



State of New Jersey  
Department of Environmental Protection  
Geological Survey



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# PLAN OF NEW VEIN

Richard Mine Wharton, N.J.  
 Dec. 8, 1914 L. H. Stone, E.M.  
 Revised, 12-12-14 Scale, 1" = 25'



NOTE:  
 The rock is 1 1/2 to 2 ft thick in places and is made of 1/2 to 1 inch pieces of iron ore.

Part looks like falling back by following west we can get some low-cost ore  
 means like north top of a shoot 1/4 mi

As seen in mine examination by Tom Myers in spring of 1914, shoots appeared to be 10 to 20 ft wide

1 B/p. sent to A. J. S. 7/1/14 = returned to Easton office with revisions 12/15/14.  
 1 " " " W. S. H. " "  
 1 " to be kept in Easton office

Intersection of  
North Vein and  
Coker Property  
Line

1061

9th Level  
Projected  
Bottom Rock

North Vein

7th Level

6th Level

5th Level

500 Level

Projected Top Rock

BAKER PROPERTY

THOMAS IRON CO

Base Line

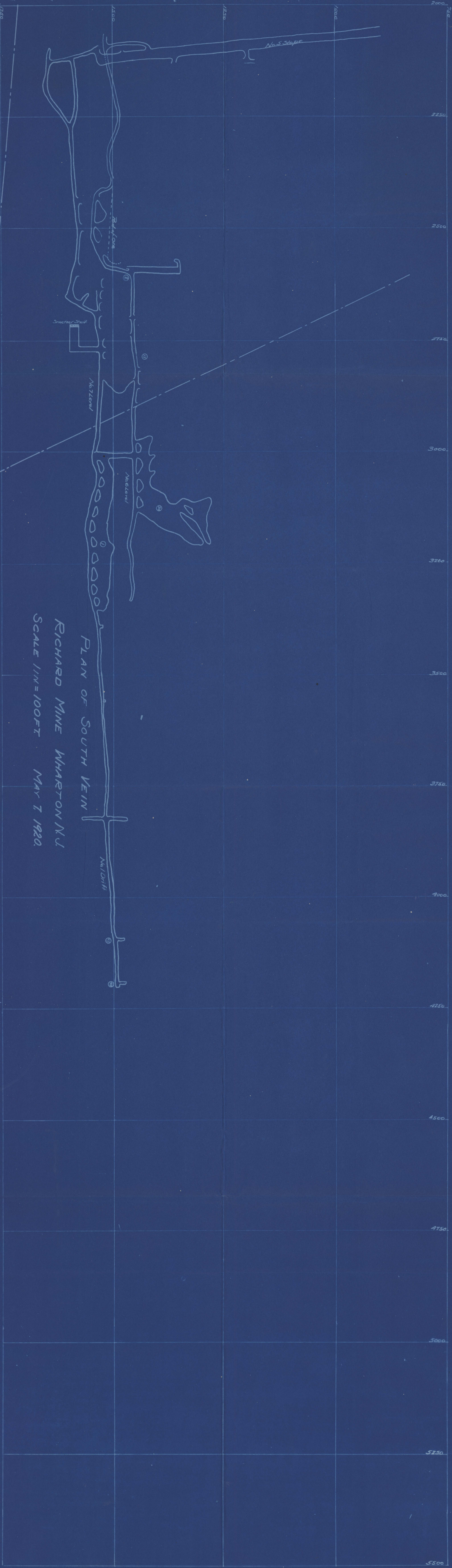
45°

Cross Section  
Richards Mine  
Scale 1" = 100'

Diagonal Drift Hole,  
being drilled, April 15th,  
projected on section.

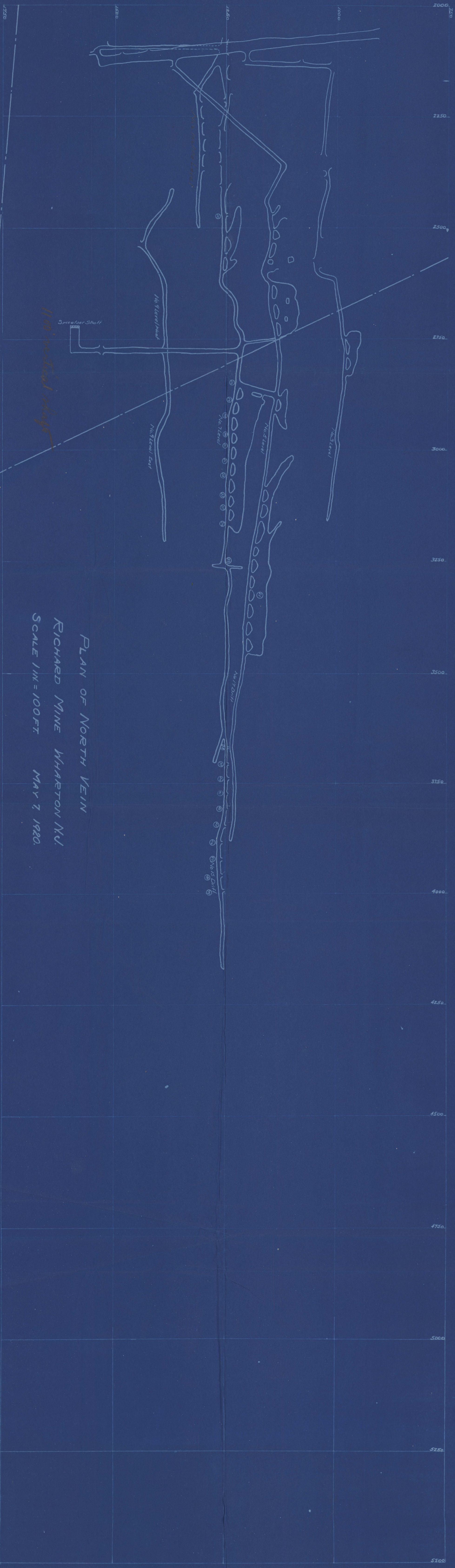
THOMAS IRON CO  
Section #  
Scale 1" = 100'

BAKER



PLAN OF SOUTH VEIN  
RICHARD MINE WHARTON N.J.  
SCALE 1/4" = 100 FT. MAY 7, 1920.

BAKER

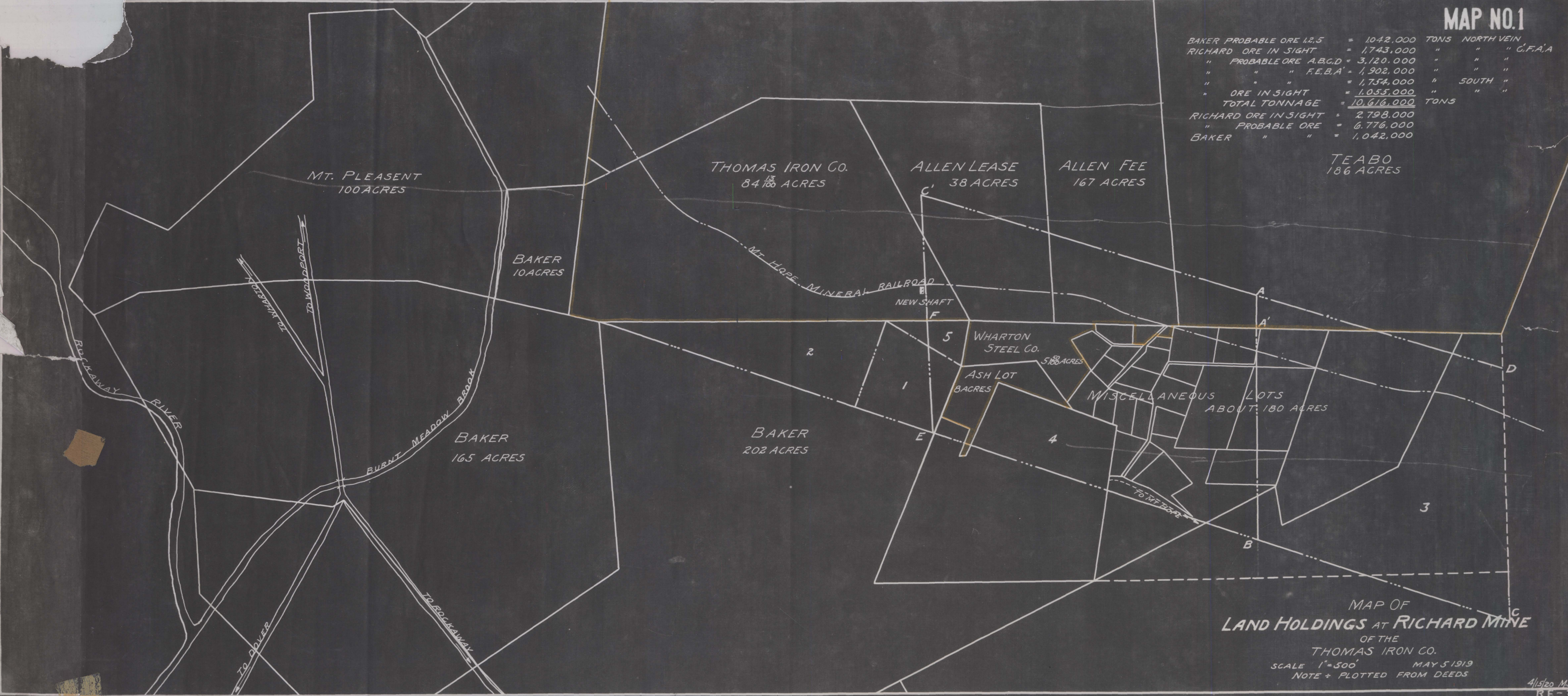


PLAN OF NORTH VEIN  
RICHARD MINE WHARTON N.J.  
SCALE 1 IN = 100 FT. MAY 7, 1920.

