CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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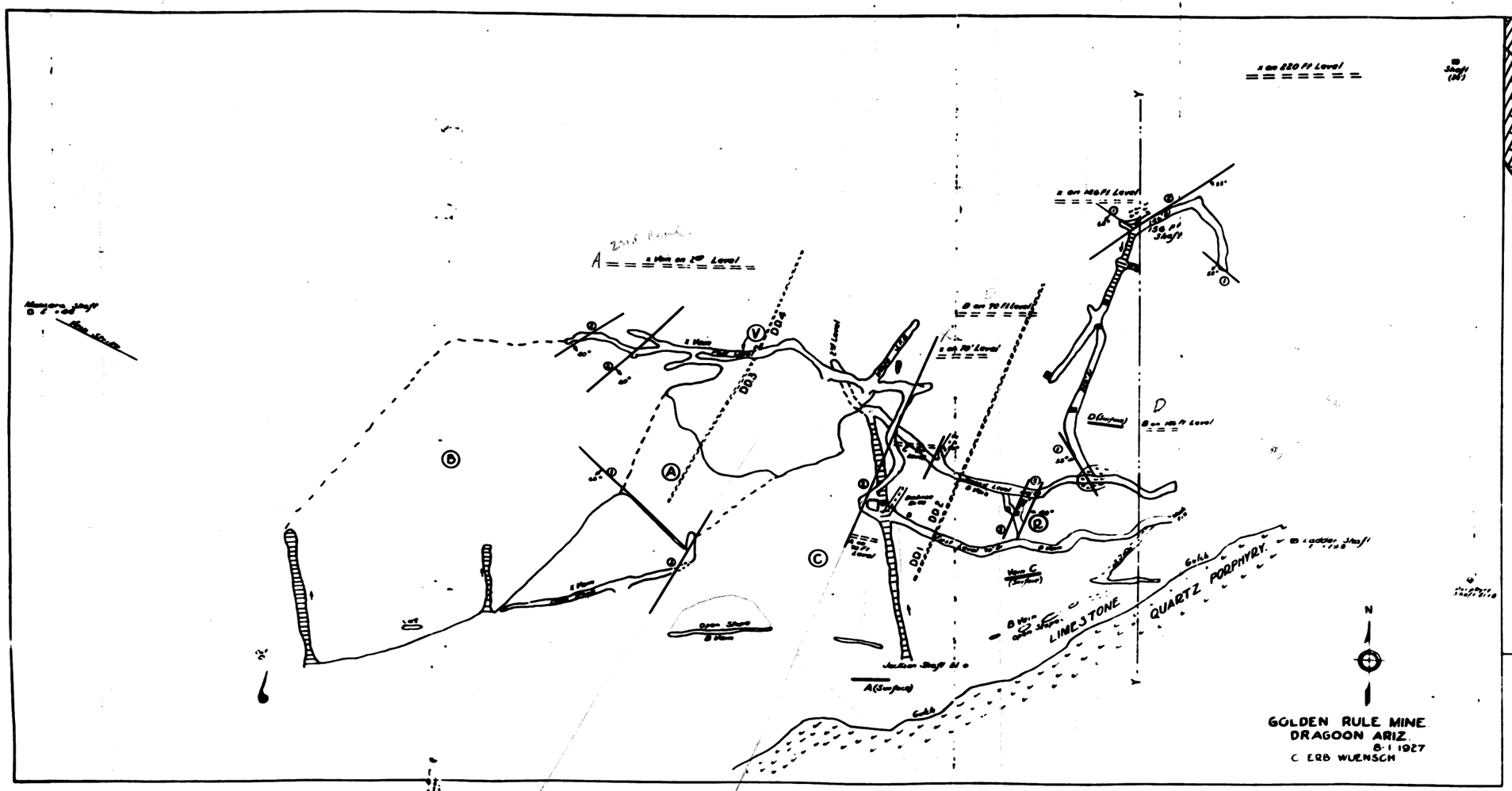
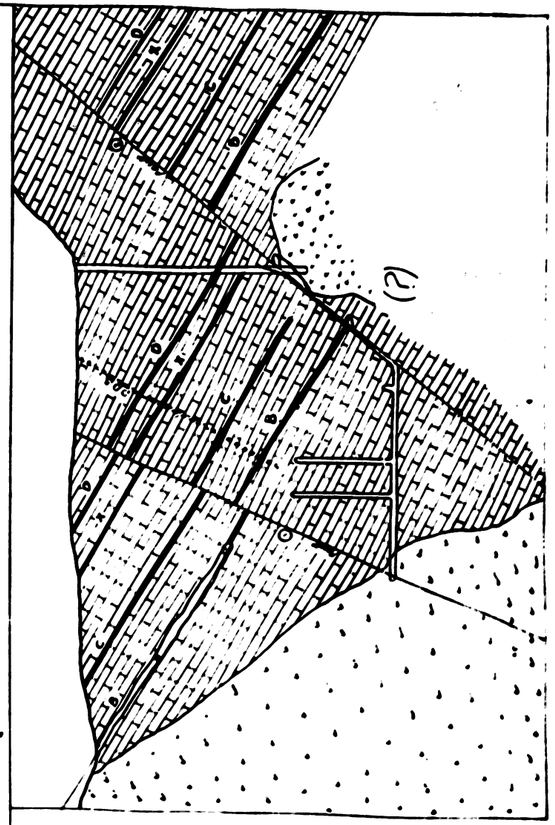
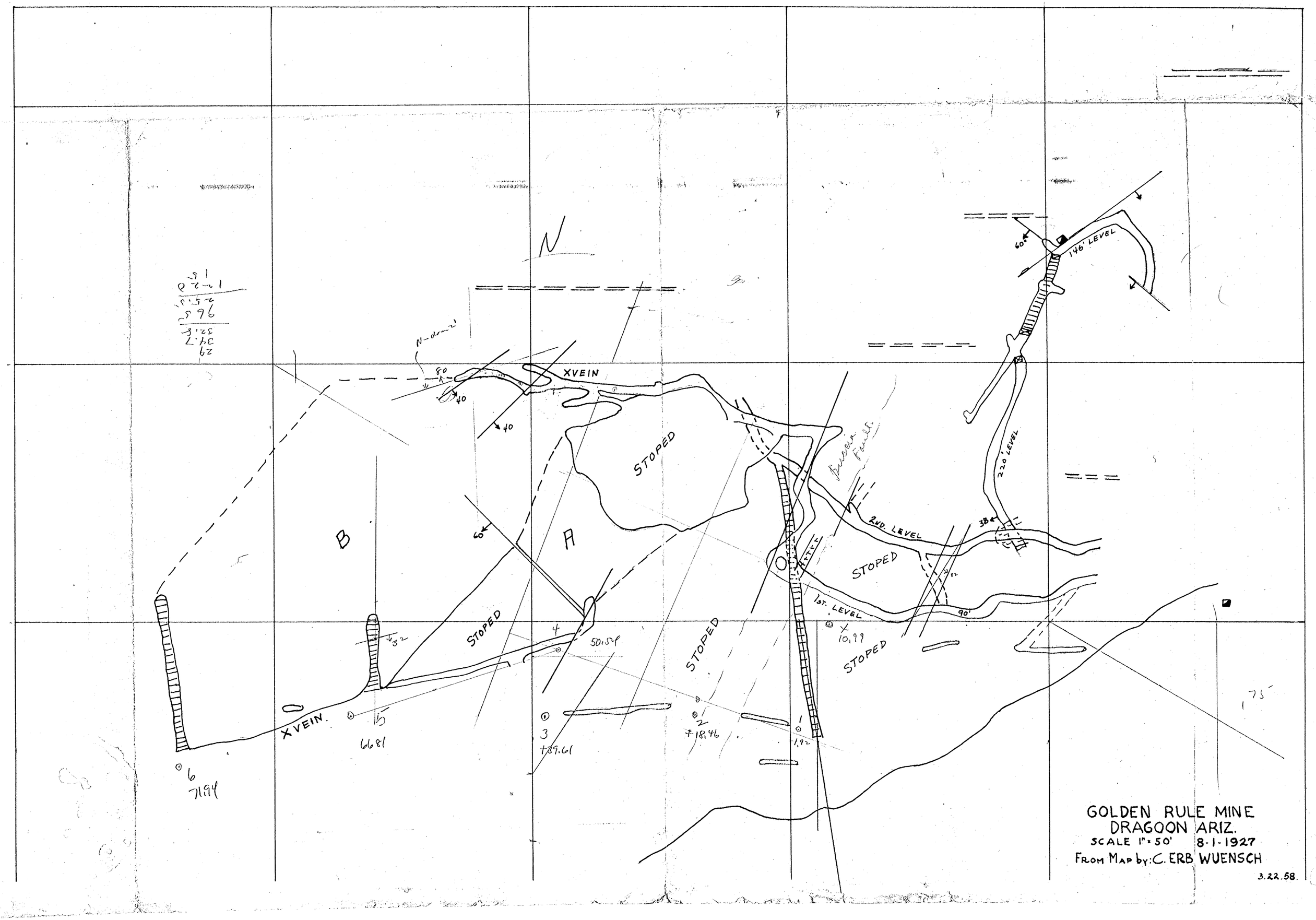
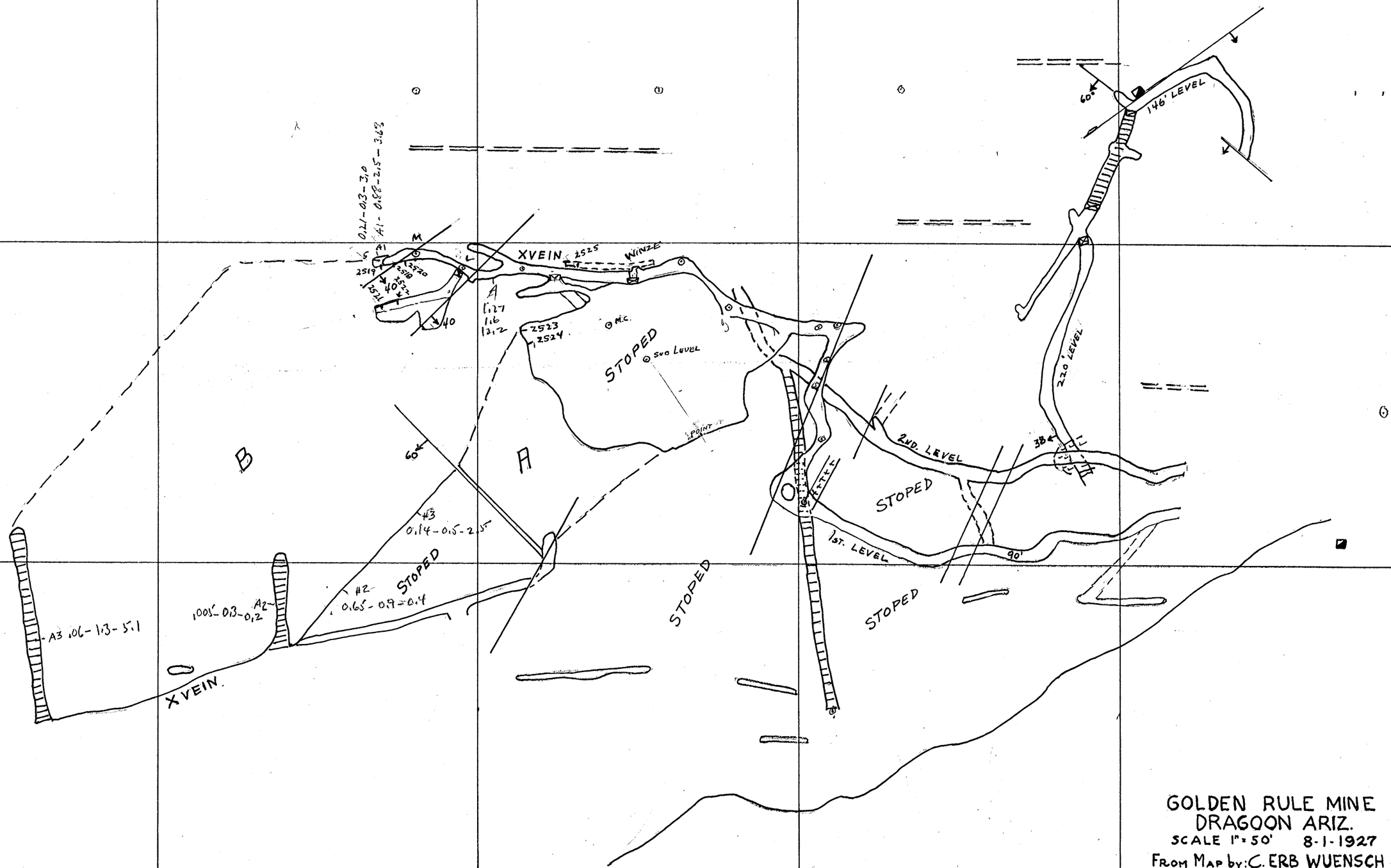

GOLDEN RULE MINE
DRAGOON ARIZ.
8-1 1927
C. ERB WUENSCH
LIMESTONE
QUARTZ PORPHYRY
Gulch
Gulch
Open Stope
Ladder Shaft
N
A
B
C
D
V
DD1
DD2
DD3
DD4
Y
Y

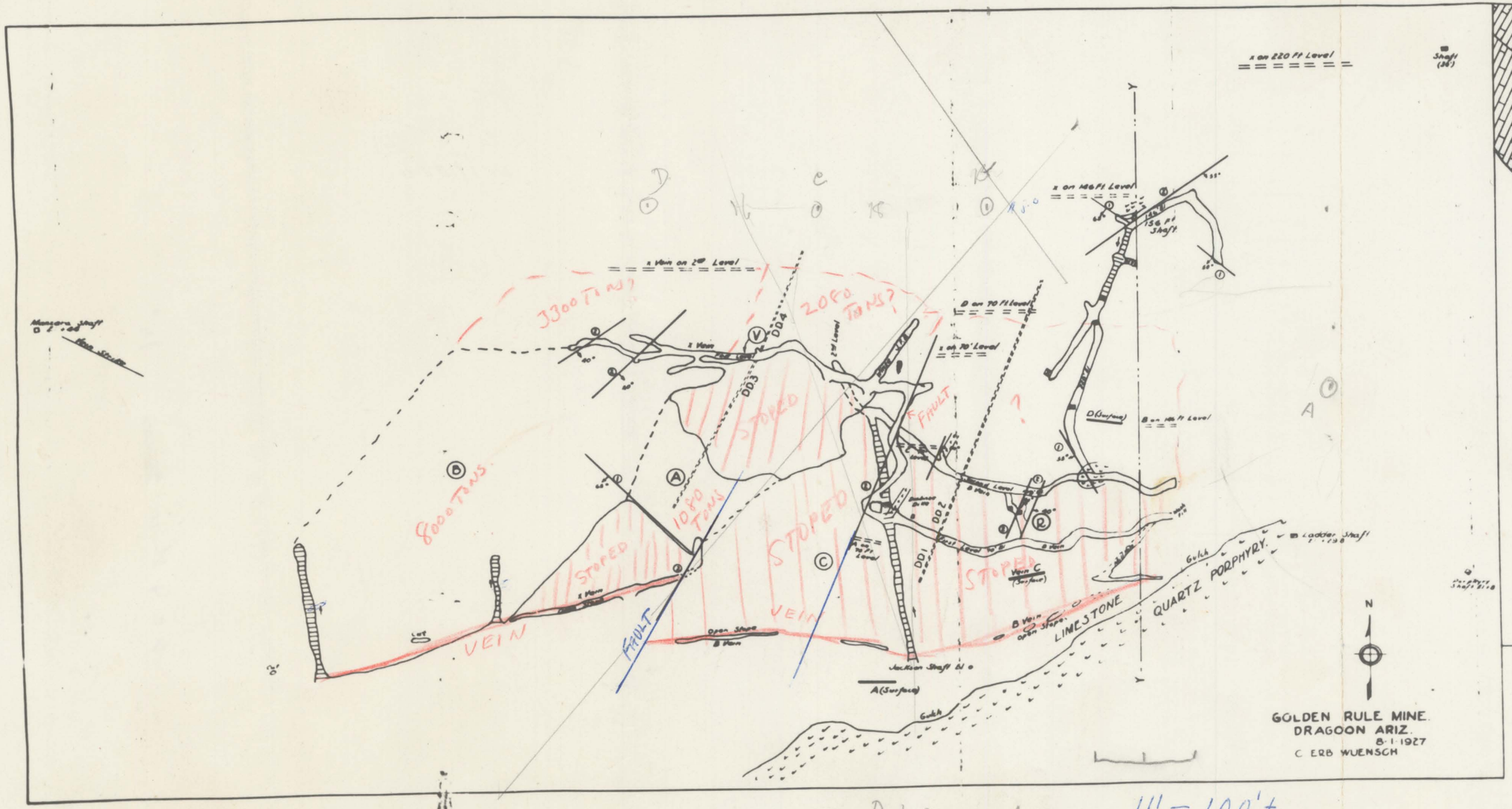

SECTION Y-Y


N
XVEIN
STOPED
STOPED
STOPED
STOPED
STOPED
B
A
O
146' LEVEL
220' LEVEL
2ND. LEVEL
1ST. LEVEL
XVEIN.
6681
7194
+89.61
+18.46
1.92
10.99
50.52
GOLDEN RULE MINE
DRAGOON ARIZ.
SCALE 1" = 50'
8-1-1927
FROM MAP by: C. ERB WUENSCH
3.22.58.



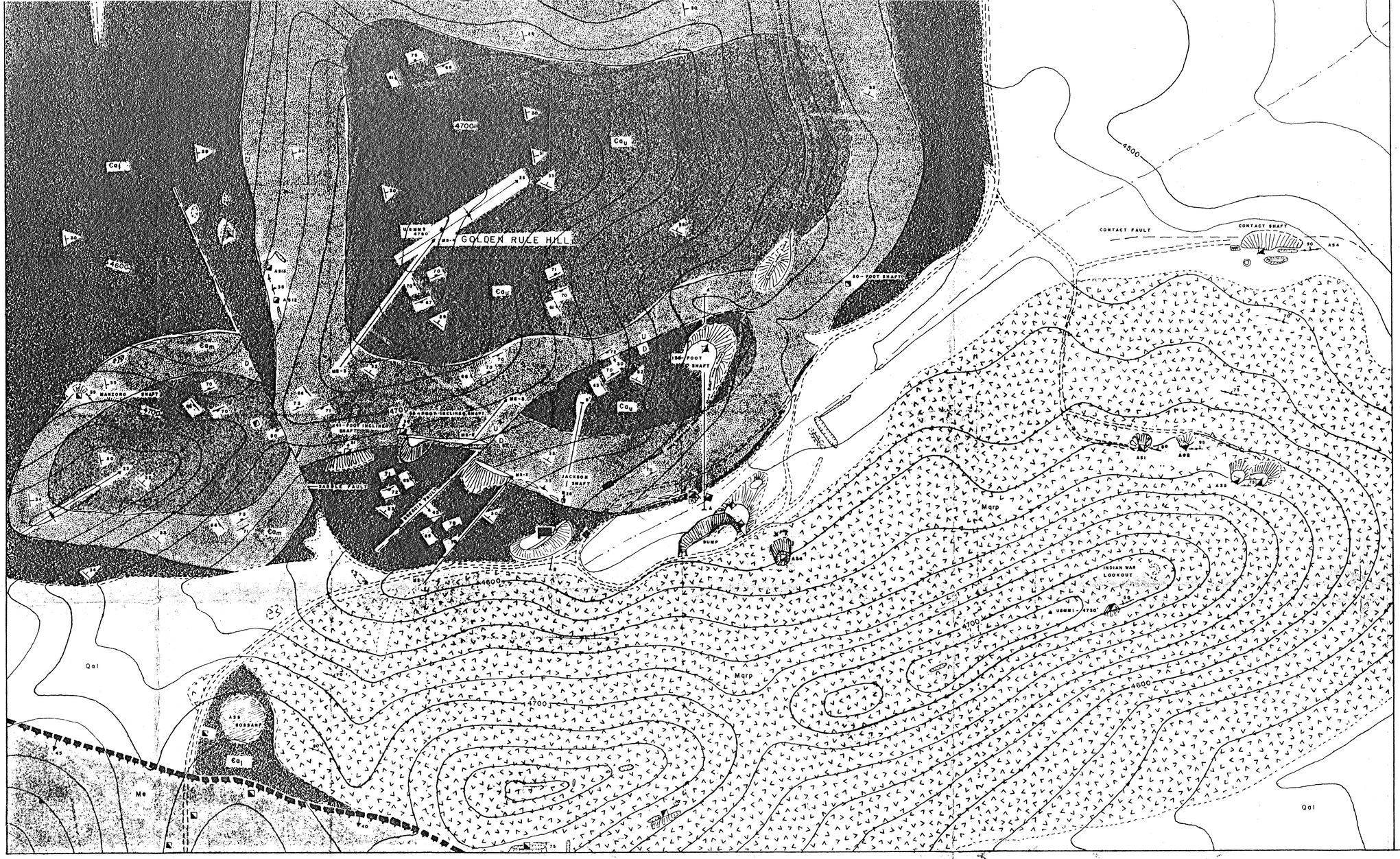
GOLDEN RULE MINE
DRAGOON ARIZ.
SCALE 1" = 50' 8-1-1927
FROM MAP by: C. ERB WUENSCH

3.22.58.



D to Jackson shaft

1" = 100'+



INFERRED CONTACT

QUARTZ VEIN, IN PLACE, SHOWING DIP

R.E.A. POWER LINE

POWER LINE

FAULT, SHOWING DIP AND RELATIVE MOVEMENT, DASHED WHERE INFERRED

THRUST FAULT, SHOWING DIP, BARBS ON UPPER PLATE, DASHED WHERE INFERRED

SYNCLINE, SHOWING DIRECTION OF PLUNGE

BUILDINGS

USMMI U.S. MINERAL MARKER

AS4 ASSAY SAMPLE LOCATION

Qal QUATERNARY ALLUVIUM

Mqrp MESOZOIC QUARTZ RHYOLITE PORPHYRY

Me MISSISSIPPIAN ESCABROSA LIMESTONE

Cau CAMBRIAN-UPPER MEMBER-ABRIGO FORMATION

Cam CAMBRIAN-MIDDLE MEMBER-ABRIGO FORMATION

Cal CAMBRIAN-LOWER MEMBER-ABRIGO FORMATION

0 100 200 FEET

SCALE: 1" = 100'

CONTOUR INTERVAL = 20'

FIGURE 3 GEOLOGIC MAP, GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA

ANDREW E. HAMPF GEOSCIENCES THESIS-1972

Figure 3

EXPLANATION
A — A' CROSS SECTION LOCATION
ORE PILE
WATER BASIN
OPEN STOPE
INTERMITTENT STREAM
MS-1 MEASURED SECTION LOCATION
STRIKE AND DIP OF JOINTS
ABANDONED RAILROAD
DUMP
ROAD
SHAFT
WINZE, WITH INCLINATION
SHAFT, INACCESSIBLE
PROSPECT, TRENCH, OPEN CUT
ADIT
CONTACT
STRIKE AND DIP OF BEDDING
FLOAT CONTACT, INFERRED
INFERRED CONTACT
QUARTZ VEIN, IN PLACE, SHOWING DIP
R.E.A. POWER LINE
POWER LINE
FAULT, SHOWING DIP AND RELATIVE MOVEMENT, DASHED WHERE INFERRED
THRUST FAULT, SHOWING DIP, BARBS ON UPPER PLATE, DASHED WHERE INFERRED
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Cau CAMBRIAN-UPPER MEMBER-ABRIGO FORMATION
Cam CAMBRIAN-MIDDLE MEMBER-ABRIGO FORMATION
Cal CAMBRIAN-LOWER MEMBER-ABRIGO FORMATION
MAGNETIC NORTH
0 100 200 FEET
SCALE: 1" = 100'
CONTOUR INTERVAL = 20'
GOLDEN RULE HILL
CONTACT FAULT
CONTACT SHAFT
80-FOOT SHAFT
150-FOOT SHAFT
MANZORO SHAFT
JACKSON SHAFT
Qal
Cau
Cam
Cal
Mqrp
4500
4700
4800

Figure 3

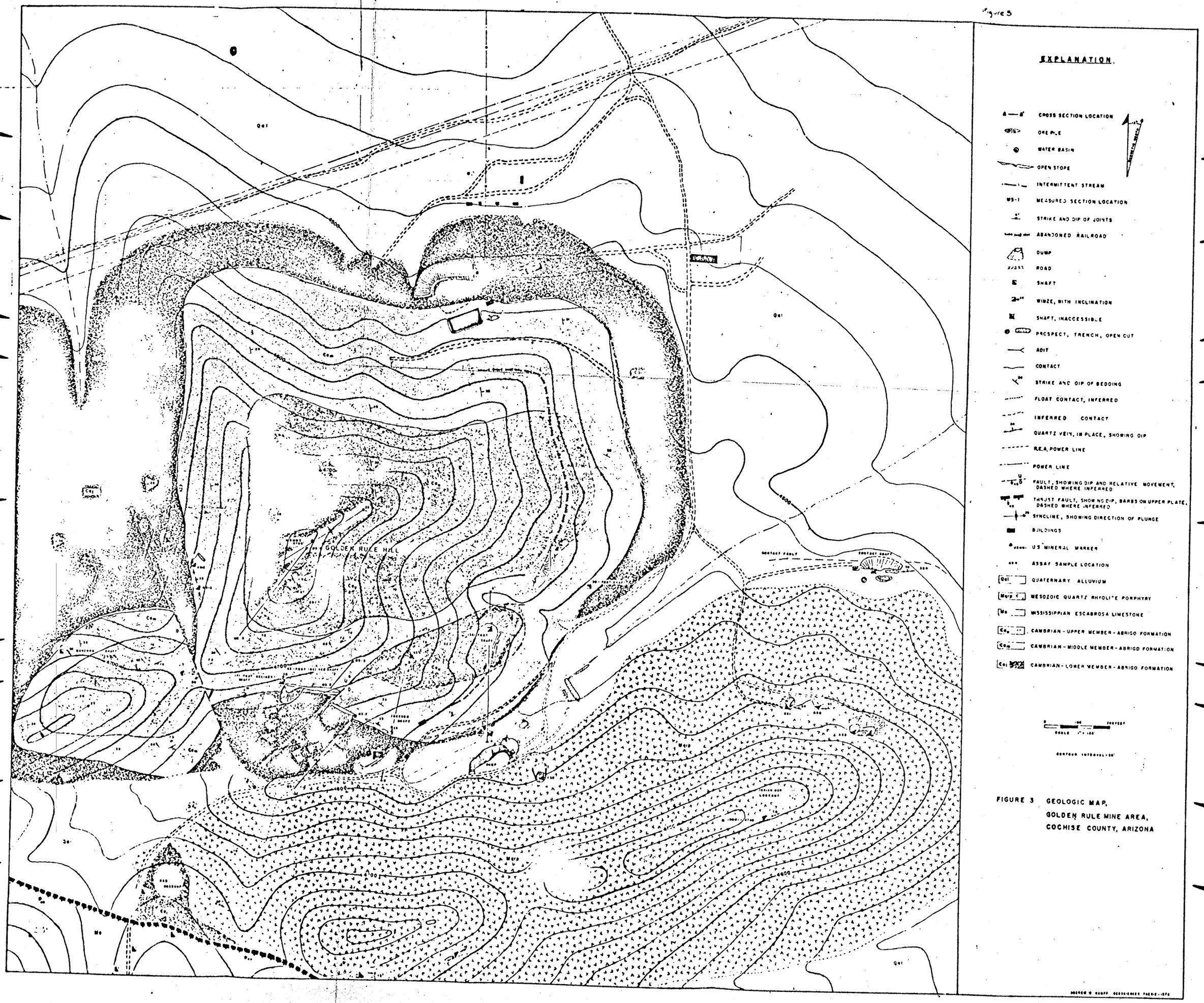


FIGURE 3 GEOLOGIC MAP, GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA

Figure 29

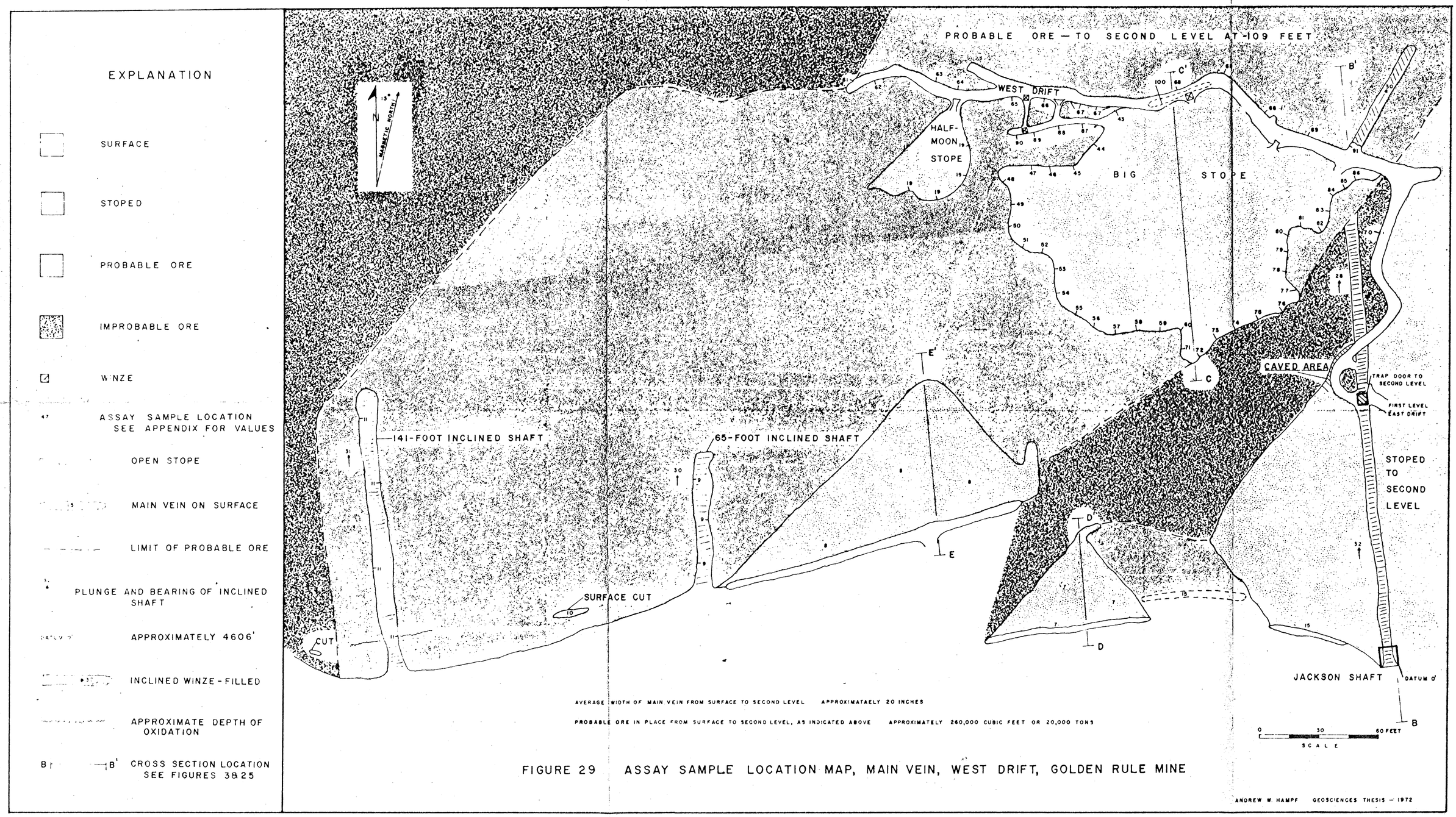
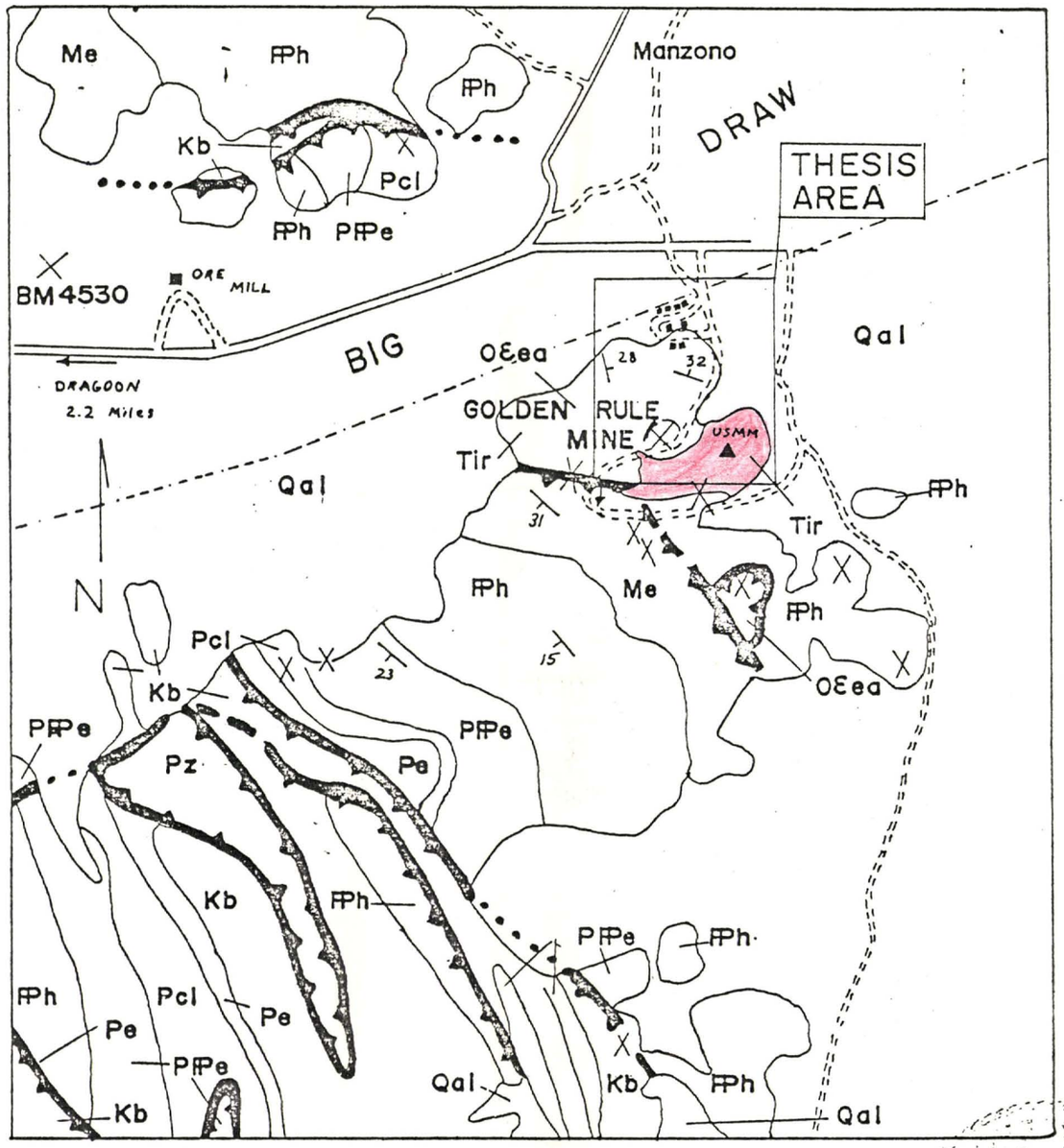


FIGURE 29 ASSAY SAMPLE LOCATION MAP, MAIN VEIN, WEST DRIFT, GOLDEN RULE MINE



LEGEND

Qal	Aulluvium
Tir	Tertiary Intrusive Rocks
Kb	Bisbee Formation
Pz	Paleozoic Rocks, Undifferentiated
Pe	Epitaph Dolomite
Pcl	Colina Limestone
PℙPe	Earp Formation
ℙh	Horquilla Limestone
Me	Escabrosa Limestone
OЄea	El Paso and Abrigo Formation

SYMBOLS

Thrust Fault, showing dip
Dashed where approximately located
Dotted where inferred

Contact

Railroad

Power Line

Strike & Dip of beds

Road

Jeep Trail

Buildings

Mines and Prospects

Bench Mark BM 4530

U.S. Mineral Marker USMM 1

Arizona

GOLDEN RULE MINE
ARIZONA, U.S.A.

GENERAL GEOLOGY MAP

Adapted from: HAMPF and COOPER

Traced by—AFR
Scale— 1" = 1/2 mile
Date — May 15/73

GOLDEN RULE MINE

Dragoon, Arizona

Mch 1st, 1960.

Sample #	Discription	Width	Oz Au	Oz Ag	%Pb	Gross Valu
2517	Tailings at old stamp mill	--	.06	0.6	---	2.64
2518	First level M+15'	2.5'	.02	0.4	0.2	1.46
2519	" " M+20.5'	2.0'	.22	0.9	0.3	9.11
2520	" " M+9.5'(toside drift)	2.0'	.03	0.4	0.2	1.81
2521	" " Chute L	2.0'	.16	2,0	3.3	14.00
2522	" " 13' from face	16"	.05	0.4	1.1	4.31
2523	"A" Stope 15" point minus 10'	12½"	.25	3.3	5.5	22.72
2524	" " " " " 18"	16"	.20	0.6	0.8	9.14
2525	Winze sublevel 38' West CL Winze	19"	.05	1.3	3.2	9.32
2526	Vert Shaft in porphyry Red Quartz		.07	0.4	---	2.51
2527	" " " "		.01	4.5	----	4.40

Note: Sample 2527 contained a little copper

Note: Arithmetical average of samples 2518 to 2525 inclu. = $9.00

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Lane

.02	0.4	0.2
.22	0.9	0.3
.03	0.4	0.2
X .16	2.0	3.3
X .05	0.4	1.1
5 | .48	4.1	5.1
.096	.82	1.02
3.36	.74	2.04 $6.14

Wings

.05	1.3	3.2	
1.75	1.17	6.40	9.32

Stroke

.25	3.3	5.5
.20	0.6	0.8
2 | .45	3.9	6.3
.22½	1.95	3.15
7.88	1.75	6.30

A $15.93

3 | .27	1.70	.70	
.09	.56	.23	
3.15	.49	4.60	= 8.24

Lane

2 | .21	2.4	4.4	
.105	1.2	2.2	
3.67	1.08	4.40	= 9.15

Stroke

B

February 13, 1960

Dear Dan:

The enclosed Annual Report of the Arizona State Mine Inspector covers the mines operating in 1958. The new edition for 1959 operating mines will be out in about three weeks.

See you soon,

Bob Wiseman

.09
35
45
27
3,15

.56
.90
.4940

.023
46,000
.10
4,60

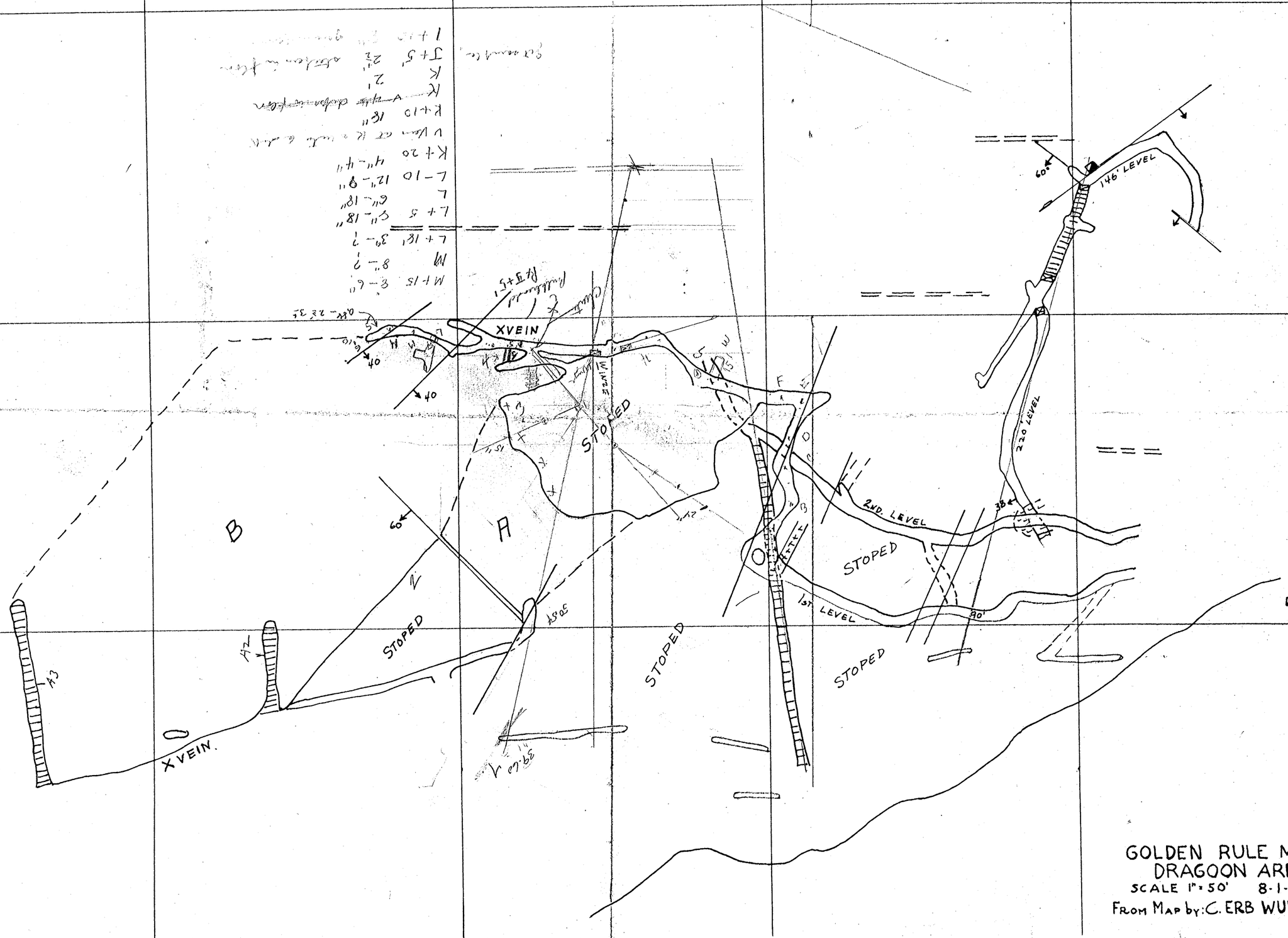
.105
35
525
315
3,675

3,15
.49
4,60
824

1,2
.90
1,080

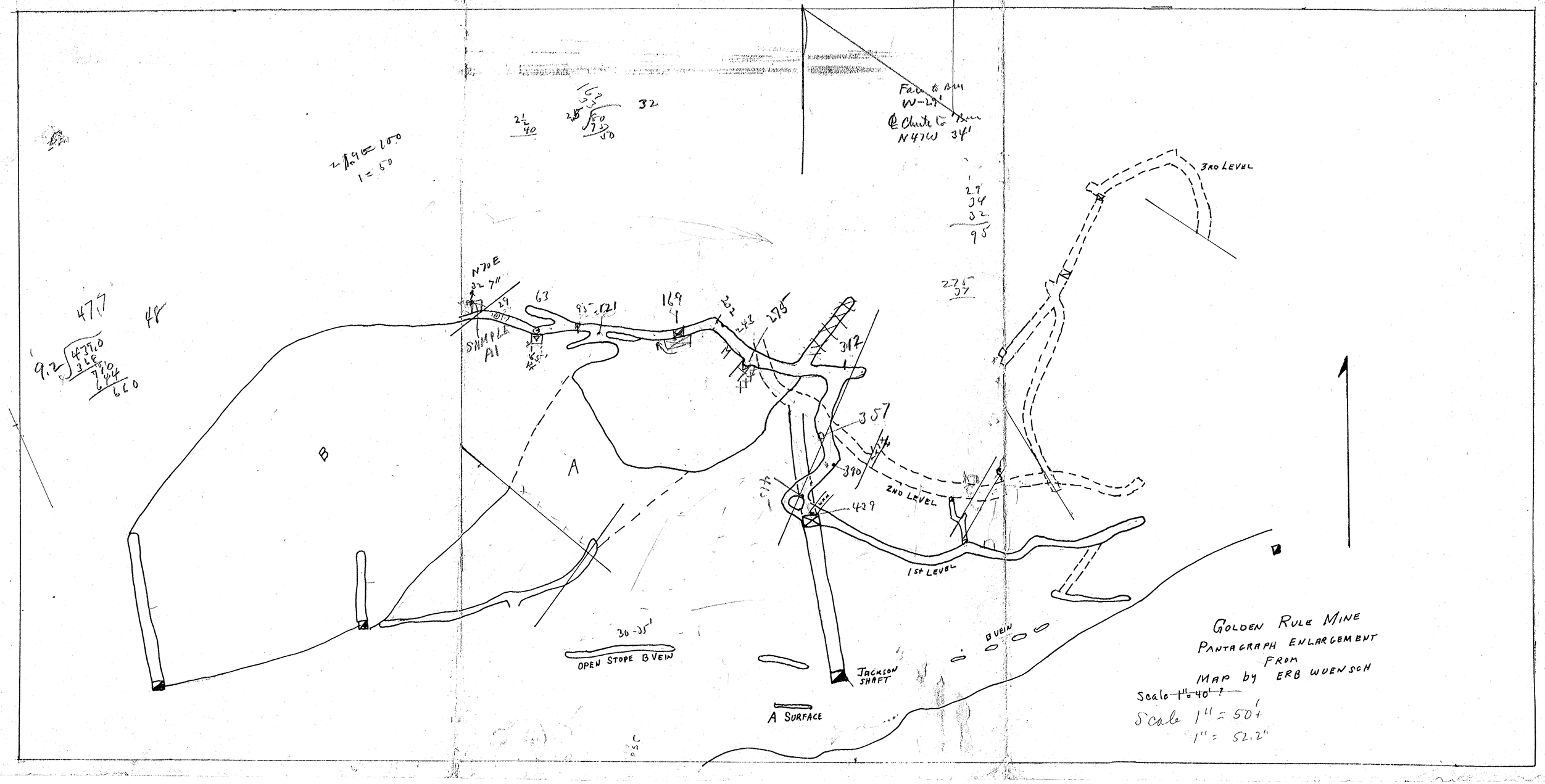
.0212
44,000
.10
4,40

3,67
1,08
4,40
9,15



GOLDEN RULE MINE
DRAGOON ARIZ.
SCALE 1" = 50' 8-1-1927
FROM MAP by: C. ERB WUENSCH

3.22.58.


3RD LEVEL
2ND LEVEL
1ST LEVEL
A
B
N70E
SAMPLE A1
OPEN STOPE B VEIN
JACKSON SHAFT
A SURFACE
B VEIN
GOLDEN RULE MINE
PANTAGRAPH ENLARGEMENT
FROM
MAP by ERB WUENSCH
Scale 1" = 50'
1" = 52.2"

① N end of first open stope.
② N " " second.
3 end of 2
4 – N end second stope
X = X Vein?

5 S end ~~second stope~~
first shot

6 second shot
about 10' back from
S stope

shaft 6 has same
fault as 5 —
two veins about
1½ – 6" separated —
a few 11 or 18" at second
level

3.0	4.1
1.9	3.0
1.1	1.1

4.3	4.3
4.2	4.3

40
2.9
1.1

5.1
4
1.1

#5 Shaft
down 35' 30°
to fault.

Fault N75E
dip 32S -
no on north side
vein cut up.

5 ~ #1 4.25

5-6 4.70 4.0 313

180-41 + 2.0

Golden Rule afn 15

A - back site to ℄ Shaft
A in centerline Collar
A - H.I. 3.6

A - ① 2.74 2.68 2.61
50.45 0

A ② 0.5 1.0 1.5
290.25 +9.15

③ other end of ~
2.9 - 4 - 5.1
283-30 +10-40

A 4 4.9 3 4.1
298.20 +13 30

A (X) 3.47 3.0 2.53
6- +6-23

backsite A
4 H1 4.05
⑤ 143.30 4.85 4 3.15
+5-30

Gold free

2 cent ore either w

Ore 18" to 1' wide.

goes Easty of Johnston 150 to 200'
300' further - full - wind -
38 gold stuffed -

Johnston shaft killed - wrt

Original #1
machine in gulley -
350' deep - 35'-0 -

Shaft E - W
W side 125' in ledge
ledge 125' deep - (SW)
E side ?
W bigger ledge some distance.
Ore in bottom side ledge
Vein said to be 2½' -
high ore - 5 to 8 - 10 oz
ore -
Milling for gold -
Flood filled in -
20 stamp mill -

SAMPLE A1 -
7" = face of shaft
Xcut

apprx 70°

Sample A2 - (Bucket)
West side shaft 5
35' down -
cut 2'2"

Sample A3

Shaft 6 - Two veins
down - 1½ + 6" inch gouge
between -
2'

56' down. - 24°

---

both same S side
vein N 40 W V
18" wide
Globe quartz one
Cuts NW. SW

forest along line
of Vinia.

