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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: HUMBOLDT MINE

ALTERNATE NAMES:
BRADSHAW ARIZONA
ROUND VALLEY MINE

COCHISE COUNTY MILS NUMBER: 15

LOCATION: TOWNSHIP 17 S RANGE 31 E SECTION O9 QUARTER SW
LATITUDE: N 31DEG 57MIN 10SEC LONGITUDE: W 109DEG 09MIN 49SEC
TOPO MAP NAME: PORTAL - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

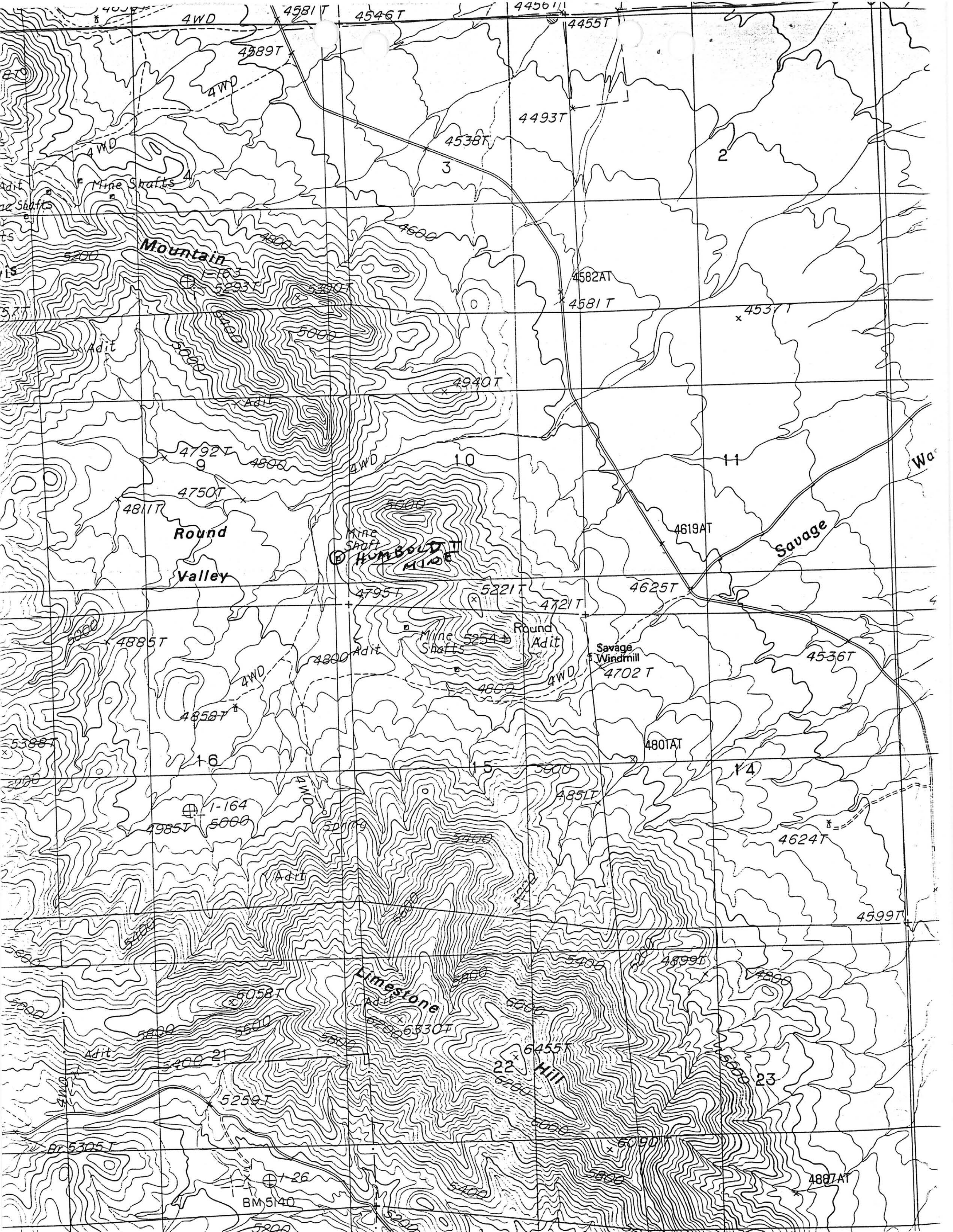
COMMODITY:
SILVER
COPPER SULFIDE
LEAD SULFIDE
MANGANESE

BIBLIOGRAPHY:
KEITH, S.B., 1973, AZBM BULL. 187, P. 53
ANTHONY, J.W, ET AL MINERALOGY OF AZ P 105
THE MINES HANDBOOK, VOL XVII, 1926, P 279
HEWETT, D.F. & ROVE, O.N., ECON GEO V. 25,
1930, P. 45
ADMMR HUMBOLDT MINE FILE
CLAIMS EXTEND INTO SEC 15, N2

ROUND VALLEY MINE

COCHISE COUNTY
California District
T17S R31E Sec 15

CJH WR 4/20/84: Visitor: Doug Schneider, Associate, Anthony Lane & Associates, researched the Humboldt Mine file, Calfiornia Mining District Sec 15, T17S R31E, Cochise County. The mine is owned by R. W. Morrow & Associates, San Simon, AZ who are trying to interest buyers. Mr. Schneider reports that four additional claims have veen added to the initial eight and that Rich Lundin, Wallaby (c) did some geochem and other work on this property.



4WD
4581 T
4546T
4456T
4455T
4589T
4493T
4538T
2
3
4
Mine Shafts
Adit
Mountain
4800
4600
5200
1-163
5293T
5300T
4582AT
4581 T
5000
4940T
4792T
9
10
11
4750T
4811T
Round
Valley
Mine
Shaft
HUMBOLDT
MINE
4619AT
Savage
4625T
4795T
5221T
4721T
Round
Adit
Mine
Shafts
5254
Savage
Windmill
4702 T
4536T
4885T
4858T
5388T
16
15
14
4801AT
4851T
1-164
4985T
Spring
5400
4624T
4599T
4899T
5800
Limestone
Hill
6058T
6330T
6455T
5600
21
22
23
6000
6200
5259T
Br 5305T
6090T
1-26
BM 5140
4887AT

Arizona Department of Mines and Mineral Resources
Verbal Information Summary

Mine: Humboldt
County: Cochise
Location: T17S, R31E, Secs 9, 10 and 15.

Date: May 25, 1995
Engineer: Nyal Niemuth

Ray Grant visited this area in March 1995 and reported the following:
1. The Humboldt mine as described by Hewett and Rove, 1930, Econ. Geol. 25, p 36-56 (in file) is located in the southeast corner of section 9 and is labeled mine shaft on the Portal 7.5 min. quadrangle. The mine is similar to their description of one major steeply inclined shaft. And as they described alabandite (MnS) is abundant on the fairly large obvious dump. Also found were rhodonite, rhodochrosite, malachite, and azurite, but these were not found as good specimens. No galena or cerussite as reported in Econ. Geol. were seen. There was another shaft several hundred yards to the southwest but it had no sulfide minerals present and only a very small dump.
2. In the northern half of section 15 are several other mines. An adit labeled on the topo map - Round Adit - was not entered, but there was only crystalline calcite on the dump, and no other minerals were seen. The unlabeled shaft shown to west of the Round Adit had nothing of interest to mineral collectors. The adit and mine shaft in the northwest corner of section 15 have been worked more recently with bulldozing of a large cut and some trenches. No sign of the original adit or shaft were found. Calcite, quartz, malachite, and azurite in very small quantities were found here.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine 'Round Valley Mine (Alabandite Group) Date Sept. 26, 1963

District California Mining District, Cochise Co. Engineer Axel L. Johnson

Subject: Field Engineers Report. Information from John A. Morrow, owner.

References: (1) Joseph A. Willcox, Engineer, Shattuck Denn Corp. - Nov. 1935
(2) Memorandum to Frank P. Knight by Field Engineer - June 14, 1963

Location: Approx. Sec. 15 -- T 17 S -- R 31 E. About 2 air miles NW of Portal, and 1 mile south and a little bit east of Copper Hill claims, owned by Emil Schaaf, Willcox. To reach the property, take the lower road to Portal, and turn right at the 2nd canyon and take mine road.

Owner: 'John A. Morrow, 131 N. 6th Ave., San Manuel, Arizona

Number of Claims: 8 unpatented claims on Federal land.

Principal Minerals: Silver, gold, copper, manganese, the principal mineral being silver.

Present Mining Activity: None. Mine is for sale or lease.

Geology & Mineralization: From report of Joseph A. Willcox: -

"Sloping to the west for 1500 ft. is a zone of white limestone, with a quartz porphyry intrusion from 20 to 75 ft. in width cutting thru the middle of the claims and striking E & W. On each limestone-porphyry contact there is a strong and continuous quartz vein carrying alabandite (MnS), silver sulphide, complex chlorides and bromides of silver, a small amount of gold and a trace of copper.

"At a distance of 1,000 ft. N of this dyke, and running more or less parallel to it, is another vein with good silver outcrops; and 400 ft. south of the dyke are 2 large veins also showing outcrops of silver.

"Numerous other veins paralleling the former are to be seen, and on one of these is a 40 ft. shaft. All the veins run from 12 to 60 inches in width, with an average of 42 inches."

Also see description of the Geology & Mineralization by Ralph Morrow, Portal, Ariz. under "Memorandum to Frank P. Knight, June 14, 1963.

Ore Values: Smelter returns of ore shipments to A.S. & R. Co. shows shipments of 257.7575 tons, totaling $5,067.32 or an average of $19.66 per ton.

161 tons were shipped in 1905 to 1912 with silver at 60¢ to 70¢, and the remaining 97 tons in 1920 to 1923 with silver at 90¢ to $1.00.

The shipments show an average of 38.412 oz. silver. Besides these shipments, there was also 9.4 tons of copper ore shipped, which averaged 4.5% copper.

1 sample taken several places on the vein for a distance of 1000' by John A. Morrow on Aug. 16, 1963 ran 43.10 oz. silver.

Ore in Sight and Probable: Not estimated.

Past History:

(1) About 1903, 'Clarence May located the claims and organized the Bradshaw-Arizona Mining Co.

Round Valley Mine (Alabandite Group)

Mr. May operated the mine for a few years and sunk the main shaft to a depth of 150 ft. He shipped a small amount of ore, most of it being shipped to El Paso, with some small lots being sold to Hawley & Hawley.
(2) Bradshaw-Arizona Mining Co. worked the mine from 1905 to 1912, sinking the main shaft to the full depth of 186 ft., and making several ore shipments to the A.S. & R. smelter.
(3) Several lessees operated the mine from 1920 to 1923, one of these being Frank Officer. Several more ore shipments were made, at that time, to the A.S. & R. smelter, and to other ore buyers.
(4) Leaser in 1930 drifted for a distance of 86 ft. thru the porphyry to the south contact with the limestone, exposing another ore vein.
(5) The last lessee was W.K. Morrow, father of the present owner, who in 1932 sank a new shaft ~~about 30' to~~ 40' deep on a different vein, ~~about 100 to~~ 300 ft. to the southwest of the first shaft.

Past Ore Production:
(1) 1905-1912 - 161 tons of silver ore to A.S. & R. Co.
(2) 1920-1923 - 97 tons of silver ore to A.S. & R. Co.
(3) One shipment of 9.4 tons of copper ore to A.S. & R. Co.
(4) Various other shipments with no records available.

Old Mine Workings & Condition:
(1) 1 inclined shaft (incl. 47 deg. to N.) - 186 ft. deep. This shaft was sunk on the north contact of the limestone and porphyry. The shaft is accessible down to the 90 ft. level. Below this, the shaft is filled with water.
On the 90 ft. level - 50 ft. of drift to the E and 30 ft. of drift to the W with the ore mined out above the drifts.
On the 186 ft. level - 89 ft. drift to the E, with a crosscut running S thru the porphyry for a distance of 86 ft. to the south contact with the limestone to a 3 ft. quartz vein, then a 12 ft drift along this quartz vein. Stoping was done from 35 to 40 ft. above the 186 ft. level.

(2) 1 inclined shaft (incl. 47 deg. to N) - 40 ft deep. This is about 300 ft. west of the first shaft and on a different vein. This is reported to show a small amount of commercial ore. The shaft is open but needs repairs to the shaft ladders.

Summary & Opinion from report of Joseph H. Willcox:
"Because of the well fractured limestone with its porphyry intrusions, and the strong veins of commercial width, and the extensiveness of the mineralization all along the veins, this property is worth prospecting.
"The prospective feature along with the record of ore shipments makes me believe that a good examination is justified."

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

Tucson, Ariz.,
June 14, 1963

MEMORANDUM

To: Frank P. Knight, Director

From: Axel L. Johnson, Field Engineer

Re: Round Valley Mine (Alabandite Group) in the California Mining District, Cochise Co.

