

09 1531 1915 1-1-15 101' LEVEL A-34

OLIVER IRON MINING CO.

— MAP OF —

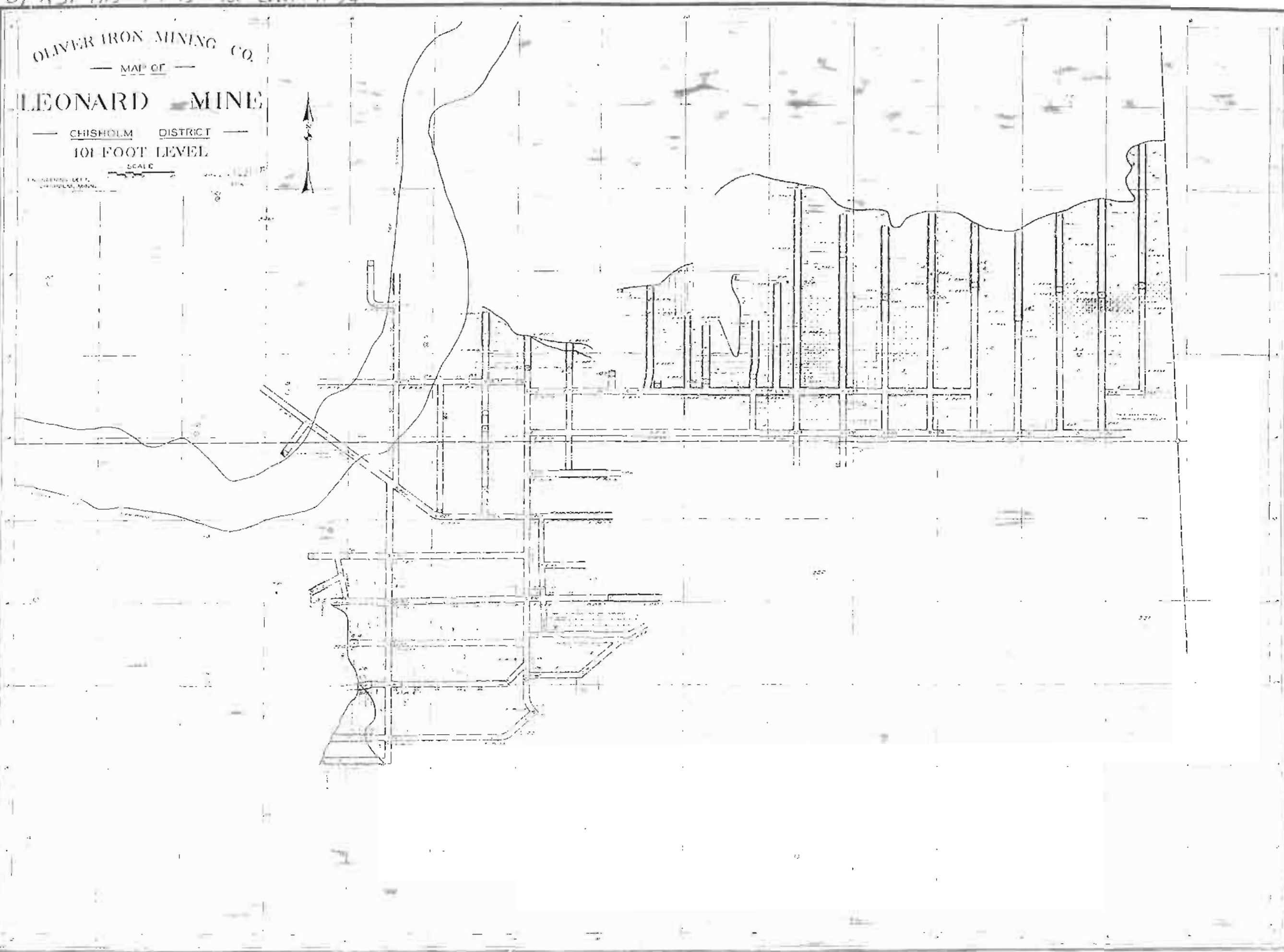
LEONARD MINE

— CHISHOLM DISTRICT —

101 FOOT LEVEL

SCALE

ENGINEERING DEPT.
CHISHOLM, MINN.



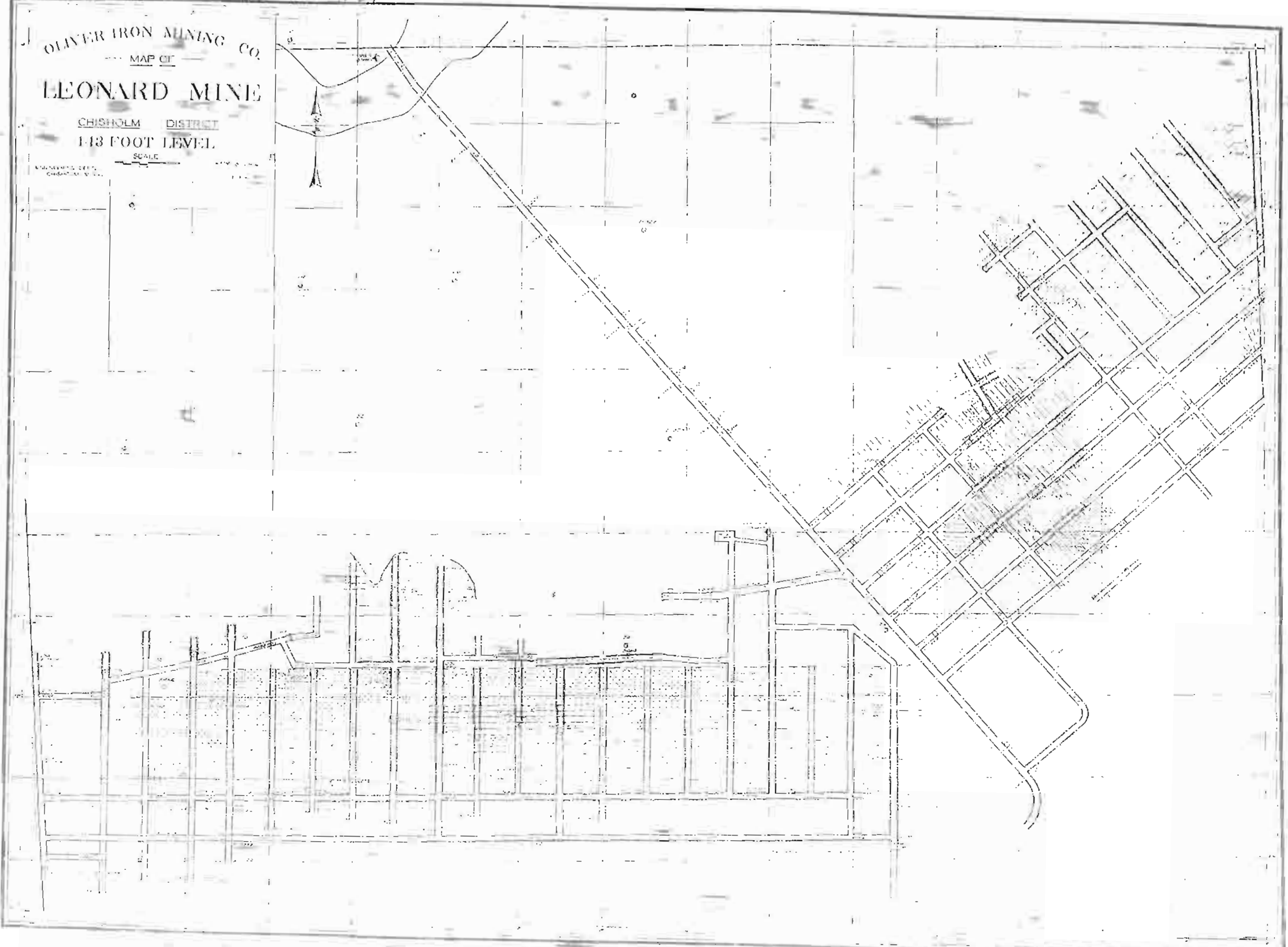
07-1531 1915 1-1-15 143 (level A-36)

