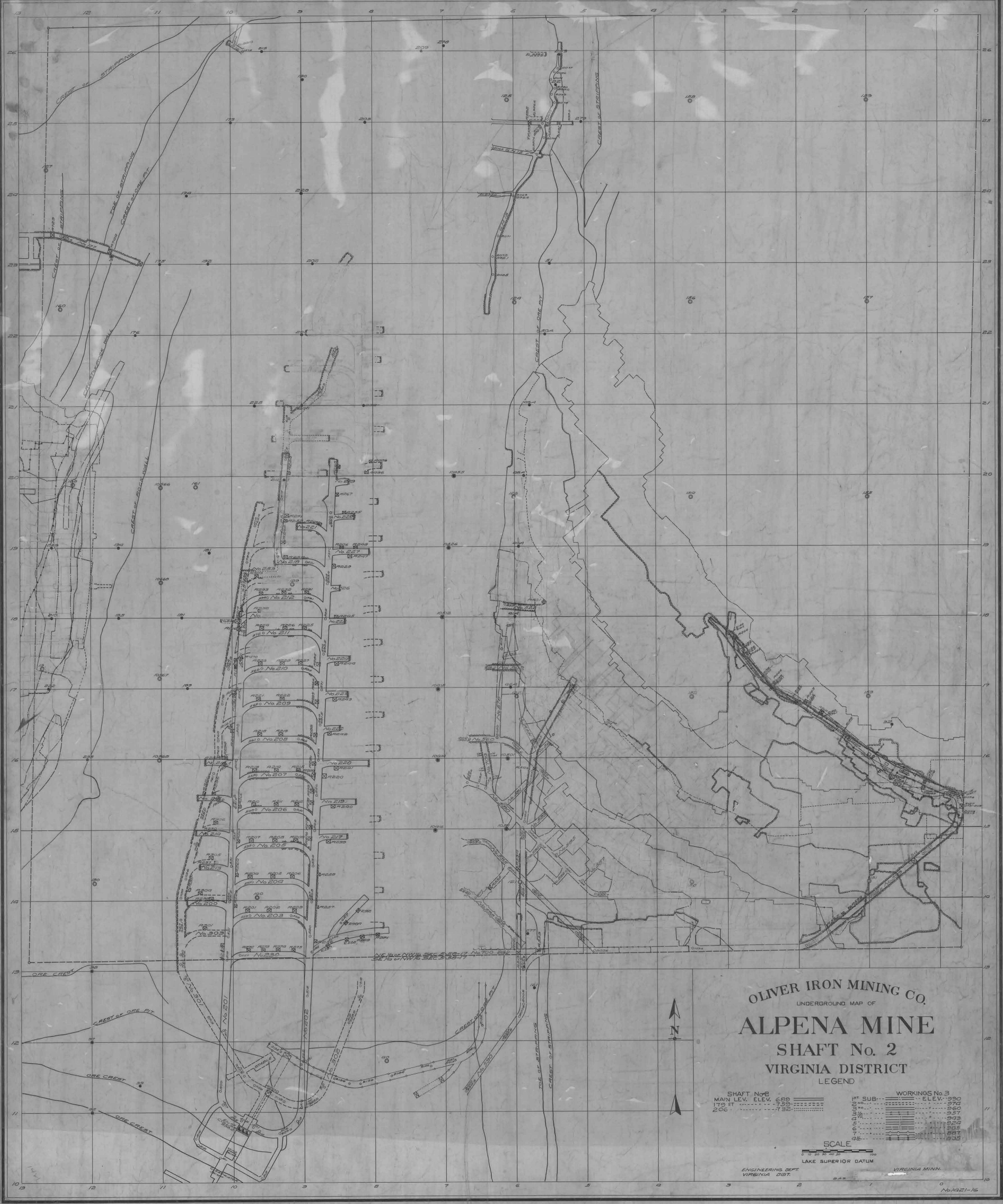




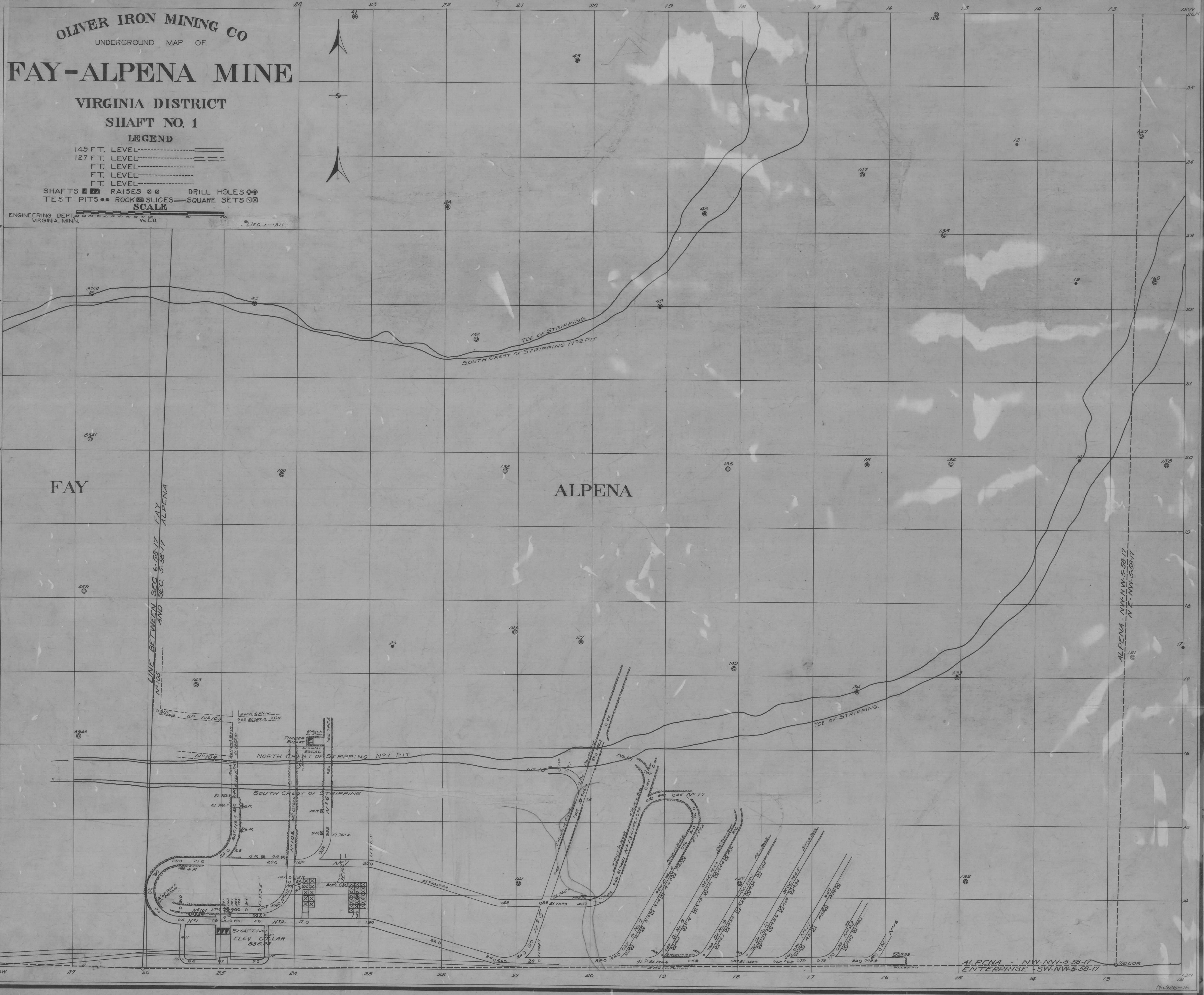
OLIVER IRON MINING CO.
UNDERGROUND MAP OF
ALPENA MINE
SHAFT No. 2
VIRGINIA DISTRICT
LEGEND

SHAFT No. 2
MAIN LEV. ELEV. 689
179 FT
206 FT

WORKINGS No. 3
1st SUB. ELEV. 930
920
910
900
890
880
870
860
850
840
830
820
810
800
790
780
770
760
750
740
730
720
710
700
690
680
670
660
650
640
630
620
610
600
590
580
570
560
550
540
530
520
510
500
490
480
470
460
450
440
430
420
410
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0