Vert. Vein near chute in big stope - 1st level

N 70 W - 68 N

R E P O R T

O N

G O L D E N R U L E M I N E

Dragoon, Cochise County,

Arizona.

By----------

H. E. LUNDQUIST

GOLDEN [illegible] MINE

LOCATION

This property is located about 4 miles from Dragoon, Cochise County, Arizona and 24 miles southeasterly from Tucson. Dragoon is the postoffice address and the ore is shipped from Benson station, a siding on the S. P. R. R. one mile northerly from the mine. It is a good auto road with down grade all the distance.

HISTORY

The original locating dates back to 1894 as corner posts bearing this date are still to be found on the ground. The early operations are very obscure and no definite information could be secured, except that a considerable tonage had been hauled away to be milled. On the instance over 100 miles, it is said and later at a mill near Cochise 15 miles distant. Still later a 10-stamp mill was built on the property. It is estimated this handled some 2,000 to 3,000 tons. In later years practically all the production was shipped direct to the smelters. In 1919 the property came into the possession of the present owner.

PROPERTY EQUIPMENT ETC.

The property consists of 16 claims held by location, although the claims have been surveyed for patent. The patent has never been applied for. Until recently the one claim which contains the water supply well was detached from the main group. Subsequent claim locations have closed this gap and now the claims are all contiguous.

THE EQUIPMENT CONSISTS:

- 1 - [illegible] air compressor, size 9 x 12, single stage belt connected to 20 H.P. Samson gasoline engine.
- 1 - 5 H.P. [illegible] Morse hoist.
- 1 - 9 H.P. [illegible] engine and wood saw.
- 1 - Steam [illegible], combination dwelling and office
- 2 - Mess houses.
- 1 - Large storage.
- 4 - Bunk houses.
- 1 - Blacksmith shop, fully equipped.
- 1 - Drill sharpener.
- 1 - 40 ton ore bin, track, ore cars, etc.

GEOLOGY:

The mineralization occurs in both the Paleozoic sediments and the quartz porphyry intrusives which uplifted them. The porphyry intrusives form an elliptical shaped hill that penetrated and uplifted a fractured Cambrian limestone to the north and west and the carboniferous limestone to the south and perhaps to the east although

the alluvium of the flat approaches the property at a gentle slope without limestone exposure in the immediate vicinity.

This tilting action has created pre-mineral fault or veins which have subsequently been filled with silicious mineral bearing solutions. The majority of the veins occur along the bedding planes of the limestone which are approximately 30 degrees from the horizontal while the veins in the porphyry assume angles of from 40 to 80 degrees. The strike of all the veins is more or less east and west. There is a strong breccia fault with a strike of north 30 degrees east, dipping about 50 degrees to the southeast. This fault is without a doubt the channel through which the mineral bearing solutions reached the surface and fractures, filling the vein with quartz and the mineral solutions contained. It is traceable for some 400 to 600 feet on the surface and is encountered on the first and second levels in the mine. There is indications under ground that some post mineral faulting may have taken place, as well as the premineral.

ORE BODIES:

As before mentioned the veins in the limestone occur along the bedding planes on both east and west sides of the breccia fault. The mineral enrichment extends from the fault some 600 feet to the east and 400 feet to the West. On the easterly side of the fault 5 or 6 veins exist. Two of them easterly having been worked to a more or less extent. To the west 4 veins exist, two of them having been disclosed and therefore indications of more. Two or three of them have been worked and opened up. Several of the remainder have been exposed to the surface with open cuts. One of them being worked on the west side of the fault did not outcrop on the surface but was encountered in the underground development. The veins are well defined, striking approximately north 80m degrees west and dipping 80 degrees from the horizontal to the north. The vein filling is very silicious, practically all quartz containing lead in the form of galena, sometimes and were sulphides, small amounts of silver. The gold is apparently free and rather coarse.

At the extreme eastern exposure the veins are found in the porphyry itself with an angle of dip straightening up considerable from those in the limestone. The vein filling in these is in every way similar to the other veins, except it was found that the gold values were invariably lower than in the limestone veins.

DEVELOPMENT AND EXPLORATION:

At about 400 eastarly from the Jackson shaft is the original shaft, practically in the bottom of the gulch, and the location is obviously the reason why the old workings and shaft were filled with gravel. Nothing has been done in this section since the early days. There is no map on these workings available, but it was reported that they extended with a stope 75 feet below the second level through the comparatively open stopes, which were then the

extreme western limits of the old workings and had not penetrated the breccia fault into the ore, as this was done after the Jackson shaft was in operation.

The Jackson incline goes down about 30 degrees from the horizontal to the first level 130 feet. A drift to the east continues for over 300 feet where it encounters the gravel. That gravel was washed back along the drift when the flood secured in the old shaft. The ore along this drift from this level to the surface has all been removed. The shaft continues to the second level on an angle of about 28 degrees a distance of 95 feet along the incline. From this point a drift fault bears off to the southeast [illegible] 50 feet into the footwall and through the breccia fault, thence [illegible] on the level [illegible] continues in ore until it reaches the gravel as on the level above. Some stoping has also been done on this level, but to what extent could not be learned as it has also been done on this level, but was inaccessible. There is a drift to the northeast for 50 feet, but it is in the wall between the veins.

On the level, west from the Jackson shaft the shaft and drift stopes west and immediately turns very rapidly to the right and assumes a generally northeast course through and somewhat parallels the breccia fault on the west side for a distance of about 120 feet then turns to the left westerly for [illegible] feet where it encounters an old shoot that is designated as "A" on the map. Stratigraphically the so-called shaft vein which the Jackson shaft follows down is [illegible] feet below the "A" vein that is open stoped on the surface. The [illegible] stope plane then lies between shaft vein and "A" vein 46 feet above the "A" vein is another called the "B" which has also been open stoped. Beyond this other outcrops have been disclosed but no work done also been open stoped on them. About 400 feet west from these exposures a vein is opened up that carries good values and is thought to be an extension for the "G" vein referred below.

Samples taken from east and west sides of "A" stope on first level as a check to previous sampling, that average gold 0.8 ozs. silver 1.7 ozs., lead 8.4% for an average of 2 feet width. Some 75 feet west from this stope a recent lead 12.2% also for a width of 2 feet. In this opening a foot wide vein of high grade ore leaves the vein proper and dips down vertically probably connecting. In three instances ore has been followed in winzes down below this level. Good values are reported in all cases, but they were inaccessible at this time.

Beginning on the north end of the porphyry intrusive wall down toward the flat, the first vein was note 18" to 20" wide in a shallow trench 200 feet south from this vein going up the face is another vein 12 wide in a shaft 16 ft. deep. A carload of ore is said to have been shipped from this shaft averaging gold $4.00 silver 11 oz., lead 30%; strike of vein is 65 degrees west. About 14 feet south of last described vein still ascending hill is fourth vein about 2 feet wide in a shaft 39 feet deep containing silver and gold values. The point now reached on the hill is approaching the

summit or apex. Passing around the hill on east side 400 or 500 feet is located what is called the porphyry and lime contact shaft; on southeast side of porphyry intrusive there is a strong vein 6 to 8 feet wide striking north 80 degrees east. A square set shaft has been started and the opening is down about 30 feet with a short drift to the southwest apparently to follow the contact. The drift however is in limestone. The general appearance would suggest that it is a vein near the contact rather than the contact itself. This vein is a very good prospect and should be investigated or developed further. The values at present are said to be $12.00 in gold and silver and lead.

VALUATION:

The writer has read the reports of Messrs. Waensch and Hight and made a sketch plan map from one of it the mine. His visit to the property was brief and consisted chiefly in checking the physical conditions, etc., he feels that great care was exercised in taking the samples referred to in these reports. The valuation placed according to them fair and reasonable.

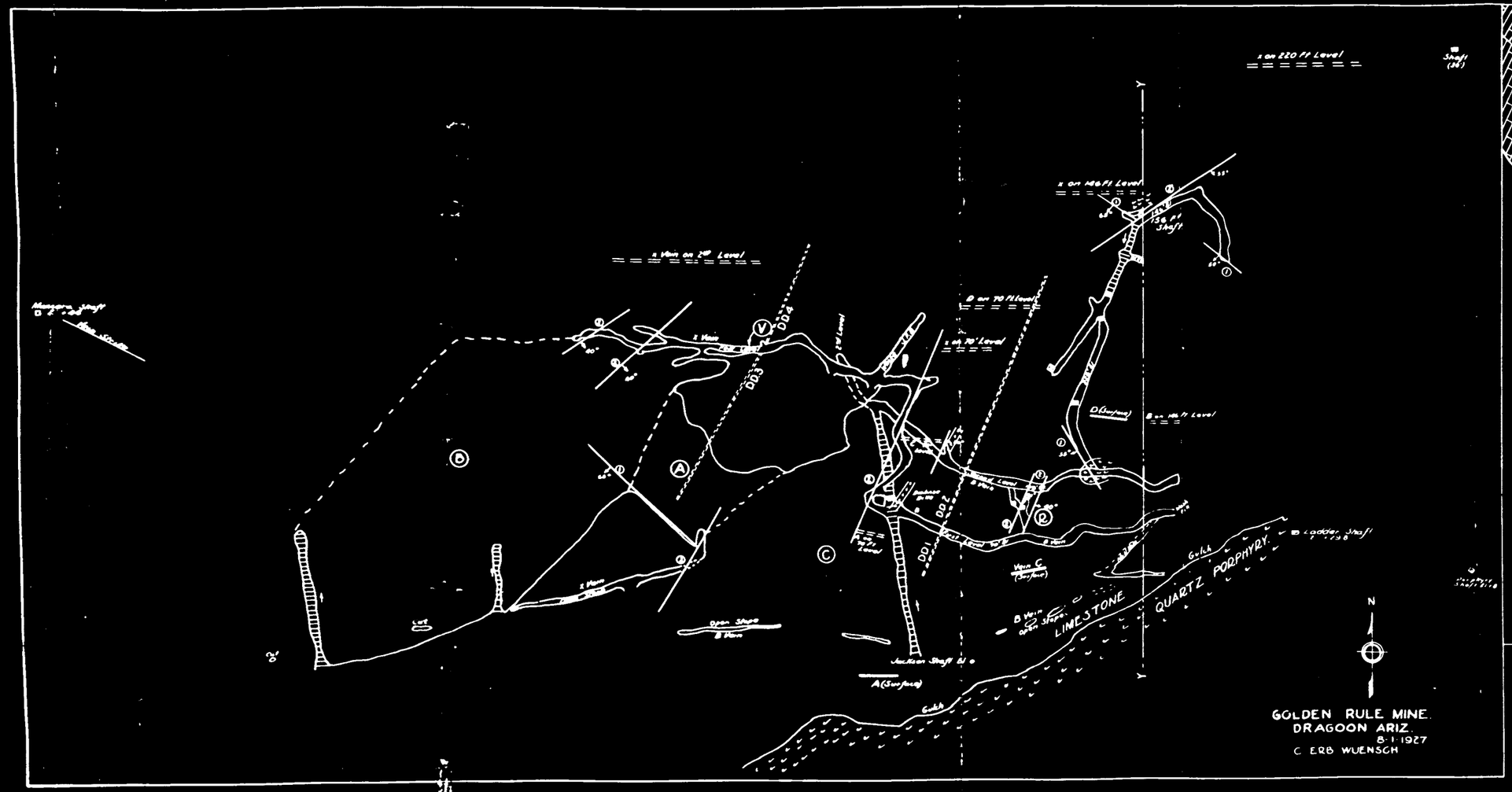
The block of ore marked "B" is very conservatively estimated at 16,[illegible] tons. The question of positive ore, as that term is usually understood means ore blocked out on four sides. This does not apply literally to this ore, although the persistency of the veins and ore where developed would indicate it to be more than merely probable ore. In the above estimate the block marked "A" both above "B" and farther west to 141 shaft has been disregarded in spite of the fact that ore is in the various faces as thy are stope down from the surface and is ready to be stoped on again. In adding block "A" to estimate we should have not less than 50,000 tons of [illegible] ore. And if only one more place of ore or vein parrallels this should be the second level $2,000,000 value would be attained assuming the values persisted to the second level which is not unlikely as practically all the exposures show substantial values. And when one considers the number of veins that will in all probability give an indent or [illegible] as those opened have done, the cost of developing more ore should be comparatively small after the Jackson shaft is cleaned up and extended to the second cross-cuts north and south from the present levels and the same from lower levels after the shaft is deepened would quickly and cheaply develop the veins to a producing basis. Later the porphyry veins should be developed by sinking shaft which would determine their value.

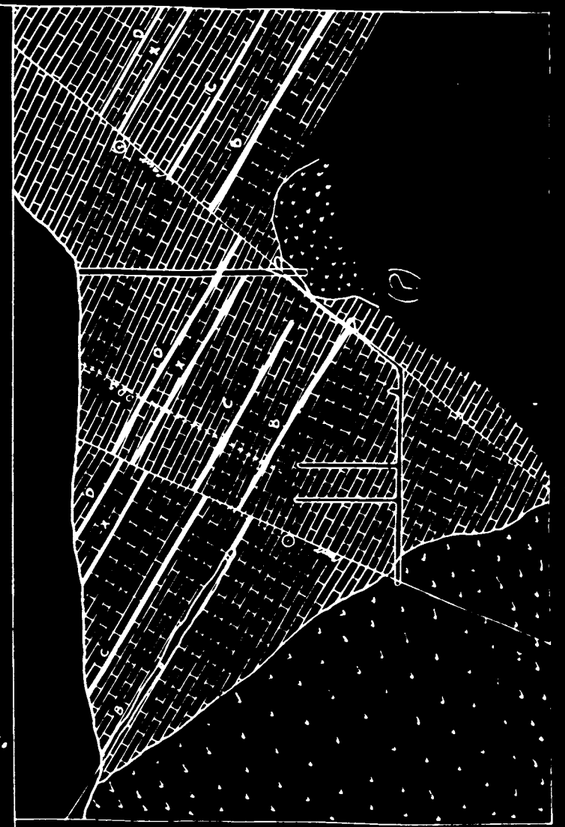
The potential possibilities for creating a well paying mine on this property are the best the writer has visited in many years and any one desiring a mine of approximately 100 tons production that will pay handsome return with careful management, will do well to give this property consideration.

Respectfully submitted,

(SIGNED)

E. M. LUNDQUIST.


x on 220 ft Level
Shaft (38)
x on 146 ft Level
136 ft Shaft
x Vein on 210' Level
Manganese Shaft
x Vein
DD4
DD3
DD2
DD1
x on 70' Level
B on 70 ft Level
D (Surface)
B on 146 ft Level
Vein C (Surface)
B Vein
Open Stope
Jackson Shaft
A (Surface)
Gulch
LIMESTONE
QUARTZ PORPHYRY
Ladder Shaft
N
GOLDEN RULE MINE.
DRAGOON ARIZ.
8-1-1927
C. ERB WUENSCH


(?)
SECTION Y-Y

Arizona Bureau of Mines Bul. #137

Golden Rule or Old Terrible Mine, of Northern Cochise County, is 3/4 mile South of Manzoro, a siding on the Southern Pacific RR.

The property was located during the late seventies. In 1883 the Tucson Star and the U.S. Mint Report credited it with a production of $125,000 in gold.
A yield of $30,000 was reported for 1884, after which the next recorded output was in 1891 when $12,000 worth of ore was shipped to Pinos Altos, New Mexico. In 1897 the mine was acquired by the Golden ~~XXXX~~ Queen Consolidated Gold Mining Company which built a small mill. Intermittant production continued thru 1902 during which period the Company was reorganized or purchased by the Old Terrible Mining Company. From 1905 to 1908, the Manzoro Gold Mining Company operated the property. No work was reported for 9 years afterward. Small intermittant production, largely by lessees, has continued since 1916. In 1933, the property was owned by Mrs E. M. Jackson of Benson.
The recorded production from 1833 thru 1929 amounts to 9,543 oz of gold and 317,088 lbs of lead worth about $224,000.

The mine is at the Northeast foot of the Dragoon Mountains where cherty dol dolomitic, cambrian abrigo limesto nes strike Westward, dip 30 to 40 deg North and is intruded by a small stock of granite or monzonite porphyry.

Mining has been done principally on three veins that lie from 25 to 40 ft apart, parallel to the bedding of the limestone.
These veins have smooth regular walls and are traceble for a few hundred feet. Their filling consists of coarsely crystalline grayish white quartz which locally is somewhat banded to brecciated. In places it shows abundant vugs which contain hematite, limonite, calcite, cerussite , anglesite and galena.
The gold is reported to occur mainly in the iron oxides and to a small extent in the quartz.
On two of the veins, stopes about 75 to 100 feet long by 2 to 3 ft wide extended for 50 to 60 feet from the surface.

(This abstract may not be complete)

COPY

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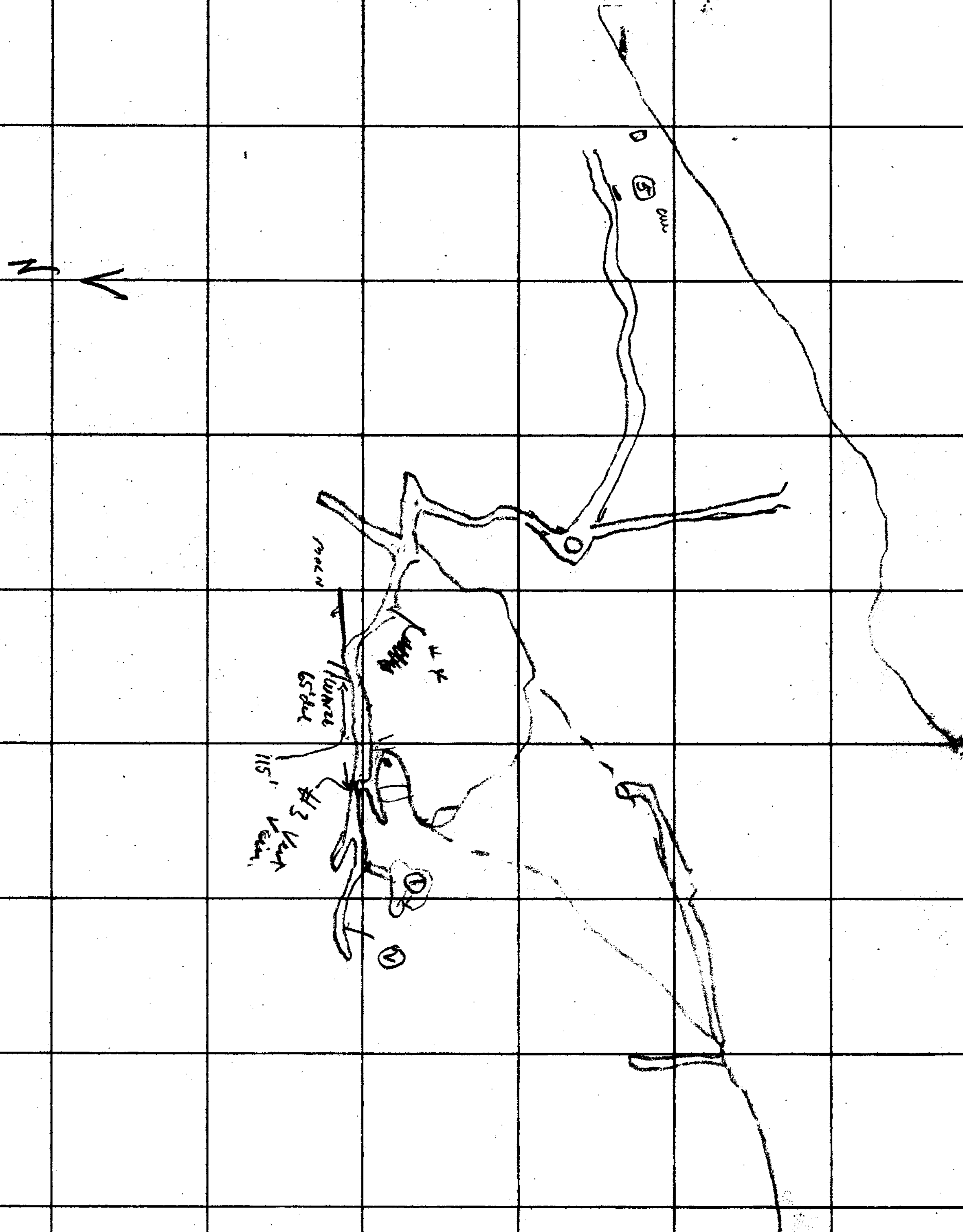


MINE ________ LOCATION ________ LEVEL ________

GEOLOGY BY ________ SURVEY ________ DATE ________ SCALE ________

N ________ E ________ EL. ________

CSON BLUE PRINT CO. — K & E ALBANENE 195M

GOLDEN RULE

average UNDERGROUND
au .63, ag 1.16, Pb 4.34%
$42.91

Average Shafts 5 & 6
(2 samples each)
au .0325, ag 0.8, Pb 2.65%
$8.22

Average all

au 0.459
ag 1.05
Pb 3.85
average 26.25

3200
12) 38400
36
24
20

160
240
6400
320
38400

416 Tons.

3200
16

A = 100 x ~~50~~ 65 x 1 = 12) 5000
48
20
12
80

5000
20
100,000

625
12) 7500
72
30

A = 1' thick 100 x ~~50~~ 65 416
A = 18" " 604

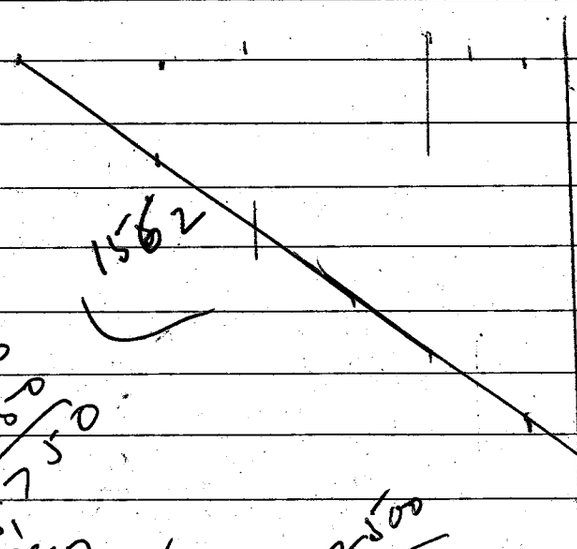
B = 160 x 240 (300) x 1 = 38400 ÷ 12 = 3200
B = 160 x 240 (300) x 18" = 4800

5000 Tons @ = 20 = $100,000

1 - 2nd 125-' incline

6000

160
300
48000
24000
72000
12



12500
6250
7500
12) 81
72
67
60
75
60
30

25000
12) 30000
24
60

125
160
7500
125
20000
625

125
500
62500
312500
137500
12 | 184
97
96
15
12
30

78 | 12

12085
20
241,700

120,850

5

10

12,050

50.45
180

BS.	Sin	FS.	angle	HI	UW	MW	LW	Vert	Distance
Shift	A	①	310-45 ~~290-45~~	3.6	2.78	2.68	2.61	0	
		Hor distance 17'		Vert dist. +.92					
	A	②	290.25	3.6	1.5	1.0	0.5	+9 15 ✓	100'
		Hor distance 97.47		Vert distance 15.86					
				act-				+18.46	
	A	③ ✓	283-30	3.6	5.1	4.0	2.9	+10 40	220
				212.5	40.01				
				act. 39.61					
	A	④ ✓	298.20	3.6	4.1	3.0	1.9	+13.30	220
				~~415.46~~	~~27.29~~ 49.94				
	1			208.01	~~27.84~~ 50.54				
	A	ⓧ	6.	3.6	3.47	3.00 2.53		~~+6.23~~ +6.23	94
				92.84	10.39				
					10.99				
A	4	⑤ ✓	143.30	4.05	4.85	4 3.15		+5 30	170
				168.44	16.22				
					16.27				
4	5	6	180-41	4.25	4.70	4.0	3.8	+2°	140'
				139.83	4.88				
					5.13				

A = 0	Elevation above shaft	Elevation
1	+.92	
2	+18.46	
3	39.61	
4	~~27.84~~ 50.54	
X	10.99	
5	44.11	66.81
6	49.24	71.94

Golden Rule

Stop

cu	.63	1,176.35		22.05
ag	1.16		.90	10.44
pb	4.34	86.8	.12	10.42
				$42.91

.0325	1.14
0.8	.72
2.65	6.36
	$8.22

	16.06
.489	.95
1.05	9.24
3.85	$26.25

VMA3—7731

0.65	0.9	0.4
0.14	0.5	2.5
1.27	1.6	12.2
.21	0.3	3.0
.88	2.5	3.6
5 3.15	5.8	21.7
	1.16	4.34
.63		
.005	0.3	0.2
.06	1.3	5.1
2 .065	1.6	5.3
.0325	.8	2.65

~~3.20~~

3.15	5.6	2.7
.05	1.6	6.3
3.25	7.4	2.76
.459	.05	3.85

7

3.14	
2.95	
1.77	
16.65	

1.16	
.09	
10.40	

10.73	
8.000	

1.05	
2.10	
2.05	

9.8	
1.73	
1.68	
10.41	

$$\begin{array}{r} .0325 \\ 35 \\ \hline 1625 \\ 975 \\ \hline 11.375 \end{array}$$

$$\begin{array}{r} 1.05 \\ .90 \\ \hline 1.9450 \end{array}$$

$$\begin{array}{r} 4.24 \\ 77 \\ 1.54 \\ 7.1 \\ \hline 77000 \\ \hline 0.5390 \end{array}$$

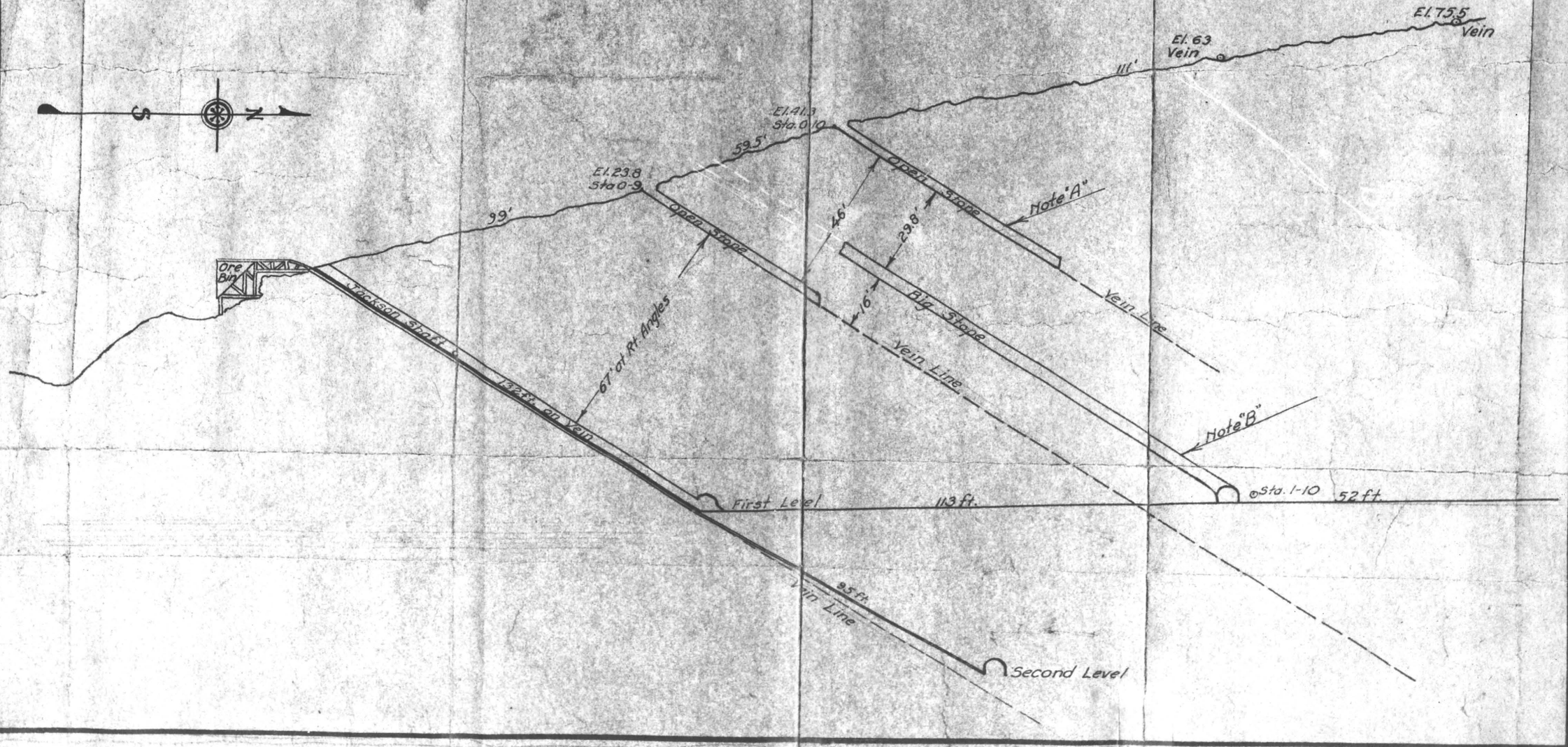
$$\begin{array}{r} .0265 \\ 20 \\ \hline 0000 \\ 53 \\ .12 \\ \hline 106 \\ 53 \\ \hline 6.36 \end{array}$$

$$\begin{array}{r} .90 \\ .720 \end{array}$$

CROSS SECTION
JACKSON SHAFT AND VEINS

PROJECTED TO LINE OF SECTION
WEST DRIFT AT STATIONS 1-7
SCALE 1" = 30'

Note A - This open stope marks East end of Block A
Note B - Stope line marks approximate center line (E&W) of Block B



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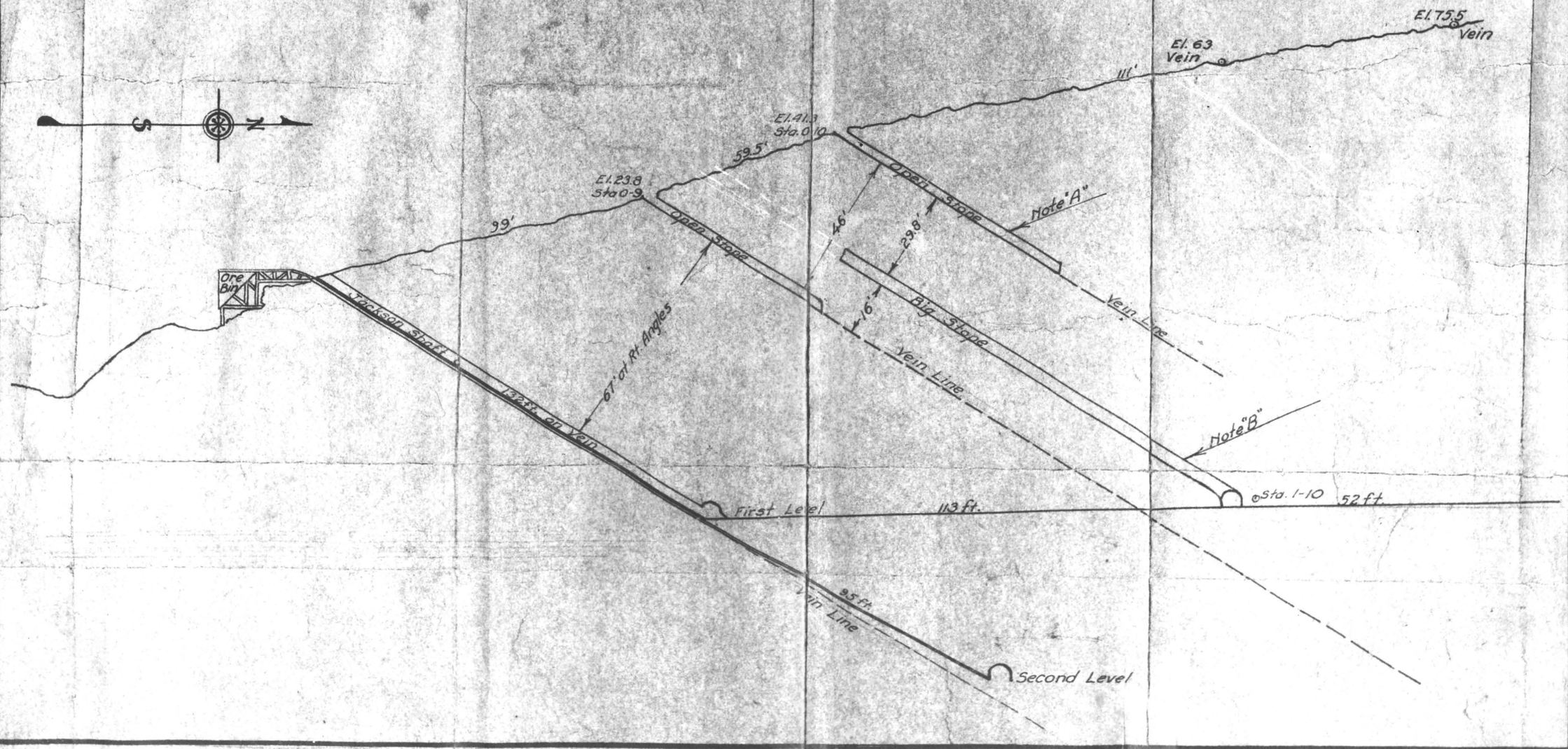
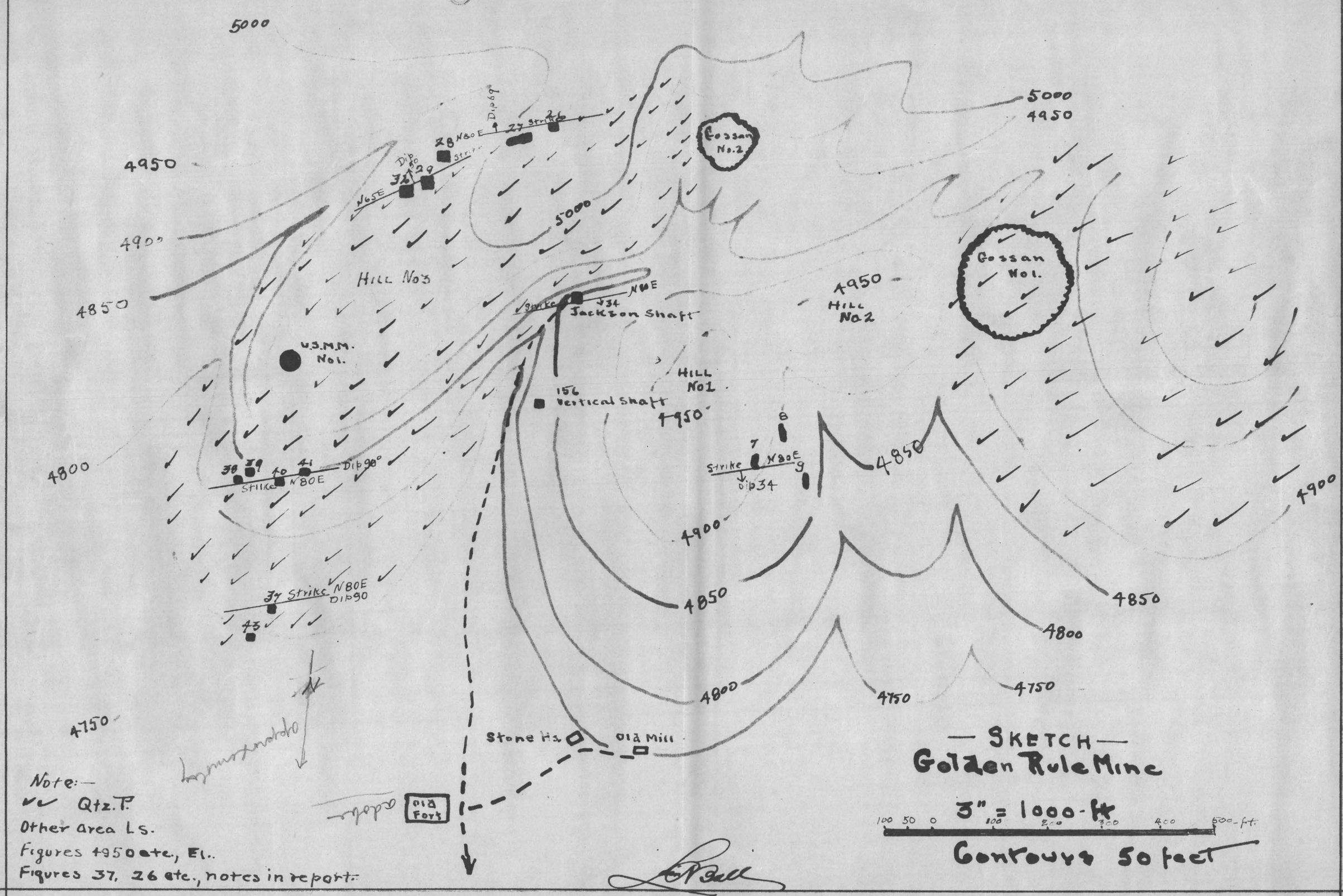
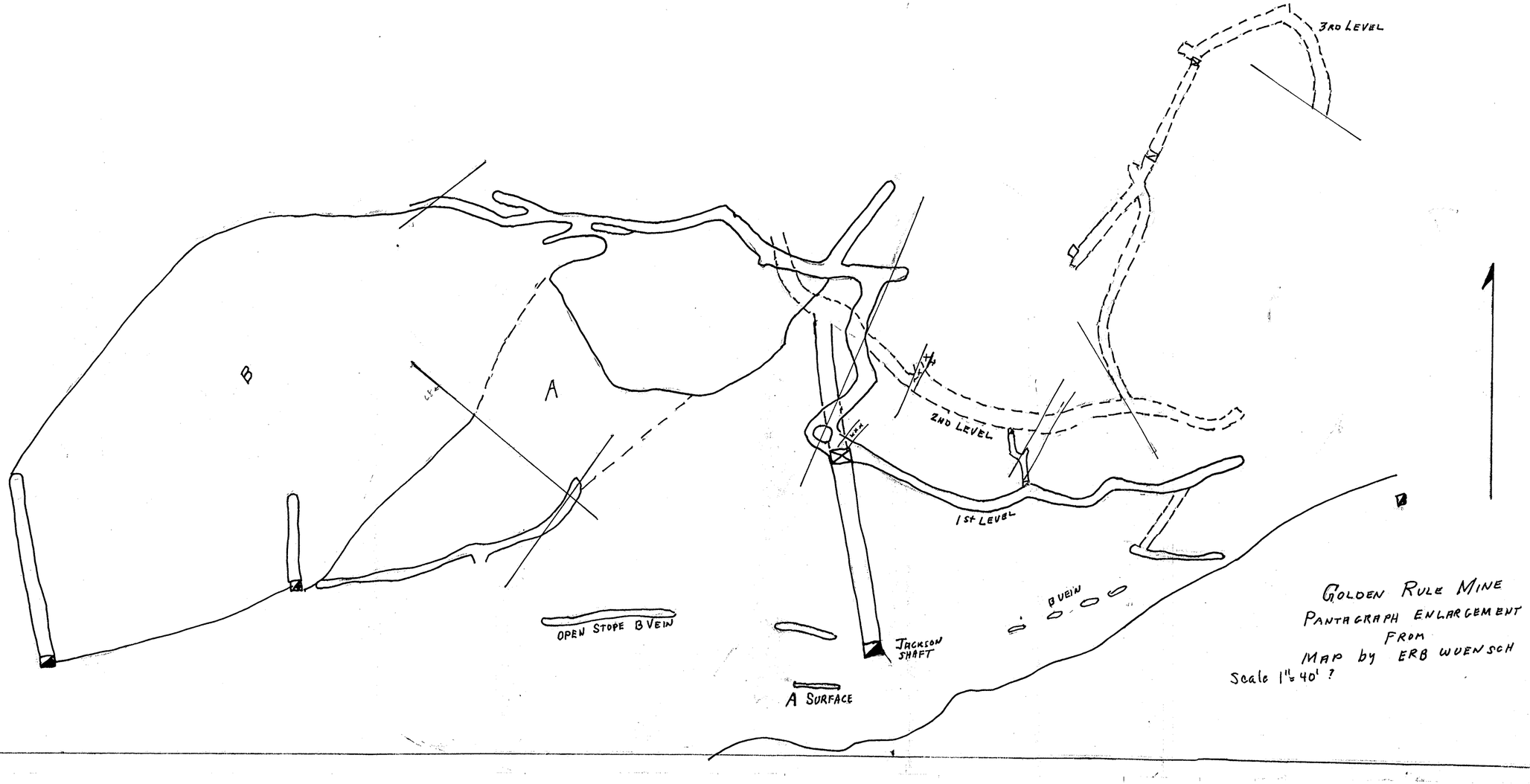


Enclosed herewith is a Topographical map of the Golden Rule as promised.

Mills


5000
4950
4900
4850
4800
4750
Hill No3
U.S.M.M. No1.
Gossan No.2
Gossan No1.
Hill No2
Hill No1
Jackson Shaft
156 Vertical Shaft
Stone Hs.
Old Mill
Old Fort
N80E
Strike
Dip 90°
Dip 34
Dip 69°
Strike N80E Dip 90
— SKETCH —
Golden Rule Mine
3" = 1000 ft
100 50 0 100 200 300 400 500 ft.
Contours 50 feet
Note:—
Qtz. P.
Other area Ls.
Figures 4950 etc., El..
Figures 37, 26 etc., notes in report.



GOLDEN RULE MINE
PANTAGRAPH ENLARGEMENT
FROM
MAP by ERB WUENSCH
Scale 1" = 40' ?

February 18th, 1958.

RECEIVED

FEB 20 1958

Mr. L. J. Lichty,
Quebec Metallurgical Industries, Ltd.,
88 Metcalfe Street,
Ottawa, Ontario,
Canada,

Dear Beef:-

The other day I heard of and visited a small lead-silver mine in the Dragoon mountains.

I visited the property, passing by, before I saw the owner but did not go underground.

The following is a summary of information given me.

Ore- Limestone replacement - dips 30 to 40 deg. 1 to 4 ft wide, it was 2 ft at the surface.
Lead, silver and gold- Average value said to be $20.00.

Estimated tonnage- Reports in owners hands indicate 165,000 tons blocked out, H. O. Mann gave it 120,000 tons.

Owner- Matt V. Lee of Dragoon, Arizona.

Price- Owner said that they wanted $50,000 cash and a total of $385,000.00 over a period of years. He also said that it was open to negociation. Mann believes that he will come down, Wes was not there but he says he has known the family for a long time as they came from Camp Verde and also believes they are just setting their sights high.

It occured to me that you might be interested in this property in order to make the Santa Cruz Copper Company a going concern.
If on examination it proved to be desirable I believe that both down payment and total price could be substantially reduced.

Near Payson there is a cinnabar property said to be high grade which has never been worked. Near by are two other properties both said to have just shut down, one worked 4 years and the other about 10. This might be worth looking into.

With best regards,

Sincerely,

Dan Stranahan

D. M. Stranahan.

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With best regards,

Sincerely,

D. M. Stranahan.

March 13th, 1958.

Mr. L. J. Lichty,
Twin Maple Farm,
Ramsayville P.O.,
Ontario, Canada,

Dear Beef:-

Have talked with Eldred Wilson, Geologist of Arizona Bureau of Mines about the Golden Rule Mine. Saw Matt Lee again and spent some time with him and think that I have more or less dragged him back to earth & out of the clouds. I explained that obviouly it was not a large mine and that that was no sense in my crawling thru the mine and cutting a lot of samples unless there was the possibility of their making a deal with us that allow us to operate at a profit. It may take a little while, he has to talk with two brother and a sister, but I feel sure I can get them to agree to something reasonable. There is no point in going ahead with an outlandish deal.

George was here and said that he had made a deal with Bilor rather Joe Kane for the Reforma Mine. I asked him to adise me as to what happened, in the meantime do you want the report, it might be well to have it and then if George cannot complete his deal time would be saved, if after reading the report you like the property.

Best regards,

Sincerely,

Dan Stranahan

D. M. Stranahan.

March 25th, 1958.

Dear Beef:-

Have made several trips to the Golden Rule Mine, the last time over more of the surface as well as underground.

I did not expect it to be a large mine , even tho they claimed 169,000 tons and am quite sure now that there is only one vein or at the most two. There has been considrable step faulting which gives the impression of around four veins but they do not over lap except the amount caused by faults at an angle to the vein. The last time I was there I had a map furnished by the owners but could not make my measurements check. (The map was from a photostat which gave it an unusual scale.) Now I have a map with a scale of 1" equals 50 ft and can plot the faults on the map.

So far I can only give it about 15,000 tons and regardless of individual samples the records indicate a grade of $20,00

The owners wanted $50,000 cash and a purchase price of $380,000 but Lee said cut the 50,000 in hald and deduct it from the last payments of 10% royality. That is no good as at 15,000 tons at 10% the royality would only amount to $30,000. They might accept a royality of 10% but without any down payment.

The property would not be large enough to interest the Company and I doubt if it could be purchased at a price that would make profitable even a small operation.

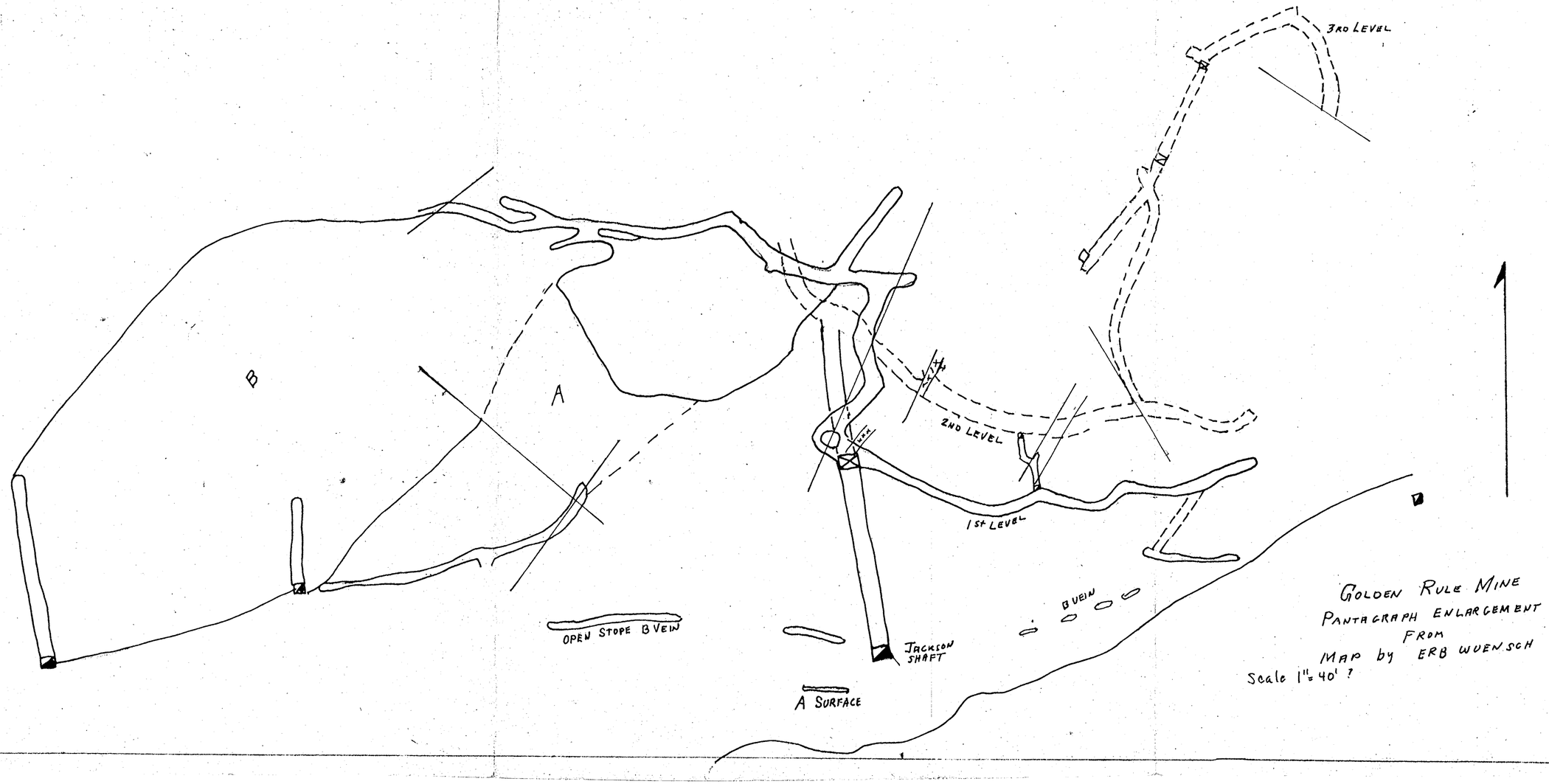
However, as soon as I get more data I will send you a report on the property.