**MAP NO.1**

BAKER PROBABLE ORE 1,2,5	= 10,42,000	TONS	NORTH VEIN
RICHARD ORE IN SIGHT	= 1,743,000	"	" " " C.F.A.A
" PROBABLE ORE A,B,C,D	= 3,120,000	"	" " "
" " " F.E.B.A	= 1,902,000	"	" " "
" " " "	= 1,754,000	"	SOUTH "
" ORE IN SIGHT	= 1,055,000	"	" " "
<b>TOTAL TONNAGE</b>	<b>= 10,616,000</b>	<b>TONS</b>	
RICHARD ORE IN SIGHT	= 2,798,000		
" PROBABLE ORE	= 6,776,000		
BAKER " "	= 1,042,000		

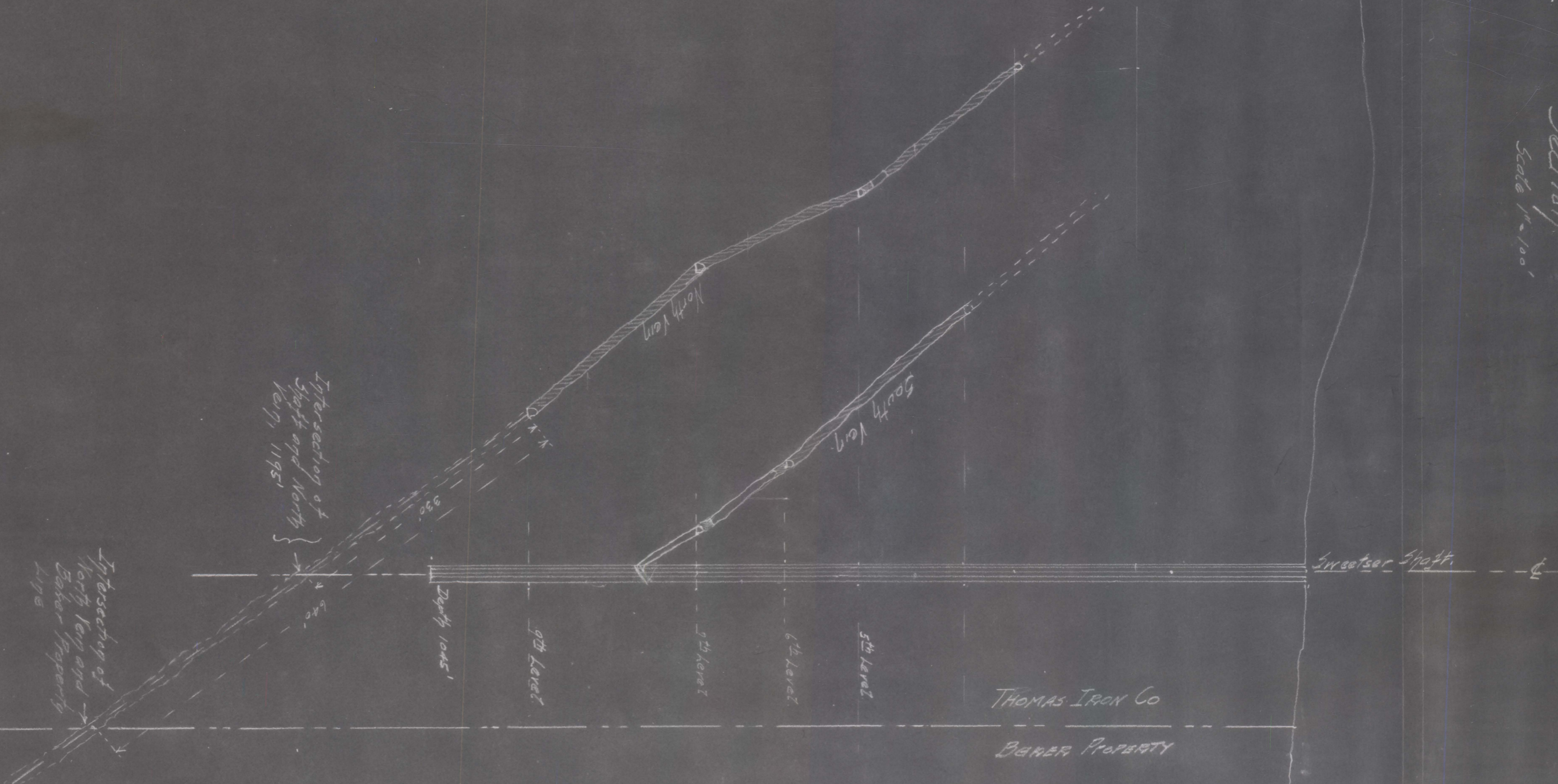
TEABO  
186 ACRES



MAP OF  
**LAND HOLDINGS AT RICHARD MINE**  
OF THE  
THOMAS IRON CO.  
SCALE 1"=500' MAY 5 1919  
NOTE - PLOTTED FROM DEEDS

Cross Section  
Richards Mine  
Scale 1" = 100'

THOMAS IRON CO.  
Section #  
Scale 1" = 100'



Intersection of  
Shaft and North  
Vein, 1195'

Intersection of  
North Vein and  
Baker Property  
Lips

Sweetser Shaft

Depth 1045'

