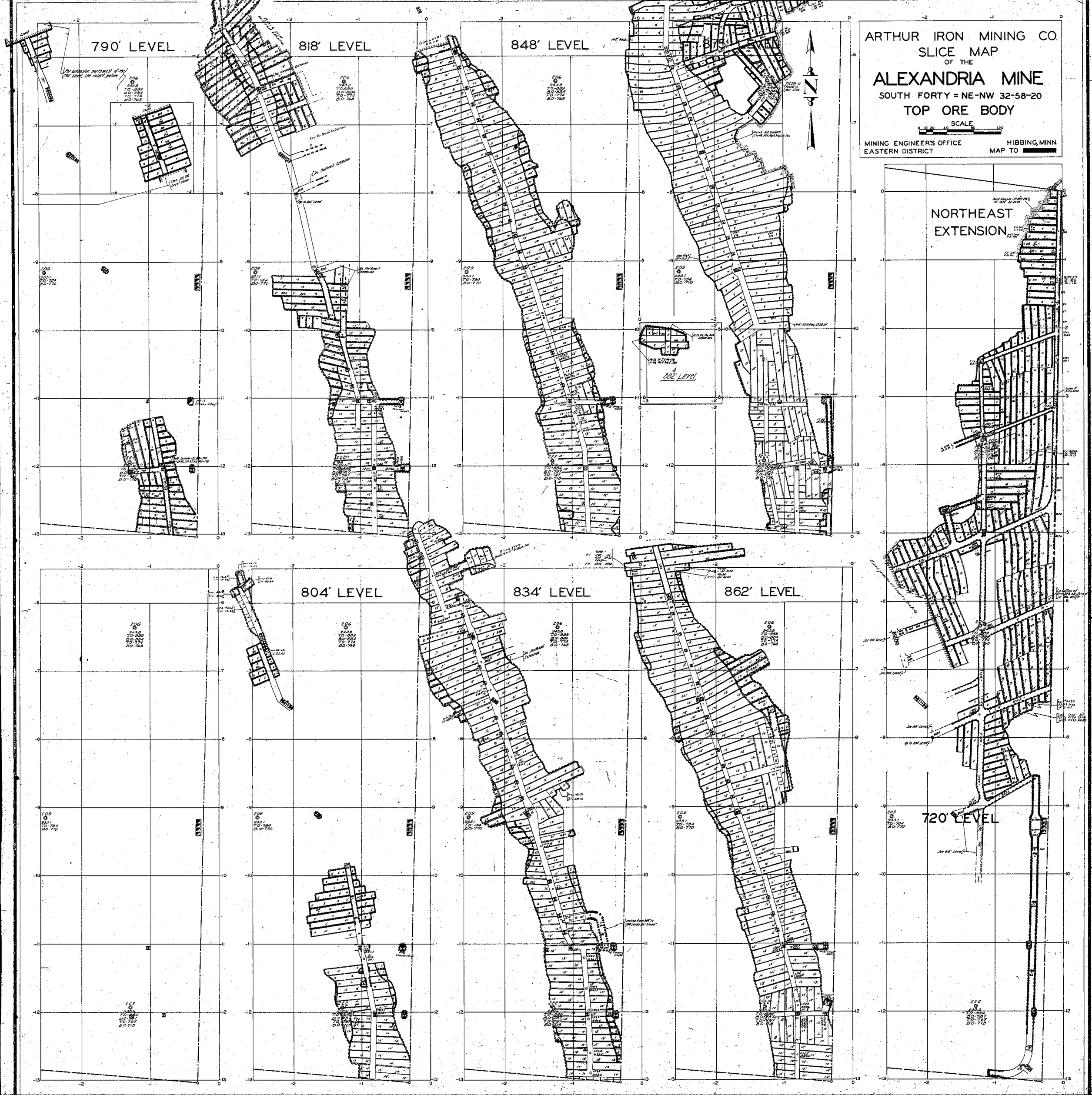
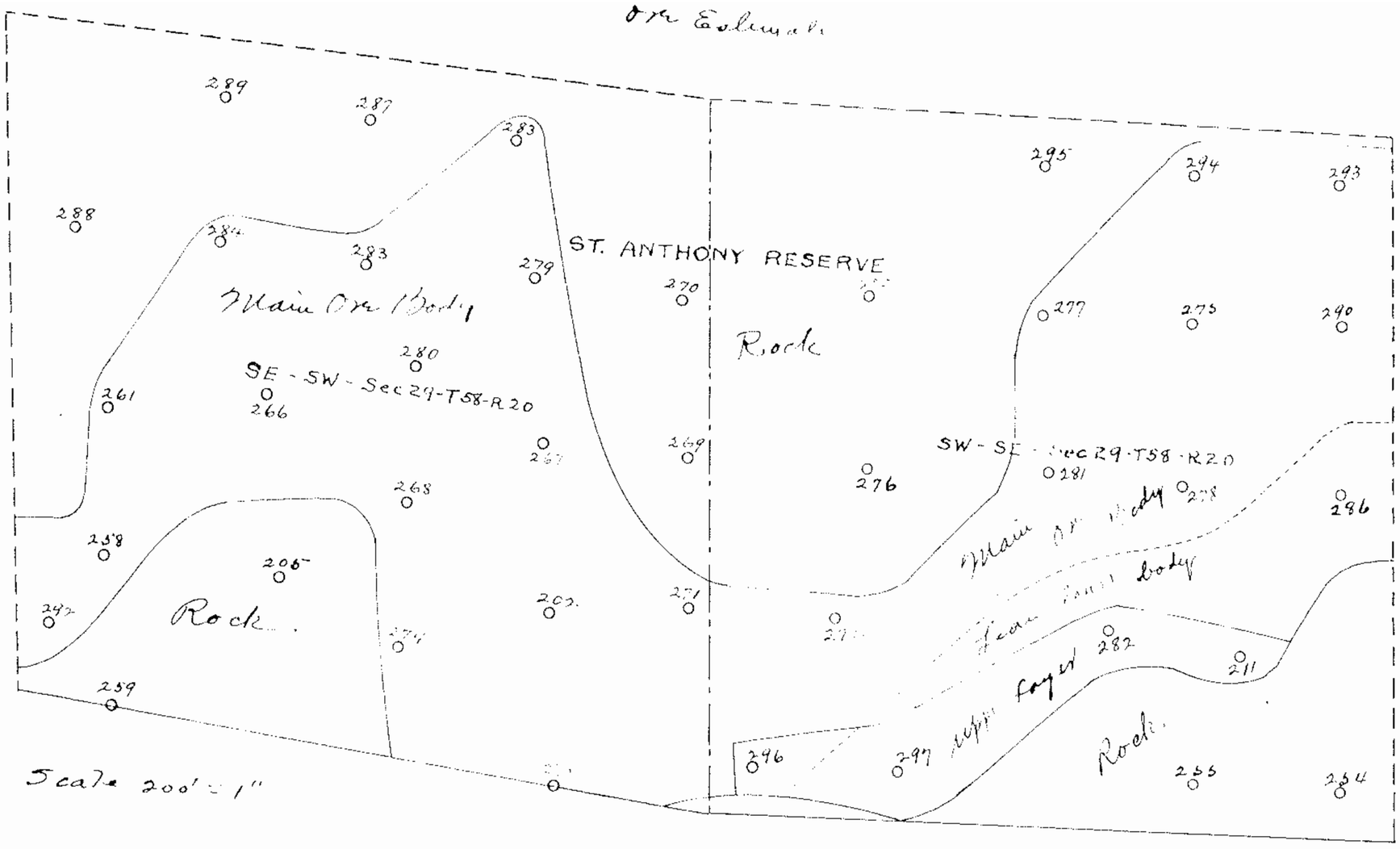

ARTHUR IRON MINING CO.
SLICE MAP
OF THE
ALEXANDRIA MINE
SOUTH FORTY = NE-NW 32-58-20
TOP ORE BODY
SCALE
MINING ENGINEER'S OFFICE
EASTERN DISTRICT
HIBBING, MINN.
MAP TO
790' LEVEL
818' LEVEL
848' LEVEL
875' LEVEL
NORTHEAST EXTENSION
804' LEVEL
834' LEVEL
862' LEVEL
720' LEVEL
882' Level