OLIVER IRON MINING CO.
MAP OF
LEONARD MINE

CHISHOLM DISTRICT
143 FOOT LEVEL

SCALE

ENGINEER'S DEPT.
CHISHOLM DISTRICT

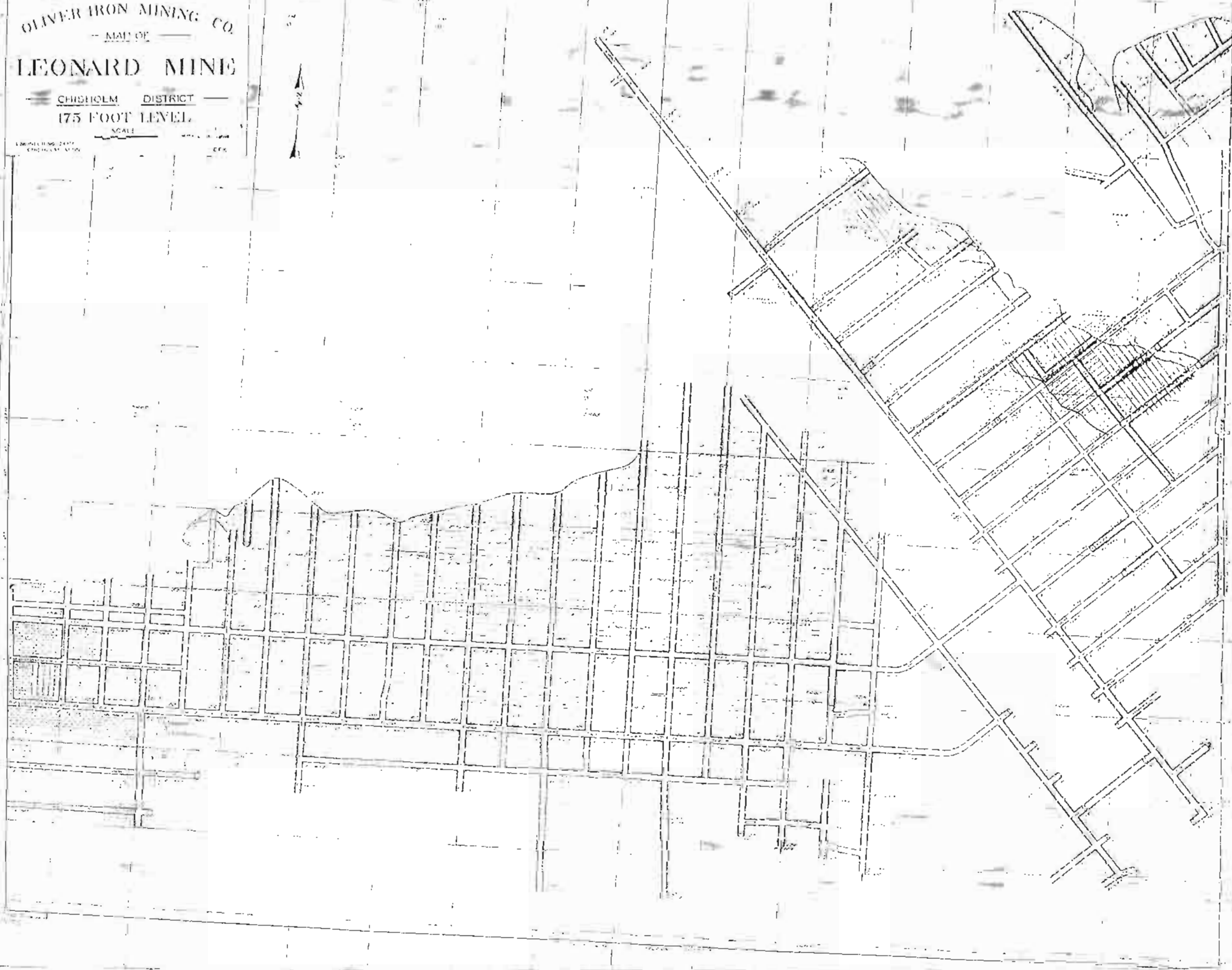


09 15 31 1915 1-1-15 175' Level A-36

OLIVER IRON MINING CO.
— MAP OF —
LEONARD MINE

CHISHOLM DISTRICT
175 FOOT LEVEL

SCALE
