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See "Big Blue Mine"

BRAATHEN MINE

October 1, 1942

Tyndall Mining District, Santa Cruz
County

J. S. Coupal

Granted

Reconstruction Finance Corporation ✓
Preliminary Development Loan

Docket No.

Phx. 53

Date Application Received

September 23, 1942

Date of Field Examination

September 9, 1942

(George A. Ballam)

Date of Report

October 1, 1942

1. Name and address of applicant (correspondent):

Arnt T. Braathen, Amado, Santa Cruz County, Arizona.

2. Character of project and estimated cost thereof:

Unwater and repair 60 foot shaft and further develop showing copper, lead, zinc, gold, silver ore.

3. Location of property:

Sect. 15-16-21-22 T 20 S - R 14 E, Tyndal Mining District, Santa Cruz County, Arizona, 10 miles east of Amado in Montoso Canyon.

4. Applicant's interest in or ownership of property:

Applicant is partnership - Arnt F. Braathen (applicant) and Jane K. Braathen (wife).

5. Loan requested:

\$5,000.

6. Loan recommended:

\$5,000.

7. Comments:

(A) Added to this docket is report by George A. Ballam, field engineer for Department of Mineral Resources. Ballam has reported at various times of his discouraging mine operators from making application for loan when in his opinion he did not consider loan advisable.

(B) Ballam advised applicant to make this application whereas information supplied does not fully present conclusive data, I am yielding to Ballam's suggestion and making recommendation for loan.

(C) The three assays presented and recorded on map indicate mineable ore which can be opened up at comparatively small expense and owner believes he can develop additional ore and start producing at an early date.

(D) Property is partially equipped and requires only hoist as major item.

(E) Mine workings should be checked as soon as they are accessible.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

J. S. Coupal, Director

R. F. C
Mining Section
Supervising Engineers Report.

Tulley - Assit Chief, Washington D.C. April 13, 1943

Re: Arnt T. Braathen, Docket No C-ND-7823

ND 5399.

In regards to your letter of March 24, 1943
requesting elucidation of the following
points:

Depth of shaft

Grade of samples

Failure to indicate rein structure.

I have some additional data to
submit.

Mr. T. P. Lane, Supervising Engineer, was
going to the vicinity of this mine when
your letter arrived and he was kind
enough to suggest getting ^{the} desired information.

I am submitting a sketch he made of
the property along with some additional
assays of samples.

Depth of shaft

At the time of my examination the
bottom of the shaft was measured at
21 feet. Mr. Braathen was holding the
tape on the bottom and I at the top.
From my observations that was the bottom.
Besides there were four people standing

on the muck pipe with an aggregate weight of 600 pounds. If there was a cave below it certainly would have moved perceptibly.

However, I was in error as Mr. Braathen has uncovered an additional 13 feet and Mr. Lane states he saw an old air pipe projecting up through the muck. Thus it is quite possible the shaft is 60 feet deep, but nevertheless the proposed program was not completed if I could not see the bottom of the shafts or the drift at the time Mr. Braathen asked for the examination. Mr. Lane has shown on his map the plan of the shaft at 34 feet.

Grade of Samples

without a vein structure that was observable and with sulfides in a pocket all around the shaft at 21 feet, I was forced to take samples on all sides to indicate the grade of mineralization. Mr. Lane took three more samples at the present bottom. They are shown on the map. They would indicate a decreasing grade in mineralization downward. However, Mr. Lane has stated to me that the mineralization was not continuous downward from where I sampled. One foot away from this samples the ore appeared of better grade but two feet away mineral did not occur.

Mr. Lane's No 4 sample was taken from

4

apparently the grade of ore is not as highly metalized as it was near the surface, but no doubt to get the true picture of the mineralization the whole of the shaft should be cleaned out.

Charles A. Pison
J. E.

Attachment

Map prepared by Mr. Lane
Assay certificates

ore ready for shipment. Neither the grade nor the amount are convincing.

vein structure

I failed to indicate a vein structure as a vein structure was not observable. This shaft is in the bottom of a dry wash and the vein structure was not indicated on the surface. Some tunnels approximately 500 feet away did show the vein as indicated on my sketch. Mr. Lane has shown the probable trend of mineralization as observed at the 34 foot level.

Comments

I trust that the several features discussed are presented more clearly. Some times it is difficult to present certain features clearly that are not well defined and can not be augmented from applicant's statements. The applicant is slightly crazy from prospector's fever as one glances at his application papers suggest something wrong with his mentality.

It now appears that the shaft is filled with muck and not with water and this exhuming of an old shaft can go on indefinitely until the 60 feet is opened.

R. F. C.
Mining Division
Report of S. C.

Docket No C-ND-7823
Date of Examination, inclusive Feb 27, 1943
Date of Report March 1943

A preliminary development loan of \$2500 was approved to the captioned borrower for the purpose of rehabilitating the shaft and underground workings of the applicant's lead-zinc-copper mine, erect a barrier to flood waters and to perform additional work on the vein when it became accessible.

applicant wrote this office on Feb 23, 1943 that he was ready for an examination as the money advanced him under a Class C. Preliminary Development Loan was expended.

Through the expenditure of preliminary development loan funds the proposed program was not completed in the sense ^{that the} applicant did not open up the full depth of the shaft. The Arizona Mineral Resources Engineer stated that the shaft was about sixty feet deep with fifteen feet of drifting on either side. The shaft measured 21 feet in depth and it appeared that this was the full extent of the shaft. Most of the money was spent in buying and installing equipment, building a roof over the hoist and compressor and building a concrete platform with retaining wall. Applicant did not build a wing dam or erect a concrete collar for the shaft.

Applicant timbered the shaft 20 feet and bailed out all the water. The loan was for the purpose of unwatering the shaft and continuing the drifting from bottom of shaft.

Applicant claims the shaft is 55 feet deep with 30 feet of drifting and that the ^{present} muck in the shaft came from retimbering the ~~shaft~~ 20 feet. His arguments do not seem to hold water ^{for}. It is believed the shaft is but slightly over 21 feet deep.

Subject report considers the application of borrower for an additional loan to further develop the workings.

1. Name and Address of Applicant

• Bert T. Braathers
Amado, Arizona

Correspondent: Applicant

2. Character of Project

To develop lead-zinc-copper mine

3. Location of Mine

In Secs. 15, 16, 21 and 22, T. 20 S., R. 14 E., Tyndall Mining District, Santa Cruz County, Arizona. The nearest railroad shipping point is Amado, Ariz., approximately 10 miles away. The first seven miles from Amado are over a desert county road.

3.

The last three miles are ^{open} unimproved desert, ^{road} which leads over boulder strewn flats and gulches and ends in a steep mountainous area within one half mile of property.

4. Applicant

Applicant does not have an operating personnel. Under the loan he has been doing most of the work. The applicant may be competent to handle loan funds, although it appears he has had little operating experience.

5. Loan Requested

\$ 27,500

6. Description of Project

A. General Features

1. There are no mine workings or other necessary appurtenances which are not confined within applicant's ownership.
2. Proposed project would comply with State Compensation or Safety-first statutes.
3. There are no legal discrepancies not covered.
4. There are no impeded right-of-way facilities.
5. Surface or sub-surface trespass not likely.

