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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MARICOPA

ALTERNATE NAMES:
KATHERINE CLAIM
APOCIRAM CLAIM
OPOEIRAM CLAIM
OPHIR NO 3

MARICOPA COUNTY MILS NUMBER: 549

LOCATION: TOWNSHIP 6 N RANGE 4 E SECTION 8 QUARTER E2
LATITUDE: N 33DEG 52MIN 49SEC LONGITUDE: W 111DEG 57MIN 44SEC
TOPO MAP NAME: NEW RIVER MESA - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD LODE
MOLYBDENUM
VANADIUM
IRON SULFIDE
LEAD SULFIDE

BIBLIOGRAPHY:
KOSCHMANN A & BERGENDAHL N USGS PP 610 P 40
ADMMR MARICOPA MINE FILE
BLM MINING DISTRICT SHEET
ELSING M & HEINEMAN R AZBM BULL 140 P 94
WILSON E, CUNNINGHAM J & BUTLER G AZBM BULL 137 P 157-162

MARICOPA MINE

See: ABM Bul # 137 p164

MARICOPA [redacted]

Au, Pb, Vn, Mo

Maricopa 7 - 2 T 6 N, R 4 E

Alfred S. Lewis, Cave Creek '40

MARICOPA MARICOPA COUNTY

RRB WR 2/27/87: Sally Dix of the Bureau of Land Management called for information on the Maricopa (file) and Phoenix (file) mines. She is working on a land exchange in the area. I gave her the information that she asked for over the phone and invited her to come examine the files herself.

NJN WR 1/15/87: The only current activity at the Maricopa Mine (file) Maricopa County consists of recreational gold panning in Cave Creek. Markings on the workings indicate that a sampling prouejct has probably been conducted here in the last five years.

Friday, June 1 - Accompanied Mr. Lumbert to his Maricopa and Phoenix Au properties north of Cave Creek. Here the schist is intruded by rhyolite and andesite dikes that strike about N40°-50°E in places they are sheared by N75°W faults of no great displacement. It is at the shears where the ore occurs in highly silicified zones. On the north side of the ridge and about 25 feet above Cave Creek and adit trends S30E for a reported 600 feet. At about 200 feet from the portal, a cross-cut to the east intersects a stope 8-20 feet wide by 60 feet long by 50-60 feet high and probably 60 feet deep (below the adit level). About 30 feet NE of this stope is another of comparable size but only about 20 feet below the level. Part of this stope connects with one of 4 shallow shafts. On the surface none of the shafts appear to be more than 50 feet deep. However, they are all clustered within about 40 feet horizontally and are near the top of the ridge.

The Phoenix mine is about 3/4 mile NE of the Maricopa and consists of 2 patented claims. Here two parallel open stopes about 150 feet long and from 10-30 feet deep by 8-25 feet wide, are sloughed or otherwise inaccessible. These trend about N30E and dip W at 75°; they are 50-75 feet apart and are in a rock too altered for positive identification. However, slightly north of the west one, tuff crops out which Mr. Lumbert stated ran $14.00 per ton at $35.00 Au. This tuff has been tunneled in various northerly directions for several hundred feet. GW WR 6/1/73

Bernie Lumbert came in for a brief visit saying he was drifting on a quartz vein on the west side of Cave Creek immediately west of his Maricopa mine. The piece of quartz he brought in had no mineralization in it. GW WR 1-22-74

Bernie Lumbert called to say he wants to sell both the Maricopa and the Phoenix gold properties north of Cave Creek. GW WR 1/22/75

PAY DIRT for February 24, 1975

American Selco Inc. geologist John Proch~~eur~~nau, called regarding the whereabouts of Bernie Lumbert saying his company is interested in the Maricopa and Phoenix mines NW of Cave Creek. Mr. Lumbert was contacted at his office and told of the compan's interest. GW WR 5/6/75

July 23, 1975

To: John H. Jett, Director
From: Ken A. Phillips
Subject: Weekly report for week ending July 18, 1975

Monday, July 14 - Office details

Tuesday, July 15 - Completed Tap 'Er Light. Dave Muller, 279-3787, with the local Phoenix group of the Gold Prospectors Association of America requested a program for their August 15, 1975, meeting on gold mining history and gold deposits which was scheduled. [Received a call requesting ownership status of the Phoenix and Maricopa mines in the Cave Creek District. Data on the Phoenix mine is contained in the Cave Creek Gold Mine file. The properties generally referred to as the Phoenix and Maricopa mines are two separate properties. The Phoenix mine is located in the NE¼, NW¼ and NW¼, NE¼, Sec. 9, T6N, R4E, and consists of two patented claims, the Phoenix and the Westside and two patented mill sites owned by Betty Pickering, 6631 E. Horse Shoe Lane, Scottsdale, 85253, 948-6994 or 949-9413 (office) and Warren Holst per a conversation with Mrs. Pickering. They had at one time leased with an option to purchase the property to Bernie Lumbert. About 18 months ago a group allegedly associated with the Maricopa County Sheriff's Dept. on permission from Lumbert as supposed legal owner filled in a shaft on the Phoenix-Westside property with old tires and other rubble prior to blasting the opening shut as a safety measure. Lumbert referred to the location of the shaft as his Katherine Claim. American Selco (often referred to as just Selco) has expressed some interest in the Phoenix and Westside property, but the owners are presently allowing anyone interested to study the property and have not yet signed any agreements. The Maricopa mine property is located in the SE¼, NE¼, Sec. 8, T6N, R4E. The property is private ground, according to the BLM, owned by Rubenstein Construction et al, as per Maricopa County Assessor's office and was acquired by them through a land exchange. Prior to the exchange there was a Mineral Survey #4504 on the property according to the BLM, however, Betty Pickering understands that Bernie Lumbert has staked many claims on the property.]

KP/WR 4/4/79 - Visited the location of the Maricopa Mine Property, Cave Creek District, Maricopa County, No Activity. 5/22/79 a.p.

KAP WR 8/15/80: Len Pritchard, 6530 N. Scottsdale Road, Suite 1031, Scottsdale, Arizona 85253, phone 991-5093, reported his firm is planning cyanide heap leaching operations on the Maricopa Mine, Cave Creek District, Maricopa County. He reports he suspects the dump to contain 50,000 tons of material which will run .12 tr.oz/ton gold. He indicated he would proceed with cautious testing before committing funds for full development.

E X H I B I T --- T E C H N I C A L D A T A

Application for Class-B Development Loan $40,000.00

Docket B-2985 Maricopa Mine

Alfred Strong Lewis Cavecreek, Arizona

June 1940

MILL STATUS

The mill tests made during the latter part of 1939 and the early part of 1940 showed a gradual reduction in tailing losses. The first mill tests showed tails averaging $4.00. The result of making many changes and additions to the mill and improvements in process was to bring the tailing loss in the last test down to $1.05.

The direct milling costs were maintained below $2.00 per ton with mining costs ranging from 75 cents to $1.75 per ton. Our marketing costs were excessive due to the necessity of making very small shipments to the smelter which realized less than 75% payment on the gold content. Our indirect milling costs occasionally by the expense of changing, making over, repairing and improving the milling plant have not been broken down into cost per ton but have been approximately $3.00 per ton of ore milled. Total milling cost of $2.00 direct and $3.00 indirect equals $5.00 per ton for ore previously milled.

Since the last mill test a number of small changes, improvements and additions have been made and everything is in readiness to run the mill on a basis superior to the conditions which existed on the last run.

Milling Costs estimated upon basis of present conditions are as follows:

Direct Milling cost; labor, power, reagents	$ 2.00
Further indirect costs	1.00
Mining cost	1.50
Tailing loss	1.00
Marketing loss in payment for gold, etc.	1.50
	$ 7.00

This would require the crude ore to run $8.00 to insure a profit of a

MILL STATUS (Continued)

minimum of $1.00 per ton. However, the above costs can be materially reduced after the milling operations become standardized. The indirect cost can be reduced to 25 cents per ton; the Tailing loss should be lowered to 75 cents; and the marketing loss to 75 cents by making truck load or about 10 ton shipments to the smelter and later on by preparing a small cyanide plant for treatment of the Flotation concentrates. (A greater part of the tanks, pumps, and other equipment for this cyanide plant are now on the property and can be re-built in our shop.)