ARTHUR IRON MINING CO.
SLICE MAP
OF THE
ALEXANDRIA MINE
SOUTH FORTY = NE-NW 32-58-20
TOP ORE BODY
SCALE
MINING ENGINEERS OFFICE
EASTERN DISTRICT
HIBBING, MINN.
MAP TO
818' LEVEL
848' LEVEL
875' LEVEL
NORTHEAST
EXTENSION
N



SE-SW Sec. 29 58 20

no. of D.H.	from	to		Depth of ore	% Fe	% P
202	85'	97		12'	54.54	.084
258	75	84		9'	59.04	.064
261	60	73		13'	54.70	.062
266	70	80		10'	56.14	.062
267	75	115		40'	57.55	.097
268	82	110		28'	56.97	.083
271	94	104		10'	58.18	[illegible]
273	100	[illegible]		8'	56.34	.116
274	90	100		10'	56.93	.077
277	41	51		10'	57.18	.157
280	70	83		13'	57.21	.089
283	27	36		9'	57.15	[illegible]
284	40	54		14'	57.58	.081
285	51	67		16'	[illegible]	.135
292	75	86		11'	57.39	.072
				218'	57.14	.091

Underground Mining only.
Average depth of ore - 14.53'.
Cubic feet per ton 15.50
No. of tons total - 919,000
Grade 57.19% Fe & .091% P

Edward P. McCarthy
July 14 - 1915

SW-SE Sec. 21-58-20

no. of D.H.	from	to		Depth of ore	% Fe	% P
211	57'	75'		18'	55.43	.104
	135	145		10'		
272	100	116		16'	58.91	.097
275	64	80		16'	57.66	.074
277	66	50		16'	59.22	.079
278	100	117		17'	56.[illegible]	.082
281	79	94		15'	56.[illegible]	.098
282	53	60		7'	53.21	.104
	125	136		11'		
286	[illegible]	130		20'	53.85	.077
290	75	89		14'	55.[illegible]	.085
295	36	48		12'	57.12	.075
294	23	40		17'	57.35	.073
296	38	50		12'	55.[illegible]	.146
	109	120		11'		
297	50	68		8'	53.52	.104
	125	151		26'		
				240'	55.82	.095

Underground Mining only

Total ore

Tonnage main body 984,000 tons
" upper " 111,000 "
1,095,000 "

av. grade 55.[illegible]% Fe & .095% P of total.
" " 54.89% Fe & .149% P of upper layer
" depth of ore in ft. = 15.46'
" " " " " " in upper layer 11.25'
cu. ft. per ton 15.75 in main body
" " " 16.05 in upper layer
If we deduct 325,000 the grade of the remaining 659,000 = 57.10% Fe & .095% P.

211	57'	75'		18'	55.94	.116
282	[illegible]	60		7'	53.89	[illegible]
297	60	68		8'	53.60	.156
211	38	50		12'	53.6	.199
				45'	54.59	[illegible]

Upper Layer

Tonnage 111,000
Grade 54.59% Fe & .149% P.
Probably paint rock

Lean & paintly

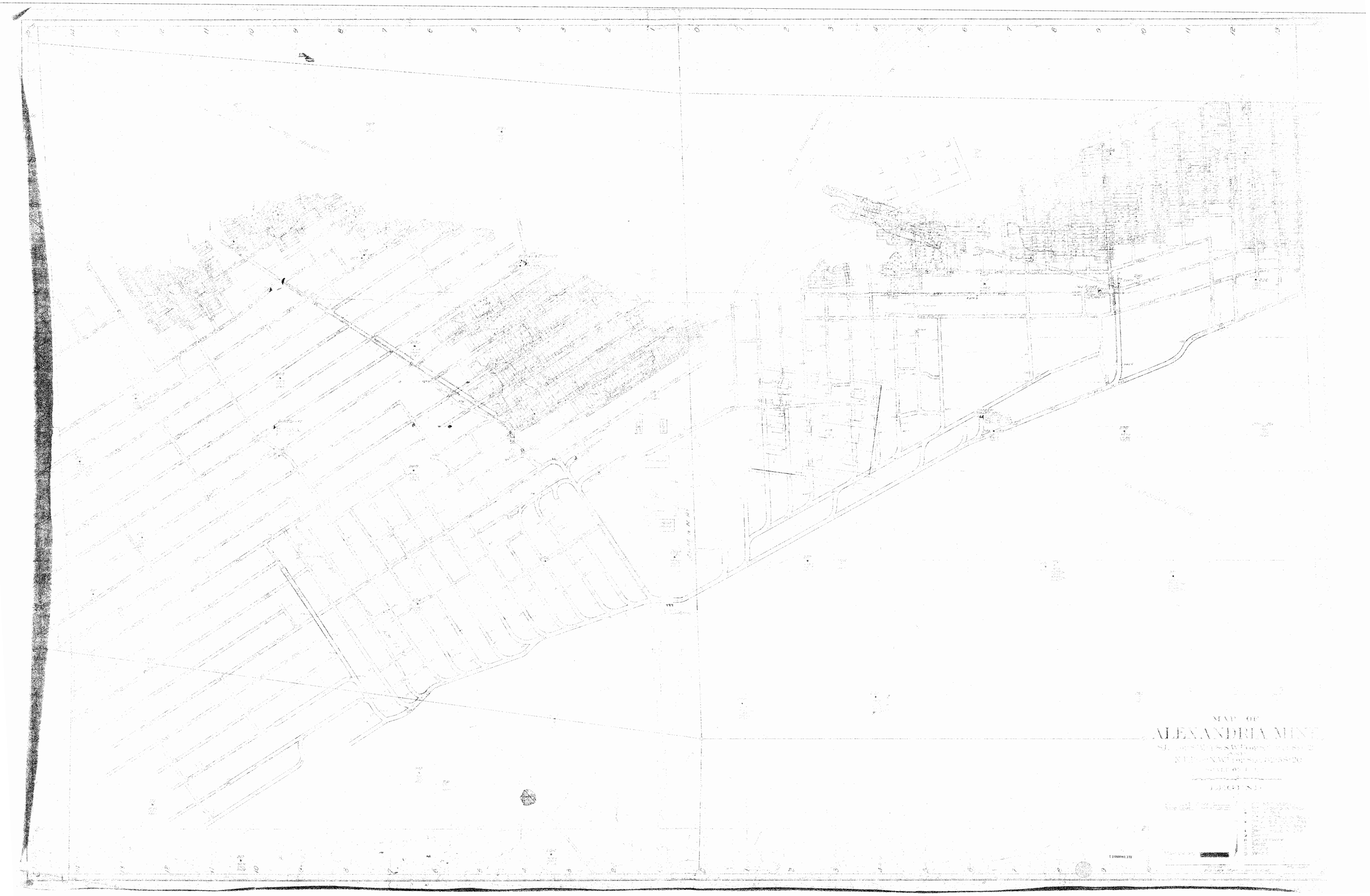
211	135'	145'		10'	54.52	.083
282	125	136		11'	53.78	.082
286	110	130		20'	53.85	.077
297	125	151		26'	53.49	.087
				67'	53.64	.083

