MAPS OF THE Pearce Mine CHISHOLM MINN

NE¼ of NW¼ of Sec. 28-58-20

A P Lillimon
Mining Engineer

O B Warren
Superintendent.

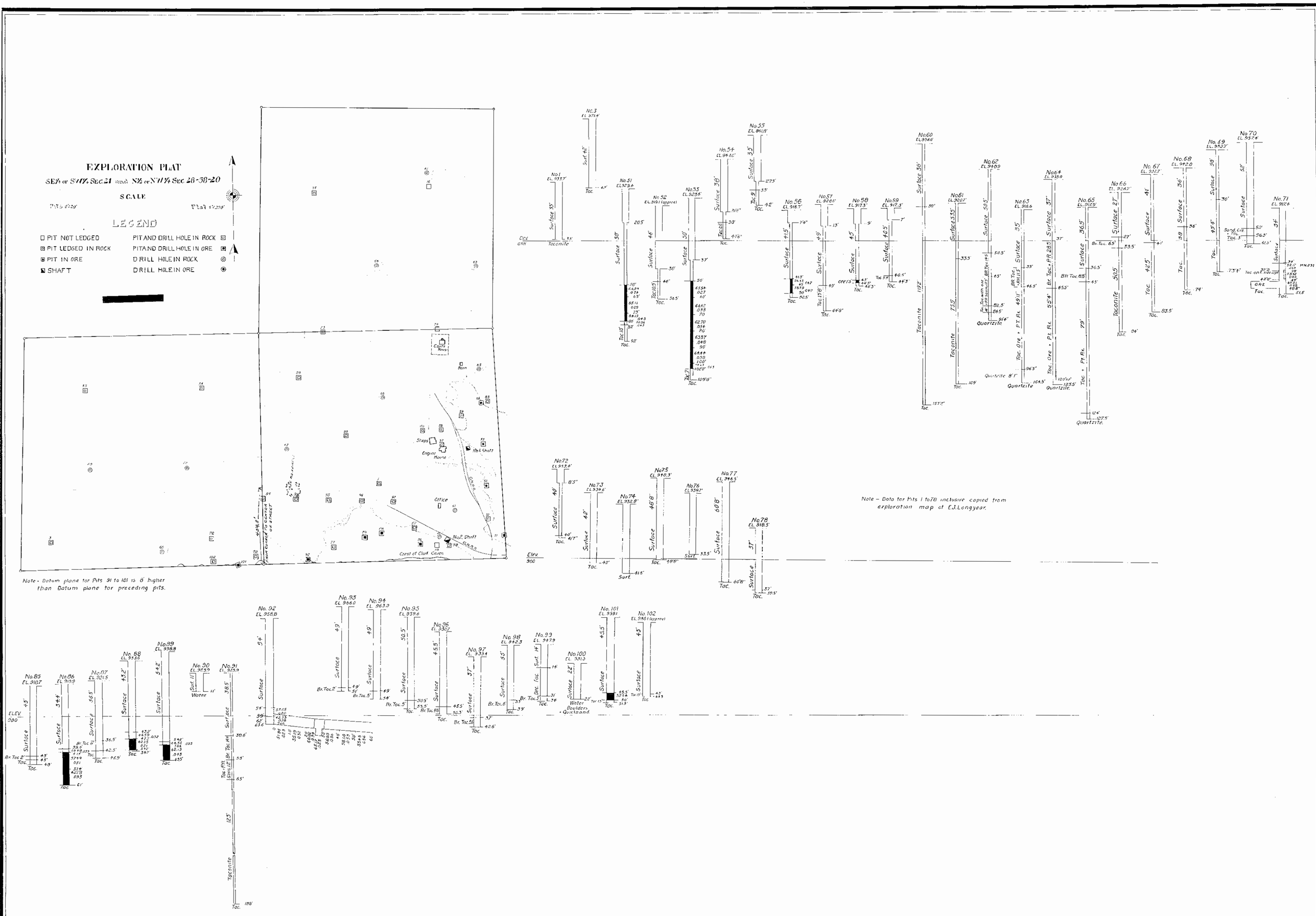
List of Plates

1 Exploration Map by E.J. Longyear.
2 Survey made under direction of the Bradford Mining Co.
3 Completed Survey First Level Sub.
4 Completed Survey First and Second Level
5 Composite Map of all Levels
6 First Level and First Level Sub as designed by O.B. Warren.
7 First Level and Second Level as designed by O.B. Warren.
8 Composite Map of all Levels as designed by O.B. Warren.

Legend

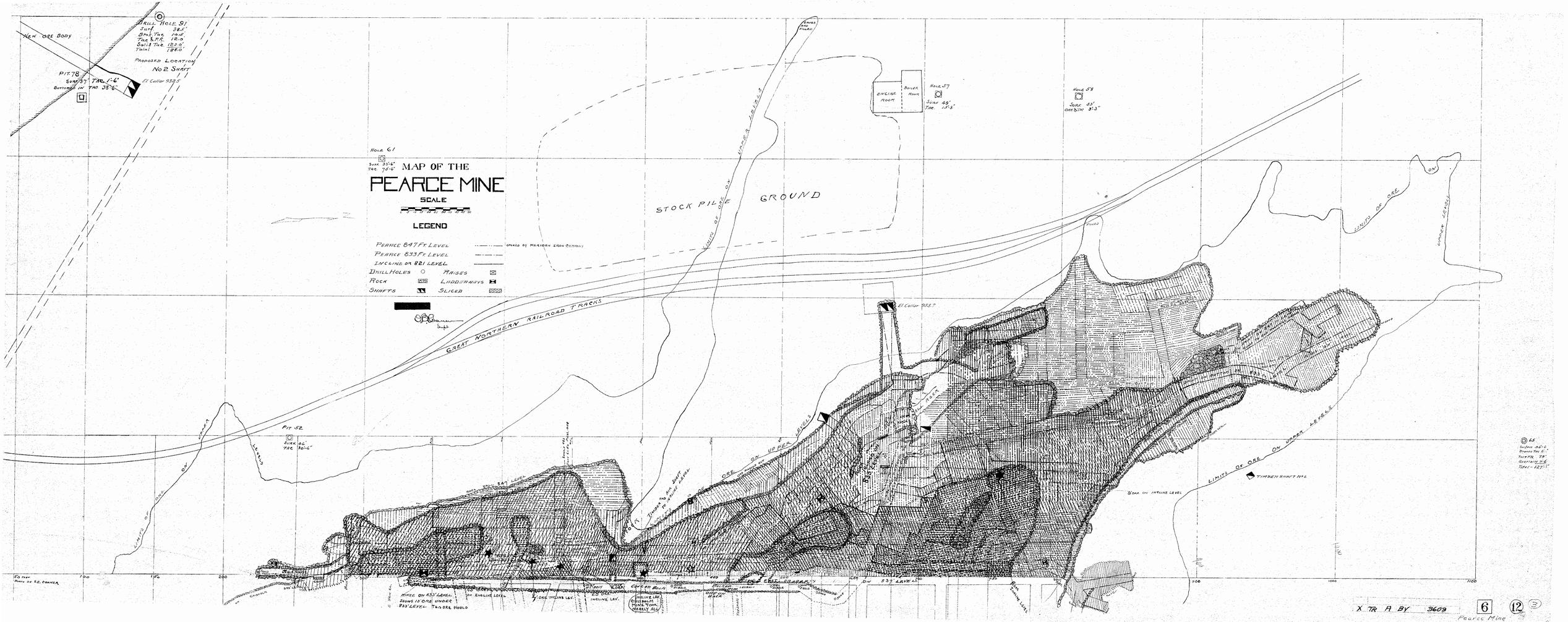
Drill Holes ◎
Shafts ◪
Raises ⊠
Slices ▨
Rock ▩

Elevation Collar of shaft, 932.15
Elevation F.L.S. near shaft, 869.66
Elevation F.L. at shaft, 857.53
Elevation S.L at shaft, 832.45



X TR A BV 3605

6


MAP OF THE
PEARCE MINE
SCALE
LEGEND
Pearce 847 Ft. Level
Pearce 833 Ft. Level
Incline or 821 Level
Drill Holes
Raises
Rock
Ladderways
Shafts
Sliced
Drawn by Meriden Iron Company
New Ore Body
Drill Hole 91
Proposed Location No. 2 Shaft
Pit 78
El Collar 932.5
Hole 61
Stock Pile Ground
Great Northern Railroad Tracks
Engine Room
Boiler Room
Hole 57
Hole 58
Pit 52
Limits of Ore
Limits of Ore on Upper Levels
Timber Shaft No. 2
Stope on Incline Level
Mine on 833 Level
Stope in Ore under 833 Level. This ore should
Incline Lev.
Ore Incline Lev.
Ore on Incline Level
Ore on 833 Level
Ore on Upper Levels
Timber Shaft No. 1
Ore on Upper Levels
Incline Level
Ore on Incline Level
Ore on Incline Level
Ore on

MERIDEN IRON CO.

MAP OF THE

PEARCE MINE

N.E.¼ of N.W.¼ SEC. 28-58-20.

SCALE

LEGEND

- TEST PIT NOT LEDGED
- TEST PIT IN ORE
- TEST PIT IN ROCK
- TEST PIT + DRILL HOLE IN ROCK
- TEST PIT + DRILL HOLE IN ORE

- Nº 1 SHAFT — 833' LEVEL
- Nº 1 SHAFT — 821' LEVEL
- Nº 2 SHAFT — MAIN LEVEL
- Nº 2 SHAFT — SUB LEVEL
- Nº 2 SHAFT —

OAK STREET

SECOND AVE.

TAMARACK STREET

THIRD AVENUE

LOCUST ST

LINDEN STREET

4th. AVE.

3d. AVE.

ROAD

GREAT NORTHERN R.R.

CAPTAIN'S DWL.