The lower limit of costs for the present mill operating at a capacity of 18 tons per day including tailing loss, would be $3.50 per ton. The practical limit would probably be around $4.00 per ton, which with mining costs of $1.00 per ton from tunnel level and $2.00 per ton from 100 foot level would indicate the limit of ore to yield $1.00 profit would be $6.00 per ton at tunnel level and $7.00 per ton at 100 foot level.

BASIS UPON WHICH APPLICATION FOR ADDITIONAL LOAN IS PREDICATED

Under Mill Status the cost of mining and milling have been set out as $5.00 per ton at tunnel level and $6.00 per ton from 100 foot level. To allow a minimum of $1.00 per ton profit this would require a gold value of $6.00 per ton at tunnel level and $7.00 per ton at 100 foot level.

There are numerous headings in various parts of the mine where such values exist. It is proposed to follow all of these headings with a primary view of developing and blocking out a large tonnage of this mill grade ore. However, it is expected that many new ore shoots of the high grade shipping ore will be found. There seems to be some relationship between the various high grade shoots, as yet obscure, but in part due

BASIS UPON WHICH APPLICATION FOR ADDITIONAL LOAN IS PREDICATED (Con'td)

to dislocation and faulting and in part due to certain ore channels, leading from one shoot to another making ore where cross-fracturing is encountered.

Experience so far in our development has shown that all high grade ore shoots are encased by or fade out into $6.00 values. It seems obvious that reversing the procedure and following $6.00 values we will be led into other favorable cross fractured zones where the values will again come up to shipping grade. Our past difficulty has been that we had to discontinue work whenever the values dropped below $8.00. Under a plan providing a development fund for following and blocking out all ore above $6.00 grade, our development could be carried out with little or no dead work and with the assurance that not only would important shoots of shipping grade ore be found but very large reserves of mill grade ore would also be blocked out.

All workings would be started in ore and continued as long as the values keep up to a certain grade. Under the program as outlined in detail elsewhere there could be blocked out sufficient ore of a probable grade of $8.00 to repay the loan by milling this grade of ore in the present mill.

DEVELOPMENT PROGRAM

No. I Ore Shoot Sheet No. II - a vertical cross-section of No. I shaft shows the No. I shoot to be six inches wide at the collar of the shaft. It swells to a width of 15 feet at a depth of about forty feet. It was assumed that this shoot dipped to the southwest but when a connection was made by a raise from the 100 foot level it was found that the old filled stope was entirely on the northeast side of the shaft, proving that the dip of the vein was in the opposite direction from the

DEVELOPMENT PROGRAM (Continued)

original assumption. The dip of the shoot from the 43 foot level (where last exposed) down to the 100 foot level would throw the shoot 20 feet to the northeast when it reaches the 100 foot level.

The nearest workings on the 100 foot level are short by 5 feet of cutting the projection of the No. I ore shoot to that level had the shoot been of vertical pitch, but with its present pitch from the nearest point on the 100 foot level about 25 feet in a northeast direction would be required to reach the probable continuation of the No. I ore shoot. See Drift G-A, Sheet I and II.

GALENA ORE SHOOT The Galena shoot has none of the characteristics of No. I shoot nor of any of the shoots found on the tunnel level. It appears to be a new shoot not yet clear in its relationship to the various other ore shoots. The size of this shoot is 7 feet by 30 feet. The average of all material removed from this 7 x 30 foot drift was $8.10 gold and 6% lead. Development of the Galena shoot could be undertaken with the double purpose of blocking out ore of $8.00 value combined with development of the No. I shoot.

DRIFT G-A Drift G-A would follow a sheer zone which passes across the higher grade section of the Galena shoot. Twenty-five feet advance in this drift would reach the point where the projection of shoot No. I would be found. This drift not to be carried beyond 25 feet unless values in excess of $5.00 ore are found. 25 feet @ $7.00 - cost $175.00.

RAISE G-B This raise would be started in the $14.00 section of Galena ore shoot. It would follow the ore 40 feet up or as long as values were good. 40 feet @ $7.00 - cost $280.00.

WINZE G-E In driving through the Galena ore shoot a streak of solid galena 6 to 8 inches wide was cut at the bottom of the drift. It extended about three feet above the floor of the drift but in the roof

DEVELOPMENT PROGRAM (continued)

only irregular small patches were found. This would indicate that a winze on this Galena streak would be justified. This winze can be sunk for $15.00 per foot for a depth not exceeding 40 feet or as long as water inflow does not materially increase. Total cost 40 feet @ $15.00 = $600.

DRIFT ON NO. I ORE SHOOT AT 100 FOOT LEVEL. This drift would begin at the point where drift G-A cuts the continuation of No. I shoot. The length of this shoot is 80 feet. 80 feet @ $8.00 = Cost $640.00.

SOUTH DRIFT 100 FOOT LEVEL This drift was started at the south-west corner of the winze at station of the 100 foot level and is 40 feet in length. It follows a distinct sheer and has had erratic values. Hand samples often carrying up to $100.00. A 100 pound box sample from the last round of 5 feet assayed $8.75. This is a 5 x 7 drift. The breast has a central rib of 12 inches of black quartz with a high grade soft streaks on each side. The appearance of the breast has definitely changed for the better in the last five feet. The relationship of this ore shoot to other ore shoots is obscure. It will have to stand on its own merits although it should be pointed out that it is headed in the direction of the No. 2 ore shoot and is now entering an area which shows very intense fracturing and mineralization at the tunnel level. It is proposed to continue this drift 500 feet or as long as values are $6.00 or better. Cost - 500 feet @ $7.00 = $3500.00.

Two raises to tunnel level from South Drift. Cost - 200 feet @ $6 = $1200

SNOW WORKINGS See Sheets I and II.

RAISE S-I This raise has been started about 7 feet by 7 feet and is about 10 feet above floor of ore chute, average value $6.00. It could be extended toward the surface as long as values held. Cost - 50 feet @ $4.00 = $200.00.

DRIFT S-2 The breast of this drift shows $6.00 values. It is being

DEVELOPMENT PROGRAM - Snow workings (Continued)

driven in a direction under same promising surface outcrippings. About 50 feet ahead it will cut a corss fracture that shows strong at the surface and yields $15.00 gold values, at 100 feet it will come under a broken zone of silicified formation, about 50 feet in extent. Thus with values continuing in this drift there may be justified a drift. 150 feet @ $5.00 = $750.00.

RAISE S-3 This would be a raise following ore to the surface at some logical point along drift S-2. - 100 feet @ $4.00 = $400.00.

NO. 2 ORE SHOOT See Sheets Lv, V and VI. In the development of this ore shoot and the recently proven continuation of this ore shoot to the southwest, designated as the south shoot, it is proposed to follow the ore step by stop.

(A) Drive inclined raise T through to connect with winze O. 55 feet @ $10.00 = $550.00.

This raise is becoming more mineralized and has an average value at heading of $6.00. The fault M-M should cross this raise in about 25 feet of advance work or about midway to bottom of winze O. This should bring in ore of about $12.00 such as found in the bottom of winze O. Call this point - 80 foot level.

(B) At 80 foot level drive a drift U on the ore shoot to Basic Dyke. Fifty feet at $6.00 cost $300.00.

(C) Cut through dyke-5 feet; drift on south ore shoot-20 feet; raise 40 feet to bottom of south shaft- Total 65 feet @ $7. Cost $455.00.

(D) Sink a winze W on the south ore shoot to 105 foot level. 25 feet @ $12.00 Cost $300.00

(E) Cross-cut X from end of tunnel workings at 125 feet level to cut the No. 2 ore shoot, drift on the ore to a point under winze W = 80 feet; Raise Y to connect with bottom of Winze W =

DEVELOPMENT PROGRAM (Continued)

15 feet. Total 95 feet @ $7.00 Cost $665.