9th Level

7th Level

6th Level

5th Level

THOMAS IRON CO

BEMER PROPERTY

North Vein

South Vein

ALLEN  
 RICHARD MINE  
 ALLEN MINE

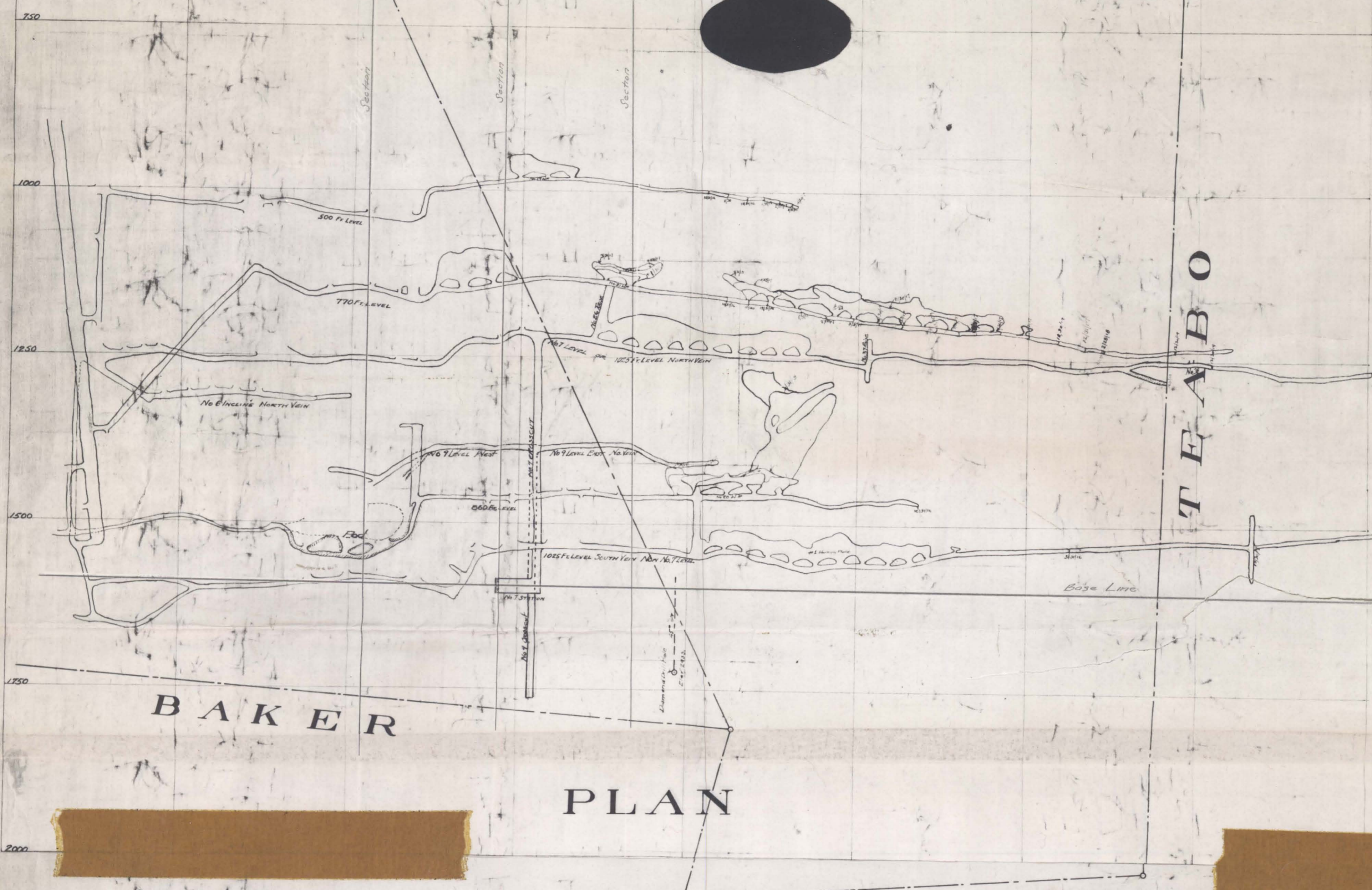
# MAP

## OF LEASED WORKINGS

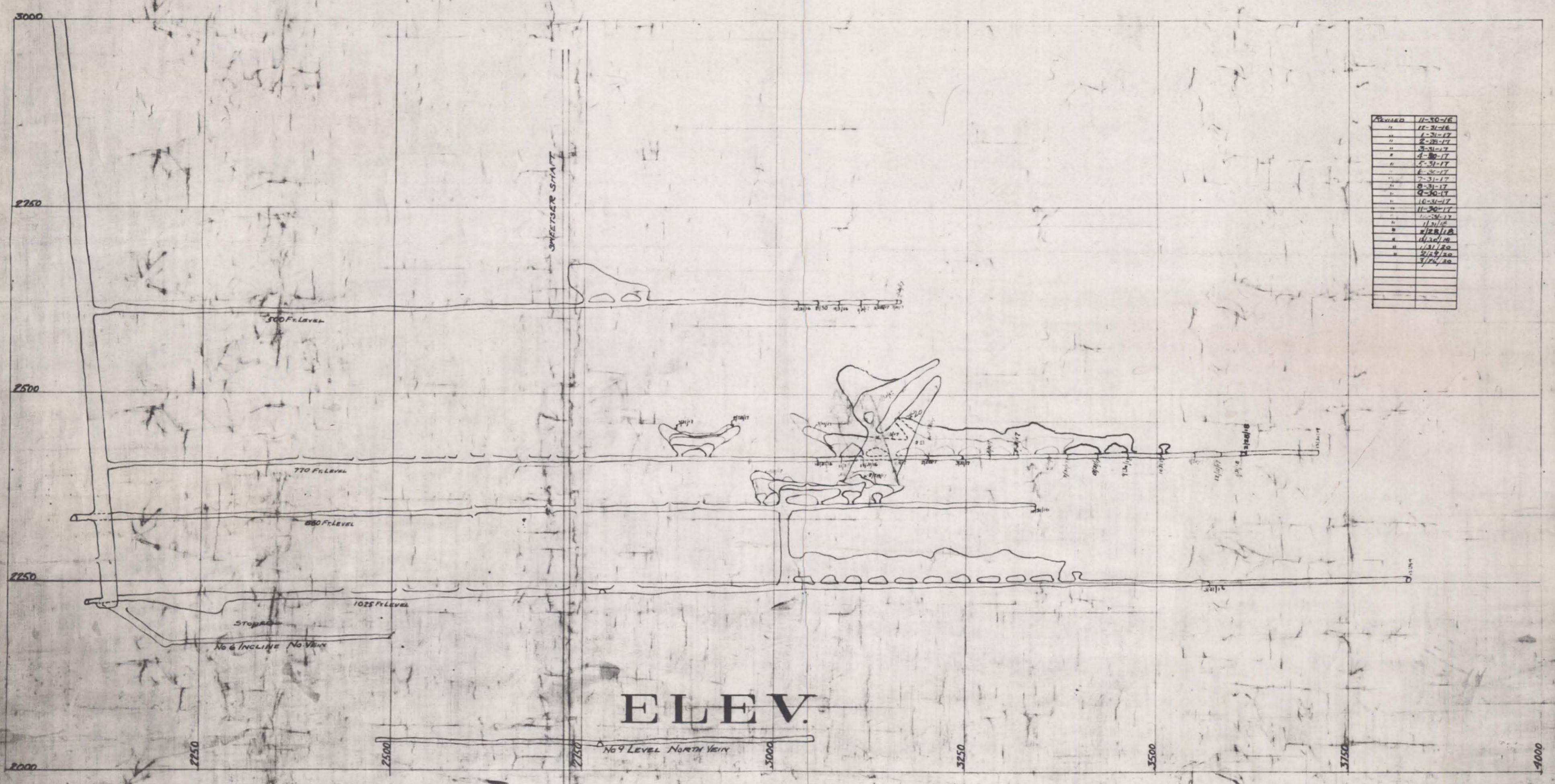
RICHARD MINE WHARTON N.J.

APR. 6, '15. L.H. STONE EM.

SCALE: 1" = 100'