SCALE
0 10 20 30 40 50 60 70 80 90 100
LAKE SUPERIOR DATUM

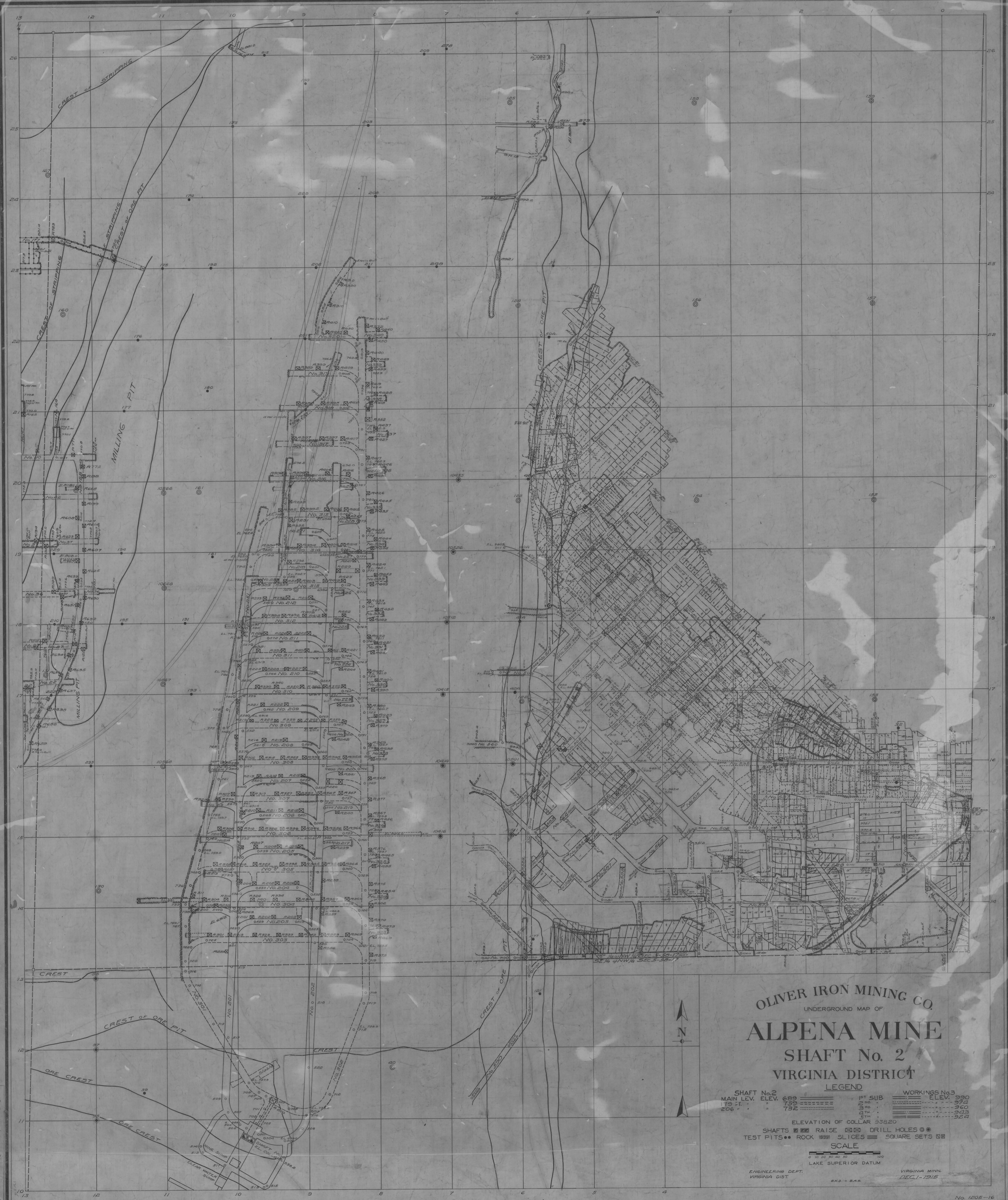
ENGINEERING DEPT.
VIRGINIA DIST.
VIRGINIA MINN.
No. 1421-16