(F) Drift Z on the 125 foot level on south ore shoot 600 feet @ $6.00 Cost $3600.00.

(G) At a logical point in Drift Z sink a winze S to a depth of 75 feet @ $12.00 Cost $900.00.

The south ore shoot referred to above is the new ore shoot as found and exposed in the new south shaft. The No. 2 ore shoot was cut off at its south end by a basic dyke and the former operators made no attempt to find the extension. In our work in sinking the south shaft it was fou d that the Basic Dyke was only a narrow dyke about 4 feet in width. The No. 2 ore shoot extends up to the dyke on the north side and the south ore shoot begins on the south side of the dyke. There is, however, a change of strike of the South ore shoot to a course southwesterly from the dyke.

The size and value of the south ore shoot has gradually increased from a width of 2 feet and value of $2.00 per ton at the surface to a width of 8 feet and value of $6.00 per ton at bottom of 46 foot South Shaft. A slight further increase can reasonable be expected. When this south vein is reached by drift U at the 80 foot level sufficient work will be done to determine characteristics, trend, etc., connection made with the bottom of the South Shaft and a winze sunk to within 15 feet of the back of the 125 foot or main tunnel level. This will provide survey notes for a direct connection from end of the tunnel to the south vein, where a drift along the south ore shoot can be started and continued for an indicated distance of 600 feet with an average depth below the surface of 135 feet. The i portance of this south ore shoot is predicated upon three sets of conditions (a) the surface shows

DEVELOPMENT PROGRAM No. 2 Ore Shoot (Continued)

stronger silicification, more regularity and continuity of outcrop than does the surface above the No. 1, Boyer and snow segments, (b) value of $6.00 per ton at a depth of 40 feet below the surface corresponds with values of $6.00 in Boyer & Snow at same depth. The Boyer and Snow shoots, however, continued to increase invalue to an average of $12.00, a short distance below 40 feet. (c) The same condition of soil covering, rock foundation and surface appearance which overlays the south ore shoot in the vicinity of the south shaft continues in a direct line about 250 feet south westerly to a point where the soil covering disappears and the formation in place occurs. At this point a ledge of silicified quarts brecciz appears and continues unbroken for a distance of 300 feet lining up exactly with the course of the south ore shoot as exposed at the south shoot. (Sheet V.)

REPORT

By J. S. Conpal

~~Can~~ CAVE Creek Mining District

~~Can~~ CAVE Creek, Maricopa County, Arizona

December 10, 1934

J. S. Conpal
Consulting Mining Engineer
60 State Street
Boston, Massachusetts

GENERAL.

In the latter part of 1933 two gold properties in the Cave Creek District were brought to my attention by a former mining acquaintance. I came to Arizona from New York and spent about two months at Cave Creek.

One of these properties was the Maricopa Mine, belonging to Mr. Alfred Strong Lewis, an engineer whom I had met upon several previous occasions in Arizona. During the past fifteen years Mr. Lewis has made Cave Creek his headquarters and when not engaged in consulting mine engineering work, has devoted his time (and money) to acquiring and holding together a large group of claims in this district.

I am making this report at his request.

LOCATION.

From a map of Arizona Cave Creek may be located about 28 miles north of Phoenix, in Maricopa County. The road to Cave Creek is paved for about one-third of the distance, with an improved, dirt-surfaced highway the balance of the way.

There is a mineralized zone extending from Jerome down through the Bradshaw Mountains into Cave Creek at about the central part, and then continuing on to Superior, Globe, Ray, etc.

FORMATION.

The main formation in Cave Creek is a series of schists, similar to the Yarapai schists as developed in the Bradshaw area. These schists are intruded by tertiary dikes of diorite, granite porphyry and various phases of Rhyolite, andesite and monzonite.

At the close of the tertiary period the entire district was covered by a thousand feet or more of volcanic agglomerate, which in part has now been removed by erosion.

EROSION AND ELEVATION.

Erosion does not appear to have entered the mineralized horizon to any great extent. With only a few exceptions, the strongest mineralization is found at elevations of around 2500 feet, the base level being around 2200 feet. The higher ridges and mountain tops, ranging from 4,000 to 5,000 feet, while showing silicification, do not, generally, have any encouraging metallic values.

PRODUCTION.

I am informed that the district has produced about one and one-half million dollars in gold, at present prices. There has also been some copper production, and one mine has produced a large amount of silver.

DEVELOPMENT.

For the past thirty-five years all of the gold properties have been inactive. A number of small operations are now getting under way. The old-time operations, without exception, were conducted on the basis of searching for surface bonanzas. There are thousands of feet of tunnels and shallow shafts, with no systematic attempt in any instances to explore the possibilities of deep mining.

ORE DEPOSITS.

The most important type of ore deposit is of the chimney type, at points along prominent quartz veins or ledges. Several of these have been followed down and have shown improvement as depth gained. Surface enrichment of gold values is almost entirely absent.

Contact deposits are not developed. Cross-fractures in the igneous rocks and shear zones in the schists account for most of the known deposits. Some of the large silicified dolomite outcroppings may represent the surface expression of replacement deposits in depth.

GOLD-BEARING ZONE.

A large mass of intrusive granite porphyry has domed and broken up the various pre-cambrian formations through which it has been intruded. The strike of this intrusion has been across or almost diagonal to the strike of the schists. This granite porphyry is prominently exposed at Gold Hill, Mexican Hill and Continental Mountain. It probably occurred during the Tertiary time. A majority of the gold prospects are within a belt one and one-half miles wide bordering each side of this granite porphyry. The granite itself is cross-fractured and veins up to several feet in width containing gold, silver, tungsten, lead, copper, vanadium and molybdenum--these occur in all these cross-fractures.

While the surface exposure of this granite porphyry ends at the west end of Continental Mountain, there is evidence that it continues below the surface in the same trend, passing about three-quarters of a mile south of the Phoenix and Maricopa mines and appearing again about two miles south-westerly in the Apache Springs region.

MINING AND MILLING COSTS.

It should be possible to secure as low mining and milling costs in this district as anywhere in the United States. It is adjacent to a large area of agricultural production and the largest headquarters for unemployed labor in the state of Arizona. Electric

power is available from the existent power companies or can be independently developed in the district. Any amount of water can be obtained from known sources within the district. The climatic conditions permit outdoor operations the year around. Road conditions are excellent.

INACTIVITY IN DISTRICT.

In seeking an explanation of the prolonged inactivity in this district it is apparent that causes outside the value and condition of the mining properties have contributed largely to the long period of virtual abandonment. Among these causes were uneconomical and ill-advised mining operations; seeking ore deposits at shallow depths; early-day high costs; wasteful milling machinery; and a general lack of interest in gold mining during the greater part of the past thirty-five years.

OPINION.

This district has a large area of virgin ground with evidence of vigorous mineralization. There are several partially developed properties which should make producing mines. There are a number of meritorious prospects that are worthy of being carefully considered for exploration, some of which, I believe, will make valuable properties.

The existing evidence appears to confirm the supposition that erosion has not proceeded deeply enough to expose at the surface the metal-bearing horizon of ore deposits.

Any exploration work should mainly consist of sinking or gaining depth on the ore shoots.

I believe this district has an important future as a producer of gold.

Respectfully submitted.

J. S. Conpal.

J. S. Conpal
Consulting Mining Engineer.

ALFRED STRONG LEWIS
CONSULTING MINING ENGINEER
PHOENIX, ARIZ.

ENGINEERS REPORT

By

ALFRED STRONG LEWIS

on

MARICOPA MINE,
APOCIRAM MINING CLAIM,
Cave Creek Mining District,

Maricopa County, Arizona

October 6, 1933.

ALFRED STRONG LEWIS
CONSULTING MINING ENGINEER
PHOENIX, ARIZ.