BARN

OUTLOT Nº 1

OUTLOT Nº 2

OUTLOT 2

Nº 1 SHAFT

NE-NW-SEC. 28-58-20

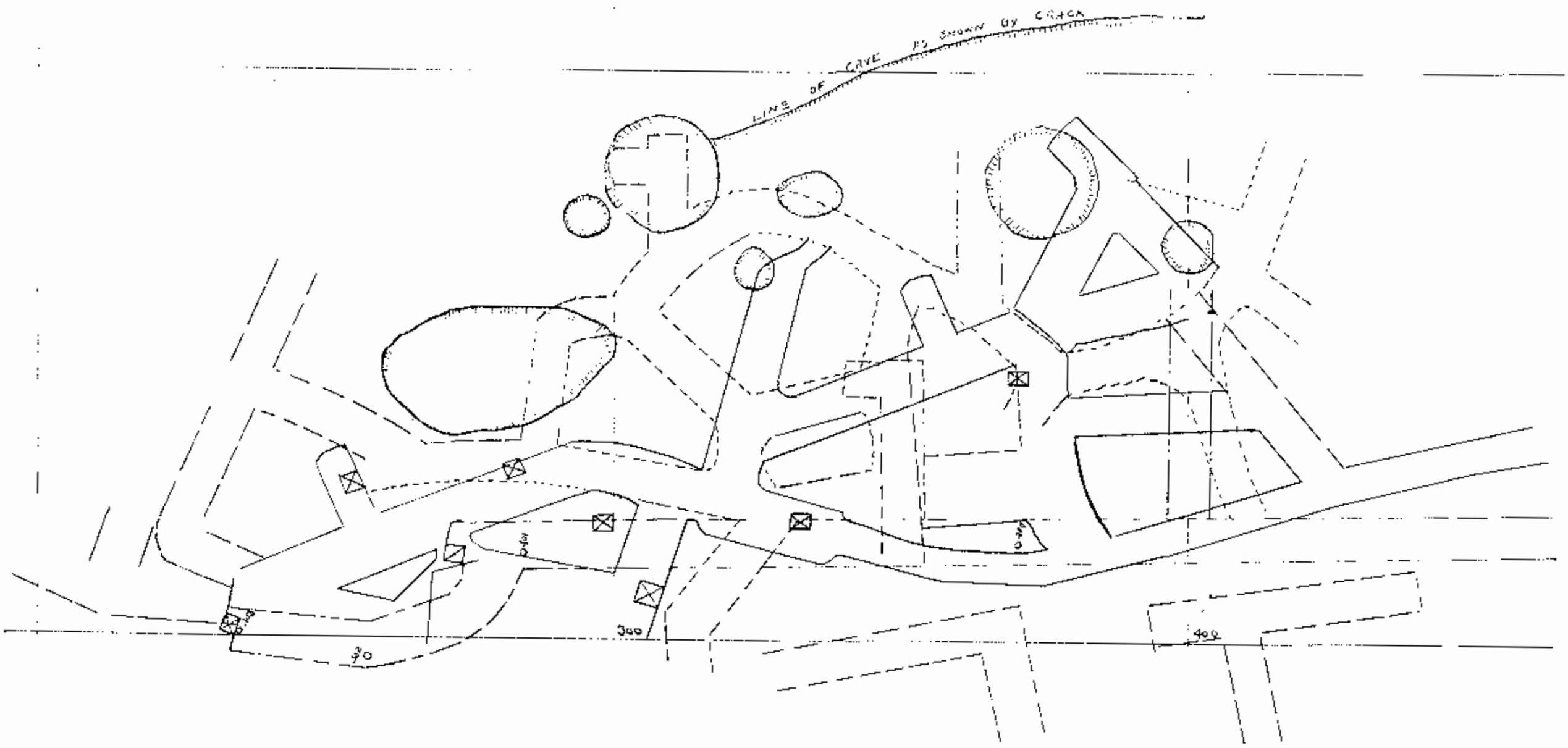
CHATACO MINE

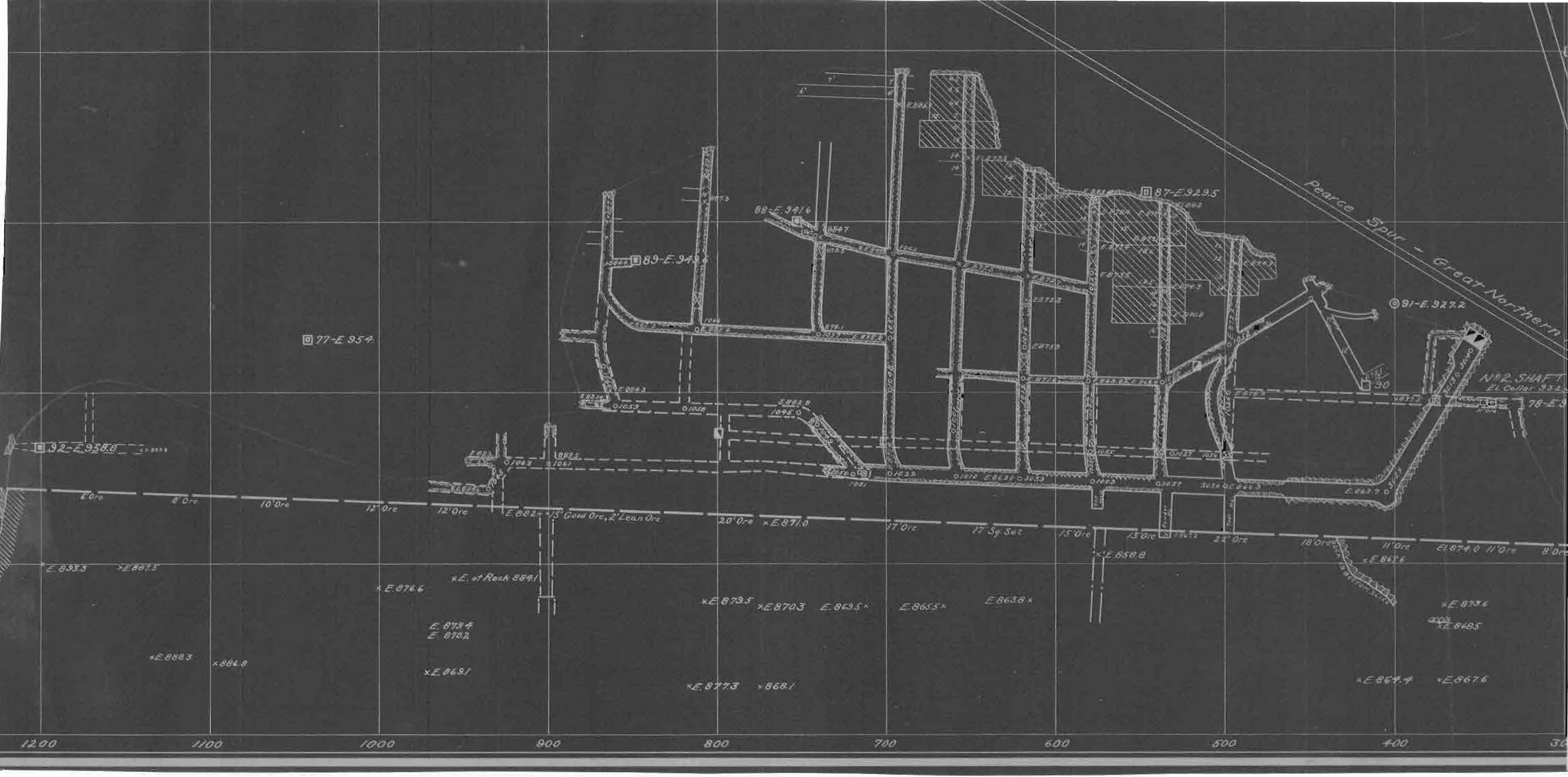
CLARK TRESPASS

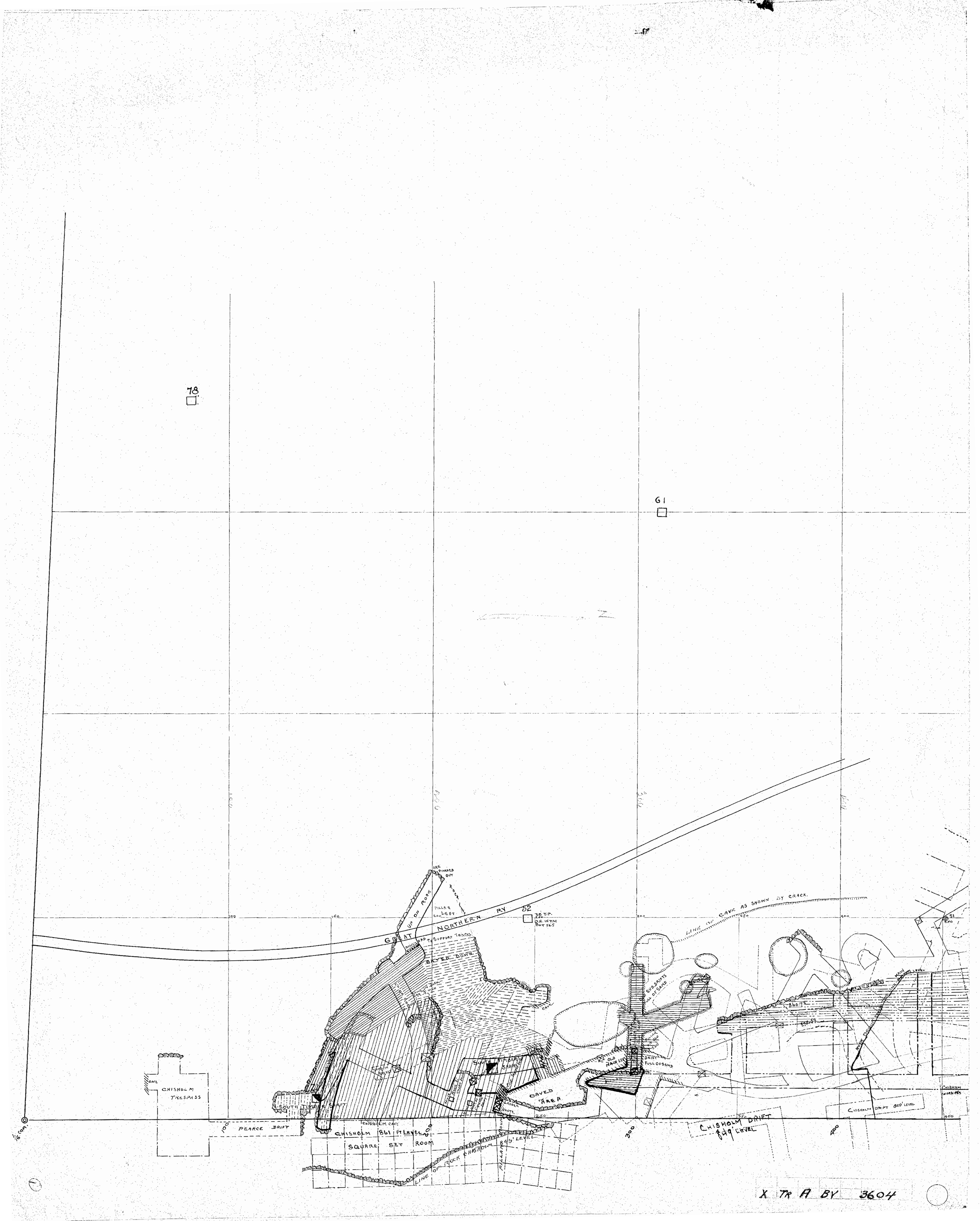
LIMIT OF CLARK WORKINGS

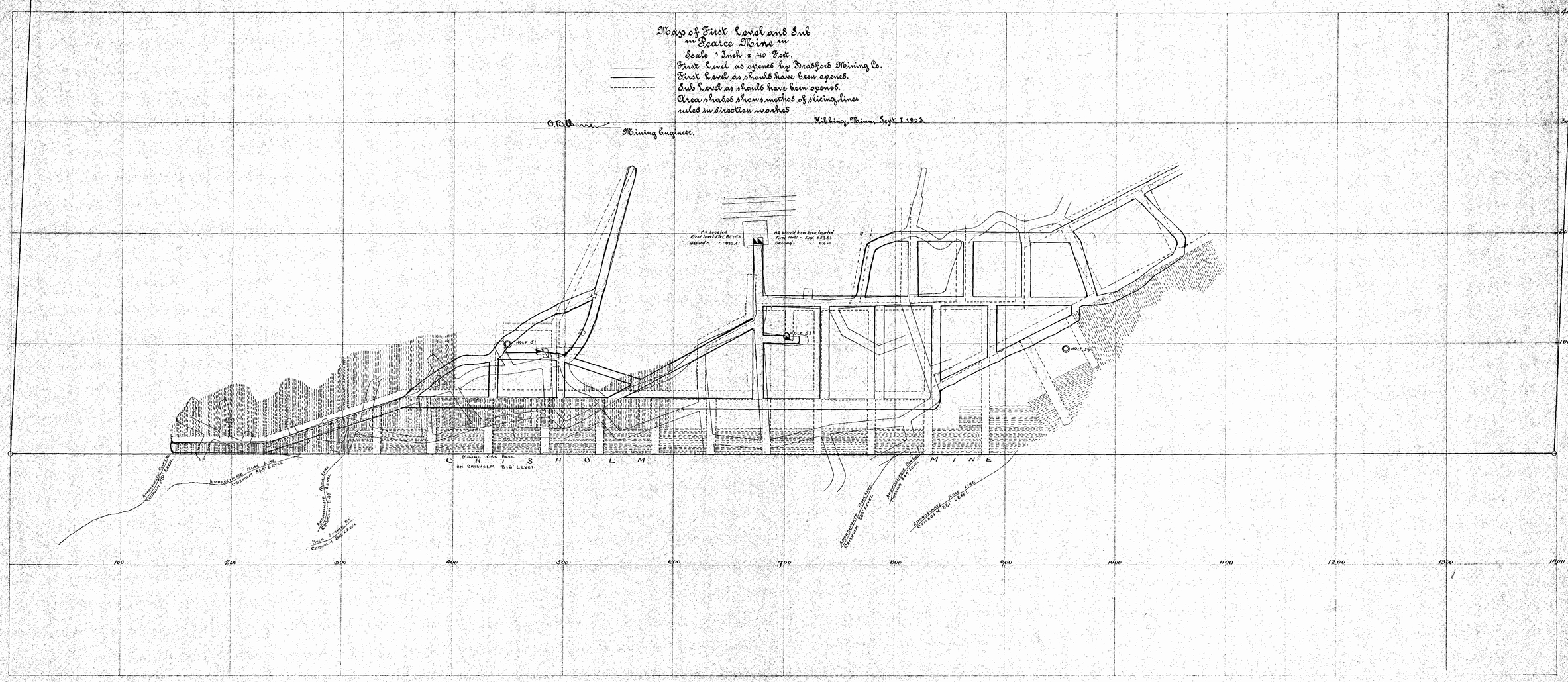
CREST OF OPEN PIT

21 22 23 28 29 30 31 32 33

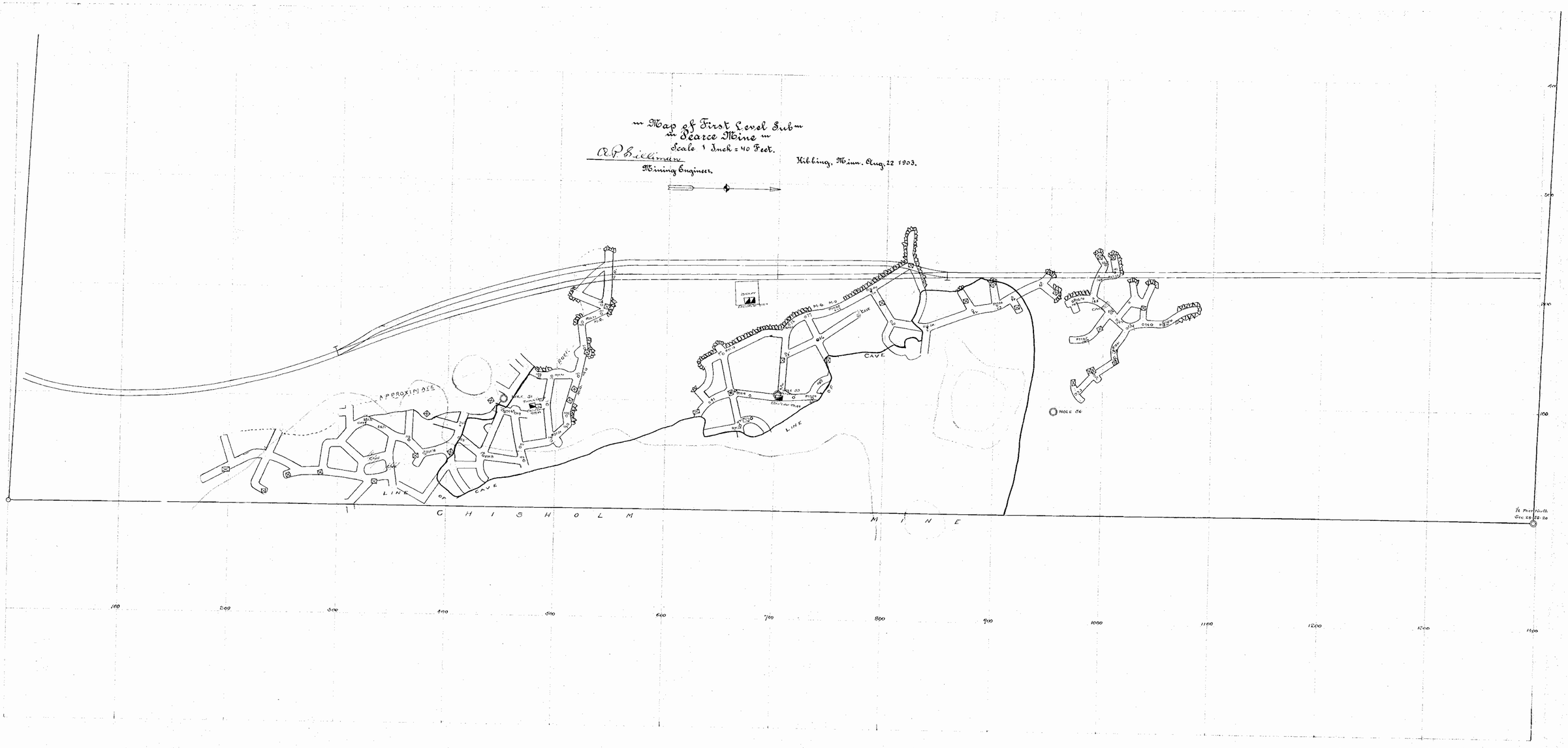

LINE OF CAVE AS SHOWN BY CRACK
300
400


Pearce Spur - Great Northern
87-E.929.5
88-E.941.6
89-E.94
77-E.954
91-E.927.2
90
No 2. SHAFT
El. Collar 932
78-E.
92-E.938.8
6' Ore
8' Ore
10' Ore
12' Ore
12' Ore
E.882 15' Good Ore, 2' Lean Ore
20' Ore
E.871.0
17' Ore
17' Sy. Set
15' Ore
13' Ore
22' Ore
18' Ore
11' Ore
E.874.0
11' Ore
E.858.8
E.867.6
E.893.3
E.887.3
E.876.6
E. at Rock 884.1
E.879.5
E.870.3
E.869.5
E.865.5
E.863.8
E.873.4
E.870.2
E.873.6
E.868.5
E.888.3
E.886.8
E.869.1
E.877.3
E.868.1
E.867.4
E.867.6
1200
1100
1000
900
800
700
600
500
400


78
61
GREAT NORTHERN RY
52
30 T.P.
D.H. IN TAC BOT 565
ORE PINCHED OUT
PILLAR 200' LEFT
UP ON ROCK
ROCK
BOARDED UP TO SUPPORT TRACKS
CAVED DOWN
LINE OF CAVE AS SHOWN BY CRACK.
SUBDRIFTS FULL OF SAND
OLD MAIN LEVEL
DRIFT FULL OF SAND
SOUTH TIMBER SHAFT
CAVED AREA
CHISHOLM TRESPASS
CAVE
PEARCE DRIFT
CHISHOLM CAVE
CHISHOLM 861 FT LEVEL
SQUARE SET ROOM
LINE OF ROCK
CHISHOLM 849' LEVEL
CHISHOLM DRIFT 849' LEVEL
CHISHOLM DRIFT 849' LEVEL
CHISHOLM WORKINGS
MAIN LEVEL
1/6 COR.
X TR A BY 3604

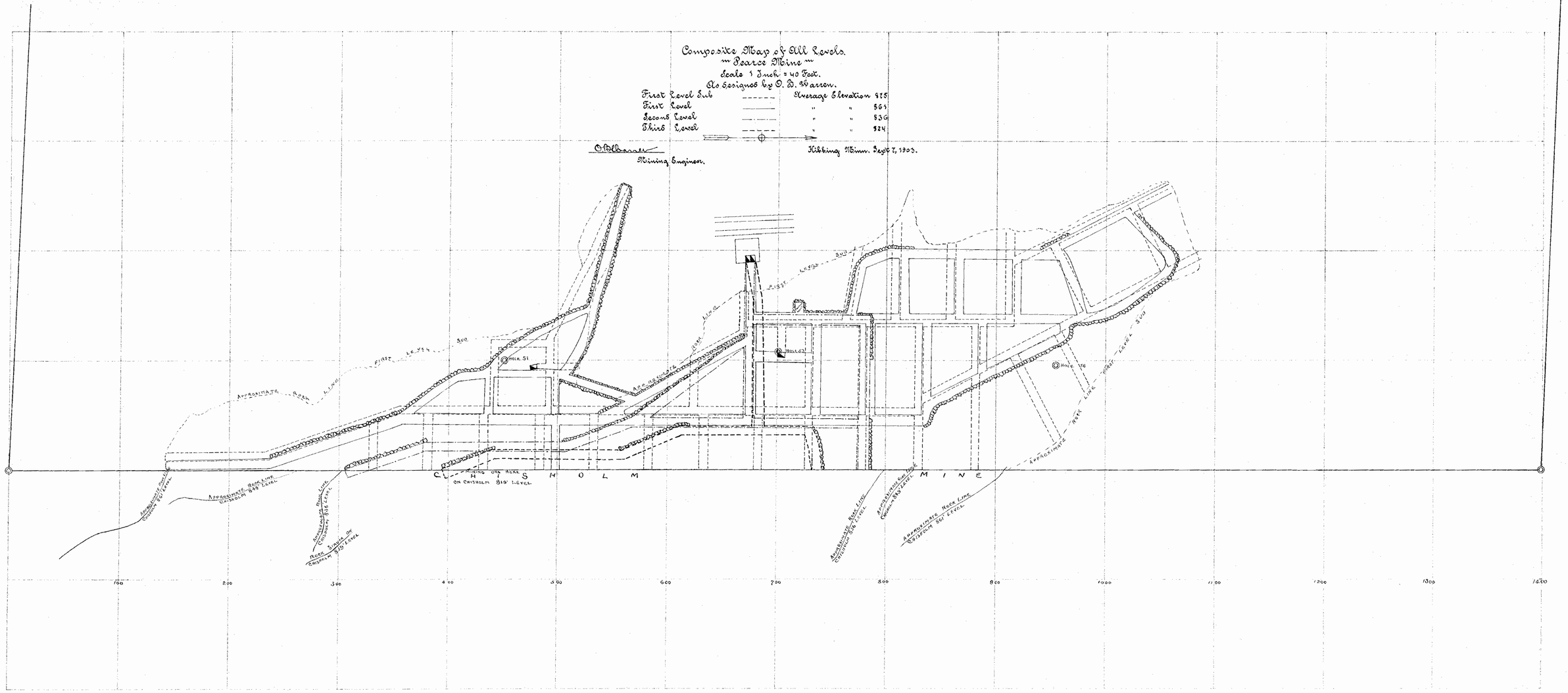

Map of First Level and Sub
in Pearce Mine
Scale 1 Inch = 40 Feet.
First Level as opened by Bradford Mining Co.