With best regards,

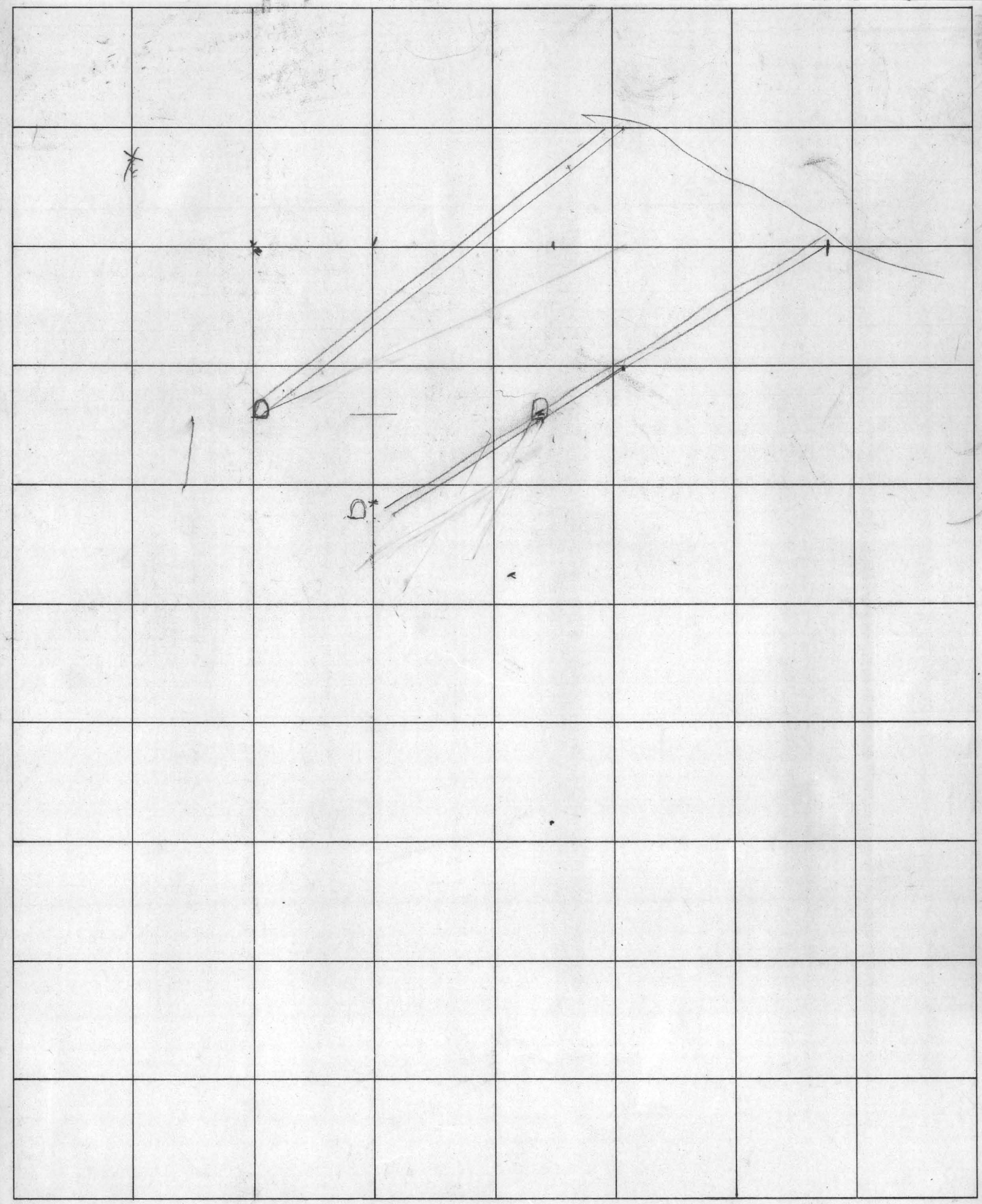
Sincerely,

Dan Stranahan

D. M. Stranahan.



GOLDEN RULE MINE
PANTAGRAPH ENLARGEMENT
FROM
MAP by ERB WUENSCH
Scale 1" = 40' ?

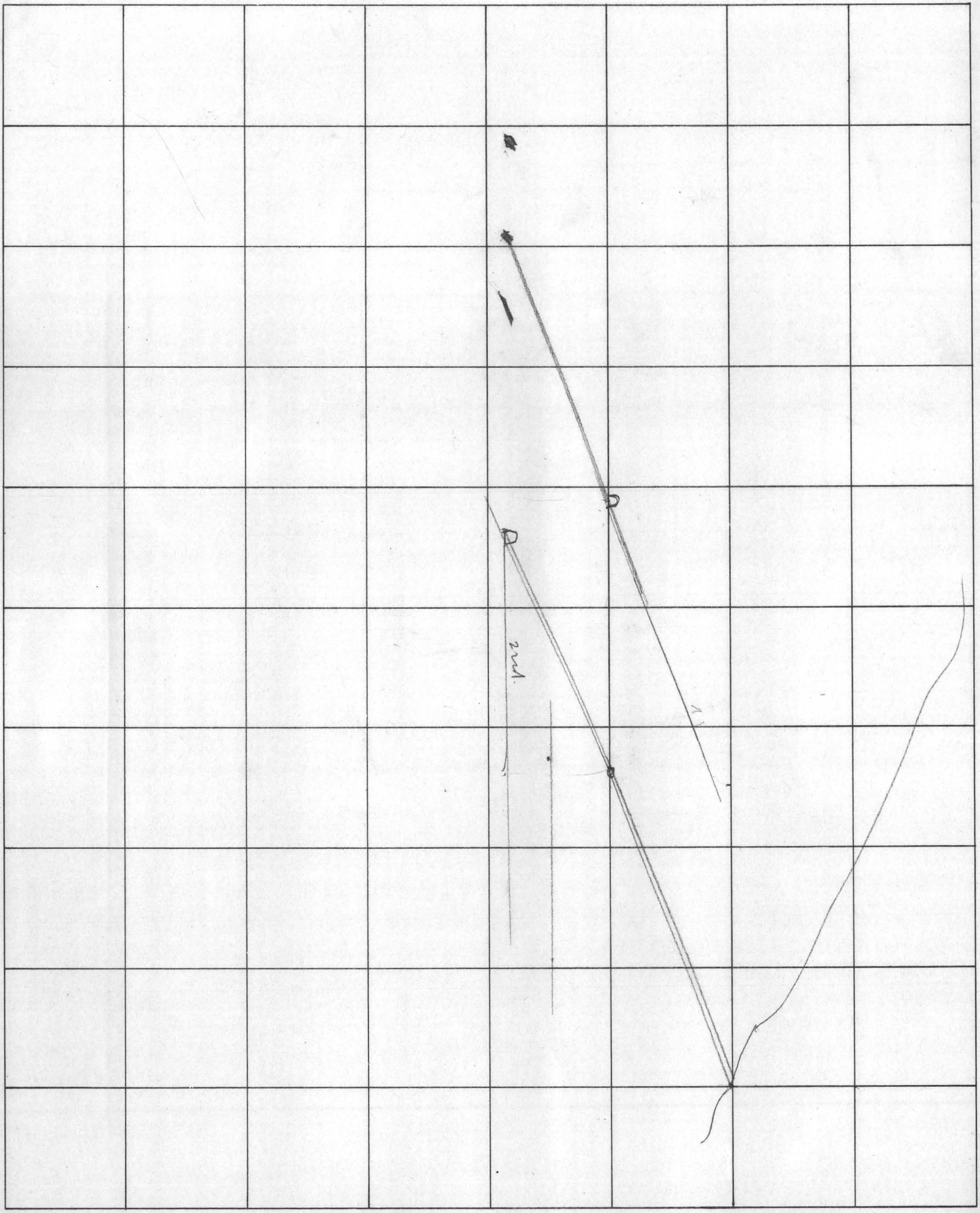


MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____

N _____ E _____ EL. _____

TUCSON BLUE PRINT CO. — K & E ALBANENE 195M



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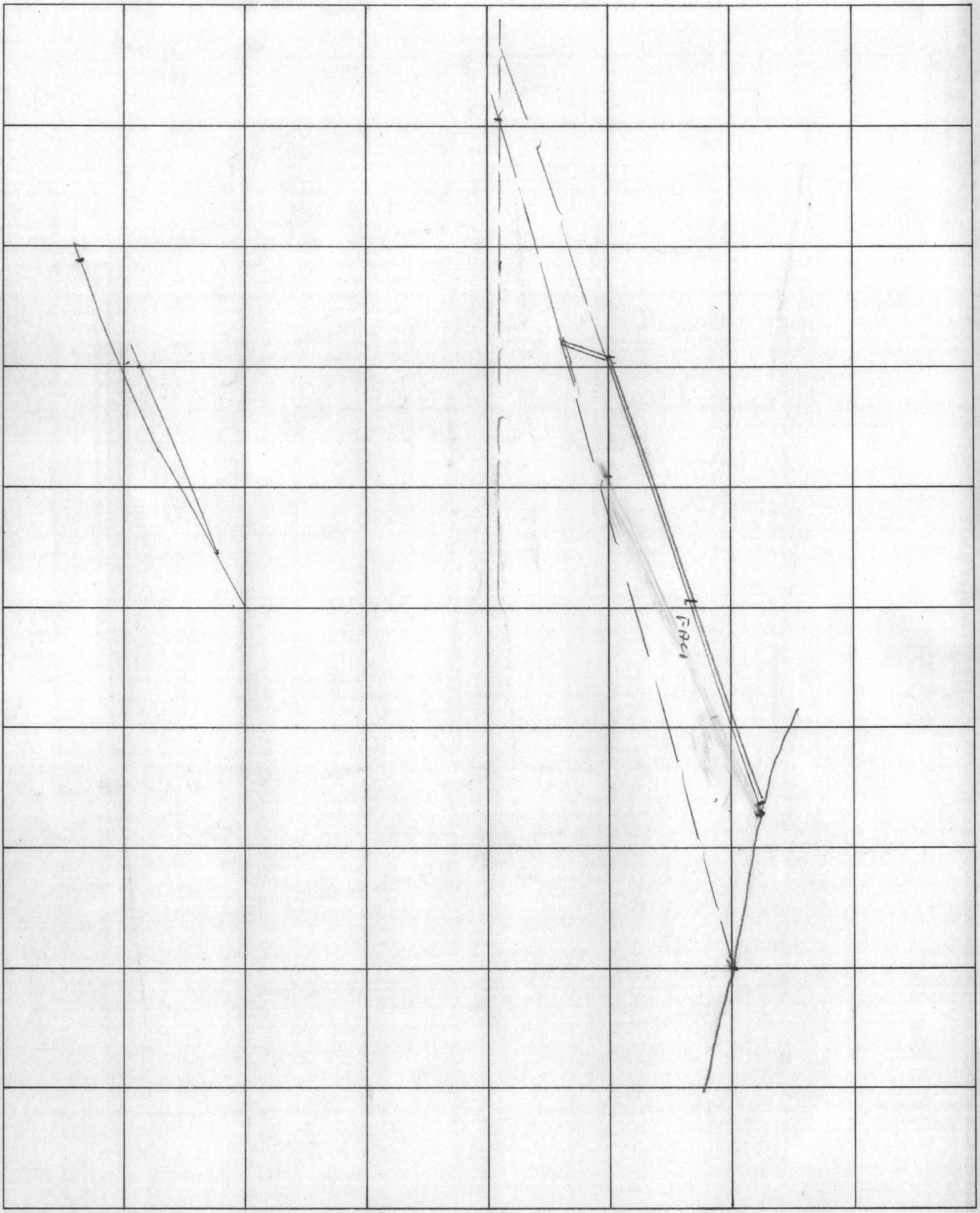
GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____

N _____ E _____ EL. _____

TUCSON BLUE PRINT CO. — K & E ALBANENE 195M



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GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____

N _____ E _____ EL. _____

TUCSON BLUE PRINT CO. — K & E ALBANENE 195M

MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____

N _____ E _____ EL. _____

TUCSON BLUE PRINT CO. — K & E ALBANENE 195M

MINE _____ LOCATION _____ LEVEL _____

GEOLOGY BY _____ SURVEY _____ DATE _____ SCALE _____

N _____ E _____ EL. _____

TUCSON BLUE PRINT CO. — K & E ALBANENE 195M

Return to Edith McJackson
Box 1071. Bisbee, Ariz.

PRELIMINARY REPORT

ON

GOLDEN MINE

Dragoon, Cochise County,

Arizona.

By-------

C. Erb. Wuensch.

Joplin, Mo.

August 15th., 1927.

Introductory:

The writer was only able to spend four days at the above named property to make the preliminary investigation because the pressure of some other work in Missouri. This examination involved mostly a geologic study of the property. Time did not permit a detailed sampling or preparation of a complete set of maps. However, the past records of the production of the mine were so consistant that it is a safe inference for preliminary purposes to assume that the extensions of the unstopped portion of the veins for some distance, both in depth and laterally, should average up in grade to the past shipments.

The geologic features are so favorable that a most casual examination strongly indicates that several other veins similar to those already developed, will in all probability be discovered. In addition, a relatively small amount of development work should lead to the discovery of several faulted portions of the known veins.

Location

The "Golden Rule Mine "(also known as the Golden Eagle and old Terrible Mine) is situated about four miles east of Dragoon, Cochise County, Arizona. Dragoon is about seventy miles east of Tucson on the main line of the Southern Pacific Railroad.

The mine lies about a mile south of Manzoma, the shipping point and is accessible over a fairly good auto road with a down- hill haul to the railroad.

Property, Development & Equipment.

The property embraces ~~24~~ 18 standard size unpatented mining claims containing an area of about ~~320~~ acres. (See Map # 1 (, Map # 2 will give an idea as to the extent of the underground development.

The equipment consists of the following:

1- Chicago Pnuematic 9" x 12" single stage air compressor driven by a belt connected 50 h.p. Sampson gasoline engine
3- New Rock Drills (1 Chicago Pneumatic, 1 Cochise and 1 Ingersollrand
1- 6 h.p. Fairbanks -Morse Gasoline hoist.
1- 9 h.p. gasoline driven wood-saw.
2- Reo trucks.
1- stone house(combination office and dwelling)
1- Mess house.
4- Bunk houses.
1- Garage.
1 Blacksmith shop.

History and Past Production.

No authentic records are available of the past production. It seems highly probable that the past production has been in excess of a quarter of a million dollars. (records just are 1000,000)

Howard M. Field, ore purchasing Agent of the El Paso Smelter of the American Smelting and Refining So. advised the writer that during the last few years several hundred tons of ore had been shipped to their smelter and that with few exceptions the ore had been consistently averaged as follows: under the old Price of gold.

Gold	0.62 ozs.
Silver	2.3 "
Lead (wet)	7.9%
Copper	0.%
Zinc	2.0%
Insol.	75.0%
Iron	6.0%
Lime	2.5%
Sulphur	0.4%

Geology

Maps 2 and 5 will give a general idea of the geology of the property. Map No. 3 shows a low elliptical shaped hill of quartz porphyry which has intruded the lime stones, the predominating rock of the district. The limestones dip away from the porphry at low angles and the limestones form a low domatic structure.

The principal veins are narrow quartz veins, averaging about 1 ft in width, which have been formed along pre-mineral faults along the beddings of the limestone. The wall rock (the lime-stone) shows no silification near the veins. Contact metamorphims is conspicuously absent.

There are also narrower veins in the porphry itself.

These are not as promisingly mineralized as the quartz veins in the limestone, but they have only been developed superficially.

These veins do show a similar mineralization to the veins in the lime-stone, but they contain much shorter and erratically mineralized ore-shoots. These, strangely enough, are practically devoid of gold content, but are liable to contain more lead, silver and copper, than the veins in the limestone.

In addition to the faulting above noted (the pre-mineral system of faulting along the veins in the limestone) there are three other systems of faulting. System designated No. 1 has a northwesterly trend and dips at high angles to the southwest.

System No. 2 striking northeasterly and dipping at various angles to the southeast, cuts System No. 1 and has been usually subsequently mineralized with siderite and calcite. The former upon oxidation develops considerable iron and manganese orides which makes these veins (fa ults) appear promisingly mineralized. Consequently the old timers conducted a great deal of development along this system of faults with negative results.

Fault No. 3 is found along the south contact of the quartz porphyry as shown on Map 3. In places, small bunches of vein material have been exposed which resembles the productive part of the veins, but like the veins in the porphry it contains practically no gold, and like the faults of System No. 2, considerable manganese and iron oxides. On account of the proximity of this fault to the contact, several have considered this fault to be a mineralized contact, but it is not.

There is a strong probability of finding veins in the limestone as suggested in the idealized cross-section Z-Z'-Z" on Map No. 3. In this area a brownish colored limestone predominates, whereas on the north of the porphry, the productive veins occur in a white partially silicified limestone; the latter lies a short distance stratigraphically below the brown limestone a relative short depth # on the south side of the contact should encounter the favorable limestone horizon.

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The principal veins are narrow quartz veins, averaging about 2 feet in width, which have been formed along pre-mineral faults along the beddings of the limestone. The wall rock (the lime-stone) shows some silification near the veins. Contact metamorphism is conspicuously absent.

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Ore Reserves.

There is very little ore that might be called positive ore. In blocks A and B there are apprximately 15,000 tons of what might be called Prpbable ore above the 200 foot level. If veins X and B as now exposed along the strike are productive to the 200 ft. level and additional 30,000 tons is possible. In addition to this there is the possibility of developing the other veins indicated on Map 2 vein "X" west of block B and it is very likely that all the veins will be productive to greater depths than the 220 ft. level. There has been no work done on the outlying veins and there is everygeologic indication that many similar veins should be discovered around the periphery of the whole quartz porphry intrusion. The possibilities are, therefore, very great even if no other veins are discovered by "X" and "B", there are possibilities of developing in excess of 100,000 tons in them alone.
In all these preliminary estimates the veins are assumed to have an average width of 2 feet and that 13 cu .ft. of the ore in place is equal to 1 ton. The grade for this preliminary purpose, it is assumed, will be approximately that given on Page 4.

Later further → West of Block A there is approximately 75,000 tons to the extent the vein has been discovered. This is giving no weight of extending still further with many thousand additional tons

Economies

Labor

Most of the work is done by contract. Wages for the various classes of labor ranges between $4.25 and $5.00 per day. About $6.00 per ton

$200 to $300 per ton for Breaking ore only

should be ample to cover the total cost of mining ore, including power, tramming, overhead and the small amount of development work that will be necessary to prepare the ore, now developed , for extraction.

Power

The only power now available are the gasoline driven units enumerated on page 3 under "Equipment". I have no separate data on the power cost.

Water

Domestic water is scarce and must be hauled from wells or collected from the roofs of the buildings conserved. Thus far no water had been encountered in the mine workings.

About a half mile north of the mine, in the flat near the railroad, a water shaft has been sunk to the depth of about 250 ft. in the alluvium of the desert. No accurate data is available as to the amount of water that is available except that there is a subterranean river flow in the bottom of this well, which has been used to provide water for cattle. It will probably make sufficient water for all mining purposes and if economically used as small mill might be also operated.

This well belongs to a cattleman and some arrangements should be made to insure water supply. If this cannot be equitably arranged a few churn drill holes can be drilled which would undoubtedly supply all the water that will be necessary. This well was dug by the mine & supplied ample water to operate a 20 stamp mill & for all domestic purposes. only surface rights belong to the cattle man.

Freight, Hauling and Smelter Treatment Charges.

The ore is hauled to the railroad in trucks. This cost about 35 cents a ton and is included in the mining cost. The freight from Manzora, the shipping point, to the El Paso Smelter of the A. S. & R. Co. is $1.90 per ton for ore under $30.00 a ton.

The smelting base charge is $3.50 per ton for ore less than $30.00 per ton, with a 10¢ increase for each $1.00 increase in grade up to $1.00 additional. Settlements are made on the following basis:-

Gold: 100% at $20.00 per ounce if above 0.03 oz.
Silver: 95% at market quotation
Lead: 1.5% off wet assay and 95% of dry content at 1.4¢ off market quotation.
Zinc: 10% allowed 30¢ penalty per unit above 10%
Copper: 90% wet assay in excess of 0.5% cu.
Lime: Premium 10¢ per unit
Insoluble: Premium 5¢ per unit except when gross value of ore is less than $30.00 then a credit of 1/5 of the definiency up to $2.50

Milling

Near the surface the ore is oxidized and consists of free gold associate with cerrusite in a predominately quartz vein gangue material. Small amounts of copper carbonates are also present. In depth of galena and a small amount of pyrite and chalcopyrite constitute the ore minerals. No tests have been taken to determine what recoveries can be made by milling, but if a sufficiently high percentage of the values can be recovered a small mill would greatly increase the profits.

Respectfully submitted

Signed
C. ERB SUENSCH

Mining Engineer & Geologist

Box 1181, Benson, Arizona

all this data must be copied and the original returned to the above or to Bob Taylor.
5140 N. Rosemead Blvd.
Temple City Calif

PRELIMINARY REPORT

ON

GOLDEN MINE

Dragoon, Cochise County,

Arizona.

By-------

C. Erb. Wuensch.

Joplin, Mo.

August 15th., 1927.

Introductory.

The writer was only able to spend four days at the above named property to make the preliminary investigation because the pressure of some other work in Missouri. This examination involved mostly a geologic study of the property. Time did not permit a detailed sampling or preparation of a complete set of maps. However, the past records of the production of the mine were so consistant that it is a safe inference for preliminary purposes to assume that the extensions of the unstopped portion of the veins for some distance, both in depth and laterally, should average up in grade to the past shipments.

The geologic features are so favorable that a most casual examination strongly indicates that several other veins similar to those already developed, will in all probability be discovered. In addition, a relatively small amount of development work should lead to the discovery of several faulted portions of the known veins.

Location

The "Golden Rule Mine "(also known as the Golden Eagle and Old Terrible Mine) is situated about four miles east of Dragoon, Cochise County, Arizona. Dragoon is about seventy miles east of Tucson on the main line of the Southern Pacific Railroad.

The mine lies about a mile south of Manzoma, the shipping point and is accessible over a fairly good auto road with a down- hill haul to the railroad.

Property, Development & Equipment.

The property embraces ~~14~~ 18 standard size unpatented mining claims containing an area of about 280 acres. (See Map # 1 (, Map # 2 will give an idea as to the extent of the underground development.

The equipment consists of the following:

1- Chicago Pneumatic 9" x 12" single stage air compressor driven by a belt connected 50 h.p. Sampson gasoline engine
3- New Rock Drills (1 Chicago Pneumatic, 1 Cochise and 1 Ingersollra
1- 6 h.p. Fairbanks -Morse Gasoline hoist.
1- 9 h.p. gasoline driven wood-saw.
2- Reo trucks.
1- stone house(combination office and dwelling)
1- Mess house.
4- Bunk houses.
1- Garage.
1 Blacksmith shop.

History and Past Production.

No authentic records are available of the past production. It seems highly probable that the past production has been in excess of a quarter of a million dollars. (records go over 1000,000)

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Fault No. 3 is found along the south contact of the quartz porphry as shown on Map 3. In places, small bunches of vein material have been exposed which resembles the productive part of the veins, but like the veins in the porphry it contains practically no gold, and like the faults of System No. 2, considerable manganese and iron oxides, On account of the proximity of this fault to the contact, several have considered this fault to be a mineralized contact, but it is not.

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Reference to Map 2 will show the existence of several parallel veins in the limestone. In addition to those indicated several other veins have been exposed by trenching at considerable distances from the contact. No work has been done on them. The fact that the outcrops of the veins are frequently masqued and completely covered over by a secondary deposit of "caliche", makes it appear highly probable that cross-cutting will disclose other parallel veins in the limestone. Not over 150 to 200 feet.

The easterly flank of the porphry is covered with the alluvium of the gently sloping desert. Therefore, no outcrops have been exposed in this area but structurally there is no reason why numerous other veins should not be discovered in this area as well as at other points around the entire periphery of the quartz intrusion..

Comments on Mine Developments.

Unfortunately no complete maps of the mine developments were available. Therefore, a complete and accurate geologic mapping could not be made. Also, several of the old shafts along the eastern part of the mine, near the porphry contact, was inaccessible. If some ladders were placed in so some of these shafts considerable valuable information might be gained. However, several years agos a cloudburst washed the creek gravel down some of these shafts and filled in a considerable part of the easterly workings so that many of these may be inaccessible.

Above the first level, the vein to the east of the Jackson shaft, (incline), vein B, has been pretty thoroughly stoped from fault # 2 to the eastern extremities of the workings as shown on Map No. 2.

There has been some work further east but these drifts are filled with wash. Old timers state that exceeding rich ore was found farther to the east, where the vein approaches the quartz porphry contact. This vein also, has been quite thoroughly stoped above the second level immediately east of the Jackson incline but east of the two closely spaced faults of System No. 2 (East of R) there has been no stoping.

In the floor of the first level in this section the vein appears to be less than the average width of two feet (not over 1 foot). The drifting on the second level east of these faults is in the barren limestone. A short cross-cut into the hanging wall should encounter the vein.

West of the Jackson Incline on the first level, the drift trends northerly along the main fault of System No. 2 until vein X is encountered. The area designated by "C" has been thoroughly stoped up to the fault No. 2 Almost paralleling this fault is a narrow pre-mineral diabase dike. The dike occurs only in the hanging wall side and is faulted by vein B; its faulted extension on the footwall side of the vein has not been noted as yet. Beyond fault 2, vein X has been stoped as shown between the first level and the surface. A small block "A" remains unstoped between the stope above the first level and the under hand stope from the surface. In the vicinity of "V" there seems to be a vertical vein forming an intersection with vein X, but insufficient work has been done to prove conclusively whether this is a separate vein or merely a split off vein) In one place a short underhand stope about 20 feet along appears to be higher grade than the average.

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later faults → East of Block A. there is approximately 75,000 tons to the extent the vein has been discovered. tho it gives every evidence of extending still further. with many thousand additional tons

Economies

Labor

Most of the work is done by contract. Wages for the various classes of labor [illegible] between $4.25 and $5.00 per day. About $6.00 per ton

$2.00 to $3.00 per ton for breaking ore only

5

tramming, overhead and the small amount of development work that will be necessary to prepare the ore, now developed, for extraction.

Power

The only power now available are the gasoline driven units enumerated on page 3 under "Equipment". I have no separate data on the power cost.

Water

Domestic water is scarce and must be hauled from wells or collected from the roofs of the buildings conserved. Thus far no water had been encountered in the mine workings.

About a half mile north of the mine, in the flat near the railroad, a water shaft has been sunk to the depth of about 250 ft. in the alluvium of the desert. No accurate data is available as to the amount of water that is available except that there is a subterranean river flow in the bottom of this well, which has been used to provide water for cattle. It will probably make sufficient water for all mining purposes and if economically used as small mill might be also operated.

This well belongs to a cattleman and some arrangements should be made to insure water supply. If this cannot be equitably arranged a few churn drill holes can be drilled which would undoubtedly supply all the water that will be necessary. This well was developed by the mine & supplied ample water to operate a 20 stamp mill & for all domestic purposes. only supplies ample water to the cattle man

Freight, Hauling and Smelter Treatment Charges.

The ore is hauled to the railroad in trucks. This cost about 35 cents a ton and is included in the mining cost. The freight from Manzora, the shipping point, to the El Paso Smelter of the A. S. & R. Co. is $1.00 per ton for ore under $30.00 a ton.

The smelting base charge is $3.50 per ton for ore less than $30.00 per ton, with a 10¢ increase for each $1.00 increase in grade up to $1.00 additional. Settlements are made on the following basis:-

Gold: 100% at $20.00 per ounce if above 0.03 oz.
Silver: 95% at market quotation
Lead: 1.5% off wet assay and 95% of dry content at 1.4¢ off market quotation.
Zinc: 10% allowed 30¢ penalty per unit above 10%
Copper: 90% wet assay in excess of 0.5% cu.
Lime: Premium 10¢ per unit
Insoluble: Premium 5¢ per unit except when gross value of ore is less than $30.00 then a credit of 1/5 of the definiency up to $2.50

Milling

Near the surface the ore is oxidized and consists of free gold associated with cerrusite in a predominately quartz vein gangue material. Small amounts of copper carbonates are also present. In depth of galena and a small amount of pyrite and chalcopyrite constitute the ore minerals. No tests have been taken to determine what recoveries can be made by milling but if a sufficiently high percentage of the values can be recovered a small mill would greatly increase the profits.

Respectfully submitted

Signed

G. ERB SUENSON

Mining Engineer & Geologist

Edith my Jackson
Box 1181. Benson, Ariz.

PRELIMINARY REPORT

ON

GOLDEN MINE

Dragoon, Cochise County,

Arizona.

By----

C. Erb. Waesch.

Joplin, Mo.

August 15th., 1927.

Introductory.

The writer was only able to spend four days at the above named property to make the preliminary investigation because the pressure of some other work in Missouri. This examination involved mostly a geologic study of the property. Time did not permit a detailed sampling or preparation of a complete set of maps. However, the past records of the production of the mine were so consistant that it is a safe inference for preliminary purposes to assume that the extensions of the unstopped portion of the veins for some distance, both in depth and laterally, should average up in grade to the past shipments.

The geologic features are so favorable that a most casual examination strongly indicates that several other veins similar to those already developed, will in all probability be discovered. In addition, a relatively small amount of development work should lead to the discovery of several faulted portions of the known veins.

Location

The "Golden Rule Mine "(also known as the Golden Eagle and Old Terrible Mine) is situated about four miles east of Dragoon, Cochise County, Arizona. Dragoon is about seventy miles east of Tucson on the main line of the Southern Pacific Railroad.

The mine lies about a mile south of Manzona, the shipping point and is accessible over a fairly good auto road with a down- hill haul to the railroad.

Property, Development & Equipment.

The property embraces ~~14~~ 18 standard size ungatented mining claims containing an area of about 320 acres. (See Map # 1 (, Map # 2 will give an idea as to the extent of the underground development.

The equipment consists of the following:

1- Chicago Pnuematic 9" x 12" single stage air compressor driven by a belt connected 50 h.p. Sampson gasoline engine
3- New Rock Drills (1 Chicago Pneumatic, 1 Cochise and 1 Ingersoll-Ra
1- 6 h.p. Fairbanks -Morse Gasoline hoist.
1- 9 h.p. gasoline driven wood-saw.
2- Reo trucks.
1- Stone house(combination office and dwelling)
1- Mess house.
4- Bunk houses.
1- Garage.
1 Blacksmith shop.

History and Past Production.

No authentic records are available of the past production. It seems highly probable that the past production has been in excess of a quarter of a million dollars. records get over 1,000,000.

Howard M. Field, ore purchasing Agent of the El Paso Smelter of the American Smelting and Refining Co. advised the writer that during the last few years several hundred tons of ore had been shipped to their smelter and that with few exceptions the ore had been consistently averaged as follows: under The ore had of gold.

Gold	0.62 ozs.
Silver	2.3 "
Lead (wet)	7.9%
Copper	0.%
Zinc	2.0%
Insol.	75.0%
Iron	6.0%
Lime	2.5%
Sulphur	0.4

Geology

Maps 2 and 5 will give a general idea of the geology of the property. Map No. 3 shows a low elliptical shaped hill of quartz porphry which has intruded the lime stones, the predominating rock of the district. The linestones dip away from the porphry at law angles so th the limestones form a law domatic structure.

The principal veins are narrow quartz veins, averaging about 2 feet in width, which have been formed along pre-mineral faults along the beddings of the linestone. The wall rock (the lime-stone) shows some silification near the veins. Contact metamorphims is conspicuously absent.

There are also narrower veins in the porphry itself.

These are not as promisingly mineralized as the quartz veins in the limestone, but they have only been developed superficially.

These veins do show a similar mineralization to the veins in the lime-stone but they contain much shorter and erratically mineralized ore-shoots. These, strangely enough, are practically devoid of gold content, but are liable to contain more lead, silver and copper, than the veins in the limestone.

In addition to the faulting above noted (the pre-mineral system of faulting along the veins in the limestone) there are three other systems of faulting. System designated No. 1 has a northwesterly trend and dips at high angles to the southwest.

System No. 2 striking northeasterly and dipping at various angles to the southeast, cuts System No. 1 and has been usually subsequently mineralized with siderite and calcite, The former upon oxidation develops considerable iron and manganese orides which makes these veins (fa ults) appear promisingly mineralized. Consequently the old timers conducted a great deal of development along this system of faults with negative results.

Fault No. 3 is found along the south contact of the quartz porphry as shown on Map 3. In places, small bunches of vein material have been exposed which resembles the productive part of the veins, but like the veins in the porphry it contains practically no gold, and like the faults of System No. 2, considerable manganese and iron oxides, On account of the proximity of this fault to the contact, several have considered this fault to be a mineralized contact, but it is not.

There is a strong probability of finding veins in the limestone as suggested in the idealized corss-section Z-Z'-Z" on Map No. 3.. In this area a brownish colored limestone predominates, whereas on the north si of the porphry, the productive veins occur in a white partially silicified limestone; the latter lies a short distance stratigraphically bel the brown limestone a relative short depth # on the south sice of the contact should encounter the favorable limestone horizon.

In the area south of this contact some work has been done along veins which contain considerable amounts of iron and manganese oxides.

In places small bunches of silicious material is found which show considerable copper carbonates and the manganese and iron oxides often have important lead content associated with them. None of these working were examined, but a hasty reconnaissance of this section suggested the the work was done along the faults having the siderite mineralization

characteristic of the faults of System No. 2. This area warrants careful geologic study and it is possible that the productive veins may be found along the bedding planes of the proper limestone horizon just as is suggested in cross-section Z-Z'-Z" Mpa No. 3.

Reference to Map 2 will show the existence of several parallel veins in the limestone. In addition to those indicated several other veins have been exposed by trenching at considerable distances from the contact. No work has been done on them. The fact that the outcrops of the veins are frequently masqued and completely covered over by a secondary deposit of "caliche", makes it appear highly probable that cross-cutting will disclose other parallel veins in the limestone. Not over 150 to 200 feet.

The easterly flank of the porphry is covered with the alluviun of the gently sloping desert. Therefore, no outcrops have been exposed in this area but structurally there is no reason why numerous other veins should not be discovered in this area as well as at other points around the entire periphery of the quartz intrusion..

Comments on Mine Developments.

Unfortunately no complete maps of the mine developments were available. Therefore, a complete and accurate geologic mapping could not be made. Also, several of the old shafts along the eastern part of the mine, near the porphry contact, was inaccessible. If some ladders were placed in so some of these shafts considerable valuable information might be gained. However, several years agos a cloudburst washed the creek gravel down some of these shafts and filled in a considerable part of the easterly workings so that many of these may be inaccessible.

Above the first level, the vein to the east of the Jackson shaft, (incline), vein B, has been pretty thoroughly stoped from fault # 2 to the eastern extremities of the workings as shown on Map No. 2.

There has been some work further east but these drifts are filled with wash. Old timers state that exceeding rich ore was found farther to the east, where the vein approaches the quartz porphry contact. This vein also, has been quite thoroughly stoped above the second level immediately east of the Jackson incline but east of the two closely spaced faults of System No. 2 (East of R) there has been no stoping.

In the floor of the first level in this section the vein appears to be less than the average width of two feet (not over 1 foot). The drifting on the second level east of these faults is in the barren limestone. A short cross-cut into the hanging wall should encounter the vein.

West of the Jackson Incline on the first level, the drift trends northerly along the main fault of System No. 2 until vein X is encountered. The area designated by "C" has been thoroughly stoped up to the fault No. 2 Almost paralleling this fault is a narrow pre-mineral diabase dike. The dike occurs only in the hanging wall side and is faulted by vein B; its faulted extension on the footwall side of the vein has not been noted as yet. Beyond fault 2, vein X has been stoped as shown between the first level and the surface. A small block "A" remains unstoped between the stope above the first level and the under hand stope from the surface. In the vicinity of "V" there seems to be a vertical vein forming an intersection with vein X, but insufficient work has been done to prove conclusively whether this is a separate vein or merely a split off vein) In one place a short underhand stope about 20 feet along appears to be higher grade than the average.

Farther to the west, the vein is unstoped. It is faulted twice by two faults of System No. 2 but the faulted extensions have been found

It is in this section, as well as block "A" that the present operators are concentrating their mining operations.

About 500 feet to the west, in a gulch, a vein outcrops which may

be the continuation of the vein X to the west.

There has been no work done on vein "X" on the second level. The [illegible] cut shown on the second level, trending off the bottom of the Jackson Incline still lacks about 50 feet of intersecting the vein.

To the northeast there is an old shaft designated as the "Lee [illegible]". The present operators have not done any work in it. On account of its location being almost exactly in the correct position to encounter the [illegible] extension of the main fault of the System No. 2 the writer [illegible] this shaft. It was a matter of [illegible] surprise to find the quartz porphyry at the bottom of the shaft as indicated and also to find that previous operators had done considerable work, off an incline that was sunk along this fault, on the 200 ft. level with negative results. On the surface the other veins with out any trenching done on them were noted as indicated on Map No. 2 as veins C. and C. The cross-section Y-Y is preliminary interpretation of the faulting and of the reason of the negative results. Veins D and X are indicated as occurring in the shaft. At the time of my examination these were not noticed and I have shown them thusly as a result of the subsequent office work in correlating the preliminary observations which were made while in the field. It is very unlikely that these veins were encountered in the shaft. Fault No. 2 at the bottom of the 1Shaft shaft has a more easterly trend than elsewhere. It also has a vertical displacement of about 200 feet which is more than it appears to have elsewhere in the mine and also more displacement than other faults of this system have. Very evidently there is some other faulting in this area, which a more detailed study, with accurate maps as a basis, may indicate and possibly this fault may belong to another system. The shaft very likely passed through a barren zone between faulted sections. This shaft is very well located to carry on the further development of all veins below the present lowest level (the seven level, depth 180 ft.)

There is no geological reason to expect that the veins should extend to even greater depths because of the unconvertible evidence that the veins occur along strong preminental faults. They also have considerable length already developed of over 600 feet and indications of being productive for still greater distances laterally, and therefore, one would expect them to be productive for a depth comparable to their lateral extent.

Ore Reserves.

There is very little ore that might be called positive ore. In blocks A and B there are approximately 15,000 tons of what might be called Probable ore above the 200 feet level. If veins X and B as now exposed along the strike are productive to the 200 ft. level and additional 30,000 tons is possible. In addition to this there is the possibility of developing the other veins indicated on Map 2 vein "X" west of block B and it is very likely that all the veins will be productive to greater depths than the 200 ft. level. There has been no work done on the outlying veins and there is overwhelmingly indication that many similar veins should be discovered around the perimeter of the small white quartz porphyry intrusion. The possibilities are, therefore, very great even if no other veins are discovered by "X" and "B". There are possibilities of developing in excess of 100,000 tons in these veins.

In all these preliminary estimates the veins are assumed to have an average width of 2 feet and that 13 cu. ft. of the ore in place is equal to 1 ton. The grade for this preliminary purpose, it is assumed, will be approximately that given on Page 4.

Further → West of Block A there is approximately 75,000 tons to the distance the vein has been discovered. The it gives every evidence of extending still further with many thousand additional tons

Economies

Labor

If see to 300 per ton for breaking ore only.

Most of the work is done by contract. Wages for the various classes of labor varies between [illegible] and $5.00 per day. About $6.00 per ton

should be ample to cover the total cost of mining ore, including power, tramming, overhead and the small amount of development work that will be necessary to prepare the ore, now developed , for extraction.

Power

The only power now available are the gasoline driven units enumerated on page 3 under "Equipment". I have no separate data on the power cost.

Water

Domestic water is scarce and must be hauled from wells or collected from the roofs of the buildings conserved. Thus far no water had been encountered in the mine workings.

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This well belongs to a cattleman and some arrangements should be made to insure water supply. If this cannot be equitably arranged a few churn drill holes can be drilled which would undoubtedly supply all the water that will be necessary. This well was developed by the mine & supplied ample water to operate a 20 stamp mill & for all domestic purposes. Only surface rights belong to the cattle man.

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The ore is hauled to the railroad in trucks. This cost about 35 cents a ton and is included in the mining cost. The freight from Manzora, the shipping point, to the El Paso Smelter of the A. S. & R. Co. is $1.90 per ton for ore under $30.00 a ton.

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Lime: Premium 10¢ per unit
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Milling

Near the surface the ore is oxidized and consists of free gold associate with cerrusite in a predominately quartz vein gangue material. Small amounts of copper carbonates are also present. In depth of galena and a small amount of pyrite and chalcopyrite constitute the ore minerals. No tests have been taken to determine what recoveries can be made by milling, but if a sufficiently high percentage of the values can be recovered a small mill would greatly increase the profits.

Respectfully submitted

Signed
C. ERB SUENSCH

Mining Engineer & Geologist

GOLDEN RULE MINE

Dragoon, Arizona

Mch 1st, 1960.

Sample #	Discription	Width	Oz Au	Oz Ag	%Pb	Gross Valu
2517	Tailings at old stamp mill	--	.06	0.6	---	2.64
2518	First level M+15'	2.5'	.02	0.4	0.2	1.46
2519	" " M+20.5'	2.0'	.22	0.9	0.3	9.11
2520	" " M+[illegible].5'(toside drift)	2.0'	.03	0.4	0.2	1.81
2521	" " Chute L	2.0'	.16	2.0	3.3	14.00
2522	" " 13' from face	16"	.05	0.4	1.1	4.31
2523	"A" Stope 15" point minus 10'	12½"	.25	3.3	5.5	22.72
2524	" " " " " 18"	16"	.20	0.6	0.8	9.14
2525	Winze sublevel 38' West CL Winze	19"	.05	1.3	3.2	9.32
2526	Vert Shaft in porphyry Red Quartz		.07	0.4	---	2.51
2527	" " " "		.01	4.5	----	4.40

Note: Sample 2527 contained a little copper

Note: Arithmetical average of samples 2518 to 2525 inclu. = $9.00

GOLDEN RULE MINE

Dragoon, Arizona

Mch 1st, 1960.

Sample #	Discription	Width	Oz Au	Oz Ag	%Pb	Gross Val
2517	Tailings at old stamp mill	--	.06	0.6	---	2.64
2518	First level M+15'	2.5'	.02	0.4	0.2	1.46
2519	" " M+20.5'	2.0'	.22	0.9	0.3	9.11
2520	" " M+9.5'(toside drift)	2.0'	.03	0.4	0.2	1.81
2521	" " Chute L	2.0'	.16	2,0	3.3	14.00
2522	" " 13' from face	16"	.05	0.4	1.1	4.31
2523	"A" Stope 15" point minus 10'	12½"	.25	3.3	5.5	22.72
2524	" " " " " 18"	16"	.20	0.6	0.8	9.14
2525	Winze sublevel 38' West CL Winze	19"	.05	1.3	3.2	9.32
2526	Vert Shaft in porphyry Red Quartz		.07	0.4	---	2.51
2527	" " " "		.01	4.5	----	4.40

Note: Sample 2527 contained a little copper

Note: Arithmetical average of samples 2518 to 2525 inclu. = $9.00

			Au	Ag	Pb	$
2517	TAILINGS at OLD STAMP MILL		.06	0.6	—	~~0.06~~ 2.64
2518	FIRST LEVEL M+15	2.5'	.02	0.4	0.2	1.46
2519	" " M+20.5	2'	.22	0.9	0.3	9.11
2520	" " M+9.5 to side shaft	2'	.03	0.4	0.2	1.81
2521	" " Chute L	2'	.16	2.0	3.3	14.00
2522	" " 13' back From Face	16"	.05	0.4	1.1	4.31
2523	"17" Stope. Down 10' from 15" Point	12½	.25	3.3	5.5	22.72
2524	" " 18" down from 15" Point	16"	.20	0.6	0.8	9.14
2525	WINZE Sob level 38'4" W of winze	19"	.05	1.3	3.2	9.32
2526	Pit Shaft in Porphyry Red quartz		.07	0.4	—	2.51
2527	" " " "		.01	4.5	either Au.	4.40

2518 to 2525

$9.00

	an	ag	pb	
2517	.06	.6		
2518	.02	.4	.2	
2519	.22	.9	.3	1.05
2520	.03	.4	.2	5.60
2521	.16	2.0	3.3	1.75
2522	.05	.4	1.1	8.75
2523	.25	3.3	5.5	7.00
24	.20	.6	0.8	1.05
25	.05	1.3	3.2	2.45
26	.07	.4	—	.35
27	.01	4.5	—	

cu kette

.35	.07	2.15	4.50
		.36	1.60
	.35	2.51	4.05

7.0	4.1	2.75	9.00
	1.75	1.17	0.40
			6.3

1.60	.01	.00
	1.6	3.00

.70	.20	.40

.70	.20	1.70

.35	.05	1.75

.03	.00	6.40
	6.4	.10

35
.22
70
70
7.70
81
8.51
60

.90
.9
.810

.003
2000
6000

35
.03
1.05
.36
.40
.81

5.60
1.80
6.60
14.00

.4
.90
.360

.90
2

.002
2000
4000

35
.16
210
35
5.60

.033
2000
66000
.10
6.60

4
.10

.70
36
40
1.46

.021
.54

2.10
.54

35
.06
2.10

.90
.04
.360

35
.02
.70

35
.06
02.10

.90
.540

.002
2000
4000

.90
.4
.360

35
1.75
36
2.20
4.31

35
1.75
70
35
1.75
7.75
2.97
11.00
22.72

.011
2000
2.20

2
33
90
2.970

.056
2000
11.00
11000
11.00

Golden Rule People want

$385000 fixed Price
75000 down
Royalty 15% on net smelter returns after on price

Two stds

6 mo	25000
12	25000
18	25000

next stds
after examin

down	15000
6	20000
12	20000
18	20000

Matt Lee doubts if he could arrange any deal that did not include a down payment.

$385,000 fixed price

75 000 down — 50000 in 6 mo 25,000

Royality 15% net smelter

$65000

B- 8000
LB 3300
A 1060
LA 2080
14,460

Put 1st payment!

