

MESABI IRON COMPANY,
MACNETIC CONCENTRATION PLANT
(Reserve Mining Company Test Plant)
Babbit
St. Louis County
Minnesota

HAER NO. MN-38

HAER
MINN,
69-BAB,
1-

PHOTOGRAPHS AND
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

STATE Minnesota COUNTY St. Louis TOWN OR VICINITY Babbitt

HISTORIC NAME HAER NO.

MESABI IRON COMPANY MAGNETIC CONCENTRATION PLANT MN-38
SECONDARY OR COMMON NAMES

Reserve Mining Company Test Plant
COMPLETE ADDRESS (DESCRIBE LOCATION FOR RURAL AREAS)
SW 1/4 Sec 7 and NW 1/4 Sec 18, T60N R12W

HAER
MINN
69-BAB
1-

DATE OF CONSTRUCTION ENGINEER, BUILDER, OR FABRICATOR
beginning 1920

SIGNIFICANCE (TECHNOLOGICAL AND HISTORICAL, INCLUDE ORIGINAL USE)
This plant began the development of commercial scale taconite processing in Minnesota. This plant used for the first time the magnetic concentration process to convert low-grade taconite into blast furnace feed.

STYLE (IF APPROPRIATE)

MATERIAL OF CONSTRUCTION (INCLUDE STRUCTURAL SYSTEMS)
Heavy structural steel girder framing, roofs and walls covered with corrugated metal, bedrock & concrete foundations, poured concrete slab floors.

SHAPE AND DIMENSIONS (SKETCHED FLOOR PLANS ON SEPARATE PAGES ARE ACCEPTABLE)
complex of 8 significant structures, 7 noncontributing

EXTERIOR FEATURES OF NOTE

conveyor and control houses attached to some buildings exteriors

INTERIOR FEATURES OF NOTE (DESCRIBE MECHANICAL SYSTEMS, MACHINERY OR EQUIPMENT)

Complex divided by function into 3 departments: Coarse crushing, Intermediate crushing; & grinding, magnetic separation, filtering & sintering.

MAJOR ALTERATIONS AND ADDITIONS WITH DATES

Buildings added in the 1950's including the rod mill (to incorporate a new technology that allowed for finer crushing), the quonset garage, 2nd metal silo or conse bin, concentration bins, and the office/lab.

PRESENT CONDITION AND USE

abandoned

OTHER INFORMATION AS APPROPRIATE

Also significant for its association with Prof. Edward Wilson Davis of the Univ. of Minn., the most important developer of the taconite technology. He directed the tests which developed the process installed here. Leader in the field.

SOURCES OF INFORMATION (INCLUDING LISTING ON NATIONAL REGISTER, PROFESSIONAL ENGINEERING SOCIETY LANDMARK DESIGNATIONS, ETC.)

National Register nomination, prepared by Joe Roberts, Historical Research, Inc. Minneapolis, Sept. 1987.

COMPILER, AFFILIATION DATE

C. Lavoie, Historian, HABS/HAER Jan. 1989