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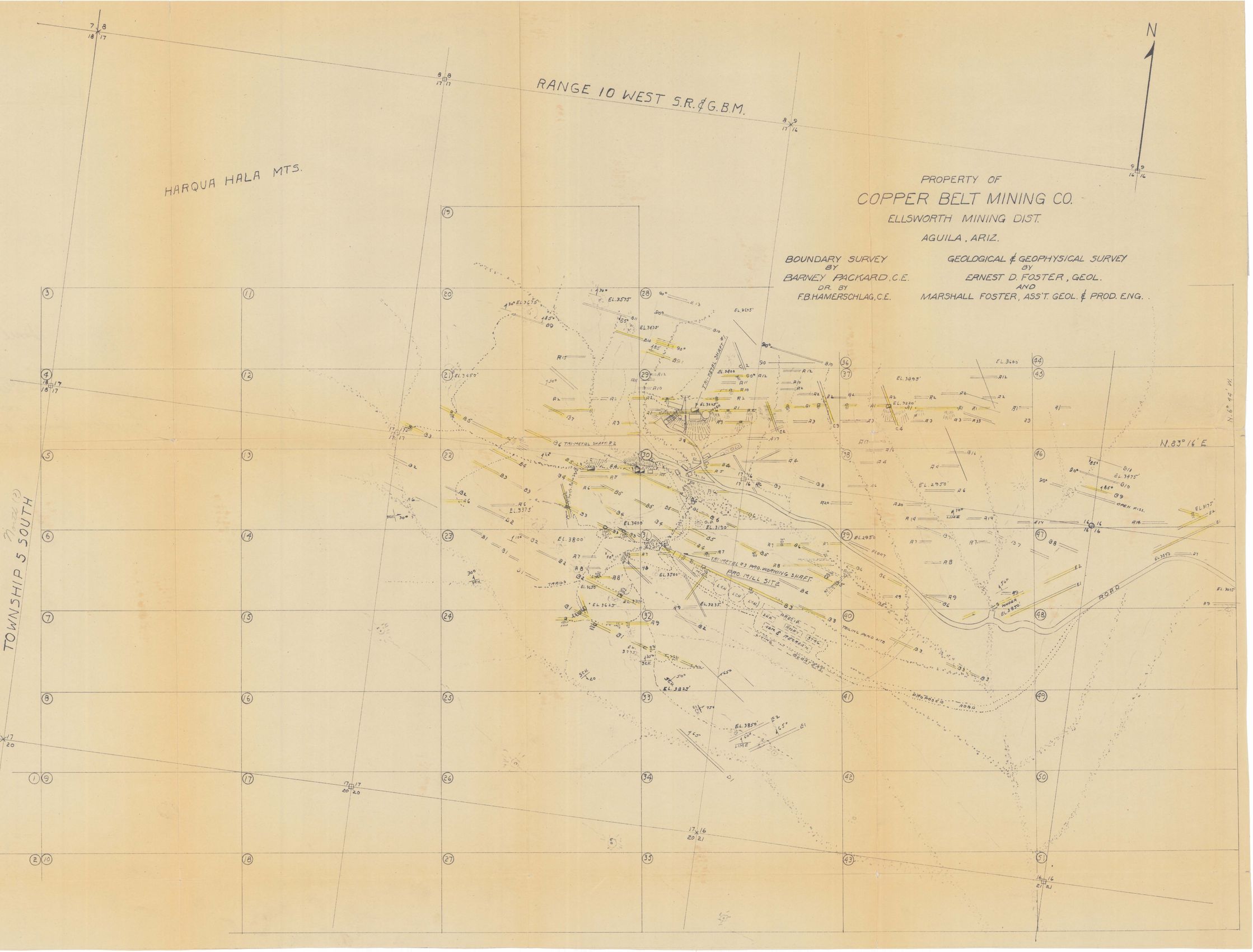
LEGEND