First Level as should have been opened.
Sub Level as should have been opened.
Area shaded shows method of slicing, lines
miles in direction north
Mining Engineer.
Hibbing, Minn. Sept. 1 1903.
HOLE 51
HOLE 53
HOLE 55
C H I S H O L M
M I N E
Mining Ore Rock
on Chisholm 810' Level.
Abandoned Rock Line
Chisholm 810' Level
Abandoned Rock Line
Chisholm 810' Level
Abandoned Rock Line
Chisholm 810' Level
Abandoned Rock Line
Chisholm 810' Level
Abandoned Rock Line
Chisholm 810' Level
Abandoned Rock Line
Chisholm 810' Level
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
100
200
300
400

M 18



M 20

Pearce Mine 1903


Composite Map of All Levels.
Pearce Mine
Scale 1 Inch = 40 Feet.
As Designed by O. D. Warren.
First Level Sub Average Elevation 975
First Level " " 961
Second Level " " 936
Third Level " " 924
Mining Engineer.
Hibbing Minn. Sept 7, 1903.
HOLE 51
HOLE 52
HOLE 56
FIRST LEVEL SUB
APPROXIMATE ROCK LINE
APPROXIMATE ROCK LINE CRISHOLM 849 LEVEL
APPROXIMATE ROCK LINE CRISHOLM 816 LEVEL
ROCK SURFACE ON CRISHOLM 810 LEVEL
APPROXIMATE ROCK LINE CRISHOLM 816 LEVEL
APPROXIMATE ROCK LINE CRISHOLM 843 LEVEL
APPROXIMATE ROCK LINE CRISHOLM 801 LEVEL
MINING ORE ACRS ON CRISHOLM 819' LEVEL
CRISHOLM MINE
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400

M 19

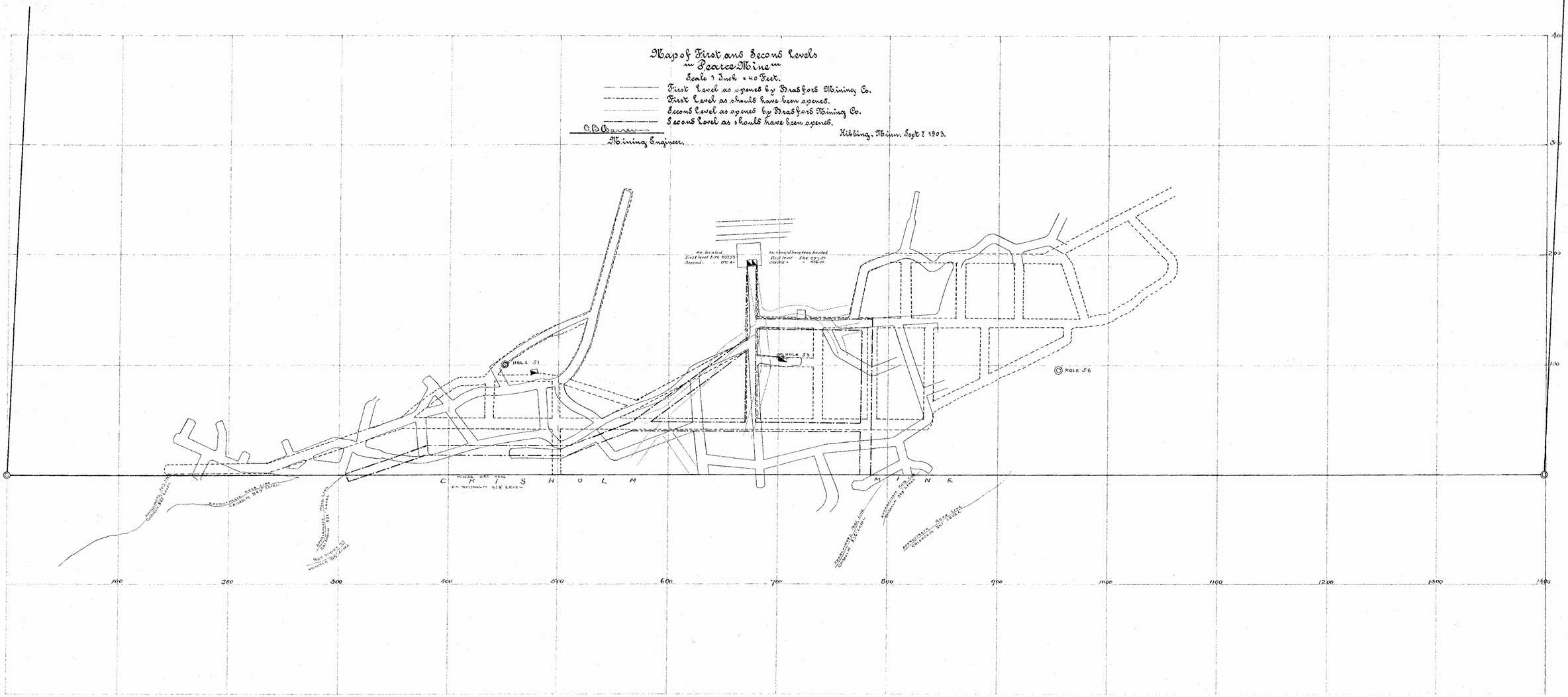
Map of First and Second Levels
"Pearce Mine"

Scale 1 Inch = 40 Feet.

First Level as opened by Bradford Mining Co.
First Level as should have been opened.
Second Level as opened by Bradford Mining Co.
Second Level as should have been opened.