B. Existing Development

1. Shaft and tunnel,
 - a. Compass and tape maps and sections were

made and are attached to report -

b. Sampling data.

channel samples were taken of ore exposed in bottom of shaft. They are recorded as follow -

No	width	Au	Ag	Cu	Pb	Zn	Description
1	56"	.01	1.2	.09%	2.99%	3.5%	South side of shaft one foot above muck
2	45"	.01	1.4	.11%	4.35%	6.1%	East side of shaft one foot above muck
3	72"	.01	0.4	.17%	1.70%	3.9%	North side of shaft one foot above muck
4	84"	.01	1.8	.17%	5.24%	4.6%	West side of shaft one foot above muck

c. Condition and accessibility of mine workings

Shaft measured 21 feet from collar to top of muck. Arizona Mineral Resources report shaft 60 feet deep with 30 feet of drifts.

d. General Features of Deposit.

The applicant's three unpatented lode mining claims, which have been developed by a tunnel and by a shaft in the bottom of a dry wash, are near the base of Mt. Hopkins in quartz diorite of Mesozoic age. This quartz diorite intrudes the granite, quartz monzonite and upper Paleozoic limestones to the west at the mouth of Montosa Canyon. At the property the quartz diorite is cut by a system of dikes and fissures a mineral bearing fissure trending north N 75 degrees W. This fissure is exposed in part by the applicant's workings.

Mineralization

Mineralization appears restricted to quartz veins varying in width from 12 to 18 inches on both sides of a dike which was intruded into the fissure. Although the vein does not show on the surface where the shaft was sunk, apparently vein material was encountered 20 feet below. A few hundred pounds of ore on the dump reveal both brown and black sphalerite associated with cube galena, cube pyrite and minor chalcopyrite ~~are~~ dissemination in an altered igneous rock. Some quartz is associated with the sulfides. The assays on four samples taken around the bottom of the shaft reveal very low values in copper and only moderate values in lead and zinc. For the applicant to ship this type of ore to the Denn Mill in Bisbee, the combined value of the metals must be 15% or better. There is no indication that the grade of the ore ~~sampled~~ will assay any higher than the samples.

~~C. Proposed Development~~

D. Equipment

Applicant has a Sampson 10 HP hoist and 16 foot boom with bucket powered by an automobile engine, a 210 compressor powered by another automobile engine, a blower not connected, jackhammer, small tools and blacksmithing equipment.

Comments of Supervising Engineer.

The results of spending \$2500 on this property has not revealed any additional information over what was known before the loan was spent. Apparently there was not more than a hat full of water in the bottom of the shaft and the applicant has failed to show the shaft as being 60 feet deep with 30 feet of drifting. The shaft was measured 21 feet deep and was tightly boarded from the surface to within 3 feet of the bottom. Four samples were taken on all sides of the shaft and revealed only scant amounts of copper and between 5 and 10% combined lead and zinc; an amount too small for transportation to a mill in Bisbee, Ariz. There was a small amount of ore on the dump, possibly not more than a ton. In the application the applicant states he is getting 15 tons per day. This statement is absurd as well as the statement that "future production should be tremendous". Such statements reveal that the applicant has very little mining or management sense. However, if the applicant can show that he has areas of lead and zinc that can be sampled

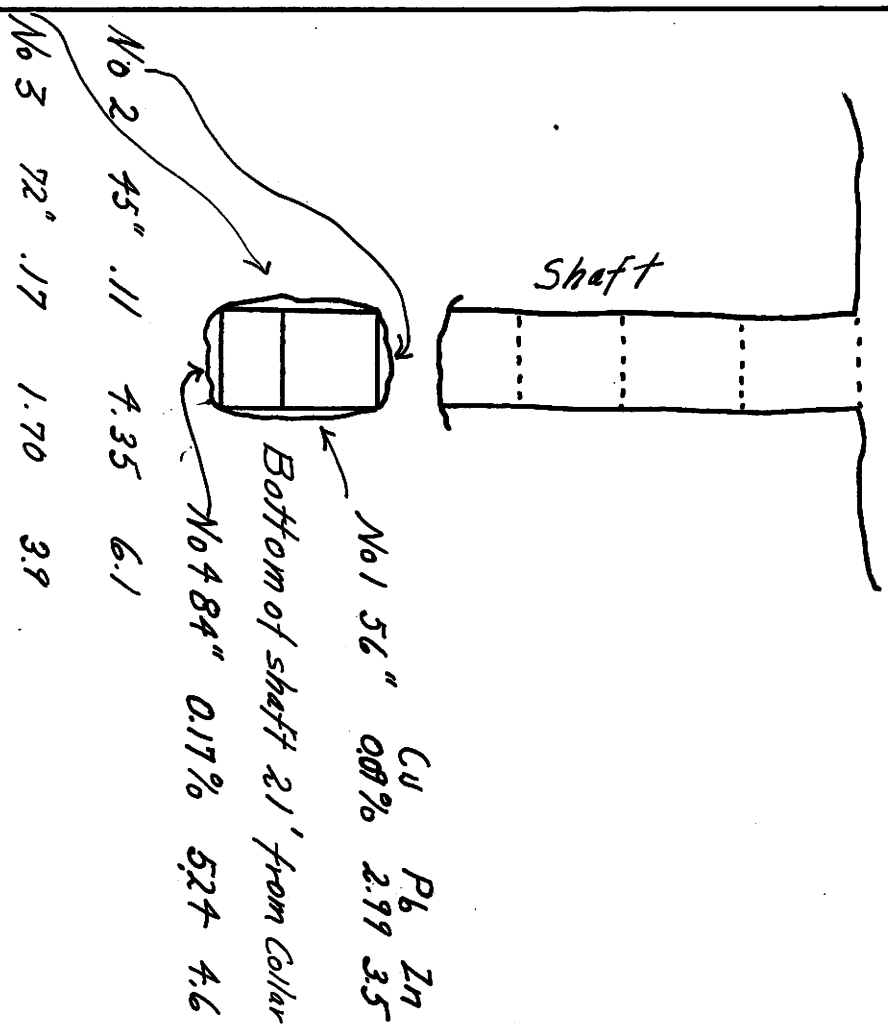
This engineer is willing to go and sample them but on the basis of one opening a shaft 21 feet deep it is considered that what the applicant proposes to do is prospecting.