The following information was received by the field engineer from Ralph Morrow, Portal, Ariz., who resides near the Hilltop Mine. Ralph Morrow is a brother of the owner of the claims, John A. Morrow, San Manuel, Ariz., and is quite familiar with the property. His father, W. K. Morrow, leased and operated the property in 1932, and Ralph did some work in the mine. Following info. rec'd:

Location Approx. Sec. 15 -- T 17 S -- R 31 E. About 2 air miles NW of Portal, and 1 mile south and a little bit east of Copper Hill claims, owned by Emil Schaaf, Willcox. To reach the property, take the lower road to Portal, and turn right at the 2nd canyon and take mine road.

Owner John A. Morrow, San Manuel, Ariz. (works for San Manuel)

Number of Claims Owner relocated several of the claims in the Alabandite Group recently, but may not have relocated all of the old ~~xxxxx~~ claims. Informant does not know how many claims were relocated. Originally, there were about 20 claims.

Principal Minerals Silver, lead, manganese

Geology & Mineralization Mr. Morrow describes the geology, viz:
The ore is found in quartz veins in a limestone formation, the quartz veins being at right angles to the bedding planes of the limestone. The veins are parallel to each other, and are also parallel to an intrusive mass of quartz porphyry about 35 ft. wide. Veins are almost vertical, dipping about 87 deg. to the north, and strike almost due east and west. The main vein, which might be a fault vein, is from 7 to 8 ft. wide, and the main shaft is located on this vein.
The ore, principally silver, is found in ~~ore steaks~~ pockets, ore ~~chutes~~ shoots, and ~~kidneys~~ lenses in the quartz veins. Mineralization is spotty, but some rich ore ~~chutes~~ shoots have been reported as coming out of the main shaft. The silver ore is generally found together with lead or in alabandite (MnS).

Past History & Production (1) About 1903, Clarence May located the claims and organized the Bradshaw-Arizona Mining Co. Mr. May operated the mine for a few years and sunk the main shaft to a depth of 150 ft. He shipped a small amount of ore, most of it being shipped to El Paso, with some small lots being sold to Hawley & Hawley.
(2) Upon the death of Mr. May, the company was dissolved and the mine was leased out at different times to various lessees.
(3) One of the leasers extended the shaft to a depth of 200 ft., and did some stoping at the 170 ft. level, shipping some ore.
(4) The last lessee was W. K. Morrow, father of the present owner, who sank a new shaft about 30' to 40' deep on a ~~xxxxxx~~ different vein, about 100 to 150 ft. to the south-west of the first shaft. This was about 1932.

MEMORANDUM (con't

Re: Round Valley Mine (Alabandite Group)

The vein is reported to have been about 7 ft. wide. Pockets of alabandite, containing silver ores, were found in the quartz vein. The ore mined averaged about 25 oz. of silver to the ton. One carload of ore was shipped by Mr. Morrow to El Paso.

Old Mine Workings and Condition

(1) 1 inclined shaft (incl. 87 deg. to N.) ---- 200 ft. deep, foll. vein. Water stands in the shaft to about the 110 ft. level. The shaft is not caved in, but the shaft timbers are rotten. Shaft can not be entered for examination until some repairs have been made.

(2) Drift to the east on the 110 ft. level from 40' to 50' long, with about 20' of stoping above the drift.

(3) Drift to the west on the 110 ft. level from 40' to 50' long, with about 35' to 40' of stoping above the drift.

(4) Stoping almost next to the shaft for 35' to 40' on the 170 ft. level.

(5) 1 inclined shaft (incl. 87 deg. to N.) ---- 30' to 40' deep on a second vein to the south. This shaft is about 125 ft. to the SW of first shaft. The shaft is not caved but the shaft collar is rotten and should be repaired before the shaft is entered.

Mine workings did not make a great deal of water. Mr. Morrow reports that it was necessary to bail out the water only once in 3 or 4 days, when the mine was being operated.

Remarks An interested operator should examine and sample the underground workings. Howver, to do this, some slight repairs on the shaft timbers and ladders would no doubt be necessary. The 110' level will, most likely, not be under water at the present time.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

May 23, 1963

Mr. Michael M. Gallup
7466 Stanford
University City 30, Mo.

Dear Mr. Gallup:

Your letter of May 9th to "Mine Inspector" was received by us this morning, having been forwarded for reply.

We have no knowledge of any Arizona mining having been done 14 miles east of San Simon or anywhere between there and the New Mexico border.

Just over the border is the Steins Pass area in which there has been mining. It seems likely the property in question is in New Mexico (the border is 12 miles east of San Simon) and that you should write to the State Bureau of Mines, Campus Station, Socorro, New Mexico, for information.

It is suggested that you try to get the name and location of the property before you write.

Yours very truly,

FRANK P. KNIGHT
Director

FPK/H

COPY

May 9, 1963

Mine Inspector
1700 W. Washington
Phoenix, Arizona

Gentlemen:

Mr. John A. Morrow, 131 Sixth Avenue, San Manuel, Arizona has approached me relative to organizing a company to help develop an existing mine about 14 miles east of San Simon, Arizona. I would be most appreciative to receive from you any information on possible minerals found in the area, the State of Arizona requirements to operate in the area, and any information or advice that you would care to tender.

The mine in question has been operated beginning in 1902 until 1923. One notarized statement shown indicated a return of $6000 for minerals over those 21 years, evidencing spasmodic operation. No core borings were ever taken in surveying this mine's possibilities. However, I was advised that Phelps-Dodge and nearby mills would welcome the ore for processing.

Any courtesies that you would extend to me will be appreciated.

Yours truly,

MMGallup

Michael M. Gallup
7466 Stanford
University City 30, Mo.

MMG:dn

We have no dope on this; maybe you have something. Thanks
R.V.H.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

June 4, 1963

Mr. M. Gallup
7466 Stanford
University City 30, Mo.

COPY

Dear Mr. Gallup:

With reference to your letter of May 31st:

We have no information about the Round Valley Mine or the Alabandite group of claims in the Paradise area of Cochise County.

I am writing our field engineer for the district, but doubt that he knows the property. I also am writing a friend in the mine vicinity who may know something about it.

According to the Arizona Bureau of Mines Bulletin No. 140, Arizona Metal Production, the Chiricahua District produced from 1908-1930 approximately $560,000. in lead and silver with a minor amount of copper. The silver is given as $75,000.

The lead price is low at 10½ cents with the market stronger. Silver is at $1.278 per ounce, slightly off from a high of $1.285 due to passage by the House and Senate of legislation permitting withdrawal of $1 and $2 silver certificates. If the president signs as expected, it will tend to hold the considerable advance in silver price to below the $1.29 figure - above which coins are likely to be melted and sold for silver content.

We will write you again when we have further information.

Yours very truly,

FRANK P. KNIGHT,
Director.

FK:p
cc: A.L.Johnson
Axel - do you know anything about the mine and property this correspondence with Gallup is concerned with? If not, I may learn something from my friend at Portal and I might later decide to go over there.

May 31, 1963

Department of Mineral Resources
Mineral Building
Fairgrounds
Phoenix, Arizona

Attention: Mr. Frank P. Knight
Director

Dear Mr. Knight:

Please forgive my error. The mine that I had reference to is the Round Valley Mine located on the Alabandite group of claims and is approximately 29 miles south of San Simon and about 2 miles east. This is in Cochise County, Arizona.

This mine, from information given to me has been recorded and in operation since 1903. It was operated spasmodically from 1903 to 1925. Available invoices from smelters indicate a minute return; enough to know there is something there, yet research and caution is mandatory. The present owner, John A. Morrow, whom I met, is a very intelligent person and a man who was raised in mine and tunnel construction. I am a graduate from a mining college with considerable tunnel construction experience. Mr. Morrow believes that a silver vein that has been followed in the slope shaft and other visible indications, if explored, may lead to the feasibility of added development.

Would appreciate receiving any advice that your experience, the history of the area and present day demands for minerals would permit you to give me. Any courtesies that you will give me will be greatly appreciated.

Yours truly,

M. Gallup

M. Gallup
7466 Stanford
University City 30, Mo.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

June 4, 1963

Mrs. Irving Moller
Cave Creek Ranch
Portal, Arizona

COPY

Dear Gertrude:

We have an inquiry from a man about a mine and its owner in your area. The mine is the Round Valley and the owner is John A. Morrow. We have no knowledge of either. If you know anything about either, even second hand information, it could be helpful to the inquirer, who lives in Missouri and wants to be shown.

Perhaps I would decide to look at the mine and we could make you a call. We miss seeing you. I hope this finds you well and that things at the Ranch are not only in great shape but also are not overtaxing you.

Laure hasn't been as well as I would wish. Her cholesterol is high and she is on apretty strict diet. Her days are up and down with her activity always up. Doctor is not sure of what is bothering her. It may be a touch of the labyrinthitis which she had a rather rough time with a number of years ago. She is better and improving and I think she'll be alright soon.

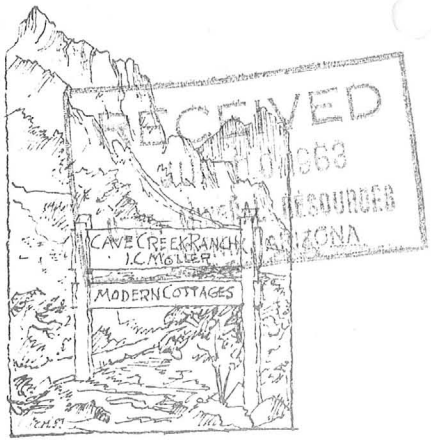
Bob left Saturday for a summer's work at Beverly. Sally starts summer school next week.

With best regards and wishes,

Sincerely,

FRANK P. KNIGHT,
Director.

FK:p



MRS. IRVING C. MOLLER

CAVE CREEK RANCH

PORTAL, ARIZONA

June 6, 1963

Completely Furnished Cottages

Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix 7, Arizona

Attention: Mr. Frank P. Knight,
Director

Dear Frank,

To find information requested in your letter of June 4, may necessitate a personal visit on your part. That would be fine with the management here! I have never heard of "the Round Valley" as a mine; but it is the name of a geographical area north of Portal and southeast (or south) of Hilltop Mine. There is a man Named Ralph Morrow, living at Hilltop; he had a brother named Carson who died about 2½ years ago. I never heard anyone mention "John Morrow.

However, I'll ask further from some of the oldtimers here; and if I learn anything more, I'll pass on the information to you.

My best wishes to you, and greetings to Laure,

Very sincerely,

Gertrude

Gertrude B. Moller
(Mrs. Irving C. Moller)

P.S. Personal note enclosed.

G.

Completely Furnished Cottages

CAVE CREEK RANCH

PORTAL, ARIZONA

June 7, 1963

Dear Frank —

To-day I learned there is truth about the name of John Morrow, and his mine. I inquired of Mrs. Van Nolan who is our mail carrier, and lives on the San Simon road.

She said John A. Morrow is the brother of Ralph, and Carson (who died); also that John did have mining operations. She doesn't know where he lives now; and her suggestion was to talk with Ralph Morrow directly. So you'd better come out here!

Ralph Morrow recently retired from

the Game Commission, and lives at Hilltop. His address is simply "Portal, Ariz." Maybe you'll want to write him.

I hope this lead is a help to you. Best wishes,

Sincerely -

Gertrude

(Gertrude B. Moller
Mrs. Irving C. Moller)

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

June 17, 1963

Mr. Michael M. Gallup
7466 Stanford
University City 30, Missouri

COPY

Dear Mr. Gallup:

With further reference to your letter of May 31st, we are sending you herewith a copy of our field engineer's June 14th memorandum regarding information he received from Robert Morrow on the Round Valley Mine.

Hoping that this will be of some help to you,

Yours very truly,

FRANK P. KNIGHT,
Director.

Enc.

FK:p

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX 7, ARIZONA

October 1, 1963

Mr. John Y. Cole, Jr.,
Gold Fields American Corporation
123 William Street
New York 38, N. Y.

Dear Mr. Cole:

With reference to your letter of September 7th about air photographs of the general area of Round Valley mines, Cochise County:

The U. S. Geological Survey map showing Status of Aerial Photography gives the Commodity Stabilization Service, U. S. Department of Agriculture, Western Laboratory, 2505 Parleys Way, Salt Lake City 9, Utah, as the holder of photographs out of the forest in the region. The mine location reported by Axel Johnson is just out of the Forest.

Army planimetric photos may or may not be held by the above department. The status map gives the holders of what are considered the best available photographs. Air Force photographs are held only when others are not available.

Army Map Service Headquarters, Department of the Army, Office of the Chief of Engineers, Washington, 25, D. C., might be a source, but the U. S. G. S. tries to keep track of all photography.

Then there are Maddock & Associates Aerial Survey, Inc., 4900 E. Indian School Road, Phoenix and Aero Service Corporation - Division of Litton Industries, 2406 E. Hawthorne, Tucson, either of whom may have flown the area.

Our Status map is 1959 issue. Later photography is possible and the Map Information Office, U. S. Geological Survey, Wabhington, 25, D. C. probably would have record of it.

Yours very truly,

FRANK P. KNIGHT,
Director.