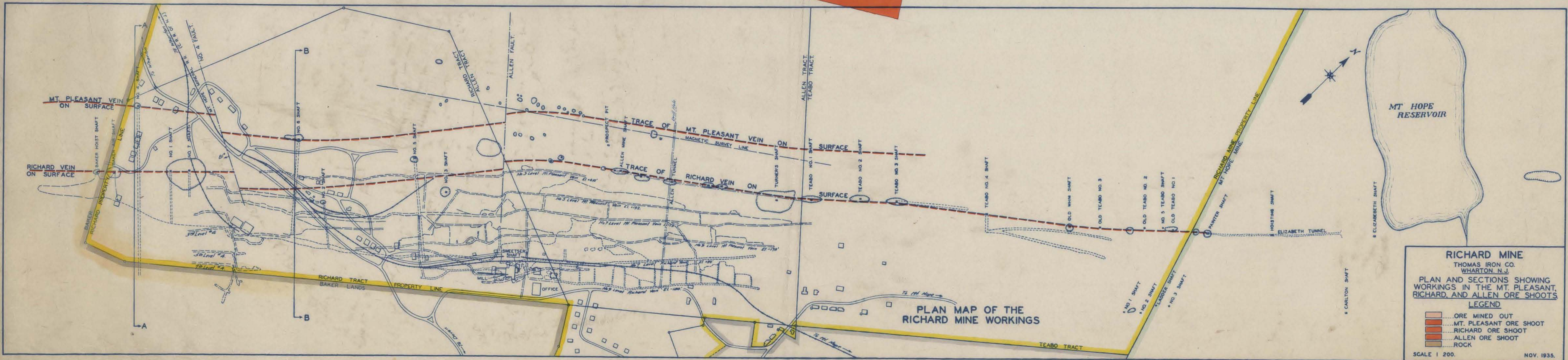
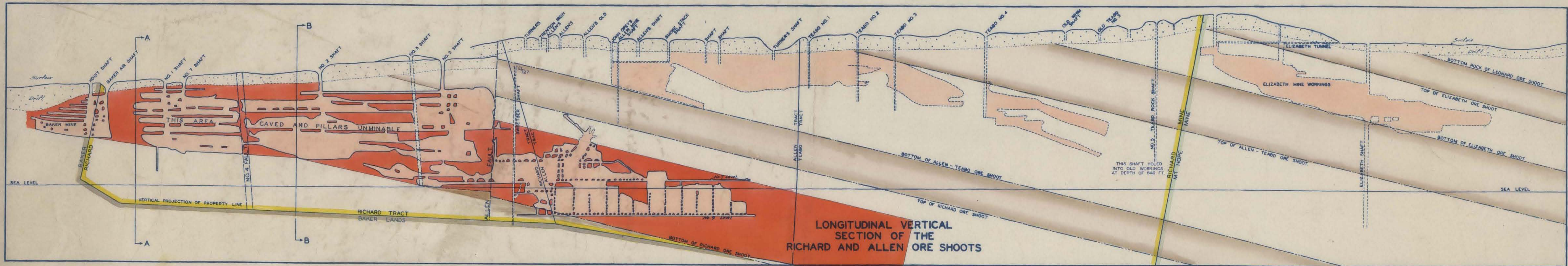
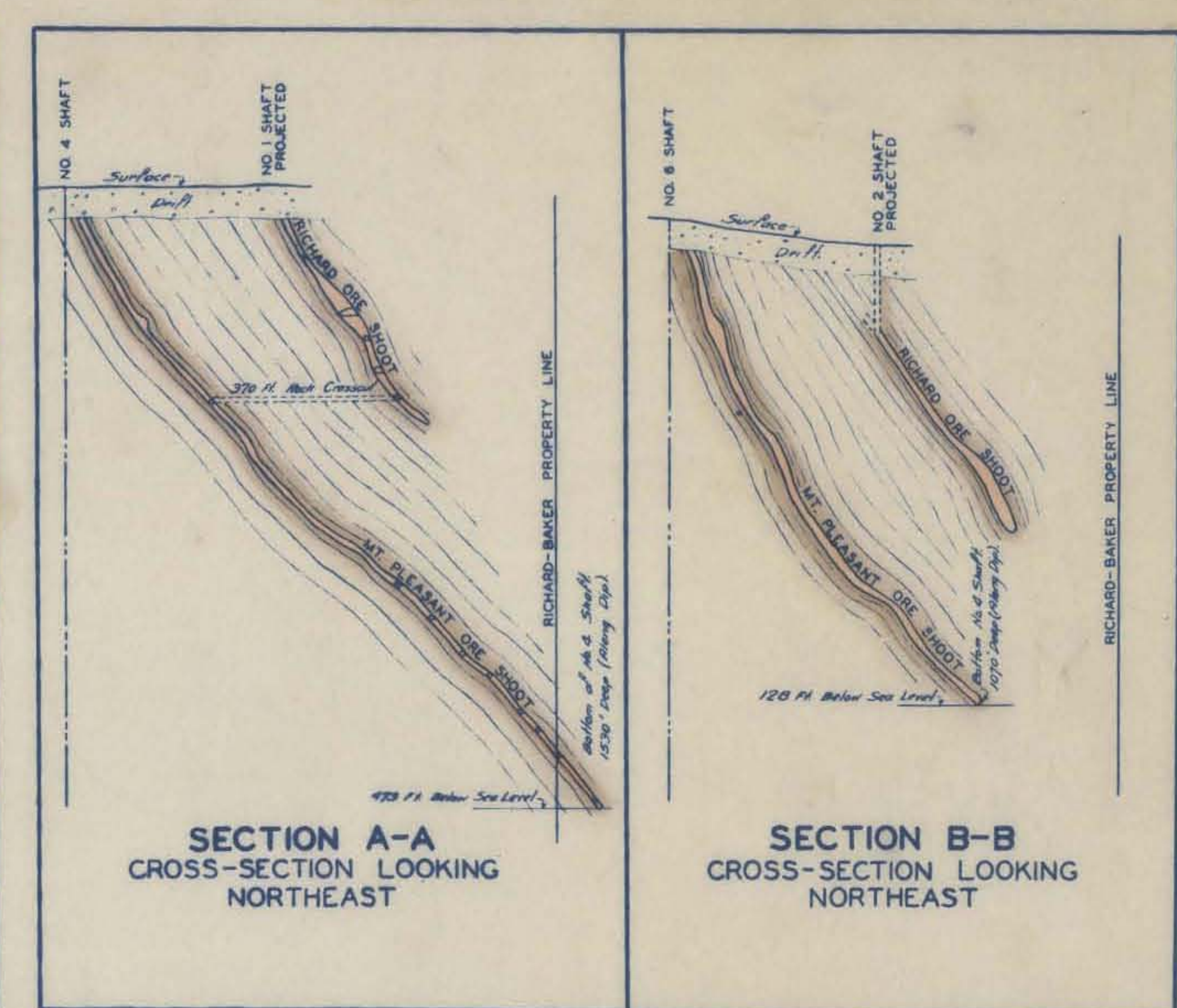
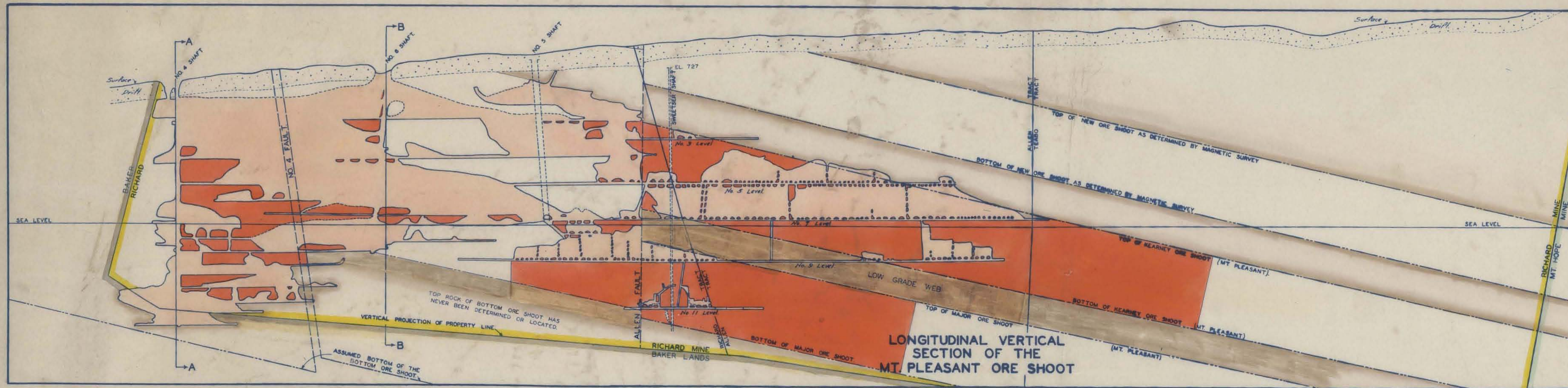
# PLAN

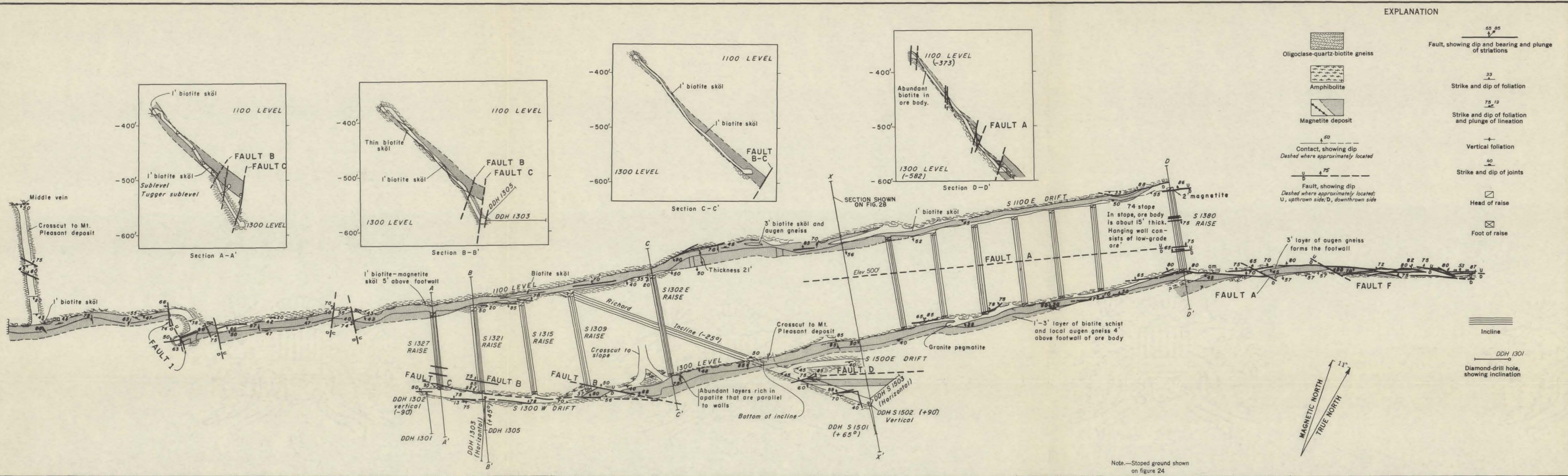


# ELEV.

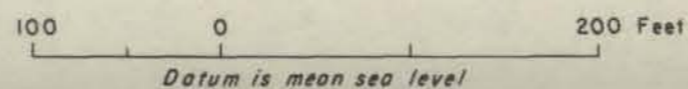
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50	1025