50000 in 6 mo

6 mo 25 000
18 25 000
18 25 000

after one down 6 20,000
12 20,000
18 20,000

Wuensch
a-B 15000

30000 fixed

15000
26
90000
30000
390,000
150,000
240,000
36000
204000
150000
54,000

240000
.15
120000
24000
36000

15000
14

60000
15000

210000
150000
60000
37500
28,500

150,000

210000
.15

1050000
210000

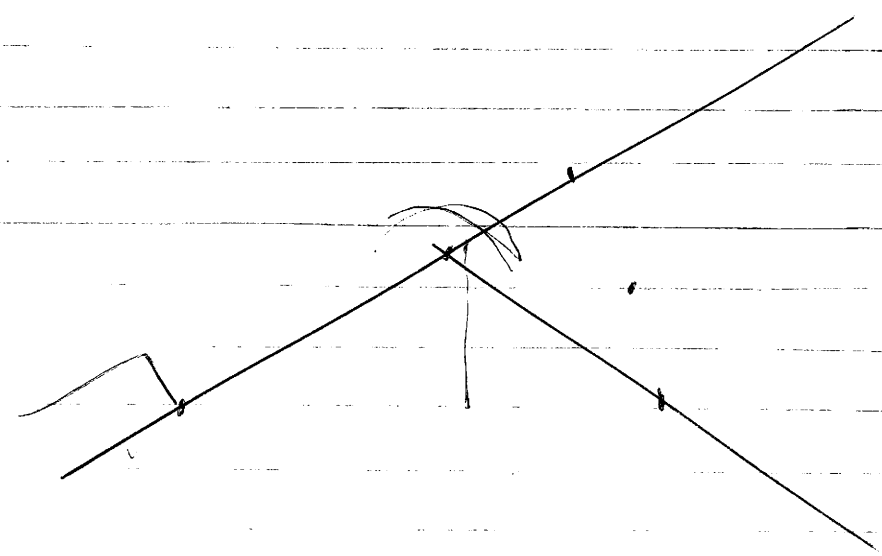
31500000

50000

Pecan Fault 40' wide 5th hw. ag

2

12
50
2 600
5 300
60 30
4 300
75 37½
3



Neil Campbell coming shortly ✓

Use TL ~~Geo~~ & the coming out ✓
such 8

Quartzite - Both USGS Bul 620 ✓
Contributions to ~~eco~~ Geo
1915 Part 1 — by EL Jones Jr. ✓
Gold deposits near quartzite
with map ✓

Lode Gold Mines. ✓

Work of ~~sonora~~
Pub by ~~Geo~~ Soc of America by King

Assays		Au	Ag		
Grunger	2505	.03	2.0		Sulphide
Independent	2506	.02	0.4	Cu	West Canyon on gulch
"	2507	.28	1.3	4.04 Cu	Vein
Golden Rule	2508	.07	13.3	41.6 Pb	many sulphides pyr Mine & Porphyry
Independent	2509	.02	1.8	4.51 Cu	?
Golden Rule	2510	.03	6.4	21.2 Pb	Gold City
" "	2511	.01	1.6	1.5 Pb	Mary & Porphyry
Wonderful	2512	.01	1.2	8" stuff oxide in bottom of gulch	
"	2513	.03	37.4	5.88 Cu	Copper stained Malachite pyr Dark

Sta	Bearing	Slope	Dist	H1	FS	Hor Dist	Vert Dist.	Elev
Sui. to sta	N 9 E	-32	99.9	3	0	84.72	52.34	
Sta to Sta 1	N7E	-32.30	40.5	2.5	2.5	34.16	21.76	
Sta 1 to A	N12E	+2°	25.3	4.0	1.5	25.28	2.15	
A B	N52-30E	-10	19.45	4.0	0	19.15	3.38	
B C	N25E	-6	32.85	4.1	0	32.67	3.43	
C D	N28-30E	-12	16.6	4.1	0	16.24	3.45	
D E	N37E	-8 30	22.7	4.0	0	22.45	3.36	
E F	N19W	-18	12.3	4.2	0	11.70	3.80	
F G	N61 30 W	-2° 30'	58.95	4.1	0	58.89	2.57	
G H	N43 W	-5	41.85	4.0	0	41.69	3.65	
H I Wing	S81 30 W	-6	32.55	4.0	0	32.37	3.40	
I J Chute	N77 W	-4.30	50.5	4.1	0	50.34	3.96	
J K	N61 W	-12	18.45	4.1	0	18.05	3.84	
K to Sub	V stub Dist same bearing J-K					31.2'	~~[illegible]~~	~~[illegible]~~
K L Chute	N82 W	-5	38.05	4.1	0	37.91	3.32	
L M	N48 W	-6.30	31.3	4.0	0	31.10	3.54	
M Face	N83 W	—	28.95 Hor.					
Follow to chute	vertical	19.5'				~~[illegible]~~	+19.5	
chute mid chute	S 50E	25	50.0	0	0	45.32	21.13	
MC X	S 50 W	[illegible]	25	-	-	25		
X to 15'	S 50 W	0	22'	-	-	22		
MC Sub Cut	S 48E	+23°	33'	-	2	30.38	12.89	
Sub Cut Face	S 35 E	—	50 + 23 Ext.			73 -		

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

REGISTERED ASSAYERS

Phone 2-0813

DUPLICATE

Certificate No. 53440 Tucson, Arizona, Mar 24, 1958

Sample Submitted by Mr. Dm Stevenson

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	..... Per cent Wet Assay
156133	A 1	0.25	$ 30 80	2 7/10	—	3 6/10	—
	1nd item wrt'ed						
	7" wrt per of short			Xed			

* Gold Figured $35.00 per oz. Troy

Charges $ 3.21

Very respectfully,

Ben Jacobs

4

1.35
.88
240
280
30.80
2.25
9.36
42.41

4

2.50
.90
2.25

.036
.13
108
36
4.68

.6

4.1

10

3

30

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

Phone 2-0813

REGISTERED ASSAYERS

DUPLICATE 53476

Certificate No. ..... Tucson, Arizona, April 26 " 8, 195.....

Sample Submitted by Mr. D M Stranahan

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	..... Per cent Wet Assay
156335	A 2	0.005	$ 0.17	0 3/10	—	0 2/10	
36	A 3	0.06	2.10	1 3/10	—	5 1/10	
		A2	Shot 5	wrt side	35' down	2' 2"	
		A3	Shot 6	two down	1½' & 6"		
				Gouge between		2 ft.	
			56'	down at 24 deg			

Return Tube

* Gold Figured $35.00 per oz. Troy

Charges $ 6.50

Very respectfully, Ben Q. Jacobs

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

REGISTERED ASSAYERS

Phone 2-0813

DUPLICATE

Certificate No. 53420

Tucson, Arizona, Mar 7th, 1958

Sample Submitted by Mr. DM Stanchan 1211 E 9th Apt 1C

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	~~Per cent Wet Assay~~
155971	#2	0.65	$ 22.75	0 9/10	—	0 4/10	
72	3	0.14	4.90	0 5/10	—	2 5/10	
73	4	1.27	44.45	1 4/10	—	12 2/10	
74	5	0.21	7.35	0 3/10	—	3 0/10	

2 Surface sloth A Area NW Area
3 A Area down from
4 Bauer on point road
5 Fortune West from dump

* Gold Figured $35.00 per oz. Troy

Charges $13.00

Very respectfully,

Ben Jacobs

30 So. Main St.
P. O. Box 1889

Jacobs Assay Office

Registered Assayers

PHONE Main 2-0813

Certificate No. 54254

Tucson, Arizona, Jul 3 1940

Sample Submitted by Mr. DM Strachan

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay	Per cent Wet Assay
2501	0.01	$ 0.35	0 3/10				
2502	0.01	0.35	0 3/10				
2504	0.11	3.85	0 3/10				

ARIZONA

Paid cash to date

* Gold Figured $35.00 per oz. Troy

Charges $ 6.00

Very respectfully,

Ben B. Jacobs

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

PHONE Main 2-0813

REGISTERED ASSAYERS

Certificate No. 53420 Tucson, Arizona, Mar 7th, 1958

Sample Submitted by Mr. DM Stramatian 1211 E 9th Apt 16

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Per cent Wet Assay
155971	#2	0.65	$22.75	0 9/10	—	0 4/10	
72	3	0.14	4.90	0 5/10	—	2 5/10	
73	4	1.27	44.45	1 6/10	—	12 2/10	
74	5	0.21	7.35	0 3/10	—	3 0/10	

2 - Surface stope 'A' area NW Tunnel
3 - A area lower tunnel
4 - B area first level
5 - First level west tunnel drift

* Gold Figured $35.00 per oz. Troy

Charges $ 13.00

Very respectfully,

Ben B. Jacobs

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

PHONE Main 2-0813

REGISTERED ASSAYERS

Certificate No. 53440 Tucson, Arizona, Mar 29th, 1958

Sample Submitted by Mr. D M Strana han

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	..... Per cent Wet Assay
156133	A. 1.	.88	$30.80	2 7/10	—	3 6/10	—
	2nd level West end						
					7" W face of Hunt Xcut		

.88
63
14
1.27
21
31
.63

36
.4
20
2
12.0
13
21.4
4

* Gold Figured $35.00 per oz. Troy

Charges $ 3.25

Very respectfully,

Ben Jacobs

30 So. Main St.
P. O. Box 1889

JACOBS ASSAY OFFICE

REGISTERED ASSAYERS

Phone 2-0813

Certificate No. 53476 Tucson, Arizona, April 26th, 1958

Sample Submitted by Mr. D M Stranahan

SERIAL	SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore * $	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	~~Per cent Wet Assay~~
156335	A 2	0.005	0.17	0 3/10	—	0 2/10	
36	A 3	0.06	2.10	1 3/10	—	5 1/10	

Golden Rule

A3 — West side shaft [illegible]
A 2 Middle [illegible]

A2 — East side shaft 5 35' down
Cut 2'2"

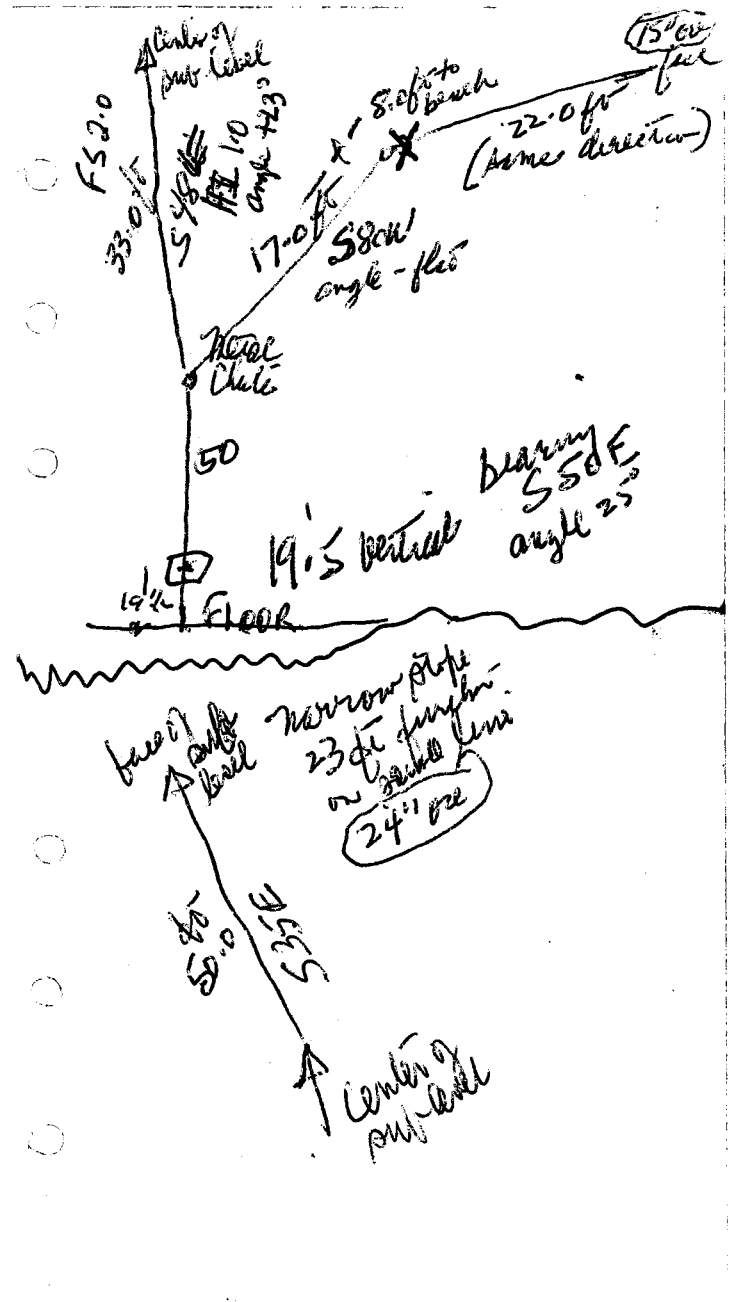
A3 Shaft — 50' down 24" deep 2' wide 1½ x 6" small gauge [illegible]

* Gold Figured $35.00 per oz. Troy

Charges $ 6.50

Very respectfully,

Ben P. Jacobs


center of out-bell
FS 2.0
33.0 ft
S 4° W
FT 1.0
angle 73°
8.0 ft to bench
22.0 ft
(same direction)
15" ore face
17.0 ft
S80W
angle - flat
Metal Chute
50
19.5 vertical
bearing S50E
angle 23°
19½
FLOOR
face of out-bell
narrow slope
23 ft length
on 30° incline
24" ore
59.0 ft
S32E
center of out-bell

Sta	FS	Bearing	V	Slope	HI	RS
Sup pt 5X	5X	N 32 E	−29°	25.75	3.4	0
5X	5Y on level	N 8 E	−22°	82.10	3.35	0
	0	0	0	0	0	0

	O	O	O	O	O	O
Wing ~~I~~ chute to J	N 77 W	−4°30′		50.05	4.1	0
Chute J to K	N 61 W	−12°		18.45	4.1	0
K to end of first drift 31.2 ft						
K to L	N 82 W	−5°		38.05	4.1	0
L chute to M	N 48 W	−6°-30′		31.3	4.0	0
M to face	N 83 W	—		28.95	—	0

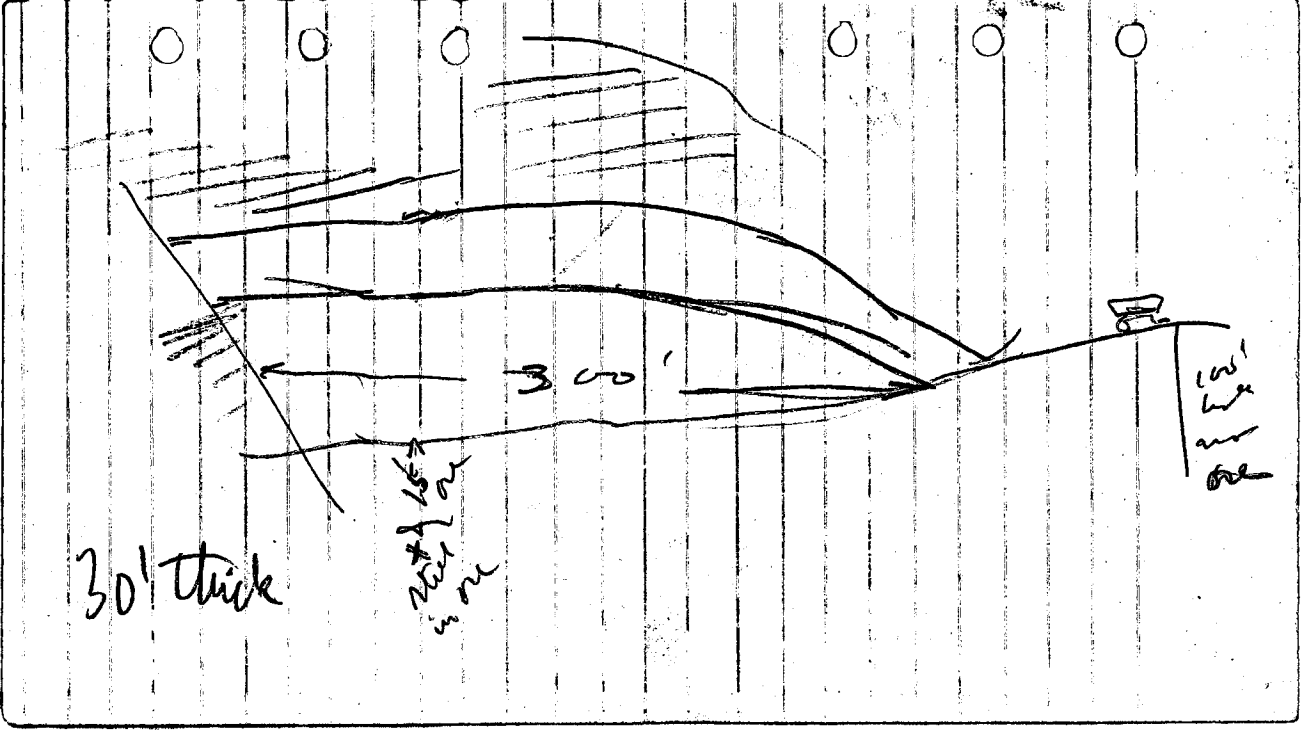
Sta	Sta	Bearing	V	Slope Distance	H.I.	FS
B	C	N25E	-6°	32.85	4.1	0
C	D	N 28-30E	-12°	16.6	4.1	0
D	E	N37E	-8°30'	22.7	4.0	0
E	F	N19W	-18°	12.3	4.2	0
F	G	N 61-30W	-2°-30'	58.95	4.1	0
G	H	N 43W	-5°	41.85	4.0	0
H	I	S 81-30W	-6°	32.55	4.0	0

Sta 99.9 - N 9 E -32 HI +3°
FS 0 to sta

Sta 40.15 N 7 E -32-30 HI 2.5 Ave
FS 2.5

Sta Sta - 25.3 - +2° N 12 E
STA A HB 4.0
FS 1.5

Sta A to 19.45
Sta B N 52-30 E HI 4.0
L -10 FS 0


300'
30' thick

Mt Pt at L

L to Point
Hor 16.93
Vert 10.35'

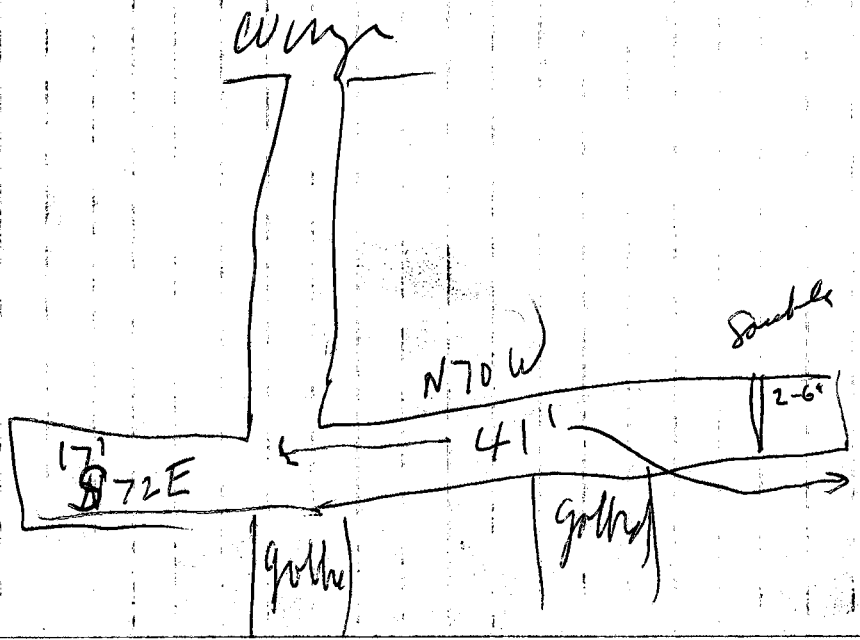
Point to Pm
Hor 47.33
Vert 12.68'

ocd shell

E 190 -13-30 = .97 ltm

E 53

to ℄ DD Hole location

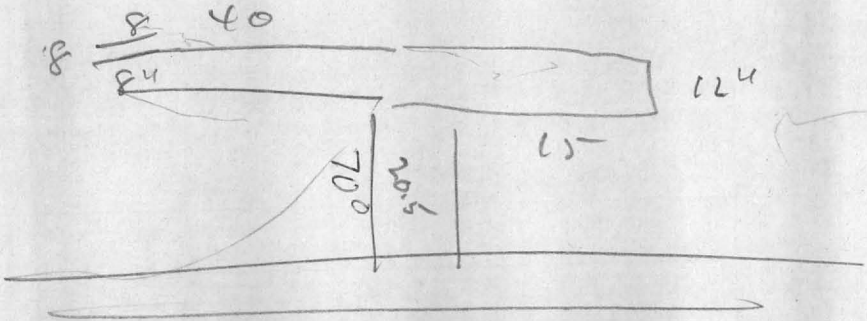

N70W
41'
2-6"
17'
S72E
gotter
gotter

72	.92	2.7	8.1
74	.81	4.1	17.5
75	.56	2.5	6.8
76	.72	2.1	4.7
77	.84	3.0	7.7
78	1.16	2.5	8.5
79	.44	1.6	5.5
80	.92	3.1	6.5
81	1.04	3.0	11.5
82	.41	1.4	5.6
83	.26	6.4	3.6
84	.52	1.1	9.2
85	.57	2.9	5.7
86	1.16	3.7	6.3

0.459
1.05
3.85

3 | 26.20
8.75

6" = 18"
3



Vent 19.26
Lam 7.01

4122 North 56th Street,
Phoenix, Arizona.
February 29, 1960.

Ore Purchasing Division,
Phelps Dodge Copper Company,
Douglas, Arizona.

Attention of Mr. Hale

Gentlemen:

Mr. Stranahan and I wish to thank you for seeing us on February 16th last, regarding the possibility of selling high silica gold ore.

We have sampled the property we had in mind but have come to the conclusion that in the mining of the narrow veins we could not hold an 80% silica content. We have, therefore, not sent in a sample as we promised.

We may in the future have some ore that is suitable for your purchase and will be in touch with you at that time.

Yours very truly,

L. J. Lichty

c.c. D. M. Stranahan

Phone 4501

The Property of Edith M Jackson Box 564 Benson Arizona

This property consists of sixteen mining lode claims held by location, covering an aproximate area of three hundred acres, situated one mile in a Southerly direction from Manzora Station on the Southern Pacific R. R., in Cochise County, Arizona. The elavation of the main mine workings is about 4,500 ft. The mine is conected with Manzora station by a good auto road. State Highway 79 passes within about 500 ft. of the mine and connects with the Sunset Highway about a mile from the mine, thus giving easy access to Douglas, El paso and Tucson.

HISTORY

Very little of the early history of the property is obtainable from any creditable source, but the mine was being worked in August 1885 under the name of The Golden Rule Mine. Later a cloud burst filled the Golden Rule w working shaft, and a short time later the property was taken over and operated by a promotion concern. About the year of 1900 it was taken over and operated for a number of years by the Old Terrible Mining Co. and the workings were surveyed. In 1920 the property came into the possession of the present owner. The ores extracted have been reduced by at least three different mills and many shipments to the various smelters have been made. One of the mills is about ten miles east,near the shores of the Wilcox Lake, which, judging from the amount of tailings in the flat, must have handled some thousands of tons of ore. A small mill at the town of Cochise operated for a few months, and a 20 stamp mill was erected on the property later, which worked not to exceed 6,000 tons of ore. No dependable figures on production was obtainable.

FORMATION

This formation is in a Devonian lime, uplifted and faulted by an intrusive porphyry, probably batholitic. The veins in the lime bedding planes caused by that action and a large breccia pre-ore fault, striking north 25 to 30 degrees east and traceable from near the lime porphyry contact through the veins to at least 500 ft. northeasterly of the apex of the veins. The breccia fault has obviously been the source channel for the ore disposition. This fault is seen both on the first and second levels in the mine workings, and dips from 45 to 50 degrees from the horizontal southeasterly. The known contact is exposed in only one place, about 800 ft. westerly from the Jackson Shaft and directly in the bottom of the Gulch. The point of exposure is too far westerly to be in line with the veins from the mineralized zone.

ORE OCCURANCES

The Breccia fault before mentioned is also obviously related creatively to the vein system. The bedding plane veins west of this fault and those easterly therefrom not being inter-related, excepting as the fault has been the source channel for the disposition of the quartz and its metal content. From this fault out and along the line of the bedding planes, the area of action, so far as exposed, is aproximately 600 ft. easterly and 400 ft. westerly. There are too veins worked and two others exposed easterly. Westerly three veins have been worked and two more exposed. On the surface two or three more have been opened by shallow cuts and etc. The general strike of the vein series in the lime is north 84 west and the dip northerly at 30 to 38 degrees from the horizontal. The veins are continuous in their extention from the breccia fault so far as explored and are well defined, with salvage on both foot and hanging walls. The ores are highly silicious, most of the gold content is free and course, a low silver content, the lead is galina and some carbonates.

EXPLORATION AND DEVELOPMENT

There is surface evidence of extensive old workings beginning 400 ft. easterly from the Jackson Shaft and in the bottom of the gulch, but all are filled with sand and gravel. From such reports as were obtainable the old filled shaft reached about the second level of the Jackson Shaft and had one winze that extended about 75 ft. below that level. Practically everything above the lower workings has been stoped. At this time some leassors desire a lease on the old winze and tell the usual story of good ore in large width.

ACCESSABLE WORKINGS

The Jackson Shaft, through the open stopes which it followed, is on a dip of 32 degrees for 132 ft. to the first level, then flattens out to 30 just below that level and leaves the B vein in the foot, then flattens to 28 degrees. It is 95 feet from the first to the second levels. From the Station at the first level drifts are opened easterly along the same vein stoped in the shaft, for a distance of 250 ft., to the line of the old filled shaft. All ore on the Jackson Shaft vein in this area has been stoped, other than some pillars and stope heads.

Near East drift station at station 1-1 is a mill hole on ore to the surface at station 0-1, which is a seperate ore plane from the one stoped all the way ~~fffff~~ above the drift from the Jackson Shaft. being northerly or above the open stope and is obviously the ore exposed in the hanging wall of the winze head above Station 1-2 (Sample #42) and while undoubtedly the continuation of the ore exposed in the mill hole and of considerable area and tonage, it is not ore "in sight", as this plane has not been further prospected.

At the second level on the Jackson Shaft the east drift bears southerly into the foot wall for 90 ft., passes through the Breccia Fault at that point and encounters the same ore body as stoped along the level above. From the point where the ore was entered, as far east as the drift is accessable, all ore on level, on the vein upon which it was driven, has been taken out. Below this level some underhand stoping has been done. The ore face can not be seen and the grade of ore can only be judged from the pillars left and sampled, as Sample #99.

The drift west from the Jackson Shaft becomes a lost cross-cut driven closely along the line of the Breccia Fault for 150 ft., then turns westerly and picks up an ore plane on the South or foot wall, on its upward extention, and has been driven along ore of varying widths and value for 399 ft. From that point with ore still in west d rift face, but broken up by cross vein. It is well to remember at this point thatore body designated "Block B" is in its west extention in the hanging wall, at the west drift face, as demonstrated in the west face of the sub-level, above station 1-10.

Three winzes have been extended from this level, at station 1-4, station 1-7, and between 1-11 and 1-2. The first is waste filled. Sample #91, taken at the collar of the winze, is at only point accessable. The winze below 1-7 is on a strong vertical vein that crosses the bedding plane vein as stoped in "Block B". This winze is vertical for 18 ft. and a short drift extended westerly, from which sample #100 was obtained. Downward from this the partially filled winze goes down on a large vein on the usual plane dip. The winze between 1-11 and 1-12 is also filled and a sample at east collar of winze, #63, is the only point at which access could be had to the ore. The ore in the drift level that is mapped and designated as "Block B" is not so blocked as to be classed as positive ore, but has been allowed as 18,643 tons of an average width cut of 2 ft., assaying as an ore block, gold .684 ozs., silver 2.3 ozs., lead 7.9% wet.

While the easterly boundry of this stope is probably not to exceed an average distance of 30 ft. from present face, the "Breccia" making one limit of any known ore body in this portion of the property, the westerly extention of this ore body has not been determined at this time and has been arbitrarily de-limited westerly as per map "BlockB". This stope block has over 299 ft. of ground above the stope head on plane of dip.

There has been extracted from the stope in this "Block B" 2,130 tons (in addition to the tinnage allowed) . Smelter returns on only 823 tons were available and averaged, Gold .657 ozs., Silver 2.3 ozs., Lead 7.9% wet. All faces about the 840 ft. stope face has ore averaging in width with the stoped portions.

On the second level, from this shaft, a drift has been extended generally westerly for 55 ft., no vein or ore showing in drift, as it is far in the foot (southerly) from any known ore plane west of the "Breccia".

In the upper length above the first level of the Jackson Shaft, the stope has been carried westerly on the shaft vein for 105 ft. at fartherest point. Along the westerly face of this stope is good quartz showing but in no

place or way otherwise exposed and can not be estimated as "blocked ore".

Between Stations O-7 and O-8 and downward as a small block of apparently good ore but sufficient is not evident to be of material value. Downward and westerly from station O-9 is stope of good looking ore but is approaching so close to the "Breccia" that it was not given consideration. Beginning at Station O-10, 58 ft. north from Station O-9, on a lower vein, is easterly boundary of vein in open stope 850 ft. in length with worked depth of 74 ft. on dip plane. Further exploration on this vein is 65ft. shaft at Station O-11, superficial cut 60 ft. west of shaft and an 141 ft. shaft 166 ft. west of 65 ft. shaft and small cut 38 ft. west of 141 ft. shaft.

Throughout these workings is wxposed a strong, well defined vein, averaging 26 inches wide, carrying some high gold and lead values, but owing to the spotted character, the considerable tonnage of thes block, designated "A" has not been allowed in estimates. This vein has not been exposed in any of the workings from the Jackson Shaft, nor has there been any attempt mad to do so. This vein is on a higher plane than vein mapped as "Block B". Across section from survey making vein of "Block A" 26 ft. above vein of "Block B" and further vein of "Block B" is 18 ft. above plane line of vein stoped between Stations O-8 and O-9.

In general, in all workings from Jackson Shaft, the ore on downward extention, samples an appreciable increase in metallic content over ore in place in stopes and faces on first level. On the surface, 111 ft. north of Station O-10,is a strong vein cropping out, not opened. North 67ft. from this, is another promising looking quartz cropping, not opened.

On the Manzora Claim, 390 ft. northwesterly from 141 shaft, is a 24 ft. incline on a 2 ft. vein, exhibiting some galina. All the above veins strike and dip with the lime bedding plane and all can be opened from lower Jackson Shaft Workings by a comparatively short upraise at right angle to the dip of the planes.

Easterly 475 ft. from Jackson Shaft is a shaft in the Porphyry sunk on strong Quartz vein, shaft said to be 90 ft. deep, caving at collar, could not be entered. At about 400 ft. east from this shaft is an 80 ft. shaft, in Prophyry, sunk on 20 inch vein. The vein matter shows galena and carbonates. Indications are, some ore has been removed from shaft, caving at collar, no means of entering. Both these shafts are very old.

At 60 ft. northerly from last mentioned shaft is a parallel vein opened by a 70 ft. trench, and underhand stoped to as much as 14 ft. deep at some points. Vein will average 20 inches wide, shows some solid galena streaks. Some ore shipped shows, Gold ;11, Silver 8.9, Lead 35.8, some ore now on dump. 30 ft. down the hill from the last is a 4in. streak of solid galena opened along a 15 ft. trench. Two more lead veins lower down, northeasterly, are exposed, not so large lead content as above. All veins exposed in the porphyry have the same general strike as the veins in the lime, i-e, North 84 degrees west, but dip varies from 80 degrees to 40 degrees from horizontal in veins in Porphyry.

There is a vertical shaft 420 ft. northeasterly from Jackson Shaft in which a plumb line shows bottom at 156 ft. Considering the strike and dip of the veins and trend of the ore shoots, which follows closely the dip and strike of the "Breccia", in the area worked from the Jackson Shaft, the vertical shaft could not be better located, but has not the depth to cut any of the known ore planes, the shaft ground is good and standing, but timbering is rotten and most of it has fallen. No equipment was at hand to descend and make an examination of the shaft nor of the drifts reported to be from the bottom.

MINE EQUIPMENT

One Chicago-Pneumatic air compressor- 8x12, single stage, connected to 50 H.P. Sampson Engine.
One six H.P. Fairbanks morse Hoist
One (9H. P) gas engine with wood saw
One stone house, combination office and dwelling.
One mess house
Four bunk houses
One large garage
One Blacksmith shop fully equipped
One drill sharpener
One 60 ton ore bin
cars, track and etc.

Water is developed in considerable quantity in a 230 ft. well 2800 ft. northerly from the camp and mill site on the North Pass Claim. This well supplied the 20 stamp mill formerly on the property. Camp elevation is 250 ft. above top of well.

Valuation

The ore planes in the exposures in and about the Jackson Shaft occur in angle intervals of from 16 to 50 ft., some appex,others evidently do not. All surface and underground indications favor the belief that those ore planes will continue to occur from the "Breccia" line so far as it extends across the lime uplift. The "Breccia" can be traced for at least 800 ft. northerly from the Jackson Shaft and 200 ft. southerly from the Shaft, toward the Porphyry Lime contact line.

The Jackson Shaft only penetrates 227 ft. down on plane dip of the Lime, is an egress for ores of "Block B", but of more value and point from which to quickly and cheaply open the ore planes by direct angle cross-cutting by raise and winze. The before enumerated Lead showings on easterly slope of the Porphyry Hill are meritorious of considerable development and exploration.

There is an area within the property lines that prospectively offers great possibilities, and that is the ground directly east of the Ladder Shaft, and below, northerly from the Porphyry Shaft. In this Zone there is contact and the point of convergence of all the known veins in both the Lime and those mentioned in the Porphyry. There is surface evidence of much movement and metamorphic action.

In-so-far as can been seen all conditions in this zone are favorable for disposition of large ore bodies of replacement or contact type. While, of course, this is speculative, the probable occurance of such ore bodies within this zone can not be too much emphasized. No Prospecting or exploratory work has been done but the time and cost of prospecting would be small.

The property as a whole is a medium sized mine with large possibilities. The Probabilities can be proven or disproven in a few months with no great outlay.

In sampling, all samples were taken from "Channel" cuts from foot to hanging, including gauge, and such wall material as would break with the ore blasting. In the stopes, as Block B, such cuts were at measured ten foot intervals. All samples samples channeled above the sheet, all material from the cut sacked on the spot, marked tied and bagged, then removed to the top, crushed, rolled and quartered, placed in envelopes, one half sent out for assay, the other half retained. Some samples are "Composit" of several cuts, but are taken as such from places where it was considered advisable to secure definite data as to value of ore extracted, as in stope pillars, downward extention of some winze, or as indicative in a prospective way. Ore was being broken during the examination and grab samples were taken from this ore as it accumulated and this, amounting to several sacks, was broken down by hand, mixed, rolled and quartered to 69 pounds, further broken, rolled and split, such as sample #88.

Composite "B" was made ~~###~~ as check on stope samples from "Block B" Each crushed sample reject was weighed out at ration of ½oz. for inch of ground cut, mixed and quartered.

Sample No.	Gold Oz.	Silver Oz.	Lead %
42	.42	2.6	3.6
[illegible]	.68	2.6	9.9
91	.35	---	2.8
100	.46	2.8	6.0
63	.55	2.5	5.5
88	.64	2.0	6.4
Stope Block B.			
43	2.48	2.9	7.4
44	.36	3.1	6.7
45	.60	2.3	5.4
46	.72	4.9	5.8
47.	.55	3.6	4.9
48	1.22	1.6	9.5
49	.42	2.0	6.4
50	.51	1.4	5.2
51	.63	2.7	6.8
	10.59	37.10	92.3

15

Sample No.	Gold Oz.	Silver Oz.	Lead %
52	1.98	2.2	7.7
53	.97	3.4	4.6
54	1.18	2.5	7.4
55	.42	1.5	7.4
56	1.60	3.6	11.9
57	.32	3.8	8.2
58	.31	2.5	4.6
59	.92	2.0	8.3
60	.44	2.6	7.5
71	.24	4.1	11.2
72	.80	2.2	7.8
73	.92	2.7	8.1
74	.81	4.1	17.5
75	.56	2.5	6.8
76	.72	2.1	4.7
77	.84	3.0	7.7
78	1.16	2.5	8.5
79	.44	1.6	5.5
80	.92	3.1	6.5
81	1.04	3.0	11.5
82	.41	1.4	5.6
83	.26	6.4	3.6
84	.52	1.1	9.2
85	.57	2.9	5.7
86	1.16	3.7	6.3

Following are some of the undeveloped ore faces enumerated:

Vein in winze head at 1-2
Vertical vein in winze below 1-7
Vein in mill hole 1-1 to 0-1
Vein below station 0-9
Vein east from station 1-1
Vein east of 1-9 (cross)
Vein west from 0-7 to 0-8
Winze bottom stope below 0-8 and 0-9
Face east from 0-3
Face west from bottom of Ladder Shaft
Stope head west from bottom of Ladder Shaft

Strike and dip if vein explored in Manzora Shaft, projected, shows that it could be reached by cross-cut into the hanging.

The geological conditions are all favorable for the disposition of ore bodies both on the Porphyry Lime contact- up to date unexplored - and in lime along beddingover an area as mapped both east and west of Fault. This Fault designated as "Breccia", undoubtedly caused by Porphyry uplift, has afforded easy access for mineral laden solutions and has - as before stated - been the same channel for enrichment of the various ore sheets already exposed.or explored.

The limits of the disturbed area subject to enrichment are not known. Area as mapped was carefully studied. Some enrichment was present as far west as Mangora incline and east to Ladder Shaft.

In undertaking the development of the property, the Jackson Shaft should be re-conditioned, cleaned out to the second level, track layed and etc. Cross-cuts at right angles to dip of bedding should be driven in west face of first level to open the parallel veins already mapped in cross-section accompanying this report. When these are cut and explored, then the drift should be driven ahead west to open all veins on west extention. Same plan should be followed in the west end of the second level. These cross-cuts should be driven both foot and hanging, Jackson Shaft should immediately be extended one hundred feet on the dip. cross-cutting done and area east explored. Should extention east on strike and continuity on dip be established, then the 155 ft. shaft should be continued and ore handled entirely through it.

At a point to be determined after the completion of the above exploration, the prospecting of the Porphyry-Lime contact must be done. Dip and strike of the contact can not be determined at this stage of development, as the Porphyry is Batholithic, its dip is probably northerly under the tilted uplifted lime and above recommended development may determine a point from which the line of contact can be easily reached.

Prospecting of the line of contact is recomend and is considered an extremely attractive program of exploration. Contact meta-morphic deposits also replacement, should be found along or near line of contact.

The property is considered unusually meritorious and is recommended to any one desiring such a property.

Respectfully submitted,

(W. HEIT)

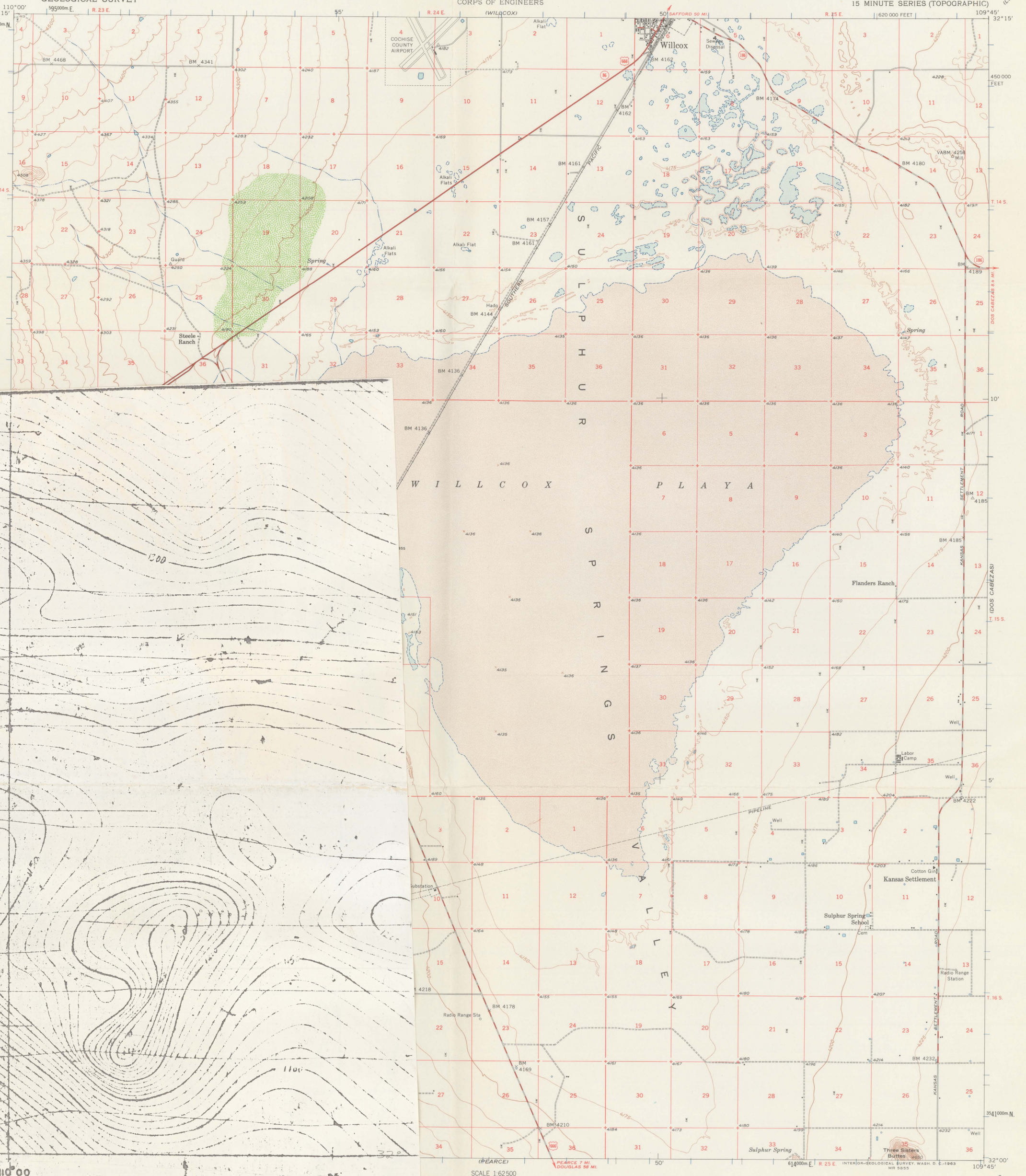
COPY

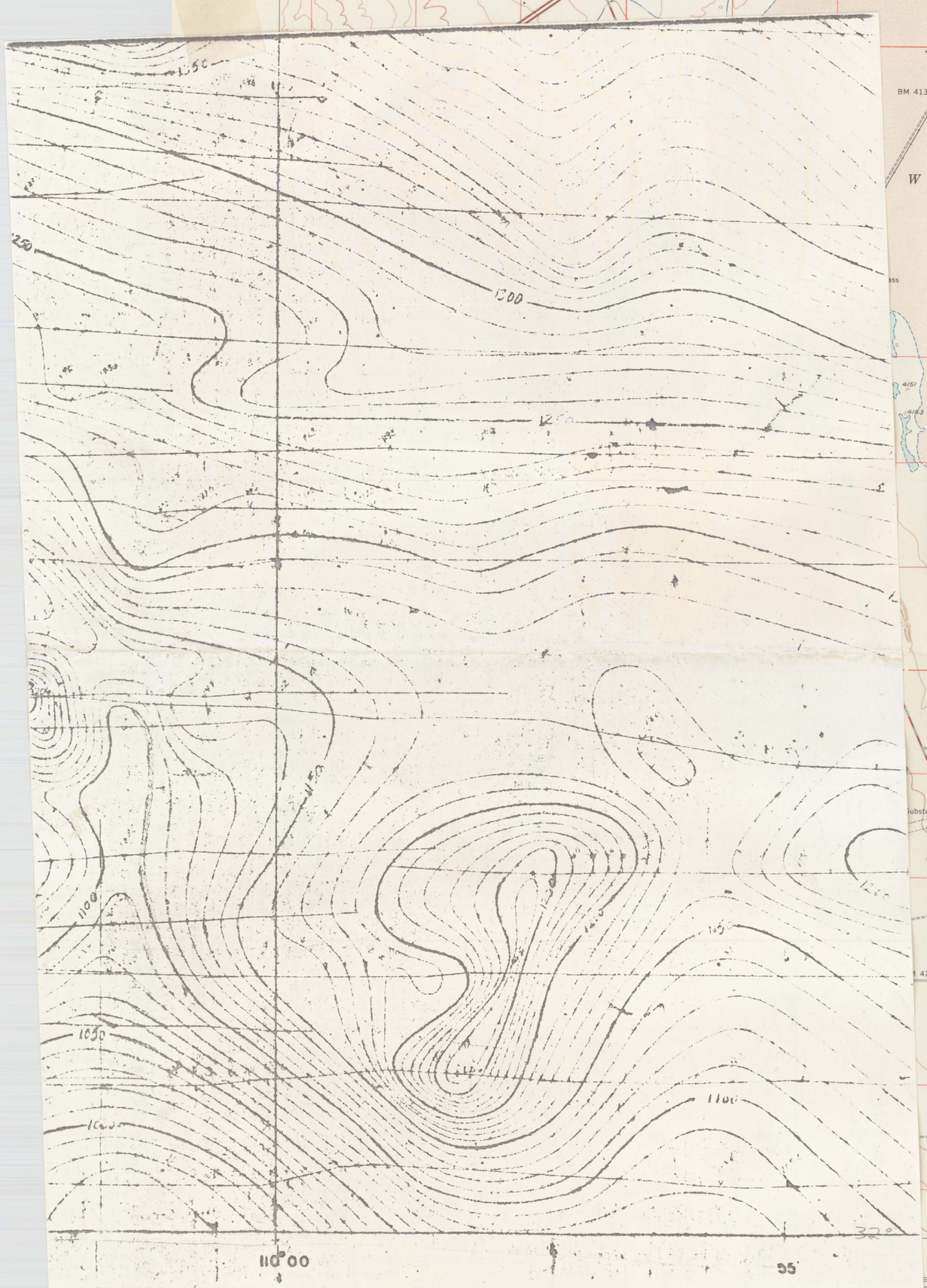
Hight

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

COCHISE QUADRANGLE
ARIZONA—COCHISE CO.
15 MINUTE SERIES (TOPOGRAPHIC)





MAGNETIC MAP OF COCHISE AND DRAGOON QUADRANGLES, AR
RELATIVE TO ARBITRARY DATUM

0 1 2 3 4 5 MILES

Contour interval 10 gammas
pproximately 500 feet above the surface

SCALE 1:62500

0 1 2 3 4 MILES
0 6000 9000 12000 15000 18000 21000 FEET
0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 25 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
U. S. Route — State Route

ARIZONA
QUADRANGLE LOCATION

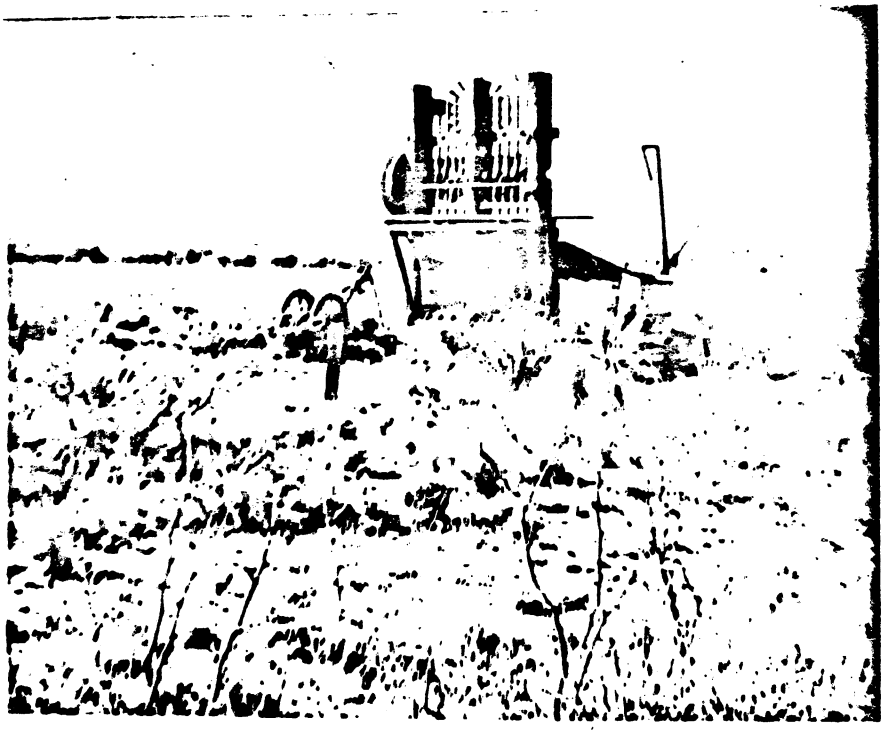
INTERIOR—GEOLOGICAL SURVEY, WASH. D. C.—1963
MR 5855

OGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
BING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