OLIVER IRON MINING CO
UNDERGROUND MAP OF
FAY-ALPENA MINE
VIRGINIA DISTRICT
SHAFT NO. 1

LEGEND
145 FT. LEVEL:=====|
127 FT. LEVEL:=====|
FT. LEVEL:-----|
FT. LEVEL:-----|
FT. LEVEL:-----|
SHAFTS [Symbol] RAISES [Symbol] DRILL HOLES [Symbol]
TEST PITS [Symbol] ROCK [Symbol] SLUGS [Symbol] SQUARE SETS [Symbol]

SCALE
ENGINEERING DEPT.
VIRGINIA, MINN.
W.E.B.
DEC. 1-1911

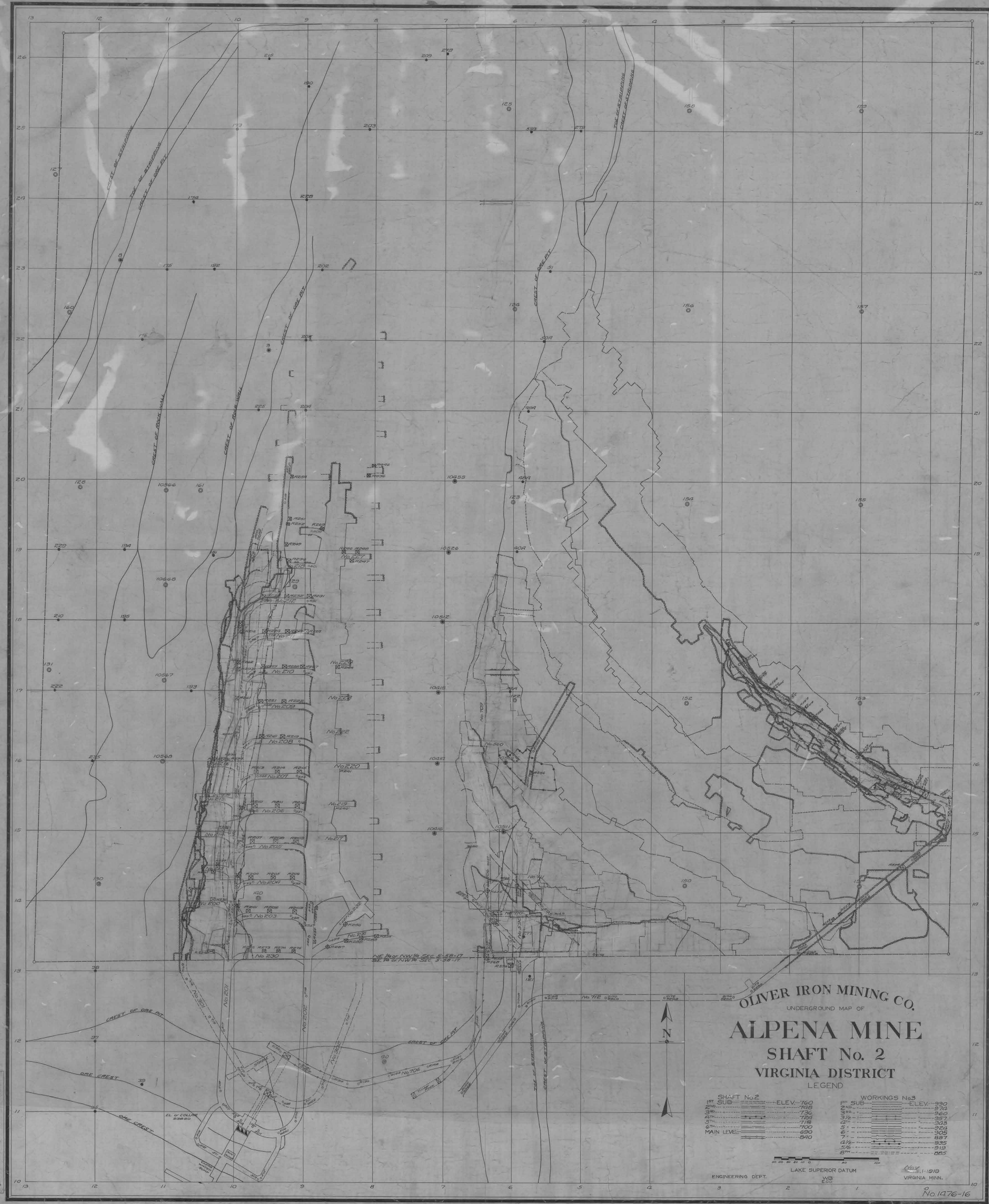


OLIVER IRON MINING CO.
UNDERGROUND MAP OF
ALPENA MINE
SHAFT No. 2
VIRGINIA DISTRICT

LEGEND

SHAFT No. 2	MAIN LEV. ELEV. 689	1ST SUB	WORKINGS No. 3	ELEV. 990
	732	2ND		974
		3RD		960
		4TH		924

ELEVATION OF COLLAR 938.20
SHAFTS ■■■ RAISE ■■■ DRILL HOLES ○○○
TEST PITS ●● ROCK ■■■ SLICES ■■■ SQUARE SETS ■■■
SCALE
0 10 20 30 40 50 100
LAKE SUPERIOR DATUM
ENGINEERING DEPT.
VIRGINIA DIST.
B.K.D. - B.A.S.
VIRGINIA MINN.
DEC. 1-1915



OLIVER IRON MINING CO.
UNDERGROUND MAP OF

ALPENA MINE

SHAFT No. 2

VIRGINIA DISTRICT

LEGEND

SHAFT No. 2		WORKINGS No. 3	
1ST SUB	ELEV. 760	1ST SUB	ELEV. 390