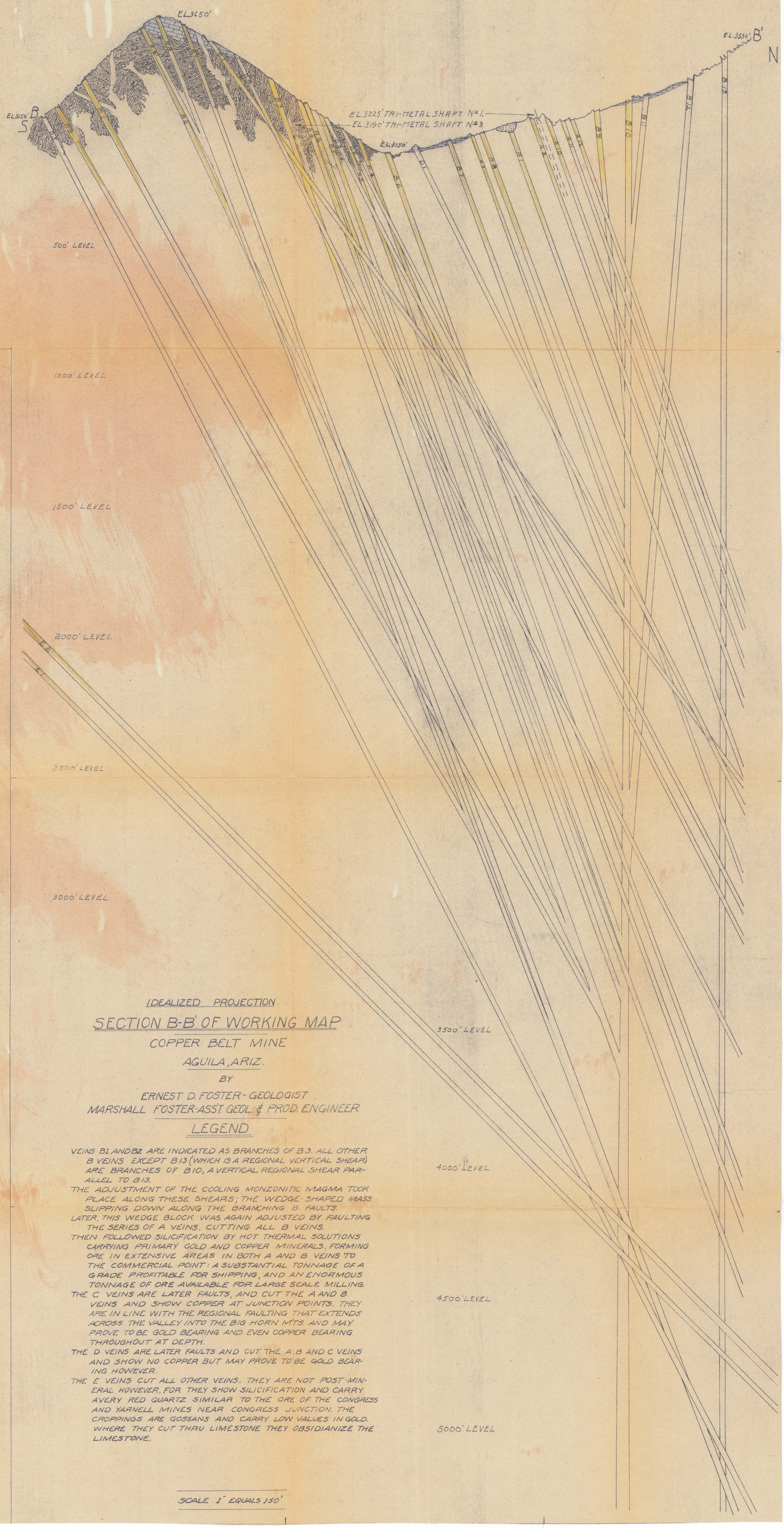
CLAIMS

1 GREEN GOLD
2 " " #11 FRACTION
3
4
5
6
7 LONE EAGLE #3
8 " " #4
9 GREEN GOLD #1
10 " " #10 FRACTION
11
12
13 TRI-METAL EXT. #8 L'T'D.
14 " " " #5 "
15 LONE EAGLE #2
16 " " #5
17 GREEN GOLD #2
18 " " #9
19 TRI-METAL EXT. #10
20 " " " #6
21 " " #7
22 " " #7 L'T'D.
23 " EXT. #6
24 LONE EAGLE #1
25 " " #6
26 GREEN GOLD #3
27 " " #8
28 TRI-METAL #5
29 " " L'T'D
30 " " EXT. L'T'D.
31 " " " #7 L'T'D.
32 LONE EAGLE
33 " " #7
34 GREEN GOLD #4
35 " " #7
36 TRI-METAL #4
31 " " #1
38 " " EXT. #11 L'T'D.
39 " " " #8
40 LONE EAGLE #9
41 " " #8
42 GREEN GOLD #5
43 " " #6
44 TRI-METAL #3
45 " " #2
46 " " EXT. #10
47 " " " #9
48 LONE EAGLE #10
49 " " #11
50
51
52

VEIN SYSTEMS

	ORE BEARING				
A1	N83°16'E	and N70°	B4	N74W	and N70°
2	"	"	5	"	"
3	"	"	6	"	"
4	"	"	7	"	"
5	"	"	8	"	"
6	"	"	9	"	N85°
7	"	"	10	"	N80°
8	"	N65°	11	"	S85°
9	"	N60°	12	"	"
10	"	N70°	13	"	-90°
11	"	"	C1	N28W	E65°
12	"	"	2	"	"
13	"	"	3	"	"
14	"	"	4	"	"
15	"	"	5	"	"
16	"	"	D1	N55W	N65°
17	"	"	2	"	"
18	"	"	3	"	"
19	"	"	4	"	"
20	"	"	5	"	"
B1	N74W	N60°	E1	N60E	"
2	"	N65°	2	"	"
3	"	N70°			





IDEALIZED PROJECTION

SECTION B-B' OF WORKING MAP

COPPER BELT MINE

AGUILA, ARIZ.

BY

ERNEST D. FOSTER - GEOLOGIST
MARSHALL FOSTER - ASS'T. GEOL. & PROD. ENGINEER

LEGEND

VEINS B1 AND B2 ARE INDICATED AS BRANCHES OF B3. ALL OTHER B VEINS EXCEPT B13 (WHICH IS A REGIONAL VERTICAL SHEAR) ARE BRANCHES OF B10, A VERTICAL REGIONAL SHEAR PARALLEL TO B13.

THE ADJUSTMENT OF THE COOLING MONZONITIC MAGMA TOOK PLACE ALONG THESE SHEARS; THE WEDGE-SHAPED MASS SLIPPING DOWN ALONG THE BRANCHING B FAULTS.

LATER, THIS WEDGE BLOCK WAS AGAIN ADJUSTED BY FAULTING THE SERIES OF A VEINS, CUTTING ALL B VEINS.