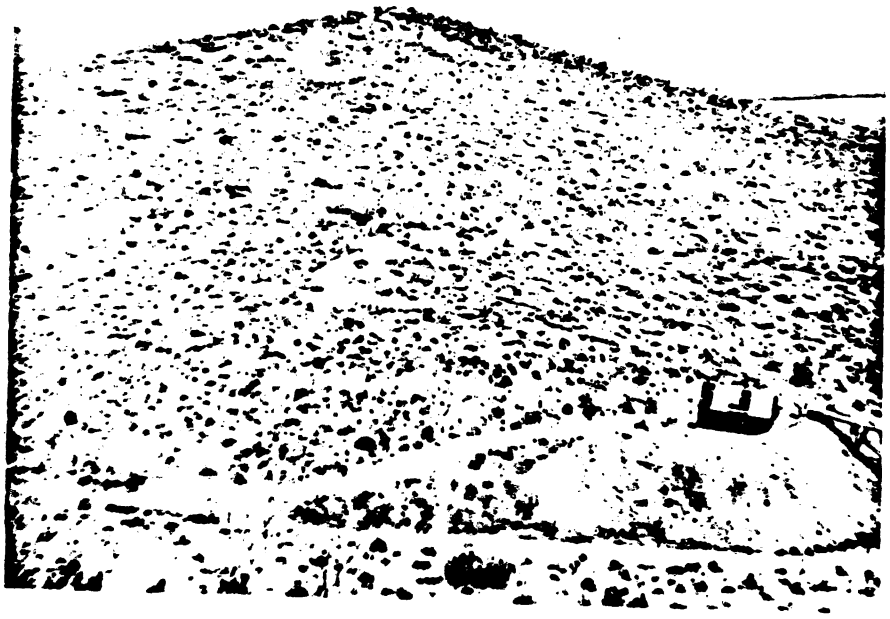
Mag. Anomaly
Golden Rule

COCHISE, ARIZ.
N3200—W10945/15
1958

Vein break throu
Golden Rule Hill
West end



Stamp Mill
Water well
behind it



Golden Rule
Hill shaft
right edge

Monzonite Hill
from Contact
Shaft

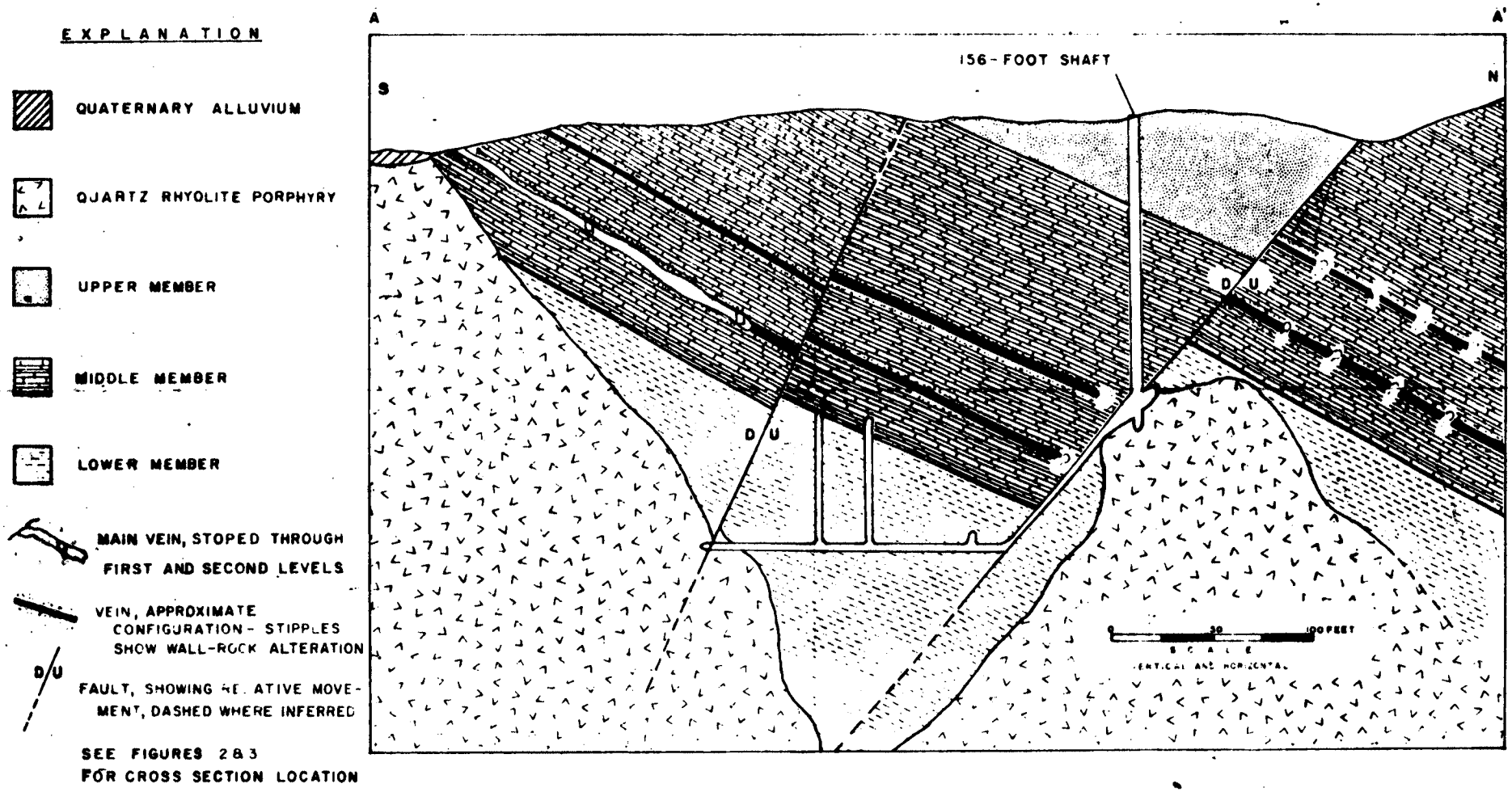


FIGURE 18 CROSS SECTION A-A' GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA, FACING WEST.--MODIFIED FROM WUENSCH (1927)

ANDREW W HAMPF GEOSCIENCES THESIS — 1972

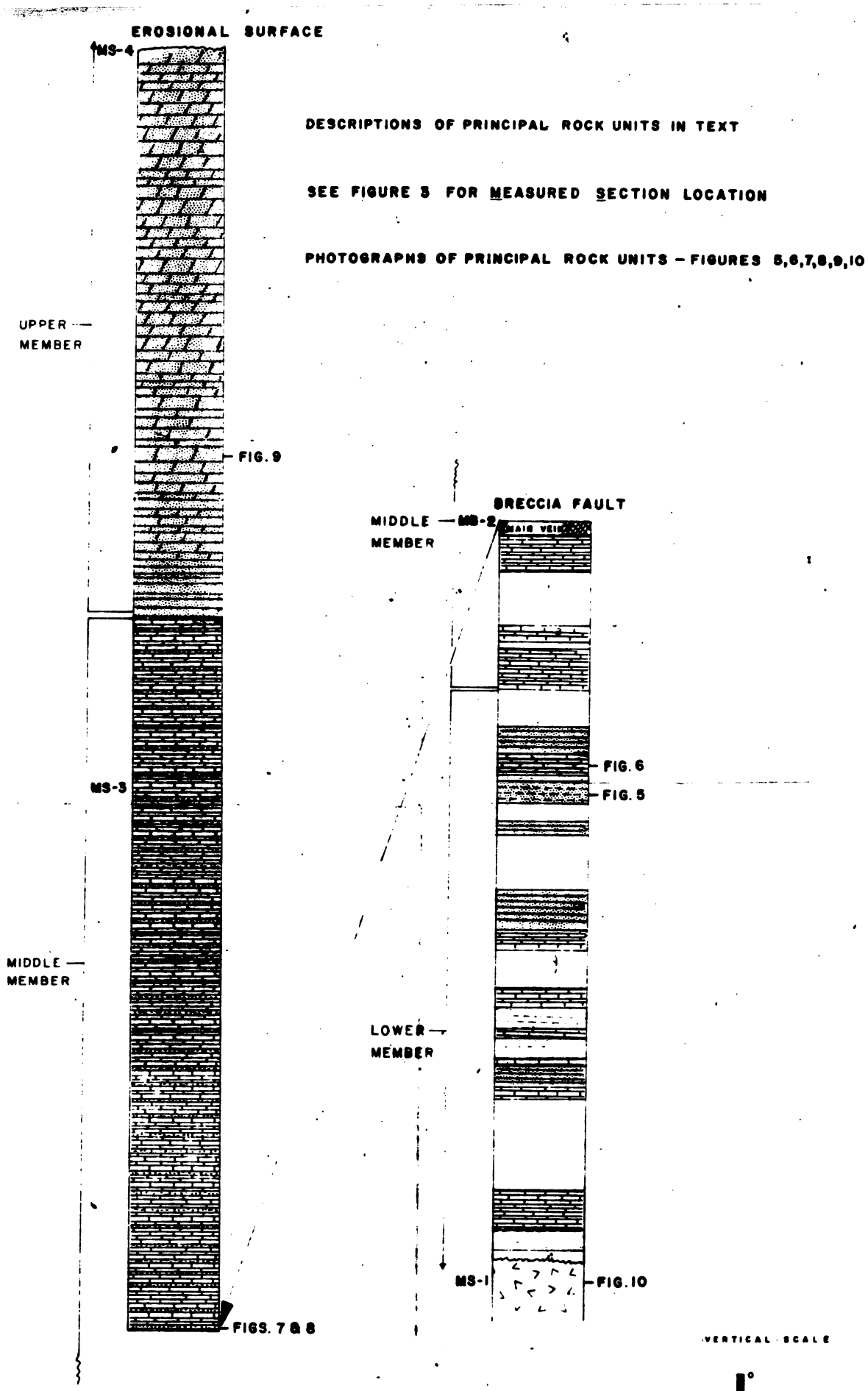


FIGURE 4 STRATIGRAPHIC COLUMN OF THE CAMBRIAN ABRIGO FORMATION, GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA

Figure 25

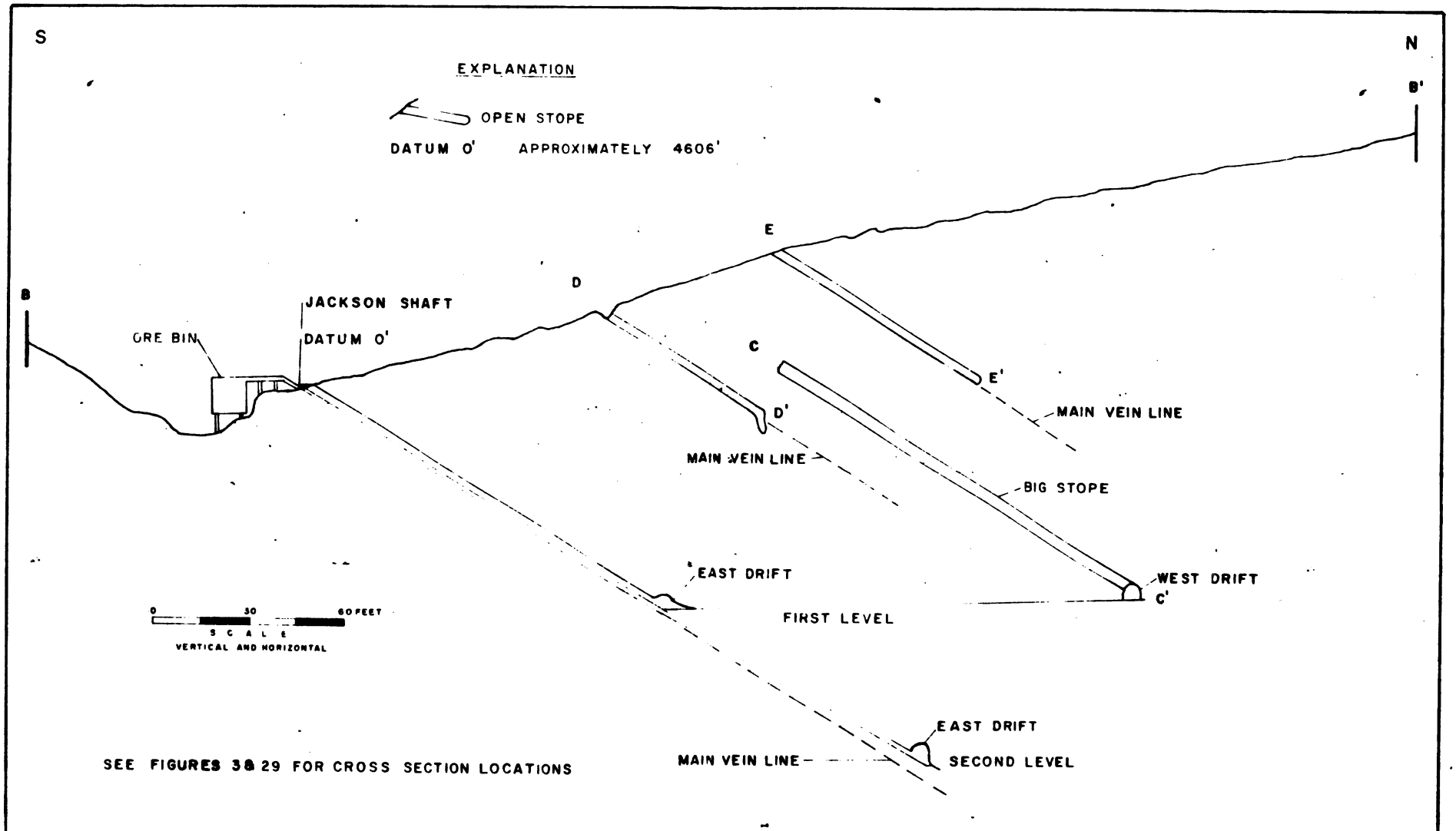
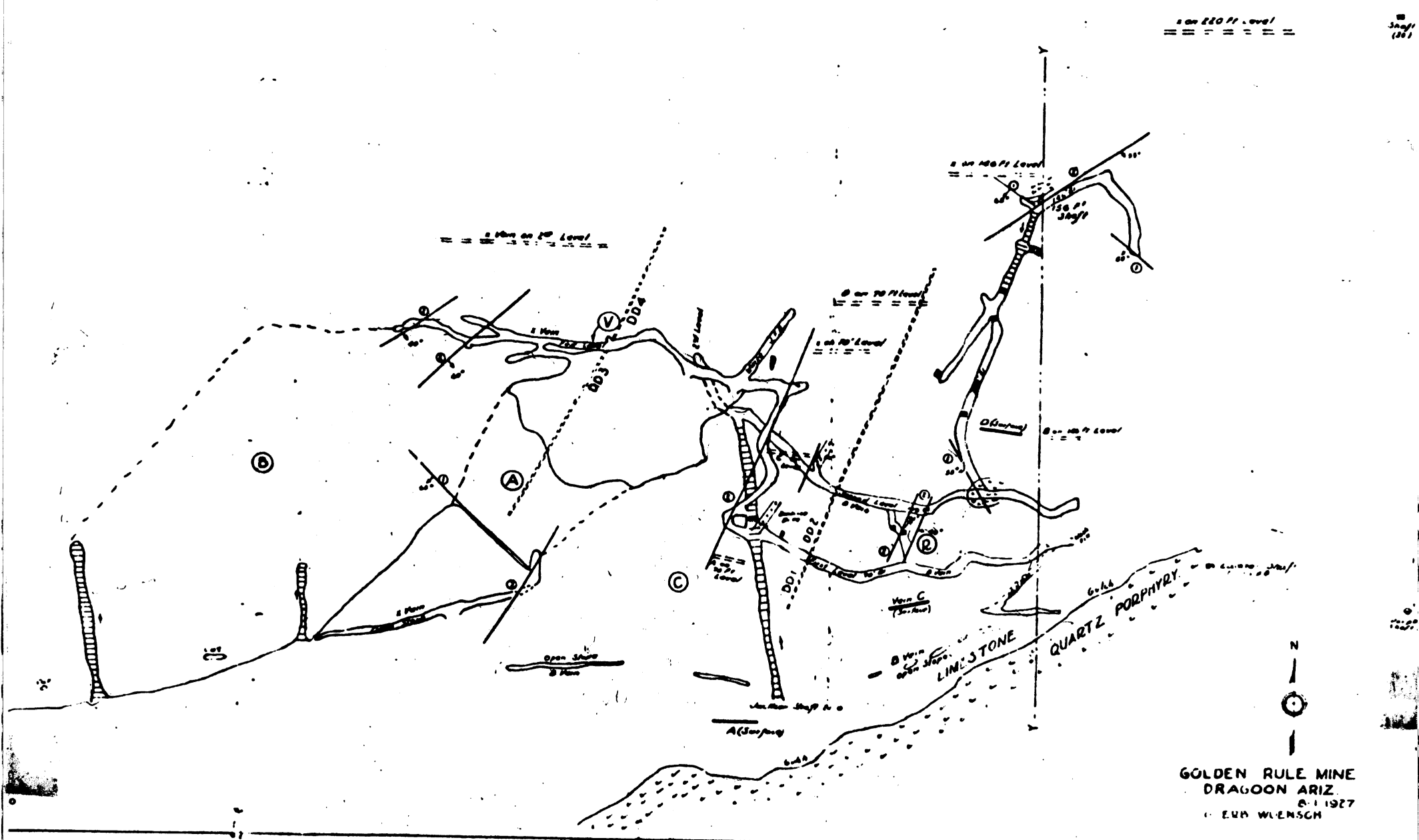
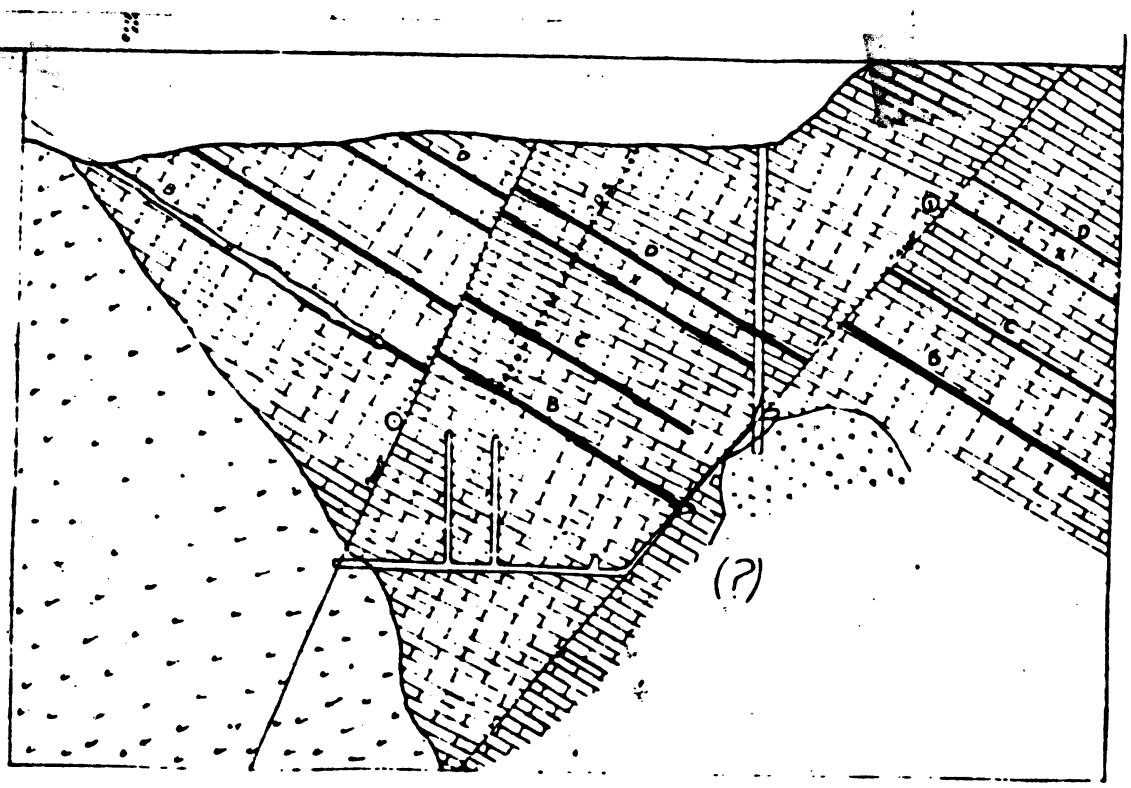


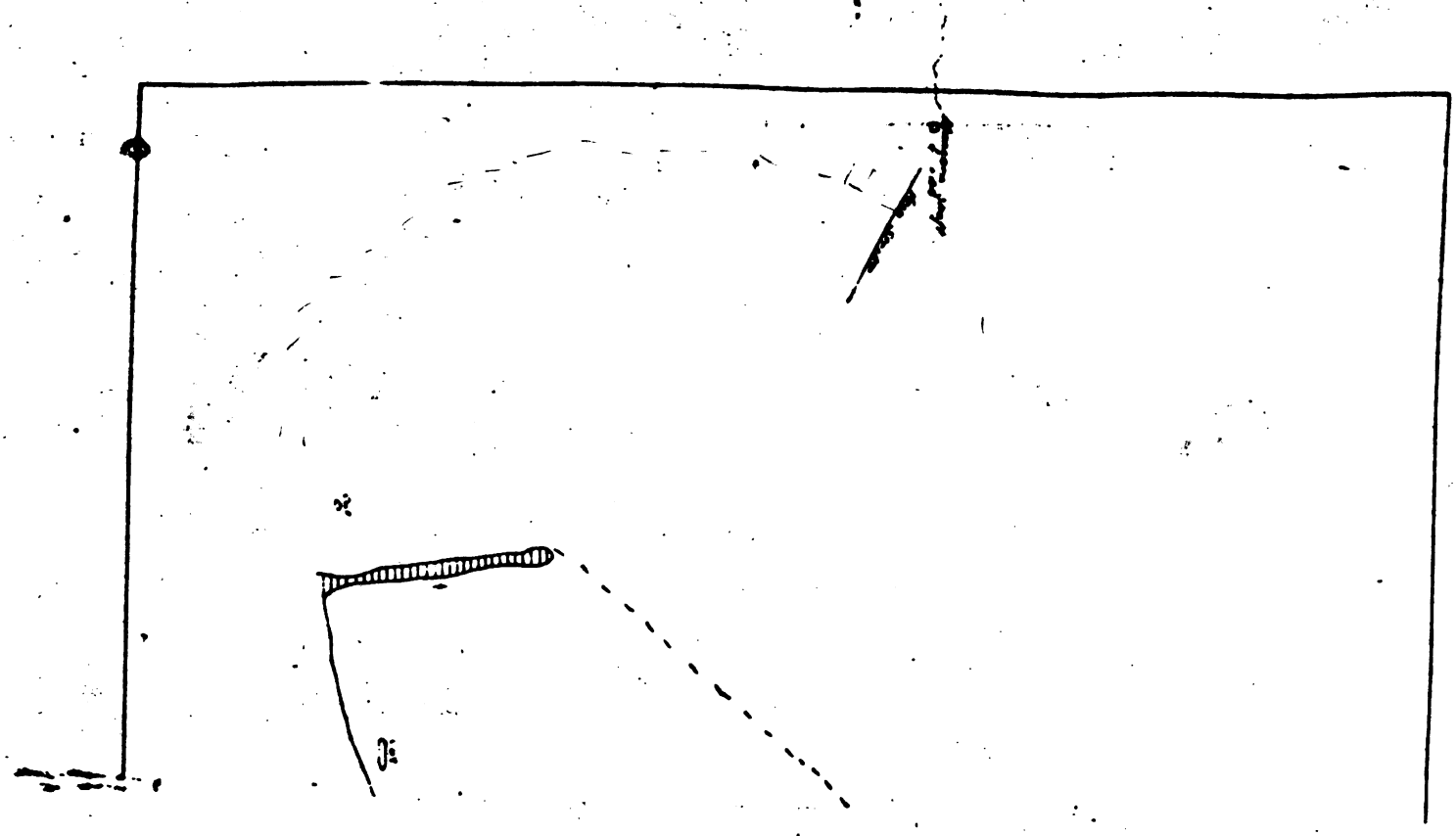
FIGURE 25 PROJECTION ONTO CROSS SECTION B-B' OF THE MAIN VEIN, WEST DRIFT, GOLDEN RULE MINE, FACING WEST

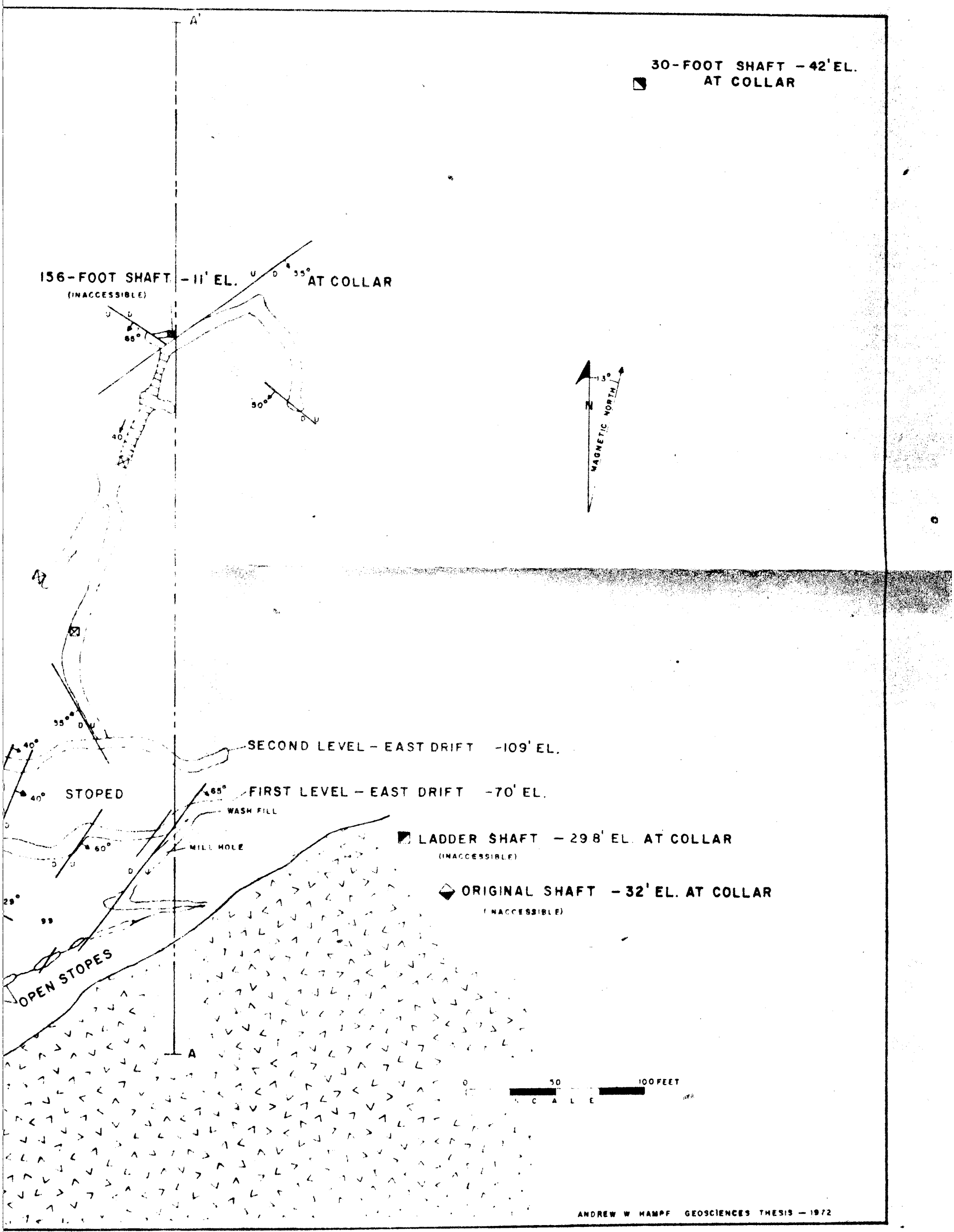
ANDREW W HAMPF GEOSCIENCES THESIS — 1972

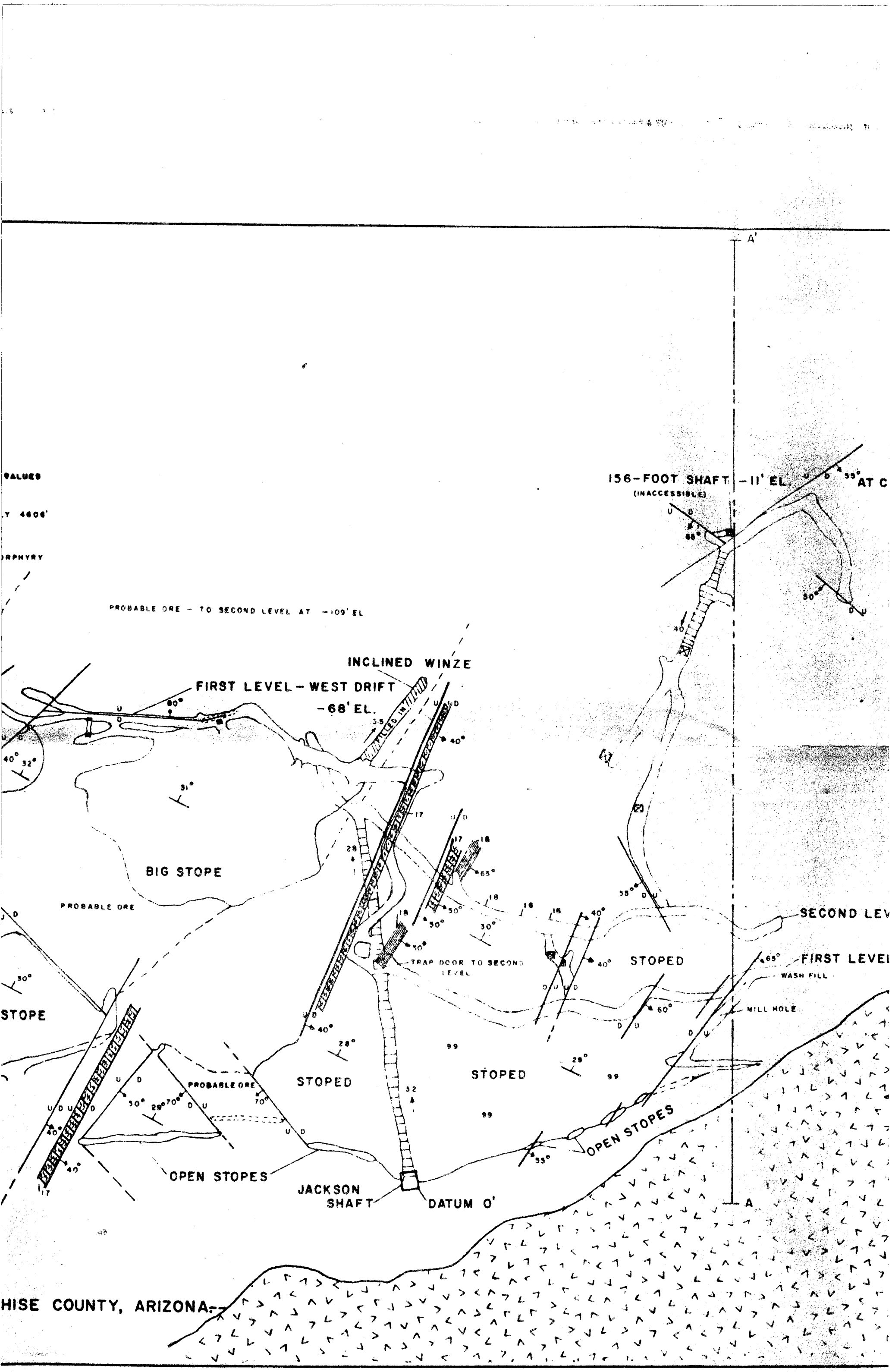

DD4
DD3
DD2
DD1
A
B
C
V
LIMESTONE
QUARTZ PORPHYRY
N
GOLDEN RULE MINE
DRAGOON ARIZ.
8-1 1927
EDW WIENSCH



SECTION Y-Y




A'
30-FOOT SHAFT -42' EL.
AT COLLAR
156-FOOT SHAFT -11' EL.
(INACCESSIBLE)
AT COLLAR
55°
65°
50°
40°
13°
N
MAGNETIC NORTH
55°
SECOND LEVEL - EAST DRIFT -109' EL.
40°
STOPED
65°
FIRST LEVEL - EAST DRIFT -70' EL.
WASH FILL
60°
MILL HOLE
LADDER SHAFT -29.8' EL. AT COLLAR
(INACCESSIBLE)
ORIGINAL SHAFT -32' EL. AT COLLAR
(INACCESSIBLE)
29°
OPEN STOPES
A
0
50
100 FEET
SCALE
ANDREW W HAMPF GEOSCIENCES THESIS — 1972


A'
156-FOOT SHAFT -11' EL.
(INACCESSIBLE)
AT C
PROBABLE ORE - TO SECOND LEVEL AT -109' EL
INCLINED WINZE
FIRST LEVEL - WEST DRIFT
-68' EL.
FILLED IN
BIG STOPE
PROBABLE ORE
STOPE
TRAP DOOR TO SECOND LEVEL
STOPED
SECOND LEV
FIRST LEVEL
WASH FILL
MILL HOLE
STOPED
STOPED
PROBABLE ORE
OPEN STOPES
OPEN STOPES
JACKSON SHAFT
DATUM 0'
A
HISE COUNTY, ARIZONA

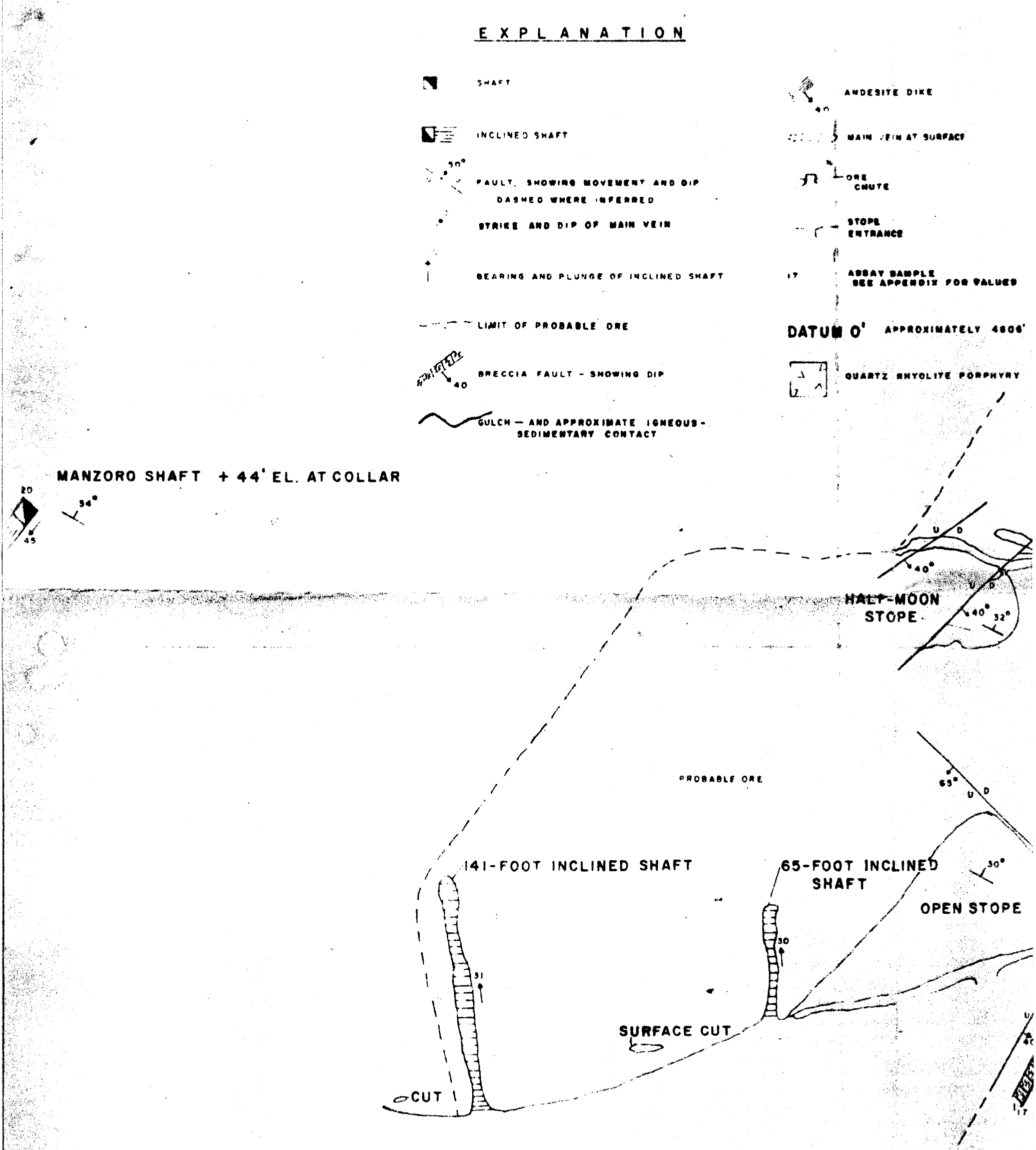


FIGURE 2 COMPOSITE LEVEL PLAN MAP OF THE GOLDEN RULE MINE, COCHISE (
MODIFIED FROM WUENSCH (1927)

EXPLANATION

SURFACE

STOPED

PROBABLE ORE

IMPROBABLE ORE

WINZE

47 ASSAY SAMPLE LOCATION
SEE APPENDIX FOR VALUES

OPEN STOPE

5 MAIN VEIN ON SURFACE

LIMIT OF PROBABLE ORE

PLUNGE AND BEARING OF INCLINED SHAFT

APPROXIMATELY 4606'

INCLINED WINZE - FILLED

APPROXIMATE DEPTH OF OXIDATION

B B' CROSS SECTION LOCATION
SEE FIGURES 3 & 25

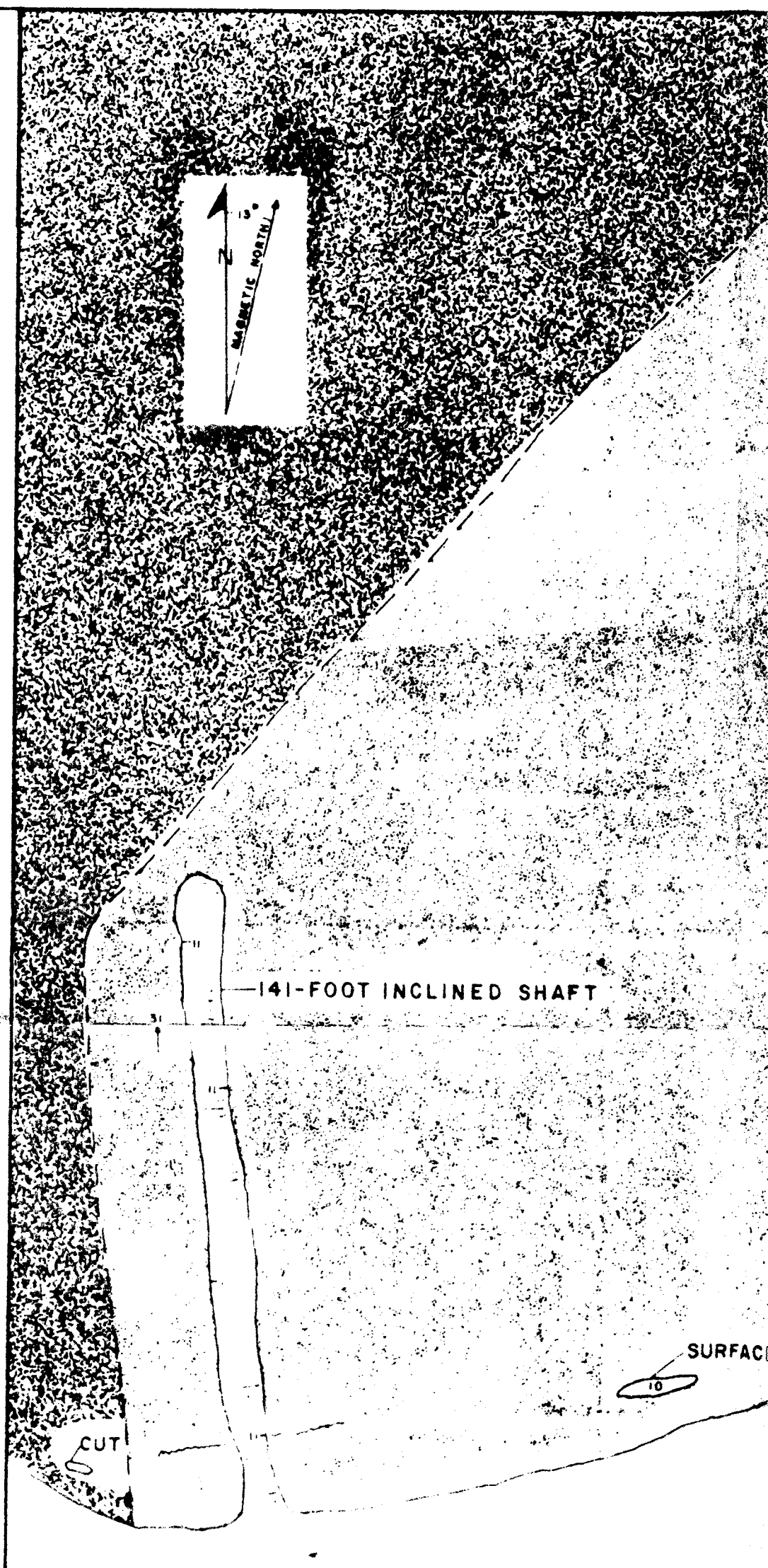


FIGURE 29

ON
VALUES

ACE

E ORE

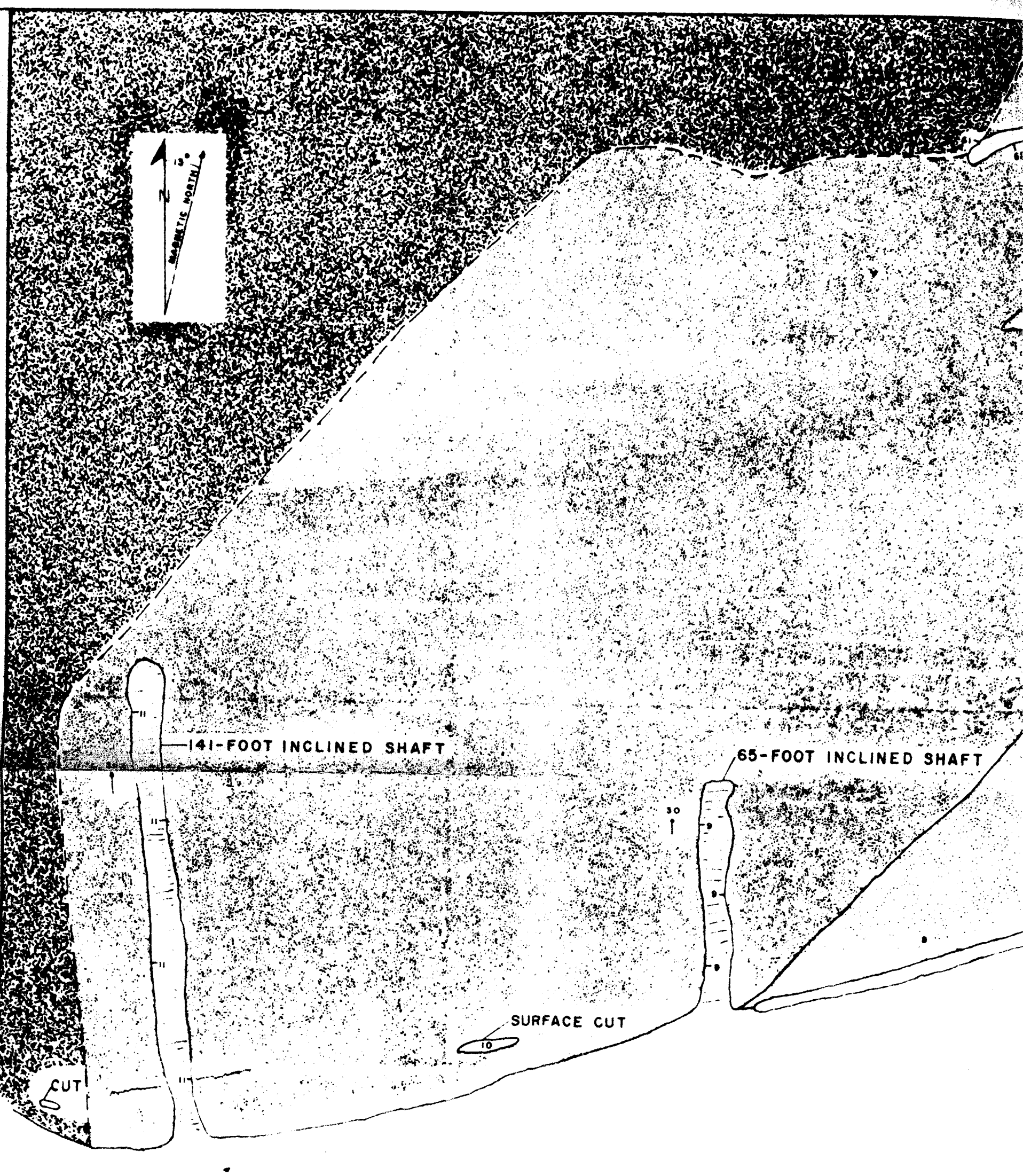
LINED

)6'