Charles A. Rosen

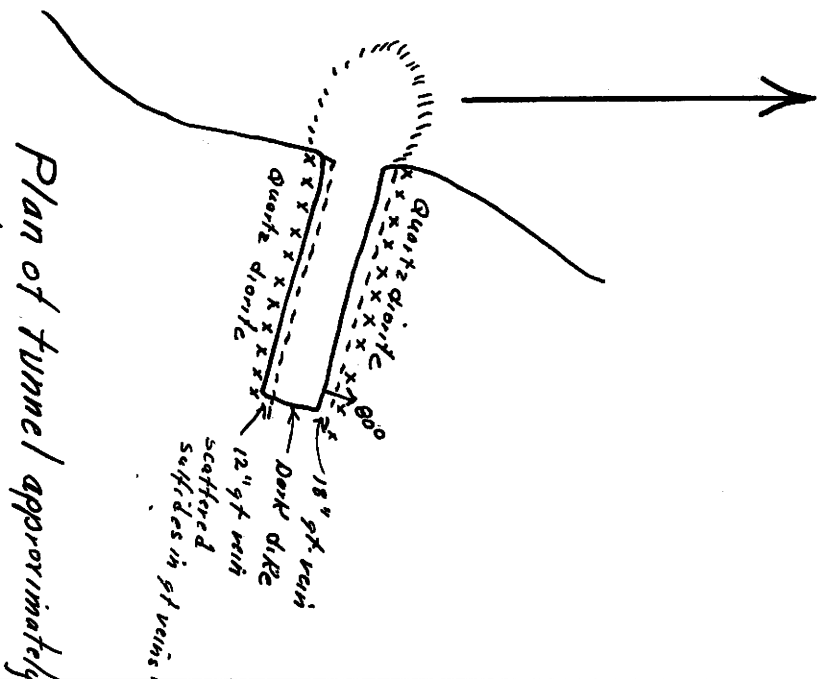
Attachments

Map

Assay certificate

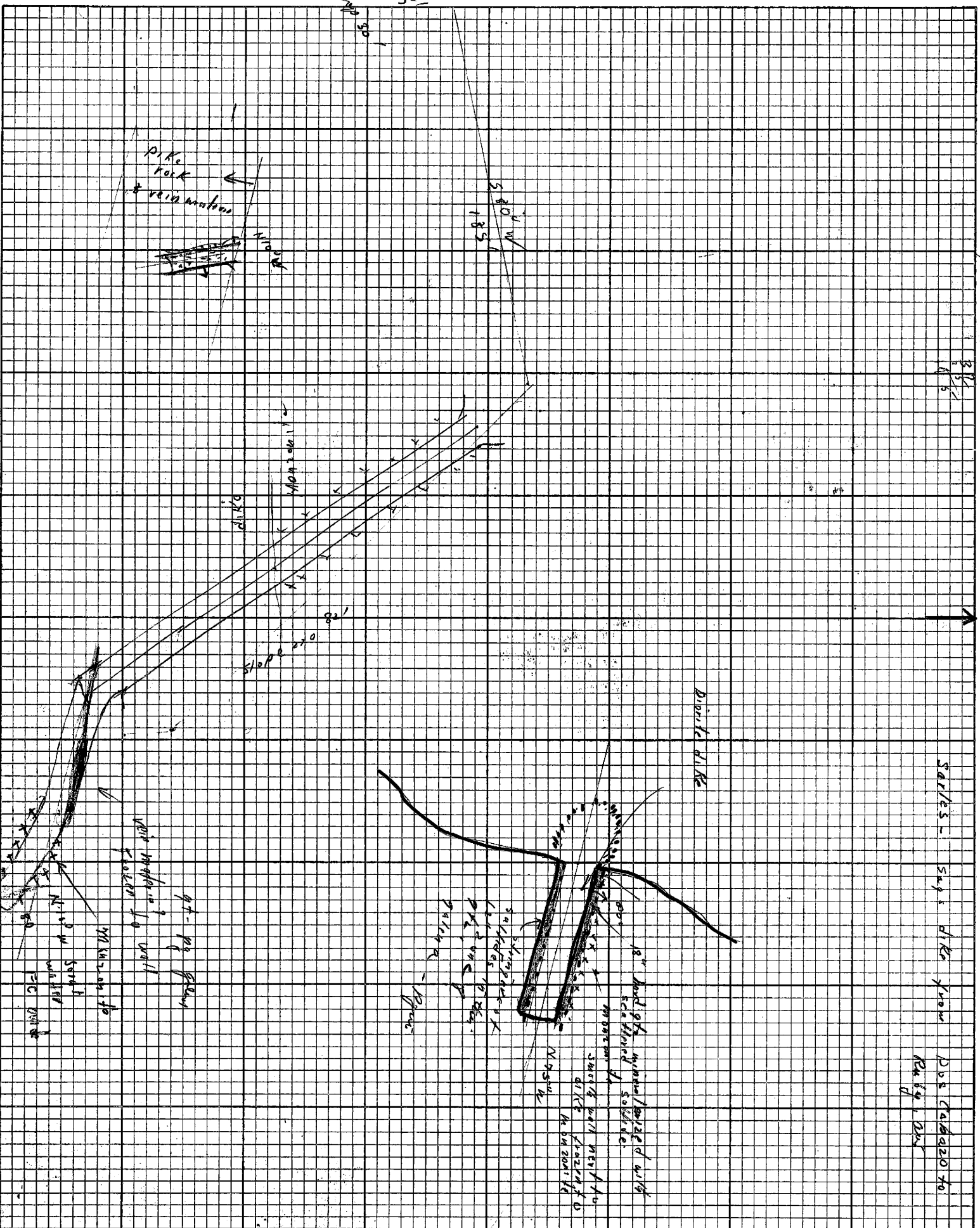


Scale 1" = 10'



Plan of tunnel approximately
500' East of shaft
Scale 1" = 20'

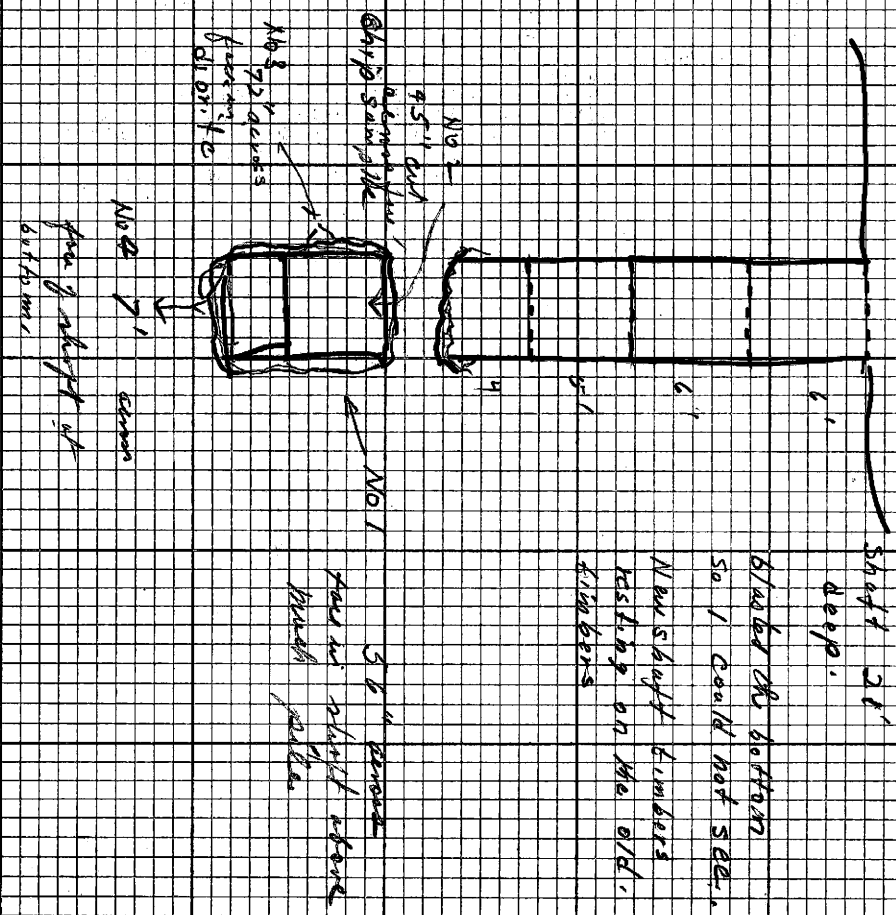
FRNT T. Braathen
 Amado, Ariz., Feb 27, 1943
 Docket No C-ND-7823
 Charles A. Raas.