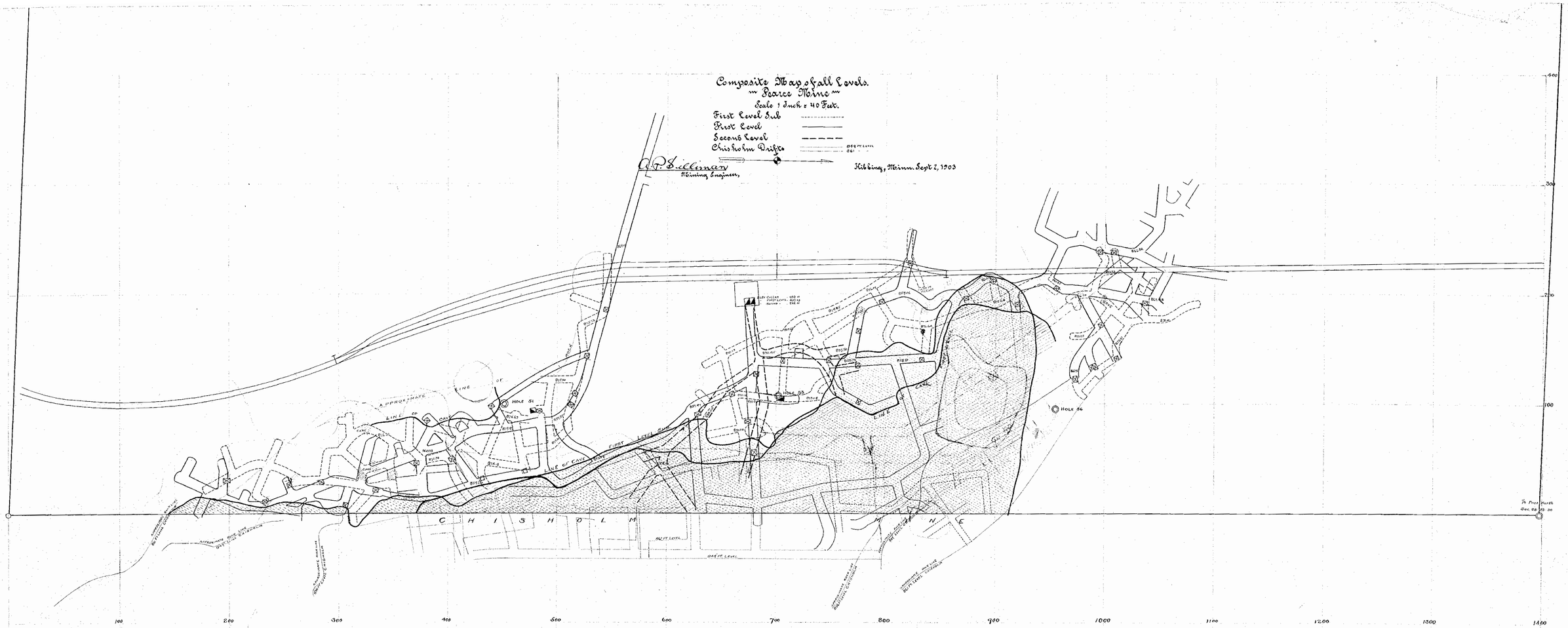
O. B. Brown
Mining Engineer.

Hibbing, Minn. Sept 7 1903.

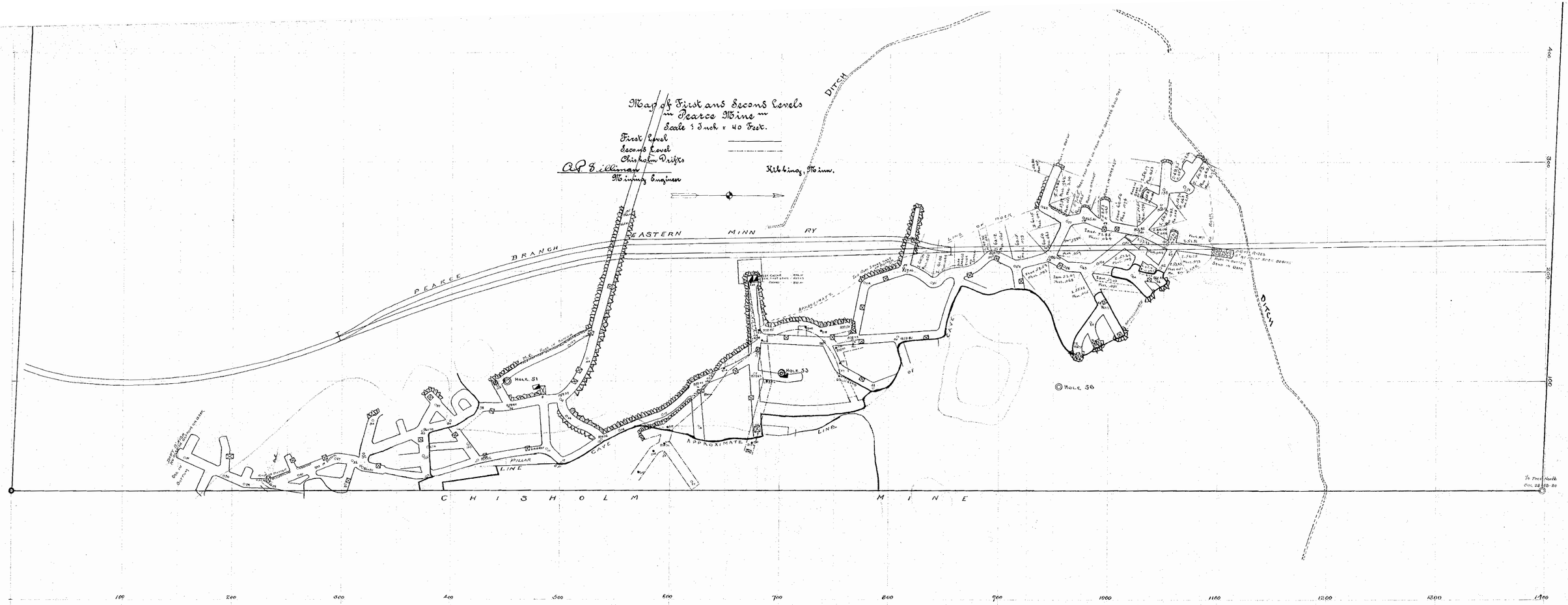


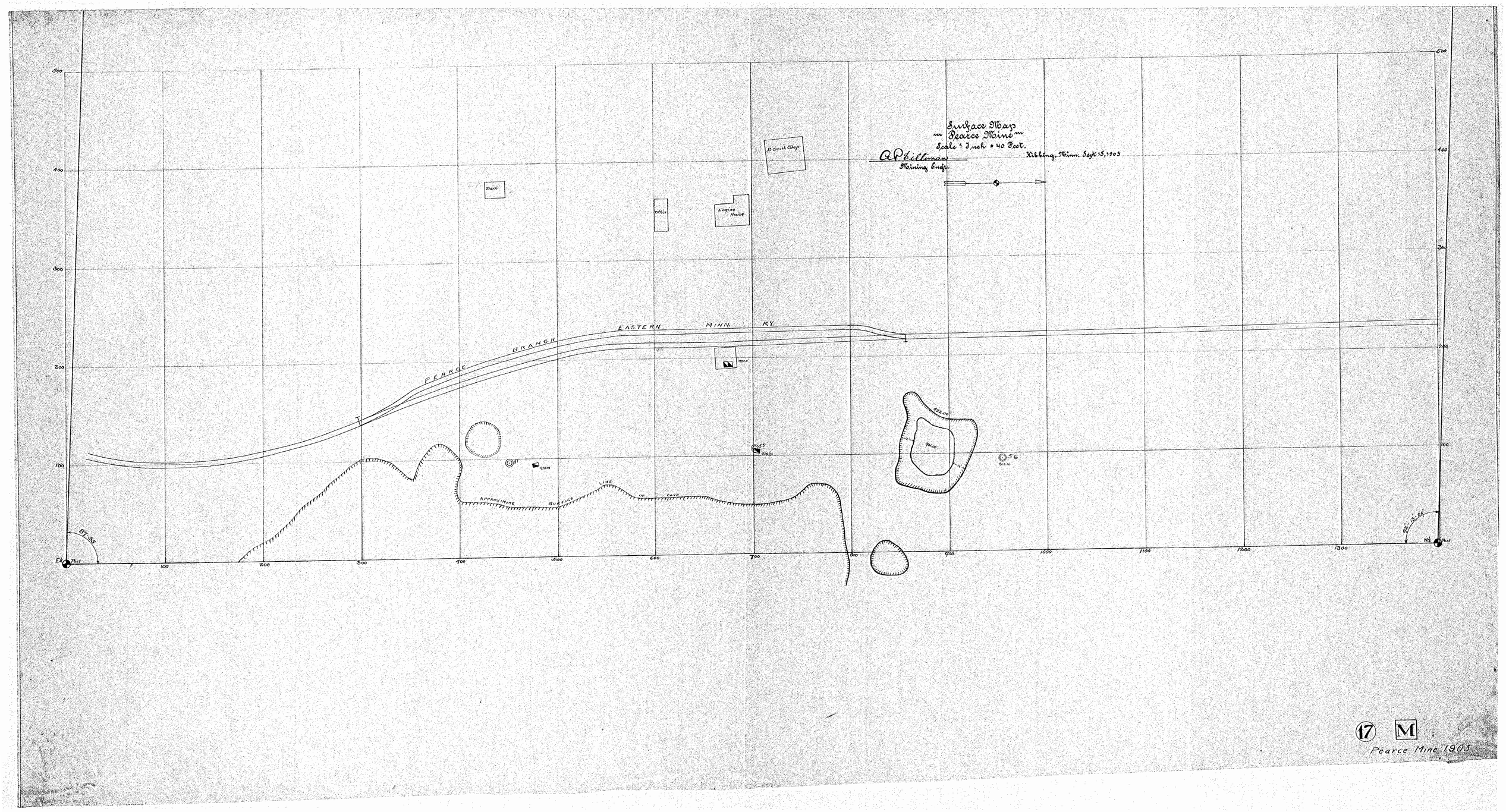
M 16

Pearce Mine 1903


Composite Map of all Levels.
— Pearce Mine —
Scale 1 Inch = 40 Feet.
First Level Sub
First Level
Second Level
Chisholm Drifts
A. P. Gillman
Mining Engineer,
Hibbing, Minn. Sept 2, 1903
APPROXIMATE LINE OF CAVE
LINE OF CAVE
FIRST LEVEL SUB
HOLE 51
HOLE 53
HOLE 56
CHISHOLM
LINE
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400

M 21


Map of First and Second Levels
Pearce Mine
Scale 1 Inch = 40 Feet.
First Level
Second Level
Chisholm Drifts
A. P. Gillman
Mining Engineer
Hibbing, Minn.
DITCH
EASTERN MINN RY
PEARCE BRANCH
APPROXIMATE LINE OF CAVE
HOLE 31
HOLE 53
HOLE 56
PILLAR
CHISHOLM MINE
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400