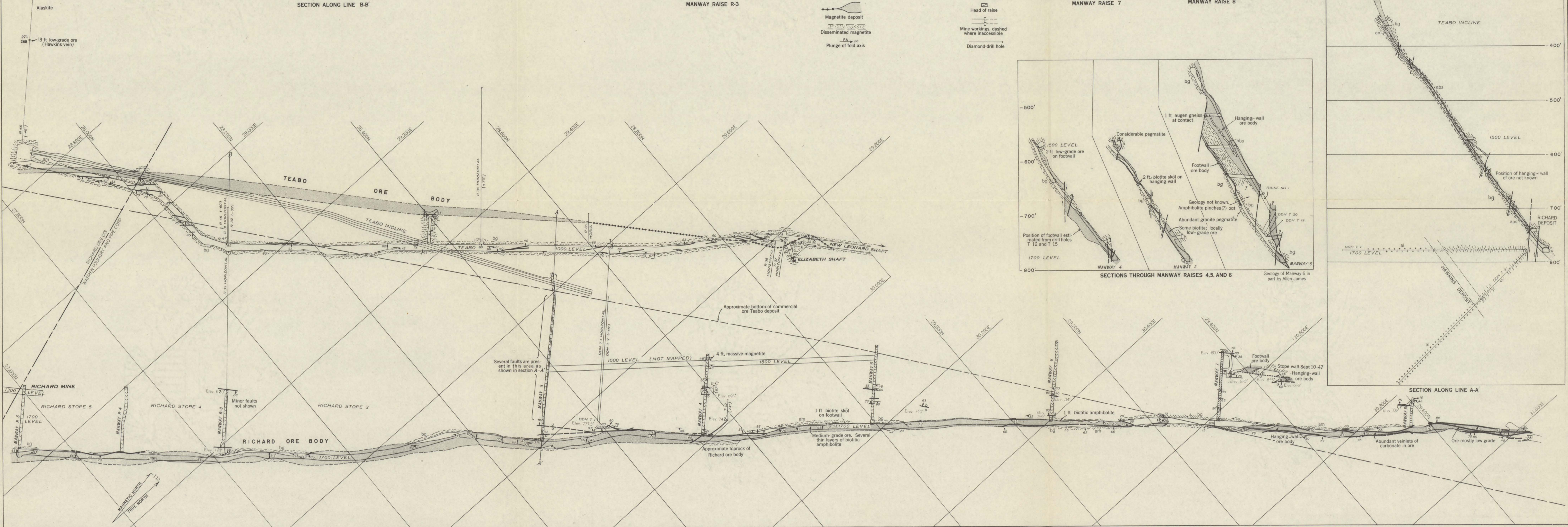
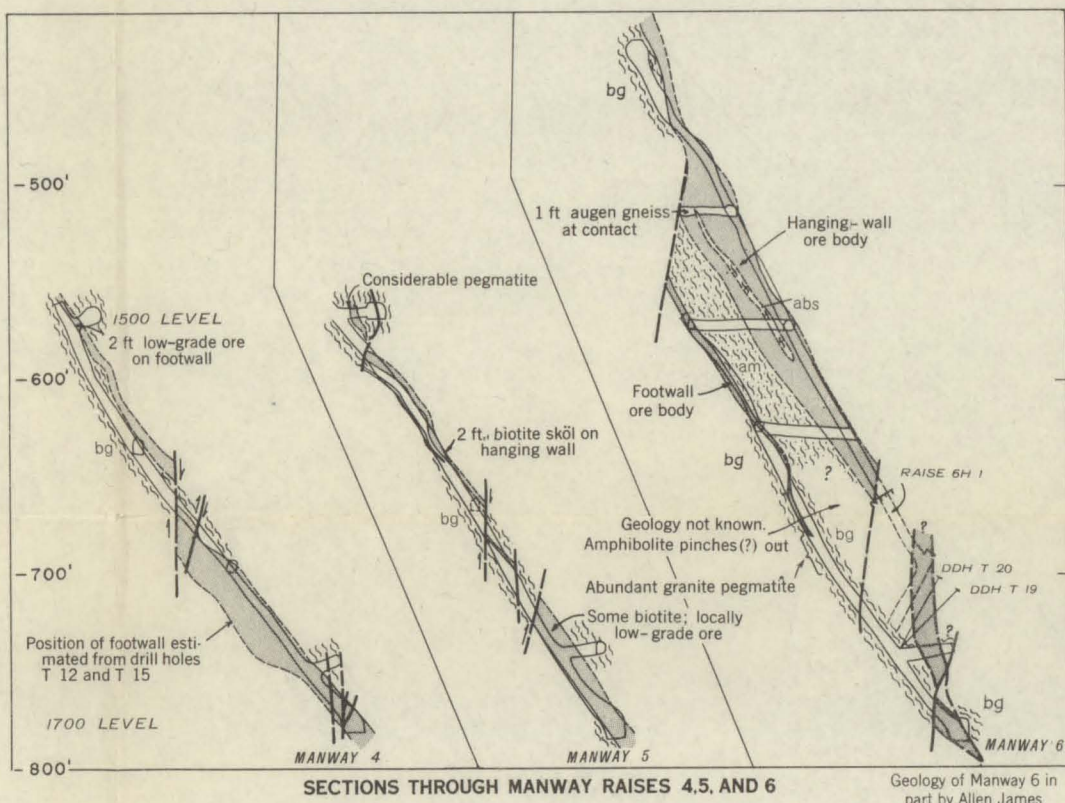
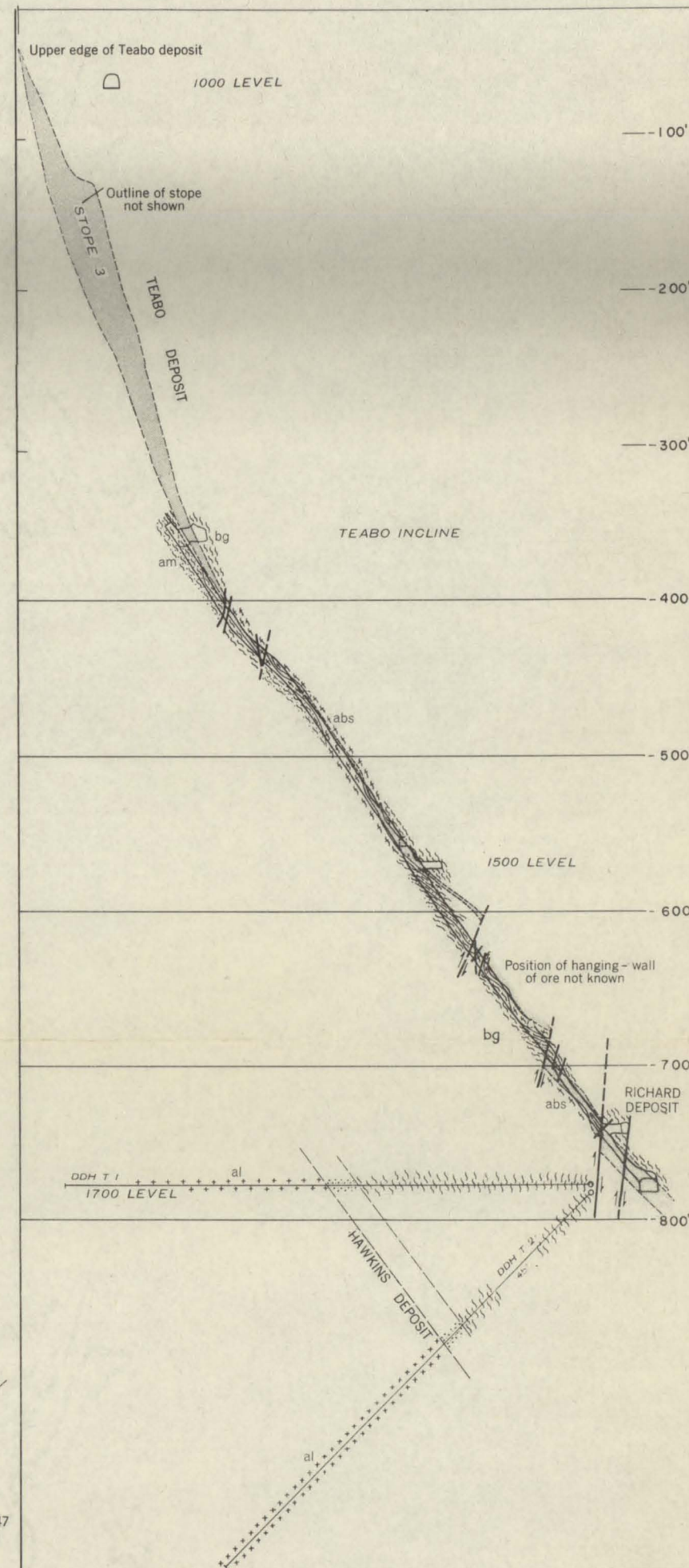
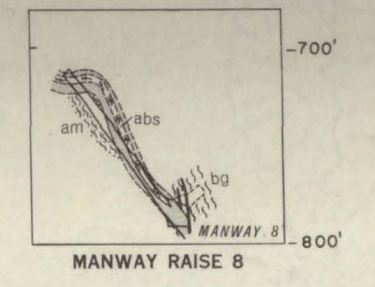
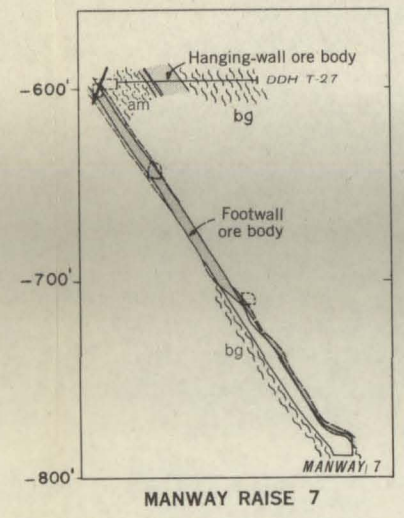
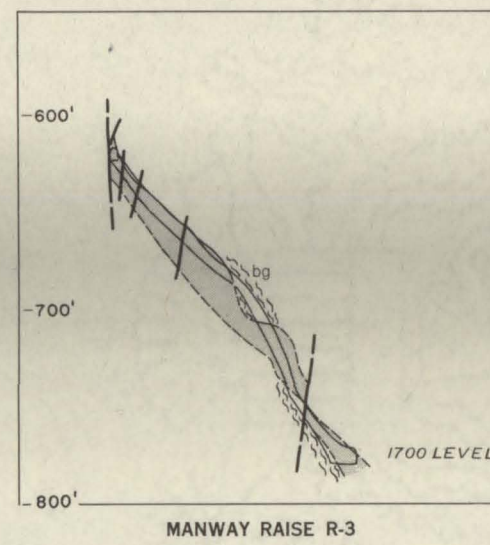
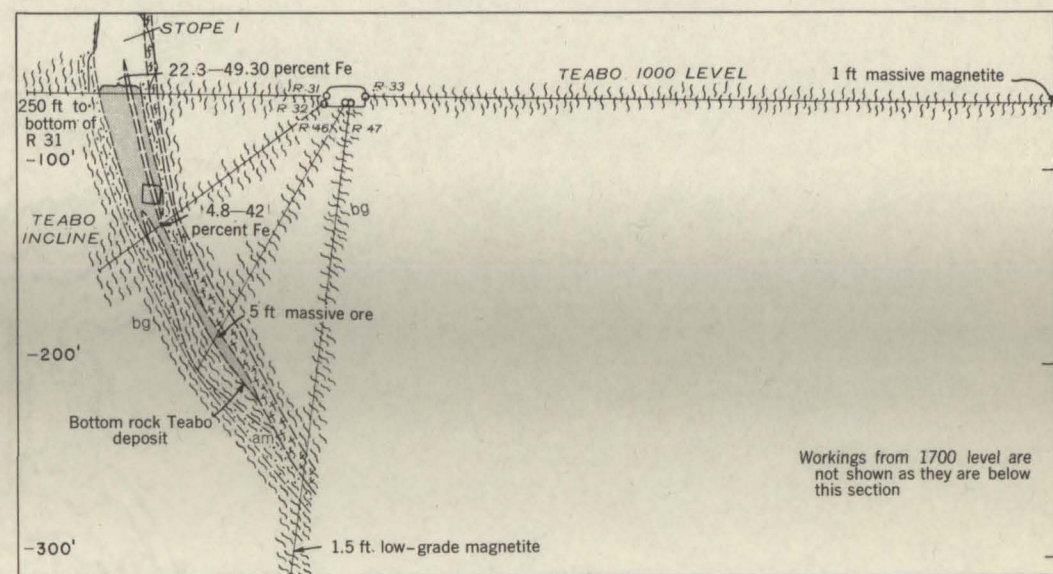