Scales - 50' Dike show D.S. Callahan to
R. Taylor

Applicant thinks it is a
 same D.C. same so soon
 would see more
 no sign of vein
 ore in diorite and
 ore in quartzite
 lens of diorite in the
 ore zone, but field
 it shows no continuity
 over the surface

CRASH KING - 67 PUEBLO
 COURT ORANGE 1100 SHORE
 83000



Feb 27, 1943 Braden

Shift -

Rolling test 9" x 8" covered

3 x 8' Two compartments

No higher above each than before

RD wing down to prevent water from

each going in shaft

to connect in shaft

Double bearing for last frame

automatic engine driven haul

galvanic not over engine haul

compressor and tests

Completed from two miles into in shaft

equipment systems OK,

haul up done, out over hauler

for division, engine & etc

Bracken

Minnis Brown and black

sphalerite

Cube galena - ab

acte pyrite

white waxy pyrite

chalcopyrite - not abundant

in district

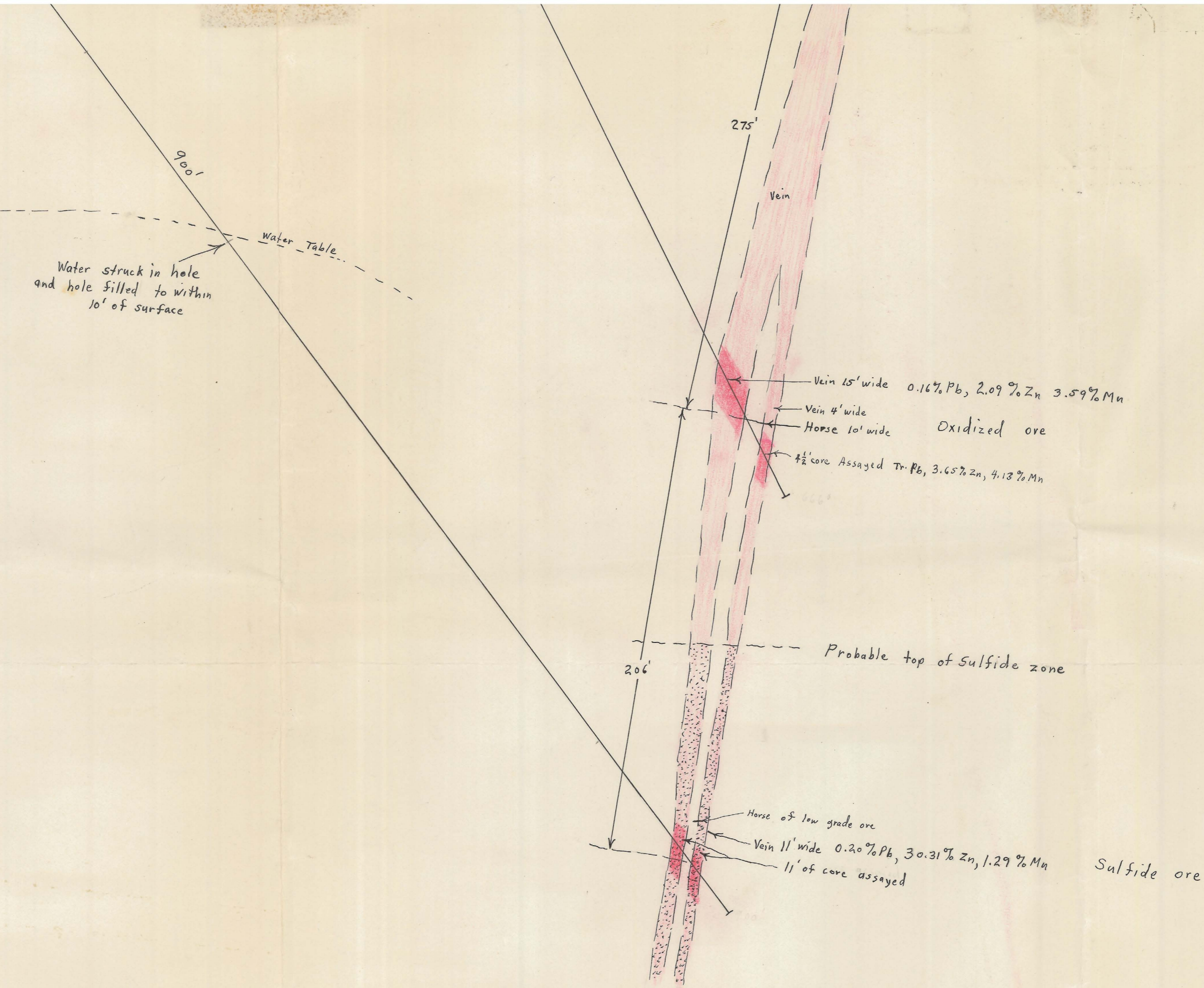
Some disseminated pyrite

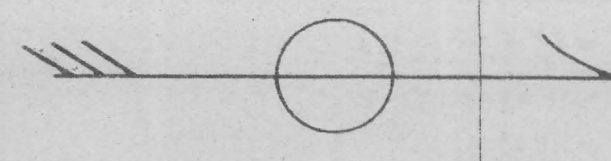
in district

of disseminated pyrite in wags

Position of Holes in relation to Vein
Shown in longitudinal Section Above

⊙ Hole No. 3
Sulfide



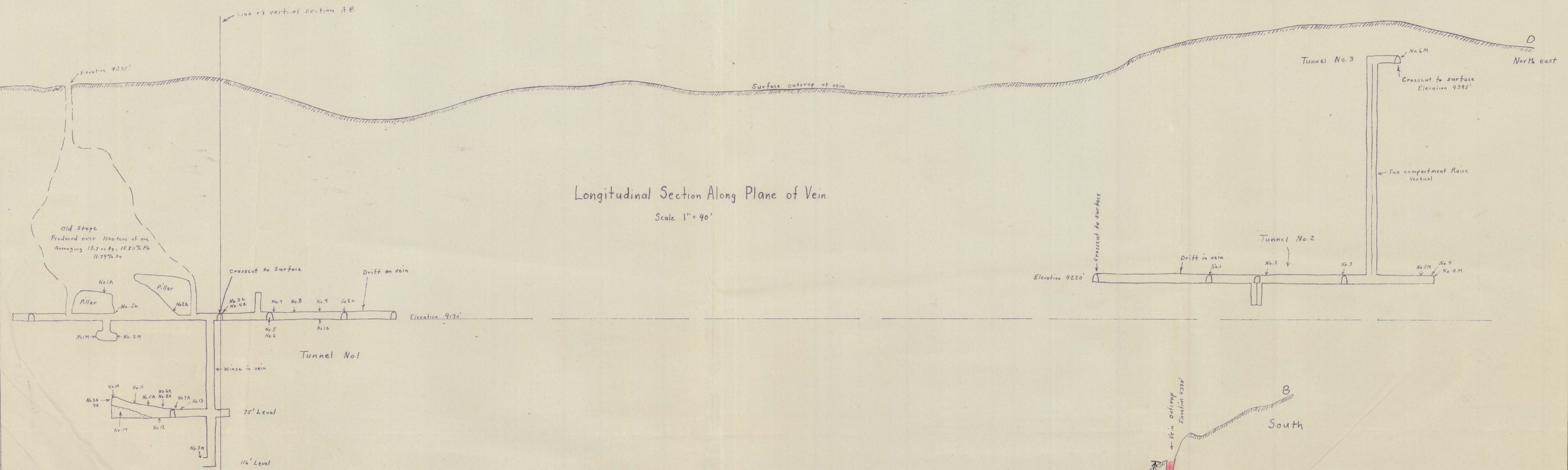


IRENE MINE
 Globe - Arizona
 Map By 1923 ELO
 1" = 40'