1" = 100' HORIZONTAL
1" = 20' VERTICAL



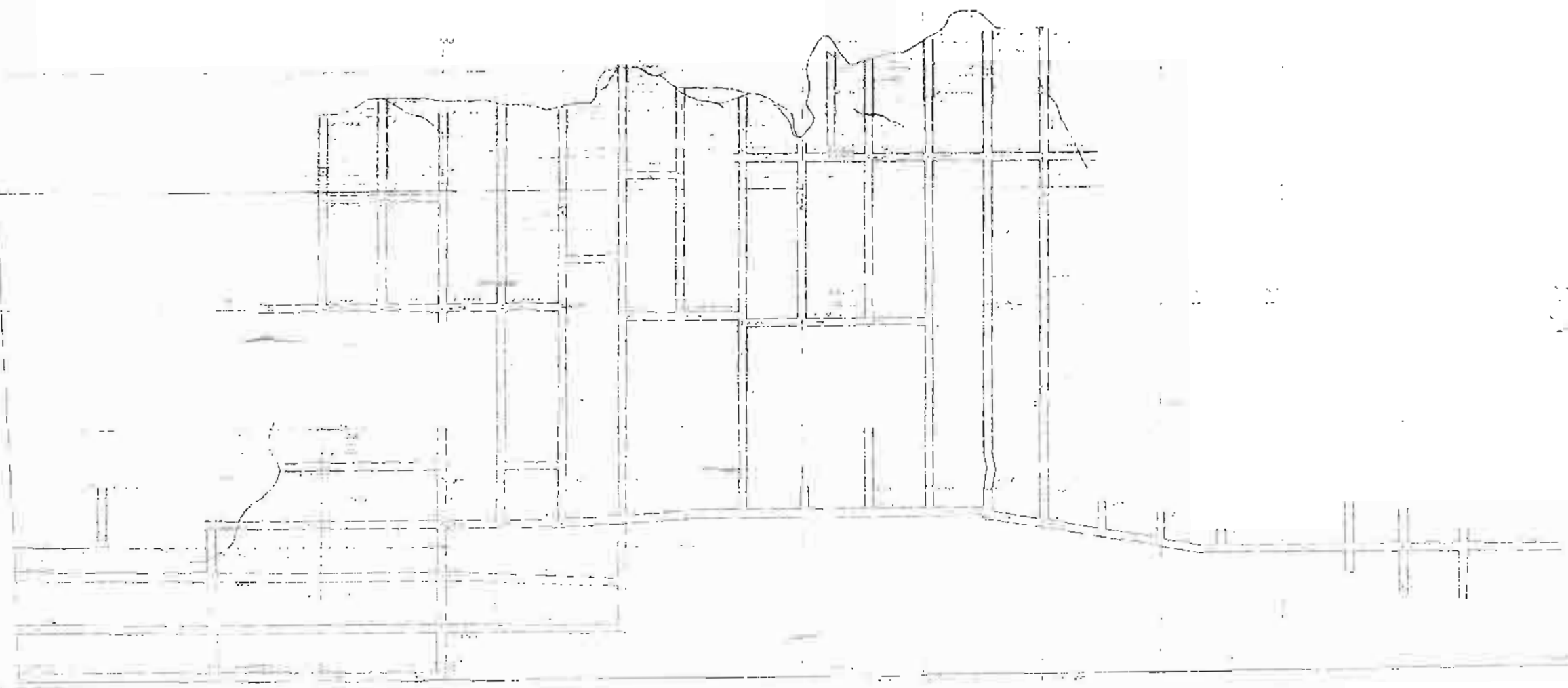
07 1531 1915 1-1-15 185 FT LEVEL A-36

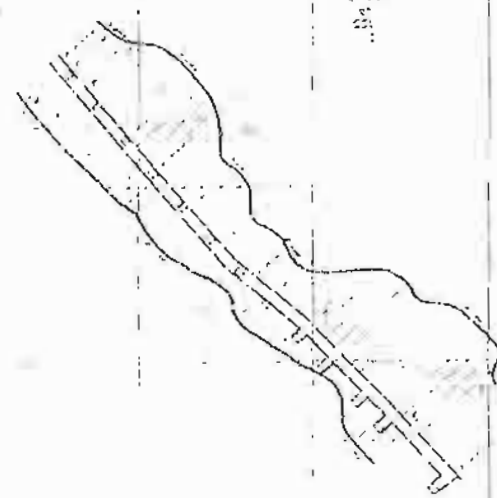
OLIVER IRON MINING CO.
--- MAP OF ---

LEONARD MINE

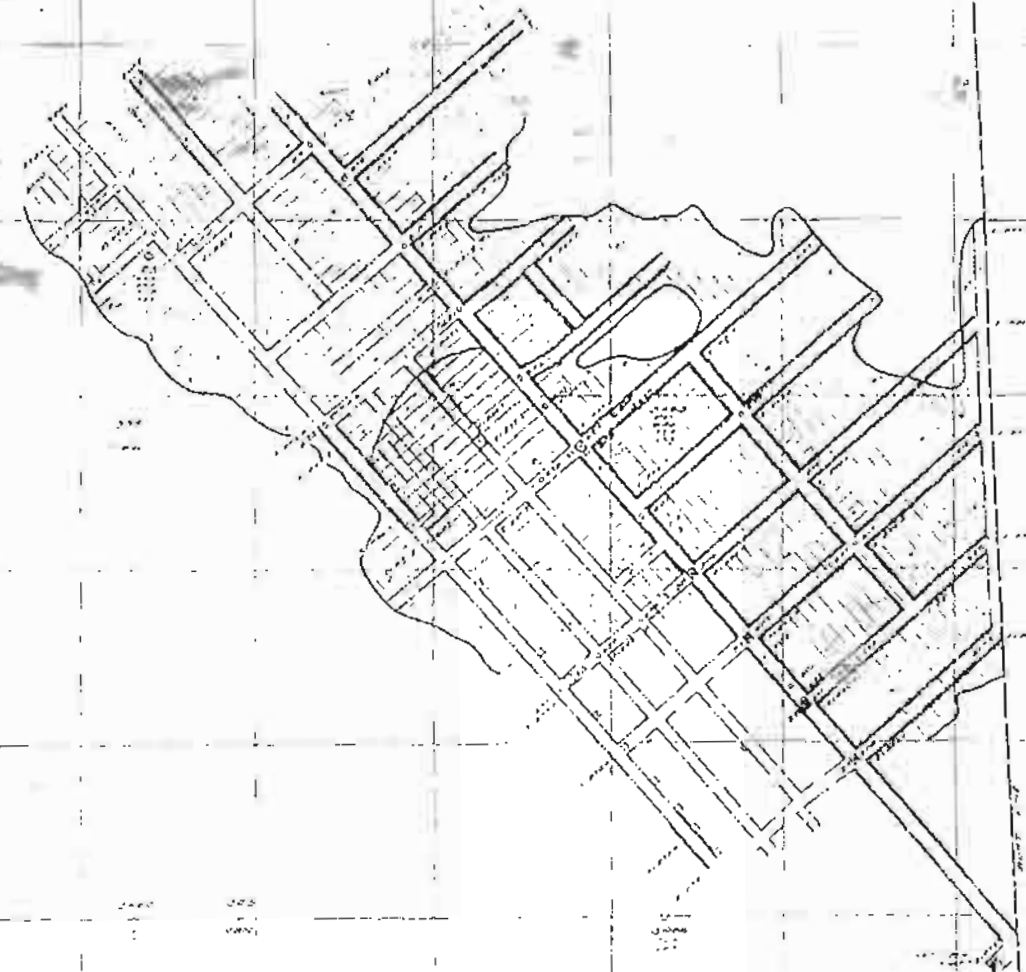
--- CLISHOTON DISTRICT ---
185 FOOT LEVEL