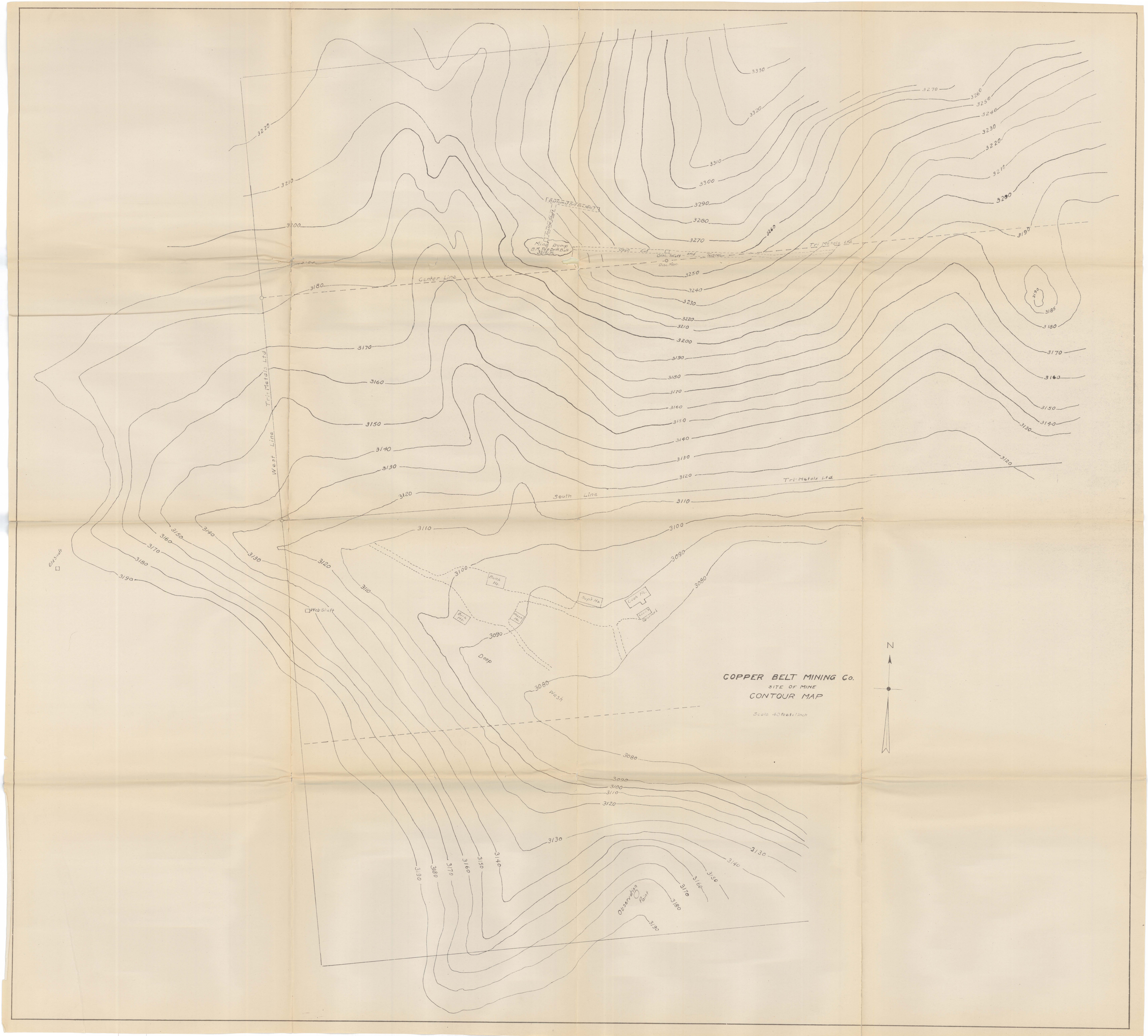
THEN FOLLOWED SILICIFICATION BY HOT THERMAL SOLUTIONS CARRYING PRIMARY GOLD AND COPPER MINERALS, FORMING ORE IN EXTENSIVE AREAS IN BOTH A AND B VEINS TO THE COMMERCIAL POINT: A SUBSTANTIAL TONNAGE OF A GRADE PROFITABLE FOR SHIPPING, AND AN ENORMOUS TONNAGE OF ORE AVAILABLE FOR LARGE SCALE MILLING.

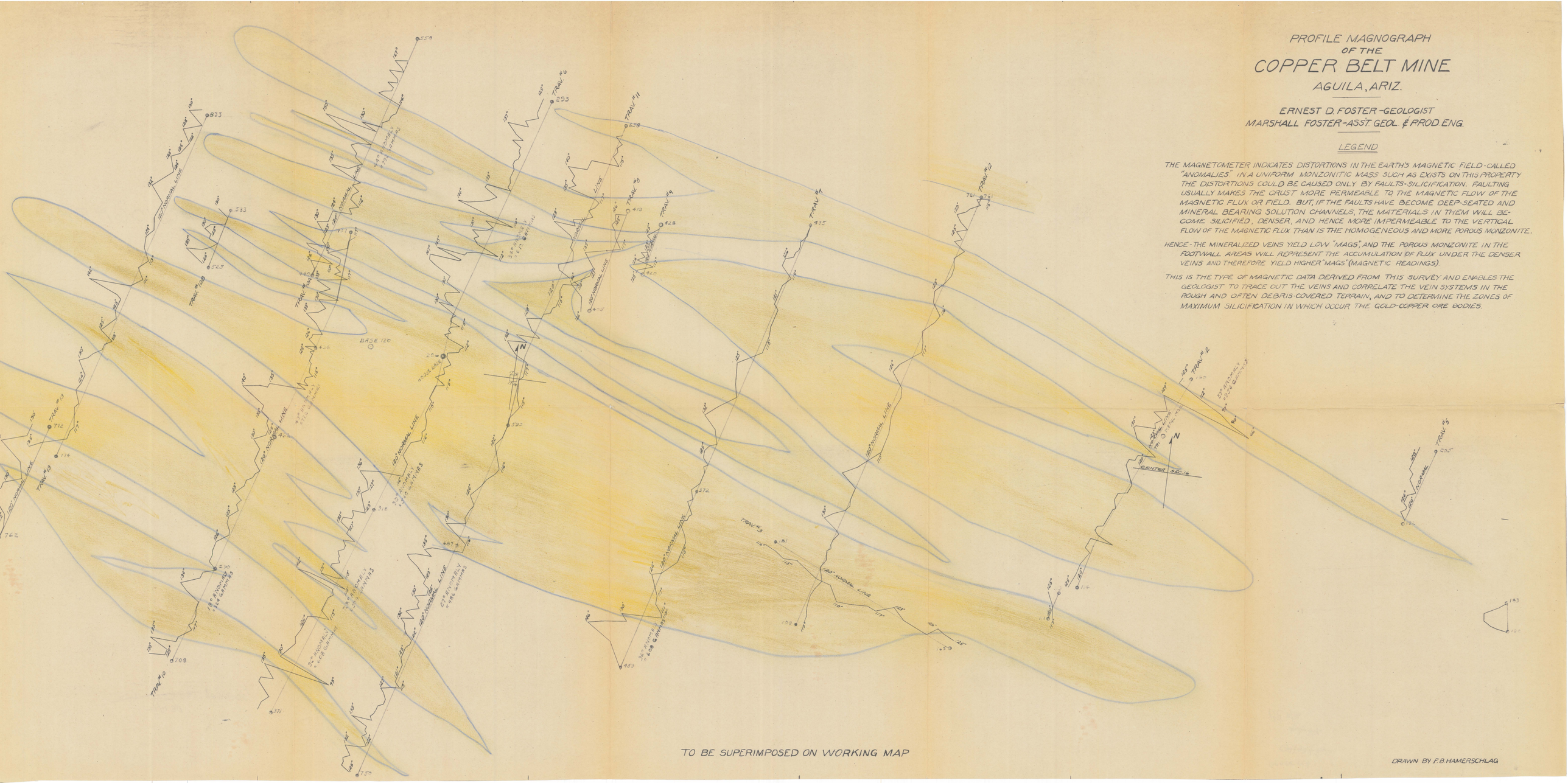
THE C VEINS ARE LATER FAULTS, AND CUT THE A AND B VEINS AND SHOW COPPER AT JUNCTION POINTS. THEY ARE IN LINE WITH THE REGIONAL FAULTING THAT EXTENDS ACROSS THE VALLEY INTO THE BIG HORN MTS. AND MAY PROVE TO BE GOLD BEARING AND EVEN COPPER BEARING THROUGHOUT AT DEPTH.