HISTORY and PRODUCTION: Fourteen years ago I made an examination of the Maricopa Mine, covering the surface outcropping, geological structure and formation, and such underground workings as were accessible. I was favorably impressed at that time, with gold at $20 per ounce, and recommended it to an Eastern syndicate for development. Work was started, but before the objective was reached the New York Stock Exchange collapsed and the Eastern syndicate retired from all mining operations in the Cave Creek District. Since that time I have been gathering data and information from all possible sources concerning the production and past operation of this property. I have interviewed many of the miners and oldtimers who worked in the mine or were in the country during the period of its operation. This has been necessary, owing to the partial caving and filling of the two working shafts during the past thirty years of inactivity.

The outstanding feature of all evidence is the close agreement from all angles of the following items:

1 - The original owners of the property were stubborn men, hard to do business with, and after disagreement with five different sets of leasers, were unable again to find anyone to operate the property, and not knowing anything about mining themselves, the property remained idle.

2 - The last leaser to operate the property offered a substantial cash bonus for renewal of his leasehold, but was refused. He then removed his five foot Huntington mill and other machinery from the property. The combination of (1) and thelatter part of (2) resulted in stalemate for the property.

3 - The production of the mine, purporting to be from sworn court statements (Extracts from report by C. M. McReynolds, dated September 26, 1900) is as follows:

Phoenix Co.	800 tons, 60% on plates,	$9.00	$7200.00
Black Jack Newman	800 " " " "	12.00	9600.00
Platt and Tranor	800 " " " "	7.00	5600.00
Charles Davies	800 " " " "	8.00	6400.00
Charles Davies	1900 " " " "	9.00)	
	$3.00 by cyanide	3.00)	22800.00
			$51600.00

Analysis of the above figures indicates that the average extracted values in gold with recovery by amalgamation at 60% is about $9.00 per ton, or an actual value of $15.00 per ton with gold at $20.00 per ounce.

At present price of gold at $35.00 per ounce, this would indicate an average value of the ore to be $26.25 per ton.

In addition to this ore milled on the ground, there was produced and shipped direct to the smelter a number of small shipments of galena containing five or more ounces per ton in gold. This galena was found in stringers or kidneys up to one foot in width within the ore deposits of both No. 1 and No. 2 shafts. It was carefully sorted out and sacked for shipment.

In No. 1, or whim shaft, the width of the ore outcropping was only a few inches at the surface, but at a depth of 15 to 20 feet widened to a stoping width of six feet. The vein continued to widen down to the bottom level at about 110 feet. Between this bottom level and within 20 feet of the surface, the vein has been stoped across an average width of eight feet, and a maximum length of 60 feet. There are no distinct walls. The mineralization is evident for 10 to 20 feet in the porphyry walls each side of the siliceous vein that has been stoped. It is probable that these

mineralized walls will show gold values of at least $3.00 to $4.00 per ton, in which case a mining width of from 30 to 40 feet could be maintained.

The leasers always had plenty of ore in sight to take care of their small milling capacity of 20 tons per day. The length of this ore shoot has not been determined beyond the stoped length of 60 feet.

No. 2 shaft is about 300 feet distant from No. 1 shaft. After the mill was set up at No. 1 shaft, there was no incentive for work to be done on No. 2 shaft. It was worked over a width of from 8 to 10 feet by 40 feet in length, and to a depth of 50 feet. There are about 50 tons of discarded ore on the dump at this shaft which averages $12.00 per ton in gold at present prices, with exposed faces of ore outside the original stoped area of $8.00 to $12.00 in gold per ton over widths of six feet or more.

TITLE: The title can be traced from 1882 to the present time, and all matters pertaining to the title are in good standing. It is held as an unpatented claim under the name APOCIRAM recorded in Book 35 of Mines, at Page 39, records of Maricopa County.

LOCATION: Elevation 2500 feet; excellent year around climate; 35 miles graded road Northerly from Phoenix; adequate water for milling and camp purposes in Cave Creek passing through the claim; good gravity millsite joining the West side of the claim. This location cannot be surpassed for low cost mining and milling operations.

GEOLOGY: The rock formation of this claim is an igneous complex, composed of several varieties of acid and basic igneous rocks. It is flanked on the East by Pre-Cambrian schists, and on the West by a large mass of diorite. An acid dike traverses the claim from end line to end line. The ore shoots occur in cross fractures. The developed ore shoots are on the East side of the dike. Several undeveloped ore shoots with good surface showings are exposed on the West side of the dike. There is evidence of folding, but none of the faulting in this locality.

ORE DEPOSITS: The two ore shoots opened by Shafts No. 1 and No. 2 do not have any visible connection at the surface. However, in the crosscut tunnel, and also in a spur from same, there is a mineralized, leached, sheared zone, which, if extended, would connect the two ore shoots. It appears reasonable to assume the two ore shoots to be chimneys from the same source, and probable that with depth a continuous ore shoot of considerable length will be found.

CHARACTER OF ORE: The ore is mainly a brittle, shattered silica with some oxide of manganese, a small amount of oxidized iron, liberal amounts of lead vanadate and molybdate. The predominating sulphide is galena, occurring in sizeable stringers and kidneys.

POSSIBILITIES IN DEPTH: It is apparent that these ore shoots have not been appreciably eroded. No. 1 ore shoot was practically a blind shoot, there only being a few square feet of apex exposed at the surface. There is no evidence, either direct or hearsay, indicating any change in values at the bottom of the workings. The size

of the shoots has shown definite improvement with depth. Mineralization is stronger as exposed in the crosscut tunnel than at the surface. It is therefore justifiable to expect the ore shoots to improve in size with depth.

The general habit of Arizona mines is for the siliceous outcrops to become base in depth. The predominating sulphide in these shoots is galena carrying five ounces in gold (no silver). Should this habit prevail in Maricopa, the average value of the deposit would be materially increased with depth.

PRESENT VERSUS PAST: OPERATIONS : There is good reason for believing that a profit was made from the ores mined. Five different sets of leasers operated the property. The oldtime leasers, each producing 800 tons or more, would not have persisted unless there had been some profits. The last one offered to pay a cash bonus of $2,000 for a renewal of his lease, but was refused by the owners. These leasers were all paying a stiff royalty to the owners, said to be twenty per cent. Wages were the same as wages would be today. With machine drills instead of hand steel, power hoist instead of horse whim, modern crushing plants and flotation, followed by concentration; extracting from 90% to 95% of the values at one half the cost, the oldtimers paid for 60% extraction; and with gold at $35 instead of $20, the whole commercial aspect at the present time is highly attractive, compared with former operations. Assuming $5.00 per ton as past production cost for mining and milling, the profit was $4.00, while with the present day production costs of $4.00 per ton for mining and milling, the profit would be $17.25 per ton, or a ratio of profit between present and past operation of about four to one.

ALFRED STRONG LEWIS
CONSULTING MINING ENGINEER
PHOENIX, ARIZ.

DEVELOPMENT POSSIBILITIES: The past production of the mine represents only a partial extraction of the upper 100 feet of the two developed ore shoots. This past production of $50,000.00, if calculated upon the basis of modern mill extraction and present gold price would amount to over $110,000.00. With the same size and values, the vein, developed to 1000 feet of depth, would yield a production of $1,000,000.00. The evidence all points to increased size and values in the two developed ore shoots, with the virgin ore shoots containing additional promise. In evaluating the possibilities of this claim, I personally believe a forecast of a two to three million dollar production is justified.

RECOMMENDATION: I recommend this property as unusually favorable. With an expenditure of $2500.00, the old workings can be cleaned out, and the size and value of the two ore shoots can be checked and proven. With this done, a small amount of development work would bring the property to the point where a substantial mill could be installed and steady production maintained.

Respectfully submitted,

Alfred Strong Lewis.

March 9, 1934,
Cave Creek, Arizona.