SCALE 1" = 100' DATE 1-1-15
DRAWN BY J. H. B. CHECKED BY J. H. B.

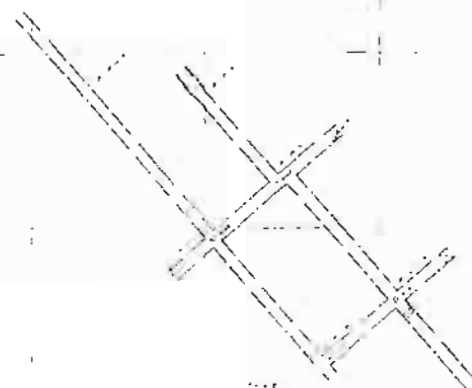




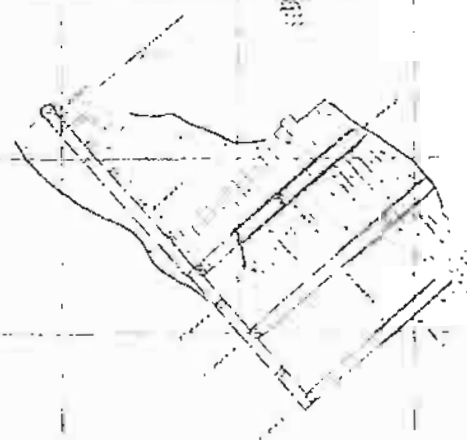
55Ft LEVEL



87Ft LEVEL



98Ft LEVEL



68Ft LEVEL

OLIVER IRON MINING CO.
— MAP OF —
LEONARD MINE

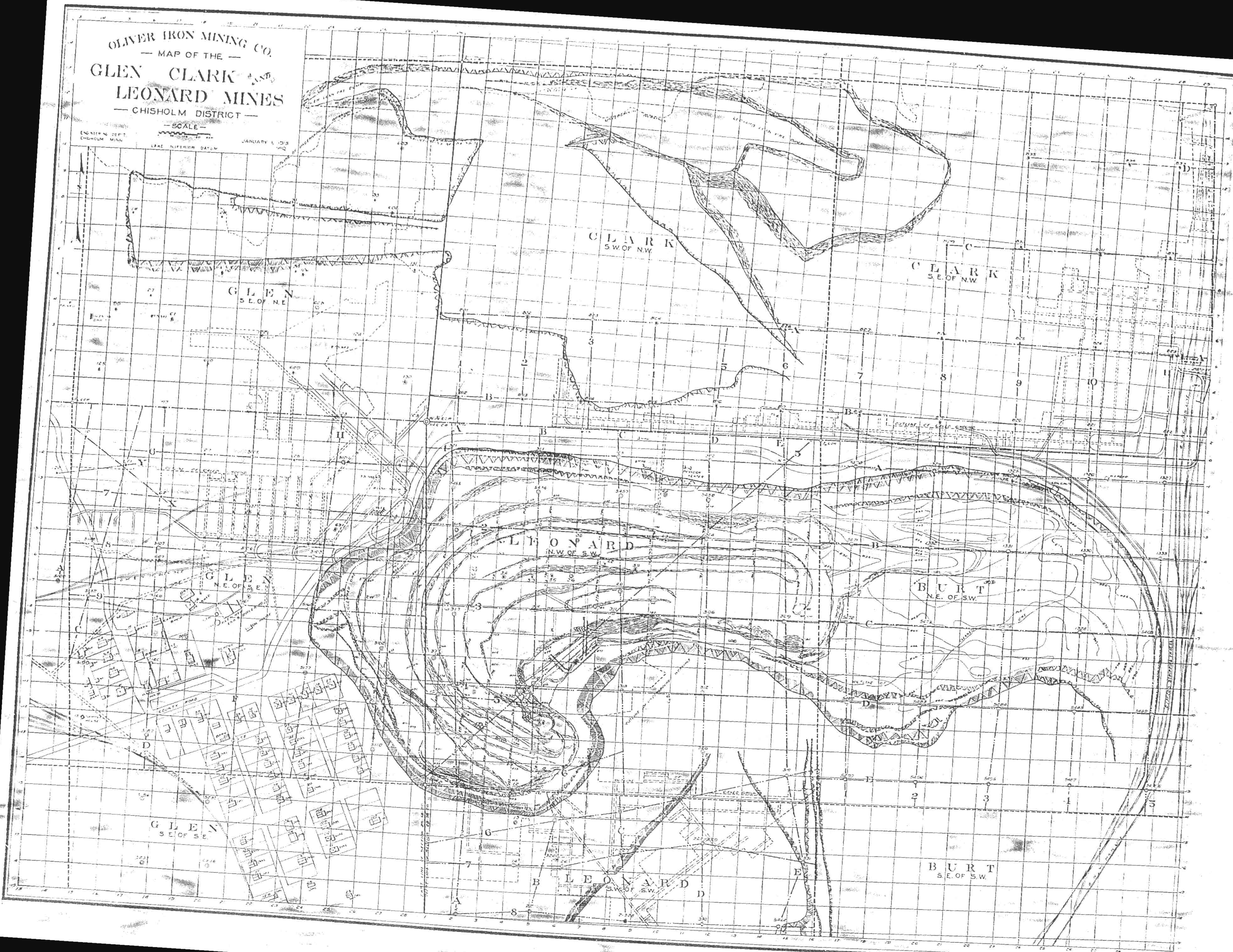
— DUSHOLM — 2-27-15 —
TOP ORE BODY

OLIVER IRON MINING CO.
— MAP OF THE —
**GLEN CLARK AND
LEONARD MINES**
— CHISHOLM DISTRICT —

SCALE

JANUARY 1, 1913