THE D VEINS ARE LATER FAULTS AND CUT THE A, B AND C VEINS AND SHOW NO COPPER BUT MAY PROVE TO BE GOLD BEARING HOWEVER.

THE E VEINS CUT ALL OTHER VEINS. THEY ARE NOT POST-MINERAL HOWEVER, FOR THEY SHOW SILICIFICATION AND CARRY A VERY RED QUARTZ SIMILAR TO THE ORE OF THE CONGRESS AND YARNELL MINES NEAR CONGRESS JUNCTION. THE CROPPINGS ARE GOSSANS AND CARRY LOW VALUES IN GOLD. WHERE THEY CUT THRU LIMESTONE THEY OBSIDIANIZE THE LIMESTONE.

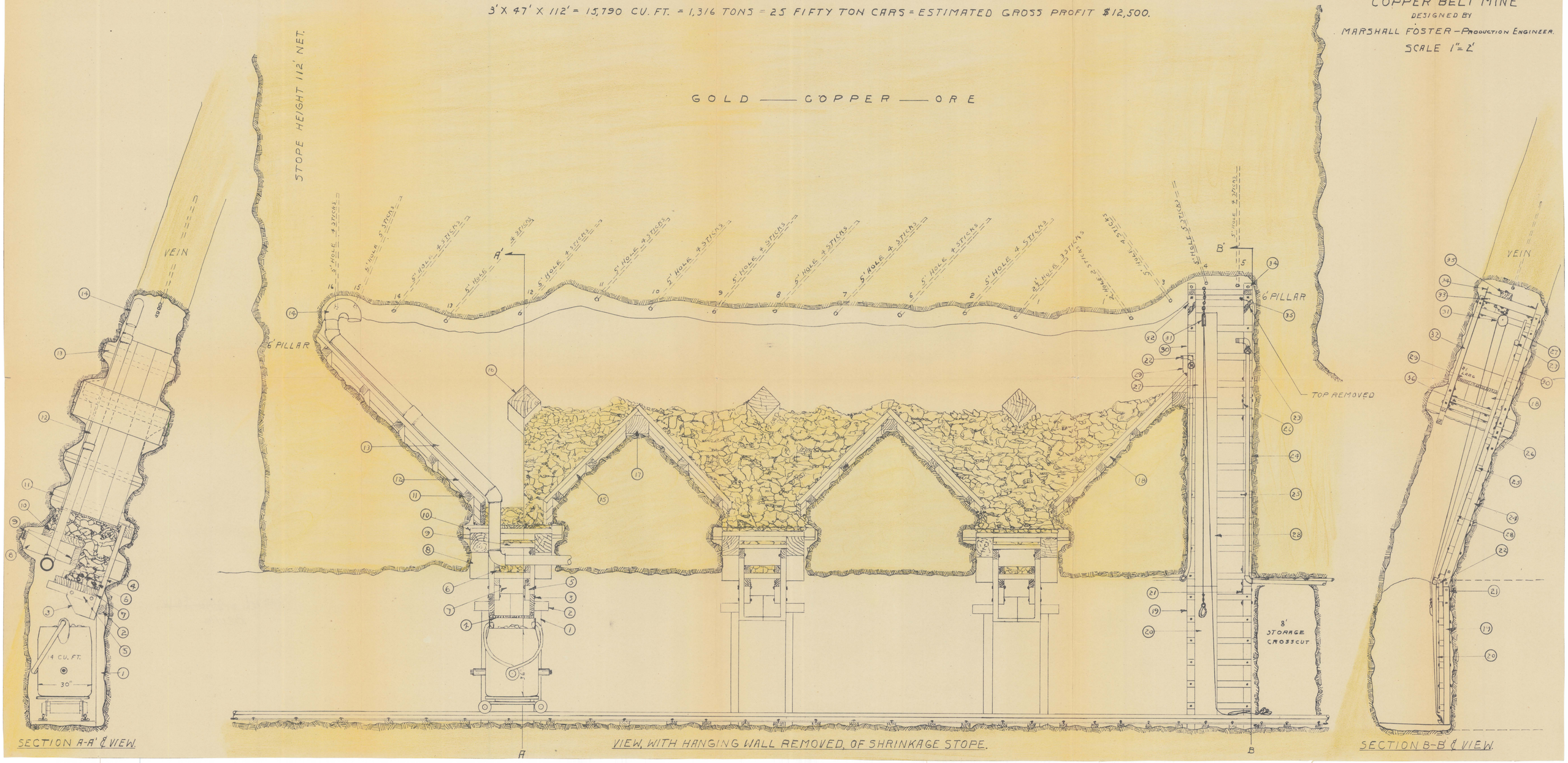
SCALE 1" EQUALS 150'