1960-01-0015-05 BR414

Sample No.	Width	Ag.	Pb.	Zn.	Mn.	Sample Location
1M	48"	5.70	6.77	-	-	Tunnel No. 1
2M	48"	5.40	4.58	-	-	" " "
3M	60"	0.92	7.80	-	-	" " Winze
4M	60"	0.20	3.99	9.20	-	Tunnel No. 2
5M	60"	0.20	6.00	16.37	-	" " "
6M	60"	0.31	14.52	29.77	-	Tunnel No. 2
Ave. Assays by W.R. Matland Dec. 30, 1942						
1A	76"	5.24	5.20	-	-	Tunnel No. 1
2A	32"	6.71	12.72	-	-	" " "
3A	54"	5.44	13.73	-	-	" " Winze
4A	60"	0.52	21.62	-	-	" " "
5A	76"	4.90	16.75	-	-	" " "
6A	20"	1.9	4.82	8.88	-	" " "
7A	12"	7.0	14.09	16.34	-	" " "
8A	12"	0.87	16.90	-	-	" " "
Above Assays by W.B. Gohring May 15, 1942						
1	36"	1.4	3.44	1.11	-	Tunnel No. 2
2	36"	0.7	2.95	5.35	-	" " "
3	40"	0.2	1.04	1.71	-	" " "
4	50"	0.7	0.91	3.53	-	" " "
5	72"	2.4	2.70	3.93	-	No. 1
6	70"	1.9	0.83	6.70	-	" " "
7	48"	1.1	1.88	2.92	-	" " "
8	37"	0.7	1.46	2.32	-	" " "
9	42"	2.1	0.91	1.71	-	" " "
10	54"	1.9	4.61	2.92	-	" " Winze
11	36"	2.0	6.71	9.79	-	" " "
12	20"	4.2	6.07	12.40	-	" " "
13	20"	7.2	7.12	13.23	-	" " "
14	60"	5.8	3.51	9.17	-	" " "
Above Assays by I.L. McIver May 6, 1942						
1c	2.80	5.20	2.15	-	-	Tunnel No. 1
2c	4.40	3.74	4.00	-	-	" " "
3c	2.80	3.42	5.75	-	-	" " "
4c	1.40	4.26	7.90	-	-	" " "
5c	2.00	9.78	7.05	-	-	" " "
Above Assays by Calkins & Roberts July 12, 1925						

Longitudinal Section Along Plane of Vein
Scale 1" = 40'

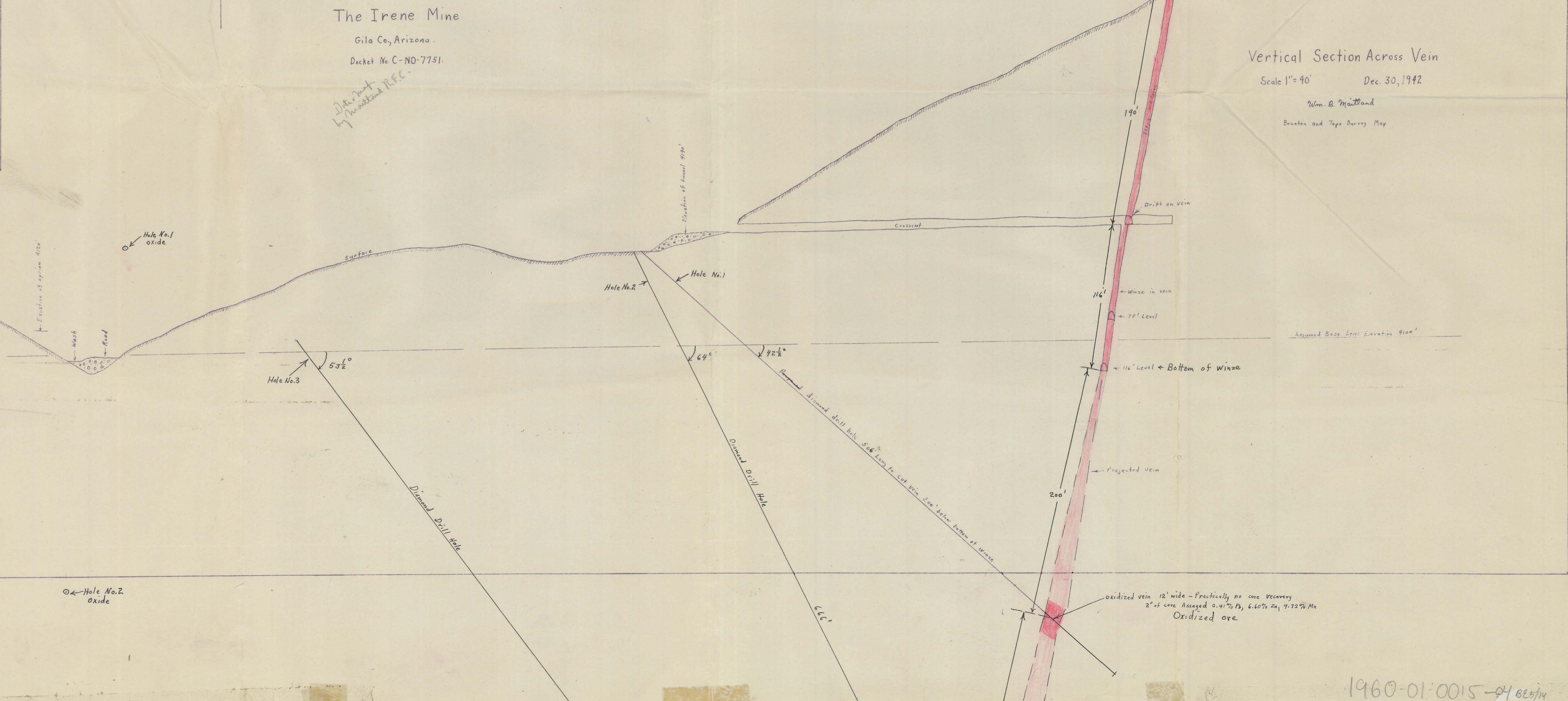


The Irene Mine
Gila Co., Arizona
Docket No C-ND-7751.