FK:p

GOLD FIELDS AMERICAN CORPORATION
A MEMBER OF THE GOLD FIELDS MINING & INDUSTRIAL GROUP

CABLE ADDRESS
GOFMIL
TELEPHONE CORTLANDT 7-0900

123 WILLIAM STREET
NEW YORK 38, N.Y.

September 27, 1963

Mr. Frank P. Knight, Director
Department of Mineral Resources
Mineral Building, Fairgrounds
Phoenix, Arizona

Dear Mr. Knight, ROUND VALLEY MINES, COCHISE COUNTY

Thank you for your letter of September 9th. The enclosed report was of considerable help. We shall await the results of Mr. Johnson's meeting with Mr. Morrow.

If possible, we would like to know if air photographs are available on the general area.

Very truly yours,

John Y. Cole

John Y. Cole, Jr.

JYC,Jr.:em

(file) CochiseCo

ROUND VALLEY MINE (ALABANDITE CLAIMS)

Mining and ore shipments from Round Valley Mine began in 1905. Intermittent production continued into the 1930's. Shipped ore ranged in value from 14.80 to 108.80 ounces of silver.

Richard Lundin of Wallaby Enterprises investigated the property in 1978 and reported, "... this property has an excellent potential for further, high-grade mineralization, and for development as a bulk, low-grade deposit." He also stated, "... this property could be a real profit producer, if the work is done in an orderly manner with an eye to the geology and ore controls."

Dumps near the main shaft were trenched and sampled at two foot intervals in 1979. Samples averaged over 5.0 ounces of silver per ton of material. Dumps were estimated to be 2,500 tons.

Alan Glaser, geologist for AMSELCO, looked at the Round Valley Mine in 1982 and stated, "... one main vein indicated good values, perhaps with depth this same network of fractures will start to show some replacement, and if the silver continues, it will make an ideal target for a smaller company (than AMSELCO)."

When mining ceased, it was reported that substantial amounts of commercial grade ore had been developed on the 80 foot level of the main shaft.

Extensive surface drilling to depths of 20 feet indicates silver values extending over a broad area in the region of the main shaft.

R.W. Morrow
HCR Box 77
Portal, AZ 85632
(602)558-2239

ROUND VALLEY SILVER MINE VENTURE

Round Valley Mine offers an opportunity to invest in a developing, though past producing, silver mine. Now is the time to invest in silver.

It is anticipated if an exploration program is able to define a larger commercial ore body, the venture will sell their interests therein and distribute the proceeds to investors, or bring the mine into commercial production.

If the mine is brought to commercial production, at the investors option, silver ingots will either be delivered to the investor, or sold for the investor.

Economics It is not possible to make economic proforma projections for an ore body which has not yet been fully delineated. The potential product value of the ore is a function of its grade (ie: the silver and gold content), and mining and recovery costs are a function of location, nature of the host rock, and other factors. The amount of ore required to return, for example, a 10 to 1 return on investment, may be as little as 50,000 tons for a high-grade silver and gold mine. Thus a relatively small ore deposit can yield an exceptionally high return on any investment.

A possible process for beneficiation of the Round Valley Mine ore is Counter Current Decantation. Mine ore is crushed and ground, in a second stage, in ball mills. Lime and NaCN (Sodium Cyanide) are added directly into the ball mill at approximately 2 pounds per ton of pulp. Slurry pulp of approximately 60% density is discharged into a mixing vat. Slurry is retained in the vat for about 8 hours with lime and NaCN being added as needed. Slurry is next pumped to the counter current decantation circuit. Clarified solution is precipitated using zinc powder. (This process has been used successfully at the Delmar Mines in Idaho).

Precipitates are refined to soluble anodes. Electro-winning in neutral $AgNO_3$ solution settles out gold and silver plates on a starter sheet. The resulting nearly pure silver and gold is cast into ingots which are readily marketable with no penalties or transportation costs.

Example of possible production

Feed of 100 Tons per day of 20oz silver/ton and 80% Recovery.	
2000 oz silver x .80 = 1600 oz silver x $8.00/oz	= $12,800/day
Costs of processing $20.00 x 100 tons	= 2,000
Period costs	= 800
NET TOTAL FROM PLANT/DAY	= $10,000

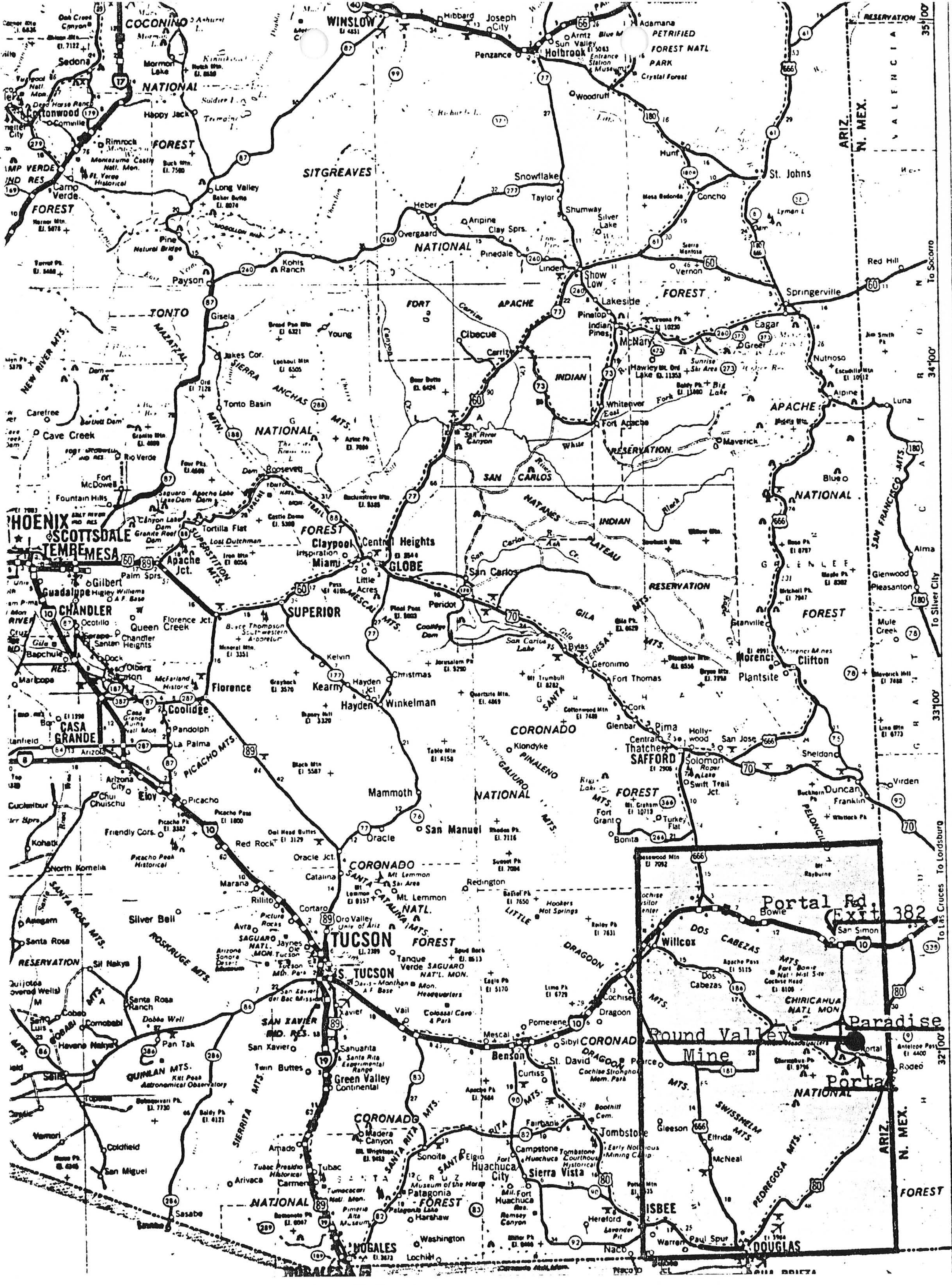
These costs are estimates of ore processing only. Mining, development, and exploration costs must also be considered in the determination of the profitability of an ore deposit.

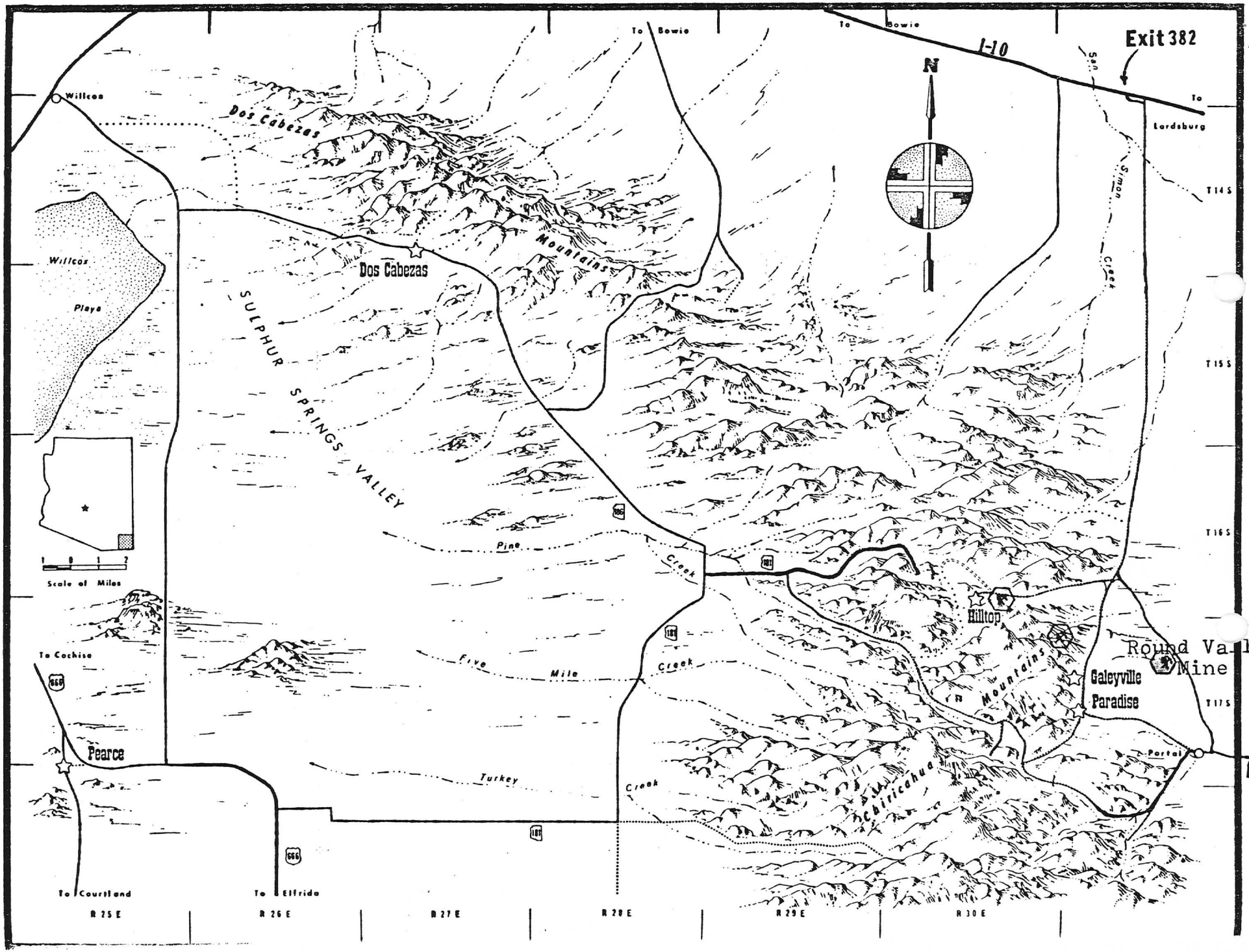
Historically, other than in early 1980, the Value Ratio of Gold to Silver has been 35 to 1 (ie: Gold @ $350/ounce and Silver @ $10/ounce). The Value Ratio of Gold to Silver in August 1987 was approximately 60 to 1. Gold traded at $460/oz, and Silver at $8/oz. Using the Value Ratio of 35 to 1, Silver should have traded at $13/oz.