17 M

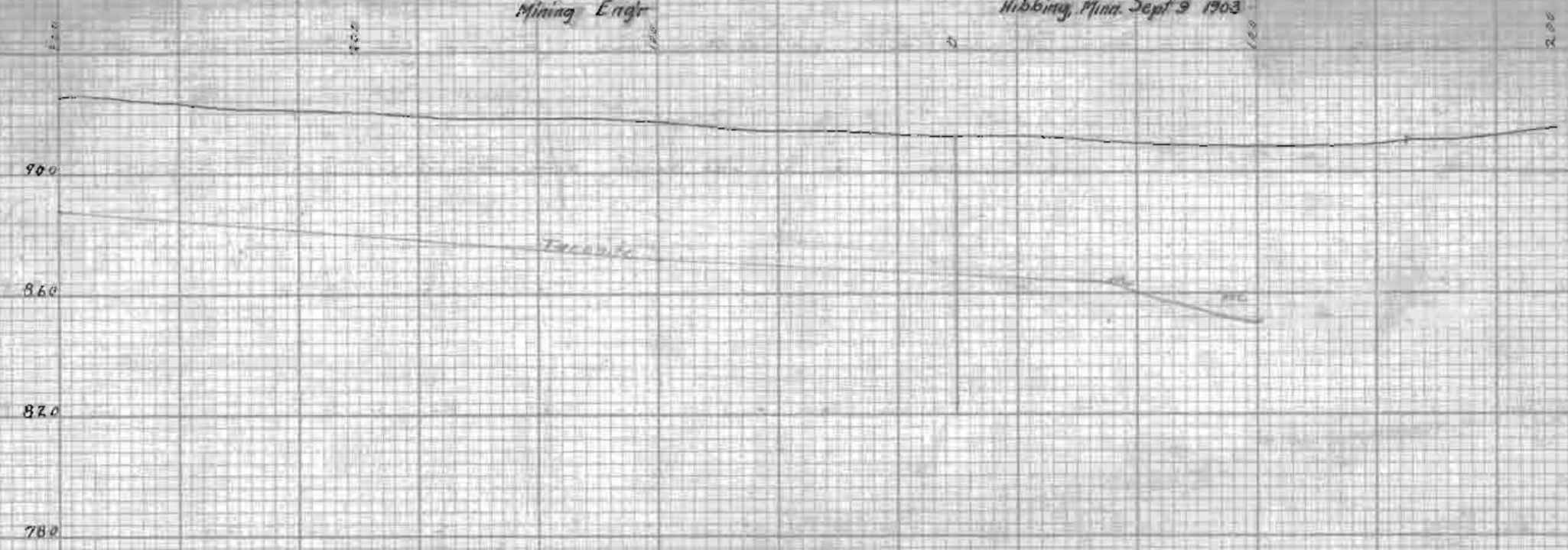
Pearce Mine 1903

Cross Sections of Pearce Mine

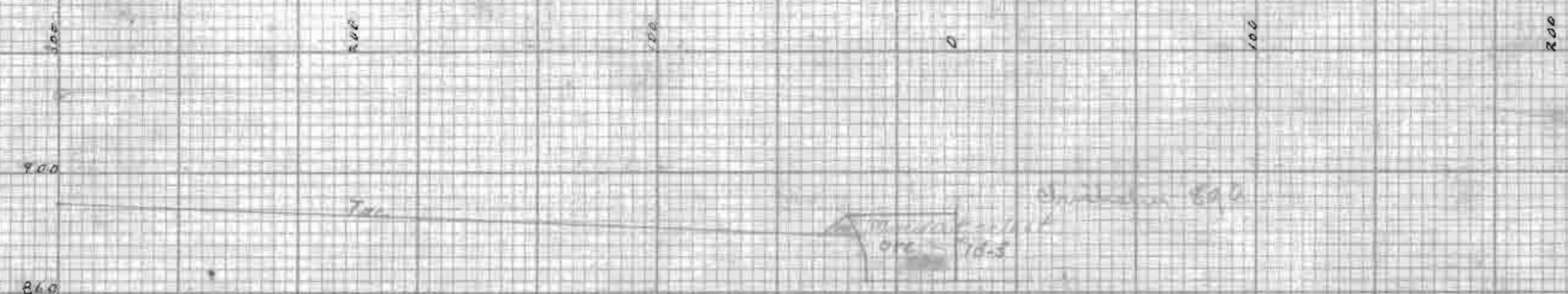
Cross Section a-a 100

Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet

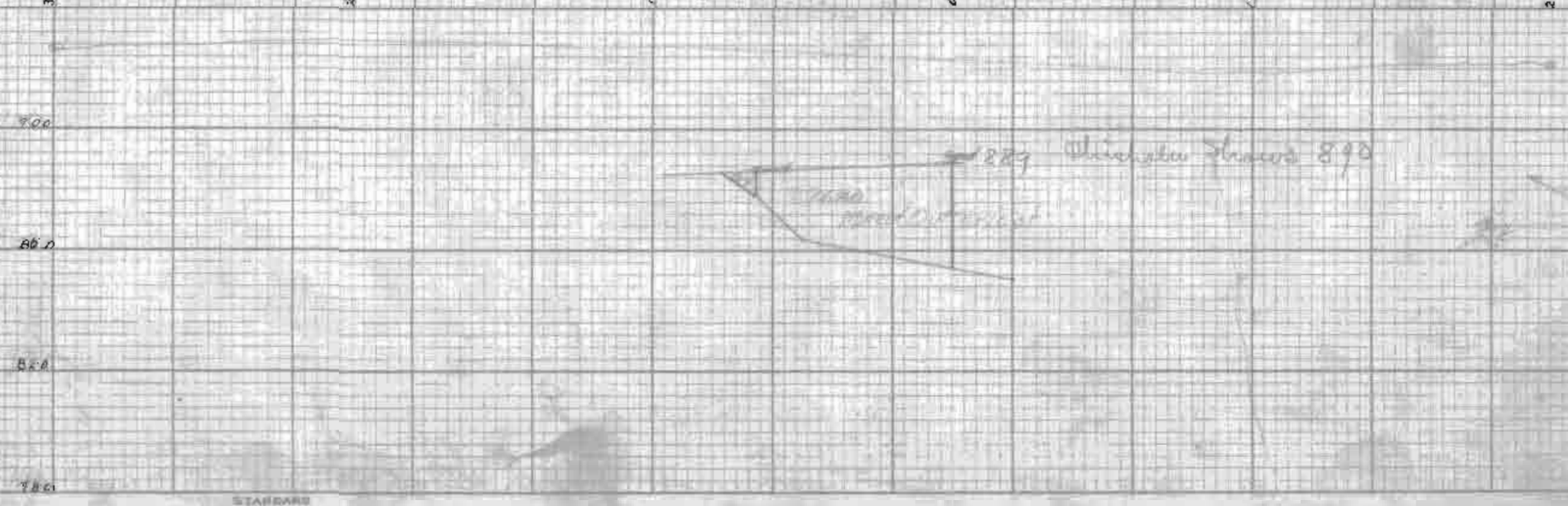
Mining Engr Hibbing, Minn. Sept 9 1903



Cross Section b-b 150



Cross Section c-c 200



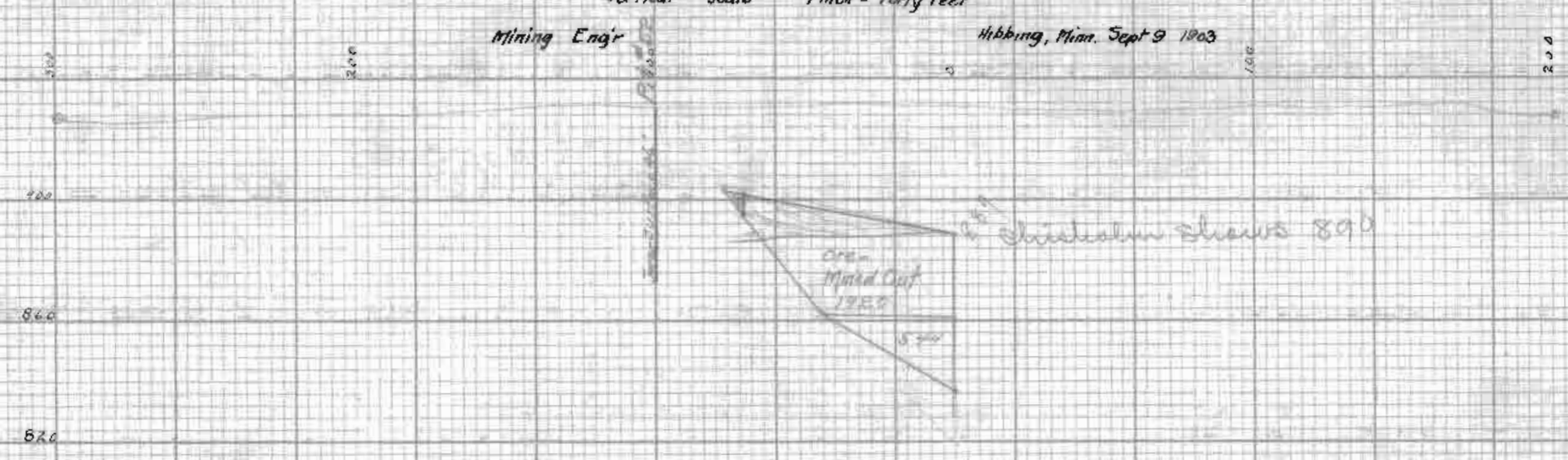
STANDARD
CROSS SECTION

Cross Sections of Pearce Mine

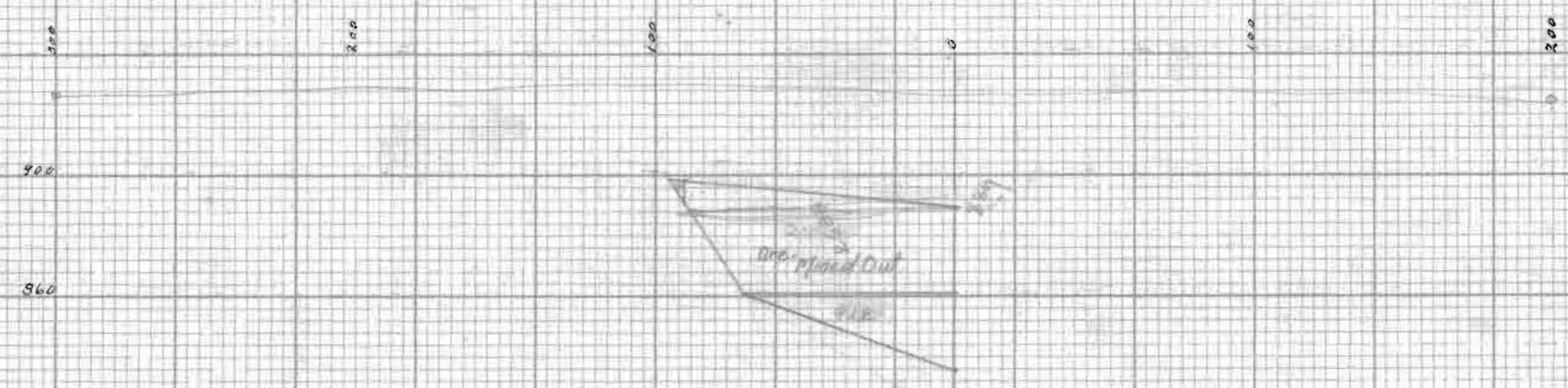
Cross Section d-d 250

Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet