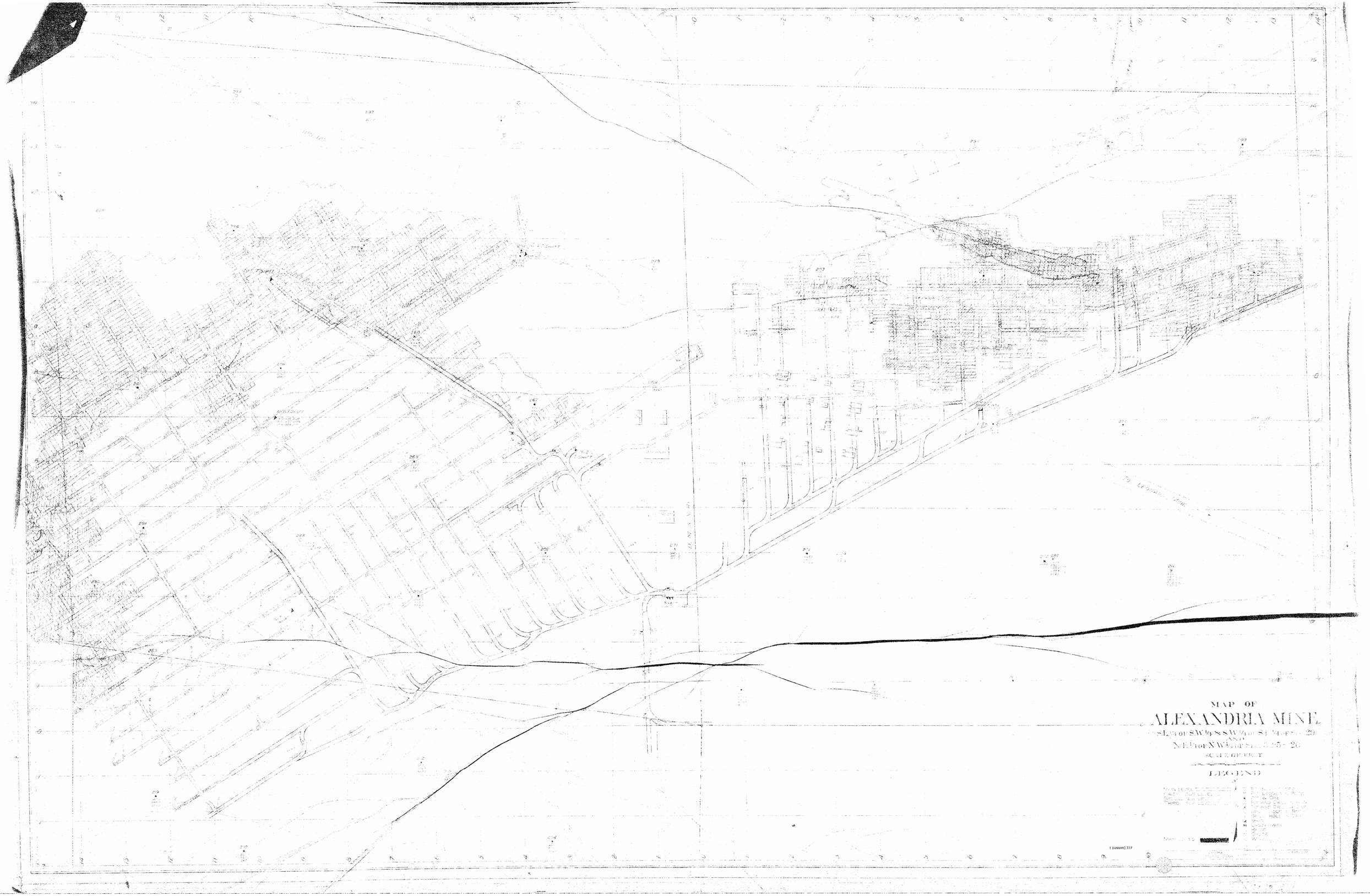
Partial Lower Layer

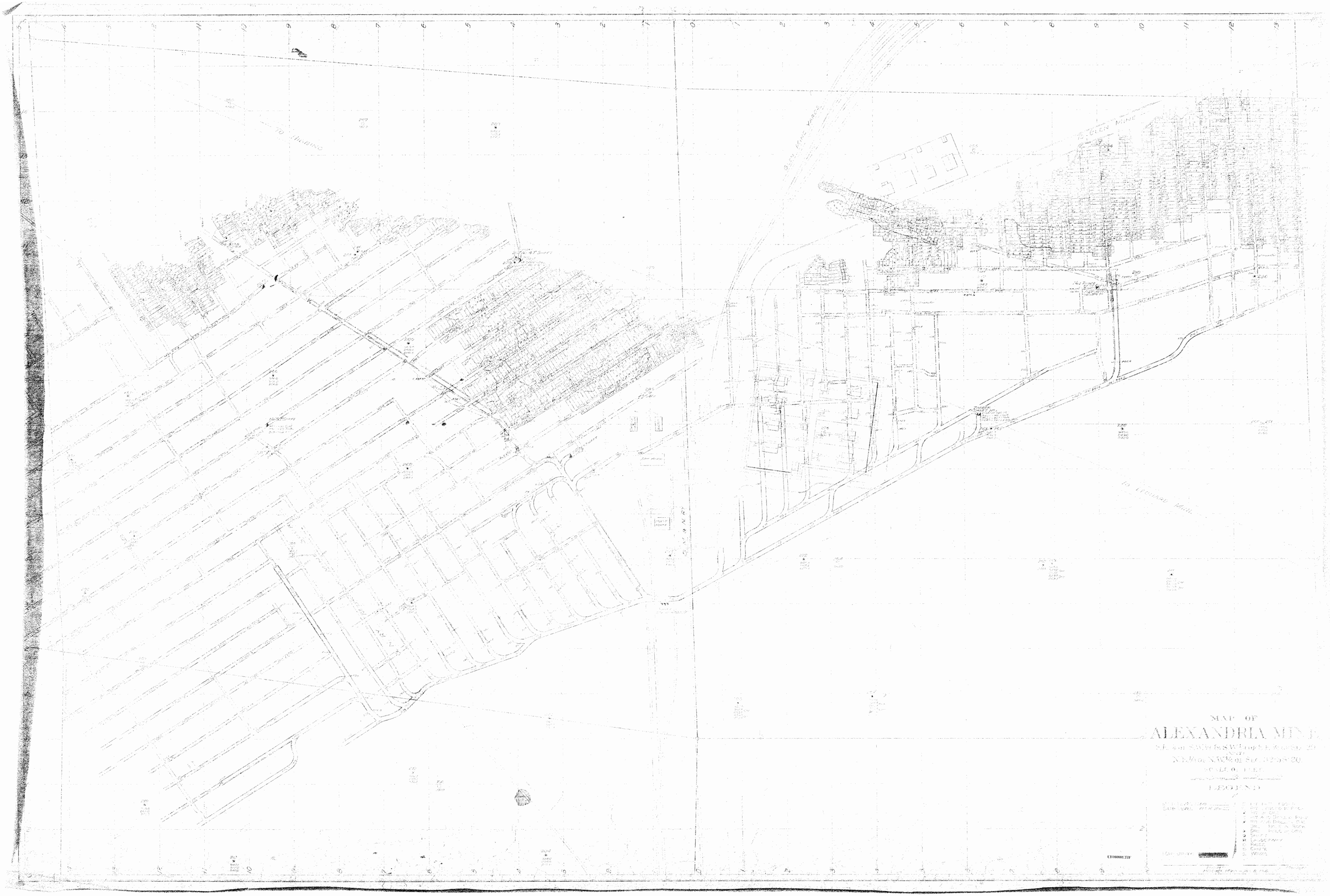
Tonnage in this area = 325,000
Grade 53.64% Fe & .083% P.
This tonnage has been included in total above.