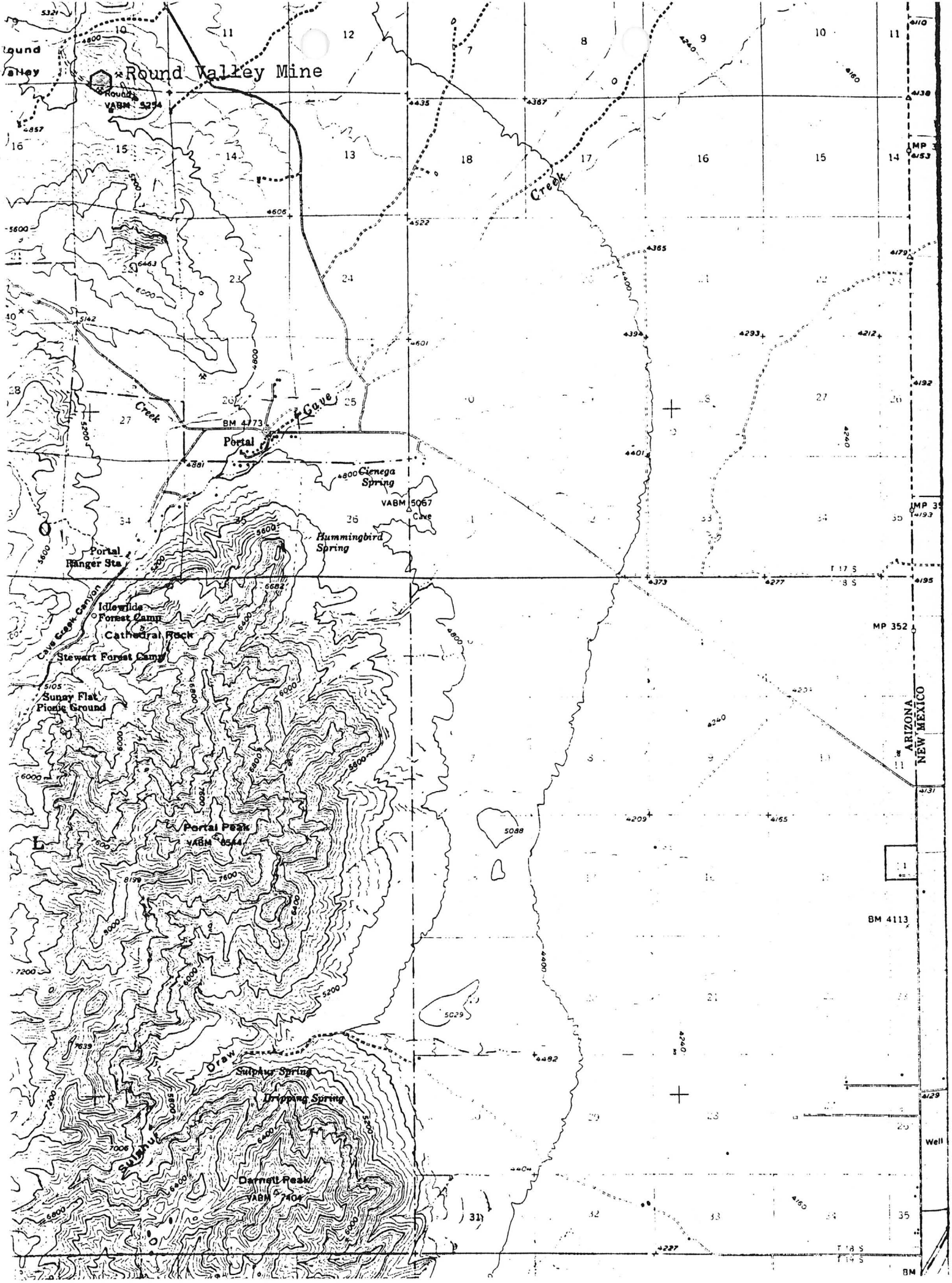
A correction in the Value Ratio, and continued upward trends in precious metals prices, point the way to lucrative returns from investments in precious metals.

February, 1985, saw Gold priced in the $300/ounce range. August, 1987, and Gold priced at over $450/ounce, a 50% increase in value in two and one-half years.

RWM
8/87


Portal Rd
Exit 382
Paradise
Round Valley
Mine
Portal
COCONINO
WINSLOW
Joseph City
Holbrook
PETRIFIED FOREST NATL PARK
Sedona
Cottonwood
Camp Verde
FOREST
NATIONAL
SITGREAVES
Snowflake
Taylor
Shumway
St. Johns
Concho
Heber
Overgaard
Pinedale
Linden
Show Low
Lakeside
Pinetop
McNary
Springerville
Eagar
Nutrioso
Alpine
Luna
Payson
Pine
TONTO
FORT APACHE
INDIAN RESERVATION
Cibecue
Whiteriver
Fort Apache
SAN CARLOS
Young
Tonto Basin
Roosevelt
Carefree
Cave Creek
Fountain Hills
PHOENIX
SCOTTSDALE
TEMPE
MESA
Apache Jct.
Gilbert
CHANDLER
Guadalupe
Queen Creek
Florence Jct.
SUPERIOR
Claypool
Miami
GLOBE
Central Heights
San Carlos
Peridot
Florence
Kearny
Hayden
Winkelman
Coolidge
CASA GRANDE
Eloy
Picacho
Mammoth
San Manuel
Oracle
Red Rock
Marana
TUCSON
S. TUCSON
Oro Valley
Vail
Benson
St. David
Willcox
Dos Cabezas
Bowie
San Simon
CHIRICAHUA NATL MON
Rodeo
Safford
Thatcher
Pima
Solomon
Duncan
Clifton
Morenci
Green Valley
Tombstone
Sierra Vista
Huachuca City
NOGALES
BISBEE
DOUGLAS
Naco
Sasabe
Arivaca
CORONADO
NATIONAL
FOREST
ARIZ.
N. MEX.
To Lordsburg
To Las Cruces
To Silver City
To Socorro


Exit 382
I-10
To Bowie
To Bowie
To Lordsburg
N
Willcox
Dos Cabezas
Mountains
Dos Cabezas
Willcox
Playa
SULPHUR SPRINGS VALLEY
Simon
Creek
T14S
T15S
T16S
T17S
Pine
Creek
Five Mile
Creek
Turkey
Creek
Hilltop
Galeyville
Paradise
Chiricahua
Mountains
Round Valley
Mine
Portal
to U
To Cochise
Pearce
To Courtland
To Elfrida
Scale of Miles
R 25 E
R 26 E
R 27 E
R 28 E
R 29 E
R 30 E

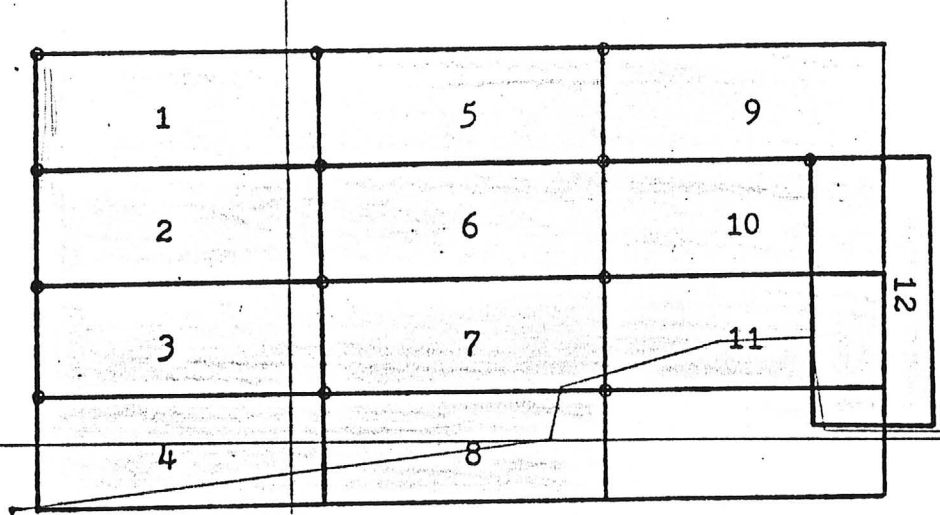

Round Valley Mine
Round Valley
VABM 5254
Creek
Cave
BM 4773
Portal
Cienega Spring
VABM 5067
Cave
Hummingbird Spring
Portal Ranger Sta
Idlewilde Forest Camp
Cathedral Rock
Stewart Forest Camp
Sunny Flat Picnic Ground
Cave Creek Canyon
Portal Peak
VABM 8544
Sulphur Spring
Dripping Spring
Draw
Sulphur
Darnell Peak
VABM 7404
MP 352
ARIZONA
NEW MEXICO
BM 4113
Well
T 17 S
T 18 S

ALABANDITE CLAIM GROUP

T-17-S, R-31-E, G&SRB&M,
Cochise County, Arizona.

9

10



MS 2621
197174
D/C

16

1039891
D/C all min

15

Note: Location notices in
NW claim corner monument
of each claim.

Scale: 1"=1000'

R.W. Morrow
Portal, Arizona
(602)558-2239

(file)

ROUND VALLEY MINE, COCHISE COUNTY, ARIZONA

In the Chiricahua Mountains of southeastern Arizona are situated the Round Valley Mining Claims. They have been periodically mined for silver ores during the years from 1905 to 1923. Smelter returns ranged from a low of 14.80 ounces to 105.80 ounces of silver per ton of ore. Other than annual assessment work, no mining has been to date done on the property.

Joseph A. Wilcox, engineer, reported in a review of the claims assays ranging from 45.0 to 200.0 ounces of silver per ton. Wilcox stated that assays taken from samples cut by other engineers consistently ranged in value from 5.0 to 50.0 ounces of silver per ton.

Wallaby Enterprises, Tucson, Arizona, investigated the claims in 1978. They concluded that the property had excellent potential for high-grade mineralization, and estimated 3,000 tons of dump material averaging 5.0 plus ounces of silver per ton on the property. They thought that this material might be leached profitably, and refined. Wallaby stated, ". . . this property could be a real profit producer, if the work is done in an orderly manner with an eye to the geology and ore controls."

An AMSELCO geologist reported in a 1982 report, ". . . main vein indicated good values. Perhaps with depth this same network of fractures will start to show some replacement . . . and if the silver continues it will make an ideal target for a smaller company."

REPORT OF INVESTIGATIONS

at the Alabandite Claim Group,
California Mining District,
Cochise County, Arizona