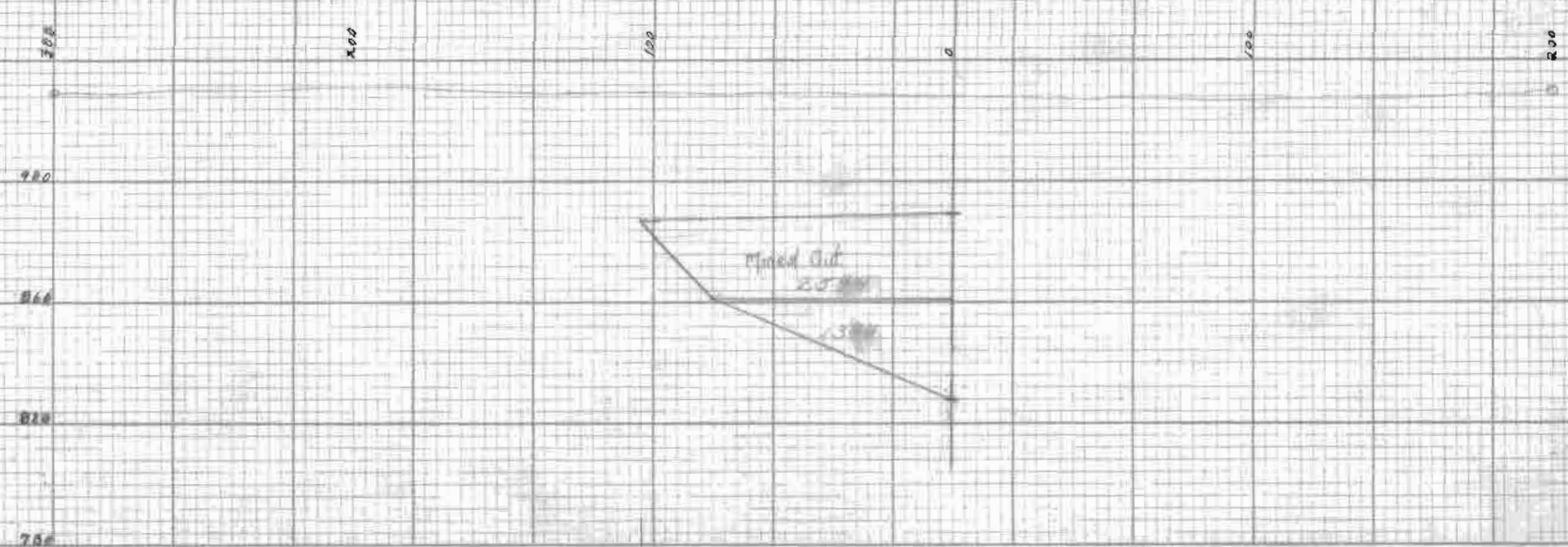
Mining Engr Hibbing, Minn. Sept 9 1903



Cross Section e-e 300



Cross Section f-f 350

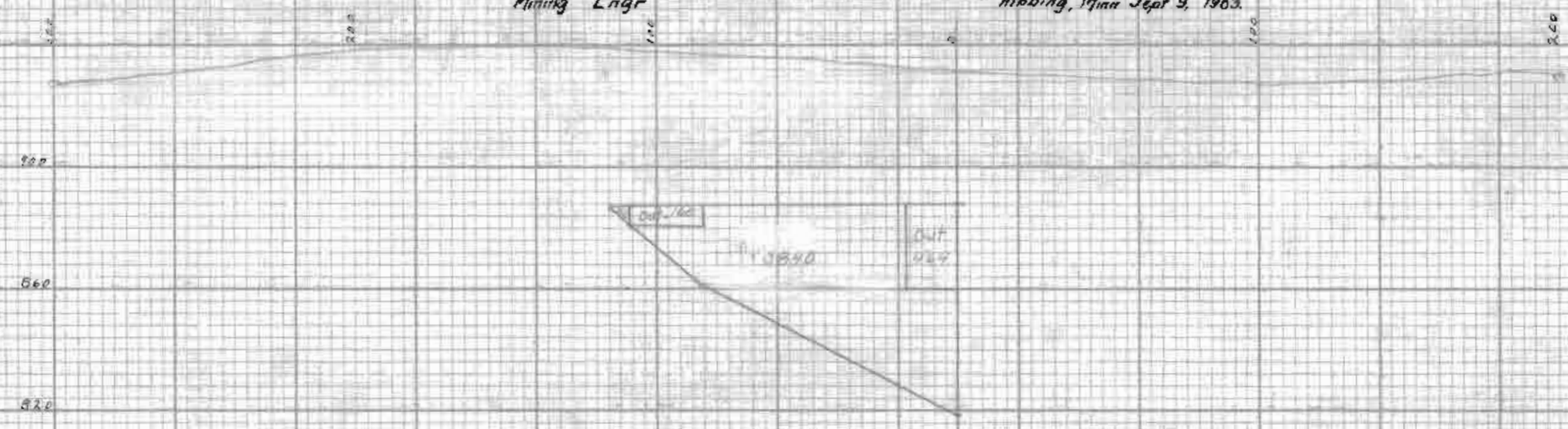


Cross Sections of Pearce Mine

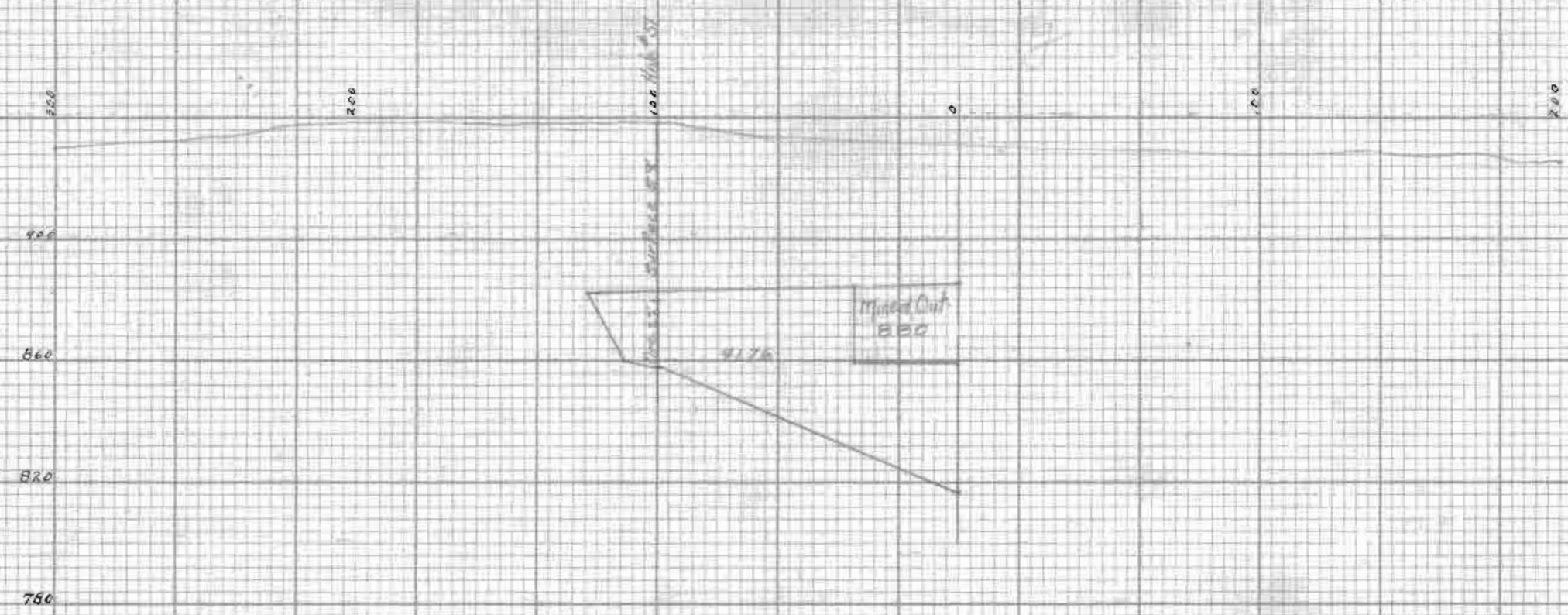
Cross Section g - g 400

Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet

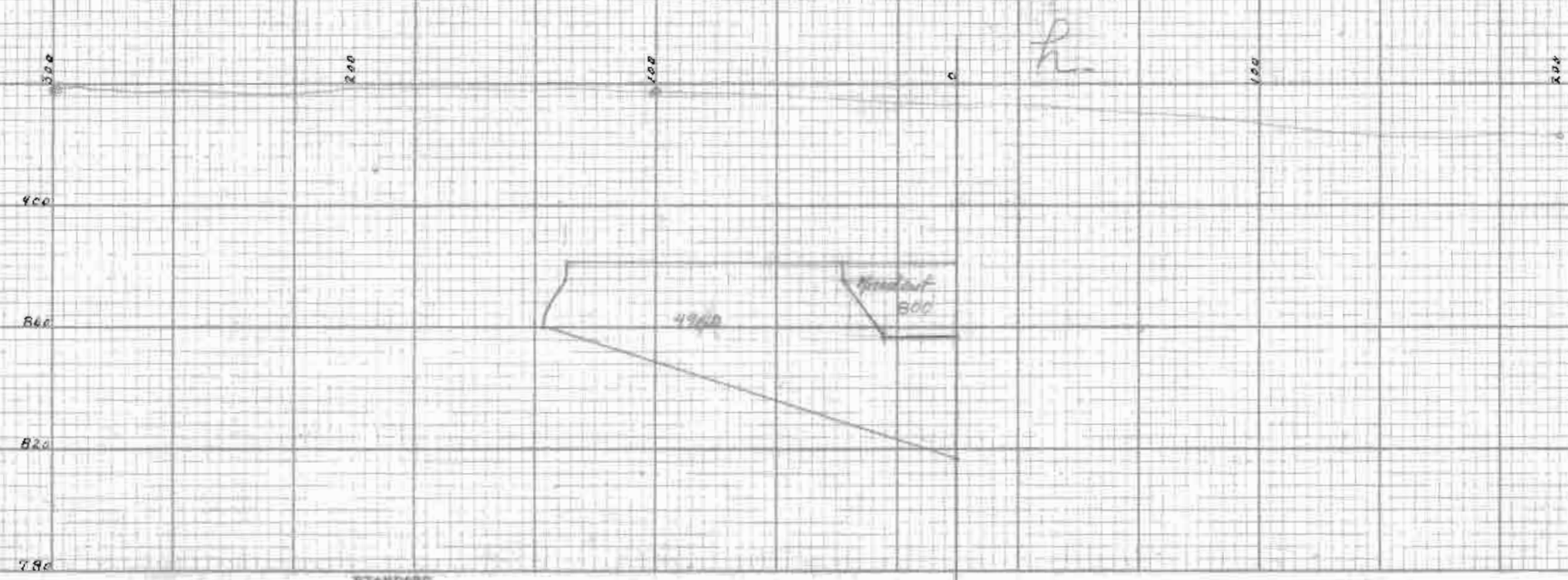
Mining Eng'r Hibbing, Minn Sept 9, 1903.



Cross Section h - h 450



Cross Section i - i 500



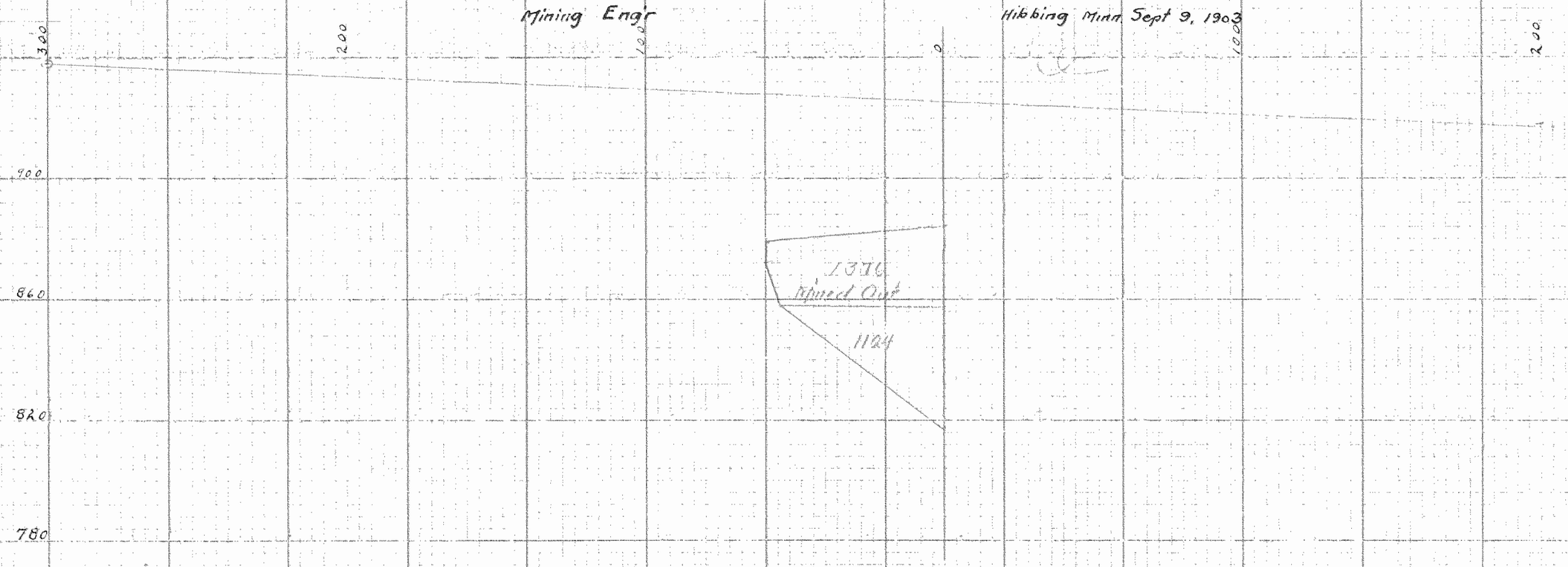
STANDARD
CROSS SECTION.