*Done and
by Provisional REC.*

Vertical Section Across Vein
Scale 1" = 40' Dec. 30, 1942

Wm. B. Matland
Bruten and Tape Survey Map

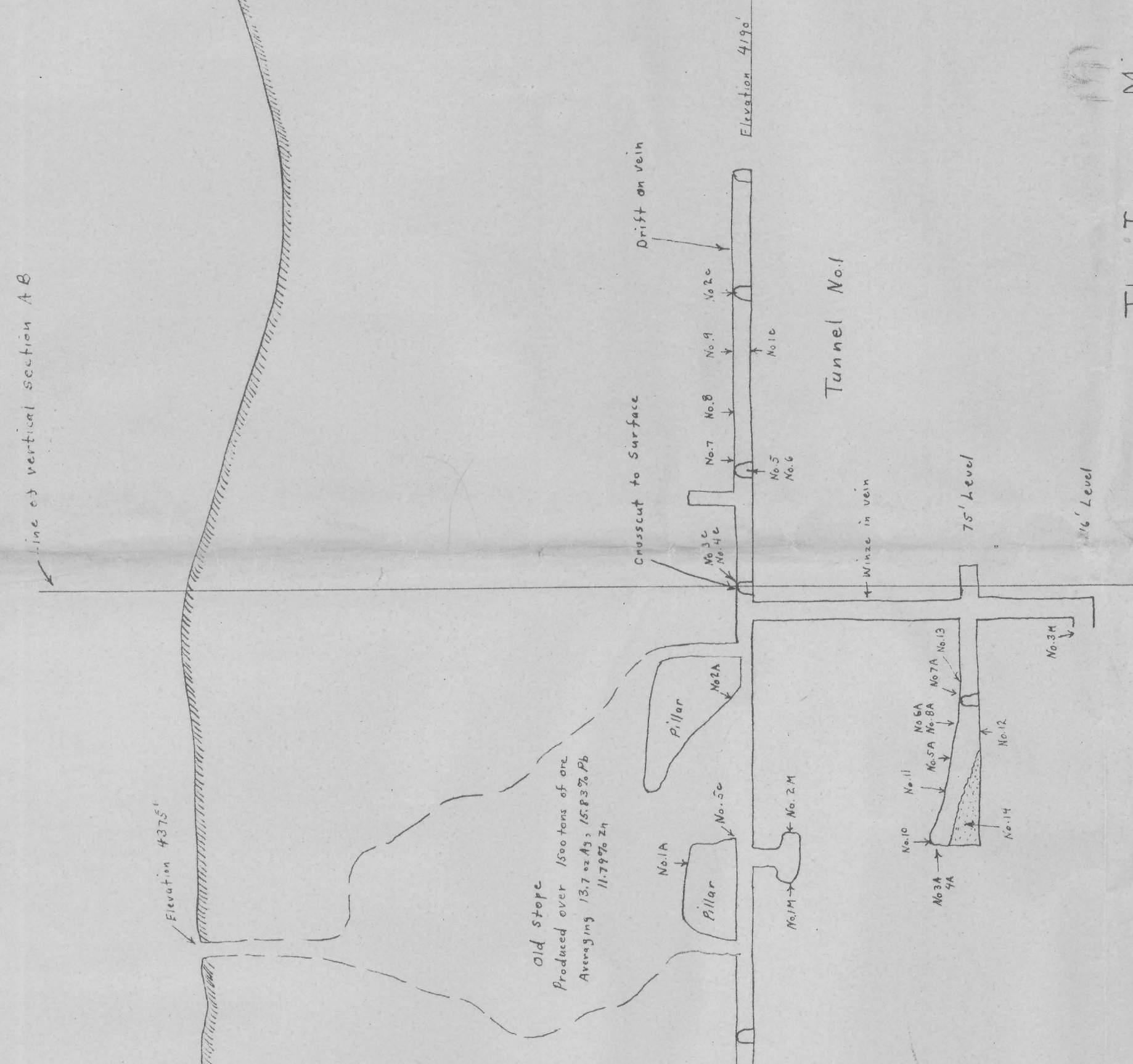
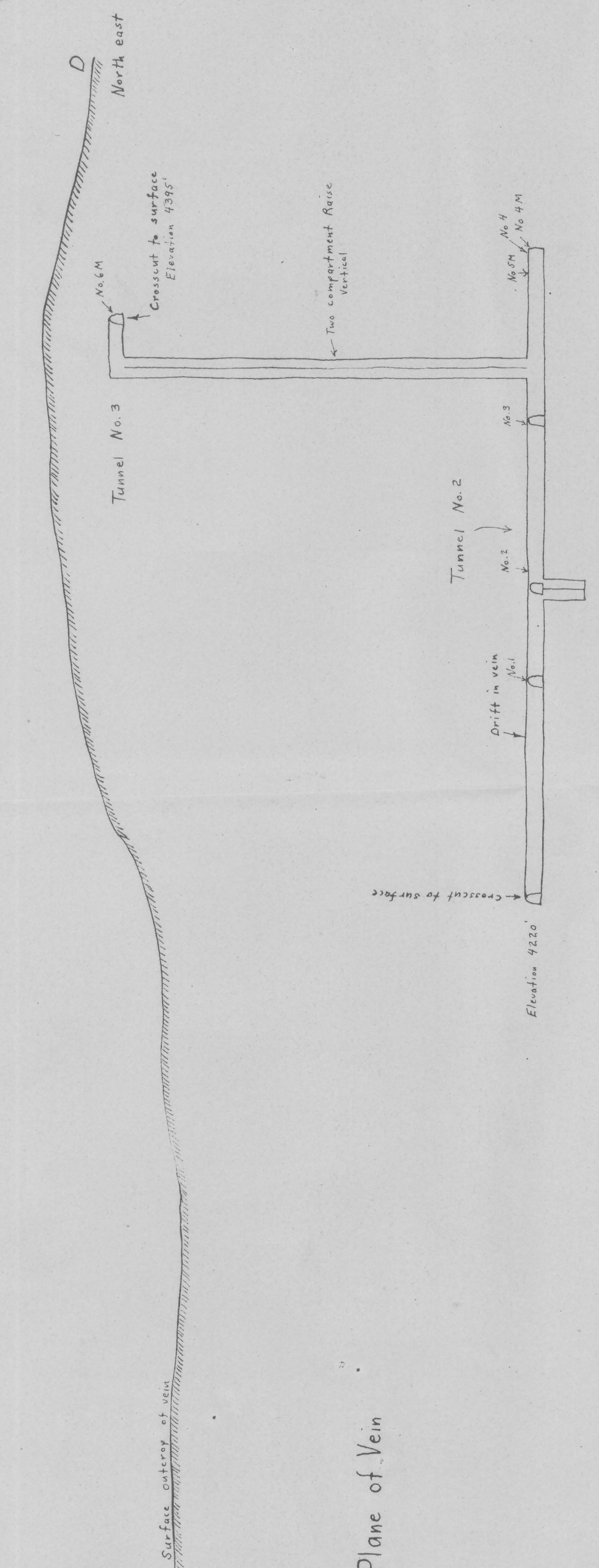


○ ← Hole No. 2 Oxide

Oxidized vein 12' wide - Practically no core recovery
2' of core Assayed 0.41% Pb, 6.60% Zn, 4.72% Mn
Oxidized ore