July 20 - 21, 1978

RICHARD J. LUNDIN

Mineral Exploration Consultant
Wallaby Enterprises

3425 W. Bardot Street
Tucson, Arizona 85704

R.W. Morrow
Phone: (602) 558-2239

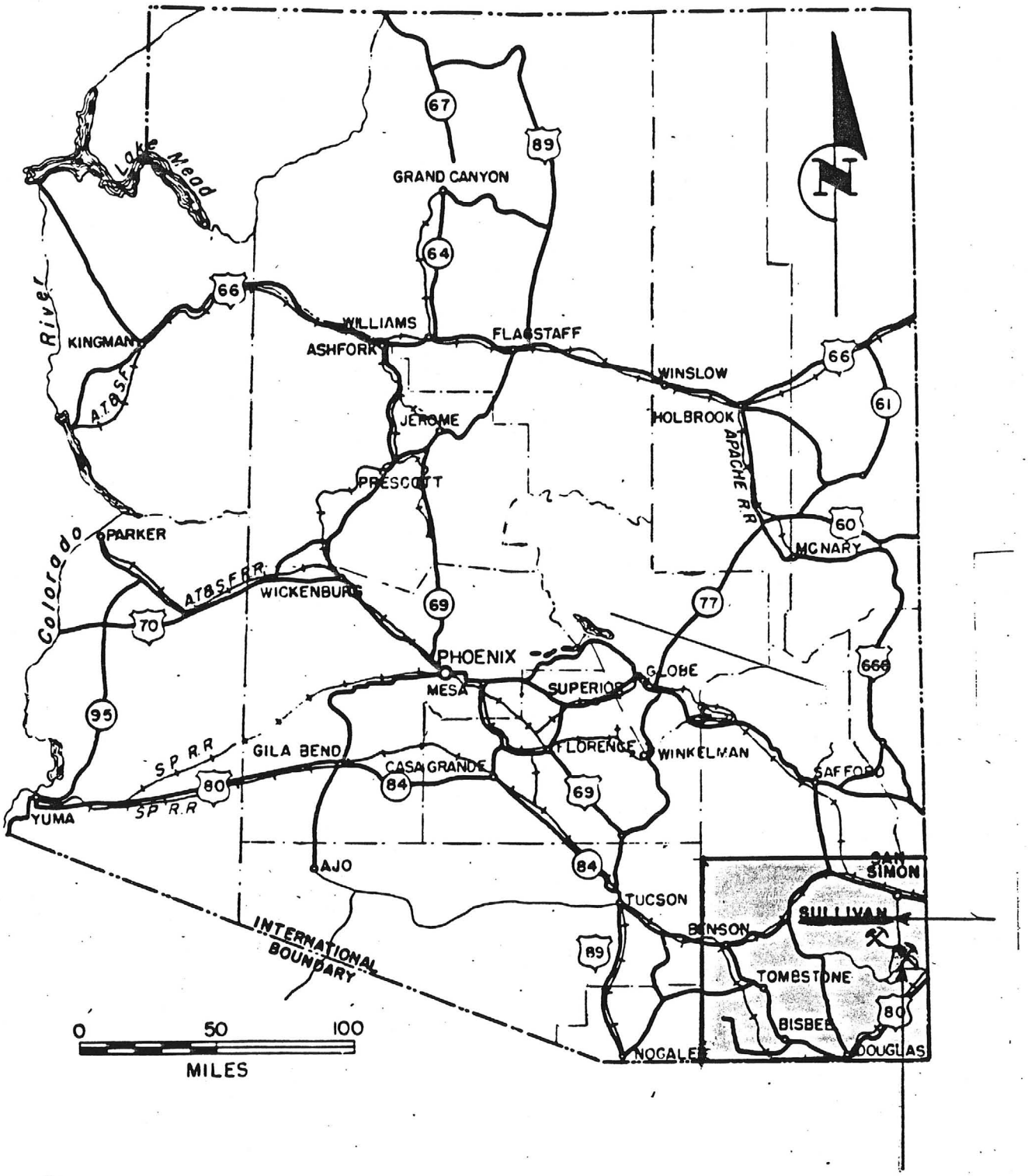
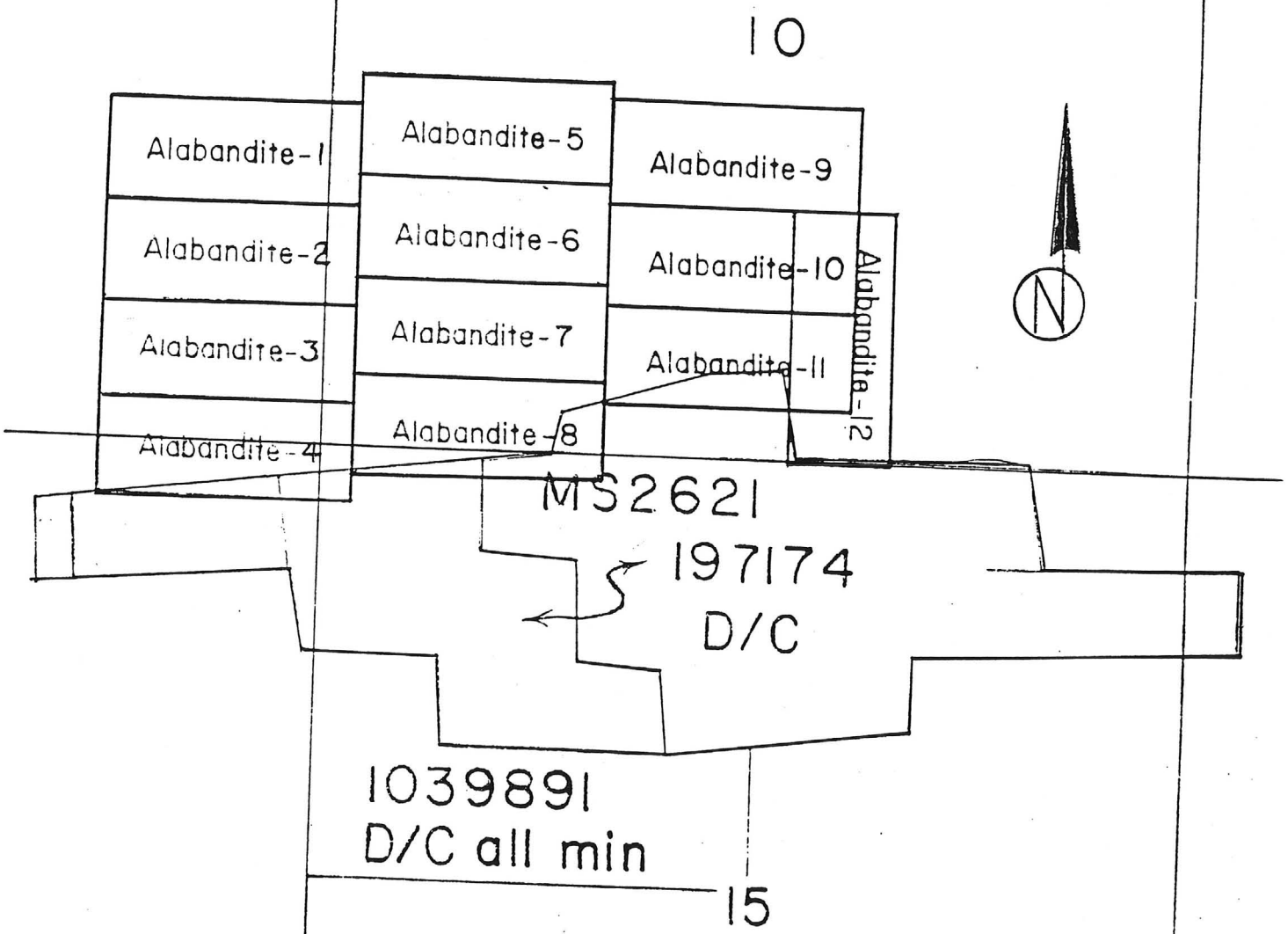


FIG.1-GENERAL LOCATION MAP.

THE ALABANDITE CLAIM GROUP

R.W. MORROW

T 17 S
R 31 E



Scale: 1" = 1000'

INTRODUCTION

At the request of Mr. Ralph Morrow, the general area of the main workings of the Alabandite Claim Group was examined, and evaluated for its mineral potential during the period of July 20-21, 1978. These investigations were carried out by this writer and Mr. Kenneth Kral, in order to aid its owners and operators of this property in its most expedient development.

The general area investigated encompasses parts of the Paragon Nos. 248-280 claims and the Alabandite Claim Group. These unpatented Federal lode claims are held by location, and have been held by the present claimant, R. W. Morrow, for quite some time.

This area was examined and mapped at a scale of 1 inch to 50 feet. Various mineralized structures were noted in the course of the effort and were plotted on a map. (See figure No. 1) Where possible, the various workings were examined, and channel samples of the exposed mineralization were taken. (See figure No. 1 for the location of these samples, CD006a-CD010a) In cases where the workings were not safe to enter, representative dump samples were taken of material thought to have been mined. (See figure No. 1 for the location of these samples, CD001a - CD005a)

Five N-S traverses across the area were made so as to gather representative lithologic and alteration information, and soil samples.

A series of cross-sections were made and are included. (See figure No. 1 and cross-sections A-A' through E-E') A single N-S magnetic survey traverse was also made. (See cross-section C-C') All samples taken were then assayed for their gold and silver content. (See Appendix A)

GENERAL GEOLOGY

As this examination of the property was of a reconnaissance nature, little time was spent in examination or correlation of the various rock types outcropping in the Round Valley area. According to S. B. Keith, the limestone units visible at the main Alabandite or Humboldt workings are part of the Permian Colina formation. This writer observed that these limestone units are very fossiliferous and contain abundant brachiopod, gastropod and ammonoid cephalopod fragments. A transition from these fossiliferous units to those containing rounded, limestone cobbles was noted. The limestone units are not strongly altered; small patches of marble have been noted adjacent to mineralized veins. No high temperature alteration minerals (diopside, actinolite-tremolite, idocrase-vesuvianite, garnet or magnetite) were noted. Lower temperature alteration minerals associated with the mineralization were quartz, calcite, and ankerite.

A series of intrusive Quartz Latite Porphyry dikes cut the limestone units. These dikes strike approximately E-W and dip to the N. The dike material is essentially, unaltered.

HISTORY AND PAST PRODUCTION

The Alabandite or Humboldt mine area was a past producer of silver, copper and lead. According to S. B. Keith, the property was active from 1907 to 1930, and produced some 180 tons of ore.** A 1935 report by J. A. Wilcox indicates that the property produced some 257 tons of ore that averaged around 36 ozs. Ag per ton.* At current market prices, the past production would have a value of around $ 92,500 (based on a market price of $10/oz. Ag).

ECONOMIC GEOLOGY

Mineralization consists of argentiferous alabandite, argentite, galena, copper and manganese oxides, and a small amount of gold. This occurs in veins and veinlets along the contacts between the limestone, and the dikes. The mineralized zones appear to be restricted to those masses of limestone that have been trapped in these dikes, or are embayed between two igneous bodies. The area of past production lies to the north of the most southerly dike that crosses the property from east to west. Previous work was done on a series of three major paralleling veins that lie along limestone-quartz latite porphyry contacts. The northernmost vein is approximately 120 feet from the major mineralized structure. The area between these two veins is strongly fractured, and contains many smaller veins and veinlets that are mineralized.

* See Appendix C, "A Report on the Round Valley Mines," Joseph A. Wilcox, page 2, paragraph 5.

** Appendix C, page 5.

According to the Wilcox report* mineralization occurs on both the northern and southern margins of the main dike. This mineralization appears to be related to the emplacement of the dike system, with values increasing as one approaches the limestone dike contacts. It is apparent that a very powerful epithermal system was active in the formation of these deposits. This system was silver, manganese, and copper rich, and had the capability to concentrate these metals. If one takes the average tenor of the veins as being in the neighborhood of 30.0 ozs. Ag per ton, then the factor of concentration at this deposit might be in the order of 500.

The veins themselves are formed of intergrown masses of quartz, calcite and ankerite in open spaces and fracture fillings. The gangue minerals are mostly euhedral. Manganese and minor amounts of copper oxides coat the surface exposures. Sulphides in the form of alabanite, galena and argentite (?) have been noted on the dump.

An indicator as to the depth of oxidation is the current water level; about 90' in the main shaft.

GEOCHEMICAL SURVEY

Thirty five soil and rock-chip geochemical samples were taken and assayed for their gold and silver content. (For the location and results of these samples, see figure No. 1, cross-sections A-A' through E-E', and Appendix A) Background values for gold and silver were established

* Appendix C, page one, paragraph 6.

as being less than .1 ppm Au and 5 ppm Ag. Eight samples showed anomalous gold values. Sixteen samples showed anomalous silver values; nine showing values greater than twice the background value. Four samples indicated mineable grade material. (CDS 014, 018, 019, 024) The distribution of the values indicates to this writer that a large anomalous area to the north of the main workings, has the potential for a low grade silver orebody. It appears that the quartz latite porphyry is not itself significantly mineralized; this being restricted to the hanging wall side of the major dike system, and is found to the south where the dikes are not exposed.

GROUND MAGNETIC SURVEY

A single traverse was made along line C-C' with readings being taken at the geochemical sampling stations. The results were inconclusive. (For the location of this traverse and the results see cross-section C-C')

DUMP AND CHANNEL SAMPLING

Ten representative samples were taken of the various dumps and exposed outcrops of vein mineralization. (For the location and results of these samples see figure No. 1 and Appendix B) The results indicated

that the dumps would average around 5.0 ozs. Ag/ton and that the surface outcropping mineralization would average around 1.0 oz. Ag/ton.

CONCLUSIONS AND RECOMMENDATIONS

It is this writer's opinion that this property has an excellent potential for further, high-grade vein mineralization, and for development as a bulk, low grade deposit. In addition, the 3000 tons of dump material at the site might be worked via a heap leaching operation similar to what is being done at Tombstone by the State of Maine Mining Company.

The three main vein systems north of the E-W trending dike might be worked along strike through the existing workings. These workings would have to be rehabilitated and dewatered. Once this was accomplished, they would have to be mapped in detail and surveyed. It is anticipated that productive mining of the high grade veins would be below the level of oxidation. As the veins are striking E-W, a N-S development and haulage heading might be initiated from the bottom of the old shaft. This would facilitate production from more than one mineralized zone and at the same time, save on hauling and hoisting costs.

Exploration might be handled from the existing workings using underground diamond core and long-hole drilling. Deep exploration would need to be handled from the surface. It should be remembered that the best mineralization is at the contact between the limestone and the quartz latite porphyry.

In the area between the main vein and the northernmost vein there are scattered outcrops of quartz latite porphyry. This could mean that the mass of mineralized limestone between these two veins is fairly thin, or it could mean that there are additional mineralized zones that have not been prospected in the past.

The problem of the relative thickness of the limestone block mass between the main and northernmost vein is a critical one, if one is to work for the development of this property as a bulk, low grade deposit. If the dikes that are seen at the surface are merely extensions of a larger igneous mass near the surface, then the potential for the requisite tonnage needed decreases. On the other hand, if these dikes are well removed from their igneous source, then the potential for a low grade, bulk deposit below the zone of oxidation increases. The only way to test this is by drilling a minimum of three core holes. (For the location of these holes see cross-sections C-C' through E-E') These holes would be drilled at an angle of 45° and to a depth of 250'. Prior to this drilling program, a plane table map should be made of the area so as to coordinate surface and underground information. This would be critical if the need arises to conduct additional surficial and underground drilling programs so as to delineate a bulk deposit.

As exploration is a high cost proposition, it is advantageous if the property can "pay its way" while under development. A possible way of recapturing the development costs might be found in the treatment of the existing mine dumps. A heap leaching operation similar to those

set up in Tombstone might be just right for recovering appreciable amounts of silver and gold from these dumps. As there are approximately 3000 tons of dump material at the property, it might pay to have some preliminary mill tests done on the ore so as to ascertain if this process might be feasible. The silver content of these dumps would average around 5.0 ozs./ton, and would have a gross value of $150,000 at $10/oz. Ag . If 40% of this value was recovered, $60,000 might be available to defray the cost of the development and exploration program envisioned.

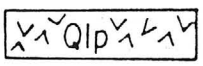
In conclusion, I feel that this property could be a real profit producer, if the work is done in an orderly manner and with an eye to the geology and ore controls.