AM-38

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date May 8, 1940

1. Mine Maricopa
2. Mining District & County Cave Creek Dist. Maricopa County
3. Former name Maricopa
4. Location 5 miles North of Cave Creek Postoffice.
5. Owner Alfred Strong Lewis (Deed) Barney Lumbert 1-5 Hamilton Chandler 6/20/72
6. Address (Owner) Cave Creek, Arizona
7. Operator
8. Address (Operator)
9. President
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Gold (Pb., Vn., Mb.)
14. Men Employed Average 5 past 3 years.
15. Production Rate 25 ton maximum
16. Mill: Type & Cap. Ball, 25 ton flotation
17. Power: Amt. & Type Gasoline and fuel oil. 200 hp
18. Operations: Present Mill tests
19. Operations Planned Probably have to increase size of mill and change to cyanide treatment.
20. Number Claims, Title, etc. 7 unpatented, no adverses.
21. Description: Topography & Geography Rolling low hills.
22. Mine Workings: Amt. & Condition Adit tunnel with connecting cross-cuts 800 ft.; 100 ft. winze; 200 ft. at 100 ft. level; a 400 various surface workings.

(over)

23. Geology & Mineralization — Complex mixture, acid and basic intrusives, kaolinized and altered. Replacement by siliceous ore along shear zones. Ore oxidized and free except small amount of galena.

24. Ore: Positive & Probable, Ore Dumps, Tailings
Mining width 10 to 15 ft.;
aggregate length shoots 1,000 ft.
7,000 tons shipped $15.00;
Marginal ore exposed $6.00 to $8.00.

Value all in gold.
Tailings - 500 tons - $4.50
Positive ore - 2,000 tons - $8.00
Probable ore (above 100 ft. level of winze)
100,000 tons - $6.00

24-A Vein Width, Length, Value, etc.

25. Mine, Mill Equipment & Flow Sheet — 1 R Hot Head Compressor and G-D Port - 500 cu. ft./mim. Wheeler Ball Mill 4 x 4 Flot. cells table, Ore bins, crusher, etc. complete mining.

26. Road Conditions, Route — Good. Phoenix to Cave Creek then 5 miles North.

27. Water Supply — Adequate for all purposes.

28. Brief History — Worked 1890 to 1900, Huntington Mill, by Chas Davies Jothers
Operations resumed 1936 by present owner

29. Special Problems, Reports Filed — Present flotation process unseccessful
Change to cyanide necessary

30. Remarks — RFC - B Loan $20,000 plus interest.
Can arrange lease with 10% royalty to apply on RFC Loan

31. If property for sale: Price, terms and address to negotiate. Price $100,000; or will sell one half interest for $25,000 to be expended for increasing mill to 50 tons, changing to cyanide and necessary development.

32. Signed ~~Alfred Strong~~ Lewis

33. Use additional sheets if necessary.

MM-3S

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date 8 MAY 40

1. Mine MARICOPA
2. Location 5 MILES NORTH OF CAVECREEK POSTOFFICE
3. Mining District & County CAVE CREEK, MARICOPA
4. Former name MARICOPA.
5. Owner ALFRED STRONG LEWIS
6. Address (Owner) CAVECREE
7. Operator
8. Address (Operator)
9. President, Owning Co.
9A. President, Operating Co.
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Men Employed AVERAGE 5 past 3 yrs -
14. Principal Minerals Au, (Pb, Un, Mb.
15. Production Rate 25 TON - MAXI
16. Mill: Type & Cap. BALL - 25 TON FLOTATION -
17. Power: Amt. & Type GASOLENE & Fuel 200 H.P.
18. Operations: Present MILL TESTS
19. Operations: Planned PROBABLY HAVE to INCREASE SIZE MILL AND CHANGE TO CYANIDE TREATMENT
20. Number Claims, Title, etc. 7-UNPATENTED - NO ADVERSES -
21. Description: Topography & Geography - ROLLING LOW HILLS
22. Mine Workings: Amt. & Condition ADIT TUNNEL WITH CONNECTING CROSS-CU 800 ft. ; 100 ft WINZE ; 200 ft AT 100 ft LEVEL ; & 400 VARIOUS WORKINGS.

23. Geology & Mineralization COMPLEX MIXTURE ACID & BASIC INTRUSIVES - KAOLINI AND ALTERED - REPLACEMENT BY SILECCOUS ORE ALONG SHEAR ZONES. ORE OXIDIZED AND FREE EXCEPT SMALL AMOUNT GALENA.

24. Ore: Positive & Probable, Ore Dumps, Tailings VALUE ALL IN GOLD

TAILINGS = 500 TONS $4.50
POSITIVE ORE = 2000 TONS $8.00
PROBABLE ORE (ABOVE 100 ft LEVEL OF WINZE) 100,000 TONS $6.00

24A. Dimensions and Value of Ore body

MINING WIDTH 10 to 15 ft ; AGGREGATE LENGTH SHOOTS 1000 ft ; 7000 TONS SHIPPED $15.00 ; MARGINAL ORE EXPOSED 6.00 to 8.00

25. Mine, Mill Equipment & Flow-Sheet

1R HOT HEAD-COMPRESSOR & G-D. PORT. = 500 Cu ft/MIN. - WHEELER BALL MILL 4 FLOT CELLS, TABLE, ORE BINS, CRUSHER, ETC. COMPLETE MINING

26. Road Conditions, Route

GOOD - PHOENIX to CAVECREEK THEN 5 MI. NORTH

27. Water Supply

ADEQUATE FOR ALL PURPOSES

Brief History

WORKED - 1890 to 1900 - HUNTINGTON MILL - BY CHAS DAVIES & OTHERS - OPERATION RESUMED 1936 BY PRESENT OWNER

Special Problems, Reports Filed

PRESENT FLOTATION PROCESS UNSUCCESSFULL = CHANGE TO CYANIDE NECESSARY

Remarks

RFC - B LOAN $20,000 plus INTEREST.
CAN ARRANGE LEASE WITH 10% ROYALTY TO APPLY ON RFC LOAN.

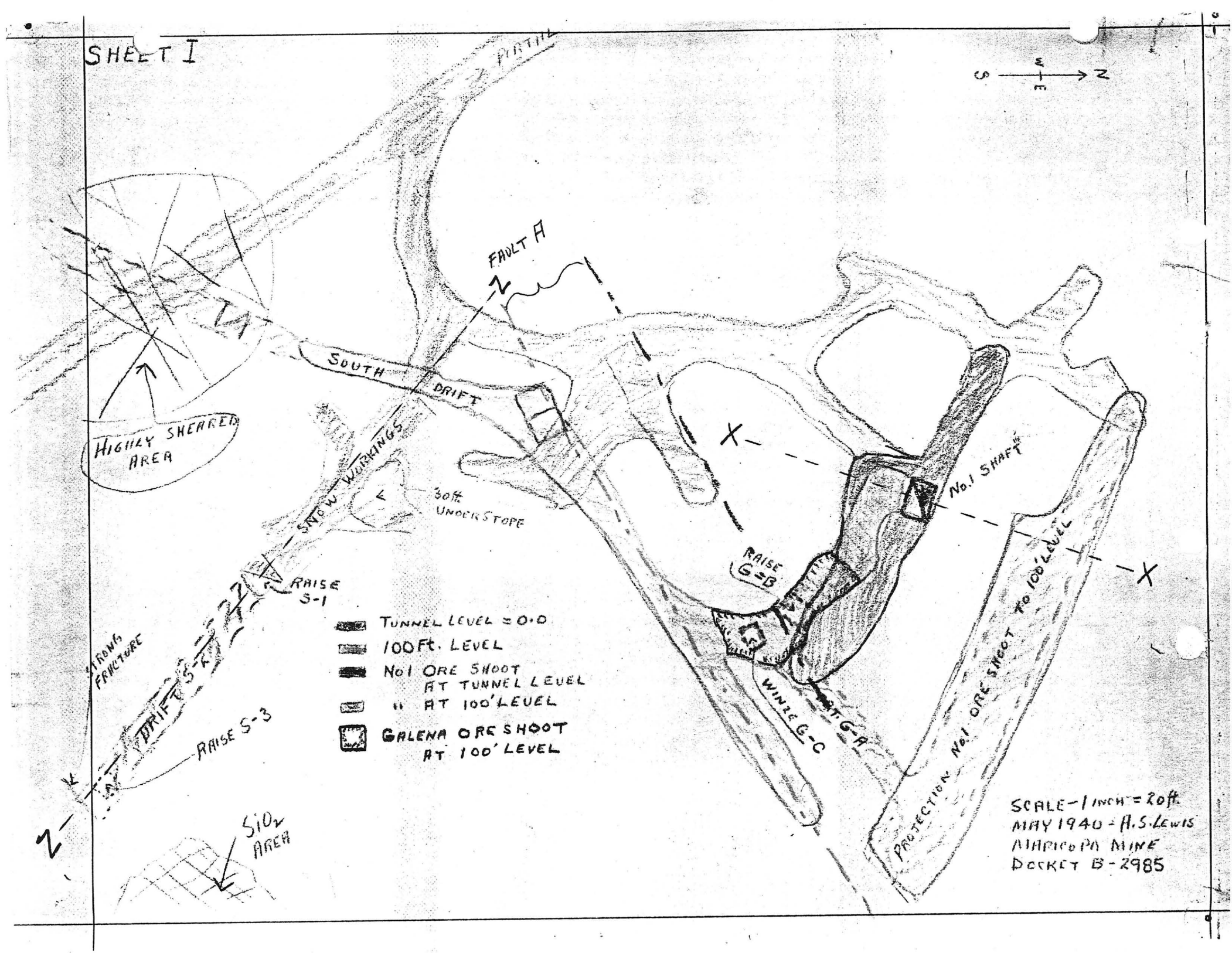
If property for sale: Price, terms and address to negotiate.