ENGINEERING DEPT.
CHISHOLM DISTRICT



09 1531 1913 1-1-13 Glen Clark + Leonard Mines
A-34

09 1531 1915 1-1-15 Leonard Mine Composite A-34

OLIVER IRON MINING CO.
- MAP OF -
LEONARD MINE

CHISHOLM DISTRICT - LEGEND

APPENDIX

1. 500000
 2. 500000
 3. 500000

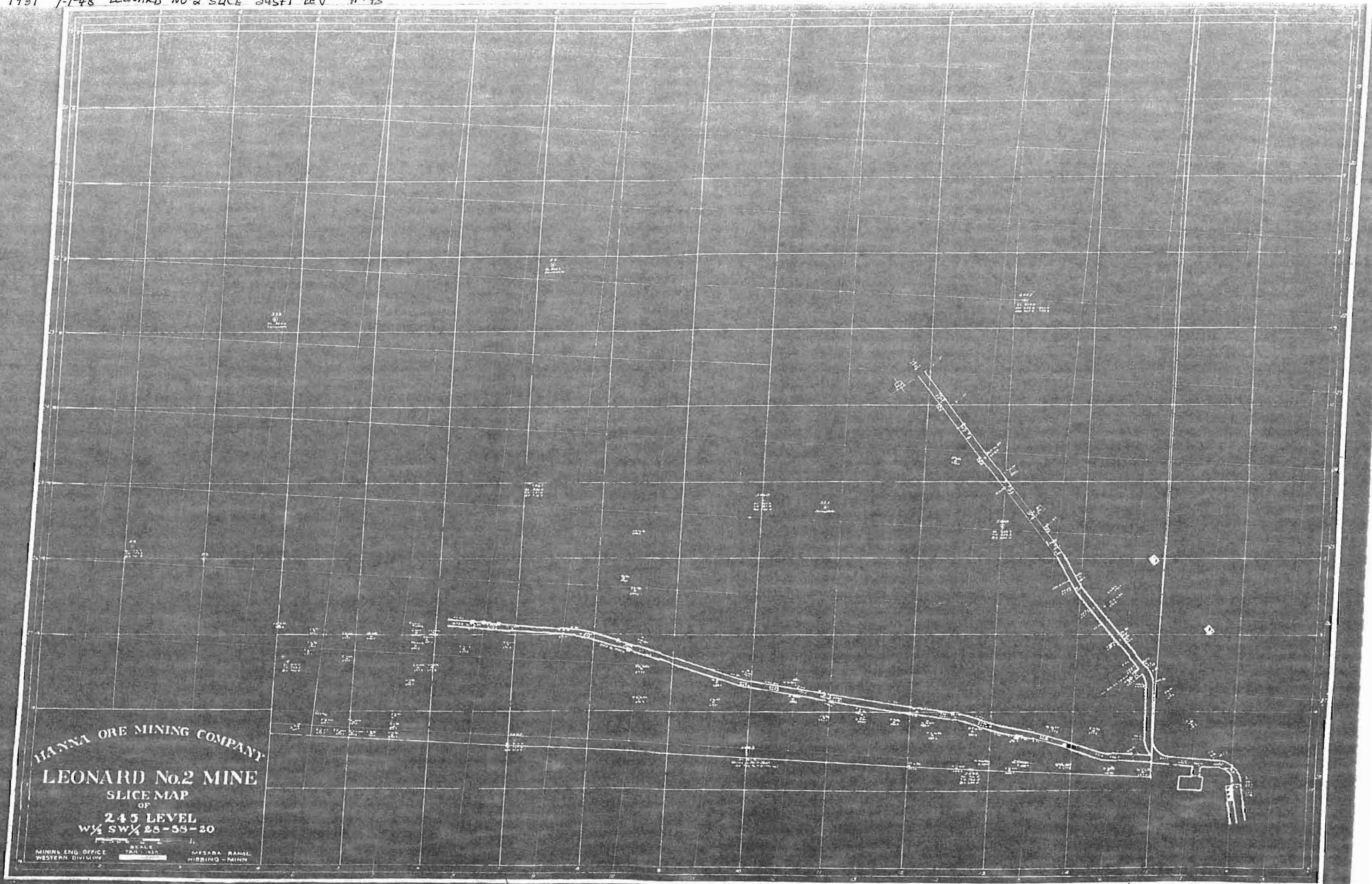
$$\begin{aligned} P &= P(A|C) = \frac{1}{2} \\ \mu &= \frac{1}{2}(1 + C^T A C) \\ \Sigma &= \frac{1}{2}(I - C^T A C) \end{aligned}$$