2ND SUB	748	2ND SUB	372
3RD SUB	736	3RD SUB	360
4TH SUB	724	4TH SUB	348
5TH SUB	712	5TH SUB	336
6TH SUB	700	6TH SUB	324
MAIN LEVEL	688	7TH SUB	312
		8TH SUB	300
		9TH SUB	288
		10TH SUB	276
		11TH SUB	264
		12TH SUB	252
		13TH SUB	240
		14TH SUB	228
		15TH SUB	216
		16TH SUB	204
		17TH SUB	192
		18TH SUB	180
		19TH SUB	168
		20TH SUB	156
		21TH SUB	144
		22TH SUB	132
		23TH SUB	120
		24TH SUB	108
		25TH SUB	96
		26TH SUB	84
		27TH SUB	72
		28TH SUB	60
		29TH SUB	48
		30TH SUB	36
		31TH SUB	24
		32TH SUB	12
		33TH SUB	0

LAKE SUPERIOR DATUM

ENGINEERING DEPT.

1-1919
VIRGINIA MINN.

No. 1476-16

OLIVER IRON MINING CO.
UNDERGROUND MAP OF
ALPENA MINE
SHAFT No.1
VIRGINIA DISTRICT

LEGEND

1ST SUB	-----ELEV 875	2ND SUB	-----ELEV 860
3RD	-----ELEV 875	3 1/2	-----ELEV 870
4TH	-----ELEV 850	4 1/2	-----ELEV 827
5	-----ELEV 815	5 1/2	-----ELEV 800
6	-----ELEV 785	7 1/2	-----ELEV 780
7	-----ELEV 760	MAIN LEVEL	-----ELEV 740
8	-----ELEV 730	8 1/2 SUB	-----ELEV 750
BOTT.			