Longitudinal Section Along Plane of Vein

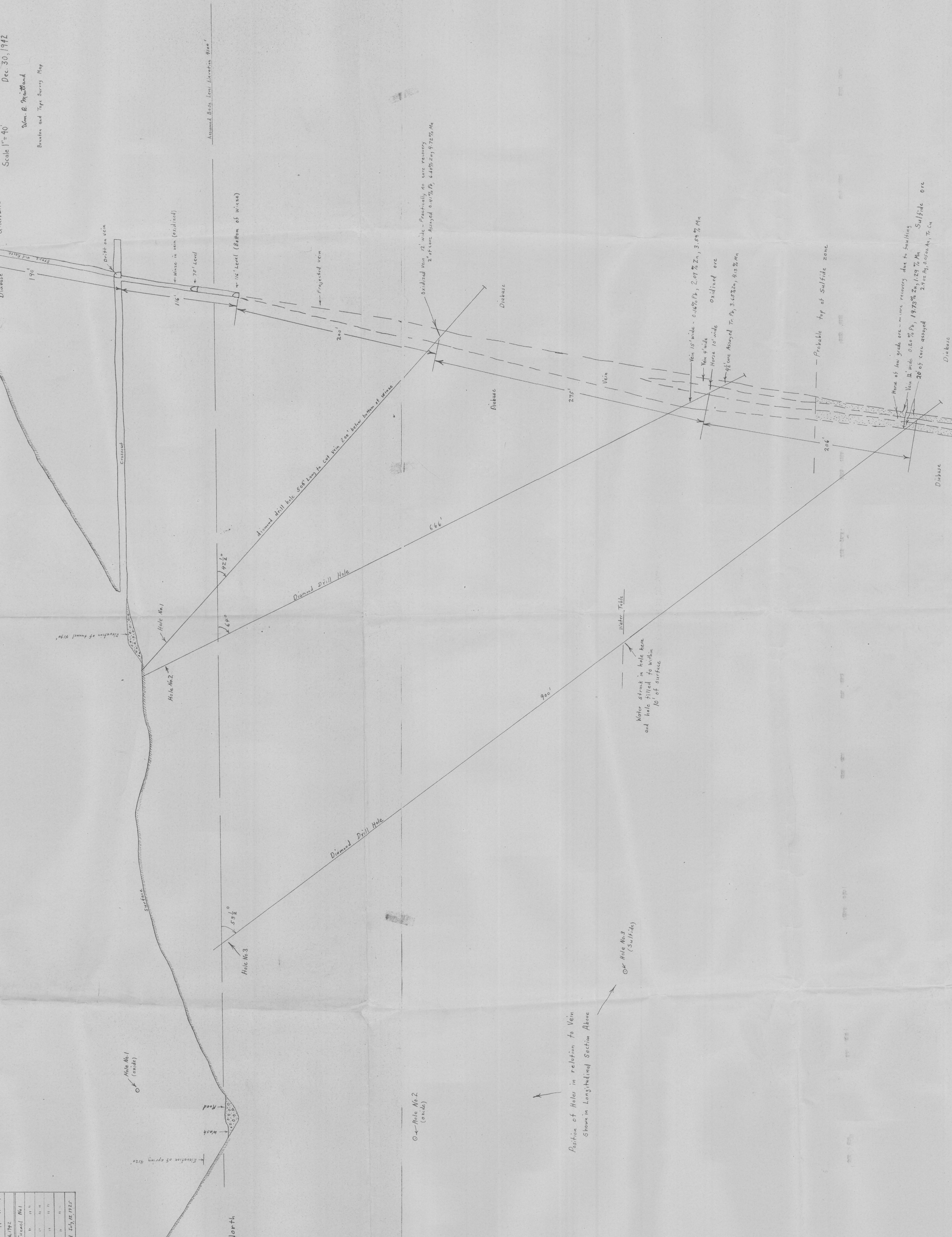
Scale 1" = 80'



Samples Analyzed		
No.	Location	Analysis
1	24	24
2	24	24
3	24	24
4	24	24
5	24	24
6	24	24
7	24	24
8	24	24
9	24	24
10	24	24
11	24	24
12	24	24
13	24	24
14	24	24
15	24	24
16	24	24
17	24	24
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89	24	24
90	24	24
91	24	24
92	24	24
93	24	24
94	24	24
95	24	24
96	24	24
97	24	24
98	24	24
99	24	24
100	24	24

The Irene Mine
Gila Co, Arizona
Docket No. C-NO-7751

Vertical Section Across Vein
Scale 1" = 40'
Dec. 30, 1942
Wm. B. MacLeod
Brecher and Type Survey Map

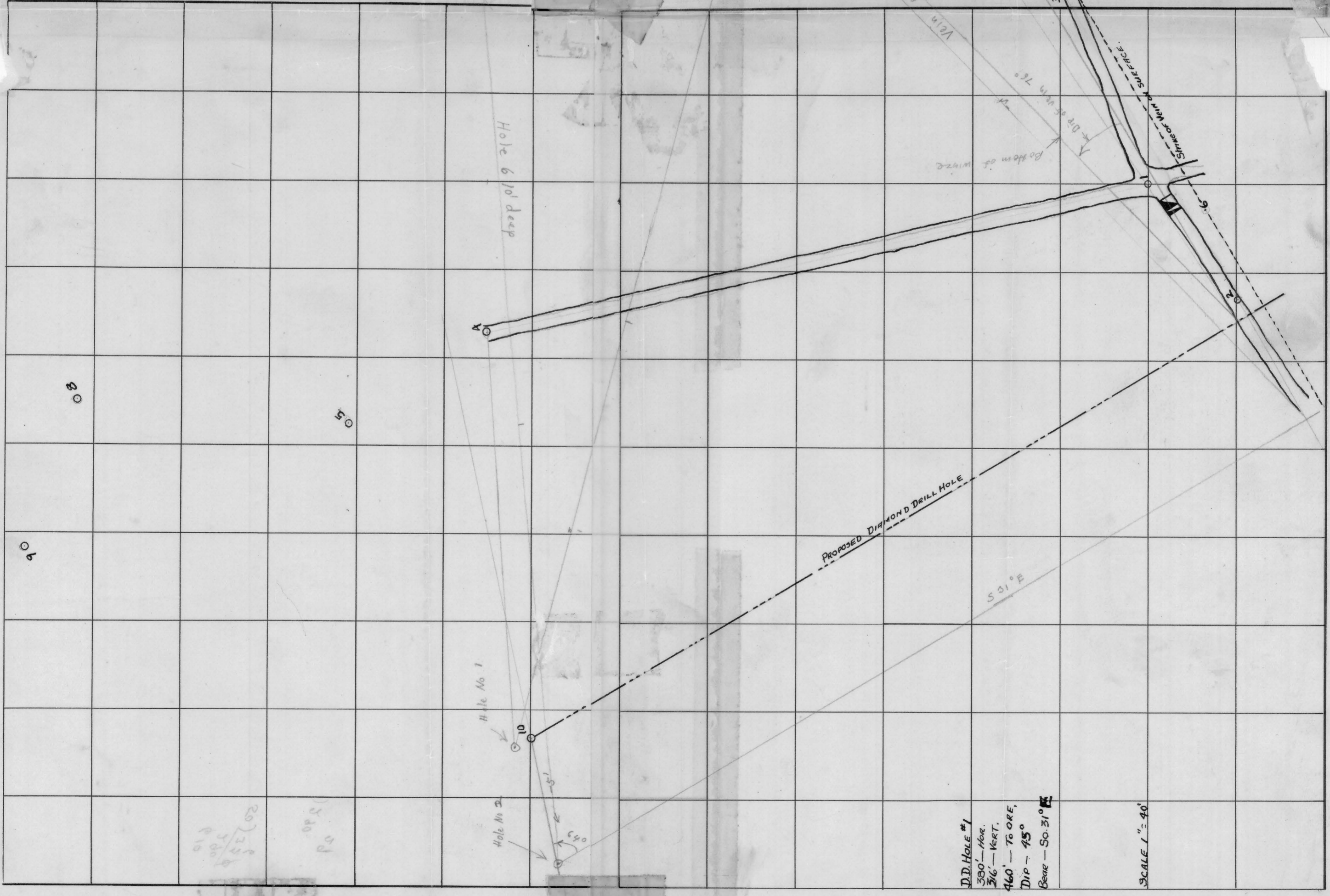


Relation of Holes in relation to Vein
Shown in Longitudinal Section Above

Here of the grade ore - ore recovery due to boulders
Vein 12' wide 0.45% Pb, 0.45% Zn, 0.75% Cu
Vein 10' wide 0.47% Pb, 0.45% Zn, 0.75% Cu
20' of ore assayed
2.4% Pb, 0.45% Zn, 0.75% Cu