RICHARD J. LUNDIN

Mineral Exploration Consultant
Wallaby Enterprises

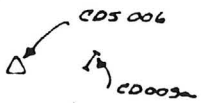
Figure 1

LEGEND



Laramide? Quartz Latite Porphyry

Colina Limestone (Permian)

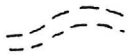


Sample Sites

Veins

Brecciated Zones

Dumps



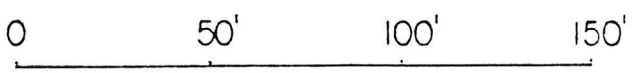
Roads

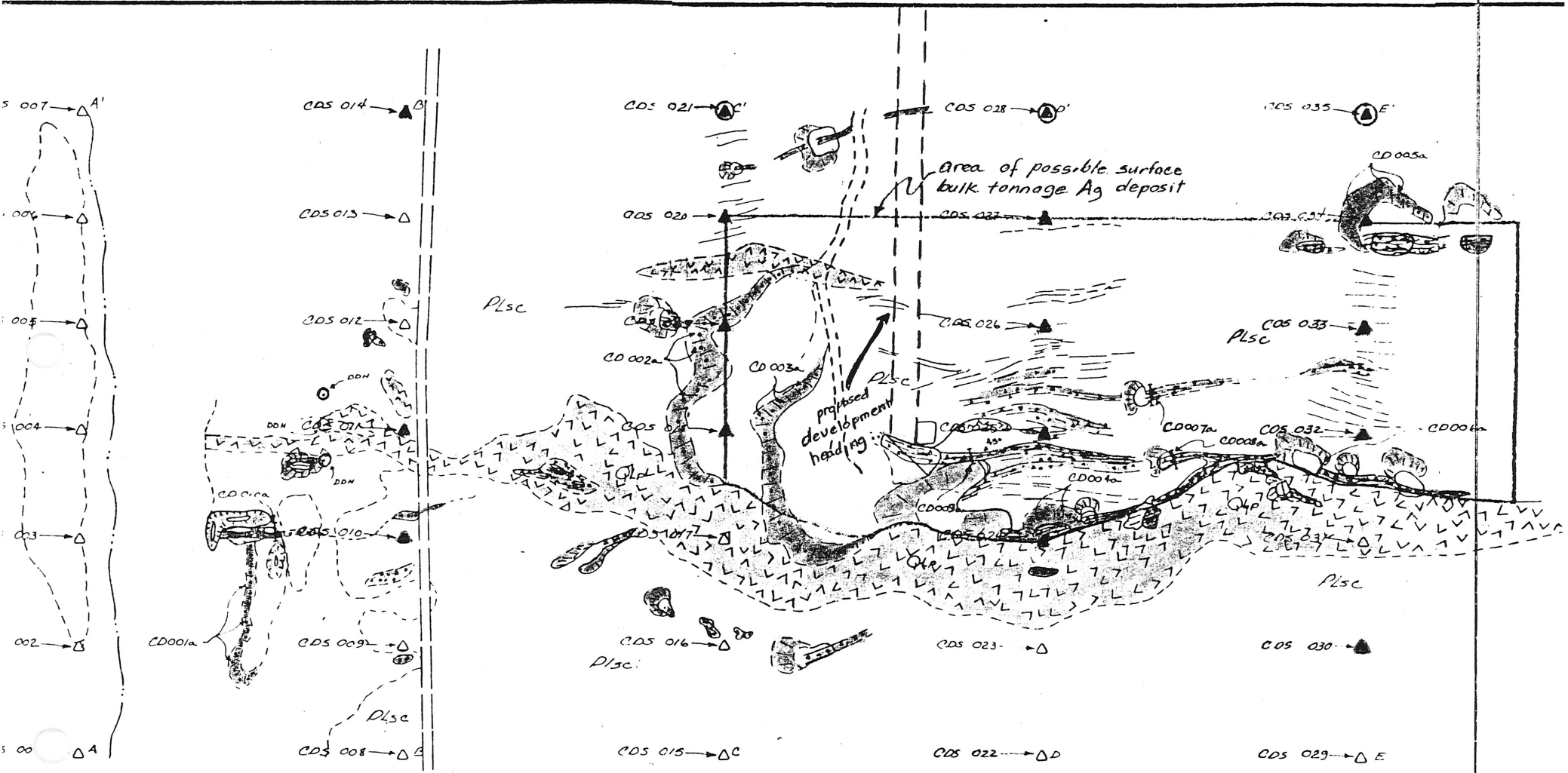
Shafts

Location of samples greater than 5ppm Ag

⊙ Proposed Drillsites

SCALE: 1" = 50'





R.J. LUNDIN
WALLABY ENTERPRISES
8/5/78

PRELIMINARY RECONAISSANCE GEOLOGIC MAP

Main Workings, Alabandite Claim Group,

California Mining District,

Cochise Co., Arizona

Explanation of symbols used on the Cross-Sections

Quartz Latite Porphyry

Limestone

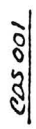
Dump Material

Breccia

Fossiliferous material

Strongly Anomalous Ag value

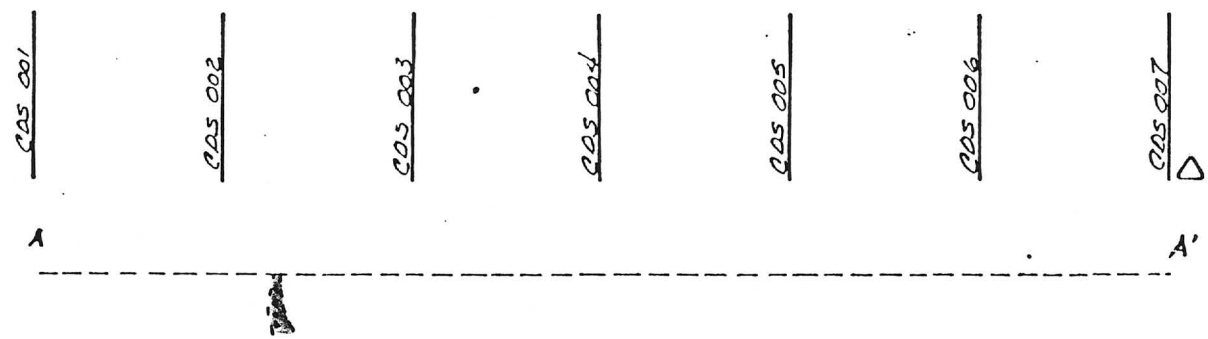
Strongly Anomalous Au value



Sample No.

Veins

Cross Section A-A'
(Looking West)



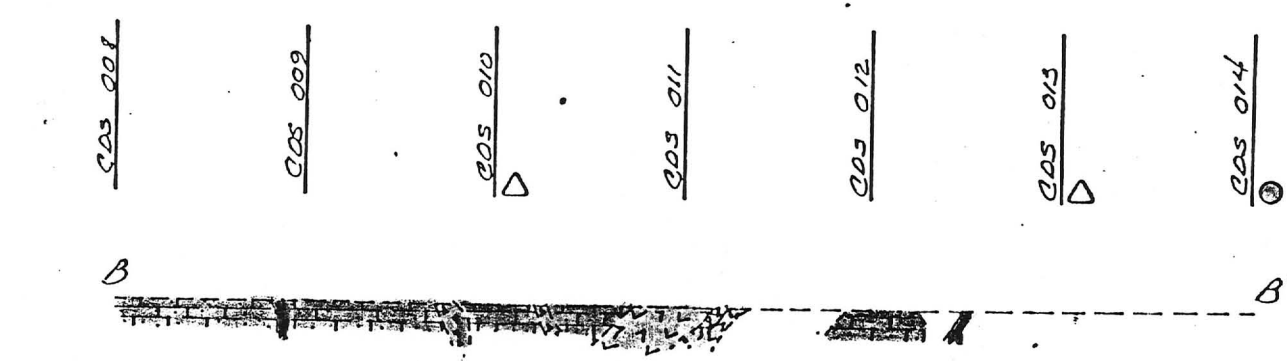
Scale:
hor. & vert. 1"=50'

50

0
ppm
Ag

R. J. London
8/5/78

Cross Section B-B'
(Looking West)



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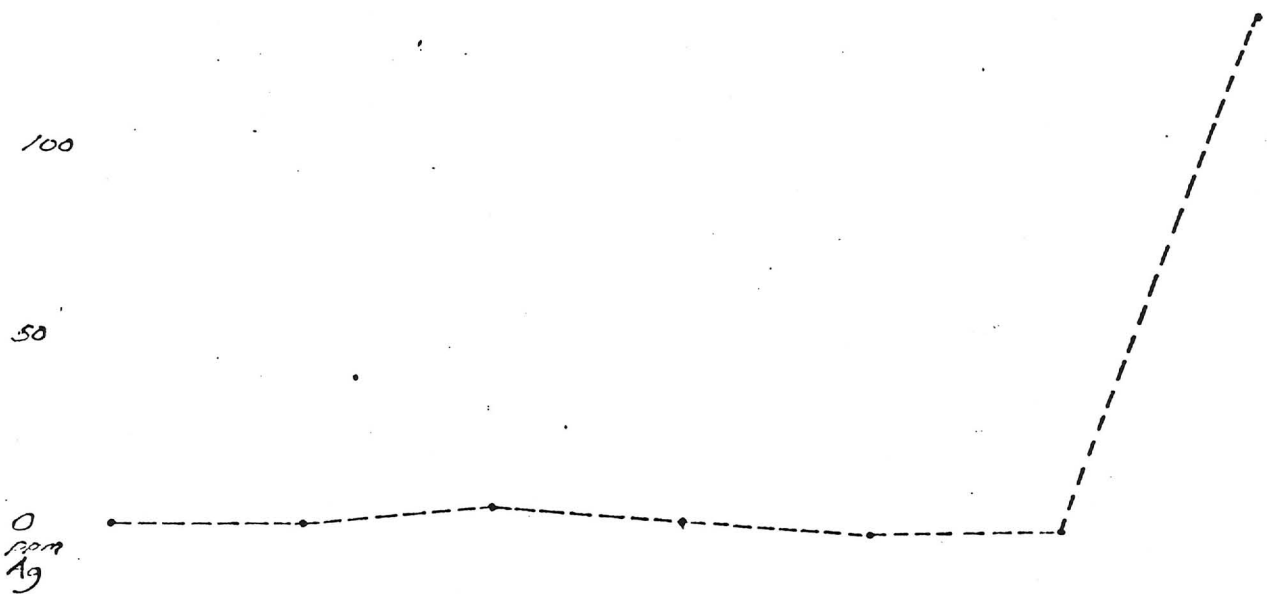
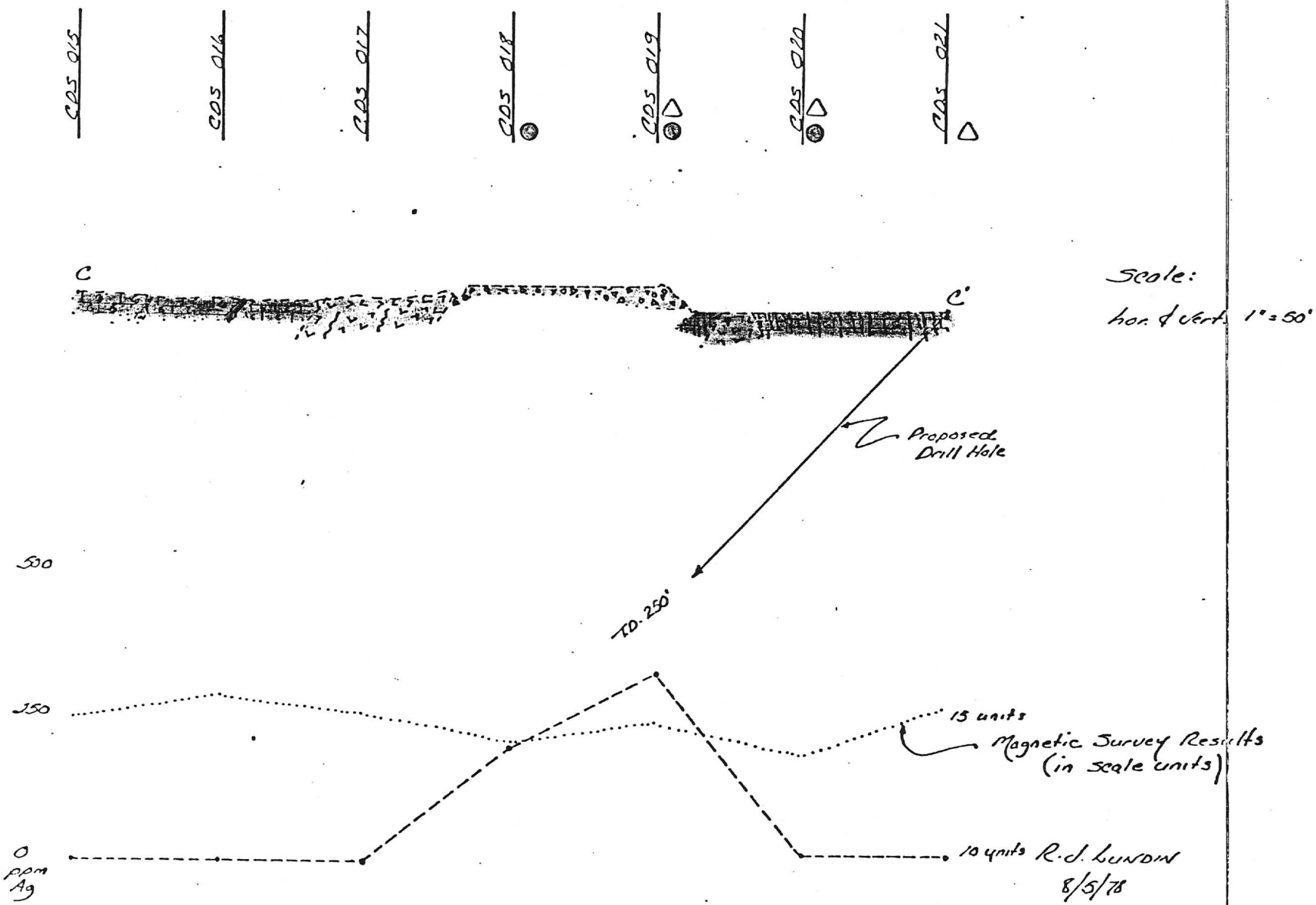
hor. & vert. 1" = 50'