THESE
 1. 104 ARE
 2. 104 ARE

SCALE

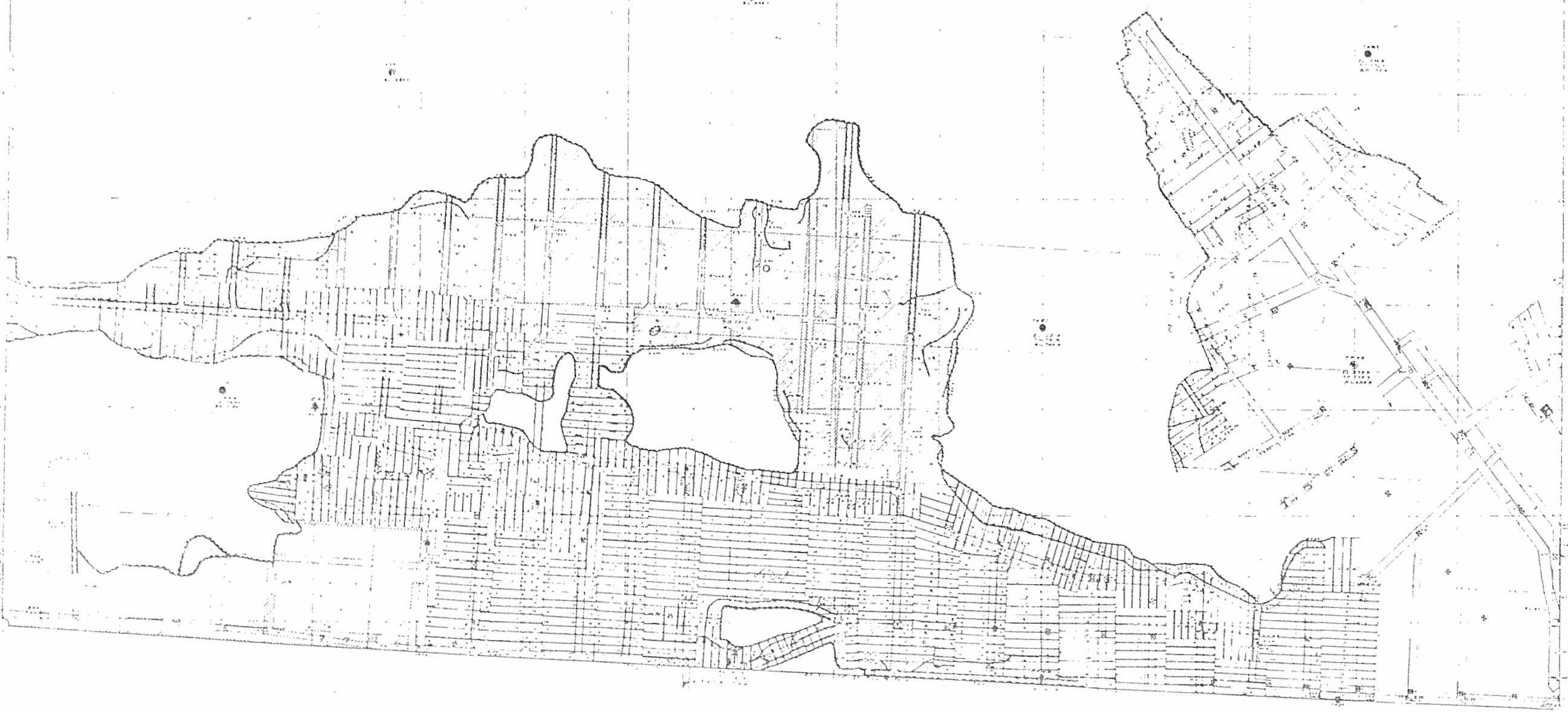
1979: 27/12/89

09 1931 1951 1-1-48 LEONARD NO.2 SLICE 245FT LEV. A-95

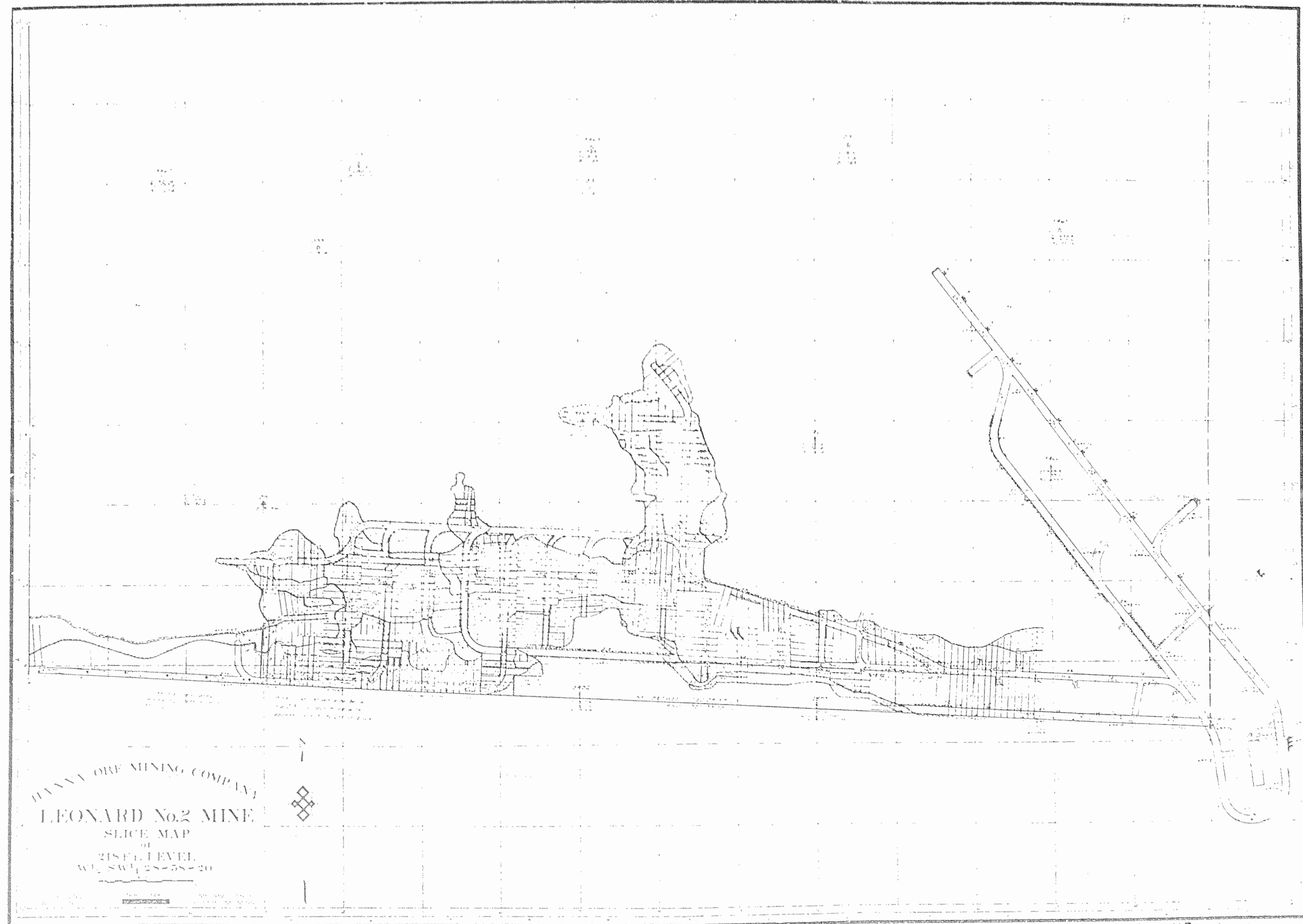


A-90

HANNA ORE MINING COMPANY
LEONARD No.2 MINE
SLICE MAP
OF
206 FT. SUB LEVEL
W 1/4 SW 1/4 28-55-20