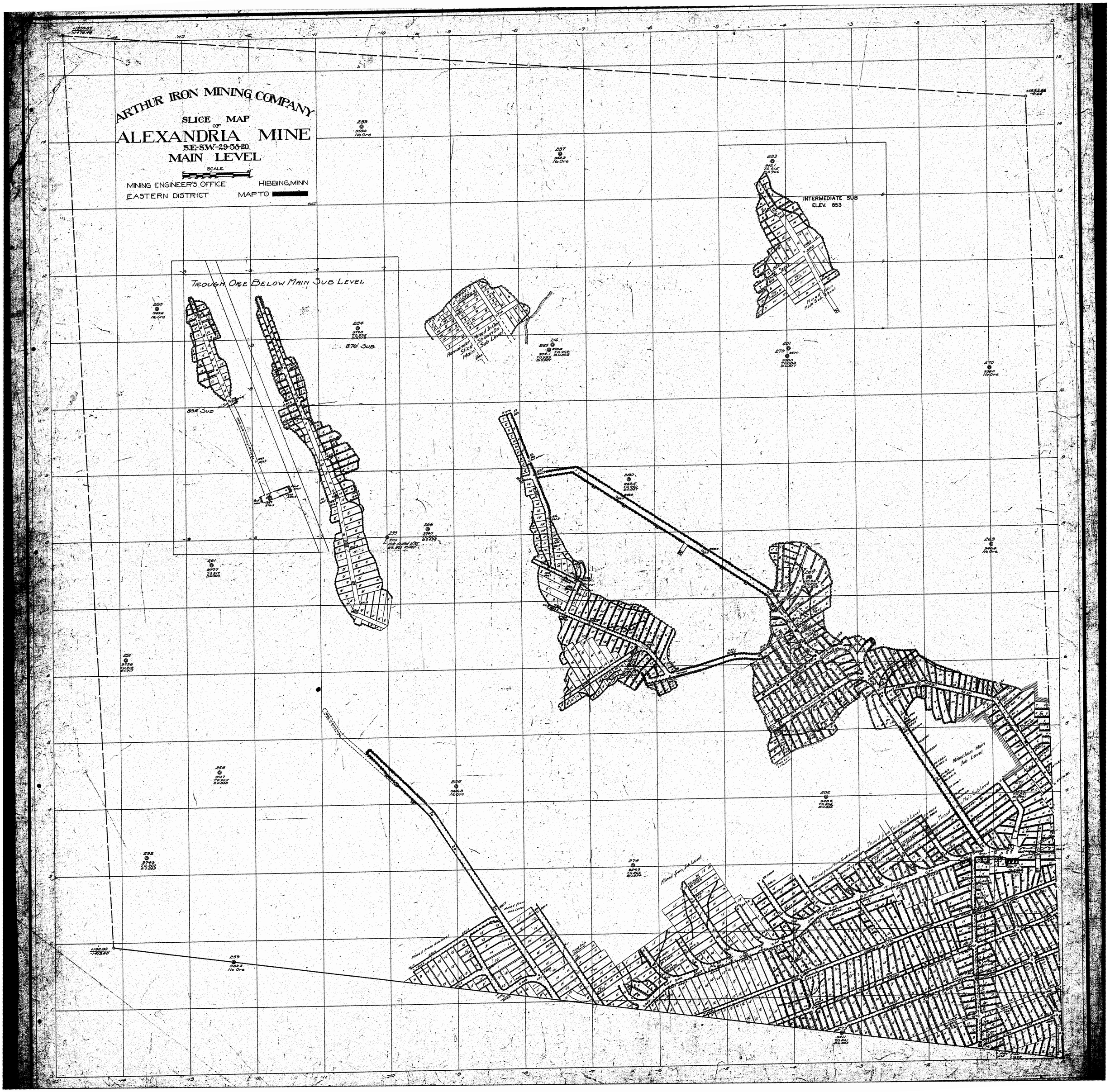
Tracing on File

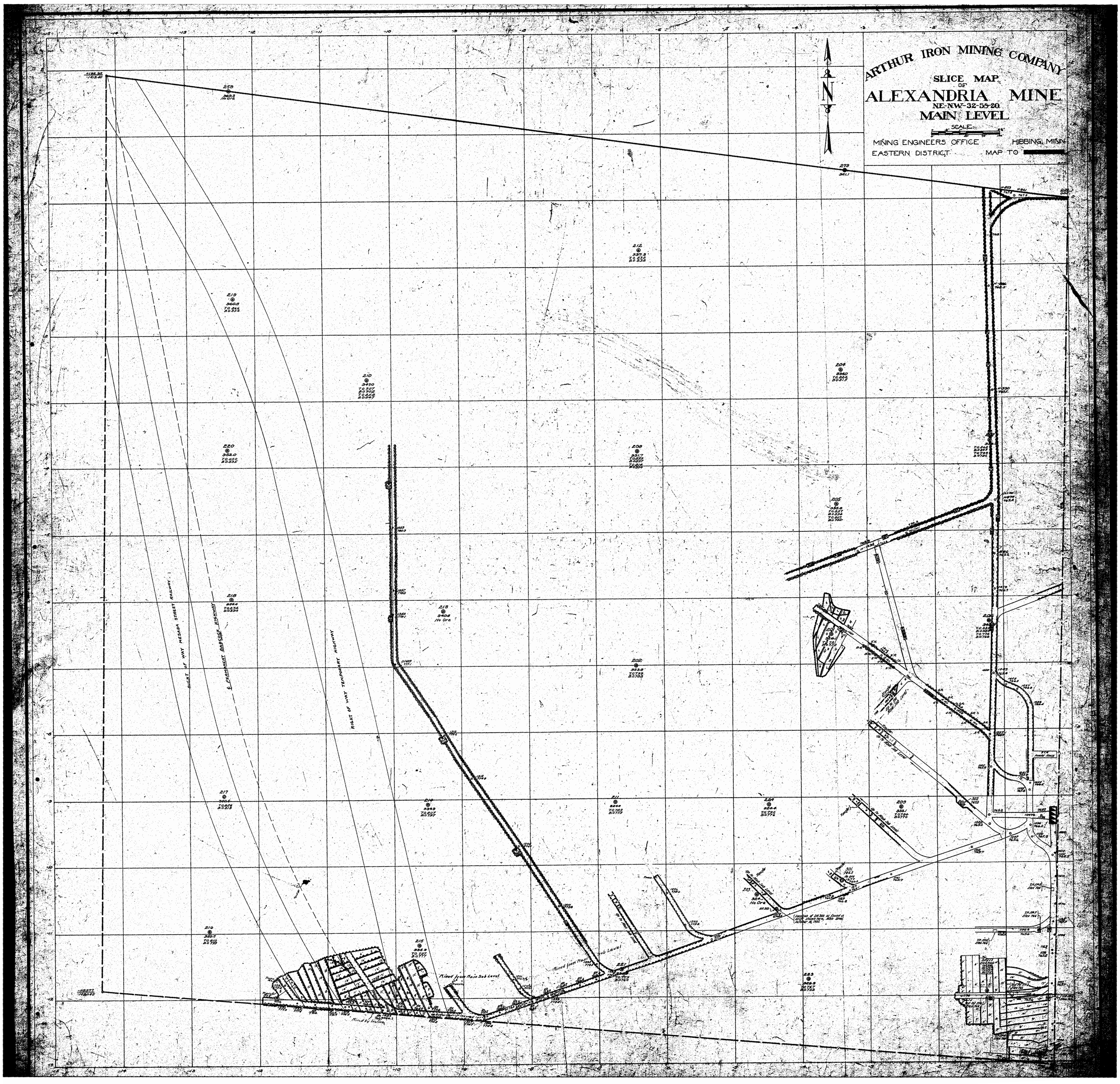
SE-SW + SW-SE Sec 29-58-20


MAP OF
ALEXANDRIA MINE
LEGEND

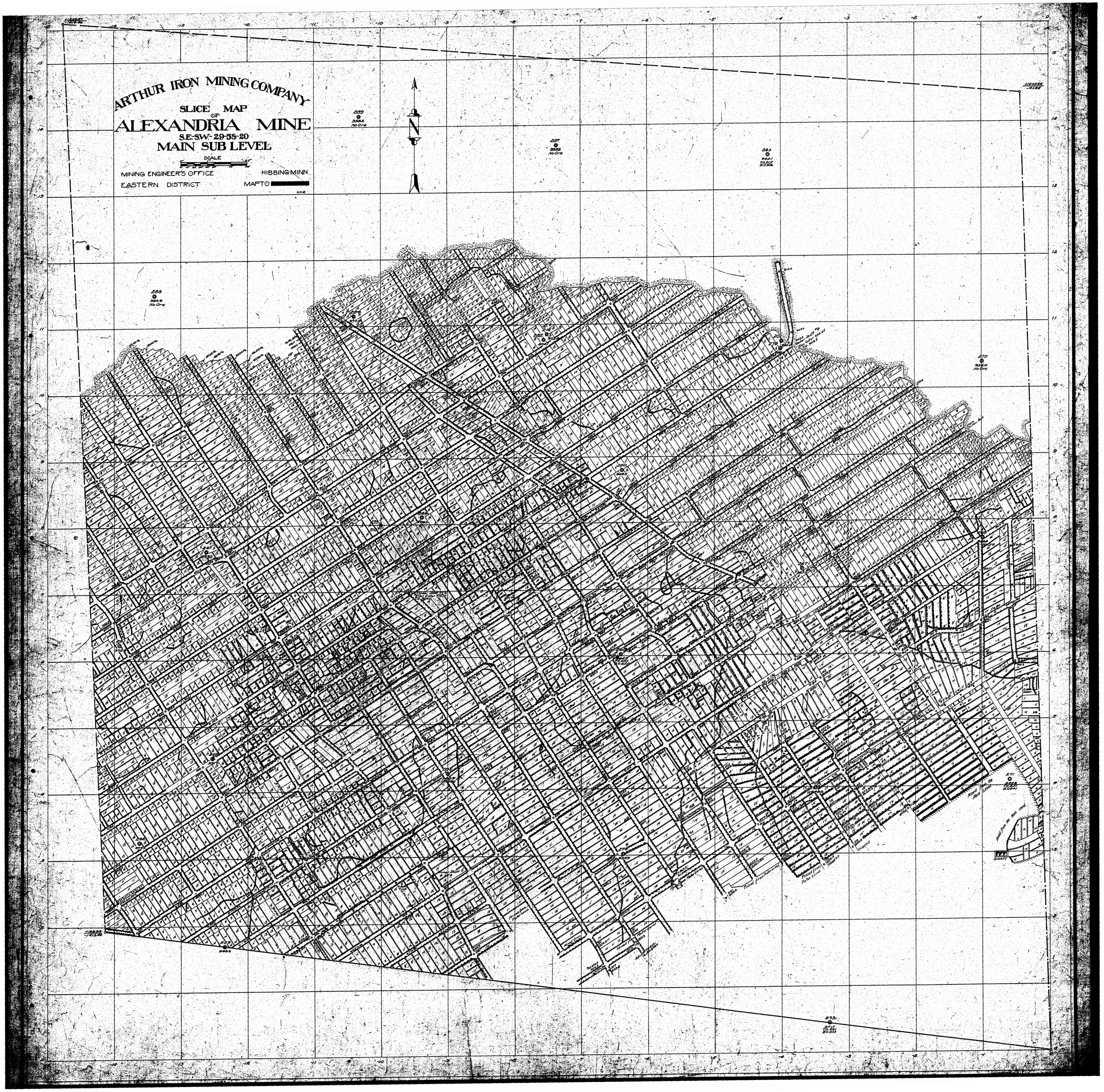

MAP OF
ALEXANDRIA MINE
SE¼ of SW¼ & SW¼ of SE¼ of Sec. 29
AND
N.E.¼ of N.W.¼ of Sec. 32 & 26
SCALE OF FEET
LEGEND
TO LEXINGTON
DANVILLE

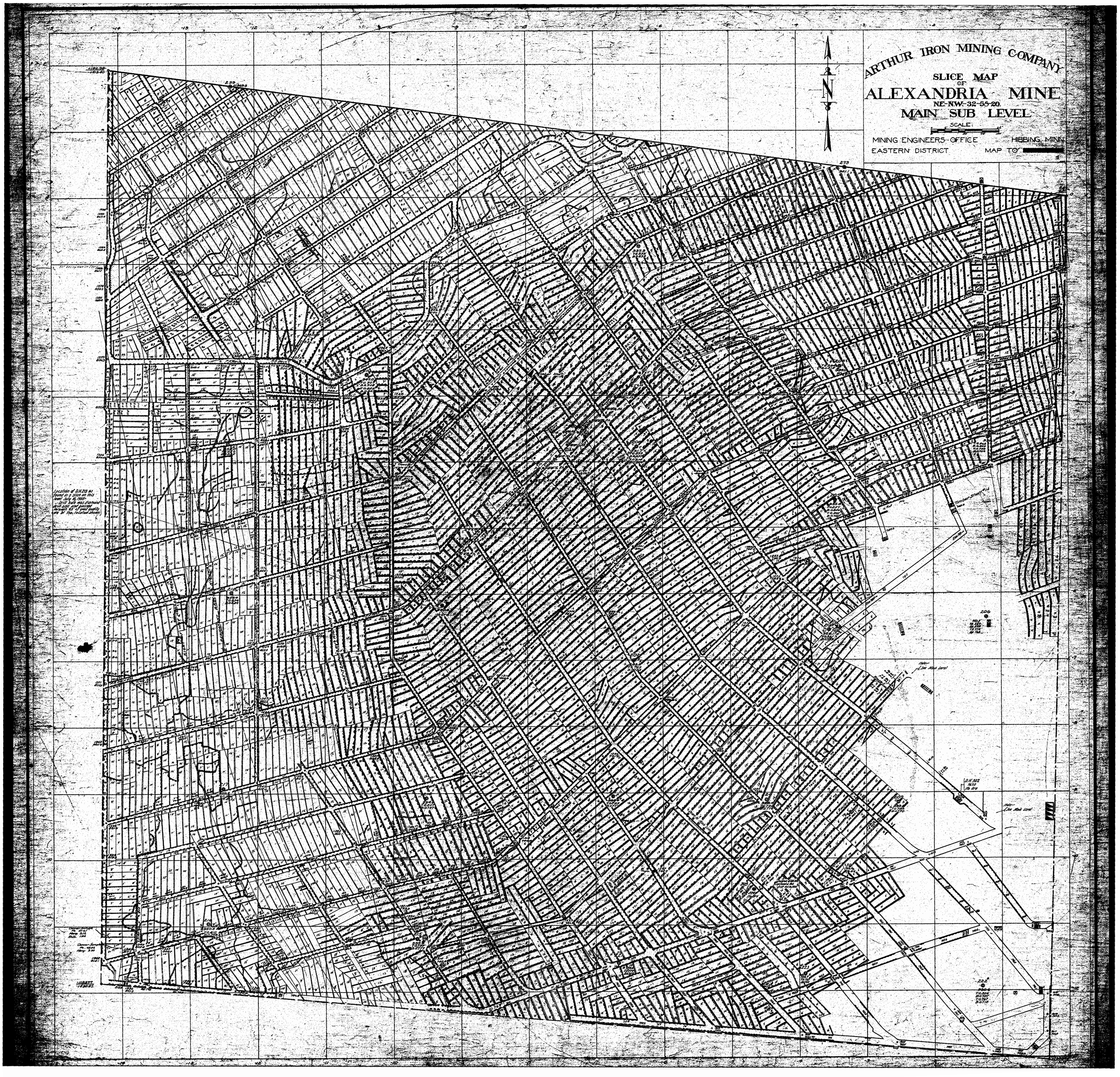

TO HAUBING
GLEN MINE
TO TENNANT MINE
MAP OF
ALEXANDRIA MINE
LEGEND
UT080001.TIF


ARTHUR IRON MINING COMPANY
SLICE OF MAP
ALEXANDRIA MINE
S.E.-S.W.-29-58-20.
MAIN LEVEL
SCALE
MINING ENGINEER'S OFFICE
HIBBING, MINN
EASTERN DISTRICT
MAP TO
INTERMEDIATE SUB
ELEV. 853
TROUGH ORE BELOW MAIN SUB LEVEL
876 SUB
895 SUB
Remainder Slice Main
Mined In Out Shown On Sub Level
Mined from Main Sub Level
Mined from Sub Level
Mined from Main Sub Level
Mined from Main Sub Level
Mined from Sub Level
Mined from Sub Level
Mined from