COPPER BELT MINING Co.
SITE OF MINE
CONTOUR MAP
Scale 40 feet = 1 inch
N
Tri-Metals Ltd
West Line
Center Line
South Line
Tri-Metals Ltd
Tri-Metals Ltd
Old Shaft
Web Shaft
Mine Dump
B.M. 15 P DH Bot.
3215.7
Bottom of Drill Excavation
Tailings Stack
Open Cut
Disc. Shaft and Tunnel
Disc. Mon.
Bunk Ho.
Bunk Ho.
Wash Ho.
Supt Ho.
Cook Ho.
Comp. Quarters
Deep Wash
Observation Point
3330
3320
3310
3300
3290
3280
3270
3260
3250
3240
3230
3220
3210
3200
3190
3185
3180
3170
3160
3150
3140
3130
3120
3110
3100
3090
3080


PROFILE MAGNOGRAPH
OF THE
COPPER BELT MINE
AGUILA, ARIZ.
ERNEST D. FOSTER - GEOLOGIST
MARSHALL FOSTER - ASS'T. GEOL. & PROD. ENG.
LEGEND
THE MAGNETOMETER INDICATES DISTORTIONS IN THE EARTH'S MAGNETIC FIELD - CALLED "ANOMALIES" IN A UNIFORM MONZONITIC MASS SUCH AS EXISTS ON THIS PROPERTY THE DISTORTIONS COULD BE CAUSED ONLY BY FAULTS - SILICIFICATION. FAULTING USUALLY MAKES THE CRUST MORE PERMEABLE TO THE MAGNETIC FLOW OF THE MAGNETIC FLUX OR FIELD. BUT, IF THE FAULTS HAVE BECOME DEEP-SEATED AND MINERAL BEARING SOLUTION CHANNELS, THE MATERIALS IN THEM WILL BECOME SILICIFIED, DENSER, AND HENCE MORE IMPERMEABLE TO THE VERTICAL FLOW OF THE MAGNETIC FLUX THAN IS THE HOMOGENEOUS AND MORE POROUS MONZONITE.
HENCE - THE MINERALIZED VEINS YIELD LOW "MAGS", AND THE POROUS MONZONITE IN THE FOOTWALL AREAS WILL REPRESENT THE ACCUMULATION OF FLUX UNDER THE DENSER VEINS AND THEREFORE YIELD HIGHER "MAGS" (MAGNETIC READINGS).
THIS IS THE TYPE OF MAGNETIC DATA DERIVED FROM THIS SURVEY AND ENABLES THE GEOLOGIST TO TRACE OUT THE VEINS AND CORRELATE THE VEIN SYSTEMS IN THE ROUGH AND OFTEN DEBRIS-COVERED TERRAIN, AND TO DETERMINE THE ZONES OF MAXIMUM SILICIFICATION IN WHICH OCCUR THE GOLD-COPPER ORE BODIES.
TO BE SUPERIMPOSED ON WORKING MAP
DRAWN BY F.B. HAMERSCHLAG
N
CENTER SEC. 16
BASE 120
TRAV. #1
TRAV. #2
TRAV. #3
TRAV. #4
TRAV. #5
TRAV. #6
TRAV. #7
TRAV. #8
TRAV. #9
TRAV. #10
TRAV. #11
TRAV. #12
TRAV. #13
TRAV. #14
TRAV. #15
TRAV. #16
TRAV. #17
TRAV. #18
TRAV. #19
180° NORMAL LINE

SHRINKAGE STOPE
FOR
COPPER BELT MINE
DESIGNED BY
MARSHALL FOSTER – PRODUCTION ENGINEER.
SCALE 1" = 2'

3' X 47' X 112' = 15,790 CU. FT. = 1,316 TONS = 25 FIFTY TON CARS = ESTIMATED GROSS PROFIT $12,500.



SECTION A-A' & VIEW.

VIEW, WITH HANGING WALL REMOVED, OF SHRINKAGE STOPE.

SECTION B-B' & VIEW.