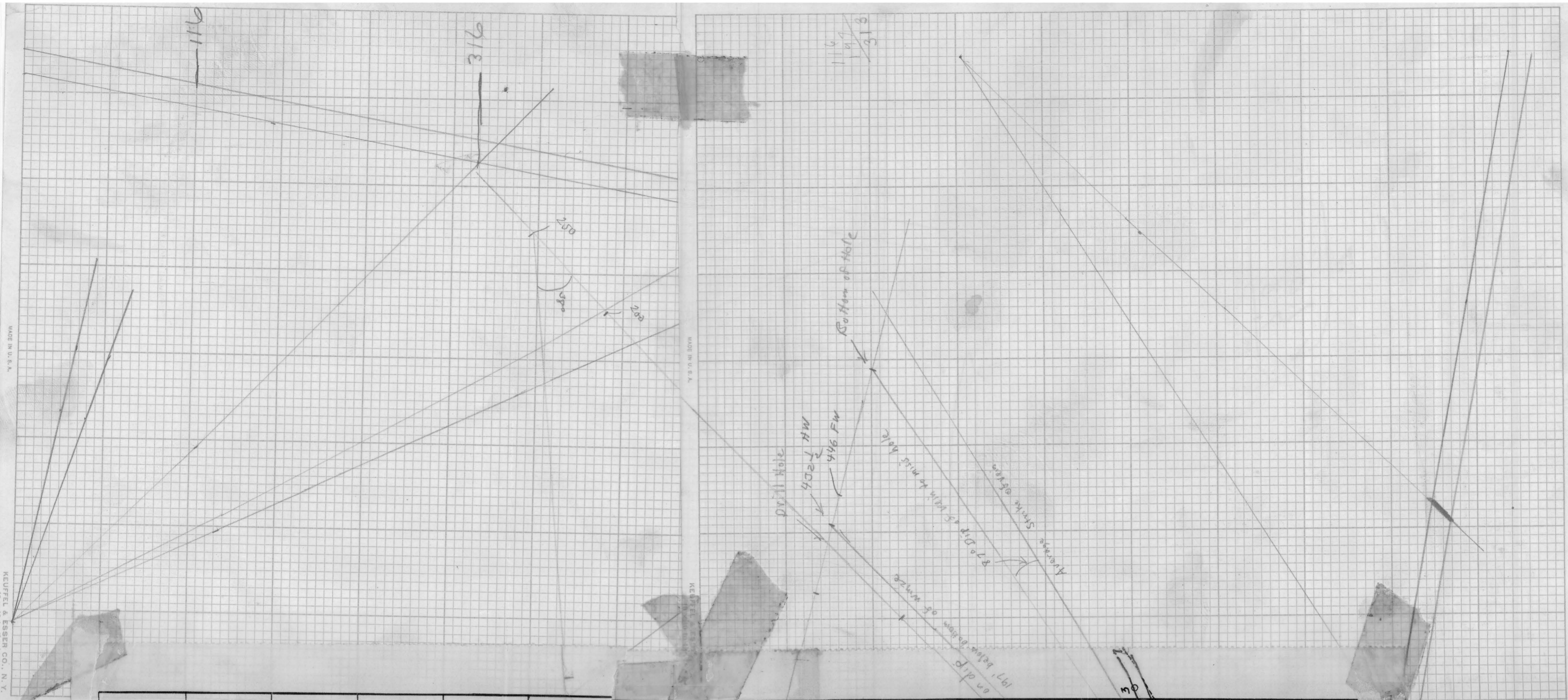
1960-01-0015-02

REUFEL & ESSER CO., N. Y.
10 X 10 to the inch.



D.D. HOLE #1
 390' - HOR.
 316' - VERT.
 460' - TO CORE
 DIP - 45°
 BEAR - S 51° E

SCALE 1" = 40'



Drill Hole
 402' HW
 446 Fw

Bottom of Hole

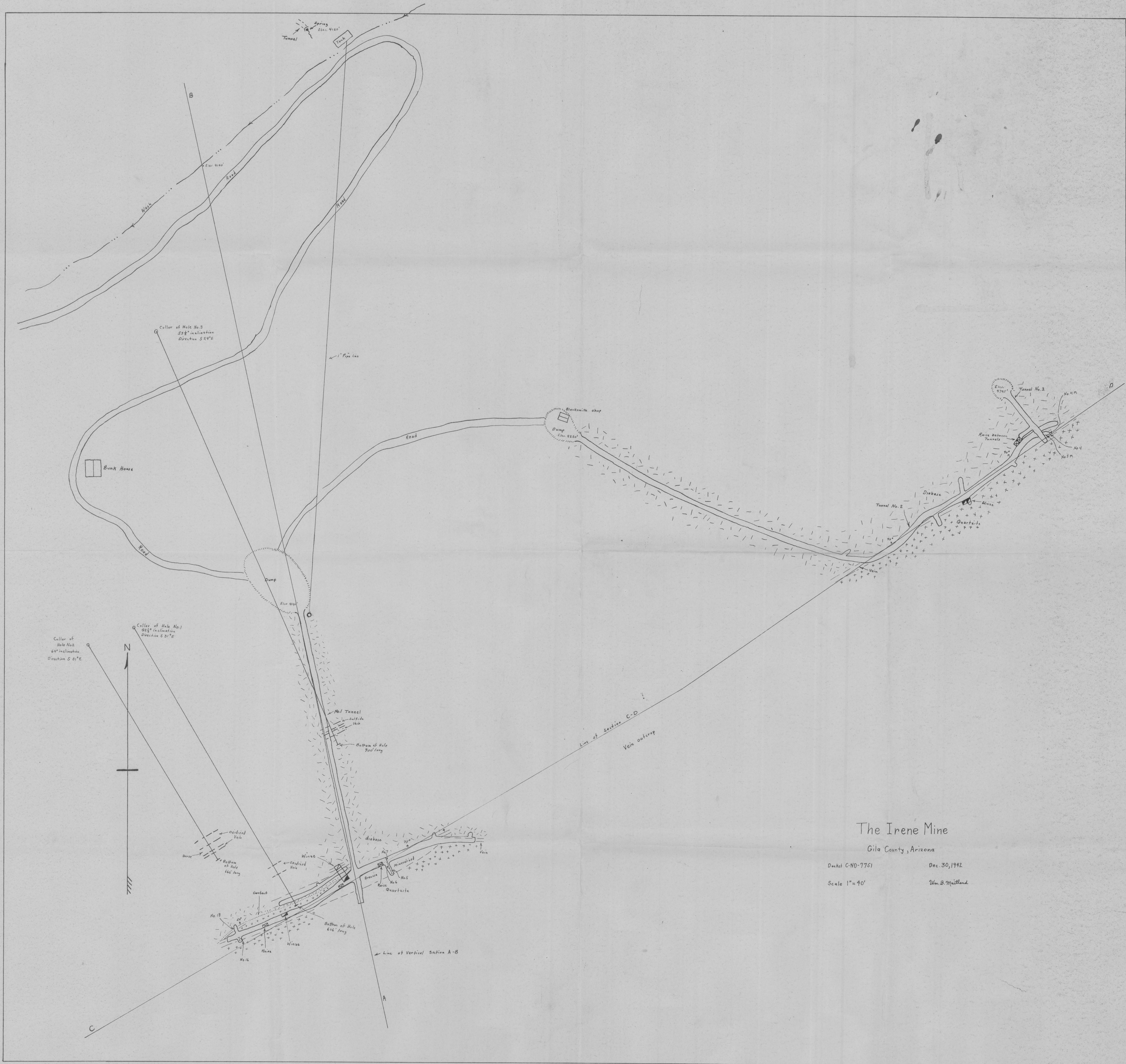
87° 0' 15" N 41° W 45' E
 Strike-slip zone
 Fault

116

316

250

116
141
316



The Irene Mine

Gila County, Arizona

Docket C-ND-7751

Dec. 30, 1992

Scale 1" = 40'

Wm. B. Millard