ARTHUR IRON MINING COMPANY
SLICE MAP
OF
ALEXANDRIA MINE
NE-NW-32-55-20
MAIN LEVEL
SCALE
MINING ENGINEERS OFFICE
HIBBING, MINN.
EASTERN DISTRICT
MAP TO
N
RIGHT OF WAY NESABA STREET RAILWAY
PROPOSED BARGOSS HIGHWAY
RIGHT OF WAY TEMPORARY HIGHWAY
Mined from Main Sub Level
Mined from Main Sub Level
Mined by Hand
No Ore
No Ore

ARTHUR IRON MINING COMPANY
SLICE MAP
OF
ALEXANDRIA MINE
S.W.-S.E.-29-58-20
MAIN SUB LEVEL
SCALE
MINING ENGINEER'S OFFICE
HIBBING, MINN.
EASTERN DISTRICT
MAP TO
N
Shaft
Plaid from Main Level


ARTHUR IRON MINING COMPANY
SLICE MAP
OF
ALEXANDRIA MINE
S.E.-SW.-29-58-20
MAIN SUB LEVEL
SCALE
MINING ENGINEER'S OFFICE
HIBBING MINN.
EASTERN DISTRICT
MAP TO
N
SHAFT

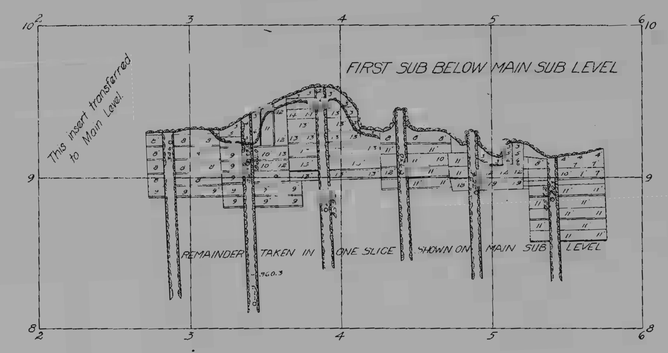

ARTHUR IRON MINING COMPANY
SLICE MAP
OF
ALEXANDRIA MINE
NE-NW-32-58-20.
MAIN SUB LEVEL
SCALE:
MINING ENGINEERS OFFICE
HIBBING, MINN.
EASTERN DISTRICT
MAP TO
N