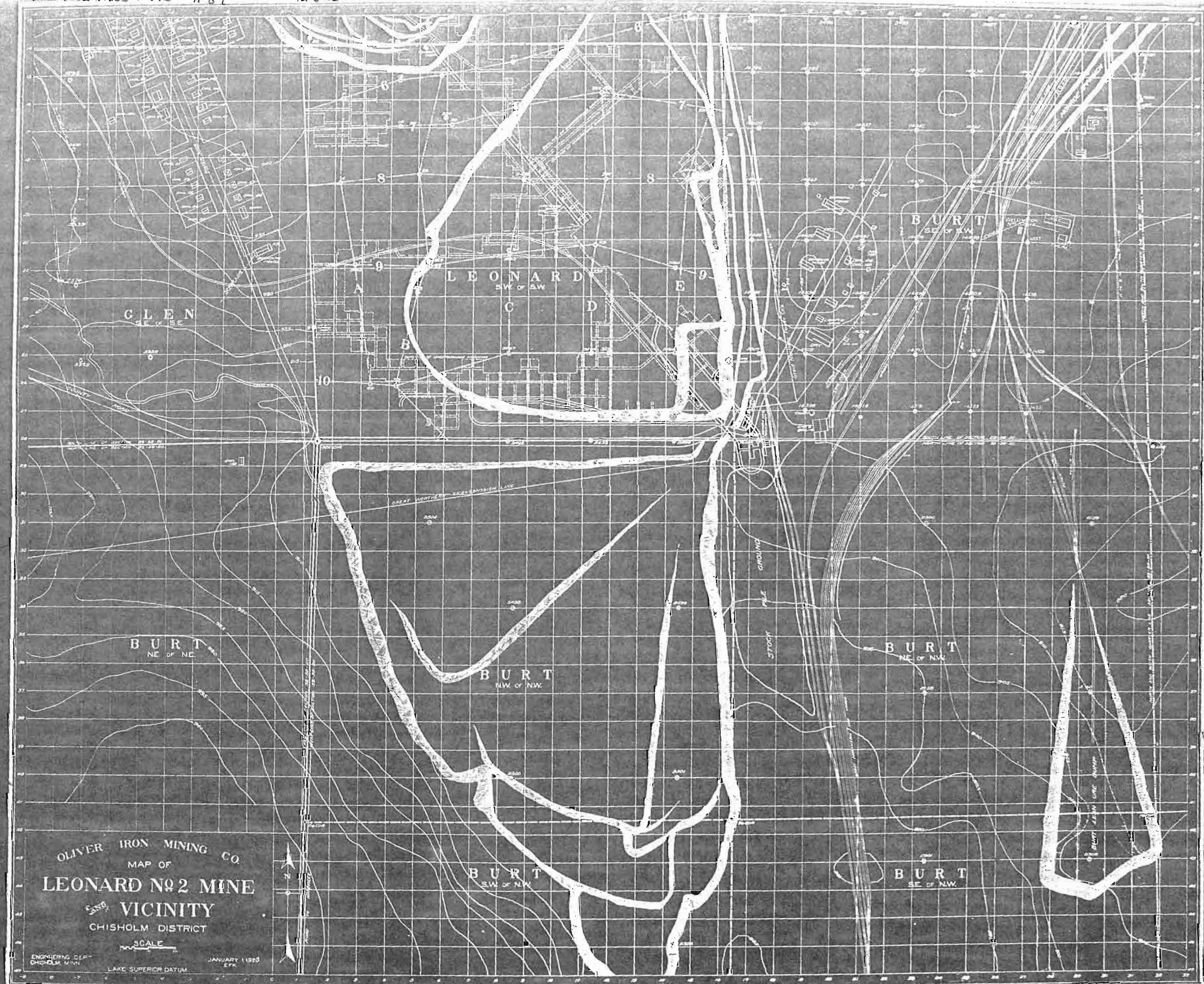


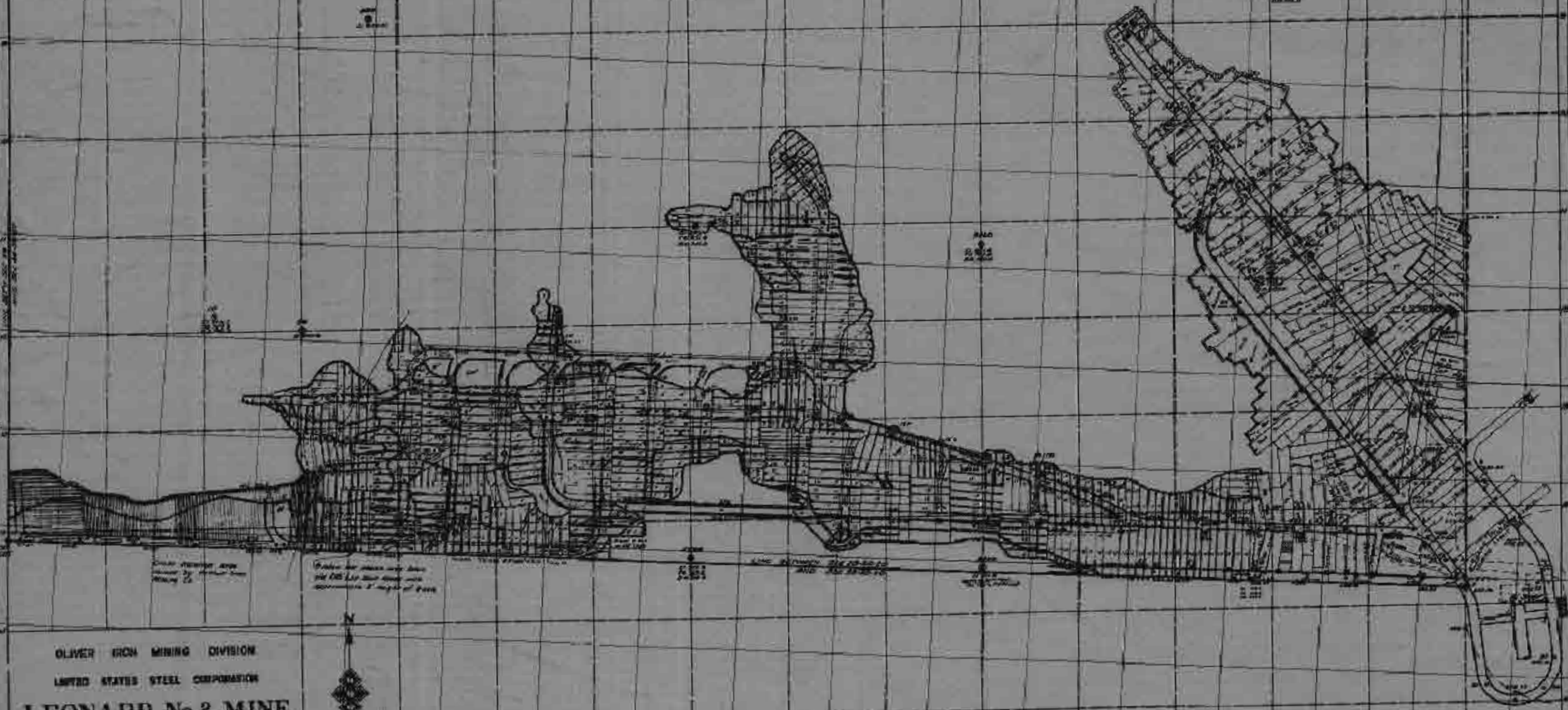
1
R
C
B



LEONARD ORE MINING COMPANY
LEONARD No. 2 MINE
SLICE MAP
of
21st LEVEL
WL SW 128-58-20

09 1531 1948 1-1-20 LEONARD NO. 2 MINE & VIC A-89 12-5-06



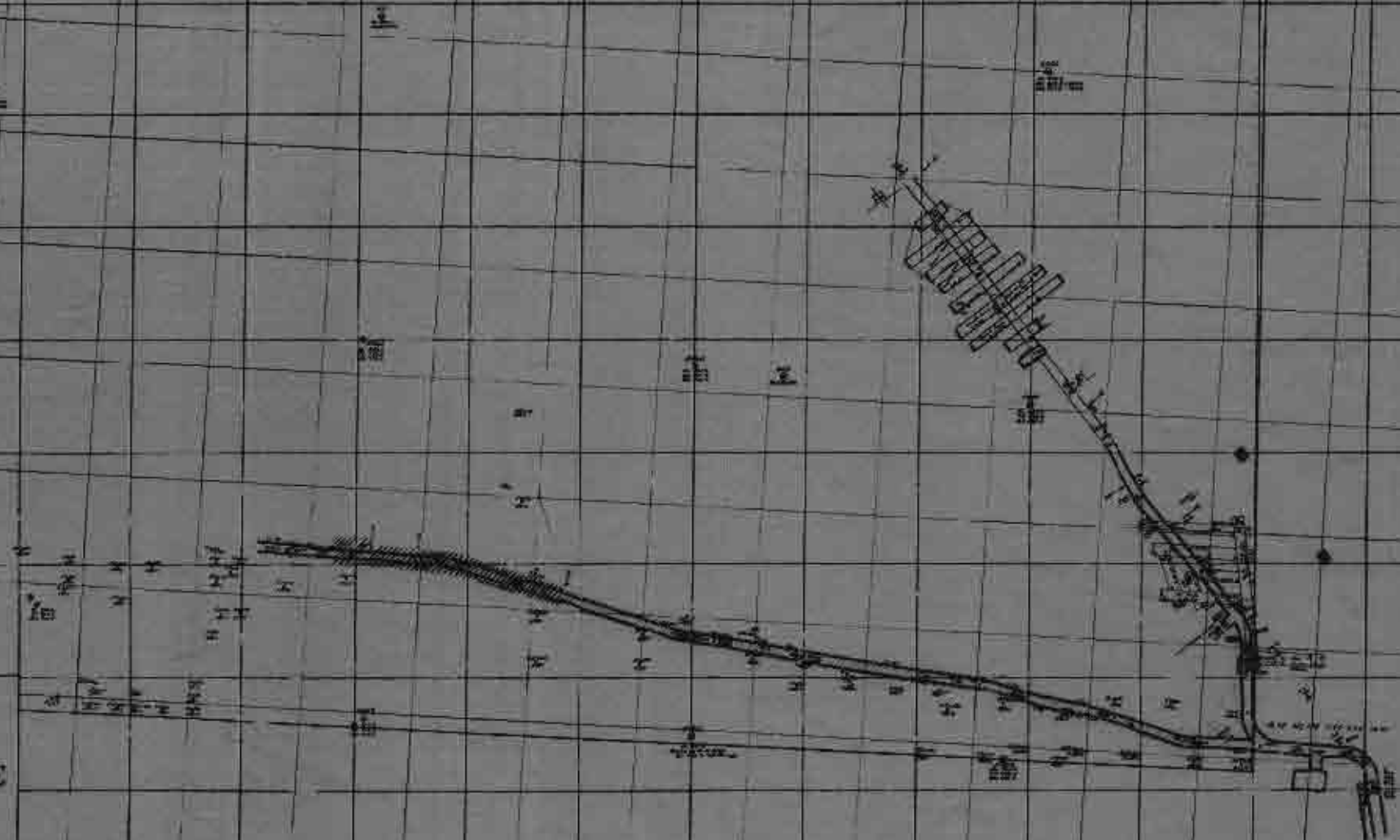


OLIVER IRON MINING DIVISION
UNITED STATES STEEL CORPORATION
LEONARD No. 2 MINE
SLICE MAP
OF
218 FT. LEVEL
W 1/4 SW 1/4 28-28-10



SNYDER MINING CO.
LEONARD No2 MINE
SLICE MAP
OF
245 LEVEL
W. 1/4 SW 1/4 24-55-50

MICHAEL B. RICH
Survey 11, 1942
WISCONSIN DIVISION



SCALE
1" = 100'
N. 1/4 S. 1/4