LEGEND

CLAIMS

1 GREEN GOLD
2 " " #11 FRACTION
3
4
5
6
7 LONE EAGLE #3
8 " " #4
9 GREEN GOLD #1
10 " " #10 FRACTION
11
12
13 TRI-METAL EXT. #8 L'T'D.
14 " " " #5 "
15 LONE EAGLE #2
16 " " #5
17 GREEN GOLD #2
18 " " #9
19 TRI-METAL EXT. #10
20 " " " #6
21 " " #7
22 " " #7 L'T'D.
23 " " EXT. #6
24 LONE EAGLE #1
25 " " #6
26 GREEN GOLD #3
27 " " #8
28 TRI-METAL #5
29 " " L'T'D
30 " " EXT. L'T'D.
31 " " " #7 L'T'D.
32 LONE EAGLE
33 " " #7
34 GREEN GOLD #4
35 " " #7
36 TRI-METAL #4
37 " " #1
38 " " EXT. #11 L'T'D.
39 " " " #8
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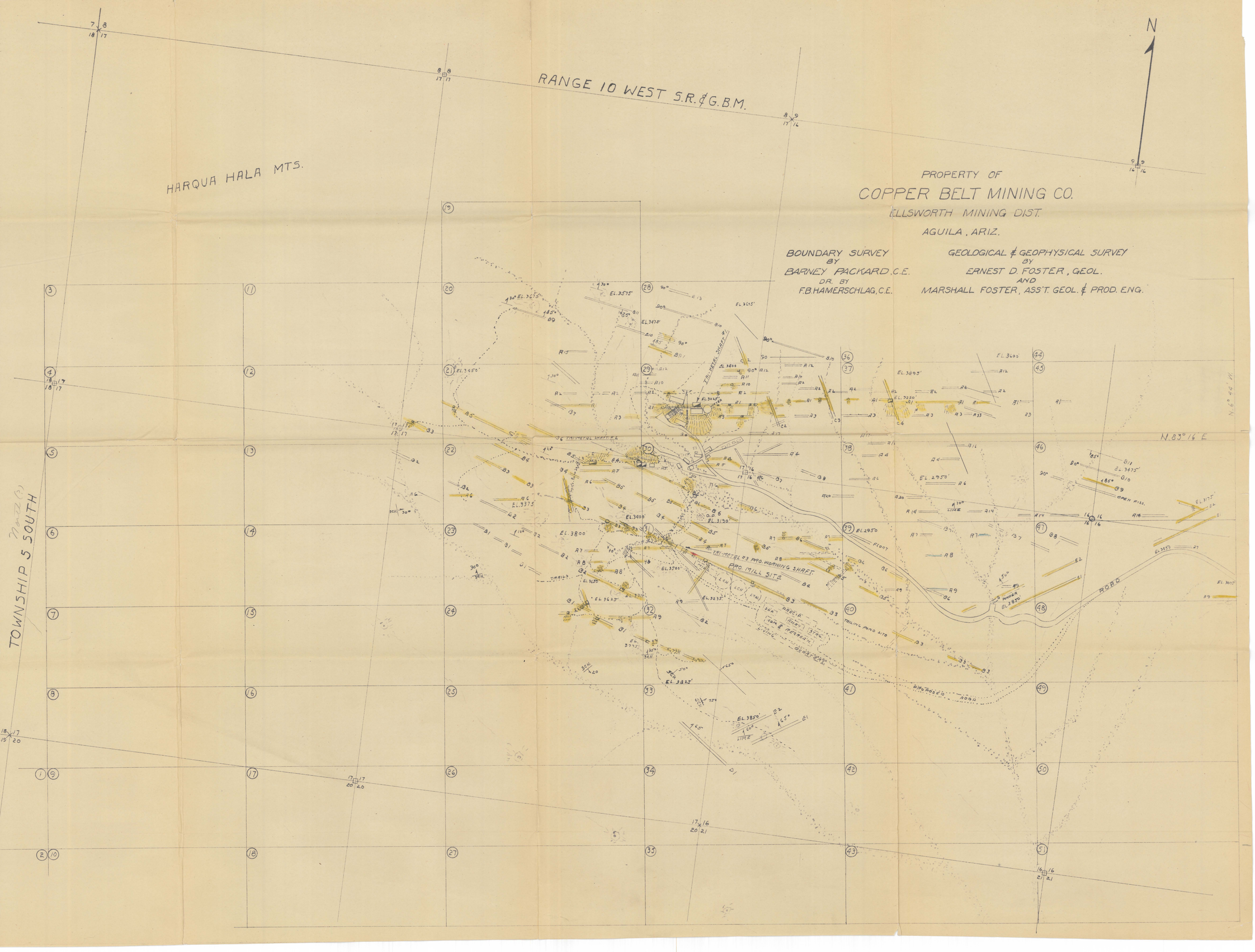
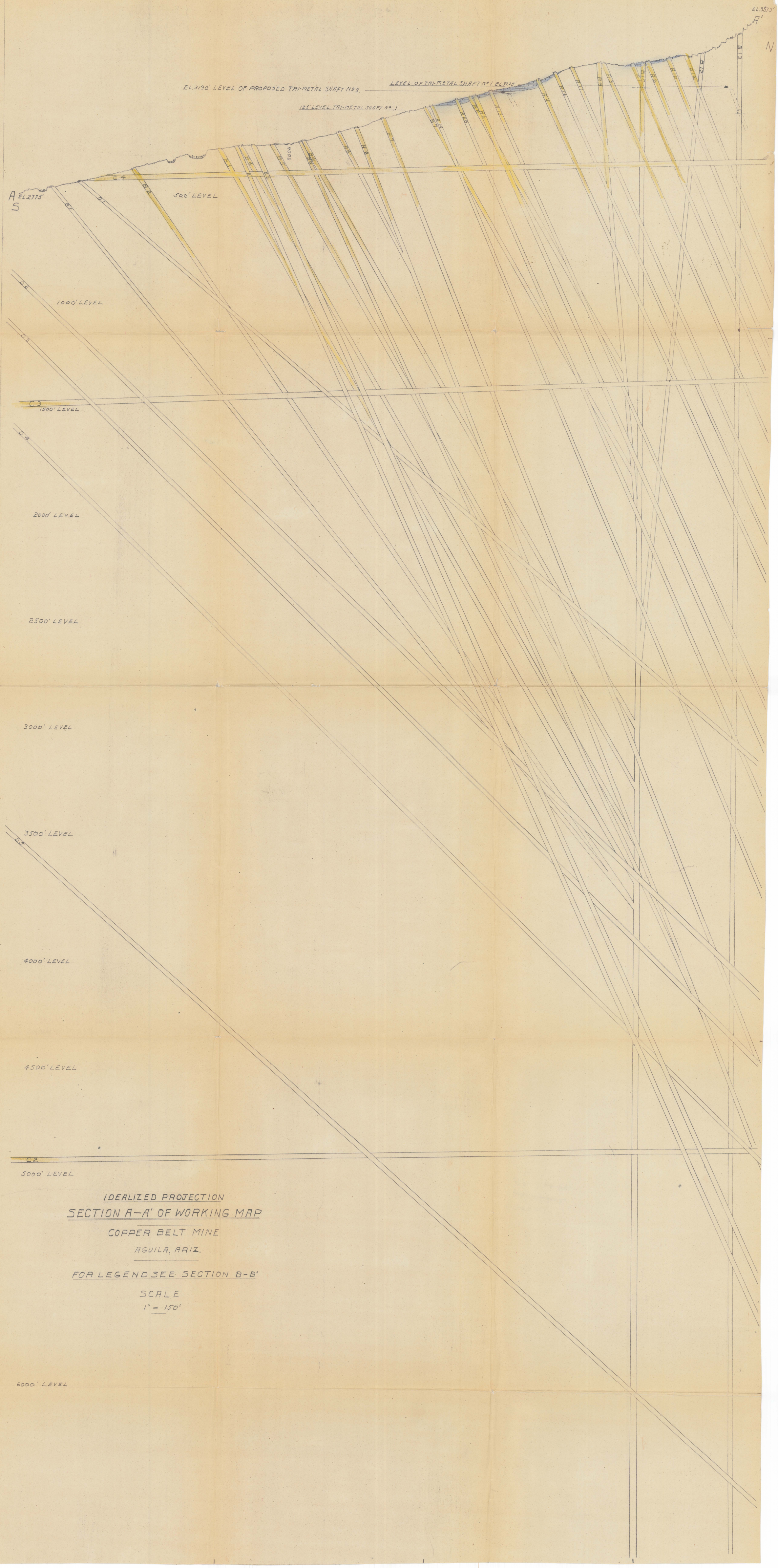
44 TRI-METAL #3
45 " " #2
46 " " EXT. #10
47 " " " #9
48 LONE EAGLE #10
49 " " #11
50
51
52