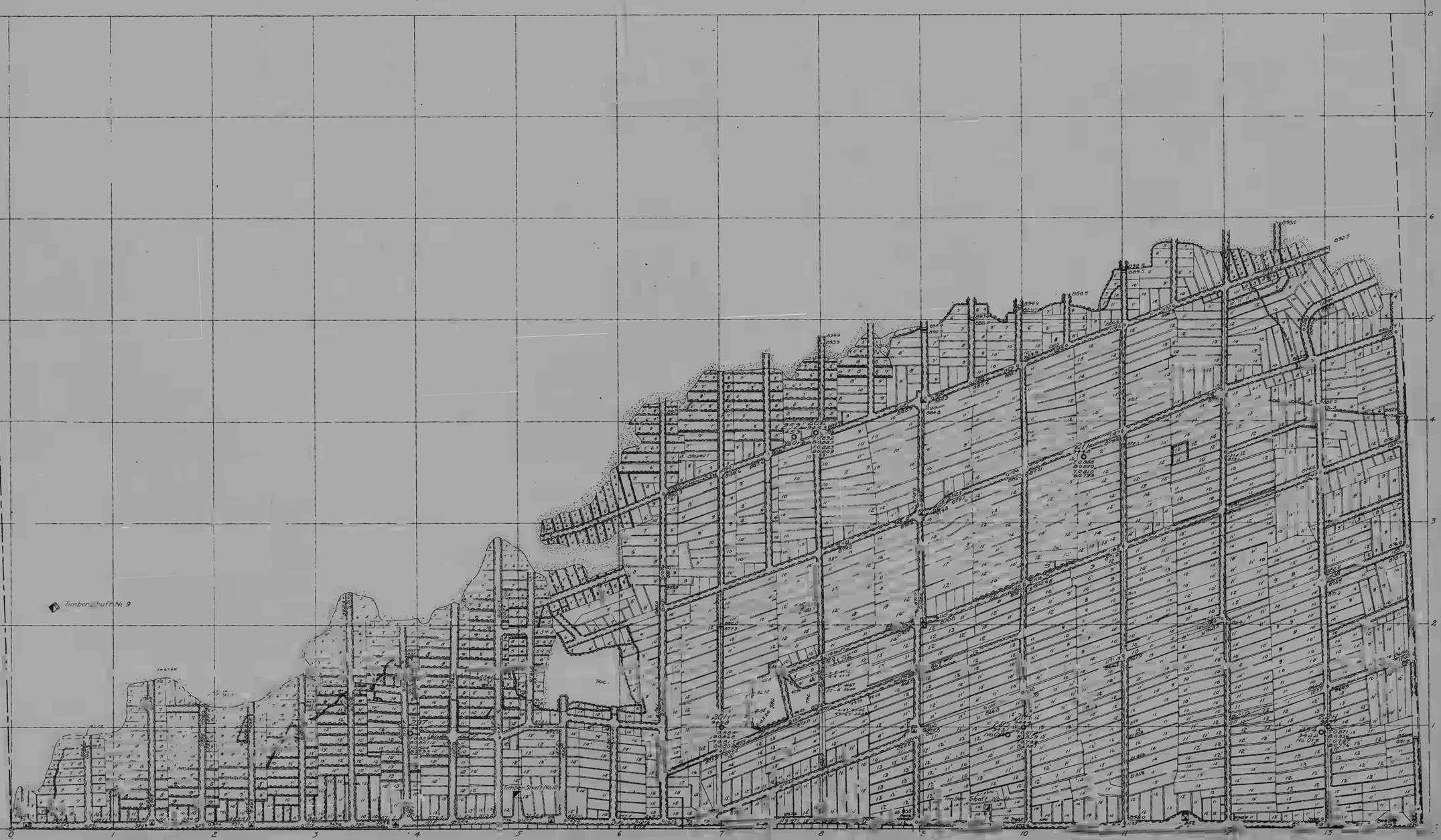
ARTHUR IRON MINING COMPANY

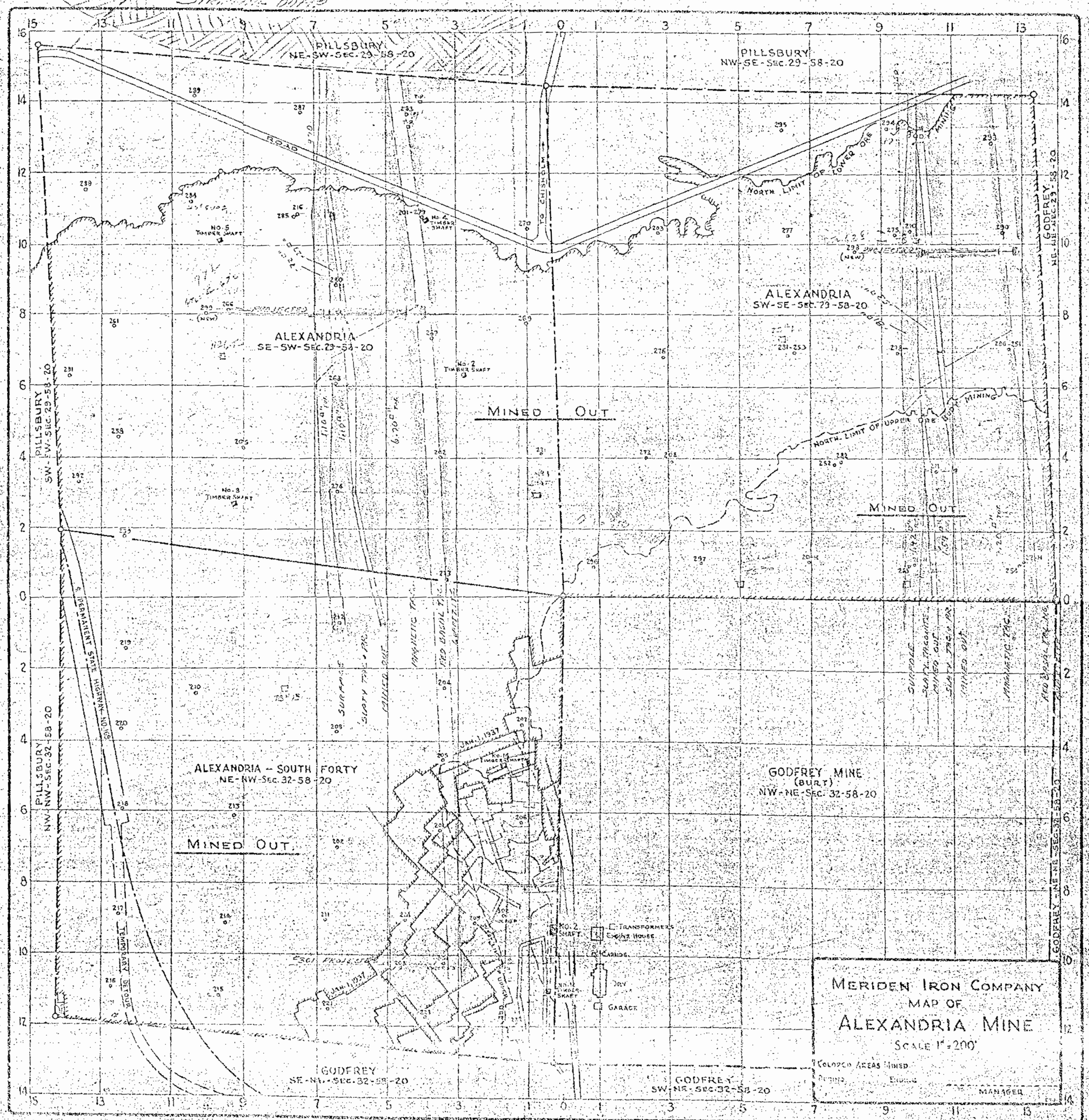
SLICE MAP
OF
ALEXANDRIA MINE
S.W.-S.E.-29-58-20
TOP ORE BODY