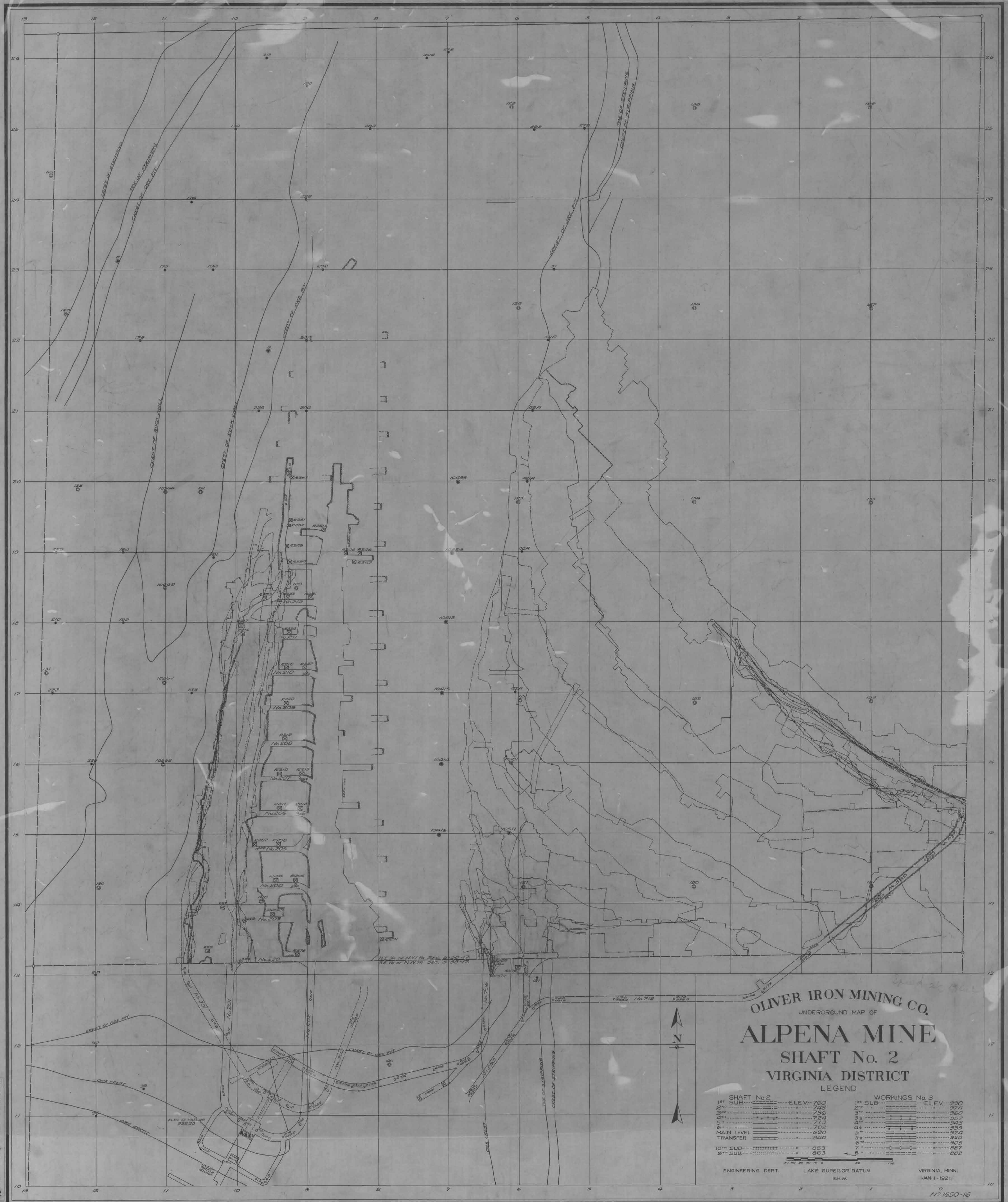
SCALE

0 10 20 30 40 50
LAKE SUPERIOR DATUM
E.H.W.

ENGINEERING DEPT.

VIRGINIA, MINN.
JAN. 1-1921.





OLIVER IRON MINING CO.
UNDERGROUND MAP OF
ALPENA MINE
SHAFT No. 2
VIRGINIA DISTRICT

LEGEND

SHAFT No. 2	WORKINGS No. 3
1ST SUB---ELEV---760	1ST SUB---ELEV---990
2ND SUB---768	2ND SUB---970
3RD SUB---766	3RD SUB---960
4TH SUB---724	4TH SUB---952
5TH SUB---713	5TH SUB---943
6TH SUB---702	6TH SUB---935
MAIN LEVEL---690	7TH SUB---924
TRANSFER---840	8TH SUB---905
10TH SUB---853	9TH SUB---887
11TH SUB---863	10TH SUB---882

ENGINEERING DEPT. LAKE SUPERIOR DATUM E.H.W. VIRGINIA, MINN. JAN. 1-1921.

N^o 1650-16