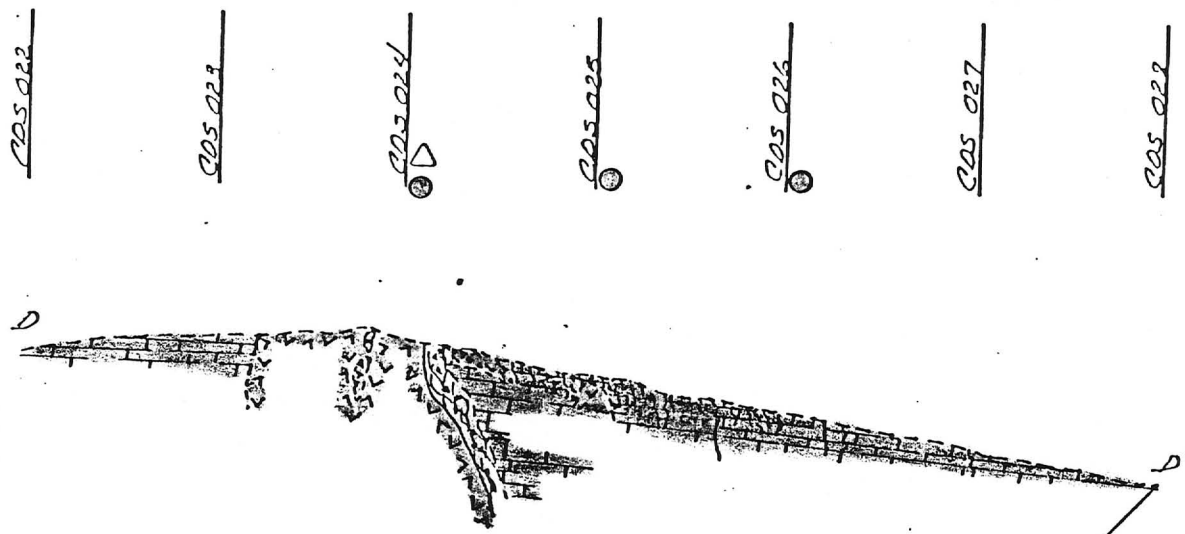


R.D. Lundin
8/5/78

Cross Section C-C'
(Looking West)



Cross Section D-D'
(Looking West)



Scale:
hor. & vert. 1" = 50'

Proposed Drill Hole

T.D. 250'

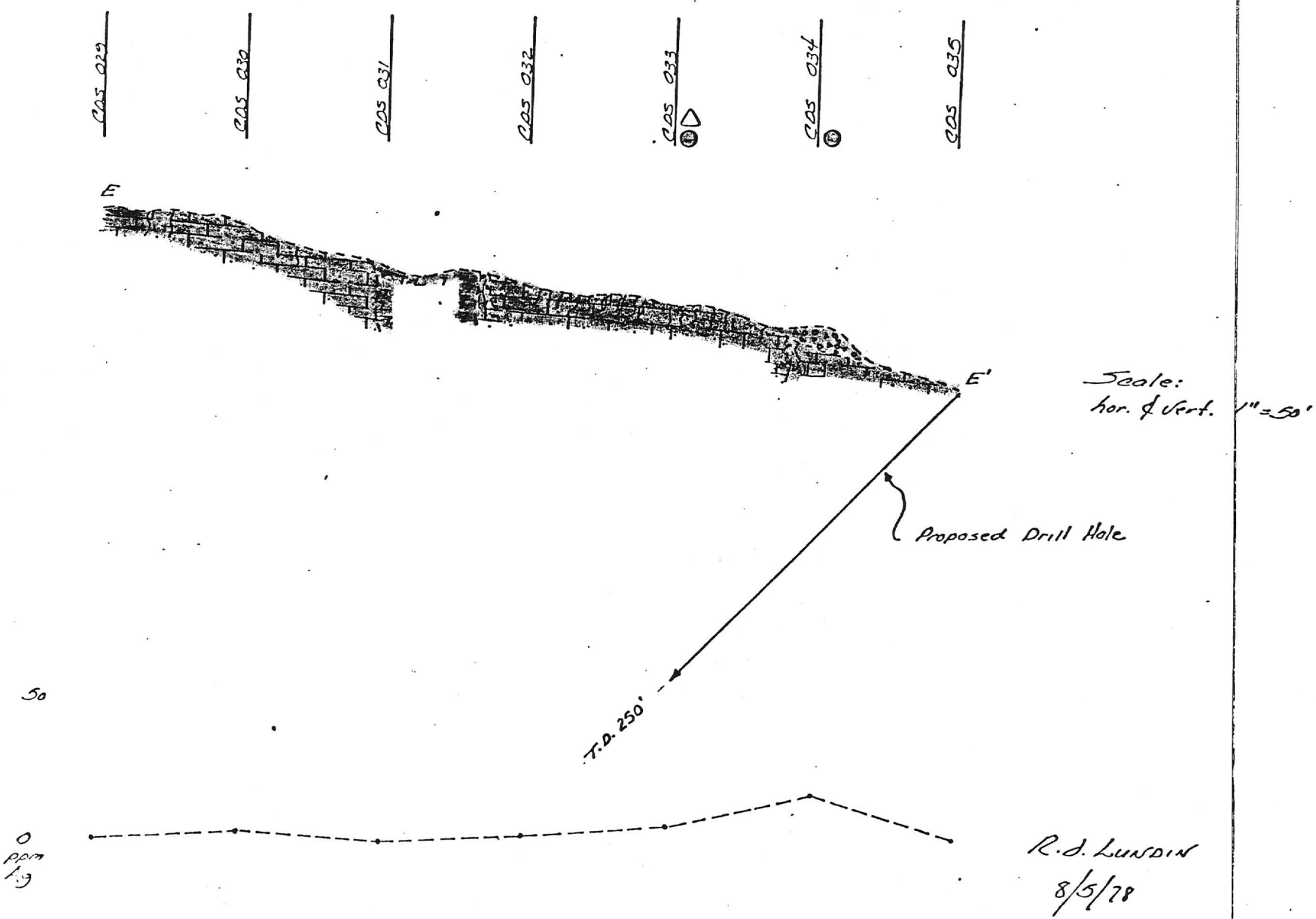
500

250

0

R. D. LUNDIN
8/3/78

Cross Section E-E'
(Looking West)



R.D. LUNDIN
8/5/78

APPENDIX A

ASSAY RESULTS OF SAMPLES TAKEN BY RICHARD LUNDIN OF WALLABY ENTERPRISES IN JULY, 1978. SAMPLES ASSAYED FOR GOLD AND SILVER.

TUCSON OFFICE

ROCKY MOUNTAIN GEOCHEMICAL CORP.
2561 EAST FORT LOWELL ROAD · TUCSON, ARIZONA 85716 · PHONE: (602) 795-9780

Certificate of Analysis

Date: August 5, 1978

Client: Wallaby Enterprises
3425 W. Bardot
Tucson, AZ 85704

RMGC Numbers:
Local Job No.: 78-13-5T
Foreign Job No.:
Invoice No.: T 8147

Client Order No.:

Report On: 35 Rock Samples

Submitted by: R. Lundin

Date Received: July 28, 1978

Analysis: AU and Ag

Analytical Methods: Determined by Atomic Absoption

Remarks:

cc: Enc:
RMGC: SLC
file

PDW/pw

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Sample Number	Au ppm	Ag ppm
CDS-001	-0.1	-1
-002	-0.1	-1
-003	-0.1	1
-004	-0.1	1
-005	-0.1	-1
-006	-0.1	1
-007	0.2	1
-008	-0.1	3
-009	-0.1	3
-010	0.2	8
-011	-0.1	7
-012	-0.1	4
-013	0.2	5
-014	-0.1	140
-015	-0.1	5
-016	-0.1	3
-017	-0.1	5
-018	-0.1	200
-019	0.1	360
-020	0.1	15
-021	0.2	8
-022	0.1	2
-023	-0.1	4
-024	0.1	425
-025	-0.1	12

Sample Number	Au ppm	Ag ppm
CDS-026	-0.1	11
-027	-0.1	8
-028	-0.1	5
-029	-0.1	4
-030	-0.1	7
-031	-0.1	3
-032	-0.1	7
-033	0.1	10
-034	-0.1	22
-035	-0.1	6

By Parry D. Willard

Parry D. Willard

1435 S. 10th AVE.
P. O. BOX 1889
PHONE 622-6819

Jacobs Assay Office

Registered Assayers

Certificate No. 59994

TUCSON, ARIZONA 85702 13 28 July 1978

Sample Submitted by Mr. Wallaby Enterprises

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
		$					
CD 001A RL-78	0.005		1.90				
2	0.005		2.30				
3	0.010		3.75				
4	0.040		8.75				
5	0.005		1.40				
6	Trace		0.55				
7	Trace		0.20				
8	0.005		0.20				
9	0.005		1.45				
CD 010A RL-78	Trace		4.55				

* Gold Figured $100.00 per oz. Troy

Charges $ 50.00

Very respectfully,
Mike Sanders

APPENDIX B

ASSAY RESULTS OF SAMPLES TAKEN BY:

A) PRODUCERS MINERALS CORPORATION, 1970 (SILVER & COPPER)

B) CHIRICAHUA COPPER CORPORATION, 1971 (GOLD, SILVER, COPPER ET.AL.)

C) COCHISE MINING COMPANY, 1979 (SILVER)

3226 East 46th Street

Phone 624-004

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85713

Round Valley Mine South Vein

SAMPLE SUBMITTED BY Producers Minerals Corporation

DATE Nov. 6, 1970

SAMPLE MARKED	GOLD OZ./TON	SILVER OZ./TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	
Round Valley South Vein - 1 (surface) samples		5.61	0.79					
2		6.60	0.23					
3		25.85	1.37					
4		3.22	0.05					
5		4.80	0.87					
6		5.43	0.76					
7		4.45	0.63					

FL

11/6/70

3226 East 46th Street

Phone 624-0[illegible]

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

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TUCSON, ARIZONA 857[illegible]3

Round Valley Mine

SAMPLE SUBMITTED BY Producers Minerals Corporation

DATE Nov. 6, 1970

SAMPLE MARKED	GOLD OZ./TON	SILVER OZ./TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	
Round Valley-1		25.32	0.02					
(Sorted Dump Samples) 2		0.58	0.02					
3		65.42	0.68					
4		17.73	0.32					
5		37.82	2.52					

REGISTERED ASSAYER CERTIFICATE 6351 FLORES

[signature] 11/6/70

3220 East 46th Street
Phone 624-

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

Round Valley Mine Dump

ASSAYERS · CHEMISTS · METALLURGISTS

TUCSON, ARIZONA 85

SAMPLE SUBMITTED BY Producers Minerals Corporation

DATE Nov. 6, 19

SAMPLE MARKED	GOLD OZ/TON	SILVER OZ./TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON
Valley Dump - 1 (Main shaft)		6.76	0.06				
2		3.03	0.03				
3		0.30	0.02				
4		0.48	0.01				
5		2.96	0.05				
6		4.74	0.07				
			(Collar of Main shaft)				

Peter S. Flores

FLORES

11/6/70

Form DRW 2060 (Rev.)

Phelps Dodge Corporation

DOUGLAS REDUCTION WORKS

dump sample

ASSAY AND ANALYSIS CERTIFICATE

HAND SAMPLE:

DOUGLAS, ARIZONA March 15, 19 71

NAME Chiricahua Copper Co. Box 1752 Tucson, Az. 85710 Round Valley Mine

Smelter Lot	Shipper's Lot	Gold Ozs.	Silver Ozs.	Copper %	Lead %	SiO_2 %	Al_2O_3 %	Fe %	Mn %	CaO %	MgO %	S %	Zn %	Cl %	%	%
1753	No. 1	0.007	7.71	0.22		50.0	2.1	1.3	0.9	20.3		0.3				

Chief Chemist

Form DRW 2060 (Rev.)