LED

H OF

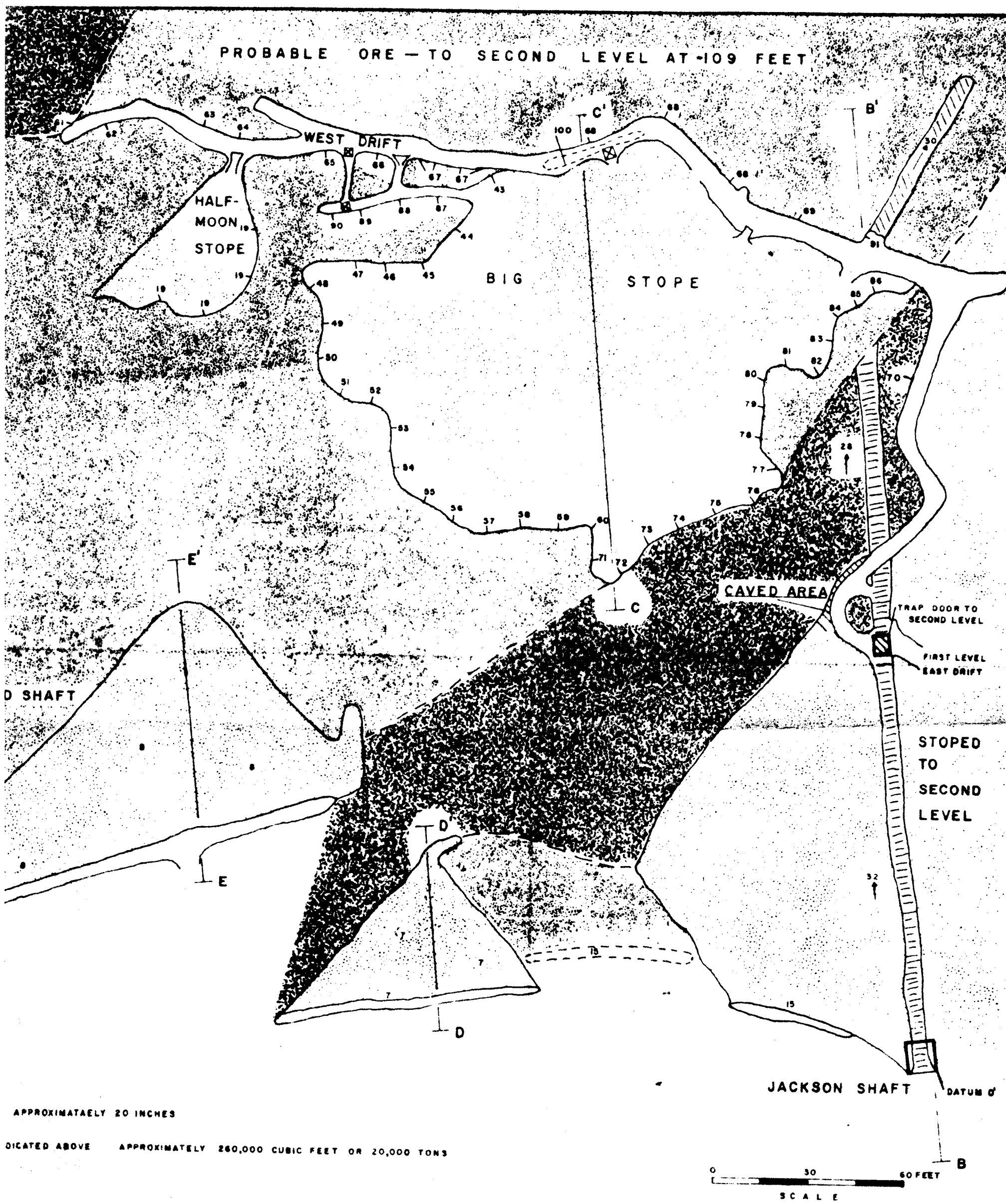
ATION
25



AVERAGE WIDTH OF MAIN VEIN FROM SURFACE TO SECOND LEVEL APPROXIMATAELY

PROBABLE ORE IN PLACE FROM SURFACE TO SECOND LEVEL, AS INDICATED ABOVE

FIGURE 29 ASSAY SAMPLE LOCATION MAP, MA

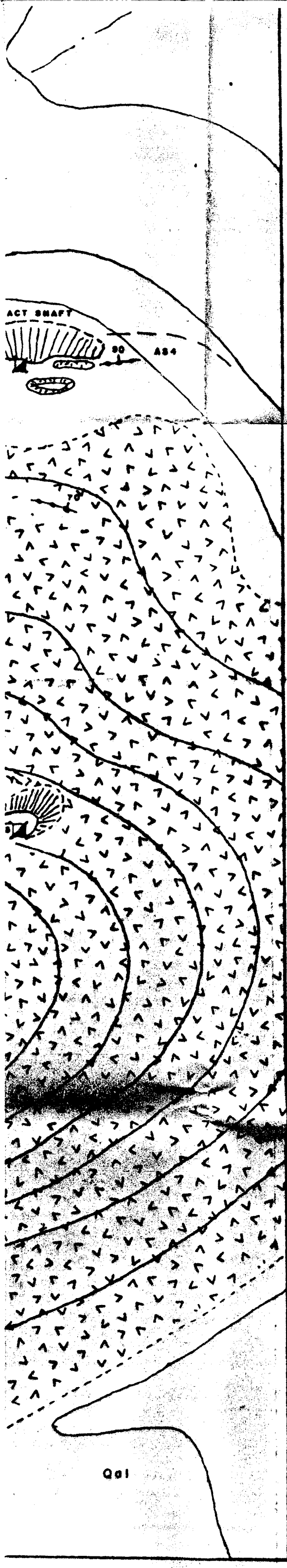


APPROXIMATAELY 20 INCHES

DICATED ABOVE APPROXIMATELY 260,000 CUBIC FEET OR 20,000 TONS

MAP, MAIN VEIN, WEST DRIFT, GOLDEN RULE MINE

ANDREW W. HAMPF GEOSCIENCES THESIS — 1972



POWER LINE

FAULT, SHOWING DIP AND RELATIVE MOVEMENT, DASHED WHERE INFERRED

THRUST FAULT, SHOWING DIP, BARBS ON UPPER PLATE, DASHED WHERE INFERRED

SYNCLINE, SHOWING DIRECTION OF PLUNGE

BUILDINGS

US MINERAL MARKER

ASSAY SAMPLE LOCATION

Qal — QUATERNARY ALLUVIUM

Mqrp — MESOZOIC QUARTZ RHYOLITE PORPHYRY

Me — MISSISSIPPIAN ESCABROSA LIMESTONE

Ꞓau — CAMBRIAN-UPPER MEMBER-ABRIGO FORMATION

Ꞓam — CAMBRIAN-MIDDLE MEMBER-ABRIGO FORMATION

Ꞓal — CAMBRIAN-LOWER MEMBER-ABRIGO FORMATION

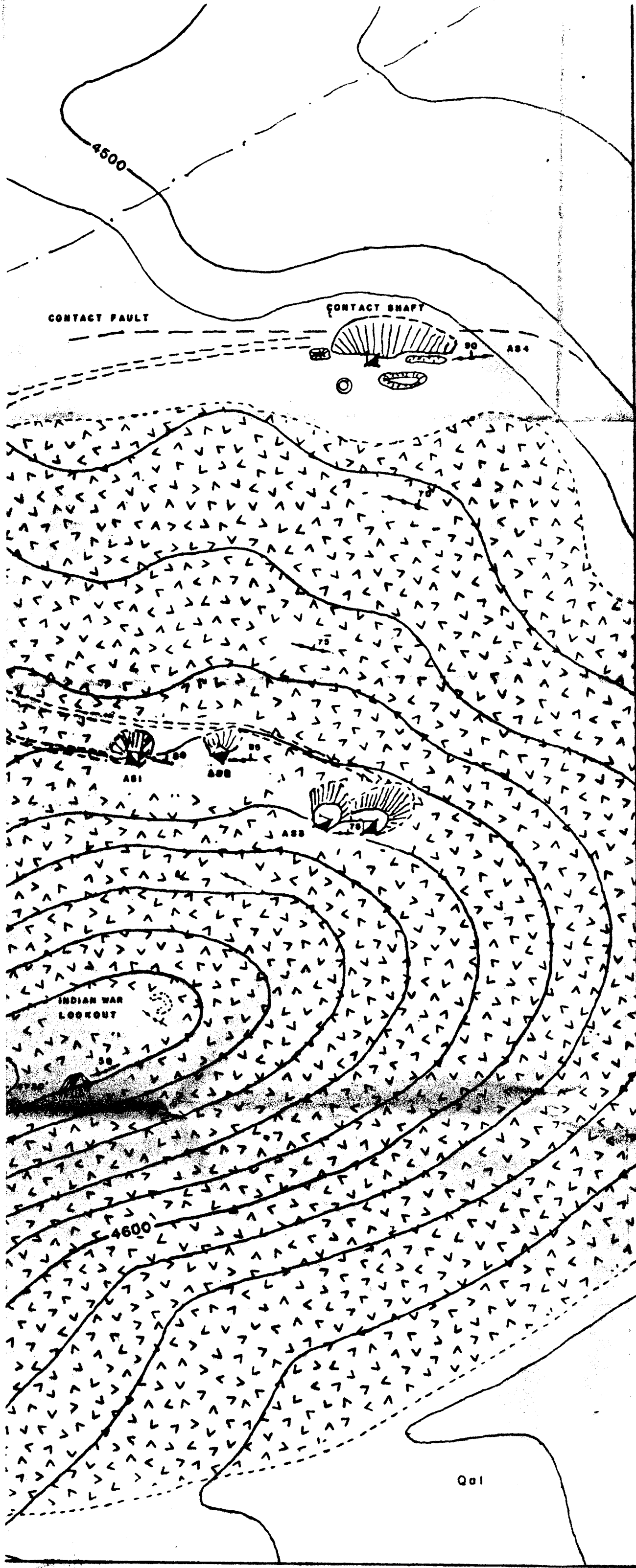
0 100 200 FEET

SCALE: 1" = 100'

CONTOUR INTERVAL = 20'

FIGURE 3 GEOLOGIC MAP,
GOLDEN RULE MINE AREA,
COCHISE COUNTY, ARIZONA

ANDREW HAMPF GEOSCIENCES THESIS — 1972



POWER LINE

FAULT, SHOWING DIP
DASHED WHERE INFE

THRUST FAULT, SHOW
DASHED WHERE INFE

SYNCLINE, SHOWING

BUILDINGS

US MINERAL MARKE

ASSAY SAMPLE LOCA

Qal QUATERNARY ALLU

Mqrp MESOZOIC QUARTZ

Me MISSISSIPPIAN ESCAB

Ꞓau CAMBRIAN-UPPER M

Ꞓam CAMBRIAN-MIDDLE M

Ꞓal CAMBRIAN-LOWER M

0 100

SCALE: 1" =

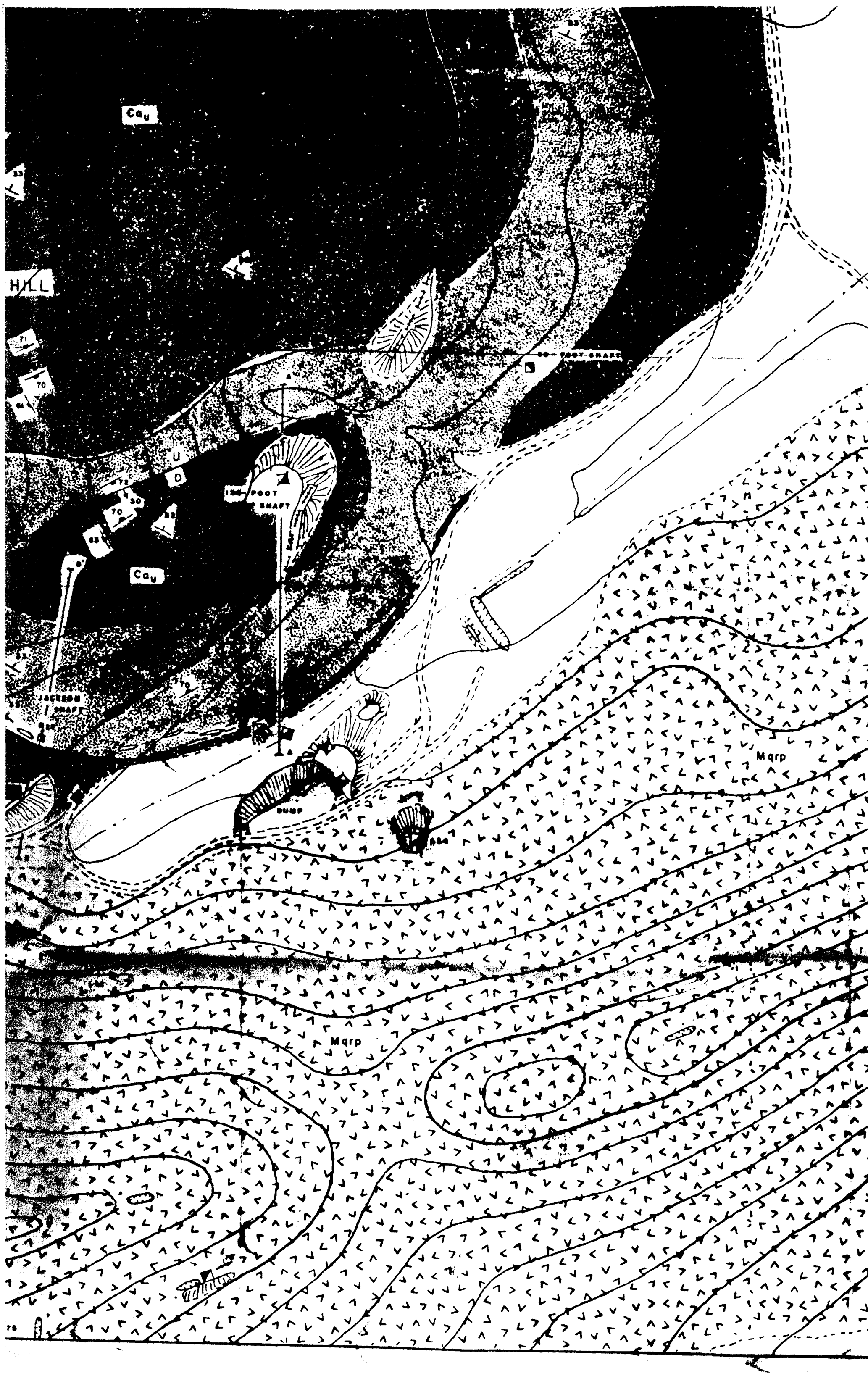
CONTOUR INT

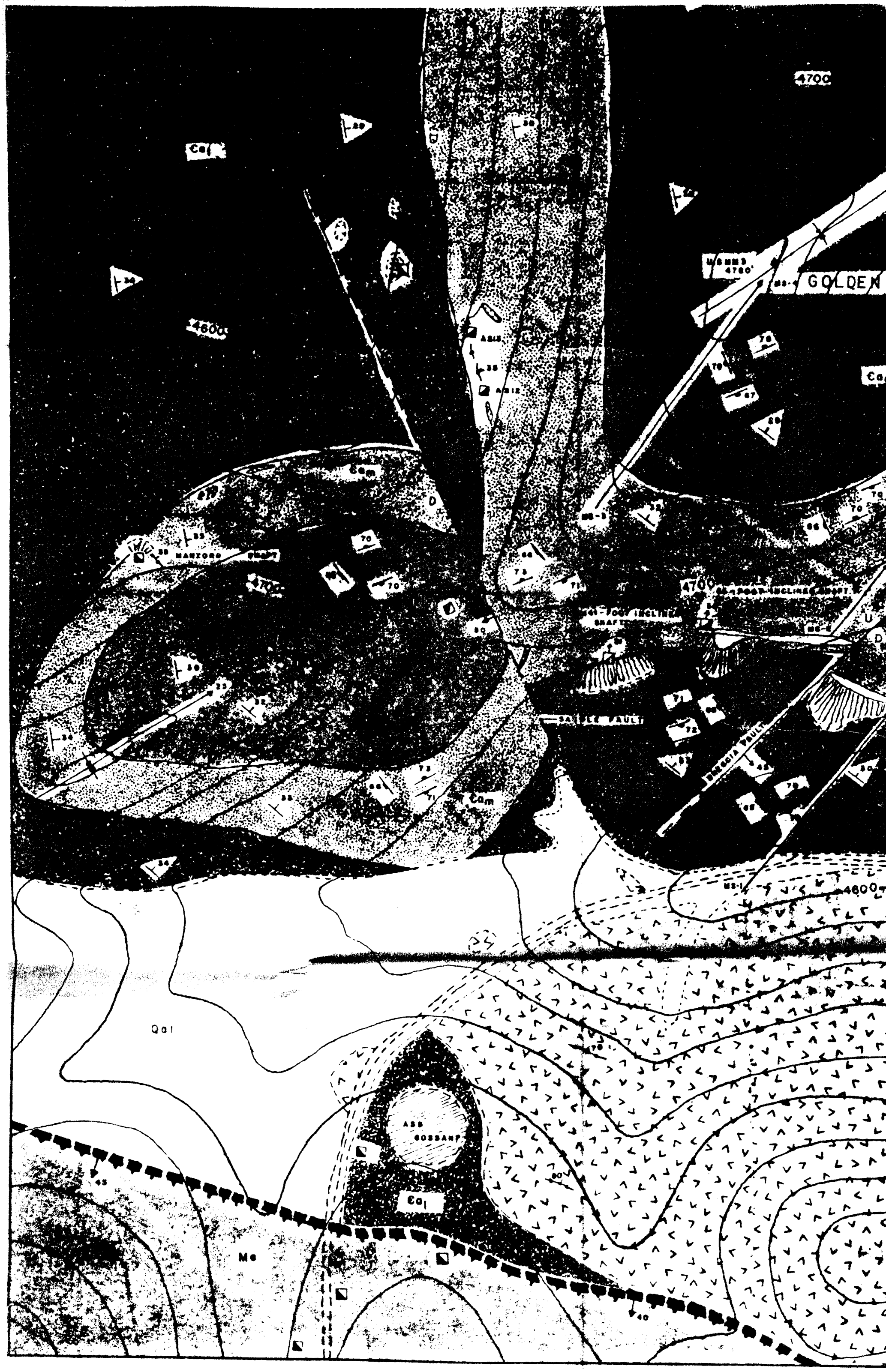
FIGURE 3 GEOLOGIC

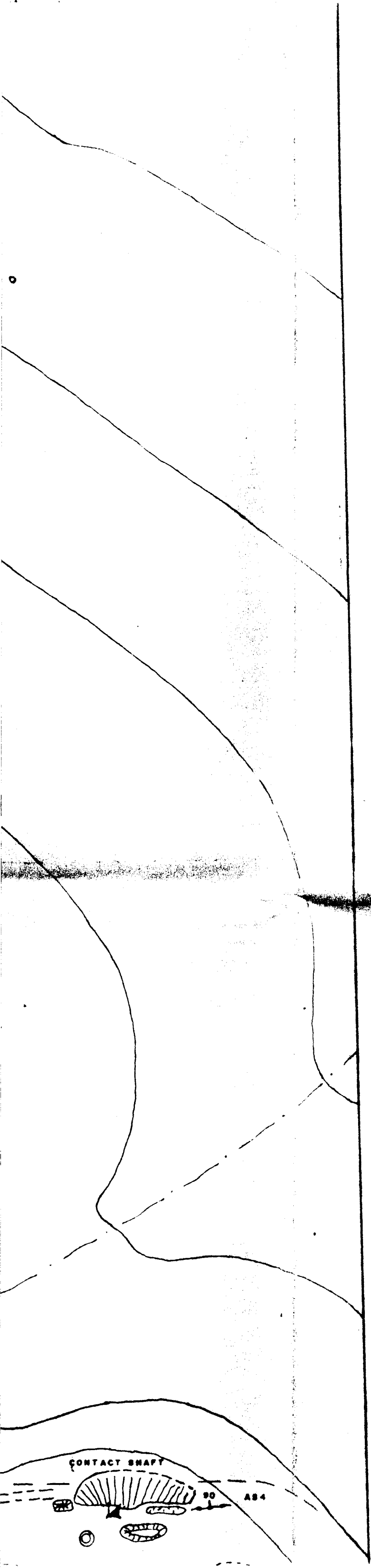
GOLDEN R

COCHISE

ANDRE


Єau
HILL
U
D
100-FOOT SHAFT
Єau
JACKSON SHAFT
DUMP
Mqrp
Mqrp


4700
4800
GOLDEN
MANZORO
4700
BRECCIA PAULS
4600
Qal
Mo
Ꞓa
45
40



EXPLANATION

A — A' CROSS SECTION LOCATION

ORE PILE

WATER BASIN

OPEN STOPE

INTERMITTENT STREAM

MS-1 MEASURED SECTION LOCATION

67 STRIKE AND DIP OF JOINTS

ABANDONED RAILROAD

DUMP

ROAD

SHAFT

34 WINZE, WITH INCLINATION

SHAFT, INACCESSIBLE

PROSPECT, TRENCH, OPEN CUT

ADIT

34 STRIKE AND DIP OF BEDDING

FLOAT CONTACT, INFERRED

INFERRED CONTACT

34 QUARTZ VEIN, IN PLACE, SHOWING DIP

R.E.A. POWER LINE

POWER LINE

U/D 45 FAULT, SHOWING DIP AND RELATIVE MOVEMENT, DASHED WHERE INFERRED

45 THRUST FAULT, SHOWING DIP, BARBS ON UPPER PLAT DASHED WHERE INFERRED

25 SYNCLINE, SHOWING DIRECTION OF PLUNGE

BUILDINGS

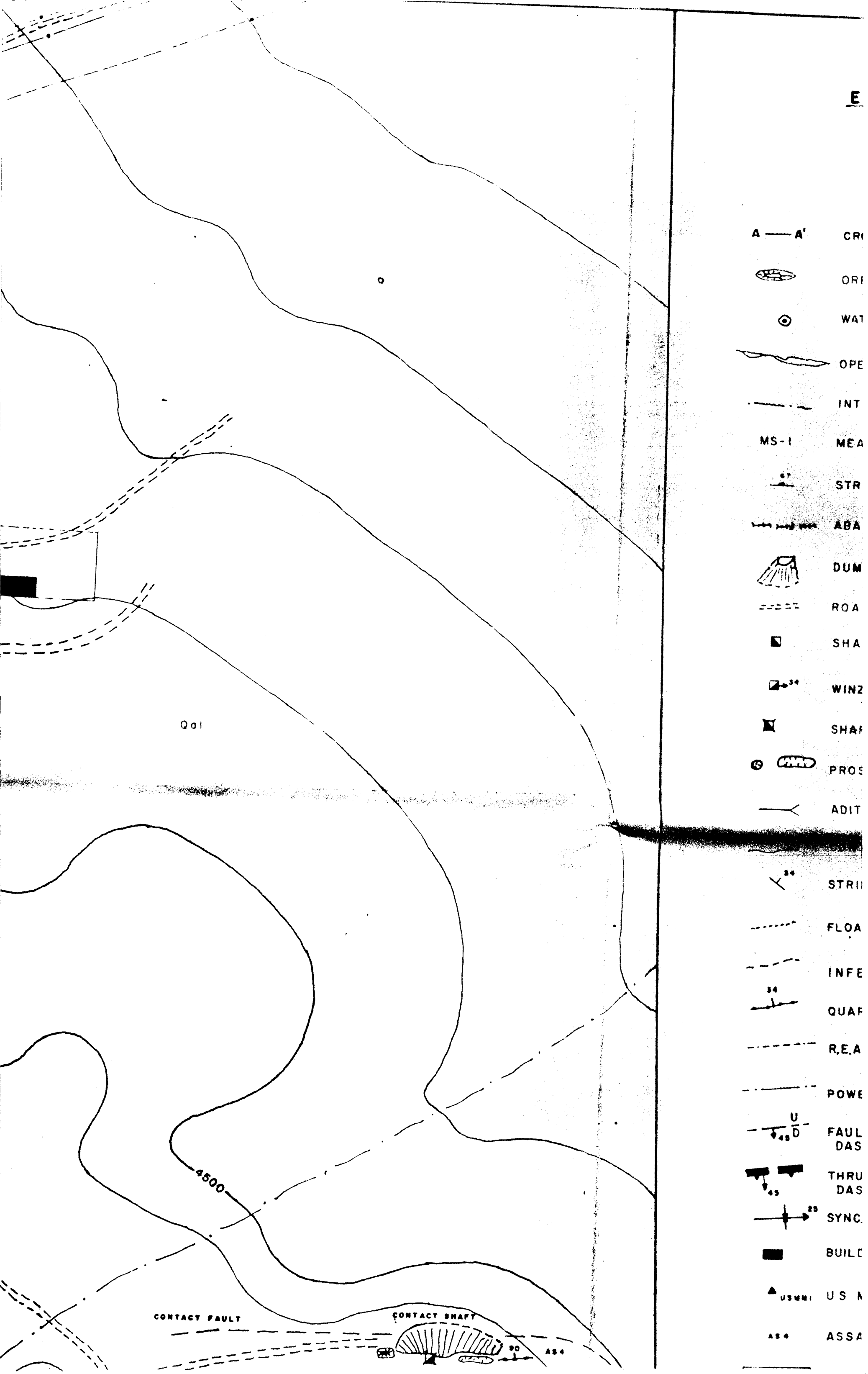
USMMI U S MINERAL MARKER

AS 4 ASSAY SAMPLE LOCATION

Qal QUATERNARY ALLUVIUM

MESOZOIC QUARTZ RHYOLITE PORPHYRY

MAGNETIC NORTH 13°


E
A — A'
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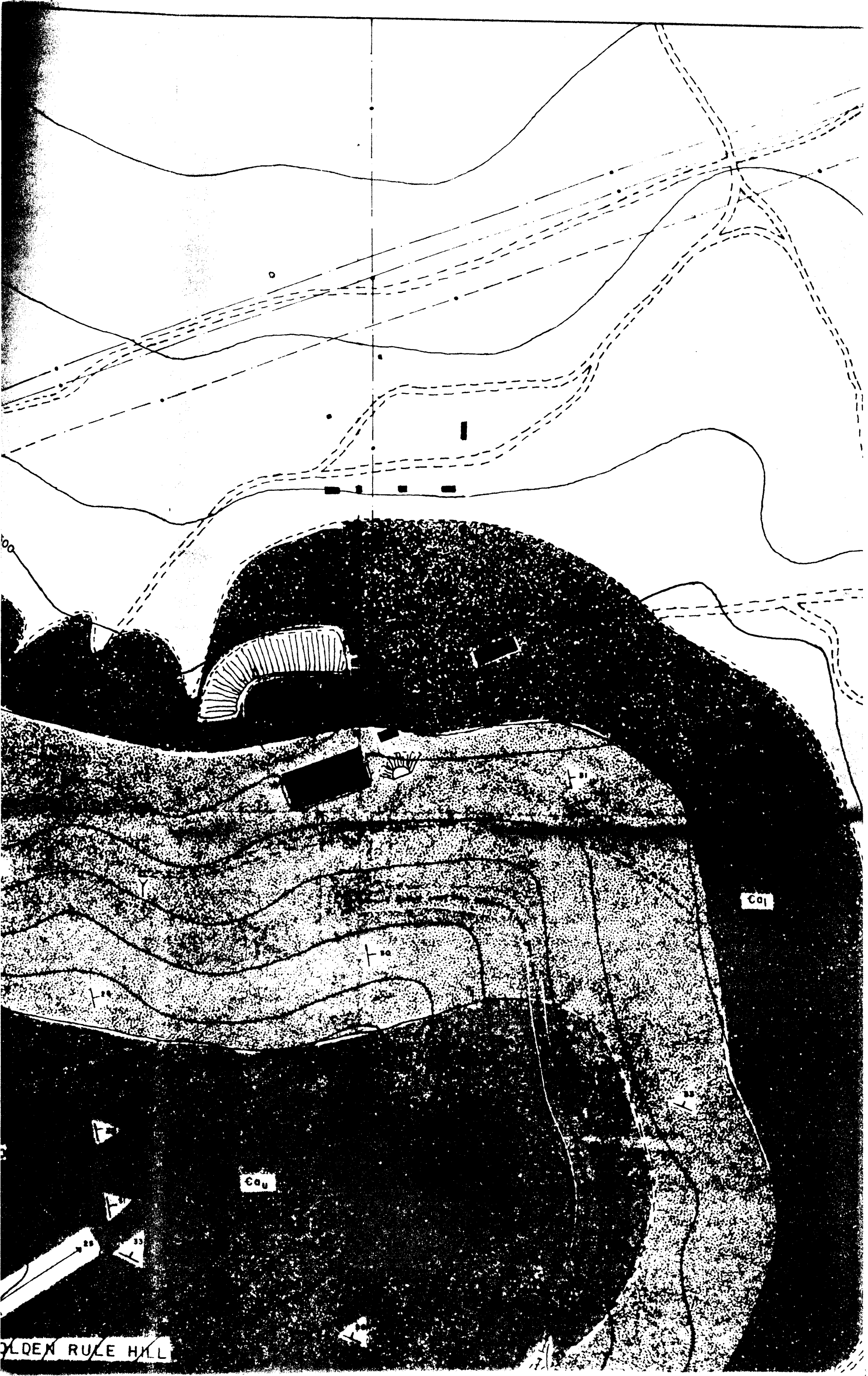
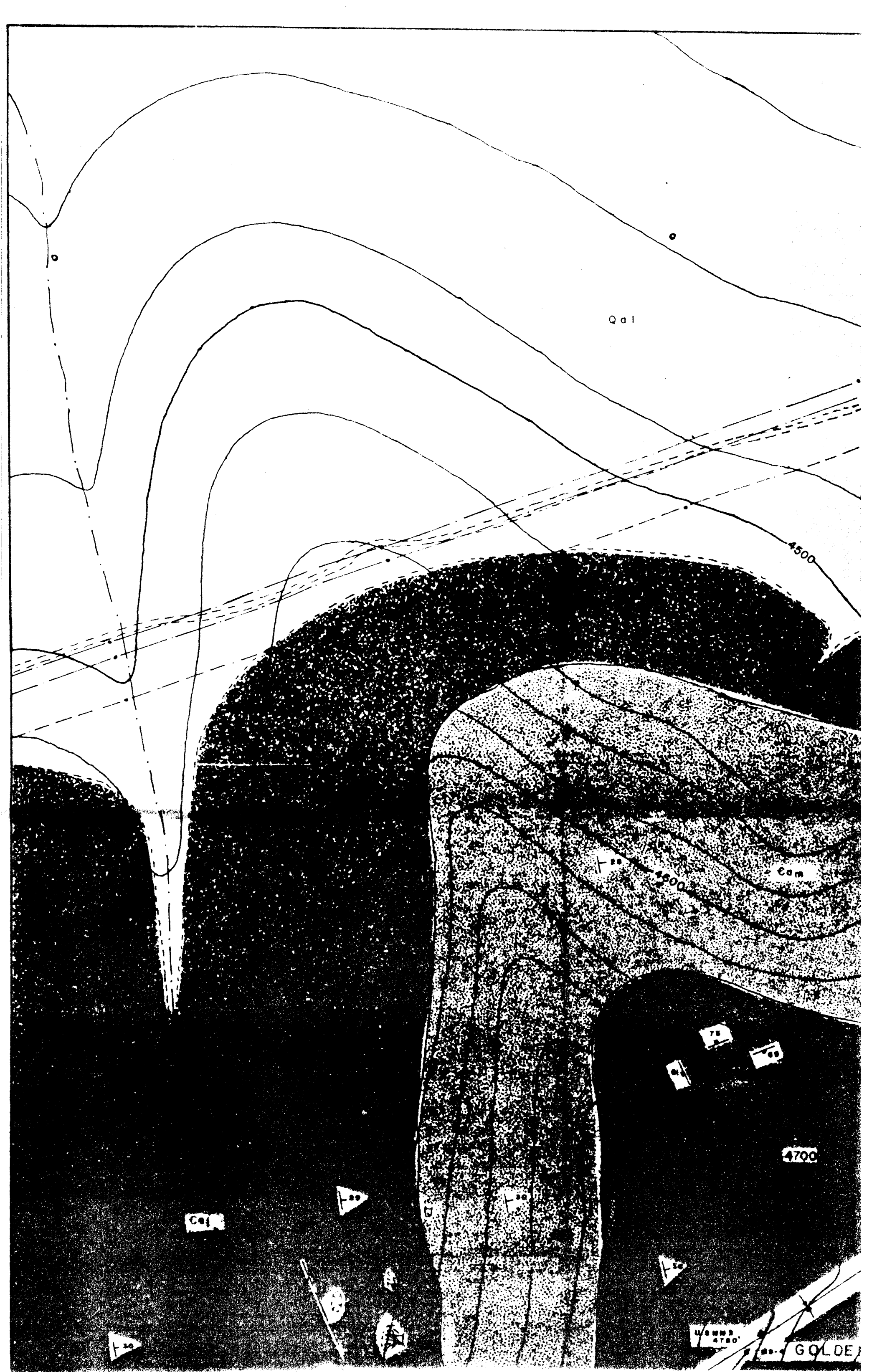
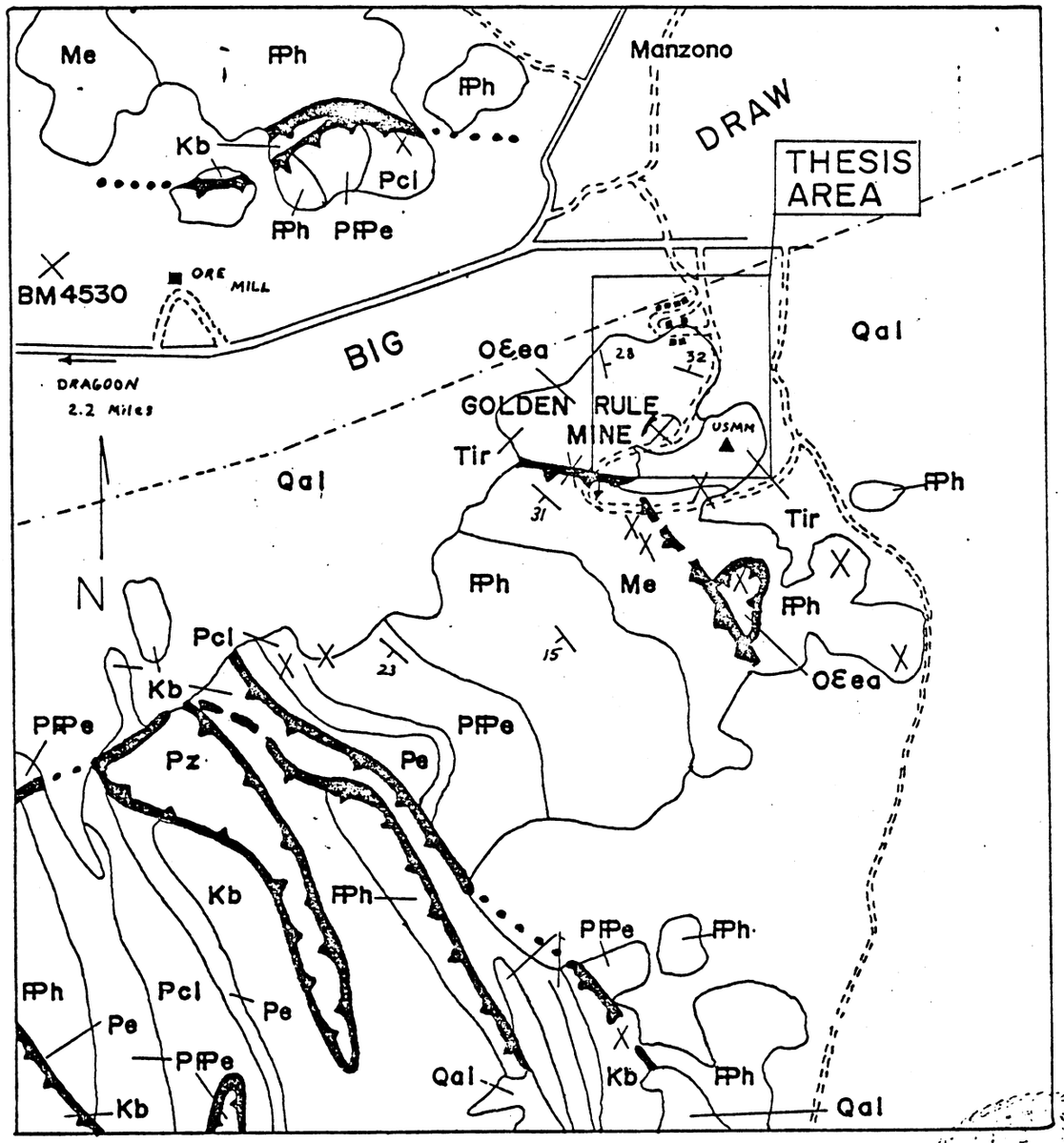
DUM
ROA
SHA
WINZ
SHAF
PROS
ADIT
STRI
FLOA
INFE
QUAF
R.E.A
POWE
U
D
FAUL
DAS
THRU
DAS
SYNC
BUILD
USMM1
U S M
AS 4
ASSA
Qal
4500
CONTACT FAULT
CONTACT SHAFT
90
AS 4


Ca1
Cau
LDEN RULE HILL


Qal
4500
4600
Ꞓm
4700
GOLDE



LEGEND

Qal	Aulluvium
Tir	Tertiary Intrusive Rocks
Kb	Bisbee Formation
Pz	Paleozoic Rocks, Undifferentiated
Pe	Epitaph Dolomite
Pcl	Colina Limestone
PℙPe	Earp Formation
ℙh	Horquilla Limestone
Me	Escabrosa Limestone
OЄea	El Paso and Abrigo Formation

SYMBOLS

Thrust Fault, showing dip
Dashed where approximately located
Dotted where inferred

Contact
Railroad
Power Line
Strike & Dip of beds
Road
Jeep Trail

Buildings
Mines and Prospects
Bench Mark BM 4530
U.S. Mineral Marker USMM 1

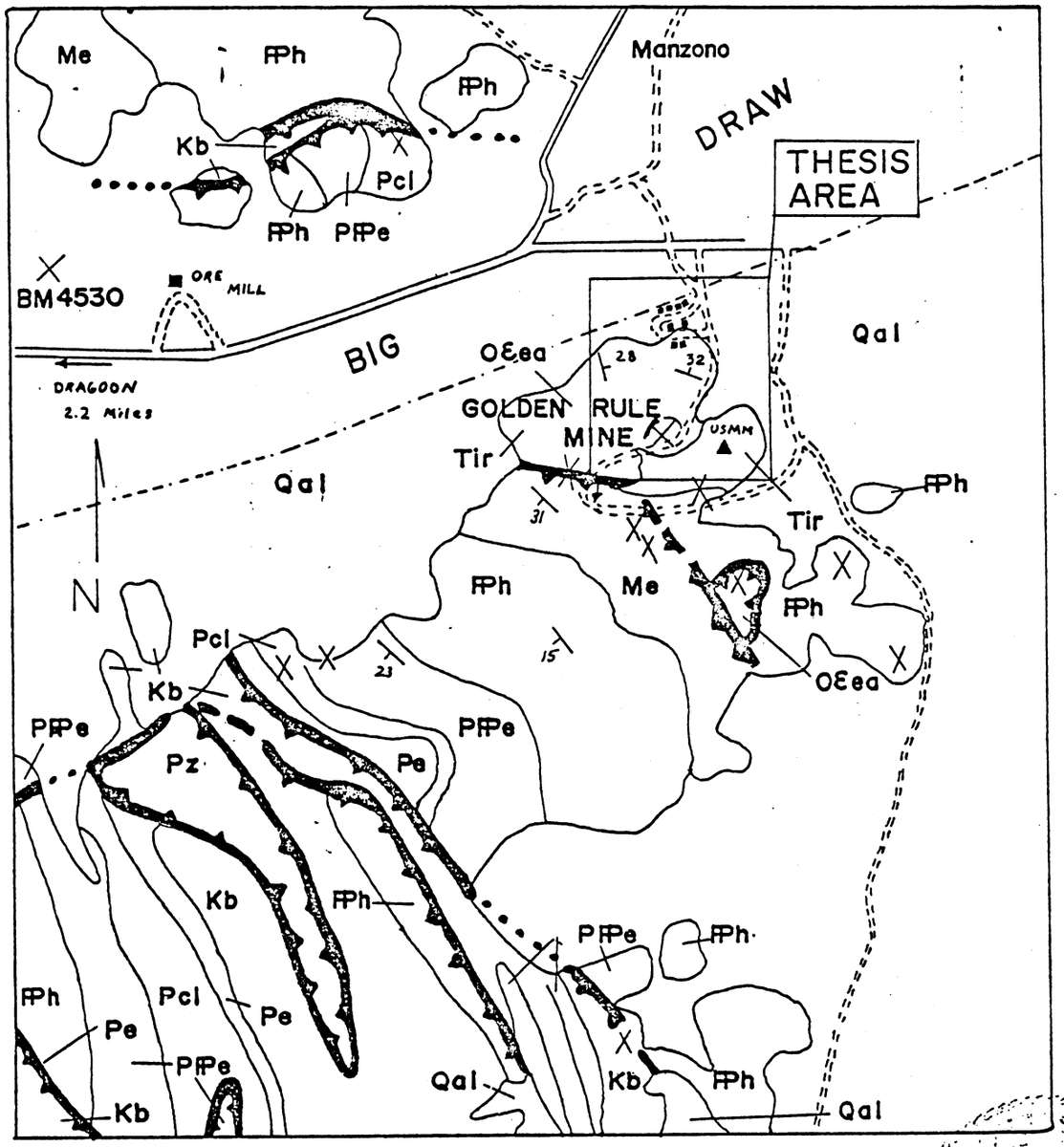
Arizona

GOLDEN RULE MINE
ARIZONA, U.S.A.

GENERAL GEOLOGY MAP

Adapted from: HAMPF and COOPER

Traced by—AFR
Scale— 1" = 1/2 mile
Date — May 15/73



LEGEND

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Dashed where approximately located
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Contact
Railroad
Power Line
Strike & Dip of beds
Road
Jeep Trail

Buildings
Mines and Prospects
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U.S. Mineral Marker USMM 1

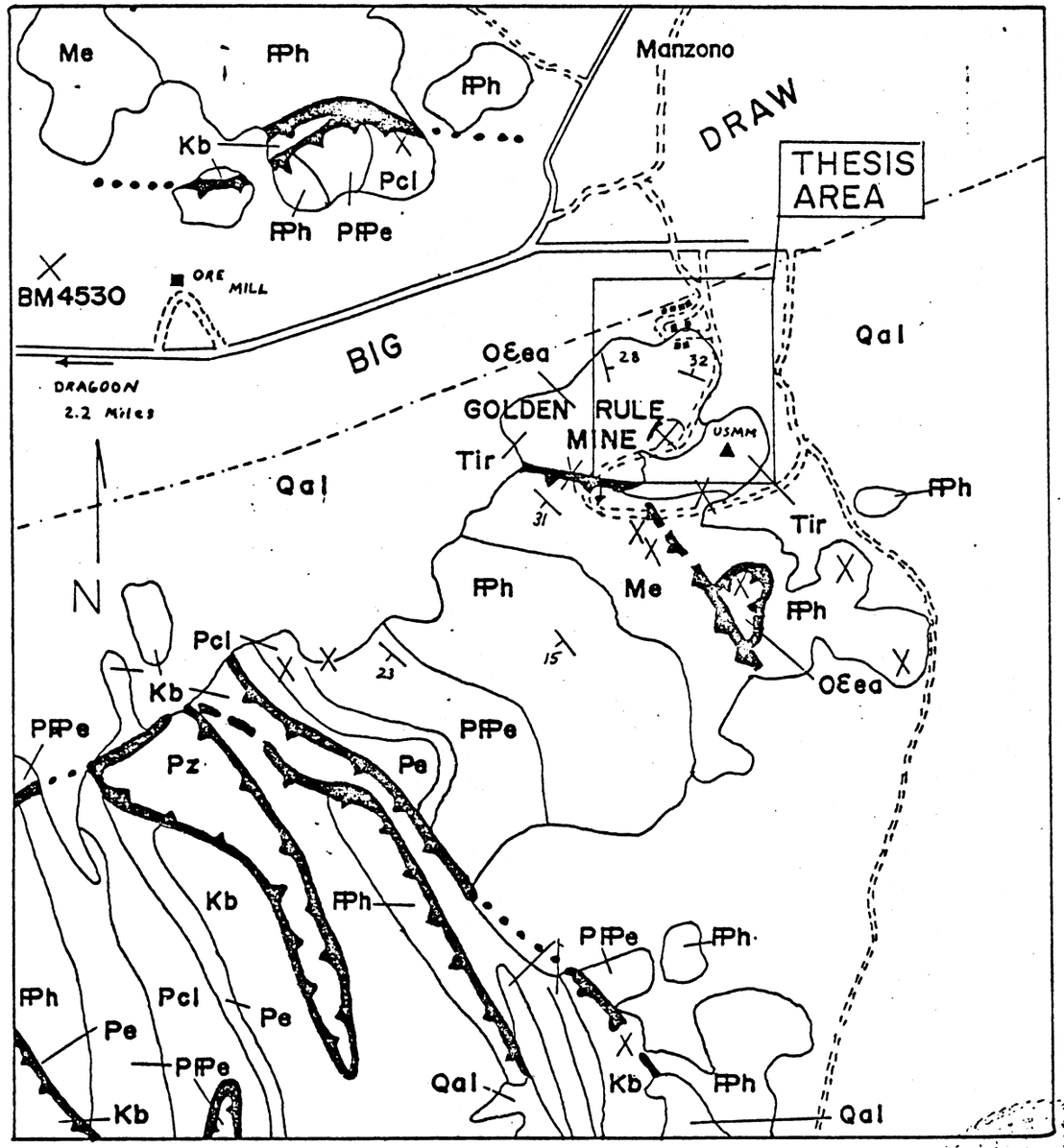
Arizona

GOLDEN RULE MINE
ARIZONA, U.S.A.

GENERAL GEOLOGY MAP

Adapted from: HAMPF and COOPER

Traced by—AFR
Scale— 1" = 1/2 mile
Date — May 15/73



LEGEND

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Kb	Bisbee Formation
Pz	Paleozoic Rocks, Undifferentiated
Pe	Epitaph Dolomite
Pcl	Colina Limestone
PƒPe	Earp Formation
ƒPh	Horquilla Limestone
Me	Escabrosa Limestone
OƐea	El Paso and Abrigo Formation

SYMBOLS

Thrust Fault, showing dip
Dashed where approximately located
Dotted where inferred

Contact

Railroad

Power Line

Strike & Dip of beds 23

Road

Jeep Trail

Buildings

Mines and Prospects

Bench Mark BM 4530

U.S. Mineral Marker USMM 1

Arizona

GOLDEN RULE MINE
ARIZONA, U.S.A.