GEOLOGIC MAPS AND SECTIONS OF THE RICHARD (SOUTH) ORE BODY ON THE 1100, 1300, AND 1500 LEVELS. RICHARD MINE, MORRIS COUNTY, NEW JERSEY

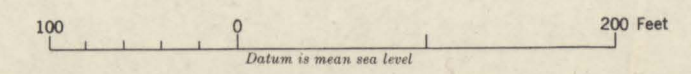


49155 O-38 (in pocket)



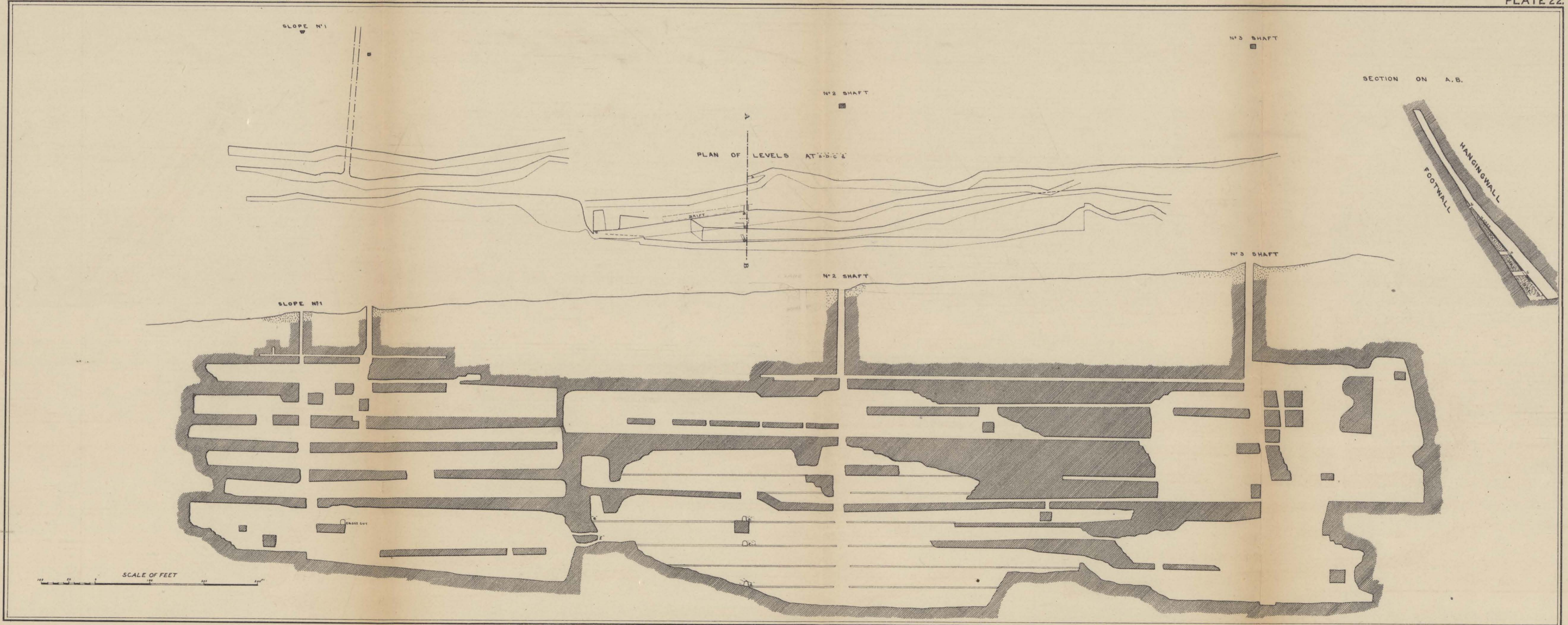
- EXPLANATION
- Alaskite
  - Oligoclase-quartz-biotite gneiss
  - Amphibolite
  - Biotitic amphibolite and biotite skil
  - Contact, showing dip  
Dashed where approximately located
  - High angle fault, showing dip  
Dashed where approximately located  
U, upthrown side; D, downthrown side
  - Vertical fault
  - Fault, showing relative movement
  - Magnetite deposit
  - Disseminated magnetite
  - Plunge of fold axis
  - Plunge of overturned fold
  - Strike and dip of foliation
  - Bearing and plunge of lineation
  - Strike and dip of foliation and plunge of lineation
  - Strike and dip of joints
  - Strike of vertical joints
  - Shaft going above and below levels
  - Inclined raise chevrons point down
  - Incline or slope
  - Foot of raise
  - Head of raise
  - Mine workings, dashed where inaccessible
  - Diamond-drill hole