Cross Sections of Pearce Mine

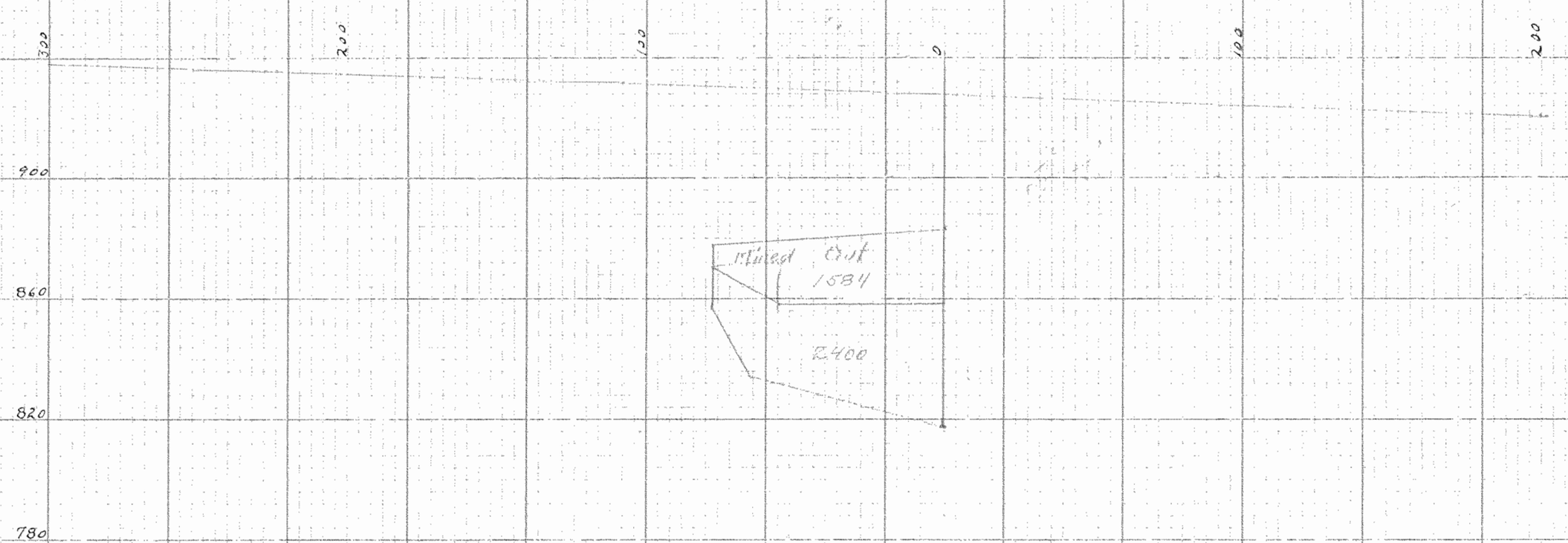
Cross Section j - j 550

Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet

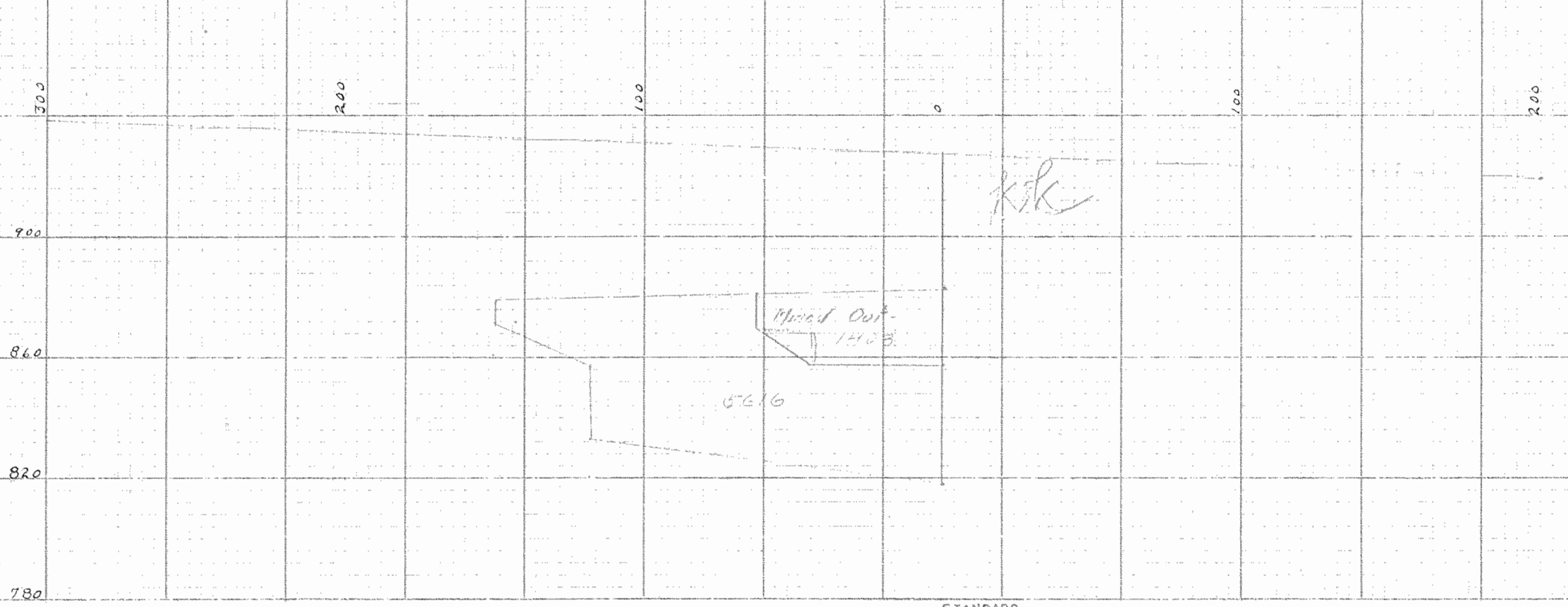
Mining Engr Hibbing Minn Sept 9, 1903



Cross Section k - k 600



Cross Section l - l 650



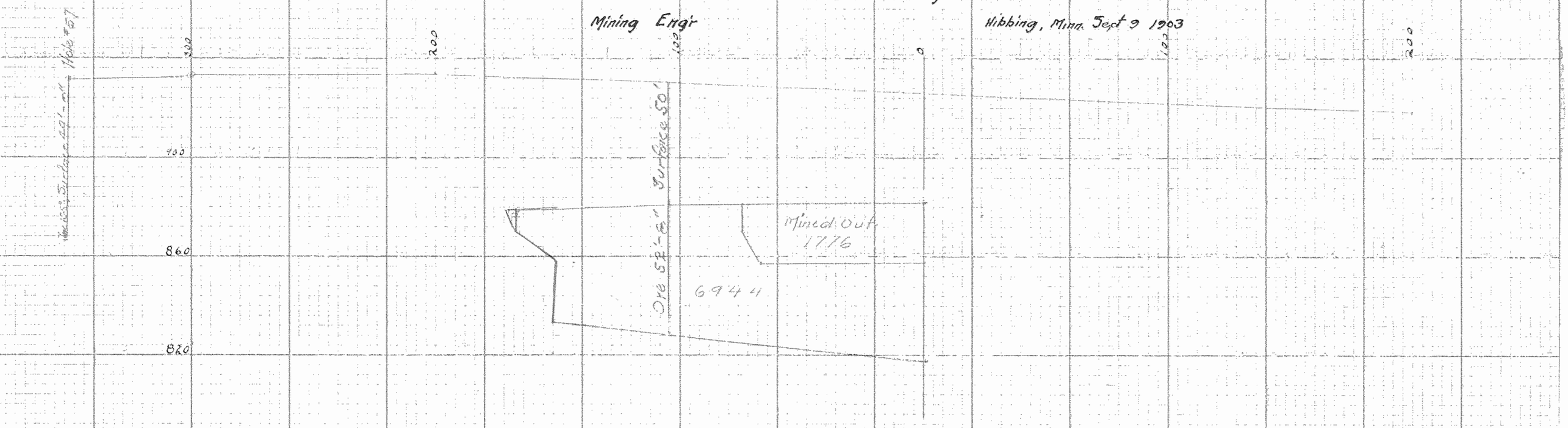
STANDARD
CROSS SECTION.
10"x 12" N°783.

Cross Sections of Pearce Mine

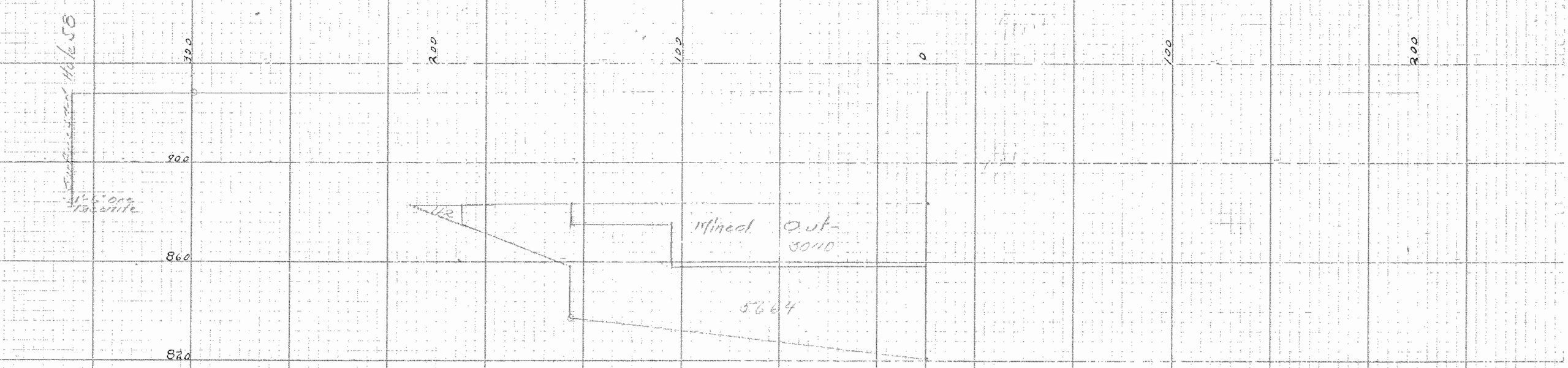
Cross Section m-m 700

Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet

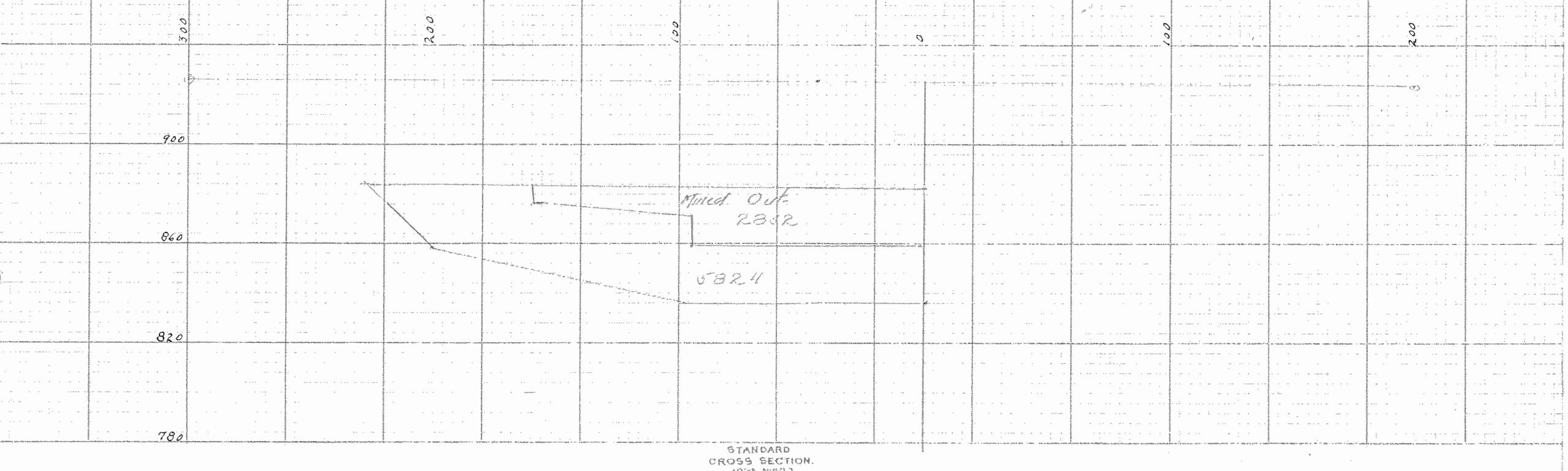
Mining Engr Hibbing, Minn. Sept 9 1903



Cross Section n-n 750



Cross Section o-o 800

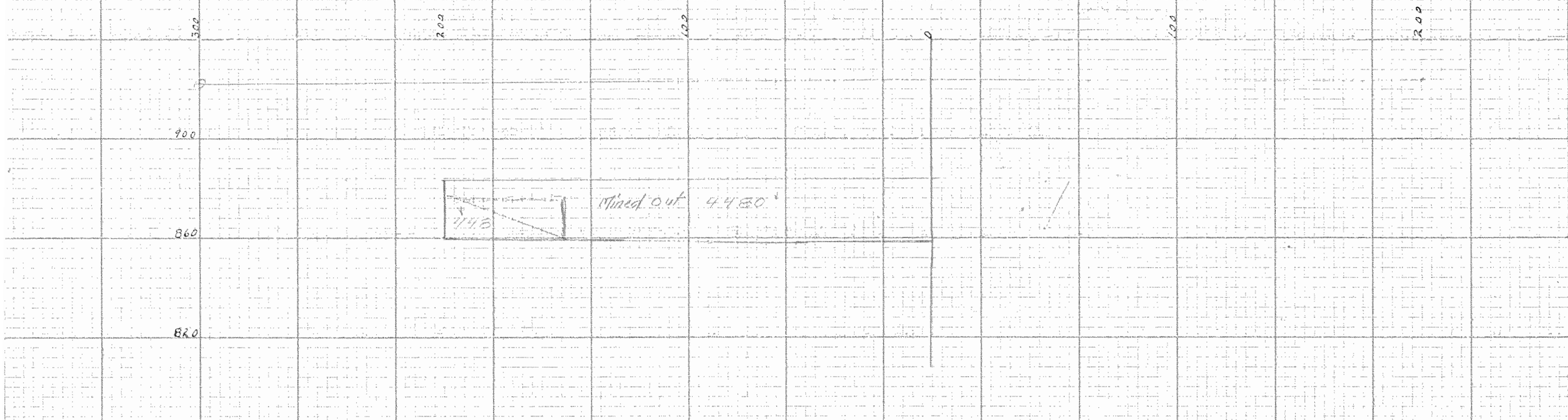


STANDARD
CROSS SECTION.
10"2 N:283.