GENERAL GEOLOGY MAP

Adapted from: HAMPF and COOPER

Traced by—AFR
Scale— 1" = 1/2 mile
Date — May 15/73

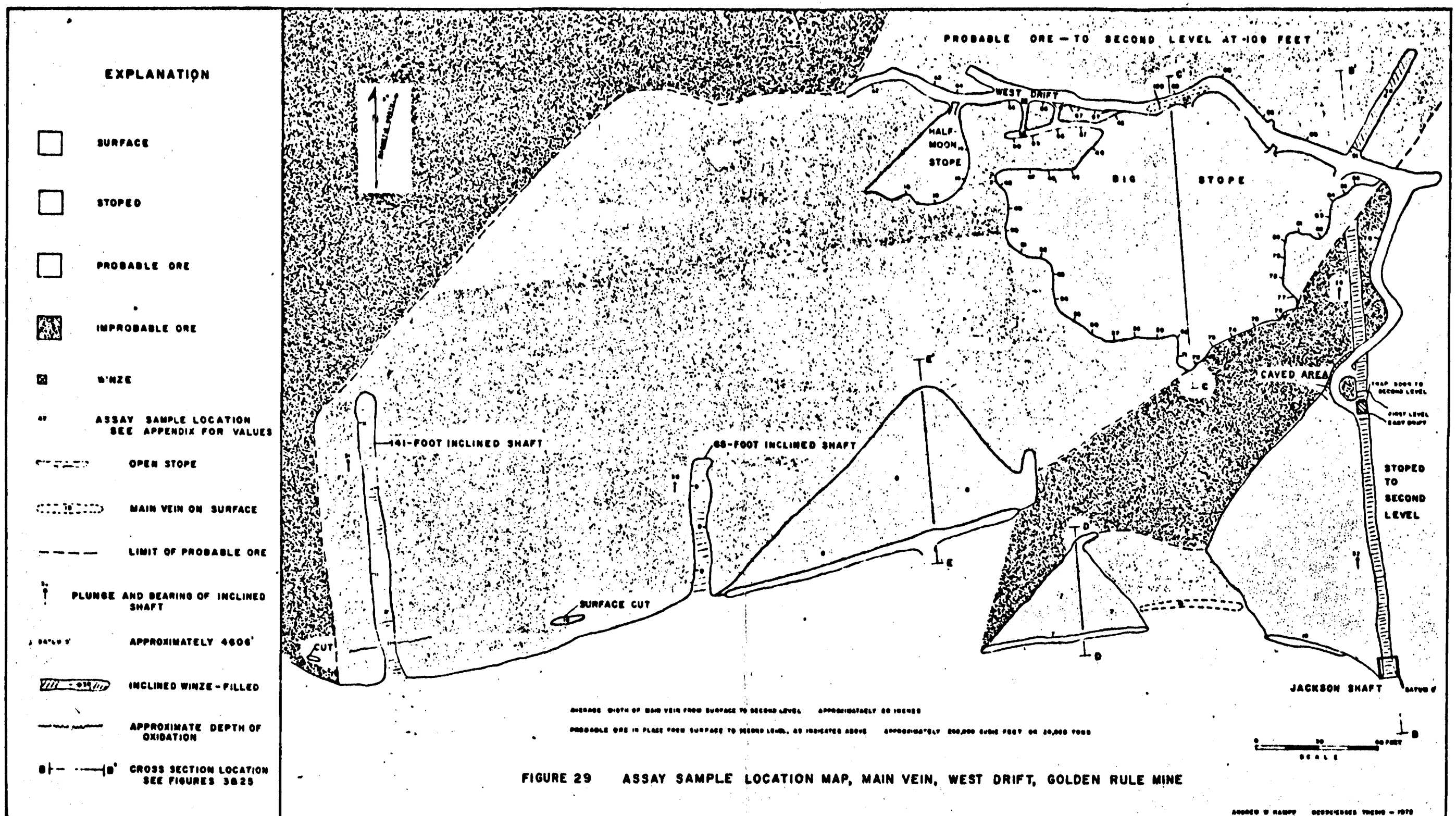

FIGURE 29 ASSAY SAMPLE LOCATION MAP, MAIN VEIN, WEST DRIFT, GOLDEN RULE MINE

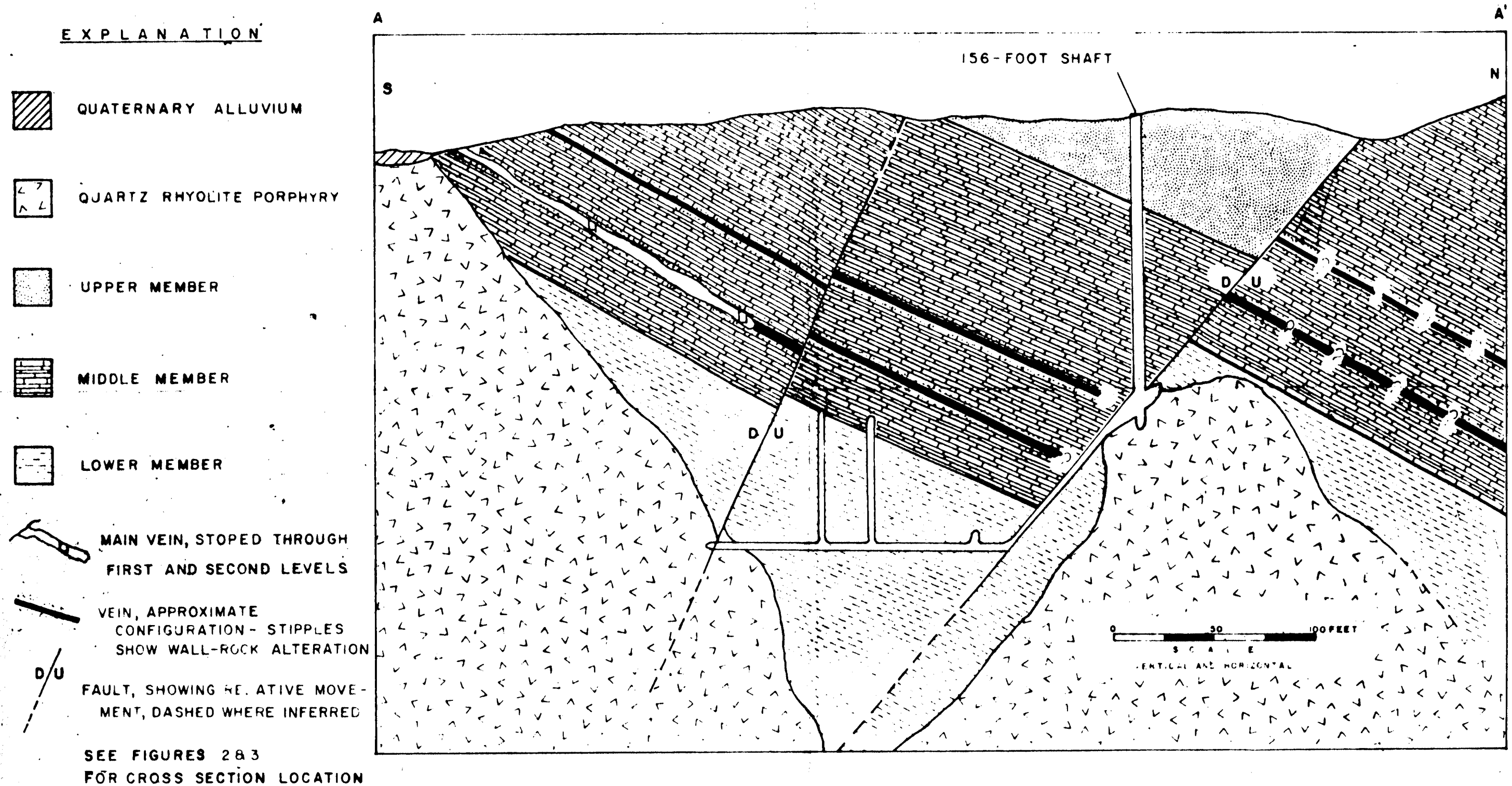

FIGURE 18 CROSS SECTION A-A' GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA, FACING WEST.--MODIFIED FROM WUENSCH (1927)

ANDREW W HAMPF GEOSCIENCES THESIS - 1972

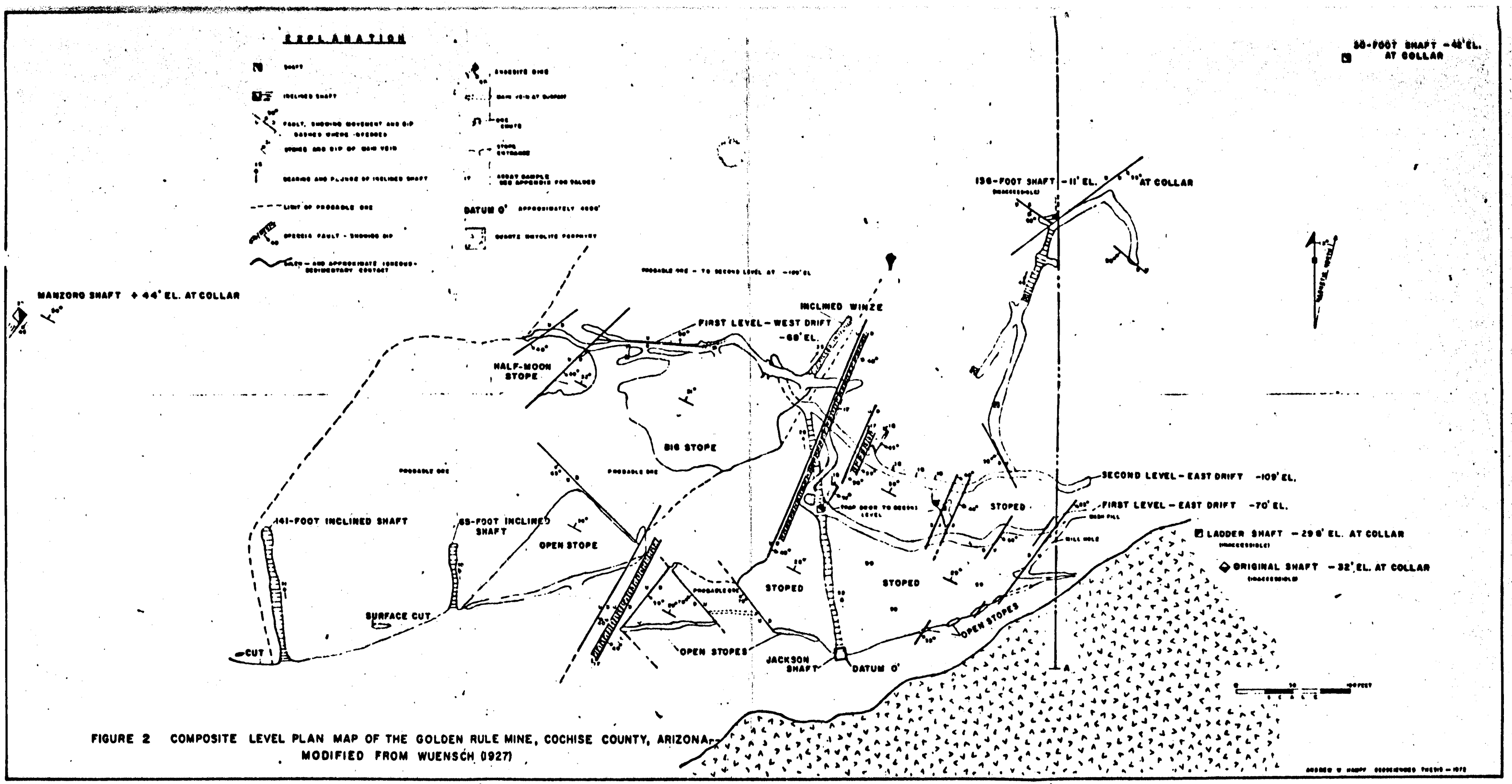

FIGURE 2 COMPOSITE LEVEL PLAN MAP OF THE GOLDEN RULE MINE, COCHISE COUNTY, ARIZONA
MODIFIED FROM WUENSCH (1927)

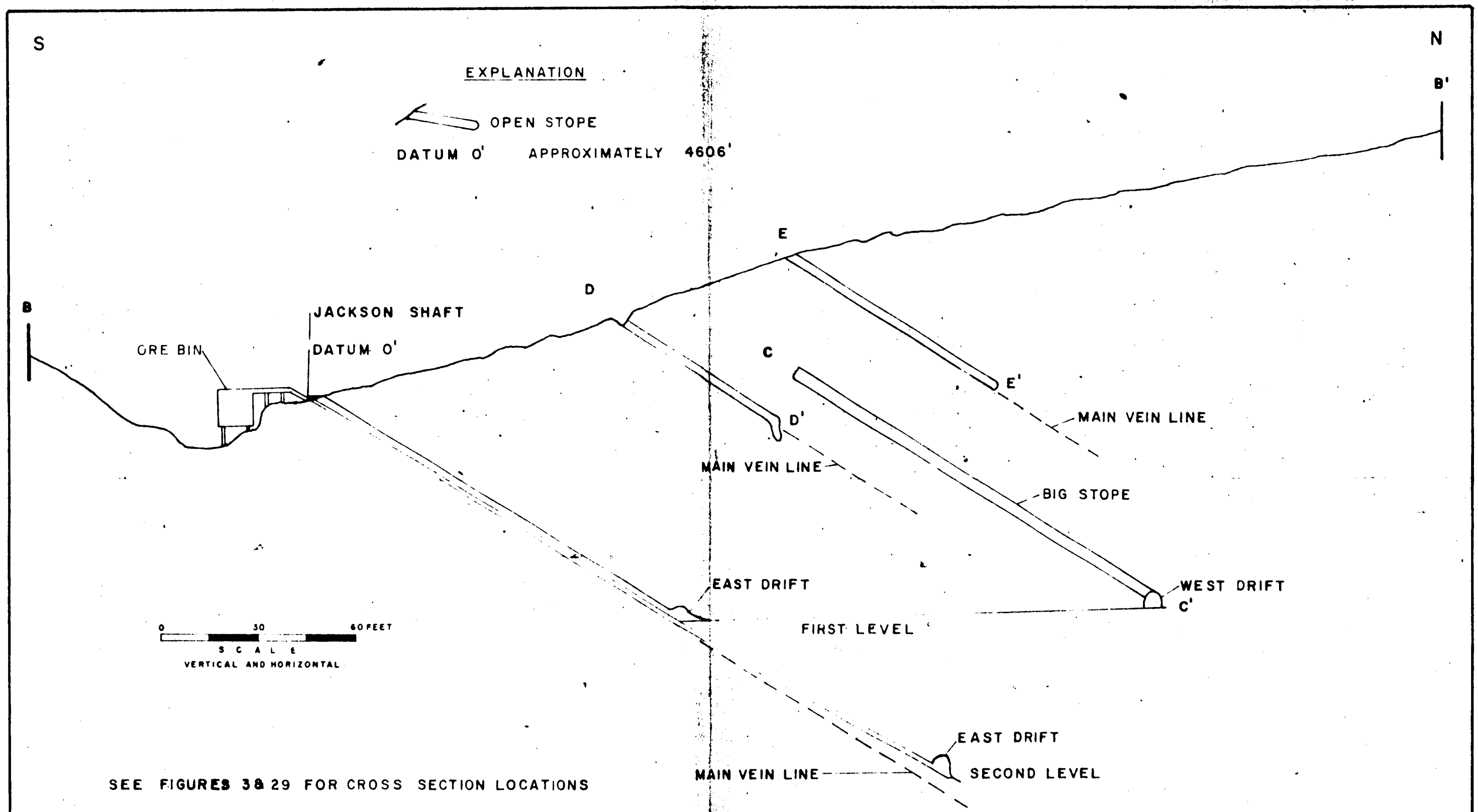

FIGURE 25 PROJECTION ONTO CROSS SECTION B-B' OF THE MAIN VEIN, WEST DRIFT, GOLDEN RULE MINE, FACING WEST

ANDREW W HAMPF GEOSCIENCES THESIS — 1972

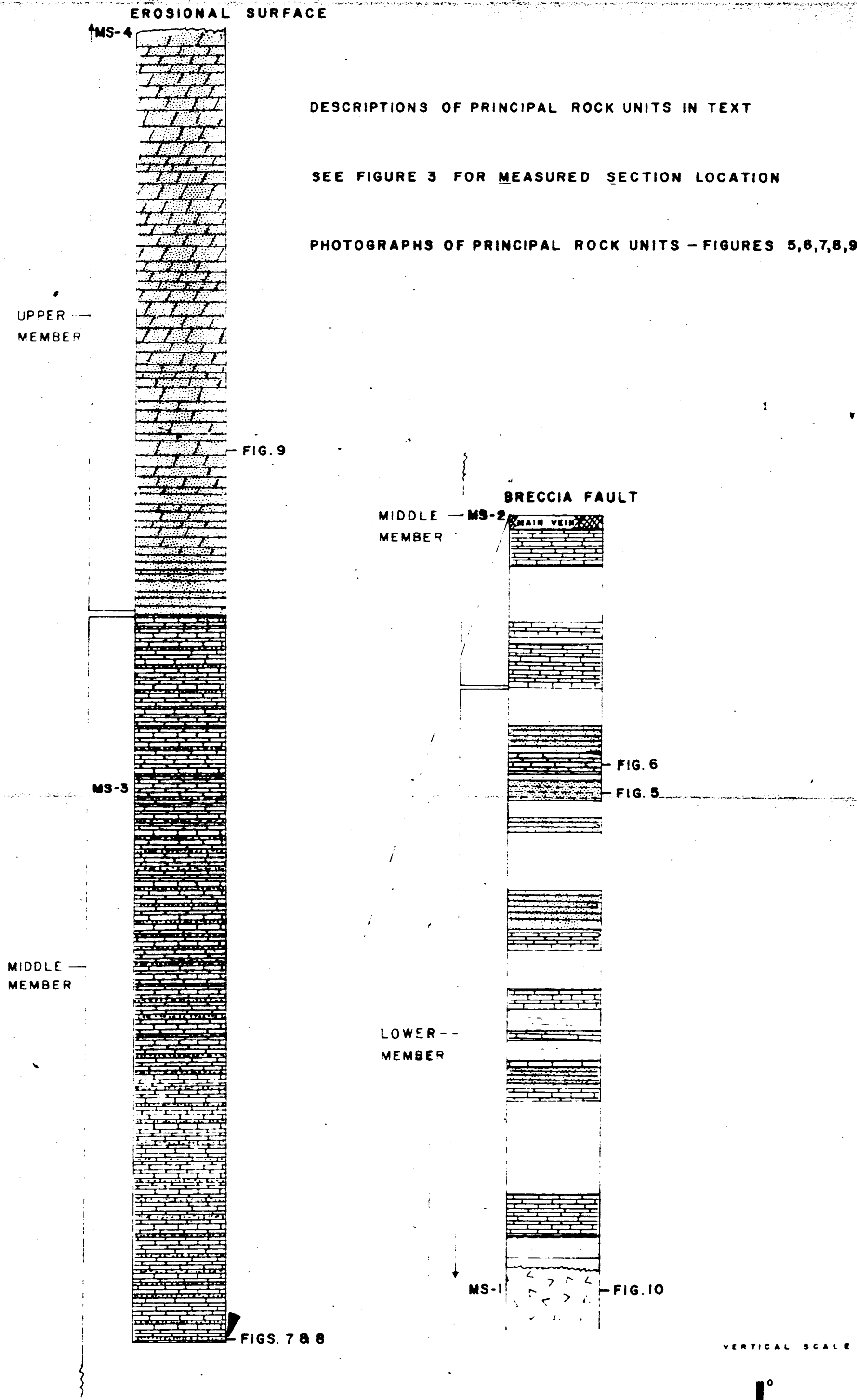

FIGURE 4 STRATIGRAPHIC COLUMN OF THE CAMBRIAN ABRIGO FORMATION, GOLDEN RULE MINE AREA, COCHISE COUNTY, ARIZONA

FORM

THE CONSOLIDATED KANSAS Y SMELTING & REFINING CO.
EL PASO SM TING WORKS
ORE SETTLEMENT

BOUGHT OF G.S.C.L.Leasing Co.,

EL PASO, TEXAS February 2,1925 192

SHIPPING POINT Manzoro, Arizona

SMELTER LOT 3694

CLASSIFICATION

SHIPPER'S LOT

CAR NO.	CAR INIT.	WEIGHT IN AVOIRDUPOIS POUNDS GROSS	SACKS NO.	SACKS WEIGHT	NET WEIGHT	MOISTURE %	DRY WEIGHT
54579	SP				78640	1.8	77224

Correction account Rate

N. Y. METAL QUOTATIONS

SETTLEMENT DATE	12/28/24 192	
SILVER	.665	CTS. PER OZ.
LEAD	$ 9.60	PER 100 LBS.
E. & M. J. COPPER		CTS. PER LB

LONDON LEAD PER 2240 LBS.

£ s d

EXCHANGE N. Y.

EXCHANGE MEX. CY.

PAYMENTS FOR METALS

ELEMENTS	ASSAY PER TON 2000 LBS.		DEDUCTED	NET ASSAY	EQUIVALENT IN LBS.	PERCENT PAID FOR	NET PAID FOR		RATE	VALUE AMOUNT PER TON	AMOUNT TOT.
GOLD	.64	OZ.						OZ.	20.00	12.80	
SILVER	2.3	OZ.	.5	1.8				OZ.	.665	1.20	
LEAD	7.1	%	1.5	5.6	112	90%	100.8	LBS.	.0820	8.27	
COPPER		%						LBS.			
TOTAL PAYMENTS FOR METALS											22.27

DEDUCTIONS

	DEBITS	CREDITS
BASING CHARGE F. O. B. EL PASO SMELTING WORKS	6.00	
BRICKING CHARGE		

ANALYSIS			DEDUCTION	NET		RATE	
INSOLUBLE		%			%	@	Cts.
SILICA		%			%	@	Cts.
ALUMINA		%			%	@	Cts.
ZINC		%			%	@	Cts.
SULPHUR		%			%	@	Cts.
As Sb Bi		%			%	@	Cts.
		%			%	@	Cts.
IRON		%			%	@	Cts.
		%			%	@	Cts.
LIME		%			%	@	Cts.

	DEBITS	CREDITS
TOTAL DEDUCTIONS	6.00	6.00
NET VALUE PER TON		16.27

					DEBITS	CREDITS
TOTAL VALUE ON	38.612	DRY TONS @	16.27	PER TON		628.2
LESS FREIGHT ON	39.320	WET TONS @	3.50	PER TON	98.30	
LESS FREIGHT ON SACKS RETURNED						
LESS DEMURRAGE		SWITCHING			2.25	
UMPIRES		settlement Dec.28.1924			500.68	
LESS REVENUE STAMPS						
LESS DUTIES		BROKERAGE				
		BALANCE DUE SHIPPER			26.99	
					628.22	628.2

MADE BY CHECKED CORRECT APPROVED

50

OUR LOT # 8.
SMELTER LOT # 2888.
Date Shipped August 20th, 1927.

S.P.Car ---52788----Weight,Net----105724.

Assays--Gold----1.00 Ounces.
Silver-- 3.16 -- 3.16 ounces.
Lead----8.6 % ounces.
Gross Value----$30.35 per Ton.
Less F. & T. $ 9.00 per ton.
Net per Ton $ 21.35 per Ton.
Value per car $1152.90

Not yet settled for.

OUR LOT E-9.
Smelter LOT # 2910.
Date shipped August 2erd, 1927.

S.P.Car-------54047-----Weight Net ------- 89846.

Assays-------Gold----1.05
Silver--5.00
Lead----7.85
Gross Value ----------$31.20
Less F and T.,----------$ 9.00
Net per Ton----------$22.20
Value per Car----------$1021.20

Not yet settled for.

AMERICAN SMELTING & REFINING COMPANY
EL PASO SMELTING WORKS
ORE SETTLEMENT

Leasing Co. EL PASO, TEXAS. Sept. 4, 19

SHIPPING POINT Manzoro, Ariz. SMELTER LOT 3164

CLASSIFICATION SHIPPER'S LOT

CAR NO.	CAR INITIAL	WEIGHT IN AVOIRDUPOIS POUNDS GROSS	SACKS NO.	SACKS WEIGHT	NET WEIGHT	MOISTURE %	DRY WEIGHT
11416	SW				76480	1.9	75027.
Val - [illegible] 1938 - Gold [illegible]				Lead [illegible]			
		Zinc [illegible] - 37.54					

N. Y. METAL QUOTATIONS

SETTLEMENT DATE	8-31-25	
SILVER	.7175	CTS. PER O
LEAD	$ 9.50	PER 100 LB
E. & M. J.		
COPPER		CTS. PER L

LONDON LEAD PER 2240 LBS. £ s d

EXCHANGE N. Y.

EXCHANGE MEX. CY.

PAYMENTS FOR METALS

ELEMENTS	ASSAY PER TON 2000 LBS.		DEDUCTED	NET ASSAY	EQUIVALENT IN LBS.	PER CENT PAID FOR	NET PAID FOR		RATE	VALUE AMOUNT PER TON	VALUE AMOU TOTA
GOLD	.79	OZ.						OZ.	20.00	15.80	
SILVER	2.8	OZ.	.5	2.3				OZ.	.7175	1.65	
LEAD	8.9	%	1.5	7.4	148	90	133.2	LBS.	.081	10.79	
COPPER		%						LBS.			
TOTAL PAYMENTS FOR METALS											28.24

DEDUCTIONS

	DEBITS	CREDITS
BASING CHARGE F. O. B. EL PASO SMELTING WORKS	3.50	
BRICKING CHARGE		

ANALYSIS			DEDUCTION	NET		RATE		
INSOLUBLE	72.8	%			%	@ .05 CTS.	3.64	
SILICA		%			%	@ CTS.		
ALUMINA		%			%	@ CTS.		
ZINC		%			%	@ CTS.		
SULPHUR		%			%	@ CTS.		
As Sb Bi		%			%	@ CTS.		
		%			%	@ CTS.		
IRON		%			%	@ CTS.		
		%			%	@ CTS.		
LIME		%			%	@ CTS.		
TOTAL DEDUCTIONS							7.14	7.1
NET VALUE PER TON								21.1

					DEBITS	CRED
TOTAL VALUE ON	37.5135	DRY TONS @	21.10	PER TON		791.5
LESS FREIGHT ON	38.2400	WET TONS @	2.80	PER TON	107.07	
LESS FREIGHT ON SACKS RETURNED						
LESS DEMURRAGE		SWITCHING			2.25	
LESS UMPIRES						
LESS REVENUE STAMPS						
LESS DUTIES		BROKERAGE				
BALANCE DUE SHIPPER					682.21	
					791.53	791.

MADE BY CHECKED CORRECT APPROVED

FORM 2-A 4-36 M'M

AMERICAN SMELTING & REFINING COMPANY
EL PASO SMELTING WORKS
ORE SETTLEMENT

BOUGHT OF G. S. C. L. Leasing Co. EL PASO, TEXAS, 8/11/36

ADDRESS Box 24, Dragoon, Ariz. SHIPPING POINT Manzoro, Ariz. SMELTER LOT 1706

CLASSIFICATION Ore. SHIPPER'S LOT

CAR No.	CAR Initial	Gross	SACKS No.	SACKS Weight	Net Weight	Moisture %	Dry Weight
92230	SP				88860	2.0	87083

WEIGHT IN AVOIRDUPOIS POUNDS

PROVISIONAL

N. Y. METAL QUOTATIONS		
Settlement Date	8/7/36	B/L Date 8/5/36
Silver	.77	Cts. per Oz.
Foreign Silver	.4475	
Lead	$ 4.60	Per 100 Lbs
E. & M. J. Copper		Cts. per Lb.

LONDON LEAD PER 2240 LBS.

£ s d

Exchange N. Y.

PAYMENTS FOR METALS

ELEMENTS	Assay per Ton 2000 Lbs.		Deducted	Net Assay	Equivalent in Lbs.	Per Cent Paid For	Net Paid For		Rate	VALUE Amount Per Ton	VALUE Amount Total
GOLD	0.61	oz.					0.61	oz.	32.81825	20.02	
SILVER	2.2	oz.	.5	1.7			1.7	oz.	.755	1.28	
LEAD	7.2	%	1.5	5.7	114	90	102.6	Lbs.	.03175	3.26	
COPPER	.1	%	No pay					Lbs.			

TOTAL PAYMENTS FOR METALS 24.5

DEDUCTIONS

	DEBITS	CREDITS
BASE CHARGE: F. O. B. El Paso, for Metal Payments, not exceeding $.....per ton - - -	3.70	
.....% of $.....excess over $.....per ton - - - - - - - -		
Handling Sacks -		
Copper Deficiency		

ANALYSIS			Deduction	Net		Rate			DEBITS
Insoluble	68.8	%		68.8	%	@	5	Cts.	3.44
Silica	65.6	%			%	@		Cts.	
Iron	8.6	%			%	@		Cts.	
Lime	2.5	%			%	@		Cts.	
Zinc	1.0	%			%	@		Cts.	
Sulphur	0.6	%			%	@		Cts.	
Alumina	1.2	%			%	@		Cts.	
As Sb		%			%	@		Cts.	
Bi		%			%	@		Cts.	

TOTAL DEDUCTIONS 7.14 7.14

NET VALUE PER TON 17.42

			DEBITS	CREDITS
Total Value on 43.5415	Dry Tons @ 17.42	Per Ton		758.49
Less Freight on 44.4500	Wet Tons @ 2.50	Per Ton	111.08	
Less Freight on Sacks Returned	Freight Emergency Charge - - - -			
Less Demurrage	Switching		2.25	
Less Umpires				
Duty and Brokerage				
Amount withheld pending receipt of Silver Affidavit			23.51	
	BALANCE DUE SHIPPER		621.65	
			758.49	758

BY CHECKED CORRECT APPROVED

EL PASO SMELTING WORKS
ORE SETTLEMENT

BOUGHT OF G.S.O.L.Lessing Co., EL PASO, TEXAS. May 24, 1924

SHIPPING POINT Manzoro, Ariz. SMELTER LOT 1320

CLASSIFICATION O re SHIPPER'S LOT

CAR INIT.	CAR NO	WEIGHT IN AVOIRDUPOIS POUNDS: GROSS	SACKS NO.	SACKS WEIGHT	NET WEIGHT	Moisture %	DRY WEIGHT
BO	250041				91555	1	90738

N. Y. METAL QUOTATIONS

SETTLEMENT DATE	5-18	19
SILVER	.66	CTS. PER OZ.
LEAD	$7.25	PER 100 LBS
DATE E. & M. J.		
COPPER		CTS. PER OZ

LONDON LEAD PER 2240 LBS. £ S D

EXCHANGE N. Y.

EXCHANGE MEX. CY.

PAYMENTS FOR METALS

ELEMENTS	ASSAY PER TON 2000 LBS		DEDUCTED	NET ASSAY	EQUIVALENT IN LBS.	PERCENT PAID FOR	NET PAID FOR		RATE	VALUE: AMOUNT PER TON	AMOUNT TOTA
GOLD	.60	OZ.						OZ.	20.00	12.00	
SILVER	2.1	OZ.	.5	1.6				OZ.	.66	1.06	
LEAD	6.2	%	1.5	4.7	94	90	84.6	LBS.	5.35	4.95	
COPPER		%						LBS.			

TOTAL PAYMENT FOR METALS 18.01

	DEBITS	CREDITS
TREATMENT CHARGE F. O. B. EL PASO SMELTING WORKS		
BRICKING CHARGE		
TREATMENT CHARGE	3.50	

	ANALYSIS		DEDUCTION	NET		RATE		
INSOLUBLE	76.0	%			%	@ .05	CTS.	3.80
SILICA		%			%	@	CTS	
ALUMINA		%			%	@	CTS.	
ZINC		%			%	@	CTS.	
SULPHUR		%			%	@	CTS.	
AS SB BI		%			%	@	CTS.	
		%			%	@	CTS.	
IRON		%			%	@	CTS	
		%			%	@	CTS.	
LIME		%			%	@	CTS.	

	DEBITS	CREDITS
TOTAL DEDUCTIONS	7.30	7.30
NET VALUE PER TON		10.71

					DEBITS	CREDITS
TOTAL VALUE ON	45.369	DRY TONS @	10.71	PER TON		485.90
LESS FREIGHT ON	45.5275	WET TONS @	1.90	PER TON	87.07	
LESS DEMURRAGE		SWITCHING			2.25	
LESS UMPIRES						
LESS REVENUE STAMPS						
LESS DUTIES		BROKERAGE				
		BALANCE DUE SHIPPER			396.58	
					485.90	485.90

MADE BY CHECKED CORRECT APPROVED

AMERICAN SMELTING & REFINING COMPANY
EL PASO SMELTING WORKS
ORE SETTLEMENT

BOUGHT OF G.C.C.L. Leasing Co. EL PASO, TEXAS, Feb. 18, 1926

SHIPPING POINT Hansoro, Ariz. SMELTER LOT 539

CLASSIFICATION Ore SHIPPER'S LOT

CAR NO.	CAR INITIAL	GROSS	SACKS NO.	SACKS WEIGHT	NET WEIGHT	MOISTURE %	DRY WEIGHT
148248	DSO				120100	1.6	118178

WEIGHT IN AVOIRDUPOIS POUNDS

N. Y. METAL QUOTATIONS		
SETTLEMENT DATE	2-12-26	
SILVER	.6675	CTS. PER OZ.
LEAD	$ 9.15	PER 100 LBS.
E. & M. J.		
COPPER		CTS. PER LB.
LONDON LEAD PER 2240 LBS.		
£	s	d
EXCHANGE N. Y.		
EXCHANGE MEX. CY.		

PAYMENTS FOR METALS

ELEMENTS	ASSAY PER TON 2000 LBS.		DEDUCTED	NET ASSAY	EQUIVALENT IN LBS.	PER CENT PAID FOR	NET PAID FOR		RATE	VALUE AMOUNT PER TON	VALUE AMOUNT TOTAL
GOLD	.63	OZ.						OZ.	20.00	12.60	
SILVER	2.1	OZ.	.5	1.6				OZ.	.6675	1.07	
LEAD	6.6	%	1.5	5.1	102	90	91.8	LBS.	.0775	7.11	
COPPER		%						LBS.			
TOTAL PAYMENTS FOR METALS											20.78

DEDUCTIONS

	DEBITS	CREDITS
BASING CHARGE F. O. B. EL PASO SMELTING WORKS	3.50	
BRICKING CHARGE		

ANALYSIS			DEDUCTION	NET		RATE	DEBITS	CREDITS
INSOLUBLE	76.2	%			%	@ .05 CTS.	3.00	
SILICA		%			%	@ CTS.		
ALUMINA		%			%	@ CTS.		
ZINC		%			%	@ CTS.		
SULPHUR		%			%	@ CTS.		
As Sb Bi		%			%	@ CTS.		
		%			%	@ CTS.		
IRON		%			%	@ CTS.		
		%			%	@ CTS.		
LIME		%			%	@ CTS.		
TOTAL DEDUCTIONS							6.50	6.50
NET VALUE PER TON								14.28

				DEBITS	CREDITS
TOTAL VALUE ON	59.069	DRY TONS @	14.28 PER TON		843.79
LESS FREIGHT ON	60.000	WET TONS @	1.90 PER TON	114.10	
LESS FREIGHT ON SACKS RETURNED					
LESS DEMURRAGE		SWITCHING		2.25	
LESS UMPIRES					
LESS REVENUE STAMPS					
LESS DUTIES		BROKERAGE			
BALANCE DUE SHIPPER				727.44	
				843.79	843.79

MADE BY CHECKED CORRECT APPROVED

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FORM 2A-25M-9-26-CPC

AMERICAN SMELTING & REFINING COMPANY
EL PASO SMELTING WORKS
ORE SETTLEMENT

BOUGHT OF Paul P. Otey. EL PASO, TEXAS. Sept. 1, 1927.

SHIPPING POINT Manzaro, Ariz. SMELTER LOT 2669

CLASSIFICATION Ore SHIPPER'S LOT E-6

CAR NO.	CAR INITIAL	WEIGHT IN AVOIRDUPOIS POUNDS: GROSS	SACKS NO.	SACKS WEIGHT	NET WEIGHT	MOISTURE %	DRY WEIGHT
54413	SP				103180	3.6	99466

CORRECTED LIQUIDATION

N. Y. METAL QUOTATIONS		
SETTLEMENT DATE	8-9-27	
SILVER	54375	CTS. PER OZ.
LEAD	$ 6.75	PER 100 LBS.
E. & M. J.		
COPPER		CTS PER LB.
LONDON LEAD PER 2240 LBS.	£ s d	
EXCHANGE N. Y.		
EXCHANGE MEX. CY.		

PAYMENTS FOR METALS

ELEMENTS	ASSAY PER TON 2000 LBS.		DEDUCTED	NET ASSAY	EQUIVALENT IN LBS.	PER CENT PAID FOR	NET PAID FOR		RATE	VALUE AMOUNT PER TON	VALUE AMOUNT TOTAL
GOLD	.95	OZ.					.95	OZ.	20.00	19.00	[illegible]
SILVER	2.5	OZ.	.5	2.0			2.0	OZ.	.54375	1.09	[illegible]
LEAD	7.6	%	1.5	6.1	122	95	115.9	LBS.	.0535	6.20	[illegible]
COPPER		%						LBS.			[illegible]
Lime	2.0								.10	.20	[illegible]
TOTAL PAYMENTS FOR METALS											26.49

DEDUCTIONS

	DEBITS	CREDITS
BASING CHARGE F. O. B. EL PASO SMELTING WORKS	3.50	
BRICKING CHARGE		
HANDLING SACKS		

ANALYSIS			DEDUCTION	NET		RATE	DEBITS	CREDITS
INSOLUBLE	75.6	%			%	@ .05 CTS.	3.78	.70
SILICA		%			%	@ CTS.		
ALUMINA		%			%	@ CTS.		
ZINC		%			%	@ CTS.		
SULPHUR		%			%	@ CTS.		
As Sb Bi		%			%	@ CTS.		
		%			%	@ CTS.		
IRON		%			%	@ CTS.		
		%			%	@ CTS.		
LIME		%			%	@ CTS.		
TOTAL DEDUCTIONS							7.28	.70
NET VALUE PER TON								19.91

					DEBITS	CREDITS
TOTAL VALUE ON	49.733	DRY TONS @	19.91	PER TON		990.18
LESS FREIGHT ON	51.590	WET TONS @	2.50	PER TON	128.98	
LESS FREIGHT ON SACKS RETURNED						
LESS DEMURRAGE	40.70	SWITCHING	12.25		42.95	
~~LESS DUMPING~~		Royalty previously taken up			191.75	
~~LESS DUNES~~	Paid shipper	BROKERAGE	"	" "	575.28	
	Jackson Royalty				12.81	
				BALANCE DUE SHIPPER	38.41	
					990.18	990.18

MADE BY CHECKED CORRECT APPROVED

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This certifies that samples assayed for _____ contain:

LOT	Ounces per Ton		PER CENT												
	Gold	Silver	Lead	Copper	Silica	Iron	Manganese	Lime	Zinc	Sulphur	Arsenic	Antimony			
First Car. 2271															
Our Assays	0.65	2.0	7.0												
2d Car. Our ~~Repeats~~	0.96	1.6	7.8												
Second Car. 2280	0.82	2.5	7.5												
First Car. Smelter Assays	0.64	1.8	6.6												
Smelter Repeats															
Umpire Assays															
Final Settlement															

Checked Assays. Smelter Assays

First Car Dry Tons 113236

Second Car 91017 Dry Tons.

210 San Francisco Street

CONTROL CERTIFICATE

The Custom Assay Office

CRITCHETT & FERGUSON
Proprietors

El Paso, Texas, March 16 1926 192__

This certifies that samples assayed for E. J. Jackson contain:

LOT	Ounces per Ton		PER CENT												
	Gold	Silver	Lead	Copper	Silica	Iron	Manganese	Lime	Zinc	Sulphur	Arsenic	Antimony			
Our Assays	1.04	1.6	5.1												
Our Repeats															
Smelter Assays															
Smelter Repeats															
Umpire Assays															
Final Settlement															

CHARGES $ 1.75

CRITCHETT & FERGUSON CHEMIST AND ASSAYER

EL PASO SMELTING & REFINING CO.

EL PASO SMELTING WORKS

ASSAY CERTIFICATE

Date Assayed _____ 192__

Marked G. S. C. L. [illegible]

LOT NO.	GOLD OUNCES PER TON		SILVER OUNCES PER TON		WET LEAD %	COPPER %	INS. %	SiO_2 %	FE %	MN %	CaO TOTAL %	CaO AVAIL %	ZN. %	SUL. %	Al_2O_3 %	AS SE BI
3105		11		8.9	[illegible]	—	[illegible]						[illegible]	[illegible]		

EL PASO SMELTING WORKS

By _____ Assayer

_____ Chemist

W. E. HAWLEY
ASSAYERS
CHEMISTS

COLE & COMPANY

W. E. HAWLEY, MANAGER

SHIPPERS REPRESENTATIVES
ORE BUYERS

DOUGLAS, ARIZ.
1023 G. AVE.

EL PASO, TEXAS
701 MILLS BLDG.

We hereby certify that the shipment from G. S. C. L. Leasing Company weighed and analyzed as follows:

DATE RECEIVED	CAR		WEIGHTS				SHIPPER LOT	SMELTER LOT	MOISTURE
	INITIALS	NUMBER	GROSS	TARE	NET WET	NET DRY			
11/18	PLE	46652	96800	46680	50120	47714	1	3111	4.8

ANALYSIS

	SHIPPERS LOT	OUNCES				PER CENT							
		GOLD	SILVER	LEAD	COPPER	INSOLUBLE	IRON	LIME	ZINC	SULPHUR	SILICA	ALUMINA	
COLE & CO.	1	.93	3.35	9.7	.36	67.8		1.5	2.0	0.6			
		umpire		umpire									
SMELTER	1	.91	3.2	9.3	.30	69.2		0.7	2.0	0.4			

Date 11/29/23

COLE & COMPANY,

By [illegible]

A P P E N D I X A

REPORT ON GOLDEN RULE MINE

DRAGOON, COCHISE COUNTY

ARIZONA

LUNDQUIST, 1928

R E P O R T

O N

G O L D E N R U L E M I N E

Dragoon, Cochise County,

Arizona.

By----------

H. E. LUNDQUIST

GOLDEN RULE

LOCATION:

This property is located about 4 miles from Dragoon, Cochise County, Arizona and 74 miles southeasterly from Tucson. Dragoon is the postoffice address and the ore is shipped from Manzora station, a siding on the S.P. R.R. one mile northerly from the mine. It is a good auto road with down grade all the distance.

HISTORY:

The original locating dates back to 1874 as corner posts bearing this date are still to be found on the ground. The early operations are very obscure and no definite information could be secured, except that a considerable tonnage had been hauled away to be milled, in one instance over 100 miles, it is said and later to a mill near Cochise 10 miles distant. Still later a 10-stamp mill was built on the property. It is estimated this handled some 5,000 to 6,000 tons. In later years practically all the production was shipped direct to the smelters. In 1919 the property came into the possession of the present owner.

PROPERTY, EQUIPMENT, ECT.

The property consists of 16 claims held by location, although the claims have been surveyed for patent. The patent has never been applied for. Until recently the one claim which contains the water supply well was detached from the main group. Subsequent claim locations have closed this gap and now the claims are all contiguous.

THE EQUIPMENT COMPRISES:

1 CP air compressor, size 9 x 12, single stage belt connected to 50 H.P. Samson gasoline engine.
1 5 H.P. Fair-banks Morse hoist.
1 9 H.P. Gas engine and wood saw.
1 Stone house, combination dwelling and office
1 Mess house
1 Large garage.
4 Bunk houses.
1 Blacksmith shop, fully equipped.
1 Drill sharpener.
1 60 ton ore bin, track, ore cars, etc.

GEOLOGY:

The mineralization occurs in both the Paleozoic sediments and the quartz porphyry instrusives which uplifted them. The porphyry intrusives form an elliptical shaped hill that penetrated and uplifted a fractured Cambrian limestone to the north and west and the carboniferous limestone to the south and perhaps to the east although the alluvium of the flat appoaches the property at a gentle slope without limestone exposure in the immediate vicinity.

This tilting action has created pre-mineral fault or veins which have subsequently been filled with silicious mineral bearing solutions. The majority of the veins occur along the bedding planes of limestone which are approximately 30 degrees from the horizontal while the veins in the porphyry assume angles of from 40 to 80 degrees. The strike of all the veins is more or less east and west. There is a strong beccia fault with a strike of north-30 degrees east, dipping about 50 degrees to the southeast. This fault is without a doubt, the channel through which the mineral bearing solutions reached the various faults and fractures, filling the vein with quartz and the metals the solutions contained. It is traceable for some 500 to 600 feet on the surface and is encountered on the first and second levels in the mine. There is indications underground that some post mineral faulting may have taken place, as well as the premineral.

ORE VEINS:

As before mentioned the veins in the limestone occur along the bedding planes on both east and west sides of the breccia fault. The mineral enrichment extends from the fault some 600 feet to the east and 400 feet to the west. On the easterly side of the fault 5 or 6 veins exist. Two of them, having been worked to a more or less extent. To the west 4 veins exist, two of them having been disclosed and therefore indications of more. Two or three of them have been worked and opened up. Several of the remainder have been exposed to the surface with open cuts. One of them being worked on the west side of the fault did not outcrop on the surface but was encountered in the underground development. The veins are well defined, striking appoximately north 80m degrees west and slipping 30 degrees from the horizontal to the north. The vein filling is very silicious, practically all quartz containing lead in the form of galena, carbonates and some sulphates, small amounts of silver. The gold is apparently free and rather coarse.

At the extreme eastern exposure the veins are found in the porphyry itself with an angle of dip straightening up considerable

from those in the limestone. The vein filling in these is in every way similar to the other veins, except it was found that the gold values were invariably lower than in the limestone veins.

DEVELOPMENT AND EXPLORATION:

At about 400 easterly from the Jackson shaft is the original shaft, practically in the bottom of the gulch, and the location is obviously the reason why the old workings and shaft were filled with gravel. Nothing has been done in this section since the early days. There is no map on these workings available, but it was reported that they extended with a winze 75 feet below the second level through the comparatively open stopes, which were then the extreme western limits of the old workings and had not penetrated the breccia fault into the ore, as this was done after the Jackson shaft was in operation.

The Jackson incline goes down about 30 degrees from the horizontal to the first level 130 feet. A drift to the east continues for over 200 feet where it encounters the gravel. That gravel was washed back along the drift when the flood occured in the old shaft. The ore along this drift from this level to the surface has all been removed. The shaft continues to the second level on an angle of about 28 degrees a distance of 95 feet along the incline. From this point a drift fault bears off to the southeast some 80 feet into the footwall and through the breccia fault, thence into the same ore vein as was stoped on the level above. The drift continues in ore until it reaches the gravel as on the level above. Some stoping has also been done on this level, but to what extent could not be learned as it has also been done on this level, but was inaccessible. There is a drift to the northeast for 50 feet, but it is in the wall between the veins.

On the level, west from the Jackson shaft the shaft and drift starts west and immediately turns very rapidly to the right and assumes a generally northeast course through and somewhat parallels the breccia fault on the west side for a distance of about 120 feet then turns to the left westerly for 40 feet where it encounters an ore shoot that is designated as "A"on the map. Stratigraphycally the so-called shaft vein which the Jackson shaft follows down is 67 feet below the "A" vein that is open stoped on the surface. The "B" stope plane then lies between shaft vein and "A" vein 46 feet above the "A" vein is another called the "C" which has also been open stoped. Beyond this other outcrops have been disclosed but no work done also been open stoped on them. About 400 feet west from these exposures a vein is opened up that carries good values and is thought

to be an extension for the "C" vein referred below.

Samples taken from east and west sides of "B" stope on first level as a check to previous sampling, that average gold 0.8 ozs. silver 1.7 oz., lead 8.4% for an average of 2 feet width. Some 75 feet west from this tope a recent lead 12.2% also for a width of 2 feet. In this opening a foot wide vein of high grade ore leaves the vein proper and dips down vertically probably connecting. In three instances ore has been followed in winzes down below this level. Good values are reported in all cases, but they were inaccessible at this time.

Beginning on the north end of the porphyry intrusive wall down toward the flat, the first vein was note 18" to 20" wide in a shallow trench 200 feet south from this vein going up the face is another vein 12 wide in a shaft 15 feet deep. A carload of ore is said to have been shipped from this shaft averaging gold $4.00 silver 11 oz., lead 35%; strike of vein is 65 degrees west. About 14 feet south of last described vein still ascending hill is fourth vein about 2 feet wide in a shaft 39 feet deep containing silver and gold values. The point now reached on the hill is approaching the summit or apex. Passing around the hill on east side 400 or 500 feet is located what is called the porphyry and lime contact shaft; on southeast side of porphyry intrusive there is a strong vein 6 to 7 feet wide striking north 80 degrees east. A square set shaft has been started and the opening is down about 30 feet with a short drift to the southwest apparently to follow the contact. The drift however is in limestone. The general appearance would suggest that it is a vein near the prospect and should be investigated or developed further. The values at present are said to be $12.00 in gold, silver, and lead.

VALUATION:

The writer has read the reports of Messrs. Wuensch and Hight and made a sketch plan map from one of mine. His visit to the property was brief and consisted chiefly in checking the physical conditions, etc., he feels that great care was exercised in taking the samples referred to in these reports. The valuation placed according to them fair and reasonable.

The block of ore marked "E" is very conservatively estimated at 18,643 tons. The question of positive ore, as that term is usually understood means ore blocked out on four sides. This does not apply literally to this ore, although the persistency of the veins and ore where developed would indicate it to be more than merely probable ore. In the above estimate the block marked "A"

both above "B" and farther west to 141 shaft has been disregarded in spite of the fact that ore is in the various faces as they stoped down from the surface and is ready to be stoped on again. In adding block "A" to estimate we should have not less than 50,000 tons of $20.00 ore. And if only one more place of ore or vein parallels this should be the second level $2,000,000 value would be attained assuming the values persisted to the second level which is not unlikely as practically all the exposures show substantial values. And when one considers the number of veins that will in all probability give an account of themselves as those opened have done, the cost of developing more ore should be comparatively small after the Jackson shaft is cleaned up and extended to the second cross-cuts north and south from the present levels and the same from lower levels after the shaft is deepened would quickly and cheaply develop the veins to a producing basis. Later the porphyry veins should be developed by sinking shaft which would determine their value.

The potential possibilities for creating a well paying mine on this property are the best the writer has visited in many years and any one desiring a mine of approximately 100 tons production that will pay handsome return with careful management, will do well to give this property consideration.

Respectfully submitted,

/s/_____

E. H. LUNDQUIST.

APPENDIX B

ASSAY DATA

HIGHT, HAMPF, ROBERTS

ASSAYS

GOLDEN RULE PROPERTY

The Assay Certificate contains data pertaining to other properties which may not be reproduced here. Therefore, the following assays are copies from:

Acme Analytical Laboratories
6455 Laurel Street
Burnaby 2, B. C.
File No. 2161

Sample No.	Ag	Au	Pb	Remarks
3091	0.10	0.004	0.70	Contact shaft - Grab, Dump
3092	0.02	0.001	0.02	Grab, Dump W of Porph. Hill
3093	0.38	0.002	1.48	Grab, Dump 50' N of 3092
3094	0.16	0.011	0.36	Grab, 300' S of 3095
3095	2.70	0.004	7.64	Grab, vein 35' N of Contact shaft
3096	0.32	0.008	3.16	Grab, 2/3 mile W of Contact shaft
3097	0.04	0.001	0.75	Grab 1/3 upper vein of S Contact shaft
3098	0.52	0.076	0.63	1st level 8", opp. #86, Wuensch
3099	0.70	0.428	1.08	E of #86, 6" vein
3100	46.20	0.478	24.90	Last Raise E, W Drift, vein
3129	0.42	0.102	1.32	10' W of 112, Main vein
3130	2.26	0.732	6.42	10" quartz, end of Big stope

Phase III:

a] 10,000 ft. Diamond Drilling @ $15/ft.	$150,000.00	
Assaying - 1,000 @ $10.00	10,000.00	
Percussion Drilling 12,000 ft. @ $3/ft.	36,000.00	
Assaying - 1,200 @ $10.00	12,000.00	
Bulldozer Rental 100 hrs. @ $40/hr.	4,000.00	
Total		$212,000.00
b] Rehabilitation of shaft and drifts	5,000.00	
Drifting - 500 ft. @ $60/ft.	30,000.00	
Raising - 500 ft. @ $40/ft.	20,000.00	
Equipment purchases, waterline, etc.	30,000.00	
Total		85,000.00
Management Services	20,000.00	
Truck Rentals, travelling, lodging	5,000.00	25,000.00
Total		$322,000.00
15% Contingencies		48,300.00
Total		$370,300.00
Say		$370,000.00

Respectfully submitted,

A. F. Roberts, P. Eng.

REPORT ON THE

GOLDEN RULE PROPERTY

NE 1/4 SEC. 23, T16S, R23E

COCHISE COUNTY, ARIZONA, U.S.A.

By

A. F. Roberts, P.Eng.

May 15, 1973

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MINERALIZATION	8
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MAPS

Reference No.		
1]	LOCATION MAP	[follows page 1]
3]	GENERAL GEOLOGY MAP	[follows page 2]
4]	GEOLOGIC MAP AND STRATIGRAPHIC COLUMN	[back pocket]
5]	CROSS SECTION, GEOLOGY	[back pocket]
6]	COMPOSITE LEVEL PLAN	[back pocket]
7]	CROSS SECTION MAIN VEIN	[back pocket]

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REFERENCES

2] Geology of the Golden Rule Mine Area, an M.Sc. Thesis, University of Arizona, by A. W. Hampf, 1972

Bulletin 137, Arizona Bureau of Mines, Arizona Lode Gold Mines and Gold Mining, Wilson Cunningham, Butler, 1967

USGS Topographic Maps, Dragoon, Cochise Counties 1:62,500

Arizona Bureau of Mines, Geologic Map, Cochise County, 1:375,000

APPENDICES

Appendix A - Report on the Golden Rule Mine, H. E. Lundquist, 1928

9] Appendix B - Assay Data

Appendix C - Smelter Return Data

10] Appendix D - I.P. Survey Data

ILLUSTRATIONS

Photos of Golden Rule Mine

[End of Report]

S U M M A R Y

An examination was made of the Golden Rule property in the period May 1 - 3, 1973.

In the vein system, there is a probable ore reserve of 20,000 tons grading approximately 0.60 oz. Au, 2 oz. Ag, and 7% Pb.

With comparatively small expense this ore could be proven up, and provide a maximum shipping grade ore of 50 tons per day.

There are possibilities of extending the ore down dip, and to both east and west in faulted blocks.

There is also the possibility of finding entirely new ore in parallel veins that have never been examined.

The main chance, is to develop a large tonnage, low grade ore body on the adjacent quartz rhyolite porphyry, where past work has found values in the larger quartz veins. This porphyry has the appearance of a stockworks of quartz veins. Smaller fractures are quartz filled, some with visible mineralization.

Therefore, it is recommended that the Company carry out a surface stripping and trenching program during the ninety day examination period to determine whether or not it is possible to develop satisfactory tonnages and grades in

1] the porphyry hill;

2] further mineable veins in the Golden Rule Mine.

This Stage I program will cost $25,000.00.