GEOLOGIC MAP AND SECTIONS OF THE TEABO AND RICHARD ORE BODIES, 1000 AND 1700 LEVELS, MOUNT HOPE MINE, MORRIS COUNTY, NEW JERSEY

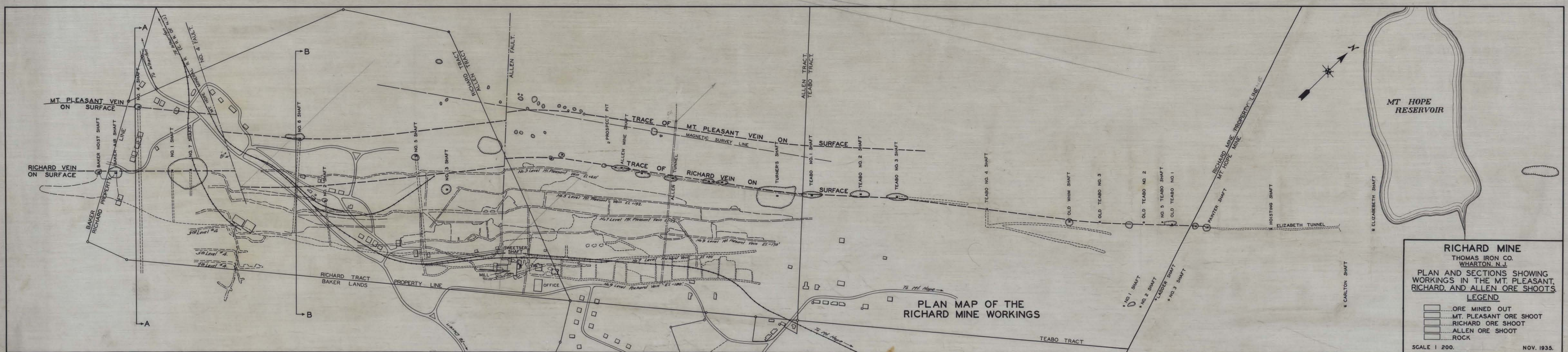
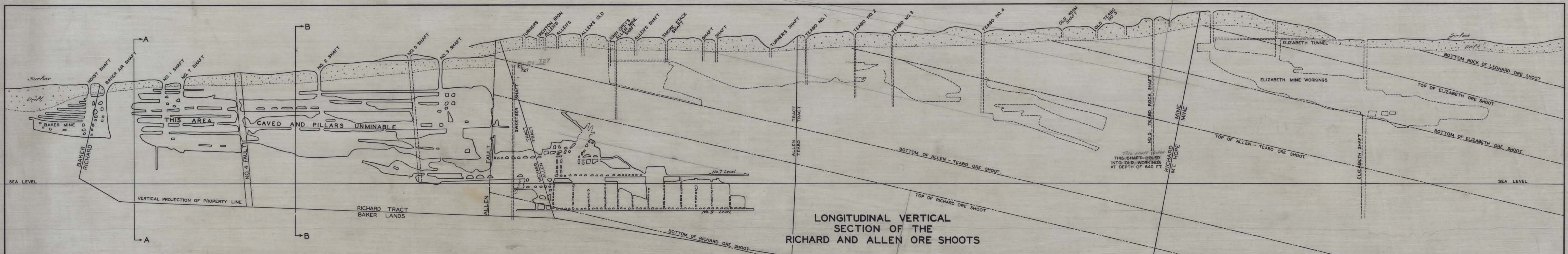
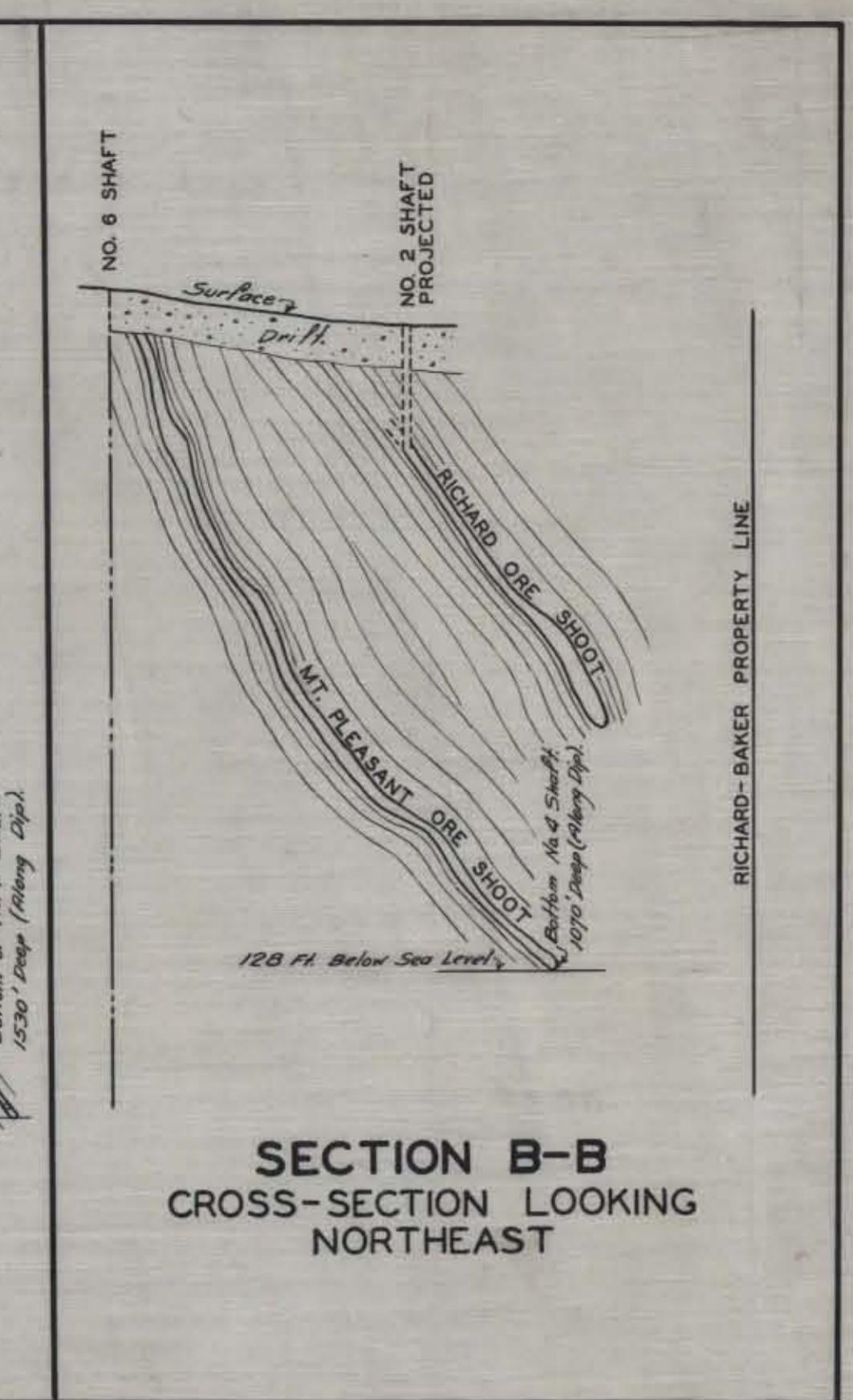
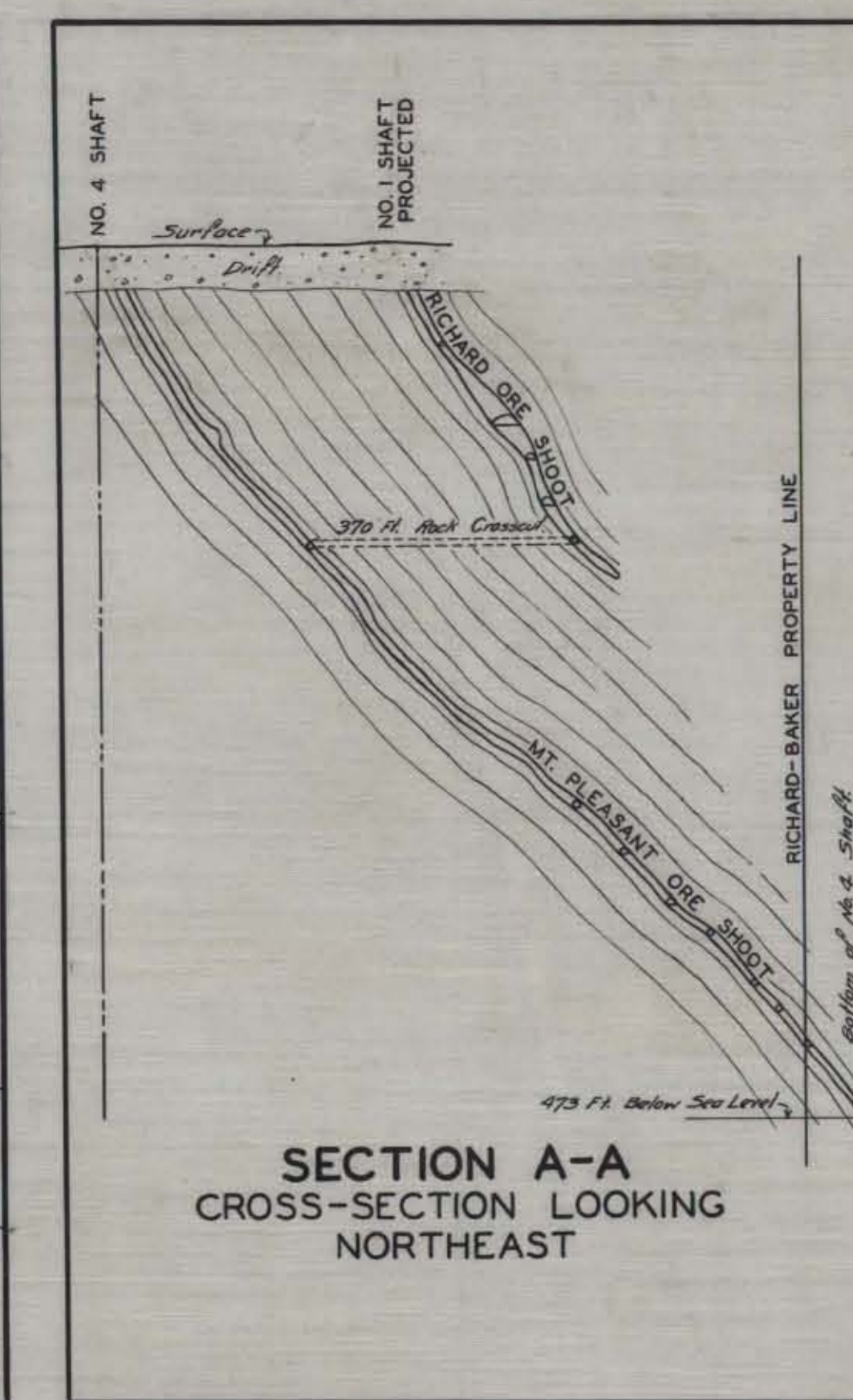
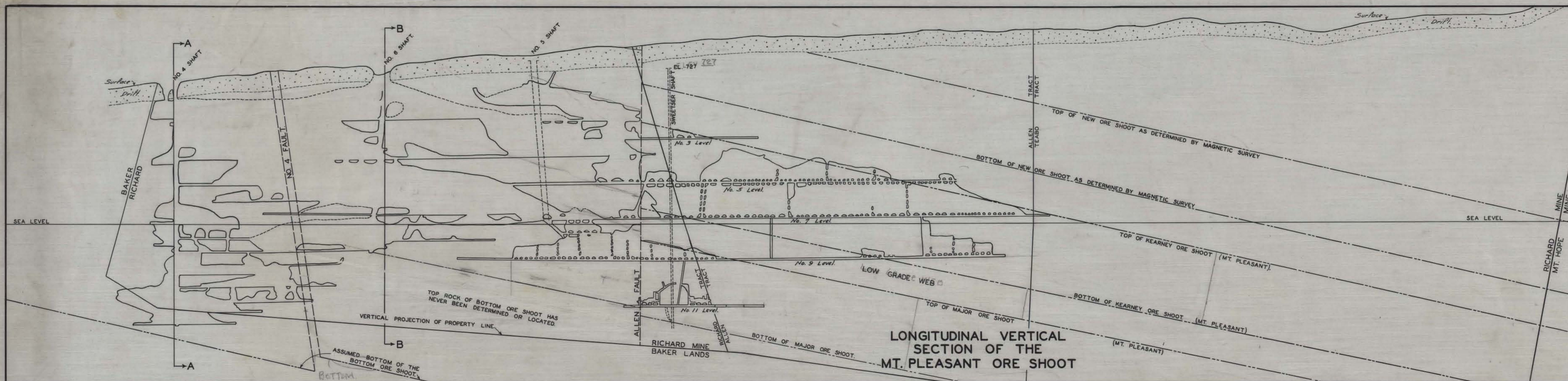