VEIN SYSTEMS

	ORE BEARING				
A1	N83°16'E	DIP N70°	B4	N74W	DIP N70°
2	"	"	5	"	"
3	"	"	6	"	"
4	"	"	7	"	"
5	"	"	8	"	"
6	"	"	9	"	N85°
7	"	"	10	"	N80°
8	"	N65°	11	"	S85°
9	"	N60°	12	"	"
10	"	N70°	13	"	-90°
11	"	"	C1	N28W	E65°
12	"	"	2	"	"
13	"	"	3	"	"
14	"	"	4	"	"
15	"	"	5	"	"
16	"	"	D1	N55W	N65°
17	"	"	2	"	"
18	"	"	3	"	"
19	"	"	4	"	"
20	"	"	5	"	"
B1	N74W	N60°	E1	N60E	"
2	"	N65°	2	"	"
3	"	N70°			





IDEALIZED PROJECTION

SECTION A–A' OF WORKING MAP

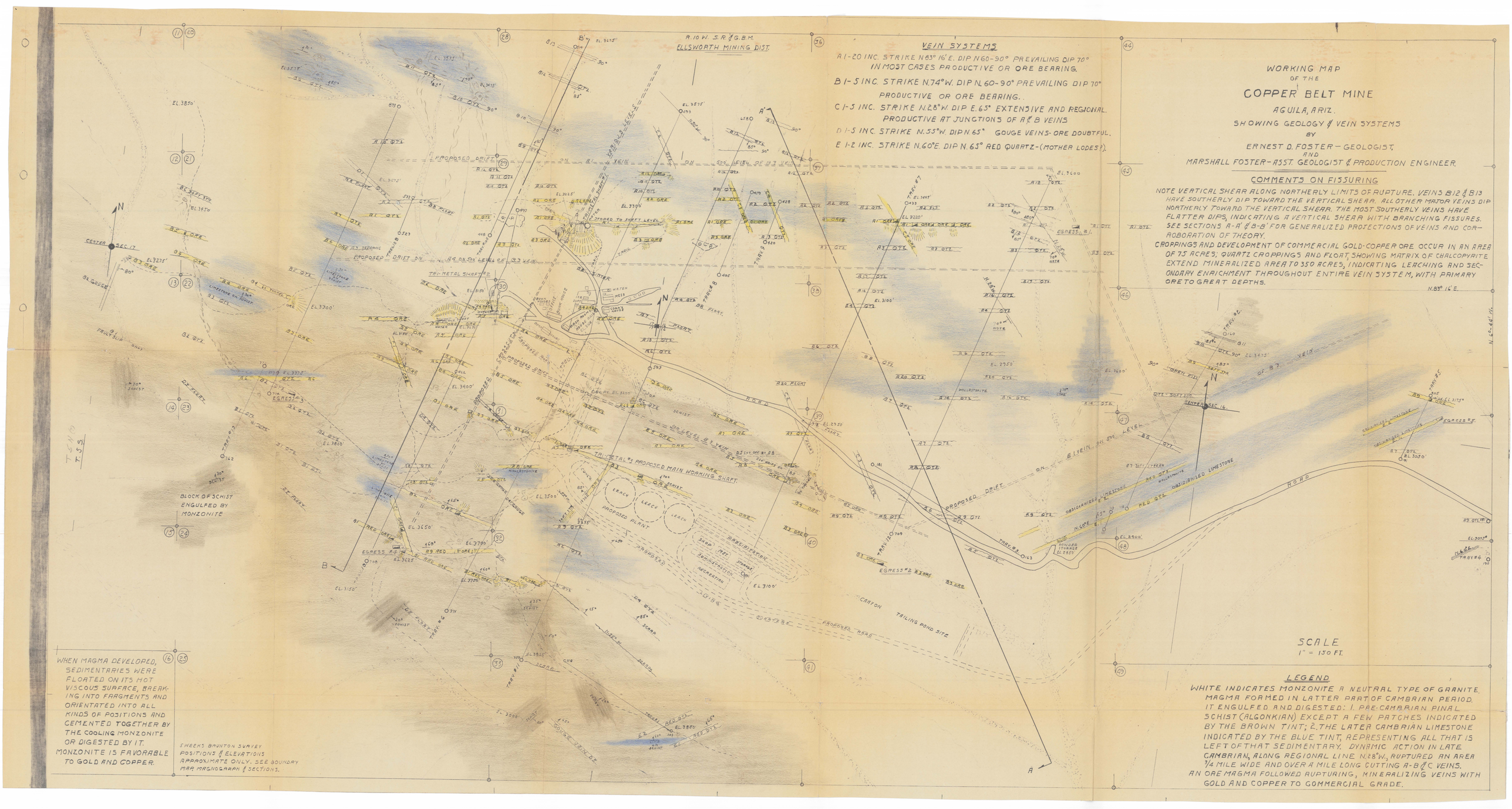
COPPER BELT MINE

AGUILA, ARIZ.

FOR LEGEND SEE SECTION B-B'

SCALE

1" = 150'


WORKING MAP
OF THE
COPPER BELT MINE
AGUILA, ARIZ.
SHOWING GEOLOGY & VEIN SYSTEMS
BY
ERNEST D. FOSTER – GEOLOGIST,
AND
MARSHALL FOSTER – ASST. GEOLOGIST & PRODUCTION ENGINEER.
VEIN SYSTEMS
A 1-20 INC. STRIKE N.83° 16' E. DIP N60-90° PREVAILING DIP 70° IN MOST CASES PRODUCTIVE OR ORE BEARING.
B 1-5 INC. STRIKE N.74° W. DIP N. 60-90° PREVAILING DIP 70° PRODUCTIVE OR ORE BEARING.
C 1-5 INC. STRIKE N.28° W. DIP E. 65° EXTENSIVE AND REGIONAL. PRODUCTIVE AT JUNCTIONS OF A & B VEINS
D 1-5 INC. STRIKE N.55° W. DIP N 65° GOUGE VEINS - ORE DOUBTFUL.
E 1-2 INC. STRIKE N.60° E. DIP N. 65° RED QUARTZ - (MOTHER LODES?).
COMMENTS ON FISSURING
NOTE VERTICAL SHEAR ALONG NORTHERLY LIMITS OF RUPTURE. VEINS B12 & B13 HAVE SOUTHERLY DIP TOWARD THE VERTICAL SHEAR. ALL OTHER MAJOR VEINS DIP NORTHERLY TOWARD THE VERTICAL SHEAR. THE MOST SOUTHERLY VEINS HAVE FLATTER DIPS, INDICATING A VERTICAL SHEAR WITH BRANCHING FISSURES. SEE SECTIONS A-A' & B-B' FOR GENERALIZED PROTECTIONS OF VEINS AND CORROBORATION OF THEORY.