PRICE $100,000 ; OR WILL SELL ONE HALF INTEREST FOR $25,000 TO BE EXPENDED FOR INCREASING MILL to 50 TONS - CHANGING to CYANIDE AND NECESSARY DEVELOPEMENT.

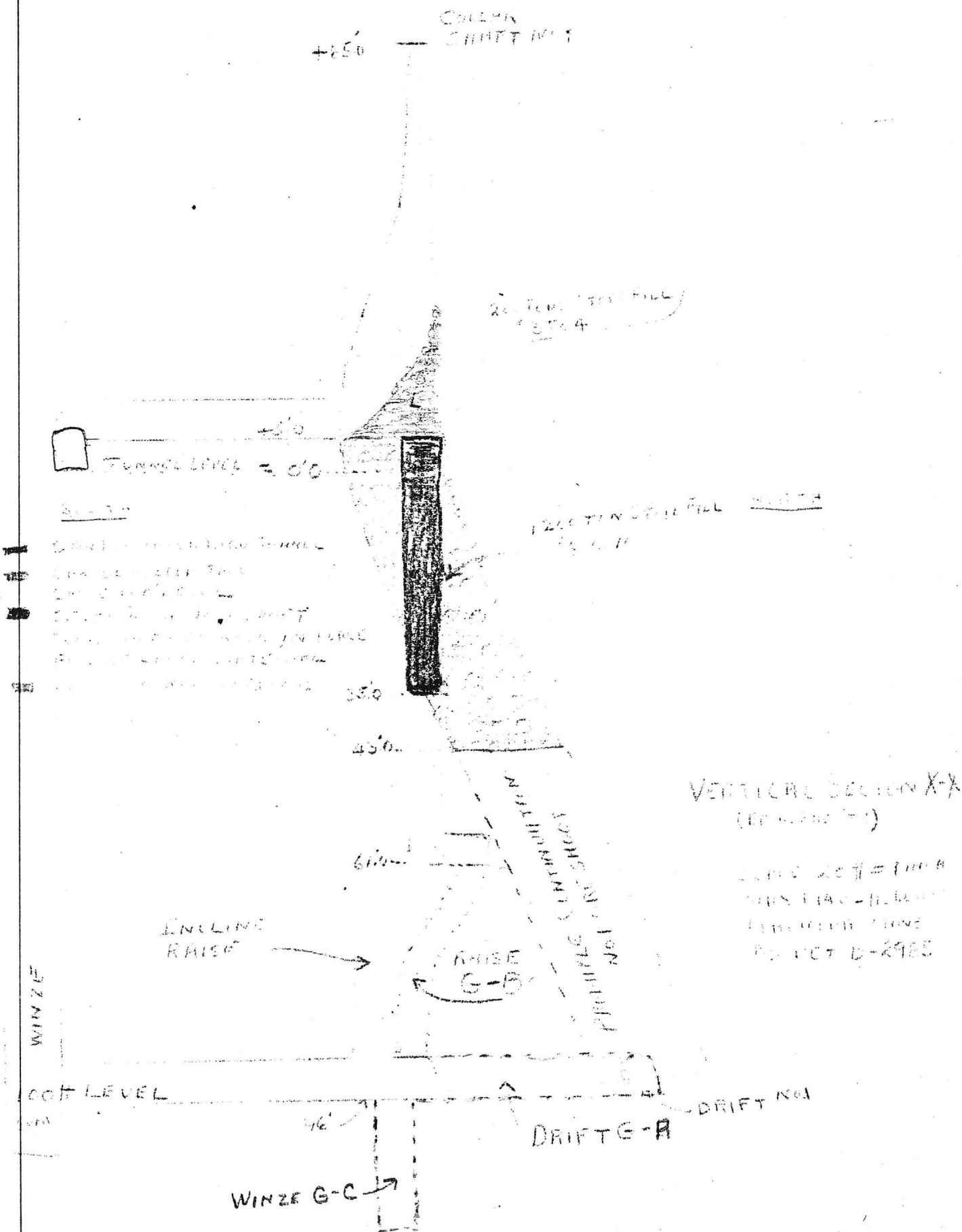
32. Signature..... Alfred [illegible]

Use additional sheets if necessary.