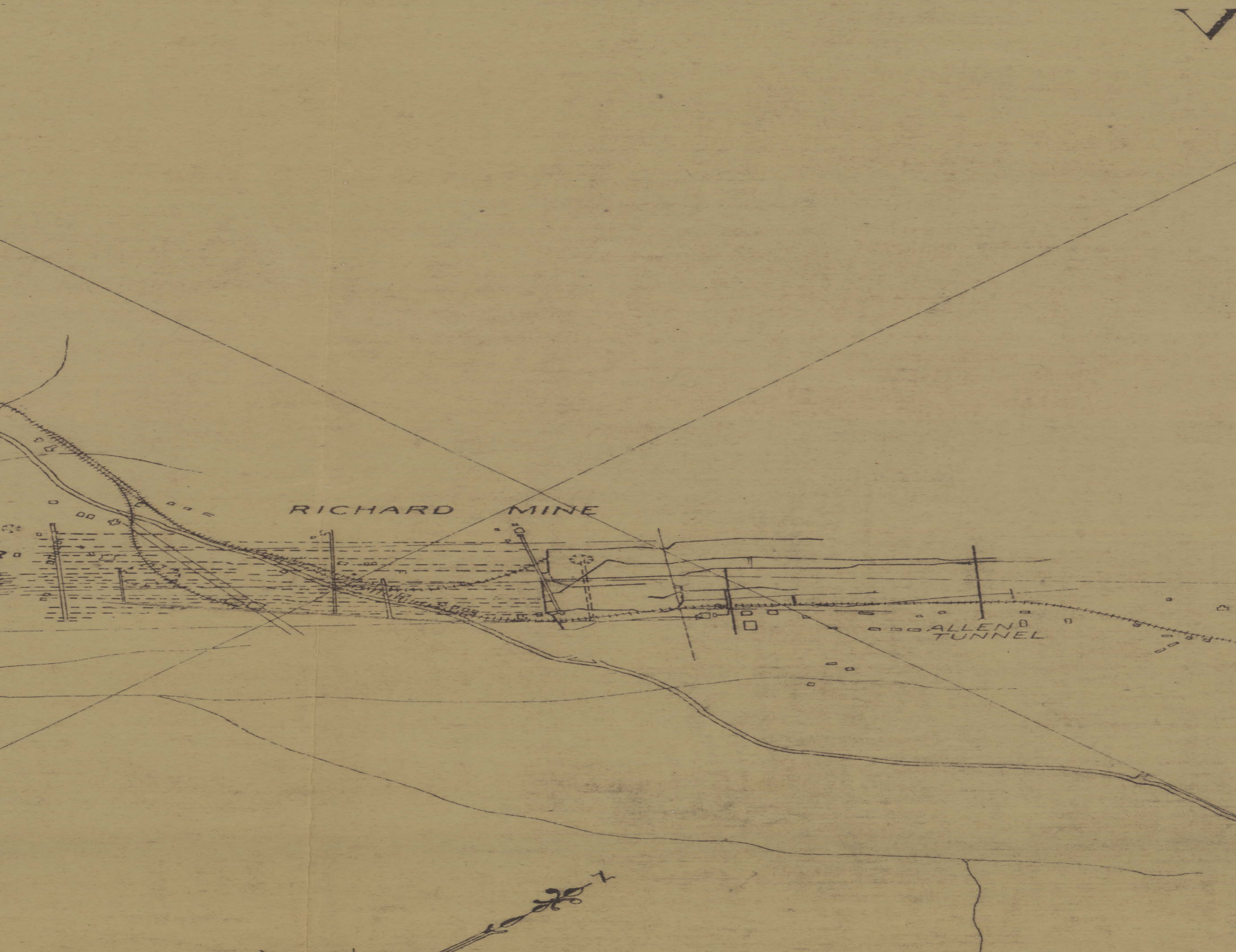
Geology by P. K. Sims, 1947-49

491519 O -58 (in pocket)



PLAN AND ELEVATION OF THE RICHARD MINE  
BY GEORGE E. JENKINS C.E.





RICHARD MINE

ALLEN TUNNEL

