

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL SURVEY OF HISTORIC SITES AND BUILDINGS

1. STATE Minnesota	2. THEME(S). IF ARCHEOLOGICAL SITE, WRITE "ARCH" BEFORE THEME NO. XVII-b Commerce and Industry	4. APPROX. ACREAGE
3. NAME(S) OF SITE Hull-Rust-Mahoning Open Pit Mine		
5. EXACT LOCATION (County, township, roads, etc. If difficult to find, sketch on Supplementary Sheet) Saint Louis County, north of Hibbing, via Third Ave. East.		
6. NAME AND ADDRESS OF PRESENT OWNER (Also administrator if different from owner)		
7. IMPORTANCE AND DESCRIPTION (Describe briefly what makes site important and what remains are extant)		

The Hull-Rust-Mahoning open pit mine of the Mesabi range is the largest iron mine in the world. It was the immense output of this mine, as the chief producer of the Mesabi range, that was to revolutionize the American steel industry, make Minnesota the largest producer of iron ore in the nation, and enable the United States to become the world's largest manufacturer of steel. developed in 1895, the Hull-Rust-Mahoning mine was also among the first of the world's mines to be worked by open pit or strip mining techniques.

While the Mountain Iron Mine was the first to be developed on the Mesabi range, it was far from the largest and most productive mine to be discovered there.<sup>1</sup> That distinction is reserved for the combination of mines known as the Hull-Rust-Mahoning open pit mine near Hibbing. The area of this mine was explored by W. C. Agnew in 1893-94 and operations began in 1895. Unlike the deep iron deposits of the Vermilion range, which had to be mined by underground workings, those of the Mesabi lay near the surface. This circumstance led to the invention of the new technique known as open pit or strip mining. In this latter process the earth above these shallow deposits is removed and then the exposed ore is mined by giant steam shovels which load the excavated ore directly onto railroad cars to be carried to the steel mills. This method was first experimented with at the Biwabik mine on the Mesabi range in 1892-93 and was then immediately adopted at the Hull-Rust-Mahoning mine in 1895.

<sup>1</sup>Mountain Iron Mine was discovered on November 16, 1890, and began producing on October 17, 1892.

(Continued)

8. BIBLIOGRAPHICAL REFERENCES (Give best sources; give location of manuscripts and rare works)
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See page 2.

9. REPORTS AND STUDIES (Mention best reports and studies, as, NPS study, IIABS, etc.)
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None.

10. PHOTOGRAPHS • Photos, No. ATTACHED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	11. CONDITION Original mines	12. PRESENT USE (Museum, farm, etc.) Active iron mine	13. DATE OF VISIT Not visited
14. NAME OF RECORDER (Signature) <i>Charles W. Snell</i> Charles W. Snell	15. TITLE Historian	16. DATE June 1, 1966	

\* DRY MOUNT ON AN 8 X 10 1/2 SHEET OF FAIRLY HEAVY PAPER. IDENTIFY BY VIEW AND NAME OF THE SITE, DATE OF PHOTOGRAPH, AND NAME OF PHOTOGRAPHER. GIVE LOCATION OF NEGATIVE. IF ATTACHED, ENCLOSE IN PROPER NEGATIVE ENVELOPES.

(IF ADDITIONAL SPACE IS NEEDED USE SUPPLEMENTARY SHEET, 10-317c, AND REFER TO ITEM NUMBER)

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SUPPLEMENTARY SHEET

This sheet is to be used for giving additional information or comments, for more space for any item on the regular form, and for recording pertinent data from future studies, visitations, etc. Be brief, but use as many Supplementary Sheets as necessary. When items are continued they should be listed, if possible, in numerical order of the items. All information given should be headed by the item number, its name, and the word (cont'd), as, 6. Description and Importance (cont'd) . . .

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STATE Minnesota	NAME(S) OF SITE Hull-Rust-Mahoning Open Pit Iron Mine
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7. Continued.

From the first shipment of ore in 1892 until 1961, the giant Mesabi range has supplied over two billion gross tons of iron ore for the nation's steel furnaces, or more than one-half of the iron ore mined in the United States during those years. Of this Mesabi output, more than 500,000,000 gross tons--or about a fourth of all ore shipped from this range--have come from the giant Hull-Rust-Mahoning mine.<sup>2</sup>

Present Condition of the Site

The Hull-Rust-Mahoning mine is not one mine but a combination of more than nine open pits operating from what appears to be a single hole in the ground. It has frequently been called "Minnesota's Grand Canyon," because more material has been removed from it than was removed from the Panama Canal in its construction. The mine, which is still active, is now more than 1 1/2 miles wide, 3 miles long, and 534 feet deep. An observation platform is located on the south rim, from which visitors can safely view the operations. The State of Minnesota has also undertaken to interpret the history and operations of the mine.

<sup>1</sup>Comparative figures, 1892-1907, on the output (in tons) of iron ores from the Vermilion and Mesabi ranges in Minnesota:

	<u>Vermilion Mines</u>	<u>Mesabi Mines</u>
1892	1,167,650	4,245 (First Year)
1893	820,621	613,620
1894	948,513	1,793,053
1895	1,077,838	2,781,587
1896	1,088,090	2,882,079
1897	1,278,481	4,275,809
1900	1,675,949	7,809,535
1905	1,578,626	20,156,566
1907	1,792,355	23,792,553

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8. Bibliographical References.

F. P. Wirth, The Discovery and Exploitation of the Minnesota Iron Lands (Cedar Rapids, 1937); June D. Holmquist and Jean A. Brookins, Minnesota's Major Historic Sites, A Guide (St. Paul, 1963), 172; Minnesota, A State Guide (American Guide Series) (New York, 1947), 95-97, 322-324; Frank R. Holmes, ed., Minnesota in Three Centuries (4 vols., Mankato, Minn., 1908), Vol. 4, 375-384; Theodore C. Blegen, Minnesota, A History of the State (St. Paul, 1963), 359-383; Charles E. Van Barneveld, Iron Mining in Minnesota (Minneapolis, 1912), 40-41.