SCALE

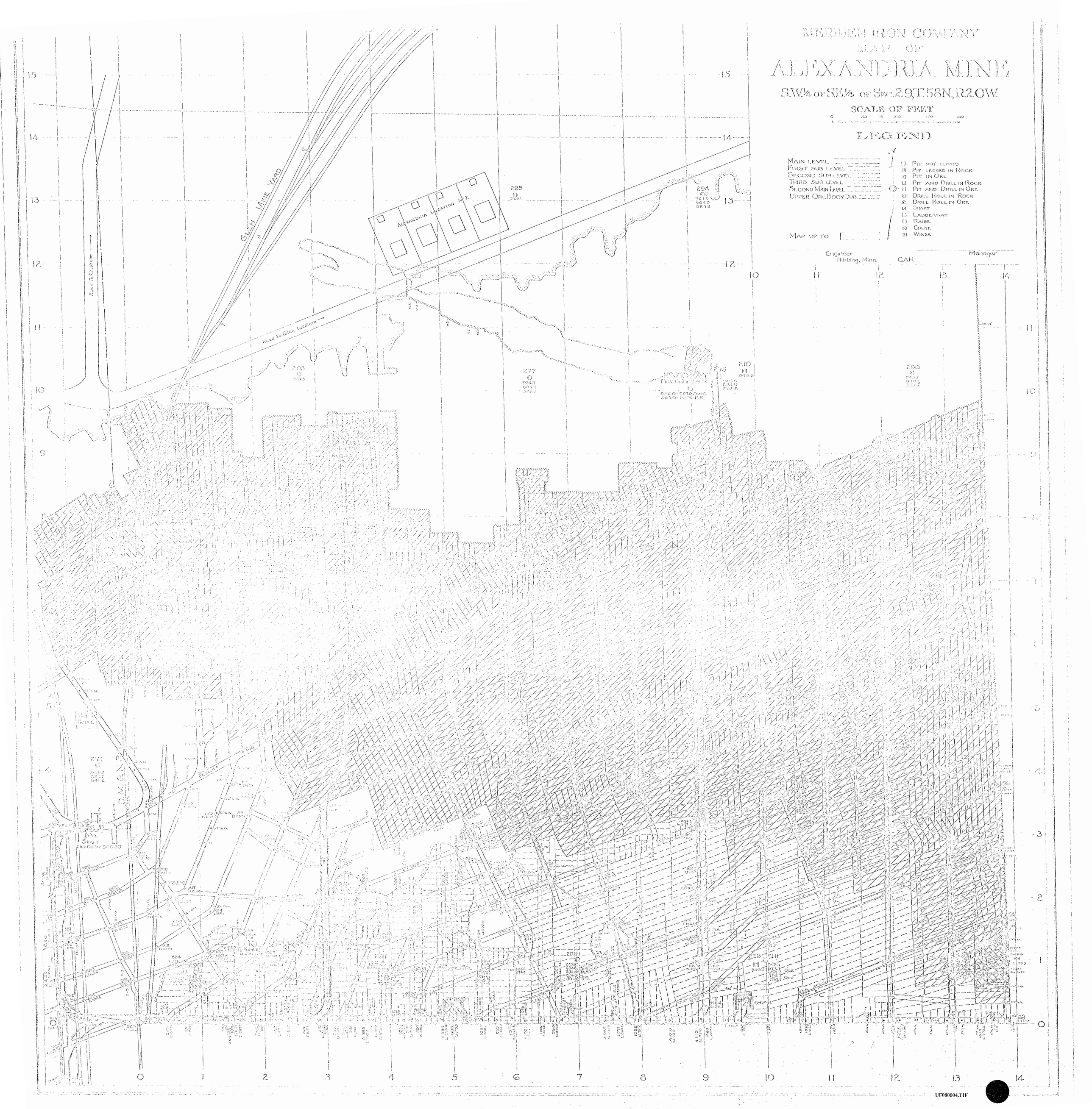
MINING ENGINEER'S OFFICE — HIBBING, MINN.
EASTERN DISTRICT — MAP TO







SEE ESTIMATE SHEET
DATED AUG. 14, 1958
VPS



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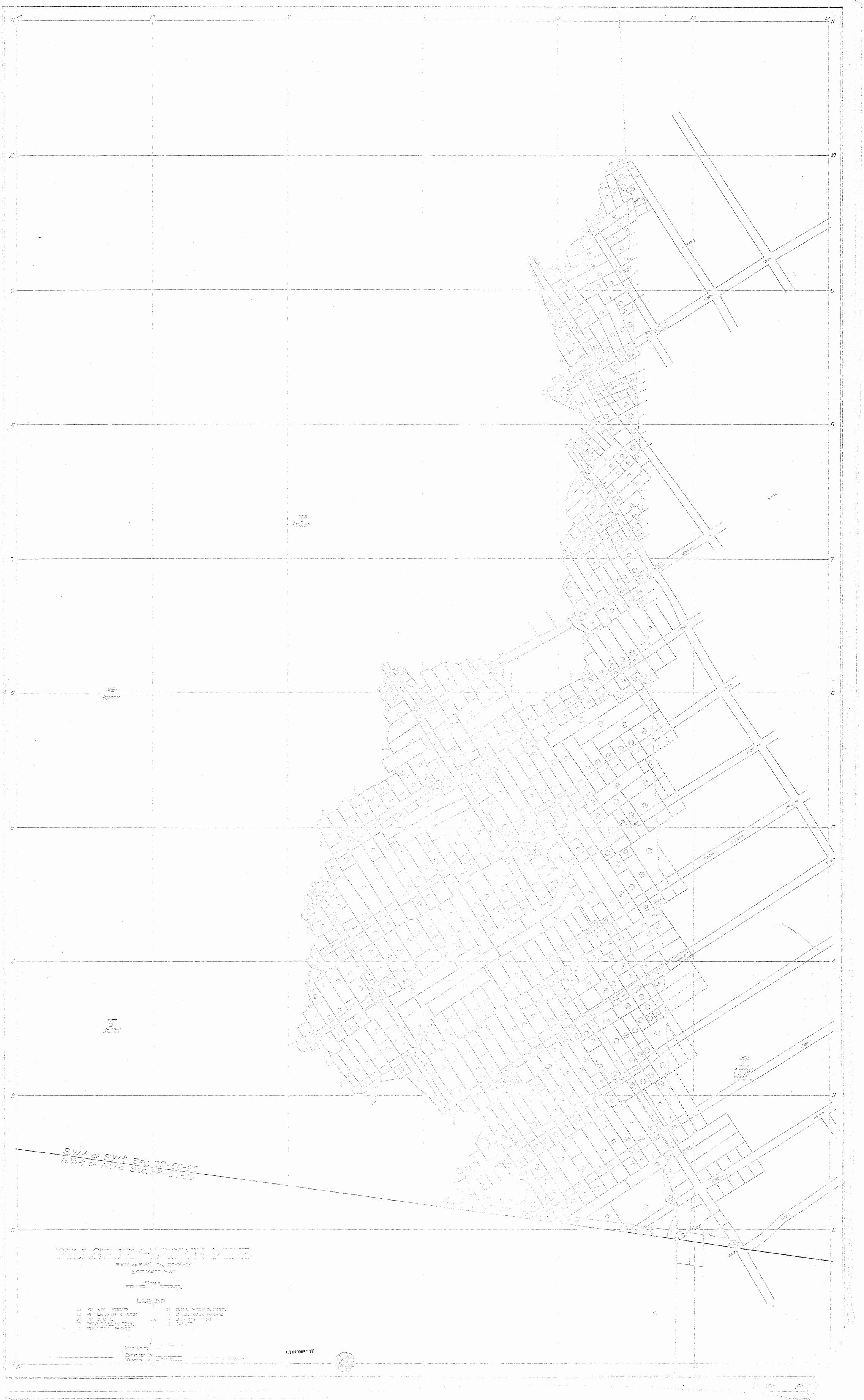
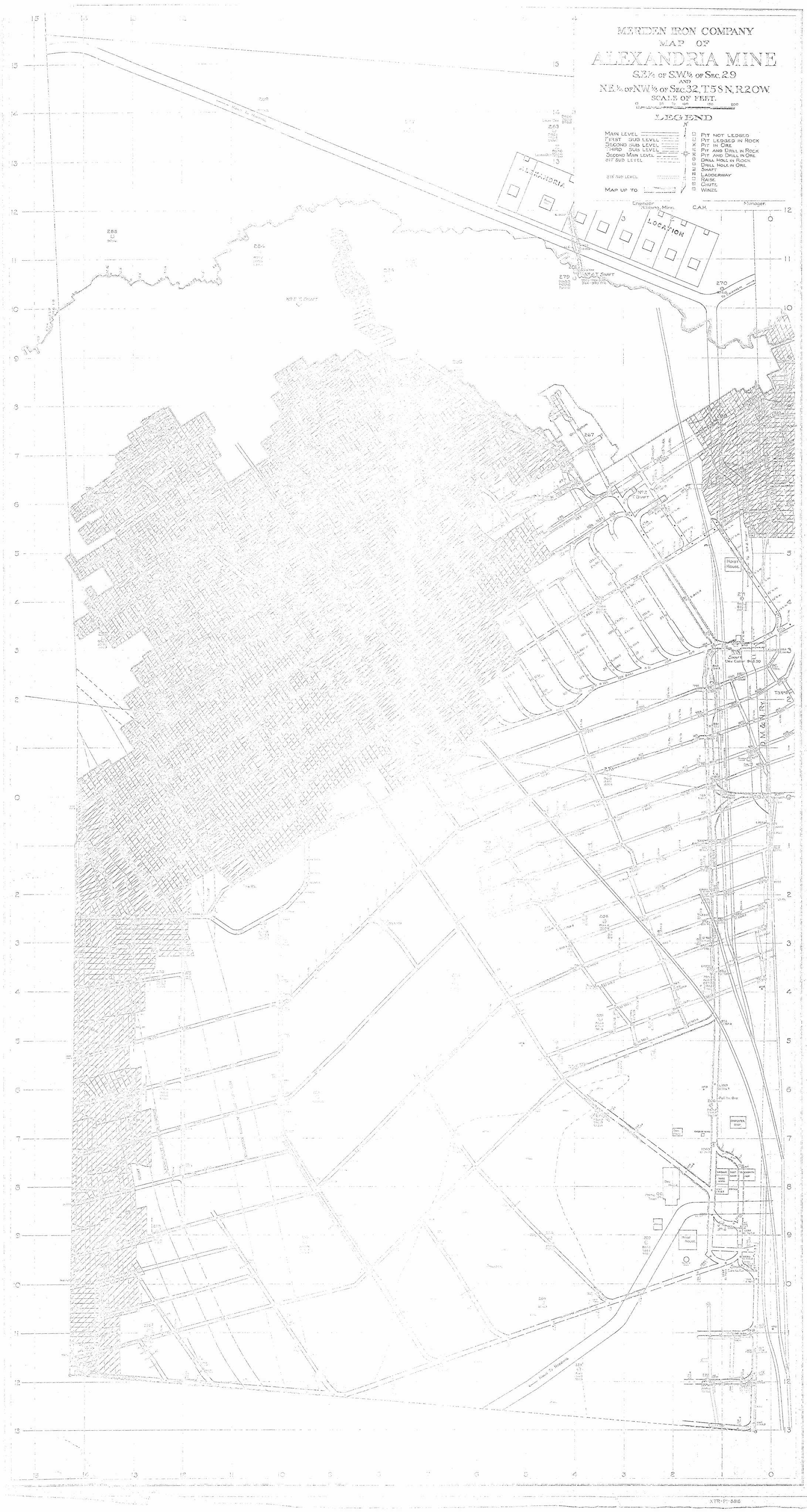

PILLSBURY-BROWN MINE
S.W.¼ of S.W.¼ Sec. 22-50-22
ESTIMATE MAP
SCALE
LEGEND
PIT NOT LEDGED
PIT LEDGED IN ROCK
PIT IN ORE
PIT & DRILL IN ROCK
PIT & DRILL IN ORE
DRILL HOLE IN ROCK
DRILL HOLE IN ORE
SHAFT
MAP UP TO
EXTENDED BY
TRACING BY
S.W.¼ of S.W.¼ Sec. 22-50-22
N.W.¼ of N.W.¼ Sec. 32-50-22
UF080005.TIF


MERIDEN IRON COMPANY
MAP OF
ALEXANDRIA MINE
S.E.¼ OF S.W.¼ OF SEC. 29
AND
N.E.¼ OF N.W.¼ OF SEC. 32, T 58 N, R 20 W.
SCALE OF FEET.
0 50 75 100 150 200
LEGEND
MAIN LEVEL
FIRST SUB LEVEL
SECOND SUB LEVEL
THIRD SUB LEVEL
SECOND MAIN LEVEL
817 SUB LEVEL
875 SUB LEVEL
MAP UP TO
PIT NOT LEDGED
PIT LEDGED IN ROCK
PIT IN ORE
PIT AND DRILL IN ROCK
PIT AND DRILL IN ORE
DRILL HOLE IN ROCK
DRILL HOLE IN ORE
SHAFT
LADDERWAY
RAISE
CHUTE
WINZE
Engineer
Abbing, Minn.
C.A.H.
Manager.
ALEXANDRIA
LOCATION
No. 4 SHAFT
No. 3 SHAFT
No. 2 SHAFT
HOIST HOUSE
SHAFT
Elev. Collar 968.50
D. M. & N. RY.
CARPENTER SHOP
GARAGE
ELECT. SHOP
BLACKSMITH SHOP
WEIGH HOUSE
OFFICE
Dry House
HOIST HOUSE
SHAFT
Elev. Collar 1013.7
Road To Hibbing
XTR-PI-8818