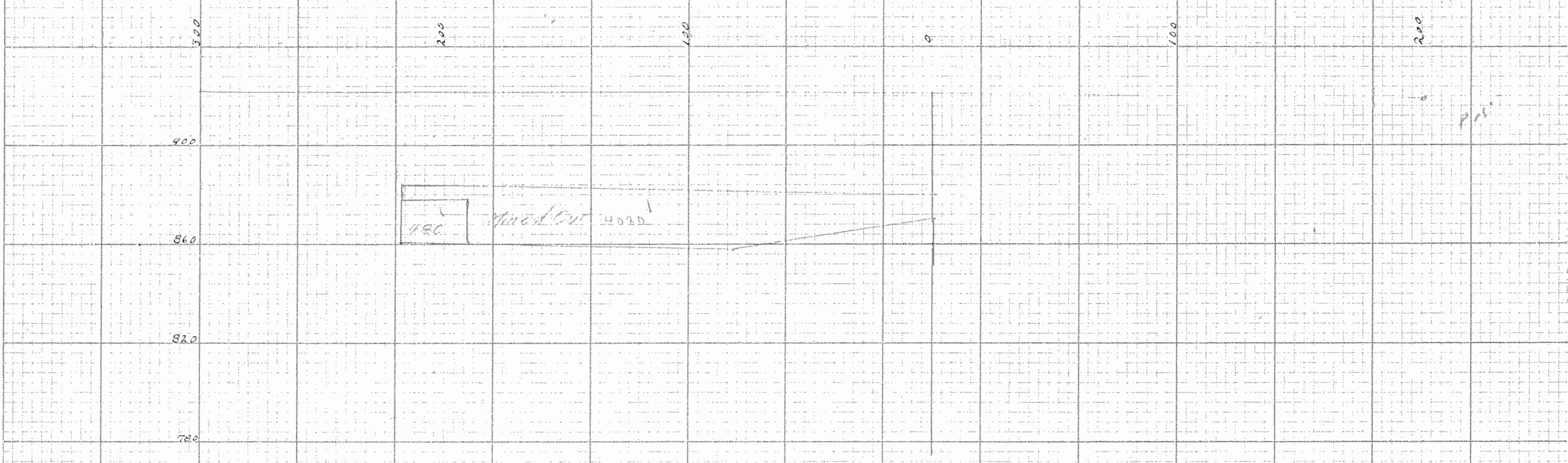
Cross Sections of Pearce Mine

Cross Section p-p 850

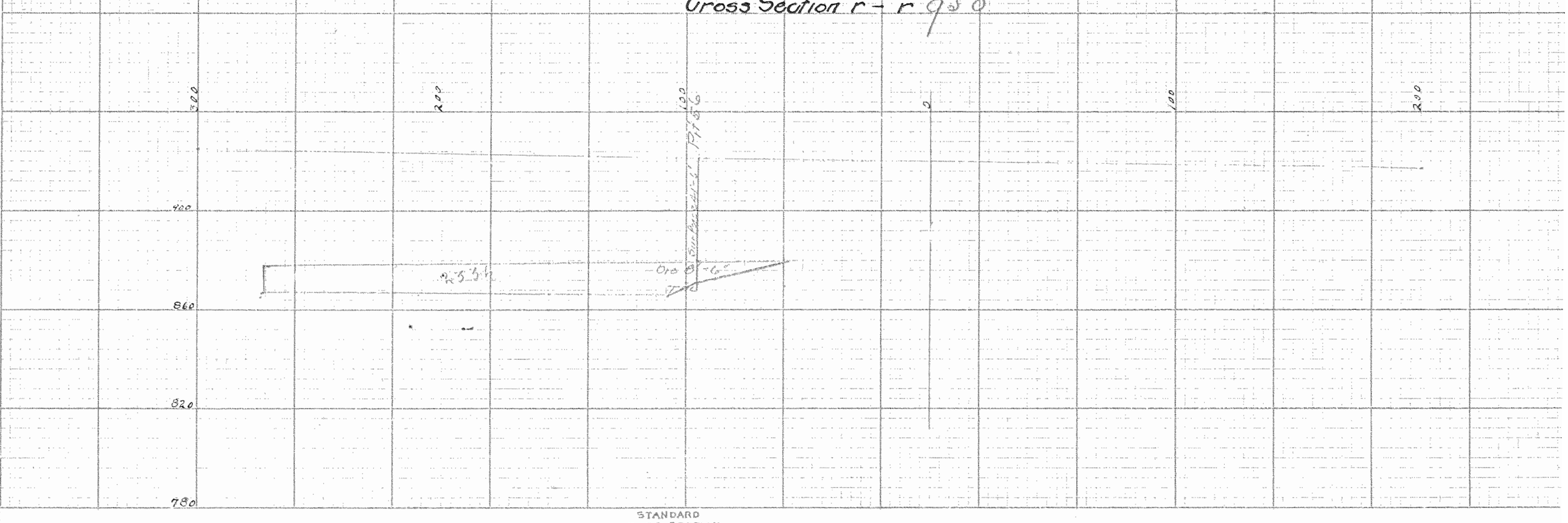
Horizontal Scale 1 Inch = Forty Feet
Vertical Scale 1 Inch = Forty Feet



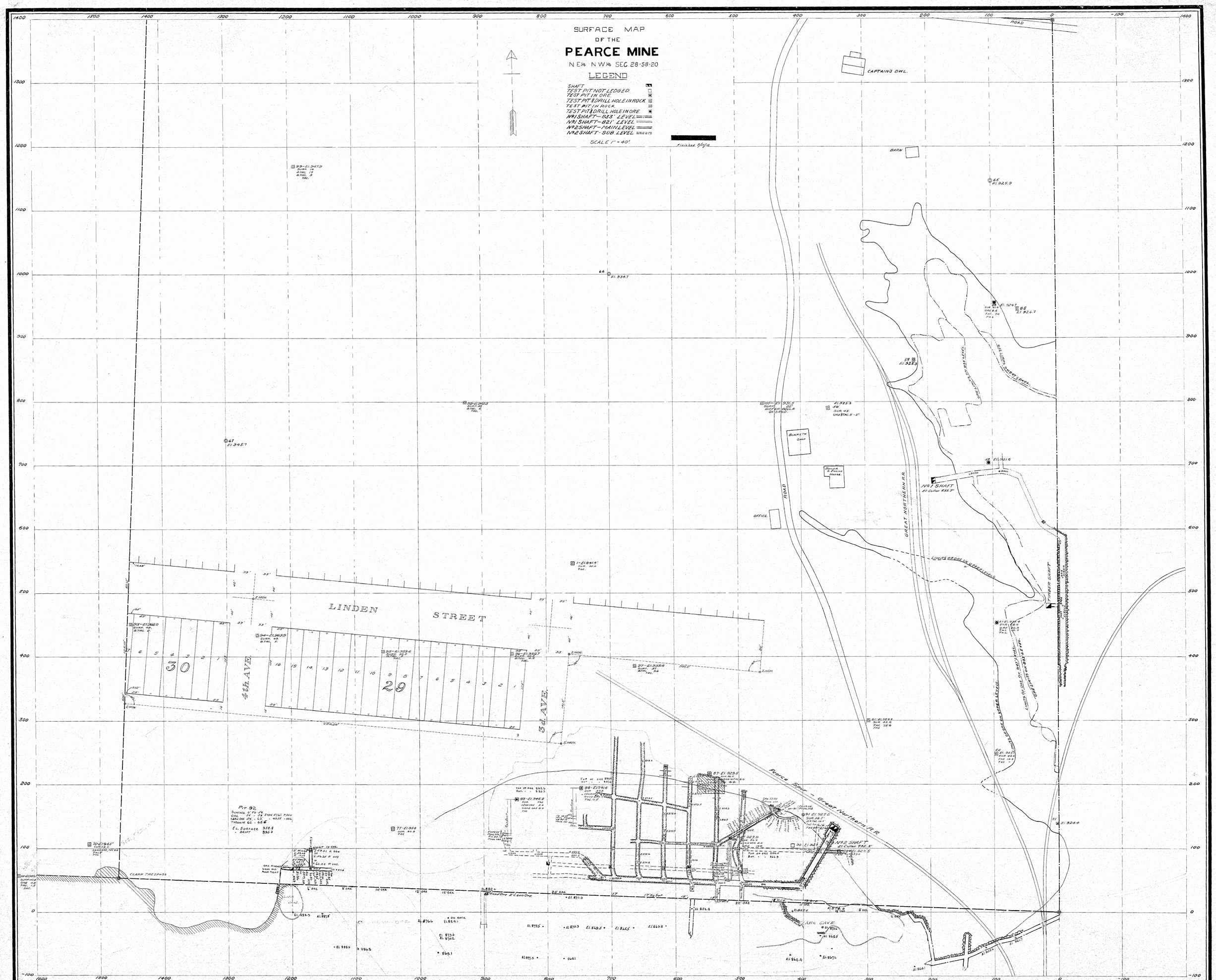
Cross Section q-q 900



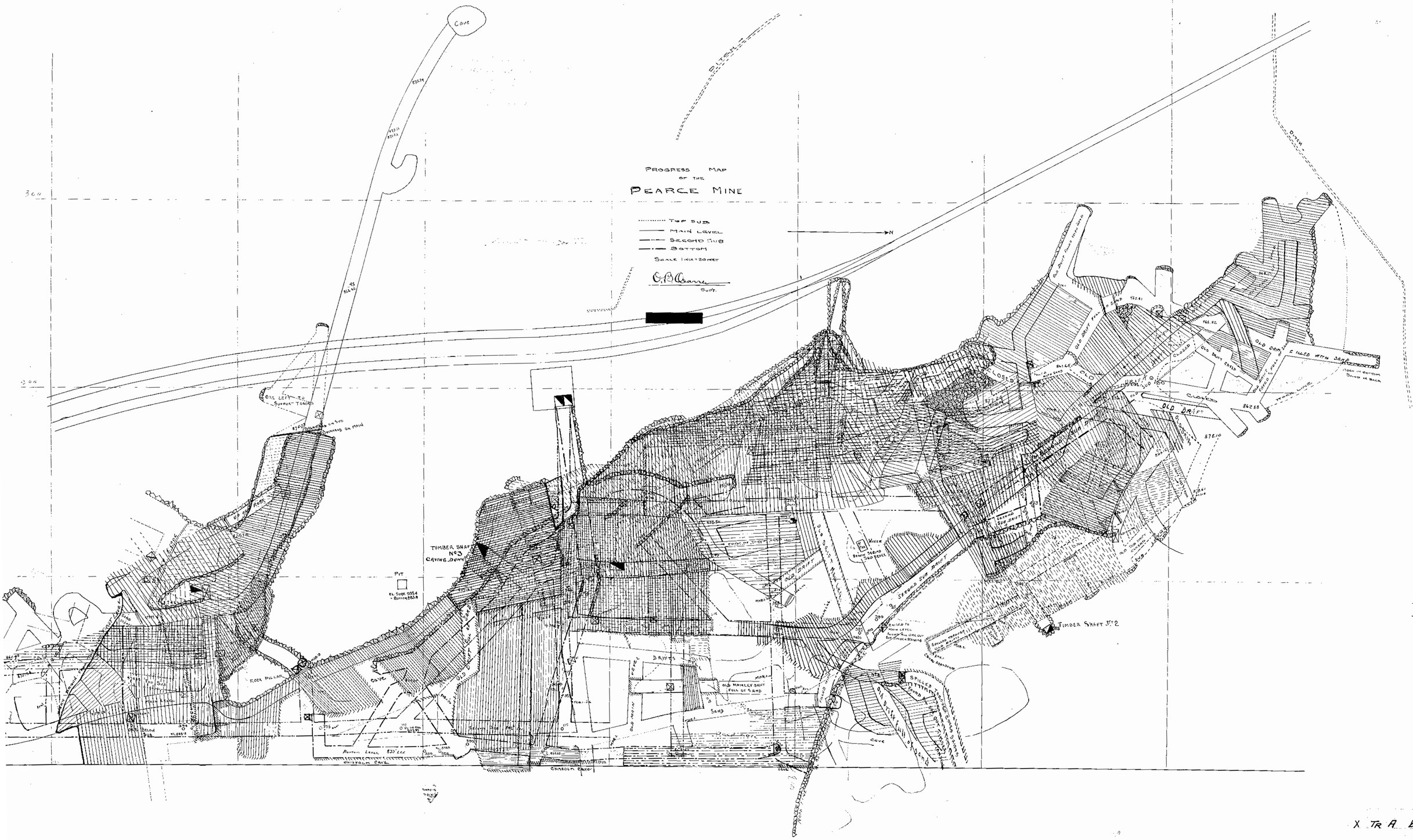
Cross Section r-r 950



STANDARD
CROSS SECTION.
10"x8" No283.


SURFACE MAP
OF THE
PEARCE MINE
N E¼ N W¼ SEC. 28-58-20
LEGEND
SHAFT
TEST PIT NOT LEDGED
TEST PIT IN ORE
TEST PIT & DRILL HOLE IN ROCK
TEST PIT IN ROCK
TEST PIT & DRILL HOLE IN ORE
NO 1 SHAFT—833' LEVEL
NO 1 SHAFT—821' LEVEL
NO 2 SHAFT—MAIN LEVEL
NO 2 SHAFT—SUB LEVEL
SCALE 1" = 40'
Finished 7/1/16
ROAD
CAPTAIN'S DWL.
BARN
BLACKS'TH SHOP
BOILER & ENGINE HOUSE
OFFICE
NO 1 SHAFT
El. Collar 933.7'
NO 2 SHAFT
El. Collar 932.8'
GREAT NORTHERN R.R.
Pearce Spur - Great Northern R.R.
LIMITS OF ORE ON UPPER LEVELS
LIMITS OF ORE ON 821' LEVEL
LIMITS OF ORE ON 833' LEVEL
TIMBER SHAFT
LINDEN STREET
4TH AVE.
3RD AVE.
30
29
CLARK TRESPASS
CLARK CAVE
Pit 92
Surface 0' to 5'
Ore 1' to 2' Lean Ore
Lean Ore 5' - 6.2'
Trenched 6.2' - 6.8'
El. Surface 958.8
Drift 893.3

X TR A BV. 3599


PROGRESS MAP
OF THE
PEARCE MINE
TOP SUB
MAIN LEVEL
SECOND SUB
BOTTOM
SCALE 1 INCH = 20 FEET
N
Supt.
Cave
PITCH
ORE LEFT TO SUPPORT TEACHES
TIMBER SHAFT No 3 CAVING DOWN
PIT
EL. SUB. 0354
BOTTOM 8554
ROCK PILLAR
CAVE
OLD DRIFT
OLD MAINLEY DRIFT FULL OF SAND
SAND
DRIFTS
SPILLED TRENCHES
Bottom Level 835' Lev
CHISHOLM CAVE
SECOND OLD DRIFT
TIMBER SHAFT No 2
OLD DRIFT FILLED WITH SAND
OLD DRIFT CLOSED
OLD DRIFT CLOSED
OLD DRIFT
TOOL LINE
STOPE IN BOTTOM
STOPE IN BACK
65
Stoping 36'-6"
Broken Tm 8'-6"
Tons Pr. 70'-
Quintuple 2'-6"
Total — 127'-6"

X TR A BY 3602