Bonanza: The Tri-State District of Missouri, Kansas, and Oklahoma. Norman, OK: U Oklahoma Press, 1972.

Goodspeed Publishing Company. History of Franklin, Jefferson, Washington, Crawford and Gasconade Counties, Missouri. Goodspeed Publishing Co., 1888.

Graff, Mildred Cresswell. "George Cresswell Site." National Register of Historic Places Nomination Draft, 1984.

----, Personal communication, 1987.

Halleck, C.A. "Cresswell Family History." Privately commissioned history of Cresswell family, n.d. In possession of Mrs. M. Graff, present owner of Cresswell property.

Ingalls, W. R. Lead and Zinc in the United States. New York: Hill, 1908.

Johnson, H. N. "Sequent Occupance of the St. Francois Mining Region." Unpublished PhD Dissertation, Washington University, 1950.

Kemp, J. F. "Notes on Smelting in Southeast Missouri." Missouri School of Mines Quarterly 9.3 (April, 1888): 74.

"Old Smelter Resumes Operations for St Joe Movie" St. Joe Safety Magazine (1940): 13. [Copy in Cresswell Family Papers, Joint Collection-Rolla].

Schoolcraft, H. R. A View of the Lead Mines of Missouri. New York: Charles Wiley, 1819.

Swallow, G. C. The First and Second Annual Reports of the Geologic Survey of Missouri. Jefferson City, MO: James Lusk Printing, 1855. [Includes A. Litton's "Preliminary Report of Some of the Principle Mines in Franklin, Jefferson, Washington, St. Francois, and Madison Counties" pp. 9-67.]

Thompson, H.C. Our Lead Belt Heritage. Flat River, MO: Flat River News-Sun Publishing Company, 1955.



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## Verbal boundary description

The Cresswell Furnace stack site is situated within the SE 1/4, NE 1/4, SE 1/4, SE 1/4 of the SW 1/4, Section 5, Township 38 North, Range 2 East, Old Mines 7.5' Quadrangle, Washington County Missouri. From the furnace stack the boundaries for the site extend outward to encompass a 30 meter x 30 meter area (900 square meters in extent). These boundaries are drawn to include the historic furnace stack, support pylon and approximate extent of a wood structure housing the stack during its period of historic significance. Subsurface archeological testing could conceivably yield information that would require these boundaries be amended. For the purposes of this nomination the nomination is limited only to the furnace stack and its immediate environs.

## Verbal boundary justification

The boundaries for the Cresswell Furnace are limited to the area encompassed by the furnace stack and pyramidal stone pylon originally supporting the southeast portion of the weatherboard furnace structure. Although the historic mill site is related to the furnace operations, it lacks integrity and requires an assessment of its potential to yield information be made to determine its eligibility for National Register listing; the latter can only be accomplished by sub-surface archaeological testing. The mill site might possess subsurface components capable of yielding information and should be recognized as being potentially eligible for inclusion to the National Register. The boundaries set for the property exclude all non-eligible properties surrounding the furnace site.

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Photographic labels for George Cresswell Furnace Stack, Potosi vic., Washington County, Missouri.

George Cresswell Furnace Stack  
Potosi vicinity  
Washington County, Missouri  
H. Davidson  
March, 1988  
Negative location: Missouri SHPO  
P. O. Box 176  
Jefferson City, MO 65102  
View of furnace stack looking southeast.  
#1

George Cresswell Furnace Stack  
Potosi vicinity  
Washington County, Missouri  
H. Davidson  
March, 1988  
Negative location: Missouri SHPO  
P. O. Box 176  
Jefferson City, MO 65102  
View of furnace stack interior and stone retaining wall; view is south.  
#2

George Cresswell Furnace Stack  
Potosi vicinity  
Washington County, Missouri  
Katherine Belfield  
1984 (field checked for condition, 1987)  
Negative location: Mrs. Mildred Cresswell Graff  
495 Inca Parkway  
Boulder, Colorado 80303  
View of Cresswell House looking northwest.  
#3

United States Department of the Interior  
National Park Service

National Register of Historic Places  
Continuation Sheet

George Cresswell Furnace

Section number Photos Page 2

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George Cresswell Furnace Stack

Potosi vicinity

Washington County, Missouri

Katherine Belfield

1984 (field checked for condition, 1987)

Negative location: Mrs. Mildred Cresswell Graff

495 Inca Parkway

Boulder, Colorado 80303

View of Cresswell House looking northwest; original house to center and right;  
1880 addition to left.

#4

George Cresswell Furnace Stack

Potosi vicinity

Washington County, Missouri

H. Davidson

March, 1988

Negative location: Missouri SHPO

P. O. Box 176

Jefferson City, MO 65102

Close up of northeast corner of furnace retaining wall.

#5

George Cresswell Furnace Stack

Potosi vicinity

Washington County, Missouri

H. Davidson

March, 1988

Negative location: Missouri SHPO

P. O. Box 176

Jefferson City, MO 65102

Back wall (south elevation) of furnace retaining wall.

#6