Phelps Dodge Corporation

DOUGLAS REDUCTION WORKS

dump sample

ASSAY AND ANALYSIS CERTIFICATE

HAND SAMPLE:

DOUGLAS, ARIZONA March 15, 19 71

NAME Chiricahua Copper Co. Box 1752 Tucson, Az. 85710 Round Valley Mine

Smelter Lot	Shipper's Lot	Gold Ozs.	Silver Ozs.	Copper %	Lead %	SiO_2 %	Al_2O_3 %	Fe %	Mn %	CaO %	MgO %	S %	Zn %	Cl %	%	%
1754	No. 2	0.004	5.96	0.20		50.4	4.8	1.7	1.1	20.5		0.3				

Chief Chemist

3441 East Milber,

Phone 889-5787

AMERICAN ANALYTICAL and RESEARCH LABORA 'ORIES

ASSAYERS - CHEMISTS - METALLURGISTS

JCSON, ARIZONA 85714

SAMPLE SUBMITTED BY Cochise Mining Company DAT July 16, 1979

SAMPLE MARKED	GOLD OZ./TON	SILVER OZ. TON	PERCENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	
1 L 2		6.72						
1 L 4		3.69						
1 L 6		6.22						
1 L 8		8.00						
2 L 2		9.72						
2 L 4		13.77						
2 L 6		7.74						
2 L 8		6.55						
3 L 2		5.55						
3 L 4		6.39						
3 L 6		6.85						
1 U 2		0.38						
1 U 4		0.57						
2 U 2		1.61						
2 U 4		1.08						
2 U 6		2.88						

UPPER & LOWER DUMP TRENCHING OF ROUND VALLEY DUMPS. U = UPPER, L = LOWER. 2, 4, 6, 8 = DEPTH AT WHICH SAMPLE WAS TAKEN. (Feet)

[Stamp: REGISTERED ASSAYER, CERTIFICATE No. ...852, ... S. ...ORES, ... Arizona, U. S. A.] [signature] 7/16/79

CHARGES $ 60.00

INVOICE NO. 16489

ASSAYER-CHEMIST

REPORT ON THE ROUND VALLEY MINES COCHISE COUNTY, ARIZONA.

This report is the result of my findings from several examinations having been made during the first week in November 1935.

This property is in Round Valley in northern Cochise County and is in the California Mining District. In the future this will be known as the Round Valley Mines.

The Round Valley Mines consists of eight and a fraction claims lying along the east side of Round Valley and extending down into the flat part of the valley where a deep covering of soil obliterates all rock formations. This report concerns only the east portion of the claims where the formations and outcrops are exposed.

Along the east side of the property a long and massive upthrust forms the east rim of the valley. Sloping to the west from porphyry summit of the rim to the floor of the valley, a distance of about fifteen hundred feet, is a zone of white fossilized limestone. Running at right angles to the porphyry upthrust and cutting through the middle of the claims is a very pronounced quartz porphyry intrusion from twenty to seventy-five feet in width and to all appearances is of deep seated origin. The general strike of this intrusion is east and west.

On each limestone-porphyry contact there is a strong and continuous quartz vein carrying alabandite (manganese sulphide), silver sulphide, complex chlorides and bromides of silver, a small amount of gold and a trace of copper.

At a distance of one thousand feet north of this dyke and running more or less parallel to it is another vein with very good silver outcrops and four hundred feet south of the dyke are two large veins also showing outcrops of silver. Samples taken on these outcrops all show silver, but due to surface leaching are of irregular value. I have taken some in the past that ran as much as one hundred ounces.

Numerous other veins paralleling the former are to be seen and on one of these is a forty-foot shaft from which I have seen some very nice assay reports.

All of these veins run from twelve to sixty inches in width with an average of about forty-two inches. Several small workings show these veins to have a general dip of from 47 to 60 degrees to the north. All the veins extend out into the valley where they become covered with earth. Their exposed lengths are from one thousand to fifteen hundred feet.

There are two shafts on the property and several small cuts. An old shaft that is in good condition around the collar is 186 feet deep on an incline of about forty-seven degrees. This shaft was sunk on the north contact of the lime and the porphyry.

At the present time the shaft below the ninety-foot level is full of water. When I was there in November, leasers had extracted practically all the ore above the ninety-foot level.

Below the ninety-foot level only one small stope was worked. The vein straightens to about 60 degrees and is strong all the way down.

The shaft was sunk to the 186-foot level only. At this point drifting was done along the vein for a total distance of 89 feet. Then a drift was run south through the porphyry a distance of 86 feet to the south contact of the lime and porphyry where a three foot vein of quartz was struck where fifteen inches of very good alabandite and silver was found. About 12 feet of drifting was done on this vein. Both of these veins are strong with fair values. A small stope was operated on the shaft vein on the 186-foot level.

I have record of net smelter returns from this property totalling 257 tons with a total value of $5,067.00. Average returns per ton is $19.66. This ore was shipped between 1905 and 1923. Since then other shipments were made of which I have no record.

I took several samples and all that carried alabandite and between 45 and 200 ounces of silver.

Mr. Morrow has a number of other assay reports that were taken by other engineers that consistantly show values from 5 to 50 ounces of silver per ton.

A new shaft 300 feet west of the shaft is down forty feet. This shaft is not on the same vein, but the vein is strong and a small amount of commercial grade ore was found. Surface leaching is very pronounced in this district and the new shaft is not down far enough to be out of the leached zone.

Water for mining and domestic purposes is easily available from the mine and from nearby wells. The water flow is about 100 gallons per day.

There is a very good country road to within a mile of the property and a road over which motor vehicles may pass goes right to the mine. Ore hauled from the mine would go to San Simon, Arizona for shipment on the Southern Pacific Railroad to the custom smelter at El Paso, Texas. The mine is 29 miles from San Simon, with a slight down hill grade all the way.

Summary and Opinion.

Because of the well fractured limestone with its porphyry intrusions, and the strong veins of commercial width, and the extensiveness of the mineralization all along the veins, this property from surface indications alone is worth prospecting. Other properties at Hilltop and Paradise, which were not far distant, produced much ore. Then the showing in the several small workings tend to verify the opinion that a very nice body of commercial ore can be found.

The entire Round Valley district has no extensive workings, but the prospective feature along with the record of ore shipments makes me believe that a good examination is justified.

Copied from: Joseph A. Wilcox Report,
Engineer.

SMELTER RETURNS FOR HUMBOLDT (ROUND VALLEY) MINE FOR THE YEARS 1905 TO 1923.

...RNDON GUNNELL
... ENGINEER

[illegible] DATA [illegible] (Later Known as Round Valley Mine)

Date	Assays Ag. Oz.	Cu.%	Total Payments	Treatment charge	Net per ton	Tons in Lot	Val. of Lot
1905	25.[illegible]		$17.9[illegible]	$[illegible]4			
1906	33.10		22.3[illegible]	[illegible]	[illegible]	12.[illegible]	101.71
"	105.80	4.27	[illegible]	[illegible]	[illegible]	[illegible]	193.90
"	59.20		40.[illegible]	[illegible]	[illegible]	9.[illegible]	637.80
"			[illegible]	[illegible]	32.[illegible]	2[illegible]	928.67
"	28.40		20.[illegible]	[illegible]	[illegible]	[illegible]	
1907	57.10		38.[illegible]	[illegible]	[illegible]	10.[illegible]	
1908	57.60		41.[illegible]	[illegible]	[illegible]	10.[illegible]	
"	35.60		31.[illegible]	[illegible]	[illegible]	[illegible]	
			20.[illegible]	[illegible]	[illegible]	2.[illegible]	
1911	40.30		21.8[illegible]	[illegible]	10.8[illegible]	3.[illegible]	
1912	52.40		[illegible]	[illegible]	[illegible]	[illegible]	
1920	16.80	(dump)	15.90	[illegible]	[illegible]	6.0[illegible]	
"	14.98	"	12.[illegible]	[illegible]	[illegible]	45.[illegible]	[illegible]
1922	47.20		47.02	[illegible]	5.20	28.[illegible]	[illegible]
"	89.60	1.51	50.0[illegible]	[illegible]	30.[illegible]	[illegible]	
"	38.80		38.65	[illegible]	[illegible]	[illegible]	[illegible]
1923	14.80	[illegible]	8.7[illegible]	3.[illegible]	[illegible]	[illegible]	[illegible]
						[illegible]	5,067.32

Total Tons. . . . 257.75 ****
Total Returns. . $5,067.32 ****
Average " per ton $19.66

above [illegible]
[illegible]

[illegible] noted [illegible] under treat[illegible] [illegible] for the [illegible] per oun[illegible]

[illegible] compilation [illegible] liquidation sheet [illegible] from the origi[illegible]

ENGINEER
332
OREGON
DEC. 31st 1915
ALVA H. GUNNELL

13.	Homestake mine (Boeckler Mng. Co.)	17S	31E	Cen. 35	Cu, Ag	Siliceous copper oxide and sulfide ore along a fault zone separating Pennsylvanian-Permian Naco Group limestone from Cretaceous volcanics near a Tertiary porphyry stock.	Pit and shaft workings. More than 140 tons of ore produced in 1912 and about 22 tons in 1919-1920.	ABM file data
14.	Horace mine (Douglas & Cross, McClellan)	16S	31E	NE ¼ 32	Pb, Cu, Ag	Lead and copper carbonates and oxides in irregular replacement orebodies in folded and faulted, silicified Mississippian to Permian limestones.	Pit, adit, and shaft workings. More than 60 tons of ore shipped in 1917-1918.	USGS Min. Res. of U.S., 1917, 1918 ABM file data
*** 15.	Humboldt mine (Bradshaw Arizona; May, Hyde & Scott; Bradshaw-Arizona Mng. Co.)	17S	31E	So. Cen. 10 No. Cen. 15	Ag, Cu-, Pb-	Spotty silver chlorides and silver values associated with alabandite and minor base metal sulfides in a shear zone and in pyrometamorphosed Permian Colina Limestone bordering an intrusive porphyry dike.	Shaft workings. Some 180 tons of ore produced intermittently between 1907 and 1930.	USGS Min. Res. of U.S., 1908, 1911-1912, 1922 Mines Handbook, 1926, 1931 ABM file data
16.	King Ainsworth mine group (Ainsworth, Cochise, Cochise-Bullion, Oregon group; King Copper Co., Ainsworth Copper Co., Cochise Consolidated Copper Co., Portal Mines Development Co., Coronado Copper Co., Arizona Consolidated Metal Producers Corp.)	17S	31E	Cen. bor. 4&5	Zn, Pb, Cu, Ag, Au, W-, Mo-	Irregular and spotty base metal oxides, carbonates, and sulfides with minor scheelite along shear zones and disseminated in silicated and pyrometamorphosed Mississippian to Permian limestone along a zone of thrust faulting.	Shaft and tunnel workings. A total of at least 1150 tons of ore produced intermittently from the 1880's to 1952.	USGS Min Res of U. S., 1906-1907, 1918 USBM Min. Res. of U. S., 1927-1929 USBM Min. Yearbook, 1948 Mines Handbook, 1926, 1931 USAEC Prelim. Rec. Rpt. A-P-47, 1953 Dale et alia, 1960, p. 15-16 ABM file data
17.	King of Lead mine (Morrow, Taylor, Pursley)	16S	30E	NE ¼ 18	Pb, Ag, Zn, Cu-, Au-	Base metal carbonates and sulfides in fault zones and in disseminate bodies in thrust blocks of Permian limestone.	Tunnel workings. A total of about 360 tons of ore were produced between 1927 and 1970.	ABM file data
18.	Leadville mine group (Chamberlain & Morrow, California & Paradise Consolidated Mng. Co., Nebraska & Arizona Copper Co.)	17S	30E Protracted 31E	SE ¼ 24 SW ¼ 19	Pb, Ag, Cu, W-	Lead and copper carbonates and sulfides with spotty scheelite in weakly silicified, locally sheared, Permian limestone intruded by porphyry dikes.	Shaft workings. A total of about 560 tons of ore produced intermittently between 1904 and 1951.	USGS Min. Res. of U.S., 1907-1915, 1923 USBM Min. Yearbook, 1949-1951 Dale et alia, 1960, p. 14 ABM file data
19.	Manhattan mine group (Manhattan Development Co.)	17S	30E	3, 10	Cu-, Pb-, Zn-, Ag-, Au-	Relatively weak base metal carbonates and sulfides with some high grade spots along a shear zone and as disseminations in metamorphosed Permian limestones and Cretaceous beds.	Relatively shallow workings. A small amount of ore produced during 1926 and 1927.	Mines Handbook, 1926 ABM file data
20.	Morning Star mine group (Paradise Mng. Co., Bisbee & Sonora Development Co., Paradise Mng. & Mlng Co.)	17S	31E	No. Cen. 5	Cu, Pb, Ag, Au	Copper and lead carbonates and sulfides in spotty, pyrometasomatic deposits in Mississippian to Permian limestones along an intrusive porphyry contact.	Tunnel and shaft workings. A total of some 85 tons of ore produced during 1916, 1942 and 1948.	Copper Handbook, 1912-1913 ABM file data

Keith, S.B., Index of Mining Properties in Cochise County, Arizona: A.B.M. Bull. 187 (1973)