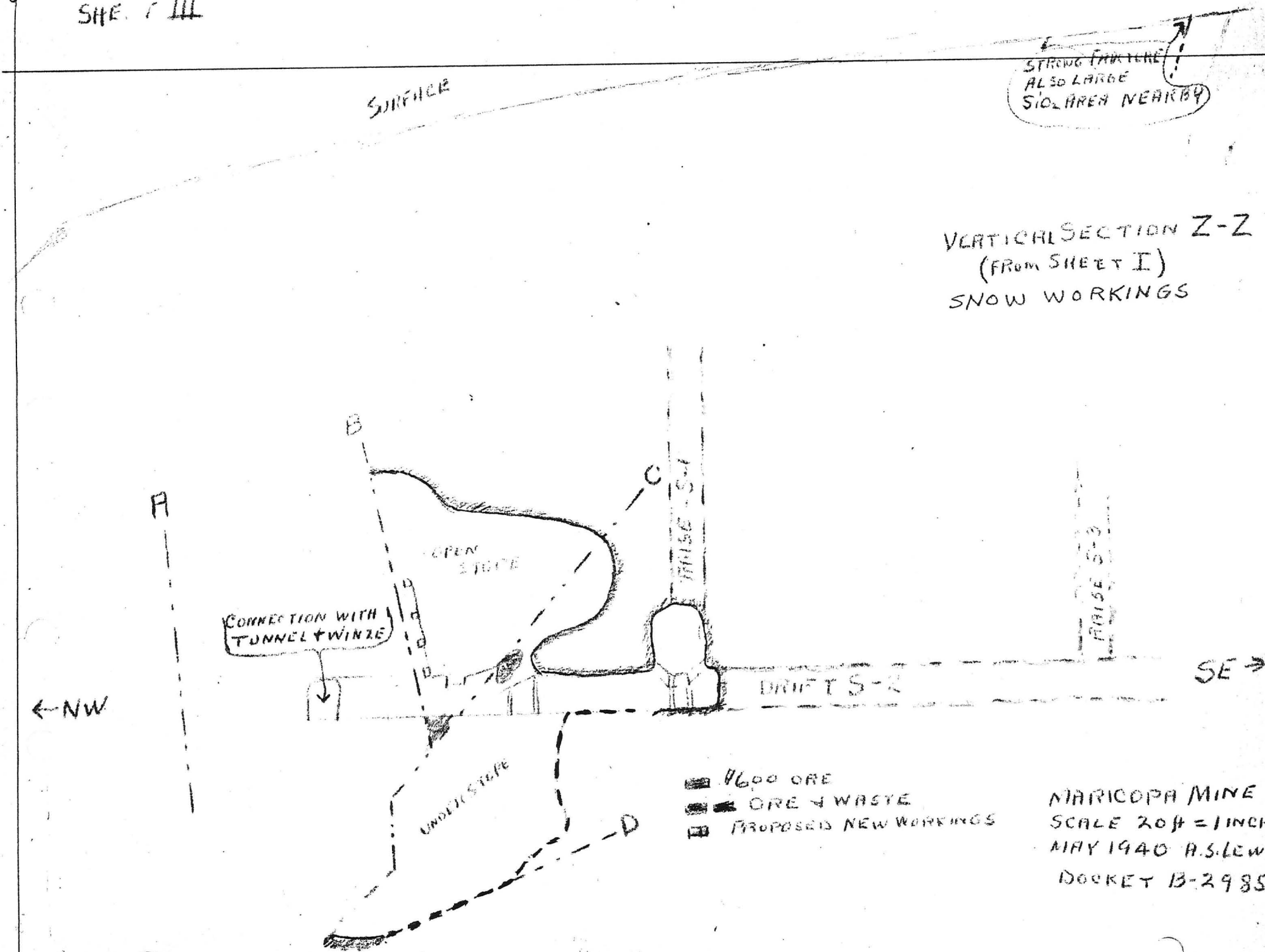
SHEET I


PATH
S
E
W
N
FAULT A
SOUTH DRIFT
HIGHLY SHEARED AREA
SNOW WORKINGS
30 ft UNDER STOPE
RAISE S-1
STRONG FRACTURE
DRIFT S-2
RAISE S-3
SiO2 AREA
TUNNEL LEVEL = 0.0
100 Ft. LEVEL
No 1 ORE SHOOT AT TUNNEL LEVEL
" AT 100' LEVEL
GALENA ORE SHOOT AT 100' LEVEL
RAISE G-B
WINZE G-C
DRIFT G-A
No. 1 SHAFT
PROJECTION No. 1 ORE SHOOT TO 100' LEVEL
SCALE - 1 INCH = 20 ft.
MAY 1940 - A.S. LEWIS
MARICOPA MINE
DOCKET B-2985

SHEET No. II

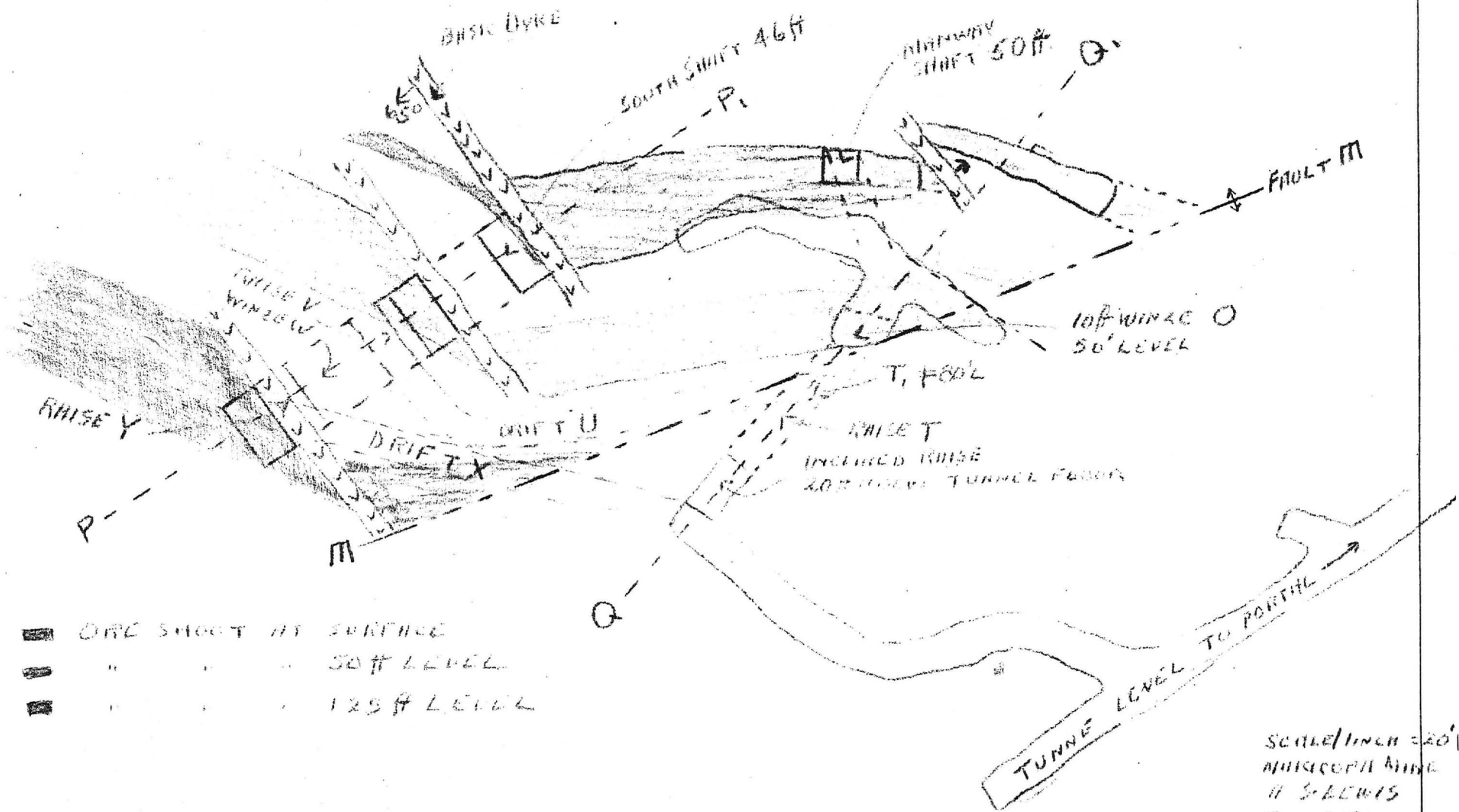

+650
+50
TUNNEL LEVEL = 0'0
35'0
45'0
VERTICAL SECTION X-X
INCLINE RAISE
RAISE G-B
WINZE
100 ft LEVEL
DRIFT No 1
DRIFT G-A
WINZE G-C

SHE. I III


SURFACE
STRONG FAULT LINE
ALSO LARGE
SIO2 AREA NEARBY
VERTICAL SECTION Z-Z
(FROM SHEET I)
SNOW WORKINGS
A
B
C
D
OPEN STOPE
CONNECTION WITH
TUNNEL + WINZE
UNDER STOPE
RAISE S-1
RAISE S-3
DRIFT S-2
SE →
← NW
ORE
ORE + WASTE
PROPOSED NEW WORKINGS
MARICOPA MINE
SCALE 20 ft = 1 INCH
MAY 1940 A.S. LEWIS
DOCKET B-2985