If Stage I is successful, then a Stage II costing $116,000.00 will be required.

A Stage III program to follow Stage II would cost an estimated $370,000.00.

Respectfully submitted,

A. F. Roberts, P. Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

REPORT ON THE
GOLDEN RULE PROPERTY
NE ¼ SEC. 23, T16S, R23E
COCHISE COUNTY, ARIZONA, U.S.A.

By
A. F. Roberts, P.Eng.
May 15, 1973

INTRODUCTION

This report is authorized by Mr. John Shelley, President, and Mr. Frank Keane, Secretary-Treasurer of the Company.

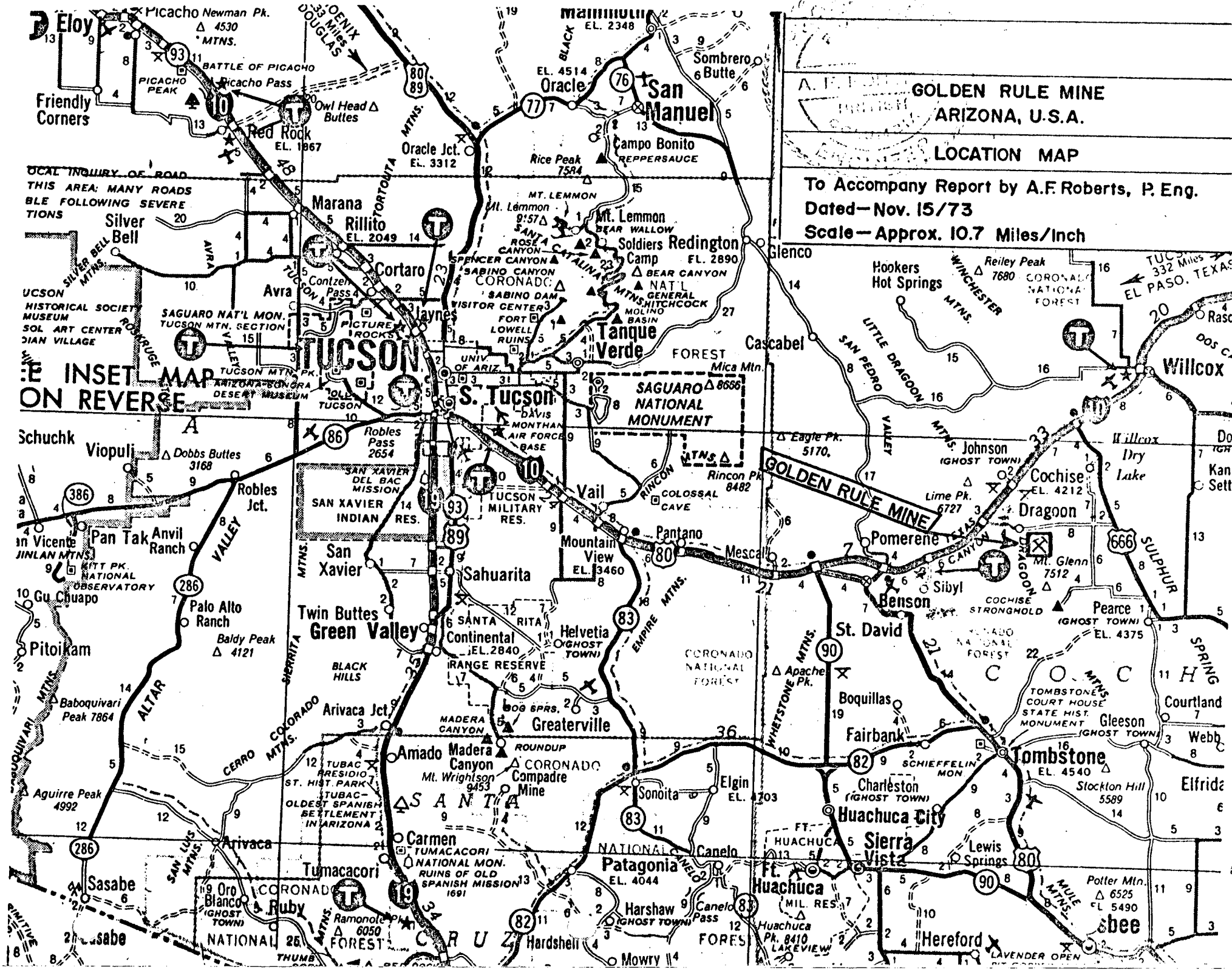
Its purpose is:

a] to evaluate the mine on the vein system for the purpose of putting it into production as a small, high grade producer;

b] to evaluate the possibility of finding extensions of the known ore, and the possible mining of parallel veins, at depth; and in other formations;

c] to evaluate the possibility of the area known as the "porphyry hill" becoming an open pit, low grade, gold-silver-lead producer.

The examination was made on May 1, 2, 3, 1973, in company with Mr. Jim Wilson of San Diego, California, and Mr. M. V. Lee of Benson, Arizona, the property vendor.


GOLDEN RULE MINE
ARIZONA, U.S.A.
LOCATION MAP
To Accompany Report by A.F. Roberts, P. Eng.
Dated—Nov. 15/73
Scale—Approx. 10.7 Miles/Inch
GOLDEN RULE MINE
TUCSON
S. Tucson
Eloy
Picacho
Red Rock
Marana
Rillito
Cortaro
Avra
Tanque Verde
Oracle
San Manuel
Mammoth
Mt. Lemmon
Redington
Cascabel
Willcox
Dragon
Cochise
Pomerene
Benson
St. David
Tombstone
Huachuca City
Sierra Vista
Fairbank
Boquillas
Pantano
Mescal
Vail
Mountain View
Sahuarita
Green Valley
Continental
Helvetia
Greaterville
Arivaca Jct.
Arivaca
Sasabe
Tumacacori
Carmen
Patagonia
Sonoita
Elgin
Canelo
Hereford
Ft. Huachuca
Pan Tak
Anvil Ranch
Robles Jct.
Viopuli
Schuchk
Pitoikam
Gu Chuapo
Palo Alto Ranch
Twin Buttes
San Xavier
Oracle Jct.
Sombrero Butte
Campo Bonito
Rice Peak 7584
Mt. Lemmon 9157
Soldiers Camp
Glenco
Hookers Hot Springs
Reiley Peak 7680
Mica Mtn. 8666
Eagle Pk. 5170
Rincon Pk 8482
Johnson
Lime Pk. 6727
Mt. Glenn 7512
Sibyl
Pearce
Courtland
Gleeson
Webb
Elfrida
Stockton Hill 5589
Potter Mtn. 6525
Charleston
Lewis Springs
Harshaw
Hardshell
Mowry
Ramonota Pk 6050
Oro Blanco
Ruby
Apache Pk.
Baldy Peak 4121
Baboquivari Peak 7864
Aguirre Peak 4992
Madera Canyon
Mt. Wrightson 9453
Compadre Mine
Robles Pass 2654
Dobbs Buttes 3168
Rincon
Colossal Cave
Cochise Stronghold
Tombstone Court House State Hist. Monument
Schieffelin Mon.
Tubac Presidio St. Hist. Park
Tumacacori National Mon.
Ruins of Old Spanish Mission 1691
Saguaro National Monument
Saguaro Nat'l Mon. Tucson Mtn. Section
Picture Rocks
Contzen Pass
Sabino Canyon
Sabino Dam Visitor Center
Fort Lowell Ruins
Univ. of Ariz.
Tucson Mtn. Pk.
Ariz.-Sonora Desert Museum
Tucson Historical Society Museum
Sol Art Center
Indian Village
Silver Bell
Friendly Corners
Picacho Pass
Owl Head Buttes
Battle of Picacho
Picacho Peak
Silver Bell Mtns.
Roskruge Mtns.
Tortolita Mtns.
Santa Catalina Mtns.
Rincon Mtns.
Empire Mtns.
Whetstone Mtns.
Sierrita Mtns.
Cerro Colorado Mtns.
Altar Valley
San Pedro Valley
Little Dragoon Mtns.
Winchester Mtns.
Dragoon Mtns.
Sulphur Spring Valley
Mule Mtns.
Tombstone Mtns.
Santa Rita Range Reserve
Tucson Military Res.
Davis Monthan Air Force Base
San Xavier Del Bac Mission
San Xavier Indian Res.
Kitt Pk. National Observatory
Coronado National Forest
Black Hills
Roundup
Madera Canyon
Bog Sprs.
Fort Huachuca Mil. Res.
Huachuca Pk. 8410
Lakeview
Canelo Pass
Lavender Open Pit
Tombstone
Bisbee
El Paso, Texas
Willcox Dry Lake
Dos C
Kan Sett
Rasc
Vicente
Jinlan Mtns.
Baboquivari Mtns.
Cerro Colorado Mtns.
San Luis Mtns.
Santa Cruz
Thumb
Sasabe
Oro Blanco (Ghost Town)
Ruby
Hardshell
Mowry
Harshaw (Ghost Town)
Canelo
Elgin
Sonoita
Patagonia
Carmen
Arivaca
Arivaca Jct.
Greaterville
Helvetia (Ghost Town)
Continental
Green Valley
Twin Buttes
Sahuarita
San Xavier
Robles Jct.
Pan Tak
Anvil Ranch
Palo Alto Ranch
Pitoikam
Gu Chuapo
Viopuli
Schuchk
Vicente
Eloy
Friendly Corners
Picacho
Red Rock
Marana
Rillito
Cortaro
Avra
Silver Bell
Oracle
Oracle Jct.
Sombrero Butte
Campo Bonito
Mt. Lemmon
Soldiers Camp
Redington
Glenco
Hookers Hot Springs
Reiley Peak 7680
Cascabel
Willcox
Dragon
Cochise
Pomerene
Benson
St. David
Tombstone
Huachuca City
Sierra Vista
Fairbank
Boquillas
Pantano
Mescal
Vail
Mountain View
Sahuarita
Green Valley
Continental
Helvetia
Greaterville
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Arivaca
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Sasabe
Tumacacori
Carmen
Patagonia
Sonoita
Elgin
Canelo
Hereford
Ft. Huachuca

LOCATION, ACCESS, TOPOGRAPHY 1]

The property is about seventy-five miles from Tucson, via good highways, and a short stretch of gravel road. It is sixteen miles from Benson, where accommodation can be found. Internal roads permit easy access to all parts of the property.

The hills are generally rounded and covered with a thin layer of soil and talus, and cactus.

The property has one well about one mile from the mine. Other wells can be drilled for larger, or more convenient water supply.

A gas line, power line, and the Southern Pacific Railway are all very convenient to the property.

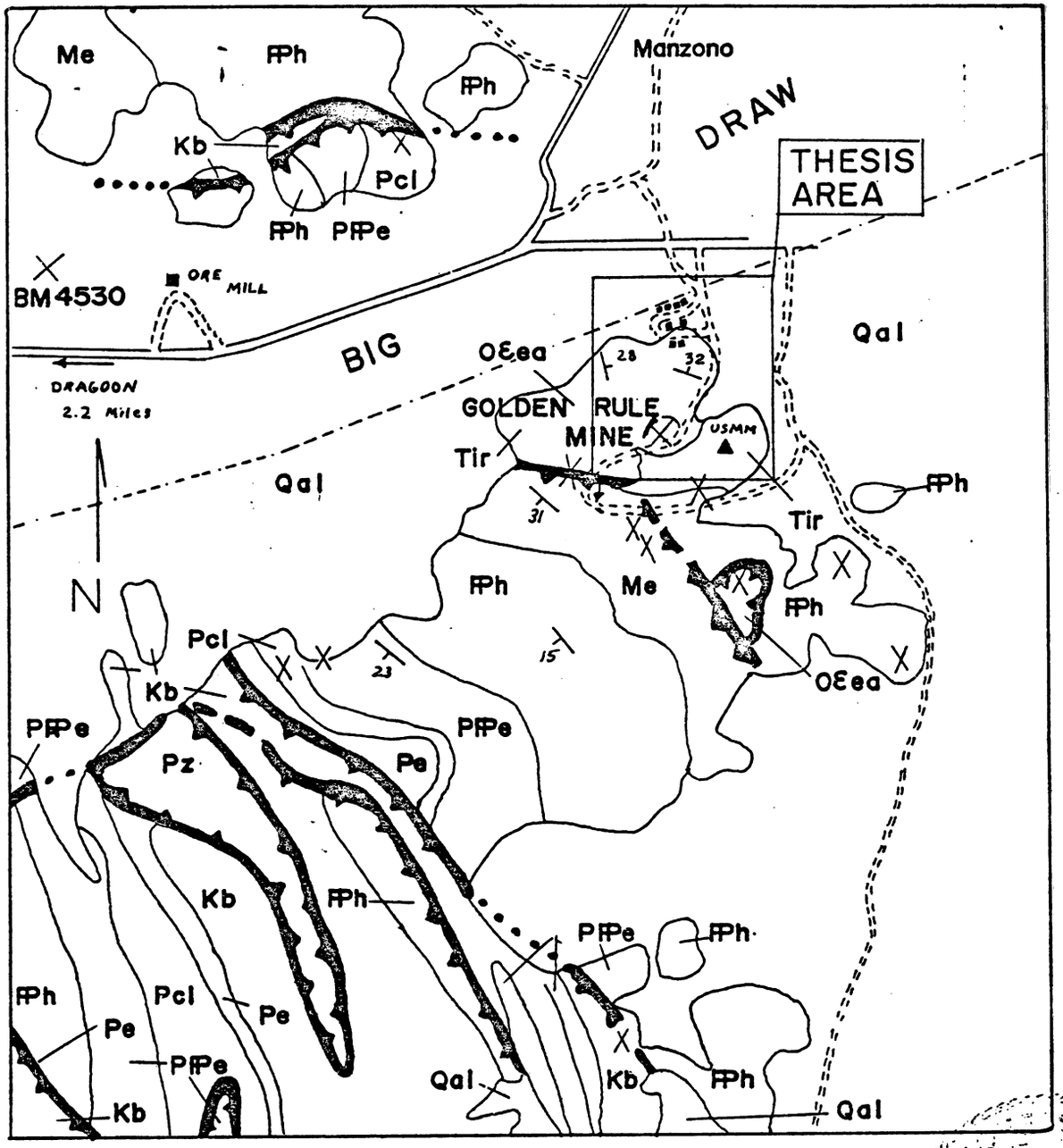
The climate is very arid.

CLAIM GROUP

The group consists of thirteen contiguous claims covering approximately 280 acres. A fourteenth claim contains the water well, and the vendor, Mr. Matt V. Lee, gave the writer assurance that all fourteen claims are contiguous.

No opinion of title can be expressed other than the verbal assurance of Mr. Lee, and the fact that he was doing assessment work at the time of our visit.

1] Location Map [follows page 2]



LEGEND

Qal	Aulluvium
Tir	Tertiary Intrusive Rocks
Kb	Bisbee Formation
Pz	Paleozoic Rocks, Undifferentiated
Pe	Epitaph Dolomite
Pcl	Colina Limestone
PℙPe	Earp Formation
ℙh	Horquilla Limestone
Me	Escabrosa Limestone
OЄea	El Paso and Abrigo Formation

SYMBOLS

Thrust Fault, showing dip
Dashed where approximately located
Dotted where inferred

Contact

Railroad

Power Line

Strike & Dip of beds 23

Road

Jeep Trail

Buildings

Mines and Prospects

Bench Mark BM 4530

U.S. Mineral Marker USMM 1

Arizona

GOLDEN RULE MINE
ARIZONA, U.S.A.

GENERAL GEOLOGY MAP

Adapted from: HAMPF and COOPER

Traced by—AFR
Scale— 1" = 1/2 mile
Date — May 15/73

HISTORY

The property was first located in 1849 by three miners going to California at the time of the gold rush. They did not do any work on the property.

After 1879, the property was relocated and actively worked. Mr. Lee told the writer that old records he removed by blasting an old safe, and which have since been destroyed by fire, showed a production of $3,000,000. This figure is not confirmed by any official documents.

From 1883 to 1957 the property has been worked intermittently by leasers to produce a more or less, efficient record of:

Lead	-	345,000 lbs.
Gold	-	9,539 ozs.

Silver is not shown, but assays indicate 1 oz. of silver for 70 lbs. of lead or about 5,000 ozs.

At today's prices this production would have a value in excess of $1,000,000.

Since 1957, the property has lain idle except for such work as necessary to cover assessment requirements.

GEOLOGY

The geology of the property was very well mapped by Mr. A. W. Hampf [2] who wrote his Master of Science Thesis at the University of Arizona, on the mine area. His work is freely used in this report, supplemented by the writer's observations.

2] Geology of The Golden Rule Mine Area, a M.Sc. Thesis, University of Arizona, by A. W. Hampf, 1972.

The mine workings are in the extreme northeast extension of the Dragoon Mts., at elevations between 4,500 and 4,700 feet.

Regionally, the rocks consist of Cambrian and Mississippian sediments intruded by a Mesozoic Quartz Rhyolite Porphyry. 3]

The subsequent folding and faulting created a northeast plunging syncline.

MINE AREA 4] 5]

The vein system occurs in the middle member of the Cambrian Abrigo Formation [limestones], which has been faulted in at least two planes. It lies in the SE limb of the NE plunging syncline.

It is close to the contact with the quartz rhyolite porphyry.

It has not been proven that the veins do not occur in the lower and upper members of the Abrigo Formation.

STRUCTURE

Saddle Fault: Strike NW, dip 50°SW

This fault shows as a depression on the west side of the Golden Rule Hill, and appears to have a horizontal throw of 200 feet. It has been assumed to cut off the veins to the west, although a short shaft exists on this faulted block.

3] General Geology Map [follows page 2]
4] Geologic Map and stratigraphic Column [back pocket]
5] Cross Section, Geology [back pocket]

Breccia Fault: Strike N 50° E, dip 45° SE

This fault crosscuts the vein system, and can be seen on surface and both mine levels. It consists of mineralized fragments, and barren country rock cemented with quartz.

Contact Fault:

This fault shows south of the main workings through the contact between the porphyry and the sediments.

Note: All faults appear to be down thrown on their eastern sides.

Bedding Plane Faults:

These are post ore faults as indicated by gouge on the veins. There are numerous small faults due to stress adjustments in the rocks. The earlier faults strike NW and dip SE. Later faults cut these, strike NE and dip SW.

Dike:

One andesite dike is known on the property, and is the youngest rock present. It cuts the main vein on the first and second levels, and has the same orientation as the Breccia fault.

Vein System: 6] 7] 8]

The veins are emplaced in the middle member of the Abrigo Formation following the bedding.

Where mining has been done in the past, it has been assumed that it was on several veins. Hampf has shown that

---

6] Composite Level Plan [back pocket]
7] Cross Section, Main Vein [back pocket]
8] Photos [last page]

it is most likely that the mining has been done on several sections of the main vein which have been offset by faulting. The writer is inclined to agree with this viewpoint.

There are at least three parallel veins on which no work has been done. Although their surface expression indicates they are narrow [10"], there is no reason they should not pinch and swell, making mineable sections, especially at today's metal prices.

The main vein is traceable for 1,000 feet on strike and about 250 feet down dip, and average width of 18". The dip is about 30° in the plane of the limestone bedding. Wuenech, 1927, reported porphyry on the second level, which may terminate part of the main vein, but other sections will be faulted up and could continue for some distance down dip.

The prevailing strike is N 50° - 60° W, dip 30° NE. West of the shaft, on the first level, the strike changes to nearly E-W, dip 80° N.

Values in gold have been reported, verbally, to increase down dip, with a decreasing width.

Menzoro Shaft:

This shaft, about 24 feet deep, follows a SW dipping vein showing pyrite and galena. It is about 400 feet NW of the main vein, and could possibly indicate an extension of the main vein faulted off.

Quartz Rhyolite Porphyry:

This intrusion occupies the hill immediately south of, and adjoining the Golden Rule Hill.

Work on this intrusive consists of short shafts and pits following quartz veins.

The most easterly shaft follows a NW striking vein at surface but drifts on a N-S vein that, according to Mr. Lee gave assays as high as 5 oz. gold.

Examination of the contact shaft and dumps showed evidence of considerable work following a quartz vein about 12" wide.

Three other inaccessible shafts follow veins striking NW with a steep NE dip.

Observation showed numerous veins, 1" or smaller, with strikes N60°E, dips 50°-80°SE, N60°W, dips 50°-80°NE or W. These latter are more often quartz filled and mineralized [Hampf].

There are other joints N-S and E-W, nearly vertical with some quartz.

The whole intrusion has the appearance of a stockworks of quartz veins, which, if sufficiently mineralized, may be of economic interest. Insufficient work has been done to evaluate it.

Assays off the dumps gave very low gold values as is to be expected, but the silver-lead values were surprisingly high. [9]

Bear Creek Mining did an I.P. [10] survey on part of the area and had anomalous readings. The data supplied

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9] Assays, Appendix B [End of Report]

10] I.P. Survey, Appendix D [End of Report]

is insufficient to draw a conclusion. It should be noted that copper in minor quantities does occur in the ore and in the country rock next to the veins.

Other Veins:

To the southwest, about one mile from the mine, short shafts and pits have opened up veins, with widths to three feet. These appear to have steep dips at surface but flatten to the dip of the sediments, or possibly other veins are followed. Grab samples from the dumps gave low values in gold, silver and lead.

MINERALIZATION

In all places on the property, the minerals are pyrite, galena, silver and gold. Minor chalcopyrite and sphalerite are reported, all apparently in quartz.

Hematite is very extensive and appears to be derived from pyrite, and as far as is known, it is the carrier of the gold.

Both galena and pyrite have been oxidized as shown by the casts left in the rock. Outside of the main vein, fresh mineralization in surface rocks is negligible.

Silver is contained in the galena, at an approximate rate of 1 oz. Ag to 3½% Pb.

From past records, and observation, most of the work has been done on the main vein, which was the most obvious target.

All other pits and shafts appear to be on hematized veins, as the hematite, probably derived from pyrite, is believed to be the gold carrier.

Mr. Lee stated that the values in the quartz-porphyry veins were less than half of those in the main vein.

The sampling done by Wuensch is still visible on the main vein. It was all channel sampling [Appendix B], and appears to be a perfect job. He averaged 0.73 oz. Au, 2 oz. Ag, 7% Pb.

Hampf took a few check samples and averaged 0.62 oz. Au per ton. This was chip sampling.

The writer took only a few samples in the vein as chips for character samples, which will average about the same as Hampf.

Ore reserves on the main vein will be about 20,000 tons of 0.60 oz. gold, 2 oz. silver, and 7% lead after dilution of 10%.

Mining Method:

The vein being narrow, it will be necessary to mine waste.

Therefore, the vein will be blasted first and removed from the stopes. Then, the waste will be blasted and used for backfill, with any excess being put on surface dumps.

CONCLUSIONS

The Golden Rule property has interesting possibilities. The vein system can be put on production with comparatively small expense as a low tonnage, high grade shipper.

At present, only two working faces are available, but 500 feet of drifting and 500 feet of raising would provide four more working faces, and there are possibilities of increasing the ore down dip.

Maximum tonnage would be in the order of 50 tons per day, or 1,350 tons per month of high grade shipping ore, with a gross value, at today's prices, of approximately $85,000.00.

However, if the untested parallel veins show high enough values, tonnage might be increased.

The Porphyry Hill has a possibility of developing a very large open pit tonnage of a lower grade, and this is probably the best bet for making a real mine.

Data to date indicates that this is a large stockworks, with values known in veins, and cross fractures with mineralization.

Without further work, no estimate can be made on the possible tonnages or grade.

Other areas of the property can be explored at a later date, to eliminate them, or put them on production.

RECOMMENDATIONS

Phase I:

a] During the property examination period, use a bulldozer to strip sections of the porphyry hill, and trench. If the rock is unrippable, blast trenches for sampling purposes.

b] At the same time, where practical, strip and trench, on either side of the vein system and over the parallel veins on surface which have received no attention in the past.

Phase II:

a] If Phase I a] is successful, diamond drill for further geology and assays of unoxidized zones.

b] Diamond drill from underground to test the parallel veins, and for main vein extension.

Phase III:

a] If Phase II a] is successful, diamond and percussion drill the porphyry hill for tonnage and grade.

b] Place vein system on production, by extending drifts, and driving raises where required.

ESTIMATED COSTS

Phase I:

Porphyry Hill:		
100 hrs. of bulldozer work @ $40/hr.	$ 4,000.00	
Trenching, blasting, cleaning	4,000.00	
Assaying - 100 @ $10	1,000.00	
Golden Rule Hill:		
100 hrs. of bulldozer work @ $40/hr.	4,000.00	
Trenching, blasting	2,500.00	
Assaying - 100 @ $10	1,000.00	
Truck Rental, travelling, lodging - 30 days	2,500.00	
Engineering and supervision	3,000.00	
	$ 22,000.00	
15% Contingencies	3,300.00	
Total	$ 25,300.00	
Say		$ 25,000.00

Phase II:

a] Diamond Drilling		
5,000 feet @ $15/ft.	$ 75,000.00	
Assaying - 500 @ $10	5,000.00	
b] Diamond Drilling		
1,000 feet @ $15/ft.	15,000.00	
Assaying - 50 @ $10	500.00	
Engineering and supervision	3,000.00	
Truck Rental, Travelling, lodging	2,500.00	
	$101,000.00	
15% Contingencies	15,000.00	
Total		116,000.00

Phase III:

a] 10,000 ft. Diamond Drilling @ $15/ft.	$150,000.00	
Assaying - 1,000 @ $10.00	10,000.00	
Percussion Drilling 12,000 ft. @ $3/ft.	36,000.00	
Assaying - 1,200 @ $10.00	12,000.00	
Bulldozer Rental 100 hrs. @ $40/hr.	4,000.00	
Total		$212,000.00
b] Rehabilitation of shaft and drifts	5,000.00	
Drifting - 500 ft. @ $60/ft.	30,000.00	
Raising - 500 ft. @ $40/ft.	20,000.00	
Equipment purchases, waterline, etc.	30,000.00	
Total		85,000.00
Management Services	20,000.00	
Truck Rentals, travelling, lodging	5,000.00	25,000.00
Total		$322,000.00
15% Contingencies		48,300.00
Total		$370,300.00
Say		$370,000.00

Respectfully submitted,

A. F. Roberts, P. Eng.

CERTIFICATE

I, A. F. Roberts, of 812 Fairbrook Crescent, Richmond, B. C., do hereby certify that:

1] I am a graduate of the University of British Columbia, [B.Ap.Sc. 1951].

2] I am registered as a Professional Engineer of the Province of British Columbia, and am a Member of the Canadian Institute of Mining and Metallurgy.

3] I have practised my profession since 1951 with Quatsino Copper-Gold Mines Ltd., Giant Mascot Mines Ltd., Cochenour Willans Gold Mines Ltd., Mogul Mines Ltd., Kerr Addison Gold Mines Ltd., Atlantic Coast Copper Corp. Ltd., Wasamac Mines Ltd., Brenda Mines Ltd., T. C. Explorations Ltd.

Previous to, and during University, I worked underground as a miner, and on various exploration-development projects.

4] The accompanying report is based on a personal examination of the property May 1 - 3, inclusive, 1973, and analysis of the references quoted herein.

5] I have not, nor do I expect to receive, any interest, direct or indirect, in these properties, or any of their securities.

6] I consent to the use of this report in or in connection with a prospectus, or a statement of material facts relating to the raising of funds for this project.

DATED at Vancouver, British Columbia, this fifteenth day of May, 1973.

A. F. Roberts, P. Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

CERTIFICATE

I, A. F. Roberts, of 312 Fairbrook Crescent, Richmond, B. C., do hereby certify that:

1] I am a graduate of the University of British Columbia, [B.Ap.Sc. 1951].

2] I am registered as a Professional Engineer of the Province of British Columbia, and am a Member of the Canadian Institute of Mining and Metallurgy.

3] I have practised my profession since 1951 with Quatsino Copper-Gold Mines Ltd., Giant Mascot Mines Ltd., Cochenour Willans Gold Mines Ltd., Mogul Mines Ltd., Kerr Addison Gold Mines Ltd., Atlantic Coast Copper Corp. Ltd., Wasamac Mines Ltd., Brenda Mines Ltd., T. C. Explorations Ltd.

Previous to, and during University, I worked underground as a miner, and on various exploration-development projects.

4] The accompanying report is based on a personal examination of the property May 1 - 3, inclusive, 1973, and analysis of the references quoted herein.

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DATED at Vancouver, British Columbia, this fifteenth day of May, 1973.

A. F. Roberts, P. Eng.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
A. F. ROBERTS

A P P E N D I X A

REPORT ON GOLDEN RULE MINE

DRAGOON, COCHISE COUNTY

ARIZONA

LUNDQUIST, 1928

R E P O R T

O N

G O L D E N R U L E M I N E

Dragoon, Cochise County,

Arizona.

By----------

H. E. LUNDQUIST

GOLDEN RULE

LOCATION:

This property is located about 4 miles from Dragoon, Cochise County, Arizona and 74 miles southeasterly from Tucson. Dragoon is the postoffice address and the ore is shipped from Manzora station, a siding on the S.P. R.R. one mile northerly from the mine. It is a good auto road with down grade all the distance.

HISTORY:

The original locating dates back to 1874 as corner posts bearing this date are still to be found on the ground. The early operations are very obscure and no definite information could be secured, except that a considerable tonnage had been hauled away to be milled, in one instance over 100 miles, it is said and later to a mill near Cochise 10 miles distant. Still later a 10-stamp mill was built on the property. It is estimated this handled some 5,000 to 6,000 tons. In later years practically all the production was shipped direct to the smelters. In 1919 the property came into the possession of the present owner.

PROPERTY, EQUIPMENT, ECT.

The property consists of 16 claims held by location, although the claims have been surveyed for patent. The patent has never been applied for. Until recently the one claim which contains the water supply well was detached from the main group. Subsequent claim locations have closed this gap and now the claims are all contiguous.

THE EQUIPMENT COMPRISES:

1 CP air compressor, size 9 x 12, single stage belt connected to 50 H.P. Samson gasoline engine.
1 5 H.P. Fair-banks Morse hoist.
1 9 H.P. Gas engine and wood saw.
1 Stone house, combination dwelling and office
1 Mess house
1 Large garage.
4 Bunk houses.
1 Blacksmith shop, fully equipped.
1 Drill sharpener.
1 60 ton ore bin, track, ore cars, etc.

GEOLOGY:

The mineralization occurs in both the Paleozoic sediments and the quartz porphyry instrusives which uplifted them. The porphyry intrusives form an elliptical shaped hill that penetrated and uplifted a fractured Cambrian limestone to the north and west and the carboniferous limestone to the south and perhaps to the east although the alluvium of the flat appoaches the property at a gentle slope without limestone exposure in the immediate vicinity.

This tilting action has created pre-mineral fault or veins which have subsequently been filled with silicious mineral bearing solutions. The majority of the veins occur along the bedding planes of limestone which are approximately 30 degrees from the horizontal while the veins in the porphyry assume angles of from 40 to 80 degrees. The strike of all the veins is more or less east and west. There is a strong beccia fault with a strike of north-30 degrees east, dipping about 50 degrees to the southeast. This fault is without a doubt, the channel through which the mineral bearing solutions reached the various faults and fractures, filling the vein with quartz and the metals the solutions contained. It is traceable for some 500 to 600 feet on the surface and is encountered on the first and second levels in the mine. There is indications underground that some post mineral faulting may have taken place, as well as the premineral.

ORE VEINS:

As before mentioned the veins in the limestone occur along the bedding planes on both east and west sides of the breccia fault. The mineral enrichment extends from the fault some 600 feet to the east and 400 feet to the west. On the easterly side of the fault 5 or 6 veins exist. Two of them, having been worked to a more or less extent. To the west 4 veins exist, two of them having been disclosed and therefore indications of more. Two or three of them have been worked and opened up. Several of the remainder have been exposed to the surface with open cuts. One of them being worked on the west side of the fault did not outcrop on the surface but was encountered in the underground development. The veins are well defined, striking appoximately north 80m degrees west and slipping 30 degrees from the horizontal to the north. The vein filling is very silicious, practically all quartz containing lead in the form of galena, carbonates and some sulphates, small amounts of silver. The gold is apparently free and rather coarse.

At the extreme eastern exposure the veins are found in the porphyry itself with an angle of dip straightening up considerable

from those in the limestone. The vein filling in these is in every way similar to the other veins, except it was found that the gold values were invariably lower than in the limestone veins.

DEVELOPMENT AND EXPLORATION:

At about 400 easterly from the Jackson shaft is the original shaft, practically in the bottom of the gulch, and the location is obviously the reason why the old workings and shaft were filled with gravel. Nothing has been done in this section since the early days. There is no map on these workings available, but it was reported that they extended with a winze 75 feet below the second level through the comparatively open stopes, which were then the extreme western limits of the old workings and had not penetrated the breccia fault into the ore, as this was done after the Jackson shaft was in operation.

The Jackson incline goes down about 30 degrees from the horizontal to the first level 130 feet. A drift to the east continues for over 200 feet where it encounters the gravel. That gravel was washed back along the drift when the flood occured in the old shaft. The ore along this drift from this level to the surface has all been removed. The shaft continues to the second level on an angle of about 28 degrees a distance of 95 feet along the incline. From this point a drift fault bears off to the southeast some 80 feet into the footwall and through the breccia fault, thence into the same ore vein as was stoped on the level above. The drift continues in ore until it reaches the gravel as on the level above. Some stoping has also been done on this level, but to what extent could not be learned as it has also been done on this level, but was inaccessible. There is a drift to the northeast for 50 feet, but it is in the wall between the veins.

On the level, west from the Jackson shaft the shaft and drift starts west and immediately turns very rapidly to the right and assumes a generally northeast course through and somewhat parallels the breccia fault on the west side for a distance of about 120 feet then turns to the left westerly for 40 feet where it encounters an ore shoot that is designated as "A"on the map. Stratigraphycally the so-called shaft vein which the Jackson shaft follows down is 67 feet below the "A" vein that is open stoped on the surface. The "B" stope plane then lies between shaft vein and "A" vein 46 feet above the "A" vein is another called the "C" which has also been open stoped. Beyond this other outcrops have been disclosed but no work done also been open stoped on them. About 400 feet west from these exposures a vein is opened up that carries good values and is thought

to be an extension for the "C" vein referred below.

Samples taken from east and west sides of "B" stope on first level as a check to previous sampling, that average gold 0.8 ozs. silver 1.7 oz., lead 8.4% for an average of 2 feet width. Some 75 feet west from this tope a recent lead 12.2% also for a width of 2 feet. In this opening a foot wide vein of high grade ore leaves the vein proper and dips down vertically probably connecting. In three instances ore has been followed in winzes down below this level. Good values are reported in all cases, but they were inaccessible at this time.

Beginning on the north end of the porphyry intrusive wall down toward the flat, the first vein was note 18" to 20" wide in a shallow trench 200 feet south from this vein going up the face is another vein 12 wide in a shaft 15 feet deep. A carload of ore is said to have been shipped from this shaft averaging gold $4.00 silver 11 oz., lead 35%; strike of vein is 65 degrees west. About 14 feet south of last described vein still ascending hill is fourth vein about 2 feet wide in a shaft 39 feet deep containing silver and gold values. The point now reached on the hill is approaching the summit or apex. Passing around the hill on east side 400 or 500 feet is located what is called the porphyry and lime contact shaft; on southeast side of porphyry intrusive there is a strong vein 6 to 7 feet wide striking north 80 degrees east. A square set shaft has been started and the opening is down about 30 feet with a short drift to the southwest apparently to follow the contact. The drift however is in limestone. The general appearance would suggest that it is a vein near the prospect and should be investigated or developed further. The values at present are said to be $12.00 in gold, silver, and lead.

VALUATION:

The writer has read the reports of Messrs. Wuensch and Hight and made a sketch plan map from one of mine. His visit to the property was brief and consisted chiefly in checking the physical conditions, etc., he feels that great care was exercised in taking the samples referred to in these reports. The valuation placed according to them fair and reasonable.

The block of ore marked "E" is very conservatively estimated at 18,643 tons. The question of positive ore, as that term is usually understood means ore blocked out on four sides. This does not apply literally to this ore, although the persistency of the veins and ore where developed would indicate it to be more than merely probable ore. In the above estimate the block marked "A"

both above "B" and farther west to 141 shaft has been disregarded in spite of the fact that ore is in the various faces as they stoped down from the surface and is ready to be stoped on again. In adding block "A" to estimate we should have not less than 50,000 tons of $20.00 ore. And if only one more place of ore or vein parallels this should be the second level $2,000,000 value would be attained assuming the values persisted to the second level which is not unlikely as practically all the exposures show substantial values. And when one considers the number of veins that will in all probability give an account of themselves as those opened have done, the cost of developing more ore should be comparatively small after the Jackson shaft is cleaned up and extended to the second cross-cuts north and south from the present levels and the same from lower levels after the shaft is deepened would quickly and cheaply develop the veins to a producing basis. Later the porphyry veins should be developed by sinking shaft which would determine their value.

The potential possibilities for creating a well paying mine on this property are the best the writer has visited in many years and any one desiring a mine of approximately 100 tons production that will pay handsome return with careful management, will do well to give this property consideration.

Respectfully submitted,

/s/_____

E. H. LUNDQUIST.

APPENDIX B

ASSAY DATA

NIGHT, HAMPF, ROBERTS

ASSAYS

GOLDEN RULE PROPERTY

The Assay Certificate contains data pertaining to other properties which may not be reproduced here. Therefore, the following assays are copies from:

Acme Analytical Laboratories
6455 Laurel Street
Burnaby 2, B. C.
File No. 2161

Sample No.	Ag	Au	Pb	Remarks
3091	0.10	0.004	0.70	Contact shaft - Grab, Dump
3092	0.02	0.001	0.02	Grab, Dump W of Porph. Hill
3093	0.38	0.002	1.48	Grab, Dump 50' N of 3092
3094	0.16	0.011	0.36	Grab, 300' S of 3095
3095	2.70	0.004	7.64	Grab, vein 35' N of Contact shaft
3096	0.32	0.008	3.16	Grab, 2/3 mile W of Contact shaft
3097	0.04	0.001	0.75	Grab 1/3 upper vein of S Contact shaft
3098	0.52	0.076	0.63	1st level 8", opp. #86, Wuensch
3099	0.70	0.428	1.08	E of #86, 6" vein
3100	46.20	0.478	24.90	Last Raise E, W Drift, vein
3129	0.42	0.102	1.32	10' W of 112, Main vein
3130	2.26	0.732	6.42	10" quartz, end of Big stope

APPENDIX

ASSAY DATA, GOLDEN RULE MINE

Samples taken by Hight were collected from channel cuts 4 inches wide and 1 inch deep in the Main vein. Channel cuts ran from upper wall-rock contact to lower wall-rock contact and include the gouge zones above and below the Main vein. The cuts ran perpendicular to the Main vein orientation in underground in-place exposures of the vein. Samples were cut over a canvas sheet, then thoroughly mixed and quartered. Opposite quarters were placed into separate sample sacks with identically numbered tags. One of the quarters was assayed and the other quarter was retained.

The samples for this study were taken in the following manner. Samples numbered 1 through 4 and sample number 6 were grab samples from ore stockpiles. Samples numbered 5 and 7 through 20 were chip samples from in-place exposures. All samples weighed approximately 2 pounds. After thorough mixing, the samples were halved. The halves were put in separate sample sacks and identically numbered. One half was assayed and the other half was retained.

Assays Results for Samples Taken by Hight (1928)

Sample No.[a]	Location Map	Au (oz/t)	Ag (oz/t)	Pb (%)
42	Fig. 2	0.42	2.6	3.6
43	Fig. 29	2.48	2.9	7.4
44	Fig. 29	0.36	3.1	6.7
45	Fig. 29	.60	2.3	5.4
46	Fig. 29	.72	4.9	5.8
47	Fig. 29	.55	3.6	4.9
48	Fig. 29	1.22	1.6	9.5
49	Fig. 29	0.42	2.0	6.4
50	Fig. 29	.51	1.4	5.2
51	Fig. 29	.63	2.7	6.8
52	Fig. 29	1.98	2.2	7.7
53	Fig. 29	0.97	3.4	4.6
54	Fig. 29	1.18	2.5	7.4
55	Fig. 29	0.42	1.5	7.4
56	Fig. 29	1.60	3.6	11.0
57	Fig. 29	0.32	3.8	8.2
58	Fig. 29	.31	2.5	4.6
59	Fig. 29	.92	2.0	8.3
60	Fig. 29	.44	2.6	7.5
61	Fig. 29	1.05	2.9	8.2
62	Fig. 29	0.82	2.4	7.1
63	Fig. 29	.55	2.5	5.5

Assays Results for Samples Taken by Hight (1928)--Continued

Sample No.[a]	Location Map	Au (oz/t)	Ag (oz/t)	Pb (%)
64	Fig. 29	0.98	3.1	6.8
65	Fig. 29	.45	2.6	5.8
66	Fig. 29	.37	2.1	6.2
67	Fig. 29	.83	2.0	7.5
68	Fig. 29	.62	2.5	6.0
69	Fig. 29	.38	2.7	7.8
70	Fig. 29	.04	0.20	0.40
71	Fig. 29	.24	4.1	11.2
72	Fig. 29	.80	2.2	7.8
73	Fig. 29	.92	2.7	8.1
74	Fig. 29	.81	4.1	17.3
75	Fig. 29	.66	2.5	6.8
76	Fig. 29	.72	2.1	4.7
77	Fig. 29	.84	3.0	7.7
78	Fig. 29	1.16	2.5	8.8
79	Fig. 29	0.44	1.6	5.3
80	Fig. 29	.92	3.1	6.3
81	Fig. 29	1.04	3.0	11.5
82	Fig. 29	0.41	1.4	5.6
83	Fig. 29	.26	6.4	3.6
84	Fig. 29	.52	1.1	9.2
85	Fig. 29	.57	2.9	5.7

Assay Results for Samples Taken by Hight (1928)--Continued

Sample No.[a]	Location Map	Au (oz/t)	Ag (oz/t)	Pb (%)
86	Fig. 29	1.16	3.7	6.3
87	Fig. 29	0.41	2.9	6.5
88	Fig. 29	.62	2.5	5.7
89	Fig. 29	.70	4.8	5.5
90	Fig. 29	.57	3.7	5.0
91	Fig. 29	.35	2.1	2.8
99	Fig. 2	.68	2.6	9.9
100	Fig. 29	.46	2.8	6.0

a. All samples were taken from quartz veins.

Assay Results for Samples Taken During This Study

Sample No.[a]	Location Map	Au (oz/t)[b]	Ag (oz/t)[b]	Pb (%)[b]
1	Fig. 3	0.02	0.30	0.50
2	Fig. 3	.01	.20	.30
3	Fig. 3	.01	.30	.4
4	Fig. 3	.40	.60	2.40
5[c]	Fig. 3	.0005	.05	0.15
6	Fig. 3	.10	.60	.70
7	Fig. 29	.55	2.3	5.8
8	Fig. 29	.61	2.5	6.4
9	Fig. 29	.41	2.1	5.8
10	Fig. 29	.36	2.5	6.1
11	Fig. 3	.65	2.3	7.9
12	Fig. 3	.34	2.5	5.9
13	Fig. 3	.41	1.0	4.5
14	Fig. 2	.55	2.0	6.9
15	Fig. 29	.60	2.5	8.9
16	Fig. 2	.65	2.3	9.4
17[d]	Fig. 2	.04	0.25	0.10
18[e]	Fig. 2	.01	.05	.05
19	Fig. 29	.74	4.1	6.1
20	Fig. 3	.49	1.9	5.1

a. All samples were taken from quartz veins unless otherwise noted.

b. Assays performed by Jacobs Assay Office, Tucson, Arizona.

c. Sample from gossan.

d. Sample from Breccia fault.

e. Sample from diabase dike.

APPENDIX C

SOME SMELTER RETURN DATA

PHELPS DODGE CORPORATION

COPPER QUEEN BRANCH

GENERAL OFFICE AND REDUCTION WORKS

GRANT H. DOWELL,
MANAGER

W. H. WEBSTER,
ASSISTANT MANAGER

H. J. BISHOP,
ORE BUYER

DOUGLAS, ARIZONA,
Sept. 29, 1923.
File 90-J.

Jackson Leasing Company,

Willcox, Arizona.

Gentlemen:-

The results on the sample of ore which you sent with your letter of the 20th, are as follows:

Gold	.70 oz.
Silver	1.66 oz.
Copper	.19 %
Silica	76.4 %

Ore of this assay and analysis is quite desirable and under the present price of silver, would have a value, after deduction of treatment charges, of about $10.00 per ton, delivered at our works.

From this amount, of course, would have to be deducted all charges incident to delivery at our plant.

Trusting that within due time we may receive a shipment from you, we are

Yours truly,

H J Bishop

HJB/W

Chief Clerk.

ALL QUOTATIONS HEREIN ARE SUBJECT TO CONDITIONS PRINTED ON THE BACK OF THIS SHEET

PHELPS DODGE CORPORATION

COPPER QUEEN REDUCTION WORKS

DOUGLAS, ARIZONA

May 27, 1929.

Mr. Edward J. Jackson,

Dragoon, Arizona.

Dear Mr. Jackson:

Our results on the small sample left with us on the 20th instant are as follows:

Gold	1.14 ozs.
Silver	6.15 ozs.
Copper	0.39 %
Lead	17.7 %

As you will note this sample does not show much copper but it does show a very satisfactory increased lead content.

I hope to be able to advise you results on the carload shipment within the next day or so.

Yours very truly,

Ore Buyer.

HJB/F

.2275
2240
3.60
2.76
5-2,45

CONDITIONS

THE QUOTATIONS NAMED ON THIS SHEET AND ANY CONTINUATION SHEETS ATTACHED, ARE MADE ONLY SUBJECT TO THE FOLLOWING CONDITIONS:

1. THAT THESE QUOTATIONS MAY BE CANCELLED BY US WITHOUT NOTICE IN CASE OF STRIKES, FIRES OR OTHER DISTURBANCES TO OPERATIONS BEYOND OUR CONTROL.
2. THAT THESE QUOTATIONS ARE GOOD FOR 30 DAYS ONLY, UNLESS OTHERWISE SPECIFICALLY STATED.
3. THAT THE SMELTER WEIGHTS AND SAMPLING, SUBJECT TO SUPERVISION BY THE SHIPPER OR HIS REPRESENTATIVE, SHALL BE THE BASIS FOR SETTLEMENT, AND WE RESERVE THE RIGHT, ALWAYS TO DISPOSE OF THE ORE FOR SMELTING WHEN THE INITIAL SAMPLE IS TAKEN.
4. ASSAY DIFFERENCES WILL BE SETTLED BY UMPIRE MUTUALLY SATISFACTORY TO SHIPPER AND OURSELVES. THE RESULTS FOUND BY UMPIRE TO GOVERN AND LOSING PARTY TO PAY UMPIRE CHARGES.

OUR LOT E-12.
SMELTER LOT ---------
Shipped Sept.6th 1927.

S.P.Car----------54478------Net Weight-------100.000

Assays----------Gold------1.16
Silver-----2.7
Lead-------8.7

Gross Value----------$30.10
Less F & T ----------$ 9.00
Net per Ton----------$21.10
Value per Car----------$1055.00

Not yet settled for.

OUR LOT E-10.
SMELTER LOT #2989.

S.P.Car------46081---------106000

Assays----------Gold----------1.40
Silver--------3.4
Lead----------8.2

Gross Value----------$36.20
Less F.& T.----------$ 9.00
Net per Ton----------$27.20
Value per Car----------$1441.60

Not yet settled for.

OUR LOT E-11.
SMELTER LOT 3140.
Shipped Sept.3rd, 1927

S.P.Car------92673----------Net Weight------196420

Assays----------Gold--------1.10
Silver------4.2
Lead--------8.5

Gross Value----------$32.00
Less F & T ----------$ 9.00
Net per Ton----------$23.00
Value per Car----------$1219.00

Not yet settled for.

Sample No	Cu	Ag	Pb
42	.42	2.6	3.6
32?	.61	2.6	9.9
91	.35	—	2.8
100	.46	2.8	6.0
63	.55	2.5	5.5
88	.64	2.0	6.4
43	2.48	2.9	7.4
44	.36	3.1	6.7
45	.60	2.3	5.4
46	.72	4.9	5.8
47	.55	3.6	4.9
48	1.22	1.6	9.5
49	.42	2.0	6.4
50	.57	1.4	5.2
51	.63	2.7	6.8
52	1.98	2.2	7.7
53	.97	3.4	4.6
54	1.18	2.5	7.4
55	.42	1.5	7.4
56	1.60	3.6	11.9
57	.32	3.8	8.2
58	.31	2.5	4.6
59	.92	2.0	8.3
60	.44	2.6	7.5
71	.244	4.1	11.2