CROPPINGS AND DEVELOPMENT OF COMMERCIAL GOLD-COPPER ORE OCCUR IN AN AREA OF 75 ACRES; QUARTZ CROPPINGS AND FLOAT, SHOWING MATRIX OF CHALCOPYRITE EXTEND MINERALIZED AREA TO 350 ACRES, INDICATING LEACHING AND SECONDARY ENRICHMENT THROUGHOUT ENTIRE VEIN SYSTEM, WITH PRIMARY ORE TO GREAT DEPTHS.
R. 10 W. S.R. & G.B.M.
ELLSWORTH MINING DIST.
PROPOSED DRIFT ON B1 VEIN
PROPOSED DRIFT ON A4 ON 200' LEVEL OF B3 VEIN
TRI-METAL SHAFT #2
TRI-METAL #3 PROPOSED MAIN WORKING SHAFT
PROPOSED PLANT
LEACH
SHOP
BARRACKS
RECREATION
"CANYON" TAILING POND SITE
PROPOSED ROAD
BLOCK OF SCHIST ENGULFED BY MONZONITE
CENTER SEC. 17
SEC. 16
T. 5 N.
T. 5 S.
SCALE
1" = 150 FT.
LEGEND
WHITE INDICATES MONZONITE A NEUTRAL TYPE OF GRANITE MAGMA FORMED IN LATTER PART OF CAMBRIAN PERIOD. IT ENGULFED AND DIGESTED: 1. PRE-CAMBRIAN PINAL SCHIST (ALGONKIAN) EXCEPT A FEW PATCHES INDICATED BY THE BROWN TINT; 2. THE LATER CAMBRIAN LIMESTONE INDICATED BY THE BLUE TINT, REPRESENTING ALL THAT IS LEFT OF THAT SEDIMENTARY. DYNAMIC ACTION IN LATE CAMBRIAN, ALONG REGIONAL LINE N.28° W., RUPTURED AN AREA 3/4 MILE WIDE AND OVER A MILE LONG CUTTING A-B & C VEINS. AN ORE MAGMA FOLLOWED RUPTURING, MINERALIZING VEINS WITH GOLD AND COPPER TO COMMERCIAL GRADE.
WHEN MAGMA DEVELOPED, SEDIMENTARIES WERE FLOATED ON ITS HOT VISCOUS SURFACE, BREAKING INTO FRAGMENTS AND ORIENTATED INTO ALL KINDS OF POSITIONS AND CEMENTED TOGETHER BY THE COOLING MONZONITE OR DIGESTED BY IT. MONZONITE IS FAVORABLE TO GOLD AND COPPER.
SWEEKS BRUNTON SURVEY
POSITIONS & ELEVATIONS APPROXIMATE ONLY. SEE BOUNDARY MAP, MAGNOGRAPH & SECTIONS.