SHEET IV

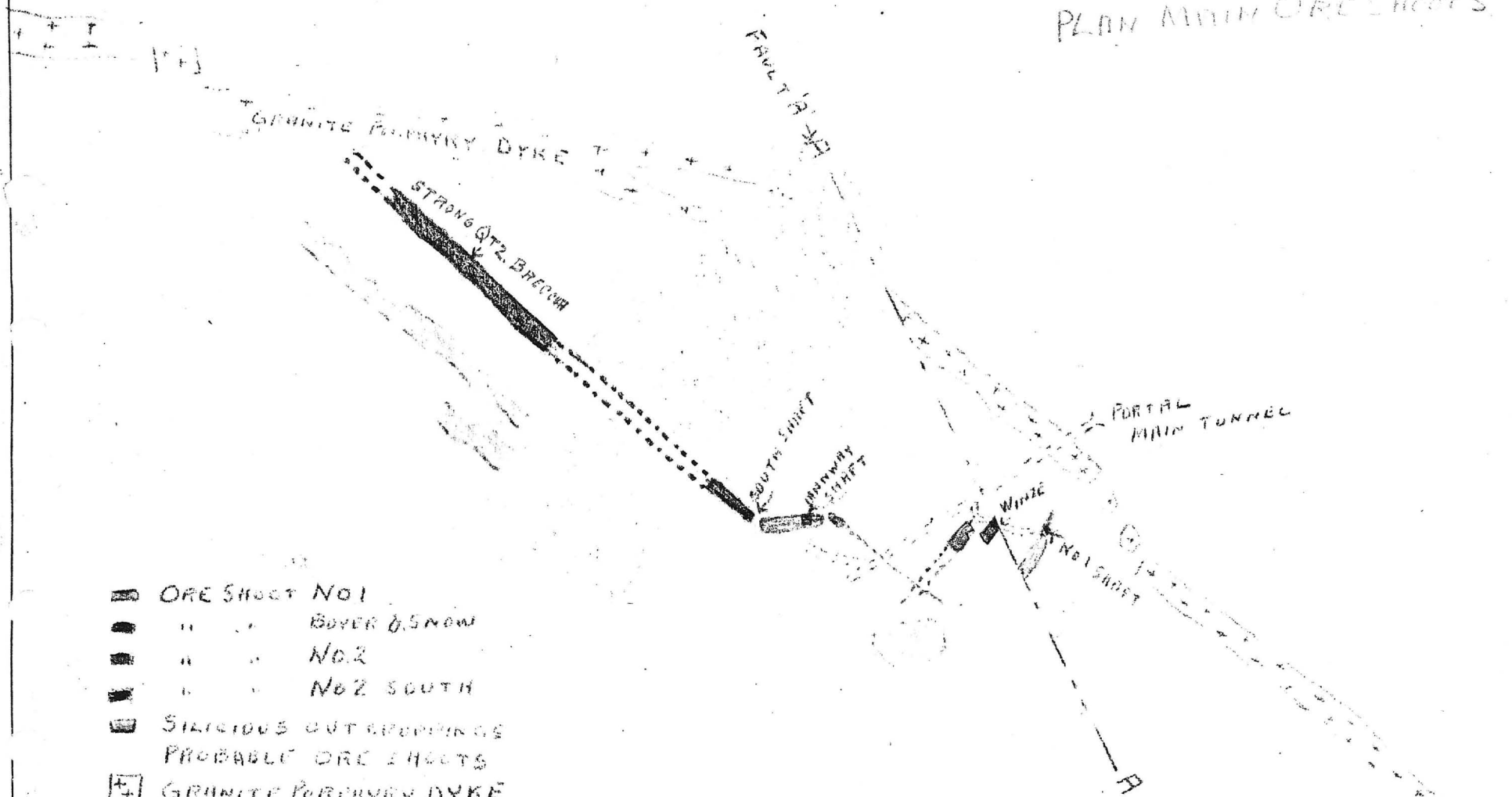
PLAN No. 2 ORE SHOOT



SCALE/INCH = 20'
MINISCOFFI MINE
H S LEWIS
JUNE 1940
DOCKET B-2955

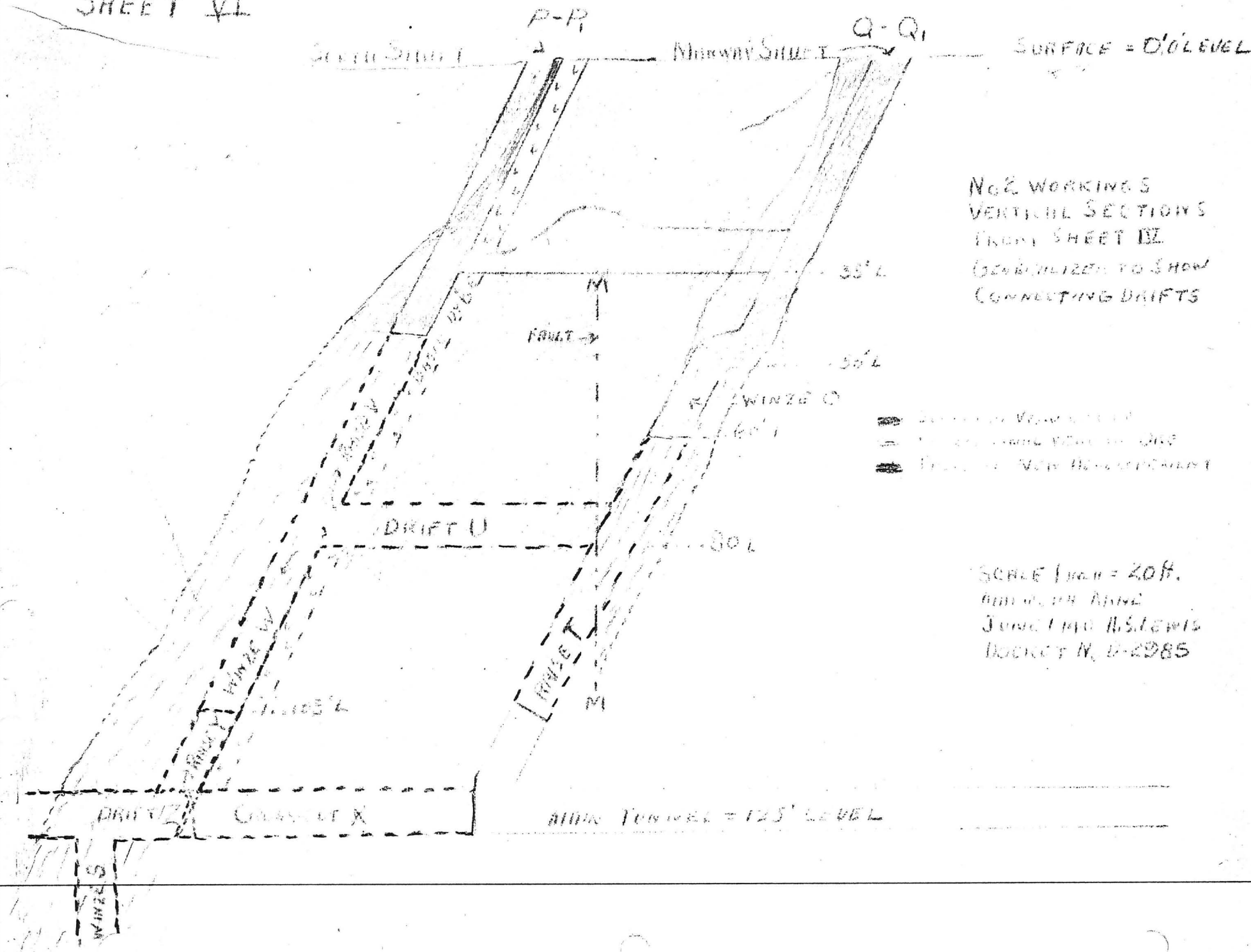
SHEET V

PLAN MAIN ORE SHOOTS



SCALE 1 INCH = 200 ft.
SURFACE PLAN - MARICOPA MINE
JUNE 40 A.S. LEWIS
DOCKET No. B 2985

SHEET VI


P-P1
Q-Q1
SURFACE = 0'0" LEVEL
35' L
30' L
FAULT
WINZE O
DRIFT U
30 L
WINZE W
WINZE T
DRIFT V
DRIFT X
ADIT TUNNEL = 125' LEVEL
WINZE S
NO. 2 WORKINGS
VERTICAL SECTIONS
FROM SHEET IX
GENERALIZED TO SHOW
CONNECTING DRIFTS
SCALE 1 inch = 20 ft.
JUNE 1940 R.S. LEWIS
DOCKET N. U-2985